

**United States Department of the Interior
Bureau of Land Management
Royal Gorge Field Office
3028 E. Main Street
Cañon City, CO 81212**

Environmental Assessment (EA)

Cache Creek Placer Area Management Plan

DOI-BLM-CO-200-2012-0069 EA

February, 2014



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CHAPTER 1 - INTRODUCTION

1.1 IDENTIFYING INFORMATION

CASEFILE/PROJECT NUMBER (optional):

PROJECT TITLE: Cache Creek Placer Area Management Plan

PLANNING UNIT: Cache Creek

LEGAL DESCRIPTION: Chaffee County, 6th Principal Meridian
T. 12 S., R. 80 W. Sections 1 and 2; T. 11 S., R. 80 W. Sections 34-36; T. 12 S., R. 79 W.
Section 6; T. 11 S., R. 79 W. Section 31

APPLICANT: BLM

1.2 INTRODUCTION AND BACKGROUND

BACKGROUND: This Environmental Assessment (EA) has been prepared by the Bureau of Land Management (BLM) to analyze the best strategy to manage an increasing demand in recreational placer activities in the Cache Creek acquisition parcel. The intent of this assessment is to analyze actions that reduce impacts to other important resources located within the parcel including riparian areas, water quality, fisheries, and wildlife habitat while also providing for public health and safety.

Cache Creek is located immediately west and south of the town of Granite and flows into the Arkansas River just below the Granite Bridge. It was the site of one of the first large mining communities in Colorado during the late 1800s. In January 2000, the Bureau of Land Management acquired 2,160 acres through which Cache Creek flows, extending from the San Isabel National Forest boundary to Highway 24. The parcel was acquired through a grant from the Land and Water Conservation Fund, a federal program that conserves irreplaceable lands and improves outdoor recreation opportunities throughout the nation. It was purchased to help protect crucial elk and riparian habitat as well as to provide recreational opportunities.

Many of the adjacent slopes and the creek bottom were significantly disturbed by placer mining and turn of the century logging. The period of major disturbance was from 1860 to 1911. Large tailings deposits and discarded mining materials and equipment are found along the drainage. Although large deposits still exist on the property, and there is interest in claim staking, the acquisition parcel is not open to the General Mining Law of 1872 since it was an acquired post-Federal Land Policy and Management Act (FLPMA). Since major mining operations ended in 1911, a slow, natural recovery began in the uplands and in the riparian zone. Much of the drainage bottom is now a wet meadow/riparian shrub/beaver pond complex. There are also several larger artificial ponds constructed by past landowners. The many ponds in the drainage are used by waterfowl from spring through fall. Brook and brown trout are also present

throughout the drainage. In addition to the fishery present, there is a large elk herd that inhabits the area year round, using the nearby uplands for winter range and calving grounds.

Environmental Assessment (EA) CO-200-2002-0043 EA (Cache Creek Placer Area) and the corresponding Decision Record (dated 6/13/2005) authorized out-of-water placer activity commonly termed “high-banking” within a designated portion of the Cache Creek acquisition parcel to accommodate demand for recreational mineral collection and in part to alleviate placer activity on the Arkansas River.

Per the Cache Creek Placer Area EA, BLM staff was expected to monitor the site. Data has been collected on use as part of the monitoring program and is broken out by type of activity; panning, sluicing or high-banking. Collected data and staff observations indicated a significant increase in all forms of use starting in 2010. The EA originally assumed, based on the level of interest at the time, that there would be approximately 180 operator days (high banking) at the site. In 2011 BLM documented 3500 total users in this area, with 479 of these consisting of high bankers. This increase in use is attributed to a number of factors including; the uniqueness of the allowed activity (high banking at a recreational level), an increase in interest in recreational placer mining (or more specifically, recreational mineral specimen collection), miner success in the area, increasing value of gold, depressed economy and the site being highlighted by the public through a variety of media and organizations.

The EA also required the BLM to perform monitoring to determine potential impacts to resource areas. This monitoring indicated that the increase in use is associated with a number of negative impacts to other resources. Due to the high volume of soil being processed and the methods used, there are excessive levels of sedimentation entering the beaver pond/wetland restoration system.

To address this, the BLM has been cleaning out the upper level beaver pond with heavy equipment as needed to prevent high levels of sediment traveling further downstream and potentially filling wetlands. In most years, this cleaning was required once annually; however, in 2011 the pond was required to be cleaned out twice. Use numbers were slightly higher than previous years but it was also noticed that water flow was unusually high, even for the high snowpack and spring runoff.

Staff discovered that mineral collection users of the site were trespassing onto adjacent private land and diverting water into the placer area to ensure higher and longer flows to allow for more pumping of water for high banking activities. Conversations with the private land owner revealed that they were not aware that people were traveling onto their land and diverting water. Neither the BLM nor the private land owner have a water right or are authorized to divert water in this location. Due to this high water flow and increased level of sedimentation entering the system, staff observed turbid water and depositions downstream that were exceeding the capacity of the settling pond and compromising the ditch/wetland restoration efforts further downstream.

Despite education efforts and an on-site host, other issues continued to occur. Hazards are created as users dig under and around large trees and digging excessively deep holes that are undercut or have vertical sides, also referred to as coyote holes. Despite staff efforts to mark hazard trees and provide education materials about unsafe digging practices, hazard trees and

holes continued to be created. Other issues include damage to trees and tree health, conflicts between users and vegetation loss associated with the expansion of dispersed camping sites.

Due to limited regulations BLM law enforcement staff has been unable to enforce the stipulations identified in the 2002 EA. As a result, several users operated equipment over long periods compounding the impacts identified above including increased sedimentation, excessively large holes, digging under trees, and user conflicts and creating essentially small scale commercial mining operations on public lands under casual use regulations

As indicated above, the increased use of this area in recent years has led BLM to take a hard look at past and present activities in this area. Based on review of BLM regulations and recent clarification regarding locatable mineral status on acquired lands revealed that the Cache Creek parcel has never been open to the General Mining Law and therefore location of claims and mining regulations (43 CFR 3809) for surface management of notice level activity do not apply. Mineral extraction is then confined to only “recreational” mineral specimen collection, which is regulated under 43 CFR 8365.1-5. These regulations do not allow motorized or mechanical devices to aid in mineral specimen collection. Based on this, the decision record of Environmental Assessment, CO-200-2002-0034EA, that originally allowed high banking, was in part rescinded to discontinue “allowance” of motorized and/or mechanized equipment on the acquired parcel with a decision documented in DOI-BLM-CO-200-2012-0038 DN.

During the summer of 2013, the private land owner upstream of the recreation area removed the diversion and water ceased to flow through the originally intended placer area. As a result, several changes in user trends began to occur and new issues arose. Users began to migrate and pan/slucce directly on Cache Creek, where there is not a settling pond that can be cleaned out and all processed sediment is going directly into the fishery/riparian system. The potential hazard trees in this area were not marked and users began to undercut trees creating additional hazards. Due to the long distance of Cache Creek from the parking area, use increased in the drainage near the cemetery and resulted in damage to the riparian system and vegetation. These changes in user patterns and the ongoing behavior of the user group resulted in ongoing impacts to resources at unacceptable levels and the continued creation of hazards from coyote holes and undercutting of trees.

1.3 PURPOSE AND NEED

The purpose of the EA is to identify an overall management strategy for recreational placer activities within the acquired Cache Creek parcel to reduce impacts to other key resources within the area that are being (or have the potential to be) negatively affected by current and future recreation activity associated with this type of recreation use. Since the demand for this type of recreation is driven by a variety of outside forces that can change relatively quickly, this management strategy must allow for adaptive management so that the BLM can respond appropriately to changes in recreation use patterns as they occur.

Goal 1: Reduce risks to public health and safety associated with recreational placer activities.

Objectives:

- a. Reduce/eliminate user-created hazards associated with undercutting trees and creating “coyote holes” (a deep narrow hole with overburden).

- b. Reduce the level of human waste at the site and provide long-term funding strategies for waste removal if necessary (i.e. paying for portable toilets or vault toilet pumping/installation).
- c. Reduce the levels of user conflict at the site by identifying clear enforceable rules that anticipate changes in mineral collection strategies.

Goal 2: Hold sediment levels in the downstream riparian complex to natural levels.

- a. Reduce/eliminate recreation uses that contribute sediment to the downstream riparian complex.

Goal 3: Continue the long-term riparian restoration efforts in the Cache Creek drainage.

- a. Prevent recreation use from interfering with the Cache Creek riparian restoration.

Goal 4: Continue to manage for winter wildlife values in the Cache Creek parcel.

- a. Minimize the amount of mineral collection activities in winter months to decrease level of wildlife disturbance.

Goal 5: Identify strategies to fund the necessary increase in management that the site requires.

- a. Improve oversight and services for the placer mining activities by managing the site through a user fee and/or partnership opportunity.
- b. Ensure that the fee charged is affordable and commensurate with areas offering similar settings and experiences.

Goal 6: Continue to provide recreational placer activities to provide opportunities for families and hobby interests in a manner that does not significantly impact other resources or recreation uses and provide the settings to meet visitor's identified desired outcomes.

- a. Maintain or modify settings to meet desired visitor outcomes including providing any necessary facilities.
- b. Establish clearly defined enforceable rules for the area and allowed uses that anticipate changes in recreational mineral collection strategies.

The need for the action is based on Resource Management Plan (RMP) decisions 1-16 and 1-24 that direct the Bureau to resolve conflicts between recreation uses and wildlife or fisheries. RMP 1-86 directs that recreation resources will be managed to ensure visitor safety. To ensure the continued availability of BLM administered lands for a diversity of resource-dependent, outdoor recreation opportunities and the multiple use and sustained yield mandate of Section 302a of the Federal Land Policy and Management Act. As identified in the Background section of this document monitoring indicated that recreation use at the site was leading to unacceptable impacts to fisheries and wildlife. Monitoring and visitor contacts also indicated that visitor safety has become an issue at the site. This monitoring indicates that RMP decisions are not being met and an action is needed to rectify these issues.

1.4 DECISION TO BE MADE

The BLM will decide whether to implement the proposed actions in this management plan based on the analysis contained in this Environmental Assessment (EA). This EA will analyze a range of strategies to manage recreational placer activities in the Cache Creek acquisition parcel based on the goals and objectives identified above. The BLM may choose to: a) implement the project as proposed, b) implement the project with modifications/mitigation, c) implement an alternative to the proposed action, or d) not implement the project at this time.

1.5 PLAN CONFORMANCE REVIEW

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: Royal Gorge Resource Area Resource Management Plan

Date Approved: 5/1996

Decision Number/Page: 1-16, 1-24, 1-82, 1-84, 1-86 pages 2-1-4, 2-1-5, 2-1-15 and 2-1-16

Decision Language:

1-16: Conflicts between Wildlife Habitat and other uses will be resolved in favor of achieving vegetation management goals.

1-24: Conflicts between fishery habitat and other values will be resolved in favor of fishery habitat.

1-82: Recreation will be managed to provide for: a variety of recreational opportunities and settings, facility development will be accomplished to reduce user conflicts and to improve visitor health and safety.

1-84: Recreation will be managed non-intensively in semi-primitive non-motorized settings.

1-86: Various actions will occur to enhance recreation: upland recreation opportunities emphasizing a balance between resource protection and tourism; coordination with various volunteer and user groups; monitoring and visitor contacts to ensure visitor safety, resource protection, and visitor information availability.

In January 1997, the Colorado State Office of the BLM approved the Standards for Public Land Health and amended all RMPs in the State. Standards describe the conditions needed to sustain public land health and apply to all uses of public lands.

Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes.

Standard 2: Riparian systems associated with both running and standing water function properly and have the ability to recover from major disturbance such as fire, severe grazing, or 100-year floods.

Standard 3: Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential.

Standard 4: Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.

Standard 5: The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado.

Because standards exist for each of these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in Chapter 3 of this document.

1.6 SCOPING, PUBLIC INVOLVEMENT AND ISSUES

NEPA regulations (40 CFR §1500-1508) require that the BLM use a scoping process to identify potential significant issues in preparation for impact analysis. The principal goals of scoping are to allow public participation to identify issues, concerns, and potential impacts that require detailed analysis.

Persons/Public/Agencies Consulted: In preparation of the proposed action and alternatives the BLM consulted a number of agencies, groups, related businesses and publics. Information was presented to the BLM Resource Advisory Council (RAC) on numerous occasions and a meeting was also held with known stakeholders. The timeline and persons/groups consulted is outlined below. In addition the proposed action and notice of scoping was on the BLM's website for over 90 days while comments were accepted.

Scoping Timeline:

- 1/27/2012 Met with US Army Corps of Engineers, Pueblo Area Office Supervisor; Mr. Van Truan to discuss reclamation and the cleaning out of the beaver ponds.
- 8/8/2012 Front Range Resource Advisory Council – presentation and tour of Cache Creek.
 - Issues Identified
 - Need to resolve water diversion issue, suggest meeting with water commissioner.
 - Need to develop management goals before proceeding.
- 8/22/2012 Colorado Division of Water Resources, Water Commissioner Staff; Mr. Bruce Smith and Mr. Gary Hanks
- 11/14/2012 Front Range Resource Advisory Council – provided update on Cache Creek
- 2/13/2013 Front Range Resource Advisory Council – provided update on Cache Creek
- 11/20/2013 Front Range Resource Advisory Council – provided update on Cache Creek

- 12/12/2013 Meeting with local gold panning clubs and related businesses – Presentation of ongoing issues at the site and brainstorming session on potential solutions.
- Attendees:
 Representatives from the following organizations and businesses
 Gold Prospectors of Colorado
 Colorado Gold Diggers
 Sidewinder Mining
 Gold Prospectors Association of America Colorado Springs Chapter
 Rock Doc
 Colorado Prospectors
 Gold Prospectors of the Rockies
- 3/03/2014 Sent scoping letter (via email and hard copy) with links to the proposed action to 49 individuals, clubs, agencies, and municipalities notifying them of the 45 day public scoping period. The scoping period ended on April 15, 2014.
- 6/4/2014 Front Range Resource Advisory Council – provided update on the Cache Creek scoping results.
- 7/3/2014 Met with Colorado Parks and Wildlife, Salida Area Office Area Manager; Mr. Jim Aragon and Fisheries Biologist; Mr. Greg Policky to discuss the proposed action and the comments they provided concerning impacts to fisheries and wildlife.
- 8/21/2014 Right-of-way holders were notified of the proposed action through a letter. A request for a response to identify issues was also included. One response was received from Xcel Energy.
- 12/3/2014 The draft management plan and EA were sent out for public comment. Letters were sent to the same list identified for public scoping and a press release was sent to news organizations throughout the region. The Chaffee County Times wrote an article.

The following issues were identified through internal and external scoping:

- How can the BLM modify management to reduce the level of adverse outcomes that are currently occurring at the site (conflicts between users, increased environmental impacts, health and human safety concerns) while still allowing for recreational mineral collection?
- By continuing to allow recreational mineral collection on the parcel this use will add to sediment within Cache Creek impacting riparian restoration efforts and fisheries. This use will also impact wildlife especially during the calving and rutting seasons. This use will also allow the conflict between hunting and recreational mineral collection use to continue.
- How can the BLM manage the site to provide improved opportunities for recreational placer activities while still managing for other resources?

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The purpose of this chapter is to provide information on the Proposed Action and Alternatives. Alternatives considered but not analyzed in detail are also discussed. The alternatives identified were based on a number of issues identified through BLM staff monitoring of the site, concerned members of the public, local and regional gold panning clubs as well as partner agencies. These issues stem from the dramatic increase over the past 6-7 years of recreational mineral collection in the Cache Creek parcel that has largely been driven by high gold values, national economic factors and an overall increase in interest in the activity. This increase in use has led to issues including user conflicts, impacts to water quality, impacts to riparian areas and concerns with human health and safety. The proposed action and alternatives were developed to meet the previously identified goals and objectives and in response to comments received during scoping. Alternatives that do not meet the identified goals and objectives were considered but not analyzed in detail.

2.2 ALTERNATIVES ANALYZED IN DETAIL

2.2.1 Proposed Action

The BLM proposes the following actions for the acquired Cache Creek parcel that addresses the issues and concerns associated with recreation placer activities. The intent is to follow a number of management strategies that will allow hobby recreational placer activities to continue, while mitigating impacts to resources. It is understood that these strategies may not be as effective as desired and modifications to the area management may be necessary in a somewhat short timeframe. Therefore, this plan is designed to be flexible and will rely on monitoring and coordination with stakeholders to identify changes in management strategies that can be quickly adopted and put into place

1. Require an Individual Special Recreation Permit (ISRP) for recreational mineral collection activities related to placer mining activities with the following stipulations¹:
 - a. Placer activities within the acquired Cache Creek parcel would be limited to a designated area (except in-situ gold panning, see #2 below).
 - b. The designated area is the only place within the parcel where digging would be allowed.
 - c. Battery powered re-circulating systems would be allowed in the designated area.
 - d. Small dry washers would be allowed in the designated area.
 - e. Hand carts would be allowed to transport equipment in the designated area.
 - f. Permitted use would only be allowed from Memorial Day Weekend to November 30th of each year.
 - g. Digging in a manner that damages trees would not be allowed.

¹ Stipulations will be reviewed annually and modified as needed based on monitoring.

- h. Creating holes that pose a threat to health and human safety would not be allowed.
 - i. Users would be charged a fee for the ISRP.
 - j. Digging could not expose groundwater. If ground water is encountered, the hole would be refilled.
 - k. Battery powered classifying systems would be allowed in the parking and camping area.
2. In-situ gold panning (no digging) in the Cache Creek stream would be allowed throughout the parcel. A permit would be required for this activity. This does not include sluices.
 3. Dispersed camping would still be allowed. Sites would be managed to limit expansion.
 4. Partners would be utilized to assist in recreational mineral collection management.
 5. Toilets would continue to be provided. A vault toilet could be installed.
 6. Annual reclamation would continue to occur.
 7. Leashes on dogs would be required within the designated placer area from Memorial Day Weekend to November 30th coincidental with the permit season.
 8. A minimal amount of trees could be removed.
 9. The site would be monitored to determine if changes in management need to occur.

Individual Special Recreation Permit

In order to meet the identified management goals the BLM proposes to designate the Cache Creek parcel as a Special Area² and implement an individual special recreation permit requirement for recreational placer activities within a designated area. Resources need to be protected by special management and control measures and a permit system for individual use would help achieve these management objectives.

The entire parcel would be closed to recreational placer activities except for under the terms and conditions of the permit. These terms and conditions would be reviewed annually and amended as needed to ensure that management goals are being met. These are outlined below:

1. An individual use permit would be required within the Cache Creek parcel for persons participating in recreational placer activities. This would be put in place in order to manage the level of use and associated impacts. This permit system would collect basic information about the participant and would be accompanied by a robust educational component. It could also be used to limit the number of days one could participate in the activity and be used as a tool to limit the volume of use based on monitoring and ongoing coordination with partners.

Adaptive Management: Changes could be made to the permit system in order to improve management of the site including but not limited to limiting the number of permits available.

² Note: Per 43 CFR 2932.3 a Special Area is defined as “any area where the authorized officer determines that the resources require special management and control measures for their protection and a permit system for individual use would achieve management objectives.” There are no other management implications associated with this designation other than providing the authorized officer the ability to implement an individual use permit system.

The BLM could explore the possibility of leasing the site to a concessionaire. This lease agreement would need to meet all of the stated goals as identified in the purpose and need section above. Any lease agreements would follow BLM national guidance for entering into these types of agreements including fair and competitive bidding.

- a. Designated Area - The permit would only authorize digging associated with recreational placer activities (the act of digging/collecting minerals) within a designated area. This would be roughly based on the previous mining disturbance area characterized by piles of waste rock. The area could be modified or altered depending upon monitoring and coordination with partners. This area would be identified on a map, made available at various information portals and marked on the ground. Placer activities would not be allowed on other public lands within the Cache Creek parcel except for in-situ panning. (see #2 below).

Although sediment in water systems occurs naturally through run off and rain events, the rate at which sediment is being added to the Cache Creek system has begun to fill beaver ponds and water delivery channels. The highest upstream beaver pond acted like a sediment catch that was cleaned out annually (sometimes biannually) with heavy equipment but would still get overloaded and allow high levels of sediment to reach the downstream wetland system.

With the removal of the illegal diversion, users moved their operations to the banks all along Cache Creek instead of along diverted water channels. Activity increased downstream near the cemetery. Operating on the stream leads to spoils being dumped directly into the creek and riparian vegetation is being damaged. Because of the intensity and location of this use, the decades long restoration efforts of the wetland and fisheries are being compromised. The BLM must be able to meet its goal of holding sediment to natural levels in the downstream riparian complex to avoid short and long term harm to riparian and aquatic ecosystems and meet water quality standards.

- b. Re-Circulating Systems - The BLM proposes to allow re-circulating systems that are battery powered with a limited size pump within the designated recreational mineral collection area and the developed area (parking lot and dispersed campsites). Only one pump would be allowed per system and one system per person. Size of the systems would be limited by number of gallons. Persons may only collect minerals within the designated area but they may process this material within the parking area or campsite. Chemicals or additives may not be added to the water to assist in processing.

Adaptive Management: Initially pump sizes would be limited to 2,200 (gph) and 25 gallon systems. These specifics could be modified through the permit's terms and conditions based upon monitoring and coordination with management partners. Returning waste materials to the designated area could be required if sediment related to processing concentrate in the parking area or dispersed campsites becomes an issue. If monitoring indicates that issues continue to occur

despite the currently proposed changes in management, additional changes will be considered with an appropriate level of environmental review and public input..

- c. Dry Washers - Small dry washer systems may also be allowed in the designated area. They would be limited in size to ½ yard per hour production and may be run by one 12 volt battery. These specifics could be modified through the permit based upon monitoring and coordination with management partners. Other actions could include no longer allowing dry washers.

Wheeled Carts - Given the demographic of the participants and the nature of some equipment used for the activity, mechanical non-motorized wheel carts such as a wheel barrow or a dolly would be allowed to transport equipment to the work site. Mechanical devices of any kind may not be used to transport materials. Small amounts of concentrate that would be considered a reasonable amount could be transported off-site in a vehicle for further classifying. This use could be modified or refined based upon monitoring and coordination with management partners.

- d. Permit Season - The permit would only authorize recreational mineral collection from Memorial Day weekend to November 30th. The Cache Creek parcel is highly valuable to wildlife, particularly during the crucial winter months when elk and deer have limited places they can travel and live. These values were one of the driving factors for the original acquisition. The travel management plan for the area restricts motorized travel into the area from December 1st to Memorial Day Weekend. As recreation demand for recreational mineral collection has increased users that have demonstrated that they are willing to hike into the site beyond the expectations of the original management decisions and have the potential to disrupt wildlife during the crucial winter months.
- e. Tree Protection – Under the terms of the permit a person may not dig in a manner that causes damage to a tree and/or creates a public safety hazard. The cutting of tree roots decreases the individual tree health creating an unstable tree that could fall over with a slight breeze. Details of the specific rule would be further established through the terms and conditions of the permit.
- f. Hazard Holes - Following Occupational Safety and Health Administration (OSHA) and similar guidelines for excavations, rules would be developed to limit hole size and angle of walls that persons may dig. Details of the specific rule would be further established through the terms and conditions of the permit. This rule would also prohibit digging within twenty feet of any electric transmission support structure to help ensure the integrity of the line and structure.

In search of minerals, users of the site often dig extremely hazardous holes, undercuts, and ledges that pose serious safety hazards to the digger. These dangerous situations are often not reclaimed when prospecting is complete and then become a safety hazard.

Adaptive Management: Specifics regarding the allowed distance to dig from trees and creation of hazard holes could be modified and adjusted based on monitoring and feedback. This would be done through the terms and conditions of the permit.

- g. Permit Fee - The BLM is proposing to initiate a fee for the individual use permit in order to provide the needed management of this site and reduce impacts to resources. This fee would be required for obtaining a permit except for persons under the age of 16. Persons under the age of 16 would still be required to obtain a permit and follow all terms and conditions but a fee would not be required.

As with any type of concentrated recreation use, a high volume of use in a concentrated area leads to the need to provide a higher level of management that can exceed the funding the bureau receives to manage recreation resources. This is the case for Cache Creek where use levels and associated issues require almost daily interaction and coordination. Adequate management of the site requires a high level workload and operational expenses to ensure reasonable visitor and resource protection.

The permit is directly tied to managing gold panning activities therefore fees would only be charged for this activity. The fees generated from this permit are then available to the field office to assist with management of the site covering costs such as portable toilets, user education, monitoring, reclamation, partnership support, and law enforcement. The process to establish a fee as outlined in the Federal Lands Recreation Enhancement Act (FLREA) would be followed including development of a business plan (see Appendix C). Adoption of the business plan is pending review by the Resource Advisory Council and notice in the Federal Register. This process also directs that any fees are reasonable when compared to similar activities. The fee structure could be revised if warranted in the future. All revision would follow established policies with an appropriate level of public input or review.

- h. Water usage - Rules would be developed that would not allow the exposure of groundwater and outline how naturally occurring water in the designated mining area would be used.

Holes should not be dug so deep as to expose groundwater. If groundwater is encountered, they would be backfilled to a point where the water is covered with 6 inches of material.

Adaptive Management: Initially, any water flowing through the designated mining area could be used for sluicing activities. If it is found that sediment levels entering the sediment pond are excessive and cannot be mitigated effectively, the usage of water outside of recirculating systems would not be allowed. In this case, mineral collection should not take place within 50 feet of live water. Options to make a more formalized water source or sediment catchment could also be explored.

2. In-Situ Panning - One of the management intents is to provide a beginner experience at Cache Creek therefore gold panning would be allowed within the Cache Creek parcel and a permit would be required. This use would be limited to the bottom in-situ wetted channel perimeter (within the creek). Sluices would not be allowed in the creek or waterways. Digging outside of the designated area would not be allowed.

Adaptive Management: If monitoring indicates that negative impacts are occurring in relation to in-situ panning then the BLM will consider making changes to this activity. This could include no longer allowing this activity outside of the designated area or reducing the season of use to end Labor Day weekend to protect trout spawning. Options could be explored to secure water in the diverted water channel near the parking lot to allow more consistent panning in a more accessible area through the water rights process. If this were to occur sediment catches would need to be established and cleaned out on a regular basis to reduce the overall impacts to fisheries and riparian plant species. Additional NEPA analysis may also be warranted.

