

Region One 490 North Meridian Road Kalispell, MT 59901 (406) 752-5501 Fax: 406-257-0349

Ref: JS060-12 July 31, 2012

#### Ladies and Gentlemen:

Fish, Wildlife & Parks (FWP), Region One, is seeking public comment for the proposed West Kootenai Wildlife Management Area Forest Management Project. The project is intended to improve wildlife habitat and reduce the risk of wildfire. A copy of the draft environmental assessment (EA) is enclosed.

The draft EA is out for public review through 5:00 p.m., Tuesday, August 21, 2012. Please contact FWP Area Wildlife Biologist Tim Thier at (406) 882-4697 or e-mail to tthier@mt.gov with questions or comments.

Sincerely,

James R. Sattafield. D.

James R. Satterfield Jr., Ph.D. Regional Supervisor

/ni

#### Enclosure

- c: \*Governor's Office, Attn: Sheena Wilson, PO Box 200801, Helena, 59620-0801
- \*Environmental Quality Council, PO Box 20, Helena, 59620-1704
- \*Dept. of Environmental Quality, Planning, Prevention & Assistance, PO Box 200901, Helena, 59620-0901
- \*Dept. of Environmental Quality, Permitting Compliance, PO Box 200901, Helena, 59620-0901
- \*Montana Fish, Wildlife & Parks, Director's Office; Legal Unit Jessica Snyder; Wildlife Steve Knapp; Rebecca Cooper.
- \*DNRC, PO Box 201601, Helena, 59620-1601 (Patty Greene)
- \*Montana Historical Society, SHPO, 225 North Roberts, Veteran's Memorial Building, Helena, 59620-1201
- \*Montana State Library, 1515 East Sixth Ave., Helena, 59620-1800
- \*Adam McLane, Montana Environmental Information Center, PO Box 1184, Helena, 59624 George Ochenski, 4 Harrison Avenue, Helena, MT 59601
- \*Wayne Hirst, Montana State Parks Foundation, PO Box 728, Libby, 59923
- \*Montana State Parks Association, PO Box 699, Billings, 59103
- \*Joe Gutkoski, President, Montana River Action Network, 304 N 18<sup>th</sup> Ave., Bozeman, 59715
- \*Senator Chas Vincent, 34 Paul Bunyan Lane, Libby, MT 59923
- \*Representatives Mike Cuffe, P O Box 1685, Eureka, MT 59917 & Gerald Bennett, 784 Taylor Road, Libby, MT 59923
- \*Lincoln County Commissioners, 512 California Avenue, Libby, MT 59923

Lincoln County Libraries, 220 W 6<sup>th</sup> Street, Libby; 318 Dewey Avenue, Eureka; and 207 N 3<sup>rd</sup>, Troy, MT Interested Parties

# West Kootenai WMA Forest Management Project

# **Draft Environmental Assessment**

**July 2012** 



Montana Fish, Wildlife & Parks 490 North Meridian Road Kalispell, Montana 59901 (406) 752-5501

# West Kootenai WMA Forest Management Project

# **Draft Environmental Assessment**

Public Comment Period: July 31 through August 21, 2012

Public Meeting: Kootenai Kraft and Grocery

7127 West Kootenai Road

Rexford, MT 59930

Thursday, August 9, 2012

7:00 p.m.

# **Address Comments to:**

Tim Thier Area Wildlife Biologist P.O. Box 507 Trego, MT 59934 tthier@interbel.net (406) 882-4697

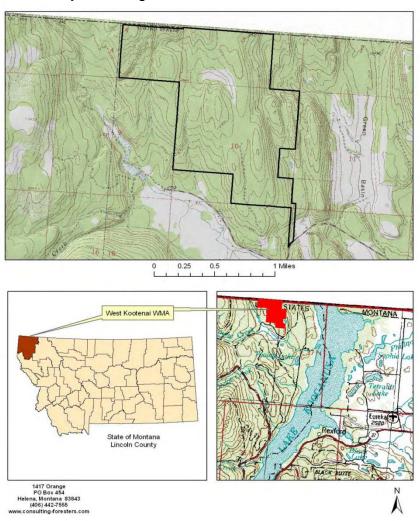
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#### INTRODUCTION

The West Kootenai Wildlife Management Area (WMA) consists of 917 acres located about 10 miles northwest of Eureka, Montana, and west of Koocanusa Reservoir (Figures 1-3). It was originally purchased by the U.S. Army Corp of Engineers in 1980 as partial mitigation for habitat loss due to the creation of Koocanusa Reservoir. It was given to Montana Department of Fish, Wildlife & Parks (FWP) to manage, primarily for the benefit for wintering white-tailed deer, mule deer, and elk. Many other species also use the WMA, such as roughed grouse, turkeys, mountain lions, black bears, and grizzly bears.

