



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

# Environmental Justice Offsets Working Group

Meeting #1

September 25, 2024

# Welcome

- Meg Baker – Facilitator, Community Outreach and Engagement Specialist
- Jordan Wildish – Senior Environmental Planner
- Nikki Harris – Climate Pollution Reduction Program Rulemaking Coordinator, Technical host
- Joshua Grice – Climate Pollution Reduction Policy and Planning Section Manager

# Working Group Role

- This working group is not tasked with making consensus recommendation changes to Ecology rule or adopted protocols
- Ecology will consider multiple sources and perspectives, including the input collected through this working group, when deciding how to proceed with changes to this protocol
- Input provided by working group members, even if unanimous, should not be considered an indicator of the changes Ecology may or may not make

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Community agreement – check in

**2**

General offsets, offset protocols and rulemaking - Q&A

**3**

Ozone Depleting Substances Protocol

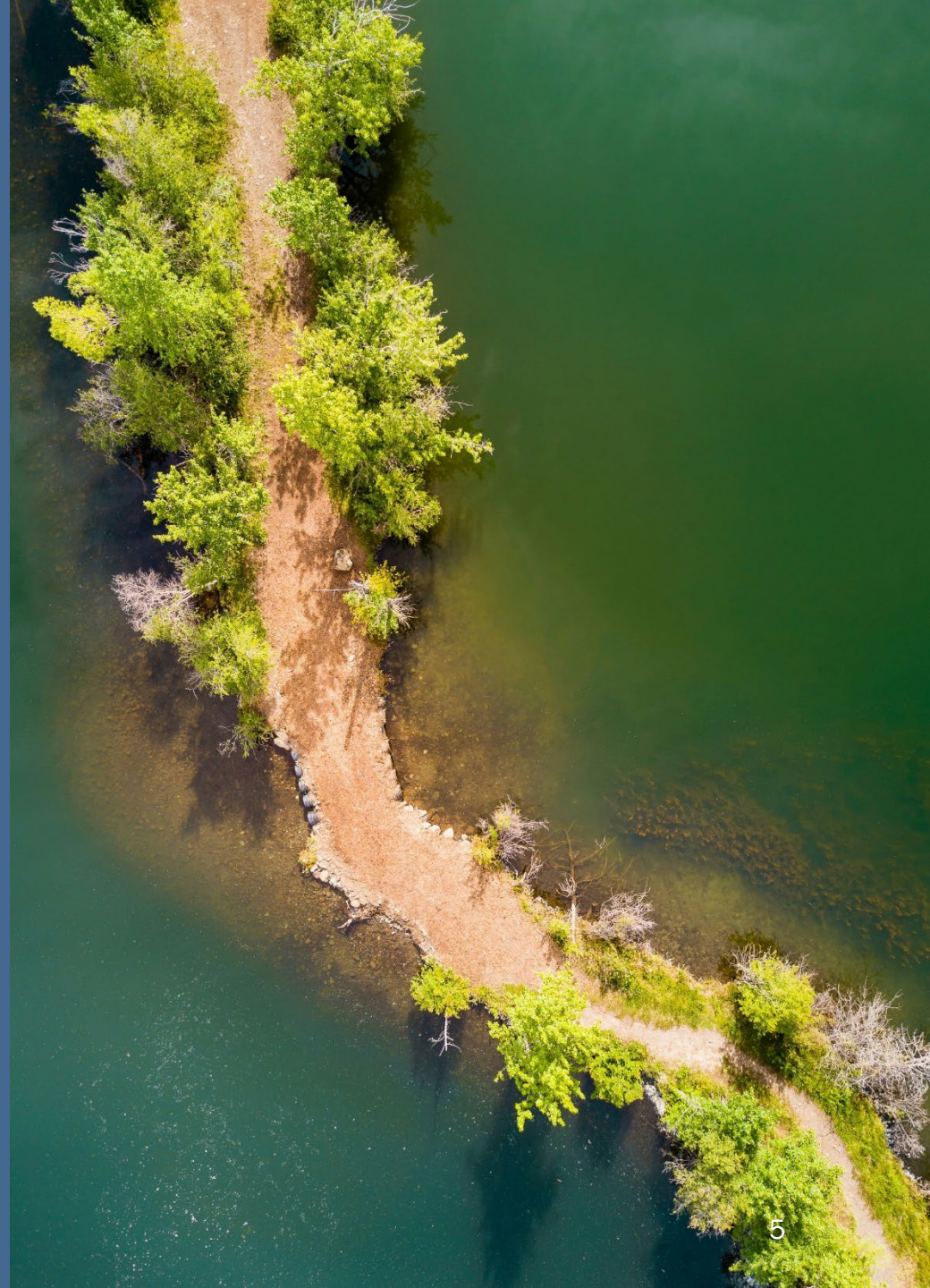
**4**

Public comment period





# Community agreement



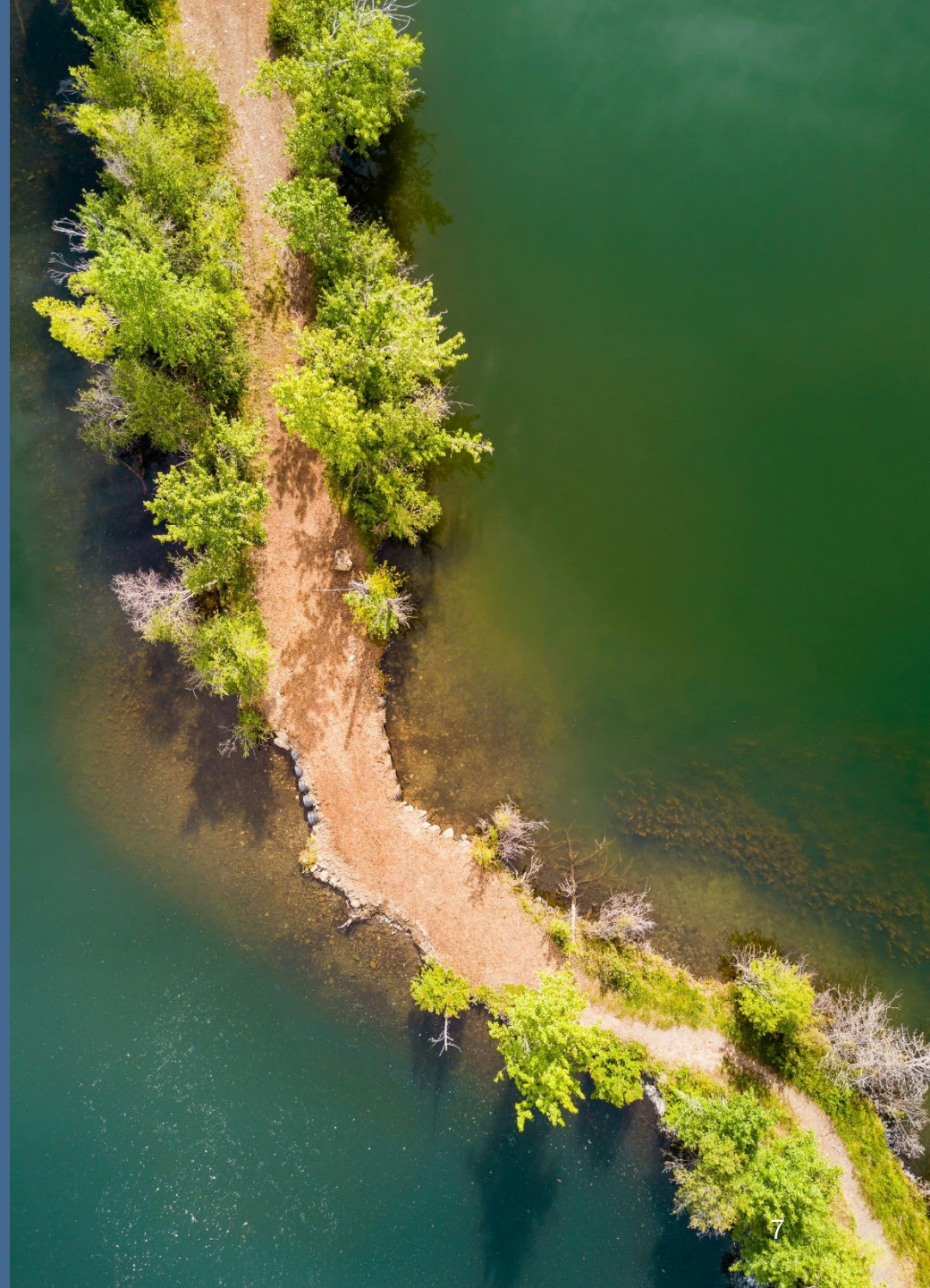
# Community Agreement

- **Respect** – diverse viewpoints, group members' time, active listening, “sit in a circle,” raise hand to speak
- **Accessibility and transparency** – plain talk complex topics and be forthcoming on desired outcomes
- **Think broadly and creatively** – including impacts outside of our own communities
- **Ask for clarification** and help when needed

