

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Towhead RX
<b>Proposed Implementation Date:</b>	06/15
<b>Proponent:</b>	DNRC Helena Unit
<b>Location:</b>	Sec. 30 Township 13 North Range 3 West
<b>County:</b>	Lewis & Clark
<b>Trust:</b>	Common Schools Trust

### I. TYPE AND PURPOSE OF ACTION

The Proponent, DNRC Helena Unit is proposing a prescribed burning project on Common School Trust Land located on Section 30 Township 13 North Range 3 West.

Current forest conditions are overstocked, dense stands of ponderosa pine and Douglas-fir. Overstocked and dense growing conditions in both ponderosa pine and Douglas-fir stands have a negative impact on forest health and growth rate. The proposed actions should be able to increase forest health and vigor while reducing the potential for insect and disease epidemics and catastrophic loss due to wildfire.

Below is a list of current or proposed actions:

- Understory burning – Over the course of the next 8 years we would have several small, easy to control, low intensity prescribed fires. The burns would be conducted under the prescription of an approved Burn Plan. Once the area has been treated, larger acreage burns will be conducted every 10 to 15 years to help maintain forest health. This would also create live fire training opportunities for the fire crew.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

On 05/04/2015 the following agencies, groups and individuals received a scoping notice:

Sieben Ranch, John Baucus  
DOT, Jeff Eberet, PO Box 3068 Butte MT, 59702  
Gary Frank, DNRC Hydrologist  
Tim Spoelma, DNRC Ecological Section  
Patrick Rennie, DNRC Archaeologist  
Kevin Chappell, DNRC Ag/Grz Mngt Bureau Chief  
John Grassy ,DNRC PIO  
L&C Co. Weed Management Dist. Larry Hoffman  
L&C Co. CD, Chris Evans  
Jenny Sike, DFWP Biologist

#### 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Montana / Idaho Smoke Management Group- The DNRC is a member of the Montana/Idaho Airshed Group which was formed to minimize or prevent smoke impacts while using fire to accomplish land management objectives and/or fuel hazard reduction (Montana/Idaho Airshed Group 2006) The Group determines the

delineation of airsheds and impact zones throughout Idaho and Montana. Airsheds describe those geographical areas that have similar atmospheric conditions, while impact zones describe any area in Montana or Idaho that the Group deems smoke sensitive and/or having an existing air quality problem (Montana/Idaho Airshed Group 2006). As a member of the Airshed Group, DNRC agrees to burn only on days approved for good smoke dispersion as determined by the Smoke Management Unit.

Lewis and Clark County Burn Permit

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### 3. ALTERNATIVES CONSIDERED:

No Action Alternative: No prescribe burning or fire line construction would take place. Only continued grazing lease activity would occur.

Action Alternative: A series of small prescribed burns over the next ten years would be conducted until entire treatment area had been accomplished. See Section I Type and Purpose.

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III. IMPACTS ON THE PHYSICAL ENVIRONMENT
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| <ul style="list-style-type: none"><li>• <i>RESOURCES</i> potentially impacted are listed on the form, followed by common issues that would be considered.</li><li>• Explain <i>POTENTIAL IMPACTS AND MITIGATIONS</i> following each resource heading.</li><li>• Enter "NONE" if no impacts are identified or the resource is not present.</li></ul> |
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### 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: Soils on the site are comprised primarily of Geohrock channery loam and Sieben Gravelly Loam. Both soil types have a low potential for fire damage. Geohrock channery loam has a moderate erosion hazard, while Sieben gravelly loam has a slight erosion hazard. Heavy equipment would only be allowed to operate when dry soil conditions are present to prevent rutting and compaction. These soils are well drained, slopes are moderate, and are not subject to compaction or excessive erosion unless operated when wet. See attached Web Soil Survey. The effects to geology and soil quality, stability and moisture would be minimal and temporary.

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### 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: There is no known Stream side management Zones or known surface water with in the project area, only dry ephemeral draws. Vegetation remaining between burned area and water features will provide for ample sediment filtration. No direct, indirect, or cumulative impacts are anticipated to occur.