3. Camping - Camping and occupancy of public lands would follow BLM statewide rules allowing for dispersed camping with a 14 day stay limit. This is the current rule for camping in the parcel. Existing campsites would be marked and expansion of campsites both new and existing would be limited through the installation of signs and barriers. Camping could be limited to designated dispersed sites if impacts increase and on the ground management controls are not effective. If demand increases, additional sites could be developed near the existing area dispersed . Additional review may be warranted.
4. Partners - BLM will pursue agreements with third parties to assist with education, monitoring, and ongoing management of the site. A campground host program could be part of this agreement. A concessionaire agreement could also be considered to assist in management of the site. A partnership with CPW would continue to monitor changes in elk population over time, including winter use of the project area, calving success, and spatial encroachment of recreational activities into adjacent elk calving, migration and wintering habitats.
5. Restrooms - The BLM will attempt to continue to provide toilet facilities at the site during busy periods as funding allows. BLM would continue to partner with organizations to provide this service and reduce the government's management costs of the site. A vault toilet could be installed in the future if other actions are successful in managing the site and there is long-term interest in the site and activity.
6. Reclamation – Interim reclamation of the site would occur annually each fall, or sooner if needed, to re-contour the site and remove any hazardous walls or holes should they occur. The existing beaver pond failed with the high 2015 early spring runoff and no longer acts as a temporary settling pond that can periodically be cleaned. This proposed action includes designed sediment catchments to be built where deemed suitable to prevent down gradient migration of silts. The main early season channel the beaver dam is upon

will need sediment retention in the vicinity SE of the parking area, however other locations as determined by a qualified engineer may also have sediment retention structures put in place to minimize additional overland flow on smaller drainage networks. Material from future settling basins would be spread 4-6 inches deep to act as a topsoil and promote vegetation growth/reclamation. Additional site specific analysis will be required when specific tailings are identified for reclamation.

Adaptive Management: A more formal sediment catchment option may be explored in the future if warranted by site conditions.

7. Dogs - Dogs would be required to be on leash at all times within the 1,600 acre designated placer area and developed parking area from Memorial Day Weekend to November 30th coincidental with the placer season. This could be expanded to include dispersed campsites if issues continue to occur.
8. Tree Removal - In order to provide more space and available ground for the public to “work” the site, the BLM could reduce the tree density within the designated mineral collection area. This would only be done on a very small scale level and only when necessary. Large scale timber removal would not be allowed.

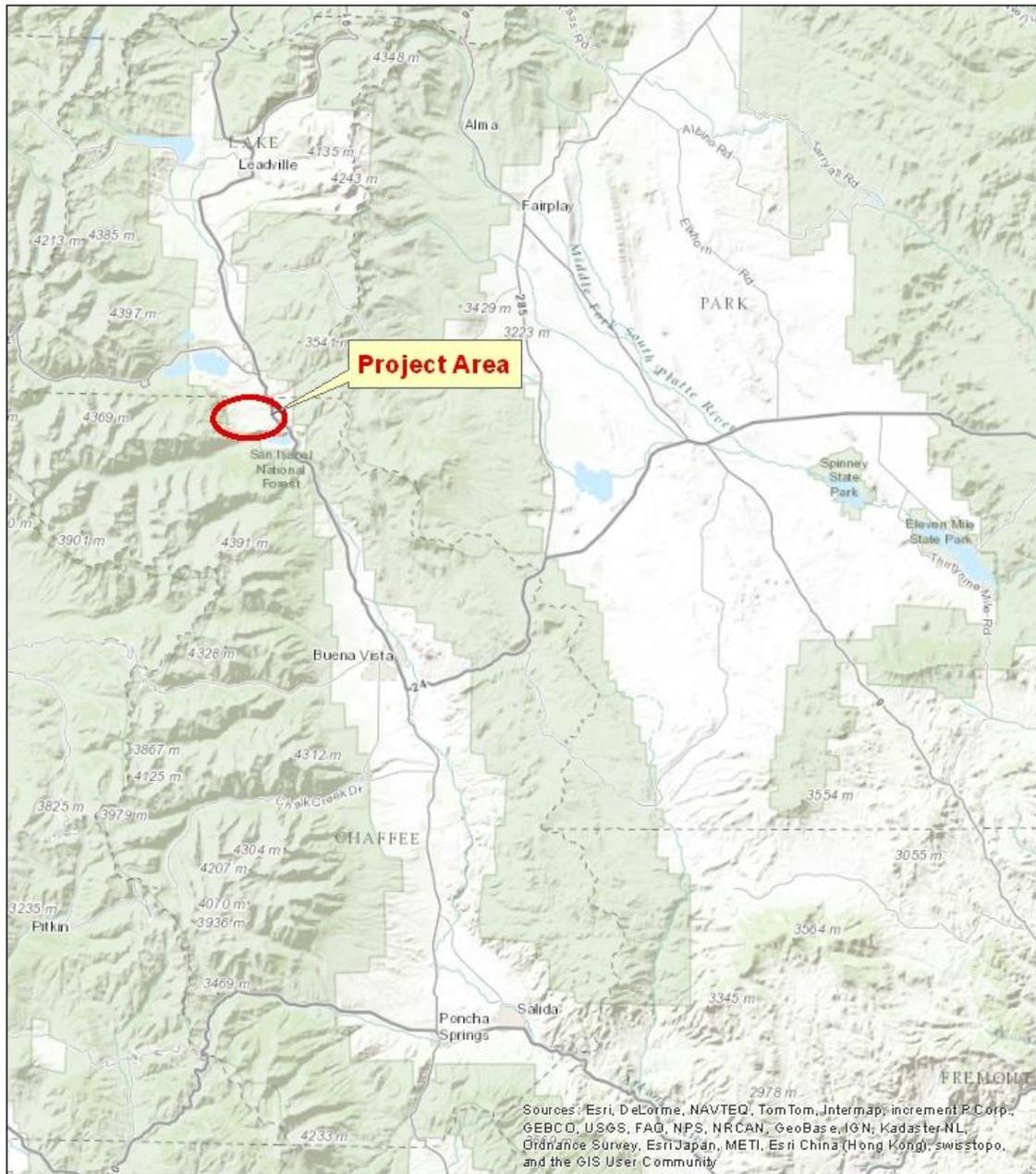
In order to reduce the creation of public safety hazards the BLM proposes to restrict digging around trees (see Health and Safety Management above). Due to the density of large trees in the area the resulting space available for recreational gold panning could be extremely limited. Therefore, it may be necessary to remove individual trees that have grown on the tailings piles based on demand.

Monitoring - Monitoring would focus on compliance with management plan actions and impacts to resources. Data would continue to be collected regarding use levels, types of use, visitor demographics, and visitor satisfaction. Monitoring efforts also focus on determining placer mining impacts to terrestrial and aquatic wildlife, riparian area vegetation and structure, and historic resources as well as soil erosion, stream sedimentation, and hazardous conditions. Part of the monitoring program will be to watch the sedimentation level in the pond to ensure that it is cleaned out before it loses its effectiveness. Use of the project area by American elk during the winter, for calving and migrating to other DAUs and effects to elk hiding cover and vegetation would be incorporated into monitoring plans.

Adaptive Management

Given the variety of influences that affect the level of interest in mineral collection in this area and the abundance of changes in management proposed in this document it is in the interest of the resources and the public for management to be able to adapt quickly. This document attempts to provide this flexibility and is reflected in each of the above sections of potential changes that could be implemented if warranted. Regular monitoring combined with ongoing coordination with stakeholders including Colorado Parks and Wildlife would be used to determine if changes are occurring at unacceptable levels and what the course of action should

be.





Cache Creek Placer Area Management Plan

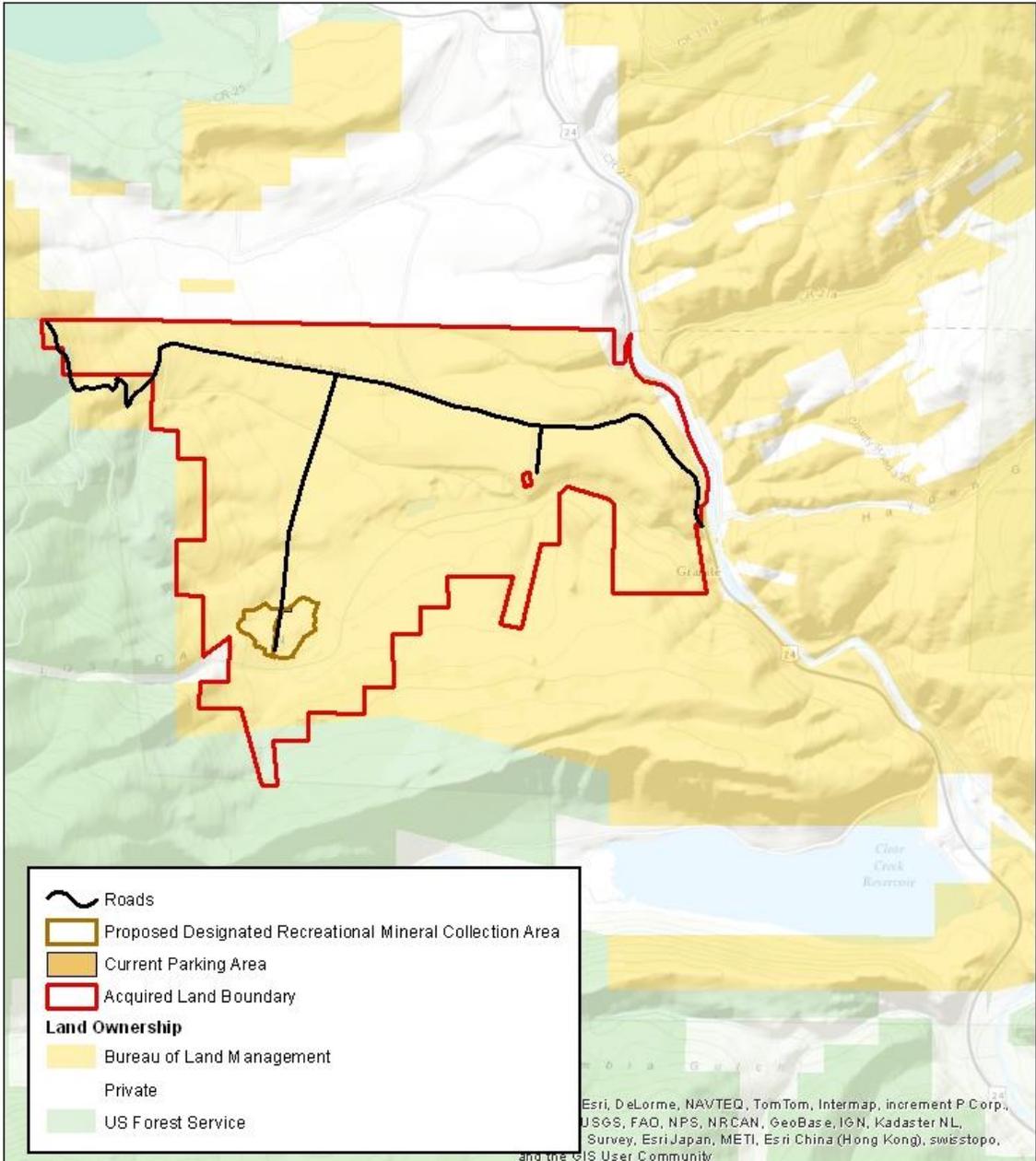
DOI-BLM-CO-200-2012-0069 EA

**6th PM, T12S, R80W Sec. 1 & 2
T11S, R80W Sec. 34-36, T12S, R79W Sec. 6
T11S, R79W Sec. 31**

0 2 4 8 12 16 Miles



NOTE TO MAP USERS
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Cache Creek Placer Area Management Plan

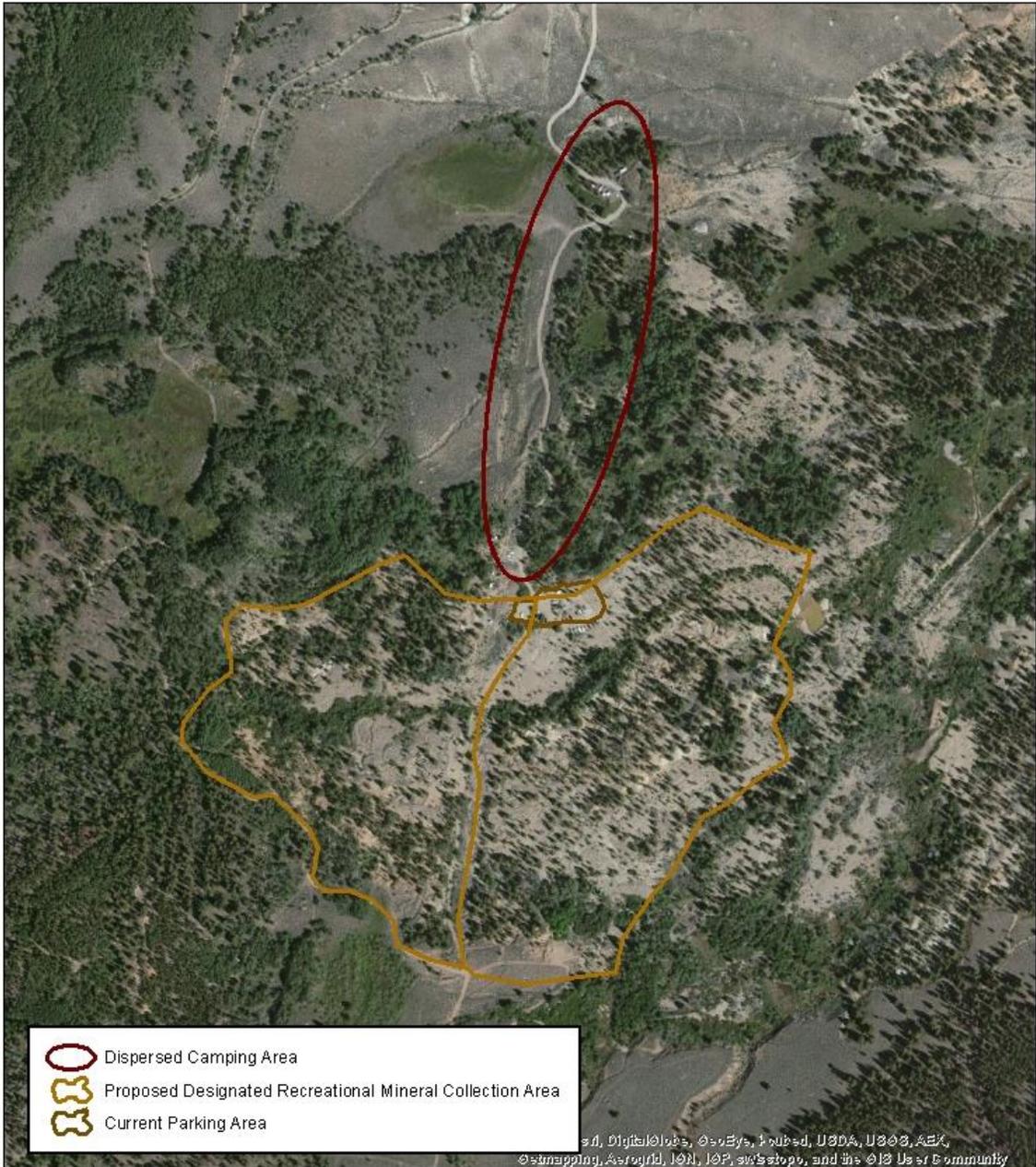
DOI-BLM-CO-200-2012-0069 EA

6th PM, T12S, R80W Sec. 1 & 2
T11S, R80W Sec. 34-36, T12S, R79W Sec. 6
T11S, R79W Sec. 31

0 0.15 0.3 0.6 0.9 1.2
Miles



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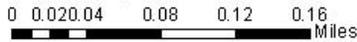
-  Dispersed Camping Area
-  Proposed Designated Recreational Mineral Collection Area
-  Current Parking Area

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Cache Creek Placer Area Management Plan

DOI-BLM-CO-200-2012-0069 EA
 6th PM, T12S, R80W Sec. 1 & 2
 T11S, R80W Sec. 34-36, T12S, R79W Sec. 6
 T11S, R79W Sec. 31



NOTE TO MAP USERS
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2.2.2 No Action Alternative

The no action alternative is to continue with current management of the Cache Creek Placer area. Recreational placer activities would be allowed on all public lands in the area under non-General Mining Law regulations where motorized and mechanized devices are not allowed. Travel management designations and season of use for the motorized vehicle closure (December 1st – Memorial Day Weekend) would remain the same. Partnerships to provide a campground host to educate users on panning ethics could continue. BLM would continue to enforce the existing rules in the area and education of users would continue to be the primary tool to protect resources and public health. Dispersed camping would continue to be managed so that sites do not cause undo degradation of the resources in the area and barriers and signs would be installed as needed to prevent unnecessary campsite expansion.

2.2.3 Closure to Recreational Mineral Collection Alternative

The focus of this alternative would be to manage the site primarily for wildlife values and ongoing restoration. In order to further manage resources of concern including wintering elk and fisheries and to reduce conflict between users of the area this alternative would close the site to recreational placer activities, including panning. This would be done through the supplementary rule making process. Travel management designations and season of use for the motorized vehicle closure (December 1st – Memorial Day Weekend) would remain the same. Rules, including the closure, would continue to be enforced in the area and education of users would focus on the closure and resources being protected. Placer mining related management partnerships would likely be discontinued and a campground host would no longer be provided on site. Dispersed camping would continue to be managed so that sites do not cause undo degradation of the resources in the area and barriers and signs would be installed as needed to prevent unnecessary campsite expansion.

Under this alternative the primary site used for recreational mineral collection would be assessed and a final reclamation plan would be developed. The existing road and parking area would remain available for use by the public.

2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

A number of alternatives for management of the site have been identified both by BLM staff, stakeholders and the public. Several of these have been identified as potential adaptive management strategies under the proposed action. Some of these however have been determined as not feasible or do not meet the overall management goals for the area.

One commenter suggested that the entire management of the parcel be focused on recreational placer activities while accepting higher impacts to wildlife and fishery resources. This included not having laws pertaining to where/how people can dig, allowing all forms of prospecting and mining methods, not requiring a permit, allowing mining year round, and allow for wheeled devices to carry materials and equipment. While some of these suggestions are addressed in the no action alternative (open to mining year round, limited rules, not requiring a permit) and others are included in the proposed action (allowing mechanized equipment, wheeled devices to carry equipment) the combination proposed would not be in conformance with the Resource Management Plan. RMP decisions call for a balance between recreation and other resources and specifically that if conflicts occur they will be resolved in favor of wildlife and fisheries habitat. In addition, the parcel was acquired with Land and Water Conservation Funds to protect crucial

elk and riparian habitat as well as provide recreational opportunities. This suggestion does not provide for protections of these habitats for which the grant to acquire the parcel was awarded.

It has been suggested that the area be “opened” to mining so that the Mining Law applies and those restrictions can be enforced. This is not feasible due to the nature of the acquisition of the parcel³ including the funding source, the reasons behind the acquisition, the purpose and need as stated in this document and direction provided in the RMP regarding wildlife and fishery values.

One comment suggested that all users of the site be required to possess a permit and pay a fee, not just the people participating in placer activities. The need for additional management of this site stems exclusively from recreational mineral collection activities and is driving the need for the management plan. Since other uses of the site do not require additional management or facilities, a fee charged for simply accessing public lands would be a violation of FLREA and was not carried forward.

Commenters suggested that the entire site not be closed to recreational mineral collection and a variety of scenarios were suggested. As proposed the BLM is attempting to strike a balance between other resource values and allowing for this type of recreation activity to continue. It has been demonstrated that mineral collection throughout the parcel is having deleterious impacts to resources of concern and therefore this type of alternative would not meet RMP decisions regarding wildlife and fishery values.

Comments were received suggesting that wheeled carts be allowed to use for moving materials and overburden. This would move closer towards commercial scale mining and outside of the intended goal of providing a “recreational” level gold panning area and was therefore not considered.

CHAPTER 3 - AFFECTED ENVIRONMENT AND EFFECTS

3.1 INTRODUCTION

This section provides a description of the human and natural environmental resources that could be affected by the Proposed Action and presents comparative analyses of the direct, indirect and cumulative effects on the affected environment stemming from the implementation of the actions under the Proposed Action and other alternatives analyzed.

³ Cache Creek was acquired utilizing LWCF money. Per Section 1 of Public Law 88-578 (Land and Water Conservation Fund Act of 1965), the purpose of the act is to assist in preserving, developing, and assuring accessibility to people such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation in such recreation by providing funds for the Federal acquisition and development of certain lands.

Per Section 3 of Public Law 88-578, Moneys covered into the fund shall be available for expenditure for the purposes of this Act only when appropriated therefor.

3.1.1 Interdisciplinary Team Review

The following table is provided as a mechanism for resource staff review, to identify those resource values with issues or potential impacts from the proposed action and/or alternatives. Those resources identified in the table as impacted or potentially impacted will be brought forward for analysis.

<u>Resource</u>	<u>Initial and date</u>	<u>Comment or Reason for Dismissal from Analysis</u>
<u>Air Quality</u> <i>Ty Webb, Chad Meister, Melissa Hovey</i>	TW, 7/5/14	No Negative impacts to air quality are foreseen in any of the proposed actions.
<u>Geology/Minerals</u> <i>Stephanie Carter, Melissa Smeins</i>	SC, 9/23/2014	The area was historically mined for gold and since the land was acquired by the BLM, small scale gold mining has occurred on the parcel. No negative impacts to geology/minerals are foreseen in any of the proposed actions.
<u>Soils</u> <i>John Smeins</i>	JS, 10/21/14	See Soils section 3.2.1
<u>Water Quality Surface and Ground</u> <i>John Smeins</i>	JS, 10/21/14	See Water Quality section 3.2.2
<u>Invasive Plants</u> <i>John Lamman</i>	JL, 8/18/2014	Due to historical and current ground disturbing activities, there is very little top soil in the project area for invasive plants to become established in. There is a small (less than 20 feet in diameter) patch of Canada thistle near the outlet of the settling pond.
<u>T&E and Sensitive Species</u> <i>Matt Rustand & Lara Duran</i>	MR, 9/2/2014, LD 5/11/15	See affected environment and analysis sections
<u>Vegetation</u> <i>Jeff Williams, Chris Cloninger, John Lamman</i>	JW, 9/5/14	See affected environment and analysis sections
<u>Wetlands and Riparian</u> <i>Dave Gilbert</i>	DG, 8/15/14	See affected environment and analysis sections
<u>Wildlife Aquatic</u> <i>Dave Gilbert</i>	DG, 8/15/14	See affected environment and analysis sections
<u>Wildlife Terrestrial</u> <i>Matt Rustand & Lara Duran</i>	MR, 9/2/2014, LD 5/11/15	See affected environment and analysis sections
<u>Migratory Birds</u> <i>Matt Rustand & Lara Duran</i>	MR, 9/2/2014, LD 5/11/15	See affected environment and analysis sections

<u>Resource</u>	<u>Initial and date</u>	<u>Comment or Reason for Dismissal from Analysis</u>
<u>Cultural Resources</u> <i>Monica Weimer</i>	MMW, 7/2/14	See Cultural Resources section.
<u>Native American Religious Concerns</u> <i>Monica Weimer</i>	MMW, 7/2/14	In 2001, in conjunction with an RMP amendment proposal, BLM consulted with the Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Sioux Tribe, Comanche Nation of Oklahoma, Crow Creek Sioux, Eastern Shoshone, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, the Ute Tribe, Oglala Sioux Tribe, Pawnee Tribe, Rosebud Sioux Tribe, Southern Ute Tribe, Standing Rock Lakota Tribe, and the Ute Mountain Ute Tribe (Cultural Resources Number CR-RG-01-44 NA). None of the tribes had any concerns about the Cache Creek area.
<u>Economics</u>	mw, 9/9/14	See affected environment and analysis sections
<u>Paleontology</u> <i>Melissa Smeins, Stephanie Carter</i>	SC, 9/23/2014	The proposed action would not impact paleontological resources.
<u>Visual Resources</u> <i>Kalem Lenard</i>	KL, 7/21/2014	None of the alternatives would introduce modifications to the landscape that would contrast greatly with the existing landscape. The proposed action and alternatives would not impact visual resources and further analysis is not warranted.
<u>Environmental Justice</u> <i>Martin Weimer</i>	mw, 9/8/14	The proposed action affects areas that are rural in nature. The land surrounding the project area is generally used for grazing and recreation, as a result, there are no minority or low-income populations in or near the project area that would be effected by the proposed management plan. As such, the proposal will not have a disproportionately high or adverse environmental effect on minority or low-income populations.
<u>Wastes Hazardous or Solid</u> <i>Stephanie Carter</i>	SC, 9/23/2014	The proposed actions will not involve use of materials that would result in generation of solid and/or hazardous wastes. Therefore, there is no concern with potential impacts involving wastes.
<u>Recreation</u> <i>Kalem Lenard</i>	KL, 7/21/2014	See Recreation Section
<u>Farmlands Prime and Unique</u> <i>Jeff Williams, Chris Cloninger, John Lamman</i>	JW, 9/5/14	Not Present
<u>Lands and Realty</u> <i>Rich Rotte, Greg Valladares</i>	RR, 10/3/2014	Four rights-of-way cross the area. Notice was sent to ROW holders and only Xcel Energy who operates a transmission line in the area responded. They requested that excavations not be allowed to occur within 20' of support structures. The request was incorporated into the proposed action as a design feature mitigating impacts to this resource. No further impacts to lands and realty resources are anticipated.
<u>Wilderness, WSAs, ACECs, Wild & Scenic Rivers</u> <i>Kalem Lenard</i>	KL, 7/21/2014	Not present.
<u>Wilderness Characteristics</u> <i>Kalem Lenard</i>	KL, 7/21/2014	Not present.

