

TOWN OF BRECKENRIDGE
OPEN SPACE ADVISORY COMMISSION
Monday, September 8, 2008
BRECKENRIDGE COUNCIL CHAMBERS
150 Ski Hill Road

- 5:30 Call to Order, Roll Call
- 5:35 Discussion/approval of Minutes – August 11th
- 5:40 Discussion/approval of Agenda
- 5:45 Public Comment (Non-Agenda Items)
- 5:50 Staff Summary
- Work Plan Update
 - Defensible Space Projects
 - County Road 3 Trail Establishment
- 6:15 Open Space and Trails
- Cucumber Gulch Preserve Access Points
 - French Gulch Trail Proposal
 - French Gulch Historical Signage
 - Joint Meeting Follow Up
 - Historical Stabilization Projects
- 7:00 Executive Session
- 8:00 Commissioner Issues
- 8:15 Adjourn

For further information, please contact the Open Space and Trails Program at 547.3110 (Heide) or 547.3155 (Scott).

Memorandum

To: Breckenridge Open Space Advisory Commission
From: Heide Andersen, Open Space and Trails Planner III
Mark Truckey, Asst. Director of Community Development
Scott Reid, Open Space and Trails Planner II
Re: September 8, 2008 meeting

Staff Summary**Workplan update**

Please see the attached workplan update.

Defensible Space Projects

Please see the attached memo from Jenn Cram regarding defensible space projects being undertaken on open space, as previously discussed at the July BOSAC meeting.

County Road 3 Trail Establishment

As part of the Amended Peaks 7 and 8 Master Plan and the relocation of CR 3 to between the Peaks Trailhead and the Stables Lot, Vail Resorts was required to decommission the old CR 3 as a road, reconnect the hydrology and the wetlands complexes from both sides of the road and re-establish native and appropriate vegetation. In addition, a non-motorized trail was to be constructed through this area to connect from the Peak 8 area to the Peaks Trailhead and the top of Cucumber Gulch. Staff is currently working with Vail, hydrology and wetlands specialists and a landscape architect to ensure that a good plan is in place. A map of this project is included in your packet for review. A larger version will be brought to the meeting.

Open Space and Trails**Cucumber Gulch Preserve Access Points**

In 2007, BOSAC discussed and identified the various access points into the Cucumber Gulch Preserve and decided to remove the existing social access from the top of Toad Alley up to the Peak 8 base area. This decision was based on the following considerations:

- 1) The Cucumber Gulch Recreation Master Plan does not identify the access.
- 2) The new detention pond installed by the Breckenridge Ski Area obliterated a portion of the existing trail.
- 3) It was assumed that one less identified access point would reduce management issues and preserve some of the natural integrity of the Preserve.
- 4) Some questions were raised regarding the feasibility of a sustainably built trail to establish that connection.

Staff requests that BOSAC revisit this topic based on the social reestablishment of the trail this summer. The trail has experienced continued use and serves a different geographic location than the Peaks Connect trail, which connects Toad Alley with the Peaks Trailhead.

Given the continued use of this trail, staff seeks a brief discussion of the costs and benefits of reestablishing this access portal to Cucumber Gulch Preserve.

French Gulch Trail Proposal

Staff will present a new non-motorized trail construction project proposed by Turk Montepare in French Gulch.

French Gulch Historical Signage

As requested by a BOSAC member, staff requests that BOSAC discuss the specifics of the proposed historical signage installation project in French Gulch.

Joint Council Meeting Follow Up

Staff requests that BOSAC discuss the major points and issues raised by Council during the August 26th joint meeting.

Historical Stabilization Projects

As outlined under the 2008 Open Space workplan, staff has commissioned Tony Harris of Harris Construction, Inc. to perform some stabilization work on the X10U8 ore chute and the Jesse mill site. The goal of this work is to prevent further irreparable deterioration of these historical structures through stabilization. This work has been completed or is being performed presently.

