



DEPARTMENT OF
ECOLOGY
State of Washington

Chapter 173-446 WAC Offsets Rulemaking Environmental Justice Listening Session

Climate Pollution Reduction Program

October 21, 2024

Today's Meetings

The morning public meeting will contain the same content as the afternoon Environmental Justice Listening Session.

The afternoon session will be focused on Environmental Justice impacts of the rule on overburdened communities.



Ecology Staff

- Meg Baker – Facilitator, Community Outreach and Education Specialist
- Nikki Harris – Rule Lead for Linkage Rulemaking & Offsets Rulemaking, Technical Host
- Jordan Wildish – Offsets and Tribal Grants Unit Supervisor
- Andy Hayes – Cap-and-Invest Policy Section Manager
- Joshua Grice – Climate Pollution Reduction Policy and Planning Section Manager

Offsets rulemaking process & timeline



The basics – offsets

There are two types of compliance instruments:



Emissions
allowances



Offset
credits

CCA offset projects must:

- Result in greenhouse gas reductions or removals that are real, permanent, quantifiable, verifiable, and enforceable.
- Avoid double counting emissions by targeting emissions *not* covered by Cap-and-Invest or other programs.
- Reduce emissions beyond what would occur without the CCA's financial incentive.
- Provide Direct Environmental Benefits (DEBs) to Washington.

Percentage of entity's compliance obligation eligible to be covered by offsets



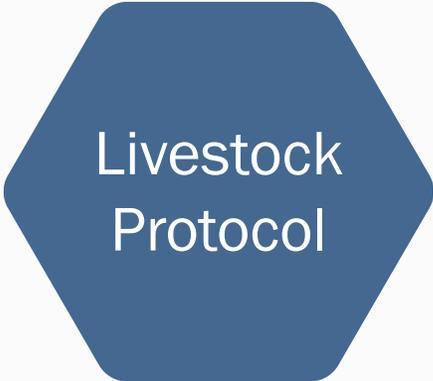
Ecology has adopted four offset protocols



U.S. Forest
Protocol



Urban Forest
Protocol



Livestock
Protocol



Ozone
Depleting
Substances
Protocol



Chapter 173-446 WAC Offsets Rulemaking

- Ecology will consider:
 - Revising/updating adopted offset protocol(s)
 - Adopting new offset protocols
- Public comment invited throughout the rulemaking process

