



August 18, 2025

To: Department of Ecology, State of Washington

Re: Proposed Revisions to U.S. Forest Protocol

The Institute for Policy Integrity at New York University School of Law (Policy Integrity)¹ respectfully submits the following comments to the Department of Ecology of the State of Washington (the Department) regarding its proposed revisions to its U.S. Forest Protocol (the Protocol). Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.

Under Washington’s cap-and-invest program, covered entities must surrender carbon allowances to cover their greenhouse gas emissions for each compliance period.² These entities can surrender carbon offsets instead of allowances to meet a limited portion of their compliance obligations (up to 8% in the first compliance period and 6% thereafter).³ Projects that generate offsets must result in “real, permanent, quantifiable, verifiable, and enforceable” emissions reductions or removals.⁴

The Department establishes the protocols that projects must follow to generate carbon offsets eligible for use in its cap-and-invest program.⁵ The Department currently seeks public comment on proposed revisions to one of these protocols, the U.S. Forest Protocol.⁶ Policy Integrity offers the following recommendations:

- The Department should not shorten its minimum commitment period of 100 years for both emissions reductions and removals. (Topic 8)
- The Department should ensure that its revisions to the method for calculating buffer pool contributions would not reduce the buffer pool’s overall size. (Revision 6)
- The Department should not allow project developers to buy insurance instead of making buffer pool contributions. (Topic 5)

¹ This document does not purport to present the views, if any, of New York University School of Law.

² *Washington’s Cap-and-Invest Program*, STATE OF WASH. DEP’T OF ECOLOGY, <https://perma.cc/4NM7-2E2X>.

³ See RCW 70A.65.170(3)(a)–(b), (e).

⁴ RCW 70A.65.170(2)(b)(i).

⁵ RCW 70A.65.170(1).

⁶ *Chapter 173-446 WAC – Cap-and-Invest Offsets – US Forest Protocol*, STATE OF WASH. DEP’T OF ECOLOGY, <https://perma.cc/MCZ4-3QC7>.

- To the extent that it has not done so already, the Department should use relevant peer-reviewed literature to inform improvements to the Protocol.

I. The Department should not shorten its minimum commitment period of 100 years for both emissions reductions and removals. (Topic 8)

While the Protocol has required “that removal enhancements must be maintained and monitored for a minimum of 100 years,” the Department notes that several methodologies in the voluntary carbon market have shorter minimum commitment periods, such as 40 years.⁷ According to the Department, the longer commitment period “poses a barrier to enrollment for many landowners.”⁸ Nonetheless, the Department should not lower its minimum commitment period. (Although the summary of the proposed revisions discusses “removal enhancements” only,⁹ the Department should also keep the higher minimum commitment period for offsets associated with emissions reductions, as it appears to have done in the draft protocol.¹⁰)

As the Department explains, under the Washington Climate Commitment Act, offsets used in Washington’s cap-and-invest program must be permanent, and a shorter minimum commitment period would violate this requirement.¹¹ At least one other compliance market, the U.K. Emissions Trading System, has required a longer minimum commitment period of 200 years for carbon removal offsets that regulated entities can use to meet their compliance obligations.¹² From a scientific standpoint, even a 100- or 200-year minimum commitment period may be insufficient, since a carbon dioxide molecule can remain in the atmosphere for thousands of years, contributing to climate change throughout that timeframe.¹³

⁷ *Proposed Revisions to Ecology’s US Forest Protocol: Draft for Public Comment*, STATE OF WASH. DEP’T OF ECOLOGY 25 (July 15, 2025), <https://perma.cc/987D-RZNU> [hereinafter *Proposed Revisions Summary*].

⁸ *Id.*

⁹ *See id.*

¹⁰ *See Draft U.S. Forest Protocol*, STATE OF WASH. DEP’T OF ECOLOGY 25, <https://perma.cc/D6WB-83MM> (“Project Operators must monitor and verify a Forest Project for a period of 100 years following the issuance of offsets for [greenhouse gas] reductions or removals achieved by the project.”).