One other stabilization project recommended by Eric Twitty of Mountain States Historical, Inc. and Rebecca Waugh is the construction of a roof (no walls) over the well jig device located at the Lucky Mine site (directly uphill of the Reiling Dredge Trailhead). Eric and Rebecca feel that this is a vulnerable site that could be better protected from the weather elements through the construction of a core-ten/ weathering steel roof to prevent annual snow weight from affecting the well-preserved structure. This location is also proposed to have an historical interpretive signage and trail spur to it.

Based on Tony's input, the proposed structure would use six local lodgepole pine posts, a few cross braces, and weathering steel to prevent the majority of snow from piling on the jig structure, at an estimated cost of \$10,000.

Staff proposes that BOSAC discuss the costs and benefits of such an expenditure during the 2008 fiscal year, thereby requiring an additional expenditure. OSAC discussed this topic at their September 3rd meeting and agreed to partner on this additional project.

Roll Call

Matt Stais called the August 11, 2008 BOSAC meeting to order at 5:42 p.m. Other BOSAC members present included David Rossi, Ellen Hollinshead, Scott Yule, Jeff Cospolich, Dennis Kuhn and Monique Merrill. Staff members present were Heide Andersen, Scott Reid, Mark Truckey and Peter Grosshuesch. Brian Lorch from Summit County was also present.

Approval of Minutes

The minutes were approved as presented.

Approval of Agenda

The agenda was approved as presented.

Public Comments

There were no public comments.

Open Space and Trails

Hidden Gems Wilderness Project

Ms. Andersen provided a summary of the project. The wilderness coalition, led by the Colorado Environmental Coalition, has been working with mountain biking groups to address the mountain bikers' concerns in the hopes of getting support from SFTS, IMBA, and others to support the wilderness proposal.

Mr. Kuhn: What is the proposal near Hoosier Pass?

Ms. Hollinshead: It starts at Quandary and includes the hiking trail. It is mostly above tree line. It also includes portions of the Wheeler Trail. The east side starts at Hoosier Pass and includes portions of the Pennsylvania drainage. They are still awaiting feedback from the Aspen and Vail areas. It will take awhile, most likely.

Nightmare on Baldy/VOC Project

Mr. Reid provided an overview of the Nightmare on Baldy VOC project. Staff is working with an area land owner to finalize the trail network in the area.

Mr. Kuhn: I don't want to change the name because people still know it as such. It will be easier to keep the original name.

Mr. Lorch: OSAC has retained names in other locations (e.g. Fishhook). They have in the past kept the names that people are familiar with.

Mr. Truckey: Historical names may be important to those with historical interests.

Mr. Cospolich: I am OK with the name as is. Leave it.

Ms. Hollinshead: Sweet Dreams is a good name too. It reflects the new experience. I'd like to change it.

Mr. Stais: Keep the name as Nightmare.

Ms. Merrill: I don't want to vote on it.

Mr. Rossi: I would vote to change it to Sweet Dreams.

Ms. Hollinshead: I'll just call it Sweet Dreams anyway.

Joint Town Council/BOSAC Meeting

Ms. Andersen outlined potential agenda items for the upcoming joint Town Council/BOSAC meeting.

Mr. Rossi: The items in the packet are good topics, but may be a bit ambitious. What do you want from Council in the Nature/Nordic discussion?

Mr. Truckey: It would just be an FYI, as we expect a presentation to BOSAC on the Nature/Nordic Center in September.

Mr. Kuhn: Dave is right. This is an ambitious agenda.

Ms. Merrill: Let's prioritize this list then.

Mr. Cospolich: The prioritization of funds is very important.

Ms. Merrill: I agree and want to see the Nature/Nordic Center discussion occur.

Ms. Andersen: The presentation from Allen Guerra will set the stage for future action on the Nature/ Nordic Center.

Mr. Stais: We will see a draft in September, then revisions will occur, then it will sit on the shelf until the Town is ready to move ahead.

Mr. Grosshuesch: The current programming and design work that is underway is just taking advantage of an offer to program the site. We will move this as far as we can, then we will be ready if and when Tim Casey decides to develop the other sites in Cucumber Creek Estates.

