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U.S. Department of the Interior
Bureau of Land Management
Kremmling Field Office
P.O. Box 68
Kremmling, CO 80459

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-120-2014-0020-EA

PROJECT NAME: Gore Canyon Whitewater Park at Pumphouse

LEGAL DESCRIPTION: T. 1S., R. 82W., 6th P.M., Section 12

KREMMLING FIELD OFFICE, KREMMLING, COLORADO

CASEFILE/PROJECT NUMBER: COC-76342

APPLICANT: Grand County Board of Commissioners, Colorado

PURPOSE AND NEED FOR THE ACTION: The purpose of the project is to provide the opportunity to provide access across BLM lands for a whitewater park. The need for the project is established by BLM's responsibility under FLPMA to respond to a request for a right-of-way grant.

Grand County Board of County Commissioners has applied to construct a whitewater park at Pumphouse recreation site. This whitewater feature would protect and enhance a variety of non-motorized boating opportunities for novices and experts in and on the Upper Colorado River.

The project is needed to provide a reasonable recreational experience as allowed by Colorado law; and in doing so, will: 1). Implement an important part of the Colorado River Cooperative Agreement (CRCA) among Denver Water and over thirty west slope entities that provides for the development of a RICD below Gore Canyon; and 2). Provide permanent protection for flows in support of the Outstanding Remarkable Values (ORV) for Recreational Floatboating in the Upper Colorado River as part of the BLM Resource Management Plan in support of the Wild &Scenic Rivers Stakeholders Group Alternative Management Plan

Background/Introduction/Issues and Concerns:
Colorado Department of Public Health and Environment (CDPHE) would be notified by application of this 404 permit. CDPHE requires review for 401 Water Quality standards to ensure the river corridor would be respected during construction. The project area is located in the CDPHE region 12, stream segment 3, mainstem of Upper Colorado River from outlet of Lake Granby to confluence with Roaring Fork River and is Classified as Aquatic Life Cold 1, Recreation E, Water Supply and Agriculture. Best Management Practices are specified including temporary and permanent erosion control.

Expected public benefits include providing an additional positive social effect and recreational experience for the 60,000 - 70,000 average annual visitors that frequent Pumphouse Recreational Area. The feature can be used both as a park and play amenity for both beginner and experienced boaters. As well, the feature provides

an opportunity for beginners to practice and/or receive instruction prior to boating down river. The feature, with its pending water right and flows, will provide a unique boater experience from early spring through late fall.

It is expected to see the heaviest use from residents within Grand, Garfield, Routt, Eagle and Summit counties. Organized events have potential to draw people worldwide. The feature would offer expanded seasonal river-based recreation opportunities due to the extended flow season of the Upper Colorado River provided by the water right, creating a draw for freestyle kayakers, standup paddle boarders, river surfers, river boarders, boogie boarders and other non-motorized boating.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action:

Grand County Board of County Commissioners is proposing to construct a Gore Canyon Whitewater Park located upstream of boat launch 2 at Pumphouse recreation site spanning the full width of the river. The feature is proposed to be constructed in accordance with the approved designs for Recreational In-Channel Diversion (RICD). The feature consists of engineered designed boulders and block-like concrete objects placed across the stream channel that are not visible at normal flows and allow for fish passage at all flow rates.
The engineering plans and designs are in the case file.

Construction timing is proposed in late fall and early winter in order to take advantage of low flows, after the brown trout spawn, as well as minimize impacts to recreational use. Construction mobilization is proposed and anticipated October 1, 2014. Commencement of construction is proposed October 15, 2014 through January 2015.

Preferred Alternative:

Based on the opportunities and constraints matrix (Table 1, attached) developed to determine feasibility of each site and both temporary and permanent anticipated environmental impacts related to the construction, staging, and access of in channel whitewater features, the Preferred Alternative was determined to be the most practicable least environmentally damaging location, which best meet the project purpose and need for Grand County.

Selection of this alternative and location was based on the presence of pre-existing human impacts to the site, existing development, ongoing human presence, reduced impact on natural habitats, and maximization of benefit to the broadest spectrum of human use. The Pumphouse Recreation Area is currently a concentrated use area for whitewater kayaking, drift boating, stand up paddle boarding, and fishing recreationalists.

The Preferred Alternative at the Pumphouse Recreation Area is located approximately 100 ft upstream of Boat Launch 2. Environmental impacts associated with the construction of whitewater features upstream of Launch 2 were considered to be the least impactful compared to other alternative locations and facility types. Environmental impacts associated with the construction of this project, at all locations, include temporary access and staging, construction, maintenance, placement and removal of diversions, placement of suitable fill materials below the plane of the OHWL, and bank stabilization activities. Impacts described herein are identical in nature to all other proposed locations; however, their magnitude is minimized at this project location. This site likely has the fewest challenges and potential to benefit the widest range of users. This location is expected to best extend the whitewater season with hydraulic modifications to the channel, creating a destination for general users, whitewater enthusiasts and bank fisherpersons.

The Preferred Alternative has direct proximity to existing facilities and use benefits as it is adjacent to a developed boat ramp, parking, bathrooms, picnic area and campground; riparian zone and potential impacts are minimized. The channel hydraulics are satisfactory with the proposed condition. Furthermore, this site has a pending RICD water right applied for. The hydrology of the site maximizes the benefit to Grand County in supplying the longest season available in the County for river-based recreation.

Construction staging areas are depicted on the Care of Water Plan (Sheet C1) and Details (Sheet R5) and are located on the north and south side of the construction area. Both areas incorporate a contained oiling area with spill cleanup and a posted cleanup plan. In addition, both staging areas would contain stage pumps with spill containment.

