Upper Finney-Chute Rx/Gee Lake Wildfire

October 4, 2024

DECLARED WILDFIRE REVIEW

Mt Baker Ranger District
Mt Baker-Snoqualmie National Forest

June 12, 2025

☐ **Forest Supervisor Delegation**

■ **Regional Forester Delegation**

EXECUTIVE SUMMARY 3
SETTING 4
MBS Fire & Fuels Organization, Structure, Ecosystem Description 4
Seasonal Setting 4
NARRATIVE 5
Fall Fuels Work Meeting 6
10/1/2024 8
10/2/2024 8
CONCLUSION 11
LESSONS LEARNED 12
Lessons Learned by The Participants 12
Lessons Learned by The Review Team Members 13
APPENDIX A: ANALYSES AND ASSESSMENTS 15
APPENDIX B: CONTRIBUTING FACTORS OR CONDITIONS 27
APPENDIX C: CHRONOLOGY 28
APPENDIX E: MAPS 30
APPENDIX F: DELEGATION OF AUTHORITY 32
APPENDIX G: REVIEW TEAM 36

EXECUTIVE SUMMARY

On Monday September 30th, 2024, the Mt Baker-Snoqualmie National Forest, Mt Baker Ranger District, in Snohomish County Washington, began pile burning operations in the Upper Finney-Chute Timber Sale area, a fairly typical project for the district at that time of year. The initial results of the burn were favorable, and burning continued the following day, with the unit being put into patrol status at the conclusion of Tuesdays ignitions

While patrolling the Upper Finney-Chute units on Wednesday October 2nd it was discovered that fire had spread through un-piled slash in some locations, and a plastic culvert had been burned and would need to be replaced. The following day the location of the culvert was plotted on a map. Looking at the map it appeared that the burned culvert was located on private timber lands adjacent to the Upper Finney Timber Sale area, which had not been previously identified.

On the morning of Friday October 4th a full size up of the situation was made, finding that piles from a timber harvest on private lands had been inadvertently lit by Forest Service resources earlier that week, not realizing they had left the Upper Finney Timber Sale area. In addition to the damaged culvert, it was estimated that approximately 30-40 acres of fire had spread out from the piled areas and that young conifer reproduction had been impacted.

Once the situation was made clear it was communicated to the private timber landowner representative and the Washington Department of Natural Resources (WADNR). In consideration of the fact that fire had been established on private land by actions of the Forest Service and that WADNR resources would be needed to suppress the resulting fire spread, the Upper Finney Chute Prescribed Fire was declared the Gee Lake Wildfire on the afternoon of October 4th.

It was determined that the initial error that led to piles being lit on private land was made when a map was created for the burn plan that did not show the 160-acre private parcel within the timber sale area. It was also acknowledged that multiple individuals involved in the implementation of the Upper Finney-Chute Prescribed Fire could have noticed the change from the commercial thinning on NFS land to the clearcut on private land, but failed to connect it to a change in ownership.

The lack of awareness around the private inholding coupled with piles from two separate timber harvest operations located along the same road system led to Forest Service resources unintentionally burning piles on private land and ultimately resulted in a wildfire declaration when fire moved out of pile footprints and caused damages to private resources.

SETTING

MBS Fire & Fuels Organization, Structure, Ecosystem Description

The Mount-Baker Snoqualmie (MBS) National Forest encompasses a 1,724,229-acre area of National Forest System Lands in northwest Washington State. The forestland is distributed in Snohomish, Whatcom, Skagit, King, Pierce, and Kittitas counties throughout the state. The forest is divided into four ranger districts, the Mount Baker, Darrington, Skykomish, and Snoqualmie Ranger Districts, with offices and workstations in the communities of Sedro-Woolley, Glacier, Darrington, Concrete, Verlot, Skykomish, North Bend, and Enumclaw with the supervisor's office located in Everett, Washington. Elevation on the forest ranges from 60 to 6,000 feet ASL and precipitation ranges from 100 to 200 inches per year. Mean temperatures are heavily dependent on elevation, but typically cool and wet as with many coastal mountain ranges in the Pacific Northwest region. The MBS is a forest that is typically considered to be at a low risk from fire due to its climate and lack of recorded fire history. While an infrequent occurrence, when conditions do align, the abundant fuel loading can contribute to large, high-severity wildfires that are known to occur in ecosystems with long (100-300 year) fire return intervals. Local concerns around fire risk were heightened in 2022 when there were multiple large fires that impacted the forest, including the 13,396-acre Bolt Creek Fire.

The MBS wildfire and fuels management organization is broken into two zones, north and south, for the entire forest area. The organization hosts one Interagency Hotshot Crew, a twenty-person initial attack crew, four engines, and helps to staff an interagency dispatch center. Supervision of the fire organization is made up of one fire staff officer, a deputy fire staff officer, two fire management officers (FMO), two assistant fire management officers (AFMO), an incident business specialist, an aviation officer, and a training officer. In 2022, the MBS created a fuels management specialist position to add to the leadership of the fire program. The fuels management program on the forest is developing and expanding beyond what was historically considered collateral duties for the zone fire managers. While the MBS does maintain a small but active timber harvest program, implementation of fuels management actions have been limited in the past, largely due to the climate of the area. One of the more exciting projects recently added to the portfolio of the fuels management program is a series of underburns for large ungulate habitat restoration in the southern half of the forest.

Seasonal Setting

Towards the end of September, the western United States was still coming out of a long and busy fire season. During 2024, the National Preparedness Level (PL) spent significant time at both levels 4 and 5, with the Northwest Geographic Area being at a PL 5 for 52 days. The MBS had two large fires on the forest in 2024, the Pincer Two and Miners incidents, and its resources spent considerable time staffing for initial attack during periods of high fire danger and supporting regional and national fire suppression efforts.

Fiscal year 2024 was also a busy year for both the national and regional fuels programs. The region was able to exceed its fuels target for the year, including a significant jump in the amount of prescribed fire

acres it had conducted compared to past averages. However, in the spring of 2024, two prescribed fires were declared wildfires within the region, and on October 1st, a third prescribed fire had been declared a wildfire. While the region has experienced prescribed fires that were declared wildfires in prior years, it is somewhat rare to have two instances of this occurring in the same year and gave an early indication of how busy fire season was to be in the region in the months to come.

NARRATIVE

Local setting

As the seasons began to transition and personnel started to return to the MBS for fall, the fire managers on the North Zone came to the forest fuels specialist (FFUELS) to ask about what projects were on the docket and what work needs to be done around them. The FFUELS worked to gather information on available underburning and pile burning throughout the forest. As they gathered information, they also created operational maps using ARCGIS. For the Upper Finney Chute and Decline pile burn units, FFUELS pulled in the collected GPS points of pile locations, compiled by an IHC member earlier in the summer, overlayed the pins on an ESRI base layer with shading and elevation demarcation, added the forest road layer, added the forest administrative boundary, and added the timber sale unit boundaries. The resulting maps were exported to georeferenced .pdf maps for field use (APPENDIX F).

The contract for the Upper Finney Timber Sale was awarded to PRIVATE TIMBER COMPANY in 2015. Sale administration concluded on 8/28/2024 and the timber sale was fully closed on 9/26/2024. The harvest activity piles were then scouted and marked in Avenza by an IHC crewmember who was supporting the FFUELS while recovering from an injury.

The handcrew assistant for the local IA crew was sent to the Upper Finney area on September 26th to assess the condition of the piles. They used the operational map, produced by FFUELS the day prior, to check that the GPS points were accurate and whether the piles were covered with wax paper. They were also asked to assess whether the piles would burn, given the precipitation that the area had received the prior week. They relayed that some piles were covered, some were not and that most were available to burn. They also reported that some piles had some logging slash around them, but they didn't believe that it would present an issue for holding when it came to implementation.

The North Zone FMO was planning to transition the role of fire manager (syn: duty officer) prior to taking annual leave for an extended period. The North Zone AFMO was returning from their own period of annual leave and was ready to inherit the fire manager responsibilities. The two had one day of planned overlap where they transitioned duties and information. They joined a meeting to discuss the fall workload for fuels work. The two also spent time discussing upcoming layoffs for temporary employees and permanent seasonal employees (PSEs). Since most PSEs were nearing the end of their tour, they were planning for a large layoff and season closeout during the week of September 30th. All the temporary employees were to be laid off that week as well.

Fall Fuels Work Meeting

On Thursday, September 26th, North Zone FMO and AFMO met with FFUELS, the IA crew supervisor, one of the engine captains, and the deputy fire staff officer to plan fall pile burning. The initial aim of the meeting was to go over units to be burned and develop a game plan for appropriate work for personnel still in pay status. Some discussion was had about the best use of available personnel, and whether the labor force should be used to cover the uncovered piles so that they could be burned at a later date. As the meeting proceeded, the group noted that they had an upcoming weather window that could be conducive to burning piles and they would have the 20 person IA crew available to help. The tenor of the conversation shifted from an information gathering meeting to an operational planning meeting when they recognized the potential weather window and available resources window. The conclusion of the meeting was ultimately that they would wait to see what weather came over the weekend, but the plan was that they would be a 'go' to implement the pile burn the following Monday, if weather didn't impact the site dramatically over the weekend. The supervisor for the IA crew passed the message along to the rest of their personnel to share advance notice.

> Like many other units across the west, pile burning culture on the MBS is relaxed. Burning piles is usually end of season work that is not complex nor stressful. The challenges associated with burning piles on the MBS do not have to do with containing the fire but getting the piles to ignite and burn completely. Rain events frequently saturate piles with moisture, so much so that covering piles with plastic or wax paper in advance of rain is common practice or included in contract specifications for pile construction.

