



Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

Meeting Overview

The 7th Washington Department of Natural Resources (DNR) Carbon and Forest Management Work Group meeting took place on Wednesday, May 8th from 9 am – 12 pm, via Zoom Webinar. The purpose of this meeting was to finalize the list of management scenarios for carbon study contractors to model. Representatives from BluePoint Planning, the firm hired to facilitate the work group in partnership with DNR staff, opened the meeting with an overview of the agenda:

1. Welcome and Meeting Overview
2. DNR Reset/Update
3. Voting Process Overview
4. Scenarios Review
5. Round Robin Feedback and Round 1 Voting and Results
6. Round Robin Feedback and Round 2 Voting and Results
7. Round 3 Voting and Results (if time/needed)
8. Recap of Scenarios Being Modeled, Next Steps

After a brief overview of the meeting, Csenka Favorini-Csorba, Policy Director for DNR, gave an update on DNR's outreach and discussions with work group members between the April 10th and 29th meetings. (DNR held a supplemental, non-voting work group meeting on April 29th to allow work group members to cement their understanding of the management scenarios that would be voted on at the May meeting.)

BluePoint Planning then presented the updated voting process for the meeting. Work group members were provided a Google Form to select their votes for the entire suite of management scenarios, instead of voting on each scenario one at a time "live" in the meeting.

Next, DNR gave an overview of the eight management scenarios that would be voted on during the meeting. Work group members asked questions on the background of the scenarios and on specifics of the scenarios as well. Two friendly amendments were suggested and seconded. Work group members then each had a chance to speak on the scenarios.

Work group members voted on eight scenarios using the Google Form. There were four available slots for additional scenarios to be modeled by the carbon study contractor, in addition to the four scenarios already approved at the March meeting. Five scenarios passed in the first round of voting. Two similar scenarios that passed were re-voted on, to narrow the list to four. After this second vote, one of those two scenarios passed and the four scenarios were finalized.

After a review of the next steps, BluePoint closed the meeting. The meeting ended at 11:45 am, after two rounds of voting. All meeting materials, including the presentations and recording, are posted on DNR's Carbon and Forest Management [Work Group website](#).

Attendees

Work Group Members

- Matt Comisky, American Forest Resources Council
- Jason Spadaro, Washington Forest Protection Association
- Randy Johnson, Clallam County
- Hannah Jones, Firelands Workers United





Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

- Steve Hinton, Tulalip Tribes (alternate for Ryan Miller, Tulalip Tribes)
- Ed Murphy, Sierra Pacific Industries
- Bryan Pelach, Washington Conservation Action
- Russ Pfeiffer-Hoyt, Washington State School Directors Association
- Paula Swedeen, Conservation Northwest (and proxy for Heidi Eisenhour)
- John Talberth, Center for Sustainable Economy
- Pat Tonasket, Confederated Tribes of the Colville Reservation

Not in attendance: Heidi Eisenhour, Jefferson County

Washington DNR Staff

- Cathy Chauvin
- Denise Roush-Livingston
- Sharon Lumbantobing
- Theresa Keith
- Duane Emmons
- Csenka Favorini-Csorba
- Mona Griswold

BluePoint Planning

- Nora Bayley
- Mindy Craig
- Lauren Schmitt
- Chris Mendoza, Mendoza Environmental (sub-consultant to BluePoint Planning)

Work group meetings are public, meaning that members of the public may join the meeting to observe. No public comment is allowed. Nine members of the public attended the 7th work group meeting.

Meeting Highlights and Themes

- DNR Reset: DNR held a supplemental, non-voting work group meeting on April 29th to allow work group members to better their understanding of the management scenarios that would be voted on at the May meeting.
 - The recording and presentation from this meeting are available on the [work group website](#).
 - DNR staff talked to most work group members between the April 10th and 29th meetings to discuss the scenario process and find an improved process for ensuring all work group members have time to ask questions and fully understand the content discussed at meetings.
- Voting Process Update: DNR announced a new voting process for the vote at the May 8 meeting. Important details include the following:
 - Work group members received a Google Form link listing all eight scenarios being voted on.
 - The same thumbs-up/thumbs-down/thumbs-sideways voting scale was used as in previous meetings.





Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

- If more than four scenarios were passed in the first round of voting, a second and possibly third round of voting would occur with a shortened list of scenarios.
- Scenario Overview: DNR gave an overview of the eight scenarios being voted on and provided some background information on the assumptions backing up the scenarios. Important details include the following:
 - Eight scenarios were presented at the meeting: seven that were reviewed at the April 29th meeting, and one new scenario suggested at the April 29th meeting.
 - All of the scenarios were different combinations of the scenarios discussed at previous work group meetings.
 - Work group members proposed amendments to two scenarios (Scenario 10 and Scenario 16); each amendment received at least one “second” and was voted on during the first round of voting.
- Voting Results: The work group finalized the four scenarios to be modeled after two rounds of voting. Important details from the vote include:
 - Five scenarios passed with more than 75 percent of the vote (thumbs-up and thumbs-sideways) after the first round of voting: Scenarios 8, 10, 11, 15, and 16.
 - Work group members agreed that Scenarios 8 and 15 were similar and one could be removed. A second vote was held to choose between those two scenarios. Scenario 8 passed the second vote.
 - The final list of scenarios passed during this meeting are Scenarios 8, 10, 11, and 16.
- Next Steps: The next meeting is scheduled for Wednesday, July 10th, 2024, from 9 am – 3 pm.



Detailed Notes

Voting Process Update

DNR announced a new voting process for the vote at the May 8 meeting. Work group members were sent a Google Form link listing all eight scenarios being voted on. The same thumbs-up/thumbs-down/thumbs-sideways voting scale was used as in previous meetings.

If fewer than four scenarios were passed in the first round of voting, a second and possibly third round of voting would occur with a shortened list of scenarios. If more scenarios were passed than the slots available, the scenarios with the fewest “thumbs-up” votes would be dropped. If the work group did not pass enough scenarios to fill the available slots, work group members were invited to propose “friendly amendments” to improve support for the scenarios.

If the work group did not pass enough scenarios to fill the available slots within the time frame of the meeting, the contractors would proceed with the scenarios that had passed, even if some slots were empty.

	Thumbs-up	Thumbs-sideways	Thumbs-down
Scenario 8 (2a + 4a)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario 10 (2a + 4a + 7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario 11 (4a + 9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario 12 (2a + 4a + 6...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario 13 (2a + 4a + 7...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario 14 (3 + 6 + 9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario 15 (2a + 4a + 9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scenario 16 (3 + 4a + 9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 1 - Google Form used for voting in Round 1

Scenario Overview

DNR gave an overview of the eight scenarios being voted on and also provided background information on the assumptions backing up the scenarios. Eight scenarios were presented at the meeting: seven reviewed at the April 29th meeting, and one new scenario suggested at the April 29th meeting. All scenarios were a different combination of the scenarios discussed at previous work group meetings, as well as amended versions of those previous scenarios.

Work group members proposed amendments to two scenarios (Scenario 10 and Scenario 16); each amendment received at least two “seconds” and was voted on during the first round of voting. Scenario 10 originally was composed of Scenario 2 (not amended), Scenario 4 (revised) and Scenario 7. The amended scenario is composed of Scenario 2 (amended), Scenario 4 (amended) and Scenario 7.



Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

Table 1 - List of Scenarios

Scenario	Components					
	Scenario 2 Amended (lengthen rotations)	Scenario 3 (shorten harvest rotations)	Scenario 4 Amended (increase thinning)	Scenario 6 (PSF defined deferrals)	Scenario 7 (PSF defined plus WG selected deferrals)	Scenario 9 (increased silviculture)
Scenario with "friendly amendments"						
Scenario 8 (2a+4a)	✓		✓			
Scenarios pending from April 10 meeting						
Scenario 10 (2a+4a+7)	✓		✓		✓	
Scenario 11 (4a+9)			✓			✓
New scenarios developed since the April 10 meeting to address concerns of work group members						
Scenario 12 (2a+4a+6+9)	✓		✓	✓		✓
Scenario 13 (2a+4a+7+9)	✓		✓		✓	✓
Scenario 14 (3+6+9)		✓		✓		✓
Scenario 15 (2a+4a+9)	✓		✓			✓
Scenario 16 NEW (3+4a+9)		✓	✓			✓

Scenario 16 originally had a minimum timber volume of 18,000 – 20,000 board feet per acre for commercial thinning. The approved amendment lowered the minimum timber volume for thinning to 10,000 to 12,000 board feet per acre.

Work group members each had a chance to speak about the scenarios and ask any remaining questions during the round robin before the vote. The work group did not have many questions and generally supported the amendments to Scenarios 10 and 16.

The full presentation with more details on each scenario can be viewed on the work group website: [Scenario Presentation](#).

Voting Results

The work group finalized the four scenarios to be modeled after two rounds of voting. The first round of voting passed five scenarios with more than 75 percent of the vote (thumbs-up and thumbs-sideways): Scenarios 8, 10, 11, 15, and 16. Each scenario needed to receive at least 75 percent of the positive vote to pass, which was at least nine votes at this meeting.

The first round of voting resulted in one more scenario passed than could be modeled. If the original voting method proposed at the beginning of the meeting was followed, Scenario 10 would be dropped since it had the fewest number of thumbs-up votes. However, it was noted that of the scenarios that passed, only Scenario 10 had a conservation focus (deferrals). DNR staff reminded the group of the intent of the Proviso, which required both conserving and managing older, carbon-dense, structurally complex forest; Scenario 10 was the only "conserve" scenario of those that passed the first round of voting.





Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

Table 2 - Round 1 Vote Results

	Scenario 8	Scenario 10	Scenario 11	Scenario 12	Scenario 13	Scenario 14	Scenario 15	Scenario 16
Thumbs-up Votes	9	6	9	3	7	2	9	8
Thumbs-sideways Votes	3	5	2	1	1	5	0	2
Thumbs-down Votes	0	1	1	8	4	5	3	2
Total Positive Votes	12	11	11	4	8	7	9	10
Pass?	Pass	Pass	Pass	No Pass	No Pass	No Pass	Pass	Pass

DNR staff and work group members recommended a few options to decide which four scenarios to keep, including using the number of thumbs-down votes to determine which scenario is removed and reviewing the scenarios for similarities. Work group members agreed that Scenarios 8 and 15 were similar and one could be removed. A second vote was held to choose between those two scenarios; Scenario 8 passed the second vote.

Table 3 - Round 2 Vote Results

	Scenario 8	Scenario 15
Thumbs-up Votes	7	7
Thumbs-sideways Votes	2	0
Thumbs-down Votes	3	5
Total Positive Votes	9	7
Pass?	Pass	No Pass

The final list of scenarios passed during this meeting are Scenarios 8, 10, 11, and 16.

Next Steps

The next meeting of the work group is scheduled for Wednesday, July 10th, 2024, from 9 am – 3 pm. The previously scheduled June 12th meeting has been canceled.

The focus and goal of the next meeting is to develop an understanding of the wood supply study and modeling methodology, presented by Evergreen Economics.





Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

Raw Notes: Verbal and Written Communication

These notes include verbal and written questions and comments from the Zoom chat log.

- Comments from the Zoom chat are denoted with (chat) at the beginning of the comment or question.
- Questions and comments from the work group members are denoted with **WG** at the beginning of the comment or question.
- Responses from DNR staff or BluePoint Planning staff are noted with **DNR** or **BPP**, respectively.
- Responses from the other two contractors, Evergreen Economics and ESSA are noted with **Evergreen** or **ESSA**, respectively.

