

# **DRAFT Environmental Analysis**

For the

## **Trail Runs Through It Phase 1A**

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## CHECKLIST ENVIRONMENTAL ASSESSMENT

|                                      |  |
|--------------------------------------|--|
| <b>Project Name:</b>                 | <u>Trail Runs Through It Phase 1A</u>  |
| <b>Proposed Implementation Date:</b> | Summer, 2009   |
| <b>Proponent:</b>                    | City of Whitefish  |
| <b>Location:</b>                     | approximately two miles west of Whitefish and just east of Skyles Lake, more specifically described as Sections 33 & 34, T31N, R22W. |
| <b>County:</b>                       | Flathead   |

### I. TYPE AND PURPOSE OF ACTION

The proponent, the City of Whitefish, acting in conjunction with the City-appointed Trail Runs Through It (TRTI) Steering Committee, has requested the DNRC to grant authorization for construction and operation of Phase 1A of the TRTI trail complex plan. The TRTI project is an amenity identified in the previously approved Whitefish Neighborhood Plan (a process in which DNRC participated), and through that plan, DNRC agreed to allow a window of time for TRTI proponents to initiate trail development and arrange corresponding compensation to the Trust for the TRTI project on Trust Lands (*ref. pages 4 and 12 of the Whitefish Neighborhood Plan at [http://dnrc.mt.gov/trust/Whitefish\\_neighborhood\\_plan/final\\_plan.pdf](http://dnrc.mt.gov/trust/Whitefish_neighborhood_plan/final_plan.pdf)*). Montana Environmental Policy Act (MEPA) review was previously conducted ("TRTI EA dated 3/12/07") and a Land Use License (LUL) subsequently awarded to the City of Whitefish (see Exhibit B) for the initial TRTI construction, however, the proposed Phase 1A portion of TRTI has been further refined to include a different, looped route, mixed use of the trail (equestrian, mountain biking, and hiking), and two parking areas and a revised trail mileage. Additionally, nearby property owners have requested more opportunity to comment on Phase 1A's construction and operation. Since there were substantial changes to the initial proposed action, DNRC is conducting additional MEPA review through an Environmental Assessment (EA) specific to Phase 1A of the TRTI project as it is now proposed to accommodate the desired public involvement and insure environmental review of the refined plan. Phase 1A is the initial phase of the larger TRTI project and is limited to the specific trail segments (hereinafter the "premises" or "project area") as identified on Exhibit A.

Granting the proposed authorization, which would be an amendment to the existing Land Use License, would meet the time window and need of the Whitefish Neighborhood Plan process and permit the proponent to construct and maintain a non-motorized recreation trail complex identified as "Phase 1A," and provide for the day-to-day operation of that proposed trail amenity.

The proposed project area is located on State Trust lands approximately two miles west of Whitefish and just east of Skyles Lake, more specifically described as Sections 33 & 34, T31N, R22W. The proposed Phase 1A trail would extend from Lion Mountain Loop (LML) Road to the existing parking lot at the Two Bear gate and the north boundary of the State ownership in Section 33. Those using the trail may be required to pay a fee. The applicant proposes to build approximately 5 miles of trail, approximately 700 linear feet of road, a parking area, and sanitation facilities to accommodate use of this area. The trail will be constructed to International Mountain Biking Association (IMBA) standards and will require approximately 300 feet of stone to be removed by blasting. Some thinning of submerchantable (brush and small diameter) timber may occur up to 50 feet on either side of the trail, under DNRC oversight and to DNRC standards. Trail, trailhead facilities and parking will not be specifically designed for equestrian use. For user safety, horse use will be limited to that portion of the trail west of the cliff-band as identified on the above-referenced map.

The original construction LUL requires an Operating Plan to be in effect. The draft TRTI Operating Plan, as identified in Exhibit C, outlines the TRTI operating process in more detail and a final Operating Plan (approved by DNRC) will be a required provision of granting the land use authorization for this project. If the land use authorization approval is granted, it is anticipated that construction would occur in summer, 2009.

The lands involved in this proposed project are held by the State of Montana in trust for ACI (Agriculture College, Morrill Grant) and ACB (Agriculture College, Second Grant), per the Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11. The Board of Land Commissioners and the DNRC are required by law to administer these Trust Lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA).

## II. PROJECT DEVELOPMENT

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

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

The MEPA for the EA of the original TRTI Plan encompassed numerous public comment opportunities, beginning in May of 2003 when the DNRC came to Whitefish to prepare a Neighborhood Plan for the 13,000 acres of State Trust Lands near Whitefish. Local citizens petitioned the State Board of Land Commissioners (Land Board) to charter a committee comprised of Whitefish citizens working in collaboration with the DNRC to develop the Neighborhood Plan in order to represent the needs and values of the community. The Whitefish School Trust Lands Advisory committee was established and completed the Whitefish Neighborhood Plan (WNP) in October, 2004. Included in the implementation phase of the plan is the establishment of a recreation trail looping around Whitefish Lake and the city itself.

Since that time, a planning committee for the project dubbed "Trail Runs Through It" (TRTI) was selected, and they developed the TRTI Master Plan. Beginning in January, 2006, the planning committee met twice monthly and through August, 2006 used the following techniques to gather public input and develop the trail plan: public meeting (130 in attendance); on-line survey (260 respondents); press releases; newspaper articles; radio and television coverage; monthly e-newsletter to 300 addresses; all-day design charette; field trips and tours. This plan was unveiled to the public at a public meeting on August 30, 2005. Public comments generated from that meeting were overwhelmingly positive (see 3/12/07 EA).

An informational report was presented to the MT Land Board at their September, 2006 meeting.

Numerous meetings and public gatherings have been held pertaining to the TRTI project since 2006. During the 2008-09 period, the TRTI Steering Committee sponsored its own TRTI-related Open Houses on October 14, 2008 and May 5, 2009 in the City Council chambers at the Whitefish City Hall.

For this MEPA specific to the refined Phase 1A, the following opportunities for public comment occurred:

Letters requesting comment from neighboring landowners (GIS-generated list provided by Flathead County) and interested parties and agencies were circulated in March, 2009. Additionally, legal advertisements for a "Request for Comments" were placed in the March 26, April 2, April 9, April 16, and April 23, 2009 issues of the *Whitefish Pilot*, respectively, and in the March 29, April 5, April 12, and April 19, 2009 issues of the *Sunday Daily Inter Lake*, respectively. Approximately 28 written, verbal, and email comments were subsequently logged. Some of those respondents (primarily neighboring landowners) requested an opportunity to meet and discuss the project with DNRC. Consequently, a DNRC-sponsored Open House was scheduled for the evening of Tuesday, June 16, 2009, and announced via legal advertisements placed in the May 28, June 4, and June 11, 2009 issues of the *Whitefish Pilot* and letters addressed to neighboring landowners and interested parties, as well as emails sent to the three Flathead County Commissioners, the Flathead County Sheriff, and the Flathead County Planning Director.

An Interdisciplinary Team (ID Team) was formed comprised of DNRC specialists, a TRTI Steering Committee member, the TRTI coordinator, and a nearby landowner to review issues and determine mitigations. Implementation of many of these mitigations is addressed in the Draft Operating Plan (Exhibit C).

The comments received throughout the 2009 process were grouped into approximate categories and entered into a TRTI Comments and Issues Matrix. The Issues Matrix is divided into two categories: 1) Issues Analyzed In Further Detail, and 2) Issues Not Analyzed In Further Detail. Issues Analyzed In Further Detail were determined to be relevant in assessing the impacts associated with the proposed action. Issues Not Analyzed In Further Detail depict questions or comments that could be addressed through a simple response or through project design (i.e. mitigations, Operating Plan specifications, etc.). The following table lists Issues Analyzed in Further Detail and where they are addressed in the document and Issues Not Analyzed in Further Detail with responses accompanying those issues.

**Issues Analyzed in Further Detail /Issues Eliminated from Further Analysis**

*(Please note that the final version of this table will have additional citations.)*

|  | Where Addressed in the EA              | DNRC Response  |
|--|--|--|
| Specifically requests public meeting for MEPA process                    | II-1                                   | Open House scheduled for 6/16/2009, 5-8 p.m. at Whitefish City Hall.   |
| Wants to be kept informed  | II-1                                   | Letters, legal advertisements, correspondence, emails, and public meetings.  |
| Wants local neighbors' meeting   | II-1                                   | Open House scheduled for 6/16/2009.  |
| Project schedule needs to accommodate more planning & public involvement | II-1                                   | EA process was extended to include public involvement in the External/Internal Inter comment period on the Draft EA was incorporated into the process.                           |
| Wants to help with written Operating Plan                                |  | Member of the public included in the ID Team.  |
| Specifically wants "snail-mail" contact.                                 |  | Done.  |
| Wants written operating plan   | See attached Operating Plan.           | A Draft Operating Plan was written with input from the External/Internal ID Team members.  |
| Plan meets goals outlined in WF neighborhood plan                        | I                                      | Yes.   |
| Future Issue Resolution  | Draft Operating Plan, Issue Resolution | An issue resolution process was determined by the ID Team and incorporated into the plan.  |
| Insurance & liability & perf bonding                                     | See Land Use License.                  | Standard requirement on DNRC land use authorizations.  |
| Concerned about Donut issue; wants county involvement                    | I-1, III-13, IV-14, IV-19              | Doughnut issue/Critical Areas Ordinance researched with Whitefish City Attorney. consulted on various EA issues. The Flathead County Sheriff, and all three Flathead encouraged. |
| TRTI permit vs. State Rec Use Permit issues                              | IV-20                                  | While the current LUL allows for a fee system for TRTI, DNRC and TRTI have agreed insuring approximately the same return to the Trust beneficiaries.                             |
| Don't preclude other uses of that State land                             | I-1, III-13, IV-14, IV-19              | LULs allow for other uses of the land and are not exclusive.   |

|   |  |   |
|---|--|---|
| Trail use permit should be required                                       | See Land Use License.  | While the current LUL allows for a fee system for TRTI, DNRC and TRTI have agreed to insure approximately the same return to the Trust beneficiaries. |
| Other Revenue from St lands should not be precluded                       |  | Will not.   |
| Trail will support & compensate the ST trust                              |  | As per the Land Use License.  |
| Trail will allow increased public recreation opportunities                |  | Yes.  |
| Trail will educate public about working forests                           | See Operating Plan, Interpretive Signage.  | Trail signage planned.  |
| Trail will educate public about trust lands                               | See Operating Plan, Interpretive Signage.  | Trail signage planned.  |
| Trail will be a good example for other similar projects                   |  | This is a project goal.   |
| Postpone permanent easement until LUL expires to protect state's interest |  | Issuing a permanent (use) easement is a sufficiently permanent disposition as to require initiation for this.   |
| Who are decision makers?  |  | Greg Poncin, Kalispell Unit Manager, will be the Decision Maker for this EA and at 406-751-2263 or gponcin@mt.gov.                                    |
| Monitoring, patrolling, & policing trail                                  | IV-14, IV-16, IV-18; Draft Operating Plan (see Trail Ops, Issue Resolution, Safety & Law Enforcement, and Multi-Use Trail System). | Please see detailed information at cited locations in document(s).  |
| Ongoing maintenance responsibility  | III-3, III-6, IV-13, IV-14, IV-18; Land Use License; Draft Operating Plan (see Trail Ops, Issue Resolution)                        | Please see detailed information at cited locations in document(s).  |
| Trail/Trail head Maintenance, seasonal & year-round                       | IV-14, IV-16, IV-18; Draft Operating Plan (see Trail Ops, Issue Resolution)  | Trails are anticipated to be kept open for year-round use. Please see detailed information at cited locations in document(s).                         |
| Risk of trespass/vandalism for neighbors                                  | IV-14, IV-18; Draft Operating Plan (see Safety & Law Enforcement, Existing Trails, Issue Resolution)                               | It is anticipated and hoped that new trails will concentrate area use, but signage and information at cited locations in document(s).                 |
| Who is responsible for new trails   | I, I-2, IV-13, IV-14, IV-16; Draft Operating Plan (see all sections).  | The TRTI Steering Committee and the City of Whitefish.  |
| Garbage   | IV-14, IV-16, IV-18; Draft Operating Plan (see Trail Ops, Issue Resolution, Safety & Law Enforcement, and Multi-Use Trail System)  | The TRTI Steering Committee will contract for removal, please see detailed information at cited locations in document(s).                             |
| Emergency Response  | IV-14, IV-16, IV-18; Draft Operating Plan (see Trail Ops, Issue Resolution, Safety & Law Enforcement, and Multi-Use Trail System)  | 911 will be Emergency Response. Please see detailed information at cited locations in document(s).  |

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|---|--|--|
| Concerned about noxious weeds                           | III-7, IV-14; Draft Operating Plan (Trail Operations)  | The TRTI Steering Committee will contract for removal, please see detailed information at cited locations in document(s).  |
| May increase illegal & unsafe use of area               | III-7, IV-13, IV-14, IV-18; Draft Operating Plan (see Existing Trails, Issue Resolution, Safety and Law Enforcement)                               | It is anticipated and hoped that new trails will concentrate area use, but signage and information at cited locations in document(s).  |
| Organized trail system may mitigate illegal forest use  | III-7, IV-13, IV-14, IV-18; Draft Operating Plan (see Existing Trails, Issue Resolution, Safety and Law Enforcement)                               | It is anticipated and hoped that new trails will concentrate area use, but signage and information at cited locations in document(s).  |
| Will near by private property boundaries be marked      | Draft Operating Plan   | Provision is made for marking boundaries with consistent signage where the trail crosses private property. TRTI to work with them on additional signage if desired.  |
| Trail/trail head lighting                               |  | Not currently planned. Lighting may be addressed as an improvements request if needed.   |
| Proper trail parking, horse trailer use, & road signage |  | The Draft Operating Plan makes provision for a sign procedure. Horse trailer use on L...   |
| Suggests private property signage                       |  | Yes, with consistent signage.  |
| Supports thinning trail area                            | TBD  | buffer area on either side of trail is identified.   |
| Encourages CWPP involvement                             |  | Yes, they are involved-2 WAF-SC board members on the ID Team.  |
| Increased fire risk concerns                            | III-7, IV-13, IV-14, IV-18; Draft Operating Plan (see Existing Trails, Issue Resolution, Safety and Law Enforcement, Trailheads and Access Roads). | Please see detailed information at cited locations in document(s).   |
| TRTI group commits to being good neighbors              |  | Have detailed issue resolution process and agreed to help with issues of increased use of the community.   |
| May diminish privacy for neighbors                      | III-11, IV-14, IV-18, IV-20; Draft Operating Plan (see Safety and Law Enforcement, Issue Resolution, Existing Trails, Trailhead and Access Roads). | Provision is made for marking boundaries with consistent signage where the trail crosses private property. TRTI to work with them on additional signage if desired.  |
| May diminish property values                            |  | This is difficult to determine and/or measure; there are also communities where near... resource articles).  |
| Costs/Funding   | IV-14, IV-16, IV-18, IV-24; Draft Operating Plan (see Trail Operations, Permits and Fees)  | TRTI Steering Committee, Flathead Gateway Partners, and The City of Whitefish.   |
| Will project be required to meet WF engineering specs   | III-13   | The Whitefish City Attorney has determined that the City cannot impose the Critical Areas Ordinance specifically designed to avoid water/wetlands areas, however the City Attorney has implemented consistency with the CAO in those areas. As the proposed project was not... management has clarified that it will entertain such changes, but reserves the right to... additional analysis. |

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| Wants DNRC logging road surveyed                         | See Project Area Map.   | Logging Road will be part of the Trail, see maps.   |
| Suggests planting live buffers on private boundaries     |   | This could be explored as a future mitigation if needed.  |
| May negatively impact agricultural operation             | III-6, III-15, IV-14  | Proponent has agreed to share in dust control and/or road use mitigation procedures   |
| Wants cleared buffer around parking area                 |   | The area slated for the parking lot is already gladed, not heavily timbered.  |
| Equestrian/Biking/Hiking interface may not work          | I, II-3, IV-14; Draft Operating Plan (see Multi-Use Trail System, Trailheads and Access Roads)                        |   |
| Human/wildlife interface concerns                        | III-8, III-9, IV-14; Draft Operating Plan (See Interpretive Signage)  |   |
| Wants to see trail constructed ASAP                      |   |   |
| Wants 100% equestrian access                             | I, IV-14, Draft Operating Plan (See Multi-Use Trail Plan)   |   |
| Sanitary facilities need along trail                     |   | Trailheads have been positioned at less than a 2-3 hour (very slow) hiking distance from roads specifically to <i>avoid</i> motorized vehicle access, placing other facilities intermittently along the trail to avoid vandalism, and hazardous pollution situations. |
| Concerned about interface with existing "evolved" trails | III-7; IV-14, IV-20; Draft Operating Plan (See Existing Trails)   | This issue will be specifically reviewed at annual public and operating meetings, and   |
| No cultural resources identified                         |   | N/A   |
| Lion Mtn Road Issues                                     | II-2, III-6, IV-14, IV-15, IV-18, IV-24; Draft Operating Plan (see Project Description, Trailheads and Access Roads). | Proponent has agreed to share in dust control and/or road use mitigation procedures   |
| Parking may be inadequate                                | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Night traffic  | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Bike Lane should be on west side of Lion Mtn access road | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Air quality concerns                                     | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Traffic control;safety issues                            | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Road maintenance;pot holes/mud/snow plowing              | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Safety of multi-user (vehicles/bikes/pedestrian/pets)    | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Dust control;air quality/effect on crops                 | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Speeding   | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| East side = short traffic view lanes                     | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Suggest bike lane on West side of road                   | <i>See Lion Mountain Road Issues, above.</i>  | "   |
| Need speed bumps or suggest movable speed bumps          | <i>See Lion Mountain Road Issues, above.</i>  | "   |

|  |  |   |
|--|--|---|
| Night traffic  | <i>See Lion Mountain Road Issues, above.</i> | " |
| Blind corner at parking lot                              | <i>See Lion Mountain Road Issues, above.</i> | " |
| LML Rd should be paved/Improved                          | <i>See Lion Mountain Road Issues, above.</i> | " |
| Need bike lane   | <i>See Lion Mountain Road Issues, above.</i> | " |
| Safety issue at intersection of LMLR (west end) & Hwy 93 | <i>See Lion Mountain Road Issues, above.</i> | " |
| Mitigate road damage                                     | <i>See Lion Mountain Road Issues, above.</i> | " |

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

An approach permit will be needed from Flathead County Road Department for the TRTI parking lot approach to Lion Mountain Loop Road. If work is conducted in the LMLR roadway and/or storm water runoff are affected by such work, additional permits from Flathead County may be needed. Permits are also required from the Flathead County Environmental Health Department to authorize the installation of the proposed vault toilets.

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## 3. ALTERNATIVES CONSIDERED:

Alternative A (No Action Alternative): Under the No Action Alternative, no activity pertaining to Phase 1A would be undertaken. No related trail would be constructed and no parking lots and access roads would be built; proposed trail corridor and parking/road areas would remain as productive timber-harvest land. Compliance with the goals of the TRTI Master Plan project as laid out in the Whitefish Neighborhood Plan would not be achieved.

Alternative B (Action Alternative): The TRTI Phase 1A project would be constructed to IMBA (International Mountain Biking Association) standards and operated as a mixed-use recreational trail as proposed by the proponent. The proposed trail would extend from Lion Mountain Loop to the existing parking lot at the Two Bear gate and the north boundary of the State ownership in Section 33, and create two twisting looped trail segments by connecting at both ends (and one center point) of two stretches of proposed logging roads as depicted on the map attached (Exhibit A). Ultimately, the larger of those loops will eventually be bisected by construction of a short connector trail). Approximately 700 linear feet of road, a parking area, and sanitation facilities would be constructed, with these respective areas being removed from timber production. An approximately 39" wide trail would be centered on a trail corridor approximately 5 miles long and generally 10' wide, but interspersed with wider trail "bulb-outs" placed approximately every thousand feet as well as some additional intermittent width as necessary to accommodate the initial trail construction on steeper slopes, and varying portions of this corridor will also be removed from timber production. Up to approximately 300 feet of stone is anticipated to be removed by blasting, and some thinning of submerchantable (brush and small diameter) timber may occur up to 50' on either side of the trail, to DNRC-designated, forest-management standards. Compliance with the goals of the TRTI Master Plan project as laid out in the Whitefish Neighborhood Plan would be achieved.

