



# United States Department of the Interior



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## ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-N040-2010-0045-EA

CASEFILE NUMBER: COC35212 Amendment 1

PROJECT NAME: Bellyache Ridge Additional 250,000-Gallon Buried Water Tank

LEGAL DESCRIPTION: T. 4 S., R. 83 W., section 34, 6<sup>th</sup> Principal Meridian, Eagle County, Colorado.

APPLICANT: Bellyache Ridge Metropolitan District

### DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

**Proposed Action:** Construct a 250,000 gallon buried water tank, in addition to the existing 100,000-gallon underground tank. The new tank will have the capacity to maintain a fire flow of 1750 gpm for 120 minutes, or a volume of 250,000 gallons for fire protection. The storage tank size is based on Eagle County's requirements.

The proposed tank would be constructed near the existing tank that is within the Bellyache Ridge Metropolitan District boundaries. The existing tank as well as the proposed tank would be filled by one well and waterline that is currently approved under right-of-way grant COC35212 and two additional wells within the district.

The maximum water level in the new tank and the existing water tank should be the same elevation to operate in sync and to reduce construction costs (due to controls, valves, etc.). This requirement reduces the possible construction sites available for the new tank. The existing tank is on a very narrow lot that also has a very steep grade to the south of the existing tank. These site constraints limited the tank location to the north of the existing tank on the present lot.

The proposed tank would be approximately 60 feet in diameter and 15 feet tall. Additional waterlines and fittings to connect the tank to the existing water system would be required underground. The tank would be operational year-round. If approved, construction would begin immediately.

In addition, a small portion of the existing 100,000 gallon buried is on BLM. If approved, the

new footprint for the new tank would be 50' x 120' including the small portion of the existing tank not originally authorized.

**No Action Alternative:** Construction alternative would not be authorized, and the Bellyache Metropolitan District would not be able to meet Eagle County's regulations utilizing public lands.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: Several alternatives were evaluated by Zancanella and Associates. Two types of storage tanks were evaluated, including a buried concrete tank and an above ground steel tank in several locations.

Option 1: A buried concrete tank was not chosen due to the fact that the grading required to bury the tank would extend into the roadway and also onto the adjacent private lot 61. This location would also cut-off access to the existing tank and piping.

Option 2: An above ground steel tank would fit in Lot 61A district property but not within the required setback. This option would also require a large retaining wall around the tank, which increased the cost.

Options 3 & 4: Are located entirely on private Lot 61 to the east. Each of these would be too expensive as they would require the purchase of the lot and would have a significant visual impact on the area.

Option 5: Was not selected due to the expense of building a large retaining wall to protect the steel tank.

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: Glenwood Springs Resource Management Plan.

Date Approved: Jan. 1984, revised 1988, amended in November 1991 – Oil and Gas Leasing and Development – Final Supplemental Environmental Impact Statement; amended Nov. 1996 – Colorado Standards and Guidelines; amended in August 1997 – Castle Peak Travel Management Plan; amended in March 1999 – Oil & Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 – Red Hill Plan Amendment; and amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance; amended in August 2006 – Roan Plateau Planning Area Including Naval Oil Shale Reserves Numbers 1 & 3 Resource Management Plan Amendment & Environmental Impact Statement.

Decision Number/Page: Page 41, Utility and Communication Facility Management.

Decision Language: To respond, in a timely manner, to requests for utility and communication facility authorizations on public land while considering environmental, social, economic, and interagency concerns.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five standards

cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands.

The proposed action falls within the Eagle River South Landscape, which was the subject of a formal land health assessment in 2002. The Determination Document, which was signed on 12/9/2003, indicated that this portion of the landscape was meeting all the standards at the time.

The impact analysis must address whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions for each of the five standards. These analyses are located in specific elements listed below:

**AFFECTED ENVIRONMENT /ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:**

**CRITICAL ELEMENTS**

This section provides a description of the human and natural environmental resources that could be affected by the proposed action and no action alternative. In addition, the section presents comparative analyses of the direct and indirect consequences on the affected environment stemming from the implementation of the various actions.

A variety of laws, regulations, and policy directives mandate the evaluation of the effects of a proposed action and alternative(s) on certain critical environmental elements. Not all of the critical elements that require inclusion in this EA are present, or if they are present, may not be affected by the proposed action and alternative (Table 2). Only those mandatory critical elements that are present and affected are described in the following narrative.

In addition to the mandatory critical elements, there are additional resources that would be impacted by the proposed action and alternative. These are presented under **Other Affected Resources**.

<b>Table 1 - Critical Elements of the Human Environment</b>									
<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>		<i>Critical Element</i>	<i>Present</i>		<i>Affected</i>	
	Yes	No	Yes	No		Yes	No	Yes	No
Air Quality	X			X	Prime or Unique Farmlands		X		
ACECs		X			Threatened or Endangered Species	X		X	
Cultural Resources		X			Wastes, Hazardous or Solid		X		
Environmental Justice		X			Water Quality, Drinking and Ground		X		
Floodplains		X			Wetlands and Riparian Zones		X		
Invasive, Non-native Species	X		X		Wild and Scenic Rivers		X		
Native American Religious Concerns		X		X	Wilderness/WSAs		X		

## AIR QUALITY

### Affected Environment:

Air quality in the project area is typical of undeveloped regions in the western United States. The closest Class I airsheds are the Flat Tops Wilderness Area located approximately 13 air miles to the North and Holly Cross Wilderness located approximately 8 miles to the south.

The primary sources of air pollutants in the region are fugitive dust from the desert to the west of the planning area, unpaved roads and streets, seasonal sanding for winter travel, motor vehicles, and wood-burning stove emissions. Seasonal wildfires throughout the western U. S. may also contribute to air pollutants and regional haze. The ambient pollutant levels are usually near or below measurable limits, except for high short-term increases in PM<sub>10</sub> levels (primarily wind-blown dust), ozone, and carbon monoxide. Within the Rocky Mountain region, occasional peak ozone levels are relatively high, but are of unknown origin. Elevated concentrations may be the result of long-range transport from urban areas, subsidence of stratospheric ozone or photochemical reactions with natural hydrocarbons. Occasional peak concentrations of CO and SO<sub>2</sub> may be found in the immediate vicinity of combustion equipment. Locations vulnerable to decreasing air quality include the immediate areas around mining and farm tilling, local population centers, and distant areas affected by long-range transportation of pollutants. Representative monitoring of air quality in the general area indicates that the existing air quality is well within acceptable standards.

The EPA General Conformity regulations require that an analysis (as well as a possible formal conformity determination) be performed for federally sponsored or funded actions in non-attainment areas and in designated maintenance areas when the total direct and indirect net air pollutant emissions (or their precursors) exceed specified levels. Since the CRVFO is not within a non-attainment or a maintenance area, the Clean Air Act conformity regulations do not apply.

### Environmental Consequences:

#### *Proposed Action:*

Fugitive dust (PM<sub>10</sub>) production may be elevated temporarily during construction activities. However, PM<sub>10</sub> levels would return to preconstruction levels within hours of completion of surface disturbing actions. Therefore, the proposed action is not anticipated to have any lasting impact to air quality locally or regionally.

#### *Mitigation:*

Minimize fugitive dust production by utilizing a BLM approved dust suppressant (e.g. water) on disturbed areas and over access roads comprised of native surfaces during construction operations.

#### *No Action:*

No air quality impacts are anticipated to be directly associated with the No Action Alternative.

## CULTURAL RESOURCES

### Affected Environment:

One Class III cultural resource inventory (CRVFO 5410-8) was conducted specifically for this action. In addition three other surveys intersect the Area of Potential Effect has been completed. No cultural resource properties were identified during any of these surveys.

### Environmental Consequences:

#### *Proposed Action:*

No direct effects to cultural resources are anticipated as a result of this action, although the potential for indirect impacts would likely increase somewhat due to easier access. As no Historic Properties were identified a determination of **No Effect** was made in accordance with the National Historic Preservation Act (16 U.S.C. 470f), the National BLM/SHPO (State Historic Preservation Office) Programmatic Agreement (1997), and Colorado Protocol (1998).

#### *Mitigation:*

The Inadvertent Discovery stipulation needs to be added and all personnel need to be informed about reporting and protecting cultural resources.

#### *No Action:*

Under this alternative, no construction would occur, the possibility of undiscovered buried cultural materials or inadvertent discoveries would be reduced, and the potential for wildland fire damaging cultural resources would increase.

## ENVIRONMENTAL JUSTICE

### Affected Environment:

Review of 2004 data from US Census Bureau indicate that the median annual income of Garfield County averages \$50,119 and is neither an impoverished nor a wealthy county. Median annual income of Eagle County averages \$59,037 and is not impoverished but is considered a wealthy county. U.S. Census Bureau data from 2006 shows the minority population of Garfield and Eagle County comprises less than 0.6 % of the total population of Colorado<sup>1</sup>.

Estimated Median Household Income (2004)	
Garfield County	Eagle County
\$50,119	\$59,037

<sup>1</sup> Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, Census of Population and Housing, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report  
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## INVASIVE NON-NATIVE SPECIES

### Affected Environment:

No known state listed noxious weeds are known to occur at the project site. However, several weeds occur in the surrounding vicinity including musk thistle, plumeless thistle, and houndstongue.

### Environmental Consequences:

Surface-disturbing activities, such as the Proposed Action, create a niche for the invasion or expansion of noxious weeds, particularly in areas where noxious weeds are already present in the vicinity.

The contractor is to ensure equipment involved in land disturbing actions be clean of noxious weed seeds or propagative parts prior to entry on site. When working in areas with noxious weeds, equipment should be cleaned prior to moving off site.

## MIGRATORY BIRDS

### Affected Environment:

BLM Instruction Memorandum No. 2008-050 provides guidance toward meeting the Bureau of Land Management's (BLM) responsibilities under the Migratory Bird Treaty Act (MBTA) and the Executive Order (EO) 13186. The guidance directs Field Offices to promote the maintenance and improvement of habitat quantity and quality. To avoid, reduce or mitigate adverse impacts on the habitats of migratory bird species of conservation concern to the extent feasible, and in a manner consistent with regional or statewide bird conservation priorities.

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service (USFWS) to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973." The list of Birds of Conservation Concern (U.S. Fish and Wildlife Service 2008) is the most recent effort to carry out this mandate.