<u>Resource</u>	<u>Initial and date</u>	<u>Comment or Reason for Dismissal from Analysis</u>
<u>Range Management</u> <i>Jeff Williams, Chris Cloninger, John Lamman</i>	JW, 9/5/14	Grazing use is currently not permitted in the analysis area. There are future plans to analyze grazing use in the Cache Creek area, but this use would be outside of this proposal area. The proposed action and alternatives would have no impact to future grazing use in the Cache Creek area.
<u>Forest Management</u> <i>Ken Reed</i>	KR, 9/5/2014	See affected environment and analysis sections.
<u>Cadastral Survey</u> <i>Jeff Covington</i>	JC 7/15/14	The project area is located in once was private mining claims. Many of these mining areas are now public lands. Much of the area has been dependently resurveyed and surveyed resulting in GCDB point reliability to be +/- 15 ft. It is not known what the condition of the boundaries (posted or not posted) are between public and private lands.
<u>Noise</u> <i>Martin Weimer</i>	mw, 9/8/14	This action will not result in any significant impacts due to noise or result in any increased noise levels.
<u>Fire</u> <i>Ty Webb</i>	TW, 7/5/14	There is no increase to fire occurrence or increased risk in any of the proposed actions.
<u>Law Enforcement</u> <i>Steve Cunningham</i>	SC, 10/20/2014	See affected environment and analysis sections.

The affected resources brought forward for analysis include:

- Soils
- Water Quality
- T& E and Sensitive Species
- Vegetation
- Wetlands and Riparian
- Wildlife Aquatic
- Wildlife Terrestrial
- Migratory Birds
- Cultural Resources
- Economics
- Recreation
- Forest Management
- Law Enforcement

3.2 PHYSICAL RESOURCES

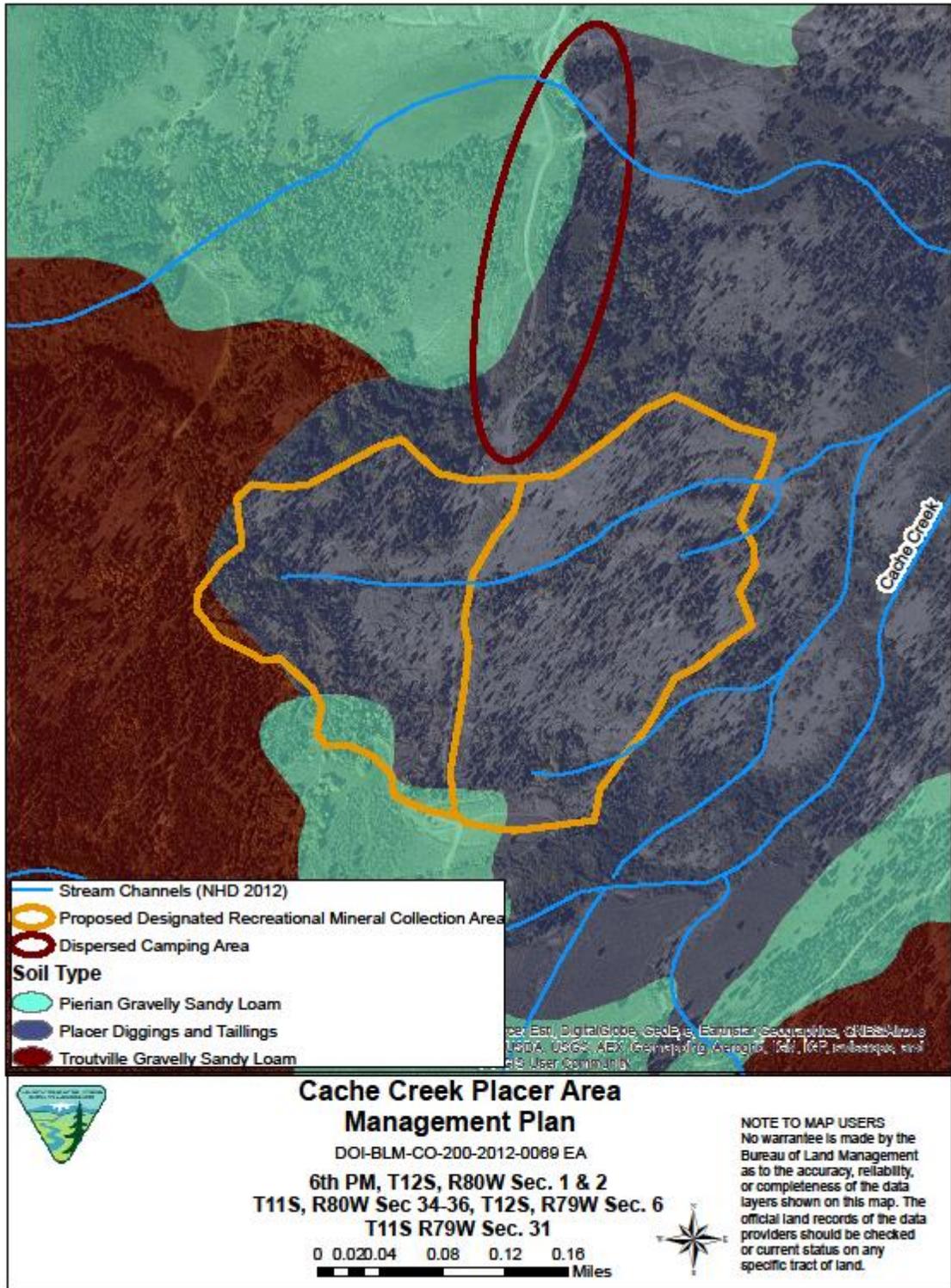
3.2.1 SOILS (includes a finding on standard 1)

Affected Environment:

The designated areas set forth by the Proposed Action overlay three main soil types: the Pierian gravelly sandy loam (PgD), the Troutville gravelly sandy loam (TrE), and Placer diggings and tailings (Pn). The Pn soil type has already been massively disturbed by historic mining, and is the location of most of the proposed use areas (See soil map below). Much of this soil type has been worked over resulting in the loss of most organic material and the ability to grow much vegetation. The recovery of this soil is anticipated to take a very long time. The designated mineral collection area is seated in the highest elevation of Pn soils in the watershed. Further up in the watershed is TrE, and the rocky parent material. None of these soils are listed as prime or unique farmland. Due to the massively heterogeneous nature of the placer diggings and tailings, data pertaining to their behavior and physical properties often do not exist through the NRCS Web Soil Survey (see table below).

Soils are currently being dug throughout the area and sluiced in Cache Creek and, when flowing, the ephemeral channel that crosses the designated area. On the eastern point of the designated area is the beaver pond that has been acting as a sediment detention pond until its 2015 breach.

Ratings	Pierian gravelly sandy loam (PgD)	Placer diggings and Tailings (Pn)*	Troutville gravelly sandy loam (TrE)
Slope range	3 to 9% slopes	<i>Not rated</i>	3 to 35% slopes
Shallow Excavations	Very Limited	<i>Not rated</i>	Very Limited



Environmental Effects

Proposed Action

Direct and Indirect Impacts:

Relatively undisturbed PgD soils exist to the west of the camping area, and installation of signs and barriers may help maintain those soil resources at current conditions. The eastern half of the designated camping area is in the Placer diggings and tailings soil type, which are already majorly disturbed and are currently in natural reclamation. However, since dispersed camping is a fairly low impact activity, the proposed action is not expected to greatly impact any of these soil resources.

The creation of a designated mineral collection area would help focus digging impacts to the already disturbed Pn soil type. Use of dry washers, recirculating sluice systems, and handcarts is not expected to have adverse effects on soil resources provided the materials are dug from the area designated in the Proposed Action. Placer activities without highbanking or removing materials from Cache Creek are relatively low impact, and with compliance, will have little impact on riparian soils. Enforcement of a no coyote-hole and minimal vegetation removal policy will promote excavation safety for recreators and possibly help hold erosion rates at lower levels.

The banning of coyote-holes is absolutely recommended. According to NRCS, these are considered ‘shallow excavations’ – a trench or hole up to 6 feet deep. Shallow excavation ratings are based on their ease of digging and resistance to sloughing. The PgD and TrE soils have a ‘very limited’ rating for this use due to unstable excavation walls and large stones. This rating means that several features of the soil will inhibit users or pose a safety danger that cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Pn soils comprise most (94%) of the designated area, and are not rated for this use. However, due to past disturbances, the lack of definable soil structure, and the heterogeneous nature of tailings, excavation behavior of Pn soils are expected to behave just as poorly.

Addition of a formalized sediment catchment at the current beaver settling pond will greatly help to keep soils and sediments from leaving the site.

Indirectly, since the Cache Creek area has an estimated 2,000 prospecting days per year, institution of a permit system and restrictions to a designated area may incentivize some individuals to conduct placer activities on other public lands not discussed or planned for. There are no data to suggest where, how much, or to what extent this possibility could mean for soil resources, and those impacts may have to be dealt with as needed.

Protective/Mitigation Measures:

If compliance to the proposed action is low, the adaptive management option to construct other sediment catchments on Cache Creek will allow BLM another method to retain soil resources out of waterways. Spreading of dredged fill from catchments along uplands may help re-vegetate those areas. Seeding with native mix should be done to minimize the amount of time spent as bare soil.

No Action Alternative

Direct and Indirect Impacts:

If no action is taken, conditions would remain as they currently are. Currently, recreational mineral collection activities are taking place outside the Pn soil type and in soils that have not been previously disturbed, mainly along Cache Creek proper. In the long term, this would lead to further degradation of soil resources in the uplands and along the riparian water courses as activity continues to shift from the main tailing area to the creek.

Protective/Mitigation Measures:

Increase user awareness and education of problems associated with sluicing and sedimentation to Cache Creek.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts:

Closure to recreational mineral collection would allow for natural reclamation for the Cache Creek area; however due to the extensive disturbance in the Pn soil type, natural reclamation would take a very long time. Indirectly, this could disperse the placer mining community to surrounding areas, mainly the mainstem of the Arkansas. While benefiting the Cache Creek area, this alternative could lead to additional negative impacts to surrounding areas that may be greater under this alternative than under the Proposed Action. Given the amount of the Arkansas that is currently claimed under the Mining Law, it is uncertain how much activity could move to the mainstem and what those additional impacts to soils could be.

Protective/Mitigation Measures:

No specific mitigation could be anticipated under this alternative.

Finding on the Public Land Health Standard for Upland Soils:

The soils in most of the designated placer area were extremely disturbed before the BLM acquisition of the parcel by mining over a century ago to the point they are still not meeting land health standards today. The Proposed Action would concentrate activities in the disturbed areas and re-disturb much of these soils. This would not alter the finding on land health standards in that the soil condition would remain largely as it currently is. Soils outside the historic tailings are largely meeting standards and impacts from the Proposed Action could alter soil function in small areas, but in those soil types as a whole would have little impact.

3.2.2 WATER (SURFACE AND GROUNDWATER, FLOODPLAINS) (includes a finding on standard 5)

Affected Environment:

The Cache Creek Placer area is located in the Clear Creek-Arkansas River watershed (110200010404), with a mean annual precipitation of approximately 20 inches. National Hydrography Dataset (NHD) watercourses can be seen on the soils map in 3.2.1.

The area has three main water courses; the perennial stream Cache Creek, an unnamed ephemeral channel in the designated area, and an intermittent channel through the dispersed camping area. Cache Creek – an ungauged creek originating in the alpine areas of Quail Mountain – has a natural hydrograph with year round base flow. The drainage area is approximately 5.24 square miles (Watershed outlet: NAD83 39.0403, -106.2947). The creek has

an estimated 2-year peak flow of 31.6 cubic feet per second (cfs) (USGS - *StreamStats*). The mean seven day, 2 year interval low flow (M7D2Y) is estimated at 0.3 cfs (USGS - *StreamStats*). Mean annual flows are estimated at 3.07 cfs, with peak flows occurring in May/June from snowmelt off of Quail Mountain (USGS - *StreamStats*). Cache Creek is not listed by the state of Colorado or the BLM as impaired.

The unnamed ephemeral channel naturally provides enough flow to maintain a small beaver pond at the east edge of the designated area. The former unauthorized diversion created on private land west of the designated area augmented flows to this channel using water from Cache Creek for placer activities, subsequently augmenting sediment loads. This pond in particular has been acting as a settling basin and requires dredging on at least an annual basis. Sediment moves beyond this main pond to lower ponds when it reaches capacity, or breaches as it has in 2015. This drainage naturally provides some water for sluicing and other mineral collecting activities, however without augmentation, it does run dry. Natural flows to this channel usually peak in April – pre-placer season – from lower elevation snowmelt. This channel is impacted heavily in places by current placer activity, but can be managed to curtail impacts to other areas.

The third is an unnamed tributary north of Cache Creek that runs through the proposed camping area. This feature is fairly downcut in places, and drains an area of 0.88 square miles. Data are not available on this channel, but observations suggest that it does not flow often. It is not impacted by current placer activities, but retains scars from historical practices.

Managing sediment loads to Cache Creek and downstream wetlands is a chief concern for the connected water, riparian, aquatic life and soil resources.

Environmental Effects

Proposed Action

Direct and Indirect Impacts:

The Proposed Action contains a management plan that addresses several issues at Cache Creek that have developed since the parcel was acquired. No single management action is expected to solve the recent resource issues, so a combination of actions in the PA will be addressed here. By far the largest issue with Cache Creek from a water quality stand point is the introduction of sediment into the waterways. The sluicing activity itself generally pours material directly into the stream channel. Given the number of users and the amount of material moved along with observed material holes and the settling pond, there is a large amount of sediment being moved in the area. The design of the Proposed Action would first implement a fee system to fund management of the area by its users. Secondly, the dry land activity would be restricted to recirculating systems only and activities would not place outside material into any waterway. Thirdly, a sediment catchment would be formalized at the end of the ephemeral channel; thereby minimizing sediment leaving the site – even from natural causes. Finally, if problems continue, the site could be closed to this activity.

Formalizing the sediment catchment in the designated area will help to localize placer impacts to the ephemeral channel and designated area, and not Cache Creek and downstream wetlands. Additionally, Cache Creek sediments can be managed with the proposed use

restrictions by lowering the density of users and types of activities allowed on Cache Creek itself. Restricting the density of users and the activity strictly to panning materials found already in the creek should return sedimentation rates closer to natural levels. The observations of camp hosts and law enforcement will be used to maintain lower densities.

Other types of water quality impacts, such as heavy metal production, have not been observed in the designated area or downstream on Cache Creek. Overall, the impacts to water from the Proposed Action would generally be better than they currently are and with the adaptive management proposed, water quality should remain the same or improve.

Protective/Mitigation Measures:

In addition to the proposed action, permanent monitoring sites for channel geometry will be created and measured pre-, during, and post-mining season to track sediment discharges into downstream waters. Monitoring would be necessary to determine if sediment is having an impact and if changes to water resources are occurring based on changes in the recreational placer mining activities. Trigger points will be established to determine when further management action is required due to excessive sediment. The protocol to be used is based on sections of the Watershed Assessment of River Stability & Sediment Supply (WARSSS) tool developed by David Rosgen for the Environmental Protection Agency (EPA). Specifically, BLM will use worksheet 28 to quantify sediment impacts and to initiate further actions. Stream discharge and other natural events during the period of monitoring will be factored into BLM’s decision making process.

Worksheet 28

W/d Ratio/Reference W/d Ratio	Depositional Pattern	Meander Pattern	Dominant BEHI/NBS	Confinement (Meander Width Ratio/Reference Meander Width Ratio)	Sub-Total Points	Stability Category (circle)
<1.2 (2)	B1, B2 (1)	M1, M3, M4 (1)	L/VL, L/L, L/M, L/H, L/VH, M/VL (2)	1.0 - 0.8 (1)		7 Stable
1.2 - 1.4 (4)	B4, B8 (2)		M/L, M/M, M/H, L/Ex, H/L (4)	0.79 - 0.3 (2)		8 - 12 Moderately Unstable
1.4 - 1.6 (6)	B3 (3)	M2, M5, M6, M7, M8 (3)	M/VH, M/Ex, H/L, H/M, H/H, VH/VL, Ex/VL (6)	0.29 - 0.1 (3)		13 - 21 Unstable
>1.6 (8)	B5, B6, B7 (4)		H/VH, H/Ex, Ex/M, Ex/H, Ex/VH, Ex/Ex (8)	<0.1 (4)		>21 Highly Unstable
Total Points						

This framework uses five categories to assign a point system for channel stability. Width to depth ratios will be compared to initial conditions upon first measurement. Increasing values suggest that the channels are aggrading, and becoming shallower. Depositional patterns describe the nature and extent of sand bar features in streams. Some patterns are known to have higher levels of instability than others. Meander patterns qualitatively express the lateral adjustment process of the channel from past events or impacts. Bank Erosion Hazard Index (BEHI) and Near Bank Stress (NBS) are scored in the Dominant BEHI/NBS category. These are designed to evaluate risk ratings related to bank and channel changes. Confinement quantifies changes in lateral migration of the stream channel. Finally, after all the points are attributed for each cross section, BLM has determined that a score of 13 (unstable) or above may warrant further management action.

In addition, closure of the area due to non-compliance risks scattering recreators to the main stem of the Arkansas River. If despite the design features of the proposed action, compliance is low and sedimentation issues continue, BLM would consider reexamining options along Cache Creek. Fines and individual banning could be issued to those working the creek. BLM could then coordinate with local clubs to construct a placer mining water source within the designated area. A large water tank (1,000+ gallons) or a water well could fill this need. For this mitigation strategy, funds would have to come – at least in part – from interested groups. This would provide users with the means to recreate, BLM the means to protect resources, and help minimize risks to surrounding areas by scattering the miner community. Additional review by BLM resource specialists would be warranted.

No Action Alternative

Direct and Indirect Impacts:

The No Action Alternative would continue management as it currently is. Current usage indicates that this encourages mining in Cache Creek itself and there would be no reliable source of funding to mitigate sediment production to the area's waters. Channel aggradation and braiding may worsen, forcing water out of the natural channels and onto the banks. Beaver ponds along Cache Creek would act as sediment traps for placer mining, and over time will fail, dumping their contents downstream to the next pond. Overall, this would continue having a large negative impact on water quality.

Protective/Mitigation Measures:

At a minimum, the settling pond would need to be maintained whenever funding allows. However, BLM should always seek to increase user awareness and education of problems associated with sluicing and sedimentation to Cache Creek.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts:

The closure to recreational mining would have the greatest positive impact on water quality on Cache Creek. With this alternative, the uplands could continue a slow recovery from previous mining and no mineral collection induced sediment would enter the system improving water quality, allowing riparian vegetation recruitment to occur. Improved riparian area vegetation leads to stabilization of stream banks and serves as a vegetation filter for potential sediments, contaminants, and heavy metals that would otherwise wash into the stream. Improved stream conditions lead to reduced stream braiding, improving stream geomorphology and sinuosity, and increasing stream depth which produces improved aquatic species habitat. However, indirectly, users could be displaced putting more pressure on the Arkansas or other nearby waters. The effect of this on water quality is hard to predict given the volatility of the activity.

Protective/Mitigation Measures:

No specific mitigation could be anticipated under this alternative.

Finding on the Public Land Health Standard for Water Quality:

Cache creek is not identified on the Colorado 303(d) list as being water quality impaired. Limited water quality sampling has been conducted on Cache Creek. One sampling event in 2008 was conducted for Arsenic, Cadmium, Iron, Lead, Mercury, and Zinc. The results of this showed that all the sampled parameters are within standards. With the trigger points established in the protective/mitigation measures of the Proposed Action sediment production from the site is anticipated to continue meeting standards.

3.3 BIOLOGICAL RESOURCES

3.3.1 INVASIVE PLANTS*

Affected Environment: Invasive plants known to occur within 7 miles of the project boundary include, but are not limited to: Canada thistle, downy brome, plumeless thistle, diffuse knapweed, spotted knapweed, hoary cress, leafy spurge, orange hawkweed, yellow toadflax, and shepherd's purse. Due to historical and current ground disturbing activities, there is very little top soil in the project area for invasive plants to become established in. There is a small (less than 20 feet in diameter) patch of Canada thistle near the outlet of the settling pond.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: Invasive plants could become established along Cache Creek, access roads, trails, dispersed camping sites, parking site, and the designated mineral collection area.

Cumulative Effects: The impacts of the proposed action when considered in addition to the existing surface disturbing activities in the general area would reduce the risk of noxious weed invasion.

Protective/Mitigation Measures: Monitoring and treatment of noxious weeds.

No Action Alternative

Direct and Indirect Impacts: Invasive plants could become established along Cache Creek, access roads, trails, dispersed camping sites, parking site, and the designated mineral collection area. Establishment of invasive plants would be more likely under the no action alternative than the proposed action.

Cumulative Effects: The impacts of the proposed action when considered in addition to the existing surface disturbing activities in the general area would continue the risk of noxious weed invasion.

Protective/Mitigation Measures: Monitoring and treatment of noxious weeds.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: Establishment of invasive plants would be much less likely under this alternative than the other alternatives.

Cumulative Effects: The impacts of the proposed action would significantly reduce the risk of noxious weed invasion.

Protective/Mitigation Measures: Monitoring and treatment of noxious weeds.

*Invasive plants are plants that are not part of (if exotic), or are a minor component of (if native), the original plant community or communities that have the potential to become a dominant or co-dominant species on the site if their future establishment and growth are not actively controlled by management interventions, or are classified as exotic or noxious plants under state or federal law. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants.

3.3.2 THREATENED, ENDANGERED AND SENSITIVE SPECIES

Affected Environment:

Primary Canada lynx habitat in the Southern Rocky Mountain region is found in the subalpine and upper montane forest zone, roughly between 8,000 and 12,000 feet elevation. Lower montane forests are likely to be important for movement and dispersal. Foraging habitat for lynx in the Southern Rocky Mountain region include subalpine fir, lodgepole pine, and Engelmann spruce cover types with abundant prey species. Densely regenerating conifer forests typically produce the highest densities of snowshoe hares. Conifer-aspen forests with dense regeneration or with an extensive shrub and woody debris understory may be important for snowshoe hare or other prey species. Extensive stands of pure aspen likely are poor lynx foraging habitat, unless intermixed with spruce-fir or young lodgepole pine stands. Regenerating burns are often quite productive for prey species due to the mixed deciduous/ conifer forests, multiple age classes, shrub layer, dense herbaceous layer, and extensive downed woody debris. Sagebrush communities at higher elevations and in proximity to subalpine and upper montane forests may be important foraging areas for lynx due to high prey abundance. Sagebrush communities also serve as movement corridors for lynx.

Other habitats that may be important for foraging include large and medium willow carrs, beaver pond complexes, and shrub dominated riparian communities. The common component of den sites appears to be large woody debris, either downed logs or root wads. Stand structure appears to be more important than forest cover type. Denning habitat in the southern Rockies is likely to occur in late-successional spruce-fir forests with substantial amounts of large woody debris, primarily on north aspects. For denning habitat to be functional, it must be in close proximity to large acres of foraging habitat.

Lynx Analysis Units (LAU) have been developed for the San Isabel National Forest and adjoining BLM lands. Potential lynx habitat has been modeled based on vegetation type, precipitation, winter precipitation, topography, and snowshoe hare habitat. Vegetation types representative of suitable habitat include dense spruce-fir and mixed conifer with spruce, Douglas-fir, early seral lodgepole pine, mature lodgepole pine with developing understory of spruce-fir and aspen. Dry forest types (ponderosa pine) were excluded and not mapped as lynx habitat. Potential habitat is defined as having the capability to provide necessary habitat components. Existing condition of suitable habitat may or may not meet the needs of a lynx for denning or winter foraging. Changes in condition of suitable habitat can occur from disturbances such as fire, wind events, harvesting or the lack of disturbances.

The project area is not located within a Lynx Analysis Unit, however it is approximately ¼ mile from the Clear Creek Lynx Analysis Unit managed by the US Forest Service, and the Clear Creek Linkage Area (USFS 2015). The Clear Creek Lynx Linkage Area was delineated based on prominent topographic features such as ridges and valley bottoms and vegetation cover that lynx

are thought to utilize during movements between LAUS and within LAUS. Designated critical habitat for Canada lynx does not occur within or in the vicinity of the project area.

About 9.5 acres of primary habitat for Canada lynx is mapped within mining portion of the project area, which is adjacent to sagebrush. However site visits conducted by Matt Rustand indicate that the mapped forested stands in the project area are currently not suitable for lynx. The mapped primary habitat within the project area is very marginal due to the current uses, degraded site conditions, dry and open vegetation structure.

Northern goshawks are associated with coniferous and mixed forests through much of the Northern hemisphere. Studies of nesting habitat show that goshawks nest in older-aged forests with variable tree species. The most consistent vegetative characteristic of goshawk nest sites is high percent canopy closure. Studies on habitat characteristics at goshawk sites have reported average canopy closure measurements ranging from 60% in eastern Oregon, 77% in northern California and 94% in northwestern California. Stand structure ranges from dense multi-layered stands in Oregon to open park-like understories in Colorado and California. Average tree size is just as variable with mean tree diameters ranging from 8-20 inches in Colorado, and 20 inches in Oregon. Goshawks appear to prefer north to east aspects for nest sites as stands on these aspects are typically denser and more suitable. Slope also appears important as nests are usually placed on flat to moderately sloped land where trees are able to grow larger and at a higher density (1-39%). Although the project area contains conifers and aspen, the vast majority of the project area offers very marginal nesting and foraging habitat for northern goshawk. The trees present are not large enough to support its nest structure or to provide adequate nest cover. Also, the overall vegetation pattern and structure do not offer an adequate prey base for this raptor. In addition, this species is fairly intolerant of disturbance during nesting the season, making the high level of human use in the area a deterrent from nesting. At best, the project area could provide marginal foraging habitat for this species.

The boreal toad of the southern Rocky Mountains inhabits high elevation montane forests and is Colorado's only alpine amphibian. Breeding habitat is found in spruce-fir forests and alpine meadows, and includes lakes, marshes, ponds, and bogs. The boreal toad continues to slide toward extinction. Its major threat appears to be the chytrid fungus, a disease that is affecting amphibians across the globe, but habitat degradation, logging, and overgrazing also play a role.