Alternatives Developed And Considered, But Eliminated From Detailed Analysis: Originally two other action alternatives were developed and considered in the course of this analysis. The first was the proponent's original trail configuration and called for two segments of trail to be located within approximately 10' of the proposed logging roads. This location was included in the public scoping document distributed in March, 2009. The second replaced two parallel road/trail segment configurations with the road serving as the trail in those segments. Ultimately, collaborative review among the proponent and DNRC led to a final action alternative ("Alternative B") that met the goals of both earlier action alternatives, offered additional mitigation to impacts that the original two Action alternatives did not, enhanced the recreation experience, and was not substantively different in trail construction mileage or location than the first action alternative. Consequently, both the first and second action alternatives were eliminated from further review, with Alternative B deemed to replace them as the "Action Alternative" for the purposes of this EA.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain **POTENTIAL IMPACTS AND MITIGATIONS** following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

#### 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.*

For documentary Geology and Soils analysis of both the No Action Alternative A and Action Alternative B, and proposed mitigations, please see Exhibit D.

#### 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.*

Because no trails are proposed near surface water, a very low risk of impacts to water quality and fisheries would exist. Unless soils disturbing activities are planned near surface water, no further analysis is deemed appropriate. Please see Exhibit E.

#### 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.*

For No Action Alternative A, no measurable direct, indirect, or cumulative impacts to air quality are anticipated.

For Action Alternative B, direct, indirect, and cumulative impacts related to initial trail, road and parking lot construction are expected to be minor and temporary, with minor particulate being released during corresponding periods of soil disturbance. Once the trail is completed, traffic on the TRTI-associated access road and parking lot, as well as on the Lion Mountain Loop Road (LMLR), may increase intermittently and seasonally over time as public awareness and use of the TRTI system increases. Neither the City of Whitefish nor Flathead County requires that the TRTI parking lot or access road be paved initially, and the project area lies outside the boundaries of the current Air Pollution Control District (*May 29, 2009 letter from Whitefish City Attorney John Phelps and June 8, 2009 conversation with and subsequent email from Flathead County Sanitarian Joe Russell*). The Air Pollution Control District is depicted in Exhibit F.

During the public comment period on this proposal, nearby residents expressed concern about the effects of air quality impacts due to increased traffic on the LMLR in their neighborhood. Additionally, there are several undeveloped residential lots also accessed by the LMLR that could create additional traffic and dust if they were developed. To date, local residents on the LMLR have shared in some cooperative dust abatement efforts and have explored the idea of a group venture to address paving the LMLR (*conversation with Bick Smith*).

As mitigation for potential impacts related to increased traffic in the area due to the TRTI project, the proponent has agreed to participate on a pro rata basis in road maintenance and/or future road improvements for the LMLR as well as monitoring parking lot use and meeting annually with the public to help determine what improvements may be needed (TRTI Steering Committee discussion in April, 2009/Draft Operating Plan, Exhibit C). This arrangement will be formalized in the Land Use License Amendment and/or other documents as necessary.

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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.*

For documentary Vegetative analysis of both the No Action Alternative A and Action Alternative B, and proposed mitigations, please see Exhibit G.

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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.*

For documentary Terrestrial, Avian, and Aquatic Life and Habitats analyses of both the No Action Alternative A and Action Alternative B, and proposed mitigations, please see Exhibits E and H.

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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.*

For documentary Unique, Endangered, Fragile, or Limited Environmental Resources analysis of both the No Action Alternative A and Action Alternative B, and proposed mitigations, please see Exhibit H.

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## **10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

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

No measurable direct, indirect, or cumulative impacts are anticipated for either the No Action Alternative A or the Action Alternative B.

The MT DNRC staff archaeologist consulted with the SHPO and although a few cultural resource sites have been documented within the legal locations of the proposed trail system, these properties consist of historic buildings or structures, historic timber harvesting sites, and the railroad route. Based on the nature of the proposed development, he determined there is no need to conduct an additional archeological investigation for the currently proposed trail project. No development-related impacts are expected to occur to known cultural resources with construction of the proposed trail system (3/12/07 TRTI EA and June, 2009 email confirmation of same from DNRC Archeologist).

A representative of the Confederated Salish & Kootenai Tribes of the Flathead Nation was contacted and also indicated that they do not know of any significant cultural resources in the area, and they have asked to be kept informed if any cultural resources are encountered through implementation of either Action Alternative (April 16, 2009 letter).

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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 measurable direct, indirect, or cumulative impacts to aesthetics are anticipated with No Action Alternative A. With Action Alternative B, the proposed trail is anticipated to increase the access to positive aesthetic opportunities and scenic locations. Though the trail may be visible to neighboring landowners in a few specific locations, because of the generally undulating nature of the topography, no measurable effect is anticipated on the area's view shed.

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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 measurable direct, indirect, or cumulative impacts on resources of land, water, air or energy are anticipated with either the No Action Alternative A or the Action Alternative B.

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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.*

- March 12, 2007 Checklist EA for the Trail Runs Through It Phase 1A .
- February 2, 2009 Decision Memo, USDA/Forest Service for "A Trail Runs Through It Project," Flathead National Forest, Tally Lake Ranger District.
- Beaver/Swift/Skyles Timber Sale Environmental Assessment (April, 2009): Comment period ended June 8, 2009.
- Environmental Assessment for the Lion Mountain Fuels Reduction Project (June, 2009): Comment period ended May 30, 2008.

There are segments of the logging roads outlined in the last two above EAs that are part of the proposed looped trail conformation depicted in Action Alternative B. These roads will remain in place and may be used intermittently for other timber sales over the coming years. During logging, segments of the trail the trail-related segments of the logging road loops may be temporarily closed to the public. In addition, it is possible that other segments of non-road related trail may be closed during logging operations for reasons of safety and efficiency.

Action Alternative B has been specifically designed to accommodate use of the logging roads as part of the trail complex, and would be designed to allow continued forest management in this area under the State Forest Land Management Plan and associated Administrative Rules for Forest Management.

- Whitefish Neighborhood Plan, adopted in 2006.

The Whitefish Neighborhood Plan was adopted by the DNRC. The same plan was adopted by the City of Whitefish and Flathead County as the growth policy for their respective jurisdictional areas. Implementation Strategy 2.1 of the Whitefish Neighborhood Plan is to "Create a Regional Loop Trail." The proposal is anticipated to address the first phase of a growing trail system that would eventually establish a longer-term land use authorization.

- Whitefish Critical Areas Ordinance, adopted April 1, 2009.

The Whitefish Critical Areas Ordinance (CAO) was adopted to address development processes on "critical areas" within the City of Whitefish's jurisdictional area. Adoption of the CAO resulted in litigation between Flathead County and the City of Whitefish over the planning and zoning jurisdiction of the two-mile extra-territorial area (hereinafter referred to as "doughnut") surrounding the City limits.

The eastern half of the proposed project area lies within the two-mile doughnut surrounding the City of Whitefish. However, the City has determined that it cannot legally impose the CAO on State lands (*May 29, 2009 letter from Whitefish City Attorney John Phelps*); although the proposed trail route was designed specifically to avoid areas affecting wetlands/water features, the City has indicated that it may choose to implement CAO compliance on its project if it feels it is needed. The DNRC advised City representatives that compliance with the ordinance is the City's choice, however the project was not originally submitted or scoped compliant with the CAO, and if a desire to comply occurs midway through the project implementation and leads to substantive changes in what was proposed, the DNRC may require further analysis.

- May 6, 2009 Order and Rationale Granting Preliminary Injunction in the case of The City of Whitefish, a municipal corporation (plaintiff) v. Board of County Commissioners of Flathead County, the governing body of the County of Flathead, acting by and through Joseph D. Brenneman, Gary D. Hall, and Dale W. Lauman.

Though the Whitefish Neighborhood Plan remains in effect, the project area falls within the two-mile doughnut surrounding the City of Whitefish. The above Rationale reflects the current status of the litigation between the City of Whitefish and Flathead County on who has jurisdictional control over planning and zoning in that belt area.

#### IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain *POTENTIAL IMPACTS AND MITIGATIONS* following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

#### 14. HUMAN HEALTH AND SAFETY:

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

The proposed project area is located within two miles of the City of Whitefish and borders on numerous private properties. Consequently, many portions of the area currently experience some impacts consistent with a forest/urban interface (both authorized and unauthorized recreational use of the project area are generally greater than that occurring in more remote areas). Impacts to human health and safety in an interface area can be challenging to measure because, on a case-by-case basis, they can be either beneficial or negative, depending on the particular situation (i.e., increased authorized public use of the area may theoretically inhibit perpetrators' willingness to commit violations for fear they may be witnessed, however increased use of the area could also theoretically increase the risk of violation due to the increase in public access). Numerous issues pertaining to human health and safety were brought up by nearby property owners and other respondents during the public comment period for this project (See *Issues and Comments Table* in Section II.1).

Adverse effects to adjacent landowners and others may be divided into two areas: trail use-related effects, and Lion Mountain Loop Road-use related effects.

##### Trail-Use Related Effects

##### Existing Conditions

Currently, the proposed project area is undeveloped DNRC classified forest land bordered by private property. Intermittent logging and fuels reduction projects may occur in the area and cause sporadic periods of forest management-related activities. As previously noted, the project area's proximity to the City of Whitefish creates a predilection for urban interface problems and unauthorized use/violations in the area.

##### Environmental Effects

##### *Direct and Indirect Effects to Health and Human Safety as a Result of Trail Use:*

With the No Action Alternative A, the existing unauthorized trails in the area would likely continued to be used and a moderate increase in use over time may occur consistent with the area's population growth. This potential increased recreational use of the area would not be closely monitored and it is probable that over time there could be a corresponding risk of increased noxious weed-spread, littering and garbage problems, diminished privacy, human-caused fires, and trespass/vandalism to neighboring property.

With the Action Alternative B, adjacent landowners and others may experience adverse effects pertaining to the proposed trail's construction, maintenance, use, and associated activities in terms of a risk of increased

increased noxious weed-spread, littering and garbage problems, diminished privacy, human-caused fires, and trespass/vandalism to neighboring property. If the trail is not monitored, policed, and maintained, unauthorized use and violations in the area could increase, as may related emergencies (fire, theft, injury, any of which may also increase) if the proposed mixed use trail is not handled successfully.

Mitigations were developed to offset for many of these effects are detailed in the Licensee's Draft Operating Plan (Exhibit C) and/or the existing LUL (Exhibit B). Potential mitigations include:

- An issue-resolution process has been determined to insure that if operational or policy complaints occur and are not satisfactorily addressed when first reported to either the City or the TRTI coordinator, a resolution can be effected through additional channels (see "Issue Resolution Flow Chart" in the Draft Operating Plan, Exhibit C).
- The proposed trail route has been specifically engineered and professionally designed to minimize potential mixed-use conflicts, minimize illegal motorized trail use, and provide for safe recreational use. Trail design is consistent with the industry standards developed by IMBA for sustainable trail design and multi-use or shared-use systems, and encompasses such design features as reduced grade percentages to facilitate adequate stopping for bikers, avoiding blind corners and thinning trail corridor vegetation to maintain lines of sight so various users can see each other, and providing for multiple "pull-outs" along the trail for users to pass one another or stop and rest along the trail. In addition, equestrians will be discouraged from using the cliff band area that separates Lion Mountain from Skyles Lake due to safety issues for horses in that particular location (see Draft Operating Plan, Exhibit C).
- Signage will be installed at trailheads, parking areas, and along the trail as appropriate to inform users about trail-use safety, procedures, etiquette, and other pertinent information (see Draft Operating Plan, Exhibit C).
- The proposed trail route has been positioned to minimize proximity to neighboring private land and to preserve personal privacy. Signage will be designed to educate trail users and discourage trespassing. Boundary-specific signage is planned for those segments that are nearer to private property and the TRTI Steering Committee may also provide signage for interested landowners to place along their boundaries if desired (see Draft Operating Plan, Exhibit C).
- A volunteer force will be organized by the TRTI Steering Committee/TRTI coordinator and provides for both parking lot steward responsibilities as well as a bike patrol. The parking lot steward will assist the project coordinator in maintaining trailheads and parking areas, including picking up garbage, checking restrooms for cleanliness and supplies, providing information to visitors, and reporting vandalism. The bike patrol will ride the trail individually or in teams, providing education and assistance to other trail users. Although the patrol will not provide law enforcement, it will provide visitor assistance, monitor illegal trail activity such as motorized use or unauthorized trail building, and will make note of trail hazards that require maintenance or mitigation (see Draft Operating Plan, Exhibit C).
- As the TRTI complex will be located outside Whitefish City limits, the Flathead County Sheriff is primarily responsible for law enforcement; in case of emergency, trail users will be required to dial 911. The 911 Call Center will dispatch the appropriate emergency response, which could include ambulance, police, and/or fire personnel. Additional law enforcement along the trail may be provided by the Montana Fish, Wildlife & Parks Region 1 Trust Lands Game Warden(see Draft Operating Plan, Exhibit C).
- Trail signage and volunteer personnel in the area will provide increased opportunities to educate the public about fire risk, safe practices, and prevention opportunities. Increased numbers of people in the area may also increase the likelihood that emergency personnel will be alerted quickly should a fire occur. The proposed trail's construction will also provide opportunity to reduce fuel loading in close proximity to potential fire corridors, as well as increase access to the forested area to enhance firefighter safety should a fire occur.
- The TRTI Draft Operating Plan calls for an annual review meeting that will be open to the public in order to maintain good relations, minimize conflict, and provide the best possible user experience. In addition, the TRTI Steering Committee will also annually meet jointly with DNRC to promote good relations and discuss

any issues related to the TRTI project. The intent of these meetings will be to expose any issues and concerns related to the TRTI project and facilitate solutions to address them (see Draft Operating Plan, Exhibit C)

While it is hard to predict whether or not increased use will lead to increased violation or risk, it is also possible that adjacent landowners may experience some benefits when these mitigations are implemented; unauthorized use/violation in the area may decrease due to potential perpetrators' possible unwillingness to violate or act illegally in proximity to an increased number of TRTI volunteers and trail users. Possibly, development of the trail may result in some increased risk to health and human safety, however the above listed mitigations are expected to reduce such risk. Assuming the complete list of mitigations is implemented, direct and indirect effects to health and human safety are expected to be minor.

#### Lion Mountain Loop Road-Use Related Effects:

##### Existing Conditions

The Lion Mountain Loop Road (LMLR) is a Flathead County road that turns to gravel approximately ¾ of a mile before the trailhead. At its east end, it provides access for a number of private properties. As the road proceeds west, it provides access to the State Trust Lands parcel which is the proposed project area as well as additional private property, and then it intersects on a curved hillside with Highway 93.

##### Environmental Effects:

###### *Direct and Indirect Effects to Health and Human Safety as a Result of Trail Use*

With the No Action Alternative A, the existing unauthorized trails in the area would likely continued to be used and a moderate related increase in use of the Lion Mountain Loop Road may occur over time consistent with the area's population growth. Since recreational use of trails in the area would be unauthorized, there would be no opportunity for trail users to participate (through an association like TRTI) in use, maintenance, or improvements of the LMLR.

With the Action Alternative B, adjacent landowners may also experience some adverse effects pertaining to increased use of LMLR. During the public comment period, neighbors expressed concern that LMLR's west intersection with Highway 93 can be difficult to navigate and that increased use of that intersection may increase the opportunities for accidents. If the parking lot proves to be inadequate for the proposed use and overflow parking occurs on the LMLR, then traffic (day and night), snowplowing, and safety complications may occur. Additional adverse effects could occur if vehicles/bikes/pedestrians/horses and pets are not able to use the LMLR safely in conjunction with one another. Increased use of the road might lead to increased violation of road regulations (speeding, parking) and dust/air quality impacts. Neighbors are concerned that the LMLR presently receives inadequate County maintenance attention, and fear that additional use may further degrade it. Neighbors have also expressed concern about the location of the proposed access road (along the "big bend" of LMLR) and whether it might create a blind corner when constructed. Area residents are also concerned about the potential for dust and air pollution generated by increased use of the LMLR.

In addition, there are several undeveloped private properties accessed by the LMLR. Their eventual development and subsequent use of the LMLR may also contribute to the adverse effects experienced by those currently living in the neighborhood.

Several mitigations for these effects were identified by both the proponent and the ID Team, and are listed below:

- An issue-resolution process has been determined to insure that if operational or policy complaints occur and are not satisfactorily addressed when first reported to either the City or the TRTI coordinator, a resolution can be effected through additional channels (see "Issue Resolution Flow Chart," Draft Operating Plan, Exhibit C).

- Signage will be installed at trailheads, parking areas, and along the trail as appropriate to inform users about trail-use safety, procedures, etiquette, and other pertinent information (see Draft Operating Plan, Exhibit C).
- A volunteer force will be organized by the TRTI Steering Committee/TRTI coordinator and provides for both parking lot steward responsibilities as well as a bike patrol. The parking lot steward will assist the project coordinator in maintaining trailheads and parking areas, including picking up garbage, checking restrooms for cleanliness and supplies, providing information to visitors, and reporting vandalism. The bike patrol will ride the trail individually or in teams, providing education and assistance to other trail users. Although the patrol will not provide law enforcement, it will provide visitor assistance, monitor illegal trail activity such as motorized use or unauthorized trail building, and will make note of trail hazards that require maintenance or mitigation (see Draft Operating Plan, Exhibit C).
- The proponent has agreed that TRTI will participate fairly with landowners in mitigating road issues associated with increased road use (see Draft Operating Plan, Exhibit C). If the proposed project is authorized, DNRC will also include a stipulation for such participation in the proponent's LUL amendment.
- Work with the County to identify a system to qualify fair participation for road users.
- Work with Flathead County and neighboring landowners to determine and current and future use of the road to assist in diligence for the road agreement (as authorized through the LUL Amendment and/or associated document). Work with the County and neighboring landowners on a plan for better control of the existing road to include: Highway 93 access issues; signage for parking, speed control, dust abatement/air quality; consideration of, and signage for, bike lanes when deemed appropriate, TRTI signage and limiting other available parking areas.
- Remove material to the south of the new parking lot access to create necessary sight lines.
- As the TRTI complex will be located outside Whitefish City limits, the Flathead County Sheriff is primarily responsible for law enforcement; in case of emergency, trail users will be required to dial 911. The 911 Call Center will dispatch the appropriate emergency response, which could include ambulance, police, and/or fire personnel. Additional law enforcement along the trail may be provided by the Montana Fish, Wildlife & Parks Region 1 Trust Lands Game Warden (see Draft Operating Plan, Exhibit C).
- The TRTI Draft Operating Plan calls for an annual review meeting that will be open to the public in order to maintain good relations, minimize conflict, and provide the best possible user experience. In addition, the TRTI Steering Committee will also annually meet jointly with DNRC to promote good relations and discuss any issues related to the TRTI project. The intent of these meetings will be to expose any issues and concerns related to the TRTI project and facilitate solutions to address them (see Draft Operating Plan, Exhibit C).

As the road's use by the proposed trail's users increases over time, the proposed mitigations are expected to offset many of the adverse impacts anticipated by neighboring property owners and others. In particular, the proponent proposes to share fairly in road use mitigation measures, and will be required by DNRC to do so. As a County road, LMLR is a designated access for both the neighboring private parcels as well as the State Trust Lands parcel. It is possible that development of the project area may result in some increased risk to health and human safety in terms of increased use of the Lion Mountain Loop Road, however the above listed mitigations are expected to reduce such risk. Assuming the complete list of mitigations is implemented, direct and indirect effects to health and human safety are expected to be minor.

#### Cumulative Effects:

Current and proposed projects that may affect Health and Human Safety within the cumulative effects analysis area include Lion Mountain Fuels Reduction Project and the Beaver/Swift/Skyles Timber Sale Project. Timber harvesting and road building in the identified areas are slated to occur in conjunction with these projects.

Under the No Action Alternative A, there will be less opportunity for interface between timber harvest operations and recreationalists in the area, and some risks to human health and safety may be reduced given that the area would be signed and restricted during the harvest process, as well as other mitigations being applied to reduce the risk to health and human safety. Following the sale, unauthorized motorized use of the area could increase over time to include the timber roads.

Under the Action Alternative B, there will be increased opportunity for interface between timber harvest activities and recreationalists. One of the Skyles Units will be winter-harvested to limit conflicts between timber harvest activities and recreationalists. In addition, the area would be signed and restricted during the harvest process, as well as other mitigations being applied to reduce the risk to health and human safety. Overall, it is possible that the looped design of the Action Alternative B may allow for segments of the proposed trail complex to be closed in conjunction with providing for safer timber harvest activities. For those activities that may pose potential risk, certain mitigations have been developed, therefore cumulative effects to health and human safety are expected to be fairly minimal.

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

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

For the No Action Alternative A, no adverse direct, indirect, or cumulative effects have been identified for industrial, commercial, and agricultural activities and production.

For the Action Alternative B, the proposed looped trail route allows for closure of segments of the trail system to minimize conflicts between timber management activities and recreational users of the area. In addition, minor beneficial effects would occur to local industrial and commercial activities given the construction process of the trail and associated facilities. Ongoing beneficial effects to local commercial activities (amenities such as restaurants, lodging, and sporting goods stores) are also likely to occur as use of the trail increases, but are difficult to measure. It is also possible that dust from the increased LMLR traffic may also adversely affect small-scale agricultural production that is occurring near the project area, however the proposed LMLR mitigations (see section IV-14, Human Health and Safety, in this document) may successfully address this concern.

