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|  **F2 Unit 4 – PRESCRIPTION & IMPLEMENTATION GUIDE**  | **WRITTEN and CERTIFIED BY: *K. Zimlinghaus 10/31/2018*** |
|  **ENVIRONMENTAL ANALYSIS:** Forsythe II Project | **DECISION DATE: 7/10/2017** | **NEPA ACRES: 64****GIS ACRES: 11.6** | **BASE FISCAL YEAR: 2018** |
| **EXISTING HSS:** 2T-2%; 3B-3%; 3C-52%; 4A-36%;4B-7%**DESIRED HSS:** 2T-15%; 3A-5%; 3B-3%; 3C-34%; 4A-36%; 4B-7% |  |
| **COVER TYPE:** Existing Overstory LPP 50%, DF 35%, PP 10%, LM 3%, AS 2% Desired Overstory LPP 45%, DF 32%, PP 15%, LM 3%, AS 5% | **EXISTING BASAL AREA=100 ft2/ac** **DESIRED BASAL AREA=75-80 ft2/ac** |
| Existing ConditionThe unit is predominantly located on a north aspect with forested areas and a canopy cover between 50 - 90%. The unit is primarily even-aged with mixed patches of dense trees (dog-hair) also present. Lodgepole pine is the dominant species with a moderate mix of Douglas-fir, ponderosa pine, and limber pine associated in the species composition. Some aspen is present in localized pockets. Trees range in size from saplings (2’ to 5” DBH) to large sawlog (16” to 20” DBH) with the majority being in the small sawlog (8” to 12” DBH) range. Minor incidences of dwarf mistletoe are present in the lodgepole pine dominated stands.Desired ConditionThe desired stand conditions would include patches of varying seral stages distributed across the area. The heterogeneous pattern of lodgepole pine stands would exhibit patches of even-aged stands mixed throughout the general lodgepole pine forest to provide a discontinuous crown level that provides a greater resiliency to large natural disturbances. Small aggregations of mixed conifer species would maintain their presence and add to the diversity of the unit. Healthy aspen clones would range from 1/2 to 1 acres in size and would be free of conifer encroachment. Insects and diseases are kept at endemic and manageable levels. Objectives* Reduce the severity and intensity of a wildfire within the WUI.
* Emulate natural disturbance at a minor scale in lodgepole pine dominated stands to mimic variable structural and spatial patterns in order to increase resistance and resiliency to future natural disturbances.
* Restore ponderosa pine/mixed conifer stands, aspen, and meadow/shrublands toward their characteristic species composition, structure, and spatial patterns in order to increase resistance and resiliency to future natural disturbance.

**Note:** This unit will be manually cut and the slash would be hand piled and burned.  |

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| **ACTIVITY** | **TIME**  | **AC** | **DESCRIPTION, MARKING GUIDES, MONITORING, ETC.**  |
| Lodgepole Pine Treatment | 2019 | 8.2 | Cutting Guides* Establish 2 to 4 patchcuts, ranging in 1-5 acres in size in “dog-hair” pockets within the unit.
* Cut all live and dead lodgepole pine > 2’ tall within the identified patchcut boundary.
* Retain all other healthy conifer species (>30% live crown without signs of insects or disease) and aspen regardless of size.
* Cut all of the limbs from the boles of cut trees to a 2” top.
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| Douglas-fir Mixed Conifer Aggregation | 2019 | 3.4 | * Reduce the existing basal area by 30% (5’-15’ crown spacing between individual trees or groups of trees).
* Favor to retain the healthiest conifer (good vigor, at least 40% live crown ratio, insect/disease and damage free. regardless of size) and identified by the species preference.
* Species preference to retain: limber pine > ponderosa pine > Douglas-fir > lodgepole pine > Rocky Mtn. juniper.
* Retain all limber pine and blue spruce that do not pose a safety hazard unless they are within the dripline of ponderosa pine >10” DBH..
* Retain all conifers > 12” DBH.
* Cut ladder fuel conifers within and up to 5’ from the edge of the dripline on all leave ponderosa pine trees > 10” DBH.
* In Douglas-fir dominated aggregations or on north aspects, thin from below by cutting trees < 6” DBH and/or crown space 5’ between residual trees.
* Retain 5 of the largest snags (dead trees) per acre (minimum 8” DBH for lodgepole pine and 10” DBH for both ponderosa pine and Douglas-fir). If the minimum number of snags is not available, then the largest available live, green replacement trees will be retained for future snags.
* Retain wildlife trees (trees with cavities, large squirrel middens, or Abert’s squirrel nest trees.
* **Aspen:** Do not cut aspen. In aspen clones (identified as the number of aspen trees with diameters > 1” DBH that are greater than the number of conifers within the clone perimeter) cut all ponderosa pine and Douglas-fir < 12” DBH or lodgepole pine < 12” DBH. Extend out 30 feet from the edge of an aspen clone perimeter (diameter >1” DBH) and cut all conifers < 12”DBH.
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| Slash Treatment  | 2019 | 11.6 | * Hand- pile existing and activity slash material 1” to 6” diameter and 2’ or longer. Any slash that must be moved more than 50’ to meet minimum required pile size may be lopped and scattered to a maximum depth of 18”.
* All treated material shall not be left beneath or within 10’ of the dripline of a retained tree.
* Piles should be at least 6’ x 6’ in diameter, 15’ apart, & 10’ from residual tree boles. Cut conifers in order to create piles when needed.
* Treated bole wood 6” in diameter or greater must be scattered and be in contact with the ground. Individual boles of 8” or greater must be bucked into 4’ lengths beginning at the large end.
* Pull back slash and construct piles at least 50’ from any infrastructure and private property boundaries.
* Retain an average of 2 piles per acre for wildlife habitat, including any piles remaining from previous vegetation treatment, distributed randomly throughout the unit.
* In aspen clone aggregations, construct piles outside of the aspen perimeter if enough material exists to establish the minimum pile size. Any slash that must be moved more than 50’ to meet minimum required pile size may be lopped and scattered to a maximum depth of 18”.
* Piles must be constructed a minimum of 100’ from all power lines.
* Do not construct handpiles on rock outcrops.
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| **BOUNDARY DESIGNATION AND TREE MARK** | * + Boundary trees marked with orange flagging and painted in orange (if needed).
	+ For the DF Mixed Conifer Aggregation, identify trees to be cut with a cut-tree mark. Cut-trees will be designated with either one vertical slash of blue paint on trees < 5” DBH or two vertical slashes on opposite sides of the bole of the tree and a butt mark.
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| **TIMING RESTRICTIONS** | * Raptor nest areas, including species-specific buffers, will generally have no treatment activity from March 1 through September 15, depending on species, or until determined unoccupied by the wildlife biologist. Access through buffers during this period will be assessed by the wildlife biologist.
* No operations from December 1 through April 30 for elk, unless determined appropriate to treat by the wildlife biologist.
* Project operations will not be conducted on Memorial Day, 4th of July and Labor Day holiday weekends and on Sundays. Operating time for heavy equipment and chainsaws shall be limited to the hours of 7am to 7pm.
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| **MMG CONCERNS** | * Large trees in unit including lodgepole pine
* Suggested cutting in angled southern portion of unit identified on the map
* Evidence of past treatment
* Dense slope in drainage may be difficult to cut
* Limber pine in unit
* Aspen in unit
* Evidence of social/wildlife trail
* Evidence of wildlife
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| **FOR MORE INFO:** | Forsythe II EA |