

MINORITY REPORT

Recommendation: Questions #4, #5 and #6—Regular Meeting of 18 November 2016

Question #4: Should the BOCC seek from the DNR ways to increase revenues from recreational uses of its forest board trust lands (FBTLs)?

Question #5: Should the BOCC seek from the DNR ways to increase fees from road use, forest products, etc. on its FBTLs?

Question #6: Should the BOCC seek from the DNR a means to secure reoccurring revenues from future established carbon sequestration markets?

For voting purposes all these 3 questions were vote on once as a group.

Vote: Yes-10, Reandeau, Beauvais, Murray, Scott, Swanson, Doherty, Thaler, Fleck, Byrnes, Bork

No-6, Bekkevar, Lea, Pacheco, Cross, Merideth, Sextro

Minority Opinion: During the discussion on the motion being considered to vote on all 3 questions it was determined that for questions 4 and 5 any additional revenue would go into a DNR general account such that Clallam county would not be a direct beneficiary of any revenue increases as any increased revenue would be shared with all other timber counties. A No vote was the only logical conclusion for these questions.

Additionally, question #6 regarding securing reoccurring revenues from carbon sequestration was interpreted to mean the types of carbon sequestration outlined in the Consortium on Research of Renewable Industrial Materials (CORRIM) paper (wood building materials, shorter timber harvest rotations, etc.) which was the only information provided to TLAC via the timber-industry controlled TLAC executive committee. The information and conclusions from the CORRIM studies were just accepted as “fact” and not substantively discussed or analyzed.

Sierra Club voted NO on this type of “sequestration” postulated by the pseudo-science discussed in CORRIM. This pseudo-sequestration supposedly results from the young, fast growing trees that act as a “carbon pump” to sequester carbon out of the air and then this carbon is then stored in a pool of final consumer products, such as wood-built homes. This is not true, a 10 year old tree may grow faster than a 100 year old tree, but the 100 year old tree will pull much more carbon out of the air. The CORRIM work shows that tress cut on a 40-year rotation will have stored 60 tons of carbon per acre over 120 years. However, since over half of the carbon stored by standing timber is in the soil and biomass, which is quickly lost back to the air after trees are harvested, if we DID NOT cut the trees the carbon stored would be in excess of 200 tons per acre.

When a forest stand is clearcut, there is a loss of carbon in the harvested timber, in the other aboveground biomass and in the forest soils. Research shows that soils degraded by clearcut logging lose massive amounts of carbon, and those losses continue for years after the harvest.

According to recent studies in the Pacific Northwest, it takes 15 to 20 years before a replanted forest begins to store carbon on a net basis. The young trees can't store carbon fast enough to offset the continuing losses of carbon from the soil.

Additionally, the CORRIM work proposes an increase in carbon incentives/taxes to support their version of carbon sequestration, but all this does is further enrich the private timber owners and companies NOT OUR COMMUNITIES. Below is the better version of carbon sequestration that preserves our county trust lands as standing timber and critical habitat for birds, salmon and people while at the same time enriches our county and the communities therein.

The carbon sequestration park concept

The recent Paris climate accords, agreed to by virtually every nation on earth, set in motion plans to sharply reduce carbon dioxide emissions that are destabilizing the global climate, acidifying oceans, spreading droughts, sparking forest fires, raising sea levels, destroying crops, increasing storms and putting the survival of most species of higher life — including people — at risk.

The science backing the Paris accords acknowledges that reducing carbon dioxide emissions will not be enough. The United States and the world's governments have agreed that all nations — including developed nations — must also begin to set aside forests to absorb excess levels of carbon dioxide from the atmosphere.

These concerns open the path for Clallam County to redeploy our forests for a higher — and more profitable purpose — as carbon sinks. Acre for acre, no ecosystem on earth comes close to the carbon-storing potential of the giant conifer ecosystem that runs along the Pacific Coast from northern California to southern Alaska. Our forests, when fully mature, can store more than 1,000 tons of carbon per hectare (2.5 acres) — at least twice as much as any other ecosystem on earth.¹

The DNR's recent survey of Clallam County's 92,525 acres of transfer lands found 2.6 billion board feet of standing timber. Forest stands in this region with that much timber will store about 200,000 tons of carbon a year in trees, other plants and forest soils. That much carbon represents the removal of 734,000 tons of carbon dioxide from the atmosphere each year. And that amount of annual sequestration will increase for hundreds of years.

¹ See "Potential upper bounds of carbon stores in forests of the Pacific Northwest," Erica A. H. Smithwick, Mark E. Harmon, Suzanne M. Remillard, Steve A. Acker, and Jerry F. Franklin; submitted to Ecological Applications, Ecological Society of America, Ithaca, NY; accepted August 05, 2001. See also J. M Adams, "Estimates of preanthropogenic carbon storage in global ecosystem types." (2004).

