

July 15, 2022

Joshua Grice
Rulemaking Lead
Department of Ecology
Air Quality Program

Dear Mr. Grice,

Thank you for the opportunity to provide formal public comment on Chapter 173-446 WAC. We appreciate the Department of Ecology's leadership of this important process. As statewide environmental organizations closely engaged in policy and projects related to forestry and climate change in Washington state, Washington Environmental Council (WEC) and The Nature Conservancy Washington (TNC) are invested in credible implementation of the Climate Commitment Act (CCA). We have strong interest in the carbon offset program of the CCA due to its implications for several shared organizational priorities: natural climate solutions, sustainable forest management, tribal sovereignty, and environmental justice.

WEC and TNC's comments are guided by a goal of ensuring high integrity offsets within the cap and invest program, which produce credible, real emissions reductions, and are improved over time through adaptive management. Our recommendations center the need to prevent harmful impacts to overburdened communities through oversight of offset credit use, and to bring benefits to overburdened communities through intentional offset protocol design. Lastly, we are guided by the obligation to develop an offset program that facilitates the participation of Tribal Nations and small forestland owners, upholds tribal sovereignty, and engages Tribal Nations in consultation in offset protocol development.

WEC and TNC have independently submitted broader comments on aspects of Chapter 173-446 WAC. Please consider this letter to be complementary to these other comments submitted by each organization. Our joint comments in this letter focus on the section of the proposed rule entitled "Procedures and protocols for establishing offset projects," consisting of WAC 173-446-500 through WAC 173-446-595. This letter offers input on carbon offsets through a natural lands lens, particularly on forestry and urban forest offset projects.

Our recommendations are organized into the following topics:

1. Adaptive Management of Offset Protocols
2. Tribal Sovereignty and Tribal Engagement in Offsets
3. Aggregation
4. Adverse Environmental Impacts
5. Direct Environmental Benefits
6. Reduction of Offset Limits
7. Alternate Monitoring Methodologies
8. Urban Forest Protocol

1. Adaptive Management of Offset Protocols

Section WAC 173-446-505 addresses “Requirements for compliance offset protocols,” including the current compliance offset protocols adopted and approved for use. However, the rule does not include procedures for review and update of existing compliance offset protocols and/or review and approval of new compliance offset protocols for use in the program. TNC and WEC recommend that Ecology add language to the rule explicitly providing for future updates to existing compliance offset protocols and development of new compliance offset protocols. Rules should specify a frequency of evaluation, e.g., every two years.

For example, in “WAC 173-446-505,” we recommend inserting new language:

(4) Informed by implementation of the Climate Commitment Act Program and input from technical experts, Tribal Nations, and stakeholders, Ecology will periodically evaluate:

- a) Opportunities to update existing compliance offset protocols to reflect best practice and ensure consistency with offset protocol criteria in WAC 173-446-505 (1), and*
- b) Opportunities to adopt additional compliance offset protocols in rule, consistent with criteria in WAC 173-446-505 (1).*

(5) Ecology will update existing compliance offset protocols and adopt new compliance offset protocols according to the evaluation in WAC 173-446-505 (3), and update WAC 173-446-505 accordingly.

To inform amended language in the rule and process moving forward, we suggest Ecology review existing provisions and procedures for protocol update and development established under the California Air Resources Board (CARB) Cap-and-Trade Program and/or by CARB-approved offset project registries, such as American Carbon Registry (ACR), Climate Action Reserve (Reserve), and Verra. For example, Ecology could adopt parallel language from Subarticle 13, Section 95970 of the Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms¹ (“Cap-and-Trade Program”):

“(a) The Board shall provide public notice of and opportunity for public comment prior to approving any Compliance Offset Protocols, including updates or modifications to existing Compliance Offset Protocols.

(b) All Compliance Offset Protocols shall be reviewed and periodically revised, if needed, in compliance with the California Administrative Procedure Act, if applicable.”

CARB also maintains an external “Protocol Review Process²”, which specifies the following:

- How and when CARB will determine which voluntary offset protocols to take through its compliance approval process;
- The criteria CARB will use for evaluating new protocols and key additionality considerations;
- The steps involved in CARB’s transparent and public protocol development process and how stakeholders can get involved.

In its protocol development process, the Reserve employs transparent and public processes similar to CARB, including an intensive multi-stakeholder process.³ Ecology could borrow language and best practices from these resources in developing its own procedures for its protocol approval.