Environmental justice

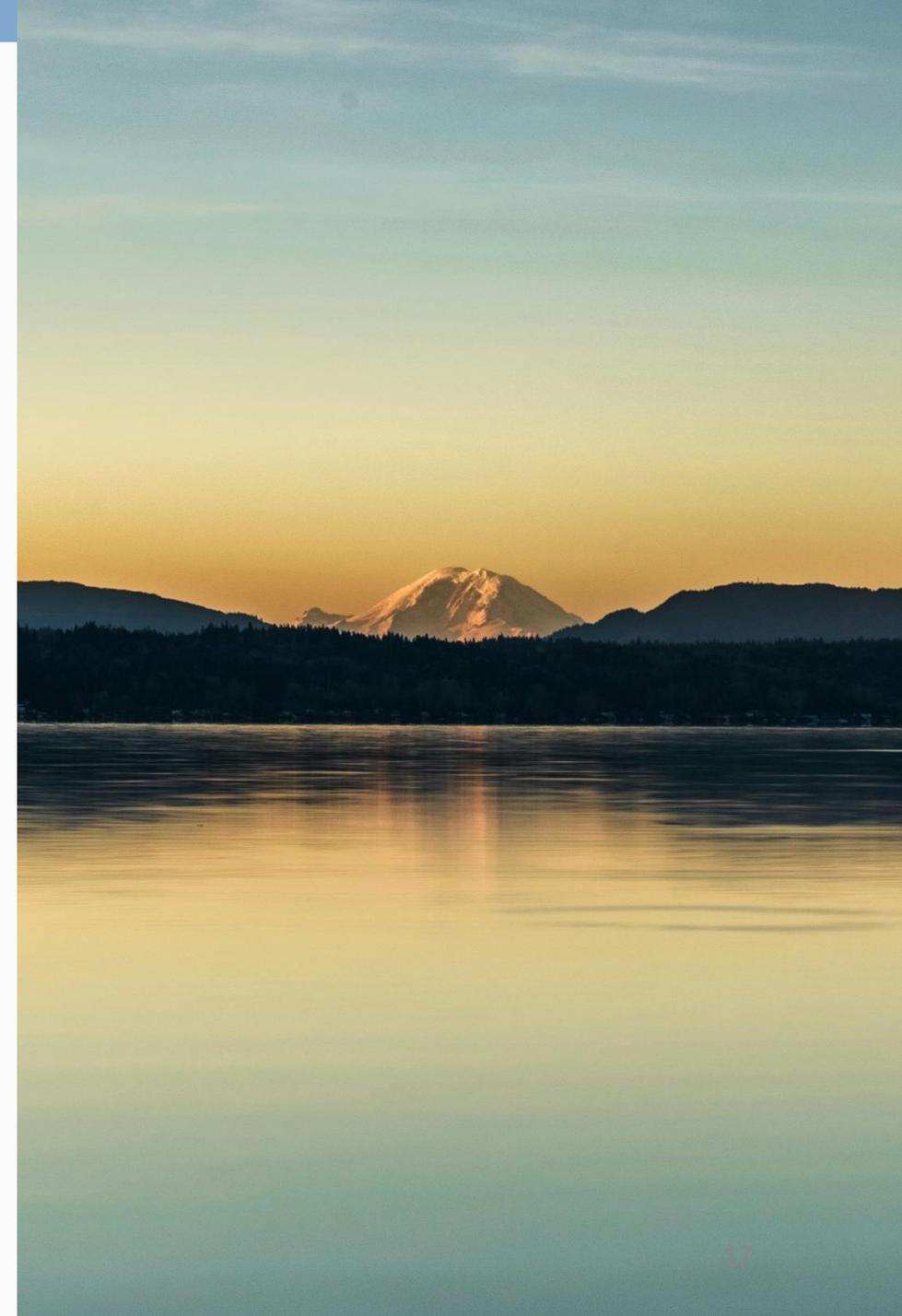
- **Environmental Justice Council consultation**
- **Environmental Justice Assessment**
 - We invite comments to inform our assessment of impacts to overburdened communities and strategies for mitigating impacts.
- **Environmental Justice Working Group**

Environmental justice offsets working group

- **Feedback on offset protocol rulemaking**
 - Helps Ecology consider potential environmental justice impacts of changes to offset protocols, identify and mitigate potential negative impacts, and increase positive impacts.
- **Environmental Justice Assessment**
 - Environmental justice working groups' comments will inform our assessment of impacts to overburdened communities and strategies for mitigating impacts.
- **Aug. 2024 – Aug. 2025 – monthly, 2 hr meetings**
- **Eligible participants are compensated**

Rule progress to-date

- Ozone Depleting Substances Technical Working Group has completed its work.
 - Informed by input from this group and public comments, Ecology has identified initial concepts and draft revisions to the Ozone Depleting Substances Protocol
 - Now seeking input on these draft revisions from the Environmental Justice Offsets Working Group, Tribes, and members of the public



