

## Threemile 2 Proposed Forestry Treatments

### Background

The Threemile Wildlife Management Area (TWMA) is 6,430 acres in size and located 8 miles east of Florence in Ravalli County, Montana. The TWMA was originally acquired in 1967, with several additions since then, and is managed with the primary goal of providing high-quality winter range for elk and mule deer, as well as compatible public recreational opportunities. Approximately 5,300 acres of the TWMA are forested and these forests provide a variety of habitat functions including thermal cover, hiding cover and security, and native understory grass and woody browse forage production. Historic timber harvest occurring at the turn of the 20<sup>th</sup> century and again in the mid-1970's coupled with over 100 years of fire suppression has allowed conifers to expand into grasslands and overtake aspen stands. Increased in-growth of conifers during this time has resulted in excessively dense stands. The progressive increase in density of forests on the TWMA has degraded habitat for targeted species, elevated levels of mountain pine beetle infestation, and increased the susceptibility of the forests to uncharacteristic stand replacement wildfire.

The 1992 TWMA Management Plan states prescribed burning and selective logging may be used to improve the availability and palatability of herbaceous vegetation, control conifer expansion into grasslands, and restore a more desirable species composition or successional stage in forests. In 2015, a 372-acre forest management project was implemented on the TWMA and was designed as a demonstration project for FWP to evaluate and learn from, and for the public to react to, before proposing any further forest management projects on the TWMA. Subsequent field tours have been well received by FWP biologists, sportsmen's clubs, legislators, local leaders, cooperating agencies, and the public. FWP is now evaluating stands for treatment to conduct a more extensive forest management project on the TWMA.

### Project Objectives

- Improve native grass and woody browse forage production on elk and mule deer winter range
- Implement forestry treatments that mimic ecological processes, promote development of ecologically site-appropriate habitat conditions, and reduce the susceptibility of forests to uncharacteristic disturbance events (such as stand replacement fires and bark beetle epidemics)
- Improve aspen habitats
- Improve and/or relocate existing roads to more suitable locations to reduce erosion and maintenance costs
- Sell resulting merchantable timber by-products to offset the cost of the treatment and generate revenue for the FWP Forest Management Account

### Potential Treatments

Approximate Gross Treatment Area – 1,605 acres

**Low Thinning (approximately 1,398 acres):** Objectives – improve native grass and woody browse forage production, reduce susceptibility of forest to uncharacteristic disturbance, mimic the role of natural low to moderate intensity fire, enhance isolated aspen stands. Treatments may include a combination of

understory thinning (commercial and non-commercial) and prescribed burning. Un-thinned areas within the treatment units would be left in draws and adjacent to open roads (approximately 15 to 30% of the gross treatment area).

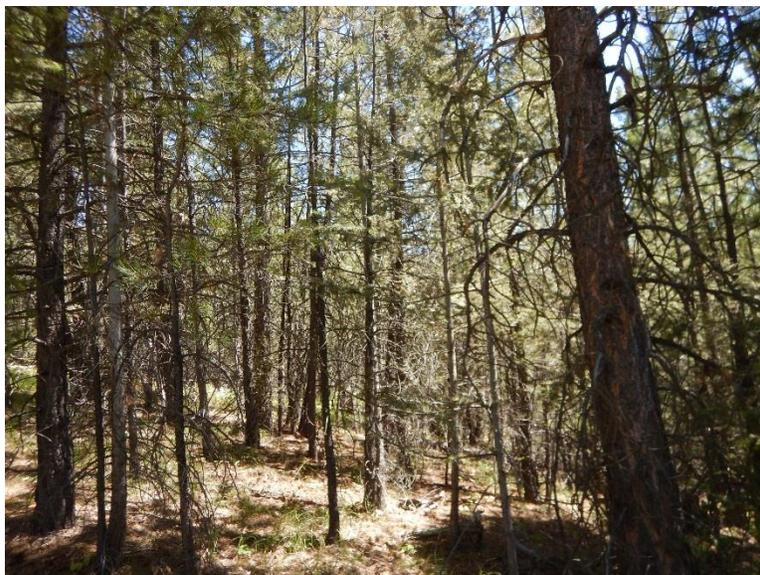
**Conifer expansion (approximately 90 acres):** Objectives – improve native grass and woody browse production. Treatments may include a combination of commercial and non-commercial conifer removal and prescribed burning.

**Prescribed burning (approximately 118 acres):** Objectives – improve native grass and woody browse production, mimic the role of natural low to moderate intensity fire, improve aspen habitats. Treatments may include preparatory work such as residual tree protection (removal of fuels around desirable leave trees) and prescribed burning.

