

# Summary of Lessons from Natural and Working Lands Work Group Discussions

Carbon Policy Office

December 13, 2018

## Process and Context

The Carbon Policy Office convened the Natural and Working Lands Work Group (NWL) in the summer of 2018, including representatives of producer groups, conservation organizations, state and federal agencies, and organizations with experience in offset project development. The Natural and Working Land Work Group met 5 times over the summer and fall of 2018.

The Natural and Working Lands Work Group was formed to gather stakeholder input on two aspects of designing a cap and trade program:

- **First, designing compliance offsets**, which represent emission reductions from sources not covered by the cap. Offset credits can provide an incentive for emission reductions in sources not directly covered by the cap and trade program.
- **Second, using direct investment incentives** to harness the rich potential for carbon sequestration in Oregon's natural and working lands. Under this approach, funds from allowance auctions could be used to incentivize farm and forestry practices that sequester carbon and contribute to climate change adaptation. Though this approach is only one of many options for the Legislature to invest funds from a cap and trade program, it provides emissions reduction outside the cap and beyond the practical reach of offset protocols.

This document summarizes the lessons learned in both of these categories in the course of discussions in the Natural and Working Lands Work Group. Several detailed supporting documents used in the discussions of the Natural and Working Lands Work Group are listed at the end of this document.

## Offset Credits in a Cap and Trade Program

Offsets used by regulated entities for compliance with a cap and trade system offer several benefits: first, emissions reductions outside capped sectors, second, an income stream for the entity that controls the reduction activity, and third, a lower cost compliance option for a regulated party. While some stakeholders in the Natural and Working Lands Work Group have not taken positions related to offsets, many are supportive of the inclusion of offsets in the design of a cap and trade program, with the caveat that developing and implementing compliance grade offset projects is typically better suited to larger entities.

### ***Oregon should pursue its own offset protocols***

California and Quebec have each developed separate offset protocols that detail the requirements for an offset project to receive offset credits to be used for compliance with their Cap and Trade Programs. As linked partners, offsets can be traded between regulated entities in both jurisdictions and used for compliance. Following passage of legislation, Oregon should pursue development of its own offset protocols to customize offset protocols to Oregon farms and forests, and to Oregon laws.

Some stakeholders in the Natural and Working Lands Work Group identified opportunities for offset protocols in improved forest management (compensates a landowner for management activities that

maintain or increase carbon stocks), avoided forest conversion, and reforestation (restoring forest cover not otherwise required). While California has its own forest offset protocols tied to its own forest practices, Oregon could develop a forest offsets protocols to work better for Oregon's forests and take advantage of developing improvements in how the offset programs work.

More research is needed to identify the most promising offset protocols available on Oregon's natural and working lands. California has a rice cultivation offset protocol for reductions in flooded rice fields, and Quebec has a manure storage facility methane destruction protocol, and Oregon should create its own offset protocols. Some stakeholders among the Natural and Working Lands Work Group identified the potential for a compliance offset similar to existing voluntary offsets for avoided grassland conversion to other uses and the potential to develop a tidal wetland restoration protocol in the future.

Compliance offset protocols can be most easily developed from voluntary protocols already in use in voluntary offset markets. Adapting voluntary offset protocols to Oregon objectives and natural and working lands is consistent with the approach taken in California and Quebec. Stakeholders recommend that the Oregon Department of Agriculture and Oregon Department of Forestry have principal roles in offset protocol development, in partnership with the agency charged with implementing the core elements of the cap and trade program.

### ***Important offset design details***

To understand opportunities to learn from and improve upon compliance offsets in use in California and Quebec, the Natural and Working Lands Group included and heard from individuals with experience in compliance offset project development. Their recommendations are available in a separate memorandum discussed in the Natural and Working Lands Work Group (see end of this document). From this discussion came the following lessons:

- **To increase landowner interest in participation in offset markets, the policy should be structured to avoid introducing unnecessary risk:** Compliance offsets are complex financial transactions that commit the landowner/project developer to long term reductions. Additional project risk dampens landowner/project developer engagement in offset markets. It will be important to design the offset policies to reduce risk – in particular with regard to how the state will address concerns about local air quality violations and structure rules regarding invalidation.
- **Ensure transparent, timely offset protocol development and project review:** Oregon should develop offset protocols through a public process using current science and best practices that reduce project development costs. Oregon also should pursue ways to streamline review of offsets. Stakeholders report delays in review at the California Air Resources Board, and recommend Oregon utilize third party contractors and statistically valid evaluation techniques to ensure offsets can be processed timely. These processes should use transparent timelines and deadlines, and should regularly update offset protocols to improve efficiency and incorporate updated science.
- **Barriers to offset project development:** Stakeholders found that one barrier to offset project development is the requirement that a landowner make a long term (up to or over a century) commitment. Offsets generally require long term reduction commitments because many greenhouse gasses remain in the atmosphere for long periods once released. Quebec has considered an approach that grants offset credits for sequestration that occurred in the previous year. While this avoids the challenges of long term commitments, stakeholders have cautioned it introduces risk into financing offset projects. Complexity of developing offset

projects is another barrier to offset project development. Compliance grade offsets are complex enough to be out of reach for single smaller producers or landowners, and stakeholders support efforts to better aggregate reductions in one project across multiple landowners.