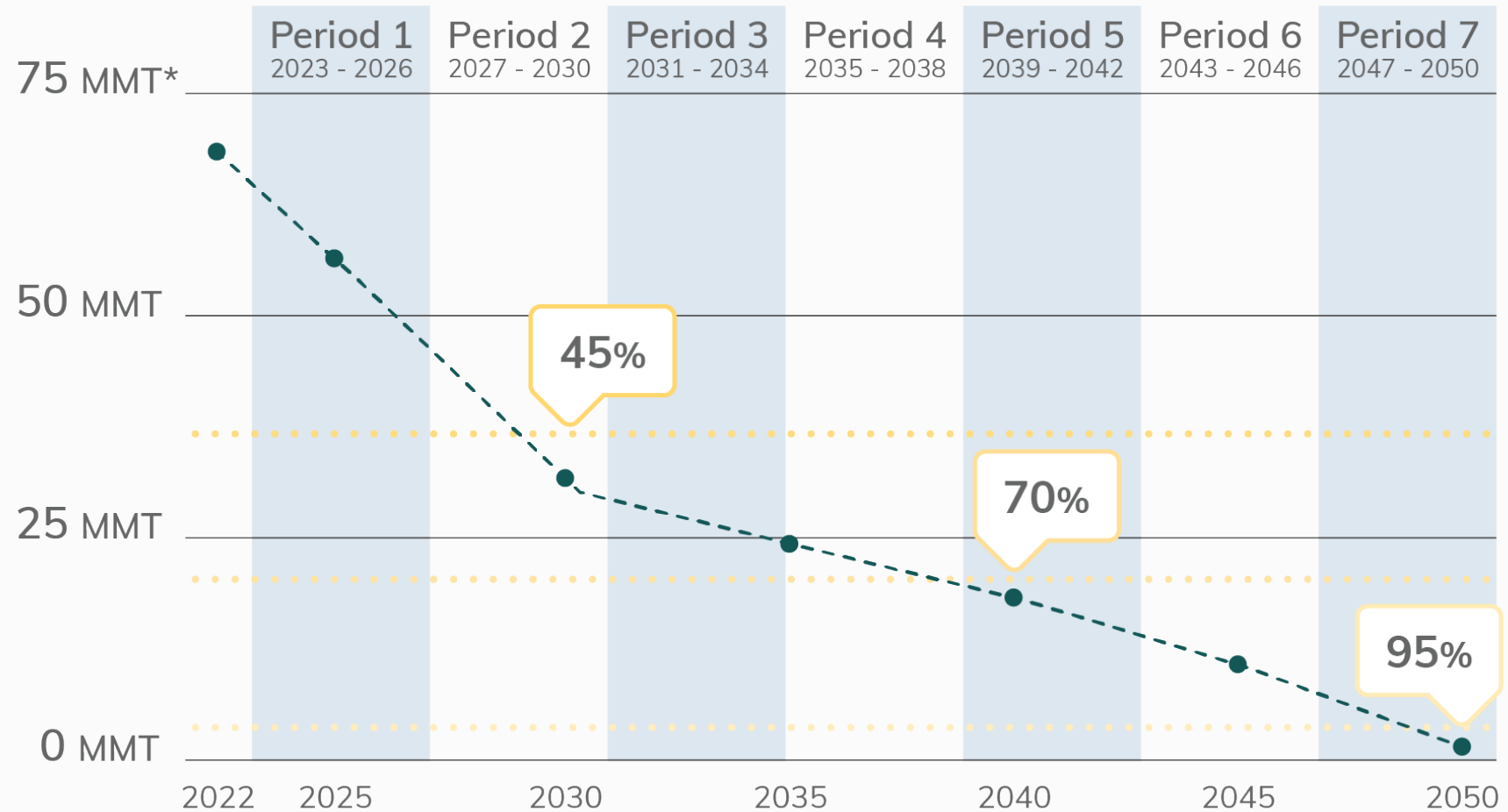




# Recap – offsets and protocols



# Emissions cap reductions and reporting



\*MMT = million metric tons of CO<sub>2</sub> equivalent





# Offsets

There are two types of compliance instruments:



Emissions Allowances

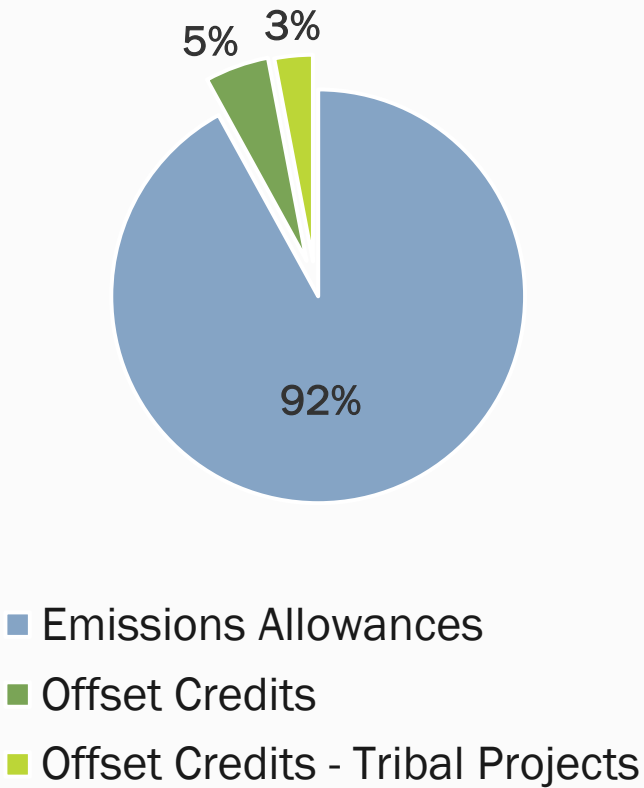


Offset Credits

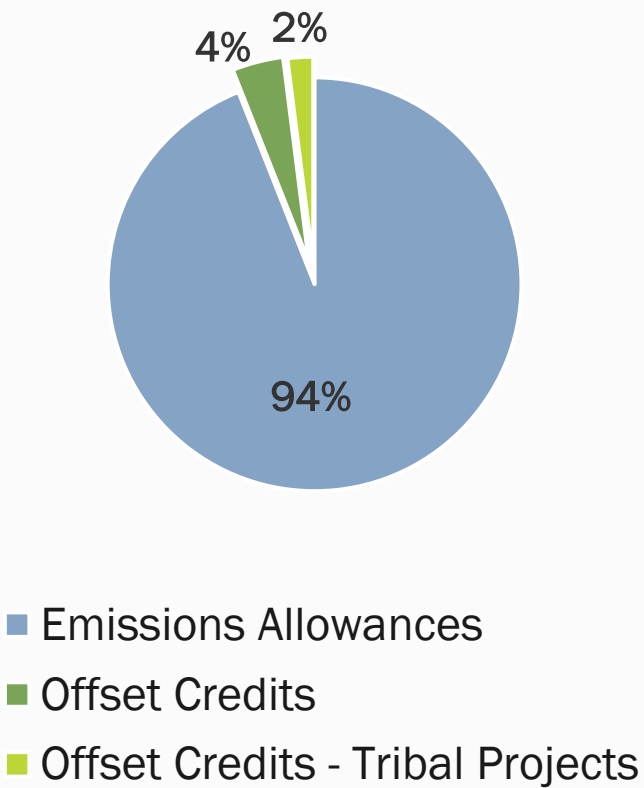


# Offsets

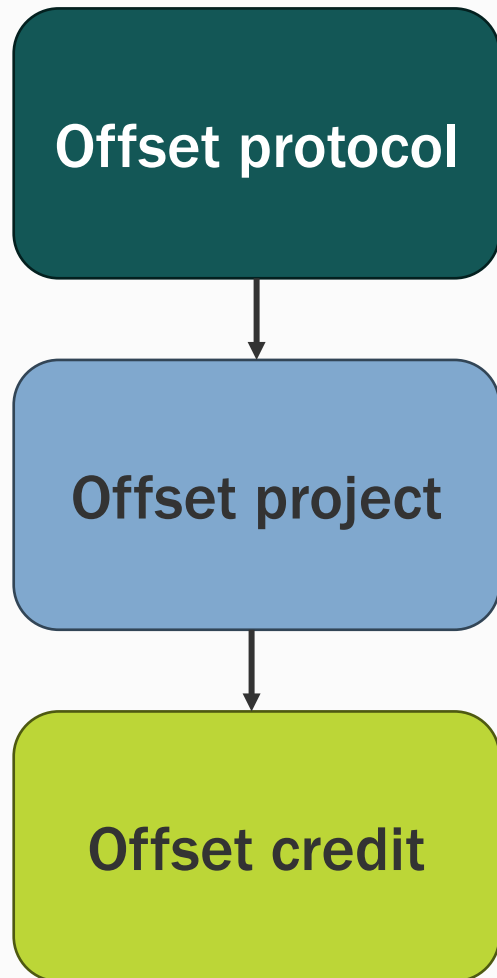
Compliance Instruments Breakdown  
through 2026



Compliance Instruments Breakdown  
2027 - 2049



# Offsets



- A “guidebook” that sets a rigorous standard and procedure that offset projects must follow to receive offset credits from Ecology to use in Cap-and-Invest Program.
- A project that reduces or removes greenhouse gases not covered by the Climate Commitment Act; offset projects produce offset credits.
- Each represents an emissions reduction or emissions removal of one metric ton of carbon dioxide equivalent; can be used in part to meet businesses’ emissions obligation.