¹ California Air Resources Board (CARB). “Cap-and-Trade Regulation”, Effective April 1, 2019. Available via <https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/cap-and-trade-regulation>

² CARB, “California Air Resources Board’s Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation”, May 2013. Available via <https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/compliance-offset-protocol-process.pdf>

³ Climate Action Reserve, “Reserve Offset Program Manual”, March 12, 2021. Available via https://www.climateactionreserve.org/wp-content/uploads/2021/03/Reserve_Offset_Program_Manual_March_2021.pdf

The importance of adding rule language on the compliance offset protocol update and/or development process include:

- **CARB compliance offset protocols are due for an update:** The most up to date protocol included in Washington’s proposed rules is CARB Compliance Offset Protocol U.S. Forest Projects, released on June 25, 2015. CARB is planning to update this protocol after completing its 2022 Scoping Plan Update.⁴ The other protocols adopted by the rule, including the CARB Compliance Offset Protocol Livestock Projects, CARB Compliance Offset Protocol Ozone Depleting Substances Projects, and CARB Compliance Offset Protocol Urban Forest Projects were released in 2011 and 2014.⁵ To date, no projects have been implemented under the CARB Compliance Offset Protocol Urban Forest Projects, adopted October 20, 2011. Washington is likely to face similar implementation challenges. The “Urban Forest Protocol” section provides recommendations for improving the urban forest protocol.
- **Facilitating adoption of the most recent science and maintaining credibility:** Periodic review of new or modified regulations and/or changes in common practice are necessary to ensure the additionality of existing compliance offset protocols. New developments in scientific data, monitoring capabilities, and/or quantification methodologies can be incorporated to improve existing compliance offset protocols.
- **Adoption of additional compliance protocols:** The compliance offset protocols adopted by Chapter 173-446 WAC are limited to forest management, urban forestry, the collection and destruction of ozone depleting substances (ODS), and the capture and destruction or reuse of biogas from livestock operations. Other project types may have significant or unique applicability to Washington, such as opportunities with blue carbon, wetlands, agriculture, and rangeland. To fully harness the power of Washington’s ecosystems, Ecology must evaluate creation and adoption of such protocols.
- **Greater transparency and coordination across jurisdictions:** Providing clarity on the frequency of periodic review of offset protocols enables a stable framework for engagement, investment and development of projects by third parties.
- **Linkage:** Updated protocols would inform coordination with Western Climate Initiative (WCI) partner jurisdictions on linkage. It is essential Ecology staff work with the Environmental Justice Council as well as WCI partner jurisdictions (e.g., California) to identify which offset project types to evaluate as part of the regional trading program. Such efforts may also include a review of existing protocols from voluntary offset programs. Staff can determine if a proposed protocol for a project type can be applied in Washington and/or at the regional level. Some protocols may not be applicable in every jurisdiction of a linked program. In all cases, all linked jurisdictions will need to agree on offset project protocols to ensure no negative impacts to the fungibility of offsets across a regional Cap-and-Trade Program. Meaningful consultation with Tribal Nations should inform linkage agreements.

We recommend adopting criteria for the prioritization of new protocols, which could include the following:

- Applicability of the project in Washington state;
- Potential for direct environmental benefits in Washington;
- Air quality, environmental justice, and other co-benefit considerations;

⁴ CARB, “CARB Compliance Offset Program Forest QA”, released October 27, 2021. Available via https://ww2.arb.ca.gov/sites/default/files/2021-10/nc-forest_offset_faq_20211027.pdf

⁵ Ecology, WAC 173-446-505(3)

- Interest and support from Tribal Nations and stakeholders;
- Cost-effectiveness and potential uptake of the protocol by project participants.

2. Tribal Sovereignty and Tribal Engagement in Offsets

It is vital that program rules are shaped by input from Tribal Nations and uphold tribal sovereignty. Consultation with tribes is necessary to ensure rules respond to the needs of tribes and draw from their expertise. The rules should well-position tribes to develop offset projects, thereby accessing the allowable offset credits for projects on federally recognized tribal lands. Although it is not WEC and TNC’s role to speak for how to best meet the needs and interests of Tribal Nations, we would like to elevate topics that require careful attention and close coordination with Tribal Nations to find solutions:

- **Tribal Sovereignty and Waiver of Sovereign Immunity:** Although Ecology has chosen not to adopt the waiver of sovereign immunity requirement from California’s compliance offset protocols, we are aware that Ecology is exploring other ways for the state to hold Tribal Nations legally accountable to implementation of carbon offset projects. Other potential options, such a requirement for consent to jurisdiction, may amount to the same infringement on tribal sovereignty. Given the sensitivity of this subject, Ecology must engage with Tribal Nations on a Government-to Government basis to identify a solution that maintains tribal sovereignty, potentially drawing from positive examples in other state programs.
- **Eligibility of Tribal Lands for Urban Forestry:** The draft rule modifies the CARB Compliance Offset Protocol Urban Forest Projects to limit eligibility as follows: “Only offset projects located in the United States and its territories are eligible under this protocol.” The rule specifically excludes existing language in the CARB protocol for eligibility of lands owned by tribes or owned by any entity within the external borders of Indian Lands. Many tribal lands include urbanized or densely populated areas that could otherwise be well-suited for urban forestry projects. This exclusion is highly problematic, and both limits the ability of Tribal Nations to fully participate in offset projects and misses opportunities for carbon sequestration and co-benefits. Similar exclusions on tribal lands are applied to the Livestock Projects Protocol and the Ozone Depleting Substances Compliance Offset Protocol. It is critical that Ecology remove these amendments to CARB protocols in order to allow Tribal Nations to participate in all offset project types.
- **Assistance Program for Offsets on Tribal Lands:** Although not part of this rulemaking process, we are concerned this assistance program may be viewed as a source of funding to develop cap & invest program changes of interest to Tribal Nations, e.g., the creation of an aggregation protocol or new compliance protocols for additional types of carbon offset projects. Ecology should take ownership for developing such important program improvements from a separate budget, to not require a decision between using limited Assistance Program funds for program-level improvements *or* project-level support. Both must be treated as priorities.
- **Tribal consultation in aggregation, additional carbon offset protocols, and linkage:** As described in other sections of our comments (see “Adaptive Management of Offset Protocols” and “Aggregation”), the full participation of Tribal Nations in carbon offsets requires developing an aggregation protocol and new carbon offset protocols for project types of interest to tribes. Ecology must develop a forum and process for gathering input from Tribal Nations to shape protocol development. For example, a mechanism exists for engagement with small forest landowners to provide recommendations on aggregation— but not tribes. This gap needs to be addressed. Consultation with Tribal Nations is also important in considering and developing any linkage agreements in the future.