Boreal toads in the Southern Rockies are isolated from other boreal toad populations. For this reason, the U.S. Fish and Wildlife Service treated it as a Distinct Population Segment. While boreal toad populations in the Southern Rockies have continued to drop, it was on the Endangered Species Act "candidate" species list for more than a decade but has been removed from the "candidate" list. The Southern Rockies boreal toad now has no formal federal protection. The BLM has no records of boreal toad occurring within the project area; however, habitat does occur for this species within the watershed and placer activities will likely degrade the potential of future occupation.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: Given the proximity to linkage areas, LAUs and suitable habitat, a lynx would likely traverse through this area during exploratory or dispersal movements. The amount of vegetation and number of trees affected by the proposed gold panning operations would decrease substantially, thereby maintaining primary lynx habitat in that portion of the project area. This would initially have a neutral effect on Canada lynx since the site is currently in marginal condition for this species. However over a longer timeframe, this alternative would have a beneficial effect on lynx with regards to its ability to move, disperse and hunt for alternative prey species on the margins of much better more contiguous habitat about ¼ mile away. This would be mainly be the result of riparian vegetation recolonization and forested regeneration. A substantial portion of the project area would remain non-habitat for lynx due to the quantity of rock tailings generated by the historical use, therefore the project area would still remain marginal at the home range scale of a female lynx. These effects on Canada lynx and its habitat would be insignificant and discountable. If tree removal, campground development, mining expansion, habitat improvements, etc... expand to greater than 2 acres in size in mapped primary lynx habitat then the effects to lynx could be a concern.

The 2010 programmatic lynx screens were used to streamline Section 7 consultation for Canada lynx. Because of the application of these screens, mitigation measures would be necessary in mapped primary lynx habitat to remain compliant with that interagency agreement. With application of the screens, the following activities would NOT LIKELY ADVERSELY AFFECT Canada lynx or its habitat: removal of hazard trees within 200 feet of the campground, roads and trails, summer and short term winter inventory and monitoring, other personal use product removal not related to snowshoe hare habitat, quarry expansion less than 2 acres in size, wildlife and fisheries habitat improvement with less than 2 acres of tree removal, designation and expansion of the campground in non-forested areas, installation of the sediment catchment and dredging beaver pond.

Available evidence suggests that two important resources, food and nest habitat, are the principle mechanisms limiting goshawk densities. The lack of canopy cover limits the usefulness of the area to this species for foraging. Because of the marginal foraging habitat available, the proposed action would have a neutral effect on this species in the short term as human use is managed. Over the long term, with recolonization of riparian vegetation and increased tree regeneration, foraging habitat for this species may improve slightly with more prey abundance and diversity. Due the large surface area covered by rock tailings, a large portion of the project would remain unsuitable for this species. Thus, the effect to northern goshawks would be minimal as a result of the proposed action.

Currently, there are no boreal toads found within the action area, however, the proposed action would eliminate the continued sedimentation into the watershed, improving potential toad habitat from its current state.

Cumulative Effects: Because the project area offers very marginal habitat for Canada lynx, northern goshawk, and boreal toad, insignificant and discountable cumulative effects would be felt from this proposed action when added to all the past, present and foreseeable future actions.

Protective/Mitigation Measures:

Mitigation measures would be necessary to remain compliant with the 2010 lynx screens in mapped primary lynx habitat:

Limit the extent of tree removal, campground development and mining expansion outside of the designated area to less than 2 acres within the mapped primary lynx habitat.

No Action Alternative

Direct and Indirect Impacts: This action would continue to allow an expanded use of the area and increased sediment loads in the watershed. Impacts to Canada lynx and northern goshawk would remain similar to the proposed action, but spread over a larger action area. Potential boreal toad habitat would continue to degrade and remain poor as a result of the increased sediment load.

Cumulative effects

Because the project area offers very marginal habitat for Canada lynx, northern goshawk, and boreal toad, insignificant and discountable cumulative effects would be felt from this alternative when added to all the past, present and foreseeable future actions.

Protective/Mitigation Measures: Restrict the introduction of fine material into the stream.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: This is the most desirable alternative for threatened, endangered, and sensitive species, however this alternative would have limited benefit to Canada lynx and northern goshawk because the site provides marginal habitat at best. Removing the primary draw of recreational users would decrease visitor use of the area and increase the utility of the project area for northern goshawk although its prey base would still be marginal. Since Canada lynx are tolerant of human presence, this alternative would have little impact on its behavior. A restoration plan could improve habitat for these species so that may occupy this area in the long-term, providing that vegetation restoration would be a part of that plan.

Cumulative effects

This alternative when combined with past, present and foreseeable future actions would have a beneficial effect on Canada lynx, northern goshawk and boreal toad and their habitats. This would be accelerated with a restoration plan that includes vegetation restoration.

Protective/Mitigation Measures: A reclamation plan will be developed to begin to restore forest vegetation structure to accelerate Canada lynx and northern goshawk habitat beyond natural regeneration.

Finding on the Public Land Health Standard for Threatened & Endangered species:

This Proposed Action will not affect the standards for public health for threatened and endangered species.

3.3.3 VEGETATION (includes a finding on standard 3)

Affected Environment:

The analysis area is located between 9,000 and 9,500 feet in elevation. The area receives approximately 15 – 18 inches of precipitation annually and occurs primarily as snow, but wet thunderstorms are frequent during the short summer months. The optimum growing season for native vegetation is limited at this elevation consisting of 70 to 90 days, typically June 15 through August 15. The average annual temperature is 37 to 40 degrees F (NRCS 1995).

The proposed placer management area occurs within the Cache Creek floodplain and is intermixed with riparian vegetation, drier upland grass-shrub community, lodgepole pine and historic mining tailings rubble. The riparian-wetland communities are dominated by various sedges and rushes intermixed with willows, alders, birch and aspen. Potentilla shrubs and aspen trees occur along the transition corridors between the wetter and drier areas. The lodgepole pine communities are scattered throughout and dominated by lodgepole pine as the over story with limited understory vegetation except for kinnikinnick. The drier upland sites are dominated by Big Sagebrush, Arizona and Idaho fescues. Other plants typically intermixed include various bluegrass species, fringe sage, Western Wheatgrass, Squirrel tail, Phlox, Penstemon, Daisies, and Geraniums.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The proposed action integrates a management plan for the Cache Creek area that addresses the issues and concerns identified at the site associated with recreation mineral collection. The plan limits recreational mineral activities to designated areas where impacts associated with stream sedimentation and disturbance to riparian vegetation is reduced. Mineral collection impacts would be diverted to existing overburden rubble. The activities would occur under a permitted use where impacts to vegetation could be better controlled. This alternative is an improvement to the current situation and will improve the Public Land Health Standards for vegetative resources in the area.

Protective/Mitigation Measures: None.

No Action Alternative

Direct and Indirect Impacts: This alternative would continue with current management as is today. This alternative limits the control of mineral collection activities and dispersed camping activities resulting in further negative impacts to vegetation including trampling and removing vegetation as well as creating more bare soils that will lead to additional erosion across the project area. Current management would not reduce the ability of the area to meet Public Land Health Standards for vegetation resources within the mineral collection footprint. Upland vegetation across the Cache Creek parcel is currently meeting land health standards.

Protective/Mitigation Measures: None.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: No mineral collection activities would occur in the area. The area would be reclaimed and managed for wildlife and riparian values. Under this alternative there are reduced impacts to vegetation and historic disturbances would eventually be

returned to a natural state. The dispersed camping area and the parking lot would still be available for public use but Public Land Health Standards for vegetation resources would be met.

Protective/Mitigation Measures: None.

Finding on the Public Land Health Standard for Upland Vegetation:

The proposed alternative is an improvement to the current situation and will improve the Public Land Health Standards for vegetative resources in the area. Vegetation across the Cache Creek parcel is generally meeting land health standards except for the footprint in the historically disturbed mineral tailings site and the more recently associated parking lot and camping area. These isolated areas will likely continue to not meet land health standards for vegetation under the proposed action but the area of impact will be contained through mitigation measures and adaptive management.

3.3.4 WETLANDS & RIPARIAN ZONES (includes a finding on standard 2)

Affected Environment:

The area discussed for management changes has two main water sources sustaining the wetland and riparian area observed. Cache Creek main-stem drains from alpine areas of Quail Mountain and has a typical for the area hydrograph with a stable year round base flow. An second unnamed smaller tributary north of Cache Creek originates within a smaller forested bowl west of the placer area and produces much less water. This water flows through a historic beaver pond complex on public land and largely goes sub-surface through areas historically disturbed in the vicinity of the power line / main access road. A high snow pack will have this stream staying on the surface farther into the Cache Creek property giving some surface flow near the main placer interest area early in the summer in some years, but is not a dependable water source for year round panning/placering as is Cache Creek. Smaller seeps cross the road further north yet in the area where campers congregate with discharges related to the annual precipitation.

These main water sources, combined with other seeps, the sporadically diverted Cache Creek water mentioned in the background section, combined with extensive beaver activity, creates a large area with spread out standing water and an associated high water table. The wetland vegetation has been expanding as the water is spread by beavers and there are numerous areas where upland coniferous evergreen trees have died due to flooding with cottonwood trees and willows encroaching. The extensive historic placering disturbance created a greatly widened valley bottom that is becoming more of a wetland with the presence of beavers than likely the historic situation of a single thread stream channel. The water spreads, but eventually collects into a single thread stream prior to entering the Arkansas River close to the town of Granite. Livestock grazing has not occurred since the parcel was acquired into public ownership and extensive wetland plant succession has been occurring across the parcel. Grazing could have been managed to allow for a similar response, but did not occur and the parcel is unallotted. Wet meadow grasses now occur among an expanding cottonwood and willow over-story. The position of this huge wetland area adjacent to sagebrush habitat and lodge-pole forest creates high value wildlife habitat.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The main area of interest for public recreational gold seeking is among large tailing piles on the western end of the wetland complex. The primary impacts of the placer activity discussed in the background section centers on a continuous large supply of dirt from the upland areas hauled into water to process for gold and then dumped. The scale of use went beyond casual use to a large cumulative impact by many separate individuals. BLM contacted the Army Corps of Engineers and was given permission to remove the highest concentration of tailings from a key silt deposit area, an upper beaver pond, sometimes referred to as a settling pond. The dirt removal was to keep those silts from continually washing down valley, to contain at least the largest source. Gold seekers however wander extensively throughout the parcel and have hauled large quantities of dirt into the Cache Creek main-stem channel well away from the area of highest recreational interest as well as the beaver ponds and surface waters of the property (see also Aquatic Wildlife Section). Large quantities of dirt aggrades in channels causing lateral movement of stream flow into banks creating a situation where additional bank erosion occurs. Often, riparian vegetation is removed or compromised by digging associated with placering activities which leads to destabilized banks, reduced ability of the riparian area to undergo heavy precipitation or flood events, reduced cover for aquatic wildlife species, and potentially reduced sinuosity if the activities continue to erode the stream banks.

Summarized: Stream instability results from the constant supply of upland soil added to waterways. Substantial guidance and policy within Bureau of Land Management Directives defines that the activities that have occurred are counter to sound watershed, riparian or wetland management. Additionally, discussions with and comments received from Colorado Parks and Wildlife biological staff highlighted the disturbance issues.

The Proposed Action, according to extensive scoping and coordination with user groups and gold seeking clubs, is believed to make huge strides to allow people to work previously disturbed piles of historic dredge spoils but to do so in a dry setting. Soil can be worked in the uplands using the allowable equipment of the proposed change and recycle that soil back into the upland setting. Precipitation induced runoff from areas of constant disturbance will mimic that of the historic disturbance because infiltration is into the generally large substrate material surrounding piles and most of the finer soils processed on site at the piles should remain there. Natural vegetation succession will be impaired; however the piles as left from the historic mining rapidly drain precipitation and inhibit vegetation growth in their current state, regardless of some of the planned activity.

The Proposed Action Alternative still allows what is thought to be a much reduced number of users to explore the property to pan using only material of the stream beds, (not hauled in upland dirt) thus reducing siltation from the current situation. Riparian resources will benefit by reducing the destructive digging of stream banks. Reducing use to a more reasonable casual level outside of the recreation area and concentrating use around the piles will limit the constant supply of soil dumped into waterways. This Alternative is the preferred alternative because activities concentrate use to an area less disturbing to riparian obligate wildlife species than the current situation. This alternative would potentially lead to more stable streambanks, better ability of the stream to withstand flooding events, and more cover (and food source habitat) and better water quality for fish and other aquatic wildlife species. Total removal of placering

activity would be more protective as in the placer removal Alternative, but much discussion however has occurred pointing out that not allowing use somewhere such as proposed at Cache Creek would serve to disperse that use to other public land in the region. Cumulatively there may be benefit to allowing the concentrated use (see also Wildlife sections)

Protective/Mitigation Measures: Evaluate the magnitude of small scale panning equipment used outside of the main recreation area (such as along Cache Creek proper) as time goes by to gauge the level of future impact. Additional restriction may be necessary depending on use and impact. Adaptive management and additional monitoring may be needed depending upon the new level of use if sedimentation is not curtailed. In order to gauge if compliance is occurring with the no digging of stream banks decision, recreational “exploration” or allowable recreational activity (panning and sluicing) outside of the targeted dry washer placer area will be monitored as followed: The first season the decision to accept this Alternative goes into effect, linear measurements will be taken upstream 300 feet, and 1000 feet downstream of the power-line road, along both main water sources discussed, along their active channels to quantify past digging, and post decision riparian bank digging. Past digging should be healing, but new digging would warrant adaptive management to curtail use. Non-compliance totaling > 2% of the streams length would be the trigger point to invoke changes. < 2% would be considered acceptable during the transition period when public users are learning new rules for recreational panning and sluicing outside of the targeted area. In addition, a designed sediment trap needs to be constructed in the vicinity of the breached beaver pond (upstream) to manage dry washer area silt loads. BLM engineering staff was shown the location and stated a settling pond construction was relatively simple and could be constructed such that water retention and a necessary water-rights needs are eliminated.

No Action Alternative

Direct and Indirect Impacts: The No Action Alternative allows recreation use to continue in a manner counter to substantial guidance provided in Public Land Management directives. Soil continues to be hauled to various wetland types and dumped into water, creating unacceptable levels of sedimentation.

Protective/Mitigation Measures: Under this Alternative, BLM should construct true siltation collection areas that can be cleaned and work with groups to encourage placer work around those areas only, but without regulation change, rogue digging of streambanks would likely continue throughout the property.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: Removal of all recreational gold seeking activity from this public land parcel best protects resources discussed for this property. It however is a reality that at least some proportion of the numbers of users displaced would dig somewhere else in the region. Dispersed use impacts can be difficult to evaluate and manage for an agency.

Protective/Mitigation Measures: This alternative risks creating a “gold rush” to another area. If this Alternative is selected the Bureau would need to be reactive to what use develops.

Cumulative impacts

The three Alternatives give a range of impact managing scenarios. Unlike most defined casual use that generally leaves limited or “no trace” impacts, recreational placering by its very nature requires that an area be dug up and leaves an area of deposited soil. Any of the Alternatives results in cumulative impacts to riparian resource. The Proposed Action however seems to best control the impacts to region wide riparian and wetland resources by absorbing demand at a specific location and moves much of it to an upland setting with adaptive management measures options depending how use of the area evolves.

Finding on Standard 2:

The riparian areas at Cache Creek were rated in 2000 to be in properly functioning condition when evaluating the overall resources on BLM given the disturbance they historically encountered. Riparian condition trends were favorable. Additional recovery of historical minded areas (advancing succession) has occurred since then and the condition remains functional. High silt loads and bank degradation were components of functional assessment that were being impaired with the explosive growth in recreational activity. Under the Proposed Action, or closure Alternative however the trend on these two impairments would reverse and the parcels riparian and wetland resources would remain in proper functioning condition.

3.3.5 WILDLIFE AQUATIC (includes a finding on standard 3)

Affected Environment:

The Affected Environment is largely described in the Wetland and Riparian section 3.3.4. Specific to primary aquatic wildlife and their habitat, the Cache Creek parcel provides fisheries values with brook and brown trout in most areas of flowing water and larger beaver and man-made ponds. In off-channel ponded areas, there are known tiger salamander populations and likely Western chorus frog inhabiting certain areas. No other obligate aquatic species have been observed other than diverse macro-invertebrate communities because of the variety of wetlands types. The wetland environments present a host of other riparian obligate terrestrial species (see wildlife section 3.3.6). Aquatic habit on the parcel is diverse with stagnate puddles, various sized beaver and man-made ponds, flowing stream segments and freshly flooded areas due to beaver colonization.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The affects to aquatic resources from placer activity is also partially described in the wetland and riparian section, 3.3.4, and is caused by siltation, stream bank digging, removal of riparian vegetation, and loss of overall stream bank integrity, etc. Impacts to aquatic habitat from placering at the scales seen on this parcel include excessive turbidity, braiding stream channels from bed-load inputs, deep-water areas (pools, etc.) within the stream filled in with dirt resulting in a shallower stream, stream bank erosion from lateral stream movement caused by aggradation within the stream channels of sediments, reduction in stream bed particle size from the addition of silts, and plugged ditches that carry beaver spread waters to various ponds, among others. These conditions were readily observable when the popularity of the property as discussed in the background section occurred. These conditions lead to reduced habitat suitability for aquatic wildlife. Habitat degradation is occurring that leads to decreases in fish and aquatic species viability, reproduction, and successful recruitment. Loss of riparian vegetation, stream bank destabilization, and reduced stream sinuosity can lead to

reduced aquatic and terrestrial insect production to the stream reducing the forage availability for fish and amphibians using Cache Creek and the associated wetland environment.

BLM's Resource Advisory Committee observed conditions and supported some type of management change. Additionally, Colorado Parks and Wildlife (CPW) has been greatly concerned over the degradation to resources. CPW provided substantial comments to BLM concerning degradation to resource as well as the recreational gold seeking at the magnitude observed. Primarily, CPW's overall concerns are that the level of activity and disturbance has become a direct conflict to the rationale for the acquisition of the property; which CPW strongly supported. CPW input has been important in building support for a change in management direction with respect to recreational prospecting. User group conflict has also been a topic not just between gold seekers, but also among local trout enthusiasts who worked with the RGFO to clean dumped waste off the property and install travel management infrastructure that aided in protecting resources.

The proposed action, according to extensive scoping and coordination with user groups and gold seeking clubs, is proposed to make huge strides to allow people to placer previously disturbed piles of historic dredge spoils but to do so in a dry setting; unlike the existing situation. Soil can be worked in the uplands with the proposed changes to allowable equipment and recycle the dirt back into that upland setting. Precipitation induced runoff to aquatic habitat from areas of constant disturbance will mimic that of the historic disturbance currently there because infiltration is into generally large substrate material surrounding the piles so that most of the finer soils processed on site at the piles should remain in situ. Natural vegetation succession will be impaired; however the piles, left from the historic mining, rapidly drain precipitation and inhibit vegetation growth in their current state regardless of some of the planned activity.

This Alternative still allows for what is thought to be a much reduced number of users that would explore the property to pan using only material of the stream beds. However, by not hauling in upland dirt a reducing siltation scenario from that of the current situation is predicted. Aquatic habitat benefits further by halting the destructive digging of stream banks and moves use levels outside of the defined placer area to a more reasonable casual use level. Aquatic areas closer to the main piles will not have the constant supply of dirt dumped into waterways. This Alternative aids in concentrating users to a less disturbing situation for aquatic wildlife species than the current situation, but of course it would be more disturbance than removal of placer activity altogether as in the removal Alternative. Much discussion however has occurred pointing out that not allowing use somewhere in the basin such as that proposed at the Cache Creek site would serve to disperse use to other public land in the region. Cumulatively there may be overall benefit to allowing the concentrated use (see also Wildlife sections 3.3.6).

Protective/Mitigation Measures: Evaluate the magnitude of small scale equipment used outside of the main recreation area in coordination with Colorado Parks and Wildlife biological staff as time goes by to gauge the level of future impact (see specific monitoring in the Wetland and Riparian section 3.3.4. to include also the construction of a settling basin). Additional restriction may be necessary depending on use and the impact quantified.

No Action Alternative

Direct and Indirect Impacts: The No Action Alternative allows recreation use to continue in a manner counter to the substantial guidance provided in Public Land Management Directives. Dirt continues to be hauled to the various wetland types on the property and dumped into water. Continued habitat degradation (siltation, vegetation removal, stream bank destabilization, etc...) is occurring and reducing the viability and reproductive success of fish and aquatic amphibians, including microinvertebrates.

Protective/Mitigation Measures: Under this Alternative, BLM should construct true siltation collection areas that can be cleaned and work with groups to encourage placer work around those areas. Without regulation change however roue digging of stream banks would likely continue throughout the property.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: Removal of all recreational gold seeking activity from this public land parcel best protects resources discussed for this property. It however is a reality that at least some proportion of the numbers of users, if displaced, would dig somewhere else in the region. Dispersed use impacts can be difficult to evaluate and manage for an agency.

Protective/Mitigation Measures: This Alternative risks creating a “gold rush” to another area. If this Alternative is selected the Bureau would need to be reactive to what develops.

Cumulative impacts

The three Alternatives give a range of impact managing scenarios. Unlike most casual use that generally leaves by definition limited or “no trace” impacts, recreational placering by its very nature requires an area dug up and an area of deposited soil. Any of the Alternatives result in cumulative impacts to riparian resource if the user participation remains high as described in the background section. The proposed action however seems to best control the impacts to region-wide riparian areas by keeping it contained to an area better suited to use; that is already disturbed piles. By absorbing demand at a specific location and moving much of it to an upland setting makes the Proposed Action preferable to the other Alternatives.

Finding for Public Land Health Standard 3:

Standard 3: States that “Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat’s potential”. At Cache Creek aquatic habitat is expanding rapidly due to beaver expansion and the spreading of water. The expected species of fish and amphibians are present with the exception of boreal toads and each should colonize the new habitats created by the beaver activity as well as occupy existing habitat. Boreal toads potentially could show up on the parcel, but range wide they are in decline. The habitat present is thought to be suitable however. When including Standard 2, for riparian function, standard 3 is also being met, and would continue to do so under any Alternative, but the no action alternative impairs aquatic habitat that BLM is directed to protect.

3.3.6 WILDLIFE TERRESTRIAL (includes a finding on standard 3)

Affected Environment:

The project area is located with Elk DAU E-17, which according to the 2011 Elk Management Plan had a post-hunt population of 3,300 (CPW 2011). Loss of winter habitat from land conversion is a concern for this DAU. The parcel was acquired by the Land and Water Conservation Fund and transferred to the BLM primarily for wildlife values (elk winter range and calving areas) and recreational opportunities. The area was to be developed as a ski area in the 1980s by a local developer until funding was lost. Considerable effort and money was spent at that time by Colorado Parks and Wildlife (CPW) to identify important wildlife habitat features present. It was determined the Cache Creek property was used as an elk migration corridor while also providing critical winter range. Vegetation along Cache Creek was used heavily for elk calving and deer fawning and the entire project area is mapped as calving area for elk.

As elk populations have increased through the years, these values have become more important in providing sustainable habitat. Colorado Parks and Wildlife recommends seasonal closures for big game winter range (December 1st through March 31st) and elk calving areas (May 1st through June 30th). However, the BLM closes the road that accesses the Cache Creek parking area (County Road #398) seasonally for a subset of that period (November 30- Friday of Memorial Day weekend) to allow motorized access for recreational uses of the landscape, including recreational placer activities. Access by foot and horse is permitted year-round. Hunters also use the area during hunting seasons from October through December.

A field visit to the Cache Creek parcel was conducted with CPW and BLM staff when recreational placer activities were first proposed. The site identified in the proposed action was examined to determine the best placement for this activity. The identified area, while located within elk winter and calving habitat, has become the preferred location for this activity.

Additionally, a variety of raptor species could occur within and near the project area. Golden eagles are common yet are unlikely to nest near the area due the lack rock outcroppings and cliff faces, commonly used in nesting, in the area. Red-tailed hawks will be the most common broad-winged hawk found in the area and nesting could occur in the tree tops. Cooper's hawk and sharp-shinned hawk are expected to occur in smaller numbers due to the absence of large tracks of forested landscape. There are no BLM records of any eagle, falcon or hawk nests in the area, although BLM has not actively conducted raptor nest surveys. Forest owl species include flammulated owl, long-eared owl, great horned owl, and saw-whet owl.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: Prior to acquisition, the land was private and was consistently used by elk and deer for calving/fawning, migration and winter range. Once the land was made public, the increased human presence has decreased the utility to ungulates using the habitat for these purposes. American elk and mule deer need solitude during calving/fawning and while on winter grounds. Elk have been documented to abandon their calves if disturbed during calving. The canopy cover within the tailing piles themselves were and remains open (less than 40%) relative to the surrounding habitat and contains little understory vegetation or forage for American elk. However elsewhere in the project area, vegetation hiding cover and forage is suitable for elk. While the action area may not provide desirable habitat for elk and other terrestrial species, human presence due to placer activity would be more controlled through

the recreation permit system, and recreation mineral extraction would be excluded during winter months and the earlier portion of the calving season. Camping would still be permitted during the winter closure so there still is a chance that disturbance to wintering and/or calving elk would remain an issue.

The designation of campsites would be a benefit to elk and deer by limiting the amount of browse, forage and hiding cover affected. Campground expansions would have very minor effect on habitat if those are located in previously disturbed sites. Campground expansions into undisturbed areas would cause a loss of forage, browse and hiding cover for elk and deer at the project scale. The requirement for dogs on leash at placer mining sites would reduce human-elk conflicts for a portion of the project area. The potential for such conflict would still exist in the dispersed/developed campground portion of the project. Dogs could chase, harm or wound elk and deer, especially if fawns or calves are present

The proposed actions to control human use and vegetation damage would have a beneficial effect on wintering elk at the project scale and a minor to insignificant effect on elk at the much larger DAU scale. Controlled human use could still have a negative effect on elk calving and migration at the project scale because the seasonal restriction does not encompass the entire calving season or fall migration. These effects on calving would be most felt at the project scale especially during springs with winter-like weather; at the DAU scale the effects on calving would be minor.

The proposed action would restrict mechanized activity to the proposed designated area, which would be an important benefit to elk and deer trying to utilize the area, improving overall habitat for all terrestrial species.

While the project area likely contains tree species used by raptors for habitat and nesting, the lack of canopy cover and prey limits the usefulness of the area to these species. The BLM does not have any records of raptors nesting in the vicinity of the project area and therefore concludes the effect to raptors would be minimal as a result of the proposed action.