Ms. Andersen: John Niemi of Shock Hill Development offered to pay for the architectural work, so that pushes the issue somewhat if the Town wants to take advantage of it. It also makes the programming work a bit challenging because the Town is not really in charge of selecting or managing the architect. We need to either take the programming document and move ahead with an RFP in a few years, or we proceed with Allen Guerra and we establish clear expectations and priorities.

Mr. Yule: I'd like to hear the Council's vision on the Nature/Nordic Center.

Pro Forma

Mr. Truckey provided an overview of his revisions to the pro forma, based on BOSAC feedback from the July meeting.

BOSAC reviewed the pro forma and agreed that it reflected comments from the previous meeting.

Executive Session

Mr. Kuhn made a motion at 7:03 p.m. to enter into Executive Session to discuss property acquisitions. Mr. Yule seconded the motion. Mr. Rossi motioned to come out of Executive Session. Mr. Yule seconded the motion. The session ended at 8:24 p.m.

Commissioner Issues

Mr. Rossi: Please move the upper post on the Minnie Mine Trail. The lower post was moved, but it was not the problematic post location.

Ms. Merrill: Please work on a post on the Corkscrew/Gold Flake connection.

Mr. Kuhn: The Freeride Park- how much use is it getting? (The Freeride Park receives a decent amount of use, although staff is considering updating some of the current features.)

Ms. Hollinshead: There is a tree down on Jack's Cruel Joke. There is a nice trail spur that comes off of the Aspen Grove Trail. Perhaps we can use it for a portion of the realignment listed in the Trails Plan. Can we ask the County to put speed limit signs on French Gulch Road? (Brian Lorch pointed out that this is a County Road and Bridge and Engineering Department issue.) The Historical Alliance has markers up for the historical interpretive signage. It would be nice to put up additional signage to tell people to expect other users along the trails. Similar info in the brochures would be useful as well. There will likely be too many signs at the Reiling Dredge with two now and two later. We may need to add more directional signage to the existing posts.

Next Meeting

The next BOSAC meeting is scheduled for 5:30 pm on September 8th in the Town Hall Auditorium. (A joint BOSAC/Town Council meeting is scheduled for 8/26 at 6:00.)

Mr. Cospolich motioned to adjourn the meeting and Ms. Merrill seconded. The meeting was adjourned at 8:40 p.m.

2008 OPEN SPACE & TRAILS PROJECT LIST

<u>Trail Projects</u>				
PROJECT	COMPLETION DATE	PRIORITY	STAFFING REQUIREMENTS	STATUS 9/4/08
OVERSEE DEVELOPMENT-RELATED TRAIL REVIEW	Ongoing	Required	Large	Ongoing. Sunrise Point, Vista Point, Corkscrew, Stan Miller/Shores, CR 3 , County projects currently.
OVERSEE TRAIL CREW-RELATED WORK (Trail construction and maintenance) – *see list of trail projects on following page	Ongoing	Required	Large	Ongoing. B-Line, Cucumber boardwalk, fencing, tree removal.
COMMENT ON USFS TRAVEL MANAGEMENT PLAN	Spring	Required	Large	Awaiting release of supplemental draft. Expected 9/15 release.
REVISE TRAILS MASTER PLAN	Spring	High	Large	Underway. Working on revisions based on Council response from August meeting.
COORDINATE VOLUNTEER EFFORTS	Ongoing	High	Large	Ongoing. SFTS projects, Eagle Scout projects, adjudicated volunteers, scheduled work days currently.
DEVELOP MASTER PLAN FOR NORDIC EXPANSION AREA (FOR USFS AND COUNTY)	Winter	High	Large	Special Use Authorization application with USFS. UBPC application underway.
PERMITTING FOR PEABODY LOOP	Spring	High	Medium	Permitting complete, construction underway.
OVERSEE CONTRACTORS ON PEABODY LOOP CONSTRUCTION	Summer	High	Large	Contractor working, Morton has given input and staff currently overseeing.
COMPLETE WEBSITE WORK	Ongoing	Medium	Medium	Skeleton page created. Awaiting feedback from rest of web group.
INSTALL MOONSTONE FOREST HEALTH INTERPRETATIVE SIGNAGE	Summer	Medium	Medium	No progress. May be focusing on other sites for interpretive purposes.
Contractor Work				