9/30/2024

The predicted rain did not materialize over the weekend of the 28th and 29th. While the FFUELS voiced concerns about the lack of moisture over the weekend, the unit had received ~1.6 inches of precipitation the week prior. While there was a bit of hesitation discussed about whether the district was into machine pile burning season (as opposed to hand piles), the consensus was that the pile units on the North Zone were ready to burn and that if there was unacceptable creep, on-scene personnel would shut down the burn.

On Monday morning, a Microsoft Teams meeting was scheduled to go over the Agency Administrator Ignition Authorization (Element 2A of the burn plan). [1] The 2A conversation included several players in several different locations. Calling in from Sedro-Wooley were the North Zone AFMO and the Mount Baker District Ranger (also acting as the qualified agency administrator RXA3). Calling in from the

[1] *PMS 484 – Agency Administrator's relevant qualifications, experience, and involvement*: Both Line Officers for the Mount Baker and Darrington Ranger Districts participated in the 2A conversation on the morning of September 30th. While they were separate operations, the implementation was done by the same fire management organization, under the same burn plan. The Mount Baker District Ranger was currently qualified as an RX Agency Administrator Type 3 and was approved to sign and implement Type 3 prescribed fires.

Darrington workstation were the supervisor and assistant for the IA crew. Calling in from the Darrington office was the Darrington District Ranger, who was training as an agency administrator, RXA3. Calling in from the Concrete workstation were the engine captains.

The FFUELS joined remotely while teleworking as well. During the conversation, the respective district rangers authorized ignitions as line officers, and the Mount Baker District Ranger signed the 2A for the next 24 hours. Once authorized, a plan was made to divide the workload. The engine program would handle the piles at Decline and the Darrington Seed Orchard. The IA crew would handle the piles in the Upper Finney Creek area. There was a brief discussion about whether the IA crew supervisor could serve as the burn boss as a type 2 burn boss trainee – but they identified a squad boss qualified as a type 3 burn boss within the crew that could provide appropriate qualification to implement the burn plan. The type 3 burn boss was working with the rest of the crew to gather supplies and vehicles for the day's operation, and they were not on the 2A call that morning. [2]

When the crew arrived in the Upper Finney area, they briefed on the day's operation. The crew was going to break up into to three different groups. Two trucks would drive up the 1735 road and ignite all the piles pinned in that road system. They were told to assess a few piles that were on steep terrain with a high potential for rollout. Another group, in two trucks, would travel up the main 17 road, lighting piles as they went. The crew supervisor and assistant were going to take their truck up the 1720 road. Following briefing, the test fire was initiated at 10:45 in a pile along the 17 road. The first pile did not consume despite several attempts. The group moved to a second pile in the briefing area. The group was able to get that pile to consume, and at 11:10 an update was called into dispatch that the test fire was successful, and ignitions were proceeding. The operation for the day proceeded as planned. Some piles remained difficult to light and there was minor creep away from the piles – however, where creep did occur, it was due to radiant heat from the burning pile and was not carrying in surrounding fuels independently.

Image 1. Image of piles burning in Upper Finney Drainage. In the foreground, a large slash pile burns next to the 1720 road. In the distance, smoke is visible from piles burning next to the 1735 road. Picture taken from the 1720 road on 9/30/24.

Two piles next to the 1735 road remained unlit because the crewmembers identified significant potential for rollout and left the piles to be lit another day. Ignitions were complete at 15:34 and all resources departed to Darrington at 16:02.

When the crew returned to the workstation, they notified the North Zone AFMO that there was still a significant number of piles that had to be lit the next day. Additionally, the crew supervisor had sprained

[2] *PMS 484 – Qualifications and experience of key personnel involved*: The Burn Boss was qualified as a Prescribed Fire Burn Boss Type 3 (RXB3) at the time of implementation.
A Burn Boss Type 2 trainee was involved to gain familiarity with the 2A process and other parts of plan implementation even though it was a Type 3 Prescribed Fire.
The Burn Plan Preparer, though not involved in implementation, was qualified as an RXB3 and the Technical Reviewer was qualified as an RXB2.

their leg during the day and would be going to see their primary care provider for assessment. The squad boss/RXB3 would continue the operation the next day.

10/1/2024

On Tuesday morning, a second 2A conversation was had to authorize ignitions for another 24 hours. The focus for the day was finishing the pile burning in the Upper Finney area. The 2A conversation included the RXB3 for Upper Finney, another RXB3 from the engine program for a pile in the Marble Creek Campground, the District Ranger, the FFUELS, and the North Zone AFMO. The discussion during the 2A Teams call was more tactical in nature, discussing the planned operation and the potential for incoming moisture. With weather expected around noon, they adjourned the conversation quickly to allow personnel to get on site and light the piles before the rain hit.

The RXB3 and six other personnel arrived in the Upper Finney area and radioed an update to dispatch. The piles lit the day before had consumed well, there were some heavies and stumps still consuming, and they were igniting the test fire for the day. The test fire was successful at 09:54 and ignitions were concluded by 12:00. Around noon, the RXB3 noted that weather arrived over the unit under a frontal passage; there was significant wind but little to no moisture. As winds hit the area, the remnant logging slash in the clearcut and open areas received embers and started burning in heavies, but no concerning growth occurred. There was a windrow of slash in the clearcut that the crew did not ignite directly, but that received an ember during the high winds and began to burn. At the end of the day, the RXB3 noticed that the fire in the windrow was burning near a plastic road culvert. The crew tried to protect the culvert but were unable to because of the radiant heat from a nearby pile. At the end of the day, the RXB3 passed along to the North Zone AFMO that they lit the piles, excluded a few, and may have burned up a culvert in the unit.

10/2/2024

On Wednesday, the only planned activity on the Upper Finney unit was a patrol. The RXB3 brought out a road closed sign to keep people from driving over the burned-up culvert, but did not notice anything concerning during their patrol of the unit. They departed the area at 09:30 to return to Darrington and help with crew closeout for the season, given that the next day was their last working day. While the North Zone AFMO was conducting RAWS maintenance for the fall, they were able to make a slight detour from a nearby RAWS site to evaluate the burned-up culvert. They let the DR know that they'd burned a culvert in the Upper Finney area. The ranger was initially irritated because of budget constraints and was concerned about the cost associated with repairing it. The North Zone

Image 2. Image of piles burning in Upper Finney Drainage. In the foreground, a slash pile remains unburned on the 1735 road. In the distance, smoke is visible from piles burning next to the 1720 road. Picture taken from the 1735 road on 10/01/24.

AFMO continued about their day, and reached out to the forest roads engineer to see if they could look at the culvert to assess what repair would need to be done.

10/3/2024

On Thursday, their last day in pay status for the year, the RXB3 did another patrol of the unit. The patrol showed no new growth or new issues on the unit, nothing had changed in their perspective from the day prior. The forest engineer was able to go out and look at the damaged culverts, but when they arrived on scene, the heat from the piles kept them from getting close enough to the culverts to fully assess the damages. As the day progressed, questions started to be asked about the location of the burned culverts. The GPS point had been plotted on an administrative map layer and that map indicated the culverts were located within a 160-acre parcel of private land ownership. The North Zone AFMO and FFUELS began to look closer at the operational map, and they realized that the GPS points for some of the slash piles were in areas that were not within the timber sale units. Multiple people at different points during the day started to have a creeping realization that many of the slash piles burned during the implementation of the Upper Finney Prescribed Burn may have been located on private timberland. District and forest personnel had several side conversations throughout the day about letting Washington State Department of Natural Resources (WADNR) and the private landowner know about the potential problem. However, without fully confirming the extent of the impacts, the group decided that it would be best to wait to contact all the affected parties until after they had a full assessment of the situation. The decision was made for the Forest Fire Staff Officer (CH1) to go to the field early the next day to gather information and then they would make contact.

10/4/2024

CH1 arrived at the office early in the morning on Friday. They tried to depart straightaway but were delayed by a dead battery. After jumping their truck, CH1 left for the Upper Finney burn units. They arrived on scene and called in an update to dispatch:

> *'Chief 1, report on PRIVATE TIMBER COMPANY parcel of Finney Chute Timber sale: parcel is approximately 160 acres total size, PRIVATE TIMBER COMPANY's name for it is Finney G, harvested in 2019 and replanted. We burned approximately 40 large machine piles in this parcel, some significant creep between piles in the southwest corner of parcel. Between 30 and 40 acres are burned, most of what has burned is in the open and has low potential for continued spread. However, there are a few leave stringers with older timber that will continue to smolder and creep. Impacts that I can see; a few more mature hemlocks were burned or will die, some loss of planted regen trees around burned piles and where there was*

Image 3. Image of road surface and hole underneath where plastic culvert had consumed.

effective broadcast burn. Approximately 1/4 of the replanted saplings will die. Potential for more spread if we get another significant warmer weather window'

-Dispatch log October 4, 2024, 09:58.

Before departing to the office, CH1 told an on-scene USFS engine to begin making a plan to see what they could to do maintain timber value in stringers near the clearcut/slash area. Rain was falling over the unit, and where fuels were not beneath an overstory canopy, fire spread had stopped. There was still some flame showing in areas under mature canopy.

On their drive back to the office, CH 1 called the acting deputy forest supervisor to provide them with a full update of what they had seen and ensure they were informed of the situation. In the district office CH1 sat down with the MBS district ranger to contact the private timber company forester. Over the phone, the initial response from the forester was jovial. They replied, 'Great! You burned our piles for us!' CH1, however, had to follow up with saying, 'Wait – there's more, we burned up a culvert and there was some creep that probably killed some young, planted seedlings in the unit.' The private timber company forester then asked that the Forest Service to suppress all the fire on their property. Following the phone call, the North Zone AFMO reached out to WADNR to tell them what was going on. The DNR DO took a report, then referred the situation to the WADNR wildland district manager. The district manager called the AFMO for more information and offered their resources to help put out the fire on private land. WADNR dispatched fire resources to the timber company inholding and they joined the on-scene USFS engine in extinguishing the fire. No suppression action was to be taken on Forest Service-managed lands.