Temporary equipment access areas are also depicted on Sheet C1 and are detailed on Sheet R-6. Each area provides access from the construction staging area to the river and incorporates appropriate Best Management Practices (BMP's). Upon construction completion, the access areas would become part of the bank terracing as depicted on the plans.

In order for contractors and staff to access the site during the construction months (October-January), winter maintenance by the contractor is being requested as part of this Application. Grand County would require that the contractor obtain proper required BLM bonding and insurance to cover said maintenance, along with required bonding and insurance for the overall construction project on BLM lands. This would be made part of the bid documents.

The channel depths at the project require that in-channel construction be timed with the lowest flow periods. The active construction areas would be isolated by turbidity curtains and/or aqua dams or equivalent. Temporary increases in turbidity may be associated with track equipment in the wet channel while setting and removing water control features and other BMPs. Track equipment may also excavate native channel alluvium and place natural boulders in the wet. No discharge of wet cement or cement laden turbid waters is permitted in the flowing channel. All isolated waters would be pumped and filtered before discharging into the main channel.

The construction activities associated with this project would require extensive Care of Water practices. It is anticipated that a water filled diversion feature or similar device would be used to isolate the work area from river flows. Alluvial coffer dams are not intended to be used as the primary diversion method. Any water pumped out of the work area during construction would be filtered prior to its return to the channel. Other Best Management Practices such as Impermeable Turbidity Curtains, Silt Fences, Erosion Control Logs, Jute Matting and Construction Sequencing would be used. Return waters would be routed to existing, stable drainages and would be monitored and controlled to prevent any erosion or sedimentation.

Equipment would be allowed to operate in the wet channels. Equipment operating in or adjacent to any wet channels would be free of any fluid leaks and in excellent operating condition. Biodegradable fluids would be utilized when feasible. No equipment would be left unattended at any time in any wet channel or below the Ordinary High Water Line. Any and all fueling and oiling of equipment would be in a designated upland location, with adequate BMPs to contain any potential spill, and would not be allowed in or adjacent to any channel. Oil booms would be installed at the downstream end of the Project Limits and functioning at all times while equipment is operating in the active channel or below the ordinary high water line.

A Spill Cleanup Plan would be posted and available at all times on site for all work areas prior to any construction activities and would include coordination with local emergency response agencies. A release of any chemical, oil, petroleum product, sewage, etc., which may enter waters of the State of Colorado (which

include surface water, ground water and dry gullies or storm sewers leading to surface water) would be reported to the Colorado Department of Public Health and Environment immediately (25-8-601 CRS).

The proposed whitewater feature includes a boulder grade control structure and pre-cast concrete wave features within the steam channel. Although this is considered a structural change to this cross-section in the stream channel, there are no long term negative environmental effects associated with the project. No significant fluvial geomorphic changes are expected due to the proposed improvements. The river recreation enhancements would not alter hydrodynamics in the reach beyond local impacts immediately surrounding the feature.

Existing roads, foot paths, gravel parking lots, improved boat launches, restrooms, camping sites, fencing, and maintenance facilities are located within the adjacent to the project site within the Pumphouse Recreation Area. In addition to these physical features currently located at the site, the riparian areas located within the limits of disturbance of the project are primarily populated by scattered coyote wouldows. Upland areas within the limits of disturbance are dominated by Rocky Mountain Juniper, brush, and Ponderosa pine. Existing Ponderosa pine on the north and south side of the river channel would be avoided and would not be disturbed; they particularly a key element of the project's bank terracing on the south side of the channel that provide shade for the staging area and viewing platform for users and spectators.

Anticipated temporary environmental impacts at this site include temporary construction access through a predominantly upland bank with impacts to riparian vegetation anticipated to be less than 0.025 acres encompassing construction activities on both sides of the bank. Permanent impacts include the conversion of the 0.025 acre riparian area to stabilized boulder bank for the purposes of ingress egress for recreational uses and spectator seating.

All discharges of materials are below the Ordinary High Water Mark, in upland areas or within the limits of the existing banks. No wetland soils or the potential for hydric soil development were observed within the limits of disturbance at the site. However, approximately 0.025 acres of sparse riparian bank would incur temporary construction impacts and would be permanently stabilized with imbricated boulder necessary to construct the river recreation enhancement features. The Ordinary High Water Line (OHWL) was delineated using an existing conditions hydraulic model of the project reach and verified in the field using geomorphic indicators. The 1.5 year return period flood of 2,311 cfs was determined using the Weibull Plotting Position formula for Bulletin

Physical design specifications of the feature, including details, cross-sections, care of water plans, grading and BMP's, are included in the attached engineered plans and designs. The design specifications include:

Bank Terracing: Encroached riparian bank material is proposed to be replaced with natural boulders. The bank terracing would take place on approximately 50 feet on the north and approximately 70 feet on the south side of the channel. Bank terrace fill material is proposed to be comprised of natural boulders with gravel and filter fabric bedding. Bank terracing on the south side of the channel would also function as a staging area and viewing platform for users and spectators.

Grade Control Structure: A grade control structure is proposed to be constructed in the main channel. The material would consist of native boulder and cobble material as well as new imported boulders.

Wave Features: The Wave Features are proposed to be integrated into the grade control structure. The Wave Features are pre-cast concrete with reinforcing rebar material and backfilled with ready mix. No wet concrete would be directly placed in flowing water. All areas constructed with cement would be isolated from any flowing waters and materials would be contained and properly cured or disposed of. Use of the pre-cast

feature construction method allows for design of a more stable feature to be constructed in the river than can be constructed with native or imported boulders. Use of the pre-cast features greatly reduces the potential for feature failure and associated long term in-channel maintenance.

