

**Forsythe II Multiparty Monitoring Group (MMG)  
January 8, 5:00 PM to 8:00 PM  
Nederland Presbyterian Church  
Meeting Summary – FINAL**

**ATTENDANCE**

*Participants:* Karen Blakemore, Teagen Blakey, Chad Buser, Marin Chambers, Aurelia DeNasha, Mark Foreman, Angie Gee, Alex Markevich, Paul McCarthy, Mark Mendonca, Yvonne Short, Susan Wagner, and Kevin Zimlinghaus

*Facilitation:* Heather Bergman and Samuel Wallace

**ACTION ITEMS**

<b>Angie Gee</b>	<ul style="list-style-type: none"> <li>• Consider what end product the US Forest Service (USFS) needs from a community-led treatment design to be able to execute the treatment.</li> <li>• Determine if it is possible for MMG participants to accompany USFS contractor inspectors as they work with contract crews in the field.</li> <li>• Identify opportunities for MMG participants to accompany USFS contractor inspectors as they make determinations about slash treatments and pass/fail treatments.</li> </ul>
<b>Kevin Zimlinghaus</b>	<ul style="list-style-type: none"> <li>• Create a zoomed-in map of the areas with the phase 5 and 6 units.</li> <li>• Distribute the Blue Dot contract for MMG review once it is completed.</li> <li>• Provide maps for the Manchester and Blue Dot contracts.</li> <li>• Prepare a document that responds to the proposed suggestions and revisions for the phase 2 Manchester contract.</li> <li>• Update a map to include the actual treatments areas of the phase 3 and 4 units.</li> <li>• Update the contract to include language that allows for lop and scatter/hand piles to go up to 18 inches for boles but up to 12 inches for slash and limbs.</li> </ul>
<b>Chad Buser and Mark Mendonca</b>	Consider how the fire team could place in their program of work the activity of reshaping slash piles for wildlife.
<b>Samuel Wallace</b>	Send out a Doodle to schedule the February and March MMG meetings.

**DISCUSSION ABOUT MMG TIMELINE AND ACREAGE TARGETS**

MMG participants discussed the expected timeline and acreage targets for the Forsythe II project. Their comments are summarized below.

- There are no updates regarding the contract discussion between Denver Water and the US Forest Service (USFS) except that the USFS will enter into a conversation with Denver Water to develop a new agreement. There is still uncertainty about what a contract could look like and the process for that contract discussion.
- There was a question about what assumptions the MMG should make related to the timeline for the Forsythe II project based on the USFS and Denver Water contract discussions. Because of the uncertainty related to the contract discussions, the MMG should proceed as if they have two years to complete Forsythe II.
- The MMG should assume that the acreage targets for the next two years will be similar to the 2019 acreage target with the potential for a small increase in the targets (around 1,000

acres per year). The 1,000-acre target does not mean 1,000 treated acres on the ground; the 1,000-acre target is the total amount of credited acres based on the number of activities in each treatment area.

- The roughly 2,000-acre target goal over the next two years will be around the amount needed to complete Forsythe II, not including broadcast burning.
- Broadcast burning, which can be counted as credited acres, will likely not occur in fiscal year 2020. The USFS will likely not be ready to implement a burn this winter, and the conditions would have to be right to manage a broadcast burn in fall 2020. Considering that the USFS's fiscal year ends on September 30, this leaves a small window of opportunity to implement a broadcast burn. The first broadcast burns will likely occur in fiscal year 2021.

#### **DISCUSSION OF UNITS FOR PHASES 5 AND 6**

MMG participants discussed which units will be included in the next phase of Forsythe II. Their comments are summarized below.