The WADNR incident commander called in to dispatch at 15:45 requesting 2 heavy equipment bosses, 2 excavators, 2 engines, 1–20-person crew, 2 porta-tanks, 1 hose kit, 2 pump kits, and 1 fire investigator. They also reported the fire as being estimated at 30 acres. They described fuels of grass, shrub, and timber, fire behavior was described as creeping, spread risk was low, and the values at risk in the fire area were timber values. They set about working the fire with the resources that they had on scene.

As with all notifications that affect multiple stakeholders, the news of Forest Service personnel inadvertently igniting piles on private land spread quickly through multiple channels. Once the regional office was made aware of the situation, staff set forward trying to find options to cover the cost of the suppression response through agreements. The WADNR wildland district manager notified the Washington State Forester – who in turn reached out to the USFS regional forester. While news was spreading throughout all the involved organizations, peers were contacting each other as well. The WADNR wildland district manager was requesting that a wildfire be declared for the Upper Finney piles on private ground for multiple reasons. The wildland district manager pointed out several critical issues:

- Ordering resources was cumbersome without an active wildfire incident in the dispatch center.
- The end-state requested by the landowner was the extinguishment of all fire and the activities required to achieve that constituted wildfire suppression.
- Without an active wildfire code, the wildland district manager could not ensure that their employees were paid their full wildfire premium pay.
- And, if the roles were reversed, DNR policy would require declaring a wildfire if any fire were to impact any other landowner or manager, Forest Service included.

Once CH1 understood the perspective of the DNR wildland district manager, they encouraged the district ranger to declare the Upper Finney Prescribed Fire a wildfire. Around the same time, the district ranger was receiving instruction from the regional office, through the forest supervisor, that they expected the prescribed fire be declared a wildfire.

As more information started to reach the district ranger, it was clear that declaring the Upper Finney Prescribed Fire as a wildfire was going to be the best method to respect the wishes of the timber management company, honor the work being done by state firefighting resources, and respect the direction of the regional office.

The district ranger sent an e-mail to the forest supervisor at 17:23 that read:

Due to the fact that the Upper Finney Chute RX has spread outside of its project area and contingency actions have failed to contain the fire by the end of the next burning period, I declare it to be a wildfire effective immediately.

RXA3 and Mt. Baker District Ranger

Following their declaration of the Upper Finney Chute prescribed fire as the Gee Lake wildfire, the district ranger made it a priority to ensure that they made it clear to all their employees that they knew the situation was a mistake. They wanted to make it known that it was not a case of someone not being fully present or not performing, but that it was simply a collection of mistakes. They wanted to ensure that the employees involved knew that they were not at fault for what happened and that the district ranger would take full responsibility. When speaking with employees following the event the ranger stated and re-stated, "There's one signature that matters and there's one person that's responsible, and that is me."

Over the course of the next five days, firefighters set about suppressing the Gee Lake fire on private ownership. The AFMO completed a complexity analysis that showed the fire was appropriately managed at the type 4 level. There were locations on the Gee Lake fire that the risk to firefighters was deemed too great to engage in complete extinguishment of all burning materials, but through most of the fire area, line securement and 100% mop-up was the standard. Included in the suppression activities, an excavator on the wildfire was used to replace two burned culverts (a second burned but was not identified until later) and repair the road surface over top of them. The repairs were completed less than a week after they were damaged.

CONCLUSION

An analysis of prescribed fire burn plan and the subsequent implementation of the plan did not reveal any significant departures from the outlined prescription, actions, and procedures described in the plan. As a low complexity programmatic burn plan, many of the elements are written to be general in nature and applied to multiple locations and a relative wide prescription range. While the review did identify some areas in which the general plan could be more specific, the prescribed fire was implemented following the plan as it was approved.

It is the opinion of the review team that conditions leading to declaring the Upper Finney Prescribed Fire as a wildfire centered around maintaining stakeholder relationships, streamlining access to required suppression resources, ensuring ownership and exhibiting humility when mistakes were made. While it was a frustrating situation, the humility and professionalism of the forest leadership allowed them to

receive criticism, understand the perspective of their partners, and adjust their approach accordingly. The forest leadership on the MBS was able to acknowledge mistakes and begin to make things right. It should be noted that, had relationships with stakeholders and partners not already been established and strong prior to this event, the outcome could have been far less cordial and far more negative.

LESSONS LEARNED

Lessons Learned by The Participants

- Double check your maps. Having the right layers included could have prevented piles being ignited on private land.
- Pile burning is generally a low complexity routine activity– it can be easy to miss some of the minutia. It may be worthwhile to include the same suite of questions normally asked of a broadcast or underburn. Don't take it for granted.
- Understand the tension between involvement of District fire leadership and empowerment of qualified individuals. Intentionally look for the balance between empowering employees and the need for oversight from more senior fire leadership.
- Pile burning should include more intentional planning on the long term – a plan to light it, a plan to hold it, a plan to patrol it. The plan should ensure personnel are identified and available for all phases.
- A pile burn plan should better define 'acceptable creep' so there is an objective measure for someone in the field to assess.
- While perceivably low in complexity, fuels expertise is still required to manage the intersection between timber harvest activities and activity fuels disposal.
- Clear delineation of tasks and responsibilities with associated expertise and organizational titles/positions is still needed within small organizations. Fuels management can be viewed as a collateral duty for a fire management officer and assistant fire management officer, or it can be viewed as the sole responsibility of fuels managers. As fuels programs expand, clear communication of reasonable expectations and responsibilities is required for all fire and fuels programs to integrate successfully.
- Tensions arose from not notifying partners as early as possible and waiting to gather information. In the chronology of understanding the situation, the piles were lit on Monday and Tuesday, but it took an additional two days to fully understand the situation, and then notification was made on the fifth day. Notice was delayed because management wanted to ensure they had accurate information to share, yet the delay in notification and the subsequent delay in declaration was the source of most friction with partners.
- Declaring a prescribed fire to be a wildfire allows a streamlined process for ordering non-Forest Service resources for a suppression response. While declaring a wildfire does come with added scrutiny, it also allows for appropriate organizational adjustments to an unplanned situation.

- The difference between a prescribed fire and a wildfire has payment ramifications for partner agencies as well as Forest Service employees. Bargaining Unit employees for other agencies have the power to file grievances with their management regarding how they are paid based on what work they are doing. Ultimately, DNR employees were suppressing a wildfire (unplanned event) on their protection area. Had they been working on a prescribed fire agreement, premium pay (hazard pay) would not have been paid, and a few employees would have been unable to receive true time and half.
- During notification periods of wildfire declarations, numerous lines of communication open throughout multiple levels of one or more organizations. As information is transferred throughout numerous networks it is important to realize that communication, however well intended, can become noise. When systems become overly noisy, alignment of information flow and message content is an effective means to reduce confusion and doubt.
- Building guidelines to aid in wildfire declarations at the local level could reduce delays in decision making. Examples could include both objective and subjective criteria such as: fire on private ground, wildfire response efficiency, preservation of cooperator relationships, ordering resources beyond contingency, etc.
- Having strong relationships pays off.

Lessons Learned by The Review Team Members

- Long, demanding fire seasons were mentioned by fire personnel at multiple levels of the organization. The increased fatigue associated with long-duration; high-demand fire seasons can diminish focus on fine details.
- Developing fuels management programs requires a clear understanding of all the duties included. Expectations for a fuels management program range from forest management activity planning (including but not limited to: NEPA planning or writing, IDT participation, Grants and Agreements management, and Contract Administration or Representation), to planning for project implementation, and participating in the physical implementation of activities. Expectations for the program need to be managed appropriately to the size and capacity of the organization.
- Management and leadership support to employees was strong following the declaration. Despite acknowledgement of that by the employees, self-criticism still existed, and self-doubt still occurred.
- Particular attention should be given to contacting employees who were involved in the activities but not included in early conversations as these situations unfold. Knowing that the rumor mill will eventually reach everyone involved, it is important to contact employees early with clear and empathetic communication to ensure they have a full understanding of the events.
- It can be difficult to plan for unexpected responses that go beyond the normal expectation of ‘containment.’ On USFS-protected land, containment is a measure of success and can be left to

natural suppression methods (rain and snow). Creep from piles is even seen as desirable in certain situations. However, on other ownerships or in other situations, a suppression response can require a much higher investment of resources to completely extinguish all smoldering material. A wildfire declaration, even when delayed, can and should be considered a positive option when the response goes beyond what was reasonably expected.

- The health and strength of the fire program on the MBS was evident to the review team. Intentions were clear and in the right place, communication amongst one another supportive, and responses to the review were forthright and earnest. The interest in learning was keen and felt by the review team.
- There is a trusting culture within the forest and fire management. This trust was evident to the review team and echoed throughout multiple accounts.

APPENDIX A: ANALYSES AND ASSESSMENTS

The ***NWCG Standards for Prescribed Fire Planning and Implementation (PMS 484)*** requires the following analyses and assessments be made as part of any declared wildfire review:

1. *An analysis of the seasonal severity, weather events, and on-site conditions leading up to the wildfire declaration.*
2. *An analysis of the prescribed fire plan for consistency with agency policy and guidance related to prescribed fire planning and implementation.*
3. *An analysis of prescribed fire implementation for consistency with the prescription, actions, and procedures in the prescribed fire plan.*
4. *The approving agency administrator's qualifications, experience, and involvement.*
5. *The qualifications and experience of key personnel involved."*

#1: Analysis of seasonal severity, weather events, and on-site conditions.

Although the Upper Finney Chute Prescribed Fire area experienced moderately below normal (75-90%) precipitation during the 2024 water year as a whole, the month of September leading up to the burn was substantially drier (25-50% of normal) (Figure 1), resulting a Drought Monitor characterization of "abnormally dry" during ignition (Figure 2). Snow water equivalent at the nearest functioning Snotel site (Elbow Lake) was much lower than the historic median, and the snowpack melted off approximately 1 month earlier than normal (Figure 3), contributing to accumulated precipitation that was consistently below the 30th percentile throughout the 2024 water year (Figure 4).