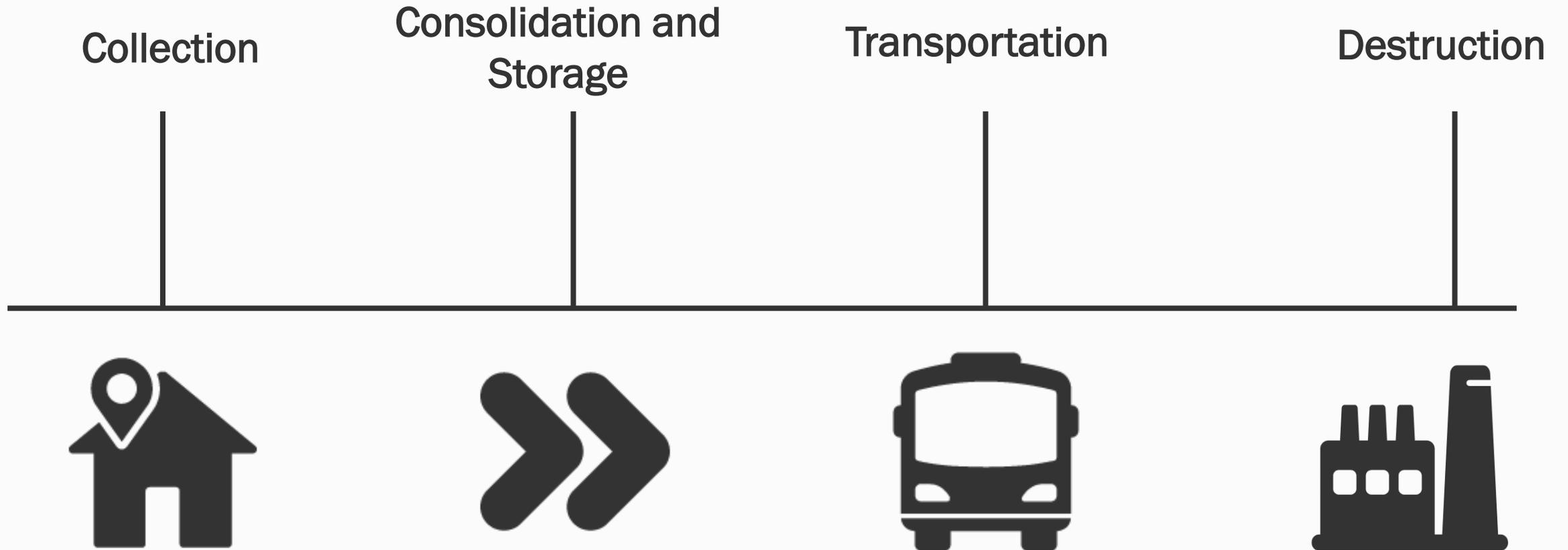
Ozone depleting substances (ODS)

ODS substances include chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs)

- Commonly used in products such as refrigerators, air conditioners, and building and appliance foams
- **High global warming potential (GWP)**
 - Compared to $\text{CO}_2 = 1$ per 100 years, methane (CH_4) is estimated to have a GWP of 27-30 vs. CFCs and HCFCs which are estimated in the 1,000s – 10,000s
- Production and import of these chemicals is controlled by the Montreal Protocol, and the subsequent Kigali amendment



ODS – process of destruction



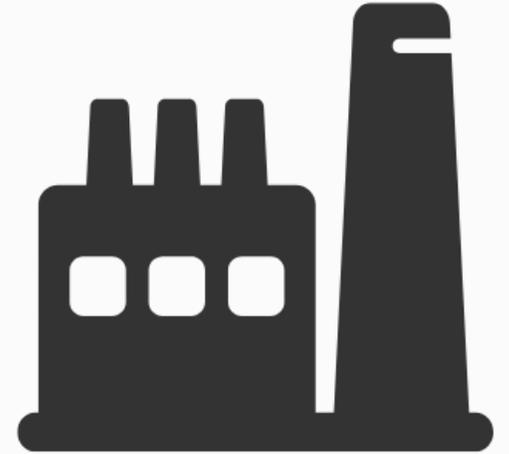
ODS - destruction

Ozone depleting substances must be destroyed at facilities that have:

- Permit for hazardous waste
- Comply with the Technology and Economic Assessment Panel (TEAP) recommendations

There are a handful of facilities in the United States that have authority to destroy ODS under our protocol

- None in Washington state
- Any entity destroying ODS must report the type and quantity of ODS destroyed annually to EPA



Ozone Depleting Substances protocol



Compliance Offset Protocol Ozone Depleting Substances Projects

Destruction of U.S.
Ozone Depleting Substances Banks

Adopted: November 14, 2014

Note: All text is new. As permitted by title 2, California Code of Regulations, section 8, for ease of review, underline to indicate adoption has been omitted.