# Offset projects


- Provide direct environmental benefits (DEBs) to the state
- Result in greenhouse gas reductions or removals that:
  - Are real, permanent, quantifiable, verifiable, and enforceable; and
  - 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
- Have been certified by a recognized 3<sup>rd</sup> party registry

## Set in statute:

- Offset usage limits
- Tribal lands usage approach
- DEBs
- Greenhouse gas reductions or removals that are measurable, long term, and in addition to



# Ecology has adopted four offset protocols:



U.S. Forest  
Protocol

Ozone  
Depleting  
Substances  
Protocol

Livestock  
Protocol

Urban Forest  
Protocol

# Rule development timeline\*

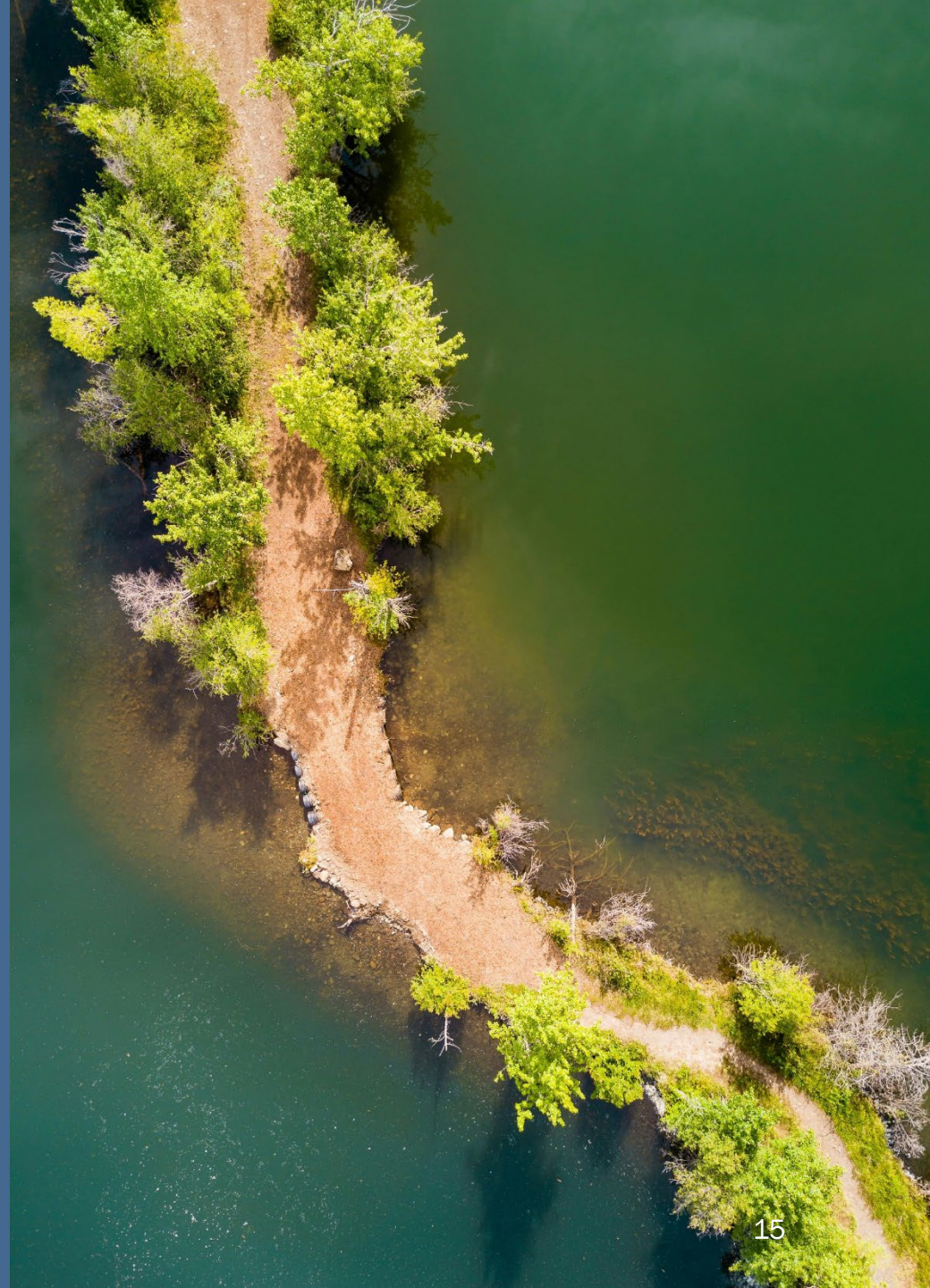


*\*Timeline is tentative and subject to change.*





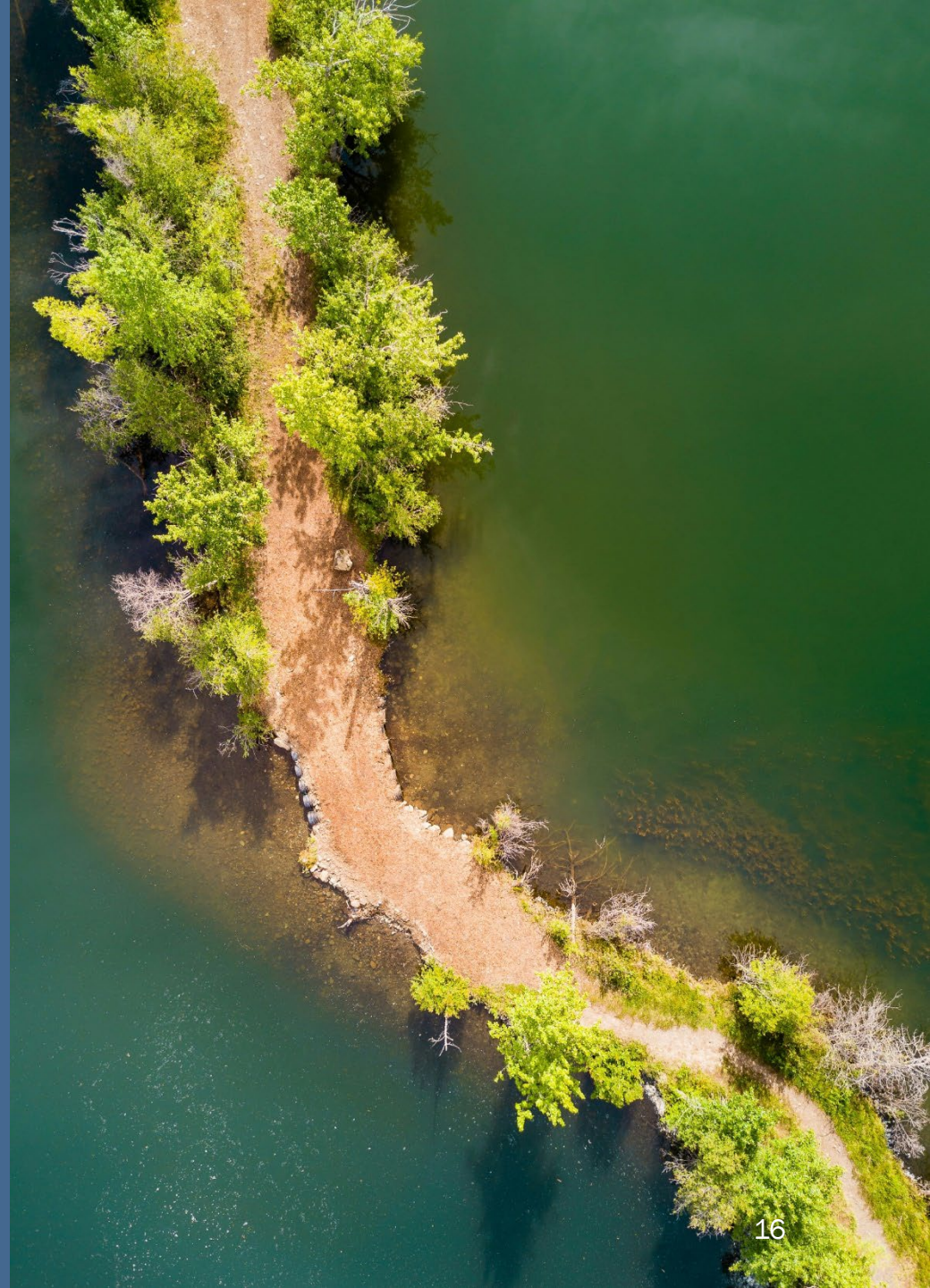
# Questions?







# Ozone Depleting Substances Protocol



# Ozone depleting substances (ODS)

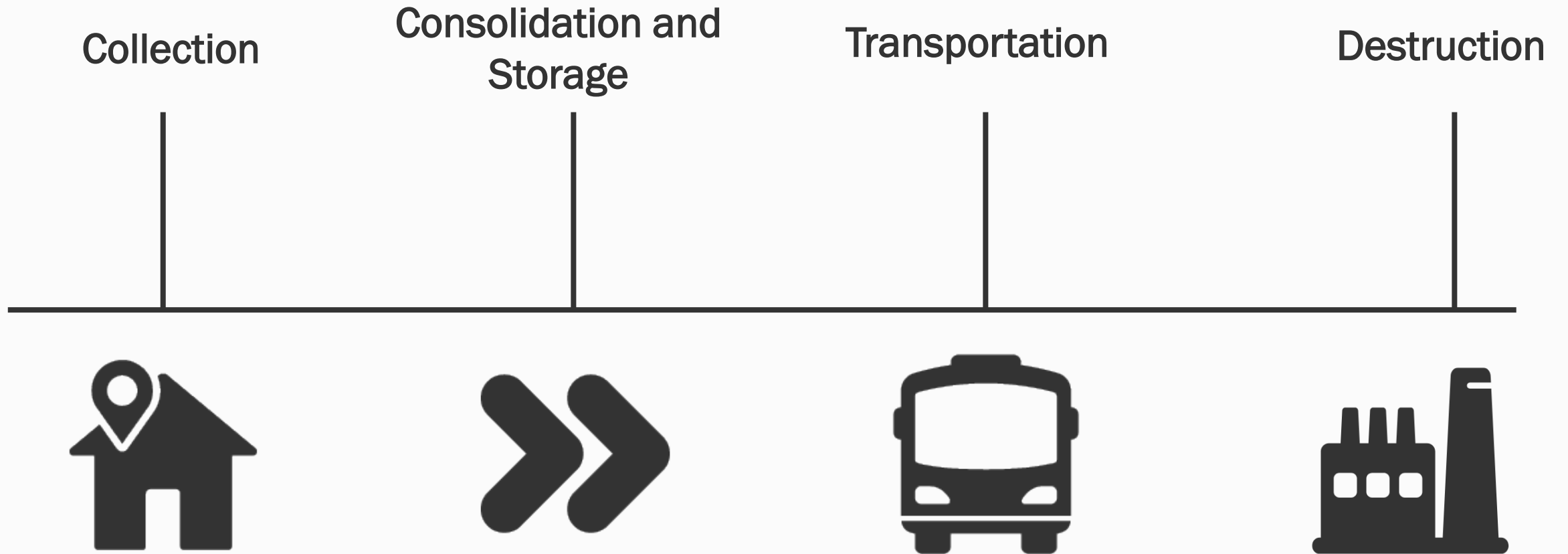
ODS substances include chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs)