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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 measurable direct, indirect, or cumulative impacts are anticipated for No Action Alternative A.

It is anticipated that at least one seasonal or year-round trails management position and limited seasonal construction jobs would be created by the implementation of Action Alternative B. While it is also anticipated that a successful regional trail system will have positive effects on the local tourism industry, those effects are difficult to measure and it is beyond the scope of this document to quantify them. Consequently, other than what is outlined above, no measurable impact to quantity and distribution of jobs is anticipated as a result of this proposal.

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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 measurable direct, indirect, or cumulative impacts to local and state tax base and revenues are anticipated with either the No Action Alternative A or the Action Alternative B.

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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*

Currently, the No Action Alternative A requires some law enforcement efforts when unauthorized use or violations occur within the project area. Though it would be difficult to measure, it is anticipated that unauthorized use of the area is likely to increase with population growth, as it is located in an urban interface area.

With implementation of the Action Alternative B, recreational use of the area is anticipated to gradually increase over time and traffic patterns are thus also likely to increase on the roads providing access to both trailheads. The planning and construction of the proposed trail system and the project coordinator position are being funded by earmarked donations, though the City of Whitefish or a TRTI-subcontractor may need to provide occasionally for snow-plowing of the parking areas during the winter months if trail use merits it. Increased presence of law-abiding public users may curtail the opportunities for violators. Implementation of the TRTI Operating Plan, and the trail monitoring and publication education proposed therein, may also significantly reduce the number of violations and law enforcement response required to the area.

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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.*

- Whitefish Neighborhood Plan, adopted in 2006.

The Whitefish Neighborhood Plan was adopted by the DNRC. The same plan was adopted by the City of Whitefish and Flathead County as the growth policy for their respective jurisdictional areas. Implementation Strategy 2.1 of the Whitefish Neighborhood Plan is to “Create a Regional Loop Trail.” The proposal is anticipated to address the first phase of a growing trail system that would eventually establish a longer-term land use authorization.

- May 6, 2009 Order and Rationale Granting Preliminary Injunction in the case of The City of Whitefish, a municipal corporation (plaintiff) v. Board of County Commissioners of Flathead County, the governing body of the County of Flathead, acting by and through Joseph D. Brenneman, Gary D. Hall, and Dale W. Lauman.

Though the Whitefish Neighborhood Plan remains in effect, the project area falls within the two-mile “doughnut” surrounding the City of Whitefish. Currently, the City of Whitefish and Flathead County are in litigation on who has jurisdictional control over planning and zoning in that belt area. The above Rationale reflects the current stage of that litigation process.

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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.*

Implementation of the No Action Alternative A would have no measurable effects on Recreational and Wilderness Activities.

While a formal trail system will increase the overall use of the area, active management of the trail use is expected to increase the access to, and quality of, recreational activities under Action Alternative B.

The previously agreed-upon fee structure for the TRTI project involves the City of Whitefish charging TRTI users a fee for accessing the trail, and then reimbursing DNRC a percentage of the gross fee revenues as a portion of its annual licensing cost to DNRC (in addition to a per-mile base trail cost); while TRTI would encourage individual users of the TRTI system to purchase State Recreational Use Permits, under this arrangement their users would not be required to purchase individual State Recreational Use Permits to recreate within the boundaries of the TRTI licensed corridor, in that TRTI would be purchasing “bulk use” Recreational Use permits

by way of forwarding a percentage of its gross fee revenues to DNRC (consistent with the DNRC's fee structure for some Outfitter License situations).

Public scoping for this EA resulted in concerns being raised about access to the trail potentially being denied to people who hold State Recreation Use Permits but did not wish to pay an additional TRTI fee for access to the TRTI trail complex, and the practical complications inherent in enforcing such a fee structure.

While the current Land Use License allows for such a structure, DNRC and the TRTI Steering Committee have agreed to enter into discussion on determining a more efficient method of structuring the TRTI license fee process, with the intent that revenue raised for the beneficiaries by the project remain approximately consistent to that determined by the current Land Use License.

There is no wilderness area within the proposed project area.

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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 measurable impact to density and distribution of population and housing is anticipated under either the No Action Alternative A or the Action Alternative B.

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#### **22. SOCIAL STRUCTURES AND MORES:**

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

No measurable disruption of social structures and mores is anticipated as a result of either the No Action Alternative or the Action Alternative B. The Action Alternative B would formalize the use of an area traditionally used by the community for recreation.

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#### **23. CULTURAL UNIQUENESS AND DIVERSITY:**

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

No impact to cultural uniqueness and diversity is anticipated as a result of either the No Action Alternative A or the Action Alternative B.

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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.*

Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return. The estimates of return are based on average Northwest Land Office Area annual timber sale revenues per year, per acre (in 2009 dollars) and upon the trail fee-per-mile charge and incremental schedule of revenues outlined in the TRTI-related Land Use License currently in effect.

Timber sales are high-value events, but they occur intermittently over decades. Currently, classified-forest Trust Lands in this Area generate, over time, an average timber revenue of approximately \$16.00 per acre (2009 dollars), per year (*personal conversation with Robert Sandman, NWLO Area Manager, and Peter Seigmund, DNRC-KU Timber Forester Supervisor*). The proposed trail corridor licensing area of the Action Alternative B encompasses approximately 6.2 acres. While timber harvest would be authorized to continue in some portions of the trail corridor, the amount of timber harvested within the previously cleared trail corridor is likely to be negligible. Effectively, up to approximately 6.2 acres may be removed from timber production, totaling to an annual decline in timber revenue for the project area at a (2009 dollar value) value of approximately \$100.00 year (2009 dollars).

Conversely, the recreation revenue generated by the Action Alternative B as outlined in the current Land Use License (Exhibit B) would be (at the base fee of \$200/mile of trail) at least \$1,000.00 per year, with a sliding scale based on trail use potentially increasing up to \$9,000.00 or more annually in the fourth year. It should be noted, however, that future timber sales in the surrounding area will likely bear an increased cost (e.g., added restrictions on the timber sale contract in turn increasing the cost to the potential purchaser) due to management issues involved in working around and accommodating recreational trails threading through the sale area.

The No Action Alternative A would leave the proposed trail corridor in timber production and potentially produce approximately \$100.00 in average annual per-acre return (without incurring increased costs due to trail-based management issues), however there would be no annual recreation revenue generated on that same property as provided for in Action Alternative B.

|                                  |                                      |                            |
|----------------------------------|--------------------------------------|----------------------------|
| <b>EA Checklist Prepared By:</b> | <b>Name:</b> Anne Shaw Moran         | <b>Date:</b> June 11, 2009 |
|                                  | <b>Title:</b> Kalispell Unit Planner |                            |

**V. FINDING**

25. ALTERNATIVE SELECTED:

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS     
  More Detailed EA     
  No Further Analysis

|                                  |               |
|----------------------------------|---------------|
| <b>EA Checklist Approved By:</b> | <b>Name:</b>  |
|                                  | <b>Title:</b> |
| <b>Signature:</b>                | <b>Date:</b>  |

2,000 Feet

1,000

500

0



Point A to B =  
Road segment  
used as trail loop

Point C to D =  
Road segment  
used as trail loop

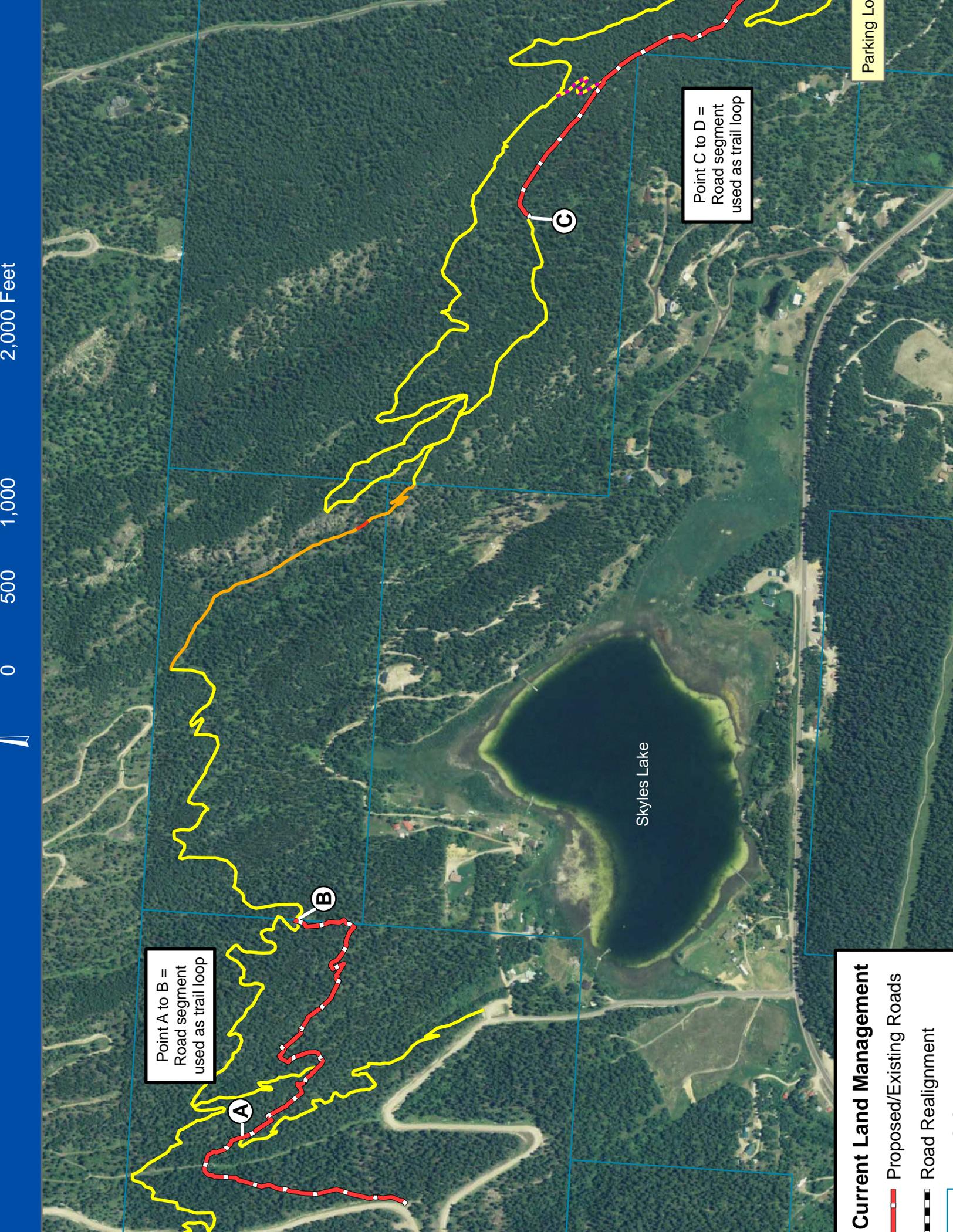
**Current Land Management**

Proposed/Existing Roads

Road Realignment

Skyles Lake

Parking Lo



STATE OF MONTANA  
DEPARTMENT OF NATURAL RESOURCES & CONSERVATION (DNRC)  
LAND USE LICENSE - OTHER  
LICENSE # 3052995

The STATE OF MONTANA, acting through the Montana Department of Natural Resources and Conservation (hereinafter "Licensor"), hereby grants to the CITY OF WHITEFISH (hereinafter "Licensee") a LAND USE LICENSE (hereinafter "LUL") to occupy and use lands administered by Licensor, subject to all of the terms and conditions hereof, and pursuant to Mont. Code Ann. §§ 77-1-202, 77-1-203 and 77-1-204, and Admin. R. Mont. 36.25.136.

**1. LICENSEE**

The City of Whitefish, Montana  
402 East Second Street,  
Whitefish, Montana 59937.

**2. DESCRIPTION**

- A. This License is granted to the Licensee for the purpose of constructing and maintaining an improved recreational use trail on State Trust Lands in the Beaver Lake/Skyles and Spencer Mountain sub-areas of the Whitefish Neighborhood Plan (hereinafter "WNP"). This is the initial phase of the larger "Trail Runs Through It" (hereinafter "TRTI") project and is limited to the specific trail segments (hereinafter the "premises") as identified on Exhibit "A" which is attached hereto and incorporated herein by reference. Unless otherwise provided in writing by Licensor, the trail shall be 10 feet in width, provided that Licensee shall also be entitled to use an additional width of 5 feet, at intervals no greater than 1/4 mile, for the installation of benches, where minimal grade work and clearing are necessary. The LUL mileage will be adjusted annually as the trail system expands; and, as long term/permanent authorizations replace this LUL on segments of the trail system as is anticipated by the WNP.
- B. Subject to the approval of the Montana Board of Land Commissioners of the granting of a permanent easement, Licensor agrees to grant to Licensee a permanent easement(s) over those segments of the trail that Licensee desires to purchase such easement(s). Any such purchase shall be based on full market value of the easement at the time it is granted. Licensor agrees to support any application for an easement by Licensee as long as Licensee has complied with the terms of this LUL and as long as the granting of the easement is in the best interest of the State.

**3. DURATION**

- A. This License shall take effect upon signature of the licensor and remain in full force and effect up to and including the last day of **February, 2017**, unless canceled as provided herein for good and sufficient reasons prior to that date. A license year is March 1<sup>st</sup> of each year through February of the

following year. Year 1 will be from the last date of signing by Licensor and Licensee through February of 2008.

- B. If Licensee is not in breach of this LUL, Licensee shall be entitled to renew this LUL for an additional ten-year term by providing to Licensor, at least 180 days prior to the expiration of the initial ten-year term, a written notice that Licensee elects to extend the term for an additional ten years. Any such renewal shall be according to the terms in effect at the time notice is given, except that the rental shall be governed by Section 4.
- C. The terms of any subsequent term must be reviewed by the Licensor for potential conflict with resource management activities and to determine if a new License should be issued.

#### 4. RENTAL

- A. Upon acceptance of this License, the Licensee agrees to pay the Licensor rental of: **\$200.00 per mile** annually, plus:

**(Year 1) – 30% of gross income for sale of trail use permits by Licensee.**

**(Year 2) – the greater of \$3,000, or 30% of gross income for sale of trail use permits by Licensee.**

**(Year 3) – the greater of \$6,000, or 30% of gross income for sale of trail use permits by Licensee.**

**(Years 4 through 10) – the greater of \$9,000, or 30% of gross income for sale of trail use permits by Licensee.**

The minimum rental is due at the beginning of the license year. Any outstanding balance due based on the sale by Licensee of trail use permits must be paid together with the following year's minimum rental.

- B. Trail related amenities such as, but not limited to, parking lots, shelters, and restrooms will be authorized under a separate Land Use License or other appropriate means and compensation will be based on full market value of the land area dedicated to the trail related amenity at the time Licensor authorizes the amenity.
- C. All rentals are non-refundable.
- D. Prior to renewal of this LUL the Licensor reserves the right to review and adjust the annual rental rate, as deemed necessary, to assure full market rental value of the land authorized under this LUL is received.
- E. Licensee shall submit an accurate accounting of users and fees associated with the LUL. The Licensor reserves the right to perform an audit.
- F. The per mile rental shall be applied only as to those miles or fractions of mile that are promoted and signed by Licensee as a portion of Licensee's TRTI trail system, as identified on Exhibit "A."

**5. LICENSED ACTIVITY**

This LUL is granted to the Licensee for the purpose of constructing, maintaining and managing the initial phase of the TRTI project as provided for in Exhibit "A" and in general conformance with the TRTI Master Plan, a copy of which is attached hereto as Exhibit "B," and incorporated herein by reference. Expansion of the TRTI project affecting State Trust Lands that is consistent with the TRTI Master Plan (see TRTI Master Plan map, attached to the TRTI Master Plan as Exhibit "B") may be authorized, at Licensor's discretion, through amendment of this LUL.

**6. AMENDMENTS**

Any changes to this License or proposed expansion, reduction or re-location of the trail system, addition of improvements or other amendment to the activity licensed within this LUL must be requested by Licensee in writing in the form of an "Annual Operating Plan" on or before October 1<sup>st</sup> of any given license year in order to allow appropriate review (including Montana Environmental Policy Act review) and rental adjustment prior to the following license year's billing cycle.

**7. RESERVATIONS**

Licensor reserves all rights and interests to the land under this LUL other than those specifically granted by this LUL. Licensor reserves the right to require licensee to relocate portions of the trail system to minimize conflicts with land management activities subject to the following:

- A. A minimum of one-year notice will be given to licensee of pending management activities affecting licensed activities.
- B. Licensee will be invited to participate in the Montana Environmental Policy Act (MEPA) review to develop a solution that minimizes impacts to licensed activities while meeting Trust Land Management goals.

**8. RIGHT TO ENTRY**

Representatives of the State Historical Society of the State of Montana shall at all reasonable times, upon written notification to Licensor prior to entry, have the right to enter into and upon the premises for the purpose of carrying out the duties assigned the Historical Society by the State Antiquities Act, Mont. Code Ann. §§ 22-3-421 through 22-3-442.

**9. UNLAWFUL USE**

If any part of the lands or premises under this LUL are used, or use is permitted by Licensee for any purpose contrary to the laws of the State of Montana or the United States, such unlawful use shall, at the discretion of Licensor, constitute a material breach of, and sufficient reason for the cancellation of this LUL, according to the procedure contained in Section 17.

**10. LAWS AND RULES**

Licensee agrees to comply with all applicable laws and regulations in effect at the date of this LUL or which may from time to time be adopted and do not impair the obligations of this LUL and do not deprive Licensee of an existing property right recognized by law.

**11. EXTENT**

All covenants and agreements herein set forth between the parties hereto shall extend to and bind their successors, assigns, and legal representatives.

**12. FIRE PREVENTION AND SUPPRESSION**

Lands specified herein shall be kept free of all fire hazards. Licensee agrees to take all reasonable precautions to prevent and suppress wildland fires. Licensee accepts full responsibility, financial and otherwise, for fires resulting from trail-maintenance activities that are authorized by Licensee. Licensee also agrees to assume responsibility, financial and otherwise, for fires caused by Licensee's negligent or willful conduct.

**13. ACCESS**

Representatives of Licensor shall at all reasonable times have the right to enter into and upon the premises and all parts thereof for the purpose of managing the land and/or inspecting and examining uses thereof.

**14. IMPROVEMENTS**

No improvements not specifically authorized herein will be allowed without written approval of Licensor.

**15. LIABILITY**

Licensee agrees to hold, defend, and save the Licensor and Licensor's surface lessees harmless from all claims and lawsuits that may result from any and all damages, injury, or death to persons and/or property that occur upon or about said land caused by or arising out of Licensee's negligent or willful conduct and/or Licensee's use of the premises.

**16. LIMITATION OF AUTHORITY**

Other than for the purposes specifically described in this LUL, Licensee agrees that it does not, and shall not, claim at any time any interests or estate of any kind or extent whatsoever in the premises by virtue of this LUL or its occupancy or use hereunder.

**17. TERMINATION**

Licensee may surrender and relinquish this LUL in whole or part, by providing written notification of such fact to Licensor no less than thirty (30) days prior to the effective date of such action or expiration of this LUL. Such surrender and relinquishment will not entitle Licensee to any refund of rentals paid or exemption from the payment of any rents, penalties or other compensation due Licensor. Licensor shall have the power and authority to cancel this LUL for any of the following causes: fraud; misrepresentation; or concealment of facts by Licensee relating to the issue of this LUL, which if known would have

prevented its issue in the form or to Licensee; failure by Licensee to comply with, or abide by, each and all of the provisions hereof; or for any other reason provided by law. For violations that relate to immediate resource damage, or to public health, welfare and safety, Licensor may terminate the License pursuant to procedure provided in Admin. R. Mont. 36.25.121(2). For all other violations, Licensor shall provide Licensee with written notice of grounds that may lead to cancellation of the LUL and provide Licensee with 60 days to eliminate or cure the possible grounds for cancellation. If Licensee eliminates or cures the possible grounds for cancellation within the 60 day period, this LUL will remain in force. If Licensee fails to eliminate or cure the possible grounds for cancellation, Licensor may elect to proceed with cancellation using the procedure provided in Admin. R. Mont. 36.25.121(2). Licensee agrees to peaceably yield possession of these premises upon proper termination of this LUL.

#### **18. RECLAMATION OF THE LAND**

Licensee will take all reasonable precautions to prevent or minimize damage to natural (i.e., vegetation, soil, water, wildlife) and cultural resources, as well as manmade improvements within the lands specified in this LUL. Upon termination of this LUL by either Licensor or Licensee, or upon final expiration of the LUL, Licensee shall reclaim the area to the specifications of Licensor.