Random Boulders: Random boulders are proposed to be placed along both shorelines downstream of the grade control structure to create near bank eddies for upstream navigation of small water craft.
(d) the term of years needed;

Grand County requests that the term of the right-of-way permit be perpetual.

Alternative 1 No-Action:

Alternative 1 describes the No-Action future without project condition. Grand County has invested heavily into obtaining conditional water rights to protect in channel recreation from future water development. The water rights are conditional on features that would capture and control and put to beneficial use the waters of the State. Alternative 1 No-Action does not provide the features, required by Colorado State Statutes, to capture and control the flow of the river and to put to beneficial use that flow. Alternative 1 No-Action does not provide a feature for appropriation of water rights. Alternative 1 No-Action does not protect and enhance long-term river-based non-motorized boating opportunities for Grand County residents and tourists. Alternative 1 No-Action does not protect the resource of Colorado River. Alternative 1 No-Action does not have temporary impacts associated with construction activities.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

Numerous sites were evaluated for the installation of in channel whitewater features within the banks and channel of the Colorado River through Grand County. All sites require features to be built out of imported boulder, native alluvium, and precast concrete that extend across the entire width of the channel. A site reconnaissance analysis was conducted within the County downstream of the Blue River to determine opportunities and constraints associated with each site and subsequently the site's ability to meet the expressed purpose and need of the project. The following list of five (5) sites was reviewed and provided in Table 1 (attached):

- Alternative 2a The County Road 11 Bridge Crossing at Radium;
- Alternative 2b The Radium boat launch;
- Alternative 2c Upstream of Pumphouse Launch 1;
- Alternative 2e Inspiration Point
- Alternative 3

The following list of opportunities and constraints were used to evaluate the appropriateness of each selected potential project site described in the above mentioned Alternatives:

- Land ownership and partnership opportunities;
- Appropriate concentrated use;
- Proximity to commercial areas;
- Management partnering opportunities;
- Available access;
- Competing uses;
- Regional draw;

- Parking capacity;
- Existing facilities;
- 100yr Floodplain complications;
- Appropriate channel hydraulics;
- Ability for feature to multi function;
- Existing disturbances;
- Habitat sensitivity;
- Implications to reach morphology;
- Duration of seasonal use;
- Disturbance footprint;
- Construction access; and
- Maintenance requirements.
- Water right appropriated and applied for

In addition to the opportunities and constraints associated with each site, environmental impacts were also evaluated in order to determine the least environmentally damaging most practicable project alternative that meets the stated purpose and need. The general configuration of in channel whitewater features was assumed to be similar between sites and therefore the impact of discharge was considered similar. The permanent environmental impact of whitewater features was assumed to be insignificant at each site; however, access to that feature may have additional impacts. Therefore, the existing site conditions dictated the potential for impact and the prioritization of one site over another. In general the temporary environmental impacts related to construction, staging, and access varied between in-channel project locations also based on the existing site conditions.

All sites would require construction of in-channel boulder ramps and wings as well as precast concrete pillars to accelerate flows to super critical velocities necessary to generate a hydraulic jump for the purposes of river recreation enhancements. In addition, terraced boulder seating would also be developed to locally stabilize banks and provide spectator seating opportunities. Impacts, to waters of the US, associated with the construction of the spectator seating also varied from site to site depending on the degree of entrenchment observed at each site. For sites with adjoining low lying floodplains, impacts to riparian areas were determined to be greater due to the extent of the seating area to be constructed within the OHWL. All potential sites displayed evidence of underfit channel scenarios resulting from ongoing hydromodification in the basin.

<u>Alternative 2a County Road 11 Bridge Crossing at Radium:</u>

The County Road 11 Bridge crossing of the Colorado River at Radium was evaluated for opportunities and constrains as well as anticipated environmental impacts resulting from the construction of river recreation enhancement features. The results of this analysis showed this location to have fewer opportunities coupled with increased constraints as compared to other locations. Specific challenge associated with this site included no water rights applied for or appropriated, decreased land ownership and partnership opportunities, diminished proximity to commercial areas, increased competing uses, reduced regional draw, increased 100yr floodplain complications, inappropriate channel hydraulics, increased implications to reach morphology, larger disturbance footprint, reduced construction access, and greater maintenance requirements.

Environmental impacts identified at the County Road 11 bridge crossing were also determined to be challenging. This site sits between Lower Gore Canyon and Red Gorge, at the downstream end of a braided reach. Hydraulic gradient through the reach is low and a deep contraction scour hole has developed upstream of the county bridge. These two factors would necessitate construction of whitewater features with a significant backwater on the channel to produce energy losses consistent with the purpose and need from the County.

Furthermore, a large low lying riparian area to the adjacent to the river channel would incur temporary construction impacts as well as long term impacts related to the extension of the river feature to the southeast onto the relatively flat floodplain.

Alternative 2a presented construction access benefits as both river banks could be accessed for construction; however, the existing channel hydraulics would be significantly changed to achieve the stated purpose and need. This site had a relative score of 68 as presented in Table 1.

Alternative 2b Radium Boat Launch:

A constriction of the river channel just upstream of the Radium boat launch was also evaluated for feasibility and environmental impacts related to the construction of river recreation enhancements. This site presented many similar challenges to the County Road 11 Bridge crossing at Radium. Specific challenges associated with the site include no water rights applied for or appropriated, limited land ownership and partnership opportunities, reduced proximity to commercial areas, increased competing uses, diminished regional draw, minimal existing disturbances, sensitive habitats, implications to reach morphology, disturbance footprint, construction access, and increased maintenance requirements. For these reasons, it was determined that this site did not maximize benefits to the County and subsequently did not fully meet the purpose and need of the project to the same degree as the selected alternative location.