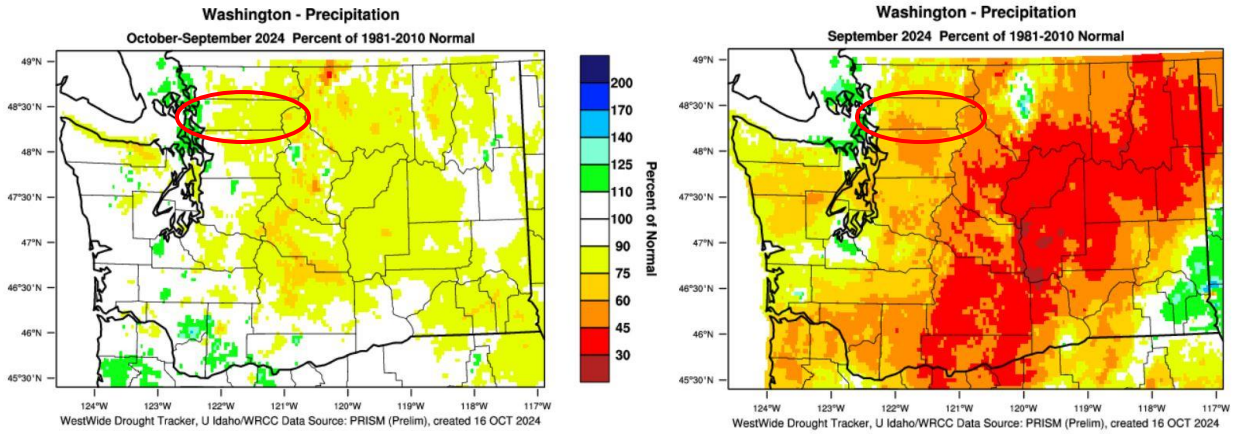

Figure 1. Mapped precipitation percentiles for Washington, October 2023-September 2024, and September 2024

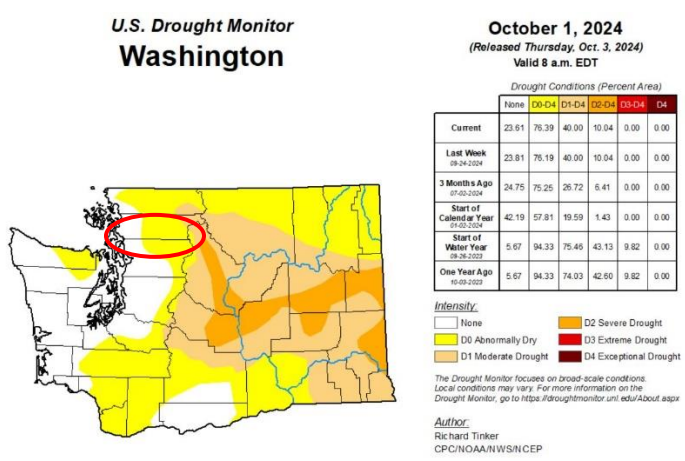

Figure 2. Washington drought conditions October 1, 2024

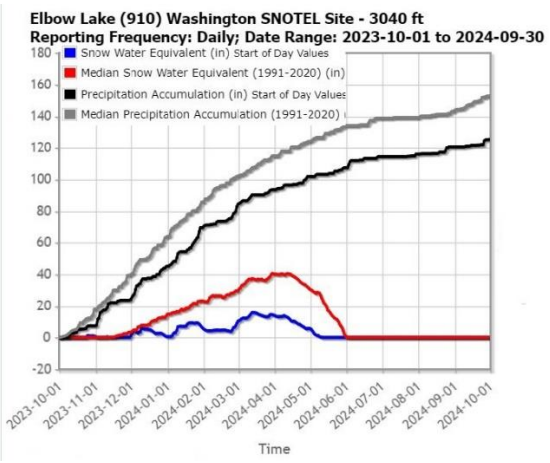

Figure 3. Snowpack at Elbow Lake Snotel site

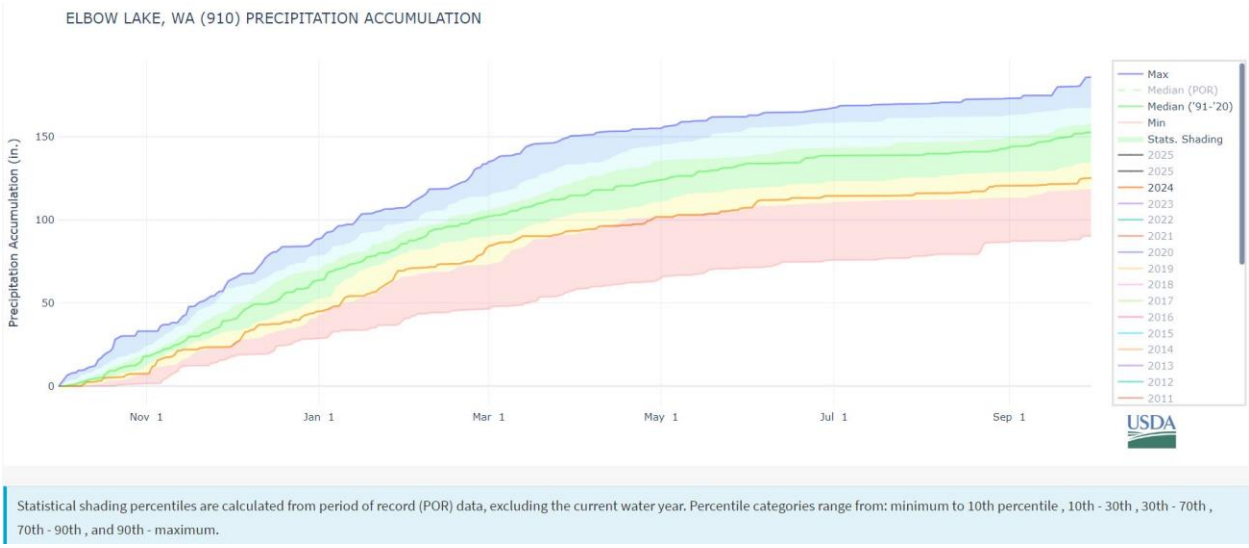

Figure 4. Precipitation received since Oct 1, 2023 (orange line) compared to average at the Elbow Lake Snotel Site

While the Mt. Baker Ranger District experienced a drier-than average water year, personnel described the weather pattern during the time leading up to ignition as typical of the local fall pile burn window. The nearby Finney RAWS recorded a substantial wetting precipitation event (approximately 1.9 inches) during the week prior to the burn, and other notable precipitation events had occurred during the summer (approximately 1.3 inches in late July, 2.9 inches in mid to late August, 0.3 inches in mid-September) which likely moderated fuel moisture in the burn unit (Figure 5). This is reflected in predictions of normal significant wildland fire potential for September and October on the District (Figure 6).