The MBTA prohibits the "take" of a protected species. Under the Act, the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The USFWS interprets "harm" and "kill" to include loss of eggs or nestlings due to abandonment or reduced attentiveness by one or both adults as a result of disturbance by human activity, as well as physical destruction of an occupied nest.

The conservation concerns are the result of population declines - naturally or human-caused, small ranges or population sizes, threats to habitat, or other factors. Although there are general patterns that can be inferred, there is no single reason why any species

was is on the list. Habitat loss is believed to be the major reason for the declines of many species. When considering potential impacts to migratory birds the impact on habitat, including: 1) the degree of fragmentation/connectivity expected from the proposed project relative to before the proposed project; and 2) the fragmentation/connectivity within and between habitat types (e.g., within nesting habitat or between nesting and feeding habitats). Continued private land development, surface disturbing actions in key habitats (e.g. riparian areas) and the proliferation of roads, pipelines, powerlines and trails are local factors that reduce habitat quality and quantity for many species.

The Colorado River Valley Field Office (CRVFO) is within the Southern Rockies/Colorado Plateau Bird Conservation Region (BCR). The 2008 list of Birds of Conservation include the following: Gunnison sage-grouse (*Centrocercus minimus*), American bittern (*Botaurus lentiginosus*), bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), peregrine falcon (*Falco peregrinus*), prairie falcon (*Falco mexicanus*), snowy plover (*Charadrius alexandrinus nivosus/tenuirostris*), mountain plover (*Charadrius montanus*), long-billed curlew (*Numenius americanus*), yellow-billed cuckoo (*Coccyzus americanus*), burrowing owl (*Athene cunicularia*), Lewis's woodpecker (*Melanerpes lewis*), willow flycatcher (*Empidonax traillii*), gray vireo (*Vireo vicinior*), pinyon jay (*Gymnorhinus cyanocephalus*), juniper titmouse (*Baeolophus ridgwayi*), veery (*Catharus fuscescens*), Bendire's thrasher (*Toxostoma bendirei*), Grace's warbler (*Dendroica graciae*), Brewer's sparrow (*Spizella breweri*), grasshopper Sparrow (*Ammodramus savannarum*), chestnut-collared longspur (*Calcarius ornatus*), black rosy-finch (*Leucosticte atrata*), brown-capped rosy-finch (*Leucosticte australis*), and Cassin's finch (*Carpodacus cassinii*).

The CRVFO planning area provides both foraging and nesting habitat for a variety of migratory birds that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, oakbrush, aspen, pinyon-juniper woodlands, other types of coniferous forests and riparian and wetland areas support many bird species. The gray vireo, pinyon jay, juniper titmouse, and Lewis's woodpecker are characteristically found in pinyon/juniper (P/J) woodlands. All of the P/J species are tree nesters. The sage sparrow is a ground nester that nests in sagebrush. The Brewer's sparrow is also found within sagebrush habitats.

Many species of raptors—including the red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperii*), and American kestrel (*Falco sparverius*)—not on the list of Birds of Conservation Concern can also be seen in the area. Golden eagles and red-tailed hawks likely forage throughout the project area. Raptor surveys have not been conducted in the area for the project however no nest sites are known to occur in such small trees. Nesting habitat for these species is present near the project area.

Bald eagles are increasing in numbers throughout their range and were removed from the federal threatened and endangered species list in 2007. However, they remain protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Bald eagles are known to winter along portions of the Colorado, Eagle and Roaring Fork Rivers and its major tributaries. Wintering bald eagles are generally present from mid-

November to mid-April. Large mature cottonwood trees along the rivers and their major tributaries are used as roosting and perching sites, and these waterways provide the main food sources of fish and waterfowl. Upland habitats adjacent to these waterways are used as scavenging areas primarily for winter-killed animals. Major threats include habitat loss, human disturbance and illegal shooting.

Environmental Consequences:

*Proposed Action:*

The Proposed Action would result in a loss of nesting, roosting, perching, and foraging habitat for migratory birds on disturbed areas and reduce habitat effectiveness adjacent to areas where disturbance-related effects could be expected. The construction of the proposed tank (60 feet in diameter and 15 feet tall) would remove approximately ½ acre of vegetation as well as some areas of interim reclamation and would result in reduced habitat patch size.

The physical loss of habitat and habitat fragmentation, it is possible that during construction activities, individual birds could be displaced to adjacent habitats due to noise and human presence. Effects of displacement could include increased risk of predation or failure to reproduce if adjacent habitat is at carrying capacity. Furthermore, impacts to birds at the species or local population level could include a change in abundance and composition as a result of cumulative habitat fragmentation from energy development in the larger area. Impacts to migratory bird species that nest in similar habitats can be minimized by avoiding surface-disturbing activities during the nesting season.

All migratory bird species are protected by the Migratory Bird Treaty Act (MBTA), which makes it unlawful to pursue, hunt, kill, capture, possess, buy, sell, purchase, or barter any migratory bird, including the feathers or other parts, nests, eggs, or migratory bird products. In addition to the MBTA, Executive Order 13186 sets forth the responsibilities of Federal agencies to further implement the provisions of the MBTA by integrating bird conservation principles and practices into agency activities and by ensuring that Federal actions evaluate the effects of actions and agency plans on migratory birds. Consistent with Executive Order 13186 and BLM Colorado guidelines, CRVFO has established a condition of approval (COA) applies to all activities resulting in the removal of vegetation and broad use of pesticides to protect BCC habitat during the nesting season. The COA would apply to activities between May 15 and July 15. The COA would consider the scale, type, and duration of the project; species potentially present; weather conditions; elevation and habitat types present; and type of motorized equipment to be used. An exception may be granted if nesting surveys indicate no nesting BCC species within 10 meters of the area to be disturbed. Due to the small scale of this project (approx. 1/2 acre) no COA would be applied.

*No Action:*

The no action alternative constitutes denial of the project described in the proposed action. No new surface disturbance would occur under the No Action alternative, thus eliminating impacts from this development to migratory birds.

## NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment:

The Ute tribes claim this area as part of their ancestral homeland. At present, no areas of Native American religious concern have been identified within the project area. In addition, the cultural resource survey conducted for the project did not identify any areas of concern. The Ute Tribes have indicated that they do not want to be notified or consulted if the project is small or does not include areas of Native American religious concern.

Environmental Consequences:

Although no direct impacts would result from the Proposed Action, indirect impacts from increased access and accessibility could result in impacts to undiscovered Native American resources. These impacts could range from illegal collection to vandalism. The Education/Discovery/NAGPRA stipulation needs to be added to the permit.

No Action: Impacts would be the same as the proposed action. The potential for wildland fires damaging Native American resources might increase.

## THREATENED, ENDANGERED, AND SENSITIVE SPECIES – Plants (includes an analysis on Standard 4)

Affected Environment:

*Federally Listed, Proposed, or Candidate Plant Species*

According to the latest species list from the U. S. Fish and Wildlife Service (2008), the only federally listed, proposed, or candidate threatened or endangered plant species that may occur within or be impacted by actions occurring in Eagle County is the Ute Ladies'-tresses orchid (*Spiranthes diluvialis*).

Ute ladies'-tresses Orchid. The Ute ladies'-tresses orchid is found below 6,500 feet along streams, lakes or in wetland areas with seasonally saturated or subirrigated soils. This species has not yet been found in Eagle County and the project area is at 9,000 feet, well above the upper elevational limit for this threatened species.

*BLM Sensitive Plant Species*

According to the latest *Colorado BLM State Director's Sensitive Species List (Animals and Plants)*, November, 2009, the only BLM Sensitive plant species which may occur within or be impacted by actions occurring within Eagle County is Harrington's penstemon (*Penstemon harringtonii*).

Harrington's Beardtongue (Harrington's penstemon). Harrington's penstemon is found in open sagebrush habitat on rocky loam or rocky clay loam soils between the elevations of 6,200 to 10,000 feet. There are no known occurrences of this species within or adjacent to the project area that could be impacted by the proposed action.

Environmental Consequences:

*Proposed Action:*

*Federally Listed, Proposed or Candidate Plant Species*

Due to the absence of any suitable habitat for Ute ladies'-trresses orchid within or adjacent to the proposed action area, the proposed action would likely have "No Effect" on this species.

*BLM Sensitive Plant Species*

Due to the lack of any known occurrences or suitable habitat for Harrington's penstemon within or adjacent to the project area, the proposed action would have "No Impact" on this species.

*No Action:*

Under the no action alternative, the construction of the new water tank would be denied and no new surface disturbance would occur. There would be no impacts to special status plants under this alternative.

Analysis on the Public Land Health Standard 4 for Plant Special Status Species:

The proposed action falls within the Bellyache allotment within the Eagle River South Landscape, which was the subject of a formal land health assessment in 2002. The assessment determined that the Bellyache allotment was meeting Standard 4 for threatened, endangered, and other special status species at the time of the assessment. The proposed action would have little impact on the ability of the allotment and landscape to continue to meet this standard.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES – Terrestrial Wildlife (includes a finding on Standard 4)

Affected Environment:

*Federally Listed, Proposed or Candidate Terrestrial Wildlife Species*

According to the latest species list from the U. S. Fish and Wildlife Service (2008), the following Federally listed, proposed, or candidate terrestrial wildlife species may occur within or be impacted by actions occurring within the GSFO (Table 1).

These species and their status, distributions, habitat associations, and association to the project area is summarized following Table 1.

Black-footed Ferret (*Mustela nigripes*). Federally listed as endangered. Black-footed ferrets have ranged statewide but never have been abundant in Colorado. Their habitat included the eastern plains, the mountain parks and the western valleys – grasslands or shrub lands that supported some species of prairie dog, the ferret’s primary prey. Little is known about their natural history. They mate in early spring and give birth to a litter of three or four mouse-sized pups after a seven-week gestation period. Black-footed ferrets are susceptible to distemper, predators like owls and coyotes, and vehicles.

It is assumed that plowing for agriculture and programs to eradicate prairie dogs have driven the black-footed ferret to the verge of extinction. State and federal biologists have established two major black-footed ferret colonies: one at Coyote Basin (Colorado-Utah border west of Rangely) and another at the BLM's Wolf Creek Management Area southeast of Dinosaur National Monument (CDOW 2009). Because occurrences have not been documented and are unlikely in this area is unlikely due to range and habitat conditions, this species is not considered further.