The vast majority of the WMA is heavily forested, with 4 grassy openings interspersed that range in size from approximately 5 to 30 acres. Douglas-fir is the dominant tree species in the overstory, with stand conditions throughout most of the WMA generally considered stagnant and at high risk of wildfire. Few deciduous shrubs are found in the understory. The area currently receives high levels of use by wintering elk, white-tailed deer, and mule deer.



Figures 1-3. Location of West Kootenai Wildlife Management Area (WMA).

West Kootenai WMA, T37N, R28W, PMM

Lincoln County, MT

#### PROPOSED ACTION

A 2011 Management Plan for this WMA identified five primary management goals for this property: 1) develop and maintain structurally and ecologically diverse, mature forest habitats to provide big game winter range, 2) develop and maintain healthy forest conditions that reduce risk of insect and disease outbreaks, 3) reduce the risk of extreme wildfire behavior in proximity to neighboring properties and infrastructure, 4) continue to provide nonmotorized opportunities for hunting and other compatible public recreation opportunities, and 5) control noxious weeds. The management plan also identified various forest treatments needed to improve forest health, maintain habitat diversity for wildlife, and reduce the risk of wildfire. These treatments would focus on the WMA perimeter, existing roadways, and several identified units (Figure 4). A total of 240 acres is currently proposed for treatment in 7 units. A short section of road (approximately 300 yards long) would be constructed in order to complete the harvest activities and provide a public access point for future recreational use.

Proposed treatments include commercial thinning of treatment areas to achieve a variable tree spacing along 12,000 feet of roadway, with thinning occurring within 100' on both sides of existing roads. Variable tree spacing would also occur within 6 other units ranging in size from 9 to 60 acres. Trees to be cut will primarily include sapling and pole-sized trees in poor-to-fair condition. Trees with live crowns greater than 25% will be preferred for retention, with western larch and ponderosa pine given preference over Douglas-fir. Trees over 6" diameter will be cut mechanically with a feller buncher, with limbs and tops placed into roadside landing piles. They will be either burned at a later date or chipped for hog fuel, should suitable market conditions exist. Trees less than 6" diameter will be either hand cut and piled or mechanically masticated, unless designated to be saved. Solid dead wood present on the forest floor greater than 4" diameter will be retained. It is hoped that work can begin on this project by October 2012. Harvest activities could potentially occur during both winter and summer months. The sites would be managed to promote natural regeneration of the forest within 3-5 years. Please refer to the individual treatment area prescriptions below for more detail.

While products derived from thinning will be used to help offset the total cost of the project, this work will still cost approximately \$85,000 to complete. FWP (via Eureka Rural Development Partners) applied for and received from DNRC a grant for \$41,000 for fuels reduction that will greatly help to offset the total cost of this project. Costs to FWP will be approximately \$44,000. Details of proposed harvest prescriptions are provided below.

# **Treatment Area 1: Wildfire Hazard Reduction (**9 acres)

# **Desired Future Condition:**

The objective of this treatment is to reduce heavy wild land fuel loading located in the immediate vicinity of nearby residential developments, parking areas, and access roads serving the trailhead and local residences. Fuel break width will extend 150 feet from existing roads, property boundaries, and the trailhead area. Secondary objectives are to improve aesthetics of the area and to provide a safer environment for visitors in the vicinity of the parking area and trailhead by removal of hazardous trees.

# **Treatment Prescription:**

Work will include thinning of merchantable- and nonmerchantable-sized trees, removal of hazardous trees, pruning of residual trees, and slash disposal. Thinning of trees will significantly reduce ladder fuels and disrupt the horizontal continuity of tree crowns in the project area. Thinning will be completed in a manner that favors retention of trees with live crown ratios greater than 35%. An average crown spacing of 10-15 feet in desired between residual trees. All trees to be retained within the project area will be marked with blue plastic flagging by a professional forester prior to implementation of the project. The project boundary will be marked with pink flagging. Trees to be removed will predominately include suppressed sapling and polesized trees in poor-to-fair biologic condition. All mature retention trees will be pruned to a height of 6-12 feet to further reduce ladder fuels. Standing sawlog-sized trees will not be cut unless they are dead, in poor biologic condition, or designated as a safety hazard tree. All mature retention trees will be pruned to a height of 6-12 feet to further reduce ladder fuels. Solid, dead, down wood present on the forest floor and less than 12 inches in diameter will be removed from the project area. Root balls left from earlier road construction work near the trailhead parking will be piled and burned or removed from the project area. Trees over 6 inches in diameter (merchantable-sized trees) will be cut mechanically with a feller buncher. This aspect of the work will be completed in conjunction with other commercial thinning work scheduled to occur within the WMA. Stumps will be cut to a height of 1 foot or less. Pulpwood and sawlog material generated from the harvest will be merchandized and sold. Limbs and tops from mechanically cut trees will be placed into roadside landing piles. Stems less than 4 inches in diameter will be placed into hand piles and burned or masticated. Stems between 4 and 6 inches in diameter will be cut into 8-foot lengths and left on-site as firewood. Implementation of this prescription is anticipated to reduce basal area from approximately 134 sq ft per acre to 90 to 110 sq ft per acre. The number of trees per acre in the 1-4-inch size class will be reduced by approximately 75-80%. Harvest volume of pulpwood-sized trees (5-7-inch DBH) is anticipated to be approximately 4-8 tons per acre. Harvest volume of sawlog-sized trees is estimated to be approximately 1.00 MBF per acre (7.5 tons per acre).