3. Aggregation

The CCA requires reduction of barriers and transaction costs for landowners, including through aggregation. However, as currently written, the rule does not explicitly prohibit, allow, or incentivize aggregation of offset projects. The only rule language supporting aggregation is the ability to modify or waive offset project *listing* requirements in WAC 173-446-520. This provision is insufficient to enable aggregation without modification of other aspects of offset protocols. More explicit and clear rules are necessary to incentivize aggregation in Washington’s program, including adoption of an aggregation protocol.

Allowing smaller projects—especially projects with similar characteristics within a logical geographic boundary such as a watershed—to register as part of an “aggregate” can create efficiencies, reduce costs, and potentially create more interest in innovative financing structures to address the high upfront project costs that create a barrier for most small landowners. Aggregation is particularly important for forestry projects, given that 15% of Washington’s forestland is managed by small forest landowners⁶ and approximately 7% is owned by Tribal Nations. By facilitating aggregation, Ecology can make compliance offset protocols more accessible to a significant percent of the state’s landowners.

Aspects of offset design that are necessary to meaningfully facilitate aggregation include: streamlining measurement and verification, streamlining additionality testing, and streamlining participation requirements (e.g., through the proposed waiver or modification to listing requirements). From lessons learned in the California Compliance Offsets Program, two significant cost centers for natural and working lands are 1) project development and 2) monitoring, reporting, and verification (MRV) requirements. It is not possible for many small landowners to fully absorb these costs. Small landowners often do not have the technical capacity to develop and manage a carbon offset project without additional support from project developers and technical consultants.

Aggregators can often fill the gaps in the landowners’ knowledge and skills to ensure project success. Safeguards to ensure aggregation projects maintain the integrity of a carbon offset program include not incentivizing large landowners to break up projects into smaller projects, ensuring aggregators can be held accountable for delivering on commitments in an offset program, and providing rules that allow for individual project participants to enter and exit a project if needed.

Ecology should incorporate common guidance and requirements to promote aggregation, giving due consideration to issues around project integrity and legal liability for individual project participants, especially across tribal land ownership. In particular, Ecology should:

- Review the existing aggregation methods currently available and in use under the American Carbon Registry (ACR), Climate Action Reserve (Reserve), and Verra;
- Convene a work group of interested stakeholders and Tribal Nations to advise Ecology staff on key elements of an aggregation method that is credible, simple, and cost-effective while improving access for small landowners and tribes interested in participating in offset projects;
- Coordinate with WCI partner jurisdictions for agreement on aggregation methods;
- Evaluate and implement resolutions to reduce legal and economic constraints associated with multiple-owner projects, in particular, allowing consolidation of offset projects on fragmented tribal trust and fee lands and tribal member allotments.

⁶ Department of Natural Resources. “Small Forest Landowner Demographic report.” 2021. Available via. https://www.dnr.wa.gov/publications/fp_sflo_demographic_report_20210401.pdf

Examples of existing models that Ecology should explore in developing an aggregation approach include the Climate Action Reserve (Reserve) guidelines for aggregation of forest projects⁷— created for the Reserve’s forest project protocol which is very similar to California’s compliance protocol, and the Reserve’s grassland protocol,⁸ which incorporates different models for aggregation. The ACR Validation and Verification Standard allows a risk-based assessment for aggregated projects. The verifier is also allowed to develop a random sample of projects for site visits rather than visiting every site or to conduct a minimum number of measurements. The programmatic Development Approach allows for incremental addition of sites into the project over time through the use of cohorts. Each cohort has a common baseline and start date. Site visits should include a mix of new sites and sites from previously validated cohorts.⁹

Ecology should incorporate aggregation approaches and associated programmatic efficiencies into adopted protocols as appropriate, and consider adopting a separate aggregation protocol. We hope to see Ecology indicate a clear, timebound path to adopting an aggregation protocol, e.g., within two years of the initial rule adoption. Proposed rule language offered in the “Adaptive Management of Offset Protocols” section above also provides space for adoption of a potential aggregation protocol alongside compliance protocols for different project types. If new protocols for agricultural or wetland conservation projects were developed, the issue of multiple ownerships within a project area would need to be addressed due to the fact that ecological functions operate on the project area as a whole, and not according to parcel boundaries.