COMPLETE WEED AND PEST CONTROL	Spring	Required	Small	Held Cucumber Weed Pull on 8/2.
CONTINUE REVEGETATION FOR SHOCK HILL	Spring	Medium	Small	Awaiting growth, particularly on black loop. Growth improving, placed tread delineators on Black Loop. Reveg effort will need to be coordinated with Breck Lands following the sewer line construction.
INSTALL TRASH AND TOILET FACILITIES AT F&D PLACER	Summer	Medium	Small	No progress.
<u>Open Space Projects</u>				
PROJECT	COMPLETION DATE	PRIORITY	STAFFING REQUIREMENTS	STATUS
FULFILL B&B MINES CONSENT DECREE REQUIREMENTS	Ongoing	Required	Medium	Ongoing, need to revisit.
OVERSEE CONCESSIONAIRES	Ongoing	Required	Small	Ongoing. BNC lease renewal process ongoing because of negotiations with current lease holder. Good Times, Breck Nordic Sleigh Rides will need to be renewed.
OVERSEE OS ACQUISITIONS	Ongoing	Required	Large	Ongoing. Working on strategic plan to discuss with BOSAC and County.
ADDRESS GOLDEN HORSESHOE MANAGEMENT TASKS	Ongoing	High	Large	Ongoing. Route assessments underway. Reiling TH improvements scheduled. Nightmare project complete.
DEVELOP FOREST HEALTH AND WILDFIRE PROTECTION STRATEGIES FOR OPEN SPACE PARCELS	Ongoing	High	Large	Study complete. Working on implementation strategy.
PLANNING FOR CUCUMBER NATURE/NORDIC CENTER	Ongoing	High	Large	Ongoing. Working with architects on programming document to present to BOSAC and TC in October.
OVERSEE PLANS AND				Ongoing. Field

RESEARCH FOR REILING DREDGE RESTORATION	On-going	Medium	Low	research by NPS completed. Awaiting reports.
McCAIN/ BLOCK 11 MASTER PLANNING	Ongoing	Medium	Small (will be Large if grant pursued)	Ongoing. Assisting with river restoration plan, including trails. Possibly pursuing DOLA grant for restoration work.
TRACK OS PROPERTY OWNERSHIP	Ongoing	Medium	Small	Ongoing.
OVERSEE PROCESS FOR HIDDEN GEMS WILDERNESS PROOSAL	Ongoing	Medium	Low	Ongoing. Most recent staff input on Hoosier area and research into Eisenhower tunnel land bridge.
Contractor Work				
CUCUMBER PRESERVE MONITORING	Ongoing	Required	Large	Underway. VERP study initiated and several additional monitoring components (owls and willows).
NATURE SERIES PROGRAM	Ongoing	High	Small	Ongoing. Director resigned, but process being handled by Rec Center.
FOREST HEALTH/FIRE MITIGATION/MPB PROJECTS	Ongoing	High	Large	Ongoing. Working on implementation strategy.
MINESITE INVENTORY	Summer	High	Small	Waiting to respond to latest version of Phase II from Eric Twitty.
HISTORIC PRESERVATION/ RESTORATION EFFORTS	Ongoing	High	Medium	Underway. Construction will occur this fall by Tony Harris on three sites: Jesse, X10U8 and Lucky.

*** Trail Projects Include:**

- X Annual Trails Inventory and Maintenance
 - Four O'clock Switchback repairs
 - Carter Park Switchback repairs
 - Flumes drainage
- X Freeride Park maintenance and improvements
- X Volunteer Commitments
 - Training Days
 - Golden Horseshoe trailwork ***
- X Install/ update Breckenridge Nordic Center trail posts
- X Trail Signage Program- Cucumber and other

- Iowa Hill work ('cameras present' signs and trail delineation)
- Cucumber Preserve Projects
- Wellington Bridge
- Make a Difference Day
- X B-Line Trail
- X Peabody/Middle Flume Connect
- Hermit Placer Boardwalk
- Toad Alley Boardwalk
- X Nightmare on Baldy Reroute

