DATE: <u>02/06/2008</u> PREPARED BY: <u>B. Reid</u>

## SILVICULTURAL PRESCRIPTION

| TWP   | RNG            | SEC              | FORVIS OR STAND # <u>Mec</u>    | hanical and Ha | nd; FIELD OFFICE Lewistown |  |  |  |  |  |
|---|----------------|------------------|---------------------------------|----------------|----------------------------|--|--|--|--|--|
| AVG ELE   | V. & RANG      | GE <u>4850 –</u> | 5600 ASPECT All aspects S       | SLOPE Variable | <u>0% - 60%</u>            |  |  |  |  |  |
| HABITAT   | TYPE: <u>M</u> | oderate Do       | uglas-fir (See JMLA for full de | escription)    | ACRES <u>582</u>           |  |  |  |  |  |
| PRIMARY OBJECTIVE: Forest health; specifically Fuels Reduction in the WUI and along major travel routes and improved wildlife habitat |                |                  |                                 |                |                            |  |  |  |  |  |
| SECONDA   | ARY OBJE       | CTIVE(S):        | Local economics                 |                |                            |  |  |  |  |  |

DESCRIPTION OF EXISTING STAND: This portion of the Maiden project area is defined by mostly steep, shallow soiled or rocky slopes. The vegetation consists mostly of a dense overstory of Douglas-fir along with stands of Lodgepole Pine scattered throughout. The understory is fairly depauperate in the Lodgepole while the Douglas-fir stands consist of Snowberry, Kinnikinnick, rose, Oregon grape, hawthorn, buffalo berry and choke cherry. In addition to the conifer overstory small areas of desirable deciduous trees occur such as Aspen and Birch. Some areas of the Douglas-fir stands have dense understory of Douglas-fir trees less than 25 years old in the .5" – 6" diameter class. Most of the understory trees appear to be in poor condition due to stand densities. However, a scattered few would release if given enough space to grow. There are a few Ponderosa Pine in the 10" to 24" DBH scattered but no one area has a large quantity.

CONSTRAINTS TO MEETING OBJECTIVES: Portions of these two areas have good access via public road. However the remaining areas have limited road access and completion of projects will require either walk –in (hand work) and/or the cooperation of adjacent landowners to provide limited access on private roads.

TARGET STAND: STRUCTURE: Even-age (Two-Storied)

% SPP MIXES: 50-70% PP; 30-40% DF; 5-10% LPP

DESIRED STOCKING LEVELS: BASAL AREA = 60 – 120 Sq Ft (In the overstory; trees > 10" DBH)

DESCRIPTION OF TARGET STAND: The Lodgepole sites will be managed as even-aged patches of 10 acres or less. However, multiple treatments (entries) will result in a variety of age classes throughout the stand. The Douglas-fir sites will be thinned from below with the healthiest 4" – 8" understory trees left. PP will be favored over DF. All Lodgepole will be cut and the remaining overstory of DF and PP will be thinned to desired BA. In some areas the overstory BA will cut below desired target levels because of declining health or current insect and disease problems.

CONSTRAINTS TO MEETING TARGETS: Access through private may limit opportunities. Market fluctuations may influence opportunities to sell.

NARRATIVE PRESCRIBED TREATMENT: Patch clearcuts (10 acres or less) in mature Lodgepole Pine stands. Old patch cuts (LPP) that have regenerated will be thinned to a 10' - 12' spacing favoring the healthiest trees. Some gall rusts exists in these regeneration areas. Leave trees should be free from gall rust (especially on the bole of the tree).

Douglas-fir stands will marked to leave favoring only the healthiest DF over 9" DBH and all mature PP over 16" DBH. The understory will be cut with the exception of all age classes of healthy PP and healthy DF over 6" DBH. DF understory will be limited to minimum 16' spacing between trees. Minimum spacing for PP will be 10'.

Where hardwoods occur treatments may be altered to favor hardwood growth and/or expansion of the area.

All material greater than 5" DBH will be whole tree yarded to designated landings.

All slash material (less than 5" DBH) will be machine piled; hand piled or lopped and scattered in preparation for burning. Slash piles will be burned after enough curing to allow for complete consumption.

Under-burning may occur to further reduce slash and litter and to allow stimulate growth of desired trees, shrubs, forbs and grasses.

## Appendix A1

| Treatment                                 | Acres | Cost/Acre | <b>Total Cost</b> | Sub-Activity | Est. Date  |
|---|-------|-----------|-------------------|--------------|------------|
| Understory thinning                       | 582   |           |                   |              | Spring 09' |
| <b>Commercial Stand Density Reduction</b> | 582   |           |                   |              | Spring 09' |
| Slash Treatment                           | 582   |           |                   |              | Fall 09'   |
| Burn Slash Piles                          | 582   |           |                   |              | Winter 11' |
| Broadcast Burn                            | 582   |           |                   |              | Spring 12' |
| Monitor                                   | 582   |           |                   |              | FY10 10 13 |
| Begin Maintenance Treatments              | 582   |           |                   |              | FY 13'     |