- Prior to the meeting, some MMG participants developed a list of units for the next phase of treatments. They identified Units 23, 24, 29, 30, 31, 52, 53, 54, 55, 61, 80, and 81 for the next phase of treatments.
- Some MMG participants identified Units 52, 53, 54, 55, 80, and 81 for manual treatment, and they identified Units 24, 29, 30, 31 and 61 for mechanical treatment. Some MMG participants stated that they were not sure of the planned treatment for Unit 23. Some MMG participants said that the plan for aspen units is to treat them mechanically.
- Some MMG participants said that they are willing to include Unit 77 in the next phase of Forsythe II so long as it is treated manually and lightly. They said that there is no support from community members for mechanical treatments in Unit 77. Some MMG participants said that they are willing to consider only manual treatments for Unit 77, but that they would like to continue to have a conversation through field trips and not commit to a decision yet. Some MMG participants stated that they will not get far into the conversation by starting at a place where there is no opportunity for flexibility.
- Some MMG participants said they were concerned with including Unit 23 in phases 5 and 6. Other MMG participants said that Unit 23 is part of phases 5 and 6 to meet acreage targets.
- At this time, the proposal for the units in phases 5 and 6 is not final, and the MMG will continue to discuss the identified areas and units over the next couple meetings.

#### **DISCUSSION OF CONSIDERATIONS FOR A COMMUNITY-LED TREATMENT DESIGN PROCESS**

MMG participants discussed the process for designing treatments in the next phases of Forsythe II. Their comments are summarized below.

- In previous meetings, there was a proposed idea that the homeowners and community members design the treatments for the units in the next phases of Forsythe II. Some MMG participants said that they would like to approach that idea seriously, especially in the units in the boy scout and twin sister areas.
- Some MMG participants said that the community design approach is not common for the USFS, but it could be valuable and worth exploring. It would require a lot of work and commitment on the part of the community members.
- A community design would also need to fit within the specifications laid out in the decision notice and incorporate the goals of the decision notice. Some MMG participants stated that they would expect there to be continued discussions around the different perspectives of whether treatment designs are achieving the goals of the decision notice.
- A treatment design would also need to address critical fire concerns, wildlife impacts, social values, forestry and silvicultural concerns, and reach acreage targets.

- Some MMG participants said that it is likely that the community-proposed design would diverge from the USFS's preferred treatment design by being lighter. For example, the community may propose that the treatment for Unit 77 be a 10% thinning of ladder fuels. Some MMG participants said that they would be uncomfortable with completing a 10% treatment in terms of meeting objectives related to forest health and resiliency. Before the community proposed a design, some MMG participants said the MMG would need to build an understanding about some of the topics on which there is some disagreement.
- There are six considerations that the MMG will need to discuss further, which include the treatment percentages for patchcuts and clearcuts, basal area reductions (i.e., heavy versus light treatments), surface fuels, patchcut/clearcut locations, manual and mechanical treatments, and restoration and resiliency.
- Once the MMG has a discussion around these six considerations, MMG participants can talk about the vision and plan for community members to lay out the treatments. Some MMG participants said that they would like to begin the discussion by talking about basal area reduction.
- Some MMG participants said that discussions around manual and mechanical treatments should occur once there is a better understanding of the treatment design as the mechanical or manual treatment decision may be based on the treatment specifications (i.e., manual treatments would be an appropriate treatment method for a 10% reduction in basal area, but mechanical treatments would be an appropriate treatment method for a 30% reduction in basal area).
- Some MMG participants said there may be opportunities to build a mosaic of different treatments across the landscape.
- Some MMG participants said that from their perspective, they have given up more of their treatment preferences than other participants of the MMG. Other participants said that all participants of the MMG had to give up aspects of their preferred outcome to reach an agreement on treatment design.

#### **DISCUSSION OF IMPLEMENTATION OF A COMMUNITY-LED TREATMENT DESIGN PROCESS**

MMG participants discussed how they could implement a community-led treatment design. Their comments are summarized below.

- The timeline for the community treatment design process for the phase 5 and 6 units would require there to be preliminary designs by mid-May so that marking crews can begin to flag boundaries. This follows a similar timeline as the phase 3 and 4 process in which the MMG began finalizing designs during the 2019 summer to release contracts during the 2019-2020 winter.
- Some MMG participants said that the community does not have to take a lead on the treatment design for all the units in phases 5 and 6. For example, some MMG participants said that the USFS can take the lead on designing the treatments for the units in the Coal Creek area (e.g. Units 29, 30, 31, and 61). MMG participants will still like to provide input on these units, and some MMG participants said they would like to take a field trip to these units to better understand the USFS's perspective on design.
- Marking crews may be coming by the end of April. If Coal Creek is an area in which the USFS will design the treatments, then the USFS may focus initial marking and flagging efforts in that area. Some MMG participants also identified Units 52, 53, 54, and 55 as other units for community members to focus initial design efforts because they are small. The designs for these units will come together more quickly, and there are shared objectives within the MMG in these units because Unit 54 is an old-growth forest.