Table 1.

Terrestrial Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
<b>Black-footed ferret (<i>Mustela nigripes</i>)</b>	In Colorado habitat includes the eastern plains, the mountain parks and the western valleys. Specifically grasslands or shrublands that supported some species of prairie dog, the ferret’s primary prey.	X				
<b>Canada lynx (<i>Lynx canadensis</i>)</b>	Mesic forests of lodgepole pine, subalpine fir, Engelmann spruce, and quaking aspen in the upper montane and subalpine zones, generally between 8,000 and 12,000 feet in elevation.	X	X	X	X	X
<b>Mexican spotted owl (<i>Strix occidentalis lucida</i>)</b>	Mature montane forests, shady canyons, and steep canyons. The key components in montane forests are common to old-growth forests: uneven-age stands with high canopy closure and tree density, fallen logs and snags.	X	X		X	
<b>Greater sage-grouse (<i>Centrocercus urophasianus</i>)</b>	Resident of relatively large, open sagebrush flats or rolling sagebrush hills. Uncommon and unlikely in this part of the GSFO or associated habitats	X				X
<b>Yellow-billed cuckoo (<i>Coccyzus americanus</i>)</b>	Mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Uncommon summer resident of Colorado.	X	X	X	X	X
<b>Uncompahgre fritillary butterfly (<i>Boloria acrocnema</i>)</b>	Patches of snow willow ( <i>Salix nivalis</i> ) at high elevations.	X			X	

Canada Lynx (*Lynx canadensis*). Federally listed as threatened. Canada lynx (*Lynx canadensis*) was listed as a federally threatened species, effective April 24, 2000 (Federal Register Volume 65, No. 58). Canada lynx occupy high-latitude or high-elevation coniferous forests characterized by cold, snowy winters and an adequate prey base (Ruggiero et al. 1999). The preferred prey of Canada lynx throughout their range is the snowshoe hare (*Lepus americanus*). In the western United States, lynx are associated with mesic forests of lodgepole pine, subalpine fir, Engelmann spruce, and quaking aspen in the upper montane and subalpine zones, generally between 8,000 and 12,000 feet in elevation. Although snowshoe hares are the preferred prey in Colorado, lynx in also feed on other species such as the mountain cottontail (*Sylvilagus nuttallii*), pine squirrel (*Tamiasciurus hudsonicus*), and dusky (blue) grouse (*Dendragapus obscurus*).

The U.S. Forest Service (USFS) has mapped suitable denning, winter, and other habitat for lynx within the White River National Forest (WRNF). The mapped suitable habitat in the WRNF comprises several areas known as Lynx Analysis Units (LAUs). Lynx analysis units (LAUs) are management areas that contain suitable lynx habitat and approximate the size of a female home range. Several LAUs border BLM lands however no areas large enough to be considered LAUs occur within the GSFO. BLM lands within the GSFO area generally support the movement of lynx dispersing to a new area or, potentially, moving to lower elevations during severe winter weather in search of prey. This project proposal is located within the Castle Peak landscape linkage.

Greater Sage-grouse (*Centrocercus urophasianus*). The U.S. Fish and Wildlife Service announced on Friday, March 5, 2010 that the greater sage-grouse would be added to the Endangered Species Act “Candidate” list. The USFWS determined that proposing the species for protection is precluded by the need to take action on other species facing more immediate and severe extinction threats. As a result, the greater sage-grouse was placed on the list of species that are candidates for Endangered Species Act Protection. Evidence suggests that habitat fragmentation and destruction across much of the species’ range has contributed to significant population declines over the past century. If current trends persist, many local populations may disappear in the next several decades, with the remaining fragmented population vulnerable to extinction.

Sage-grouse, as the name implies, are found only in areas where sagebrush is abundant, providing both food and cover. Although these birds are found at altitudes of 6000-8500 feet, they are not forest grouse and prefer relatively open sagebrush flats or rolling sagebrush hills. In winter, sagebrush accounts for 100% of the diet for these birds. In addition, it provides important escape cover and protection from the elements. In late winter, males begin to concentrate on traditional strutting grounds or leks. Females arrive at the leks 1-2 weeks later. Leks can occur on a variety of land types or formations (windswept ridges, knolls, areas of flat sagebrush, flat bare openings in the sagebrush. Breeding occurs on the leks and in the adjacent sagebrush, typically from March through May. Females and their chicks remain largely dependent on forbs and insects for food well into early fall. Cultivated herbaceous broad-leaved plants (alfalfa, clover) are important early fall food sources when available (CDOW 2009a).

The Northern Eagle/Southern Routt population, while small (<200 birds), probably has, or had, a relationship with the larger population in Moffat, Rio Blanco and western Routt counties, and probably with the Middle Park population to the east. Sage-grouse are still present in the Radium area between State Bridge and Kremmling (Northern Eagle/Southern Routt Greater Sage-Grouse Work Group 2004) and likely to occur in the Gypsum Hills area and the area north of Wolcott, which includes the Ute Creek allotment. Because occurrences have not been documented and are unlikely in this area due to range and habitat conditions, this species is not considered further.

Mexican Spotted Owl (*Strix occidentalis*). Federally listed as endangered. This owl nests, roosts, and hunts in mature coniferous forests in canyons and foothills. The only extant populations in Colorado are in the Pikes Peak and Wet Mountain areas of south-central Colorado and the Mesa Verde area of southwestern Colorado. Because occurrences have not been documented and are unlikely in this area due to range and habitat conditions, this species is not considered further.

Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*). Candidate for Federal listing. This secretive species occurs in mature riparian forests of cottonwoods and other large deciduous trees with a well-developed understory of tall riparian shrubs. Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods (*Populus* spp.) and willows (*Salix* spp.). A few sightings of yellow-billed cuckoo have occurred in western Colorado along the Colorado River near Grand Junction (USFWS 2009b). Riparian areas in the project area do not provide suitable habitat for this species due to the patchy nature of the stands and the general lack of a tall-shrub understory. Because occurrences have not been documented and are unlikely in this area due to range and habitat conditions, this species is not considered further.

Uncompahgre Fritillary Butterfly (*Boloria acrocneuma*). Federally listed as endangered. The butterfly has been verified at only two areas in the San Juan Mountains in Colorado. There is anecdotal evidence of other colonies in the San Juan and southern Sawatch ranges in Colorado. The butterfly exists above treeline in patches of its larval host plant, snow willow. The butterfly is most often found on north and east facing slopes, which provide a moist, cool, microclimate. The greatest known controllable threat is butterfly collecting. Climatological patterns, disease, parasitism, predation, and trampling of larvae by humans and livestock might pose additional threats. Because occurrences have not been documented and are unlikely in this area due to range, elevation, and habitat conditions, this species is not considered further.

#### *BLM Sensitive – Terrestrial Wildlife Species*

According to the latest *Colorado BLM State Director's Sensitive Species List (Animals and Plants) June, 2000*, the following terrestrial wildlife species may occur within or be impacted by actions occurring within the GSFO (Table - BLM Sensitive - Terrestrial Wildlife Species):

Table - BLM Sensitive – Terrestrial Wildlife Species

Name	Habitat/Range	Potential for Occurrence
Townsend's big-eared bat and fringed myotis	Occur as scattered populations at moderate elevations on the Western Slope, along the foothills of the Front Range and the mesas of southeastern Colorado. Maximum elevation is 7,500 feet. Breeds and roosts in caves, trees, mines, and buildings; hunts over pinyon-juniper, montane conifer, and semi-desert shrubland habitats. Known occurrences - Potential in caves, mines or trees	Possible
Northern goshawk	Resident in foothills and mountains and occasional in migration and winter at lower elevations. Predominantly uses mature stands of aspen, and pines (ponderosa and lodgepole). Uncommon – seasonal visitor.	Possible
Barrow's goldeneye	Rare winter resident and spring/fall migrant in lowlands and mountains; a few breed in the northern mountains. Uncommon - seasonal	Absent
White-faced ibis	Inhabits wet meadows, marsh edges and reservoir shorelines. Very rare, non-breeding, summer migrant to western Colorado valleys and mountain lakes. Main breeding area is in the San Luis valley.	Absent

The following paragraphs address species with a habitat potential to be present in the project area.

Fringed Myotis (*Myotis thysanodes*) and Townsend's Big-eared Bat (*Corynorhinus townsendii*). Occur as scattered populations at moderate elevations on the Western Slope of Colorado. Habitat associations are not well defined. Both of these bats will forage over water and along the edge of vegetation (pinyon-juniper woodlands, montane conifer woodlands, semi-desert shrublands) for aerial insects. Although they commonly roost in caves, rock crevices, mines, or buildings, they also may roost in tree cavities. Both species are widely distributed and usually occur in small groups. The animals roost in rock crevices, caves, mines, buildings and trees. Townsend's big-eared bat is not very abundant anywhere in its range and this is attributed to patchy distribution and limited availability of suitable roosting habitat (Gruver, J.C. and D.A. Keinath 2006).

Northern Goshawk (*Accipiter gentilis*). The northern goshawk is the largest North American accipiter. The goshawk is a forest habitat generalist that uses a variety of forest type, forest ages, structural conditions and successional stages. Goshawks prey on small-medium sized birds and mammals. It breeds in coniferous deciduous and mixed forests. The nest is typically located on a northerly aspect in a drainage or canyon and is often near a stream. Nest areas contain one or more stands of large, old trees with a dense canopy cover. A goshawk pair occupies its nest area from March until late September. The nest area is the center of all movements and behaviors associated with breeding from courtship through fledging. Because occurrences have not been documented and are unlikely in this area due to range and habitat conditions, this species is not considered further.

Barrow's Goldeneye (*Bucephala islandica*). This bird is a rare and local breeder in Flat Tops Wilderness Area in Garfield and adjacent counties. First confirmed record this century of fledged young or broods on three shallow lakes in Flat Tops Wilderness in 1990; also found in 1991 and 1994 (CLO 2009). Goldeneye prefers alkaline-freshwater lakes in parkland areas and, to a lesser extent, subalpine/alpine lakes/beaver ponds for breeding. Because occurrences have not been documented and are unlikely in this area due to range and habitat conditions, this species is not considered further.