¹¹ *See Proposed Revisions Summary*, *supra* note 7, at 25; *see also* RCW 70A.65.170(2)(b)(i). As another rationale for its decision to maintain a 100-year minimum commitment period, the Department highlights its statutory obligation to “seek to enter into a linkage agreement with other jurisdictions” (in particular, California and Québec) and the value of ensuring compatibility and consistency regarding “key offset attributes” among these jurisdictions (both California and Québec require a minimum commitment period of 100 years). *Proposed Revisions Summary*, *supra* note 7, at 25. As a previous comment letter from Policy Integrity implies, a desire for consistency among linked jurisdictions’ requirements should not stop the Department from using the linkage negotiations to advocate for higher offset integrity standards where California’s and Québec’s standards fall short. *See* Inst. for Pol’y Integrity, Comment Letter on Cap-and-Invest Program: Linkage Agreement 2–4 (Mar. 31, 2025), <https://policyintegrity.org/projects/update/comments-to-the-wa-dept-of-ecology-on-cap-and-invest-market-linkage>.

¹² *See* U.K. Gov’t et al., *Integrating Greenhouse Gas Removals in the UK Emissions Trading Scheme: Main Response 4*, 19 (July 2025), <https://perma.cc/J8CW-X8TA>.

¹³ *See* David Archer et al., *Atmospheric Lifetime of Fossil Fuel Carbon Dioxide*, 37 ANN. REV. OF EARTH AND PLANETARY SCIENCES 117, 131 (2009), <https://perma.cc/JJD5-XGXX>; Kaya Axelsson et al., *Oxford Principles for Net Zero Aligned Carbon Offsetting*, UNIV. OF OXFORD SMITH SCH. OF ENTER. AND THE ENV’T 20 (revised Feb. 2024), <https://perma.cc/D79G-HTEU>; *see also* Erin Shortell & Chris Holt, *Demystifying the Voluntary Carbon*

Ideally, Washington’s cap-and-invest program and other carbon markets will move towards more transparent communication and valuation of risks that can affect carbon credit integrity, including permanence. For example, alongside the minimum commitment period, the Department could set uncertainty thresholds to specify what level of uncertainty is acceptable for offsets surrendered in place of allowances. To illustrate, the Department might determine that regulated entities can surrender offsets instead of allowances for the specified portion of their compliance obligations only if those offsets are determined to have a 5% or lower risk of reversal, non-additionality, or leakage over a given timeframe (for instance, 100 years). Alternatively, the Department could estimate the present value of imperfect offsets relative to the social cost of carbon, thus measuring these offsets’ effects on social welfare rather than physical emissions. For example, if an imperfect offset is worth 10% of a perfect offset in terms of social welfare, a regulated entity could surrender ten such offsets instead of a single allowance representing the right to emit one metric ton (up to the 6% or 8% of compliance obligations the entity can satisfy by using offsets).¹⁴ Policy Integrity will soon release a report that explains these concepts in greater detail. In any case, the shorter the commitment period, the greater the risk that the emissions reductions or removals represented by offsets lack permanence.

II. The Department should ensure that its revisions to the method for calculating buffer pool contributions would not reduce the buffer pool’s overall size. (Revision 6)

For each offset issuance under the Protocol, project developers must contribute a portion of the issued offsets to the buffer pool, which “function[s] as an insurance mechanism to guard against unintentional reversals, such as fire, disease, natural disasters, or proponent insolvency.”¹⁵ The Department is weighing two changes to the required buffer pool contributions under the Protocol; “[t]aken together, these revisions are intended to more accurately reflect the risk of carbon loss within the project area and increase the incentive for project proponents to implement risk mitigation measures.”¹⁶

First, instead of using default buffer pool contributions to account for wildfire and disease risk, the Department “is considering revising the buffer pool contributions in this protocol to assess wildfire and disease risk at a more localized level” and “is also considering increasing average buffer pool contributions in the program.”¹⁷ These revisions would seemingly occur through changes to the modeling and formulas used to calculate these risks, which would increase the maximum

Market: An Overview of the Market’s Inner Workings, INST. FOR POL’Y INTEGRITY 28–30 (Feb. 2025), <https://policyintegrity.org/publications/detail/demystifying-the-voluntary-carbon-market>.