# Treatment Area 2: Wildfire Hazard Reduction/Forest Winter Range Habitat Improvement (55 acres)

#### **Desired Future Condition:**

The objective of this treatment is to reduce wild land fuels in the vicinity of the south property boundary, which adjoins a residentially developed area. A secondary objective is to improve the health and condition of residual trees to facilitate development of full, deep live crowns, which will provide snow interception, thermal cover, substrate for lichen development, and Douglas-fir foliage for winter deer browse. The treatment will maintain a multi-layered forest structure and emphasize removal of suppressed trees in the forest understory. The treatment will emphasize retention of mature trees with deep live crowns and immature trees with crown ratios of 35% or greater. Variable tree spacing will be utilized to maintain canopy cover where groups of healthy trees are present and to maintain adequate snow interception within the project area.

# **Treatment Prescription:**

Work will include thinning of merchantable- and nonmerchantable-sized trees and slash disposal. Thinning of trees will significantly reduce ladder fuels and disrupt the horizontal continuity of tree crowns in the project area. Trees to be cut will predominately include sapling

and pole-sized trees in poor-to-fair biologic condition. These trees generally have live crown ratios of less than 20%. Trees with live crowns of 25% or greater, regardless of size, will be preferred for retention within the project area. Western larch and ponderosa pine in good condition will be given preference as retention trees over Douglas-fir to improve species diversity and maintain a future seed source. Standing sawlog-sized trees will not be cut unless in poor-to-fair biologic condition. Standing dead trees greater than 10 inches in diameter will be retained as snags unless a safety hazard. Solid, dead, down wood present on the forest floor greater than 4 inches in diameter will be retained in the project area. Trees over 6 inches in diameter (merchantable-sized trees) will be cut mechanically with a feller buncher. This aspect of the work will be completed in conjunction with other commercial thinning work scheduled to occur within the WMA. Pulpwood and sawlog material generated from the harvest will be merchandized and sold. Limbs and tops from mechanically cut trees will be placed into roadside landing piles. Roadside piles will be burned. Chipping slash piles for hog fuel may be an option if suitable market conditions are available. Following the mechanical cutting, removal, and disposal of merchantable-sized trees, a hand crew or mechanical masticator will be utilized to cut and dispose of residual designated cut trees less than 6 inches in diameter. Stumps of nonmerchantable trees will be cut or ground to a height of 4 inches or less. Stems less than 5 inches in diameter will be placed into hand piles and burned or masticated. Retention tree marking will occur in portions of the project area to guide the contractor doing the harvesting and thinning work. The project boundary will be marked with pink flagging. Implementation of this prescription is anticipated to reduce basal area from approximately 134 sq ft per acre to 90 to 110 sq ft per acre. The number of trees per acre in the 1-4-inch size class will be reduced by approximately 75-80%. Harvest volume of pulpwood-sized trees (5-7-inch DBH) is anticipated to be approximately 4-8 tons per acre. Harvest volume of sawlog-sized trees is estimated to be approximately 1.5 MBF per acre (11.25 tons per acre).

Treatment Area 3: Roadside Fuels Reduction/Forest Winter Range Habitat Improvement (55 acres and about 12,000 feet of roadside with 100-foot width either side)

#### **Desired Future Condition:**

The objective of this treatment is to reduce wild land fire hazard adjacent to existing roads within the WMA and improve forest winter range habitat. Hazard reduction work will occur within 100 feet on either side of designated access roads located within the project area. Creation of fuel breaks adjacent to roadways allows for safe ingress and egress for fire suppression personnel and visitors in the event of a wildfire. The treatment will maintain a multi-layered forest structure and emphasize removal of suppressed trees in the forest understory. The treatment will emphasize retention of mature trees with deep live crowns and immature trees with crown ratios of 35% or greater. Variable tree spacing will be utilized to maintain canopy cover where groups of healthy trees are present and to maintain adequate snow interception at various intervals along road lengths where canopy cover is preserved to the extent to allow for snow interception that will facilitate deer crossing the roads during period of deep snow.

