

# Oregon Global Warming Commission

## Public Comments February 3rd, 2023

---

**From:** Robert Hayden <RHayden@pewtrusts.org>

**Sent:** Tuesday, January 24, 2023 1:06 PM

**To:** Oregon GWC \* ODOE <Oregon.GWC@energy.oregon.gov>

**Cc:** Elizabeth Ruther <eruther@pewtrusts.org>

**Subject:** Support with suggested changes for SB 530, SB 522, HB 2527 (2023 Oregon legislature)

Greetings Chair MacDonald –

On behalf of my colleague Liz Ruther and myself, I write to express Pew's support, with recommend changes, for SB 530: Relating to natural climate solutions, SB 522: Relating to the Oregon Global Warming Commission, and HB 2527: Relating to wildlife habitat special assessment.

We base our support and recommended changes on the nonpartisan research and analysis presented in the attached letter. The letter is directed to the Chairs, members and staff of the Senate Committee on Natural Resources and House Committee on Agriculture, Land Use, Natural Resources, and Water, and will also be distributed to the list of contacts named at the end of the PDF (including relevant state agency and commission directors).

Oregon's natural and working lands and waters – stewarded by coastal and inland forestry, farming, fishing, ranching communities, and Tribal sovereigns to support jobs and unique lifeways across the state – are under threat, making SB 530, SB 522, and HB 2527 timely.

Please reach me with any questions.

Thanks in advance for your consideration of these perspectives.

-Bobby

**Bobby Hayden**

(pronouns: he/him)

Associate Manager, [Conserving Marine Life in the U.S.](#)

The Pew Charitable Trusts - Portland, Oregon

*p:* 503.230.6949 (main) | 202.823.3698 (cell)

*e:* [Rhayden@pewtrusts.org](mailto:Rhayden@pewtrusts.org) | *twitter:* [@bobintheh2o](#)

[Sign up for our West Coast Ocean News e-newsletter](#) <>< <>< <><

**PDF Attachment follows -**



111 SW Columbia Street, Suite 200  
Portland, Oregon 97201  
[pewtrusts.org](http://pewtrusts.org)

Senator Jeff Golden  
Chair, Senate Committee on Natural Resources  
900 Court St. NE, S-421  
Salem, Oregon 97301

Representative Ken Helm  
Chair, House Committee on Agriculture, Land Use, Natural Resources, and Water  
900 Court St. NE, H-490  
Salem, Oregon 97301

**RE: Support with suggested changes for SB 530, SB 522, HB 2527.**

Dear Chair Golden, Chair Helm and members of the Senate Committee on Natural Resources and House Committee on Agriculture, Land Use, Natural Resources, and Water:

The Pew Charitable Trusts writes to express its support, with recommend changes, for SB 530: *Relating to natural climate solutions*, SB 522: *Relating to the Oregon Global Warming Commission*, and HB 2527: *Relating to wildlife habitat special assessment*.<sup>1,2,3</sup> We base our support on the nonpartisan research and analysis presented below. These legislative proposals offer sound, timely investments for the state and advance existing Oregon priorities for mitigation and adaptation to climatic change, buffering against natural disasters, and increasing the function of natural and working lands that are vital to the resilience of human communities and the food systems on which Oregonians rely.

To maximize legislative cohesion, HB 2527, if amended, could remove barriers for the agricultural community and other landowners to participate in existing tax incentive programs and provide opportunity for landowners to achieve natural climate solutions goal embedded within SB 530.

## Contents

Background and Urgent Need for Oregon .....	2
SB 530: Relating to natural climate solutions.....	3
Strengths .....	3
Recommendations for SB 530 .....	6
SB 522: Relating to the Oregon Global Warming Commission .....	10
Strengths .....	10

<sup>1</sup> 2023 Oregon Legislative Session. SB 530 - *Relating to natural climate solutions*

<https://olis.oregonlegislature.gov/liz/2023R1/Measures/Overview/SB0530>

<sup>2</sup> 2023 Oregon Legislative Session. SB 522 - *Relating to the Oregon Global Warming Commission*

<https://olis.oregonlegislature.gov/liz/2023R1/Measures/Overview/SB522>

<sup>3</sup> 2023 Oregon Legislative Session. HB 2527 - *Relating to wildlife habitat special assessment*

<https://olis.oregonlegislature.gov/liz/2023R1/Measures/Overview/HB2527>

Recommendations for SB 522 .....	10
HB 2527: Relating to wildlife habitat special assessment .....	10
Recommendations for HB 2527 .....	11

## Background and Urgent Need for Oregon

Oregon’s natural and working lands and waters – stewarded by coastal and inland forestry, farming, fishing, ranching communities, and Tribal sovereigns to support jobs and unique lifeways<sup>4</sup> across the state – are under threat, making SB 530, SB 522, and HB 2527 timely.

Weather patterns continue to increase in irregularity, including the occurrence of a ‘heat dome’ in 2021, that were statistically impossible a decade ago,<sup>5</sup> severely impacting Oregon’s natural and working lands.<sup>6</sup> Oregon's 6th Climate Assessment, published in January 2023, determined the state faces clear impacts to natural and human systems – now and in the coming years relative to historic baselines of human existence – in areas including but not limited to extreme heat, drought, wildfire, floods, impacts to Tribal cultural resources, coastal hazards, and public health.<sup>7</sup>

The Intergovernmental Panel on Climate Change (IPCC)’s most recent report recognizes the interdependence of climate, ecosystems and biodiversity, and human societies to a greater extent than previous reports and recommends immediate action to curb detrimental impacts.<sup>8</sup> Examples of key regional risks to North America include:

- Reduced surface water availability for irrigated agriculture.
- Risk to food and nutritional security through changes in agriculture, livestock, hunting, fisheries, and aquaculture productivity and access.
- Risk to economic activities from cascading and compounding climate hazards, including risks to coastal cities, settlements, and infrastructure from sea level rise.
- And increasing costs and damages related to maintenance and reconstruction of transportation infrastructure.

---

<sup>4</sup> The word 'lifeway' focuses on "an interpretive effort to express indigenous understandings of human-earth relations as an interactive and pervasive context that outsiders might label religion." See source: Grim, John A. (2004). "Native American Religions, Bioethics in" (Gale Virtual Reference Library). In Post, Stephen G. (ed.). Encyclopedia of Bioethics, Vol. 4 (3rd ed.). New York, NY: Macmillan Reference USA. p. 1881.

<https://go.gale.com/ps/i.do?p=GVRL&u=nla&id=GALE|CX3402500381&v=2.1&it=r&sid=GVRL&asid=477a398d>

<sup>5</sup> Lindsey, Rebecca, “Preliminary analysis concludes Pacific Northwest heat wave was a 1,000-year event...hopefully," National Oceanic and Atmospheric Administration (NOAA) Climate.gov, July 20, 2021, <https://www.climate.gov/news-features/event-tracker/preliminary-analysis-concludes-pacific-northwest-heat-wave-was-1000>

<sup>6</sup> Oregonian / Columbia Insight. "Record number of firs dying in Oregon, Washington in what experts call ‘Firmageddon.’" By Nathan Gilles. Published November 25, 2022. <https://www.oregonlive.com/environment/2022/11/record-number-of-firs-dying-in-oregon-washington-in-what-experts-call-firmageddon.html#:~:text=Fir%20trees%20in%20Oregon%20and,trees%20in%20the%20two%20states>

<sup>7</sup> Fleishman, E., editor. 2023. Sixth Oregon Climate Assessment. Oregon Climate Change Research Institute, Oregon State University, Corvallis, Oregon. <https://blogs.oregonstate.edu/occri/oregon-climate-assessments>.

<sup>8</sup> <https://www.ipcc.ch/report/ar6/wg2/>

The IPCC further notes that although efforts in the land sector cannot compensate for delayed emission reduction in other sectors, measures taken in the agriculture, forestry and other land use arenas can “provide large scale emissions reductions and also remove and store carbon dioxide at scale.”<sup>9</sup>

This backdrop of volatility and uncertainty for Oregon's people and industries, coupled with the need to work across all sectors to mitigate and adapt to a changing climate, lends credence to each of the following bills that tackle governance structure and coordination, funding, and improvements to landowner incentive programs that will enable increased natural climate solutions (i.e., efforts to reduce emissions and enhance carbon sequestration and storage through conservation, restoration and improved land management strategies) to take place in Oregon.