- One aspect of developing a design will include ordering which units and geographic areas the community will address first. Some MMG participants said that as the community orders and designs treatments, it may make sense to move past unit boundaries when appropriate.
- There was a question about what end product community members would provide (e.g., a table, narrative, etc.) so that the USFS can to execute the treatments. Angie Gee will consider what end product the US Forest Service (USFS) needs from a community-led treatment design to be able to execute the treatment.
- A community design process would need to include a data management strategy. To be able to execute the treatments, the USFS would need a way to delineate boundaries of a community treatment design, whether it be flagging, Avenza points, etc. Some MMG participants said that the community members could collect data via GPS and report it to the USFS staff through Avenza. The USFS staff already has collected a lot of data via step transects but still has to process it.
- Some MMG participants said that community members would need help from USFS staff members who have a perspective on implementation and contracting to make sure the designs are feasible.

### **DISCUSSION OF INSPECTIONS AND QUALITY CONTROL IN THE PHASE 3 CONTRACT**

MMG participants discussed the plans for inspections and quality control in the contract for the phase 3 units. Their comments are summarized below.

- Prior to the meeting, MMG participants received a copy of the phase 3 unit contracts and provided feedback and questions on the contracts.
- There was a question about how the USFS determines whether a contractor has achieved a 90% quality of work, which is the threshold required for the contractor to receive payment. Some MMG participants said that the criteria on how inspectors decide whether a treatment achieved that 90% threshold were not clear. To inspect the contractor's work, USFS staff randomly establish one-tenth acre plots and divides them into four quadrants. A contract inspector then inspects the quadrants and gives a pass/fail to the quadrant. If there is a single error, that quadrant fails. The USFS staff then calculates the percent of pass/fail quadrants from the total to determine whether the contract met the 90% threshold.
- In addition to these inspections, the contract inspector will work with the contracted crews as they complete treatments to point out problems when they occur (i.e., a pile size is not meeting specifications). The contract inspector will be out there three or four times a day as the contractor cuts in the unit so that they do not have to return and inspect every stump.
- Some MMG participants said they are concerned that with some of the units, the implementation of the treatments will occur quickly, and the MMG will only be able to inspect the units once the treatments are done and mistakes, if any, have occurred. There is an opportunity for MMG participants to accompany inspectors for the final inspection. There also may be an opportunity for MMG participants to accompany the USFS contract inspectors as they actively advise the crew foreman during the treatment.
- If MMG participants can accompany a contract inspector in the field, they would need to wear personal protective equipment (e.g., long sleeves, long pants, boots, helmets, and safety glasses). MMG participants would also have to be flexible as there is not a lot of time for advance warning about when MMG participants will be able to accompany the contract inspector.
- Some MMG participants said that they do not want to distract the contract inspector who needs to identify problems quickly. Other MMG participants said they do not need to accompany the contract inspector in every unit but would like to do so in a couple of units so they better understand the inspecting process. Angie Gee will determine whether it is

possible for MMG participants to accompany contractor inspectors in real time as a potential option for MMG participants in the future

- Some MMG participants had a question about what was in the contractor's control plan and whether it would be valuable for the MMG to review the quality control plans that the contractor develops. The quality control plan is something the contractor must develop to comply with the contract. The plan is often the contractor repeating the contract specifications, so it would not necessarily be valuable for the MMG to review the quality control plan.

### **DISCUSSION OF SLASH IN THE PHASE 3 CONTRACT**

MMG participants discussed the plans for slash in the phase 3 contract. Their comments are summarized below.