- Commonly used in products such as refrigerators, air conditioners, fire extinguishers, and aerosols
- **High global warming potential (GWP)**
  - Compared to  $\text{CO}_2 = 1$  per 100 years, methane ( $\text{CH}_4$ ) 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

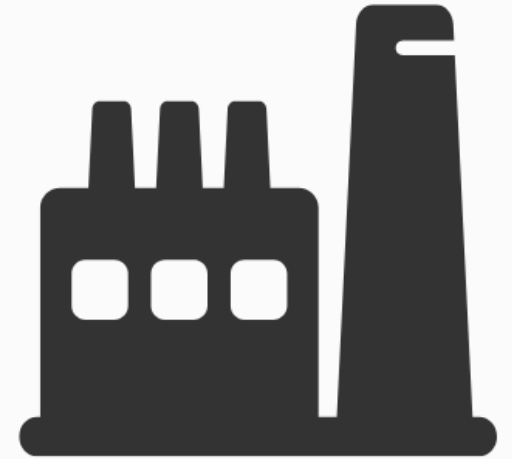
Ozone depleting substances must be destroyed at facilities that have:

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

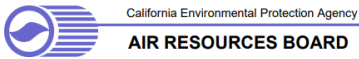
There are a handful of facilities in the United States that have authority to destroy ODS under our protocol

- 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.



# ODS – considered 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 – not considered for revision

## ***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)

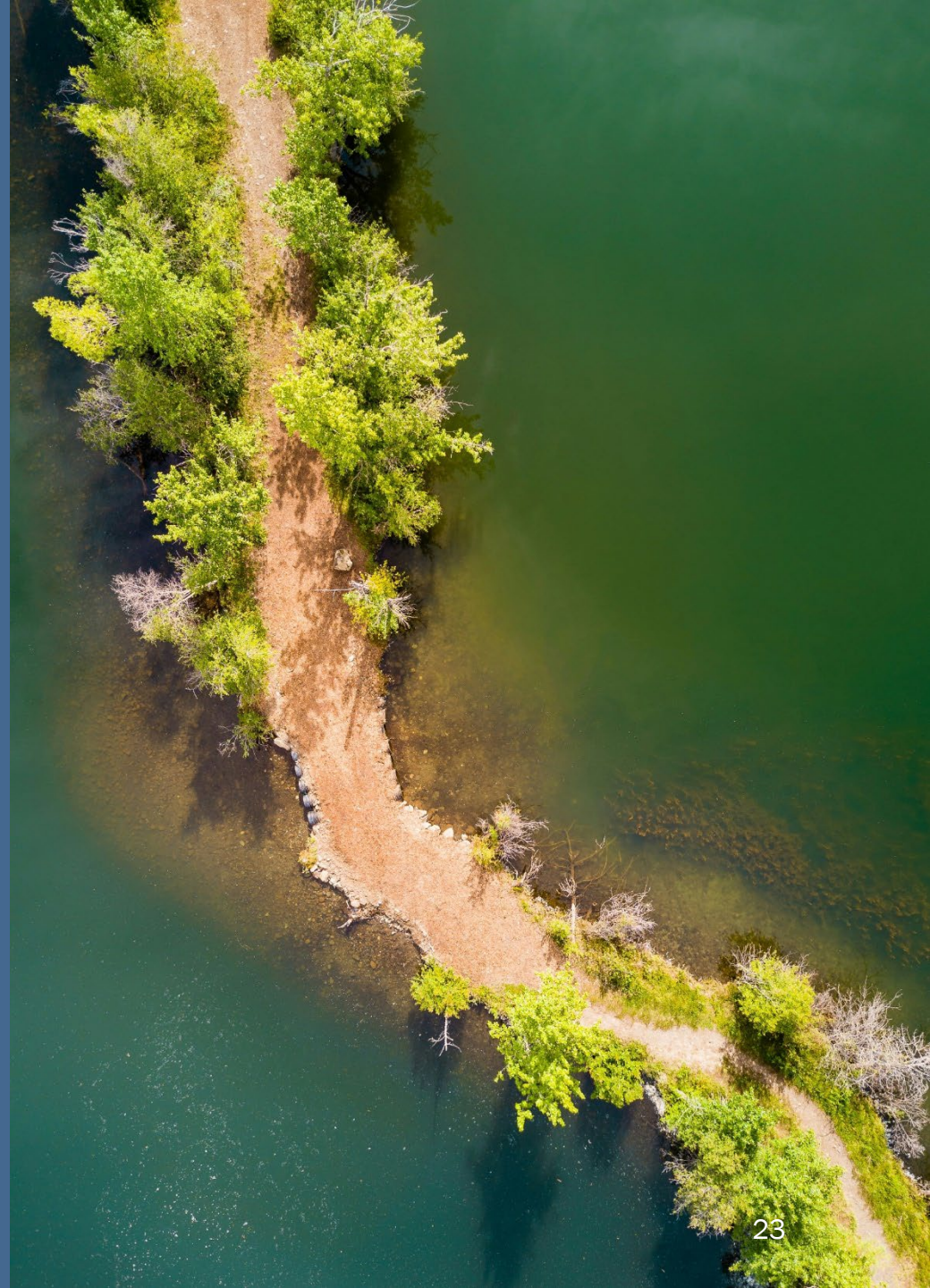
Allow destruction of ODS outside the United States

Allow destruction of ODS sourced from Canada





# Questions?





# #1 Considered change background GWP values from AR4 to AR5

IPCC – Intergovernmental Panel on Climate Change (IPCC)

- job is to advance scientific knowledge about climate change caused by human activities

AR – IPCC's Assessment Report

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







# #1 Considered 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)



# #1 Considered change: GWP values from AR4 to AR5

- Clarifying questions?
- What are the potential environmental justice impacts of this change?
  - Negative?
  - Positive?
- Are there potential ways to mitigate the negative or enhance the positive?