Cumulative Effects

The past, present and foreseeable actions when combined with this proposed action would have an insignificant and discountable effect on raptor species at the project area scale. The cumulative effects to elk and deer due from winter range loss would be slightly improved at the DAU scale and minor at the project scale. Since the elk herd is currently meeting herd objective, the effects from the human disturbance to wintering and calving elk seeking solitude would be insignificant at the DAU scale and minor at the project scale when combined with the other effects.

Protective/Mitigation Measures: To protect wintering and calving elk, a seasonal closure from December 1st through June 30th is suggested. This measure would eliminate human disturbance associated with placer mining from the action area during this critical time period.

Vegetation restoration may be needed to provide elk with hiding cover between the designated use areas (camping and placer mining sites) and the remainder of the calving and

winter range to visually discourage human encroachment into new areas and provide elk with a sense of solitude.

Photo point monitoring of vegetation conditions once every three years would be needed to ensure that the proposed action is meeting the intent to manage the site for American elk in terms of minimizing the damage to resources. Sites that would be photo point monitored include willows, forested vegetation and sagebrush adjacent to the action area that currently have adequate forage, browse and cover. Sites should also include areas desirable for dispersed camping that are not currently used for such activities. More restrictive adaptive management actions may be needed if observational photo point monitoring reveals any of the following changes to the existing vegetation conditions that are important to elk:

- a net 15% reduction on average of either browse, forage and/or hiding cover
- a net 15% increase on average of bare mineral soil cover

Periodic progress meetings every one to two years with CPW would be needed to ensure the proposed action is meeting the intent to manage the site for American elk. If elk calving trends or evidence from CPW show a statistically significant decrease in elk calving that is believed to be attributed to management of the project site, then adaptive management actions may be needed. If violations of the winter closure for mineral extraction are found, then adaptive management actions may be needed.

If reports or evidence are received of domestic dogs causing conflicts with elk especially during the remainder of the calving season, a leash requirement in the dispersed/developed campground may be needed.

No Action Alternative

Direct and Indirect Impacts: This action would continue to allow the expansion of recreational mineral collection within the Cache Creek watershed. If the footprint of human presence is allowed to grow, the acres of valuable terrestrial wildlife habitat will also expand thereby decreasing the worth of this watershed to terrestrial species.

Cumulative Effects

This alternative, when combined with other past, present and foreseeable future actions would have a negative effect on elk and deer at the project scale and larger DAU scale. Vegetation removal would continue, human use and occupancy would increase in size, spatial extent and duration, and these would cause further habitat loss and disturbance when elk and deer need solitude. The effects when combined with other winter habitat loss in the DAU would be a concern. Although elk population levels are currently meeting herd objectives, increased recreational pressure in this particular site when combined with the development and other recreational pressures in the DAU could start to effect elk calving and migration within and to adjacent DAUs.

Protective/Mitigation Measures: Mitigation measures needed to protect terrestrial species would render the alternative unrecognizable with respect to its current description. This alternative is not a viable option for terrestrial wildlife species.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: Eliminating recreational mineral collection will likely reduce public use enough to promote an increase in use by all terrestrial species. However, due to the nature of habitat, a reclamation plan would have to be developed and implemented before the full potential of the Cache Creek watershed could be realized.

Cumulative effects

This alternative when combined with other past, present and foreseeable actions would have a moderately beneficial effect on elk and deer at the project scale and a minor beneficial effect at the DAU scale. The natural regeneration of the site would be decades before hiding cover, forage and browse would be restored and this would be immeasurable at the DAU scale in a timeframe that is applicable to the project.

Protective/Mitigation Measures: A reclamation plan that includes vegetation restoration would be needed to begin to restore terrestrial wildlife habitat.

Finding on the Public Land Health Standard for Plant and Animal Communities

(partial, see also Vegetation and Wildlife, Aquatic): The area identified for the placer activity is mostly un-vegetated and described in the soil survey as “waste” areas. With these conditions the area does not meet the health standard for a properly functioning plant and animal community. The proposed action will likely keep the area from reaching this standard.

3.3.7 MIGRATORY BIRDS

Affected Environment

The project area is around 9200 feet in elevation with an annual precipitation of 15-18 inches with higher amounts within the watershed to the west. The area is a mosaic of aspen, mixed conifer, sagebrush flats and riparian areas with narrow-leaf cottonwood, various riparian shrubs and wet meadow herbaceous vegetation. The following birds are listed on the US Fish and Wildlife Service Birds of Conservation Concern (BCC) – 2008 List for BCR 16-Southern Rockies/Colorado Plateau with habitat available. These species could occur in the project area and have been identified as species with declining populations that should be monitored and protected from habitat alterations.

The golden eagle is a bird of grasslands, shrublands, pinon-juniper woodlands, and ponderosa pine forests, may occur in most other habitats occasionally, especially in winter. Nests are placed on cliffs and sometimes in trees in rugged areas, and breeding birds range widely over surrounding habitats.

American peregrine falcons nest on cliffs and forage over adjacent coniferous and riparian forests. A peregrine eyrie is located less than four miles from the project area. The eyrie does not appear to be in current use, but it is an indication that nesting habitat is available near the project area and falcons would likely use this area as hunting grounds.

Flammulated owls prefer old-growth or mature ponderosa pine, apparently due to the presence of large broken-top and lightning-damaged snags and trees for nesting cavities, large cavities excavated by Northern Flickers and other woodpeckers, open structure of trees and understory

for foraging, and high prey availability. They will utilize other habitats with similar structure, such as open mixed-conifer and aspen forests.

Williamson's sapsuckers breed in forested regions throughout the western United States. In Colorado populations are concentrated along the eastern edge of the Rockies and in the San Juan Mountains in southwestern Colorado, with smaller numbers in appropriate habitat throughout the area. Williamson's sapsuckers nest primarily in ponderosa pine and in aspen components of mixed-conifer. They often place nest cavities in aspen trees, and often choose nest trees in aspen stands adjacent to open ponderosa pine or mixed-conifer forest. Nest substrate preferences appear to be live aspen (with some decay) or aspen snags, followed by conifer snags.

Cassin's finch often live in mature forests of lodgepole pine and ponderosa pine, but are also found in Douglas-fir, limber pine, Engelmann spruce, subalpine fir, grand fir, pinyon pine, bristlecone pine, and quaking aspen

Environmental Effects

Proposed Action

Direct and Indirect Impacts: Species mentioned above may be seen or their sign identified within the project boundary during any season of the year. The project action will affect lands within the proposed designated area and an additional area that will be impacted by noise and human presence. The quality of habitat within the designed area for golden eagle, American peregrine falcon, flammulated owl, Williamson's sapsucker and Cassin's finch is considered relatively poor due to the amount of bare soil, exposed rock and lack of forage, roosting and nesting sites.

Some of these bird species would incur additional habitat loss due to on-going noise and human presence while others will not be affected by these activities (Gilbert and Chalfoun 2011). American peregrine falcon, flammulated owl, golden eagle and Williamson's sapsucker would likely avoid the project area due to human activity. Species richness of newly impacted habitat would probably decrease as bird species not tolerant to noise as these species will avoid the area which would be expected when the campground becomes more developed and attracts more visitors (Francis et al. 2009). Cassin's finch may be unaffected by human activity.

However, restricting mechanized use and material removal to a designated area will decrease the size of human footprint created which could have a neutral effect on foraging habitat in the project area for American peregrine falcon, golden eagle, flammulated owl, Williamson's sapsucker and Cassin's finch.

In addition, removal of vegetation such as willow, cinquefoil, sagebrush, and hazard trees is occurring under the current management situation and impacts to vegetation would still occur under the proposed action due to placering activities, designation and development of the campground, and removal of hazard trees. However, the removal of riparian related vegetation will be reduced in the proposed action compared to the current management situation based on the focus on reducing the placer activities in Cache Creek proper where most removal of riparian vegetation is occurring. The removal of hazard trees and shrubs is still a concern for migratory bird nesting and roosting activities and effects to nesting habitat and behaviors could be felt but

only for flammulated owl if cavity trees are present, Williamson's sapsucker if deciduous trees are present and Cassin's finch. Other migratory birds that nest in riparian shrubs and upland sagebrush could also be affected.

Cumulative Effects

The species listed in this analysis are a concern as the result of downward population trends either in the State or physiographic area. Habitat loss, fragmentation and degraded habitat quality are contributing factors. Thus when this alternative is combined with the past, present and foreseeable future actions, vegetation removal causing breeding habitat degradation and loss continues to be a concern, although to a minor degree for flammulated owl, Williamson's sapsucker and Cassin's finch due to the controlled vegetation removal and spatial expansion of mining activities. There would be no cumulative effects to breeding habitat for American peregrine falcon and golden eagle.

Protective/Mitigation Measures: All vegetation removal such as cutting down hazard trees and camp area maintenance vegetation removal will occur outside of the nesting season, May 15-July 15. If it is necessary to remove vegetation within this time frame, a wildlife biologist will be required to survey the area to ensure that trees with signs of nesting individuals are not removed and disturbance does not occur that could lead to take of migratory birds until the nesting season is over. If nesting birds are discovered in hazard trees through surveys imminent threats to health and human safety could still be addressed per the suggestion of the staff wildlife specialist and the discretion of the field manager.

No Action Alternative

Direct and Indirect Impacts: Same as proposed action, except the human footprint would be much larger in spatial extent as mining and camping actions expand into new sites. The effect would likely decrease the quality of habitat and an additional loss of acres of breeding habitat for migratory birds when compared to the proposed action.

Cumulative Effects

When combined with past, present and foreseeable future actions, this alternative would continue to cause a loss of breeding habitat, foraging habitat and lower habitat quality for American peregrine falcon, golden eagle, flammulated owl, Williamson's sapsucker and Cassin's finch. Although these effects would be less felt for large ranging raptors, the effects would be more pronounced for the other three species due to their smaller home ranges and limited breeding sites in the vicinity.

Protective/Mitigation Measures: Same as Proposed Action.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: Eliminating recreational mineral collection will likely reduce public use enough to promote an increase in use by all migratory bird species. However, due to the nature of habitat, a reclamation plan would have to be developed and implemented before the full potential of the Cache Creek watershed could be realized.

Cumulative Effects

This alternative would have beneficial cumulative effects for migratory birds, especially American peregrine falcon, golden eagle, flammulated owl, Williamson's sapsucker and Cassin's finch because the amount of vegetation removed or damaged would cease, human use of the area would substantially decrease and habitat loss and quality would be stabilized. However it would take decades for natural regeneration to return the site to more suitable conditions for American peregrine falcon, golden eagle, flammulated owl, Williamson's sapsucker and Cassin's finch for foraging and breeding.

Protective/Mitigation Measures: A reclamation plan that includes vegetation restoration will be developed to begin to restore migratory habitat.

3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

3.4.1 CULTURAL RESOURCES

Affected Environment:

The area of potential effect is located within an important historic landscape, which contains sites that date to the very earliest mining in Colorado. The landscape is anchored by an enormous historic placer mining site (5CF1750), which is mostly extremely disturbed, due to the nature of the site itself (extractive), severe erosion, and some non-adverse effects resulting from modern recreational mineral collection (gold panning). Portions of the site are intact, but are distant from the area of concentrated recreational mineral collection activity and are not located near the drainage bottom. The site was analyzed in 2005 (Report CR-RG-05-39 P), and BLM and the Colorado State Historical Preservation Office (SHPO) concurred that the proposed recreational mineral collection undertaking would have no adverse effect on the historic property.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The area of potential effects is located on a portion of the site that was not expected to be adversely affected by the gold panning activities. A plan to limit and control recreational mineral collection activities in the proposed designated area would provide the benefit of preventing damage to other parts of the site that might be adversely affected.

Protective/Mitigation Measures: The proposed action, itself, is protective in nature, so no additional protective or mitigation measures are likely to be necessary. However, BLM and SHPO agree that a field visit to reassess the finding of a no adverse effect is appropriate, along with the development of a protection plan, including monitoring and possible physical measures. In addition to its annual monitoring, prior to the opening of the 2016 season, BLM will visit the area of the site potentially impacted by gold panning activities over the past decade. In consultation with SHPO, BLM will develop and implement any necessary protection measures following the field evaluation.

No Action Alternative

Direct and Indirect Impacts: Because recreational mineral collection activity would be allowed on all the public land in the area, the important areas of Site 5CF1750 would be at a high risk of being disturbed or destroyed.

Protective/Mitigation Measures: It would be necessary to prevent access to certain areas of the site and develop and implement a mitigation plan. Extensive consultation with the Colorado State Historic Preservation Office, and possibly the Advisory Council on Historic Preservation, would be required.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: This alternative would provide the most protection for Site 5CF1750. By preventing additional recreational mineral collection on the site, erosion would likely proceed at a much slower pace, and the likelihood of adverse effects would be essentially eliminated.

Protective/Mitigation Measures: None.

3.4.2 ECONOMIC

Affected Environment: In 2013 Chaffee County travel and tourism dollars were estimated at 75.5 million dollars, generating for the County 21million dollars in earnings, the creation of 970 jobs and generating a total of 4.9 million in state and local taxes (Runyan 2014). Although the recreational mining community represents only a small subset of the total recreational tourism for Chaffee County, they do contribute, albeit in a small way, to the overall tourism generated revenue in the County and State.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: While many of the recreational miners camp on site at Cache Creek location, some take advantage of the nearby campgrounds. Indirect impacts to the local and overall tourism generated revenue would be in those dollars spent by the recreational miners in support of these campgrounds, local food and fuel services as well as other benefitting service providers.

Protective/Mitigation Measures: None

No Action Alternative

Direct and Indirect Impacts: Impacts would be similar to the proposed action.

Protective/Mitigation Measures: None

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: Should the area be closed to recreational mineral collection in favor of protection and restoration of the natural resources of the project area, it would have the effect of reducing by a negligible amount those tourism dollars generated for the County and State by the recreational miners. Due to the small amount of revenue generated by the miners relative to

the overall tourism of the county, this impact would be considered minor. The loss of this specific area for recreational placer mining would generally impact individual recreationists and may not reduce the use of the activity completely; it would likely spread out the areas impacted by this activity to a greater landscape scale. Impacts could be realized to local mining and rock shops that cater to the type of use in Cache Creek.

Protective/Mitigation Measures: None

3.5 LAND RESOURCES

3.5.1 RECREATION

Affected Environment:

Given that Cache Creek is a place that the general public can very easily successfully pan for gold without concern of being on someone else's claim or belonging to a prospecting club gives it a somewhat unique recreation niche. Because of this, Cache Creek is a regionally, if not nationally, recognized area for prospecting that attracts visitors from throughout Colorado and nearby states. It is estimated that Cache Creek sees approximately 2,000 prospecting days annually. The season of use generally begins Memorial Day weekend and ends November 30th when the roads are closed for seasonal wildlife closures. Seasonal road closure dates were originally established in 2001 and then modified in 2004 at the request of the Lake County Commissioners. Walk-in recreational mineral collection still occurs within the parcel outside of these dates but these dates are typically acknowledged as the 'open' season for Cache Creek based on reduced access directly to the main parking area. As described in the Purpose and Need section of the document one of the main goals of the Bureau of Land Management is to continue to provide recreational mineral collection opportunities for families and hobby interests by providing the settings to meet the desired outcomes of this user group. As directed by the Resource Management Plan this must occur in a manner that does not significantly impact other resources, reduces conflicts between uses, and improves visitor health and safety.

Through conversations with recreation users of the site, people go here to improve their knowledge about natural resources, develop skills and self-reliance, increase their outdoor resourcefulness and know-how, and help others obtain this resourcefulness. Users also desire to release tensions/stress by spending time outdoors in nature. While some of these outcomes are being achieved, visitors also realized adverse outcomes including increased disregard towards other visitors and evidence of increased human impacts to public lands resources.

The BLM recognizes that recreation experiences are largely affected by the overall setting of an area which can be broken out into three components; social, physical and operational. Combined; these settings greatly affect a person's overall recreation experience. The social setting refers to how busy an area apparently is which is generally measured in terms of the number of contacts with others. The physical setting refers to how natural appearing an area is and the operation setting describes the types and number of management controls that are apparent at an area such as regulations, signing, and staff presence.

Operational Setting:

The level of regulation at the site includes a kiosk, a site host, and an occasional contact with staff or law enforcement. Minimal regulations are in place to manage recreation use in the area.

Users of the site feel that there is a need for additional regulations and increased law enforcement presence to better manage the site to reduce conflicts and impacts to resources.

Social Setting:

During the summer months the main developed parking area is fairly busy and encounters with others is common with limited opportunities for solitude. Sounds of other users and of vehicles are common within the core area as well as other evidences of use such as worn vegetation and social trails. The further one travels from the developed parking area visitors can expect fewer contacts with other users; especially the further one travels from the parking area and visits the area outside of weekends. Scoping comments and informal conversations with visitors indicates that few contacts with others are desired by some visitors in order for them to fully realize their desired recreational experience. Conflicts between users are commonly reported.

Physical Setting:

The area has a number of landscape modifications including an improved county road, primitive roads, utility lines and evidence of past and recent mining disturbances. There are primitive campsites, portable restrooms and a kiosk. Despite these modifications the area still ‘feels’ natural and is a large part of the overall attraction to the site.

Health and Human Safety:

Limited regulations combined with increased volumes of use has resulted in a number of health and human safety concerns. This includes users digging in an unsafe manner creating hazards such as overhangs, deep narrow holes, and undercut trees, throughout the site. Altercations between users have also been reported.

High volumes of gold panning related recreation use has also been reported to cause conflicts with hunters who also desire to use the area.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: In order to better meet the stated goal of providing a high quality yet somewhat primitive/rugged opportunity for hobby level prospectors the proposed action calls for making a number of management changes.

Operational Setting:

The biggest changes would be seen in the increased regulations of the site and the necessary increase in posting of rules and law enforcement presence. Many of these changes would occur through a new requirement for obtaining a permit and paying an associated fee. These operational changes will be seen as a mixed bag for most visitors of the site who, for the most part, desire minimal rules and restrictions while participating in their activity. Many visitors at the same time see the need for additional rules and enforcement in order to reduce conflicts between visitors, decrease concerns for health and human safety, and ultimately fear for the loss of the opportunity to gold pan at the site, based on continued degradation to important natural resources. Allowing mechanized equipment and wheeled carts for the transport of this equipment will be seen as a welcome change greatly enhancing the recreational experience of

some users. However, for some visitors this increase in rules and restrictions will greatly impact their recreational experience to the point that they may be displaced from the site entirely.

Social Setting:

The proposed changes in the operational settings of the site could also alter the social setting. It is proposed to limit digging to a designated area which would concentrate the majority of the users potentially resulting in more visitor to visitor contacts or interactions per outing. While most visitors already gold pan within the proposed designated area, the number of visitors who prefer further out areas is currently unknown. Anecdotally, staff observes one to two cars parked at the cemetery on a regular basis and has also observed visitors prospecting throughout the parcel. It is assumed that these are the types of visitors who prefer fewer contacts and would be most impacted by the changes. Given the observed relatively low volume of use outside of the proposed designated area it can be assumed that few visitors would realize an actual change in social setting and any associated impacts. The proposed action includes the option for visitors to 'in-situ' gold pan along Cache Creek where fewer visitor contacts are expected further reducing increases to visitor contacts for those seeking solitude.

The change in settings associated with the proposed action could indirectly impact other gold panning areas, most likely those along the Arkansas River, if users are displaced. This could result in increases in the number of contacts between visitors engaging in recreational placer mining per outing at other sites however, it is assumed that the level of displacement would be relatively low and this indirect impact would be negligible.

Physical Setting:

The proposed action would not alter the physical setting other than potentially installing a permanent toilet that would be perceived as neutral by most visitors neither enhancing or reducing their recreation experience. Barriers to manage dispersed camping may also be installed. Removal of trees to facilitate recreation use would be minimal and would not greatly alter the physical setting.

Health and Human Safety:

The special recreation permit terms and conditions would introduce measures to reduce the creation of hazards and clarify rules for the site thereby improving health and human safety conditions including a reduction in altercations.

Protective/Mitigation Measures: BLM staff assigned to the site would record keep a record of informal feedback they receive from visitors including the number of complaints and documented altercations. They would also document the occurrence of human created safety hazards. This data would be used to determine if the management controls have had a positive result. On an annual basis this data would be coordinated with resource monitoring (identified in other sections) and input from partners to determine the effectiveness of management controls. Modifications could be made to the management of the site, including changing terms and conditions of the permit, to improve management and reduce impacts to resources.

No Action Alternative

Direct and Indirect Impacts: The No Action Alternative would partially meet the stated goal of continuing to provide gold panning recreation at Cache Creek in a primitive/rugged

setting. However, without the changes in rules for the area it is anticipated that conflicts between users would continue to occur and some visitors would have a poor recreational placer mining experience while recreating at Cache Creek. As stated in the section above visitors to Cache Creek, for the most part, desire fewer rules while recreating on public land. Through this alternative you would not see the same type of displacement due to a change in operation setting and most visitors would likely achieve their desired recreational experience. The social setting would remain the same as it currently is. By not requiring a permit and an associated fee it can be assumed that visitors would realize fewer enforcement/education contacts and a reduction in services such as portable toilets if other funding was not available. Impacts to resources would continue and BLM monitoring of coyote holes and hazard trees would still be necessary to improve human health and safety conditions.

Protective/Mitigation Measures: Monitoring, hazard tree removal, site host presence, educational information, management of tailings piles including yearly reclamation, dredging impacted ponds, and monitoring impacts to vegetation and Cache Creek would be necessary.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: This alternative would have the greatest impact of all the alternatives on the recreational prospecting community. As stated earlier in this section, Cache Creek is somewhat unique in the opportunities that it offers (free recreational placer mining that does not require a claim under the Mining Law regulations), hence the level of demand. If closed to recreational mineral collection this unique opportunity would no longer be available and thousands of users annually would be displaced. This displacement could result in indirect impacts to the recreational gold panning community in the region as former visitors to Cache Creek look for other locations. This could result in increases in recreational placer mining uses in other areas, new “untouched” areas, and potentially more conflicts between displaced recreational placer miners, mining claim owners, and other recreationists. Thereby, more interactions for visitors in other areas will impact a variety of users as use is currently concentrated in Cache Creek and Point Barr, potentially limiting visitor’s ability to achieve their desired recreation outcomes.

This alternative could improve conditions for sportsmen who would now use the area for hunting in the fall. This is a result of reduced displacement of animals during the hunting season and improved conditions for elk reproduction. Also, there would be improved riparian conditions, decreased sediment load into Cache Creek and ponds and ephemeral channels, and Cache Creek stream conditions would continue to move towards a healthy and productive fishery. There would also be fewer conflicts between recreationists and less law enforcement would eventually be required.

Protective/Mitigation Measures: Increased Law Enforcement presence and monitoring to ensure that recreational placer mining activities no longer occur on the Cache Creek parcel.

3.5.7 FOREST MANAGEMENT

Affected Environment:

The forests on the BLM lands in Cache Creek are considered second growth (mature) due to the historic timber harvests in the late 1800’s. The timber was used to build the railroad and the

infrastructure of the local towns; and utilized for heating and cooking. Lodgepole pine and quaking aspen are the two most common tree species currently found in Cache Creek drainage. Both aspen and lodgepole pine are considered a shallow rooted species. Douglas-fir was more common prior to the historic timber harvests, their stumps can be found throughout the area.

In 2008, numerous lodgepole pine trees came under attack by Mountain Pine Beetles (MPB). It is thought that they moved from Summit County into the Leadville area. Adequate rain occurred in the summer of 2011 and the additional moisture naturally slowed the MPB progress. The forestry program has been salvaging timber in this area since 2009 and should have a majority of the beetle killed timber removed by the fall of 2014. Tree growth has occurred on the historically impacted mining tailings and within the hydrologic strip mining areas. These trees create environmental hazards when recreational placer miners dig around their shallow roots, dig underneath the trees (undercutting the root systems), and further loosen the soils associated with the earlier mining activities in the 1800's. The trees impacted by recreational placer mining have been removed on almost a yearly basis to reduce hazardous conditions for recreationists.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: If fully implemented the proposed action should result in less tree damage and fewer hazard trees created by the recreational placer mining activity. There is still likely to be a few individuals who will not follow the rules and therefore creating hazard trees in the mineral collection area.

Protective/Mitigation Measures: The site shall be monitored by BLM staff on a regular basis for hazard trees during the open period (May 31 – December 1). A hazard tree is defined as a tree that has been identified as a risk for failure that would cause injury to a person. In this proposed activity these are typically trees that have been undercut or had severe root damage.

If 25 or more hazard trees are found on the site then the Field Office manager shall be notified immediately. Certified tree fallers shall remove the hazard trees as soon as possible. The field manager could decide to temporarily close the site until the safety issue has been resolved.

No Action Alternative

Direct and Indirect Impacts: There will continue to be 50-100 hazard trees created each year. Current mitigation measures are not enforceable and over-sight is insufficient. This alternative does not regulate the activity to control hazardous conditions for the users of this site.

Protective/Mitigation Measures: Current mitigations are not sufficient to stop hazard tree creation. There would be a need to increase monitoring of hazard trees throughout the entire parcel and removal of safety concerns in a timely and efficient manner.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: Closing the site to mineral collection will result in no tree damage from mineral collecting. Individual trees will not be under-cut, therefore no root systems damaged and hazards to recreational miners would not occur.

Protective/Mitigation Measures: Adequately enforce the mineral collection closure.

3.5.8 LAW ENFORCEMENT

Affected Environment:

The area being discussed for management changes has historically been a challenge for law enforcement to manage primarily due to the lack of site- specific regulations. As an acquisition the parcel is not open to the General Mining Law of 1872 therefore BLM law enforcement staff has been unable to enforce the stipulations identified in earlier management actions. This has created a situation where the BLM law enforcement staff does not have the regulatory tools it needs to address many of the activities resulting in resource impacts and threats to public safety. Issues such as the public safety concerns created when users dig deep holes with steep walls or horizontal “coyote holes”, when users dig underneath or near trees compromising root system integrity, or impacting resources by digging along water ways are difficult to address under existing regulations. Additionally, user conflicts occur relatively frequently during the placer mining open season and local law enforcement (County Sheriff’s Office) is called upon inordinately to deal with issues as they arise.