Environmental impacts at the Radium boat launch hinged primarily on impacts to the adjoining riparian wetlands. This site is located on the tail end of a riffle sequence on a sweeping left hand bend in the channel. Construction of the Union Pacific railroad along the right bank has hardened the bank, limiting lateral migration of the channel. Low lying floodplain along the left bank up past the head of the riffle could incur significant temporary and permanent impacts resulting from the construction of river recreation enhancement features at this location. Temporary impacts at this site would be greater than all other sites evaluated due to construction access and staging opportunities. Access to the location would require the construction of a road through the riparian wetland. Staging at the site would also require temporary fills within the adjoining riparian wetland. Additionally, construction of a river recreation enhancement feature at this location would result in increased overbank flooding in the wetland, potentially enhancing erosion and sedimentation rates and altering both abiotic and biotic river function.

Alternative 2b presented existing facilities and use benefits as it is a developed boat ramp and picnic area; however, the significant riparian zone posed greater habitat sensitivity and the railroad proximity posed access challenges. This site had a relative score of 68 as presented in Table 1.

Alternative 2c Upstream of Pumphouse Launch 1:

The site is approximately 1,000 feet upstream of the upper most boat launch (Launch 1) and was evaluated and determined to have challenges associated with no water rights applied for or appropriated, appropriate concentrated use, reduced proximity to commercial areas, competing uses, existing disturbances, habitat sensitivity, disturbance footprint, and construction access. Though this site offered many advantages, constraints associated with the location upstream of Launch 1 led to a determination of lesser value.

Environmental impacts upstream of Launch 1 were primarily related to temporary construction access and staging as well as long term access to the feature. This site sits downstream of Gore Canyon within a relatively steep pool riffle sequence. Construction of a river recreation enhancement feature midway up the riffle would require the construction of an approximately 1,000 ft long access road to be built on river left through a well-developed low lying riparian wetland. Staging at the site would also create significant temporary impacts to the riparian zone on river right. Because this location does not currently have access other than an unimproved foot

path and it sits at the mouth of Gore Canyons Class V-VI rapids, minimal shore traffic affects the quality of the existing riparian habitats.

Alternative 2c has fair proximity to existing facilities and use benefits as it is upstream of a developed boat ramp, parking, bathrooms and picnic area; however, the significant riparian zone posed greater habitat sensitivity. This site had a relative score of 70 as presented in Table 1.

Alternative 2e Inspiration Point:

Alternative 2e at the Inspiration Point is located approximately 2,000 ft upstream of Pumphouse Boat Launch 1. Similar to all potential in-channel sites, Alternative 2e was evaluated for opportunities and constraints associated with the construction of whitewater features. Challenges identified at this site included reduced proximity to commercial areas, restricted parking capacity, no existing facilities and significant construction costs mostly associated with improving the very steep existing 4WD drive road that accesses the site and installing parking and facilities in existing disturbed areas.

Environmental impacts associated with the construction of whitewater features at Inspiration Point were considered to be the most satisfactory in conforming with the natural morphology of the channel and the existing hydraulics. Environmental impacts associated with the construction of this project, at all locations, include temporary access and staging, construction, maintenance, placement and removal of diversions, placement of suitable fill materials below the plane of the OHWL, and bank stabilization activities. Impacts described herein are identical in nature to all other proposed locations; however, slightly more challenging and perhaps greater temporary impacts associated with construction, because of the depth of the channel. This location is expected to best extend the whitewater season with hydraulic modifications to the channel, creating a destination for general users, whitewater enthusiasts and bank fisherpersons.

Alternative 2e has most satisfactory existing conditions and a whitewater feature at this location would have the least competing uses. The existing channel hydraulics are most satisfactory with the proposed condition. RICD water rights have been applied for at this site. However, there is expected to be greater upland environmental impacts with Alternative 2e because of the anticipated improvement of parking area, access road, and facilities. The cost benefit of this site was considered lesser and extremely more challenging than Alternative 2d. This site had a relative score of 78 as presented in Table 1.

Alternative 3 off Channel Whitewater Features:

Alternative 3, off-channel whitewater features were evaluated to determine associated impacts. Alternative 3 was assumed to meet the expressed purpose and need of Grand County. It was determined that though this alternative provides benefit, several fatal flaws create significant long term environmental impacts. The concept is that a whitewater channel parallel to the Colorado River could be constructed. This course would require a diversion structure of greater magnitude than an in-channel whitewater feature, constructed in the main channel in order to divert flows out of the main channel. This approach is considered wasteful in terms of land use and financing, and would unnecessarily degrade the river environment which it runs parallel to. Furthermore, water rights are not applied for or appropriated for this type of structure.