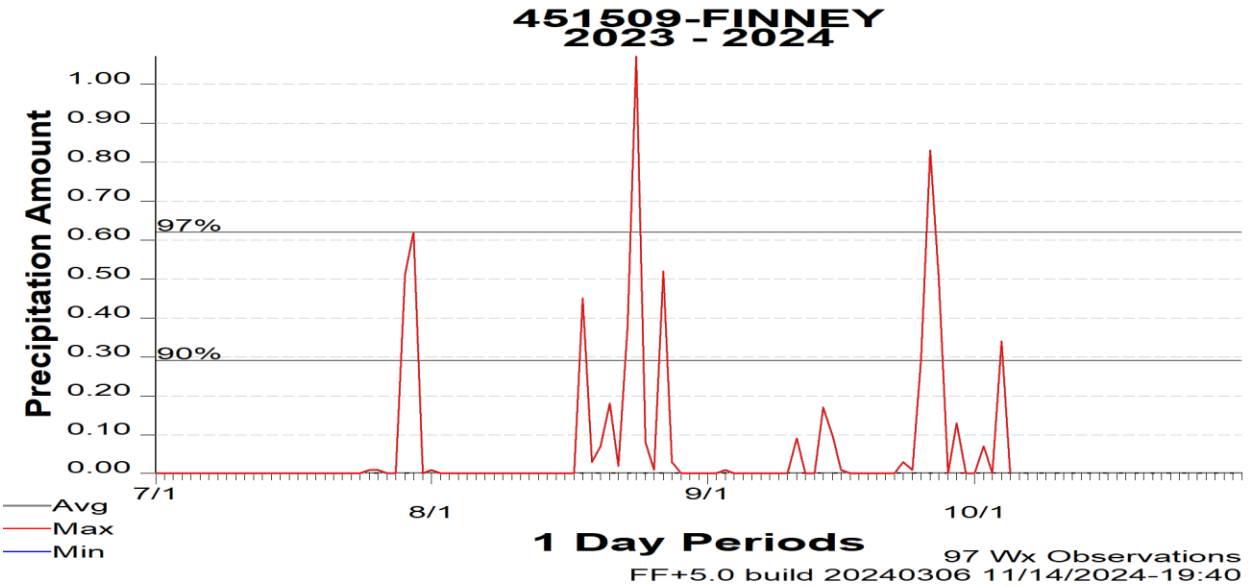

Figure 5. Precipitation received during summer 2024 at Finney RAWS

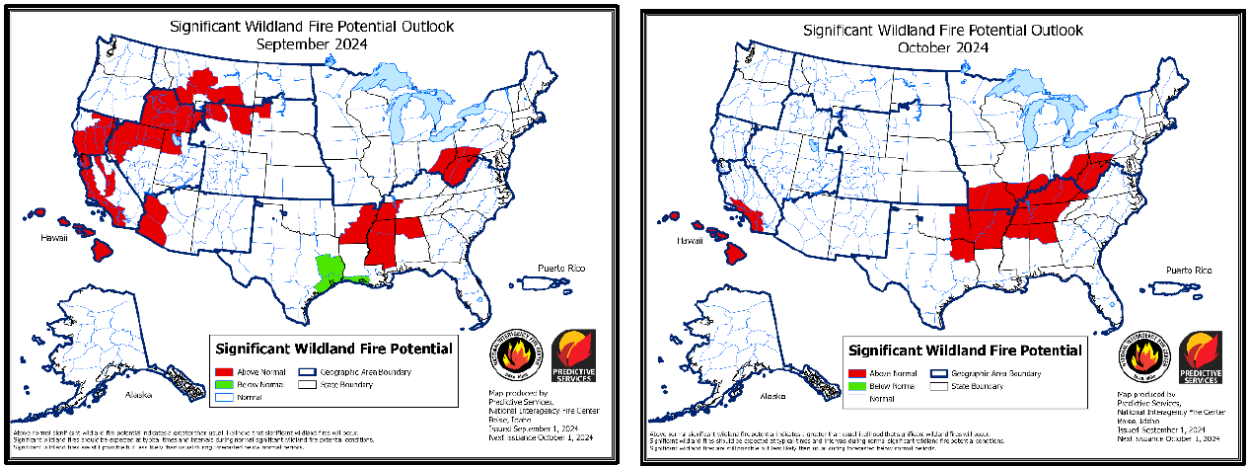

Figure 6. Significant Wildland Fire Potential, September and October 2024

Fire danger in the Western Washington Predictive Service Area (PSA NW01) was near average on the day of ignition, with slightly below average energy release component (ERC) values, and slightly above average 100 and 1000 hour fuel moistures (Figure 7). This pattern had been in place since mid-September, and was forecast to continue through early October. This was consistent with normal fire danger trends for that time of year in the area of the burn.

While much of northwest Washington received below normal snowpack and overall precipitation throughout the 2024 water year, particularly during the month leading up to ignition, periodic wetting rain events during late summer and early fall moderated fuel moisture and fire danger in the Upper Finney Chute Prescribed Fire area. Consequently, seasonal severity and weather did not contribute to problem fire behavior or the circumstances surrounding the wildfire declaration.

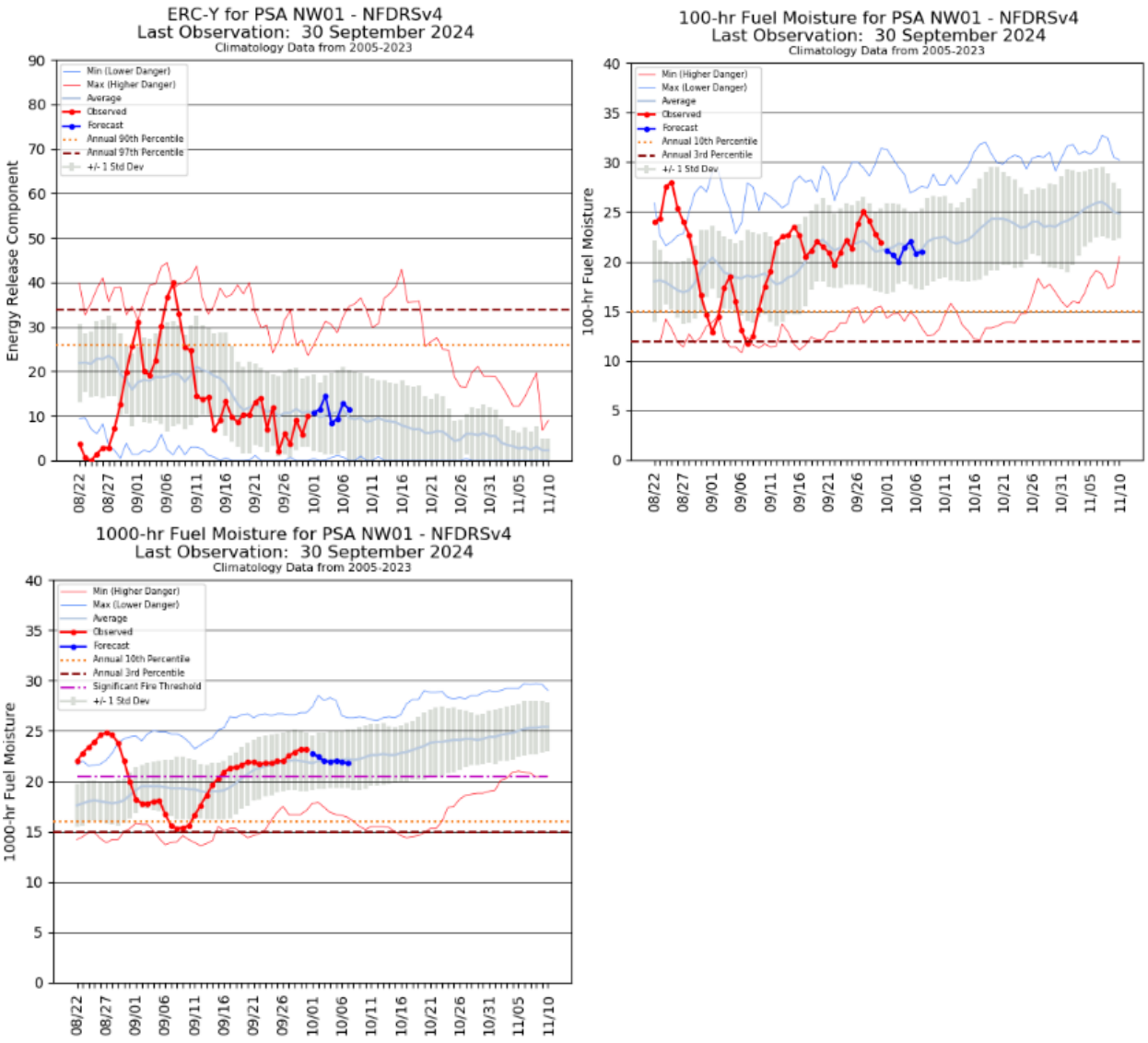

Figure 7. Energy Release Component, 100 and 1000 hour fuel moistures in Western Washington Predictive Service Area

#2: Analysis of the prescribed fire plan for consistency with agency policy.

The Upper Finney Chute prescribed fire was implemented under a programmatic low complexity burn plan that covered all pile burning on the Mt Baker Ranger District. The plan was approved by the Agency Administrator on April 13th, 2024.

The burn plan was analyzed for policy consistency utilizing NWCG Standards for Prescribed Fire Planning and Implementation, PMS 484, as well as the recommended procedures and emphasis areas found in Appendix B of the USDA Forest Service National Prescribed Fire Program Review, which is to be followed as interim guidance following the Forest Service's 90-day program review period in 2022. Elements that are listed as having potential as contributing factors are described in the table below.

Table 1: Analysis of Upper Finney Chute Prescribed Fire Plan Elements for consistency with policy and whether the element may have been a contributing factor to the outcome.

PRESCRIBED FIRE PLAN ELEMENTS	CONSISTENT WITH POLICY (NWCG and USFS)	COMMENTS	CONTRIBUTING FACTOR?
Element 1: Signature Page	Yes	The signature page was signed on April 4th, 2024, by a qualified RXB3 preparer and RXB2 technical reviewer. A qualified Agency Administrator then signed the plan on April 13th, 2024.	No
Element 2A: Agency Administrator Ignition Authorization	No	The plan contained the USFS 2022 template with drought indicators and 24-hour ignition authorizations as required by the USDA Forest Service National Prescribed Fire Program Review, Appendix B. The authorization was signed by the agency administrator on both Sep 30th and Oct 1st with 24-hour authorizations. However, with the plan containing maps that included plies on private ownership, Element 2A authorized ignition outside of the jurisdiction of the agency.	Yes
Element 2B: Prescribed Fire GO/NO-GO Checklist	Yes	Criteria met as per PMS-484.	No
Element 3: Complexity Analysis Summary and Final Complexity	Yes	The most current Prescribed Fire Complexity Rating System Guide (PMS 424, July 2017) was signed by the Prescribed Fire Plan preparer and the Technical Reviewer on April 12th, 2024, and Agency Administrator on April 13th, 2024. The Agency Administrator/Preparer Discussion was also marked as completed. However the signed complexity analysis summary page was in the appendix, not on page 6 as indicated in the table of contents.	No
Element 4:	No	Location of several units is included in element 4, but it does not include Upper Finney Chute. Recommend	No

Description of Prescribed Fire Area		referencing a complete list of units in the appendix or included here.	
Element 5: Objectives	Yes	Criteria met as per PMS-484.	No
Element 6: Funding	Yes	Criteria met as per PMS-484.	No
Element 7: Prescription	Yes	Criteria met as per PMS-484 and USDA Forest Service National Prescribed Fire Program Review, Appendix B, but calculated mid flame wind speeds were not accurately transfer over into the optimal and hot ends of Table B Prescription Parameters. Additionally, the element states that "*piles will be ignited after significant moisture has occurred*" but does not define what amount could be considered significant.	No
Element 8: Scheduling	No	The burn plan states that "Prescribed fire use may require regional or national approval at preparedness levels 4 and 5". Per policy prescribed fire *will* require regional approval at national PL 4 or 5, and at NFDRS Extreme.	No
Element 9: Pre-burn Considerations and Weather	Yes	Criteria met as per PMS-484 and USDA Forest Service National Prescribed Fire Program Review, Appendix B.	No
Element 10: Briefing	Yes	Criteria met as per PMS-484.	No
Element 11: Organization and Equipment	Yes	Criteria met as per PMS-484 and USDA Forest Service National Prescribed Fire Program Review, Appendix B.	No
Element 12: Communication	Yes	Criteria met as per PMS-484 and USDA Forest Service National Prescribed Fire Program Review, Appendix B.	No
Element 13: Public and Personnel Safety and Medical	Yes	Criteria met as per PMS-484.	No
Element 14:	Yes	Criteria met as per PMS-484.	No