### **Stand Photos**



*Figure 1 - Area proposed for low thinning. Understory Douglas-fir would be removed and overstory would be thinned favoring removal of suppressed trees with low crown ratios.*



*Figure 2 - Another area proposed for low thinning.*



*Figure 3 - Another area proposed for low thinning.*



*Figure 4 - Dense conifer expansion adjacent to a grassland proposed for treatment.*



*Figure 6 - Dense conifer expansion.*



*Figure 5 - Conifer expansion into grasslands.*



*Figure 8 - Sagebrush shaded out in understory of conifer expansion area.*



*Figure 7 - Struggling aspen regeneration amongst dead and downed aspen stems.*



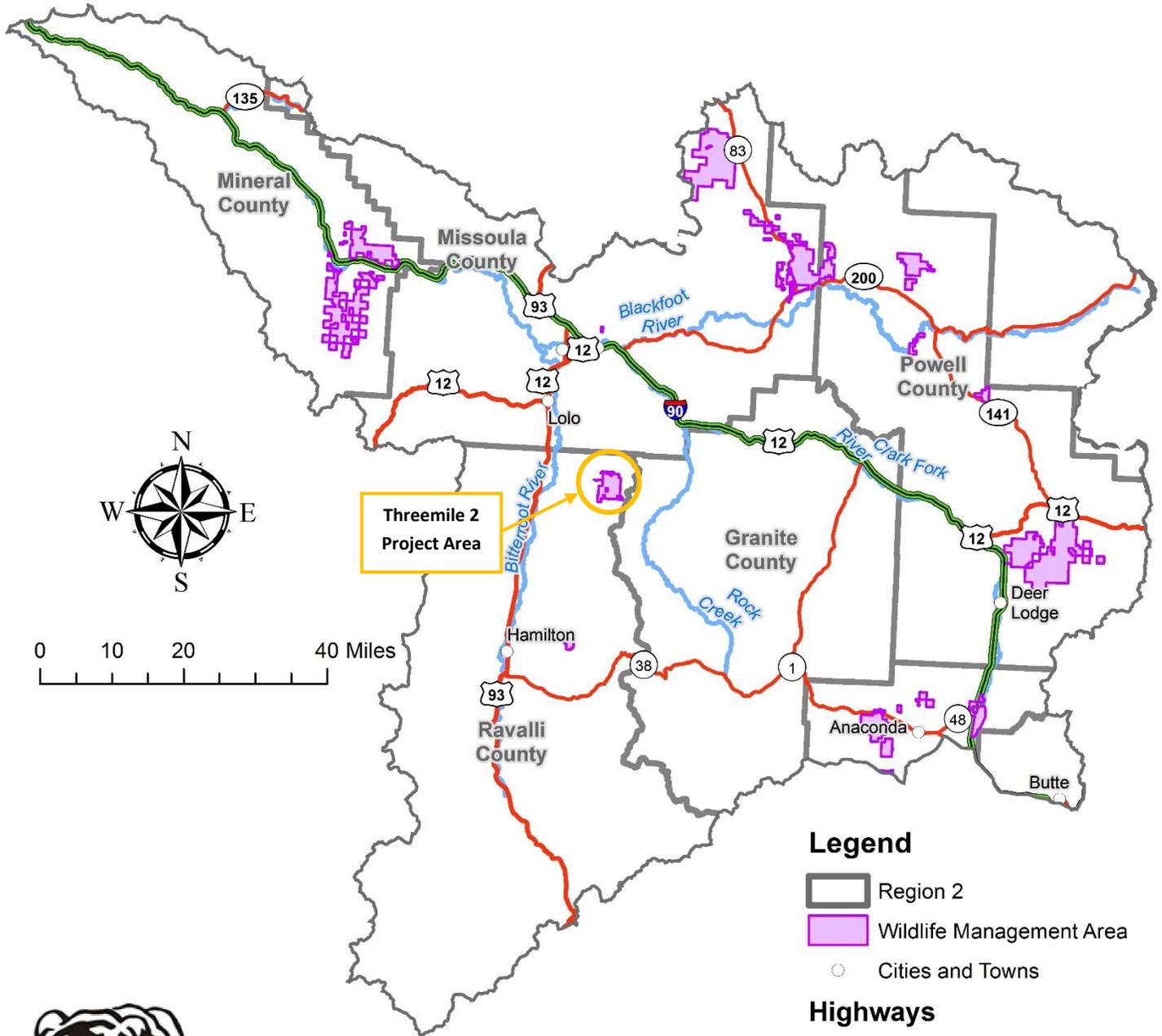
*Figure 9 - Open, savannah-like grassland proposed for prescribed burning to promote forage production.*