White-faced Ibis (*Plegadis chihi*). The species inhabits primarily freshwater wetlands, especially cattail (*Typha* spp.) and bulrush (*Scirpus* spp.) marshes. This species feeds in flooded hay meadows, agricultural fields, and estuarine wetlands. This species breeds in isolated colonies in mainly shallow marshes with "islands" of emergent vegetation. This species is more commonly found on the eastern slope of Colorado. Sparse historical records indicate that this species is uncommon within the CRVFO. Because occurrences have not been documented and are unlikely in this area due to range and habitat conditions, this species is not considered further.

#### Environmental Consequences:

##### *Proposed Action:*

This project is within the Castle Peak linkage area for Canada lynx. This portion of the linkage has been impacted by surrounding human infrastructure such as: Interstate 70, highway fences and subdivisions/developments. The proposed action would not negatively affect the suitability of habitat within a LAU. The proposed action would not impede a lynx's ability to move through this portion of the linkage. Connectivity to other habitats across landscape linkage areas would not be degraded. Based on the proposed action, the BLM has reached a determination of "No Effect" for the Canada lynx.

For the sensitive species listed above, the minor amount of direct or indirect loss of habitat, the transient nature of their potential use of the area, and the brief period of construction-related activities in any given part of the project area combine to result in negligible potential for adverse impacts.

##### *No Action:*

The No Action alternative constitutes denial the proposed action and any of the associated impacts. No new surface disturbance would occur under the no action alternative, thus eliminating impacts from this proposal to BLM sensitive; or Federally listed, proposed, or candidate animal species.

#### Finding on the Public Land Health Standard for Threatened and Endangered Species.

Terrestrial Wildlife (partial, see also Plants and Terrestrial Aquatic): The proposed action, in conjunction with activities throughout this watershed, would not cause the area to be out of conformance with the standard. The No Action alternative would have no bearing on the ability of the area to meet the public land health standard because no construction activities would take place.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES – Aquatic Wildlife (includes a finding on Standard 4)

Affected Environment:

*Federally Listed, Proposed or Candidate Aquatic Wildlife Species*

According to the latest species list from the U. S. Fish and Wildlife Service (2008), the following Federally listed, proposed, or candidate aquatic wildlife species may occur within or be impacted by actions occurring within the GSFO (see Table - Special Status Species – Aquatic Wildlife):

Table - Special Status Species – Aquatic Wildlife

Aquatic Wildlife Species	Habitat/Range	Eagle County	Garfield County	Mesa County	Pitkin County	Routt County
<b>Greenback cutthroat trout</b> ( <i>Oncorhynchus clarki stomias</i> )	Cold, clear, gravely headwater streams and mountain lakes. Originally found in the mountain and foothill areas of the Arkansas and South Platte river systems in Colorado and part of Wyoming.	X	X	X	X	X
<b>Colorado pikeminnow</b> ( <i>Ptychocheilus lucius</i> )	Swift flowing muddy rivers with quiet, warm backwaters of the Green, Yampa, White, Colorado, Gunnison, San Juan, and Dolores rivers.	X	X	X	X	X
<b>Humpback chub</b> ( <i>Gila cypha</i> )	Deep, fast-moving, turbid waters often associated with large boulders and steep cliffs such as canyon-bound portions of the Colorado River system such as Black Rocks and Westwater canyons.	X	X	X		X
<b>Bonytail</b> ( <i>Gila elegans</i> )	Large, fast-flowing waterways of the Colorado River system.	X	X	X	X	X
<b>Razorback sucker</b> ( <i>Xyrauchen texanus</i> )	Deep, clear to turbid waters of large rivers and reservoirs over mud, sand or gravel. Currently low numbers in the Yampa, Colorado and Gunnison rivers. Reproducing populations remain only in the Colorado River near Grand Junction.	X	X	X	X	X

These species and their status, their distributions, habitat associations, and association to the project area are summarized below.

Greenback Cutthroat Trout (*Oncorhynchus clarki stomias*). Federally listed as threatened. The greenback cutthroat trout was not identified on the USFWS list for Garfield County; however, recent surveys have identified a population in Cache Creek, located several drainages east of the project area. The greenback is the subspecies native to the Platte River drainage on the Eastern Slope of Colorado, while the Colorado River cutthroat trout (*O. c. pleuriticus*) is the subspecies native to Garfield County and throughout the Western Slope of Colorado. Although the occurrence of greenbacks in Cache Creek and potentially elsewhere in the GSFO and WRNF areas is apparently the result of human intervention (e.g., sanctioned or *ad hoc* transplantation of fish from the Eastern Slope), its status as threatened applies to Western Slope populations. However,

because drainages within the project area do not support this species, it is not considered further.

These four species of Federally listed big-river fishes occur within the Colorado River drainage basin downstream from the project area.

Colorado Pikeminnow (*Ptychocheilus lucius*). Federally listed as endangered. The Colorado pikeminnow (formerly Colorado squawfish) Colorado pikeminnow were once abundant in the main stem of the Colorado River and most of its major tributaries in Colorado, Wyoming, Utah, New Mexico, Arizona, Nevada, California and Mexico. Now, they exist primarily in the Green River below the confluence with the Yampa River, the lower Duchesne River in Utah, the Yampa River below Craig, Colo., the White River from Taylor Draw Dam near Rangely downstream to the confluence with the Green River, the Gunnison River in Colorado, and the Colorado River from Palisade, Colo., downstream to Lake Powell. Biologists believe Colorado pikeminnow populations in the upper Colorado River basin are now relatively stable and in some areas may even be growing. Designated Critical Habitat for the Colorado pikeminnow includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.

Bonytail (*Gila elegans*). Federally listed as endangered. This large chub is a member of the minnow family. Their current distribution and habitat status are largely unknown due to its rapid decline prior to research into its natural history. Historically, bonytails were present in the Colorado River system, which includes the Yampa, Green, Colorado and Gunnison rivers. The bonytail is extremely rare in Colorado and no self-sustaining population exist throughout the Colorado River basin. Only one has been captured in the state since 1980. Restoration stocking of bonytail in the wild to develop adult populations is the priority recovery action in Colorado.

Humpback Chub (*Gila cypha*). Federally listed as endangered. The nearest known habitat for the humpback chub and bonytail is within the Colorado River approximately 70 miles downstream from the project area. Only one population of humpback chub, at Black Rocks west of Grand Junction, is known to exist in Colorado.

Razorback Sucker (*Xyrauchen texanus*). Federally listed as endangered. The razorback sucker was once widespread throughout most of the Colorado River Basin from Wyoming to Mexico. In the upper Colorado River Basin, they are now found only in the upper Green River in Utah, the lower Yampa River in Colorado and occasionally in the Colorado River near Grand Junction. Because so few of these fish remain in the wild, biologists have been actively raising them in hatcheries in Utah and Colorado and stocking them in the Colorado River. Designated Critical Habitat for the razorback sucker includes the Colorado River and its 100-year floodplain west (downstream) from the town of Rifle.

#### *BLM Sensitive Aquatic Wildlife Species*

According to the latest *Colorado BLM State Director's Sensitive Species List (Animals and Plants) June, 2000*, the following aquatic wildlife species may occur within or be

impacted by actions occurring within the GSFO (Table - Colorado BLM Sensitive Species - Aquatic):

Table - Colorado BLM Sensitive Species - Aquatic

Name	Habitat	Habitat Potential Present / Absent
<b>Northern leopard frog</b> ( <i>Rana pipiens</i> )	Wet meadows and the banks and shallows of marshes, ponds, glacial kettle ponds, beaver ponds, lakes, reservoirs, streams, and irrigation ditches.	<b>Absent</b>
<b>Flannelmouth sucker</b> ( <i>Catostomus latipinnis</i> )	Generally restricted to rivers and major tributaries.	<b>Absent</b>
<b>Roundtail chub</b> ( <i>Gila robusta</i> )	Generally restricted to rivers and major tributaries.	<b>Absent</b>
<b>Colorado River cutthroat trout</b> ( <i>Oncorhynchus clarki pleuriticus</i> )	Occurs in clear, cool headwaters streams with coarse substrates, well-distributed pools, stable streambanks, and abundant stream cover.	<b>Absent</b>

Environmental Consequences:

*Proposed Action:*

Since no streams or wetlands are present in the immediate vicinity of the project, the proposed action would not have direct impacts on aquatic wildlife.

*No Action:*

The No Action alternative constitutes denial of the project described in the proposed action and any of the associated actions. No new surface disturbance would occur under the no action alternative, thus eliminating impacts from this development to aquatic wildlife species.

Finding on the Public Land Health Standard for Threatened and Endangered Species.

Aquatic Wildlife (partial, see also Plants and Terrestrial Aquatic): Neither the proposed nor the no action alternative would have any bearing on the ability of the area to meet the public land health standard 4 because no aquatic species are present in the project area.

WASTES, HAZARDOUS OR SOLID

Affected Environment

Proposed activities would occur north of the Bellyache Ridge Subdivision, and Interstate 70, and the Eagle River. There are no perennial drainages within the project area. During upgrading activities and pipeline and tank installation operations, vehicles and equipment would be used that require fuel and lubricants to operate.

Environmental Consequences/Mitigation

*Proposed Action:*

Fuels and lubricants would be stored in appropriate containers and refueling would occur in designated areas. While no spills are anticipated, there is potential for hazardous materials to be transported to the nearby ephemeral drainages in the event of a spill followed by heavy precipitation and runoff events. Based on the distance of the proposed activities from perennial drainages and good existing vegetation cover between the project area and the Eagle River; the likelihood of hazardous materials reaching the Eagle River is minimal.

*No Action:*

Under the no action alternative, there would be no fuel or lubricants present.

**WATER QUALITY, SURFACE AND GROUND (includes an analysis on Standard 5)**

**Affected Environment:** The proposed project area is located within water-quality stream segment 10a of the Eagle River Basin. The Eagle River is a major tributary to the Colorado River near Dotsero, Colorado. Stream Segment 10a of the Eagle River Basin is defined as “All tributaries to the Eagle River, including all wetlands, from a point immediately below the confluence with Lake Creek to the confluence with the Colorado River, except for specific listings in segments 10b, 11, 12, and those waters included in Segment 1” (CDPHE–WQCC. 2010a).