Test Fire			
Element 15: Ignition Plan	Yes	Criteria met as per PMS-484.	No
Element 16: Holding Plan	Yes	Plan references that the burn boss may transition mop up and patrol to the Zone Fire Manager. It is not clear if the Fire Manger is a prescribed fire manger, duty officer, or Fire Management Officer.	No
Element 17: Contingency Plan	No	The burn plan states that the burn boss will determine if contingency resources are required or not. While the PMS-484 allows for flexibility in determining if contingency resources are needed or not, it states that "*If it is determined that contingency resources are not needed, the rationale should be documented in this element of the Prescribed Fire Plan.*" In the burn plan there was not clear language about what factors or conditions would support the decision around needing contingency resources.	No
Element 18: Wildfire Declaration	Yes	Criteria met as per PMS-484.	No
Element 19: Smoke Management and Air Quality	Yes	Criteria met as per PMS-484.	No
Element 21: Post Burn Activities	Yes	Criteria met as per PMS-484.	No
Prescribed Fire Plan Appendices: Appendix A: Maps: Vicinity, Project (Ignition Units)	No	A missing private lands ownership layer on a map led to piles inadvertently being authorized for ignition on private land while implementing the prescribed fire on the adjacent NFS land.	Yes
Appendix B: Technical Review Checklist	Yes	Criteria met as per PMS-484.	No

Appendix C: Complexity Analysis	Yes	The most current Prescribed Fire Complexity Rating System Guide (PMS 424, July 2017) was signed by the Prescribed Fire Plan preparer and the Technical Reviewer on April 12th, 2024, and Agency Administrator on April 13th, 2024. The complexity analysis also showed that the Agency Administrator/Preparer Discussion was completed for all preliminary risk rating descriptors.	No
Appendix D: JHA Risk Assessment	Yes	Criteria met USFS Policy.	No
Appendix D: JHA Risk Assessment	Yes	Criteria met USFS Policy.	No
Appendix E: Medical Plan	Yes	Criteria met as per PMS-484.	No
Appendix F: Fire Behavior Modeling Documentation	Yes	Criteria met as per PMS-484.	No
Appendix G: Smoke Management Plan and Smoke Modeling Documentation (Optional)	Yes	Criteria met as per PMS-484.	No

#3: An analysis of prescribed fire implementation for consistency with the prescription, actions, and procedures in the prescribed fire plan.

An analysis of prescribed fire burn plan and the subsequent implementation of the plan's implementation did not reveal any significant departures from the outlined prescription, actions, and procedures described in the plan. As a low complexity programmatic burn plan many of the elements are written to be general in nature and applied to multiple locations and a relative wide prescription range. While the review did identify some areas in which the general plan could be more specific, the prescribed fire was implemented following the plan as it was approved.

With a basic objective to reduce piled fuels and focused on consumption, the objectives of the burn were met during day of active ignitions. While fire did move out from the pile footprints after ignitions were complete, the plan acknowledge that this may occur and the predicated and actual weather moderated any fire growth shortly after the creep. The plan did not discuss any issue of mortality in planted conifers since it was an identified value within the timber sale area.

The plan has a wide range of environmental parameters in the prescription to accommodate pile burning under a variety of weather conditions. The prescribed fire was carried out within the range of conditions outlined in the plan and limited modeling need to plan for pile burning looked adequate to meet objectives. While it may have been more appropriate to model fuels outside the piles as a higher slash loading than the TL3 shown in the plan where the declaration occurred, the plan was not made to burn piles in a clear cut with its more exposed fuels and higher fuel loading. The piles that were burned on NFS land within the Upper Finney Chute Timber Sale did not spread outside of their footprints.

ELEMENT 5: OBJECTIVES

Objectives are SMART – Specific, Measurable, Attainable, Relevant and Time Related

A. Goals and Objectives	
Purpose and Resource Management Goals:	
Resource objectives for burning piles are to reduce hazardous fuel loading and to dispose of slash following timber sale processing or hazard tree falling or recreation area maintenance.	
B. Resource and Prescribed Fire Objectives	
Resource Objectives:	Prescribed Fire Objectives:
Reduce hazardous fuels.	Burn piles to consume 85-100% of fuels.
C. Constraints	
Burning may be prohibited during a burn ban due to air quality.	

Figure 8. Element 8 Objectives table from the burn plan

ELEMENT 7: PRESCRIPTION

A. Prescription Narrative

The Fire Behavior Prescription is the range of desired fire behavior needed to obtain the fire treatment and resource objectives. The Environmental Prescription parameters are used to determine the Fire Behavior Prescription. Any combination of weather and fuels parameters that results in an acceptable fire behavior range will be considered within prescription.

The prescription was developed from local knowledge and experience burning hand and machine piles in this ecosystem.

The Burn Boss will monitor fire behavior and fire effects during burn operations in a manner that assures prescribed fire and resource objectives are being met.

B. Prescription Parameters

1. Environmental Parameters	Fire Behavior Levels		
	Cool	Optimal	Hot
Temperature (F°)	≤ 60°	60°	70°
Relative Humidity (%)	≥ 50	50	35
Mid-Flame Wind Speed (mph)	1	6	10
20 Foot Wind Speed (mph)	3	15	20
Wind Adjustment Factor	0.3	0.3	0.3
Wind Direction (Azimuth°)	Any	Any	Any
1-Hour Fuel Moisture (%)	25	16	12
10-Hour Fuel Moisture (%)	27	18	16
100-Hour Fuel Moisture (%)	35	26	20

Additional Information

Prescription range is based on predicted fire behavior in adjacent areas, project objectives, and local knowledge. Burning under the extremes of all environmental parameters would not meet or possibly exceed the desired prescribed fire behavior characteristics and would therefore be out of prescription.

Broad prescriptive weather and fuel moisture conditions have been selected to allow resource objectives to be met across the entire project area. Due to variability across the project area, each unit will require a thorough evaluation of onsite fuel conditions prior to ignitions to ensure environmental conditions will result in the appropriate intensity fire to meet the objectives described in this plan.

Project implementation will be reassessed when any of the weather or fuels elements are outside the prescription range.

2. Fire Behavior Parameters

Fire behavior prescription range is the range of desired fire behavior needed to obtain intended treatment and resource objectives. Weather and fuels guidance parameters are used to determine fire behavior. Any combination of weather and fuels guidance parameters that results in an acceptable fire behavior range will be considered within prescription.

Piles can be burned under varying conditions. There is not adequate fire behavior modeling for pile burning, so this prescription is a guide that has been developed from experience burning in this geographical area.

Burning will occur early, to minimize smoke and visual impacts. Spring or Fall burning conditions will also significantly minimize the threat of containment issues, as the potential for fire spread and spotting at designated burn locations is typically low.

It is anticipated that pile debris will be cured enough to allow for 85 to 100 % consumption, although it may take chunking of piles for this to occur in some cases.

3. Fire Behavior Prescription for Adjacent Area (FM TL3)

Fuel Model(s)	TL3	Acceptable Fire Behavior Range		
		Cool	Optimal	Hot
Rate of Spread (ch./hr.)		0.0	0.7	1.7
Flame Length (ft.)		0.0	0.5	1.0
Spotting Distance (mi.)		0.0	0.1	0.1
Probability of Ignition		1	10	21

Fire behavior for the adjacent fuels was modeled in BehavePlus 6.0.0 using a range of environmental conditions and fuel moistures. The hot end of the prescription reflects fire behavior that would occur if fire escaped the piled slash and begins to spread in adjacent timber. The low end of the prescription was written to reflect cool and wet conditions where piles will burn but rate of spread, spotting distance, and probability of ignition in adjacent fuels is very low.

Piles will be ignited after significant moisture has occurred and spread potential is relatively low. Some live, standing trees directly adjacent to larger piles may torch during pile ignition. Additionally, fire may creep through forest litter outside the pile rings for days or weeks following pile ignition.

Spring or Fall burning conditions will also significantly minimize the threat of containment issues, as the potential for fire spread and spotting at designated burn locations is typically low.

Figure 9. Element 7 Prescription from the bun plan

#4: The approving agency administrator's qualifications, experience, and involvement.

The Burn Plan and Complexity Analysis were both signed by a qualified Rx Agency Administrator Type 3.

The same qualified Agency Administrator also signed the Agency Administrator Ignition Authorization (element 2A) for implementation of the burn plan.

#5: The qualifications and experience of key personnel involved.

The Burn Boss was qualified as a Prescribed Fire Burn Boss Type 3 (RXB3). The Burn Plan Preparer was qualified as an RXB3 and the Technical Review was qualified as an RXB2

APPENDIX B: CONTRIBUTING FACTORS OR CONDITIONS

To better understand the factors associated with prescribed fires that result in declared wildfires, the U.S. Forest Service maintains a database of all reports associated with these events. This database (the USFS Prescribed Fire Escapes Database) uses a system of categories of contributing factors or conditions present in each report and uses these as a means of identifying commonalities and trends over time across all such events to better evaluate the prescribed fire program as a whole.

Each Declared Wildfire Review Team is asked to identify any of the following contributing factors or conditions that pertained to the event to help WO-FAM's understanding of prescribed fire risks and opportunities across the entire program. In addition, the Team is asked to identify any additional contributing factors or conditions WO-FAM might need to consider tracking in the future if this review identified any new or unique factors or conditions not previously observed.