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### 6. AIR QUALITY:

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: Burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions emitted from prescribed burning are less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous. Burning within the project area would be short in duration and would be conducted when conditions favor good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality and the Montana Idaho Airshed

Group. DNRC Helena Unit would burn only on approved days. Thus, direct and indirect, effects to air quality due to slash burning associated with the proposed action would be minimal and short in duration.

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## **7. VEGETATION COVER, QUANTITY AND QUALITY:**

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

No Action Alternative: DNRC has had timber sales on this tract in 1991-1992 and in 2011-2012. Overstocked, very dense growing conditions in ponderosa pine allowed there to be a significant mountain pine beetle outbreak on the tract that lead to the 2011-2012 salvage timber harvest. The uneven aged forest management prescription has produced abundant natural regeneration. Higher susceptibility to insects and disease and that take advantage of overcrowded forest conditions heightened risk to loss by catastrophic wildfire would continue.

Action Alternative: DNRC has had timber sales on the tract in 1991-1992 and in 2011-2012. Overstocked, very dense growing conditions in ponderosa pine allowed there to be a significant mountain pine beetle outbreak on the tract that lead to the 2011-2012 salvage timber harvest. The uneven aged forest management prescription has produced abundant natural regeneration. By implementing the proposed actions, the DNRC will be able to increase forest health and vigor while reducing the potential for future insect and disease epidemics and catastrophic loss due to wildfire.

Noxious weeds are always a concern. There is knapweed along I-15 and scattered knapweed through out the tract. The lessee utilized both grazing and chemical treatments for on going weed control. The DNRC may choose to chemically treat the burn areas if necessary.

Short term, temporary, minor and minimal reduction of vegetation cover, quantity and quality would lead to improved cover, quantity and quality with the action alternative.

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## **8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:**

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: The area support a wide range of species common to this area; mule deer, whitetail deer, elk, raptors, song birds, and small mammals. The proposed actions will help restore the area to the historic condition and increase available forage in the longer term (2-10 years) Proposed actions are short duration and no direct, indirect or cumulative adverse effects are expected.

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## **9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:**

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: This ponderosa pine site near to the interstate has no known occurrence of federally listed endangered or threatened species. If sighting of a federally listed endangered or threatened species occur a review of operations would take place. The treatment would help create unique habitat that are rare in the area (low intensity burn with a regenerating forest stand) and help restore historic conditions. There are animal 12 species of Concern and one species of special status that are known to occur in the Township in which the project is located, they are the Spotted Bat, Hoary Bat, Little Brown Myotis, Fringed Myotis, Golden Eagle, Great Blue Heron, Evening Grosbeak, Pileated Woodpecker, Peregrine Falcon, Lewis's Woodpecker, Clark's Nutcracker and Westslope Cutthroat Trout. There is one plant species of concern with recorded occurrence with in the township of the proposed action, Divide Bladderpod, it occurs on open subalpine slopes, no such areas are present in the project area. The Proposed action is small in scale, and short in duration. See attached MNHP Animal & Plant Reports. No direct, indirect, or cumulative impacts are anticipated to occur to federally listed threatened and endangered species.

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**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: There are no known archaeological sites in area. The site has been reviewed as part of a previous timber sale. There are a couple of old cabins in the South West corner of the tract that have been used by the lessee for a sheep camp. No direct, indirect, or cumulative impacts are anticipated to occur.

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**11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: The proposed project area is near to I-15 but the area is flat and heavily timbered and will not be seen from the interstate. Smoke will likely be visible during operations. Effects will be short in duration and minor.

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**12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: There are no other activities planned and only treating a small (95 acres of a section) area of state land. Proposed actions are short duration and no direct or cumulative adverse affects are expected.

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**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

No Action Alternative: There was a previous EA done for the past timber sale and for some prescribed fire. Post timber sale monitoring has indicated overstocked tree regeneration. The Helena Unit has an ongoing tree growth study on this tract. No direct, indirect, or cumulative impacts are anticipated to occur.

