COUNTY FOREST ADVISORY BOARD
April 23, 2019
Development Services Building
Room 409

Members Present: Brent Keller, Dan Green, Murray Johnson

Members Absent: Jim Rice, Bill Street

Staff Present: Andrew Dobmeier, Chris Dannenbring, Samantha Wolf, Commissioner Humberston

Guest Presenter: David Ford

Brent Keller called the meeting to order at 6:21 pm.

Minutes Review & Approval
Minutes from the August 28, 2018 meeting were reviewed. Dan moved to approve, Murray seconded and the motion carried.

1. Forest Carbon Sequestration - David Ford (Sr. Fellow with American Forest Foundation)
   David presented a brief overview of the Carbon Sequestration Program through the American Forest Foundation. David is on the board of the Programme for the Endorsement of Forest Certification (PEFC), the parent organization of many forest certifications programs around the world and works on carbon development projects with forestland owners including the City of Astoria and Port Blakely on their lands in Washington. David Met Bill at a PEFC meeting and connected David to Clackamas County Forests staff to review forest inventory data and roughly estimate carbon potential. In early 2018, David worked with Rick Gruen, Andrew Dobmeier, and Samantha Wolf to use initial 2016/2017 county forest inventory data (data contained older stands ~20 years or older).

   In April of 2018, David sent in a short preliminary estimate of carbon stocks on county forestlands. David used the American Carbon Registry's standard methodology (City of Astoria and Port Blakely used the same methodology). Based on the ~1,400 acres of inventoried data and 210 acres of merchantable volume (but no inventory data), David found at least 355,000 metric tonnes of carbon (tC) which would generate an initial 80,000 offset credits. Credits can sell for $5-8/tC depending on who you are, and the "story" attached to the carbon. This is a conservative estimate, given the incomplete inventory dataset used.

   In June of 2018, David presented on the number of steps and costs associated with creating carbon offset credits. The American Carbon Registry would require a full inventory and valuation, then review and accreditation by an expert third party (~$150,000 in start up cost). Stand volumes providing credits, must be held for 40 years (two 20 year crediting terms). In return, the credit provider (forestland owner) would receive payment for selling the offset credits in the first 20 years, and again in the next 20 years. In a working forest, the landowner can't cut more than growth or initial level of carbon monetized.

Q: what does that commit us to doing?
A: It commits you to preserve the initial carbon stock inventoried and the amount you monetize (b/c you won't be able to monetize every bit of carbon on the property due to accrediting rules). Example: 100 trees sold in carbon and they grow over time and accumulate carbon over time. Works well in forests where you aren't cutting annual growth every year.
Q: Would we make enough money in the short term to fund our parks? Is there a point where we have a lose/lose and we can't make money from carbon or harvests?
A: We have a number of young stands that will put on carbon faster than the older, more merchantable, stands. If we can capitalize on younger stands to balance the carbon removed from harvests, we can optimize income potential from credits on non-merchantable stands (that sequester carbon quickly) and earn money on them while they grow and still harvest older stands.

At the moment, not much has changed in how programs operate in the US but demand is growing. In Oregon, HB 2020 - Relating to greenhouse gas emissions, is a carbon cap and trade bill, which will establish a carbon market in Oregon. The expectation is that an Oregon carbon program will launch in the next two years. This is valuable as demand for carbon credits are expanding as the Civil Airline Association has developed a plan for airlines across the world to cap their emissions. This is unlikely to occur within the industry, so carbon credits are going to be in greater demand (150-180 billion credits). This is ambitious for the market to provide as the California market has only generated 40 million credits over the 10 years the program's lifetime. Oregon is well poised geographically, as many major airlines are located here and US carbon programs are viewed as more credible and reliable than those coming out of the US.

You can get credits for harvesting trees for wood intended for wood-products, 70% of wood harvested can be accredited as long-lived wood products.

Q: Hypothetical scenario: If we had a 65 acre forest with an acre of each age class from 0 - 65 years, and we'd cut each acre (and replant the old) annually when the trees turn 65 years old. Would that forest be a good candidate for a carbon project?
A: No, because it's a regulated forest that cuts growth. This scenario assumes that harvest (carbon loss) = growth (carbon gained) and there would not be enough carbon generated in year 1 to cover the loss of carbon in years 2 – 20 of the commitment. However, if the younger stands are growing (adding more carbon) at a faster rate than harvest, then the carbon program should be viable.

Dan discussed the County's plan to cut a majority of the acres designated as working forestland and cutting an average of annual growth over time. Described ~1,000 acres of non-working forestlands (parks, category II lands, riparian buffers, etc.). May not be a problem to have these acres in a carbon program, if it was financially possible to administer. Dan expects that it is quite expensive to administer. David says 1,000 is not enough acres to consider a program given the costs (i.e. not enough credits could be generated to offset the cost of entering the program). But, there is probably enough carbon in the 4,000 acres of the forest inventory to justify it, and still allow some harvest.