# **Treatment Prescription:**

Work will include thinning of merchantable- and nonmerchantable-sized trees and slash disposal. Thinning of trees will significantly reduce ladder fuels and disrupt the horizontal continuity of tree crowns in the project area. Trees to be cut will predominately include sapling

and pole-sized trees in poor-to-fair biologic condition. These trees generally have live crown ratios of less than 20%. Trees with live crowns of 25% or greater, regardless of size, will be given preference for retention within the project area. Western larch and ponderosa pine in good condition will be given preference as retention trees over Douglas-fir to improve species diversity and maintain a future seed source. Standing sawlog-sized trees will not be cut unless in poor-to-fair biologic condition. Standing dead trees greater than 10 inches in diameter will be retained as snags unless a safety hazard. Solid, dead, down wood present on the forest floor greater than 4 inches in diameter will be retained in the project area. Trees over 6 inches in diameter (merchantable-sized trees) will be cut mechanically with a feller buncher. This aspect of the work will be completed in conjunction with other commercial thinning work scheduled to occur within the WMA. Pulpwood and sawlog material generated from the harvest will be merchandized and sold. Limbs and tops from mechanically cut trees will be placed into roadside landing piles. Roadside piles will be burned. Chipping slash piles for hog fuel may be an option if suitable market conditions are available. Following the mechanical cutting, removal, and disposal of merchantable-sized trees, a hand crew will be utilized to cut and dispose of residual designated cut trees less than 6 inches in diameter. Stems less than 4 inches in diameter will be placed into hand piles and burned. Stems greater than 4 inches in diameter will be cut into 8foot lengths and left on-site. Retention tree marking will occur in portions of the project area to guide the contractor doing the harvesting and thinning work. The project boundary will be marked with pink flagging. Implementation of this prescription is anticipated to reduce basal area from approximately 134 sq ft per acre to 100 to 110 sq ft per acre. The number of trees per acre in the 1-4-inch size class will be reduced by approximately 75-80%. Harvest volume of pulpwood-sized trees (5-7-inch DBH) is anticipated to be approximately 8 tons per acre. Harvest volume of sawlog-sized trees is estimated to be approximately 1.25 MBF per acre (7-8 tons per acre).

# **Treatment Area 4: Forest Winter Range Habitat Improvement (**60 acres)

#### **Desired Future Condition:**

The objective of this treatment is to improve the health and condition of residual trees to facilitate development of full, deep live crowns, which will provide snow interception, thermal cover, and substrate for lichen development over the next 20-50 years. Development of healthy seedling, sapling, and pole-sized trees is desired to provide a source of Douglas-fir foliage for winter browse. The treatment will maintain a multi-layered forest structure and emphasize removal of suppressed trees in the forest understory. The treatment will emphasize retention of all trees with crown ratios of 35% or greater. Variable tree spacing will be utilized to maintain canopy cover where groups of healthy trees are present and to maintain adequate snow interception within the project area.

# **Treatment Prescription:**

Work will include thinning of merchantable- and nonmerchantable-sized trees and slash disposal. Trees to be cut will predominately include sapling and pole-sized trees in poor-to-fair biologic condition. These trees generally have live crown ratios of less than 20%. Standing sawlog-sized trees will not be cut unless in poor-to-fair biologic condition. Standing dead trees greater than 10 inches in diameter will be retained as snags unless a safety hazard. Solid, dead, down wood present on the forest floor greater than 4 inches in diameter will be retained in the

project area. Trees over 6 inches in diameter (merchantable-sized trees) will be cut mechanically with a feller buncher. Pulpwood and sawlog material generated from the harvest will be merchandized and sold. Limbs and tops from mechanically cut trees will be placed into roadside landing piles. Roadside piles will be burned. Chipping slash piles for hog fuel may be an option if suitable market conditions are available. Following the mechanical cutting, removal, and disposal of merchantable-sized trees, a hand crew will be utilized to cut and dispose of residual designated cut trees less than 6 inches in diameter. Stems less than 4 inches in diameter will be placed into hand piles and burned, mechanically masticated, or chipped. Stems greater than 4 inches in diameter will be cut into 8-foot lengths and left on-site. Retention tree marking will occur in portions of the project area to guide the contractor doing the harvesting and thinning work. The project boundary will be marked with pink flagging. Implementation of this prescription is anticipated to reduce basal area from approximately 111 sq ft per acre to 80 to 90 sq ft per acre. The number of trees per acre in the 1-4-inch size class will be reduced by approximately 50-60%. Harvest volume of pulpwood-sized trees (5-7-inch DBH) is anticipated to be approximately 6 tons per acre. Harvest volume of sawlog-sized trees is estimated to be approximately 1.0 MBF per acre (7-8 tons per acre).