#### **19. REMOVAL OF TIMBER**

Licensee shall not cut, remove, use, or destroy any timber or standing trees upon the premises and shall not allow or permit any other person to cut, use, remove, or destroy any such timber or standing trees, unless such person is authorized in writing by Licensor to do so.

#### **20. WEATHER CONDITIONS**

Licensor reserves the right to restrict or preclude any surface activity during periods of adverse weather, and other conditions which may contribute to accelerated erosion, fire hazard, disruption of seasonal wildlife, or any other condition that, in the opinion of Licensor, may have an adverse effect on State-owned land.

#### **21. SPECIAL STIPULATIONS**

- A. Use of the trail system is exclusive to Licensee and its permit holders. Licensee will not discourage lawful recreational use activities by the public as permitted by statute and the Administrative Rules of Montana regarding General Recreational Use. With respect to any groomed cross-country ski loop trail, Licensee may propose sign language that encourages recreational users to minimize disruption of the groomed trail surfaces when possible.
- B. Authorization to further improve, post or otherwise market the trails in the Spencer Mountain sub area of the WNP will be reliant on addressing the public access issue up front. Currently used access points are universally recognized as unsafe, inadequate and the source of negative impacts to Trust Lands.

- C. Licensee must obtain and carry for the duration of this LUL comprehensive general liability insurance coverage with minimum limits of \$1,000,000 for each claim or each occurrence. Said coverage shall list State of Montana as an additional insured. Licensee must provide proof of insurance to Licensor and notify Licensor at the Kalispell Unit of its NWLO no less than ten (10) days prior to any cancellation or material change in such policy.
- D. Licensee is responsible for controlling any noxious weeds introduced by Licensee's activity on state-owned land. The minimum requirement is a spring treatment of weeds in the trail corridors during the rosette stage by a certified applicator. Licensor must approve Licensee's method of control. Licensee shall comply with the Montana County Noxious Weed Management Act, Mont. Code Ann., §§ 7-22-2101, *et seq.*
- E. Licensor reserves the right to require mitigation on, or close trails that are poorly located or otherwise contribute to potential resource damage.
- F. The following authorized trail maintenance activities are limited as follows to trail segments identified on Exhibit "A:"
  - a. Clearing of deadfall, woody debris, brush and branches to a width of up to ten feet and a height of up to ten feet above the underlying ground. No trees greater than three inches in diameter may be removed without Licensor's authorization.
  - b. Posting and maintenance of approved signage.
  - c. Installation of other previously approved trail related amenities such as benches or trash cans located within or immediately adjacent to the trail corridor.
  - d. Any trail construction, reconstruction, relocation or abandonment/obliteration would require the written consent of the DNRC representative.
  - e. Any maintenance activities that require power equipment (heavy equipment) for soil moving would require the written consent of the DNRC representative.
  - f. Any soil disturbing activities within 50 feet of surface water would require the written consent of the DNRC representative.
  - g. Design standards of constructed or reconstructed trails including the trail width, grade, erosion control features, and location would require the written consent of the DNRC representative.
  - h. All erosion control measures on existing trails must be in place prior to construction new trails.
  - i. Limit trail use during wet periods to reduce soil impacts.
- G. Before Licensee makes any effort to promote use of the trail, Licensee must maintain informational signage at traditional entrance points and approved locations. Proposed sign formats will be submitted to Licensor for approval prior to posting to assure compliance with Licensor's Trust Land posting

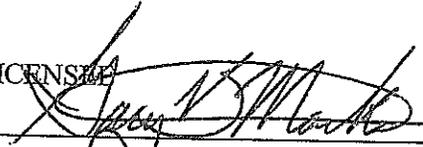
policies. The signs shall include, at a minimum, language similar to, or addressing the following points:

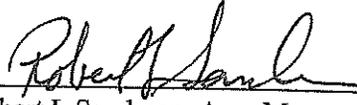
- a. Identify the TRTI Licensee and managing entity as the City of Whitefish including contact information.
  - b. Identify the land as State Trust Lands managed by Licensor and including Licensor's logo and contact information.
  - c. Applicable recreational use regulations.
  - d. Trail etiquette to minimize conflicts between different uses.
  - e. Users of trail system and general recreational users are required to have a TRTI Trail Use Permit. A portion of the fee toward Purchase of a TRTI Trail Use Permit entitles the permit holder to General Recreation use rights to State Trust Lands adjacent to the licensed trail corridor.
  - f. Licensee may propose signage language that would encourage recreational users to minimize disruption of the groomed XC ski trail surfaces when possible.
- H. Licensee must patrol for, and remove any litter from the premises.
- I. Seasonal trail marking signs must be removed as soon as conditions reasonably allow.
- J. If any special events are planned which will generate an unusually high demand for parking, volunteers must be enlisted to direct parking such that no parking occurs within the travel lanes of any public road to impede the flow of traffic. Any special parking permits that may be necessary from Flathead County are the responsibility of Licensee.
- K. Licensor retains the right to modify any stipulation or condition of this LUL if it becomes necessary to protect threatened or endangered species or their habitat.
- L. Licensee's use of motorized vehicles off of any roads and on closed roads is prohibited unless Licensor otherwise authorizes use in writing. Motorized vehicles include snow machines, all terrain vehicles (ATVs), motorcycles, and passenger cars and trucks.
- M. Licensor reserves the right to require Licensee to install sanitation facilities that are necessary to accommodate the uses authorized by this LUL. If Licensee desires to temporarily use portable sanitation facilities, it must obtain Licensor's approval. If Licensor grants approval, such temporary use must be conducted pursuant to all applicable local, state and federal laws and regulations. Whether such use is temporary or permanent, Licensee must obtain the necessary sanitation-facility permits, and use of the sanitation facilities must be consistent with all applicable local, state and federal laws and regulations, and consistent with conditions Licensor deems necessary to ensure resource protection. All requests by Licensee for the installation of permanent sanitation facilities will be treated by Licensor as a request pursuant to Paragraph 4.B. herein.

- N. Licensee must restrict motorized access to limit disturbance to wildlife and reduce the loss of snags and coarse woody debris.
- O. Licensee must limit mechanized trail construction and maintenance within the Whitefish Lake Bald Eagle territory (the last 0.75 miles on the north end of the Beaver Lake subarea) to time periods when disturbance would have the least effect on the nesting territory.
- P. Licensee must limit trail construction in the vicinity of Boyle Lake such that access to the lake and tunnel area is not encouraged in order to maintain breeding loon habitat and potential Townsend's big-eared bat habitat.
- Q. Licensee must encourage dog owners to restrain their dogs to the trail corridor to limit the disturbance to wildlife species and minimize the fragmentation of forested habitats.
- R. Licensee must reduce unnatural food sources by ensuring litter is removed. Should containers be desired for litter, using wildlife-proof containers that are regularly emptied is preferred

IN WITNESS WHEREOF, THE PARTIES HAVE EXECUTED THIS STATE LAND USE LICENSE THIS 27 DAY OF March 2007.

LICENSOR  
Mary Sexton, Director  
 Department of Natural Resources and Conservation

LICENSEE  
  
Gary B. Marks, City Manager, City of Whitefish

By:   
 Robert L Sandman, Area Manager  
 Northwestern Land Office

# **A Trail Runs Through It**

## **Management and Operations Plan**

**6/11/2009**

**Prepared by Greg Gunderson, TRTI Project Coordinator**

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## **Introduction:**

This report provides management and operating procedures for the Trail Runs Through It recreational trail system near Whitefish, Montana. A Trail Runs Through It (TRTI) is a natural surface, non-motorized trail system designed for hikers, runners, mountain bikers, and equestrians. The TRTI project has involved many partners, including the City of Whitefish, Montana Department of Resources and Conservation, Flathead National Forest, and private landowners. The operations and management procedures specified within this document constitute the proposed management plan for TRTI. This plan has been developed to provide guidance and identify responsibilities within the TRTI project.

## **Project Description:**

As described in the TRTI Master Plan, dated September, 2006, "TRTI will be a recreational trail network that includes a continuous corridor encircling the greater Whitefish area. This network will enhance access to public lands and other trail systems while respecting traditional use and promoting public interest in forest health. Primary goals of the trail network will be to provide opportunities for relaxation and outdoor recreation close to town, promote open space, increase revenues for the School Trust Lands, and support the local economy."

The first phase of TRTI is the development of a main spine trail from Lion Mountain Loop Road to Beaver Lake Road. The first trailheads under development will be located at Lion Mtn. Loop Rd., Skyles Lake Lane, and a small trailhead on Beaver Lake Road. Current plans are in progress to continue the trail system through the Beaver Lakes complex, and to develop sustainable trails in the Spencer Mountain area. Amenities at trailheads will include informational and safety-related signage, adequate parking, and restroom facilities in some locations.

## **Project Background:**

The need and purpose of TRTI arose from the Whitefish Neighborhood Plan, a land use plan for the 13,000-plus acres of State School Trust Lands surrounding the community of Whitefish. The Neighborhood Plan identifies future land uses for trust lands, which comprise a large portion of the area covered by the Whitefish City/County Master Plan that was adopted in 1996. Policy 2 of the Neighborhood Plan is to "Create a Multipurpose, Regional Recreational System That Links Trust Lands in the Whitefish Area." Policy 2 goes on to state "While trails have evolved in an ad hoc fashion, none have been planned, developed, or maintained to maximize the experience of these lands or interconnections to the community. This plan calls for the creation of a regional recreation system as a significant amenity to the area."

Following the adoption of the Neighborhood Plan, the City of Whitefish and Flathead Gateway Partners (a local non-profit group) signed a memorandum of understanding (MOU) that created a partnership to implement the recommendation for a recreational loop trail. This planning effort began in January 2006, with an 18-member planning committee. The planning committee met twice a month for six months, and also conducted multiple public meetings, contacted private property owners, initiated a media campaign, and held an on-line survey that received 260 responses. The plan was finalized in September 2006, and was adopted by the City soon thereafter.

There are seven sub-areas identified in the TRTI Master Plan: Spencer Mountain, Skyles Lake, Beaver Lakes, Swift Creek, Haskill Basin, Happy Valley, and KM. The Master Plan map designates a main corridor and parking areas in each subarea, while accompanying narratives give general descriptions of special issues, opportunities, and features.

The initial focus of TRTI is to provide a connected corridor of trails that will allow users the opportunity to circumnavigate the City of Whitefish and Whitefish Lake. This corridor will primarily rely on new trail construction to connect trailheads in a sustainable, well-designed manner. As stated in the Master Plan, "The addition of secondary trails to the system will be based on recreation and conservation criteria. The secondary trail system will consist of some existing trails ... and some new trails. Not all existing trails will be included in the system. (Some) existing trails will be vacated due to poor design."

Although the Master Plan lays out the vision, guiding principles, and general route of the main spine trail system, the Plan does not give specific details regarding daily management and operational guidelines of the trail system. This document provides a higher level of detail that clarifies rules, guidelines, and responsibilities, and provides a roadmap for conflict resolution. The objective of this management plan is to ensure that the TRTI trail system is managed and maintained in a way that maximizes safety and functionality for all trail users.

### **Trail Operations:**

The City of Whitefish holds a 10-year Land Use License from the Montana Department of Natural Resources and Conservation for constructing and maintaining the Trail system. As noted earlier, the City is working in conjunction with Flathead Gateway Partners (FGP) to develop and manage the Trail. The City and FGP have formed a TRTI Steering Committee that makes policy decisions. The Steering Committee has hired a Project Coordinator to manage the planning, design, construction, and maintenance of the trail system. The Project Coordinator reports directly to the Steering Committee for project guidance and policy decisions.

The Steering Committee is actively recruiting volunteers who will assist the Project Coordinator and the City in maintaining the trail system and trailhead areas. Currently, volunteers are being recruited in six categories: Parking Lot Steward, Trail Construction/Maintenance, Noxious Weeds, Bike Patrol, Fundraising/Events, and Interpretive Signage.

### **Parking Lot Steward**

Parking Lot Stewards will assist the Project Coordinator in maintaining trailheads and parking areas. This will include picking up garbage, checking restrooms for cleanliness and supplies, providing information to visitors, and reporting vandalism. In addition to basic stewardship requirements, parking lots will be regularly plowed of snow through the winter season. Parking lots and trailheads will also be checked on a regular basis for maintenance needs in regards to road/parking/trail surfacing, erosion, weeds, signage, and restroom facilities.

### **Trail Construction/Maintenance**

Volunteers who sign up for trail construction and maintenance will receive training in sustainable trail construction techniques, and will be crucial to the success of the TRTI project. With a strong corps of trained volunteers, the Steering Committee will be able to build approved trails with fewer resources than if all trails are professionally contracted.

### **Noxious Weeds**

Noxious weeds are a serious issue in Montana that displace native plant habitat and threaten ecosystem health. The Land Use License requires that TRTI eradicate noxious weeds along the trail system. To minimize spraying of herbicide, the Steering Committee and Project Coordinator will promote using trained volunteers to identify and safely hand pull noxious weeds to the greatest extent feasible. If hand-pulling efforts are not adequate, the Coordinator will contract with a licensed herbicide applicator to spray weeds along the trail system.

### **Bike Patrol**

Mountain bike patrols are groups of volunteers who ride authorized trails individually or in teams. With the blessing of the trail system's management, patrollers provide education and assistance to other trail users. Bike patrols are addressed more thoroughly under *Safety and Law Enforcement* on page 6.

### **Fundraising/Events**

A primary goal of the Steering Committee is to leverage available trail funds to the greatest extent possible. The Project Coordinator will work with volunteers and others to plan and carry out fundraising campaigns and specific events that will help raise money for the TRTI project.

### **Interpretive Signage**

There has been significant discussion regarding the value of interpretive signage along the trail system. Interpretive signage is different than informational and safety-related signage that will be required at trailheads. Ideas for interpretive signs include information on native flora and fauna, wildfire prevention information, as well as signage that explains the importance of school trust lands as managed forests that provide important revenue for Montana schools. The Project Coordinator will oversee the gathering

of interested individuals or associations to develop and fund the design and installation of interpretive signage along the trail. TRTI signage will be designed and installed in a consistent fashion throughout the trail corridor, and all signage designs and plans will be reviewed and approved by DNRC prior to installation.

In addition to trained volunteers, the TRTI project is receiving significant assistance from the Montana Conservation Corps (MCC). MCC young adult and youth crews can assist with trail construction, trail maintenance, noxious weed pulling, signage installation, and other areas. For projects that require professional assistance, the Steering Committee is prepared to hire local forestry and trail contractors. The Project Coordinator is responsible for organizing volunteers, MCC crews, and professional contractors as necessary for trail construction and maintenance. The Project Coordinator will also ensure that any trailhead restroom facilities are professionally cleaned as necessary. All trail operations will be conducted in compliance with the terms and conditions of the State Land Use License.

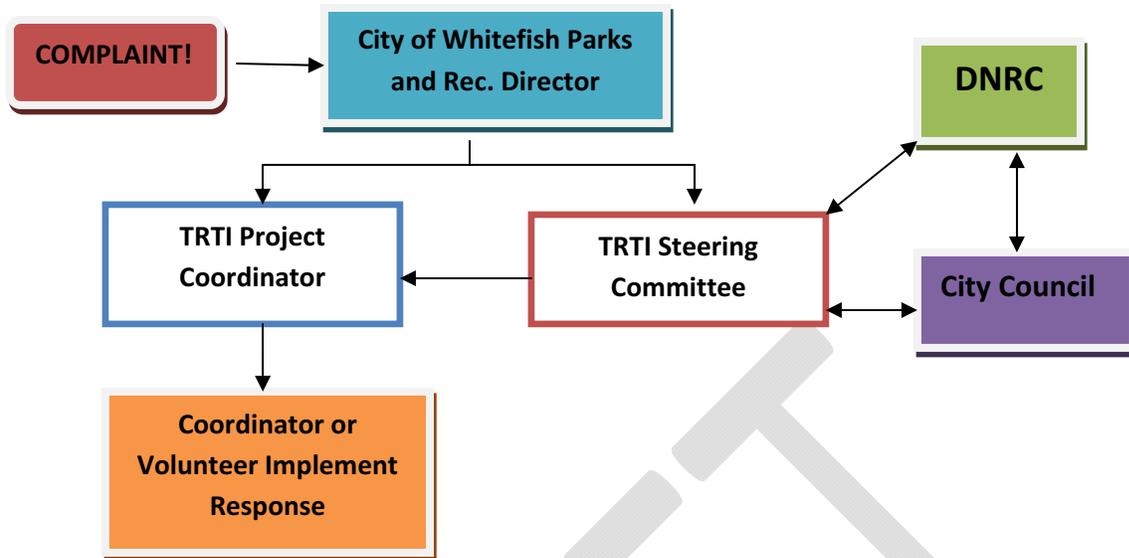
### **Issue Resolution:**

The Steering Committee, in conjunction with the DNRC, has identified a process for resolving operational and policy complaints that will invariably arise from time to time. Operational complaints may include, but are not limited to, issues such as garbage, vandalism, erosion, and others. Policy complaints might include disagreements between user groups, non-motorized rules, etc.

All complaints will first be directed to the City of Whitefish Director of Parks and Recreation. For operational complaints, the Parks Director will contact the Project Coordinator. The Coordinator will either implement the response, or call a scheduled volunteer for assistance. For complaints that are determined to be insignificant, the Coordinator may choose to do nothing. After taking action to resolve the complaint, the Coordinator will report back to the Parks Director.

For policy complaints, the Parks Director will contact the Steering Committee. The Committee will consider policy changes as necessary at regularly scheduled Committee meetings. Input will be invited from DNRC, other partners, and community stakeholders. DNRC and other interested parties will be sent advance notice of all upcoming Steering Committee meetings, with attached agendas.

The Steering Committee may also choose to forward citizen or agency complaints to the City Council. If City Council is to be notified of a complaint, DNRC will also be contacted with as much notice as possible prior to the Council meeting. The Council may discuss and address those issues within the scope of the current TRTI Operating Plan and Land Use License, respectively, in effect. Any proposals involving changes to the TRTI Operating Plan and/or amendment to the Land Use License will be forwarded to DNRC for review and approval.



**Flow Chart Representing Proper Communication Channels**

**Safety and Law Enforcement:**

The Steering Committee intends to provide for safe and legal use of the trail system by applying the 3Es: Engineering, Education and Enforcement.

The trail and related amenities will be engineered and designed to minimize potential conflicts, preclude illegal motorized trail use, and provide for safe recreational use. Educational materials, including brochures, maps and signage, will help establish clear public awareness and expectations. Enforcement efforts will include coordination with the Sherriff’s Office, the FWP State Lands Warden, and volunteer trail monitors.

The entire TRTI system is located outside of Whitefish city limits. As such, the Flathead County Sherriff is primarily responsible for law enforcement at trailheads. In case of emergency, trail users will be required to dial 911. The 911 call center will dispatch the appropriate emergency response, which could include ambulance, police, and/or fire personnel.

Additional law enforcement along the trail will be provided by the Fish, Wildlife, & Parks State Lands Warden. The State Lands Warden is responsible for law enforcement on all school trust lands in the Whitefish area, and as such has many responsibilities in addition to the TRTI trail network.

The Steering Committee and Project Coordinator are actively pursuing the creation of a volunteer Bike Patrol specifically for the TRTI network. Mountain bike patrollers are trail ambassadors who provide a regular presence on the trail system. Although the Bike Patrol will not provide law enforcement, the Patrol will be able to provide visitor assistance. The Patrol will also monitor illegal trail activity such as

motorized use or unauthorized trail building, and will make note of trail hazards that require maintenance or mitigation. The Bike Patrol will work with the Coordinator and Steering Committee to encourage proper trail etiquette and to provide a positive experience for all trail users.

Although extreme care has been utilized to protect personal privacy, portions of the Trail pass through private property on trail easements. In addition, segments of the Trail pass in proximity to various private properties. While passing through private property, trail users will be required to stay on the trail. For those portions of the Trail that are on state lands but come near private property, the Steering Committee has committed to installing signage, in appropriate locations, that indicates nearby private property and encourages trail users to stay on the TRTI easement. The Committee may also provide private property signs for interested landowners to place along property boundaries. It is the hope of the Committee that appropriate signage will educate trail users and deter trespassing. All TRTI signage will be designed in a consistent fashion that meets approval of DNRC.

The majority of the TRTI system is located on school trust lands. As the manager of these lands, DNRC generates revenue for Montana schools through timber harvesting. To provide for the safety of trail users, portions of the TRTI system may be closed while active logging is taking place. Trail closures will be posted in advance at trailheads and on the TRTI website ([www.trailrunsthroughit.org](http://www.trailrunsthroughit.org)).