# #2 Considered 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 sourced from federal facilities)
  - Rationale: established expectation that federally recovered ODS was already undergoing destruction, absent offset project registration
  - However, federal ODS sources are not being destroyed as expected





## #2 Considered change:

# Allow ODS sourced from federal government

- **Current:** ODS sourced from federal government installations or stockpiles is not eligible
- **Considered change:** Make ODS sourced from federal governmental installation or stockpiles eligible
  - Government / federal agencies **cannot** be project developers
  - Must report data on location of ODS collection



## #2 Considered change:

# Allow ODS sourced from federal government

- Clarifying questions?
- What are the potential environmental justice impacts of this change?
  - Negative?
  - Positive?
- Are there potential ways to mitigate the negative or enhance the positive?







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

- **Current:** Offsets are credited based on estimated 10-year emissions of ODS, absent destruction
- **Considered change:** Update 10-year emissions rates to more recent data, if available from the EPA vintaging model



# #3 Considered change:

## Revise emissions factors for refrigerants

- Clarifying questions?
- What are the potential environmental justice impacts of this change?
  - Negative?
  - Positive?
- Are there potential ways to mitigate the negative or enhance the positive?



# #4 Considered 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 Considered 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
- **Considered 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





# #4 Considered change: Restrict project invalidation liability

- Clarifying questions?
- What are the potential environmental justice impacts of this change?
  - Negative?
  - Positive?
- Are there potential ways to mitigate the negative or enhance the positive?



# #5 Considered 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 Considered 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



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

- Clarifying questions?
- What are the potential environmental justice impacts of this change?
  - Negative?
  - Positive?
- Are there potential ways to mitigate the negative or enhance the positive?



# #6 Considered 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 Considered change:

### Credit generation from medical aerosols and unused solvents

- **Current:** ODS produced as medical aerosols or solvents are not eligible for crediting
- **Considered change:** Make medical aerosols and solvents eligible



## #6 Considered change:

### Credit generation from medical aerosols and unused solvents

- Clarifying questions?
- What are the potential environmental justice impacts of this change?
  - Negative?
  - Positive?
- Are there potential ways to mitigate the negative or enhance the positive?





# Next Meeting

- October 23, 2024, 9:00 – 11:00 a.m.
- December meeting – Dec. 18
- Please submit compensation forms (Aug. and Sept. hours) today.



# New Air Quality Community Grants

Open now through Oct. 24 at  
5 p.m. PDT

- \$10 million for projects in communities overburdened and highly impacted by "criteria" air pollution
- Eligible applicants include but are not limited to Tribes, CBOs, local municipalities

Eligible projects:

1. Planning and engaging communities to develop projects that will reduce criteria air pollution
2. Implementing projects to reduce criteria air pollution



Email us: [AQcommunitygrants@ecy.wa.gov](mailto:AQcommunitygrants@ecy.wa.gov)



Visit our webpage for more details:  
[ecology.wa.gov/AQCommunityGrants](https://ecology.wa.gov/AQCommunityGrants)