One specific modification to the proposed rule to enable aggregation is to amend the definition of aggregation in WAC 173-446-020 to enable not only pooling of individual offset projects, but bringing together multiple activities or land areas under a single offset project. This change would avoid the need for individual landowners to register for separate projects in order to participate. Suggested modification:

"Aggregation" means in the context of offsets, a grouping of offset projects [or activities that reduce or remove emissions] carried out according to the same compliance offset protocol and under the responsibility of the same offset project developer or operator."

➤ **Small Forest Landowners (SFLO) and Tribal Aggregation**

While the Climate Commitment Act mandated the creation of a small forest landowner work group to inform guidance of possible carbon market opportunities, no similar group was established for tribal landowners, nor does the work group include tribal representation.

Our understanding is that the Tribal Offset Assistance Program is envisioned as a financial resource to support aggregation on tribal lands, among other goals. This grant program offers important project-level financial support, but should not be expected to bear the costs of developing an aggregation protocol. Developing an aggregation protocol without the guidance of a codified technical protocol is onerous and legally risky. The comparative financial, staffing, legal, and technical resources available to Ecology for developing a protocol are much more substantial than this small grant program, which is also intended to respond to other needs related to offsets on tribal lands. Ecology should lead on the creation of an

⁷ Climate Action Reserve, “Guidelines for Aggregating Forest Projects”, January 18, 2017. Available via https://www.climateactionreserve.org/wp-content/uploads/2017/01/Reserve_Guidelines_for_Aggregating_Forest_Projects_011817.pdf

⁸ Climate Action Reserve, “Grassland Protocol”. Available via <https://www.climateactionreserve.org/how/protocols/grassland/>

⁹ American Carbon Registry (ACR), “ACR Validation and Verification Standard, Version 1.1”, Released May 2018. Available via <https://americancarbonregistry.org/carbon-accounting/standards-methodologies/acr-validation-and-verification-standard-1>

aggregation protocol in the short-term. Ecology must engage tribes in the process of developing such a protocol and provide compensation for their time.

Section 21 of the CCA tasks the small forestland owner work group with analyzing and providing recommendations for aggregation, along with incentives and information sharing. According to criteria in the CCA, this group is to be established by the Washington Farm Forestry Association (WFFA). WFFA is a membership organization with 1,300 members, compared to the 218,000 total small forest landowners (SFLOs) in the state – 77% of which hold less than 20 acres.¹⁰ It is critical the work group be representative of SFLOs of all sizes, and provide recommendations, assistance and information sharing that reflects the needs of all SFLOs.

The importance of representative membership of small forest landowners is underscored by recent studies showing that SFLOs with holdings of less than 20 acres consistently hold different values related to their forestlands than landowners with acreages between 20 and 5,000 acres. For example, SFLOs who focus on income and investment from forestlands possess disproportionately larger landholdings, but many SFLOs who do not prioritize timber harvest still engage in management activities.¹¹ This suggests that carbon projects may be of interest to SFLOs who are less engaged in timber harvest, and therefore, may be underrepresented in a trade group and unaware of the work group. Without those perspectives at the table, aggregation recommendations from the SFLO work group may not be truly representative of the smaller holders- precisely the landowners unable to participate in carbon projects without aggregation. Ecology should evaluate the representativeness of the work group compared to the overall makeup of SFLOs in the state and ensure smaller SFLOs are engaged in the work group. Because the Department of Natural Resources (DNR) is the agency coordinating the work group, Ecology should coordinate with DNR to ensure broad representation and input on aggregation.

4. Adverse environmental impacts

WAC 173-446-500 (1)(f) states that registry offset credits must “Result from an offset project that will not produce significant adverse environmental impacts after mitigation.” This is a welcome addition, consistent with the intent of the CCA to avoid “increased negative impacts to those communities most impacted by environmental harms.” Mitigation of environmental impacts ensures the climate benefits provided by offset projects are not overshadowed by negative environmental impacts— including health or sociocultural impacts in communities. However, an implementable and effective requirement to not produce adverse environmental impacts requires more specificity. Additional clarity needed in the rule includes:

- **Definition of terminology:** “Significant adverse environmental impact” requires a definition in the rule. While numerous different definitions for adverse environmental impact exist in law and federal guidance, many focus on long-term and/or measurable impacts to species or biological communities. In addition to impacts to biodiversity, we recommend aligning the definition of “environmental impact” with the definition of “environmental harm” in the proposed rule, which includes impacts related to community health, e.g., exposure to pollution and contamination, health and economic impacts from climate change, and importantly, “loss or impairment of ecosystem functions or traditional resources or loss of access to gather cultural resources or harvest traditional foods.” It is critical that carbon offset projects do not limit the rights of Tribal Nations to hunt and gather in traditional lands, and fish in usual and accustomed fishing areas. Internationally, restriction or loss of

¹⁰ Washington's Small Forest Landowners in 2020, p. 14. Available via https://app.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=Small-Forestland-Owners-ESSB-5330-Report-2021011_8378259f-f9fb-47f4-8727-58819fc10027.pdf

¹¹ *Ibid*, p. 15

access to land and natural resources has been a concern in implementation of forest-related projects under the REDD+ framework (Reducing Emissions from Deforestation and Forest Degradation). We recommend explicitly including loss or reduction of access to land and natural resources as an adverse impact offset projects must avoid.