Additionally the Cache Creek area is located a long distance from the Royal Gorge Field Office in Cañon City making patrols to the area logistically challenging.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The implementation of an Individual Special Recreation Permit (ISRP) and associated stipulations would give the BLM Law Enforcement staff the regulatory tools necessary to more effectively protect resources and provide for public safety. Law enforcement would be able to enforce the requirement that each person participating in recreation mineral collection within the designated area have an ISRP on their person while participating in that activity. Additionally law enforcement would be able to enforce the stipulations of the ISRP. These stipulations, which are discussed in detail elsewhere in this document, would give law enforcement the tools it currently lacks to protect resources and better provide for public safety.

Designating a specific area where recreational mineral collection could occur with an ISRP will give law enforcement the ability to control the expansion of resource impacts which is currently occurring as users dig holes and damage riparian, stream, vegetation/tree resources throughout the parcel. Having the ability to adapt management to limit camping to designated dispersed sites will give law enforcement the tools needed to reduce resource impacts which occur when campsites are pushed further and further into the surrounding landscape.

Protective/Mitigation Measures: Monitor the effectiveness of the ISR Permits by conducting visitor contacts, working with visitors and site hosts on educational messages, and providing Law Enforcement presence to ensure that stipulations within the permits are being adhered to. Yearly, adjust permit language and associated stipulations as necessary with the Recreation Staff and staff representing affected resources.

No Action Alternative

Direct and Indirect Impacts: The No Action alternative would allow existing uses to continue without giving BLM Law enforcement staff the tools needed to provide protection to resources or effectively provide for public safety. Current hazards such as users digging under and near trees, causing the eventual death and collapse of the tree, would continue since the existing laws do not adequately address the impacts. Users would still likely dig dangerous steep walled, deep holes, and coyote holes and law enforcement would not have adequate regulatory tools to address these.

Protective/Mitigation Measures: Continue to monitor Cache Creek Parcel and make visitor contacts and improve educational contacts to help users understand how their actions impact the resources and other users.

Closure to Recreational Mineral Collection Alternative

Direct and Indirect Impacts: If the Cache Creek area was closed entirely to recreational mineral collection through the supplemental rule making process it would be a simple matter for law enforcement to identify individuals who are violating the closure. There would likely be a period of adjustment where increased patrols would be necessary to enforce the closure, possibly including detailing in additional Law Enforcement Rangers to enforce the closure. During this initial period following closure it is anticipated that there would be a high number of violations of the closure.

Protective/Mitigation Measures: Law Enforcement presence would be required to monitor and patrol the Cache Creek area recreational mineral collection closure. Supplemental rule making would be necessary to close the site to this activity.

3.6 CUMULATIVE IMPACTS SUMMARY

As identified in the background the historic mining on the parcel had a high impact to a number of resources which have been slowly recovering since the 1800's mining boom. Over time wetlands and riparian habitat have been reestablished leading to improved conditions for aquatic species as well as terrestrial wildlife, soils, and overall landscape health. As recreation use has increased impacts to water resources have begun to re-appear but not at the same scale as the original mining disturbances. Forest health projects to establish age class diversity have also occurred on the project leading to an overall landscape improvement. Recreation use is anticipated to continue into the future unless the closure alternative is chosen. It is also anticipated that livestock grazing could be introduced on the parcel.

The three alternatives give a range of impact managing scenarios. Unlike most casual use that generally leaves by definition limited or "no trace" impacts, recreational placer activity by its very nature requires an area of soil removal and an area of deposited soil. The proposed and current management alternatives result in cumulative impacts to riparian resources if the user participation remains high as described in the background section. The proposed action however

seems to best control the impacts to region wide- riparian areas within the larger watershed level landscape by keeping it contained to an area better suited to use; that is already disturbed tailings piles. By absorbing demand at a specific location and moving much of it to an upland setting, the proposed action becomes the preferable alternative to the other Alternatives.

Interest in recreational placer activity on public lands appears to be a growing activity leading to an increase in management challenges and impacts across a broader landscape. As interest in this activity increases land managers throughout the region will be required to develop management responses to address associated impacts. Depending upon this response, impacts to recreation could vary with the potential to see changes in social settings (more people) in given areas as well as changes in the physical setting as disturbances become more apparent to other users. The proposed action attempts to provide a location where this type of activity is generally accepted by other recreating public absorbing this demand and reducing impacts to other recreation users dependent upon healthy riparian resources. Other alternatives have the higher potential to cumulatively impact other recreation users either from decreased angling opportunities or re-locating the use at Cache Creek to other locations.

Monitoring includes; impacts to water quality, impacts to cultural resources, volume of gold panning use, conflicts between users, and number of hazards created. Monitoring will be coordinated with management partners including Colorado Parks and Wildlife and prospecting clubs. Based upon results of monitoring adaptive management strategies will be implemented to mitigate impacts to resources. Additionally, the BLM will conduct monitoring for cultural resources and develop a protection plan in consultation with SHPO.

CHAPTER 4 - CONSULTATION AND COORDINATION

4.1 List of Preparers and Participants

Preparer: Kalem Lenard, Outdoor Recreation Planner.

Please see Interdisciplinary Team Review list for BLM Participants

4.2 Tribes, Individuals, Organizations, or Agencies Consulted

In 2001, in conjunction with an RMP amendment proposal, BLM consulted with the following tribes;

- Apache Tribe of Oklahoma
- Cheyenne and Arapaho Tribes of Oklahoma
- Cheyenne River Sioux Tribe
- Comanche Nation of Oklahoma
- Crow Creek Sioux
- Eastern Shoshone
- Kiowa Tribe of Oklahoma
- Northern Arapaho Tribe
- Northern Cheyenne Tribe

The Ute Tribe
Oglala Sioux Tribe
Pawnee Tribe
Rosebud Sioux Tribe
Southern Ute Tribe
Standing Rock Lakota Tribe
Ute Mountain Ute Tribe

During the scoping and proposed action development the following organizations, agencies, businesses and individuals were consulted and/or notified.

- Front Range Resource Advisory Council
- Gold Prospectors of Colorado
- Colorado Gold Diggers
- Sidewinder Mining, associated business
- Gold Prospectors Association of America Colorado Springs Chapter
- Rock Doc, associated business
- Pic N' Pan Prospectors Club
- Colorado Gold Camp Prospecting Club
- Colorado Prospectors
- Gold Prospectors of the Rockies
- Lake County Commissioners
- Chaffee County Commissioners
- Arkansas Headwaters Recreation Area
- USFS, Leadville Ranger District
- USFS, Salida Ranger District
- Trout Unlimited
- Colorado Parks and Wildlife, Salida Area Office Area Manager; Mr. Jim Aragon and Fisheries Biologist; Mr. Greg Policky.
- US Army Corps of Engineers, Pueblo Area Office Supervisor; Mr. Van Truan
- Colorado Division of Water Resources, Water Commissioner Staff; Mr. Bruce Smith and Mr. Gary Hanks
- Paul Zoch, mining claimant in area
- Scott McGinn, adjacent private land owner
- Keith Hilbert, interested public
- Shane Menenti, interested public
- Alberta Woods, interested public
- Wallie Robinson, interested public
- James Long, interested public
- Dennis Shaydak, interested public

CHAPTER 5 - REFERENCES

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- , 2004 Realty-Chaffee County Road 398C Vacation and Right-of-Way, Cache Creek Environmental Assessment CO-200-2004-0084 EA. Royal Gorge Field Office. Cañon City, Colorado.
- , 2006. Cache Creek Placer Area Adjustment Determination of NEPA Adequacy CO-200-2006-00110 DNA. Royal Gorge Field Office. Cañon City, Colorado.
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- Gilbert, M. M., and A. D. Chalfoun. 2011. Energy development affects populations of sagebrush songbirds in Wyoming. *The Journal of Wildlife Management* 75: 816-824.
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Finding Of No Significant Impact (FONSI)

DOI-BLM-CO-200-2012-0069 EA

Based on review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects from any alternative assessed or evaluated meet the definition of significance in context or intensity, as defined by 43 CFR 1508.27. Therefore, an environmental impact statement is not required. This finding is based on the context and intensity of the project as described below:

RATIONALE:

Context: The proposed action was selected for the Cache Creek Placer Area Management Plan and Environmental Assessment as it best addresses the purpose and need of the document. Staff monitoring and observations over the course of several years identified that impacts to water quality, riparian habitat and fisheries were being caused by recreational placer related activities. Staff also observed that people participating in this activity were creating public hazards within the area including overhangs that could potentially collapse, digging deep holes with potential for entrapment, and undercutting the root systems of large trees.

The BLM acquired the 2,160 acre Cache Creek parcel that lies just west of the small town of Granite, in 2000, to help protect critical elk and riparian habitat, of which the parcel had high values, and provide access for recreation. A field visit to the Cache Creek parcel was conducted with CPW and BLM staff when recreational placer activities were first proposed. The site identified in the proposed action was examined to determine the best placement for this activity. The identified area, while located within elk winter and calving habitat, has become the preferred location for this activity. As use increased in this type of recreation activity impacts to riparian habitat also increased along with the number of user created hazards and complaints. This resulted in the exploration of management alternatives that would alleviate these issues.

It is recognized that Cache Creek is now identified as a unique opportunity for people wishing to participate in hobby level placering and as a result has regional if not national significance for this group of people. The parcel also plays a regional role in providing crucial elk habitat and riparian habitat while impacts to water quality affect the Arkansas River downstream of the confluence. The proposed action takes this significance and the context of the site into account by facilitating the recreation activity through a permit system while putting measures into place to reduce impacts to resources which the parcel was originally purchased to help protect.

Intensity:

I have considered the potential intensity/severity of the impacts anticipated from the Cache Creek Placer Area Management Plan decision relative to each of the ten areas suggested for consideration by the CEQ. With regard to each:

Impacts that may be beneficial and adverse:

The environmental assessment identifies that the proposed action will have beneficial impacts for a number of resources including soils, water quality, vegetation, wetlands/riparian habitat, aquatic wildlife, terrestrial wildlife, migratory birds, cultural resources, lands/realty resources, and law enforcement. These benefits are associated with managing recreation use under a permit system that incorporates terms and conditions to restrict the area where the activity can occur and how people participate in the activity. The document identifies that the proposed action may have beneficial and adverse impacts depending upon the individual. While the proposed action was developed in conjunction with related organizations and businesses to improve conditions for recreation it is also acknowledged that some individuals may see the increase in rules and restrictions as an adverse impact that would take away from their experience.

Public health and safety:

The document anticipates an improvement to public health and safety. Under the terms and conditions of the permit identified in the proposed action restrictions would reduce the number of hazards created at the site. There would be a reduction in the number of undercut trees and other hazards such as overhangs and deep vertical holes that are currently being created by the public.

Unique characteristics of the geographic area:

The EA evaluated the area of the proposed action and determined that no unique geographic characteristics such as: wild and scenic rivers, prime or unique farmlands, Areas of Critical Environmental Concern, designated wilderness areas, wilderness study areas or Lands with Wilderness Characteristics; were present.

Degree to which effects are likely to be highly controversial:

The proposed action includes a number of changes in recreation management at the site. There is some disagreement on how affective these changes will be in reducing impacts to resources. To address this disagreement the proposed action includes a number of adaptive management strategies based on monitoring and thresholds to adjust management if needed.

Degree to which effects are highly uncertain or involve unique or unknown risks:

The anticipated effects of the proposed action are not highly uncertain or involve unique or unknown risks.

Consideration of whether the action may establish a precedent for future actions with significant impacts:

This decision is like one of many that have previously been made and will continue to be made by BLM responsible officials regarding the management of recreation on public lands. While the recreation situation of Cache Creek is somewhat unique, the management strategy outlined is used fairly often in other situations. River management is an excellent example of this where permits combined with terms and conditions are utilized to protect resources and provide recreation opportunities. The decision is within the scope of the Resource Management Plan and is not expected to establish a precedent for future actions. The decision does not represent a decision in principle about a future consideration. The adaptive management technique that the

proposal provides, if successful, could provide a foundation for similar approaches to similar management situations in the future.

Consideration of whether the action is related to other actions with cumulatively significant impacts:

It was identified that there is potential for cumulative impacts to this recreation activity and areas where this activity occurs as a result of displaced users unhappy with the change in management of the site. This impact is not anticipated to be significant and the cumulative impacts from other alternatives are anticipated to be higher.

Scientific, cultural or historical resources, including those listed in or eligible for listing in the National Register of Historic Places:

The project occurs within an enormous historic placer mining site. The proposed action to limit and control recreational mineral collection activities within the parcel would provide the benefit of preventing damage to other parts of the site that may be adversely affected.

Threatened and endangered species and their critical habitat:

The project area is known to contain or has potential to contain habitat for Canada lynx, Northern goshawks, and boreal toads. The document identifies that the proposed action would likely have no effect to Canada lynx due to lack of suitable habitat within the project area. The BLM does not have any records of goshawks nesting in the vicinity of the project area and therefore concludes the effects to goshawks would be minimal. The document also finds that there are no boreal toads found within the action area and the proposed action would eliminate the continued sedimentation into the watershed, improving potential toad habitat from its current state.

Any effects that threaten a violation of Federal, State or local law or requirements imposed for the protection of the environment: The proposed action conforms with the provisions of NEPA (U.S.C. 4321-4346) and FLPMA (43 U.S.C. 1701 et seq.) and is compliant with the Clean Water Act and The Clean Air Act, the National Historic Preservation Act (NHPA), Migratory Bird Treaty Act (MBTA) and the Endangered Species Act.

NAME OF PREPARER: Kalem Lenard

SUPERVISORY REVIEW: Melissa K.S. Garcia

NAME OF ENVIRONMENTAL COORDINATOR: /s/ Martin Weimer

DATE: 9/30/15

SIGNATURE OF AUTHORIZED OFFICIAL:


Keith E. Berger, Field Manager

DATE SIGNED: 2/2/16

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ROYAL GORGE FIELD OFFICE**

Decision Record

**Cache Creek Placer Area Management Plan
DOI-BLM-CO-200-2012-0069-EA**

DECISION: It is my decision to authorize the Proposed Action as described in the attached EA. The proposal is to implement an Individual Special Recreation Permit requirement for recreational mineral collection within the Cache Creek parcel. All recreational mineral collection allowed within the parcel would fall under the terms and conditions of the permit. Permits would only be issued from Memorial Day Weekend to November 30th each year. Permits would allow ‘in situ’ gold panning throughout the parcel but digging would only be allowed within a designated area. The permit would also allow for the use of re-circulating equipment and wheeled carts to transport this type of equipment. There would be restrictions on creating hazards such as digging under trees and creating holes that pose a risk to health and human safety. A fee would be associated with this permit. Persons under the age of 16 would still be required to possess a permit but a fee would not be required.

It is also proposed that a vault toilet be installed if funding and demand warrants and dispersed camping would be managed to prevent the spread in size and number. Partners would still be utilized to assist in the management of the site. Leashes on dogs would be required within the designated area from Memorial Day Weekend to November 30th. Some trees may be removed to facilitate recreation use of the designated area. Annual reclamation would continue to occur.

This decision is contingent on meeting the monitoring requirements and adaptive management strategies outlined in the proposed action. Monitoring includes; impacts to water quality, impacts to cultural resources, volume of gold panning use, conflicts between users, and number of hazards created. Monitoring will be coordinated with management partners including Colorado Parks and Wildlife and prospecting clubs. Based upon results of monitoring adaptive management strategies will be implemented to mitigate impacts to resources. Additionally, the BLM will conduct monitoring for cultural resources and develop a protection plan in consultation with SHPO.

The development of the proposed action was coordinated through the Front Range Resource Advisory Council along with a variety of prospecting clubs, individuals and related businesses. Key agencies were also consulted in the early stages of proposal development. A scoping letter asking for comments on the proposed action was sent to 49 individual clubs, agencies and municipalities. Based on comments received the proposed action was modified and alternative management scenarios were developed covering a range of options. These alternatives were analyzed for impacts and a draft environmental assessment was sent out for public comment. A press release was also issued.

The BLM received 12 responses on the draft EA from agencies, organized groups and individuals. Some comments suggested that we revise the proposed action to be more restrictive

offering suggestions for dates of the permit system or additional conditions are added to the proposed permit. Some comments suggested that the 'Closure to Recreational Mineral Collection Alternative' be selected. Other comments suggested that the BLM focus management of the parcel on small scale mining and place fewer, if any, restrictions on use. Some comments felt that the proposed action was welcomed and would provide much needed management of the site. Many of the comments submitted were considered in one of the action alternatives. Some were already identified in 'Alternatives Considered but Not Analyzed in Detail' since they did not meet RMP goals or were not consistent with management for LWCF acquired lands. Some changes were made to the document to provide consistency, clarify meanings, or modify the proposed action. Changes to the proposed action include identifying additional adaptive management strategies and stating that the proposed fees do not apply to persons under the age of 16.

This office completed an Environmental Assessment and reached a Finding of No Significant Impact therefore an Environmental Impact Statement will not be prepared.

RATIONALE: This course of action was pursued since it strikes a careful balance between protection of key resources and providing recreation opportunities. The BLM recognizes the uniqueness of Cache Creek as it pertains to recreational prospecting and desires to continue to provide this important recreation opportunity. The BLM also recognizes that the Cache Creek parcel provides valuable wildlife habitat, has a recovering fishery and was originally acquired through LWCF funds to protect these resources and make them available to the public. Monitoring indicates that key resources were being impacted and serious concerns relating to health and human safety were occurring daily at the site. The proposed action was developed with public input, including users of the site, related businesses and prospecting clubs who felt that the strategy outlined would be successful in striking this balance of improving conditions for recreation use, mitigating impacts to resources and reducing health and human safety concerns. Changes to dates of the permit was considered to better protect elk calving but based on negotiations that occurred in 2004 with the Lake County Commissioners and the subsequent visitor use patterns that were established it was decided that opening Memorial Day Weekend is the best balanced management approach.

MITIGATION MEASURES\MONITORING: The proposed action incorporates a number of required monitoring and mitigation measures. Adaptive management strategies are also identified. All of the mitigation measures identified in the proposed action are carried forward except for establishing a December 1st to June 30th seasonal closure date. The date identified in the proposed action (December 1st to Memorial Day Weekend) was established in previous planning efforts in close coordination with Lake County and therefore will not be changed through this project. The following measures are included in the decision record:

- Limit the extent of tree removal and campground development and mining expansion outside of the designated area to less than 2 acres within the mapped primary lynx habitat.
- Construct true siltation collection areas that can be cleaned and work with groups to encourage placer work around those areas only.

- If compliance to the PA is low, the adaptive management option to construct other sediment catchments on Cache Creek will allow BLM another method to retain soil resources out of waterways.
- Spreading of dredged fill from catchments along uplands may help re-vegetate those areas. Seeding with native mix should be done to minimize the amount of time spent as bare soil.
- Permanent monitoring sites for channel geometry will be created and measured pre-, during, and post-mining season to track sediment discharges into downstream waters. Stream discharge and other natural events during the period of monitoring will be factored into BLM's decision making process.
- If despite the proposed action, compliance is low and sedimentation issues continue, BLM could consider other actions designed to shift mineral activity away from Cache Creek. BLM could then coordinate with local clubs to construct a placer mining water source within the designated area.
- Vegetation restoration may be needed to provide elk with hiding cover between the designated use areas (camping and placer mining sites) and the remainder of the calving and winter range to visually discourage human encroachment into new areas and provide elk with a sense of solitude.
- Photo point monitoring of vegetation conditions on a reoccurring basis would be needed to ensure that the proposed action is meeting the intent to manage the site for American elk in terms of minimizing the damage to resources. Sites that would be photo point monitored include willows, forested vegetation and sagebrush adjacent to the action area that currently have adequate forage, browse and cover. Sites should also include areas desirable for dispersed camping that are not currently used for such activities. More restrictive adaptive management actions may be needed if observational photo point monitoring reveals any of the following changes to the existing vegetation conditions that are important to elk:
 - a net 15% reduction on average of either browse, forage and/or hiding cover
 - a net 15% increase on average of bare mineral soil cover
- Periodic progress meetings every one to two years with CPW would be needed to ensure the proposed action is meeting the intent to manage the site for American elk. If elk calving trends or evidence from CPW show a statistically significant decrease in elk calving that is believed to be attributed to management of the project site, then adaptive management actions may be needed
- If reports or evidence are received of domestic dogs causing conflicts with elk especially during the remainder of the calving season, a leash requirement in the dispersed/developed campground may be needed.

All vegetation removal such as cutting down hazard trees and camp area maintenance should occur outside of the nesting season, May 15-July 15 unless operations are necessary to address immediate threats to public safety.

- The BLM will conduct monitoring for cultural resources and develop a protection plan in consultation with SHPO and implement any necessary protection measures.
- BLM staff assigned to the site would keep a record of informal feedback they receive from visitors including the number of complaints and documented altercations. They would also document the occurrence of human created safety hazards and violations of the permit's terms and conditions. This data would be used to determine if the management controls have had a positive result and are being followed. On an annual basis this data would be coordinated with resource monitoring (identified in other sections) and input from partners to determine the effectiveness of management controls. Modifications could be made to the management of the site, including changing terms and conditions of the permit, to improve management and reduce impacts to resources.
- The site shall be monitored by BLM staff, volunteers or partners on a regular basis for hazard trees during the open period (May31 – December 1). If 25 or more hazard trees are found on the site then the Field Office manager shall be notified immediately. Certified tree fallers shall remove the hazard trees as soon as possible. The field manager could decide to temporarily close the site until the safety issue has been resolved.

APPEALS: Any appeal of this decision must follow the procedures set forth in 43 CFR Part 4. Within 30 days of the decision, a Notice of Appeal must be filed in the office of the Authorized Officer at the Royal Gorge Field Office, 3028 E. Main St., Canon City, CO 81212 with copies sent to the Regional Solicitor, Rocky Mountain Region, 755 Parfet St., Suite 151, Lakewood, CO 80215, and to the Department of the Interior Board of Land Appeals, 801 North Quincy St., MS300 QC, Arlington, VA, 22203. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals at the above address within 30 days after the notice of appeal is filed with the Authorized Officer. Appeal and stay procedures are outlined in the attached Form 1842-1 and available at: http://cq.blm.gov/author/co/en/fo/rgfo/planning.html?CFC_cK=1456264879172&CFC_scrollTo p=112

SIGNATURE OF AUTHORIZED OFFICIAL:


Keith E. Berger, Field Manager

DATE SIGNED:

2/23/16

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS

1. This decision is adverse to you,
- AND
2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL	A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the <i>Notice of Appeal</i> in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a <i>Notice of Appeal</i> in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).
2. WHERE TO FILE	
NOTICE OF APPEAL	U.S. Department of Interior, Bureau of Land Management, Royal Gorge Field Office, 3028 E. Main St., Canon City, CO 81212
WITH COPY TO SOLICITOR	U.S. Department of the Interior, Office of the Solicitor, Rocky Mountain Region, 755 Parfet St, Suite 151 Lakewood CO 80215
3. STATEMENT OF REASONS	Within 30 days after filing the Notice of Appeal, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the Notice of Appeal, no additional statement is necessary (43 CFR 4.412 and 4.413).
4. ADVERSE PARTIES	Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the Notice of Appeal, (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413)
5. PROOF OF SERVICE	Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).
6. REQUEST FOR STAY	<p>Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a Notice of Appeal (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your Notice of Appeal (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the Notice of Appeal and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.</p> <p>Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.</p>

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

ART 1821-GENERAL INFORMATION

Sec. 1821.10 Where are BLM offices located? (a) In addition to the Headquarters Office in Washington, D.C. and seven national level support and 43 CFR SUBP d service centers, BLM operates 12 State Offices each having several subsidiary offices called Field Offices. The addresses of the State Offices can be found in the most recent edition of 43 CFR 1821.10. The State Office geographical areas of jurisdiction are as follows:

STATE OFFICES AND AREAS OF JURISDICTION:

- Alaska State Office ----- Alaska
- Arizona State Office---- Arizona
- California State Office --- California
- Colorado State Office--- Colorado
- Eastern States Office---- Arkansas, Iowa, Louisiana, Minnesota, Missouri and, all States east of the Mississippi River
- Idaho State Office----- Idaho
- Montana State Office---Montana, North Dakota and South Dakota
- Nevada State Office ----Nevada
- New Mexico State Office -- New Mexico, Kansas, Oklahoma and Texas
- Oregon State Office ----- Oregon and Washington
- Utah State Office----- Utah
- Wyoming State Office --- Wyoming and Nebraska

(b) A list of the names, addresses, and geographical areas of jurisdiction of all Field Offices of the Bureau of Land Management can be obtained at the above addresses or any office of the Bureau of Land Management, including the Washington Office, Bureau of Land Management, 1849 C Street, NW, Washington, DC 20240