The following table identifies stream classifications and water quality standards for Eagle River Basin stream segment 10a as outlined in CDPHE, Regulation No. 33.

Classifications	Numeric Standards (Stream Segment COUCEDA10a)					
	Physical and Biological	Inorganic (mg/l)		Metals (µg/l)		
Aq Life Cold l Recreation E Water Supply Agriculture	T=TVS(CS-I)oC D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100m	NH3(ac/ch)=TVS Cl2(ac)=0.019 Cl2(ch)=0.011 CN=0.005	S=0.002 B=0.75 NO2=0.05 NO3=10 Cl=250 SO4=WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=WS Mn(ac/ch)=TVS Hg(ch)=0.01(tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS

Table data from CDPHE–WQCC. 2010a

The CDPHE Integrated Water Quality Monitoring and Assessment Report, 2010 update to the 2008 305(b) Report (CDPHE-WQCC. 2010c), was reviewed to determine the current status of assessment and determination of water quality within the project area. The Colorado Integrated Reporting Category (IR) value assigned to this assessment unit in the —Status of Water Quality in Colorado – 2010 document was IR=2. Stream segment 10a is described as fully supporting agricultural, water supply and primary

contact recreation. However, this assessment is not supporting aquatic life cold due to selenium from unknown sources. In Colorado, the majority of the assessed surface water bodies fall into IR Categories 1, 2, and 3. Category 1 indicates waters attaining water quality standards. Colorado has elected to place segments where not all uses have been assessed in IR Category 2. In some cases, a complete assessment of all uses cannot be completed do to the lack of data, but the data that is available indicates that at least some of the uses that were assessed are fully supporting. IR Category 3 indicates that insufficient data is available to determine whether or not the classified uses are being attained. Category 4 indicates waters that are not supporting a standard for one or more classified uses, but a TMDL is not needed. IR Category 5 indicates that available data and/or information indicate that at least one classified use is not being supported or is threatened, and a TMDL is needed. Segments must be placed in Category 5 when, based on existing and readily available data and/or information, technology-based effluent limitations required by the Clean Water Act (CWA), more stringent effluent limitations, and other pollution control requirements are not sufficient to implement an applicable water quality standard and a TMDL is needed. This category constitutes the Section 303(d) list of waters impaired by a pollutant (CDPHE-WQCC. 20010c).

The 2010 CDPHE-WQCC Regulation No. 93 Section 303d List of Impaired Waters and Monitoring and Evaluation List, was reviewed to determine if Eagle River stream segments 10a was listed. While stream segment 10a was not on the 303(d) List, it was identified on the Monitoring and Evaluation list for potential selenium impairments (CDPHE-WQCC. 2010b).

### Groundwater

A review of the USGS Groundwater Atlas of the Colorado and the CDSS map viewer (CDSS 2010) indicate the proposed action will be situated within the boundaries of the Eagle Basin sedimentary rock aquifer system. The primary Eagle Basin aquifers are found in the Permian and Pennsylvanian sandstones and the Mississippian and Devonian carbonates (Table 1).

Identified sandstone aquifers include the Weber Sandstone and Maroon and Minturn Formations, which are underlain by the confining Eagle Valley Evaporite. The Mississippian and Devonian aquifers are composed of the Leadville Limestone, Gilman Sandstone, and Dyer Dolomite. Many of these units crop out along the edge of the Eagle Basin, which represents the regional recharge area (Topper et al., 2003).

Water levels indicate that groundwater flow is controlled by the basin's structural features. In the southern portions of the basin, groundwater flows follow the Eagle and then the Colorado Rivers. Ground water appears to flow to both the Sand Wash and Piceance Basins in the northern portions of the basin. Springs are common along the uplifts and the aquifers discharge to streams and rivers where they are incised (Topper et al., 2003).

## Hydrogeologic Units of the Eagle Basin.

Era	System	Stratigraphic Unit	Unit Thickness (feet)	Physical Description	Hydrogeologic Units	Hydrogeologic Characteristics
Cenozoic	Quaternary	Alluvial sands and gravels	variable	Pinedale and Bull Lake age; silt, sands, and gravels	Local water-table aquifers	
	Mesozoic	Cretaceous	Pierre Shale		Gray shale	Confining unit
Colorado Group				Gray shale, limestone		
Dakota Sandstone		120	Massive gray to brown sandstone	Local aquifer		
Jurassic	Morrison Formation		Purple and gray variegated mudstone, sandstone			
	Entrada-Curtis Fm	350	Fine-grained sandstone	Local aquifer		
Triassic	State Bridge Formation		Reddish-brown to green siltstone and claystone. Some sandstone and limestone	Confining unit	Conductivity range 0.0001 to 0.01 ft/day	
Permian						
Paleozoic	Permian and Pennsylvanian	Weber Sandstone	400	Tan cross-bedded sandstone	Weber-Maroon-Minturn aquifer	Conductivity range 0.0001 to 20 ft/day
		Maroon and Minturn Formations	10,000	Tan, gray, and red interbedded sandstone. Gravely sandstone, conglomerate, limestone, and dolomite		Conductivity range 0.0001 to 2.0 ft/day
	Pennsylvanian	Eagle Valley Evaporite	4,700	Claystone, siltstone, gypsum, and dolomite	Confining units	Conductivity range 0.0001 to 0.1 ft/day
	Pennsylvanian and Mississippian	Belden Shale	4,000	Gray to black shale, sandy shale, limestone, and dolomite		Conductivity range 0.0039 ft/day
		Molas Formation		Red to purple siltstone, sandstone, and conglomerate		
	Mississippian and Devonian	Leadville Limestone	500	Limestone and dolomite	Mississippian and Devonian carbonate rock aquifer	Conductivity range 0.0001 to 170 ft/day
		Gilman Sandstone Dyer Dolomite				
	Devonian	Parting Formation	200	White, pink and gray quartzite and quartz sandstone, sandy dolomite		Conductivity range 0.0001 to 0.25 ft/day
	Ordovician and Cambrian	Harding Sandstone	100	Sandstone	Local aquifer	
		Manitou Dolomite		Dolomite		
Peerless Formation		100	Interbedded, dolomite, sandy dolomite, and limestone			
Cambrian	Unnamed Shale	50	Shale			
	Sawatch Sandstone	500	Tan to gray quartzite		Conductivity range 0.0001 to 2.0 ft/day	

Table data from Topper et.al. 2003.

Of the non-alluvial permitted wells of record within the basin, over 90% are completed at depths less than 375 feet. The average well depth is 175 feet, and the deepest well recorded in the area is 1,402 feet below ground surface. Well yields vary significantly throughout the basin, with flows of up to 3,000 gallons per minute (gpm) recorded from the Mississippian and Devonian carbonates. Natural discharges of up to 50 gpm are common from the regional aquifers. Local aquifers rarely produce more than 50 gpm unless intensely fractured, with an average yield of 22 gpm reported from the DWR well permit database (Topper et al., 2003).

Transmissivities for the Mississippian and Devonian carbonate aquifers are typically much greater along the uplifted areas than near the basin centers, exceeding 10,000 ft<sup>2</sup>/day along the White River uplift near Glenwood Springs. Hydraulic conductivities for the carbonates are also highly variable, ranging from 0.01 ft/day near McCoy to greater than 170 ft/day near Glenwood Springs. Hydraulic characteristics of these key hydrogeologic units are described in *Hydrogeologic Units of the Eagle Basin* (Topper et al., 2003).

Ground water in the Eagle Basin has historically been utilized for a variety of uses, including domestic, livestock, irrigation, and industry. Surface water is the predominant source of water utilized by municipalities due to the ready availability of large quantities

of water in the Eagle, Roaring Fork, and Colorado Rivers. In 1995, ground water accounted for 1 to 11 percent of total water use for those counties within the Eagle Basin, ranging from a low of 995 acre-feet per year in Pitkin County to 14,960 acre-feet per year in Rio Blanco County. Public water supply and domestic use accounts for most of the groundwater use in Eagle and Grand counties (Topper et al., 2003).

Ground-water quality of the Eagle Basin aquifers is extremely variable and highly dependent upon connectivity to the evaporitic rock sequences. In general, the highest quality ground water is located in the alluvial aquifers adjacent to the major rivers, select springs, and wells completed in the Leadville Limestone. Geothermal discharges from the Leadville Limestone near Glenwood Springs are an exception. Here total dissolved solids (TDS), sulfate, and chloride all exceed applicable drinking water standards. Ground water in the Eagle Valley Evaporite is highly saline and of a sodium chloride composition. TDS routinely exceeds 10,000 mg/L and the water is not suited for domestic, agricultural, or livestock use (Topper et al., 2003).

#### Environmental Consequences:

##### *Proposed Action:*

Direct impacts associated with implementation of the proposed action may include stormwater contributions of sediment and/or temporary elevated sediment loading resulting from surface disturbance. With suggested mitigation, potential water quality impacts resulting from stormwater sources will be sufficiently avoided.

##### *Mitigation:*

The operator should utilize stormwater best management practices such as proper placement and installation of silt fencing, straw wattles, revegetation, surface roughening, etc... to effectively mitigate potential downstream water quality impacts. Discharge of fresh water onto public lands from storage tanks should not be permitted without a BLM approved erosion prevention plan.

##### *No Action:*

No environmental consequences to water quality are anticipated with the No Action Alternative.

Finding on the Public Land Health Standard for water quality. Water quality in stream segment 10a is not identified on the State's List of Impaired Waters (303d List) thus it currently meets standard 5. Standard 5 will continue to be meeting until future data determines otherwise. Implementation of the proposed action will not alter this finding.

#### NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

## SOILS (includes a finding on Standard 1)

**Affected Environment:** A review of the NRCS soil survey for the Aspen-Gypsum Area, Colorado, Parts of Eagle, Garfield, and Pitkin Counties was conducted to identify affected soils within this heavily utilized portion of the project area. The primary soil unit affected by the proposed action was identified as the Anvik-Skylick-Sligting association (map unit #10). This soil unit is located on alluvial fans and mountain slopes. The parent material consists of mixed alluvium and/or mixed colluvium. This soil unit association is deep, well drained, and rated as moderately erodible for off road or trail locations.