¹⁴ A firm that surrendered ten such imperfect offsets would not perfectly counteract one metric ton of emissions; instead, it would offset the damages—in social welfare terms—of one ton of emissions. This option would introduce a minor mismatch between carbon allowances (which relate to physical emissions impact) and carbon offsets under this equivalence framework (which relate to social welfare). Nonetheless, this situation may be more desirable than a scenario where regulated entities submit low-integrity offsets that, in reality, represent significantly less than one metric ton of emissions reductions or removals in place of carbon allowances.

¹⁵ *Proposed Revisions Summary*, *supra* note 7, at 8.

¹⁶ *Id.* at 9.

¹⁷ *Id.* at 8–9.

contribution to account for wildfire risk from 4% to 12% and the maximum contribution to account for disease risk from 3% to 8%.¹⁸

At the same time, the Department states that the “revision also significantly increases the wildfire and disease buffer contribution *reductions* that a project can receive for comprehensive, approved, implemented, and verified risk reduction work.”¹⁹ As the Department suggests, it likely makes sense to incentivize project developers to mitigate the risks of reversals due to wildfire and disease,²⁰ though greater clarity from the Department on the types of risk mitigation measures available would better enable the public to evaluate the implications of this proposed revision.

Importantly, these two proposed revisions could have opposite effects on the buffer pool’s size. On its own, the first revision (changing the modeling and formulas to calculate wildfire and disease risk and thereby increasing the maximum buffer pool contributions to account for each type of risk) would probably increase the size of the buffer pool. By contrast, the second revision (allowing project developers to lower their buffer pool contributions by implementing risk mitigation measures) could lower some project developers’ contributions. It is thus unclear whether these two revisions could, on net, decrease the overall size of the buffer pool.

The Department should ensure that these revisions could not end up shrinking the buffer pool. Notably, researchers have identified severe deficiencies in the size of the buffer pool for California’s forest offset program.²¹ Because the Department adopted this Protocol from California’s cap-and-trade program,²² the Department’s Protocol might have the same problem. The buffer pool exists to replace offsets associated with emissions reductions or removals that are reversed after issuance due to wildfire, disease, and other causes (that is, emissions reductions or removals that turn out not to be permanent).²³ The smaller the buffer pool, the greater the risk that the offsets used in Washington’s cap-and-invest program do not represent the permanent emissions reductions or removals required by the Washington Climate Commitment Act.²⁴

III. The Department should not allow project developers to buy insurance instead of making buffer pool contributions. (Topic 5)

The Department has also evaluated a revision to allow project developers to buy insurance to protect against reversal risks like wildfire and disease instead of contributing to the buffer pool.²⁵

¹⁸ See *id.*

¹⁹ *Id.* at 9.

²⁰ See *id.*

²¹ See Grayson Badgley, *Fire threatens the integrity of California’s forest offset program*, CARBONPLAN (Feb. 8, 2024), <https://perma.cc/RZ4W-54RP> (“Collectively, fires have destroyed nearly 11 million offset credits in California’s program. But the buffer pool, meanwhile, had only set aside a little more than six million credits to compensate for losses from wildfire. Even more concerning, those six million credits were meant to protect the program for the next 100 years. The program has literally burned through that reserve in a mere decade.”).

²² *Cap-and-Invest offsets*, STATE OF WASH. DEP’T OF ECOLOGY, <https://perma.cc/Q56V-MNA3> (“What categories of projects are qualified to issue credits under Cap-and-Invest?”).

²³ See Proposed Revisions Summary, *supra* note 7, at 8; Shortell & Holt, *supra* note 13, at 29.

²⁴ See RCW 70A.65.170(2)(b)(i).

²⁵ See Proposed Revisions Summary, *supra* note 7, at 23.

In explaining possible downsides to making this revision, the Department enumerates several concerns. To begin with, the Department states that “the forest carbon insurance market appears to be largely speculative” and that “policies do not appear to be widely available.”²⁶ Even if policies were available, the Department emphasizes that “safeguards would be needed to ensure the insurance policies are held for the entire 100+ year life of the project, and to protect against insurer insolvency in what would be a very new insurance market.”²⁷ Finally, the Department expresses concern about the possibility of adverse selection if private insurers can more accurately assess the risks associated with offset projects.²⁸ The Department is correct to have these concerns.

