

New Information About Oregon's Forests and the State's Carbon Footprint

Last year a former member of the Global Warming Commission described startling new FIA findings about the role of Oregon's forests on the state's carbon footprint: "When comparing 2001-2005 forest inventory assessment (FIA) data to 2010-2015 inventory data of the same sites, there appears to be an annual net statewide forest carbon gain..... The net gain equals 36 million metric tons CO2e (an equivalent of 60% of all emissions from all other reporting sectors including transportation, utilities, construction, etc.)." In other words, estimates presently being used to calculate the state's carbon footprint (which the Clean Energy Jobs bill is based on) are wrong; Oregon's carbon footprint is not 60 million tons, as previously thought, but only 40% of that-24 million tons, (the other 36 million tons being absorbed each year in net growth of our forests). Yet this information has hardly seen the light of day in Salem, and is absent from discussions about the Clean Energy Jobs bill. Why are we not talking about the huge potential economic value of Oregon's forest carbon stores- unmatched anywhere else on earth? It could well be our most valuable resource- and holds the potential to transform our rural economy, if we're wise enough to provide resources for a world-class facility to carry out needed research in this infant science, which can also make Oregon the global leader in forest carbon research.

An Elliott Forest Carbon and Wildfire Research Institute

Meanwhile, the Governor, Secretary of State and our state Treasurer, acting as the State Land Board, have directed interim Director of State Lands Vicki Walker to consult with OSU and other interested parties to develop a plan for converting the Elliott State Forest into a forestry research institute by the end of 2019. However OSU President Ed Ray raised immediate red flags with his implied threat to hold OSU's participation in the Elliott project hostage to increases in OSU's overall budget, raising serious questions about linking such an Elliott forestry institution directly to the higher education system. There are many highly controversial unsettled scientific disagreements over forest carbon and wildfire. It's essential that an Elliott research institution have an independent source of revenue in order to ensure its scientific impartiality. Why has the OSU administration been silent to date on the recent fundamental discoveries in forest carbon science? And why have both OSU and ODF been silent about the **budy** million worth of Elliott carbon credits eligible today for sale in the California carbon offset market? It may be that the Oregon Climate Change Research Institution, the Global Warming Commission, and the Division of State Lands itself should lead an Elliott research facility, if questions over financial obligations of the Elliott to the Common School Fund can be settled through a **St** thousand board foot increase in the forest harvest tax.

Here's what the Oregon Climate Change Research Institute has to say about the need for research on forests and carbon: "Management principles to foster resilience to disturbance while conserving ecosystem services include: 1) managing dynamically and experimentally through a sustained commitment to adaptive management, 2) managing for ecological processes and functional characteristics instead of specific structures and species compositions, 3) considering trade-offs and conflicts that include ecological and socioeconomic sensitivities, 4) prioritizing choices that are likely to work within a range of possible futures and in crucial areas that are most exposed to changing disturbance regimes, 5) managing for realistic outcomes by focusing on a broader set of ecosystem services, and 6) treating disturbance as a management opportunity for applying adaptation strategies (Seidl et al., 2016)."

In their draft report to ODF about forest carbon, the Global Warming Commission describes a complete research curriculum for a forest carbon/wildfire research institute, in the form of 20 fundamental scientific questions about how forest carbon works; the report also details eight specific areas for research: 1) Adjustments to FIA data; 2) Biomass estimating; 3) Accuracy in measuring carbon flux of forest pools in addition to live tree carbon; 4) Refine estimating methods for mineral soil carbon; 5) Board-foot to cubic foot conversion factor; 6) Reconcile FIA modeling with Process Modeling Methodologies; 7) Translating the vulnerability assessment and productivity modeling into losses or gains in forest carbon; 8) State forest carbon storage. (See GWC website under October mtg agenda materials)

DSL Is the Best Choice for Managing the EFCWRI, Given a St thousand Increase in the Forest Harvest Tax

The Division of State Lands does an excellent job managing the South Slough Estuarine Reseach Reserve in Charlleston, close to the Elliott Forest. Given the financial stability resulting from a small increase in the forest harvest tax, DSL is clearly the best choice for managing an Elliott Forest Carbon and Wildfire Research Institute. Such a small increase would still leave Oregon's forest harvest tax a small fraction of what both California and Washington levy on the same forestry firms working in Oregon.

For a description of a self-funding organizational template for an Elliott Forest Carbon and Wildfire Research Institute, email willamettedams@Q.com Fergus Mclean Many Rivers Sierra Club Conservation Chair (541) 937-3034