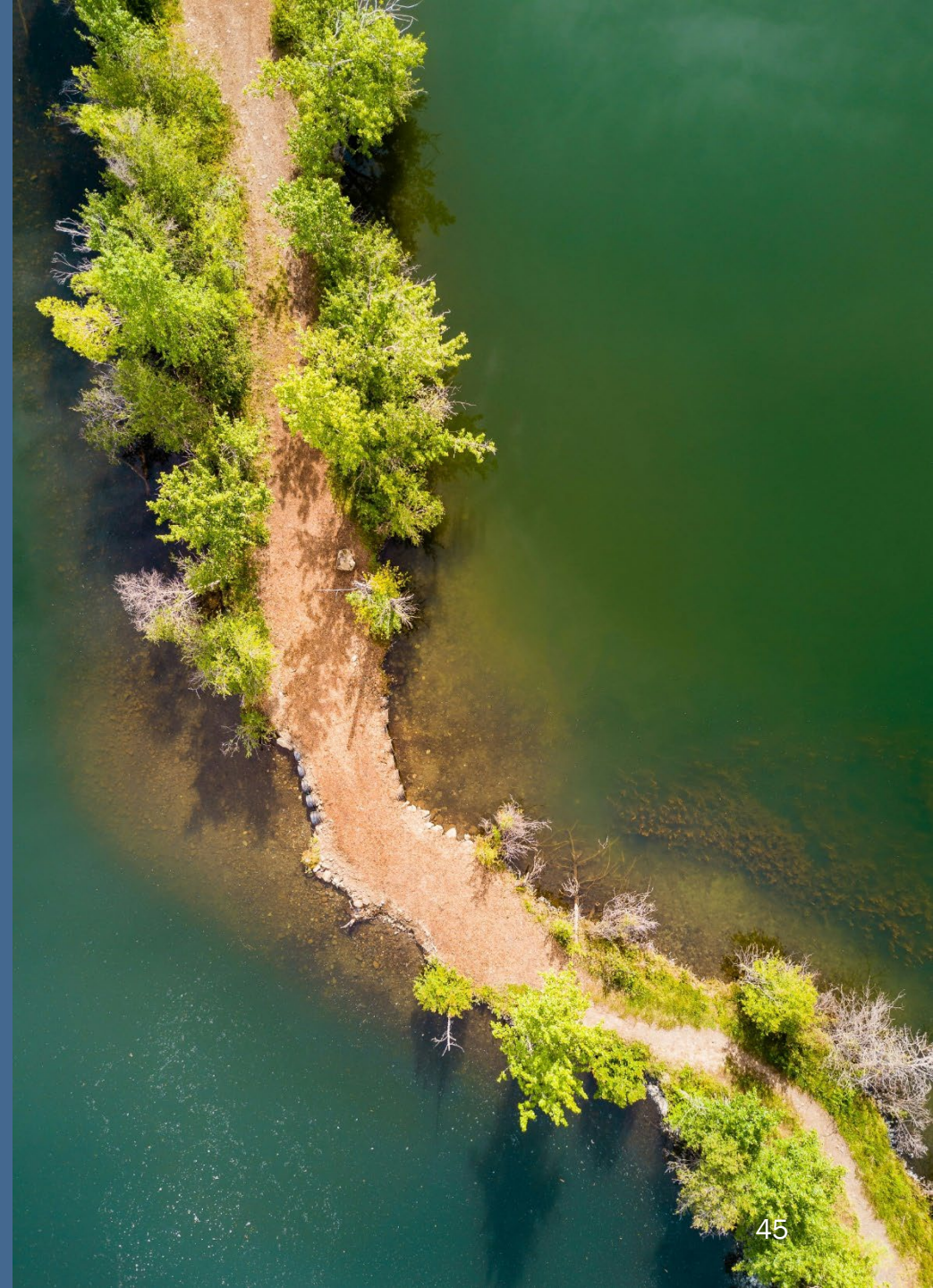
# Tribal Consultation Grant Program

- 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)





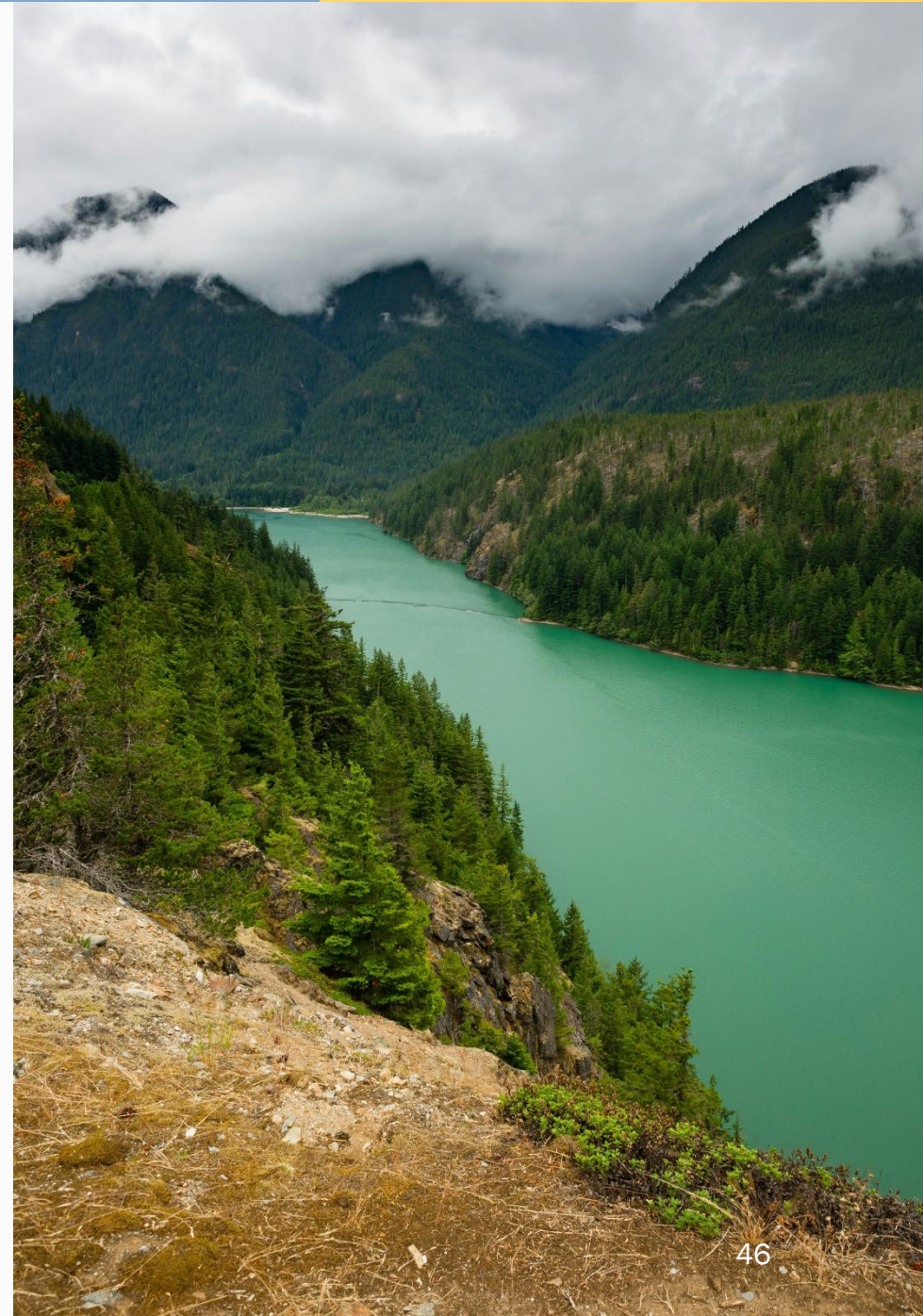
# Public comment period





# Public comment period

- Guidelines for providing public comment
  - Up to two minutes per person
  - Host will unmute you and begin timer
  - Please keep the comments related to ODS or offset projects
  - Ecology will not respond to comments in this meeting
  - To submit written comments, use our digital comment platform
  - Please use “raise hand” button to indicate that you wish to provide a comment







# Thank you!

**Meg Baker**

[margaret.baker@ecy.wa.gov](mailto:margaret.baker@ecy.wa.gov)

**Jordan Wildish**

[jordan.wildish@ecy.wa.gov](mailto:jordan.wildish@ecy.wa.gov)