In addition, allowing insurance as a substitute for buffer pool contributions may not be workable under the Washington Climate Commitment Act. If insured risks materialize, insurers typically pay covered parties in either cash or replacement offsets.²⁹ If, upon a reversal event, an insurer compensates a project developer in cash, then it does not address the lost emissions reductions or removals caused by the reversal. But even if the insurer paid the project developer in replacement offsets, the Department would need to confirm those offsets’ eligibility for use in the cap-and-invest program under the Washington Climate Commitment Act.³⁰

IV. To the extent that it has not done so already, the Department should use relevant, peer-reviewed literature to inform improvements to the Protocol.

As the Department points out, the Protocol was adopted from California’s cap-and-trade program and “is closely based on” a protocol from the Climate Action Reserve, a crediting program that also operates in the voluntary carbon market.³¹ Some peer-reviewed studies that have examined California’s forest offset program and the voluntary carbon market have identified systemic integrity problems in the offsets used in both of these markets. For example, one peer-reviewed study found systematic over-crediting in California’s forest offset program, affecting 29.4% of the offsets analyzed in the study.³² In the voluntary carbon market context, one recent study synthesized other studies’ findings about one-fifth of the offsets issued to date and estimated that

²⁶ *Proposed Revisions to Ecology’s US Forest Protocol: Draft for Public Comment*, STATE OF WASH. DEP’T OF ECOLOGY 23 (July 15, 2025), <https://perma.cc/987D-RZNU>.

²⁷ *Id.*

²⁸ *Id.* (“Presumably every project proponent would seek out the lowest cost option to comply with the protocol requires [sic]; either contributing to the buffer pool or acquiring a private insurance policy. If low-risk projects can attain private insurance policy [sic] for the less [sic] than the value of the buffer pool contribution, while high-risk projects would be better served by contributing to the buffer pool, then the program buffer pool would be comprised of contributions from a smaller number of higher-risk projects, which would increase the risks to the program.”).

²⁹ See, e.g., FAQs, KITA, <https://perma.cc/AAH9-CTFP> (payouts in cash or replacement offsets, depending on the covered party’s choice); *Frequently Asked Questions*, OKA, <https://perma.cc/6L7A-QYY2> (“How much is the policy payout?”) (“Each carbon credit will have a stated value provided by the insured to Oka. The policy will pay out the stated value per credit times the number of insured credits, less a retention.”); CARBONPOOL, <https://perma.cc/8ES7-MP7Z> (payouts in replacement offsets only).

³⁰ See RCW 70A.65.170.

³¹ Proposed Revisions Summary, *supra* note 7, at 4.

³² See Grayson Badgley et al., *Systematic over-crediting in California’s forest carbon offsets program*, 28 GLOBAL CHANGE BIOLOGY 1433 (2022), <https://onlinelibrary.wiley.com/doi/epdf/10.1111/gcb.15943> (last visited Aug. 18, 2025).

about 84% of the covered offsets have integrity problems.³³ Another examined the offsets used from 2020 to 2023 by the 20 companies that retired the most offsets in the voluntary carbon market and found that 87% of these offsets had a high risk of not providing the claimed amount of emissions reductions or removals.³⁴

Relevant peer-reviewed literature may offer useful insights for improving the Protocol. To illustrate, the aforementioned study on over-crediting in California's forest offset program pinpoints the methods used to determine improved forest management projects' baselines as a driver of over-crediting.³⁵ The Department could review this study and other relevant evidence to assess whether to update its own approach to setting project baselines. To the extent that it has not done so already, the Department should apply the insights from relevant, peer-reviewed literature to improve its own Protocol.

Sincerely,

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³³ See Benedict S. Probst et al., *Systematic assessment of the achieved emission reductions of carbon crediting projects*, 15 NATURE COMMUNICATIONS no. 9562, 2024, at 1–2, <https://www.nature.com/articles/s41467-024-53645-z> (last visited Aug. 18, 2025).

³⁴ See Gregory Trencher et al., *Demand for low-quality offsets by major companies undermines climate integrity of the voluntary carbon market*, 15 NATURE COMMUNICATIONS no. 6863, 2024, at 1, <https://www.nature.com/articles/s41467-024-51151-w> (last visited Aug. 18, 2025).

³⁵ See Badgley et al., *supra* note 32, at 1433, 1436, 1438–40.