- **Alignment with SEPA:** It is unclear how the requirement is intended to be consistent with or additive to State Environmental Policy Act (SEPA) requirements. While certain offset project types are exempt from SEPA analysis— such as many of those covered under the US Forests Compliance Protocol, including projects that fall under Forest Practices Class I, II, and III permitting—other project types require SEPA, such as projects under the Livestock Compliance Offset Protocol. To avoid duplicative analysis, we suggest drawing from SEPA requirements to identify probable impacts, alternatives, and mitigation measures, including cumulative, short-term, long-term, direct and indirect impacts. Clarity and consistency in requirements across project types will ensure all projects are held to the same standard for adverse environmental impact.
- **Timing:** The proposed rule does not specify when analysis of adverse environmental impact will occur. We suggest analysis occur during the project development phase of a project, prior to listing of the project, and be submitted as part of the offset project listing information. At this stage, an assessment can shape project design, and Ecology can make a decision to list a project only after determining there will be no adverse environmental impacts after mitigation. We recommend carrying out this analysis in tandem with analysis of Direct Environmental Benefits (DEBS), as similar information will be required.
- **Scope of initial analysis:** To achieve the rule’s intent to mitigate impact, analysis should include both an assessment of the potential impact of a proposed project without mitigation measures, and assessment of the impact of alternatives and mitigation measures.
- **Ecology's oversight and enforcement:** Clarity is needed regarding actions Ecology will take if a project is determined to have significant environmental impacts after mitigation. Consistent with WAC 173-446-520, we recommend Ecology adhere to a timeframe of 30 calendar days to notify an offset project operator or authorized project designee if the project does not meet the requirement for significant adverse environmental impact, followed by 30 calendar days for the offset project operator to submit an updated offset project listing including an amended mitigation plan. It will also be important to include a provision in the rule for Ecology to invalidate offset projects for the duration of significant adverse environmental impacts are found during implementation.
- **Gathering and sharing information on impacts:** Accountability for this provision will require collection of information on adverse environmental impacts and mitigation measures, which could be incorporated into project verification. Information about anticipated and actual environmental impacts should be made public.

5. Direct Environmental Benefits

TNC and WEC applaud Ecology for prioritizing projects that provide direct benefits in the state (DEBS). We anticipate challenges in meeting the DEBs requirements of the law, and encourage Ecology to explore how the agency can support projects providing DEBS.

In the California Compliance Offset Program, only 19% of issued credits had been designated as DEBS of June 22, 2022. To date, the only projects located outside of California designated as DEBS have been ODS projects

that sourced ODS gasses from within California, and a few forestry projects in Oregon and Washington.¹² Analysts project that DEBS-designated offsets will continue to be in shortage in the California program over the second half of the decade, impacting all compliance entities and altering the business decisions of all offset developers, verifiers, and other stakeholders.¹³ With Washington likely to face similar challenges as California, will projects within and/or adjacent to Washington be able to supply enough DEBS-designated offsets? How can Ecology support the cap and invest program to generate offsets to meet DEBS requirements?

Recommendations to enhance the development of offset projects with DEBS include the following:

- Expedite the process for adopting/developing new compliance offset protocols favoring project types that provide substantial opportunity within Washington. For example, wetland and other blue carbon opportunities, and agricultural and rangeland opportunities. See “Adaptive Management of Offset Protocols” section.
- Facilitate small forest landowner aggregation, which would open additional acres to in-state carbon offset project opportunities. See “Aggregation” section.
- Expand the definition of DEBS to include a wider range of environmental benefits (e.g., biodiversity, habitat conservation, etc.) and potentially sociocultural benefits (cultural resources, community involvement, job creation, education, etc.),
- Provide clarity and flexibility as to the evidence required for out-of-state projects to demonstrate DEBS (i.e., how significant of an impact does the benefit need to be to meet DEBS?)
- Provide clear guidance and/or examples as to how projects implemented outside of the state under the currently approved compliance offset protocols can meet the DEBS requirement, e.g., ODS projects with Washington-sourced ODS regardless of where the ODS destruction occurs, forest projects in counties adjacent to Washington state, etc.

6. Reduction of offset limits

We welcome the language in WAC 173-446-600 (6)(d) which allows Ecology to reduce offset limits if a covered-or opt-in entity “contributes substantively to cumulative air pollution burden in an overburdened community” or violates permits required by “federal, state, or local” agencies in a way that may increase emissions. We view this language as an important means of addressing critiques of offsets related to local air pollution, and reducing harm to overburdened communities. It is notable that the proposed rule extends to both the general offset limit and the offset limit for projects on federally recognized tribal lands. Additional clarity needed, however, includes the following:

- **Achieving reduced air pollution burden in overburdened communities:** Moderating offset use is a valuable tool to address air pollution burden in overburdened communities. However, the ability of offsets to reduce cumulative air pollution burden is limited by the modest portion of compliance instruments offsets comprise. For both categories of offset limits (including offsets on tribal lands), entities may collectively meet 8% of compliance obligations using offsets in the first compliance period, and 6% in the second and third compliance periods. Even if the offset limit is fully reduced to zero for an entity fully utilizing their allowable offset usage, only 6-8% of an entity’s emissions will be impacted. If an entity is not using offset credits, Ecology will have no recourse to mitigate the entity’s contribution to air pollution burden.