Category	Contributing Factor or Condition	Mark "X" If Observed
Planning	Burn area boundaries not aligned with favorable locations for fire containment.	
	Interdisciplinary team coordination lacking during design and planning of the treatment	
	Lack of proficiency using fire behavior and related modeling tools.	
	Insufficient holding plan	
	Insufficient ignition plan	
	Insufficient mop-up and patrol plan	
	Insufficient contingency plan	
	Insufficient technical review	
	Complexity rating did not adequately reflect the conditions actually experienced.	
Operations	Burn could not be completed and secured before forecasted worsening weather arrived.	
	Test fire did not provide accurate representation of fire potential.	
	Actions taken inconsistent with those described in the burn plan.	
	Insufficient patrol after burn boss transfers control to local unit.	
Communications	Unit boundaries or special features not communicated or identified accurately.	X
	Instructions not given or well understood.	
Equipment	Malfunction or breakdown.	
	Improper use or selection of equipment.	
	Equipment not set-up and tested prior to need.	
Fire Environment	Extended fire persistence – 2 weeks or more in patrol status	

	Actual weather experienced was outside what was forecast.	
	Severe drought conditions contributing to unusually dry fuels	
Fuels	Higher than typical fuel quantity/loadings	
	Large machine piles	X
	Hand piles	
Human Factors	External influences or distractions	X
	Internal stress or fatigue.	

APPENDIX C: CHRONOLOGY

Friday, September 27Th 2024	
	District Fire Staff, Forest Fuels Specialist (zoned), and RXB trainee discussed pile burn units, prescription, weather outlook, and resources availability.
Monday, September 30th 2024	
08:00	Element 2A Discussion with zone acting Fire Manager, Fuels Specialist, Agency Administrators, and designated burn boss. Determination was made that required resources and prescription parameters were met for the district's three pile burning locations: Decline, Darrington Seed Orchard, and Upper Finney
10:46	Upper Finney Unit Test fire was initiated.
11:10	Test fire was successful, and crew was continuing with ignitions.
15:34	Ignitions on Upper Finney were completed for the day.
16:02	Reported all prescribed fire was holding within unit boundaries and resources were departing for duty station
Tuesday, October 1st, 2024	
Morning	Element 2A discussion was had with same participants. Plan for the day was to continue burning Upper Finney unit and light a single pile at Marble Creek Campground. Check previous day's pile at Decline and Darrington Seed Orchard.
	Crews arrived at Upper Finney Unit, report previous days pile had consumed well overnight, and moderate amount of creep from the piles but everything was still within harvest unit boundaries.
09:44	Test Fire was initiated.
09:56	Test fire was considered successful, and ignitions continued.
12:00	Ignitions completed and crews started to patrol and monitor.
14:33	Crews reported seeing increase in fire behavior and smoke volume due to increased winds. Some piles had begun to burn outside of their original

	footprint. Conditions were still in prescription and fire remained within harvest unit boundaries, with low potential for spread. Crews continued to monitor.
16:10	Precipitation began to occur over Upper Finney Unit. Fire behavior moderated and crews returned to duty station.
Wednesday, October 2nd 2024	
07:44	Burn Boss plus one departed to check Upper Finney unit.
09:30	Reported that fire had crept from a pile and ignited a plastic culvert which completely burned. A way point was taken of the burnt culvert.
11:57	Burn Boss plus one returned to duty station.
Thursday, Oct 3rd 2024	
10:00	Private landowner called about the volume of smoke seen in the area to dispatch.
10:03	Burn Boss plus one enroute to check Upper Finney Unit. Placed a road closed sign to keep public off the road with the burnt culvert.
10:58	Burn Boss plus one departed unit for duty station
	Realization that the burnt culvert was on private land and not Forest Service Land occurred with multiple agency personal when latitude and longitude of the culvert was plotted on an official District Map. Decision was made to go and recon the area and provide a full size up of the situation prior to notifying private landowner of the situation.
Friday, Oct 4th 2024	
09:58	Upper Finney unit was scouted and personnel determined that approximately 40 piles had been burned, with 30 acres consumed by creep on a 160-acre private inholding surrounded by Forest Service land. Fire potential was minimal in the open, but fire was continuing to creep and smolder in areas with overstory timber stringers. Potential for more spread if another significant weather window occurs.
11:50 -18:00	Communications between USFS and private landowners, Washington Department of Natural resources, and internal USFS chain of command began to occur. Additionally, communications between WaDNR and private landowner, and within the internal chain of command within the WaDNR were occurring. Discussions on the Decision to Declare Upper Finney Pile burn a Wildfire was brought up to the Forest Service Regional Level and WA State level.
14:16	WaDNR sent resources to the scene.
15:45	DNR took command of the fire. Ordered resources for full containment and suppression.
17:30	Email was sent by Agency Administrator to declare Upper Finney Pile RX as a wildfire -Gee Lake
Saturday, Oct 5th to Oct 20th 2024	
	Full suppression and mop-up occurred on the Gee Lake Fire. Damaged culverts were replaced. Oct 20th Gee Lake Fire was called controlled.

APPENDIX E: MAPS

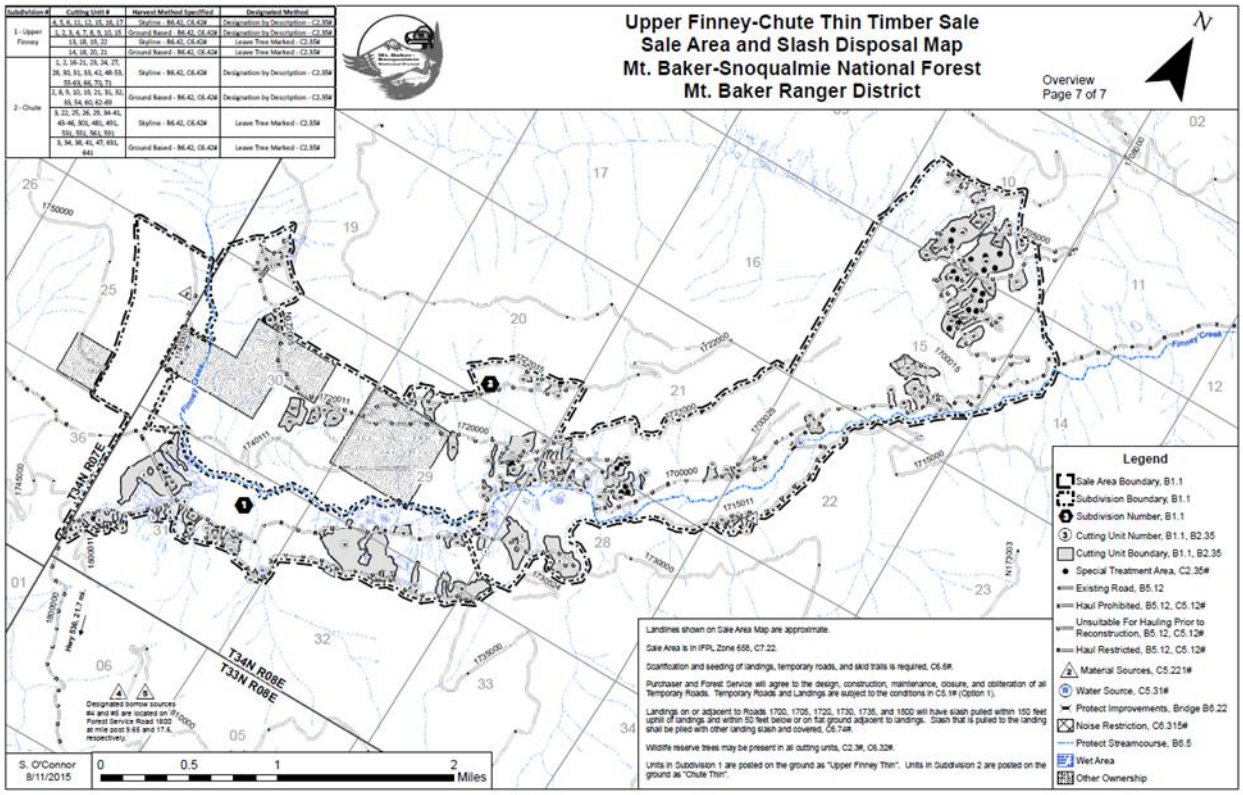

Figure 10. Upper Finney-Chute Timber Sale Area Map showing private ownership inholdings adjacent to sale units