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<b>IV. IMPACTS ON THE HUMAN POPULATION</b>
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| <ul style="list-style-type: none"><li>• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i></li><li>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i></li><li>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i></li></ul> |
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**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: There are concerns about smoke effecting visibility on I-15. In the area, multiple slash piles have been burned nearby and in equal proximity to I-15 in the past 5 years with no impact visibility. To mitigate potential visibility and safety impacts DNRC Helena Unit is proposing to not conduct burning operations with a west wind that could potentially push smoke in the direction of I-15. Additionally, signs would be placed in accordance with MUTCD notifying travelers of prescribed fire occurring in the area. There is a potential for some night time drift smoke due to diurnal wind patterns. Drift smoke should be minimal, light and not have an effect on visibility.

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**15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

*Identify how the project would add to or alter these activities.*

No Action Alternative: There are ongoing ranching activities in the area. this project is not anticipated to affect these activities. No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: There are ongoing ranching activities in the area. this project is not anticipated to affect these activities. No direct, indirect, or cumulative impacts are anticipated to occur.

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**16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: Project is going to be undertaken by DNRC staff. No direct, indirect, or cumulative impacts are anticipated to occur.

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**17. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

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**18. DEMAND FOR GOVERNMENT SERVICES:**

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: Proposed actions are short duration; we are planning on a few days each spring burning for a few years. No direct, indirect, or cumulative impacts are anticipated to occur.

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**19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

No Action Alternative: The State Forest Land Management Plan and the Sustained Yield Calculation have a timber harvest component. There is a greater potential for catastrophic fire, insects and disease without treatment that could have a negative impact on the Sustained Yield Calculation.

Action Alternative: The State Forest Land Management Plan and the Sustained Yield Calculation have a timber harvest component. The proposed action would help create a more fire and insect and disease resistant forest and increase growth rates by reducing competition in dense and overstocked stands of regenerating ponderosa pine and Douglas-fir. The proposed action would help DNRC meet the goals of the Sustained Yield Calculation and the State Forest Land Management Plan.

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**20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: Accessible state lands are available for recreational use with the purchase of a conservation license or State land recreational use license. I-15 passes through this tract. While technically, interstate highways do not allow for access to adjacent lands, hunters are known to park along the interstate to access the trust land as well as, the private land which has a block management agreement with FWP. The planned activities are in the spring when there is no hunting season and proposed actions are short duration. No direct, indirect, or cumulative impacts are anticipated to occur.

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**21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

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**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

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**23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

No Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

Action Alternative: No direct, indirect, or cumulative impacts are anticipated to occur.

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**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

No Action Alternative: Overstocked forest conditions which if not addressed will become stagnant and not develop into a merchantable stand capable of producing long term revenues for the trust.

Action Alternative: The understory prescribed burn is a forest improvement action commonly used to address this situation. In this case our plan is to utilize state fire crews to conduct the prescribed burn at no cost to the forest improvement fund. A secondary benefit of this burn is the live fire training experience that our crews receive.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> John Huston	<b>Date:</b>
	<b>Title:</b> Helena Unit Fire Supervisor	

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**V. FINDING**

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**25. ALTERNATIVE SELECTED:**

Action Alternative: implement the prescribed burning project on Common School Trust Land located on Section 30 Township 13 North Range 3 West

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**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

As proposed, I do not anticipate any direct, indirect or cumulative effects from the implementation of the selected alternative. The mitigations discussed in Item 14 **HUMAN HEALTH AND SAFETY** are necessary and sufficient, if followed, to address smoke related issues near I-15. Improvement to forest health and vigor combined with training opportunities for the Helena Unit fire program will result.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