### **Permits and Fees:**

Unbeknownst to many local citizens, a State Recreational Use Permit is currently required for any personal, non-commercial recreation on school trust lands. This permit is sold for \$10, and is available from specific locations within the Flathead Valley. There is a second permit that covers some activities on state lands. This permit, issued by Fish, Wildlife, & Parks, is a "Montana Conservation License" that provides users the right to hunt, fish, or trap on school trust lands.

There is ongoing discussion regarding the most appropriate fee structure for both use of the TRTI system and general recreation on school trust lands, and at this time a definitive plan is still under discussion. One possibility that has been discussed is that the TRTI users may be called upon to help fund the trail by way of paying a special TRTI fee in lieu of Recreation permit purchase, with the TRTI Steering Committee then reimbursing the DNRC for the Land Use License to operate the trail. However, if this option were implemented and trail users were to pursue other uses of school trust lands such as hunting, birding, or snowmobiling, it would then be required by current state law that each person possesses either the State Recreational Use Permit or, if appropriate, the Montana Conservation License.

The Steering Committee is committed to helping generate revenue for the School Trust, and will encourage locals and visitors alike to purchase general Rec Use Permits in addition to paying a TRTI user fee. Under the terms of the Land Use License, TRTI must pay 30% of gross trail fee revenue to the DNRC, in addition to \$200 per mile of trail per year, and an escalating minimum fee that grows to \$9,000 per year or 30% of gross income, whichever is greater, by Year Four of trail operations.

Initially, the TRTI fee will be collected on an honor system basis, with self-service pay stations located at the trailheads. If sufficient funds to meet the commitments of the Land Use License cannot be collected through the honor system, a monitored permit system may be implemented.

### **Existing Trails on School Trust Lands:**

There are currently miles of trails on trust lands; some have existed for many years and are tied to historic uses of the land, while others have been built quite recently by local mountain bikers. Although it is not legal to construct trails without permission of the DNRC, the general public does have the right to hike and pursue non-motorized recreation on trust lands. Existing trails are not part of the TRTI network, and will not be explicitly managed by the Steering Committee. It is agreed, however, that the use of existing trails may be increased or complicated by activity occurring on the nearby TRTI complex and may require review, consideration, and determination of mitigation options at both the annual TRTI sponsored public meeting and the annual DNRC/TRTI Operations meeting, called for by this document.

Some existing trails leave state lands and trespass across private property. For those situations where such "evolved" trails are not connected or spurred off the TRTI system, the DNRC will handle them consistent with how they address impacts on other State Trust Lands and/or on a case-by-case basis. However, it is also conceivable that some users of TRTI trails may build unauthorized trails spurring off of the TRTI system. If trail users are using the TRTI network to facilitate illegal trail building or trespassing, the Steering Committee and Project Coordinator will be responsible for decommissioning these unauthorized trails, with the understanding that any work done outside the TRTI corridor, under any circumstances, will be with permission and oversight from DNRC. In addition, the TRTI network may at times intersect with or create conflicts with existing user-created trails. The Steering Committee (again with permission and oversight from DNRC) will also take responsibility for decommissioning existing user-created trails that create conflict or present hazards for users of the TRTI system.

As the TRTI network expands over time, it is possible that some existing trails will be included in the Trail system. These trails will be carefully analyzed for sustainability and safety before being included in the TRTI network. Some existing trails may need to be modified before being included in the network. Any additions to the TRTI system will need permission and authorization from DNRC.

### **Multi-Use Trail System:**

To the greatest extent possible, the TRTI trail network will be open to multiple types of non-motorized use. The most frequent users are expected to be hikers, mountain bikers, runners, and equestrians. The TRTI main spine trail network has been professionally designed to accommodate multiple user groups. This has been accomplished through designing the main spine system to average less than 10% grade, and by providing good lines of sight along the trail. By keeping average grades under 10%, bikers can maintain control and have adequate stopping distance on the trail. Avoiding blind corners and thinning the vegetation along the trail corridor helps maintain long lines of sight, which allows users to see each

other and prepare for passing. In addition, multiple pull-outs along the trail corridor will provide plenty of room for users to pass or rest along the trail.

The International Mountain Bicycling Association (IMBA) has developed industry standards for sustainable trail design and designing multi-use or shared use trail systems. The TRTI system has been carefully designed to IMBA standards for sustainability, and the Steering Committee believes that shared use makes sense for the majority of the trail network. Reasons for shared use include:

- Shared-use trails best accommodate the needs of the most users
- Sharing helps build a trail community
- Shared trails are most cost effective for land managers
- Shared trails empower responsible, experienced users
- Shared-use trails take better advantage of the available space
- Trail systems with shared trails require fewer trail miles and therefore have less impact
- Shared-use trails manage the most visitors

As the TRTI trail system grows in mileage and popularity, there may arise opportunities to develop single-use, or preferred-use, trails. Reasons to develop preferred-use trails may include:

- Crowded trails
- Crowded trailheads
- Extraordinary mountain biking trails
- Bike parks
- Nature trails

Trail systems that see high usage may eventually require some separation between users. For instance, popular equestrian trails may benefit from separate trailheads and parking areas. In this case, trail networks can blend shared and single use within the network. Within the planned TRTI system, it has been determined that the Lion Mountain Loop Road trailhead is not suitable for horse trailer parking. In addition, the cliff band that separates Lion Mountain from Skyles Lake presents safety issues for horse users. This area will require a narrow trail, with steep slopes and few pull-outs. For these reasons, horses will be discouraged from utilizing the east side of the Skyles Unit.

### **Trail/Trailhead Monitoring**

The Steering Committee and Project Coordinator will conduct monitoring reports of various aspects of the TRTI project. Monitoring that has been discussed includes vehicle counts at parking areas, breakdown of trail users by mode of travel, user satisfaction surveys, and tracking conflicts along the trail between user groups. Results of monitoring efforts will be used to make improvements and provide concise data pertinent to the Trail project.

## **Trailheads and Access Roads:**

Locations for trailheads were identified in the TRTI Master Plan, dated September 2006. Planned trailheads within the TRTI system will provide varying levels of service. Trailheads closer to town may provide more amenities such as restrooms, landscaping, and picnic areas, while “backcountry” trailheads may provide limited parking and informational signage only. Some trailheads will provide parking for horse trailers, while others will only service vehicles without trailers. All trailheads will have consistent and clear signage that provide information on trail locations, multi-use trail etiquette, forest management rules, and current fire hazards.

### **Lion Mountain Loop Road Trailhead**

The proposed trailhead at Lion Mountain Loop Rd. will be the closest trailhead to town. As such, it is expected that this trailhead will see more vehicular usage than others. In addition, this trailhead will be the “gateway” to the TRTI system, providing connectivity to the Beaver Lakes complex and beyond. Because of the “gateway” status, this trailhead will provide a higher level of service than other trailheads. Amenities will include restroom facilities, handicapped parking, a wheelchair accessible trail, and interpretive signage.

Lion Mtn. Loop Rd. is a county road that turns to gravel approximately  $\frac{3}{4}$  of a mile before the trailhead. Landowners along the road currently have issues with dust and speeding. It is not the intent of TRTI to increase traffic hazards or create air quality issues. The Steering Committee has agreed that TRTI will participate with landowners in mitigating road issues associated with increased road use. If landowners wish to form a Rural Special Improvement District (RSID) or some other association format to address road issues, TRTI has committed to participating in this process.

Users of the existing trails in this area currently park their vehicles along the sides of the county road. In order to reduce congestion along the county road, all TRTI users will be directed through informational signage to park in the designated TRTI parking lot. Existing trail users who are habituated to parking on the county road may still want to park in the same areas, which could cause confusion by new TRTI users who may notice existing trails and vehicles along the county road. It is not the intent of the Steering Committee to exacerbate this parking issue, therefore the Committee will participate in addressing the issue of how to prevent illegal parking and encourage all trail users to park in designated areas.

Some trail users may bicycle from town to the trailhead. Because Lion Mtn. Loop Rd. is gravel, there may be a safety issue with bikes assuming the road is low-speed and low-traffic, and as such utilizing the entire roadway. There is a limited visibility corner on the road that could result in collisions between bikes approaching the trailhead and vehicles coming back towards town, particularly in dusty conditions. Because of this safety issue, signage should be placed along the road requiring bikes and pedestrians to stay to the right. If bikes stay to the right, based on direction of travel, safety issues should be minimized.

There is an additional safety issue at the intersection of Lion Mtn. Loop Rd. and Highway 93N. Extremely limited lines of sight make it hazardous for vehicles entering or exiting Lion Mtn. Loop Rd. from this intersection. For this reason, all trail users will be encouraged to approach the trailhead via State Park Rd., which provides a much safer access for vehicles. Signage should be placed at the trailhead, located with maximum visibility for vehicles exiting the trailhead, that discourages all vehicles from making a right hand turn towards Highway 93.

### **Beaver Lakes Complex**

The Whitefish Neighborhood Plan identified the Beaver Lakes area as having significant potential to be a major regional amenity for recreation. Because of the large acreage (over 4,000 acres), 5 lakes, and wide variety of scenic terrain, the Neighborhood Plan called for the development of a Beaver Lakes Recreation Plan. This plan would need to be developed in cooperation with the Steering Committee, DNRC, FWP, Whitefish Area Fire Safe Council, Flathead County, and private partners. The Steering Committee recognizes that the Beaver Lakes area has potential to become the heart of a world-class recreation system that provides trails and other amenities to the public. Ideas that are put forward in the Neighborhood Plan include the development of a hike/ski hut system and a backcountry lodge. This future recreational complex would be managed to generate revenue for the school trust through both recreation fees and timber harvest. In order to provide predictability for the future, the Steering Committee will actively pursue the necessary partnerships to develop a Master Plan for recreation in the Beaver Lakes complex.

### **Annual Review of Management Plan:**

This Management and Operations Plan is intended to be a “living” document that will grow and change to meet the needs of trail users, the Steering Committee, the Land Use Licensee, the DNRC, and surrounding landowners. The contents of this plan will be updated as new issues arise or more clarification is needed as to management and responsibilities. The Steering Committee will conduct at least one annual review meeting that will be open to the public, in order to maintain good relations, minimize conflicts, and provide the best possible user experience. The Steering Committee will also conduct at least one sit-down meeting per year with DNRC to promote clear communication and discuss any issues related to the Trail project. Any changes or amendments to this TRTI Operating Plan require the approval of both TRTI and the DNRC.

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John Doe  
TRTI Steering Committee Representative

X

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Jane Doe  
DNRC Representative

## Whitefish Trails Environmental Assessment Soil Resources

### Introduction

This analysis is designed to disclose the existing condition of the soil resources and display the anticipated effects that may result from each alternative of this proposal. During the initial stages of the project, issues were identified by the public regarding soil impacts. The following issue statement was expressed from comments regarding the effects of proposed actions:

- Additional use on existing and proposed trails may result in increased erosion.
- Increasing the number of trails in the area will remove land from forest production.

### Analysis Area

The direct and indirect impact analysis area for soil impacts will be the proposed trail route. The cumulative effects analysis area is approximately 475 acres will include DNRC managed land in the NW1/4 and the N1/2NE1/4 of Section 33; the NW1/4 and the DNRC managed lands in the SE1/4 and north of US Highway 93 in Section 34 of 31N, R22W. This analysis area will adequately allow for disclosure of existing conditions, direct, indirect and cumulative impacts.

### Analysis Methods

Methods for disclosing impacts include using general soil descriptions and the management limitations of the landtype and then qualitatively assessing the risk of erosion for each alternative. To adequately address the loss of land from forest production, the area within the trail corridor will be assumed to be removed from production.

While the anticipated impacts from each alternative will disclose the direct/indirect effects, the cumulative impacts will be the result of previous and proposed activities. Much of the existing condition description was derived from the Soils Analysis in the Beaver/Swift/Skyles Timber Sale Project Environmental Assessment completed in April 2009.

### EXISTING CONDITIONS

#### *General Conditions*

In order to determine the risk of erosion for the proposed trails, a basic inventory soil and landtypes in the project area was reviewed using the Natural Resources Conservation Service (NRCS) National Cooperative Soil Survey (NCSS) Web Soil Survey. Four separate soil types were identified in the project area, however, two of the soil types comprise a very small portion of the project area (5.6 acres) and no activities are planned on these soil types. A description of the two basic landtypes/soils with proposed activities in project area is found in table ST-1.

**Table ST-1: Project Area Landtype Descriptions**

| Soil Description    |   |  | Management Implications   |   |
|---------------------|---|--|---|---|
| Landtype /soil type | Name/location                           | Soil & Vegetation Descriptions   | Potential Erosion Hazard  | Source  |
| Mr                  | Mountain land/ Skyles area              | Mixed landtypes consisting of Waits stony silt loam and Whitefish cobbly silt loam.  | The 'potential erosion hazard' for roads and trails is listed as severe in the Web Soil Survey. However, the Waits soils are well drained and have little erosion problems. | Soil Survey Upper Flathead Valley Area, Montana (1960)  |
|                     |   | The Waits series consists of moderately deep, silty soils with many boulders and stones. Generally Douglas-fir and western larch are the overstory with an undergrowth of shrubs and woody plants. | Regardless, erosion control measures (BMPs) are advised.  | Web Soil Survey <a href="http://websoilsurvey.nrcs.usda.gov/app/">http://websoilsurvey.nrcs.usda.gov/app/</a> |
| Wu                  | Whitefish stony silt loam/ Spencer area | Deep, well-drained silty soils with some gravel overlying calcareous glacial till. Native vegetation is similar to the Waits series.   | The 'potential erosion hazard' for roads and trails is listed as severe in the Web Soil Survey, This indicates that erosion control measures (BMPs) are advised.            | Soil Survey Upper Flathead Valley Area, Montana (1960)  |

This portion of the Kalispell Unit, like much of northwest Montana, are dominated by bedrock consisting of metasedimentary rocks from the Proterozoic age. Rocks in this formation are generally comprised of argillites,

quartzites, and siltites. Surface deposits of glacial till, outwash, and lacustrine sediments can be found throughout the area. Overlying these sediments is a layer of loess that has been influenced by volcanic ash deposited and redeposited from Mount Mazama approximately 6,700 years ago (*Martinson and Basko, 1998*).

The erosion hazard for these soils is based on *Erosion Factor K* which indicates the susceptibility of a soil to sheet and rill erosion by water. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. (NRCS, 1996) The K value for the whole soils (*K<sub>w</sub>*) is 0.20 for both soils in the project area. This would indicate that erosion hazard is moderate.

### **Existing Condition due to past Management Activities**

Nearly all of the DNRC managed land within the project area has been harvested since logging first started in 1913. While some of these skid trails and roads are still discernable, vegetation similar to the surrounding vegetation is generally present and growing. Through the freeze-thaw cycles and root mass penetrating the soil, impacts from past entries are substantially reduced. Adverse compaction and displacement impacts from past logging are estimated to cover less than 10% of the project area. (DNRC, 2009).

Past harvesting operations in the *project area* includes started around 1913 with primarily harvests for making railroad ties). Harvests for tie logs generally were selective with very little site preparation (DNRC, 2000). Since that time harvest has continued with a variety of harvest types from clearcuts to thinning. The most recent harvest in proposed units took place in the mid-1920's near Skyles Lake. Smaller forest product removals include small salvage harvests; post-and-pole harvests; firewood gathering and individual Christmas tree harvesting throughout the last 80+ years. Other uses in the area include hunting, berry picking, and hiking on game trails, roads and skid trails.

On classified forest land, DNRC strives to maintain soil productivity by limiting cumulative soil impacts to 15 percent or less of a harvest area, as noted in the State Forest Management Plan (*DNRC, 1996*). As a recommended goal, if existing detrimental soil effects exceed 15 percent of an area, proposed harvesting should minimize any additional impacts. Harvest proposals on areas with existing soil impacts in excess of 20 percent should avoid any additional impacts and include restoration treatments, as feasible, based on site-specific evaluation and plans.

Cumulative effects from past and current uses include roads and skid trails and hiking trails. The current extent of impacts to soils from skid trails is low and is expected to be below the 15% recommended threshold. (DNRC, 2009., DNRC 2008).

Area taken out of production for roads including the Two Bear Road, Lion Mountain Road, and Wolftail Pines road is estimated at 13 acres (2.7% of analysis area). This includes road construction on the proposed Skyles Lake Timber Sale and the Lion Mountain Timber Sale projects.

## **ENVIRONMENTAL EFFECTS**

### ***Description of Alternatives***

No Action Alternative: Under the No Action Alternative, no activity pertaining to Phase 1A would be undertaken. No related trail would be constructed and no parking lots and access roads would be built; proposed trail corridor and parking/road areas would remain as productive timber-harvest land. Existing recreation activities would continue.

(Action Alternative): The TRTI Phase 1A project would be constructed to IMBA (International Mountain Biking Association) standards and operated as a mixed-use recreational trail as proposed by the proponent. The proposed trail would extend from Lion Mountain Loop to the existing parking lot at the Two Bear gate and the north boundary of the State ownership in Section 33, and create two looped trail segments by connecting at either end of two stretches of proposed logging roads. Approximately 700 linear feet of road, a 100-foot by 65-foot parking area, and sanitation facilities would be constructed, with these respective areas being removed from timber production. A 39" wide trail is proposed to be centered on a trail corridor approximately 5+ miles long and generally 10' wide, but interspersed with wider trail "bulb-outs" placed approximately every 1,000 feet as well as some additional intermittent width as necessary to accommodate the initial trail construction on steeper slopes, will also be removed from timber production. Approximately 100 feet of stone is anticipated to be removed by blasting, and some thinning of submerchantable (brush and small diameter) timber may occur up to 50' on either

side of the trail, to DNRC-designated forest management standards. The proposed length of trail on DNRC lands is approximately 24,700 feet (4.7 miles).

### ***Direct and Indirect Effects***

#### **No Action Alternative**

If this alternative were selected, continued use of the area would not change from the existing condition. Erosion problems would not be identified or repaired. An authorized trail system would not be constructed; therefore no additional ground would be removed from timber production.

#### **Action Alternative**

##### ***Loss of timber production***

Under the action alternative approximately 24,700 feet of trail would be constructed in the Lion Mountain and Skyles Lake area. Trail width would vary from 24 inches wide on approximately 1,680 feet to 39 inches wide on approximately 23,020 feet. This includes a short 250 foot spur that may not be implemented for several years. The total area removed from timber production would be 6.2 acres and includes 4.7 miles of trail corridor, a new parking area (100 ft x 65 ft) and 707 feet of new road construction.

##### ***Increased Erosion***

Because vegetation reduces erosion potential by holding soil with roots and by filtering runoff with above ground vegetation, the risk of erosion would increase under this alternative. Erosion potential would be the highest during construction and for an estimated two years post-construction. This would be a result of approximately 1600 cubic yards of material excavated from the trail prism and *wasted* on the downhill side of the trail. Steeper areas would result in larger quantities of waste material. Calculations indicate that excavation of a 39 inch trail on a 10% side slope would generate 0.25 cubic feet of material for every foot of trail constructed. Conversely, the excavation of a 39 inch trail on a 50% sideslope would generate 4.5 cubic feet of waste material for every foot of trail constructed.

Because no streams are located near the proposed trail, the risk of adversely impacting water quality would be very low. However, the wasted material would provide a good seedbed for weeds.

A short area of the proposed trail would likely require blasting. With the limited soil in the area proposed for blasting, no substantial erosion increase would be expected from this action.

Trails would be constructed and maintained according to the International Mountain Biking Association's standards and principles found in *Trail Solutions; IMBA's Guide to Building Sweet Singletrack* and *Managing Mountain Biking: IMBA's Guide to Providing Great Riding*. While bared soil and increased use typically results in additional erosion and wear, proper design and maintenance coupled with the well-drained soil would reduce the potential erosion on the trails. As part of the Land Use License, erosion control measures would be required and therefore the risk of erosion would be lessened.

To further reduce the risk of erosion; the following mitigations would be required:

- 1) Backslopes (cutslopes) must be at a stable angle.
- 2) Wasted material must be spread to a depth not to exceed ¾ inch.
- 3) Depositing waste material within a draw is prohibited. Additionally, wasted material should not be placed in a location that could facilitate erosion to a draw.
- 4) Bare soil must be seeded within 7 days to stabilize soils and reduce the risk of weed infestations.
- 5) Drainage must be maintained at all times on the trails.
- 6) Limit trail use during wet periods

By implementing erosion control measures on existing trails and following these mitigation recommendations, the risk of unacceptable impacts would be low.

### **Cumulative Soil Effects**

#### **No Action Alternative**

Cumulative effects to soils under the no action alternative include continued erosion from the current uses. Erosion control measures would be implemented in the future as part of a timber sale or other proposed action.

No additional loss of timber productivity would result from the implementation of this alternative.

