



Meeting Notes

January 21, 2021, 1-3pm

Zoom Remote Meeting

Participants:

1. Jon Paul Anderson, High Cascade, Inc.
2. Erin Black, MARD District Ranger, USFS
3. Lucy Brookham, Cascade Forest Conservancy
4. Gary Collins, Backcountry Horsemen of Washington
5. Grant Domke, USFS Northern Research Station
6. Mary Ann Duncan-Cole, Saving Skamania County
7. Sharon Frazey, Mt. Adams Resource Stewards
8. Jeremy Grose, SDS Lumber
9. Dave Howe, WDFW
10. Mackenzie Karnstein, OSU Student
11. Sarah Kohout, Senator Maria Cantwell's Office
12. Tom Lannen, Skamania County Commissioner
13. Rick Larsen, Rocky Mountain Elk Foundation
14. Tom Linde, Gifford Pinchot Accountability Group
15. Matt Little, Backcountry Hunters and Anglers
16. Audrey Maclennan, Ecologist, USFS
17. Ryan Ojerio, Washington Trails Association
18. Josh Petit, SGPC Coordinator
19. Mary Repar, Community Member
20. Emily Stevenson, Skamania County Noxious Weed Control Program
21. Jim White, Underwood Conservation District
22. Sue Wright, Community Member

Meeting Purpose: This meeting featured: (a) a presentation by Dr. Grant Domke from the USFS Northern Research Station, (b) a ZOA Subcommittee update, (c) USFS Ranger Updates, and (d) SGPC Monthly News.

December Meeting Notes: Approved as written.

Guest Speaker: Dr. Grant Domke, Team Leader and Research Forester at the USFS Northern Research Station Forest Inventory and Analysis program

Status and trends in GreenHouse Gas (GHG) emissions and removals from forest land in the US (Grant Domke, Brian Walters, Jim Smith)

- Begin with the end... context within the land sector
 - other land, cropland, grassland, wetland, settlements, forest land (majority of carbon)
 - transfers – NEP (Net Ecosystem Production), Fire, Harvest, Gains, Losses
- Keeling curve – sediment cores from 1950 to present show fossil fuel emissions increase
- Atmospheric CO₂ – related to fossil fuel emissions, projections to increase greatly in near future
- Why is this important?
 - Entered into force in 1994
 - US is a (Annex 1) party to the UNFCCC - United Nations Framework Convention on Climate Change.
 - “act in the interests of human safety even in the face of scientific uncertainty”
 - Stabilize GHG concentrations “at a level that would prevent dangerous anthropogenic interference with the climate system.”
- Relevance to recent and renewed commitments
 - US emissions reduced by 2020 and 2025
 - Target 17% below 2005 levels in 2020
 - Target 26-28% below 2005 levels in 2025
 - For all categories including electrical, transportation, waste sectors
- Relevance to recent and renewed commitments
 - Include all categories of emissions and removals as reported in the National Inventory Report (NIR)
 - Account for the land sector using a net-net approach
 - Use a “production approach” to account for Harvested Wood Products (HWPs) consistent with Intergovernmental Panel on Climate Change (IPCC) guidance
 - May exclude emissions from natural disturbances, consistent with IPCC guidance
- Mission: to advance science, monitoring and reporting of GHG emissions and removals on land with trees in the US.
- Estimated emissions and removals
 - Live trees sequestration from atmosphere to live vegetation
 - Land conversion from forest land to non-forest land – biggest emission
- Forest Inventory and Analysis (FIA) - A comprehensive survey of the present and prospective requirement for timber and other forest products
 - Survey forest land
 - About 1ac in size
 - Tree height 5m
 - NFI sampling frame – forest land use
 - Pre-field analysis

- Core field
- Intensive field
- Survey permanent plots every 5 -10 years.

In the west, takes 10 years to measure all of the plots. But can make inferences every year with 1/10th of the plots.

There are 130,250 forest land plots across all ownerships of the US.

Collect information on other lands too.

- Forest ecosystem C pools
 - Aboveground live biomass
 - Belowground live biomass
 - Dead wood – standing, downed
 - Litter
 - Soil organic matter – mineral, organic
- Forest land emissions and removals, 2018
 - WA is substantial net sink
 - Sources are intermountain west – slow growth rates, slow recovery rates
- Greenhouse Gas Emissions and Removals Report – links of tables for each state
 - Broken out by ecosystem pools, and carbon stocks – standing carbon
 - Non-CO2 emissions
 - Settlement trees
 - Land conversion
- FIA national program web site – www.fia.fs.fed.us/forestcarbon
 - User interface to download data
- Opportunities to increase carbon uptake
 - In WA, a lot of understocked opportunities to fully stock forest lands
 - Need to consider recovery dynamics and disturbance regimes
 - Mostly on private but also federal, state, and local land opportunities
 - Improve sink strength – not just CO2 – one of many values
 - Reforestation opportunities
 - Maintain forests as forests
- Challenges in maintaining and increasing carbon uptake
 - Natural disturbance – fire, insects, disease
 - Size and age class distributions, composition
- More resolved estimation
 - Each district doing something different
 - Leverage remote sensed information with surveys
 - Stock changes – emissions identified from photographs as fire
 - Change maps – carbon loss – in CA, OR, WA – seeing both recovery and emissions
- Consistent representation of land
 - Build out land use and land cover products to use for reporting and fine scale data products – cooperate with EPA and states
- Final thoughts