### SB 530: Relating to natural climate solutions

**Overview:** SB 530 establishes state policy regarding natural climate solutions (NCS) including implementing NCS strategies, investing in research to fill data gaps, and directs agencies to incentivize and implement NCS through various means and incorporate NCS into their missions, programs, and performance metrics. It defines the term ‘natural climate solution’ and seeks to establish funding and governance of that funding to implement NCS. SB 530 recognizes the importance of studying workforce and training programs needed to support NCS implementation and requires a report to the legislature. Lastly, the bill provides the Oregon Global Warming Commission (OGWC) with the ability to establish a formal Natural and Working Lands Advisory Committee.

#### Strengths

**Complements current investments made by the Oregon government:** SB 530 is a natural extension of the current work by the OGWC in its Natural and Working Lands Proposal.<sup>10</sup> The Natural and Working Lands Fund established in the bill complements existing state investments toward identifying climate solutions, via the Department of Energy<sup>11</sup>, climate action and natural hazards planning investments made by Oregon’s counties and cities, as supported by the Department of Land Conservation and Development,<sup>12</sup> the Oregon Department of Agriculture’s deepening investments in soil health,<sup>13</sup> the Oregon Department of Forestry’s Climate Change and Carbon Plan completed in November 2021,<sup>14</sup> and the Oregon Watershed Enhancement Board’s (OWEB) 2022 Climate Resolution<sup>15</sup> and policy

---

<sup>9</sup> IPCC Special Report on Climate Change and Land: Summary for Policy Makers, Accessed May 22, 2022; <https://www.ipcc.ch/srccl/chapter/summary-for-policymakers/>

<sup>10</sup> Oregon Global Warming Commission. 2021 Natural and Working Lands Proposal. <https://www.keeporegoncool.org/s/2021-OGWC-Natural-and-Working-Lands-Proposal.pdf>

<sup>11</sup> <https://www.oregon.gov/energy/energy-oregon/pages/climate-change.aspx>

<sup>12</sup> <https://www.oregon.gov/lcd/CL/Pages/Climate-Change-Resources.aspx>

<sup>13</sup> KTVL News 10. "ODA, soil scientists say the future of Oregon farming is in dirt." By Malik Patterson. Published April 17, 2022. <https://ktvl.com/news/local/oregon-department-of-agriculture-is-working-on-improving-farmers-soil-climate-smart-commodities-healthy-trees-plants>

<sup>14</sup> Oregon Department of Forestry. *Climate Change and Carbon Plan*. As adopted by the Oregon Board of Forestry, Nov. 3, 2021. <https://www.oregon.gov/odf/forestbenefits/Documents/odf-climate-change-and-carbon-plan-draft.pdf>

<sup>15</sup> Oregon Watershed Enhancement Board. 2022 Climate Resolution. <https://www.oregon.gov/oweb/Documents/OWEB-Climate-Resolution-01-2022.pdf>

change requiring applicants requesting funding for habitat protection and restoration to provide information on expected climate mitigation outcomes of the project.<sup>16</sup>

**Data Driven:** Like many other states, Oregon does not have a complete inventory of greenhouse gas emissions and removals in Oregon’s natural and working lands, making Section 7 of SB 530 a worthwhile investment. The methodologies for completing these types of inventories, and the remote sensing and field work required for data capture have all progressed considerably in recent years. This innovation is well synthesized in a recent publication from the World Resources Institute (WRI).<sup>17</sup> Section 7 of the bill requires an inventory of net carbon sequestration and storage in the state’s natural and working lands to be created with the best available science and data. The Pacific Northwest has some of the most robust carbon data in the country for certain land/aquatic habitat types<sup>18</sup> and can successfully create a Natural and Working Lands (NWL) inventory based on the best available data and science. As a starting point, states can utilize disaggregated data from EPA’s National Greenhouse Gas Inventory of Emissions and Sinks, as well as EPA’s State Inventory Tool. As the inventory gets updated, improvements can be made based on state and region-specific data and research.<sup>19</sup> The methodologies for completing these types of inventories, and the remote sensing and field work required for data capture have all progressed considerably in recent years. This innovation is well synthesized in a recent publication from WRI that the Institute for Natural Resources intends to incorporate into its process.<sup>20</sup>

**Fosters a collaborative process, includes community impact metrics:** The bill (see Section 10) will harness the expertise of the OGWC newly formed NWL Advisory Committee which will include Tribal governments; local governments; forest products interests or organizations; agricultural interests or organizations; environmental justice interests; conservation interests; and technical service providers. The Committee’s charge will be to advise the OGWC on all substantive aspects of SB 530. This type of collaboration is in keeping with other state processes – from the Oregon Sage-Grouse Conservation Partnership<sup>21</sup> to the Oregon Health Authority’s model of cross-sector partnerships between Oregon’s coordinated care organizations and early learning hubs<sup>22</sup> - as well as Oregon’s Statewide Land Use

---

<sup>16</sup> Oregon Watershed Enhancement Board. *Climate-Related Technical Resources for OWEB Applicants*. As published July 15, 2021. <https://www.oregon.gov/oweb/Documents/Climate-Related-Technical-Resources.pdf>

<sup>17</sup> Natural & Working Lands Inventory Improvements: A Guide for States. Prepared by the World Resources Institute for US Climate Alliance states, September 2020, <https://static1.squarespace.com/static/5a4cfbfe18b27d4da21c9361/t/604652f0d82ffb5074df3b3d/1615221491785/Guide+to+NWL+Inventory+Improvements.pdf>

<sup>18</sup> See: <https://smithsonian.github.io/CCRCN-Pew-Project/analysis.html#oregon-state-report>

<sup>19</sup> See: <https://www.epa.gov/ghgemissions/state-ghg-emissions-and-removals>

<sup>20</sup> Natural & Working Lands Inventory Improvements: A Guide for States. Prepared by the World Resources Institute for US Climate Alliance states, September 2020, <https://static1.squarespace.com/static/5a4cfbfe18b27d4da21c9361/t/604652f0d82ffb5074df3b3d/1615221491785/Guide+to+NWL+Inventory+Improvements.pdf>

<sup>21</sup> Allen, Jennifer H.; Odell, Turner; Babcock, Julia; and Henrie, Charis, "Advancing Collaborative Solutions: Lessons from the Oregon Sage-Grouse Conservation Partnership (SageCon)" (2017). National Policy Consensus Center Publications and Reports. 9. <http://archives.pdx.edu/ds/psu/22055>

<sup>22</sup> Oregon Health Authority, *The State of Collaboration: A handbook for cross-sector partnerships between Oregon’s coordinated care organizations and early learning hubs*. April 2017.

Planning Goal 1 for citizen involvement.<sup>23</sup> Research suggests that conveners of collaborative initiatives should endeavor to define and adjust existing power relationships and structures to provide opportunities for differing cultural perspectives to be expressed, heard, and incorporated.<sup>24,25</sup> Additionally, the OGWC's call for community impact or social impact metrics is in keeping with an emerging line of inquiry in natural resource management.<sup>26</sup>

**Prioritizes jobs, economic development under state agency capacity constraints:** Given the economic inequality facing rural communities who live on and/or rely upon the state's natural and working lands<sup>27</sup>, the bill's charge (see Section 8) for the Oregon Department of Energy to, in coordination with the OGWC, study the workforce and training programs needed to support adoption of natural climate solutions on natural and working lands is a sound investment. This analysis will fill a needed gap in the state's understanding of the economic opportunities for valuing and enhancing the carbon in natural and working lands to benefit residents, landowners, local businesses, and whole Oregon communities.