David discussed the costs associated with a carbon program and commitments to not cut a certain level of carbon credited for 20-40 years. Cost of develop a carbon program is $150,000-200,000 to conduct the inventory, analysis, vetting, and selling credits. Future inventories are conducted in years 5, 10, 15, and 20. Any year you monetize credits, you do a desk audit, every 5 years you do a full audit. Don't have to monetize every year. You can wait until you have enough new growth to cover the cost of monetizing new credits. This allows a landowner to manage two commodities: stumpage and carbon.

The landowner can make decisions to keep the trees on the land or harvest based on market prices for both commodities or financial needs.

Brent asked if there was a minimum size/acreage. David said it depends on volume and site index (growing conditions) more than acreage. However, in this region, 2,500-3,500 acres at minimum depending on age class. Ideal forest profile is a mix of age classes (10-30 years), they will put on a lot of volume quickly. Having older, high volume trees, would generate a large number of credits in the first year to offset carbon program costs. If you have a young, single age-class profile, then the number of credits generated would not be enough to cover the costs. If all you had was older high volume trees, you'd make a lot of money in the first year.

Every year you can choose to monetize the new growth or whatever is left after a harvest beyond growth (growth – harvest = new carbon to monetize). If you don't want to monetize afterwards until the end of the 40 years obligation, you just need to verify the original volume of carbon is still on the property(s) participating in the program. If you monetize new growth on year 5, the obligation on that contract is 35 years. This is very different than California, where a carbon credit has an obligation of 100 years!

To get out of the program early, you'd pay back the price of the carbon credits and cancel the contract. This would be lucrative if the carbon market crashed, it would be cost effective to pay back the credits and then cut timber right away. Alternatively, if the carbon market doubled, it would make more sense to sell more carbon and hold off on cutting timber (depending on market price comparisons).

If there is a forest fire (or other natural disaster), its covered by a buffer pool of ~18%. This is a contingency volume of biomass required of each project to contribute towards an insurance of all carbon programs. If a disaster occurs and takes out half or all of the forest, then the buffer is kept in the program and the rest of the credits are canceled. The landowner can salvage, too. If the buffer pool is destroyed, too, that 18% credit obligation is the only liability the landowner would have to pay back. You can also trade the buffer pool credits for alternative project type of credits (i.e. outsource the buffer pool) and then monetize the buffer pool.

Bret discussed how its a value question of forest management and restrictions on flexibility to harvest. If the county had a major expense (ex: replace the county golf course lost to disaster), then the commitment would reduce flexibility to harvest and generate lots of money quickly to cover emergent, high-ticket expenses. The cost to get out of the program early is the cost of each credit and no extra fees. But if you aren't harvesting growth every year and you have a 70 year rotation, then a carbon program would likely make sense. David recommends a cost/benefit analysis to determine if a carbon program is feasible and prudent to have on county forest lands. Cost ~$3,000 for David to do.

Murray asked out the market works. David explained how brokers the credits to interested buyers who pay to hold the credit to offset emissions.

David asked about the current proposed legislation in Salem (HB 2020) and if there would be restrictions placed on the county to limit emissions. David explained that no restrictions would be placed on governments. Restrictions would be placed onto industries that emit the most pollution (transportation, power industries, manufacturing, pulp mills, etc.).

Dan said he would like to see the numbers.

2. Boomer II Timber Sale Update

AD- 7-8 acres to go on the down-hill area, 1.7 million mmbf, cruised at 2.05 mmbf. Maybe will come down at 1.95 million mbf at the end. We have received ~$800,000 so far in revenue and more is due from tickets received ($170,000 to be paid given current boardfeet delivered). Total due from timber delivered to date is $970,000. At the end of the day, the county would receive ~$1.6 million, and then cost ~$620,000 – $630,000 for logging. Net revenue would be about $850-900,000 or so. The revenue is lower due to a lot more pulp coming off the land than expected, some cutting techniques were not optimizing boardfeet, and county staff had to intervene and correct loggers to cut more optimally. So far we have seven sorts for different mills/processors.

Based on the 10 year plan, we are supposed to bring in 1.4 million feet a year and generate $550,000/year to pay for the parks and the forests programs. This timber sale is about 1.5 year's worth of timber volume and revenue goals.

In future sort harvests, Andrew would like to limit the amount of pulp generated. This harvest has created 1,000 tons so far, an optimal harvest would create about 400 tons. Dan and Andrew discussed if a sort sale was better than a single contract sale. Andrew felt he would have liked it more if he knew more about the market demand and what the mills are willing to pay. The next harvest is scheduled on Family Camp (south county), which should generate another 1.5 year's worth of volume, later in the year.

Meeting was adjourned at 8:14pm

Next meeting TBA