# **Treatment Areas 5 and 6: Forest Winter Range Habitat Improvement (**45 acres)

#### **Desired Future Condition:**

The objective of this treatment is to encourage natural regeneration of Douglas-fir seedlings, which are nearly absent in this area at this time and improve structural diversity. Canopy closure and basal area will need to be reduced in the project area to accomplish this objective. Long-term development of healthy seedling, sapling, and pole-sized trees is required to provide a source of Douglas-fir foliage for winter browse over the next 20-50 years. This treatment will require several decades to achieve the closed canopy conditions desired for thermal cover, snow interception, and increased lichen abundance. The treatment will create an open, multi-layered forest structure. The treatment will emphasize retention of nearly all trees with crown ratios of 35% or greater and removal of suppressed sapling and pole-sized trees in the forest understory. Variable tree spacing will be utilized to maintain canopy cover where groups of healthy trees are present and to maintain snow interception within the portions of the project area.

#### **Treatment Prescription:**

Work will include thinning of merchantable- and nonmerchantable-sized trees and slash disposal. Trees to be cut will predominately include sapling and pole-sized trees in poor biologic condition. These trees generally have live crown ratios of less than 20%. Standing sawlog-sized trees will not be cut unless in poor-to-fair biologic condition. Standing dead trees greater than 10 inches in diameter will be retained as snags unless a safety hazard. Solid, dead, down wood present on the forest floor greater than 4 inches in diameter will be retained in the project area. Trees over 6 inches in diameter (merchantable-sized trees) will be cut mechanically with a feller buncher. Pulpwood and sawlog material generated from the harvest will be merchandized and sold. Limbs and tops from mechanically cut trees will be placed into roadside landing piles. Roadside piles will be burned. Chipping slash piles for hog fuel may be an option if suitable market conditions are available. Following the mechanical cutting, removal, and disposal of merchantable-sized trees, a hand crew will be utilized to cut and dispose of residual designated

cut trees less than 6 inches in diameter. Stems less than 4 inches in diameter will be placed into hand piles and burned, mechanically masticated, or chipped. Stems greater than 4 inches in diameter will be cut into 8 foot lengths and left on-site. Retention tree marking will occur in portions of the project area to guide the contractor doing the harvesting and thinning work. The project boundary will be marked with pink flagging. Implementation of this prescription is anticipated to reduce basal area from approximately 103 sq ft per acre to 65 to 80 sq ft per acre. The number of trees per acre in the 1-4-inch size class will be reduced by approximately 60-70%. Harvest volume of pulpwood-sized trees (5-7-inch DBH) is anticipated to be approximately 10 tons per acre. Harvest volume of sawlog-sized trees is estimated to be approximately 1.0 MBF per acre (7-8 tons per acre).

# Treatment Area 7: Wildfire Hazard Reduction/Forest Winter Range Habitat Improvement (9 acres)

#### **Desired Future Condition:**

The objective of this treatment is to improve the health and condition of residual trees to facilitate development of full, deep live crowns, which will provide snow interception, thermal cover, substrate for lichen development, and Douglas-fir foliage for winter deer browse. The treatment will maintain a multi-layered forest structure and emphasize removal of suppressed trees in the forest understory. The treatment will emphasize retention of mature trees with deep live crowns and immature trees with crown ratios of 35% or greater. Variable tree spacing will be utilized to maintain canopy cover where groups of healthy trees are present and to maintain adequate snow interception within the project area.

# **Treatment Prescription:**

Work will include thinning of merchantable- and nonmerchantable-sized trees and slash disposal. Thinning of trees will significantly reduce ladder fuels and disrupt the horizontal continuity of tree crowns in the project area. Trees to be cut will predominately include sapling and pole-sized trees in poor-to-fair biologic condition. These trees generally have live crown ratios of less than 20%. Trees with live crowns of 25% or greater, regardless of size, will be given preference as retention trees within the project area. Western larch and ponderosa pine in good condition will be given preference as retention trees over Douglas-fir to improve species diversity and maintain a future seed source. Standing sawlog-sized trees will not be cut unless in poor biologic condition (less than 25% live crown). Standing dead trees greater than 10 inches in diameter will be retained as snags unless a safety hazard. Solid, dead, down wood present on the forest floor greater than 4 inches in diameter will be retained in the project area. Trees over 6 inches in diameter (merchantable-sized trees) will be cut mechanically with a feller buncher. This aspect of the work will be completed in conjunction with other commercial thinning work scheduled to occur within the WMA. Pulpwood and sawlog material generated from the harvest will be merchandized and sold. Limbs and tops from mechanically cut trees will be placed into roadside landing piles. Roadside piles will be burned. Chipping slash piles for hog fuel may be an option if suitable market conditions are available. Following the mechanical cutting, removal and disposal of merchantable-sized trees, a hand crew or mechanical masticator will be utilized to cut and dispose of residual designated cut trees less than 6 inches in diameter. Stems less than 5 inches in diameter will be placed into hand piles and burned or masticated. Retention tree marking will occur in portions of the project area to guide the

contractor doing the harvesting and thinning work. The project boundary will be marked with pink flagging. Implementation of this prescription is anticipated to reduce basal area from approximately 134 sq ft per acre to 90 to 110 sq ft per acre. The number of trees per acre in the 1-4 inch size class will be reduced by approximately 75-80%. Harvest volume of pulpwood-sized trees (5-7-inch DBH) is anticipated to be approximately 4-8 tons per acre. Harvest volume of sawlog-sized trees is estimated to be approximately 1.5 MBF per acre (11.25 tons per acre).