Memo Only

To: BOSAC
From: Jennifer Cram, Community Development
Date: September 4, 2008
Subject: Fuel Break Plan for Tract D, Highlands Park Update

On July 14th staff and a representative from the RWB Fire District shared with BOSAC a proposal to create a fuel break on Tract D in the Highlands Park Subdivision. BOSAC was supportive of the proposal at that time. Since July 14th we have prepared a more detailed plan for the fuel break. There are 4.9 acres proposed for treatment. Attached to this memo is a letter and map from our consultant Eric Petterson, detailing how the 4.9 acres will be treated. Staff will be available during the BOSAC meeting on September 8th to answer any questions.



ROCKY MOUNTAIN ECOLOGICAL SERVICES, INC.
NEPA••WILDLIFE••VEGETATION••WILDFIRE MITIGATION••WETLANDS••PLANNING

August 29, 2008

Jenn Cram
Town of Breckenridge
150 Ski Hill Road
Breckenridge, CO 80424

RE: Tract D Highlands Park Fuels Reduction/ Fuels Break Plan

Dear Ms. Cram

This memo describes some of the planning efforts and objectives for fuels reduction and forest management of Tract D on Discovery Hill. I have provided some background information here, to illustrate some of the forest management and forest ecology parameters we will be working with.

Background

Mountain pine beetle (*Dendroctonus ponderosae*) ("MPB") infestation and mortality of lodgepole pine (*Pinus contorta*) trees is a widespread and major impact to the forested ecosystems in Summit and surrounding Counties. As citizens and land managers observe the effects of MPB, strategies for handling the anticipated effects are being developed throughout the counties being affected. As the MPB epidemic progresses and spreads, land managers are more often concluding that there is nothing that can be done at a landscape scale to protect or preserve lodgepole pine from MPB mortality. At very small scales, the only method that has shown some level of effectiveness at protecting lodgepole pine trees is application of insecticides on individual trees as a prophylactic against MPB. However widespread insecticide treatment is cost prohibitive and can have negative impacts on wildlife and water quality and is therefore not recommended for large treatment blocks. Land management agencies dealing with areas ranging from a few acres to hundreds of thousands of acres are now faced with how to manage seemingly inevitable MPB mortality.

Through a series of collaborative meetings with Summit County, Town of Breckenridge Community Development, and the Red White & Blue Fire Protection District, a number of various areas within the Upper Blue watershed near the Town of Breckenridge were identified as areas where large-scale fuel breaks would be beneficial in defending life, property, and infrastructure in the event of a large-scale wildfire event.

The Highlands Home Owners Association had also approached the Town of

Breckenridge during this time in support of efforts to assist in protecting life, homes and property, and have offered logistical and financial support of efforts for any potential projects around their subdivision.

Tract D, on Discovery Hill was assessed in late July and early August 2008 in order to ascertain the best fuels treatment scenarios. The following stand types were observed: lodgepole pine, Engelmann spruce / subalpine fir (*Picea engelmannii* and *Abies bifolia*), and mixed conifer stands which had all three coniferous trees (lodgepole pine, Engelmann spruce and subalpine fir trees).

Lodgepole Pine Forests

As much of the area around Breckenridge was historically logged during the mining era, subsequent lodgepole pine regeneration has produced fairly homogenous lodgepole pine stands across the valley. Average diameter breast height (dbh) of trees is 5 to 10 inches. Understory regeneration of seedling conifers in these lodgepole pine stands in general is marginal and patchy. Understory conifer species (where they do occur) generally consists of lodgepole pine, Engelmann spruce, or subalpine fir. Grasses and forb composition in the understory is dependant upon the individual stand location (slope and aspect). For instance, stands on hillsides where drainage is more rapid and sites are drier, understory cover and composition is more limited. Stands located on benches and on shallow slopes where topography is fairly level and moisture retention is higher and has higher forb cover.