Welcome

1. No questions on the welcome

Reset/Updates from DNR

1. Appreciate the time and commitment to the work group that everyone puts in
2. Know that people were frustrated about the early April meeting, that's why the April 29 meeting happened, to focus on just answering questions with no constraint about voting
3. Willingness from all work group members to work together and figure out a feasible scenario
 - a. Assume positive intent from everyone

Voting Process

1. WG: If acting as a proxy for another, do we get two Google forms?
 - a. BPP: Enter your name and vote, then allowed to vote again using proxy's name. Reuse the same link, separate entries

Scenario Overview - Background

1. WG: Want to clarify – structurally complex forests on the ground, vs DNR inventory data, based on the definition. Appreciate extra time DNR put into this. Feel that DNR's estimate of 12,000 acres is underestimate. Need broadened way to query inventory data to more closely match what we've been finding on the ground.
 - a. DNR: Very complicated, this was the better approach to get that desired scenario. Recognize that not every 80-year-old stand is structurally complex
 - b. DNR: Opportunity to see how the data bears out for all of the scenarios, remembering that it won't be perfect. "All models are bad and some are useful"
2. WG: Follow up – have ever made clear how much properly functioning landscape includes as result of this condition?
 - a. DNR: Want connectivity, habitats near the forest. Don't have any areas devoid of long-term forest cover, but, where we want the most benefit is in larger contiguous blocks.
 - b. WG: Current research that heterogeneous mixture is more important to owl species.
3. WG: What is the time dimension? What is the analysis period for the scenario? Is deferral the point in time? Or build in growth in acres over time?
 - a. DNR: Will identify those stands that meet these criteria, is that a fixed point in time?





Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

- b. WG: Using age as a proxy, not as a definitive answer. What meets the condition currently?
- c. (chat) WG: I agree with that definition of deferral.

Scenario Overview

1. Going to see scenarios that didn't get a chance to vote on at the April meeting, and then new scenarios created since, using existing components of existing scenarios.
2. WG: Seems that it would be more useful to have harvest rotation and thinning parameters mirror modifications that were made. To better closely compare the scenario modeling results. For Scenario 10 – include 2a and 4a and not 2 and 4r
 - a. DNR: Scenario 13 is similar, with silviculture
 - b. (chat) WG: I'd second that amendment.
3. WG: Confused about increasing riparian thinning, would this require modifying policy?
 - a. DNR: Opportunity to thin riparian areas for self-objectives, don't do it very much currently. Treatments allowed under the Habitat Conservation Plan (HCP), anticipates doing more thinning.
 - b. (chat) WG: There is a policy that guides thinning in riparian areas to increase structural complexity.
 - c. (chat) WG: As a matter of actual performance, riparian thinning is essentially non-existent.
4. WG: Want to wait for amendments until the rest of the scenarios are explained. Why would Scenario 10 be different from Scenario 13? Or, drop amendment until end and we see all of the scenarios.
 - a. DNR: Don't need to decide on the amendment now, but good to hear about it.
5. WG: What is site prep?
 - a. DNR: herbicide application
6. WG: What is the baseline for Scenario 11 riparian thinning?
 - a. DNR: 10% more than what is currently happening, looking back 10 years, relative to what is modeled in Scenario 1 (current operations).
7. WG: Deferral means 66,000 acres?
 - a. DNR: This is the 12,000 acres
8. WG: What is the threshold for carbon density?
 - a. DNR: Not sure if that is part of the definition? Capturing the language from the proviso about carbon density.
 - b. WG: So no metric for carbon density?
 - c. DNR: Correct.
9. WG: Since we don't have the current operations scenario – what is the current operations for picking rotation age on site 3 and 4?
 - a. DNR: 30,000-35,000 board feet
 - b. (chat) DNR: DNR current operations: Site class 1, 50 years; Site class 2, 55 years; Site class 3, 65 years; Site class 4 78 years.
10. WG: Increased silviculture – would ages and volumes change?
 - a. DNR: Yes that would happen. Not really shown in the diagrams.
11. WG: Curious about lowering threshold to harvest a stand, will that leave much room for commercial thinning?



Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

- a. DNR: On the ground, would depend on the stand. May be some opportunities to do that.
- b. WG: 20,000-25,000 acres is well past threshold for thinning. Key is thinning early. Might generate greater cash flow for beneficiaries over time.
- c. DNR: Commercial thinning is after 18,000 -20,000 board feet per acre
- d. WG: Might need to be revised to lower bf/acre to 10,000. Friendly amendment.

Scenario Round Robin

1. WG: Agree with friendly amendment on Scenario 16 – 10,000 bf/acre for thinning. Scenario 10 – lengthen rotation should line up with the rest of the modeling, but is that too close to Scenario 13?
2. WG: No comments.
3. WG: No comments, appreciate the work on this. Question about the voting – four slots left, only supposed to vote yes on four? Agree that it doesn't make sense to have an outlier for Scenario 10. Fine with friendly amendment on Scenario 16.
 - a. BPP: Vote yes on as many as you want, then will see the results and assess.
4. WG: Agree with previous comments, support friendly amendment. Comment on the process – confusing everyone about not using age.
5. WG: Support both amendments
6. WG: Want to make sure the 2,000 acres are added to the structurally complex. Curious about how mortality will be handled. Want horizon to be same for economic and carbon analysis. What is the group's definition of rotation age?
 - a. DNR: 2,000 acres already deferred. Rotation age – neither volume nor age is ideal. Single dial graphs for rotation age, but doesn't show dip in volume after thinning and then the time to get back to the volume. Not much that we can do to change that. Things will look different from simplistic graphs shown during the meetings.
7. WG: Scenarios purpose – better understanding impact on carbon and economics. In the report – need to clarify that the scenarios weren't chosen as perfect management decisions but to advance the understanding around the different management options.
8. WG: Appreciate the effort gone into these scenarios. Agree with framing point above.
9. WG: Appreciate the work gone into the scenarios. Concerned about the narrow range of the scenarios, no true conservation scenario – no “no harvest” scenario anymore. Not getting a big enough range in results. Need to lock in metrics that will be used. Would like to talk about that at the next meeting.
10. WG: Concerned about what previous work group member just said, assumption was that there would be scenarios on both ends of the spectrum, industry and conservation.
 - a. DNR: Work group decided not to vote on the furthest extremes – no harvest and state legal minimum. Two deferral-only scenarios were voted down in April. Bookends can be very polarizing. Do still have some scenarios that represent different ends of the spectrum.
11. WG: No comments to add. Looking forward to turning the corner on this and getting into the next conversations, about economics and results. Support the friendly amendments to Scenario 10 and Scenario 16.



Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

Recap

1. Scenario 10 and Scenario 16 –
 - a. 10 – replaced with friendly amendment – $2a + 4a + 7$
 - b. 16 – amendment to thinning – not 18,000 to 20,000, but 10,000 to 12,000