Action Alternative

Under the action alternative, an additional 6.2 acres (1.3% of analysis area) of land would be removed from timber production. This would increase the cumulative loss of productivity to an estimated 19.2 acres or 4.0% of the analysis area.

Erosion potential would be increased, especially during construction and for an estimated two years following construction would be increased, mainly due to the loose soil deposits in waste areas and unvegetated cutslopes. After the waste areas and unvegetated cutslopes stabilize the erosion potential would be reduced, although it would remain higher than the No Action alternative due to the loss of vegetative cover on the trail prism. No cumulative impacts to water quality from erosion would be expected due to the lack of streams near the proposed trail location.

**REFERENCES:**

Martinson, A.H. and Basko, W.J. 1998. Soil Survey of Flathead National Forest Area, Montana. USDA Forest Service, Region 1, Flathead National Forest. Kalispell, MT. 206 pp.

Soil Survey, Upper Flathead Valley Area, Montana. 1960. USDA SCS. US Government Printing Office, Washington D.C.

DNRC, 2009. Beaver/Swift/Skyles Timber Sale Project Environmental Assessment. Montana Department of Natural Resources and Conservation, Northwestern Land Office, Kalispell and Stillwater Units.

DNRC, 2008. Lion Mountain Timber Sale Environmental Assessment. Montana Department of Natural Resources and Conservation, Northwestern Land Office, Kalispell Units.

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**MEMORANDUM**

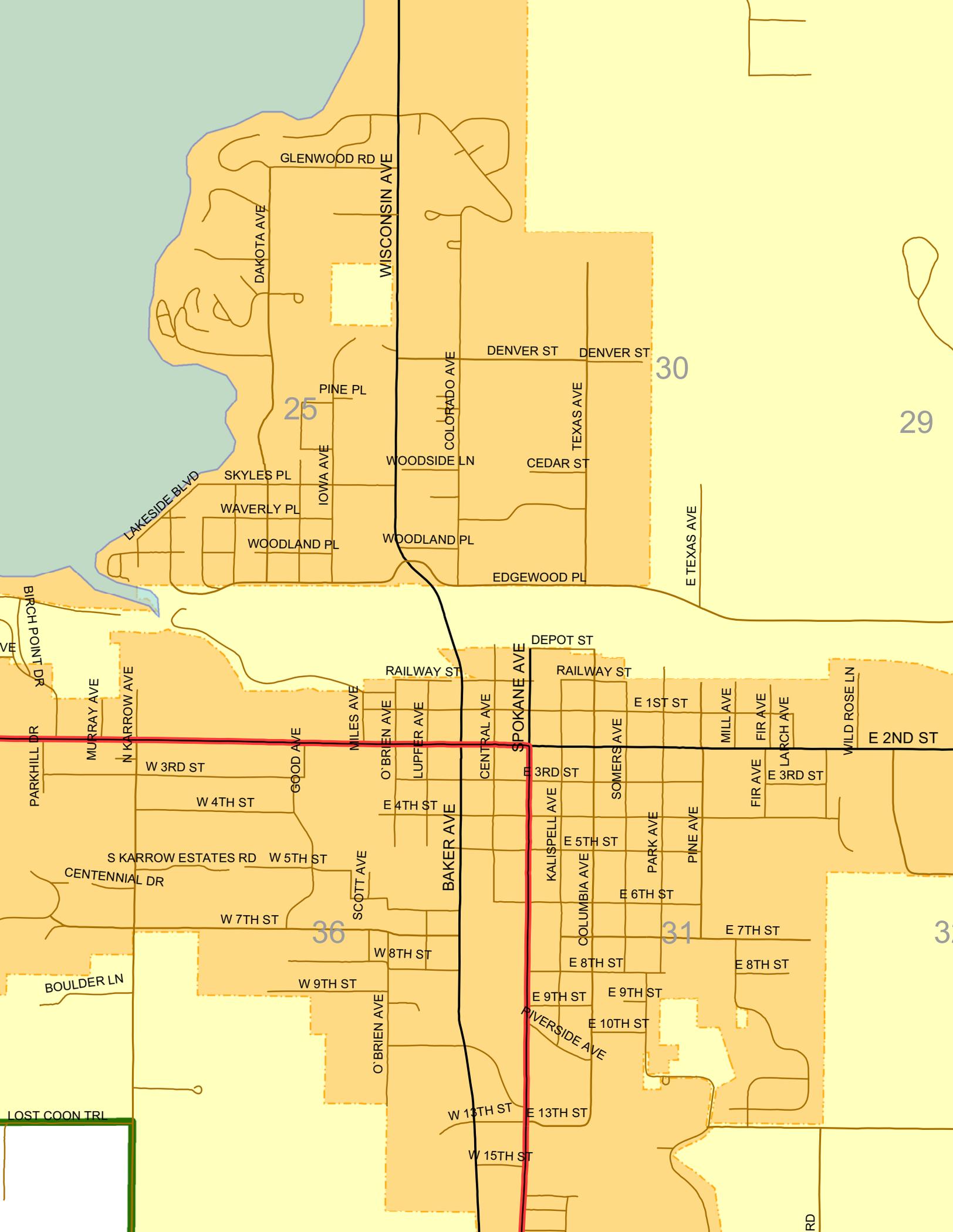
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**TO:** ANNE MORAN, PROJECT LEADER  
**FROM:** MARC VESSAR  
**SUBJECT:** WHITEFISH TRAILS ANALYSIS OF HYDROLOGY AND FISHERIES  
**DATE:** 6/12/2009  
**CC:** GARRETT SCHAIRER, GREG PONCIN

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I have reviewed the proposal for the trails system in the Beaver Lakes, Skyles and Spencer Areas. Because no trails are proposed near surface water, a very low risk of impacts to water quality and fisheries would exist. Unless soil disturbing activities are planned near surface water, no further analysis is deemed appropriate.



GLENWOOD RD

DAKOTA AVE

WISCONSIN AVE

DENVER ST DENVER ST

30

25

PINE PL

COLORADO AVE

TEXAS AVE

29

LAKESIDE BLVD

SKYLES PL

IOWA AVE

WOODSIDE LN

CEDAR ST

WAVERLY PL

WOODLAND PL

WOODLAND PL

EDGEWOOD PL

E TEXAS AVE

BIRCH POINT DR

MURRAY AVE

N KARROW AVE

PARKHILL DR

W 3RD ST

W 4TH ST

S KARROW ESTATES RD W 5TH ST

CENTENNIAL DR

W 7TH ST

36

SCOTT AVE

E 4TH ST

BAKER AVE

DEPOT ST

RAILWAY ST

RAILWAY ST

E 1ST ST

MILL AVE

FIR AVE

LARCH AVE

WILD ROSE LN

E 2ND ST

W 3RD ST

GOOD AVE

MILES AVE

O'BRIEN AVE

LUPFER AVE

CENTRAL AVE

SPOKANE AVE

E 3RD ST

SOMERS AVE

E 3RD ST

FIR AVE

E 3RD ST

S KARROW ESTATES RD W 5TH ST

W 5TH ST

E 4TH ST

E 5TH ST

PARK AVE

PINE AVE

E 6TH ST

E 7TH ST

31

W 7TH ST

W 8TH ST

E 8TH ST

E 8TH ST

BOULDER LN

W 9TH ST

O'BRIEN AVE

RIVERSIDE AVE

E 9TH ST

E 9TH ST

E 10TH ST

W 13TH ST

E 13TH ST

W 15TH ST

LOST COON TRI

3

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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.*

Vegetative analysis was conducted approximately two years ago (3/12/2007 TRTI EA). The vegetative quality of the area has not changed measurably in the interim; however the following analysis was updated with minor modifications to address current thinning projects in progress and proposed timber sale projects awaiting approval.

### Vegetative Cover, Quantity and Quality

The corridor of the area where trail work is proposed runs through topography that is glacially influenced with predominantly broken ground that includes cliffs, draws, ridges, benches, and potholes. The corridor would travel through elevations generally ranging from approximately 3,000 feet to just over 3,800 feet. With inclusions of rock outcrops, forest productivity is rated moderate to high. Areas with shallower soils or drier south aspects commonly contain Douglas fir, lodgepole pine, and ponderosa pine in the forest canopy. The moister, more productive sites also have grand fir, western larch, subalpine fir, and several hardwoods included in the species mix. Common species of ground cover include snowberry, pinegrass, buffaloberry, and huckleberry; a diverse array of forbs reside on the wetter sites. The trail corridor would go through many stands of varying age classes, stand structures, and cover types. Stocking levels in these stands are also extremely variable. Past disturbance in the area includes an active history of timber harvesting, wildfires, and substantial dispersed recreational use. Noxious weeds in the area include hound's tongue, orange hawkweed, and spotted knapweed. Most weeds occur in small spotty populations; however spotted knapweed is widespread.

### Direct and Indirect Effects to Vegetation:

With the No Action Alternative A, no new trail work would be authorized. No additional forest land would be taken out of timber production. The existing unauthorized trails in the area would likely continue to be used and a moderate increase in use over time may occur consistent with the area's population growth. Current uses of the area would continue with the potential of increased recreation in the future. The potential for the spread of noxious weeds would remain low.

With the Action Alternative B, activities such as pruning trees, removing downfall and hazardous trees, and clearing the trail tread of ground cover and small areas adjacent to the trail for signs and benches would directly affect vegetation in these areas. The effect to vegetation would occur on a narrow, confined area and the overall vegetation in the general area would not be affected. The exposed areas would have a greater risk of weed infestation. Authorization of the proposed trail would remove 6.2 acres from timber production and, over time, possibly substantially increase the recreational use of the area. Consequently, there is risk that more unauthorized trails could be constructed, which would spread more noxious weeds and remove more acreage from timber production. Potential effects to vegetation include increased opportunity for weed spread, human-caused fires, and creation of unauthorized trails. Mitigations outlined in the TRTI Operating Plan and elsewhere in this document are designed to address these effects.

### Cumulative Effects to Vegetation:

Cumulative Effects of the No Action Alternative A: In addition to the effect of ongoing increasing dispersed recreation, past harvesting and road construction in the area have resulted in impacts; these impacts include additional weed infestations and removal of forest acreage to become part of a road system. Current and proposed fuels reduction projects (*Lion Mountain Fuels Reduction Project EA*) and timber sales (*Beaver/Swift/Skyles Timber Sale Project EA*) are planned in the area of the proposed trail, and have been designed to have a positive effect on forest growth, vigor, and desired species mix. Additional areas of exposed soil would be created by these projects and would increase the risk of noxious weeds. Increased weed management is often implemented with timber sale projects, greatly offsetting the effect, or actually providing a net benefit.

Cumulative Effects of the Action Alternative B: Potential cumulative effects to vegetation include increased soil for weed infestation since the area will receive additional public exposure under recreation management. Another effect of the TRTI's construction is likely to be an increase in cost and time on managing current and future timber sales in the area, given the complications of arranging logging activities around a recreational corridor. Past harvesting and road construction in the area have impacted vegetation by allowing additional weed infestations and removing some acreage from forest to become part of a road system. Current and proposed fuels reduction projects (*Lion Mountain Fuels Reduction Project EA*) and timber sales (*Beaver/Swift/Skyles Timber Sale Project EA*) are planned in the area of the proposed trail, and have been designed to have a positive effect on forest growth, vigor, and desired species mix. Additional areas of exposed soil would be created by these projects and would increase the risk of noxious weeds. Increased weed management is often implemented with timber sale projects, greatly offsetting the effect. Managing the trail system in the area under the Land Use License and Draft Operating Plan would lead to identification and reclamation of problem areas on existing trails, as well as increased public information that would provide details on how to use the trail responsibly in order to reduce the spread of noxious weeds, unauthorized trails, and human-caused fire. With the proposed increase in management, the trail may become more confined and better maintained, therefore mitigating potential negative effects to vegetation.

# WILDLIFE ANALYSIS

## INTRODUCTION

This analysis is designed to disclose the existing condition of the wildlife resources and display the anticipated effects that may result from each alternative of this proposal. During the initial scoping, the following wildlife issues were identified from internal and external comments regarding the effects of proposed timber harvesting:

- Proposed trail construction, maintenance, use, and associated activities could increase disturbance to wildlife in the vicinity, which could alter wildlife use of the project area.
- Proposed trail use and associated activities could generate conflicts between users (and their pets) and the wildlife inhabiting the area.
- Proposed trail use and associated activities could generate litter and garbage, which could attract wildlife species and/or habituate wildlife species creating potential for increased conflicts.
- Proposed trail construction, maintenance, use, and associated activities could alter cover, increase access, and reduce secure areas, which could adversely affect grizzly bears by displacing grizzly bears from important habitats and/or increasing risk to bears of human-caused mortality.
- Proposed trail construction, maintenance, use, and associated activities could alter habitats for sensitive species, namely affecting potential flammulated owl and pileated woodpecker habitats.
- Proposed trail construction, maintenance, use, and associated activities could disturb big game species and/or alter the effectiveness of their habitats.

The following sections disclose the anticipated direct, indirect, and cumulative effects to these wildlife resources in the analysis area from the proposed actions. Past and current activities on all ownerships in each analysis area, as well as planned future agency actions have been taken into account for the cumulative effects analysis.

### *Analysis Area*

The discussions of existing conditions and environmental effects will focus on two different scales. The first will be the “project area”, which consists of approximately 604 acres of DNRC managed lands in Sections 33 and 34, T31N, R22W. The second scale or the “analysis area” relates to the surrounding landscape for assessing cumulative effects to wildlife and their habitats. The scales of these analysis areas vary according to the species being discussed, but generally approximate the size of the home range of the discussed species.

### *Analysis Methods*

DNRC attempts to promote biodiversity by taking a ‘coarse-filter approach’, which favors an appropriate mix of stand structures and compositions on State lands. Appropriate stand structures are based on ecological characteristics (e.g., land type, habitat type, disturbance regime, unique characteristics). A coarse-filter approach assumes that if landscape patterns and processes are maintained similar to those with which the species evolved, the full complement of species would persist and biodiversity would be maintained. This coarse-filter approach supports diverse wildlife populations by managing for a variety of forest structures and compositions that approximate historic conditions across the landscape. DNRC cannot assure that the coarse-filter approach will adequately address the full range of biodiversity; therefore, DNRC also employs a “fine-filter” approach for threatened, endangered, and sensitive species. The fine-filter approach focuses on a single species’ habitat requirements.

To assess the existing condition of the proposed project area and surrounding landscape, a variety of techniques were used. Field visits, scientific literature, SLI data, aerial photographs, Montana Natural Heritage Program (MNHP) data, and consultations with other professionals provided information for the following discussion and effects analysis. Specialized methodologies are discussed under the species in which they occur. Species were dismissed from further analysis if habitat did not exist in the project area or would not be modified by any alternative.

### ***Description of Alternatives***

The remainder of the analysis assesses the effects related to the following 2 potential action alternatives:

No Action Alternative: Under the No Action Alternative, no activity pertaining to Phase 1A would be undertaken. No related trail would be constructed and no parking lots and access roads would be built; habitats in those areas would continue providing habitat for those species that are presently using those areas. Existing recreation activities would continue.

Action Alternative: The TRTI Phase 1A project would be constructed to IMBA (International Mountain Biking Association) standards and operated as a mixed-use recreational trail as proposed by the proponent. The proposed trail would extend from Lion Mountain Loop to the existing parking lot at the Two Bear gate and the north boundary of the State ownership in Section 33, and create two looped trail segments by connecting at either end of two stretches of proposed logging roads. Some thinning of submerchantable (brush and small diameter) timber may occur up to 50' on either side of the trail to DNRC-designated forest management standards. The proposed length of trail on DNRC lands is approximately 4.7 miles.

## **COARSE FILTER WILDLIFE ANALYSIS**

Of the 108 mammal species found in Montana, 74 are suspected or known to occur in Flathead County (Foresman 2001). The majority of terrestrial vertebrates that were present at the time of European settlement likely still occur in the vicinity of the proposed project area. Six amphibian and seven reptile species have also been documented in Flathead County (Maxell et al. 2003) and at least 65 species of birds have been documented in the vicinity in the last 10 years (Lenard et al. 2003). Terrestrial species that rely on special habitat elements, such as white bark pine (*Pinus albicaulis*), western white pine (*Pinus monticola*), or burned areas, may not be present or may occur in lower abundance due to the decline of these elements across the landscape. Over time, due to fire suppression, tree densities have increased and shade-tolerant species, such as Douglas-fir and grand fir, have become more prevalent than they were historically. These departures probably benefit wildlife species that rely on shade-tolerant tree species and/or closed-canopy habitats, while negatively affecting species that rely on shade-intolerant tree species and/or open habitats. However, in the vicinity of the project area, the forests are a mosaic of mature stands, which benefit species relying on mature forests, and regenerating forests, benefiting wildlife species that use early seral stages either exclusively or seasonally. Past timber harvesting that led to the early seral stages has likely reduced the quality and quantity of snags and coarse woody debris compared to historical conditions, reducing habitat for those wildlife species that require these components.

Since the proposal involves negligible habitat changes and the most of the general wildlife issues arise out of changes in human access and the associated increased human use of an area, the coarse filter analysis will focus on human access and associated disturbance, displacement, potential for wildlife/human conflicts, and potential for introducing wildlife attractants.

### **WILDLIFE HABITAT ALTERED WITH HUMAN ACCESS**

***Issue:*** Proposed trail construction, maintenance, use, and associated activities could increase disturbance to wildlife in the vicinity, which could alter wildlife use of the project area.

***Issue:*** Proposed trail use and associated activities could generate conflicts between users (and their pets) and the wildlife inhabiting the area.

***Issue:*** Proposed trail use and associated activities could generate litter and garbage, which could attract wildlife species and/or habituate wildlife species creating potential for increased conflicts.

### **INTRODUCTION**

Increasing human access into wildlife habitats creates the potential for interactions between wildlife and humans. Humans can disturb or displace wildlife, attract wildlife, and/or get into conflicts with wildlife. Disturbance of wildlife by humans may elicit short-term or long-term behavioral (avoidance, habituation, or attraction) and/or physiological (affecting an individual's energy budget or population productivity) responses in wildlife (Joslin and Youmans 1999). Extensive research has focused on the behavioral and/or physiological effects of human

disturbance on groups of wildlife, including large carnivores, ungulates, birds, and even small mammals. Low level behavioral effects can include mild disturbance of individuals or interference with foraging or other life requisites. More detrimental behavioral effects can include abandoning habitat, habituation to human activities, and potentially mortality of individuals due to habituation. Physiological effects can frequently be more subtle and may include a host of changes internally that are energetically costly to an individual or the population as a whole; physiological effects can include the energetic cost of moving away from the disturbance, to elevated heart rates while being disturbed, or increased stress associated with changing situations. Several factors (type of disturbance, distance to disturbance, speed, frequency, magnitude, location of disturbance) influence the behavioral response of the various species of wildlife to human disturbance. Additionally, rarely do these disturbance factors affect only the narrow trail corridor, but rather extend some distance out into the adjacent habitats and potentially affects the wildlife in that wider area. This is of particularly importance when recreationalists bring dogs with them since dogs extend the zone of influence around the trail, especially when not on a leash since dogs can disrupt wildlife activities, alarm individuals, chase, injure, or even kill wildlife. Collectively, facilitating increases in human activities within wildlife habitats increases the potential for elevated wildlife disturbance.

Similarly, wildlife conflicts are negative interactions between wildlife and humans that largely stem from humans encroaching on wildlife habitats or wildlife becoming adapted to using human developed landscapes (Woodroffe et al. 2005). Generally, the 2 common types of conflicts include interactions that can pose a danger to human safety (aggressive or defensive conflicts) or those that cause damage to property (nuisance conflicts). Human safety concerns largely stem from wildlife species that have the ability to defend themselves (and subsequently pose a danger to humans) from attack/intrusion, such as mountain lions, bears, and wolves. Increased human access places more people in wildlife habitats, which can increase the potential for aggressive or defensive wildlife/human conflicts.

Conversely, some wildlife can be attracted to humans and/or the associated refuse/garbage/litter as a source of easily accessible source of food. Individuals of some species of wildlife can become a nuisance when habituated to artificial food sources that humans introduce. Litter from food items brought while recreating that may not be properly removed, introduces foods sought by humans (e.g. sweet, salty, etc) to wildlife. This conditioning of wildlife to human foods can lead to nuisance wildlife conflicts. Even when litter/trash/refuse is properly disposed of, receptacles may not be wildlife resistant, which may allow certain wildlife to access the trash and become habituated to eating human garbage/litter. These refuse receptacles can then become not only an attractant, but may also become a primary source of food. Unfortunately, food conditioned wildlife are not easily separated from human garbage, and this condition can frequently lead to management death of the individuals that are conditioned.

