

Large Landowner Draft Interview Guide

Fire & Carbon-Oriented Management Across PNW Forests

1. Pre-Interview

- a. Assign an interview identifier number to the interview/participant(s)
- b. Document the name(s), title(s), and organizational affiliation of the participant(s)
- c. Determine the ecoregion, state, and size (acres) of the forestlands that will be the focus of the interview
 - i. If a private company, determine subsidiaries/affiliates and other landholdings
- d. Ready Survey123 for screensharing and complete the first section of the Survey123 form, titled “Pre-Interview Information”
 - i. The first section shared with participants during the interview should say “Introduction” at the top

2. Introduction

- a. Welcome/thank you to the participant(s)
- b. Introduction to researcher(s) on the call
- c. Study overview
 - i. Our research rests within a broader initiative focused on exploring fire and climate adaptation in west-side forests and includes two main components:
 - 1. Interviews with large landowners:
 - a. Federal, Tribal, state, and private interviews with randomly selected owner/managers that hold 5,000+ acres in western WA and OR and northwestern CA
 - b. Intent is to learn about fire and carbon-oriented forest management and cross-boundary efforts between landowners to inform practice and policy
 - 2. Modeling:
 - a. Information about current management practices obtained through interviews will inform modeling that simulates how current management practices will affect wildfire and carbon in west-side forests over the next few decades, compared to some alternative management scenarios
- d. Data use and confidentiality
 - i. Plan to share findings
 - ii. Default will be to aggregate/anonymize information
 - iii. Individuals/organizations can choose if they’d like to be acknowledged or mentioned by name
- e. Today’s Process
 - i. To respect your time, I’ll try to move us through the questions as quickly as possible without missing key details.
 - ii. If anything goes wrong with the connection, sit tight – I’ll reach out to you via email and we can try to re-join the meeting.
 - iii. We will be displaying our questions on the screen for you to see.

3. Consent

- a. Would you be comfortable with this interview being audio recorded for the purpose of transcribing the interview at a later date?
 - i. *Recording will make it possible to better capture the information you provide without me having to take extensive notes while you speak.*
- b. The recording would only be shared among members of the research team.

4. General

- a. Would you please briefly state your title and explain your position?
 - i. *Confirm subsidiaries/affiliates for private owners (where applicable)*
- a. We would like to focus the interview today on your forest management in [state] in the [ecoregion], which you can see in the map displayed here. *[Show map of relevant state/ecoregion boundaries].*
 - a. *For private owners only: Confirm total west-side acreage.*
- b. *For landowners with multiple westside holdings in our study area:*
 - ii. I understand that you also have lands in other west-side ecoregions. Our conversation today will focus on your forestlands in [ecoregion], but we may come back and talk a bit about these other forestlands to compare/contrast your westside management.
- c. *For tribal and private owners/managers: Would you please give me a brief overview of your organization's forest management history and operations?*
 - a. *E.g., the length of time the organization has had lands in the ecoregion of focus, any recent land acquisitions (or sales), if they have mills, if the lands are certified, other areas they operate/own land in, total acreage (beyond ecoregion of focus)*
 - b. *If private: company ownership, industrial/TIMO/REIT?*
- d. What are the primary forest management goals for your organization's forestlands in our ecoregion of focus?
 - a. *In other words, what is the most important goal you manage for in terms of forest conditions, services, and/or products? What are the 2nd and 3rd most important goals? Are there others, beyond that?*

5. Silvicultural Parameters

- a. How would you describe your forests in our ecoregion of focus in terms of dominant forest type?
 - ☐ Spruce-Hemlock
 - ☐ Douglas Fir
 - ☐ Mixed conifer
 - ☐ Other:

Even-Aged Management

- b. What percentage of your forests are under an **even-aged management** system that ultimately leads to a regeneration harvest?
This includes shelterwood and seed tree cuts, which count as regeneration harvest, not thinning, because they're typically followed by overstory removal after regeneration establishes. We'll discuss uneven-aged management separately.

