Oregon Department of Forestry

Report on Proposed Actions for Executive Order No. 20-04

Overview

As related to the Agency's plans for implementation of specific directives given to the agency by EO 20-04, the Oregon Department of Forestry (ODF) has been actively and cooperatively working on climate change and climate mitigation efforts for over 20 years. Initially working to establish the authority and ability to facilitate development of carbon offset markets and later participating in early statewide climate and carbon research and policy development efforts. The department continues these efforts with multiple partners and stakeholders and is actively involved in the development of science behind measurement and quantification of carbon storage and sequestration in forests.

Agency Reduction of Greenhouse Gas (GHG) Emissions

Agency operational protocols have a direct relationship to carbon and emissions. Further evaluation of these protocols and related business practices to identify where achieving efficiencies are meaningful in realizing emission reductions. Toward this end, actions ODF has begun evaluating, and will continue to evaluate, towards reducing "GHG emissions in a cost-effective manner" include:

- Expand and encourage utilization of remote meeting technology to reduce vehicle travel to and from the numerous meetings agency staff and associated committees are regularly involved.
- Reduce building energy and electrical consumption through technological and personal action (e.g. power sensors, shut off lights and computers off when not needed).
- Utilize electric vehicles where reasonable as fleet replacements arise. Identify and facilitate additional telecommuting options where appropriate.

Agency Reduction of GHG in Policy

ODF has established active research and policy relationships with federal, academic, and stakeholder partners and neighboring states to assess and account for forest carbon and impacts of climate change. The Pacific Temperate Forest MOU (Oregon, California, Washington, and British Columbia) formalizes this relationship and involves active research participation and support around regional forest carbon and climate change. The policy and research efforts vary but relate directly to the relationship between carbon, climate and Oregon's forests and natural working lands. Examples of these efforts include:

Forest Carbon Sequestration and Flux – ODF has worked cooperatively with the USDA Forest Service Pacific Northwest Research Station (PNWRS), research institutions, and stakeholders to produce the Forest Ecosystem Carbon Report (FECR) that quantifies the amount of carbon that is currently stored in Oregon's forests. The report is intentionally consistent with forest carbon reporting in California and Washington to facilitate regional analysis and comparison and has helped establish a baseline for the storage and flux of carbon in forest ecosystems across the Pacific coast region. This approach is a critical aspect to understanding and informing carbon and climate policy within and beyond Oregon. Forest ecosystem carbon reporting in Oregon will be iterative, utilizing ongoing federal Forest Inventory Analysis (FIA) data collection and will continue to be dynamic and current with the next update expected when all field plots have been remeasured in the next few years.

Wood Product Carbon Flux – ODF is currently working with the PNWRS and State partners to produce a report on the storage and flux of carbon in harvested wood products (HWP). This report will provide estimates of carbon in products currently in use, landfills, and emitted from burning (by ownership) based on timber harvests in Oregon since 1906. This report is anticipated to be completed by the fall of 2020 along with an assessment of sawmill energy usage and production in Oregon. ODF included a stakeholder committee during the production of both the Forest Ecosystems Carbon Report and the Harvested Wood Products Carbon Report. This research and reporting provides a vital linkage with the flow of carbon out of forest pools to utilization. Work like the FECR is being conducted in a manner comparable to neighboring state partners, providing a necessary mechanism for tracking carbon flows and utilization regionally.

Scenario Planning and Management Projections – ODF is currently collaborating with the PNWRS, and the other signatories of the Pacific Temperate Forest MOU in a co-production effort to model the benefits and consequences of alternative forest management scenarios for carbon mitigation. There is ongoing, broad-level stakeholder involvement, with outreach to those most impacted. This work is part of a long-term initiative within the PNWRS that includes numerous staff from various natural resource agencies and organizations including Andrew Yost, the department's forest ecologist and Danny Norlander, the forest carbon policy analyst. With completion of this work, ODF will be able to present projected impacts of various forest management scenarios and the implications to forest carbon. It is anticipated that this work will be completed within the next few years with a variety of intermediate products produced along the way.

Detecting Changes in Biogeography of Trees and Adaptation Planning – ODF is currently collaborating with the Forest Inventory and Analysis Program, The Institute For Natural Resources, and Groom Analytics to measure the rate of change in tree species' distributions due to climate change. In 2021, the US National Forest Inventory program will complete remeasurement of 33,600 Forest Inventory and Analysis (FIA) plots in Oregon, California, and Washington. These measurements provide the data to test one of the most important hypotheses about the effects of atmospheric carbon enrichment on climate and vegetation on a large geographic scale. This analysis will provide a geographical baseline for all tree species in the FIA datasets. The intensity, design, and spatial extent of the Forest Inventory and Analysis (FIA) data sets provide a distinct opportunity to detect slight shifts in tree species' ranges within a 10-year monitoring interval. ODF and the Board of Forestry (Board) will use the results of this analysis for adaptation planning centered on assisted migration.