Alternative Name:	**Alternative 2: In-Channel Whitewater Features**
Potential Use Description:	The Proposed Alternative of in-channel river recreation enhancements upstream of Launch 2 at the Pumphouse Recreation Area was determined based on a thorough analysis of the three alternatives and their ability to meet the stated purpose and need for the project. Furthermore each potential in-channel site was evaluated for opportunities and constraints and associated environmental impacts. Construction of the in-channel alternative would allow for two separate whitewater feature, one on river left and one on river right, that would generate eddies and recirculating hydraulics. Terraced banks would also be developed to provide for bank stabilization, concentrated access, spectator seating, and fishing opportunities. The adjacent Pumphouse Recreation Area would provide existing infrastructure to easily expand for the increased demand associated with a facility of this type. The site currently provides parking, restrooms, river access, boat launches, and camping.
Measures:	• Create RICD features upstream of Launch 2 designed to facilitate river function for specific flow rates anticipated in this reach of the Upper Colorado River. • Create a take-out eddy and bank access along river left. • Terrace the existing river left bank for stability, passive viewing, and access. • Revegetate disturbed areas downstream with native riparian vegetation. • Provide drift boat passage. • Provide for river function and fish passage at the site.
Stakeholder Issues:	• This Alternative would allow Grand County to realize its objective to obtain Recreational In-Channel Diversion (RICD) water rights on the Colorado River for the purpose of enhancing recreational opportunities in the County and providing for numerous incidental environmental benefits.
Environmental Impacts:	Anticipated environmental impacts at this site include temporary construction access through a predominantly upland bank with impacts to riparian vegetation anticipated to be less than 0.025 acres encompassing construction activities on both sides of the bank. Permanent impacts include the conversion of the 0.025 acre riparian area to stabilized boulder bank for the purposes of ingress egress for recreational uses, stabilization, and spectator seating. Fill materials to be placed in the channel below the plane of the OHWL are anticipated to include 3-6 ft boulder, precast concrete pillars, filter fabric, and native alluvium. Precast concrete pillars will be footered to a pre-determined elevation as shown of the Construction Drawings. Temporary impacts will include the establishment of a phased river diversion necessary to dewater approximately one half of the channel for the two subsequent phases of construction. Furthermore tracked equipment may need to operate in the wet periodically for the placement of alluvial materials related to the coffer dam.
Social Impacts:	Social issues would improve by creating a central location where the residents and tourists of Grand County can identify with the Colorado River. This project would mainly benefit water craft users however, bank fisher persons would also benefit from designated access and bank enhancements. General users would also benefit by being able to access and experience the riparian environment.
Economic Impacts:	Whitewater destinations have been recognized as economic boons at other Towns throughout Colorado and Grand County chosen what they believe to be the best Alternative and location to host this type of facility. Furthermore, freestyle river recreation spectator opportunities will be greatly enhanced at this location with the potential to hold major events at this site. Whitewater rafting, kayaking, and stand up paddle boarding are very

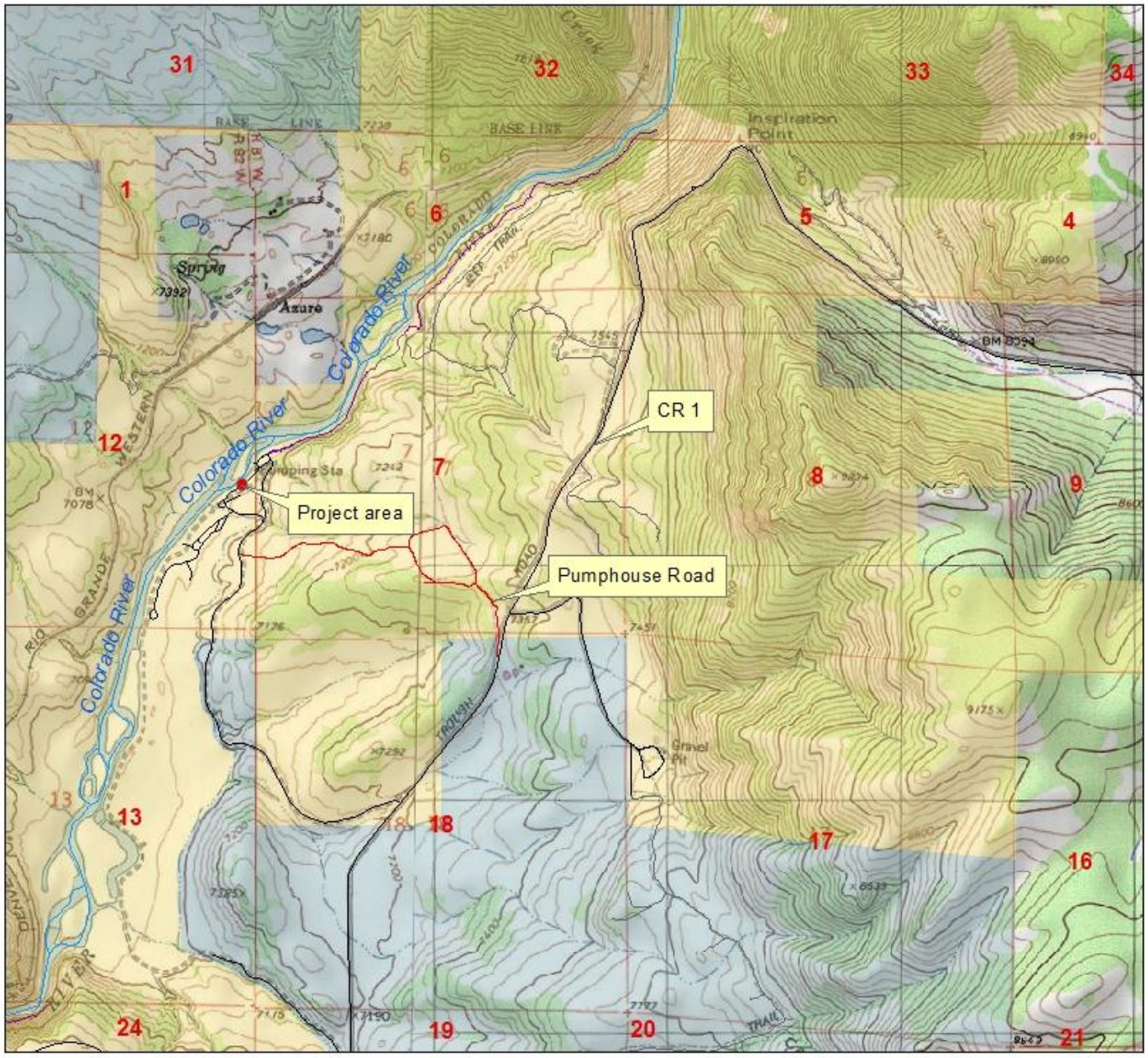
	important to the regional economy and the establishment of a RICD water right at the whitewater feature will protect and enhance these interests for future generation.