- ☐ No even-aged management (*skip to uneven-aged management*)
☐ Other:

**The next set of questions pertain to the forest acres that you actively manage using even-aged management.*

- c. What is the typical **rotation age** (or range of ages) at which these even-aged forests receive a regeneration harvest?
- d. What percentage of your even-aged forests receive **pre-commercial thinning**, if any?
☐ No pre-commercial thinning
☐ Other:
- e. What percentage of your even-aged forests receive **commercial thinning** prior to your final harvest, if any?
☐ No commercial thinning (*skip to question 5g*)
☐ Other:
- f. At what **stand age** does this commercial thinning typically happen in your even-aged forests?
- g. What percentage of your even-aged forests receive **more than one commercial thinning** before the final harvest?
☐ None receive more than one commercial thinning (*skip to question 5i*)
☐ Other:
- h. At what **stand age** (or ages) does this additional commercial thinning typically occur in your even-aged forests?
- i. Please describe the **prescriptions and targets** for your thinning operations with respect to:
- i. Residual stand characteristics, such as basal area, trees per acre, stand density index or average spacing
 - ii. Preferred species for removal/retention
 - iii. Diameter “caps” (that limit the size of trees allowed to be harvested)
 - iv. Cutting of trees smaller than merchantable size limits or of non-commercial species
 - v. Other parameters (if applicable)

Uneven-Aged Management

**Now we are going to shift and talk about your uneven-aged management practices.*

- j. What percentage of your forests are under an **uneven-aged management system**? *This involves repeated harvest entries that are not intended to lead to regeneration harvest of all merchantable trees.*
☐ No uneven-aged management (*if none, skip to “Harvest Systems”*)
☐ Other
- k. What are the most **common prescriptions** in your uneven-aged forests?
- l. What is the **typical cutting cycle or interval between harvests**?

Harvest Systems

- m. On what percent of your harvested acres do you use **log-length harvest systems**, which leave tops and limbs in the forest, versus **whole-tree harvest systems**, which deliver tops and limbs to the landing? *Please comment on the influence of slope on your answer.*
- n. How do you treat logging slash?
 - i. *If you have both even and uneven aged forests, how does the way you treat logging slash differ?*

Fuels Treatments

- o. Beyond treating slash that results from harvest, does your organization apply any surface-fuels only-treatments to address wildfire hazard (e.g., prescribed burning, mastication)? Please describe.
 - ☐ No surface-fuelonly-treatments applied
 - ☐ Yes (*please explain*)
- i. If yes: On what percent of your forested acres are these treatments applied each decade? If unsure, what generally determines where you apply these treatments?
- p. When carrying out commercial harvests, or entering stands for another reason, are sub-merchantable sized trees cut to reduce ladder fuels, and if so, what happens to them?
 - i. If yes: On what percent of your forested acres are these treatments applied each decade? If unsure, what generally determines where you apply these treatments?

Fuel Breaks

- q. Has your organization created **fuel breaks** within forests or along road systems?
 - ☐ We have created fuel breaks within forests (i.e., not along roads).
 - ☐ We have created fuel breaks along road systems.
 - ☐ We have created fuel breaks both within forests and along road systems.
 - ☐ We have not created fuel breaks.

Comparing Management Across Lands

- r. *If organization/owner has other lands in our study area, beyond the ecoregion of focus:* Are the forest management practices you just described for your forestlands in our ecoregion of focus basically the same as your forest management practices in other parts of the state, west of the Cascade crest?
 - i. If not, what are the general differences in management?
 - ii. Why are these management practices different?

6. Fire Management

- a. *For all but federal owners:* When was the last time a fire burned on your organization's forestlands west of the Cascade crest? *Please provide the approximate year of the fire and number (or percent) of forested acres burned.*
- b. Over the last 10 years, how often has wildfire burned on your property?

- c. On a scale of 1 to 4, how concerned are you about wildfires burning on your organization's forestlands in our ecoregion of focus within the next 20 years, where 1 means that you aren't at all concerned and 4 means you are extremely concerned? Please explain your rating.

1	2	3	4	
Not concerned	Slightly concerned	Concerned	Extremely concerned	Unsure
☐	☐	☐	☐	☐

- d. What factors influence whether you fully suppress a new fire start?

- e. How does your forest management in our ecoregion of focus address wildfire?

- f. On a scale of 1 to 4, how effective do you think your current forest management practices are at enhancing fire resistance in your forests, and reducing unwanted impacts when wildfire occurs? Please explain your answer.