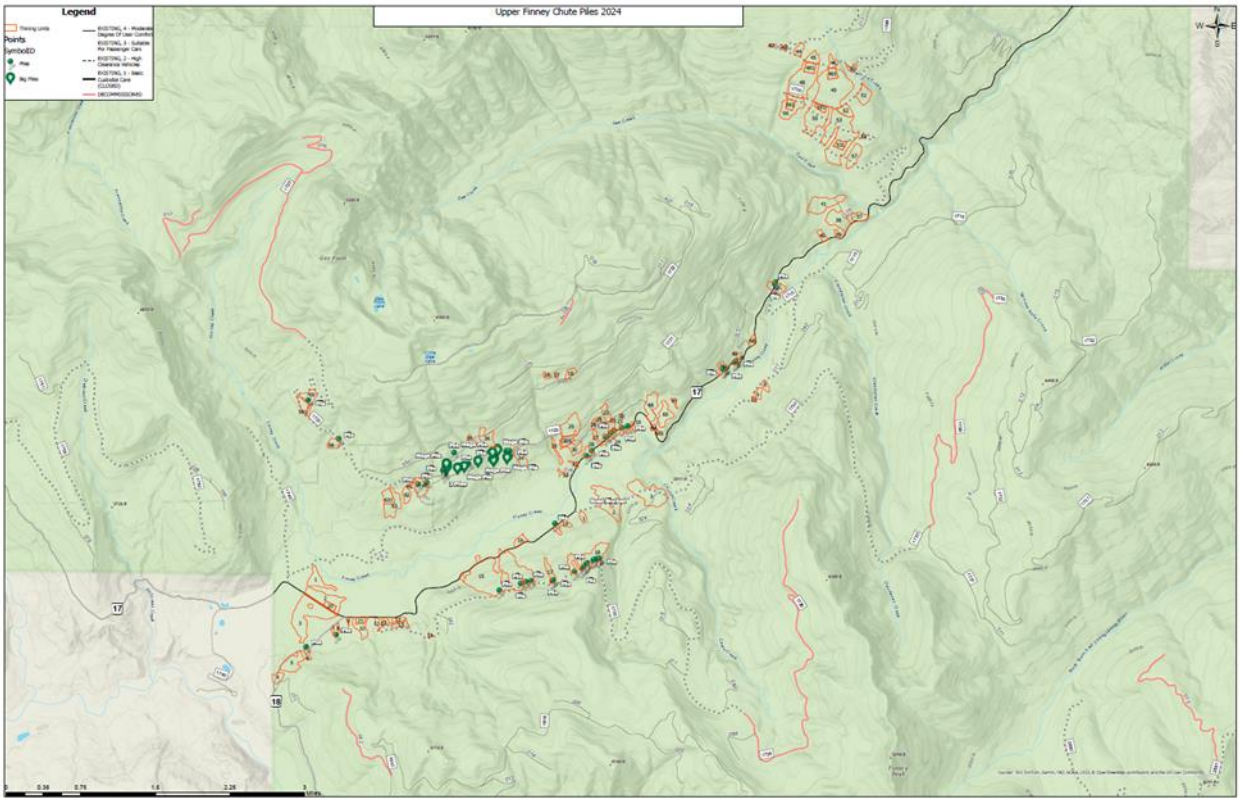

Figure 11. Pile inventory map used for pile reconnaissance that was used by resources on the day of the burn. While private land is shown outside of the administrative boundary, the private land inholdings within the administrative boundary were not visible.

APPENDIX F: DELEGATION OF AUTHORITY

Forest Service | Pacific Northwest Region | 1220 SW Third Avenue Portland, OR 97204

File Code: 5140 **Date:**
Route To:

Subject: Delegation of Authority – Declared Wildfire Review for Upper Finney Chute RX

To: Jacob Winn

This letter formalizes your appointment as Review Team Leader to complete a Declared Wildfire Review for the Upper Finney Chute prescribed fire initiated on September 30, 2024, that resulted in the Gee Lake wildfire on the Mt. Baker Ranger District of the Mt. Baker Snoqualmie National Forest. To ensure an objective and insightful review, I have approved your review team roster that includes subject matter experts from various US Forest Service offices.

As Team Leader, you have the authority of my office to execute and complete a thorough review as described in this document. Your Point of Contact for assistance and coordination with Region 6 is Trevor Miller, Regional Fuels PM, 541-604-5625. Your Point of Contact with the Mt Baker Snoqualmie National Forest is Jody Weil, Forest Supervisor, 425-530-6878.
For necessary travel, equipment, salary or other costs related to this review use the Gee Lake charge code P6R9GM with override code 0605.

Your authority includes, but is not limited to:

- Controlling, organizing, managing, and directing the review.
- Maintaining the confidentiality of the process.
- Protecting and managing the integrity of documents, media or other artifacts collected.
- Authorizing requests for additional personnel, including technical specialists, to support the Team, and releasing them upon completion of assigned duties.
- Authorizing and coordinating the expenditure of funds.
- Coordinating all media releases about the review with Jennifer O'Leary Risdal, Regional Fire Communications Officer, 541-731-0390 and/or Mt Baker Snoqualmie PAO, Jefferey Clark, 425-315-4253.
- Issuance of Safety Alerts, if warranted, in coordination with Matt Holmstrom, Regional Risk Management Officer, 406-380-0247.

Expectations for Conduct of Gee Lake Declared Wildfire Review

These expectations are intended to provide you with additional context to help guide you through the Declared Wildfire Review process for which your team has been assembled.

Policy

Per Forest Service Manual (FSM) 5140, all prescribed fires that result in a wildfire declaration must be reviewed according to the procedures found in the National Wildfire Coordinating Groups NWCG Standards for Prescribed Fire Planning and Implementation, PMS 484.

Controls

Given the sensitive nature of these reports, Team Leaders, Agency Administrators, Directors, and Staffs are expected to maintain close control over all drafts, final reports, and related materials. Use care and discretion when sharing these reports adhering closely to the processes described below.

In-Brief, Status Updates, and Out-Brief

You are scheduled to in-brief with my staff and I on Thursday, November 7· 2024, at 2:15 on Teams and with the Mt Baker Snoqualmie National Forest on November 12, 2024, at Mt. Baker Ranger District 810 State Route 20 Sedro-Woolley, WA 98284. The Regional Fuels group has assigned a SME to your team (Chris Donaldson, Fuels Coordinator, 503-951-7111) and can provide process assistance and coaching as necessary. Tessa Chicks, Fuels Program Manager will be your forest logistical coordinator to you throughout the process. Please contact her at 360-982-8220 to discuss your logistical support needs as soon as possible.

I expect you will provide myself or my designee with status updates on your team's progress according to the terms we agree to during your in-briefing. I expect you to complete an initial draft within 45 days which will allow time for regional and national-level review and feedback needed to finalize the report and meet the requirement to provide a briefing to the Chief/Deputy Chief within 90 days (FSM 5140). If you need more time, or if you discover information that would warrant a different type of review or investigation, please contact me immediately to discuss further.

I request that your team conduct an out-brief with myself and identified staff when your team is ready to leave the local unit which may or may not be prior to completion of your report. Your final report will be provided to me, and my office will be responsible for scheduling briefings with the next higher authority, internal and external distribution, and permanent archive of the report.

Review Protocol

The goals of a Declared Wildfire Review are to:

1. Allow those directly involved an opportunity for individual learning and performance improvement through self-reflection as well as feedback and critique from third-party peers and other experts.
2. Provide for organizational learning and system-wide performance improvement by examining established policies, procedures, practices, and behaviors, offering advice to managers for actions to create systems that produce more reliable and less consequential results in the future.
3. Establish a factual account of the event that may be utilized in training, research, claims' proceedings, or similar uses.

To be clear, this is not a Facilitated Learning Analysis (FLA). A Declared Wildfire Review shares similarities with the FLA when it comes to interview techniques, storytelling techniques, development of the narrative, and providing an opportunity for read-back and validation by those interviewed, but it also differs in many respects. While the FLA is centered around learning and understanding of the event, it does not typically bring in the thoughts or opinions of third-party experts and relies almost exclusively on what was learned by those directly involved. The Declared Wildfire Review seeks to learn and understand what happened from the perspective of those involved, but also employs the knowledge and expertise of review team members with applicable expertise to provide additional context to the story by providing a description of the setting and conditions surrounding the event, and a critique of how applicable policy standards were applied including training, planning, and implementation standards.

An understanding of the FLA process gained from attendance in NAFRI Learning from Unintended Outcomes Workshop or LFUO: Self Study is helpful for all team members, but not required. I expect that you will use a similar approach to interviews and interaction with those involved as is described in the FLA process, but that you will be clear that this is not an FLA and rather this review is in pursuit of the goals described above.

Representing My Intentions

Employees or others you will be interviewing to learn about this event will be interested in the purpose and objectives of this review and how the information they provide might be used. They may want to know how this review might affect their employment status, and the degree to which they might face civil or criminal proceedings. I expect you will represent my intentions for how I will use the information provided to your team as follows:

In pursuit of full transparency and disclosure of the events that took place, I agree that no punitive actions will be taken by the Forest Service against any employee because of information provided to any member of your team. During the review, if it is discovered that willful negligence/illegal activity may have led to the outcome notify me immediately. I expect that employees are equally committed to the objective of this review to reduce the chances of a similar outcome in the future and will provide your team with honest and constructive accounts of their experience. Please ensure participants understand the limits of my authority and that actions taken by private citizens, or other agencies or organizations, are outside of that authority and administrative or legal proceedings could be pursued by others based on information from this review.

Format, Content and Organization

The content and organization of the final report will meet the minimum standards as described in NWCG PMS 484 under the requirements of an "Outcome Review". The telling of the story of what happened, the chronology of events, and perspectives of the individuals involved is the focal point of the report. The Declared Wildfire Review must also address the five required analyses specified in NWCG PMS 484. The methodology and format for addressing those analyses can occur in many formats and I leave that discretion up to you and your team utilizing the direction here and within other guiding documents.
In addition to the narrative and lessons from those directly involved, I am also requesting that your team reflect on this event and provide lessons learned from the team's perspective as outside observers with applicable expertise in prescribed fire. I also ask that your team be alert to and if identified, include findings of conditions that contributed to the outcome along with recommendations for actions whether

they be local, regional, or national in scope, that could help mitigate those conditions and reduce the potential for similar outcomes in the future.

I want to thank you for your willingness to lead this important review. Please contact Merv George, Deputy Regional Forester at 707-373-4151 if you need to discuss the details of this assignment or to schedule key team meetings or status reports.

MERV GEORGE
Digitally signed by MERV GEORGE
Date: 2024.11.09 10:47:14 -08'00'
MERV GEORGE
Deputy Regional Forester

Enclosures: Team Roster

cc: Kelly Kane, Trevor Miller, Deana Wall, Chris Donaldson, Jody Weil, John McFarland

APPENDIX G: REVIEW TEAM

Jake Winn, Team Lead - Agency Administrator, Deputy Forest Supervisor, Umpqua National Forest

Chris Donaldson, RXB2, Fuels Coordinator, Pacific Northwest Region

Brie Meyers, RXB2, Fuels Planner, Malheur National Forest

Lauren Clark, RXB2, Fuels Specialist, Colombia River Gorge National Scenic Area

Ted Adams, Writer Editor, Risk Management Specialist, Washington Office

Kip Van de Water, LTAN, Fire Analyst, Pacific Northwest Region