Alternative Name:	**Alternative 3: Off-Channel Whitewater Features**
Potential Use Description:	Off channel whitewater features would be installed in a newly created channel. This option would create an artificial river bed which could be shaped specifically for whitewater recreation. This option would cause construction disturbance associated with a permanent in-channel diversion and associated dewatering of a section of the main channel.
Measures:	• Install grade control in the Colorado River for diversion head • Construct head gate from the Colorado River • Construct a new side channel on unknown adjoining vacant lot • Construct pedestrian and spectator amenities • Install signage • Install return channel • Obtain water rights • Accommodate drift boat passage
Stakeholder Issues:	Lands adjacent to the river channel would need to be purchased and developed for this purpose. River navigation would be impacted.
Environmental Impacts:	This option has temporary impacts associated with construction activities to the existing channel of the Colorado River. The impacts to the existing channel would be construction of a grade control structure, head gate and a return channel. Long-term impacts to the channel could be significant with large diversion and potential drying of the channel for up to 700ft. Discharge impacts would be greater than in-channel options evaluated in Alternatives 2 because a river wide grade control structure would be need to be constructed to develop adequate head for the lower gradient of the off channel course.
Social Impacts:	Social issues could be improved through this Alternative by creating a central location where an adjacent municipality in Grand County could be identified with freestyle whitewater recreation that would be established by this Alternative. Bank fisher persons could be unaffected by the project through the dewatering of the main channel. Drift boat passage would be required over the grade control structure.
Economic Impacts:	Whitewater destinations have been recognized as economic boons at other Towns throughout Colorado and Glenwood has a potential location for this type of venue. Furthermore, spectators could be greatly facilitated at this location and large events could be staged here.

Design Features of the Proposed Action:

GC Whitewater Park ROW
COC-76342

T. 1S R. 82W



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Legend

Land Status

Land Status

- Bureau of Land Mgt
- Division of Wildlife
- National Park
- US Forest Service
- National Wildlife Refuge
- Private
- State
- State Forest

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Annie Sperandio, 1-14-2043
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CONFORMANCE WITH LAND USE PLAN AND OTHER LAWS, REGULATIONS, AND POLICIES:

The Proposed Action is in conformance with the Record of Decision for the Kremmling Resource Management Plan approved in 1984 and updated in 1999. Which states: "Provide the opportunity to utilize public lands for development of facilities which benefit the public, while considering environmental and agency concerns".

This Environmental Analysis fulfills the 1969 National Environmental Policy Act (NEPA) requirement for site-specific analysis. The Proposed Action is in accordance with the following laws and/or regulations, other plans, and is consistent with Federal, State, and local laws, regulations:

- Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.)
- Endangered Species Act of 1973 as amended
- Clean Water Act Section 303d
- Section 106 of the National Historic Preservation Act of 1966 as amended
- Executive Order 13186 – Responsibilities of Federal Agencies to Protect Migratory Birds

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

The CEQ Regulations state that NEPA documents "must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail" (40 CFR 1500.1(b)). While many issues may arise during scoping, not all of the issues raised warrant analysis in an environmental assessment (EA). Issues will be analyzed if: 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) if the issue is associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of the impacts. Table 2 lists the resources considered and the determination as to whether they require additional analysis.

CUMULATIVE IMPACTS SUMMARY: For the purpose of this EA, the general geographic area for cumulative impact analysis is at the Pumphouse recreation site.
The time line for the cumulative impact analysis is 30 years based on the term of the ROW grant.

Table 2. Resources and Determination of Need for Further Analysis

Determination[1]	Resource	Rationale for Determination
Physical Resources		
	Air Quality	
	Geology and Minerals	
	Soil Resources*	

Determination[1]	Resource	Rationale for Determination
	Surface and Ground Water Quality*	
Biological Resources		
	Wetlands and Riparian Zones*	
	Vegetation*	
	Invasive, Non-native Species	
	Special Status Animal Species*	
	Special Status Plant Species*	
	Migratory Birds	
	Aquatic Wildlife*	
	Terrestrial Wildlife*	
Heritage Resources and the Human Environment		
	Cultural Resources	
	Paleontological Resources	
	Native American Religious Concerns	
	Visual Resources	
	Hazardous or Solid Wastes	
	Fire Management	
	Social and Economic Conditions	
	Environmental Justice	According to the most recent Economic Census Bureau statistics (2009), there are minority and low income communities within the Kremmling Planning Area. There would be no direct impacts to these populations.
	Cadastral	
Resource Uses		
	Forest Management	
	Rangeland Management	
	Floodplains, Hydrology, and Water Rights	
	Realty Authorizations	There are no ROW authorizations in the proposed project area.

Determination[1]	Resource	Rationale for Determination
	Recreation	
	Access and Transportation	
	Prime and Unique Farmlands	
Special Designations		
	Areas of Critical Environmental Concern	
	Wilderness and Lands with Wilderness Characteristics	
	Wild and Scenic Rivers	
	Scenic Byways	

[1] NP = Not present in the area impacted by the Proposed Action or Alternatives. NI = Present, but not affected to a degree that detailed analysis is required. PI = Present with potential for impact analyzed in detail in the EA.
* Public Land Health Standard

If NP or NI are used in the table above, please delete your section below. If PI is used then please complete your section below.