### Environmental Consequences:

#### *Proposed Action:*

Erosion potential from the project area will be elevated during construction activities, as soils will be striped of stabilizing vegetation, woody debris, and large rock. Decreased soil stabilization in upland watersheds increases potential erosion and sedimentation downstream altering natural flow patterns, promoting stream channel instability and further erosion.

#### *Mitigation:*

See water quality mitigation. Reshape all temporary work areas to preconstruction contours. Revegetate temporary work areas with BLM recommended seed mixture.

#### *No Action:*

No impacts to soil resources would occur under the no-action alternative.

Finding on the Public Land Health Standard for Upland Soils: Soils within the permitted use area currently meet upland health Standard 1 (soils). Implementation of the proposed action or the No-action alternative will not alter this finding.

## VEGETATION (includes a finding on Standard 3)

### Affected Environment:

Most of the project area has been previously disturbed and reseeded with grasses. Vegetation appears to consist primarily of perennial grasses such as smooth brome and thickspike wheatgrass. Some aspens, snowberry and mesic grasses and forbs will also be affected.

### Environmental Consequences:

#### *Proposed Action:*

The construction of the proposed tank (60 feet in diameter and 15 feet tall) would remove approximately 0.25 acres of vegetation and temporarily remove an additional 0.25 acres of vegetation. The temporarily disturbed areas would be seeded with a mix of native

grasses and noxious weeds would be controlled within the project area by the project proponent as outlined in the Terms and Conditions of the right-of-way grant.

*No Action:*

Under the No Action alternative, the proposal to install a new water tank would be denied and no new surface disturbance would occur at the site. There would be no temporary or permanent loss of vegetation at the site.

Finding on the Public Land Health Standard for Plant and Animal Communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial). A formal land health assessment conducted in 2002 found that this portion of the landscape was meeting Standard 3 for healthy plant communities at the time of the assessment. Noxious weeds have recently become established within the vicinity of the Bellyache Communications Site and pose a risk of expansion, particularly following surface disturbing activities. If noxious weeds are actively controlled within the project area, the proposed action should not result in a trend away from meeting the Standard.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment:

*Fish.* No fish are known to exist within the area of the proposed action.

*Amphibians.* Several amphibians of interest are found within the GSFO, the Boreal toad (*Bufo boreas boreas*) and the Great Basin spadefoot toad (*Spea intermontana*). The distribution of the boreal toad is restricted to areas with suitable breeding habitat in spruce-fir forests and alpine meadows generally between 7,500 and 12,000 feet elevation. Breeding habitat includes lakes, marshes, ponds, and bogs with sunny exposures and quiet shallow water. Great Basin spadefoot toads occupy arid grasslands and high sagebrush, desert shrub, and pinyon-juniper woodlands. Great Basin spadefoot toad has been documented in the western third of the field office from the town of Rifle west to the boundary with the Grand Junction Field Office. This represents the eastern extent (fringe) of the species overall range and populations are believed to be small and sporadic.

Environmental Consequences:

*Proposed Action:*

Since no streams or wetlands are present it is concluded that no fish or amphibian habitat is in the immediate vicinity of the project. The proposed action would not have direct impacts on aquatic wildlife.

*No Action:*

The no action alternative constitutes denial of the project described in the proposed action and any of the associated actions. No new surface disturbance would occur under the no action alternative, thus eliminating impacts from this proposal to aquatic wildlife species.

Finding on the Public Land Health Standard for Threatened and Endangered Species.  
Aquatic Wildlife (partial, see also Plants and Terrestrial Aquatic): Neither the proposed nor the no action alternative would have any bearing on the ability of the area to meet the public land health standard 3 because no aquatic species are present in the project area.

## WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

### Affected Environment:

The CRVFO supports a wide variety of terrestrial wildlife species that summer, winter, or migrate through the area. The habitat diversity provided by the broad expanses of sagebrush, mixed mountain shrub, aspen, pinyon-juniper woodlands, other types of coniferous forests, and riparian/wetland areas support many species. The current condition of wildlife habitats varies across the landscape. Some habitat is altered by power lines, pipelines, fences, public recreation use, residential and commercial development, vegetation treatments, livestock and wild ungulate grazing, oil and gas development, and roads/trails. These factors have contributed to some degradation/fragmentation of habitat as well as causing disturbance to some species.

*Reptiles.* Reptile species most likely to occur include the western fence lizard (*Sceloporus undulatus*) and gopher snake (bullsnake) (*Pituophis catenifer*) in xeric shrublands or grassy clearings and the western terrestrial garter snake (*Thamnophis elegans*) along creeks. Other reptiles potentially present along creeks, although more commonly found at lower elevations than the site, are the milk snake (*Lampropeltis triangulum*) and smooth green snake (*Liochlorophis vernalis*).

*Birds.* Passerine (perching) birds commonly found in the area include the American robin (*Turdus migratorius*), pinyon jay, western scrub-jay (*Aphelocoma californica*), and black-billed magpie (*Pica hudsonia*). Two gallinaceous species, the wild turkey (*Meleagris gallopavo*) and the dusky grouse, are found here.

Birds of prey (eagles, falcons, hawks, and owls) may migrate through the area or nest in cottonwoods, conifers, or very tall oaks, while the numerous songbirds and small mammal populations provide the primary prey base. Common raptor species in the area include the: red-tailed hawk, golden eagle, American kestrel, great horned owl (*Bubo virginiana*), Cooper's hawk (*Accipiter cooperii*), and sharp-shinned hawk (*A. striatus*).

Numerous streams, rivers, reservoirs, ponds, and associated riparian vegetation provide habitat for a wide variety of waterfowl and shorebirds. Common species include the great blue heron (*Ardea herodias*), Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), pintail (*A. acuta*), gadwall (*A. strepera*), and American wigeon (*A. americana*).

*Mammals.* Numerous small mammals reside within the planning area, including ground squirrels (*Spermophilus* spp.), chipmunks (*Neotamias* spp.), rabbits (*Sylvilagus* spp.), and the striped skunk (*Mephitis mephitis*) and raccoon (*Procyon lotor*). Many of the rodent

and rabbit species provide the main prey for raptors and larger carnivores. These species are most likely to occur along the drainages, near the margins of dense oakbrush, in pinyon-juniper woodland, or in the small area of aspen and spruce/fir. Larger carnivores expected to occur include the bobcat (*Lynx rufus*) and coyote (*Canis latrans*). Black bears (*Ursus americanus*) make use of oaks and the associated chokecherries and serviceberries for cover and food, while mountain lions (*Felis concolor*) are likely to occur during seasons when mule deer (*Odocoileus hemionus*) are present.

*Big Game.* The mule deer is a recreationally important species that are common throughout suitable habitats in the region. Another recreationally important big game ungulate (hoofed animal), the Rocky Mountain elk (*Cervus elaphus nelsonii*), is also present. Mule deer and elk usually occupy higher elevations, forested habitat, during the summer and then migrate to sagebrush-dominant ridges and south-facing slopes at lower elevation in the winter.

BLM lands provide a large portion of the undeveloped winter range available to deer and elk. The CRVFO's Resource Management Plan (RMP) allocated existing forage proportionately to livestock and big game, the criterion being active preference for livestock and 5-year average demand for big game. The RMP allocated all available forage on allotments in big game winter range—unavailable to livestock because of stocking rate limitations or slope restrictions to big game. Summer range was not limiting to big game; therefore, allocating forage beyond CDOW population goals in summer range was deemed to be unnecessary since winter range is what limits herd size. In addition, the RMP allocated additional forage produced through vegetation manipulation on wildlife winter range first to big game and then to livestock up to active preference. On summer range, additional forage was allocated to livestock first.

#### Environmental Consequences:

##### *Proposed Action:*

The construction of the proposed tank (60 feet in diameter and 15 feet tall) would remove approximately ½ acre of vegetation as well as some areas of interim reclamation. The construction would result in a loss of nesting, roosting, perching, and foraging habitat for birds on disturbed areas and reduce habitat effectiveness adjacent to areas where disturbance-related effects could be expected.

Additional, indirect habitat loss may occur if increased human activity (e.g., traffic, noise) associated with construction causes intolerant species to be displaced or alter their habitat use patterns. The extent of indirect habitat loss varies by species, the type and duration of the disturbance, and the amount of screening provided by vegetation and topography. In general, disturbance-related impacts are temporary, with patterns of distribution and habitat use returning to pre-disturbance conditions rather quickly when the disturbance stops.

*No Action:*

The no action alternative constitutes denial of the project described in the proposed action and any of the associated actions. The no action alternative would leave the wildlife habitats in their current conditions, allowing them to change naturally over time. No new surface disturbance would occur under the no action alternative, thus eliminating impacts from this development to terrestrial wildlife species.

Finding on the Public Land Health Standard for Threatened & Endangered Species – Aquatic Wildlife (partial, see also Plants and Terrestrial Aquatic): Neither the proposed nor the no action alternative would have any measurable bearing on the ability of the area to meet the public land health standard 3 for terrestrial species present in the project area.

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, those brought forward for analysis will be formatted as shown above.

<b>Table 2. Other Resources Considered in the Analysis.</b>			
<i>Resource</i>	<i>NA or Not Present</i>	<i>Present and Not Affected</i>	<i>Present and Affected</i>
Access and Transportation	X		
Cadastral Survey		X	
Fire/Fuels Management		X	
Forest Management	X		
Geology and Minerals	X		
Law Enforcement	X		
Paleontology	X		
Noise	X		
Range Management	X		
Realty Authorizations		X	
Recreation		X	
Socio-Economics	X		
Visual Resources		X	
Water Rights	X		

**VISUAL RESOURCE MANAGEMENT:**

Affected Environment:

The proposed project area is located in an area classified as Visual Resource Management Class (VRM) Class II. VRM classes were allocated in the GSRA 1984 Resource Management Plan. The objective of VRM Class II is to retain the existing characteristic landscape. The level of change in any of the basic landscape elements (line, form, color, texture) due to management activities should be low and not evident.

## Environmental Consequences:

### *Proposed Action:*

The proposed action would not be visible from the Key Observation Point of Interstate 70. The long-term contrast rating process shows that with inclusion of design and mitigation measures no new contrast would be introduced or long term impacts. Therefore the proposed action meets the objective of VRM Class II in maintaining the existing landscape character.