1	2	3	4	
Not effective	Slightly effective	Effective	Extremely effective	Unsure
☐	☐	☐	☐	☐

- g. What forest or fuels management practices do you think would be most effective for minimizing the unwanted impacts of future wildfires on your forestlands?

- i. What has discouraged you from adopting these practices?

- h. *If not addressed in the answer to the preceding question (g):* What policies or programs would help your organization to adopt one or more of these practices? Please provide specific examples.

- i. Has – or could – adopting some of these practices affect the extent to which you achieve your other forest management goals? Please explain.

7. Carbon & Climate

**Now we'd like to shift our conversation to focus on carbon and climate.*

- a. How concerned is your organization about the potential impacts of the following on their forestlands in the next 10-20 years? *Please briefly explain your answers.*

	1 Not concerned	2 Slightly concerned	3 Concerned	4 Extremely concerned	Unsure
Increased frequency or length of drought periods	☐	☐	☐	☐	☐
Increased frequency or intensity of disease outbreaks	☐	☐	☐	☐	☐
Increased disturbance from insects	☐	☐	☐	☐	☐
Increased frequency or magnitude of flood ing	☐	☐	☐	☐	☐
Increased frequency or magnitude of landslides	☐	☐	☐	☐	☐
Decreased seedling survival and growth	☐	☐	☐	☐	☐
Rising temperatures	☐	☐	☐	☐	☐

- b. How do you think your forest management practices currently contribute to carbon sequestration and storage?
- c. Are there any forest management practices that your organization has adopted in this ecoregion *specifically* for the purpose of increasing carbon sequestration or storage? I.e., are there things that you do for the purpose of carbon sequestration and storage that you otherwise would not do?
- i. If yes, what was the motivation for your organization to adopt these practices?

- ii. Do you participate in any assistance or incentive programs, including carbon markets, that support these carbon-oriented management activities? Please describe.
 - iii. What have been the impacts to your management or organization as result of engaging in these carbon-oriented activities?
- d. What carbon-oriented management practices would you like to adopt or increase (beyond current management), if any?
 - i. What has discouraged you from adopting these practices?
- e. *If not addressed in the answer to the preceding question (d(i))*: What policies or programs would help or provide an incentive for your organization to adopt or increase carbon-oriented management? Please provide specific examples.
- f. Has – or could – adopting management practices to increase carbon sequestration and storage affect the attainment of your other forest management goals? Please explain.
- g. *For private owners who have other forestlands beyond the ecoregion of focus*: Thinking about the other forestlands your company owns in [state], west of the Cascade Crest:
 - i. Is your organization undertaking any forest management practices for the specific purpose of increasing carbon sequestration and storage in those forests? If so, please describe these practices.
 - ii. Would you be any more or less likely to manage those forest lands to promote carbon benefits compared with the forestlands in the ecoregion we're focused on today? Why or why not?

8. Cross-Boundary Management

- a. Do any **private corporate** lands (e.g., forest industry, TIMO, REIT) border yours?
 - ☐ No (*skip to 8b*)
 - ☐ Yes
- i. Have you engaged in any of the following cross-boundary forest management efforts with private corporate landowners/managers over the past 5 years?
 - ☐ Communicated about forest management
 - ☐ Developed coordinated forest management strategies or approaches
 - ☐ Jointly implemented forest management activities
 - ☐ Shared resources for conducting forest management (information, materials-tools-technology, infrastructure, contractors or staff, funding, etc.)
- 1. If you have *not* engaged in cross-boundary management with private corporate landowners/managers, please explain why not.
- 2. If you *have*, briefly describe the **purpose/motivation** for cross-boundary management with private corporate landowners/managers and the **outcome** of working together.