### *Analysis Area*

Direct and indirect effects were analyzed on the project area. Cumulative effects were analyzed on a the 20,004-acre area south of the Lazy Creek grizzly bear management subunit (see WILDLIFE-GRIZZLY BEAR) that is east and north of Highway 93 and west of Whitefish Lake. This scale includes enough area to support numerous individuals of many of the species of resident wildlife in the vicinity. Additional specifics on the general disturbance to some of the wildlife that may use a larger area than this (i.e. grizzly bear, gray wolves, big game, etc.) can be found in the fine filter section (see WILDLIFE-GRIZZLY BEAR, WILDLIFE-GRAY WOLF, or WILDLIFE-BIG GAME) of the wildlife analysis.

### *Analysis Methods*

Potential human disturbance levels, wildlife attractants, and potential for wildlife/human conflicts were assessed using field evaluations and aerial-photograph interpretation. Factors considered in the analysis include the level of human access, risk of disturbance and displacement of wildlife, potential for conflicts with wildlife, and the likelihood of introducing wildlife attractants.

## **EXISTING ENVIRONMENT**

The project area currently experiences moderate levels of disturbance to resident wildlife in the form of recreational hiking, snowshoeing, biking, firewood gathering, and recreational hunting. Human access in the project area is moderate, with the project area being close to the City of Whitefish, has some open roads, and has access points to/from private ownerships and the open roads. The ongoing logging associated with the Beaver/Swift/Skyles and Lion Mountain timber sale projects is introducing some short duration, high intensity disturbance to wildlife in the vicinity. Those activities may also be increasing the effective sight (and sound) distances to which wildlife in the

vicinity are affected when other disturbance regimes are in the area. For example, with the more open stands from the logging, deer may move away from a hiker at a greater distance because the sight, sound, or smell would travel further than if the stand had not been thinned. Within the project area, the road construction associated with the ongoing logging is likely facilitating increased human access and the potential for elevated human disturbance levels in the project area. In the project area, FWP reported numerous black bear/human conflicts in the past. Black bears (*Ursus americanus*) and mountain lions (*Felis concolor*) likely use the project area during portions of the year and occasional use by grizzly bears is also possible. Seasonal concentrations of prey species (i.e. big game) can also attract some of these wildlife species to an area, which could facilitate wildlife/human conflicts; numerous big game winter ranges exist in the project area (see WILDLIFE-BIG GAME WINTER RANGE). Moderate levels of human use have the potential for moderate levels of wildlife attractants being introduced to the area. Numerous species of wildlife, including black bears, grizzly bears, ravens (*Corvus corax*), raccoons (*Procyon lotor*), and several species of small mammals occurring in the area are known to become habituated to human attractants across their ranges. Attractants in the project area are fairly limited, and largely stem from human users leaving litter behind.

In the cumulative-effects analysis area, disturbance due to human developments (including agricultural areas, private developments, extensive road network including Highway 93, parts of the City of Whitefish, including a major golf course, etc.), open water, and general recreational use (e.g. Spencer mountain bike trails, etc.) is relatively high. Human access, via numerous roads and the varied ownership patterns, is quite high, facilitating this level of human disturbance. Ongoing harvesting on DNRC-managed lands and private ownership is introducing some short duration, high intensity disturbance to wildlife. Additionally other longer-term developments are introducing more permanent disturbance to wildlife in the cumulative-effects analysis area, including residential development, roads, and permanent alterations to forested stands. Habitats for wildlife that are frequently involved with wildlife/human conflicts, such as black bears, mountain lions, grizzly bears, and wolves are common in the cumulative-effects analysis area. FWP reported at least 40 wildlife/human conflicts in the cumulative-effects analysis area in the recent past, including conflicts with grizzly bears, black bears, and mountain lions. Winter range for white-tailed deer, mule deer, elk, and moose exist in the cumulative-effects analysis area, which can attract some of these same species commonly involved in wildlife/human conflicts. In the cumulative-effects analysis area, numerous species of wildlife exist, including black bears, grizzly bears, ravens, raccoons, and several species of small mammals that are known to become habituated to human attractants. A host of attractant sources occur in the cumulative-effects analysis area that are tied to human use areas, such as roads, houses, agricultural fields, and an existing trash receptacle compound that may all provide food sources for wildlife and/or concentrate wildlife.

## **ENVIRONMENTAL EFFECTS**

### Direct and Indirect Effects of the No-Action Alternative on wildlife habitats due to changes in human access

No changes to human access would occur. Existing levels of human disturbance and displacement would likely continue into the future. Existing potential for wildlife/conflict would not change. No changes to existing potential for humans introducing wildlife attractants would occur. No appreciable changes to wildlife use of the project area would be anticipated. Thus, since: 1) no further disturbance or displacement would be expected; 2) no changes to human access would occur; 3) no changes to the potential for wildlife/human conflict would occur; 4) no changes to the potential introduction of wildlife attractants would occur; and 5) no changes to existing stands in the project area would occur, no direct or indirect effects to wildlife would be anticipated.

### Direct and Indirect Effects of the Action Alternative on wildlife habitats due to changes in human access

Human access would increase in the project area. Roughly 4.7 miles of additional non-motorized access would facilitate mountain biking, hiking, running, and equestrian uses, all which may further disturb wildlife in the project area. Elevated disturbance levels would likely cause some wildlife to abandon the area, some wildlife would be habituated to the use, and some would likely alter their use patterns to avoid the disturbance.

Collectively, a reduction in use of the area by wildlife in general would be anticipated given the elevated human access and disturbance. In general, the additional human access could increase the potential for wildlife/human conflicts in the project area. The increased human access would facilitate the introduction of wildlife attractants to the project area, which could habituate resident wildlife. Incorporating suggested mitigations, including user education (keeping away from wildlife/ no feeding of wildlife, and pack out litter), encouraging dog owners to restrain their dogs on the trail, and the use of bear/wildlife resistant trash receptacles would reduce the overall potential for disturbing, displacing, attracting, or habituating wildlife and would reduce the potential for wildlife/human conflicts. A small amount of dry western larch/Douglas-fir stands would be removed to construct the road, parking lot, and trail, but these reductions would not appreciably alter the availability of these habitats in

the project area. Thus, since: 1) human access would increase to the area; 2) human disturbance levels and potential for displacement would be elevated in the project area; 3) the potential for wildlife/human conflicts would increase in the project area; 4) the potential for wildlife/human conflicts would increase in the project area; and 5) no appreciably changes to existing stands in the project area would occur, moderate adverse direct or indirect effects to wildlife would be anticipated.

Cumulative Effects of the No-Action Alternative on wildlife habitats due to changes in human access

No further changes to human access in the cumulative-effects analysis area would be anticipated; relatively high levels of human access would persist in the cumulative-effects analysis area. Existing levels of human disturbance and displacement would likely continue into the future. No appreciable changes to wildlife use of the project area would be anticipated. Overall the potential for wildlife/human conflicts would not change. Wildlife attractants in the cumulative-effects analysis area would not appreciably change. Thus, since: 1) no further disturbance or displacement would be expected; 2) no changes to human access would occur; 3) no changes to the potential for wildlife/human conflicts would occur; 4) no changes to the potential introduction of wildlife attractants would occur; and 5) no further changes to existing stands in the cumulative-effects analysis area would occur, no further cumulative effects to wildlife from disturbances would be anticipated.

Cumulative Effects of the Action Alternative on wildlife habitats due to changes in human access

Elevated human access on roughly 4.7 miles of non-motorized trail would contribute to the overall high levels of human access in the cumulative-effects analysis area. Disturbance from non-motorized use of the trail by mountain bikers, hikers, and horse-back riders would further disturb wildlife in the cumulative-effects analysis area. A reduction in use of the cumulative-effects analysis area by some species would be anticipated and an increase in others that may be habituated or attracted to these areas could occur. Some displacement of wildlife species commonly involved with wildlife/human conflicts could occur in other portions of the cumulative-effects analysis area; ongoing activities across the cumulative-effects analysis area may also be displacing some of these same species into other portions of the cumulative-effects analysis area, potentially including the project area. Overall, with an increase in human use of the cumulative-effects analysis area, a slight increase in wildlife/human conflicts would be anticipated. Elevated human use would likely lead to an overall increase in wildlife attractants in the area. Incorporating suggested mitigations in the project area would reduce the overall potential for disturbing, displacing, attracting, or habituating wildlife while reducing the potential for wildlife/human conflicts in a small portion of the cumulative-effects analysis area. A small amount of dry western larch/Douglas-fir stands would be removed to construct the road, parking lot, and trail, but these reductions would not appreciably alter the availability of these habitats in the cumulative-effects analysis area. Thus, since: 1) human access would increase to the cumulative-effects analysis area; 2) levels of human disturbance would be further elevated and the potential for displacement would be increased in the cumulative-effects analysis area; 3) the potential for wildlife/human conflicts would increase in the cumulative-effects analysis area; 4) the levels of wildlife attractants could increase in the cumulative-effects analysis area would; and 5) no appreciable changes to existing stands in the cumulative effects analysis area, minor to moderate cumulative effects to wildlife from disturbances would be anticipated.

**FINE-FILTER ANALYSIS**

In the fine-filter analysis, individual species of concern are evaluated. These species include wildlife species listed as threatened or endangered under the Endangered Species Act of 1973, species listed as sensitive by DNRC, and species managed as big game by DFWP. **TABLE W-1 – STATUS OF SPECIES CONSIDERED IN THE FINE FILTER ANALYSIS FOR THIS PROPOSED PROJECT** summarizes how each species considered was included in the following analysis or removed from further analysis because suitable habitat does not occur in the project area or proposed activities would not affect their required habitat components.

**TABLE W-1 –STATUS OF SPECIES CONSIDERD IN THE FINE FILTER ANALYSIS FOR THIS PROPOSED PROJECT**

| SPECIES                           |   | DETERMINATION - BASIS  |
|-----------------------------------|---|--|
| Threatened and Endangered Species | Grizzly Bear ( <i>Ursus arctos</i> )<br><br>Habitat: recovery areas, security from human activity | The project area is approximately 4.5 miles outside of the grizzly bear recovery zone, but is adjacent to the “occupied habitat” as mapped by grizzly bear researchers and managers to address increased sightings and encounters of grizzly bears in habitats outside of recovery zones (T. Wittinger, Unpub. Interagency Map). |

|                   |   |  |
|-------------------|---|--|
|                   | <p><b>Canada Lynx</b><br/>(<i>Felis lynx</i>)</p> <p>Habitat: Subalpine fir hab. Types, dense sapling, old forest, deep snow zone</p>                     | <p>The project area occurs outside of the elevations and habitat types where lynx are commonly found in Montana. No lynx habitats were identified in the project area. The project area is outside of the recently designated ‘critical habitat’ area as identified by the USFWS and lynx are not expected to use the project area. Thus, no direct, indirect, or cumulative effects to Canada lynx would be expected under either alternative.</p>  |
| Sensitive Species | <p><b>Bald eagle</b><br/>(<i>Haliaeetus leucocephalus</i>)</p> <p>Habitat: late-successional forest &lt;1 mile from open water</p>                        | <p>The project area is approximately 5 miles from the nearest bald eagle territory on Swift Creek. Thus, no direct, indirect or cumulative effects to bald eagles would be expected to occur as a result of either alternative.</p>  |
|                   | <p><b>Black-backed woodpecker</b><br/>(<i>Picoides arcticus</i>)</p> <p>Habitat: mature to old burned or beetle-infested forest</p>                       | <p>No recently (less than 5 years) burned areas are in the project area. Thus, no direct, indirect, or cumulative effects to black-backed woodpeckers would be expected to occur as a result of either alternative.</p>  |
|                   | <p><b>Co ur d'Alene salamander</b><br/>(<i>Plethodon idahoensis</i>)</p> <p>Habitat: waterfall spray zones, talus near cascading streams</p>              | <p>No moist talus or streamside talus habitat occurs in the project area. Thus, no direct, indirect, or cumulative effects to Coeur d'Alene salamanders would be expected to occur as a result of either alternative.</p>  |
|                   | <p><b>Columbian sharp-tailed grouse</b><br/>(<i>Tympanuchus Phasianellus columbianus</i>)</p> <p>Habitat: grassland, shrubland, riparian, agriculture</p> | <p>No suitable grassland communities occur in the project area. Thus, no direct, indirect, or cumulative effects to Columbian sharp-tailed grouse would be expected to occur as a result of either alternative.</p>  |
|                   | <p><b>Common loon</b><br/>(<i>Gavia immer</i>)</p> <p>Habitat: cold mountain lakes, nest in emergent vegetation</p>                                       | <p>Single loons have been documented on Skyles Lake in the past, but no evidence of nesting on the lake has been documented. No disturbance to loons on Skyles lake would be anticipated from trail users; vehicles accessing the proposed trailhead would pass by on the county road, and no changes to human access to the lake and/or nesting areas would be anticipated. Thus no direct, indirect, or cumulative effects to common loons would be expected to occur as a result of either alternative.</p>   |
|                   | <p><b>Fisher</b><br/>(<i>Martes pennanti</i>)</p> <p>Habitat: dense mature to old forest &lt;6,000 feet elevation and riparian</p>                        | <p>Ongoing harvesting in the project area has eliminated much of the marginal upland travel fisher habitats in the project area. No further changes to fisher habitats would be anticipated with either alternative. Given the existing stands, the limited area, the proximity to human developments, and the likelihood of use of the area by fisher, negligible direct, indirect, or cumulative effects would be expected to occur as a result of either alternative.</p>   |
|                   | <p><b>Flammulated owl</b><br/>(<i>Otus flammeolus</i>)</p> <p>Habitat: late-successional ponderosa pine and Douglas-fir forest</p>                        | <p>Some suitable dry Douglas-fir stands exist in the project area.</p>   |
|                   | <p><b>Gray Wolf</b><br/>(<i>Canis lupus</i>)</p> <p>Habitat: ample big game pops., security from human activity</p>                                       | <p>The project area is over 3 miles from the Lazy Creek wolf pack home range; annual home ranges for the Lazy Creek wolf pack routinely do not extend as far south as the project area. Little or no use of the project area by gray wolves would be expected. No wolf den or rendezvous sites are known to occur in the vicinity. Big game species are the primary prey for wolves, and continued use of the project area would be anticipated (see WILDLIFE-BIG GAME SECTION). Due to the minor changes in big game use, lack of known habitat attributes,</p> |

|                  |  |  |
|------------------|--|--|
|                  |  | and distance from normal use area, negligible direct, indirect, or cumulative effects to wolves would be anticipated under either alternative.   |
|                  | <p>Harlequin duck<br/>(<i>Histrionicus histrionicus</i>)</p> <p>Habitat: white-water streams, boulder and cobble substrates</p>  | No suitable high-gradient streams occur in the project area. Thus, no direct, indirect, or cumulative effects to harlequin ducks would be expected to occur as a result of either alternative.   |
|                  | <p>Northern bog lemming<br/>(<i>Synaptomys borealis</i>)</p> <p>Habitat: sphagnum meadows, bogs, fens with thick moss mats</p>   | No suitable sphagnum bogs or fens occur in the project area. Thus, no direct, indirect, or cumulative effects to northern bog lemmings would be expected to occur as a result of either alternative.   |
|                  | <p>Peregrine falcon<br/>(<i>Falco peregrinus</i>)</p> <p>Habitat: cliff features near open foraging areas and/or wetlands</p>    | Although a few small, unsuitable cliffs exist in the project area; no suitable cliffs/rock outcrops occur in the project area. Thus, no direct, indirect, or cumulative effects to peregrine falcons would be anticipated as a result of either alternative.   |
|                  | <p>Pileated woodpecker<br/>(<i>Dryocopus pileatus</i>)</p> <p>Habitat: late-successional ponderosa pine and larch-fir forest</p> | Western larch/Douglas-fir habitats occur in the project area.  |
|                  | <p>Townsend's big-eared bat<br/>(<i>Plecotus townsendii</i>)</p> <p>Habitat: caves, caverns, old mines</p>                       | DNRC is unaware of any mines or caves in the project area or close vicinity that would be suitable for use by Townsend's big-eared bats. Thus, no direct, indirect, or cumulative effects would be expected under either alternative.  |
| Big Game Species | Big Game Winter Range  | Mule deer, elk, and moose winter range exists in the project area.   |
|                  | Elk Security Habitat   | No elk security habitat exists in the project area and no large blocks of security habitat exist that contribute to a larger block of elk security habitat outside of the project area. Thus, no direct, indirect, or cumulative effects to elk security habitat would be anticipated as a result of either alternative. |

## THREATENED AND ENDANGERED SPECIES

### GRIZZLY BEAR

**Issue:** Proposed trail construction, maintenance, use, and associated activities could alter cover, increase access, and reduce secure areas, which could adversely affect grizzly bears by displacing grizzly bears from important habitats and/or increasing risk to bears of human-caused mortality.

#### INTRODUCTION

Grizzly bears are native generalist omnivores that use a diversity of habitats found in western Montana. Preferred grizzly bear habitats are meadows, riparian zones, avalanche chutes, subalpine forests, and big game winter ranges, all of which provide seasonal food sources. In the project area, primary habitat components include meadows, riparian areas, and big game winter ranges. Primary threats to grizzly bears are related to human-bear conflicts, habituation to unnatural foods near high-risk areas, and long-term habitat loss associated with human development (Mace and Waller 1997). Trail construction and use may affect grizzly bears by altering cover and/or by increasing access to humans into secure areas by creating roads (Mace et al. 1997). These actions could lead to the displacement of grizzly bears from preferred areas and/or result in an increased risk of human-caused mortality by bringing humans and bears closer together and/or making bears more detectable, which can increase their risk of being shot illegally. Displacing bears from preferred areas may increase their energetic costs, which, may, in turn, lower their ability to survive and/or reproduce successfully.

### *Analysis Area*

Direct and indirect effects were analyzed for activities conducted in the project area. Cumulative effects were analyzed on a the 17,834-acre portion of the “occupied habitat” area south of the Lazy Creek subunit that is east and north of Highway 93 and west of Whitefish Lake.

### *Analysis Methods*

Field evaluations, aerial-photograph interpretation, and a GIS analysis were the basis for this analysis. Open road densities were calculated using a simple linear calculation method. Factors considered in the analysis include the amount of the area with open road densities greater than 1 mile per square mile, the amount of available security habitat, and availability of timbered stands for hiding cover.

### **EXISTING ENVIRONMENT**

The project area is outside of the North Continental Divide Ecosystem Recovery Area and the “occupied habitat” area as mapped by grizzly bear researchers and managers to address increased sightings and encounters of grizzly bears in habitats outside of recovery zones (T. Wittinger, Unpub. Interagency Map). Grizzly bears have not been documented in the project area, but use is possible.

Managing human access is a major factor in management for grizzly bear habitat. Open road densities (which include high use trails) are rather high in the project area (3.1 miles per square mile, simple linear calculation), which is similar to the larger, cumulative-effects analysis area which has high open road densities (2.7 and 3.2 miles/square mile, depending on the class of roads on private ownerships; simple linear calculation). No security core exists in the project area or cumulative-effects analysis area; hiding cover in the project area is fairly limited due to ongoing harvesting and past harvesting. Across the cumulative-effects analysis area, hiding cover is more abundant. In the cumulative-effects analysis area, the Beaver/Swift/Skyles Timber Sale Project would continue altering grizzly bear habitats and/or human disturbance levels; the proposed Stillwater Jumpstart project in the Beaver Lakes area could further alter grizzly bear habitats and/or disturb grizzly bears in the cumulative-effects analysis area. Harvesting and human disturbance would continue on other ownerships in the cumulative-effects analysis area; ongoing recreational use across all ownerships would continue to provide a source of disturbance to grizzly bears.

### **ENVIRONMENTAL EFFECTS**

#### Direct and Indirect Effects of the No-Action Alternative on Grizzly Bears

No direct effects to grizzly bears would be expected. No changes to the level of disturbance to grizzly bears would be anticipated. No changes in security core, open-road densities, or hiding cover would be anticipated. Thus, since: 1) no disturbance or displacement would be expected; 2) no changes in hiding cover would occur; 3) security habitat would not be altered; and 4) no changes in open road densities would be anticipated, no direct or indirect effects to grizzly bears would be anticipated.

#### Direct and Indirect Effects of the Action Alternative on Grizzly Bears

This alternative might affect grizzly bears directly through increased noise and human activity. Activities in grizzly bear habitats reduce grizzly bear security, possibly resulting in increased stress and/or energy expenditure to endure the disturbance or to move from the area. Trail construction, maintenance, and use would likely disturb grizzly bears should they be using the area. No changes to security core habitats and negligible changes to grizzly bear hiding cover would be anticipated with the anticipated clearing along the trail and parking lot and road development. No changes to motorized human access would occur since no new roads would be constructed or opened to motorized access. However, long-term use of roughly 4.7 miles of newly constructed trails in the project area would increase open-road densities in the project area from 3.1 miles per square mile (simple linear calculation) to 7.8 miles per square mile (simple linear calculation). Incorporating suggested mitigations, including user education, encouraging dog owners to restrain their dogs on the trail, and using bear/wildlife resistant trash receptacles would reduce the overall potential for disturbing, displacing, attracting, or habituating grizzly bears and would reduce the potential for grizzly bear/human conflicts. Thus, since: 1) elevated human access could facilitate increased human disturbance and displacement of grizzly bears; 2) no changes to hiding cover would be anticipated; 3) security habitats would not be affected; and 4) long-term open road densities would be quite elevated across the project area, moderate adverse direct or indirect effects to grizzly bears in the local area would be anticipated.