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The Compliance Offset Protocol Ozone Depleting Substances (ODS) Projects provides methods to quantify and report greenhouse gas (GHG) emission reductions associated with the destruction of high global warming potential ozone depleting substances sourced from and destroyed within the U.S. that would have otherwise been released to the atmosphere.

Ozone Depleting Substances protocol process

- Scoping of potential revisions
- Ozone Depleting Substances technical working group
 - Group members were asked to provide *individual* input on a range of potential protocol revisions
 - Group members were *not tasked* with making consensus recommendations to Ecology
- Ecology deliberations
- Draft rule and protocol revisions

ODS – Proposed revisions

1. Update GWP values from AR4 to AR5
2. Allow ODS sourced from federal government
3. Revise substitute emissions factors for refrigerants
4. Restrict project invalidation liability
5. Allow credit generation from HCFC-22
6. Allow credit generation from medical aerosols and unused solvents

ODS changes not pursued in this draft rule

Proposed topics for continued research in a future rulemaking

Update cumulative emissions rates for refrigerant CFC's

Update cumulative emissions rates, substitute emissions factors, and eligible species of ODS foams

Allow crediting for HCFC-123

Allow credit generation from HFC's sourced from Washington

Revise Point of Origin requirements

Discussed revisions that are not recommended at this time

Allow credit generation from the destruction of halons

Allow credit generation from contaminated and mixed HFC's (sourced outside of Washington state)

Allow destruction of ODS outside the United States

Allow destruction of ODS sourced from Canada

#1 Proposed change background GWP values from AR4 to AR5

IPCC – Intergovernmental Panel on Climate Change (IPCC)

AR – IPCC's Assessment Report

- Includes updated global warming potential (GWP) values of various gases



#1 Proposed change: GWP values from AR4 to AR5

- **Current:** Protocol uses IPCC's Assessment Report 4 GWP values
- **Considered change:** Use IPCC AR5
 - GWP values were largely revised slightly down for relevant gases from AR4 to AR5 (less credits will be issued with AR5 values)

#2 Proposed change background

Allow ODS sourced from federal government

- Currently a blanket prohibition on crediting for the destruction of ODS from federal sources (including federal auctions and refrigeration units at federal facilities)
 - Initial expectation that federally recovered ODS would undergo destruction, absent offset project registration
 - However, federal ODS sources are not being destroyed as was initially expected



#2 Proposed change: Allow ODS sourced from federal government

- **Current:** ODS sourced from federal government installations or stockpiles is not eligible
- **Proposed change:** Allow ODS sourced from federal governmental installation or stockpiles
 - Government / federal agencies cannot be project developers



#3 Proposed change background

Revise ODS substitute emissions factors for refrigerants

- Emissions factors should be expected to decline over time as federal and state laws require lower emissions refrigerants systems
 - Ecology should seek to regularly update emissions factors
- [EPA vintaging model](#) is the primary source for updated emission factor data

#3 Proposed change: Revise ODS substitute emissions factors for refrigerants

- **Proposed change:** Update substitute emissions factors to more recent data, if available from the EPA vintaging model



#4 Proposed change background

Restrict project invalidation liability

- Offset project invalidation - process of cancelling an offset after it has already been issued
- Invalidation happens if:
 - A project report overstates the amount of greenhouse gas emissions reductions or removals by more than 5%, or
 - The project activities did not follow all local, state, and federal laws, or
 - Ecology determines credits have been double counted with another offset program.