**Leverages co-benefits provided by coastal habitats:** By including coastal/aquatic habitats in its comprehensive definition of natural and working lands, SB 530 recognizes the important services these ecosystems provide in both mitigating climate change as well as helping build resilience to climate impacts. Coastal wetlands, including eelgrass, tidal marsh, and forested tidal wetlands, sequester and store on a per-acre basis significant amounts of "blue carbon." Coastal habitats also serve as nurseries to most of the fish and shellfish species harvested in the United States. In Oregon, this includes salmon, steelhead, clams, oysters, and Dungeness crab, which in turn support more than 12,000 jobs.<sup>28</sup> These resources provide locally sourced food and first foods for Tribal people. Blue carbon habitats help lessen the effects of ocean acidification and safeguard coastal communities from more intense and frequent storms and floods.<sup>29</sup>

In the "Incorporating Coastal Blue Carbon Data and Approaches in Oregon's First Generation Natural and Working Lands Proposal" white paper, an informal expert work group created an inventory of annual sequestration provided by Oregon's coastal wetlands, estimates of overall carbon stored and

---

<https://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/BABIES/HEALTHSCREENING/ABCD/Documents/OHA-9410-HUB-CCO-Handbook-Final.pdf>

<sup>23</sup> Oregon Department of Land Conservation and Development, Statewide Land Use Planning Goal 1: Citizen Involvement. Accessed May 20, 2022. <https://www.oregon.gov/lcd/OP/Pages/Goal-1.aspx>

<sup>24</sup> Dandy, N, Fiorini, S & Davies, AL 2014, 'Agenda-setting and power in collaborative natural resource management', Environmental Conservation, vol. 41, pp. 311-320. <https://doi.org/doi:%2010.1017/S0376892913000441>

<sup>25</sup> Rapp, Claire. *Hypothesis and Theory: Collaborative Governance, Natural Resource Management, and the Trust Environment*, Frontiers in Communication, May 19, 2020, <https://doi.org/10.3389/fcomm.2020.00028>

<sup>26</sup> Alomoto et al. *Social Impact Assessment: A Systematic Review of Literature, Social Indicators Research, Social Indicators Research* 161, 225–250, October 16, 2021, <https://link.springer.com/article/10.1007/s11205-021-02809-1>

<sup>27</sup> Mechling, Audrey, A Portrait of Poverty in Oregon: The State of Working Oregon, Oregon Center for Public Policy, August 7, 2020. <https://www.ocpp.org/media/uploads/pdf/2020/08/Poverty-SWO-fnl.pdf>

<sup>28</sup> National Oceanic and Atmospheric Administration, "2017 Fisheries Economics of the United States," National Oceanic and Atmospheric Administration, accessed May 23, 2022, <https://www.fisheries.noaa.gov/national/sustainable-fisheries/fisheries-economics-united-states>.

<sup>29</sup> L. Beers et al., "Incorporating Coastal Blue Carbon Data and Approaches in Oregon's First Generation Natural and Working Lands Proposal" (working paper, submitted to the Oregon Global Warming Commission July 2021), <https://www.keeporegoncool.org/s/OR-NWL-bc-data-and-approaches-white-paper.pdf>



potential GHG benefits provided through restoration.<sup>30</sup> This analysis found that Oregon’s coastal wetlands sequester approximately 51,000 MT CO<sub>2</sub>E each year and hold approximately 83,700,000 MT CO<sub>2</sub>E in carbon stocks.

Identifying opportunities to better conserve and restore these carbon rich habitats would provide important contributions to Oregon’s climate goals, as well as offer significant co-benefits. For example, As noted in the white paper, **the carbon stocks of forested tidal wetlands in Oregon are on par with the old growth forests of the region** and are projected to be particularly resilient in the face of sea level rise.<sup>31</sup> Since carbon accumulation increases over time in these habitats, for every thousand acres that are restored, about 212,500 metric tons of CO<sub>2</sub> equivalent could be stored by 2050.<sup>32</sup> Given that Oregon has lost over 95% of its tidal forested wetlands due to extensive diking and vegetation conversion,<sup>33</sup> restoration of these habitats could play an important role in increasing carbon sequestration while also providing habitat for juvenile salmonids and delivering other important ecosystem services and ensuring the livelihoods of coastal families that are economically dependent on nature-based industries. The Oregon Coastal Management Program (DLCD) and the Pacific Northwest Blue Carbon Working Group are leaders in the policy and research arena regarding this important Oregon landscape.

### Recommendations for SB 530

**Create goals specific to the Natural and Working Lands Fund and/or agency sub-funds.** SB 530, Section 6, wisely directs the state to establish carbon sequestration goals for natural and working lands. However, goals related to the Funds created are missing. Section 4, where the Natural and Working Lands Fund is created, could establish a goal linking fund expenditures to progress in achieving the goals for natural and working lands. Sections 11-14 could establish agency-specific sub-fund goals to provide specific agency direction for expense reporting requirements, establish a metric specific to each agency sub-fund related to their jurisdiction and programs, and help illuminate agency-specific barriers to progress so that they can be addressed quickly by the legislature.

**Increase multi-agency coordination throughout the bill.** Overall, although SB 530 aims to direct all agencies to prioritize and implement NCS, it then limits the participation of land managing/planning agencies including DSL, OPRD, and DLCD in Section 6. These agencies are important for achieving the state’s natural and working lands goals. SB 530 should specifically name these agencies in the bill

---

<sup>30</sup> See page 50 of Beers, L., Troost, S., Clayton, A., Cornu, C., Crooks, S., Ruther, E., Theuerkauf, K., and Wade, H. (2021). *Incorporating Coastal Blue Carbon Data and Approaches in Oregon’s First Generation Natural and Working Lands Proposal*. [https://www.pnwbluecarbon.org/files/ugd/43d666\\_1859316df7ef415db84fd5d29f6b1d20.pdf](https://www.pnwbluecarbon.org/files/ugd/43d666_1859316df7ef415db84fd5d29f6b1d20.pdf)

<sup>31</sup> J.B. Kauffman et al., “Total Ecosystem Carbon Stocks at the Marine-Terrestrial Interface: Blue Carbon of the Pacific Northwest Coast, United States,” *Global Change Biology* 26, no. 10 (2020): 5679-92, <https://doi.org/10.1111/gcb.15248>.

<sup>32</sup> *Ibid.*

<sup>33</sup> Brophy, L.S. 2019. Comparing historical losses of forested, scrub-shrub, and emergent tidal wetlands on the Oregon coast, USA: A paradigm shift for estuary restoration and conservation. Prepared for the Pacific States Marine Fisheries Commission and the Pacific Marine and Estuarine Fish Habitat Partnership. Estuary Technical Group, Institute for Applied Ecology, Corvallis, Oregon, USA., [https://appliedeco.org/wp-content/uploads/Brophy\\_2019\\_Oregon\\_tidal\\_swamp\\_and\\_marsh\\_losses\\_FINAL\\_Dec2019.pdf](https://appliedeco.org/wp-content/uploads/Brophy_2019_Oregon_tidal_swamp_and_marsh_losses_FINAL_Dec2019.pdf)

language so they will also benefit from the inter-agency coordination and decision making described in Section 6.

**Direct agencies to fill data gaps for freshwater wetland extent and change over time.** Although the rate of loss has declined, Oregon is still losing wetlands,<sup>34</sup> and with them carbon storage services. Direct agencies including Department of State Lands to improve mapping and change over time data for other key natural lands that provide carbon storage services for the state, including freshwater wetlands (e.g., wet meadows, forested wetlands, peatlands) so the State's Wetland Inventory<sup>35</sup> can support NWL goals.

**Incorporate the State's land use planning agency to a greater extent.** Consider an increased role for the Department of Land Conservation and Development into policy and program changes in SB 530, specifically:

- Establish a Cities and Counties Climate Solution Fund in Section 3 within DLCD so the agency can leverage federal monies received through their Hazards Program (FEMA) and Coastal Management Program (NOAA). NCS project funding can be directed to counties/cities that regularly experience flooding hazards and lack capacity for nature-based solutions. This fund may also address lost revenue from existing landowner tax incentive programs (see pages 10-12 recommendations for HB 2527).
- Although this bill focuses on mitigation, adaptation is related, and often solutions address both issues. Whether or not a DLCD Cities and Counties Climate Solution Fund is created, DLCD should be added to Section 6 since they are the lead coordinator of the Climate Change Adaptation Framework, the central state hub for city and county coordination and assistance, and an agency that is central to implementing potential regulation to reduce heat islands, improve flood protection, and address coastal resilience as seas rise; all outcomes desired in Section 2.

**Improve inclusion of Tribal Nations in SB 530 to increase lateral coordination between all governments within Oregon's borders.** With deference to any consultation with Tribal Nations and the Legislative Commission on Indian Services (LCIS) that is or will be occurring in conjunction with this bill's progress, we encourage authors, co-sponsors, and committees of jurisdiction to:

- Consider traditional practices and knowledge from Tribal Nations that are known to sequester and store greenhouse gases in the definition of "natural climate solution" (Section 1) and within the scope of the inventory of net carbon sequestration and storage in the state's natural and working lands (Section 1). Increasing the role of Indigenous land management in reducing emissions, avoiding emissions associated with land conversion and enhancing carbon

---

<sup>34</sup> Per the 2000 Oregon State of the Environment Report, the most recent Oregon-government sponsored public citation for both tidal and freshwater wetland loss, Oregon has lost 68% of tidal wetlands and an estimated 38% of freshwater wetlands. See Oregon State of the Environment Report, 2000. (pp 21-27)  
<https://agsci.oregonstate.edu/sites/agscid7/files/eoarc/attachments/490.pdf>

<sup>35</sup> Oregon Department of State Lands. Statewide Wetlands Inventory. Accessed 1/17/2023  
<https://www.oregon.gov/dsl/WW/Pages/SWI.aspx>



sequestration and storage is an emerging best practice around the globe<sup>36</sup> and should be incorporated into this legislation. In Section 1 of the bill, consider adding "*and includes traditional stewardship practices or knowledge from the nine federally recognized Indian tribes in this state that are known to sequester and store greenhouse gases*" to the end of the bill's definition of "natural climate solution." Likewise, as a part (c) under subsection (1) of Section 7 of the bill, add "Include traditional stewardship practices or knowledge from the nine federally recognized Indian tribes in this state."