SOIL RESOURCES

Affected Environment:
Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:
Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:
Cumulative Effects: None

Mitigation: None

Finding on the Public Land Health Standard #1 for Upland Soils:

WETLANDS AND RIPARIAN ZONES

Affected Environment:
Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:
Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:
Cumulative Effects:

Mitigation: None

Finding on the Public Land Health Standard #2 for Riparian Systems

VEGETATION

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

Finding on the Public Land Health Standard #3 for Plant and Animal Communities:

INVASIVE, NON-NATIVE SPECIES

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

SPECIAL STATUS ANIMAL SPECIES

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

Finding on the Public Land Health Standard #4 for Special Status Species:

SPECIAL STATUS PLANT SPECIES

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

Finding on the Public Land Health Standard #4 for Special Status Species:

MIGRATORY BIRDS

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

AQUATIC WILDLIFE

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

Finding on the Public Land Health Standard #3 for Plant and Animal Communities:

TERRESTRIAL WILDLIFE

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

Finding on the Public Land Health Standard #3 for Plant and Animal Communities:

CULTURAL RESOURCES

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

PALEONTOLOGICAL RESOURCES

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

VISUAL RESOURCES

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

FIRE MANAGEMENT

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

SOCIAL AND ECONOMIC CONDITIONS

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

RECREATION

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

ACCESS AND TRANSPORTATION

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:
Direct and Indirect Effects:

Cumulative Effects:

Mitigation:

CULTURAL RESOURCES

Affected Environment:

Environmental Consequences, Proposed Action:

Environmental Consequences No Action:

Mitigation:

MIGRATORY BIRDS

Affected Environment:

Environmental Consequences of the Proposed Action:
Direct and Indirect Effects:

Cumulative Effects:

Environmental Consequences of the No Action Alternative:

Direct and Indirect Effects:

Cumulative Effects:

Mitigation: None.

ACCESS/TRANSPORTATION

Affected Environment:

Environmental Consequences, Proposed Action:

Environmental Consequences, No Action Alternative:

Mitigation: None.

Past, Present, and Reasonably Foreseeable Action:

In the present and future actions, the Proposed Action would authorize a whitewater park.

The No Action Alternative could have cumulative impacts

PERSONS / AGENCIES CONSULTED: See Appendix 2 for Tribal List.

INTERDISCIPLINARY REVIEW: See IDT-RRC in Appendix 1.

APPENDICES:

Appendix 1 – Interdisciplinary Team Analysis Review Record and Checklist
Appendix 2 – Native American Tribal List

ATTACHMENTS:

1) Stipulations
2) Seed list

Appendix 1

INTERDISCIPLINARY TEAM ANALYSIS REVIEW RECORD AND CHECKLIST:

Project Title: Gore Canyon Whitewater Park
Project Leader: Annie Sperandio
Date Proposal Received: (Only for external proposals)
Date Submitted for Comment:
Due Date for Comments:

Need for a field Exam: (If so, schedule a date/time):

Scoping Needs/Interested or Affected Publics: (Identify public scoping needs)

Consultation/Permit Requirements:

Consultation	**Date Initiated**	**Date Completed**	**Responsible Specialist/ Contractor**	**Comments**
Cultural/Archeological Clearance/SHPO				
Native American				
T&E Species/FWS				
Permits Needed (i.e. Air or Water)				

(NP) = Not Present
(NI) = Resource/Use Present but Not Impacted
(PI) = Potentially Impacted and Brought Forward for Analysis.

NPNI PI	**Discipline/Name**	**Date Review Comp.**	**Initials**	**Review Comments** (required for Critical Element NIs, and for elements that require a finding but are not carried forward for analysis.)
	Areas of Critical Environmental Concern			
	Cultural Resources **Wyatt**			
	Environmental Justice **Cassel**			
	Farmlands, Prime and Unique **Belcher**			
	Floodplains **Belcher**			
	Invasive, Non-native Species Hughes			
	Migratory Birds			
	Native American Religious Concerns **Wyatt**			
	T/E, and Sensitive Species (Finding on Standard 4)			

NP	Wastes, Hazardous and Solid **Elliott**			
	Water Quality, Surface and Ground (Finding on Standard 5) **Belcher**			
	Wetlands & Riparian Zones (Finding on Standard 2) **Belcher**			
NP	Wild and Scenic Rivers **Schechter**			
	Wilderness Lands with Wilderness Charactieristics **Monkouski**			
	Soils (Finding on Standard 1) **Belcher**			
	Vegetation **Tibbs Landing** (Finding on Standard 3) **K. Belcher**			
	Wildlife, Aquatic (Finding on Standard 3)			
	Wildlife, Terrestrial (Finding on Standard 3)			
	Access/Transportation **Monkouski**			
NP	Forest Management **K. Belcher**			
NI	Geology and Minerals **Elliott**			
	Fire **Thompson**			
	Hydrology/Water Rights **Belcher**			
	Paleontology **Wyatt**			
	Noise **Monkouski**			
	Range Management **Tibbs Landing**			
NP	Lands/ Realty Authorizations **Sperandio**	1-21-2014	AS	There are no ROW authorizations in the proposed project area.
	Recreation **Monkouski Schechter**			
	Socio-Economics **Cassel**			
	Visual Resources **Schechter**			
	Cumulative Impact Summary			
	P&E Coordinator **Cassel**			

Appendix 2

NATIVE AMERICAN TRIBES CONTACTED:

Mike Lajeunesse, Chairman
Shoshone Business Council
Shoshone Tribe
P O Box 538
Ft. Washakie, WY 82514