# **Treatment Area Monitoring**

Treatment Area 1: Wildfire Hazard Reduction

Wildfire hazard reduction objectives will be accomplished immediately upon completion of this treatment. The treatment will be monitored 10 years after completion to determine if additional fuel reduction is necessary to reduce surface fuels from conifer in-growth and if selective thinning is required to maintain desired crown spacing. Hazardous trees will be evaluated on an annual basis and immediately removed if they pose a safety hazard.

Treatment Area 2: Wildfire Hazard Reduction/Forest Winter Range Habitat Improvement

Wildfire hazard reduction objectives will be accomplished immediately upon completion of this treatment. The treatment will be monitored 10 years after completion to determine if additional fuel reduction is necessary to reduce surface fuels from conifer in-growth and if selective thinning is required to maintain desired crown spacing along the south property boundary, which adjoins residential development. The secondary objective of improving the health and condition of residual trees to facilitate development of full, deep live crowns, which will provide snow interception, thermal cover, substrate for lichen development, and Douglas-fir foliage for winter deer browse should occur over a 10-20-year period.

Treatment Area 3: Roadside Fuels Reduction/Forest Winter Range Habitat Improvement

Roadside wildfire hazard reduction objectives will be accomplished immediately upon completion of this treatment. The treatment will be monitored 10 years after completion to determine if additional fuel reduction is necessary within 100 feet of roads to reduce surface fuels from conifer in-growth and if selective thinning is required to maintain desired crown spacing along roadsides. If monitoring in years 1-5 indicates the treatment appears effective, implementing additional roadside wildfire hazard reduction work on untreated roadside areas in the north half of the WMA may be prudent.

Treatment Area 4: Forest Winter Range Habitat Improvement

The objective of this treatment is to improve the health and condition of residual trees to facilitate development of full, deep live crowns, which will provide snow interception, thermal cover, and substrate for lichen development over the next 20-50 years. The immediate goal is to significantly decrease stocking levels of trees in the 5-7-inch size class and moderately decrease stocking levels in the 1-4-inch size class and 8-10-inch size class in order to maintain a healthy component of trees in all size classes. Ultimately this will to facilitate long-term development and increased abundance of healthy trees over 16 inches in diameter. Monitoring

will be conducted over the next decade to evaluate the health and abundance of trees in all size classes and recruitment of seedlings in the 1-4-inch size class.

Treatment Area 5a and 5b: Forest Winter Range Habitat Improvement

The objective of this treatment is to improve the health and condition of residual trees to facilitate development of full, deep live crowns, which will provide snow interception, thermal cover, and substrate for lichen development over the next 20-40 years. The immediate goal is to significantly increase stocking levels of trees in the 1-4-inch size class over the next decade in treated areas. Forest openings in treated areas will be monitored for development of natural Douglas-fir regeneration. Regeneration will be monitored for overuse by deer as forage. Seedlings may require protection if overuse is occurring. If natural regeneration does not occur tree planting may be required to achieve desired stocking rates of seedling and sapling-sized trees.

Treatment Area 6: Forest Winter Range Habitat Improvement

The objective of this treatment is to improve the health and condition of residual trees to facilitate development of full deep live crowns which will provide snow interception, thermal cover, and substrate for lichen development over the next 20-40 years. The immediate goal is to decrease stocking levels of trees in the 1-4, 5-7, and 8-10-inch sizes classes and maintain or slightly decrease abundance of 11-15-inch size class trees in the next 2 decades. Over the next 2-4 decades the abundance of trees greater than 16 inches in diameter should increase to 20-30 trees per acre. Monitoring will be conducted over the next decade to evaluate the health and abundance of trees in all size classes.