- Strengthen Tribal consent or consultation within the implementation of the bill's policies and programs. The 2021 Climate Commitment Act from Washington is instructive and relevant in its content.<sup>37</sup> The bill articulates clear steps toward consultation and collaboration with Tribes.<sup>38</sup> Although the bill's provisions specific to consent ultimately did not pass at this time<sup>39</sup>, encoding Tribal consent requirements within state government policies and programs that have direct or indirect bearing on Tribal ancestral lands is a worthwhile effort for states seeking conservation outcomes that embed equity considerations and honor the self-determination of Tribes.
- Provide specific incentives or capacity to Tribes for consultation on implementation of SB 530. As a supplement to the Climate Commitment Act, Washington legislators passed HB 1753 (2022) which established an enhanced process for Tribal consultation on spending decisions from accounts created in the legislation.<sup>40</sup> We suggest replication of this for SB 530.

**Seek equitable access to benefits provided by SB 530.** While the impacts of climate change affect everyone, people are not, and will not experience it equally.<sup>41</sup> Likewise, the benefits of environmental conservation are often not equally shared<sup>42</sup> and lack of attention to inequality can undermine desired conservation goals.<sup>43</sup> Therefore, future conservation initiatives must work to address disparities in both negative impacts and positive benefits.

- Ensure the Environmental Justice Council has a role in shaping implementation of SB 530. With deference to any collaboration with members of the environmental justice community (as

---

<sup>36</sup> Gebbie, et al (2021). "Empowering Indigenous land management through emissions reductions and the carbon economy." Published in Phys.org, November 1, 2021. <https://phys.org/news/2021-11-empowering-indigenous-emissions-reductions-carbon.html>

<sup>37</sup> 2021 Washington Legislative Session. SB 5126 (2021-220 Concerning the Washington climate commitment act. Session law: <https://lawfilesexternal.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/Senate/5126-S2.SL.pdf?q=20230109221105>

<sup>38</sup> *ibid*, Section 40, page 30.

<sup>39</sup> *ibid*, Section 6, page 17-18.

<sup>40</sup> 2022 Washington Legislative Session. Climate Commitment Act Funding - Tribal Consultation - <https://lawfilesexternal.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/House/1753-S.SL.pdf?q=20220623112249>

<sup>41</sup> EPA. 2021. Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts. U.S. Environmental Protection Agency, EPA 430-R-21-003 - [https://www.epa.gov/system/files/documents/2021-09/climate-vulnerability\\_september-2021\\_508.pdf](https://www.epa.gov/system/files/documents/2021-09/climate-vulnerability_september-2021_508.pdf)

<sup>42</sup> Schell, et al. (2020). Ecological and evolutionary consequences of systemic racism in urban ecosystems. *Science*. 369. <http://dx.doi.org/10.1126/science.aay4497>

<sup>43</sup> See Joan Hoffman (2017) Sustainability and inequality: confronting the debate, *International Journal of Urban Sustainable Development*, 9:3, 359-364, DOI: 10.1080/19463138.2017.1333004

See also Kirsten Henderson, Michel Loreau. Unequal access to resources undermines global sustainability, *Science of The Total Environment*, Volume 763, 2021, 142981, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2020.142981>

defined in HB 4077, 2022)<sup>44</sup> that is or will be occurring in conjunction with this bill's progress, we encourage bill authors, co-sponsors, and committees of jurisdiction to ensure the policies and programs within SB 530 are synthesized with HB 4077 to ensure the Environmental Justice Council has a meaningful, material role in shaping the implementation of SB 530.

- Set minimum thresholds for investments made to Tribes and environmental justice communities from the funds created by SB 530. Precedent for this type of equity structure for resources is growing. The Biden-Harris Administration, via Executive Order 14008, established a goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution.<sup>45</sup> Referencing Washington's Climate Commitment Act, that bill<sup>46</sup> included stipulation that "a minimum of not less than 35 percent and a goal of 40 percent of total investments that provide direct and meaningful benefits to vulnerable populations within the boundaries of overburdened communities..." and later, "a minimum of not less than 10 percent of total investments that are used for programs, activities, or projects formally supported by a resolution of an Indian tribe, with priority given to otherwise qualifying projects directly administered or proposed by an Indian tribe."<sup>47</sup> This type of equity-based prioritization for Tribal Nations and environmental justice communities should also be reflected in the structure of Section 8 of the bill regarding the study the workforce and training program needs to support adoption of natural climate solutions on natural and working lands.

**Modify the 'lands' definition.** The definition of 'lands' is broad, however relating the definition to specific terms used elsewhere in land use or tax law of the state could help agencies administer the requirements of the bill. Consider including the terms 'buffers', 'edges', 'fallow fields' to 'lands' definition. Add lands managed for conservation to the definition and reference 'special assessment' lands (ORS 308A) that contain tax incentive programs for privately owned lands, which may be recipients of agency sub-funds.

**Include additional areas of research that will aid implementation of NCS in Oregon.** Considerable gaps in knowledge exist for the following in relation to NCS implementation in Oregon. Consider adding these explicit research gaps to Section 2:

1. How Oregon's land use system and tax structure supports or could support voluntary NCS implementation on private land.
2. Finance mechanisms needed to increase state agency capacity and ability to secure federal and private investments in NCS.

---

<sup>44</sup> 2022 Oregon Legislative Session. House Bill 4077: Relating to environmental justice.

<https://olis.oregonlegislature.gov/liz/2022R1/Downloads/MeasureDocument/HB4077/Enrolled>

<sup>45</sup> Office of the President of the United States. Justice40 / Exec Order 14008 (2021)

<https://www.whitehouse.gov/environmentaljustice/justice40/>

<sup>46</sup> *Ibid* footnote 42, Section 26, pages 56-57.

<sup>47</sup> 2021 Washington Legislative Session. SB 5126 (2021-220 Concerning the Washington climate commitment act. Session law, Section 26, pp 56-57: <https://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/Senate/5126-S2.SL.pdf?q=20230109221105>

## SB 522: Relating to the Oregon Global Warming Commission

**Overview:** SB 522 changes the OGWC's name to the "Oregon Climate Action Commission". It also aims to codify updates to the state's greenhouse gas (GHG) emissions reduction goals from 2020 to 2035 accordingly. It amends membership of the Commission to include previously excluded stakeholder groups and state agencies. Lastly, it requires state agencies to submit an annual report to the Commission on their progress.

### Strengths

- **Modernizes the Commission and aligns existing statute language with SB 530.** The statute establishing the Commission is outdated in nomenclature, social values, and goals.
- **Implements recommendations of the Climate Adaptation Framework.** The increase in agency membership on the Commission implements a top recommendation from the state's Climate Adaptation Framework, which is to initiate a near-term leadership structure.<sup>48</sup> Lateral coordination at all levels of government is a prudent step to achieve successful climate resilience action.

### Recommendations for SB 522

- **Include representation from local government.** Impacts from a changing global climate are experienced locally and implementing many solutions will need to be implemented at the local level. While state agencies, including the Department of Land Conservation and Development<sup>49</sup>, are beginning to grapple with this dynamic, integrating local jurisdictions into state level discussion remains limited, which warrants the inclusion of local government into the Commission framework.

## HB 2527: Relating to wildlife habitat special assessment

**Overview:** HB 2527 amends the statute (ORS 308A)<sup>50</sup> governing the wildlife habitat special assessment to include more specificity regarding monitoring and assessment of enrolled landowners stewarding habitat. The concept allows technical resource entities, like Soil and Water Conservation Districts, to work with the Oregon Department of Fish and Wildlife to implement the requirements.

ORS 308A in general focuses on 'special assessments' that are applied to parcels that qualify and assessed at a lower tax rate than they otherwise would be including definitions and rules for assessing taxes on 'farm', 'wildlife', and 'riparian' private lands. It also addresses land zoned 'open space' and land that has 'conservation easements.'