*Figure 10 - Area that illustrates the desired future condition for many of the units proposed for low thinning. A greater representation of this stand condition is preferred for the Threemile WMA.*

# Threemile 2 Proposed Forestry Project

## Region 2 Vicinity Map



0 10 20 40 Miles

### Legend

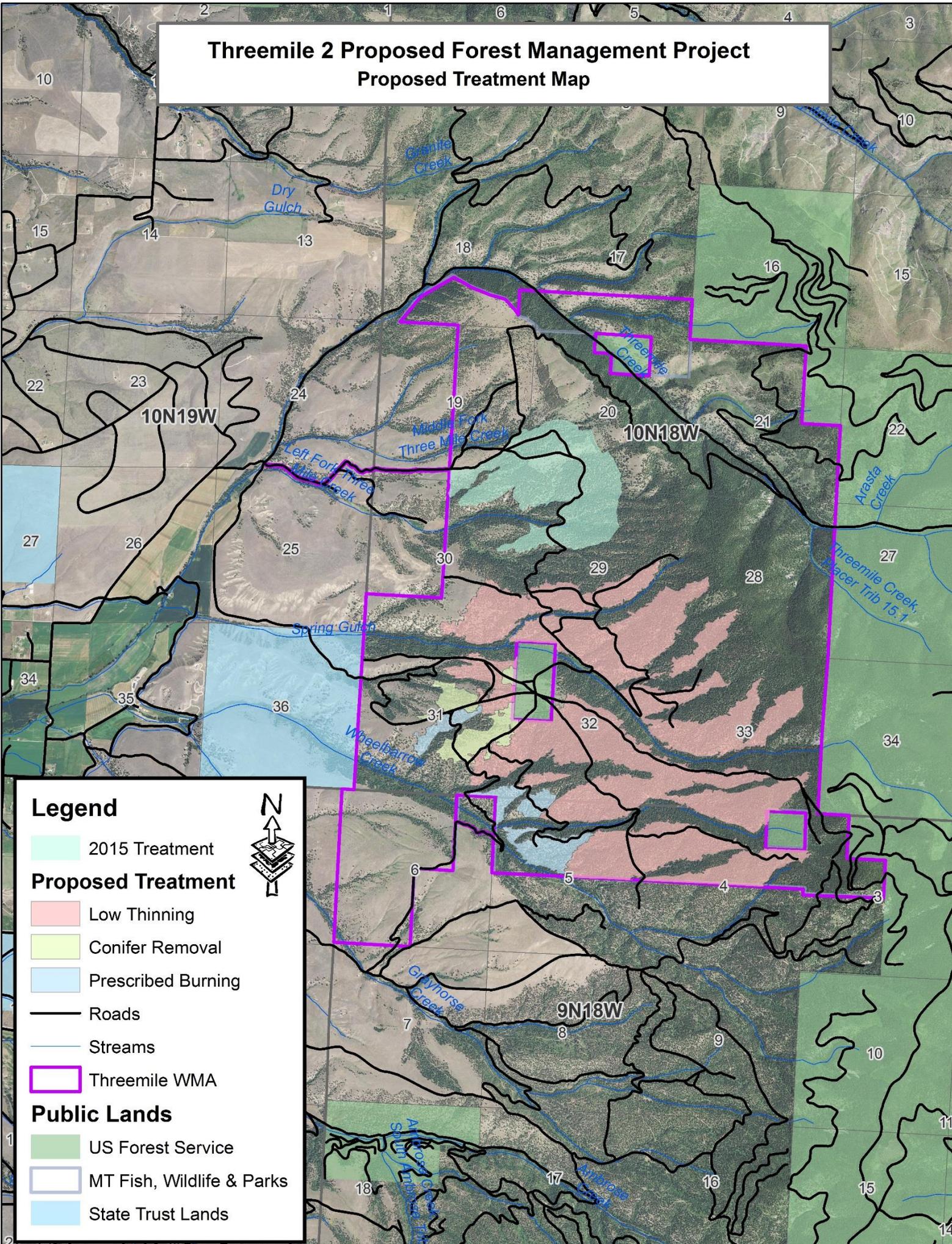
- Region 2
  - Wildlife Management Area
  - Cities and Towns
- ### Highways
- Interstate
  - U.S. Route
  - Montana Route
  - Major Streams
  - Counties



**Montana Fish,  
Wildlife & Parks**

# Threemile 2 Proposed Forest Management Project

## Proposed Treatment Map



### Legend



- 2015 Treatment
- Proposed Treatment**
- Low Thinning
- Conifer Removal
- Prescribed Burning
- Roads
- Streams
- Threemile WMA
- Public Lands**
- US Forest Service
- MT Fish, Wildlife & Parks
- State Trust Lands