- The contract specifies that the contractor will pile created slash with a diameter between one inch and eight inches; this eight-inch diameter maximum is greater than the previous maximum, which was a six-inch maximum. This will increase the number of piles, meaning that there will be more trees that are scorched when the USFS burns the piles. Some MMG participants said that the scorching will emulate a natural pattern of burning in the forest and create more variability among the forest structure, making the stands more resilient to some wildfire conditions and to future prescribed burning efforts.
- There was a question about the plan for wildlife piles in the contract. In terms of quantity, the plan for wildlife piles is to leave three wildlife piles per acre in patchcut and clearcut treatments; in mixed conifer thinning, the plan is to leave one wildlife pile per acre.
- Some MMG participants said that their concerns with the wildlife piles are related to their design and how they look. Some MMG participants said that the wildlife piles should not be too dense as dense piles are less useful for small animals. Other MMG participants said that wildlife piles should vary in style and look because different species use different types of piles. There is not a universal design for a wildlife pile that benefits all animals.
- In terms of the contract, the contract this year will specify the number of wildlife piles to be left, and next year's contract will include more specifications around the shapes of the piles.
- There was a question about whether it is possible to put vague language into the contracts about the shapes of the piles so that there is an opportunity to advise the crews later on how to shape the piles. Some MMG participants said that changing the shape of the piles will affect the bid price of the contract, and there is not enough information on hand to describe the shape of the piles.
- Some MMG participants said that the wildlife pile discussion was something they had agreed to talk about in the past but have not addressed until now, right before the contract is due. In the future, the MMG has to keep better track of topics so that they are not being discussed with a quickly approaching deadline.
- Some MMG participants said that there may not be a need for piles if there is enough woody debris on the ground as some small animals are able to use woody debris for cover. Other MMG participants said that the reduction in the number of wildlife piles occurred in part because there is woody debris on the ground, but there is still a need for wildlife piles to act as microsites for small animals to take cover.
- Some MMG participants said that the contractor constructs the slash piles for the purpose of burning. When the fire crews come to burn the piles, they determine which piles to burn and which ones to leave behind for wildlife based on the snow conditions. It would be difficult to try and shape the piles to benefit wildlife before the burn crews burn piles because selecting which piles get burned is unpredictable and dependent on snow

conditions. Returning to the slash piles and reshaping them after the fire crew has burned the piles makes more sense given these constraints.

- Because reshaping slash piles would occur after a burn and would be the responsibility of the MMG and not the contractor, the contract does not need to specify slash pile shape. There may be a potential for a shared stewardship day between fire crews and MMG participants to reshape the piles. Chad Buser and Mark Mendonca will consider how the fire team could place in their program of work the activity of reshaping slash piles.
- The MMG can consider how and when to reshape slash piles at future meetings as there is not an urgent timeline for this task.
- In the phase 3 contract, the maximum depth of lop-and-scatter was changed from 18 inches to 12 inches. In mechanically treated units, like the Unit 9 lodgepole units, the maximum depth of scatter is still set at 18 inches. Some MMG participants said that 18 inches still seems like a large maximum, but they can discuss this further during the surface fuel discussions.
- Some MMG participants said that they would like to scatter boles up to 18 inches in depth and to scatter slash and limbs up to 12 inches in depth. Kevin Zimlinghaus will update the contract with this language. When the contractor scatters boles, they make sure the boles touch the grounds to facilitate the decomposition process.

### **DISCUSSION OF ASPEN UNITS IN THE PHASE 3 CONTRACT**

MMG participants discussed the specifications for aspen units in the phase 3 contract. Their comments are summarized below.