#4 Proposed change:

Restrict project invalidation liability

- **Current:** Current rule language could be interpreted to mean any non-compliance at any part of a destruction facility during the period of destruction may be considered grounds for invalidation
- **Proposed change:** Limit invalidation to if noncompliance events directly impact ODS handling, destruction, and emissions from ODS processing
 - Non-compliance events that have no impact on ODS processing would not be grounds for invalidation

#5 Proposed change background

Allow credit generation from HCFC-22

- HCFC-22 was phased out of production and import in 2020, however use, reclamation and reuse of the refrigerant continues to be common practice.
- In 2022, 10 times more HCFC-22 was reclaimed than all CFC's combined
 - A significant opportunity to incentivize destruction of HCFC-22, rather than reclamation and reuse that will ultimately result in leakage to the atmosphere.



#5 Proposed change: Allow credit generation from HCFC-22

- **Current:** Eligible refrigerants are CFC-11; CFC-12; CFC-13; CFC-113; CFC-114; CFC-115
- **Considered change:** Make HCFC-22 eligible



#6 Proposed change background

Credit generation from medical aerosols and unused solvents

- CFCs have been used as medical aerosols (such as inhalers) and solvents (often in dry cleaning and industrial applications).
- Destruction is prohibited in California Air Resource Board's (CARB) Ozone Depleting Substances Protocol, adopted by Ecology.
- CFCs intended for use as a solvent, medical aerosol, or refrigerant will be chemically identical and often the packaging that it comes in is the only factor distinguishing its use.

#6 Proposed change:

Credit generation from medical aerosols and unused solvents

- **Current:** ODS produced as medical aerosols or solvents are not eligible for crediting
- **Considered change:** Allow destruction of eligible CFC's and HCFC's labeled as medical aerosols and (unused) solvents