### *Mitigation:*

1. All disturbed surfaces shall be revegetated with the species found in the adjacent landscape
2. Woody debris and stone material generated during construction shall be saved and placed on the disturbed ground surfaced to provide color and texture and to also create microclimates, encouraging vegetation growth.
3. Preserve the existing coniferous and deciduous forest to screen the tank.
4. Spoils from the access road or tank shall not be side cast.

*No Action:* The existing natural landscape would be maintained and VRM Class II objectives would be met.

## CUMULATIVE IMPACTS SUMMARY:

### *Soil and Water*

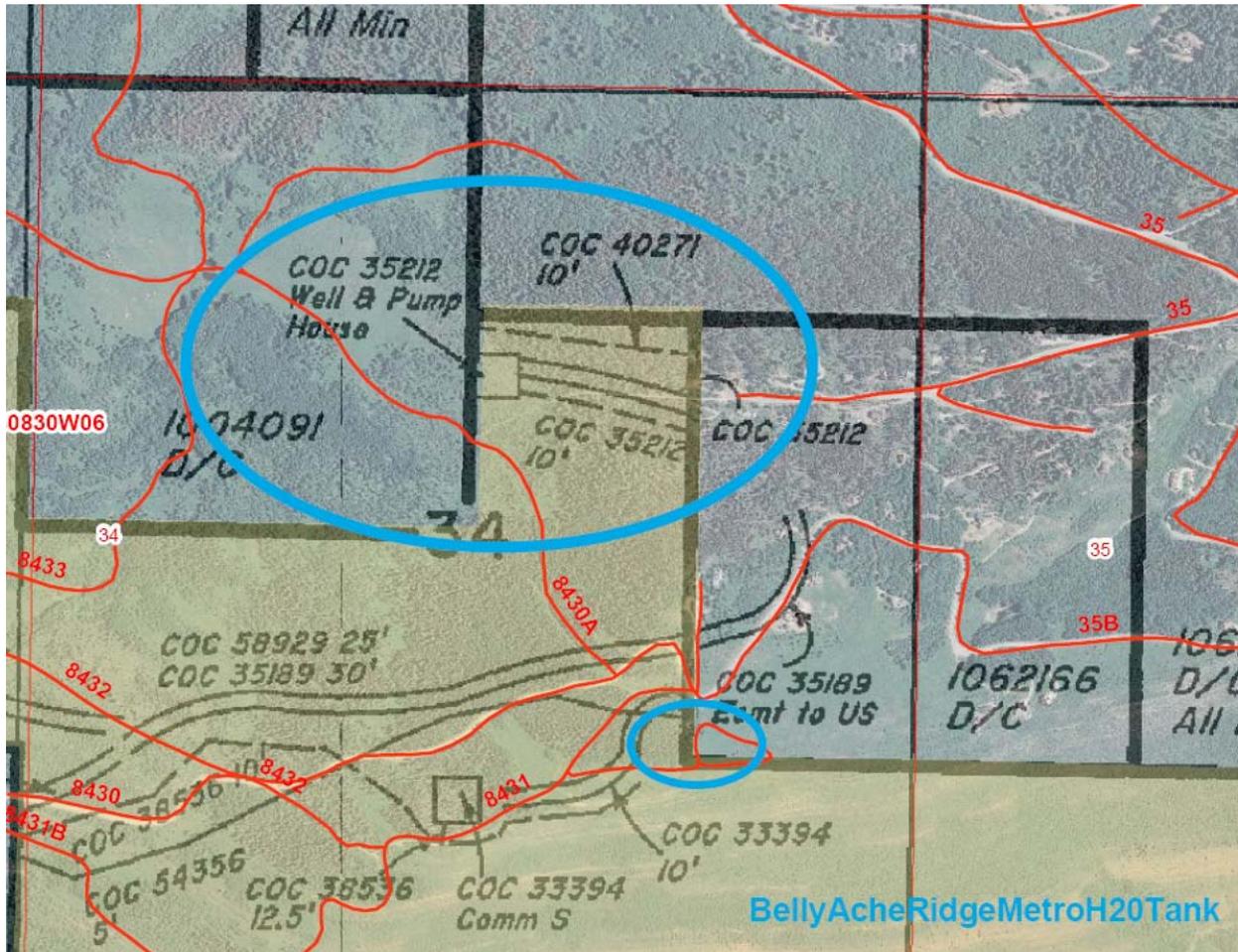
Proposed activities would result in new surface disturbance associated with upgrading constructing the tank site. These activities would result in soil compaction and displacement resulting in an increase in area erosion potential and sediment available for transport to nearby drainages.

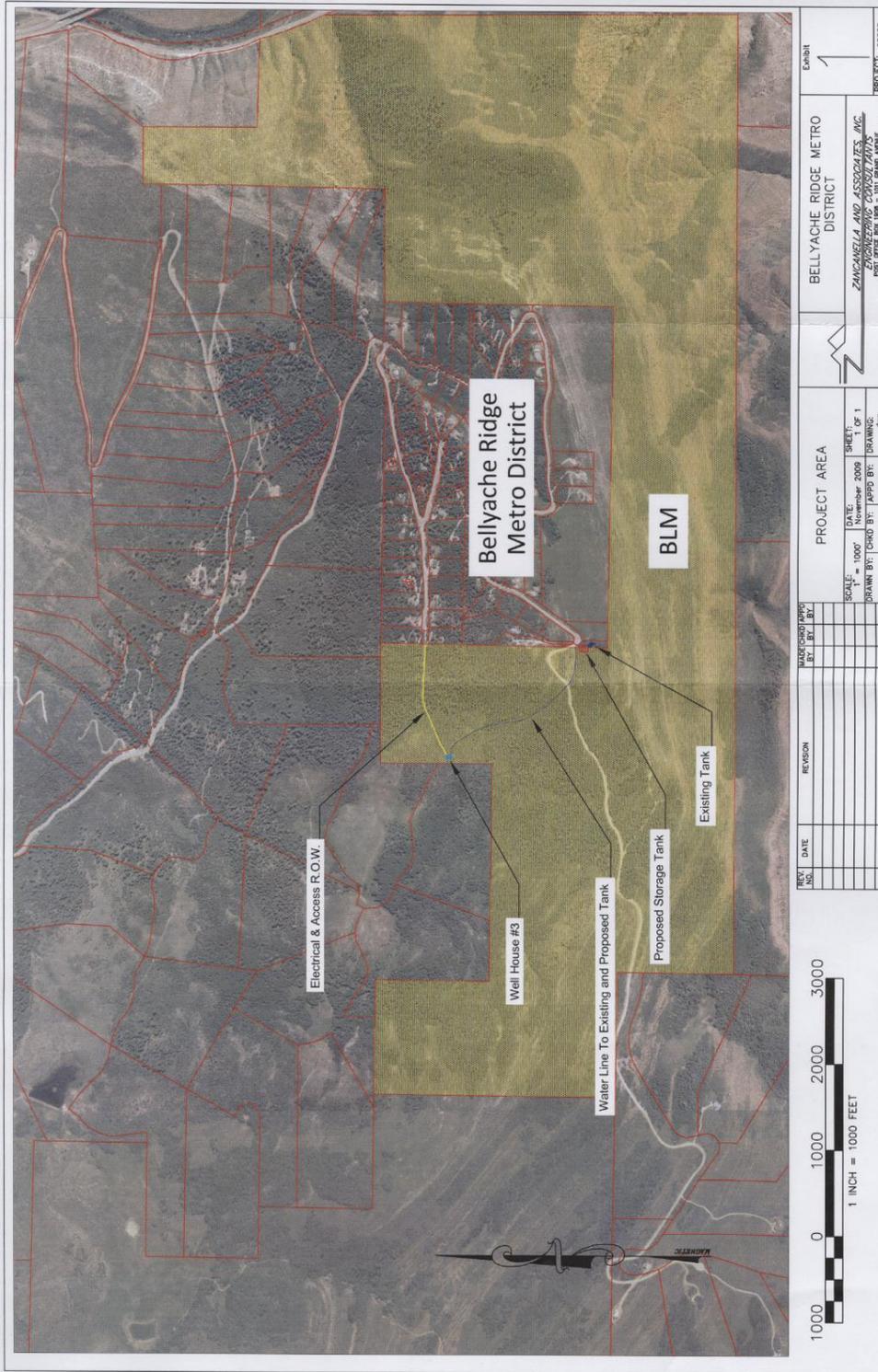
It is anticipated that the impacts from the proposed activities would be minor and of short duration if appropriate mitigation measures are applied and timely reclamation occurs. Based on the distance of the proposed activities from perennial drainages and good existing vegetation cover between the project area and the Eagle River; the likelihood of sediment associated with the proposed activities reaching the Roaring Fork is minimal.

INTERDISCIPLINARY REVIEW:

<i>Name</i>	<i>Title</i>	<i>Responsibility</i>
Cheryl Harrison	Archaeologist	Cultural Resource/Native American Religious Concerns
Kimberly Miller	Outdoor Recreation Planner	Recreation, WSR, Wilderness
Monte Senor	Rangeland Management Specialist	Invasive species
Carla DeYoung	Ecologist	ACEC, Special Status Plants, Vegetation
Greg Wolfgang	Outdoor Recreation Planner	Recreation, VRM, Travel and Access
Nate Dieterich	Hydrologist	Soils, Hydrology/Water Rights, Water Quality, Air
Brian Hopkins	Wildlife Biologist	T&E Wildlife, Fisheries
Mike Kinser	Rangeland Management Specialist	Range, Riparian, Wetlands
Isaac Pittman	Rangeland Management Specialist	Rangeland Management Specialist
Carole Huey	Realty Specialist	Interdisciplinary Team Lead

APPENDICES: Location map, drawings and specifications





REV#	DATE	REVISION	MADE/CHG/APPD BY	PROJECT AREA	BELLYACHE RIDGE METRO DISTRICT	EXHIBIT	1
				DATE: November 2009	 ZANGANELLA AND ASSOCIATES, INC. ENGINEERING AND CONSULTANTS 1600 SPRING CIRCLE BLVD. #100 DENVER, COLORADO 80202	PROJECT: 25500	
				SCALE: 1" = 1000'		SHEET: 1 OF 1	
				DRAWN BY: TDRD	BY: PAPP		







UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
RIGHT-OF-WAY GRANT

SERIAL NUMBER COC035212

1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).