Private lands that receive special assessments are poised to play a large role in helping Oregon achieve its NWL goals. Many landowners implementing Natural Climate Solutions will benefit from these existing incentive programs. However, several adjustments need to be made to align ORS 308A with SB 530 to support uptake of NCS by landowners.

---

<sup>48</sup> Climate Change Adaptation Framework. 2021. See pg. 7-8.

[https://www.oregon.gov/lcd/CL/Documents/2021\\_CLIMATE\\_CHANGE\\_ADAPTATION\\_FRAMEWORKandBlueprint.pdf](https://www.oregon.gov/lcd/CL/Documents/2021_CLIMATE_CHANGE_ADAPTATION_FRAMEWORKandBlueprint.pdf)

<sup>49</sup> Oregon Department of Land Conservation and Development. Climate Change Vulnerability Assessment. Accessed 1/17/2023 <https://www.oregon.gov/lcd/CL/Pages/Vulnerability-Assessment.aspx>

<sup>50</sup> Oregon Revised Statutes. Chapter 308A - Land Special Assessments (2021).

[https://www.oregonlegislature.gov/bills\\_laws/ors/ors308a.html](https://www.oregonlegislature.gov/bills_laws/ors/ors308a.html)

## Recommendations for HB 2527

ORS 308A, in general, and the Riparian and Wildlife special assessments, specifically, could be powerful tools for natural and working lands greenhouse gas reduction efforts in the state, especially if a new Fund, created via SB 530 or other legislation, continues to focus on funding voluntary private land conservation incentives. However, for landowners to take advantage of funded conservation incentives without being penalized by Oregon's property tax structure – for example what might occur if a landowner adds a buffer strip or restores a natural area or allows a field to fallow – improvements to both tax incentive programs and perhaps 308A broadly, via amendments to HB 2527, are needed to align with the aims of the Natural Climate Solutions bill and resulting state Fund. Here we provide recommendations by examining several problems with, and proposed solutions to, the status quo.

**Problem One: Tax penalties when implementing conservation practices like natural areas, fallow field, or buffers on private farm or forest land.** If a landowner chooses to participate in federal private lands incentive programs like EQIP or other programs offered by SWCDs, their participation can result in tax penalties in Oregon. To avoid this issue, often SWCD staff and the landowner work closely with ODFW to apply for the Wildlife and/or Riparian tax incentive programs in order to maintain the same tax deferral through these programs as their previous farm or forest tax deferral. If landowners are not able to enroll in these programs, the tax assessor of the county will assess the parcel or portion of the parcel (if allowed) at a higher rate, which results in substantially higher dollars owed. Federal programs that pay landowners as incentives often do not outstrip this burden. The same could occur with the potential Natural Climate Solutions Fund incentive programs if ORS 308A isn't modified.

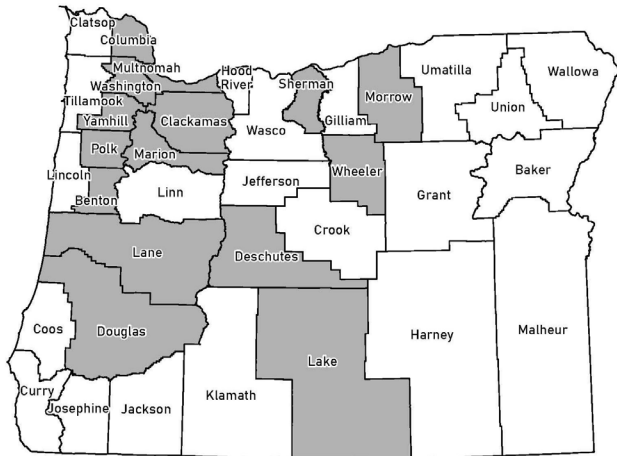
*Potential solutions via amendments to HB 2527:*

- **Add a new special assessment:** Sections of ORS 308A could be modified to include greenhouse gas reduction strategies as a special assessment in addition to 'farm', 'wildlife', and 'riparian' special assessment.
- **Change definitions:** Example includes changing definition of 'farm use' (308A.056) to include fallow land, buffer strips, or other practices that appear to be in 'non-active' use to encourage carbon sequestration and soil health.
- **Modernize 'Wasteland' section to 'Carbon Sequestering Lands':** Section 308A.074 (Wasteland qualifications) could be re-imagined for the benefits of NWL goals. Currently, the definition (308A.056(3)e) reads "Wasteland, in an exclusive farm use zone, dry or covered with water, neither economically tillable nor grazeable, lying in or adjacent to and in common ownership with farm use land and that is not currently being used for any economic farm use." Section 308A.074 currently requires an annual application to be assessed as 'nonexclusive farm use zone farmland'. Striking the definition, changing Section 308A.074 to 'Carbon Sequestering Lands' and potentially linking the annual application to the newly established Natural Climate Solutions Fund could be a solution while also solving the tax penalty issue specifically for 'wastelands.'
- **Create an 'exception' to the Disqualification Criteria.** Section 308A.113 currently describes when the tax assessor may remove land from farm special assessment, which is basically if it is no longer being actively used. Subsection 2 describes exceptions including flooding or severe drought. Carbon sequestration practices contributing to the state's NWL goals could be added as an exception and used as a qualifying factor for the NCS Funds/Programs.

**Problem Two: Geographic Extent of Programs.** Unlike the riparian program, which is automatically implemented statewide outside of urban growth boundaries, the wildlife habitat program is allowed within UGB boundaries, but relies **on counties opting in**. To date the adoption of the program has mainly occurred in counties along the I-5 corridor resulting in inequitable opportunity for landowners interested in participating.

*Potential solutions via amendments to HB 2527:*

- Amend ORS 308A.415-.418 to automatically enroll all counties in the Wildlife Habitat special assessment program, like the Riparian special assessment.



Non-participating Counties:  
 Baker, Clatsop, Coos, Crook, Curry, Gilliam, Grant, Harney, Hood River, Jackson, Jefferson, Josephine, Klamath, Lincoln, Linn, Malheur, Tillamook, Umatilla, Union, Wallowa, Wasco

Participating Counties  
 Benton, Clackamas, Columbia, Deschutes, Douglas, Lake, Lane, Marion, Morrow, Multnomah, Polk, Sherman, Washington, Wheeler, Yamhill

**Problem Three: Perceived loss of tax revenue for municipalities.** All the described special assessments in ORS 308A potentially reduce revenue for local government without any offset or additional opportunity to recover those losses. Historically, that has created opposition to some of the programs offered by the state.

*Potential solutions via amendments to SB 530:*

- Make cities and counties eligible for NCS Funds to incentivize participation in special assessment programs of ORS308A, offset perceived revenue lost from special assessments, while acknowledging critical role in meeting state’s climate goals.

**Additional Opportunity: Open Space Lands (308A.300-.330) and Conservation Easements (308A.450 to .465)**

Two additional special assessments could be leveraged to maximize NCS if SB 530 is amended to study their current use, approval process, and eligibility criteria. ORS 308A describes a process for non-public landowners to apply for ‘open space land’ special assessments which requires annual reporting. The purpose of the special assessment is to recognize the value of open space for multiple services and values described in ORS 308A.309 including promoting conservation and protecting air, streams, and water supplies. More in depth analysis is needed as well as coordination with relevant state agencies.

Additional analysis could include understanding how many landowners have applied for open space designation or even if they do so, if applications have been approved by the city or county governing body, as well as understanding open space lands typically are comprised of that are approved. Such an analysis may surface opportunities to leverage this section of ORS308A to help meet the state's goals around greenhouse gas sequestration for natural and working lands.

'Conservation easement' special assessments are also addressed in 308A and defined in ORS 271.715. Unlike 'open space land', conservation easement special assessments do not need city or county approval. Additional research would be helpful in order to understand how many conservation easement special assessments exist and whether there is opportunity to leverage this existing special assessment to help reach state NWL strategy goals.

-----

We hope the analysis above aids the conversation around SB 530, SB 522, HB 2527 and any other related legislative efforts. Thank you in advance for your consideration of Oregon's resilience and health in the face of a changing climate and exploration of carbon sequestration strategies that leverage Oregon's natural and working lands. For a deeper dive on the coastal habitat and blue carbon aspects of this issue area, we also invite you to [view Pew's primer on the subject](#) which includes a section highlighting Oregon's innovative work in this arena.

Sincerely,



Elizabeth Ruther  
Principal Associate  
The Pew Charitable Trusts



Bobby Hayden  
Associate Manager  
The Pew Charitable Trusts

To:

- Senator Jeff Golden, (Chair), members and staff of the Senate Committee on Natural Resources.
- Representative Ken Helm, (Chair), members and staff of the House Committee on Agriculture, Land Use, Natural Resources, and Water.