- Some MMG participants said that they were concerned about the contract not including the specification that the contractor will cut trees up to 30 feet away from the edge of the aspen clone. The reason the contract does not include this specification is because it is the responsibility of the marking crew to flag the aspen units to ensure that this specification is met. The contractor follows the flagging set by the marking crew.
- In the future, there may be an opportunity to flag the conifers within 30 feet of an aspen unit that are right on the edge of the diameter at breast height (DBH) limit. There would then be a verbal confirmation between the USFS contract inspector and crew foreman that the crew will not cut flagged trees. One reason to not include formal language in the contract related to not cutting flagged trees is that the MMG would have to be entirely sure that all the trees they did not want to be cut were flagged. Some MMG participants said they thought verbal confirmation is appropriate. There also may be an opportunity for MMG participants to be present when the contract inspector and crew foreman verbally confirm those plans.
- There was a question about if it is possible to set the DBH limit slightly lower than the decision notice. At this time, because the DBH limit is 14 inches, some MMG participants said they should keep it at that number.
- There were concerns about the amount of slash on the ground in Unit 5, an aspen unit, when the MMG previously passed through the unit on a field trip. There was a question about if there are constraints that could be removed in the contracts to reduce the amount of the slash on the ground in the aspen units. Aspen units are challenging because there is a specification that says the contractor must construct piles 50 feet away from an aspen stand, and at the same time, there is a specification that says the contractor should not move slash more than 50 feet to pile. In areas where there was not enough material to be piled and had to be moved more than 50 feet, the contractor lopped and scattered the slash.
- Moving forward, there are no more burn units left in Forsythe II, which means that aspen units are the remaining units that have the highest likelihood for potential lop-and-scatter

- Some MMG participants said that they would like to better understand the opportunities to monitor the construction of slash piles (i.e., whether there is enough material to make a slash pile). There may be an opportunity to accompany USFS contract inspectors as they evaluate whether the contractor properly managed the slash.

### **DISCUSSION OF OTHER CONCERNS IN THE PHASE 3 CONTRACT**

MMG participants discussed other concerns in the phase 3 contract. Their comments are summarized below.

- The USFS added maps on the last pages of the contract. The USFS staff also updated the contracts based on the MMG's feedback, identified the changes they made, and added sub-notes when changes were not incorporated.
- Some MMG participants provided feedback prior to the meeting that the contract should include language that the contractors shall not move equipment from units with noxious weeds to units without known noxious weeds. This additional language was not incorporated because the contractors will not use off-road vehicles on account of the treatment being manual.
- Depending on when the contracts are awarded and the availability of the contractors, there may be a time when there are both manual and mechanical contractors operating at the same time. It is preferable that equipment and hand contractors do not operate at the same time, but there may be some overlapping operations at some point.

### **DISCUSSION OF CONCERNS IN THE PHASE 2 MANCHESTER CONTRACT**

MMG participants discussed concerns in the phase 2 contract. Their comments are summarized below.

- Some MMG participants said they were concerned about language in the Section D.4.1 of Appendix B in the phase 2 Manchester contract, which seems to imply that the contractor can remove trees that are not marked for cutting without consequences. Other MMG participants said that the language is in the contract so that the contractor can cut trees for skid roads. In the case that the contractor needed to cut a tree for a skid road, the USFS sales administrator would have to approve and mark the trees for cutting. The contractor is not cutting trees without first consulting USFS staff.
- Some MMG participants said that they would like to have maps for the phase 2 Manchester contract and for the phase 4 Blue Dot contract once it is distributed. Kevin Zimlinghaus will provide a map for both contracts. Kevin Zimlinghaus will update a map of the units with the final treatment areas for phases 3 and 4.
- Some MMG participants said they would like to have a copy of the phase 2 Manchester contracts with the responses to the proposed suggestions and revisions. Kevin Zimlinghaus will prepare a document that responds to the proposed suggestions and revisions for the phase 2 Manchester contracts.

### **DISCUSSION OF SURFACE FUELS**

MMG participants began the first of a series of discussions about surface fuels to share different perspectives, build common terminology, and identify the best actions for moving forward. Their comments are summarized below.

- Surface fuels refer to many things: grasses, small conifers, downed woody debris, shrubs, litter, and duff. Duff is the broken down organic material and can smolder and start coarse wood on fire. Small conifer trees under 10 feet tall also are considered surface fuels.
- Some MMG participants said that participants should be sensitive to the word "surface fuels" moving forward as it could have many different meanings.