Oregon Board of Forestry – The Board is interested in developing effective policies for climate change mitigation and adaptation. The Forestry Plan for Oregon is the Board's strategic planning document and it integrates climate change as a key goal. The Board has begun the process of updating the FPFO starting with revision of the values statements and the climate change goals (Goal G). As with all Board work, this process will be open, transparent and will incorporate public comment.

Diversity, Equity, and Inclusion – Separately identified in the Board work plans for both the values and Goal G revision is identification and implementation of an inclusive and equitable public input process. How much and to what degree the public and outside entities will be able to participate in these processes will be established by the Board. To help ensure an equitable process, staff hopes to

utilize an equity lens and tools being developed under the Statewide Climate Change Adaptation Framework process led by the Department of Land Conservation and Development (DLCD). This large project has an equity subgroup that has contracted with a Diversity, Equity, and Inclusion (DEI) consultant to help develop these tools. One intent of this contract is to provide durable tools participating agencies can utilize in their own policy development and project outreach. ODF is closely involved with this group and is providing funding to the contracting agency (Oregon Health Authority) for the DEI consultant. The lead for this work is Danny Norlander, who has been the primary participant from the agency in the adaptation framework process. The timeline of the equity tools aligns with the current anticipated timeline for the Board's strategic plan revision work, with the equity lens and tools due in late summer 2020.

Work with the Board on DEI and public outreach leads into the Executive Orders requirement on participation with the workgroup on climate-impacted communities. The department will utilize the processes and tools developed in both the strategic plan revision and the adaptation framework project to increase its inclusion and outreach to impacted communities. At this time, the lead individual is likely be Danny Norlander but may also include department representatives to the Environmental Justice Task Force, Andy White and Ryan Gordon. If the agency is successful in increasing DEI staffing through budgetary requests, any new staff will be included in the process as well. It is unclear how closely this work will align with what has been done towards the adaptation framework, but it could stand as a starting point for the process.

Oregon Global Warming Commission Support and Participation – The final area where the Order specifically directs ODF action is coordination with the Oregon Global Warming Commission (OGWC) towards goal setting and scoping relating to natural working lands (section 12). ODF has been an active participant and member in the work of the OGWC and providing substantive staff support and focus on carbon and climate particularly as it relates to forestlands. While these efforts are in line with the overall direction of the Order, there are some finer points that the agencies and the Commission will need to work on before the June 2021 due date. ODF will participate in this strategic and scientifically supported best practice goal setting with participation from the state forester, Peter Daugherty and support from Andrew Yost and Danny Norlander, among other knowledgeable staff.

Advancing GHG emission reduction Goals

Relating to the general direction to all agencies to advance the greenhouse gas emissions reduction goals established by EO 20-04, ODF staff has and will continue to interact with the Board in revising the Board's strategic policy document, the Forestry Program for Oregon. The document has a series of goals, of which Goal G is specifically related to forest carbon and climate change. It reads:

> "Improve carbon sequestration and storage and reduce carbon emissions in Oregon's forests and forest products."

The Board is focusing on revising the specific objectives within the goal. While there is no rulemaking in this process there will be public outreach throughout the revision process.

Statutory Authority Review – In anticipation of future rulemaking (whether climate change related or not), the department and the Board are requesting that the Department of Justice (DOJ)provide clarification on the Board's authorities to set climate change policy and to take climate change into

account in development of new rules or revision of existing ones. This analysis of the Board's authority and related statutes is scheduled to begin in June of 2020 with anticipated completion in the fall. This process will help the Board in the revision of the climate change portion of their strategic plan. The Board has already included climate change as a policy emphasis for department operations.

Systematic Statute and Rule Review – Following input from the DOJ and revision of the climate change goal, the Board and department plan to implement a systematic review of all statutes and rules as they relate to climate change, greenhouse gas mitigation, climate adaptation, and the impact of the regulations on meeting policy and executive goals.

Forest Carbon Offsets – While ODF has the statutory authority to implement a forest carbon offset program (ORS 526.780 to 526.789), it has not had the staffing capacity or demand to progress into rulemaking and program development. With the direction provided to the Department of Environmental Quality (DEQ) and the Environmental Quality Commission (EQC) by EO 20-04 regarding programs to cap and reduce GHG emissions in several sectors, ODF will coordinate with their rulemaking processes regarding any development of forest carbon offsets that are linked to those new programs. The department will reach out to DEQ and work to be included in this program development work over the next 18 months as it relates to forest carbon. ODF has developed a Policy Option Package that would provide the needed staffing to develop a carbon offset program. Staffing capacity will likely continue to be an issue for the department and may provide a barrier to the development of the forest carbon offset program.