Appendix A – Summary of Comments and Response

Commenter	Comment	Response
Colorado Parks and Wildlife	Clarify permit season, document has different dates throughout.	Review document and provide the consistent permit dates of Memorial Day Weekend to November 30 th . This is the date that was established in CO-200-2004-0084EA.
Colorado Parks and Wildlife	Move closure date to first day after Labor day weekend to protect fall spawning trout species. There is concern that panning along Cache Creek can mechanically endanger trout eggs and sedimentation can suffocate trout eggs. A later closing date should only be considered if it can be assured that the aquatic ecosystem in Cache Creek will not be negatively affected.	Section 3.3.4 ‘Wildlife Aquatic’ analyzes the impacts to the Cache Creek fishery including impacts from sedimentation and panning. The proposed action outlines adaptive management strategies including no longer allowing panning. An adaptive management strategy of not allowing panning after Labor Day weekend was added to the proposed action.
Colorado Parks and Wildlife	Recommend that material worked at campsite be returned to the designated mining area due to concerns that sediment could impact waterways or vegetation.	At this point it is assumed the volume would be minimal and impacts are not anticipated to occur. The proposed action was modified to include an adaptive management strategy of modifying terms and conditions of the permit if this were to occur.
Trout Unlimited	Shorten permit season to end by Labor Day to better protect brown trout spawning activity	Section 3.3.4 ‘Wildlife Aquatic’ analyzes the impacts to the Cache Creek fishery including impacts from sedimentation and panning. The proposed action outlines adaptive management strategies including no longer allowing panning. An adaptive management strategy of not allowing panning after Labor Day weekend was added to the proposed action.
Trout Unlimited	Do not allow high banking for mineral extraction under any circumstances.	High banking is not being considered at this time.
Russ Lambert	Prefer that carts for equipment	Not allowing carts is

	not be allowed. Would result in people creating wide paths and carting out raw pay dirt to process later.	considered in the No Action Alternative. The proposed action as written would restrict the movement of materials with wheeled carts to reduce the level of impacts associated with moving large volumes of materials.
Russ Lambert	Does not want to see being restricted to a designated area. Feels the climb in and out (by the cemetery) would limit use. Enjoys the solitude outside of the placer area.	The proposed action allows for gold panning throughout the parcel to provide opportunities for solitude while prospecting. The No Action Alternative considers not restricting placer activities to a designated area.
Russ Lambert	Efforts should be placed on beetle kill issues instead of Cache Creek.	Noted. This is outside the scope of this document.
Russ Lambert	Do not discount the economic contribution of miners.	Economic impacts, including the contribution by persons participating in recreational mineral collection was analyzed in section 3.4.2 Economic.
Russ Lambert	Supports permit system and paying a fee to participate in their activity and giving law enforcement more tools to deal with issues. Would like to see things stay the way they are outside of the permit and see how it works.	The proposed action includes implementing a permit and fee system including several terms and conditions that permit holders would have to follow. The intent is to provide funding for management and provide law enforcement the ability to manage for violations and reduce impacts to resources. Adaptive management strategies are also included to provide flexibility based on results of initial actions. The no action alternative outlines options for less restrictions for recreational placer activities within the Cache Creek parcel.
Erick S. Miller	Recommend Alternative 2.2.3 be selected due to damage of surface, riparian, and	Noted.

	flora/fauna and downstream areas and because previous management attempts have not been successful.	
Erick S. Miller	Alternatives that include continued placer activities will require oversight, management and remediation which have been previously ineffective and would be prohibitively expensive.	An alternative closing the site to recreational mineral collection was analyzed in detail along with the impacts of managing placer activities within the Cache Creek parcel. The draft business plan identifies anticipated costs and revenues for managing the site if a permit and fee system was implemented.
Erick S. Miller	Requests that deference be given to the opinion and preferences of local inhabitants.	Noted.
Tom Goss	Support the proposal as written, it is reasonable and well thought out.	Noted.
Russell M. Chace	Questions the definition of 'recreational miners' as it relates to mining in general	As spelled out in the environmental assessment (Background, page 2-3) the Cache Creek parcel was acquired by the BLM and is therefore not open to the General Mining Law. Location of claims and mining regulations (43 CFR 3809) for surface management of notice level activity does not apply. As a result, mineral collection within the parcel is regulated by 43 CFR 8365.1-5 which provides the definition of recreational mineral collection as used throughout the document and management of the site. While large scale mining operators may derive pleasure from their activities it does not fall under the recreation mineral collection definition as established by the Code of Federal Regulations

		which also does not allow for the sale of any minerals collected.
Russell M. Chace	Get rid of attempt to segregate the small scale miner from the large scale miner.	The background section of the environmental assessment (page 1-3) outlines the reasoning why 43 CFR 8365.1-5 applies to the parcel and large scale mining operations cannot occur. Managing recreational mineral collection to reduce impacts to resources is identified in the purpose and need section of the document.
Russell M. Chace	Questions the purpose of the original acquisition. If the land was originally acquired for small scale mining then let people mine it, if not then we need to re-phrase the document.	The background section of the environmental assessment (page 1-3) clarifies that the land was purchased to “help protect critical elk and riparian habitat as well as to provide recreational access”. EA CO-200-2002-0043 dated 6/13/2005 originally authorized high-banking within a designated portion of the Cache Creek parcel to accommodate demand for recreational mineral collection. The original management intent has never been to accommodate small scale mining nor has subsequent management.
Russell M. Chace	Due to the limited options of open to the public mining areas along the Arkansas River do not restrict mining in Cache Creek	The environmental assessment analyzes the impacts of a no action alternative which places no further restriction beyond present day rules and regulations within the Cache Creek parcel. BLM does not have discretionary authority to restrict mining. This parcel is not open to the Mining Law of 1872 for claim location, prospecting and/or mining activities because it consists of

		acquired lands. This parcel is subject to recreational mineral specimen collection only, which BLM is attempting to more effectively manage through analysis of the proposed action in this document.
US Forest Service, Leadville Ranger District	Overall supports the proposed action as written and feels it would have beneficial impacts to fish habitats on NFS lands down stream of Cache Creek. They have dealt with a number of issues relating to Cache Creek in the past.	Noted.
US Forest Service, Leadville Ranger District	Recommend that permits should not allow mining from December 1 st to June 30 th to reduce impacts to elk winter range and calving meeting the original objective of the original land purchase to protect critical elk habitat.	Section 3.3.5 ‘Wildlife Terrestrial’ analyzes the impacts of the action to elk winter range including season of use. Section 3.5.1 ‘Recreation’ identifies the history of the dates identified in the proposed action and the associated impacts to recreation use, including recreational mineral collection. The dates identified in the proposed action are coincidental with seasonal road closures originally established in 2004. These dates have subsequently established visitor use patterns in the area.
Jenni and John Etgen	Supports the proposed fee and thinks it is reasonable if not a little low to allow for more supervision and/or reclamation.	Noted. The draft business plan identified anticipated costs to manage the site, compared other fees for similar activities, and analyzed a variety of fee structures. The fee proposed attempts to be commensurate with services provided and management of the site to protect resources.
Jenni and John Etgen	Values Cache Creek as a unique opportunity for public	Noted. The proposed action identifies a number of

	prospecting and agrees that the rules and restrictions need to be advised.	management actions including rules and restrictions to better manage the site and protect resources while still allowing for recreational mineral collection at the site.
Jenni and John Etgen	Supports the presence of restroom facilities at the site.	Noted. The proposed action identified the need to continue to provide restrooms including potentially installing permanent vault toilets.
Randy Witham	Questions how/why the original 14 page document turned into 61 pages.	The National Environmental Policy Act and subsequent policy requires the BLM to consider public input to develop a spectrum of management scenarios. These alternatives must then be analyzed for impacts and disclosed to the public. The 14 page document referred to in the comment was the draft proposed action developed to solicit public input. Based on this input alternative management scenarios were developed and analyzed. This resulted in the 61 page draft environmental assessment sent out to the public for comment.
Randy Witham	Doesn't feel original comments were incorporated into the draft Environmental Assessment. Comments re-submitted.	The original comments submitted were incorporated into the document either in one of the action alternatives or identified in alternatives considered but not analyzed in detail (section 2.3, page 18). The individual comment and response is included below.
Randy Witham	Manage Cache Creek as a gold mine and prospecting should be the #1 priority for the parcel.	This management alternative was addressed in section 2.3 'Alternatives Considered but not Analyzed in Detail' (page 18). The document concludes that the combination of actions suggested would not be in conformance with RMP

		<p>decision 1-24; ‘conflicts between fishery habitat and other values would resolved in favor of fishery habitat’ and 1-16; ‘conflicts between wildlife habitat and other uses will be resolved in favor of achieving vegetation management goals. The environmental assessment analyzes the impacts of the no action alternative. ‘Opening’ the parcel to mining law was also considered but it was determined it would not meet the purpose and need of providing a recreational mineral collection experience and would be unfeasible due to the nature of the acquisition and source of funding. This section was modified to better clarify laws pertaining to LWCF funding and allowed uses.</p>
Randy Witham	<p>Keep Cache Creek open all year round to allow for a longer prospecting season.</p>	<p>This suggestion was considered in the no action alternative (2.2.2, page 18) which does not include timing restrictions on recreational mineral collection. Under this alternative the travel management vehicle closure would remain in place but this does not affect recreational mineral collection within the Cache Creek parcel. The document identifies and explains that ‘mining’ is not allowed at this location and the activity falls under recreational specimen collection.</p>
Randy Witham	<p>All types of prospecting methods, both non-mechanized and mechanized should be allowed.</p>	<p>The proposed action includes allowing mechanized devices with limitations. The suggestion that all forms of prospecting be allowed was</p>

		addressed in the section 2.3 ‘Alternatives Considered but not Analyzed in Detail’ (page 18) which concludes that this type of action would not be in conformance with RMP decisions protecting fish and wildlife habitat. The document identifies and explains that ‘mining’ is not allowed at this location and the activity falls under recreational specimen collection.
Randy Witham	Allow wheeled carts and buggies (non-motorized) to transport equipment and material.	The proposed action includes the allowance of wheeled carts and buggies to transport equipment but not material. Section 2.3 concludes that ‘this would move closer towards commercial scale mining and outside of the intended goal of providing a “recreational” level gold panning area and was therefore not considered.’
Randy Witham	Do not create rules that further limit mining activities including; restricting the digging of holes in a dangerous manner, limiting sluices to 10 inches or less, limit dry washers to ½ yard production. The rules proposed are too complicated and would not be effective and the limited law enforcement would not be able to enforce these rules.	This parcel is not open to the Mining Law of 1872 for claim location, prospecting and/or mining activities because it consists of acquired lands. This parcel is subject to recreational mineral specimen collection only, which BLM is attempting to more effectively manage through analysis of the proposed action in this document. The no action alternative for recreational mineral specimen collection considered not creating rules restricting the digging of holes or limits on sluice size. The proposed action identifies implementing a permit and fee program in part to assist with enforcement of rules established for the site.

Randy Witham	Do not require a permit or a fee.	The no action alternative considers not requiring a permit or a fee.
Randy Witham	Actively advertise prospecting at Cache Creek.	This parcel is not open to the Mining Law of 1872 for claim location, prospecting and/or mining activities because it consists of acquired lands. This parcel is subject to recreational mineral specimen collection only, which BLM is attempting to more effectively manage through analysis of the proposed action in this document. The proposed action identifies the need for the permit system to include an educational component for the recreational mineral specimen collection activities at this location. The BLM also maintains a website to provide information about prospecting at Cache Creek. Outside entities advertising the recreation opportunities found at Cache Creek is outside the purview of the BLM.
Tony Cook	Concern about fee price and alignment with family friendly recreation goal. If considering a family of four or five for a weekend outing the proposed fee is cost prohibitive.	The proposed action was changed to identify that the fee would not be applicable to persons under the age of 16. These persons would still be required to obtain a permit and follow all terms and conditions.
SHPO	Background-better clarify why the parcel is not open to General Mining Law	Section 1.2 identifies that the parcel is not open to the General Mining Law of 1872 because it was acquired land. This section was modified to clarify where this direction is provided.
SHPO	Background-define coyote holes, page 3	The document was changed to better clarify what the term 'coyote hole' refers to.
SHPO	Proposed Action # 6-	The document was modified

	Reclamation; want to ensure that the spreading of sediment that is removed from the pond only affects recent/contemporary tailings and not historic tailings.	to reflect that prior to this aspect of reclamation additional analysis would be warranted to determine impacts to cultural resources.
SHPO	3.4.1 Questions if recreation activities have negatively impacted cultural resources and disagrees with the 2005 findings that that the action would have no adverse effect on historic properties.	Section 3.4.1 was modified to reflect the need for monitoring and the development of a protection plan for cultural resources. Part of this monitoring will be to reassess if the no adverse effect finding is appropriate.

Appendix B-Protocol for cross-sectional measurements at Cache Creek

Locations for 6 places for cross sections

Permanent cross sections will be established in the Cache Creek Recreational Mining Area to provide a method for BLM to assess sediment impacts to area waterways. Suitable locations for cross sections have been identified based on feasibility, distance from beaver activity, and proximity to human based sediment sources. Three locations were selected and contain a replicate in case one is lost to beaver flooding or other causes.

Setting up cross sections (Adapted from Vermont Stream Geomorphic Assessment)

Permanent cross sections will be established by hammering rebar into channel banks, taking GPS points and photos of the channel. Sites will be re-monitored pre, during and post mining season using rebar and GPS as markers. A stadia rod, hand level, and tape measure will be used to measure channels. Bankfull stage will be determined using field indicators, and the channel will be measured to the floodprone width, or 2 times the bankfull stage. This will approximately measure the width of a 50 year flood.

Indicators of Bankfull Stage (Directly from Vermont Stream Geomorphic Assessment)

The following physical features that result from the erosion and deposition associated with the bankfull flow serve as indicators of the bankfull stage.

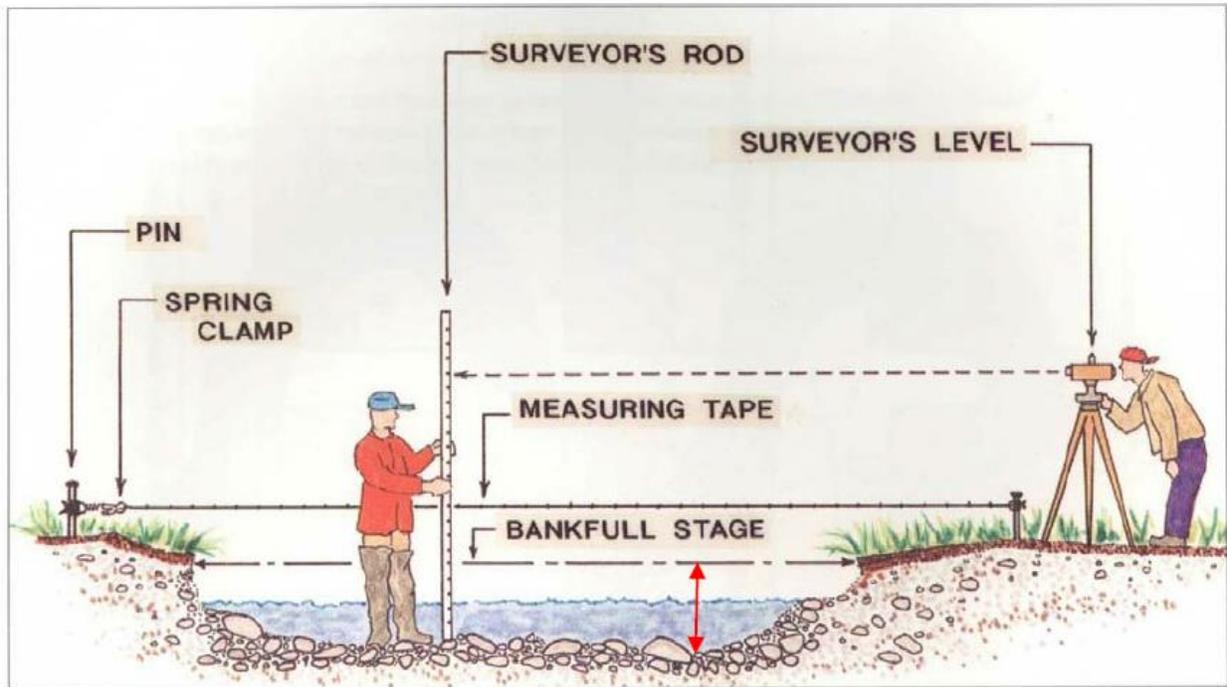
Nearly flat top of developing point bars: as the channel migrates across the valley it builds the active floodplain in its wake through the development of point bars. The top of the point bar is the active floodplain.

Flat depositional benches or lateral bars: On straighter sections of river will often exist as lateral bars. These bars may also represent the active floodplain.

Location of change on the bank from steep to more gentle slope: On reaches of river that are not prone to active floodplain building, the break in bank slope often corresponds to the bankfull stage

Lower extent of persistent woody vegetation: Because of the fairly frequent occurrence of bankfull all but the most water tolerant tree species (alder and willow) will not typically grow within the bankfull channel.

Erosion or scour features: On steeper gradient, naturally entrenched rivers the active floodplain may be intermittent in occurrence or altogether not present. In this case it becomes necessary to rely on erosional features along the banks as indicators of the flow stage that performs the most work. Because erosion can be caused by many processes such as ice scour and may not be related at all to the stage of the bankfull flow these features should be relied upon only when absolutely necessary.



Data collected from cross section sites will be used to populate Worksheet 28 from Rosgen's Watershed Assessment of River Stability & Sediment Supply (WARSSS) tool. Each cross section will be examined in five categories, and each category assigns a score. Scores will be totaled, and any cross section exceeding 13 will be assessed as unstable, and may prompt further management action from BLM as described in the NEPA decision.

Worksheet 28

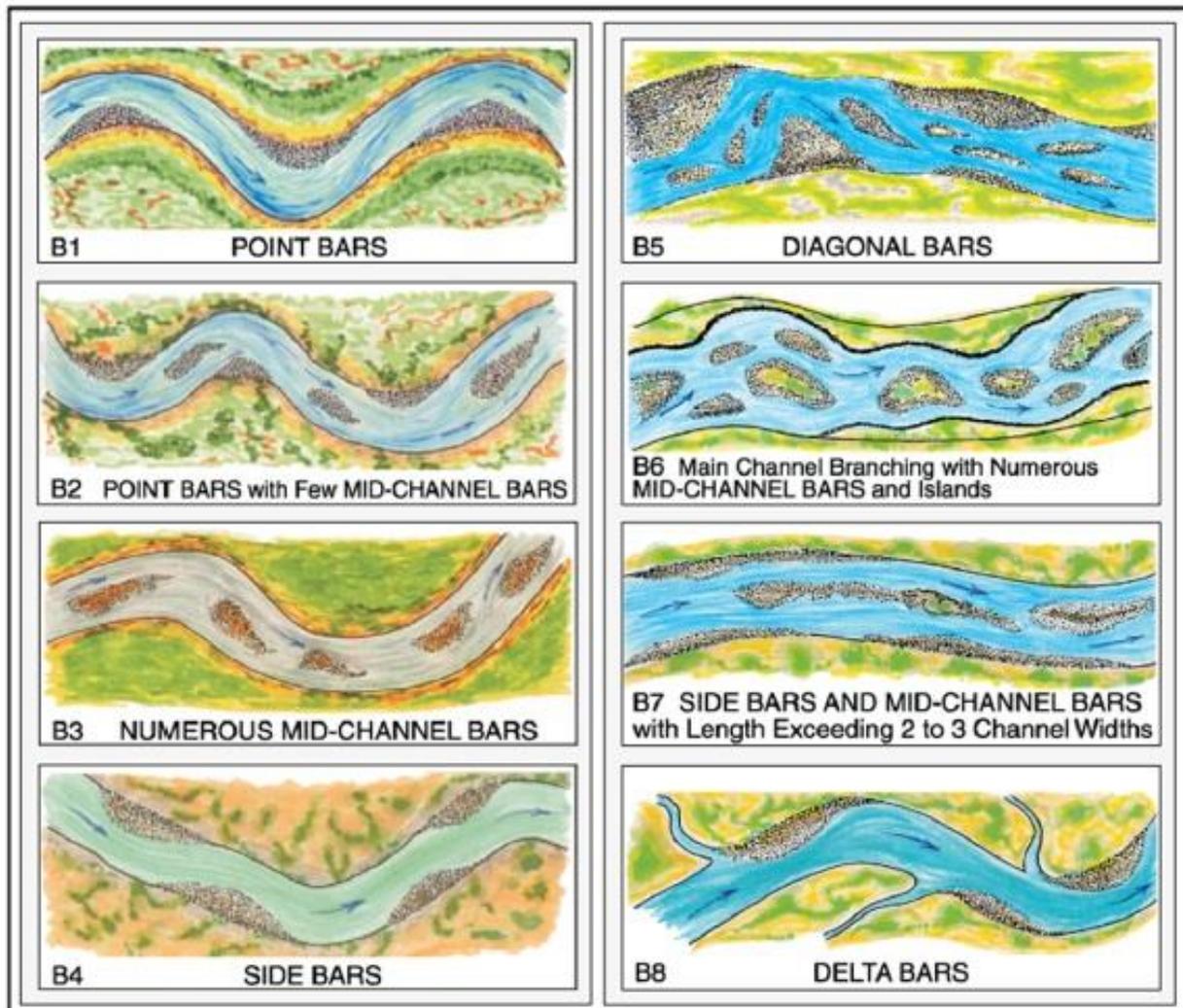
W/d Ratio/Reference W/d Ratio	Depositional Pattern	Meander Pattern	Dominant BEHI/NBS	Confinement (Meander Width Ratio/Reference Meander Width Ratio)	Sub-Total Points	Stability Category (circle)
<1.2 (2)	B1, B2 (1)	M1, M3, M4 (1)	L/V/L, L/L, L/M, L/H, L/VH, M/V/L (2)	1.0 - 0.8 (1)		7 Stable
1.2 - 1.4 (4)	B4, B8 (2)		M/L, M/M, M/H, L/Ex, H/L (4)	0.79 - 0.3 (2)		8 - 12 Moderately Unstable
1.4 - 1.6 (6)	B3 (3)	M2, M5, M6, M7, M8 (3)	M/VH, M/Ex, H/L, H/M, H/H, VH/VL, Ex/VL (6)	0.29 - 0.1 (3)		13 - 21 Unstable
>1.6 (8)	B5, B6, B7 (4)		H/VH, H/Ex, Ex/M, Ex/H, Ex/VH, Ex/Ex (8)	<0.1 (4)		>21 Highly Unstable
Total Points						

Width to Depth Ratio (w/d):

$$\frac{(Bankfull\ Width)/(Mean\ Bankfull\ Depth)}{(Reference\ State\ Bankfull\ Width)/(Reference\ State\ Mean\ Bankfull\ Depth)}$$

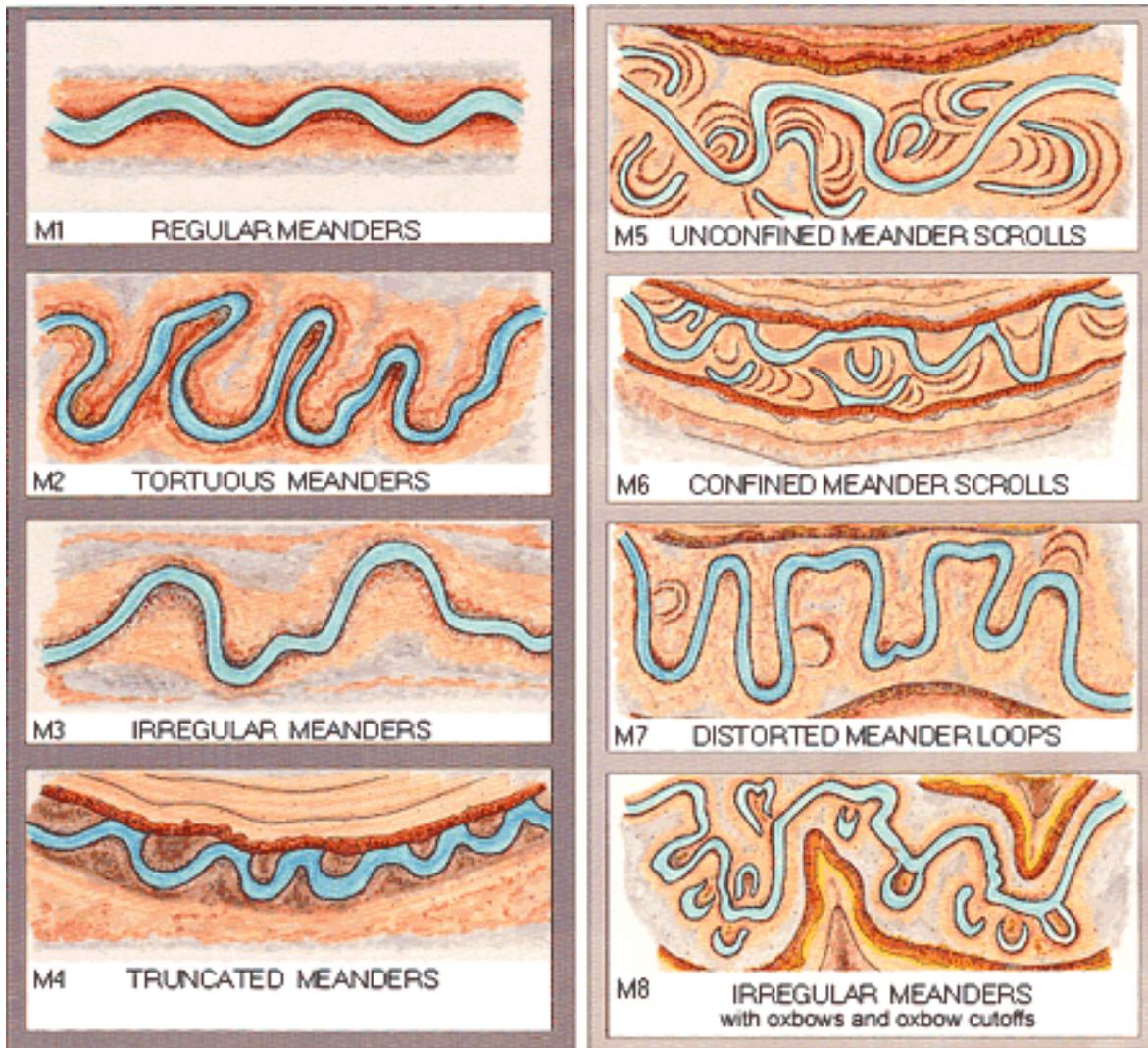
Due to the high level of disturbance in the area, natural conditions are not known and initial conditions at first measurement will be used as the reference state. If channels aggrade, the values will depart from 1 and become larger. If channels keep near current conditions (1), risks of instability and further management action are reduced.

Depositional Pattern: A qualitative, field determined measure that describes the nature and extent of sand bar features in streams. Some patterns are known to have higher levels of instability than others. With augmented sediment inputs from placer mining, Cache is expected to have more irregular bars due to augmented sediment loads.



From Rosgen, 1996

Meander Patterns: A qualitative, field determined measure of meander patterns. This describes the lateral adjustment process of the channel from past events or impacts. M1, M3, and M4 are fairly stable in their locations, but the others vary wildly and show less long term stability.



Dominant BEHI/NBS:

Bank Hazard Erosion Index (BEHI) and Near Bank Stress (NBS) indices are used to evaluate erosion and stability risk related to bank characteristics.

BEHI: 6 classes, very low to extreme, and is assessed using worksheet 21 from WARSSS. Assessment protocol examines bank height, vegetative cover, bed material and bank angle to assign erosion potential.