The current corporate market for carbon credits is immature, fragmented and inconsistent, but generally it pays about \$12 a ton for sequestered carbon dioxide. The corporate markets count only the value of standing timber available for harvest; they do not give credit for storage of carbon in other biomass or in forest soils. These corporate carbon markets are not likely to match the timber income Clallam County currently gets, but the new world markets called for by the Paris accords will likely change the game by offering higher prices and giving credit for all the carbon a forest sequesters, not just the carbon sequestered in standing timber.

Forest soils typically store as much carbon as all the aboveground biomass. And marketable timber represents only half of the aboveground stored carbon in forests.

The US government has not yet established a program to use forests to sequester carbon dioxide from the atmosphere, but it has set a value for sequestered carbon dioxide at \$36 a ton (aka, the social cost of carbon). And it has agreed to use forests for that purpose, raising the potential for Clallam County to switch its public forests from timber income to carbon income.

If the federal government pays for the full carbon-sequestration potential of our forests — timber, soils and other biomass — Clallam County would earn more than \$26 million a year, which is a much greater return than the \$6 million we now receive.

Using this annual carbon sequestration revenue we could double the income to our schools, hospitals, libraries, fire districts and other junior taxing districts, and still have nearly \$15 million to offset potential timber job losses even using \$50,000 a year for a full-time timber job. That, plus this additional annual revenue to the county could also be used for a jobs and job-training program benefitting the entire county.

The carbon income would be steady, predictable and would rise each year as our forests mature and store more and more carbon. In addition, we'd diversify our economy and restore the health of our forests and wildlife. We'd have more clean and abundant water. Tourism and recreational jobs would increase. If the US congress repealed the right of private timber companies to export our mill jobs to Asia, local employment would climb even higher.

The federal government, under the obligations that it took on in the Paris climate accords, is one likely source to pay the \$36 a ton for sequestered carbon — and it would get good value for that investment. In addition to the carbon income that forests would provide, independent studies show that with each ton of sequestered carbon dioxide, our country would gain hundreds of dollars in benefits from the environmental services that intact, mature forests provide. In other words, a carbon park is an excellent investment for our future.

Because Clallam County is in the middle of the most productive carbon-storing ecosystem on earth and because the federal government has already committed itself to this approach, we have a good chance of winning federal approval — if we pursue this opportunity.

“OFCO voted "Yes" on this combined question and cannot join in the above minority report. However, we concur that the TLAC did not gather, consider, or discuss the best available science regarding the use of forests to sequester carbon. The presumption that forest products produced from short rotation industrial forestry can come close to the sequestration capacity of longer rotation forestry is based on numerous flawed assumptions, and is not supported by the credible weight of relevant peer reviewed scientific publications.”

On behalf of Toby Thaler, representative of OFCO

Bibliography:

https://www.nrs.fs.fed.us/pubs/gtr/gtr_wo059.pdf, Carbon Storage and Accumulation in US Forest Ecosystems, in forests roughly 50% of carbon stored in below ground soil and biomass.

https://www.fs.fed.us/nrs/pubs/jrnl/2011/nrs_2011_heath_001.pdf, Carbon Stocks on Forest Lands of the US, in forests roughly 50% of carbon stored in below ground soil and biomass.

<http://www.esd.ornl.gov/projects/qen/carbon3.html>, Estimates of Preanthropogenic Carbon Storage in Earths Ecosystems, shows our region has the highest carbon-storing potential of any biome on earth.

<https://nepis.epa.gov/Exe/tiff2png.cgi/910206NF.PNG?-i+-r+75+-g+7+D%3A%5CZYFILES%5CINDEX%20DATA%5C91THRU94%5CTIFF%5C00003037%5C910206NF.TIF>, shows graphically the distribution of carbon storage in US timberland, 31% in the living tree remainder in the forest soil, floor and biomass.

<https://www.nature.nps.gov/socialscience/docs/CarbonSequestration.pdf>, Terrestrial Carbon Sequestration in National Parks, National Park Service publication 2014/880.

<http://www.dec.ny.gov/lands/47481.html>, Trees, the Carbon Storage Experts.

<http://www.nature.com/nature/journal/v455/n7210/full/nature07276.html>, Old Growth Forests as Global Carbon Sinks.

<http://www.esd.ornl.gov/projects/qen/carbon2.html>, Estimates of Total Carbon Storage in Various Important Reservoirs.

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Ingerson, Ann L. 2007. U.S. Forest Carbon and Climate Change. Washington, D.C.: The Wilderness Society.

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Respectively submitted and signed,

Robert Sextro & Josey Paul

Robert Sextro, chair North Olympic Group (NOG) of the Sierra Club
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