¹² CARB: ARB Offset Credit Issuance Table, updated June 22, 2022. Available via <https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/arb-offset-credit-issuance>

¹³ CaliforniaCarbon.info. “2021 WCI Offsets: Outlook for DEBS & Non-DEBS”, released June 30, 2021. Available via <https://www.californiacarbon.info/insight-report/?ID=19>

Although 6-8% could be a meaningful reduction in air pollution burden, replacing offset reductions with allowances is likely to be the most cost-effective option for many entities. This would have the net result of maintaining the same local air pollution burden. In partnership with the Environmental Justice Council, we encourage Ecology to consider parallel measures to ensure reduced cumulative air pollution in overburdened communities. One option may be to allow reduction in allowances as well, if air pollution burden persists after reduction of offsets to zero. This would have the effect of entities actually reducing emissions— the only way to reduce local air pollution burden. The ability to reduce allowances at an entity level would also mitigate a potential lower price for offset credits, driven by the unique potential for offset use to be revoked at the entity level.

- **Process for monitoring and determining elevated cumulative air pollution burden:** The rule does not provide clarity on the process of determining when an entity has contributed substantively to air pollution burden. Implementation requires regularly updated data about cumulative air pollution burden, and periodically cross-referencing this data with entity offset usage. The rule does not specify how this monitoring will occur or what pollutants will be monitored.

Towards the goal of finding efficiencies, we recommend the cumulative air pollution monitoring to guide offset reduction be aligned with the air quality monitoring network required by the CCA. The air quality monitoring program/air monitoring network is a significant gap in the current rule. Criteria pollutants are the focus of the broader air quality monitoring/air monitoring network, compared to broader “cumulative air pollution” language for offset reduction. Cumulative air pollution requires a definition, but could include a broader range of air pollution, e.g., air toxics, or non-point source or mobile pollution.

“Contribute substantively” also requires a definition, e.g., whether Ecology’s review or reduction of offsets is triggered in response to absolute quantity of air pollutants, recent increase in air pollutants, or established air quality targets specified in the CCA. Guidance is also needed as to whether the substantive contribution of offsets to air pollution quantity will be considered on the basis of the number offset credits used in the preceding years. We recommend thresholds be used consistent with established air quality standards and targets described in “Section 3: Environmental Justice Review” of the CCA— though we recognize that Ecology’s obligations under the CCA with respect to avoiding negative impacts to overburdened communities extends beyond and exists independent of Section 3.

- **Level of application and corporate accountability:** The reduction in offset limits applies to a covered or opt-in entity as written in the proposed rule. We recommend amending language to clarify that this provision is implemented at the level of a given facility. This would prevent entities from strategically deploying offsets at the facility level to avoid subsequent reductions in offset usage in response to air pollution burden. For example, in the event an entity operates numerous facilities in different locations, the existing language may encourage entities to apply offset credits to facilities where baseline air pollution levels are lower, and instead use allowances for facilities where air pollution levels are higher—with the same impact for air pollution.

Alternatively, entities may apply offset credits evenly across several facilities, such that offset usage at a given facility is not determined to make a substantive contribution to air pollution burden. An entity should be accountable for its collective contribution to cumulative air pollution impact in overburdened communities across all facilities. This is particularly important if offsets remain the only compliance instrument that can be adjusted in response to air pollution burden.

- **Reduction of offset credits:** The proposed rule does not describe how offsets are reduced in the event of a determination that an entity has contributed substantively to cumulative air pollution burden. We suggest offset use is reduced according to the magnitude of cumulative air pollution burden, towards the goal of remaining within established air quality targets or thresholds. It may be appropriate to reverse a reduction in offsets if cumulative air pollution falls sufficiently below a threshold for a given time period, e.g., for at least a year.

The rule does not specify how to handle offset credits purchased by an entity prior to a reduction in offset allowances. Offset credits held but not yet used to fulfill compliance obligations should be eligible to be: 1) sold and used by another entity or 2) held by the entity for future use that does not exceed its (reduced) offset limit. For any offsets credits used to fulfill compliance obligations prior to a reduction in offsets, no action is needed.

Lastly, we highlight the consultation role for the Environmental Justice Council in reducing offset usage, and underscore the importance of their engagement on this topic. In addition to giving input on individual decisions, the Environmental Justice Council can play an important role in providing guidance regarding when appropriate to reduce or reinstate offset usage, engagement with local organizations, types of pollution considered, or how to address an entity with multiple facilities.

7. Alternate monitoring methodologies

We are concerned that the rule’s requirements for monitoring methodologies in WAC 173-446-525 could result in long-term use of inadequate monitoring methodologies due to a lack of review. Under (10)(f), the rule states that, “If after using the alternate method for one reporting period ecology has determined that the alternate method is at least reasonably equivalent to the accuracy of the method(s) commonly employed when the applicable compliance offset protocol was adopted, or is not capable of being verified to a reasonable level of assurance, ecology may approve the alternate method, including any conditions, on a permanent basis.”