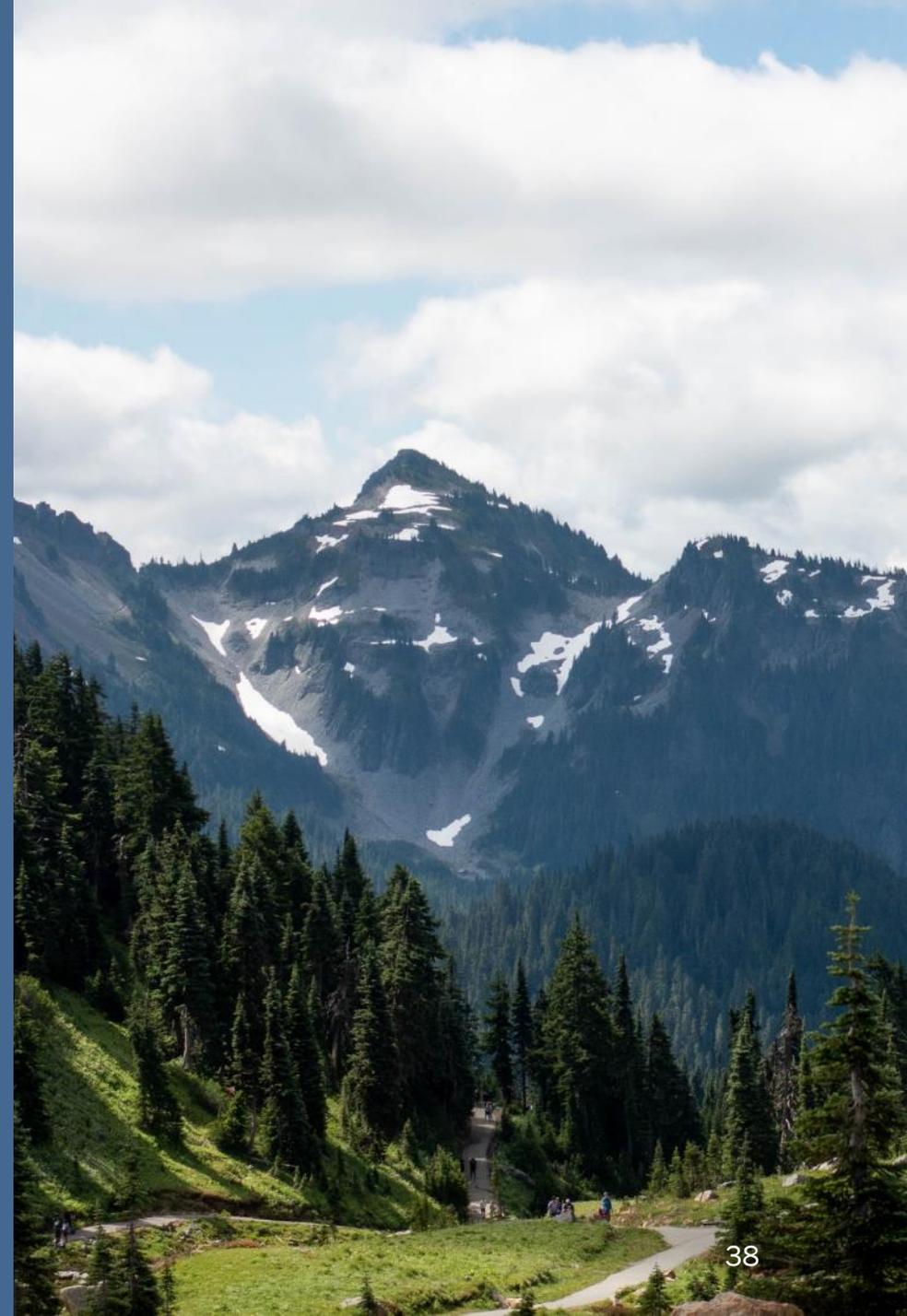
Environmental Justice Offsets Working Group feedback

- Members were asked to share potential environmental justice impacts to the considered ODS revisions
- Feedback
 - Procedural barriers
 - Paperwork
 - Accessibility to smaller developers
 - Potential contamination of federal ODS sites
 - Compounds not covered by protocol
 - Still have environmental and health impacts





Questions?



Rule progress to-date

- US Forest Technical Working Group is ongoing
 - The group will provide input to Ecology on a wide range of potential revisions to the protocol



US Forest Offset Protocol

- Through rulemaking, Ecology is seeking opportunities to:
 - Improve project feasibility for smaller landowners
 - Increase viability of less used project types and less used land types
 - Remove unnecessary or unintended barriers or exclusions to project development
 - Improve applicability of the protocol to forests in Washington state
 - Increase methodological rigor



US Forest Offset Protocol

- Ecology is seeking input on a broad scope of potential revisions sourced from Tribal input, public comments, research in other jurisdictions, input from working group members, and innovations in the voluntary market.
- A preliminary list of this broad scope of considered revisions can be found on our [working group webpage](#).