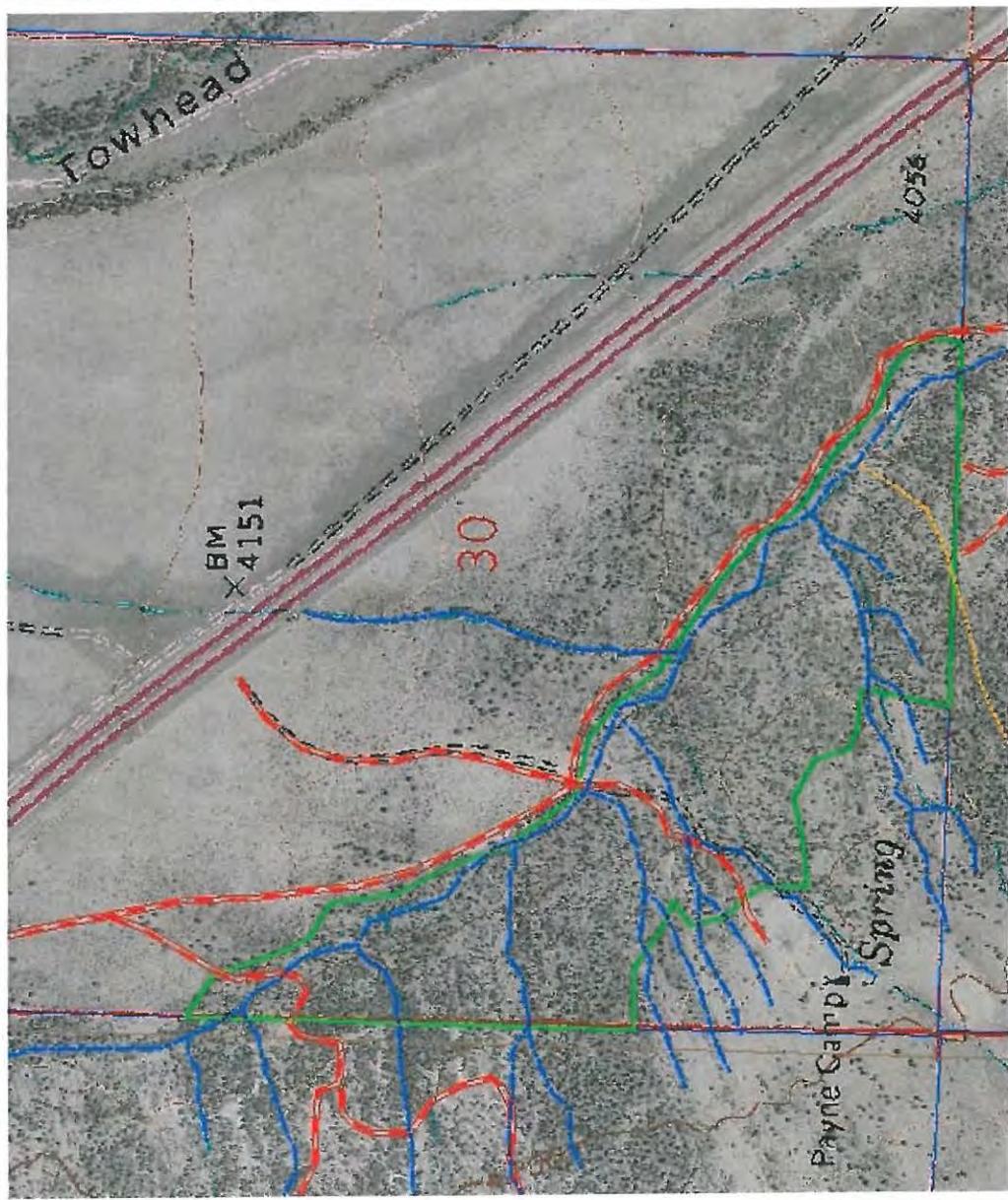
No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Andy Burgoyne <b>Title:</b> Helena Unit Manager
<b>Signature:</b> 	<b>Date:</b> 6/1/2015



# Towhead Rx Burning

30, T13N, R3W



Plot date: March 20, 2005 f:\gjarview projects\trust land forestry\Towhead\Towhead rx burn.apr