Worksheet 21. Summary of bank erosion hazard index (BEHI)

Bank Erosion Hazard Rating Guide							
Stream	Reach		Date		Crew		
Bank Height (ft): Bankfull Height (ft):	Bank Height/ Bankfull Ht	Root Depth/ Bank Height	Root Density %	Bank Angle (Degrees)	Surface Protection%		
Bank Erosion Potential	VERY LOW	Value	1.0-1.1	1.0-0.9	100-80	0-20	100-80
		Index	1.0-1.9	1.0-1.9	1.0-1.9	1.0-1.9	1.0-1.9
		Choice	V: I:	V: I:	V: I:	V: I:	V: I:
	LOW	Value	1.11-1.19	0.89-0.5	79-55	21-60	79-55
		Index	2.0-3.9	2.0-3.9	2.0-3.9	2.0-3.9	2.0-3.9
		Choice	V: I:	V: I:	V: I:	V: I:	V: I:
	MODERATE	Value	1.2-1.5	0.49-0.3	54-30	61-80	54-30
		Index	4.0-5.9	4.0-5.9	4.0-5.9	4.0-5.9	4.0-5.9
		Choice	V: I:	V: I:	V: I:	V: I:	V: I:
	HIGH	Value	1.6-2.0	0.29-0.15	29-15	81-90	29-15
		Index	6.0-7.9	6.0-7.9	6.0-7.9	6.0-7.9	6.0-7.9
		Choice	V: I:	V: I:	V: I:	V: I:	V: I:
VERY HIGH	Value	2.1-2.8	0.14-0.05	14-5.0	91-119	14-10	
	Index	8.0-9.0	8.0-9.0	8.0-9.0	8.0-9.0	8.0-9.0	
	Choice	V: I:	V: I:	V: I:	V: I:	V: I:	
EXTREME	Value	>2.8	<0.05	<5	>119	<10	
	Index	10	10	10	10	10	
	Choice	V: I:	V: I:	V: I:	V: I:	V: I:	
SUB-TOTAL (Sum one Index from each column)							
V = value, I = Index							

Bank Material Description:

Bank Materials

- Bedrock (Bedrock banks have very low bank erosion potential)
- Boulders (Banks composed of boulders have low bank erosion potential)
- Cobble (Subtract 10 points. If sand/gravel matrix greater than 50% of bank material, then do not adjust)
- Gravel (Add 5-10 points depending percentage of bank material that is composed of sand)
- Sand (Add 10 points)
- Silt Clay (+ 0: no adjustment)

BANK MATERIAL ADJUSTMENT

Stratification Comments:

Stratification

Add 5-10 points depending on position of unstable layers in relation to bankfull stage

STRATIFICATION ADJUSTMENT

VERY LOW	LOW	MODERATE	HIGH	VERY HIGH	EXTREME
5-9.5	10-19.5	20-29.5	30-39.5	40-45	46-50
Bank location description (circle one)					GRAND TOTAL
Straight Reach Outside of Bend					BEHI RATING <input style="width: 50px; border: 1px dashed black;" type="text"/>

Near Bank Stress: NBS variables used in the prediction methodology indicate potential disproportionate energy distribution in the near-bank region (1/3 of channel cross-section associated with the bank being evaluated). Changes in near-bank stress can accelerate streambank erosion.

Worksheet 22A. Various field methods of estimating Near-Bank Stress risk ratings for the calculation of erosion rate.

Estimating Near-Bank Stress (NBS)									
Stream:		Location:		Date:		Crew:			
Methods for Estimating Near-Bank Stress									
(1) Transverse bar or split channel/central bar creating NBS/high velocity gradient: Level I - Reconnaissance.									
(2) Channel pattern (Rc/W): Level II - General Prediction.									
(3) Ratio of pool slope to average water surface slope (S _p /S): Level II - General Prediction.									
(4) Ratio of pool slope to riffle slope (S _p /S _{rr}): Level II - General Prediction.									
(5) Ratio of near-bank maximum depth to bankfull mean depth (d _{nb} /d _{bf}): Level III - Detailed Prediction.									
(6) Ratio of near-bank shear stress to bankfull shear stress (τ _{nb} /τ _{bf}): Level III - Detailed Prediction.									
(7) Velocity profiles/Isopleths/Velocity gradient: Level IV - Validation.									
Level I	(1)	Transverse and/or central bars - short and/or discontinuous. NBS = High/Very High							
		Extensive deposition (continuous, cross channel). NBS = Extreme							
Level II	(2)	Radius of Curvature Rc (feet)	Bankfull Width W _{bf} (feet)	Ratio Rc/W	Near-Bank Stress				
	(3)	Pool Slope S _p	Average Slope S	Ratio S _p /S	Near-Bank Stress	Dominant Near-Bank Stress			
	(4)	Pool Slope S _p	Riffle Slope S _{rr}	Ratio S _p /S _{rr}	Near-Bank Stress				
	(5)	Near-Bank Max Depth d _{nb} (feet)	Mean Depth d (feet)	Ratio d _{nb} /d	Near-Bank Stress				
Level III	(6)	Near-Bank Max Depth d _{nb} (feet)	Near-Bank Slope S _{nb}	Near-Bank Shear Stress τ _{nb} (lb/ft ²)	Mean Depth d (feet)	Average Slope S	Shear Stress τ (lb/ft ²)	Ratio τ _{nb} /τ	Near-Bank Stress
	(7)	Velocity Gradient (ft/s/ft)		Near-Bank Stress					
Converting Values to a Near-Bank Stress Rating									
Near-Bank Stress Rating		Method Number							
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Very Low			> 3.0	< 0.20	< 0.4	< 1.0	< 0.8	< 1.0	
Low		N/A	2.21 - 3.0	0.20 - 0.40	0.41 - 0.60	1.0 - 1.5	0.8 - 1.05	1.0 - 1.2	
Moderate			2.01 - 2.2	0.41 - 0.60	0.61 - 0.80	1.51 - 1.8	1.06 - 1.14	1.21 - 1.6	
High			1.81 - 2.0	0.61 - 0.80	0.81 - 1.0	1.81 - 2.5	1.15 - 1.19	1.61 - 2.0	
Very High		See (1)	1.5 - 1.8	0.81 - 1.0	1.01 - 1.2	2.51 - 3.0	1.20 - 1.60	2.01 - 2.3	
Extreme		Above	< 1.5	> 1.0	> 1.2	> 3.0	> 1.6	> 2.3	
							Overall Near-Bank Stress Rating		

Method 5 uses a ratio of (near bank max depth)/(mean depth) to assign NBS scores. Based on the ease of use and the aggradation of sediments, this is the method BLM has chosen to use.

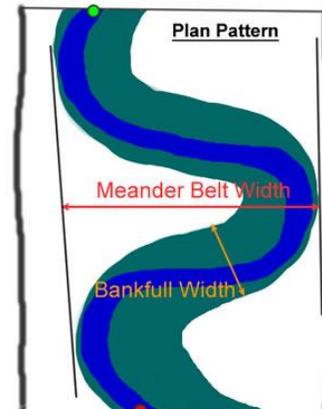
Very Low	Low	Moderate	High	Very High	Extreme
<1.0	1.0 – 1.5	1.51 – 1.8	1.81 – 2.5	2.51 – 3.0	>3.0

Confinement:

$$\frac{\text{Meander Width Ratio}}{\text{Reference State Meander Width Ratio}}$$

Confinement serves as a quantitative measure of channel migration over time. As with the w/d ratio, initial conditions will serve as the reference state. If channels keep near current conditions (1), risks of instability and further management action are reduced.

**Meander Width Ratio
of Natural Channels**



$$\text{Meander Width Ratio} = \frac{\text{Belt Width}}{\text{Bankfull Width}}$$

Sources:

Rosgen's WARSSS tool: (<http://water.epa.gov/scitech/datait/tools/warsss/>)

Vermont Stream Geomorphic assessment

(http://www.vtwaterquality.org/rivers/docs/assessmenthandbooks/rv_apxkidbankfullstage.pdf)

Appendix C

**Business Plan for Cache Creek
Placer Area Permit**

DRAFT

**PENDING REVIEW BY RESOURCE ADVISORY COUNCIL AND
FEDERAL REGISTER NOTICE**

**United States Department of the Interior
Bureau of Land Management
Royal Gorge Field Office
3028 E. Main Street
Cañon City, CO 81212**

October, 2014

**Business Plan for Cache Creek
Placer Area Permit**

DRAFT

Recommendations, Reviews, and Approvals

Recommended by:

Outdoor Recreation Planner

Date

Reviewed by:

Associate Field Manager, Renewable Resources

Date

Approved by:

Field Office Manager

Date

This business plan was prepared pursuant to the Federal Lands Recreation Enhancement Act (Public Law 108-447) and BLM recreation fee program policy. It establishes future management goals and priorities for the Cache Creek Gold Panning recreation fee program in the Royal Gorge Field Office.

Introduction

This business plan is being prepared in conjunction with the development of the Cache Creek Placer Area Management Plan and Environmental Assessment that addresses the high demand and associated impacts of recreation placer activities at the site. This plan, along with a number of other management actions, calls for the need to develop a permit system and associated fee in order to ensure a quality recreation experience in a relatively primitive and undeveloped setting and alleviate impacts to resources from the placer activity. Bureau of Land Management policy requires the development of a business plan when considering instituting a fee. This plan is intended to assist in determining appropriate fee rates to achieve management objectives, outline the cost of administering fee programs, and identify priorities for future fee program expenditures.

Description of the Cache Creek Management Program

Background

Cache Creek is located immediately west and south of the town of Granite and flows into the Arkansas River just below the Granite Bridge. It was the site of one of the first large mining communities in Colorado during the late 1800s. In January 2000, the Bureau of Land Management acquired 2,160 acres through which Cache Creek flows, extending from the San Isabel National Forest boundary to highway 24. The parcel was acquired from the Conservation Fund, a group that works to maintain Colorado's open space. It was purchased to help protect critical elk and riparian habitat as well as to provide recreational access.

Due to the traces of gold found in the waste rock piles along with past BLM management actions and the rise in popularity of gold panning, Cache Creek saw tremendous increases in recreational placer activity. Resulting impacts to water quality and visitor experiences despite several other management strategies led to the development of the Cache Creek Placer Area Management Plan. This plan was developed in conjunction with prospecting clubs and organizations. Additional background information and the need for the management plan can be found in the Cache Creek Placer Area Management Plan Environmental Assessment.

Site Description:

The Cache Creek parcel is located in Chaffee County Colorado near the town of Granite. Cache Creek flows through the heart of the parcel which is a tributary to the Arkansas River. Chaffee County Road 398 serves as the primary access to the parcel which also travels further onto lands managed by the US Forest Service. Sitting at the base of the Collegiate Peaks of the Sawatch Range rolling sagebrush dominates much of the site. The higher elevations are heavily forested with a diversity of tree species. The meandering creek and associated floodplain, while still recovering from past mining disturbance, is rich with riparian plant species and a fishery.

Recreation Use:

Based on data collected starting in 2011 by a volunteer campground host and a voluntary registration form it is estimated that on average Cache Creek sees approximately 2,000 visitor days per year participating in placer related activities.

Visitor Use Estimates

Year	2015	2014	2013	2012	2011	Average
Number of Users	2100	2100	2242	1424	2061	1985.4

Many visitors consider Cache Creek as a unique recreation opportunity offering placer activities in a relatively primitive natural environment that is available to the general public. The general parcel sees a variety of dispersed recreation activities such as hunting, hiking and sight-seeing but within the developed area the majority of users participate in mineral collection activities such as gold panning and sluicing. Users range from beginners wanting to see what the activity is all about to highly experienced individuals that have a high level of investment, both time and financially, into the activity.

While a former demographic study was not conducted staff and campground host observations indicate that people visit the site from all over the country with the majority being from the Front Range urban centers and adjacent states. For Front Range visitors Cache Creek is often the destination while visitors from out of the state often tie Cache Creek in with a larger itinerary. These types of trips often involve other placer activities including private club claims and sites along the Arkansas River such as Point Barr. Group size ranges from individuals to small groups as well as families. Cache Creek is often a repeat destination with visits occurring multiple times/year and annually.

Length of stay is also highly variable. Data indicates that approximately 25% of the visitors camp at the site staying for varying lengths of time up to two weeks. Multi-day visitors also often take advantage of nearby lodging accommodations in Buena Vista. The length of stay for day time visitors often varies depending upon the level of gold panning experience where newbies might visit for 2-4 hours where as more experienced visitors will stay all day.

Site Management:

As identified in management plan there would be a change in the management from current conditions in order to facilitate reduction in impacts to resources and improve visitor experiences. This would include additional rules for the area along with an increase in BLM staff presence at the site. Rules would be associated with a required permit. A campground host would continue to be present as well when available. Portable toilets, a kiosk, and informational signing would be provided.

Proposed Fee Rates and Permit Distribution⁴

Proposed Fee Rate

The Royal Gorge Field Office proposes to implement a fee system for individual use permits as proposed in the Cache Creek Placer Area Management Plan. Based on a financial analysis along with public comment it was determined that two types of fees should be available to users; a season permit valid for the current use season (Memorial Day Weekend – 11/30) as well as a day permit valid from time of purchase until 12:00 p.m. the following day. There would not be a separate camping fee.

⁴ This business plan would be revised and available for public review and comment if changes in the fee structure are proposed in the future.

Fee Type	Proposed Amount
Annual Permit	\$25.00
Day Permit	\$5.00

It is estimated that this fee revenue will generate approximately \$28,635 annually based on current rate of estimated visitation. Operating expenses of the site are anticipated to steadily increase based on past years trends. 2015 operating expenses are anticipated to be approximately \$34,308.38. It is anticipated that the management program for Cache Creek will continue to be subsidized from base program dollars but at levels commensurate with other recreation areas.

Permit Distribution

Season permits would be available for sale at the Royal Gorge Field Office in Cañon City as well as Arkansas Headwaters Recreation Area in Salida. These would be designed so they are small and convenient to carry in a pocket or wallet.

Day use permits would be available at the above locations as well as at the site through an iron fee tube. These would be similar to other fee envelopes that the public is accustomed to using at other recreation sites.

Stipulations would be printed on the back of the permits along with a signature line acknowledging reading and understanding of the terms and conditions.

Financial Analysis

Anticipated Operational Expenses:

To determine anticipated operational expenses actual expenses were identified over the past five years. Trends from this data were then carried forward combined with anticipated needs associated with changes in management to determine future estimated operational expenses.

Actual/Estimated Expenses; 2009-2013

All of the costs identified are based on actual expenses realized by the BLM over the five year period except for patrolling/maintenance. Patrolling/Maintenance costs were estimated based on average number of visits to the site during the year by position multiplied by the number of hours spent traveling to, from, and at the site to determine average annual hours by position. The average per season hours was then multiplied by the hourly rate cost to the government for each position. The cost per season per position was then combined to determine average annual costs. Cost of living or other increases associated with inflation was not calculated into this cost estimate.

Sum of (# of days per season x average hours/day x hourly rate cost to government) = estimated patrolling/maintenance/season

The table below identifies actual/estimated costs to operate the site from 2009-2013.

Actual/Estimated Expenses				
2013	2012	2011	2010	2009

Toilets	\$ 1,020.00	\$ 940.00	\$ 720.00	\$ 630.00	\$ 710.00
Reclamation (avg 30% annual increase)	\$ 5,400.00	\$ 4,100.00	\$ 3,300.00	\$ 1,850.00	\$ 1,650.00
Road Maintenance	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00	\$ 400.00
Patrolling Costs (2 x per week)	\$ 12,792.00	\$ 12,792.00	\$ 12,792.00	\$ 12,792.00	\$ 12,792.00
Campground Host (\$200/month x 5 months)	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
Indirect Rate	7%	7%	7%	7%	7%
Annual Cost Totals	\$ 19,612.00	\$ 18,232.00	\$ 17,212.00	\$ 15,672.00	\$ 15,552.00
Annual Cost Totals + Indirect	\$ 20,984.84	\$ 19,508.24	\$ 18,416.84	\$ 16,769.04	\$ 16,640.64

Estimated Future Expenses

As identified in the table portable toilet costs increased from \$710 to \$1,020 over the five year period with an average increase of 11% per year. It can be assumed that this rate of increase would continue as management continues due to annual inflation and use levels.

Reclamation costs also increased during this same five year period from \$1,650 to \$5,400 with an average increase of 37% per year. For the purposes of this analysis the annual 37% increase is projected forward to 2016 resulting in a dramatic increase. At this point it is unclear if this dramatic increased expense is accurate or if actual reclamation needs will be lower given changes in management.

While the cost to maintain the road annually has not increased during the five year period analyzed in can be assumed that this rate will increase slightly in the future due to inflation. This was taken into account in the analysis of future expenses.

With the changes in management there is an evident need for an increase in BLM presence and monitoring. An ideal scenario would result in law enforcement patrolling the area at least two times per month during the use season. A seasonal employee devoted almost exclusively to the site would also be warranted spending at least two days a week at the site combining patrolling with site maintenance and monitoring. Higher level planning staff would also be needed at the site monthly to assess the management program and perform monitoring of impacts to resources. This results in a labor increase not including cost of living increases.

Based on feedback from partners and past partner campground hosts the \$200/month camping rate is not sufficient to attract long term devoted hosts. In order to improve management of the site a higher amount would be more appropriate that is commensurate with other BLM volunteer opportunities. This increases the campground host cost.

The indirect rate was adjusted for future scenarios.

Projected Expenses

	2016	2015	2014
Toilets (avg. 11% annual increase)	\$ 1,377.00	\$ 1,245.92	\$ 1,127.31
Reclamation (avg 37% annual increase)	\$ 13,767.77	\$ 10,077.98	\$ 7,377.07
Road Maintenance	\$ 500.00	\$ 500.00	\$ 400.00
Patrolling/Monitoring Costs	\$ 17,740.00	\$ 17,740.00	\$ 17,740.00
Campground Host (\$125/week x 20 weeks)	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00
Indirect = 7%	7%	7%	7%
Annual Cost Totals	\$ 35,884.77	\$ 32,063.90	\$ 29,144.38
Annual Cost Totals + Indirect	\$ 38,396.71	\$ 34,308.38	\$ 31,184.49

*Since the management plan will not be finalized or implemented in 2014 these expenses will not be realized.

As identified in the analysis above expense associated with the management of Cache Creek is anticipated to increase. These increases are realized in every single expense line item. It is important to note that this is not a direct result of changes in management per se, but more associated with unavoidable increases and ideal management scenarios.

Comparable Analysis

As part of the business analysis a variety of similar opportunities were researched and compared. This provides insight into not only comparative rates but also sees the range of prices and services charged for a similar experience as well as other approaches to managing gold panning activities.

In conducting this research it became evident that similar areas managed by federal land management agencies are incredibly rare. In fact only two sites managed by a federal land management agency were identified and they were both BLM sites; one in Redding, CA and the other is Point Barr managed by the Royal Gorge Field Office. It is unclear why few federal land management sites exist. It could be that given the only recent increase in the hobby of gold panning agencies have yet to respond to the increased demand but the issue is present. It could also be that Cache Creek is unique in how it relates to mining law and few similar instances occur with the same challenges.

One State Park in South Dakota was identified that charges fees for gold panning and seven private companies located throughout the United States were also identified. Two gold panning clubs that charge fees to members to use the club claims were also included.

It was discovered that a variety of fee structures exist with a wide range of services provided. The high end is \$25/five hours which included the use of equipment. The lower end is \$5.00/five days at the Redding, CA BLM site where it is assumed there are minimum services,

similar to Cache Creek. The state park charges \$15/vehicle . Gold Panning clubs researched generally charged an annual fee ranging from \$25.00 to \$69.00. This fee provides access to the claim and reclamation but other services, such as restrooms, are generally not provided.

Private Service #1	\$2.00/day
Private Service #2	\$25/five hours with equipment
Private Service #3	\$6.00/day
Private Service #4	\$20.00/day
Private Service #5	\$5.00/day
Private Service #6	\$10.00/half day
Private Service #7	\$9.95/day
State Park	\$15.00/vehicle
BLM-Redding, CA	\$5.00/five days
BLM-Point Barr	\$25/two years
Club #1	\$25.00/year
Club #2	\$69.00/year

Anticipated Use Level Analysis

In order to determine estimated revenues based on a variety of rate structures anticipated use was determined. These figures were derived from campground host logs which document the number of participants each day during the season. Anecdotal evidence from staff and campground host observations was used to fill holes where data wasn't available.

Use Level Calculations

	2011	2012*	2013	Average
# of Users/Year	2242	1424	2061	1909
# of days with data	102	119	127	116
Avg. # of Users/Day	17.6	11.9	20.2	16.6
# of Unique Users/Year**	1121	712	1030.5	954.5

*Data from 2012 is assumed to be low due to differences in data collection methods and use would be similar to other years.

**Estimated that approximately half the visitors are return visitors within the same season based on a 25% camping rate and anecdotal campground host information.

Revenue Analysis – 2015-2016

Revenue Analysis

	Private Facility-Daily	Annual Fee-Clubs	Annual Fee-Point Barr	Daily Rate-BLM	Combination-Daily/Annual
Fee	\$10.33*	\$25**	\$12.50	\$5.00	\$25/\$5
# of Users/Year	1909	N/A	N/A	1909	954.5
# annual passes***	N/A	1909	1909	N/A	954.5
Estimated Revenue	\$19,719.97	\$47,725	\$23,862.50	\$9,545	\$28,635.00
Revenue/Expense Difference, 2015	(\$14,588.41)	\$13,416.62	(\$10,445.88)	(\$24,763.38)	(\$5,673.38)

Revenue/Expense Difference, 2016	(\$18,676.74)	\$9,328.29	(\$14,534.21)	(\$28,851.71)	(\$9,761.71)
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*Based on average price of private facilities with outliers removed.

**Based on smaller clubs offering access to limited claims.

***Estimate based on # of unique users/year.

As identified in the above table almost all of the scenarios outlined result in a deficit when comparing anticipated expenses to revenue.

Public Participation

The initial concept of a permit and associated fee was first broached at a meeting held between the BLM and prospecting interests including regional and national prospecting clubs and business owners. From this meeting the BLM developed a proposed action for the management plan that included implementing a permit and fee system. An initial scoping period was initiated in March/April 2014 that presented a draft proposed action including a permit and fee program. Scoping letters and emails were sent out to those clubs and businesses who participated in the initial meeting who then also shared the information with their members and customers. The draft proposed action was also sent out to county commissioners along with local, state and federal agencies.

6 commenters provided input on the draft proposed action during the scoping period and only two of those commented directly on the fee. One commenter requested that the fee be reasonable so that families and individuals can afford to continue to recreate at the site and have both long term and short term fee options. The other commenter was opposed to the fee and felt that budget allocations should be sufficient to cover the management of the site.

The next step in the NEPA process is to send the draft Environmental Assessment out for public review. The business plan will be an attachment to this document and the public will have further opportunity to comment. This document will be revised following this comment period.

Authorities and Planning Guidance

The Bureau of Land Management (BLM) originally began collecting recreational fees for the use of public lands under the authority of the Federal Lands Policy and Management Act of 1976. The Federal Lands Recreation Enhancement Act of 2004 (REA) now provides the BLM with its current authority to collect recreational fees, and allows the agency to collect Special Recreation Permit fees for specialized uses of federal lands and waters. The act authorizes the BLM to locally retain collected recreation fees and outlines how revenues may be used, for such things as facility repair, facility maintenance, facility enhancement, interpretation, visitor information, visitor services, visitor needs assessments, signs, habitat restoration, law enforcement related to public use and recreation, and operating or capital costs directly associated with the Recreation and Visitor Services Program.

The authorities and regulations for this business plan are:

- **The Federal Land Policy and Management Act of 1976** (Public Law 94-579), contains BLM's general land use management authority over the public lands, and establishes

outdoor recreation as one of the principal uses of those lands. Section 302 (b) of FLPMA authorizes the BLM to manage the use of the public lands through permits.

- **The Federal Lands Recreation Enhancement Act of 2004** (Public Law 108-447), repealed applicable portions of the Land and Water Conservation Fund Act and replaced BLM’s authority to collect recreational fees. This law authorizes BLM to collect recreation fees at sites that meet certain requirements, allows BLM to keep the fee revenues at the local offices where they are collected, and directs how BLM will manage and utilize these revenues. Section 803 contains BLM’s authority to issue permits and charge a permit fee for gold panning use at Cache Creek. Section 803 (h) authorizes the BLM to require Special Recreation Permits and fees associated with specialized recreation uses of federal lands and waters, such as group activities, recreation events, and motorized recreational vehicle use.
- **Code of Federal Regulations, Title 43, Part 2930 (43 CFR 2930)**, contains the regulations governing BLM’s recreation permitting programs. 43 CFR, Subpart 2932.11(b) contains BLM’s authority to issue permits for use of gold panning at Cache Creek. It states that, “If BLM determines that it is necessary, based on planning decisions, resource concerns, potential user conflicts, or public health and safety, we may require you to obtain a Special Recreation Permit for – (1) Recreational use of special areas.” A “special area” is where the BLM determines that the resources require special management and control measures for their protection. Permits for gold panning at Cache Creek protect recreation experiences, riparian ecosystems, fisheries, wildlife, and cultural and historic resources.
- **BLM Recreation Permit Administration Handbook (H-2930-1)**, explains how the BLM implements its recreation permit and fee program. Chapter 1, page 27, sections (e) and (f) specifically address Special Recreation Permit fees for Special Areas and application fees for Special Recreation Permits.

This business plan has also been prepared pursuant to all applicable BLM recreation fee program policies and guidance, including:

- BLM Recreation Fee Proposals Step-by-Step Review & Approval Process, March 22, 2007
- BLM Instruction Memorandum 2007-028: *Federal Lands Recreation Enhancement Act Final Public Participation Policy for Certain Recreation Fee Adjustments and Proposed New Fee Sites/Areas*
- BLM Colorado Instruction Memorandum CO 2012-001: *BLM Colorado Recreation Fee Proposals, Step-by-Step Review and Approval Process and Checklist for Resource Advisory Committee Fee Review*

The BLM strives to manage recreation and visitor services to serve diverse outdoor recreation demands while helping to maintain sustainable setting conditions needed to conserve public lands, so the visitor’s desired recreation choices remain available.