- b. Do any **private non-corporate lands** (e.g., family forest, land trust, other non-profit) border yours?
- ☐ No (*skip to 8c*)
- ☐ Yes
- i. Have you engaged in any of the following cross-boundary forest management efforts with private corporate landowners/managers over the past 5 years?
- ☐ Communicated about forest management
- ☐ Developed coordinated forest management strategies or approaches
- ☐ Jointly implemented forest management activities
- ☐ Shared resources for conducting forest management (information, materials-tools-technology, infrastructure, contractors or staff, funding, etc.)
1. If you have *not* engaged in cross-boundary management with non-corporate private landowners/managers, please explain why not.
2. If you *have*, briefly describe the **purpose/motivation** for cross-boundary management with non-corporate private landowners/managers and the **outcomes** derived (or expected) from working together.
- c. Do any **US Forest Service (USFS)** lands border yours?
- ☐ No (*skip to 8d*)
- ☐ Yes
- i. Have you engaged in any of the following cross-boundary forest management efforts with the USFS over the past 5 years?
- ☐ Communicated about forest management
- ☐ Developed coordinated forest management strategies or approaches
- ☐ Jointly implemented forest management activities
- ☐ Shared resources for conducting forest management (information, materials-tools-technology, infrastructure, contractors or staff, funding, etc.)
1. If you have *not* engaged in cross-boundary management with the USFS, please explain why not.
2. If you *have*, briefly describe the **purpose/motivation** for cross-boundary management with the USFS and the **outcomes** of working together.
- d. Do any other federal lands (e.g., **Bureau of Land Management, National Park Service**) lands border yours?
- ☐ No (*skip to 8e*)
- ☐ Yes (*please specify agency*)
- i. Have you engaged in any of the following cross-boundary forest management efforts with other federal agencies over the past 5 years?
- ☐ Communicated about forest management
- ☐ Developed coordinated forest management strategies or approaches
- ☐ Jointly implemented forest management activities

- ☐ Shared resources for conducting forest management (information, materials-tools-technology, infrastructure, contractors or staff, funding, etc.)

1. If you have *not* engaged in cross-boundary management with other federal agencies, please explain why not.
2. If you *have*, briefly describe the **purpose/motivation** for cross-boundary management with these federal agencies and the **outcomes** of working together.

e. Do any **Tribal** lands border yours?

- ☐ No (*skip to 8f*)
☐ Yes

i. Have you engaged in any of the following cross-boundary forest management efforts with Tribal landowners/managers over the past 5 years?

- ☐ Communicated about forest management
☐ Developed coordinated forest management strategies or approaches
☐ Jointly implemented forest management activities
☐ Shared resources for conducting forest management (information, materials-tools-technology, infrastructure, contractors or staff, funding, etc.)

1. If you have *not* engaged in cross-boundary management with Tribal landowners/managers, please explain why not.
2. If you *have*, briefly describe the **purpose/motivation** for cross-boundary management with Tribal landowners/managers and the **outcomes** of working together.

f. Do any **state** lands border yours?

- ☐ No (*skip to 8g*)
☐ Yes

i. Have you engaged in any of the following cross-boundary forest management efforts with state landowners/managers over the past 5 years?

- ☐ Communicated about forest management
☐ Developed coordinated forest management strategies or approaches
☐ Jointly implemented forest management activities
☐ Shared resources for conducting forest management (information, materials-tools-technology, infrastructure, contractors or staff, funding, etc.)

1. If you have *not* engaged in cross-boundary management with state landowners/managers, please explain why not.
2. If you *have*, briefly describe the **purpose/motivation** for cross-boundary management with state landowners/managers and the **outcomes** of working together.

- g. How do you think working with neighboring landowners/managers through cross-boundary management could help reduce the impact of wildfire on your forestlands?
- h. How do you think working with neighboring landowners/managers through cross-boundary management could enhance your organization's capacity to manage their forests for climate benefits?
- i. If desirable, what would it take to increase cross-boundary management?

9. Wrap-Up

- a. Does your organization have any management plans or other documents that address some of the topics that we discussed today that you'd be willing to share?
- b. Is there someone affiliated with the ownership or management of these lands who would be another good person to interview for this study? If so, would you be able to provide contact information and put us in touch with them?
- c. Do you have anything additional that you'd like to share before we conclude the interview, or suggestions for questions that I should have asked, but didn't?
- d. Would you be comfortable with us using quotes from today's interview in any research products we develop? We would not ascribe your name to the quote without your permission.
☐ Yes ☐ No
- e. Would you like us to reach out to you in the future with results from this study?
☐ Yes ☐ No
- f. Would you like to ask me any questions before we conclude the interview?