CC:

- Brad Kneaper, Chair, Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians
- Brenda Meade, Chair, Coquille Indian Tribe
- Delores Piglsey, Chair, Confederated Tribes of Siletz Indians of Oregon
- Cheryle A. Kennedy, Chairwoman, Confederated Tribes of Grand Ronde



- Carla Keene, Chair, Cow Creek Band of Umpqua of Indians
- Lindsey X. Watchman, Chair, Confederated Tribes of the Umatilla Indian Reservation
- Clayton Dumont, Chair, The Klamath Tribes
- Diane Teeman, Chairperson, Burns Paiute Tribe
- Jonathan W., Smith, Sr., Chairman, Confederated Tribes of Warm Springs
- Senate President Rob Wagner
- Senate Pro Tempore James I. Manning Jr.
- Democratic Leader Kate Lieber
- Republican Leader Tim Knopp
- Speaker Dan Rayfield
- Speaker Pro Tempore Paul Holvey
- Democratic Leader Julie Fahey
- Republican Leader Vikki Breese Iverson
- Members and staff of Joint Committee on Ways and Means Subcommittee on Natural Resources
- Geoff Huntington, Senior Natural Resources Advisor, Office of Governor Tina Kotek
- Karin Power, Natural Resources and Climate Advisor, Office of Governor Tina Kotek
- Patrick Flanagan, Executive Director, Legislative Commission on Indian Services
- Brenda Ortigoza Bateman, Ph.D., Director - Oregon Department of Land Conservation and Development
- Curt Melcher, Director, Oregon Department of Fish and Wildlife
- Lauren Henderson, Acting Director, Oregon Department of Agriculture
- Cal Mukumoto, State Forester, Oregon Department of Forestry
- Lisa Charpilloz Hanson, Executive Director, Oregon Watershed Enhancement Board (OWEB)
- Janine Benner, Director, Oregon Department of Energy
- Vicki Walker, Director, Oregon Department of State Lands
- Cathy Macdonald, Chair - Oregon Global Warming Commission

---

**From:** Kjellen Belcher <kbelcher@edf.org>  
**Sent:** Wednesday, January 25, 2023 7:52 PM  
**To:** Oregon GWC \* ODOE <Oregon.GWC@energy.oregon.gov>; Cathy Macdonald <cmacdonald@TNC.ORG>  
**Cc:** Julia DeGraw <julia@olcv.org>; Meredith Connolly <meredith.connolly@climatesolutions.org>; Angus Duncan <angusduncan99@gmail.com>; dheslam@earthadvantage.org; Pat DeLaquil <pdelaquil@gmail.com>; laura.tabor@TNC.ORG  
**Subject:** Joint comments on OGCW draft recommendations

Hello,

Attached, please find joint comments on OGWC's Updated Draft Recommendations for Roadmap to 2035 and Draft TIGHGER Actions Recommendations on behalf of Climate Solutions, Earth Advantage, Environmental Defense Fund, Metro Climate Action Team, Natural Resources Defense Council, The Nature Conservancy, and Oregon League of Conservation Voters.

Thank you so much,  
Kjellen

**Kjellen Belcher**  
*Manager, U.S. Climate Policy*

[kbelcher@edf.org](mailto:kbelcher@edf.org)  
T 415 293 6146

123 Mission St | San Francisco, CA 94105  
[EDF.org](https://www.edf.org) | [A vital Earth. For everyone.](#)

Follow us: [Facebook](#) | [Instagram](#) | [LinkedIn](#) | [Twitter](#)



This e-mail and any attachments may contain confidential and privileged information. If you are not the intended recipient, please notify the sender immediately by return e-mail, delete this e-mail and destroy any copies. Any dissemination or use of this information by a person other than the intended recipient is unauthorized and may be illegal.

**PDF Attachment follows -**

**Climate Solutions • Earth Advantage • Environmental Defense Fund  
Metro Climate Action Team • Natural Resources Defense Council • The Nature Conservancy  
Oregon League of Conservation Voters**

January 25, 2023

Oregon Global Warming Commission  
550 Capitol St. NE  
Salem, OR 97301  
[Oregon.GWC@Oregon.gov](mailto:Oregon.GWC@Oregon.gov)

**RE: Comments on Oregon Global Warming Commission's Updated Draft Recommendations for Roadmap to 2035 and Draft TIGHGER Actions Recommendations.**

Dear Commissioner Macdonald and Oregon Global Warming Commission Members,

Thank you for the opportunity to comment on Oregon Global Warming Commission's (OGWC) Updated Draft Recommendations for the Roadmap to 2035 and Draft TIGHGER Actions Recommendations. As organizations dedicated to an ambitious and equitable clean energy transition, we applaud the OGWC's efforts to update Oregon's climate goals to match the pace and scale of emissions reductions that the science tells us are needed to protect Oregonians from the most dangerous impacts of climate change.

**We strongly support OGWC's draft recommendation for updating Oregon's statutory climate targets to be 1) consistent with the best available science, and 2) aligned with the high level of climate leadership we are seeing from other West Coast states.** Updated climate targets must be consistent with the best available science, and we support aligning Oregon's climate targets with a pathway to limit average global temperature rise to 1.5 degrees Celsius. With less than a decade remaining to cut global greenhouse gas emission in half to avoid catastrophic and irreversible climate impacts, the urgency of the climate crisis has never been more stark. Oregonians are already experiencing dangerous climate and health impacts as a result of fossil fuel use, with communities of color, low-income households, and rural communities bearing a disproportionate burden.

**Therefore, we strongly support updated statutory emission reduction targets for greenhouse gas emissions reductions of at least 45% below 1990 levels by 2030, at least 70% below 1990 levels by 2040, and at least 95% below 1990 levels by 2050.** These targets would position Oregon as a bold climate leader by mirroring ambitious climate targets set by Washington and California, as well as mirroring the level of ambition of President Biden's nationally determined contribution (NDC) commitment to cut U.S. emissions in half from 2005 levels by 2030.

**Interim 2030 and 2040 targets are critical for keeping Oregon on pace and for driving near-term reductions in climate pollution.** As stated in the OGWC's draft recommendations, a goal of cutting emissions at least 45% below 1990 levels by 2030 is consistent with the best available science and

consistent with the level of ambition demonstrated by Oregon’s west coast neighbors—and the TIGHGER analysis demonstrates that there are substantial health and economic benefits if Oregon achieves this accelerated target. Swift near-term emissions reductions are critical, both for stabilizing the climate and because they can offer immediate public health co-benefits that will alleviate burdens for the most impacted communities. Near-term reductions also have the potential to provide significant economic benefits by encouraging early investment in clean energy and other emissions-reducing technologies. More ambitious targets and parallel climate protection programs will help position Oregon to be a leader in technological innovation and clean tech manufacturing, producing in demand for clean energy technologies that the entire world is seeking in the clean energy transition. **Including a 2030 goal—rather than a 2035 goal—is particularly important for keeping Oregon on track and holding polluters accountable in the next several years, which are a crucial window for securing deep reductions in climate pollution.**

The impact of long-lived greenhouse gas emissions in the atmosphere is cumulative; much of the pollution we are emitting into the atmosphere today will linger and continue to cause warming for decades to come, adding to the urgent need to cut emissions as soon as possible. Analysis by OGWC staff found a cumulative difference of approximately 16.5 MMT CO<sub>2</sub>e between a 90% and 95% target in 2050. **Based on differences in cumulative climate pollution, we urge OGWC to set a 2050 target of reducing emissions at least 95%—rather than 90%—below 1990 levels.**

**We support studying and setting a separate, additional net-zero or net-negative goal, as a complement to ambitious targets that require an absolute reduction in anthropogenic emissions.** As stated in the draft recommendations, a net-zero or net-negative goal should be achieved as soon as possible and no later than 2050, and should be “separate from and in addition to” targets for reducing sector-based emissions.

**We strongly support recommendations that support adaptive management of climate targets to ensure that targets remain consistent with the best available science. We also support adaptive management of climate programs and policies over time to ensure that Oregon is on track to achieve updated climate targets.** Future study and analysis are needed to ensure ambitious climate action over time, and the OGWC has a key role to play as a focal point for analysis, coordination, and future recommendations. OGWC’s recommendations for strengthened governance and accountability for climate action will help support OGWC in fulfilling this critical role and in keeping Oregon on track to translate accelerated climate targets into action that delivers the necessary emissions reductions.