Aside from mountain pine beetle, overall forest health in these lodgepole pine stands is good at this time, but species and age class diversity is very low. Mountain pine beetle will likely produce significant mortality across most of these stands. Overall stand mortality in the mature lodgepole pine stands will likely approach 90%, with smaller isolated stands of small diameter lodgepole, and mixed coniferous understory species persisting. MPB will likely kill off most of the lodgepole pine stands within the next 3 years (by 2010 into 2011). Red needles will persist into 2014, and lignin breakdown in the xylem (heart-wood) will begin to occur around 2015-2020. At this time, significant numbers of trees will begin to lose branches, and trees will begin to be blown down by high wind events. Within another 5 to 10 years (2025 to 2030), most of the trees will have fallen down. In areas with stand thinning from MPB mitigation activities (i.e. dead lodgepole pine trees are being actively removed), blowdown will be ongoing. Lodgepole pine is such a shallow-rooted species that opening up the canopy more than 30% in any one area will likely produce some level



of blowdown of residual trees. The level of blowdown will be determined by slope, aspect, level of thinning or stand perforation, and soil conditions.

Management options in these stands are dependant upon access, slope, and stocking of MPB prone lodgepole pine. Currently, most stands are in good condition, with approximately 15 to 20% MPB infestation, but as previously stated, mortality approaching 90% is expected within the next few years.

Lodgepole Pine “Doghair”

The term “doghair” refers to the small diameter, densely packed lodgepole pine trees that regenerate after a disturbance event, but never self-thin to allow for larger growth. These trees are generally old (60 to 100 years old), and stunted in height and diameter due to intraspecific competition for resources (light, water and soil nutrients). Thinning or other silvicultural treatments designed to “release” the stand from competition, and allow for more growth do not work. These stands will persist for many more decades, likely until a fire event kills the trees, or the trees die of old age.



These stands are resistant to MPB, due to the small diameter of the tree. Post-MPB infestation in the valley, they will likely be one of the main forested components left in the Breckenridge area (aside from mixed conifer stands). Generally, doghair stands are not desirable as they have very low wildlife use, and only provide marginal habitat conditions. The only way to manage these stands is to clear cut them and “start over”, or allow them to persist as they are for many more years.

Given the MPB epidemic, these doghair stands should likely be left in place until after MPB infestations have run their course, and land managers can then accurately assess the full impact of MPB. Clear cutting these stands should involve summertime logging in order to scarify the soil and prepare the seed bed for subsequent lodgepole pine regeneration (lodgepole pine seedlings need bare or disturbed soils for germination). Spruce and fir seedlings are virtually non-existent in these stands, and would therefore not recolonize the site if it was logged in the winter. Recolonization of spruce and fir generally occurs over great periods of time in natural settings, but can be accelerated here with selective planting of seedlings in selected areas. Another option to logging these stands is “chipping”. The tree diameters are small enough to allow for tracked chipping machines to clear a path through the trees for such things are roads, fire breaks, and ski trails, or simply to regenerate the stands.



Mixed Conifer Stands

“Mixed conifer” stands refer to the tree composition within the stand, in that these stands have a mixture of Engelmann spruce, subalpine fir, and lodgepole pine. Within a mixed conifer stand, there can be variations on species dominance and size classes. For example, some areas of a stand will have almost total dominance by spruce and fir trees, with only a marginal lodgepole pine component, while other areas may have



lodgepole pine as the overstory dominant species with spruce and fir seedlings/saplings forming a strong under-story component.

These stands provide the highest wildlife benefit, due to the physical structure of the trees and the increase in understory plant diversity. Mixed conifer stands usually have higher understory plant species diversity and structure, which also makes these stands more suitable for use by wildlife species such as red-backed vole, pine marten, and other various microtine rodents and various bird species.

MPB activity within these stands is limited to the lodgepole pine component of the stand. Therefore, within mixed conifer stands with a high lodgepole pine component, there will be more of a visible and structural impact from MPB mortality, and in stands with little to no lodgepole component, the impacts of MPB will be negligible.

Mixed conifer stands offer more management options, as these stands often have multiple stories, and can be thinned and treated to remove MPB trees. As many of these stands have spruce and fir seedlings and saplings, summertime logging to remove MPB infested or dead lodgepole pine would result in crushing or damaging understory trees. Winter logging offers more protection for understory spruce and fir, and even lodgepole pine seedlings. This is from deep snows protecting the small trees, as most logging equipment will “float” on snow, and trees being removed with heavy equipment will generally stay on top of snow.