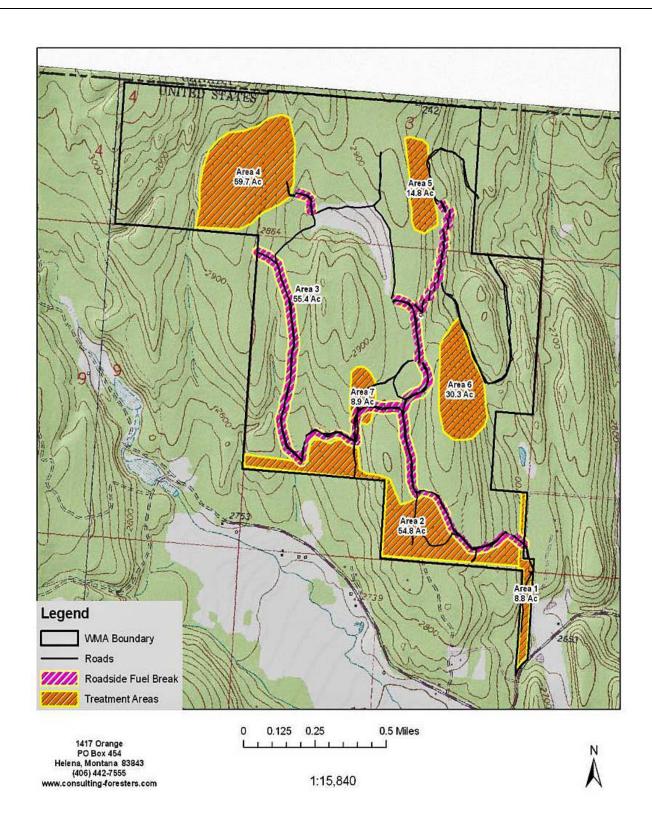


Figure 4. Location of proposed treatments on West Kootenai WMA.

#### **Habitat/Recreation Values:**

The West Kootenai WMA provides important winter habitat for elk, mule deer, and white-tailed deer, with lesser amounts of summer use also occurring. In addition, it is a popular area for hunters in the fall who are pursuing these and other game species. Other recreationists visit the WMA to view wildlife, hike, and simply enjoy the outdoors. The WMA is available for public use from May 15 to December 1. The WMA is closed to the public the remainder of the year to allow wildlife an opportunity to use the area undisturbed.

# **Location/Ownership:**

The project is located in Lincoln County in portions of Sections 3, 4, 10, and 14, Township 37 North, Range 28 West. It is located immediately south of the B.C./U.S. border and approximately 1½ miles west of Lake Koocanusa. It is directly adjacent (north) of the West Kootenai community.

# **Costs/Funding Sources:**

Products generated by this thinning project will be sold to offset costs. However, a 2011 management plan estimated that it would still cost approximately \$85,000 to complete all aspects of this project after products are sold. A DNRC grant for \$41,000 for fuels reduction was applied for and received, leaving approximately \$44,000 to be funded by FWP.

#### **DISCUSSION OF ALTERNATIVES**

# Alternative A – Proposed Action: Complete Thinning Projects as Proposed

FWP would complete the project as proposed and treat approximately 240 acres in 7 units. Doing so will greatly reduce the risk of wildfire from completely burning the WMA and removing all available cover. Should this occur, the effect on wintering ungulates, especially white-tailed deer, would be severe. Current conditions are so thick that the safety of firefighters battling a blaze on the WMA is a genuine concern. Completion of the project will greatly reduce the risk of wildfire originating on private land to the south and spreading north, and from wildfire originating on the WMA spreading to adjacent private lands and British Columbia. Treated stands will result in a healthier forest, which will allow remaining trees of various age classes to develop fuller crowns for greater snow intercept in winter that will benefit wintering ungulates. Treated stands will also be better able to withstand attacks from insects and various diseases.

#### Alternative B – No Action

Failure to complete this project will maintain the current stagnated forest conditions that are at high risk of burning. The safety of firefighters attempting to control a fire on the WMA will be even further compromised. Risks of wildfire spreading from the WMA to adjacent private lands and Canada will continue or increase. Failure to initiate the conversion of forest stands to healthier conditions will have lasting consequences on the carrying capacity of wintering ungulates in the area.

# **Description of Area Related to Indirect or Cumulative Effects**

The West Kootenai WMA is bordered by private land or Forest Service on 3 sides and Canada on the north. It is directly adjacent to the West Kootenai Community. A 2009 petition signed by 57 area residents specifically asked that FWP address wildfire risks on the WMA with prescribed forest treatments. Failure to address fire risks could have international implications if a wildfire originating on FWP property spread into Canada.

#### **ENVIRONMENTAL EFFECTS**

This section of the environmental assessment presents an evaluation of the impacts of the alternatives, including secondary and cumulative impacts on the physical and human environment.

#### PHYSICAL ENVIRONMENT

# **Land Resources:**

**Alternative A:** The area would continue to provide important habitat for a variety of species into the future. Soils would remain relatively undisturbed, except in the area with approximately 300 yards of new road construction. Cutting units would see some soil disturbance.

**Alternative B**: Under the no-action alternative, there is a greater risk the entire area will burn. If it does, it could be severe enough to bake the soils, resulting in long-term damage.

# **Air Quality:**

**Alternative A**: Under the proposed action, no activities would occur that would negatively affect future long-term air quality of this area. Smoke from the burning of slash would be minimal and relatively short-term.

**Alternative B**: No action would result in greater risk of a major fire that would produce large amounts of smoke. However, this would be for a relatively short duration.

# Water:

**Alternative A**: Under the proposed action, water quality would be maintained, as little or no surface water exists on the WMA.