We believe a single reporting period of six to 24 months (as per (11)(a) of the same section) is not sufficient to establish permanent approval. As written, the rule could allow a non-credible methodology to be utilized for up to 24 years in the case of the 25-year reporting timeframes for the US Forest and Urban Forest protocols, provided that the methodology resulted in a loosely-defined level of accuracy during a single initial reporting period. The rule should be updated to require that alternate methodologies be reevaluated again after three consecutive reporting periods.

We recommend removal of the provision that an alternate method can be approved on a permanent basis in the event that an alternate method “is not capable of being verified to a reasonable level of assurance.” If verification is not possible, this clause delegitimizes the requirements that offsets “(i) Are real, permanent, quantifiable, verifiable, and enforceable; and (ii) Are in addition to greenhouse gas emission reductions or removals otherwise required by law and other greenhouse gas emission reductions or removals that would otherwise occur” as required by Section 19 of the law.

We propose that WAC 173-446-525 (10)(f) be revised as follows:

“If after using the alternate method for one reporting period ecology has determined that the alternate method is at least reasonably equivalent to the accuracy of the method(s) commonly employed when the applicable compliance offset protocol was adopted, ~~or is not capable of being verified to a reasonable level of assurance,~~ ecology may approve the alternate method, including any conditions, on a ~~permanent~~ provisional basis. Ecology may approve the alternate method, including any conditions, on a permanent basis”

following evaluation of the accuracy of the alternate method at the end of three consecutive reporting periods."

8. Urban Forests Protocol

Urban forests provide a range of climate mitigation and adaptation benefits, which we are supportive of Ecology promoting. However, urban forestry carbon projects face numerous challenges. To address these challenges, Ecology should pursue improvements to the 2011 CARB Urban Forests Protocol. While a functioning urban forestry protocol is one tool to promote the benefits of urban forestry, we recognize that urban forestry can and should also be promoted beyond the context of offsets projects. The benefits urban forestry provides for overburdened communities are critical to equitable climate resilience.

The 2011 CARB Urban Forests Protocol has never been used due to a high cost and prohibitive degree of complexity for local governments and small non-profits. Future development of an effective, equitable urban forestry offset program focused on increasing tree cover in overburdened communities has the potential to deliver benefits to climate, people, and nature.

We put forward the below recommendations for Ecology to consider in developing a functional urban forestry protocol in the near term. These principles are grouped into general best management practices and specific environmental justice categories.

WEC and TNC contracted urban forestry experts Sarah Lillie Sewell of Lillie Leaf Consulting and John Nickerson of Dogwood Springs Forestry to conduct in-depth analysis beyond the scope of this comment letter. The comments below are a synopsis of their analyses. Moving forward, we hope to engage with Ecology in greater depth moving as the agency pursues evolution of the urban forestry protocol.

Best practices to improve viability

The matrix below briefly describes a variety of practices that could be incorporated into a future urban forest protocol to strengthen the viability of projects, e.g., through reducing risks and transaction costs for project operators. These practices are grouped thematically under the topics of “project management,” “geographic considerations,” and “technical considerations.”

Project management	
Project Activity Types	Consider urban forest management and avoided conversion activities—which have the best opportunity to efficiently capture urban forest carbon benefits—in addition to tree planting activities.
Program Services	Project operator to provide program services to participants, in exchange for carbon ownership conveyance, which might include: <ul style="list-style-type: none"> • General urban forest education • Professional arboriculture expertise • Trees for planting (free or reduced cost) • Pruning (free or reduced cost) • Removal (free or reduced cost)
Project Leadership and Development	Projects should be able to be developed and managed by a Tribal Nation or public agency (city or county) and supported by private partnerships. The Tribal Nation or public agency can ensure an open process to planning and implementation. Revenue from carbon credit sales would go to project operators, who dedicate it to funding program services.

Credit Ownership	Develop a streamlined approach to enable private landowners to convey carbon ownership and issued credits, either temporarily or permanently, to the program in exchange for program services. This will provide incentives for participation and lower transaction costs. We recommend that landowners retain management rights to prune and remove most trees.
Geographic considerations	
Geographic Inclusion and Eligibility	<p>Define the urban area as broadly as possible to include Census Bureau-defined Urban Areas and unincorporated areas in counties with dense residential areas. Consider the inclusion of lands outside of urban areas but owned by municipalities, such as watersheds owned by municipalities for domestic water purposes.</p> <p>Develop a streamlined approach to enable private landowners to convey carbon ownership and issued credits, either temporarily or permanently, to the program in exchange for program services such as those noted in the “Program Services” section of this table. We recommend that landowners retain management rights to prune and remove most trees.</p> <p>The protocol should be developed in coordination with Tribal Nations to ensure eligibility of tribal lands.</p>
Aggregation	Provide criteria to aggregate the carbon ownership to a project operator to scale the urban forest project to the entire urban area. This requires efficient coordination between landowners and the project operator. The ownership of forest carbon and the rights to be issued the credits can be conveyed in a contractual agreement between the landowner and the project operator. See the section in this comment letter on “Aggregation” above.
Technical considerations	
Application Process	Ensure that the application process is simple.
Baseline	Use current carbon stock calculations derived from canopy cover regression estimates and apply recent trends in canopy cover as defaults from published sources.
Quantification	Use extensive canopy measurement approach with ratio estimators to carbon, using iTree Canopy or LiDAR, or other remote sensing.
Monitoring, Reporting and Verification	Use tools like iTree Canopy to estimate canopy cover. Verification should be a desktop review and conducted at ~5-year intervals as change in urban forest canopy is not a rapidly occurring event to reduce costs. Credits should be issued in interim years using published default sequestration rates.