Post-logging, these stands will still offer some forested cover and won't appear to be a “clearcut”. As spruce/fir trees will persist on a site for many years, mixed conifer stands that have been thinned will still stay dominated by spruce and fir.

Summertime logging in these stands would increase the likelihood that lodgepole pine seedlings would be established in disturbed areas.



Prescription

In order to provide a defensible fuels profile from which fire fighters can safely engage in efforts to stop a large-scale wildfire event, a series of “fuel breaks” are proposed for Discovery Hill, starting with Tract D. This fuel break is not intended to stop a wildfire in its tracks; rather it is designed to stop high intensity crown fires from entering residential areas by removing the fuels that could support a crown fire. Fuel breaks will provide safe areas where fire fighters can also employ other tactics to protect residential areas. Further, fuel breaks will allow many fire fighting resources to stay near homes, and suppress small spot-fires and assist with evacuation efforts safely.

The following map depicts draft fuel break locations. Each area has a separate prescription based on its susceptibility to mountain pine beetle, its crown density, ladder fuels, and other site specific characteristics.

Access- Access will be through Highlands Park, via Discovery Hill road. Once at the site, any equipment will be unloaded onto gravel surfaces to minimize potential impacts to asphalt surfaces from tracked equipment. It is anticipated that one (1) or at a maximum, two (2) semi-truck loads of logs may be hauled off the site.

Treatment- Most of the trees within the fuel break are small diameter, and would be too small to be salvaged for logs or other commercial uses. Therefore, these smaller trees will be chipped on-site, using a chipper-head mounted on a tracked harvester. Larger trees, which are too crooked or have too many “defections” to be sold for lumber would be cut using a tracked harvester, and piled in centrally located burn-piles. These piles would then be burned during the early winter by the contractor with coordination/cooperation of Red White & Blue Fire Protection District (RWBFPD) staff. Trees which are sound enough to be salvaged will be de-limbed on-site, and limbs and tree tops will also be piled in the “slash piles” to be burned this winter. Sound logs would be skidded through Tract D to the road, and would be loaded onto log-trucks to be hauled off.

At this time, stumps are planned to be left “as is”, however all stumps shall not be left taller than 6 inches. Some slash will be left on-site, and scattered and broken down to less than 6 inches in depth. Any significant slash piles will be re-piled and burned.

Skid trails will be ripped (with bulldozer-rippers), and track-packed perpendicularly to the fall of the slope. Any earthmoving done for temporary access to the treatment units will be reclaimed to pre-disturbance topography. A native grass seed mix and certified wee-free straw mulch will be applied in areas where significant disturbance has occurred. Further re-seeding will occur next spring as needed.

Burn pile areas will have topsoils scraped and stockpiled for reclamation, but the re-spreading of stockpiled topsoils may need to occur next summer, depending on snowfall this winter. This is to avoid long-lasting “burn scars” from heat-damage to soils during burning of slash piles.



Timing- treatment is scheduled to begin in late September, and should take about one (1) week. Burning of slash piles will occur when there is at least 3 inches of snow on the ground, and could occur in mid- to late October (depending on snowfall).