Alternative B: Same as above.

# **Vegetation:**

**Alternative A**: The proposed alternative would increase the diversity, quantity, and quality of native vegetation in the project area. However, there is a risk of weeds infesting the treated areas, which would then be treated with an herbicide.

**Alternative B**: Under the no-action alternative, the risk of weed infestations would be less unless the area burns. At that point, there could be a major increase in weeds, which would then require chemical treatment.

# Fish and Wildlife:

Alternative A: Treating the area as described will improve and protect habitat conditions and increase long-term carrying capacity for wintering ungulates and many other species by regenerating stands that are currently not growing and also experiencing increased tree mortality. With an increased edge effect and creation of openings, there may be an increase in the number of ungulates using the area in summer as well, not to mention various smaller wildlife species such as songbirds. This alternative will reduce hiding cover for grizzly bears, but that reduction is unlikely to have any adverse impacts. Although bear use may increase during the spring fawning/calving season, these treatments are unlikely to hold bears in the area because the property does not contain other key habitat components such as shrubfields or riparian areas. Fish are unaffected by this project proposal because there is no permanent water on the property.

**Alternative** B: The no-action alternative will result in the continued degradation of habitat that will result in lower carrying capacities and increased risk of stand-replacing wildfire across the entire property. Should the area burn as it exists now, the burn could be severe enough that wintering ungulates would lose a major source of cover during deep snow periods. With time, however, there will be a shift in the types and numbers of species utilizing the area as succession occurs.

#### **HUMAN ENVIRONMENT**

# **Noise/Electrical Effects:**

**Alternative A**: This proposed project would have a short-term effect on noise with no effect on electrical disturbance.

Alternative B: There would be no effect on noise or electrical levels.

# Land Use:

**Alternative A**: No appreciable change in land use is foreseen. Deed restrictions on the property only allow the property to be used for providing wildlife habitat.

Alternative B: Same as above.

# **Risk/Health Hazards:**

**Alternative A**: The proposed action will significantly reduce the risks posed by wildfire to adjacent landowners and firefighting personnel.

**Alternative B**: No action could result in serious risks to health and safety to both firefighters and the neighboring community, should a fire occur.

# **Community Impact:**

**Alternative A**: The proposed action will have a positive impact on the adjacent West Kootenai community with its reduced risks of wildfire. The 2009 petition with 57 signatures supports this contention. The maintenance or enhancement of ungulate populations is also a benefit for most community members in that they will have more and better hunting opportunities and more opportunities to observe wildlife, particularly as the health and vigor of the treated stands improve over time. The proposed action may also provide some short-term employment opportunities and products that might be used in area businesses.

**Alternative B**: The no-action alternative maintains fire risks to the local community, which is a real and valid concern. Hunting opportunities will likely decrease, and there will be no new employment opportunities.

# **Public Services:**

**Alternative A**: There will be no increase in the need for public services

**Alternative B:** Same as above.

#### Aesthetics/Recreation:

**Alternative A**: The proposed action will result in forested stands that are more open and more aesthetically pleasing than current conditions. Recreational opportunities, especially hunting, are also likely to increase because visibility in the area will be increased.

**Alternative B**: No action means that the current aesthetic and recreational values of the property would likely remain the same or decrease in the future, especially if the area was to burn.

#### **Cultural/Historic Resources:**

**Alternative A**: The project area contains the remnants of an old homestead in the northwest corner, which is comprised of several old log structures in various stages of decay. Harvest activities would avoid that immediate area so no impact would occur to the homestead.

**Alternative B:** The old homestead would be unaffected under the "No Action" alternative.

# **Summary Evaluation of Significance:**

Based upon evaluation of potential impacts related to the proposal, a determination has been made that an EIS is not required. The EA is an appropriate level of analysis for the proposed action because: 1) no endangered or threatened plant or animal species will be significantly affected, 2) there are no long-term or irretrievable impacts to the physical environment, and 3) there are no negative impacts to the human environment.

# **List of Agencies Consulted During Preparation of the EA:**

Department of Natural Resources and Conservation (DNRC)

#### **Public Involvement:**

The Region and FWP have received considerable support for the proposal during project exploration and development. The 2009 petition signed by 57 area residents is evidence of their support. The Region will make the EA available to interested individuals, groups, and agencies, and will hold a public meeting in the West Kootenai at Kootenai Kraft & Grocery, 7127 West Kootenai Road, Rexford, MT, on August 9, 2012, at 7:00 p.m., to discuss the proposal and receive public comment. There will be a 21-day public review, from July 31 through August 21, 2012. Please direct comments/questions to Tim Thier, FWP Area Wildlife Biologist, (406) 882-4697 or e-mail to tthier@interbel.

#### Cost:

The estimated cost to complete this project (after products are sold) is \$85,000. DNRC is providing \$41,000 through a fuels reduction grant; FWP will pay the remaining \$44,000.