- Forest Service continues to expand role in GHG science, estimation, and reporting
- FIA data continues to be the foundation
- We are developing more spatially and temporally resolved information
- Continue to improve and expand capabilities – collaboration and partnerships are essential!
- Inform policy and land management practices across scales

Q&A

Q: Where does the GP fall on some of these C measures compared to other forests?

A: Not sure off the top of head; please check out sources given in talk.

Q: How does the age of trees differ for carbon?

A: Tracking individual trees on plots – estimate tree age from cores, measured size, height and diameter. The first 10-15 years can be emitter from respiration, decomposition, residual material. When planting trees, invest for 10 years, and they'll take care of you for rest of your life. Massive mortality in tree planting from climate and conditions.

Q: Appears that fire emissions may not be part of net carbon emissions?

A: Estimates are net flux numbers. If live tree entirely consumed, is removed and there are emissions. May be carbon transfer if dead tree. Other emissions are considered as well.

Q: How much does clearcutting contribute?

A: Immediate loss in carbon stocks. But there is generally a short period of recovery and then starts to sequester. Carbon is in harvested wood products. The amount depends on efficiency of products industry.

Q: How do you communicate these nebulous/abstract concepts and trends to non-scientists?

A: Struggle distilling down to something meaningful – e.g. average passenger vehicle is 4.1 metric tons per year. Forests sequester more than cars emit. For coal power plants the numbers are large and nebulous. Individual tree sequesters 70kg carbon per year. I appreciate that land management exists at landscape level. Decadent forests store immense amount of carbon. Forest management and climate has changed. Might need to think of managing differently with climate and disturbances. May consider different arrangement of tree species – carbon sequestration would look different as well. Difficult to condense down.

Q: Do we really know what happens to the carbon in old growth forests?

A: Old growth forests are well studied. Cool and wet areas can maintain carbon for millennia. Warm and wet, turnover rapidly. Understand cascading effects – e.g. live to dead, soil and litter. Lateral transport through soil interface is hard to know exactly. It would be nice to track carbon through everything.

Q: Where are opportunities for planting - Eastern vs Western Washington, private and federal lands that are understocked forest?

A: Speculate that the majority of land is Eastside WA - lots of opportunities although there are a lot of fire prone areas.

Update – ZOA Subcommittee (Josh Petit, Coordinator)

- Canceled last month's meeting; ZOA progress slightly delayed
- Sent draft ZOA Early Seral document out this morning so not enough time to digest and discuss so rescheduled today's ZOA mtg to coming weeks
- Will have a more concrete update at next month's meeting
- Thank you for patience, hard work, and feedback

Update: USFS Ranger Updates (Erin Black, USFS)

- Matt Dow, Recreation Planner and Wilderness Manager, started Monday
- Filled presale position from Wind River
- Planning Team lead advertised early February – know a handful of people interested
- Ben Hoppus is detailing in Jon Nakae's position, will fill position in next couple of months
- No active sales, waiting for right conditions for snow operations
- Warm wet spell has slowed winter recreation
- Negative issue in recreation – some folks in 4x4 vehicle community driving over winter recreation groomed trails
- Sebo GNA sale received lots of receipts – working with DNR to prioritize restoration work
- Planning team
 - 40 acres from Big Hollow sale dropped
 - Roadside salvage may be added to existing sales
 - Edits to Upper Wind - EA almost complete (out in February)
 - Then moving onto next planning area: Little White
 - field surveys scheduled this summer
 - Willard, Mill A area planning
 - Approximately 4600 ac plantations
 - Approximately 1,000 ac native stands
 - 2 active sales to High Cascade – review effects from fire
 - Roadside salvage – Ben looking at this

- Some of Upper Wind dropped
- On track for green volume operations - 55MMBF
 - Q: Is this number sustainable?
 - A: Yes. Targeted 65MMBF to be sustainable. That analysis did not include LSR acres, but have harvested in LSR – so number could be higher and still sustainable.

Update: SGPC Monthly Updates (Josh Petit, Coordinator)

- Virtual field trip planning on hold as Josh has been stuck in Ohio.
- February meeting will be a presentation on carbon with an interactive discussion
- Annual meeting planned for March. Will be little bit longer or perhaps over two days. We're in planning stages. Please reach out with feedback or ideas.
- Emily Stevenson: shared Invasive Species & Exotic Pest Workshop Feb 25th webinar – columbiagorgecwma@gmail.com

Closing

- *Reminder:* Meetings will be conducted remotely until further notice.