- For downed woody debris, forest scientists use a tool to measure whether it is a 1-hour fuel, a 10-hour fuel, and a 100-hour fuel. The “x-hour” measurement refers to the amount of time it will take two-thirds of a piece of woody debris to dry once it gets wet. A 1-hour fuel is the smallest and will take one hour to dry once it is wet, and a 100-hour fuel is at least 3 inches in diameter and will take 100 hours to dry once it is wet.
- A single piece of woody debris can have different components. These components may be classified differently; parts of a piece of woody debris may be considered a 10-hour fuel while others may be considered a 100-hour fuel. A professional forest monitor accounts for the different components of woody debris when estimating surface fuels.
- A professional monitor will normally have a data sheet in which they will count the number of 1-hour fuels, 10-hour fuels, and 100-hour fuels in a plot. There is a different monitoring methodology when a piece of woody-debris is a 1,000-hour fuel. They will also measure the depth of litter and duff.
- *MMG participants engaged in an exercise where they tried to estimate how much woody debris was in a pre-prepared 1-meter square plot. The purpose of the exercise was to demonstrate how there can be a wide range of estimates of how much surface fuel is in a specific area.*
- *MMG participants then looked at photos of different amounts of surface fuels in lodgepole pine stand photos to estimate the tons per acre of surface fuels in the photos. The process of estimating the amount of slash is not scientific and can produce a variety of perspectives among participants.*
- In Units 4 and 5, there were whole trees that were blown down. To measure whole trees on the ground, those monitoring will classify the fallen trees as a hack pile. They measure the depth, diameter, and length of the wood in the pile. They then measure the dimension of the pile (length x height x width).
- The US Department of Agriculture Rocky Mountain Research Station produced a general technical report titled *Coarse Woody Debris: Managing Benefits and Fire Hazard in the Recovering Forest*. The report gave optimum ranges of coarse wood debris for fire hazard, soil heating, productivity, wildlife, and historical needs. For example, the best range of coarse woody debris for wildlife is between three and thirty tons per acre. Twenty-five tons per acre is good for cavity nesting birds, and 30 tons per acre is good for small mammals.
- The optimum range for coarse woody debris for fire hazard is between 0 and 25 tons per acre. The idea behind this range is that coarse woody debris in excess of 25 tons per acre is the tipping point for increasing the threat of high severity wildfires. For prescribed burning, there is a need for fine and larger fuels to carry surface fires to reach ecological goals too.
- Some MMG participants said they were surprised to see a large range for soil microbiota. The soil microbiota relates to mycorrhizal fungi, which has been a topic of discussion at previous meetings.
- These optimum ranges are dependent on certain conditions (e.g., drought cycles, wind conditions, etc.) of the forest and cannot be universally applied. Some participants said that the ranges are so wide that it may not help with decision-making.
- Some MMG participants said they are interested in how surface fuels affect the growth of noxious weeds, noting that some amount of woody debris seems to prevent weeds.
- In the past, the USFS has experimented with how much woody debris is left after treatments, balancing considerations around nutrient cycling, fuel loading, noxious weeds, and the ability to hold the soil on site.
- The Forest Plan has constraints around large woody debris. In patchcuts and clearcuts, woody debris is important for nutrient cycling and to keep the soil intact as there is very little organic material falling onto the ground after treatment.

## **NEXT STEPS**

- For the February and March meetings, the MMG will not be meeting at their normally scheduled time. Samuel Wallace will send a Doodle to schedule the best times and dates for the MMG to meet in February and March.
- Kevin Zimlinghaus will provide the phase 4 contract for the MMG's review.
- The February meeting will continue the discussion around the six considerations where there are differences in perspectives in the MMG (treatment percentages for patchcuts and clearcuts, basal area reduction (i.e., heavy versus light treatments), surface fuels, pathcut/clearcut locations, manual and mechanical treatments, and restoration and resiliency).
- Other topics for future meetings include:
  - Implementation of community-led design (timeline, unit identification, prioritization, data management, and deliverable)
  - Opportunities to join sales administrator to inspect during and after treatments
  - Evaluation of USFS internal procedures related to communications during the pre-work meeting
  - Ongoing contract discussions between Denver Water and USFS
  - Treatment of existing surface fuels
  - Process for jointly flagging units/flagging aspen units
  - Shared stewardship day for re-shaping piles for wildlife (how, when, and who)
  - Elk collaring study
  - Updates to the master list