**Oregon’s climate programs and regulations must be expanded and accelerated in order to put the state on track to achieve accelerated climate targets in line with the best available science.** This will require an increase in the ambition of existing programs to ensure alignment with more ambitious statutory targets, as well as new regulations to fill in any gaps and ensure that Oregon can meet or exceed its climate targets. For OGWC’s first recommendation—to support continued implementation of existing climate programs and regulations—it is important to acknowledge that both: 1) existing programs may need to achieve a higher level of ambition to reflect updated targets, and 2) additional

complementary policies are needed to ensure strong implementation of existing programs. Programs like the Climate Protection Program and HB 2021 operate in tandem with other policies that drive emissions reductions. For example, while the Climate Protection Program sets an enforceable cap on emissions from transportation and natural gas fuels, complementary policies are needed to ensure an equitable, affordable transition.

**We strongly support the draft recommendation and sub-recommendations to position Oregon to take full advantage of federal investments in climate action.** Doing so will reduce the costs and increase the benefits of the clean energy transition, allowing us to cut dangerous climate pollution even faster while creating concrete benefits in households and communities. The federal Inflation Reduction Act positions the U.S. for a significant ramp-up in clean energy deployment, providing a glidepath for states to raise their climate ambition. These investments offer a golden opportunity for states to supercharge progress on clean economic growth, lower energy costs, and reduce harmful air and climate pollution.

We can also expect additional positive spillover effects from new federal funding. EDF analysis has found that key climate finance programs in the Inflation Reduction Act could unleash [ten times greater investments](#) from the private sector in climate and clean energy solutions. But in order for that private sector investment to materialize, Oregon must provide confidence and certainty that that state's economy is on a swift, consistent pathway for reducing emissions. **Updating Oregon's climate targets—and providing certainty that they will be achieved—is an essential step forwards for both maximizing the amount of Inflation Reduction Act funding that Oregon receives, and for catalyzing additional investment from the private sector.**

**In evaluating specific types of climate action through the TIGHGER analysis, we recommend performing a simple overlay analysis to indicate where new federal funding is available for investment in specific actions.** By noting where federal investments are available, the analysis can provide an additional level of detail to the cost-effectiveness metric for specific climate actions—indicating that with successful implementation of federal funds, an action may have a higher level of cost-effectiveness than indicated by the TIGHGER analysis.

**Where possible, we also recommend specifying relevant decision-making bodies for specific climate actions included in the analysis.** This would make the analysis more actionable, and would help various stakeholders and decision makers to better understand who has the necessary tools for moving a given action forwards. It is critical that relevant agencies are required to meet the state's updated climate goals. Therefore, we also urge the Commission to seek a durable, binding directive that the agencies with responsibilities for executing these actions must adopt goals, milestones, and policies sufficient to achieve Oregon's climate targets. We further urge that implementing agencies be required to report to the Commission regularly on their progress in achieving milestones, obstacles they have encountered, and plans or tools needed to navigate these obstacles. The Commission can then report to the Governor and Legislature on the cumulative picture of climate policy compliance.

**We also want to emphasize the critical importance of co-benefits as a metric in any kind of ranking or prioritization of individual climate actions evaluated by TIGHGER.** The true value of co-benefits from specific climate actions is difficult to quantify and is likely underestimated. Co-benefits of climate action provide important community benefits, especially in communities that have historically been overburdened by environmental health hazards. Actions with high co-benefits can have a strong climate equity nexus, and that connection should be better weighted in their prioritization.

**Lastly, we recommend updating the draft TIGHGER Actions Recommendation Memo (and related materials) to be even clearer that *all* of the evaluated actions need to be implemented to meet the accelerated 2030 greenhouse gas emissions reduction goal.** Prioritization of actions is useful, but it's important to be clear that the question is not *which* of these actions to undertake—instead, the question is how to develop a strategy that ensures successful implementation of as many of the actions as possible, as soon as possible, in a way that ensures benefits (including co-benefits) are equitably distributed.

Thank you for considering these comments on the Updated Draft Recommendations for the Roadmap to 2035 and on the Draft TIGHGER Actions Recommendations. We look forward to continued work to secure ambitious, updated statutory climate targets, alongside the expanded policies and programs that will put Oregon on track to achieve them.

Sincerely,

Meredith Connolly, Oregon Director  
**Climate Solutions**

David Heslam, Executive Director  
**Earth Advantage**

Kjellen Belcher, U.S. Climate Manager  
**Environmental Defense Fund**

Brett Baylor, Rick Brown, Linda Craig, Pat DeLaquil, Dan Frye, Debby Garman, KB Mercer, Michael Mitton, Rich Peppers, Rand Schenck, Jane Stackhouse, and Catherine Thomasson  
**Metro Climate Action Team Steering Committee**

Angus Duncan, PNW Consultant  
**Natural Resources Defense Council**

Laura Tabor, Climate Action Director  
**The Nature Conservancy**

Julia DeGraw, Coalition Director  
**Oregon League of Conservation Voters**





# Oregon

Tina Kotek, Governor

Oregon Department of Transportation

Policy, Data and Analysis Division, MS 11

355 Capitol St NE

Salem, OR 97301-3871

**TO: Cathy Macdonald, Chair, Oregon Global Warming Commission  
Alan Zelenka, Assistant Director for Planning and Innovation, ODOE**

**FROM: Suzanne Carlson, Climate Office Director**

**SUBJECT: ODOT Comments, Updated Draft Recommendations for Roadmap to 2035**

**DATE: 1/30/2023**

Thank you for the opportunity to comment on the Updated Draft Recommendations for Roadmap to 2035 report. Oregon Department of Transportation (ODOT) and other transportation agencies recognize the climate crisis: in Oregon, about 35 percent of GHG emissions come from transportation, and many actions are needed to address the crisis. Our climate is already changing, with more frequent and intense wildfires, floods, landslides, heat waves, winter storms and extreme weather challenging our state and transportation system. ODOT recognizes the hard work that has gone into the Roadmap to 2035. Together with partner agencies, we continue our commitment to shared emissions reduction work.

ODOT comments on the draft recommendations are as follows:

- ODOT has developed key actionable plans: the Oregon *Statewide Transportation Strategy, a 2050 Vision for Transportation Greenhouse Gas Emission Reduction*, or STS, is Oregon's state-level transportation emissions reduction strategy that comprehensively examines the sector and identifies actionable GHG emissions reduction strategies in transportation systems, vehicle and fuel technologies, and urban land use patterns. The Every Mile Counts multi-agency partnership is an existing long-term commitment to collaborative climate action between ODOT, DLCDC, DEQ and ODOE to implement the STS. This coordination includes Directors and commissions of each agency and ensures that the agencies are reducing GHG emissions, prioritizing equity and jointly leverage resources. We encourage focus on implementation and existing frameworks, with less focus on additional studies and goal setting. ODOT leads on transportation emissions reduction and will be a key partner in the Action Implementation Plans.
- ODOT is releasing a comprehensive multi-agency transportation emissions website, reporting on STS implementation, in March 2023. We recommend that this state transportation emissions website report be referenced as a key resource that guides Oregon transportation climate action. This website creates accountability, transparency, and guidance for future decision-making and addresses the goals of Recommendation 5, Strengthen governance and accountability for Oregon climate action. Further, we recommend that statewide transportation sector progress should be consistent with ODOT's STS analysis and monitoring work, and suggest TIGHGER forecast assumptions be aligned with ODOT tools used to monitor progress. Additionally, we recommend

reducing duplication and reporting requirements where participating agencies already manage target setting, reporting and evaluation.

ODOT celebrates the Roadmap to 2035 work and strategies that can get us even closer to our goals, faster. We are committed to working in partnership to reduce transportation emissions and help achieve Oregon's climate goals. The agency welcomes the opportunity to support and partner on the Roadmap to 2035 as we continue our commitment to greenhouse gas reduction.



# Oregon

Tina Kotek, Governor

Department of Land Conservation and Development

635 Capitol Street NE, Suite 150

Salem, Oregon 97301-2540

Phone: 503-373-0050

Fax: 503-378-5518

[www.oregon.gov/LCD](http://www.oregon.gov/LCD)

January 27, 2023



To: Cathy Macdonald, Chair, Oregon Global Warming Commission

From: Matt Crall, Planning Services Division Manager, DLCD

Copies to: Brenda Bateman, Director, DLCD  
Kirstin Greene, Deputy Director, DLCD  
Palmer Mason, Sr. Policy Advisor, DLCD  
Alexis Biddle, Legislative and Policy Coordinator, DLCD

**Subject: Roadmap to 2035 Recommendations**

Dear Ms. Macdonald and the Oregon Global Warming Commission,

Thank you for providing the Department of Land Conservation and Development (DLCD) the opportunity to provide feedback to the Oregon Global Warming Commission's Draft Recommendations for Roadmap to 2035 report.