Mr. Wilford Ferris
Tribal Historic Preservation Officer
Shoshone Tribe, Cultural Center
P.O. Box 538
Fort Washakie, WY 82514

Gary Hayes, Chairman
Ute Mountain Ute Tribe
P O Box JJ
Towoac, CO 81334

Mr. Terry Knight, Sr., THPO Director
Ute Mountain Ute Tribe
P O Box 468
Towaoc, CO 81334

Jim Shakespeare, Chairman
Northern Arapaho Business Council
P O Box 396
Fort Washakie, WY 82514

Darlene Conrad, THPO Director
Northern Arapaho Tribe
P O Box 396
Fort Washakie, WY 82514

Ernest House, Jr., Executive Secretary
Colorado Commissioner of Indian Affairs
130 State Capitol
Denver, Colorado 80203

Robert Goggles, NAGPRA Representative
Northern Arapaho Tribe
328 Seventeen Mile Road
Arapaho, WY 82510

Jimmy Newton, Chairman
Southern Ute Indian Tribe
P O Box 737
Ignacio, CO 81137

Lena Atencio, Director
Natural Resources Department, #65
P.O. Box 737
Ignacio, CO 81137

Irene Cuch, Chairman
Uintah & Ouray Tribal Business Committee
P O Box 190
Ft. Duchesne, UT 84026

Betsy Chapoose, Director
Cultural Rights & Protection Specialist
Uintah & Ouray Tribe
P O Box 190
Fort Duchesne, UT 84026

Alden Naranjo, NAGPRA Coordinator
Cultural Preservation Department
P.O. Box 737 Mail Stop 73
Ignacio, CO 81137

STIPULATIONS
FOR
Gore Canyon Whitewater Park
COC-76342

Mitigation Measures:

Design Features

Standard Stipulations

1. The holder would contact the authorized officer at least 5(five) days prior to the anticipated start of construction and/or any surface disturbing activities. The authorized officer may require and schedule a preconstruction conference with the holder prior to the holder's commencing construction and/or surface disturbing activities on the right-of-way. The holder and/or his representative would attend this conference. The holder's contractor, or agents involved with construction and/or any surface disturbing activities associated with the right-of-way, would also attend this conference to review the stipulations of the grant including the plans(s) of development.

2. No construction or routine maintenance activities would be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 4 (four) inches deep, the soil would be deemed too wet to adequately support construction equipment.

3. All equipment would be washed for all plant material prior to any activities on BLM lands. If invasive, non-native species do become established or spread, it would be the responsibility of the Grand County Commissioners to eradicate those species.

4. The holder would seed all disturbed areas, using an agreed-upon method suitable for the location. Seeding would be repeated if a satisfactory stand is not obtained as determined by the authorizing officer upon evaluation after the second growing season. Seed mix should include salt tolerant plants.

5. The holder is responsible for informing all persons in the area who are associated with this project that they would be subject to prosecution for disturbing historic or archaeological sites, or for collecting artifacts.

The holder would immediately bring to the attention of the Authorized Officer any and all antiquities, or other objects of historic, paleontological, or scientific interest including but not limited to, historic or prehistoric ruins or artifacts DISCOVERED as a result of operations under this authorization (16 U.S.C. 470.-3, 36 CFR 800.112). The holder would immediately suspend all activities in the area of the object and would leave such discoveries intact until written approval to proceed is obtained from the Authorized Officer. Approval to proceed would be based upon evaluation of the object(s). Evaluation would be by a qualified professional selected by the Authorized Officer from a Federal agency insofar as practicable (BLM Manual 8142.06E). When not practicable, the holder would bear the cost of the services of a non-Federal professional.

Within five working days the Authorized Officer would inform the holder as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the holder would likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
- a timeframe for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.

If the holder wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer would assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the holder would be responsible for mitigation costs. The Authorized Officer would provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the holder would then be allowed to resume construction.

Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest that are outside of the authorization boundaries but directly associated with the impacted resource would also be included in this evaluation and/or mitigation.

Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest, identified or unidentified, that are outside of the authorization and not associated with the resource within the authorization would also be protected. Impacts that occur to such resources that are related to the authorizations activities, would be mitigated at the holder's cost.

6. Pursuant to 43 CFR 10.4(g), the holder of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

7. If paleontological materials (fossils) are discovered during construction activities, the operator is to immediately stop activities that might further disturb such materials and

contact the authorized officer. The operator and the authorized officer would consult and determine the best option for avoiding or mitigating the paleontological site.

8. Use of pesticides would comply with the applicable Federal and state laws. Pesticides would be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the holder would obtain from the authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer. Emergency use of pesticides would be approved in writing by the authorized officer prior to such use.

9. The holder(s) would comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) would comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 would be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances would be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

10. One month prior to termination of the right-of-way, the holder would contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection would be held to agree to an acceptable termination (and rehabilitation) plan. This plan would include, but is not limited to, removal of facilities, drainage structures, or surface material, recontouring, topsoiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

SUGGESTED SEED MIX* FOR RECLAMATION

Western Wheatgrass	Pascopyrum smithii	6.0 lbs PLS**/acre
Bluebunch Wheatgrass	Pseudoroegeneria spicata	6.0 lbs PLS/acre
Slender Wheatgrass	Elymus trachycaulus ssp: trachycaulus	6.0 lbs PLS/acre
Canby bluegrass	Poa canbyii	2.0lbs PLS/acre
Indian ricegrass	Achnatherum hymenoides	4.0 lbs PLS/acre
	TOTAL	24.0 lbs PLS/acre

Seeding rates are for broadcast seeding. If drilled, seeding rates may be halved.

*All seed must be certified weed free

**PLS = pure live seed