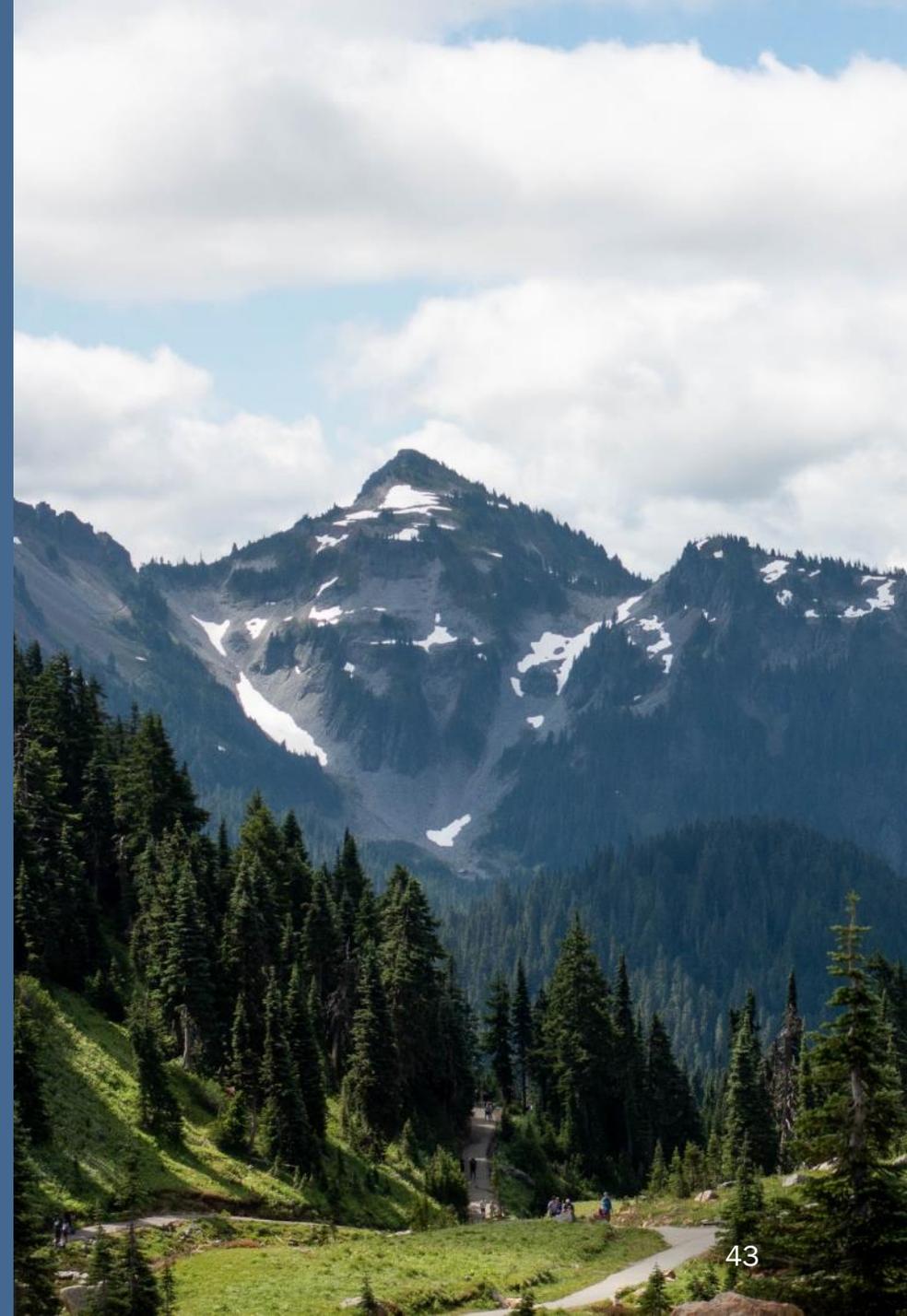
US Forest Offset Protocol

- Revisions to forest practice requirements to better reflect Washington's forests
- Revisions to baseline calculation approaches to improve accuracy
- Approaches to reduce inventory or verification costs to facilitate project aggregation