Environmental Justice

The CARB urban forests protocol adopted by the proposed rules poses both threats and opportunities to advancing environmental justice in Washington communities. To ensure Ecology is able to serve the interests of residents who have been systemically underrepresented, often have not benefited from government programs and support, and have historically been excluded from rulemaking processes, it is critical that any urban forestry protocol adopted by Ecology actively seek to enhance engagement and input of underrepresented communities, as well as provide benefits to these communities. This should include consultation with the Environmental Justice Council as well as direct engagement with communities.

U.S. urban forests, like all urban infrastructure, have been shaped by historically discriminatory planning, zoning, housing, and other urban development practices like redlining. A 2021 study on redlining^[14] and urban forestry revealed that in dozens of U.S. cities, redlined areas had about half of the tree canopy coverage of non-redlined areas. These areas are home to higher proportions of marginalized populations, relegating residents with the least power to concentrated areas of toxic burden and environmental and social stress without the critical infrastructure needed to thrive. Washington state echoes this trend: residents of color are far more likely^[15] than white counterparts to live in areas with few natural amenities like trees.

To address these disparities and promote environmental justice, the below matrix recommends additional provisions for an urban forestry carbon offset protocol, focused on expanded project management, mitigation of technical barriers, and promoting equitable representation.

Project management	
Project Operator and Authorized Project Designee eligibility	Expand definition of groups that could authorize projects and serve as designees to include Tribes, service-oriented nonprofits, faith-based groups, and clubs.
Urban forest projects on Tribal lands	Given that some tribes have urban landholdings and landholdings that would be positively impacted by nearby offset projects, excluding tribes from participating in urban forestry projects is discriminatory. Ecology should ensure Tribal lands as defined in Section 3.1 of the CARB urban forest protocol are eligible in a Washington protocol. This should be accompanied by advisory committee oversight that includes indigenous nation representation.
Mitigating technical barriers	
Technical assistance fund	Ecology should set aside technical assistance funds or create adjusted grant disbursement timelines for under-resourced institutions that need support to get projects underway. Under the current CARB protocol, the reimbursement-driven payment (payment received after carbon credits are generated) may prevent local entities that do not have sufficient funds from participating. The requirement to front the costs of tree planting favors institutions with existing financial resources, which ends up being a virtuous cycle to benefit those with resources, and discourages projects in locations where they are most needed.
Access to technical tools	Ecology should consider explicitly naming and/or making accessible the GPS/GIS tools for participating institutions to use to track project sites. This could include employing free online tools like iTree and Tree Equity Score to support reporting.
Calculations	GHG calculations may serve as another barrier to entry for under resourced institutions. We recommend Ecology populate a spreadsheet template for ease of calculations and reduction of error when reporting, including a glossary to list all required datapoints.
Representation of overburdened communities	
PO and APD representation requirements	There are no current requirements for project operators (POs) nor authorized project designees (APDs) to secure and maintain representation from local marginalized stakeholders in order to qualify for their status as a PO or APD. WEC

¹⁴ <https://www.nature.com/articles/s42949-021-00022-0>

¹⁵ <https://www.invw.org/2021/01/26/forests-washington-racial-environmental-disparities/>

	and TNC recommend instituting such a requirement to increase accountability mechanisms throughout project implementation.
Monitoring, reporting and verification review	The requirement for reports to be reviewed by a professional urban forester is an opportunity to create a state position or a fund to help smaller communities and tribes with less budget contract with a professional at a subsidized rate. This also presents an opportunity for Ecology to incentivize the creation of representative and inclusive verification teams, including partner with any of the professional societies listed in Section 8 of the CARB protocol that credential individuals to place a call out for diverse contractors and firms to partner with.
Oversight body	To ensure that a new protocol will work for marginalized communities, representatives from these communities should form the majority of any oversight body. Representatives should be fairly compensated.

Conclusion

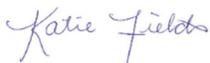
Rulemaking for carbon offsets is critically important, and we hope to work with Ecology moving forward to support robust rules, offset protocols, and implementation. Beyond this rulemaking process, we recognize that carbon offsets are only one component of a broader approach to carbon sequestration and storage with the state. We encourage Ecology, together with other state agencies and the Governor’s Office, to pursue a statewide strategy for carbon sequestration in natural and working lands. Such a strategy would incorporate carbon offset as one among a range of tools to mitigate climate change on natural lands and resource lands.

Thank you for your consideration of these comments, which we hope support offsets serving as equitable, accessible, credible, and effective compliance instruments in Washington state. We greatly appreciate the effort Ecology has put forth in developing rules, and we look forward to ongoing dialogue as we collectively learn from Washington’s experience and strengthen the cap and invest program.

Sincerely,



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