DLCD carries out the vision and legacy of Senate Bill 100, which for nearly 50 years has contributed to the quality and character of the natural and built environment of the state. The program has been charged by the Legislature with managing urban growth; protecting farm, forest, and natural resource lands; and providing for safe, livable communities in concert with the vision of the local communities. Under the statewide land use planning program, cities and counties are required to adopt and maintain comprehensive plans and implementing zoning codes consistent with 19 statewide planning goals. Recognizing that each city and county has unique values and aspirations, DLCD provides planning guidance and technical assistance to help communities plan for their future while considering the needs of the region and the state.

The Roadmap to 2035 Report and its actions and recommendations throughout are highly relevant to the statewide land use planning program that should be a strong consideration for the report. DLCD is working to reduce climate pollution and create more livable and equitable communities in Oregon by modernizing the way we plan for community development, transportation, and housing. DLCD maintains greenhouse gas reduction targets for Oregon's metropolitan areas where most Oregonians live and work. In partnership with the Oregon Department of Transportation, DLCD is working directly with local governments, offering grants and technical assistance to help them meet these greenhouse gas reduction targets. DLCD and the Oregon Department of Transportation (ODOT) are committed to providing financial and technical assistance for community implementation of the program. The departments have secured nearly \$19 million to support implementation. DLCD is seeking additional resources.

DLCD requests that the recommendations included in the Draft Roadmap to 2035 report clarify the following:

- 1) Policies and targets alone will not reduce emissions. The successful implementation of climate programs are a key factor as well. We respectfully request that your recommendations provide more detail on the implementing programs that will meaningfully reduce climate pollution and less focus on the need for additional studies and goal setting. Oregon's state agencies are willing and able to integrate our climate programs and add value to the Roadmap to 2035 through sector specific implementation plans. We would like to see more details provided on existing opportunities for implementation within the top tier actions.
- 2) Climate change is one of the most complex issues facing us today. It involves many dimensions and will require a comprehensive effort across all levels of government and private sector to solve. Please provide more clarity that the list of top tier actions rests on top of all the other things that the state is already working on. While those actions are not highlighted in the recommendations, they are also critical to meeting our climate goals. Please include specific references to these programs, such as Climate Friendly and Equitable Communities, so that the state is better positioned to compete for federal funding.
- 3) The transportation sector is responsible for the largest share of greenhouse gas emissions in Oregon, 35 percent in 2019. For the past 4 years, DLCD in partnership with ODOT, the Department of Environmental Quality, and the Department of Energy have been working collaboratively to help the state get back on track with meeting our transportation sector greenhouse gas emission reduction goals through implementing the Oregon Statewide Transportation Strategy. This cross-agency partnership will be soon releasing a transportation emissions reduction dashboard to help inform transportation sector specific actions. We would appreciate if this work was specially called as the definitive source for transportation sector emission reductions tracking.
- 4) There is a section of the report that calls for more research. Please remove mention of land use and local transportation-related policies. These are already based upon a substantial body of evidence quantifying their benefits and co-benefits.
  - a. It is well documented that increasing residential densities and mixed-use neighborhoods result in the co-benefits of improved air quality, household energy savings, increased physical activity, enhanced pedestrian and traffic safety, improved public health outcomes, and improved social equity outcomes. Land use is an enabling action that underpin several of the other transportation specific actions called out in the report.
  - b. DLCD and ODOT are currently implementing several of these actions through the Climate-Friendly and Equitable Communities program. This work centers first on land use changes that are necessary to set the table for other transportation policies and programs. We are actively working with local governments to implement strategies that will result in increased residential densities, car share, and micro-mobility.

**We also want to emphasize the critical importance of co-benefits as a metric in any kind of ranking or prioritization of individual climate actions evaluated by TIGHGER.** The true value of co-benefits from specific climate actions is difficult to quantify and is likely underestimated. Co-benefits of climate action provide important community benefits, especially in communities that have historically been overburdened by environmental health hazards. Actions with high co-benefits can have a strong climate equity nexus, and that connection should be better weighted in their prioritization.

**Lastly, we recommend updating the draft TIGHGER Actions Recommendation Memo (and related materials) to be even clearer that *all* of the evaluated actions need to be implemented to meet the accelerated 2030 greenhouse gas emissions reduction goal.** Prioritization of actions is useful, but it's important to be clear that the question is not *which* of these actions to undertake—instead, the question is how to develop a strategy that ensures successful implementation of as many of the actions as possible, as soon as possible, in a way that ensures benefits (including co-benefits) are equitably distributed.

Thank you for considering these comments on the Updated Draft Recommendations for the Roadmap to 2035 and on the Draft TIGHGER Actions Recommendations. We look forward to continued work to secure ambitious, updated statutory climate targets, alongside the expanded policies and programs that will put Oregon on track to achieve them.

Sincerely,

Meredith Connolly, Oregon Director  
**Climate Solutions**

David Heslam, Executive Director  
**Earth Advantage**

Kjellen Belcher, U.S. Climate Manager  
**Environmental Defense Fund**

Brett Baylor, Rick Brown, Linda Craig, Pat DeLaquil, Dan Frye, Debby Garman, KB Mercer, Michael Mitton, Rich Peppers, Rand Schenck, Jane Stackhouse, and Catherine Thomasson  
**Metro Climate Action Team Steering Committee**

Angus Duncan, PNW Consultant  
**Natural Resources Defense Council**

Laura Tabor, Climate Action Director  
**The Nature Conservancy**

Julia DeGraw, Coalition Director  
**Oregon League of Conservation Voters**

**From:** Amo Dylan <Dylan.Amo@oregonlegislature.gov>  
**Sent:** Monday, January 30, 2023 11:42 AM  
**To:** Oregon GWC \* ODOE <Oregon.GWC@energy.oregon.gov>  
**Subject:** Greenhouse Gas Emission

Morning-

Can you get me some historic data and projection models on Oregon's Greenhouse Gas Emission? I am sure you have it ... I just can't find it on the commissions website.

Thanks in advance,

Dylan



**Dylan Amo**

Policy Analyst  
Senate Republican Office  
900 Court St NE, S-323  
Salem, OR 97301  
[Dylan.Amo@oregonlegislature.gov](mailto:Dylan.Amo@oregonlegislature.gov)  
(O): (503) 986-1950 (C): (503) 724-3831

**Policy Areas:**

Senate Committee On Energy and Environment  
Senate Committee On Natural Resources  
Joint Committee On Transportation  
Joint Committee On The Interstate 5 Bridge

Please note that all emails sent to and from this email may be subject to disclosure under public records law.



Comment submitted to OGWC,

Apologies for getting to these recommendations so late, but after too abbreviated a review I am moved to express very great disappointment in one critical aspect of the tiered recommended actions. Oregon's largest and most persistently immovable emissions sector is transportation, yet the tiered priority actions directed here fall far short of what's necessary to bring these emissions under control. In my read there are NO transportation actions in Tier One. Tier Two references include only Amtrak ridership and car-sharing. Tier Three adds "mode shift from Heavy/Medium Duty Trucks to Light-Duty Trucks." Discussion of "congestion pricing" (Note: NOT a GHG-reduction measure!) and shifting transit and "off-road vehicles" to electricity only show up as study<sup>2</sup> subjects. There is no mention of overall Oregon vehicle fleet conversion to electricity, or the deployment of charging infrastructure and the alignment of electric utility practices to enable this conversion. There is no discussion of increasing transit service levels or targeting them to low-income neighborhoods, There is no discussion of developing residential and commercial development densities along transit corridors to the advantage of riders and transit economics both. There is no recognition that pending freeway transportation capital projects may slow GHG reduction progress by inducing greater light-duty vehicle traffic while imposing huge opportunity costs on a GHG-light transportation strategy. There is no discussion of modifying prevailing transportation revenue raising and allocation practices and laws to shift incentives to lower-GHG options including transit/bike/ped projects. Altogether, and unless I'm missing some important qualifier, this is a disappointing set of OGWC priorities that represents a step backward from the last 15 years and more of Oregon GHG-reduction strategies.

**Angus Duncan**  
**PNW Consultant**  
**Natural Resources Defense Council**  
**2381 NW Johnson St**  
**Portland, OR 97210**  
**503.248.7695**  
[angusduncan99@gmail.com](mailto:angusduncan99@gmail.com)