**Information Needed:**

- Oregon needs greater clarity about the implications for offset protocols if Oregon links its cap and trade system with those already operating in California and Quebec. The Carbon Policy Office has had discussions with both of these jurisdictions regarding offsets and will continue to improve our understanding of their approaches to offsets and any implications for potential linkage.
- More research is needed to identify the most promising offset protocols available on Oregon's natural and working agricultural lands, and for restoration of coastal and marine ecosystems.

**Investing in carbon sequestration and climate adaptation on natural and working lands**

Investing in incentive programs on natural and working lands provides emissions reductions outside the cap and provides climate adaptation benefits, and does so with a broader reach than offset projects.

***Promising types of incentives for working lands***

Across agriculture, forestry, and natural lands, incentive programs can reach landowners with small and large acreages. In the agriculture sector, the group identified soil health and nutrient management programs as among the most promising categories of agricultural practices with carbon sequestration potential, aided by the expertise of soil scientists at NRCS. In the forestry sector, some stakeholders identified avoided conversion and fragmentation, forest and watershed reforestation, extended rotations, hazardous fuels reduction, and extending stream buffers as possible priorities for incentives for forest owners.

***Promising types of incentives for natural lands***

Additionally, the group valued conservation of natural lands (lands not in production). Some stakeholders identified rangeland conservation and restoration and tidal estuary protection, among others, as incentive investments with high carbon sequestration value. Forest health treatments are also promising as an important area for investment in climate change adaptation.

***Incentive funds should be made available through existing programs or funding streams:***

Oregon farm and forest landowners have access to a wide range of programs to assist them in implementing conservation practices that contribute to carbon sequestration. These programs have good working relationships with landowners. Funds from allowance proceeds could be targeted toward specific practices that have carbon sequestration and climate adaptation benefits through the Oregon Watershed Enhancement Board, Oregon Department of Forestry, and Oregon Department of Agriculture. Oregon investments in these practices could leverage existing federal programs funded through USDA's Natural Resources Conservation Service (NRCS), including through the Environmental Quality Incentives Program (EQIP) as well as the US Forest Service, NOAA and the U.S. Fish and Wildlife Service. Many of the practices incentivized by these programs support carbon sequestration, but the programs are oversubscribed, or inconsistently applied across regions. Utilizing existing funding pathways also helps maintain program simplicity and durability. Existing federal and state conservation programs are not accessible for all Oregon agriculture or forest industries. In addition to the existing programs, the state should consider investment in improved energy or water efficiency programs where a clear benefit for climate change adaptation or greenhouse gas reduction is present.

***Incentive programs should work with and support landowners:***

Utilizing existing funding pathways helps ensure the program is compatible with programs and staff that landowners are familiar with, and that the implementing agency is familiar with what is practical and needed on Oregon lands. Along with knowledgeable program staff, stakeholders recognize a role for technical assistance and local support, though local soil and conservation districts, the Oregon Department of Forestry, Oregon State University and the OSU Extension Service, and other local partners. This could include partnering with farm or forest landowners to complete conservation planning that incorporates climate change adaptation and carbon sequestration practices.

Amid state and public interest in climate change adaptation and carbon sequestration, Oregon forest and agriculture owners continue to operate in the face of a climate-changed landscape. Agriculture producer stakeholders emphasize that practices incentivized through cap and trade revenues should be compatible with keeping working lands in production. Overly prescriptive practice requirements or complex administrative requirements should be avoided, to ensure the broadest possible uptake of carbon reduction practices.

***Additional Considerations for Incentives:***

- **Measuring results:** Funds invested in carbon sequestration practices should be measurable to provide accountability and demonstrate results, but measurement should be simple and compatible with data a landowner might otherwise collect. The Natural and Working Lands Work Group discussed measurement with NRCS in the context of soil health conservation.
- **Early adopters of GHG reduction practices:** Some agriculture stakeholders suggest that producers who have adopted practices prior to this measure should be eligible for incentives through this program.
- **Prioritization of funds:** Funds should be prioritized to achieve carbon sequestration and climate change adaptation, or other co-benefits, wherever possible.

***Information Needed:***

- Additional Oregon-specific research and data is needed on the carbon sequestration value of various agriculture and forestry practices. Some useful tools already exist: NRCS' COMET tool can be used to quantify the greenhouse gas impact of farm and ranch practices; a November 2018 study (see *Further Reading* below) sought to quantify the most promising pathways to greenhouse gas reduction on natural and working lands; and The Nature Conservancy has partnered with Portland State University to conduct Oregon specific research about these pathways.
- Additional information is needed on how to best target public funds and leverage private capital for conservation or restoration of natural lands, such as wetlands or rangelands.

## Next Steps

To refine our recommendations for offsets in a cap and trade proposal and assist the Legislature in developing policies to invest in carbon sequestration and climate adaptation practices, the Carbon Policy Office will continue to engage with stakeholders from the Natural and Working Lands Work Group and others, and will pursue the additional research identified in the *Information Needed* sections above.

## Further Reading

The following are works informative to the issues discussed:

- *Briefing Memorandum on Offsets*, prepared by representatives of The Nature Conservancy, The American Forestry Foundation, EFM, The Climate Trust, and the Climate Action Reserve.
- *Designing Working Lands Incentives for Oregon Agriculture*, prepared by Oregon Department of Agriculture and Oregon Watershed Enhancement Board staff
- *Natural Climate Solutions for the United States*, Published in *Science Advances*, November 14 2018. <http://advances.sciencemag.org/content/4/11/eaat1869>
- Issue briefs prepared by the Pinchot Institute on [Forestry Offsets](#), [Agriculture Offsets](#), and [Offset Aggregation](#)