#### Cumulative Effects of the No-Action Alternative on Grizzly Bears

Access to the area, security habitats, and hiding cover would all remain unchanged. No changes to existing forested stands in the cumulative-effects analysis area would be expected. Human disturbance levels would be expected to continue into the future at fairly similar levels. No changes to existing security habitats would be anticipated. Any potential disturbance and habitat modification associated with the Beaver/Swift/Skyles and Lion Mountain timber sale projects would continue; proposed Stillwater Jumpstart project in the Beaver Lakes area could further disturb or displace grizzly bears while modifying their habitats. Thus, since: 1) no changes in human disturbance levels would be expected; 2) no changes to hiding cover would occur; 3) no changes to security habitats would be anticipated; and 4) no changes to open road densities would occur, no further adverse cumulative effects would be expected to affect grizzly bears in the cumulative-effects analysis area.

#### Cumulative Effects of the Action Alternative on Grizzly Bears

The increased use of the trail in the project area would increase human disturbance to grizzly bears in a portion of the cumulative-effects analysis area. The additional human disturbance and potential for displacement of bears in the cumulative-effects analysis area would be additive to ongoing harvesting associated with the Beaver/Swift/Skyles and Lion Mountain timber sale projects. Grizzly bears would be expected to continue using the cumulative-effects analysis area at similar levels as currently being used. Reductions in available habitats would be additive to the reductions from past and ongoing timber harvesting as well as more permanent land-cover changes in the cumulative-effects analysis area; however, appreciable amounts of the cumulative-effects analysis area are currently providing hiding cover and suitable habitats. No changes to existing security habitats would be anticipated. Open-road densities would be elevated to between 2.9 and 3.4 miles per square mile (from 2.7 to 3.2 miles per square mile, depending on class of roads on private ownerships, simple linear calculation) in the cumulative-effects. Incorporating suggested mitigations, including user education, encouraging dog owners to restrain their dogs on the trail, and using bear/wildlife resistant trash receptacles would reduce the overall potential for disturbing, displacing, attracting, or habituating grizzly bears and would reduce the potential for grizzly bear/human conflicts. Thus, since: 1) moderate increases in human disturbance levels would be expected; 2) no appreciable changes to hiding cover would be expected; 3) no changes to security habitats would be expected; and 4) open road densities would be increased in the cumulative-effects analysis area, minor to moderate adverse cumulative effects to grizzly bears would be expected.

### **SENSITIVE SPECIES**

Several species may be sensitive to human activities, have special habitat requirements, and/or may, if management activities result in continued adverse impacts, become listed under the Federal Endangered Species Act. Because sensitive species usually have specific habitat requirements, consideration of their needs serves as a useful “fine filter” for ensuring that maintaining healthy and diverse forests is met. As shown in ***TABLE W-1 - STATUS OF SPECIES CONSIDERED IN THE FINE FILTER ANALYSIS FOR THIS PROPOSED PROJECT***, the sensitive species portion of this analysis will focus on flammulated owls and pileated woodpeckers.

### **FLAMMULATED OWL**

***Issue:*** Proposed trail construction, maintenance, use, and associated activities could alter habitats for sensitive species, namely affecting potential flammulated owl habitats.

### ***INTRODUCTION***

Flammulated owls are tiny, migratory, insectivorous forest owls that inhabit old, open stands of warm-dry ponderosa pine and cool-dry Douglas-fir forests in the western United States and are secondary cavity nesters. They usually nest in cavities excavated by pileated woodpeckers or northern flickers in 12-25" dbh aspen, ponderosa pine, or Douglas-fir. Without disturbance, Douglas-fir encroach on ponderosa pine stands, increasing stand density and resulting in decreased habitat quality for flammulated owls.

### ***Analysis Area***

Direct and indirect effects were analyzed on the project area. Cumulative effects were analyzed on the on the 10 surrounding sections (approx 7,658 acres). This scale includes enough area to support several pairs of flammulated owls (McCallum 1994).

### *Analysis Methods*

To assess potential flammulated owl habitats on the project area, SLI data were used to identify stands in preferred habitat types (ARM 36.11.403(28)). Direct and indirect effects as well as cumulative effects were analyzed using a combination of field evaluation, aerial-photograph interpretation, and a GIS analysis of available habitats. Factors considered in the cumulative-effects analysis area included the level of human disturbance and the amount of suitable habitats in the cumulative-effects analysis area.

### **EXISTING ENVIRONMENT**

The stands in the project area are a mixture of western larch/Douglas-fir with scattered ponderosa pine. In the project area there are approximately 187 acres of flammulated owl habitats. The current conditions may be partially a result of the encroachment by Douglas-fir in the past. Ongoing harvesting associated with the Lion Mountain timber sale project on DNRC-managed lands is likely improving flammulated owl habitats. During field visits, 0-2 snags >12" dbh per acre were observed in the project area.

Portions of the cumulative-effects analysis area have been harvested in the recent past, potentially improving flammulated owl habitats by creating foraging habitats and reversing a portion of the Douglas-fir encroachment; however, retention of large ponderosa pine was not necessarily a consideration in some of these harvest units; thereby minimizing the benefits to flammulated owls. Portions of the cumulative-effects analysis area are not currently providing flammulated owl habitats, including agricultural areas, open water, and human developments. Additionally, denser stands of Douglas-fir resulting from modern fire suppression have reduced habitat quality for flammulated owls. Collectively, the flammulated owl habitats in the cumulative-effects analysis area are relatively limited. In the cumulative-effects analysis area, human disturbance levels associated with the human developments (including agricultural areas, private developments, extensive road network, parts of the City of Whitefish, etc.), open water, and general recreational use (e.g. Spencer mountain bike trails, etc.) is rather high.

### **ENVIRONMENTAL EFFECTS**

#### Direct and Indirect Effects of the No-Action Alternative on flammulated owls

Existing flammulated nesting habitats in the project area would not appreciably change. Human disturbance levels would continue at levels similar to present conditions. Thus, since: 1) no further changes to potential nesting habitats would be anticipated; and 2) no appreciable changes to human disturbance levels would be anticipated, no adverse direct and indirect effects would be expected to affect flammulated owls in the project area.

#### Direct and Indirect Effects of the Action Alternative on flammulated owls

Flammulated owls are tolerant of human disturbance (McCallum 1994); however, the elevated disturbance levels associated with construction, maintenance, and use of the trail could negatively affect flammulated owls should they be using existing habitats. Minor amounts of flammulated owl habitats may be altered with the trail clearing, road construction, and parking lot development, but no appreciable changes overall availability of flammulated owl habitats in the project area would be anticipated. Thus, since: 1) no changes to nesting habitats would be anticipated and slight improvements in foraging habitats could be realized; and 2) elevated human disturbance levels could disturb and/or displace flammulated owls, minor adverse direct and indirect effects would be expected to affect flammulated owls in the project area.

#### Cumulative Effects of the No-Action Alternative on flammulated owls

Ongoing harvesting that are altering flammulated owl habitats in portions of the project area would continue. No further change to existing habitats would be anticipated. Human disturbance levels would not appreciably change in the cumulative-effects analysis area. Thus, since: 1) no further changes to flammulated nesting and foraging habitats would be anticipated; and 2) no changes to human disturbance levels would be anticipated, no further adverse cumulative effects would be expected to affect flammulated owls in the cumulative-effects analysis area.

#### Cumulative Effects of the Action Alternative on flammulated owls

Ongoing harvesting that are altering flammulated owl habitats in portions of the project area would continue. Negligible changes to existing habitats at the cumulative effects level would be anticipated. Human disturbance levels would increase in the cumulative-effects analysis area. Thus, since: 1) no further changes to flammulated nesting and foraging habitats would be anticipated; and 2) human disturbance levels would increase in the cumulative-effects analysis area, minor adverse cumulative effects would be expected to affect flammulated owls in the cumulative-effects analysis area.

## **PILEATED WOODPECKER**

*Issue:* Proposed trail construction, maintenance, use, and associated activities could alter habitats for sensitive species, namely affecting potential pileated woodpecker habitats.

### ***INTRODUCTION***

Pileated woodpeckers play an important ecological role by excavating cavities that are used in subsequent years by many other species of birds and mammals. Pileated woodpeckers excavate the largest cavities of any woodpecker. Preferred nest trees are western larch, ponderosa pine, cottonwood, and quaking aspen, usually 20 inches dbh and larger. Pileated woodpeckers primarily eat carpenter ants, which inhabit large downed logs, stumps, and snags. Aney and McClelland (1985) described pileated nesting habitat as...“stands of 50 to 100 contiguous acres, generally below 5,000 feet in elevation with basal areas of 100 to 125 square feet per acre and a relatively closed canopy.” The feeding and nesting habitat requirements, including large snags or decayed trees for nesting and downed wood for feeding, closely tie these woodpeckers to mature forests with late-successional characteristics. The density of pileated woodpeckers is positively correlated with the amount of dead and/or dying wood in a stand (McClelland 1979).

### ***Analysis Area***

Direct and indirect effects were analyzed on the project area. Cumulative effects were analyzed on the on the 10 surrounding sections (approx 7,658 acres). This scale includes enough area to support several pairs of pileated woodpeckers.

### ***Analysis Methods***

To assess potential pileated woodpecker nesting habitats on DNRC-managed lands in the cumulative-effects analysis area, SLI data were used to identify sawtimber stands with more than 100 square feet basal area per acre, older than 100 years old, had greater than 40 percent canopy closure, and occurring below 5,000 feet in elevation. Foraging habitats are areas that do not meet the definition above, but include the remaining sawtimber stands below 5,000 feet in elevation with greater than 40 percent canopy cover. Direct, indirect, and cumulative effects were analyzed using a combination of field evaluation, aerial-photograph interpretation, and these mapped potential habitats. Factors considered included the level of human disturbance and the amount of potential habitat.

## **EXISTING ENVIRONMENT**

In the project area, potential pileated woodpecker nesting habitat exists on approximately 202 acres that are dominated by western larch/Douglas-fir. Additionally, 357 acres of sawtimber stands dominated by western larch/Douglas-fir exist in the project area that may be lower-quality foraging stands. Although nesting habitat is defined differently than foraging habitat, nesting habitat also provides foraging opportunities for pileated woodpeckers. Pileated woodpeckers, numerous feeding sites and other large cavities along with and 0 to 2 variably spaced, large (>14 in dbh) snags per acre were detected in the project area.

Past timber-harvesting activity has reduced the quality of habitat for pileated woodpeckers in the cumulative-effects analysis area. Portions of the cumulative-effects analysis area have been harvested in the recent past, reducing pileated woodpecker habitats. Ongoing harvesting associated with the Lion Mountain and Beaver/Swift/Skyles Timber Sale Projects on DNRC-managed lands are continuing to modify and/or remove pileated woodpecker habitats in the cumulative-effects analysis area. Portions of the cumulative-effects analysis area are not currently providing pileated woodpecker habitats, including agricultural areas, open water, and human developments. Conversely, denser stands of Douglas-fir resulting from modern fire suppression have likely increased habitat quality for pileated woodpeckers, but may be contributing to a reduction in shade-intolerant tree species commonly used by pileated woodpeckers. Collectively, the pileated woodpecker habitats in the cumulative-effects analysis area are moderate in quality. In the cumulative-effects analysis area human disturbance levels associated with the human developments (including agricultural areas, private developments, extensive road network, parts of the City of Whitefish, etc.), open water, and general recreational use (e.g. Spencer mountain bike trails, etc.) is rather high.

## **ENVIRONMENTAL EFFECTS**

#### Direct and Indirect Effects of the No-Action Alternative on Pileated Woodpeckers

No disturbance of pileated woodpeckers would occur. No changes to existing habitats would occur. Thus, since: 1) no modifications to existing habitats would occur; and 2) no changes in human disturbance levels would be anticipated, no adverse direct or indirect effects to pileated woodpeckers in the project area would be expected.

#### Direct and Indirect Effects of the Action Alternative on Pileated Woodpeckers

Pileated woodpeckers tend to be tolerant of human activities (Bull and Jackson 1995), but might be temporarily displaced by the construction, maintenance, and use of the trail. Increased disturbance and displacement along the corridor could reduce the likelihood of use by pileated woodpeckers. However, habitats along much of the trail are being thinned with the Beaver/Swift/Skyles and Lion Mountain timber sale projects and have already experienced a reduction in quality with those activities. Proposed understory thinning adjacent to the trail corridor would be to DNRC specifications, which should not appreciably alter pileated woodpecker habitats into the future; minor amounts of pileated woodpecker habitats may be removed with the road construction and parking lot developments. No other modifications to existing pileated woodpecker habitats would be anticipated. Thus, since: 1) no changes to existing habitats would be anticipated, and future habitat quality would not be appreciably altered; and 2) elevated human disturbance levels could further discourage use by pileated woodpeckers, minor direct and indirect effects would be anticipated that would affect pileated woodpeckers in the project area.

#### Cumulative Effects of the No-Action Alternative on Pileated Woodpeckers

No further disturbance of pileated woodpeckers would occur. Disturbance associated with the ongoing Beaver/Swift/Skyles and Lion Mountain timber sale projects would continue to disturb pileated woodpeckers on DNRC-managed lands, as well as any activities occurring on adjacent ownerships. Portions of that disturbance would only occur during the winter, which should have fewer direct disturbance effects to pileated woodpeckers. No further changes to pileated habitats would on DNRC-managed lands besides the ongoing modifications associated with the Beaver/Swift/Skyles and Lion Mountain timber sale projects on DNRC managed lands; habitat modifications on private ownerships could continue. Thus, since: 1) no further changes to existing habitats would occur; and 2) no changes in human disturbance levels would be anticipated, no adverse cumulative to pileated woodpeckers in the cumulative-effects analysis area would be expected.

#### Cumulative Effects of the Action Alternative on Pileated Woodpeckers

Elevated human disturbance in the cumulative-effects analysis area would be additive to disturbance associated with the ongoing Beaver/Swift/Skyles and Lion Mountain timber sale projects on DNRC managed lands as well as any activities occurring on adjacent ownerships. Portions of those activities on DNRC managed lands would only occur during the winter, which should have fewer direct disturbance effects to pileated woodpeckers. Negligible further changes to pileated habitats on DNRC-managed lands in the cumulative-effects analysis area would occur beside the ongoing modifications associated with the Beaver/Swift/Skyles and Lion Mountain timber sale projects on DNRC managed lands; habitat modifications on private ownerships could continue. Thus, since: 1) no further changes to existing habitats would occur; and 2) no changes in human disturbance levels would be anticipated, no adverse cumulative to pileated woodpeckers in the cumulative-effects analysis area would be expected.

## **BIG GAME WINTER RANGE**

**Issue:** Proposed trail construction, maintenance, use, and associated activities could disturb big game species and/or alter the effectiveness of their habitats.

### ***INTRODUCTION***

Winter ranges enable big game survival by minimizing the effects of severe winter weather conditions. Winter ranges tend to be relatively small areas that support large numbers of big game, which are widely distributed during the remainder of the year. These winter ranges have adequate midstory and overstory to reduce wind velocity and intercept snow. The effect is that temperatures are moderated and snow depths are lowered, which enables big game movement and access to forage with less energy expenditure than in areas with deeper snow and colder temperatures. Snow depths differentially affect big game; white-tailed deer are most affected, followed by mule deer, elk, and then moose.

### *Analysis Area*

Direct and indirect effects were analyzed on the project area. Cumulative effects were analyzed on the contiguous 2,836-acre elk winter range that includes most of the similarly mapped mule deer winter range and a majority of the project area. This scale includes enough area to support numerous elk.

### *Analysis Methods*

Effects were evaluated using a combination of field evaluation, aerial-photograph interpretation, and GIS analysis. Factors considered in this cumulative-effects analysis area include acres of winter range harvested and level of human disturbance and development.

### **EXISTING ENVIRONMENT**

Montana Department of Fish, Wildlife, and Parks identified mule deer (336 acres), elk (400 acres), and moose (604 acres) winter ranges in the project area. These winter ranges are part of larger mule deer (2,709 acres), elk (2,836 acres), and moose (2,028,732 acres) winter ranges, respectively. Winter snow depths and suitable microclimates influence big game distribution and use in the vicinity. Douglas-fir/western larch stands in the project area are being thinned with the Lion Mountain and Beaver/Swift/Skyles timber sale projects, which are resulting in overall marginal thermal cover and snow intercept for big game. Proximity to human developments and open roads has likely also reduced the capacity of the winter range in the project area. Evidence of use by deer and elk during all seasons was noted throughout the project area during field visits.

Presently, several stands across the cumulative-effects analysis area is providing thermal cover and snow intercept for big game. However, much of the winter range has been harvested in the recent past, reducing thermal cover and snow intercept. Human disturbance in the winter range includes residential development, agricultural clearing, open roads, outdoor recreation (including snowmobile use, snowshoeing, skiing), and commercial timber harvesting, all of which likely influences wintering big game populations and their habitats.

### **ENVIRONMENTAL EFFECTS**

#### Direct and Indirect Effects of the No-Action Alternative on Big Game Winter Range

No direct effects to big game winter range would be anticipated. No additional disturbance or displacement would be anticipated in the project area. No further changes to big game thermal cover in the project area would be anticipated. Since: 1) no changes to existing winter range would occur; and 2) the levels of human disturbance would remain similar, no direct or indirect effects to big game winter range would be anticipated.

#### Direct and Indirect Effects of the Action Alternative on Big Game Winter Range

Construction and maintenance would likely occur during the summer, and not disturb or displace wintering big game; however, use of the trail during all seasons could disturb and/or wintering big game in the area during the winter period. Additionally, proposed thinning adjacent to the trail could increase sight distances, which could further contribute to disturbance or displacement of big game in the winter. Mitigations to encourage dog owners to keep their pets on leash would reduce the disturbance to wintering big game. No appreciable changes to existing thermal cover and snow intercept capabilities would be anticipated with the thinning, and some minor losses of winter range would occur with the road building and parking lot development. Thus, since: 1) elevated human use could increase disturbance and displacement of big game, which could alter big game use of the project area; and, 2) no appreciable changes to existing winter range habitat attributes would occur, minor adverse direct or indirect effects to big game would be expected.

#### Cumulative Effects of the No-Action Alternative on Big Game Winter Range

No changes would be anticipated in thermal cover and snow intercept. Stands that are providing thermal cover would be expected to continue providing this resource under this alternative. Continued winter use of the larger winter range would be expected. Commercial timber harvesting could continue to displace wintering big game and reduce available winter range habitats. Human disturbance levels would be anticipated to continue at similar levels. Thus, there would be no adverse cumulative effects to big game winter range as a result of this alternative.

#### Cumulative Effects of the Action Alternative on Big Game Winter Range

Displacement and disturbance of wintering big game associated with this alternative would be additive to disturbance and displacement associated with the ongoing commercial harvesting and human use of the cumulative-effects analysis area during the winter. Wintering big game that are displaced from the project area

would be expected to move into less suitable portions of the winter range, thereby increasing energetic costs to the wintering big game. No appreciable changes to existing thermal cover or snow intercept would occur with the proposed thinning, road construction, and parking lot development; commercial timber harvesting could continue to displace wintering big game and reduce available winter range habitats in the cumulative-effects analysis area. Collectively, the quality of the winter range would be further reduced and the carrying capacity of the winter range would continue to decline. Continued winter use of the larger winter range would be expected. Gradually, through time, portions of the larger winter range that are not providing suitable habitat presently, should start providing some habitat attributes suitable for winter big game use in the near future as stands mature. Thus, since: 1) elevated human disturbance levels could disturb and displace wintering big game; and 2) no appreciable changes to winter range attributes would be expected, minor adverse cumulative effects to white-tailed deer would be expected.

### **Suggested Mitigations**

- Provide for education of users (at trailheads, with permit purchase, and during encounters along the trail) about ways to reduce effects to wildlife, including information about not feeding wildlife, packing out litter, and keeping a safe distance from wildlife.
- Encourage dog owners to restrain their dogs on the trail corridor to limit the disturbance to wildlife species and minimizing the fragmentation of wildlife habitats.
- Eliminate unnatural food sources by ensuring litter is removed. Should containers be provided for litter, use wildlife/bear resistant trash receptacles?

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**Attachment XXX**  
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