Voting

1. DNR: question from work group about mortality?
 - a. ESSA: Need to check the equations. Individual mortality has a u-shaped variance. Assuming can use defaults in most cases.
 - b. WG: Want to make sure that the modeling captures that at some point, trees die, stands die, fall apart, and emit carbon. Models include seed rain. Will max out and start to decline if don't do anything.
2. Voting round 1 results
 - a. 5 passes
 - i. Scenarios 8, 10, 11, 15, 16 passed
 - ii. Scenario 10 has the most variance in votes – 6 ups, 5 sideways
 - iii. Scenario 8 had 9 up and 3 sideways and no down
 - b. DNR: Of ones that have passed, only one with deferral is Scenario 10. Has fewest thumbs-up votes. Have been transparent about proviso – conserve and manage. If don't have scenario that incorporates conserve, then not fully meeting objective of the proviso. Based on original voting proposal, would have to eliminate Scenario 10 – the only conserve vote. Maybe revoting on the ones that did pass – the five, then taking a break to come up with the process.
 - c. BPP: Any substantial overlaps or similarities in the passed scenarios?
 - i. DNR: Scenarios 8 and 15 are very similar.
 - d. WG: Was going to recommend looking at potential redundancies. Agree that Scenarios 8 and 15 are similar. Should be more inclusive – include Scenario 15, not Scenario 8
 - e. WG: Second that approach
 - f. WG: Would either support revoting on the 5 that passed, or look at the thumbs-down votes to make the distinction. Scenario 15 has 3 no votes, the outlier of the group. Remove Scenario 15 and keep the other four.
 - i. BPP: That would keep Scenario 8 and remove Scenario 15.
 - ii. BPP: Any seconds to that proposal?
 - iii. WG: If went with Scenario 15, to what degree can we break it into different parts, after the modeling happens?
 1. DNR: A bit difficult, because different things are happening on the same acres.
 - iv. WG: Of the three dials in Scenario 15, is silviculture the only one without its own scenario?
 1. DNR: Correct.
 - g. BPP: Vote on keeping Scenario 10, keeping Scenario 15, dropping Scenario 8?
 - i. BPP: No second on the previous proposal.
 - ii. WG: Second that proposal – remove Scenario 15 and keep the other four scenarios



Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

- iii. BPP: revote?
 - 1. DNR: revote on Scenario 15 and Scenario 8
- iv. DNR: Same system, thumbs-up/sideways/down for each.

Round 2: Scenario 8 vs Scenario 15

- 1. Scenario 8: pass
 - a. Thumbs-up: 7
 - b. Thumbs-sideways: 2
 - c. Thumbs-down: 3
 - d. Result: pass
- 2. Scenario 15: no pass
 - a. Thumbs-up: 7
 - b. Thumbs-sideways: 0
 - c. Thumbs-down: 5
 - d. Result: No pass

Scenario Recap

- 1. Scenario 8 – pass
- 2. Scenario 10 – pass
- 3. Scenario 11 – pass
- 4. Scenario 16 – pass
- 5. Scenario 13 – no pass
- 6. Scenario 14 – no pass
- 7. Scenario 15 – no pass
- 8. Will be spelled out in the summary document sent out later.

	Scenario 8	Scenario 10	Scenario 11	Scenario 12	Scenario 13	Scenario 14	Scenario 15	Scenario 16
Thumbs up votes	9	6	9	3	7	2	9	8
Thumbs sideways	3	5	2	1	1	5	0	2
Result	Pass	Pass	Pass?	Pass	Pass	Pass	No pass	No pass

Next steps

- 1. June 12 meeting will be cancelled
- 2. July 10 meeting: wood supply study and modeling presentation from Evergreen Economics
- 3. Planning out the remaining meetings, will be sending out more information in the next few weeks on that.
- 4. WG: what is the modeling presentation? Presenting the methodology?
 - a. BPP: Yes
 - b. WG: Note that still some lack of clarity about how the carbon accounting will be taken care of? Between what ESSA and Evergreen will do?
 - i. BPP: Noted
- 5. WG: Comment on the process – things don't make overall management sense together, need to come together to make sure that works.





Carbon and Forest Management Work Group

Meeting 7: May 8, 2024 | 9:00 am – 3:00 pm

Meeting Summary and Notes

6. WG: Can we get the metrics for which things will be compared? Not much opportunity to provide input on those.
 - a. BPP: Can you describe what the metrics you are referring to?
 - b. (chat) ESSA: Metrics for the carbon study are tC for live, dead and wood product pools. Also volume of harvested timber at 100 year mark.
 - c. (chat) WG: Is the 100yr mark from today or? Just curious what the starting point (aka "Baseline") is.
 - d. (chat) ESSA: 100 years is the duration of the simulation.
 - e. (chat) WG: Extremely important to understand GHG emissions by scenario.
7. WG: Congratulate everyone for this, sincere appreciation for DNR and their efforts.