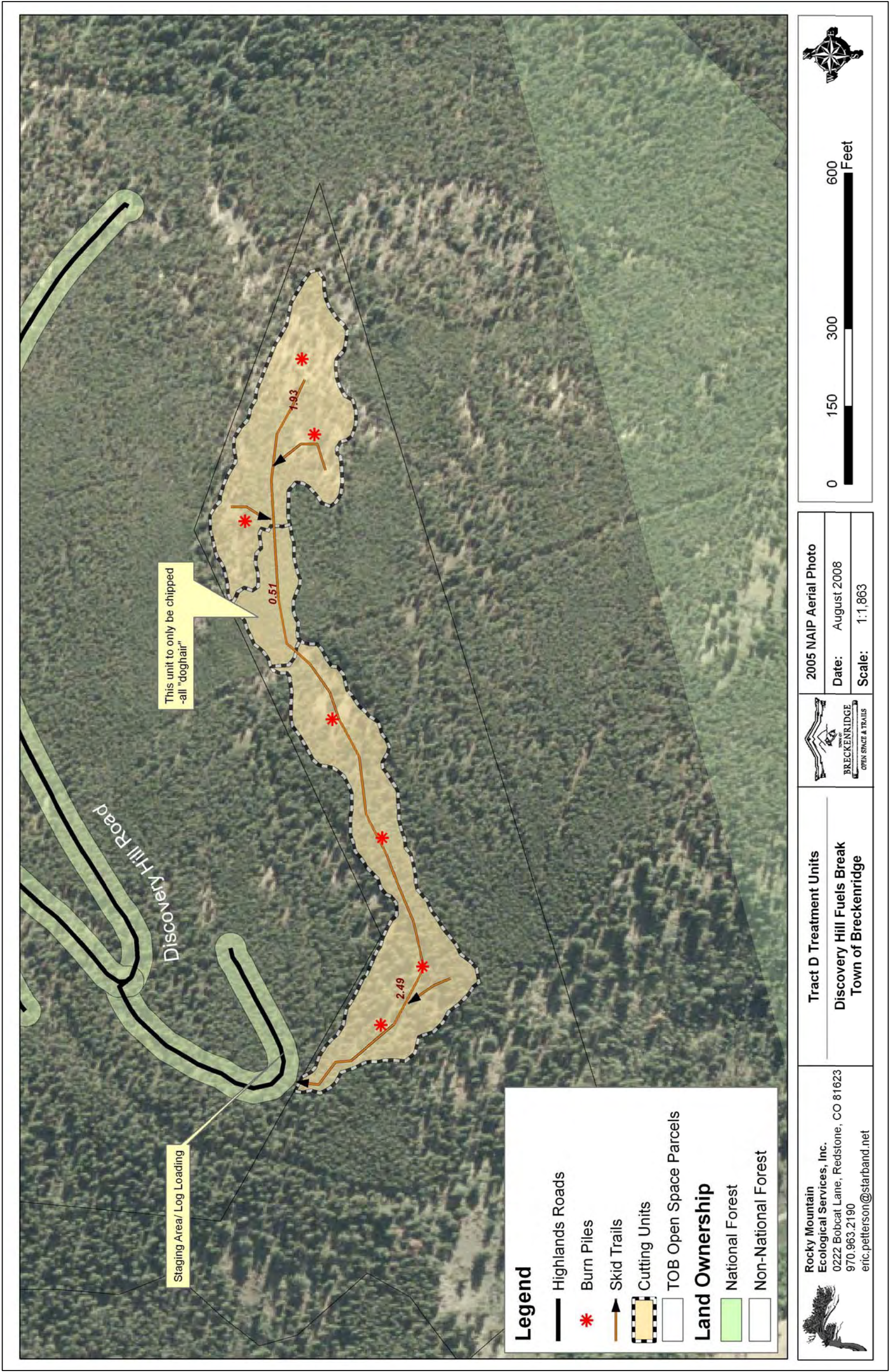
Post-Treatment Needs- Post-treatment, RWBFPD and Town of Breckenridge staff will do a site-inspection prior to releasing the contractor. Any additional requirements will be outlined at such time to meet the requests of RWBFPD or Town of Breckenridge staff. Additional "beautification" may include stump grinding, additional slash treatment etc., but would likely be outside of the scope of this contract with the logging company.

Thank you for the opportunity to work with the Town of Breckenridge on this project, please feel free to email if you have any questions.

Sincerely,

Eric Petterson
Rocky Mountain Ecological Services, Inc.





USFS INDIAN CHAIR / CPL SKI RUN GRADING	
SITE PLAN	
DESIGNED BY	TETRA TECH, INC.
CHECKED BY	
DATE	
PROJECT NO.	
PROJECT NAME	
CLIENT	
LOCATION	
SCALE	
DATE	
REVISIONS	

TETRA TECH, INC.
 410 S. FRENCH STREET, P.O. BOX 1858
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