

Alaska DNR

November 30th, 2022

Dear Ryan and Helge,

This memo outlines the carbon credit generation projections for improved forest management (IFM) projects on the DNR's Haines and Southeast Sate Forests, under the American Carbon Registry's (ACR's) voluntary forest carbon program.

On-site Volume

Carbon stocks were determined using the provided forest-level inventory and growth data, analyzed using ACRapproved biomass calculations. The Haines Forest totals 43,682 acres, and the Southeast Forest totals 33,216 acres. Annual growth rates of 3% per year were utilized for both properties with an annual harvest rate of 50% of growth. Please note, the management treatments and harvest levels ultimately assumed, modeled and projected will be entirely based on Alaska DNR's own definition of what is desired, likely, and conceivable. Alaska DNR's own foresters and resource managers will maintain full control over future management planning and decision-making.

Baseline Modeling

Given the current stocking levels on both the Haines and Southeast subsections of the Alaska DNR, we believe that the baseline scenario would involve a 10-year harvest of 40% of the current merchantable timber on the property. This harvest rate has been informed by Anew experience in the region and understanding of historical practices on comparable properties.

The feasibility of these baselines will be confirmed during the verification of the project and must be based on silvicultural prescriptions recommended by published state or federal agencies to perpetuate existing onsite timber producing species while fully utilizing available growing space. Published or written evidence that the baseline scenario is common practice in the region (this can be a state or local forester, a consulting forester, an owner of a mill, etc.) must also be provided.

Alaska DNR Carbon Volume and Revenue

Haines Forest

Date	Conservation Credits (a)	Removals Credits (a)	Conservation Credit Price (b)	Removal Credit Price (b)	Gross Revenue	Project Expense (c)	Net Revenue (d)
2023	41,000	50,000	\$15.00	\$25.00	\$1,865,000	(\$376,920)	\$1,488,080
2024	41,000	50,000	\$16.00	\$26.00	\$1,956,000	(\$28,470)	\$1,927,530
2025	41,000	50,000	\$17.00	\$27.00	\$2,047,000	(\$28,470)	\$2,018,530
2026	41,000	50,000	\$18.00	\$28.00	\$2,138,000	(\$28,470)	\$2,109,530
2027	41,000	50,000	\$19.00	\$29.00	\$2,229,000	(\$28,470)	\$2,200,530
2028	41,000	50,000	\$20.00	\$30.00	\$2,320,000	(\$165,970)	\$2,154,030
2029	41,000	50,000	\$21.00	\$31.00	\$2,411,000	(\$28,470)	\$2,382,530
2030	16,000	50,000	\$22.00	\$32.00	\$1,952,000	(\$24,220)	\$1,927,780
2031	0	50,000	\$23.00	\$33.00	\$1,650,000	(\$21,500)	\$1,628,500
2032	0	49,000	\$24.00	\$34.00	\$1,666,000	(\$21,330)	\$1,644,670
TOTAL	303,000	499,000			\$20,234,000	(\$752,290)	\$19,481,710
2033-2062	0	1,258,000	\$25.00	\$34.00	\$42,772,000	(\$1,864,000)	\$40,908,000
40 YEAR TOTAL	303,000	1,757,000			\$63,006,000	(\$2,616,290)	\$60,389,710

Southeast Forest

Date	Conservation Credits (a)	Removals Credits (a)	Conservation Credit Price (b)	Removal Credit Price (b)	Gross Revenue	Project Expense (c)	Net Revenue (d)
2023	26,000	34,000	\$15.00	\$25.00	\$1,240,000	(\$371,650)	\$868,350
2024	26,000	34,000	\$16.00	\$26.00	\$1,300,000	(\$23,200)	\$1,276,800
2025	26,000	34,000	\$17.00	\$27.00	\$1,360,000	(\$23,200)	\$1,336,800
2026	26,000	34,000	\$18.00	\$28.00	\$1,420,000	(\$23,200)	\$1,396,800
2027	26,000	34,000	\$19.00	\$29.00	\$1,480,000	(\$23,200)	\$1,456,800
2028	26,000	34,000	\$20.00	\$30.00	\$1,540,000	(\$160,700)	\$1,379,300
2029	26,000	34,000	\$21.00	\$31.00	\$1,600,000	(\$23,200)	\$1,576,800
2030	10,000	34,000	\$22.00	\$32.00	\$1,308,000	(\$20,480)	\$1,287,520
2031	0	34,000	\$23.00	\$33.00	\$1,122,000	(\$18,780)	\$1,103,220
2032	0	32,000	\$24.00	\$34.00	\$1,088,000	(\$18,440)	\$1,069,560
TOTAL	192,000	338,000			\$13,458,000	(\$706,050)	\$12,751,950
2033-2062	0	839,000	\$25.00	\$34.00	\$28,526,000	(\$1,793,000)	\$26,733,000
40 YEAR TOTAL	192,000	1,177,000			\$41,984,000	(\$2,498,000)	\$39,486,000

- a) Conservation Credits are generated from avoided emissions as a result of the project owner not harvesting as heavily as could be financially justified if they wanted to prioritize maximizing short-term revenue from wood products. Conservation Credits are only generated in the initial years of the project. Removal Credits are generated from the increase in project stocking as result of annual forest growth. All volumes are based off 12-month reporting periods.
- b) The carbon price is assumed to be \$15.00/tonne for conservation credits and \$25.00/tonne for removal credits, increasing by 5%/year for the next decade and then held constant. This pricing is conservative based on Anew's experience and current outlook for the voluntary forest carbon market
- c) Project expenses include the cost of inventory, verification, annual account fees, and credit registration and transfer fees.
- d) This is the net revenue from the project after the deduction of project expenses from the gross revenue.