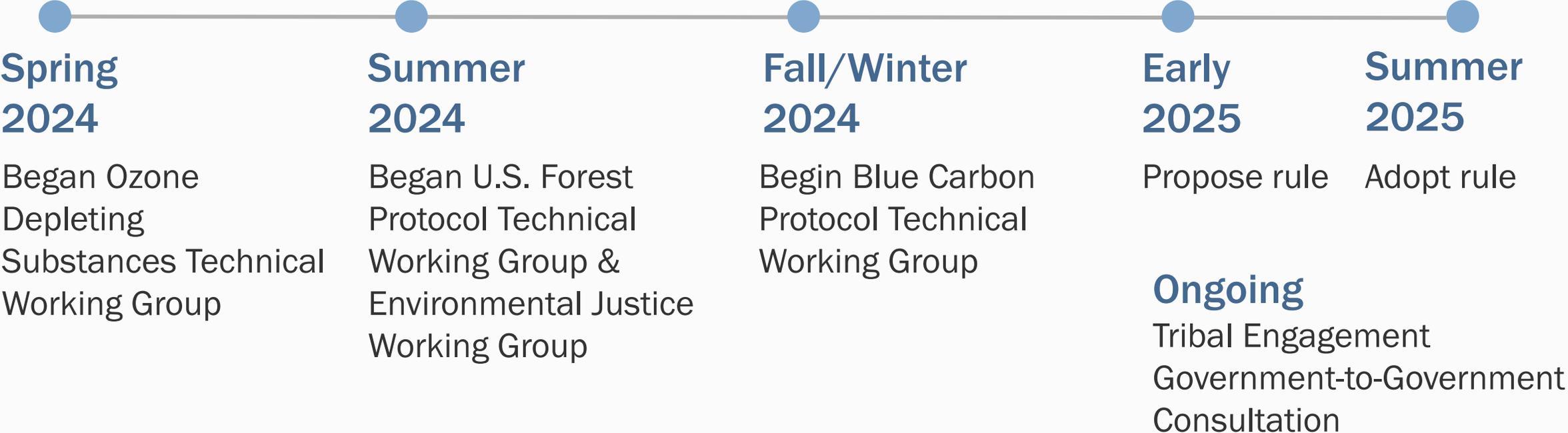




Questions?



Rule development timeline*



**Timeline is tentative and subject to change.*

Ways to engage

- US Forest Technical Working Group and Environmental Justice Working Groups meet monthly, meetings are open to the public and include opportunity for public comment
- Public comments throughout rulemaking process
- Informational meetings

Impact on project development

- Rulemaking won't affect projects currently in development or those developed prior to adoption of the rule.
- After rule adoption, projects with a start date after the adoption date may be expected to follow the new protocol.

Tribal Carbon Offset Assistance Grant Program

- Supports federally recognized Tribes with lands in Washington to design, assess feasibility of, and implement offset projects
- \$5 million in funds available per biennium
 - Funds for 2023-25 were awarded in summer 2023
 - Grant will reopen again in 2025 (pending funding appropriation)



Tribal Consultation Grant Program

- Supports the following
 - Tribal consultation on CCA spending decisions and clean energy siting studies
 - Climate resilience activities
 - Developing Tribal clean energy projects
 - Applying for state or federal funds
- \$21 million available in 2023-2025
 - \$16 million has been disbursed
 - \$5 million more available in Jan. 2025 (If Initiative 2117 does not pass)
 - Grant reopens in 2025 (pending funding appropriation)



Environmental Justice

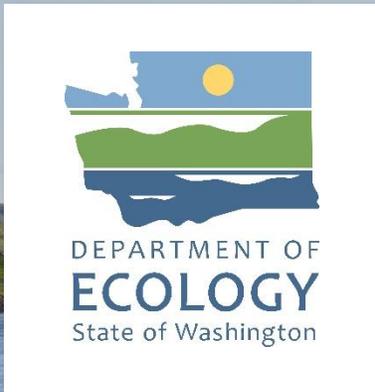
Ecology wants to hear from you!

- How do you think this rulemaking may impact you, your community, or other communities that experience greater environmental harms?
- What are your recommendations to reduce potential harms from this rulemaking?
- What are effective ways to engage with your community?
- Anything else you would like to share about this rulemaking or the engagement process?



Questions and Comments

<https://ecology.commentinput.com?id=gBeZPkmEp>



Thank you

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