Partner GHG and Carbon Research – Further development of the Board's strategic plan will provide policy guidance to the department in its efforts to reduce GHGs and help to identify further mitigation and adaptation possibilities. The continuing research and modeling that the department is involved with will provide additional scientific background and support for actions that the department may take.

Outreach and Inclusion – Community outreach and inclusion of impacted communities will continue to be a priority for the agency because ODF is committed to ensuring that climate impacted communities are included in the development of new programs or policies.

Maintaining Forestland as Forestland and Expand Forest Cover – More forests equate to more carbon sequestration. Maintaining existing forest cover and restoring forests lost to wildfire and conversion to agriculture or urban uses provides a foundational strategy for forest carbon mitigation. The combination of Oregon's statewide land use system, efficient and effective Forest Practices Act, and use of voluntary measures, such as the Oregon Plan for Salmon and Watersheds, are currently very effective at keeping Oregon's forests as forests. Relative to 1974, Oregon has maintained 98% of its wildland forests; forest industry and non-federal public forests have remained virtually unchanged. Most of the conversion has occurred in non-industrial or family forestland, because of their proximity to developed and developing areas. This success is reflected in the Forest Ecosystem Carbon Report finding of no net loss of carbon due to forestland conversion. Continued support for Oregon's statewide land use system and approaches to maintaining working forests are critical to climate mitigation. Additional support and incentives for family forestland owners could also improve carbon sequestration and help avoid conversions to non-forest uses.

Afforestation and Urban Tree Canopy (UTC) – One of Oregon's opportunities for afforestation lies in its urban and community forestry efforts. UTC cover as an environmental amenity stems from the direct flow of benefits, or ecosystem services, to people, neighborhoods, and communities where UTC cover is found. Areas with healthy, extensive UTC cover have been associated with the regulation of local climate and water cycles, and associated with reductions in childhood obesity and asthma rates, decreases in cognitive fatigue, improvements in worker attitudes on the job, and reduction of stress, including decreased feelings of anger, depression, and anxiety. UTC cover has also been associated with improved aesthetics, noise reduction, skilled and unskilled local job opportunities, stronger social cohesion and community empowerment. UTC cover is also identified as an environmental justice issue, with lower UTC cover correlated to poorer neighborhoods, often comprised of rental properties, multi-family residences, strip malls, and industrial uses. Populations in these areas often have health and social conditions that could be improved with improved UTC cover. Implementation of this urban afforestation effort would need a continual budget increase of approximately $500,000 annually to provide municipalities grant funding and staffing related to program development, implementation tracking, and ensuring that appropriate DEI process are in place and followed to ensure equitability.

Federal Forest Restoration and Fuels Reduction – Utilization of natural and working lands is seen as a key part of the implementation of mitigation and adaptation measures. Unfortunately, many of the states wildland forests are currently in an unhealthy state due to a multitude of factors. The department and its cooperators have been working for many years to address over-stocking and forest health issues though fuels treatments and cost-share programs. One barrier to full implementation of restoration principles is the lack of managed fire following fuels treatments. Current statutes appear to be in conflict in the ability of the state to participate and fund prescribed fire operations. Alignment of the fire protection and forest management statutes as well as looking to adjust the negligence and liability laws related to prescribed fire may increase the use of this tool.

Shared Stewardship – Finally, further utilization of the recently signed Shared Stewardship Agreement, and continued use of Good Neighbor Authority with our federal partners will likely lead to increased landscape level treatment and restoration of unhealthy forests across ownership classes. This process is ongoing but may become resource limited as the state attempts to increase the pace, and scale of restoration efforts. Additional staffing will be required to fully implement these programs and meet the goals of creating healthy and resilient forested ecosystems, vibrant local economies, healthy watersheds with functional aquatic habitat, and quality outdoor experiences for all Oregonians.

Concluding Remarks

Thank you for the opportunity to report out on the actions that the Oregon Department of Forestry is undertaking, envisions, and has considered in reducing the impacts of climate change on Oregonians, Oregon businesses, and the states natural environment. We look forward to further conversation and participation with the Governor's Office, our partner agencies, impacted communities, external partners, and stakeholders in this important area of work.

Contact

Danny Norlander
503-945-7395

John Tokarczyk
503-945-7414