2. Nature of Interest:

a. By this instrument, the holder:

Bellyache Ridge Metropolitan District  
PO Box 40  
Wolcott, CO 81655

receives a right to construct, operate, maintain, and terminate a two buried water tanks, well house and water pipeline and related access road on public lands described as follows:

6th Principal Meridian, Eagle County, Colorado

T. 4 S., R. 83 W.,  
Section 34: SW  $\frac{1}{4}$  NE  $\frac{1}{4}$ , NW  $\frac{1}{4}$  SR  $\frac{1}{4}$

and as shown on the attached map in Exhibit A.

b. The right-of-way area granted herein is for a 30' x 40' – Well House, 120' x 50' – portion of the 100,000 gallon buried water tank half of a 250,000 gallon buried water tank, a 15' x 2200' – access road, and a 15' x 1600 buried water pipeline, containing 1.47 acres, more or less.

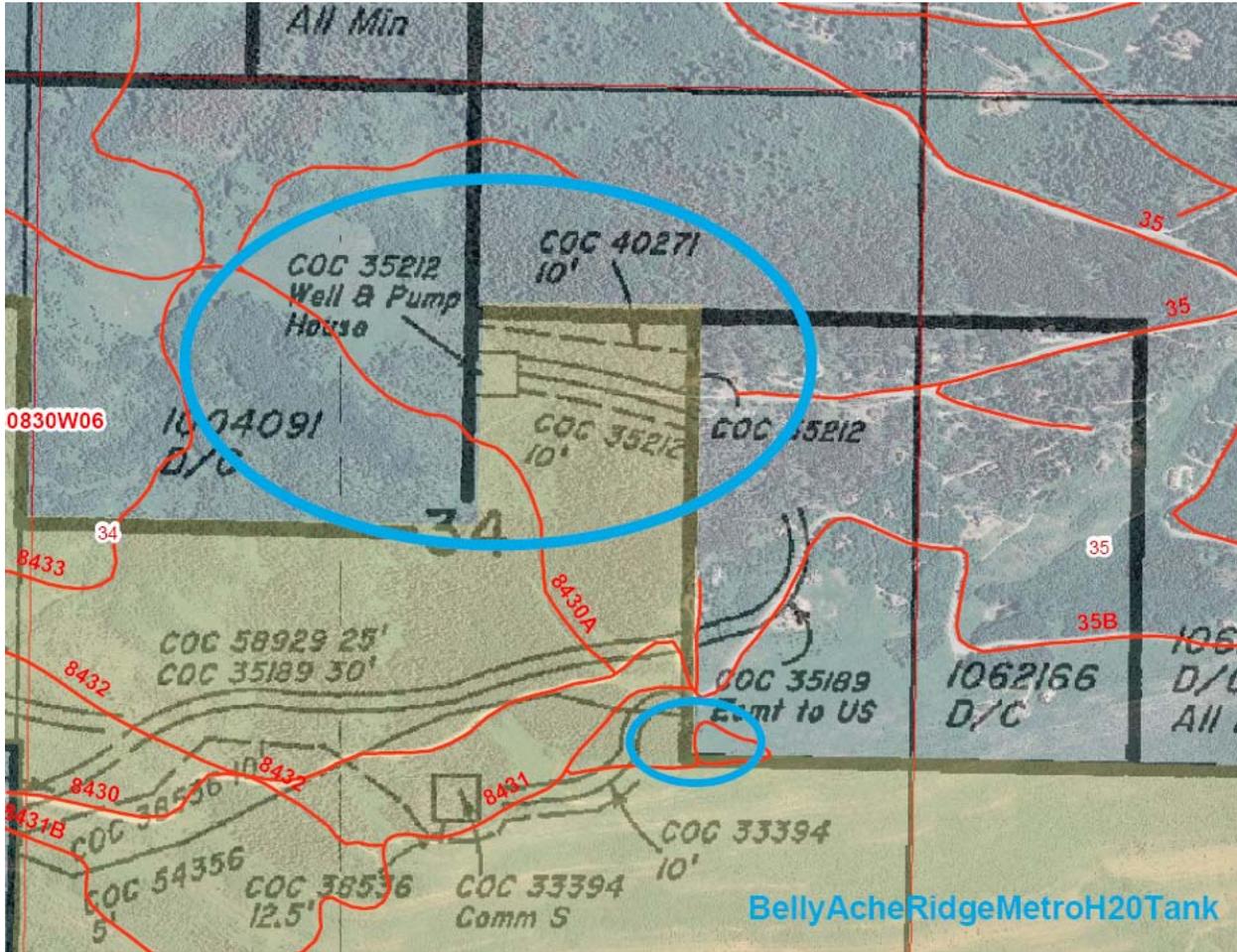
c. This instrument shall terminate on December 31, 2029, unless, prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.

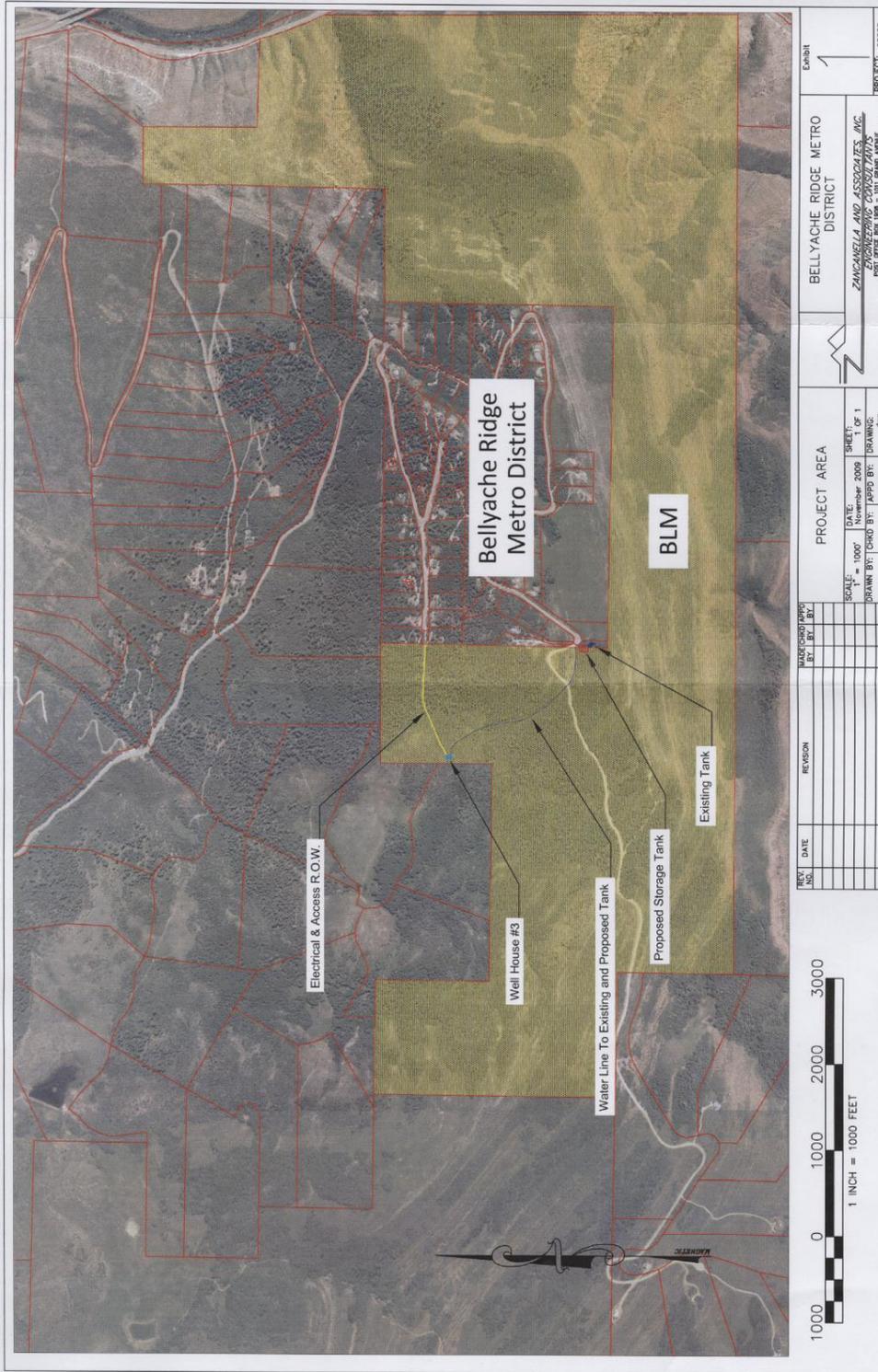
d. This instrument may be renewed. If renewed, the right-of-way or permit shall be

subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.

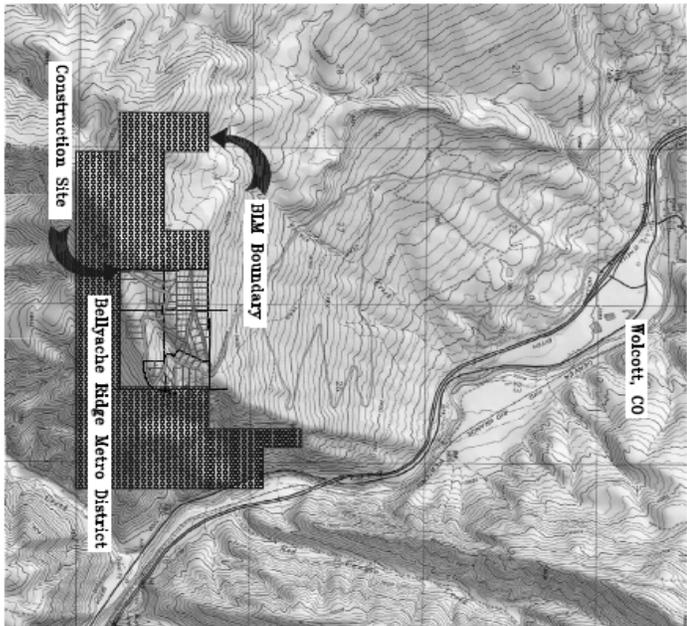
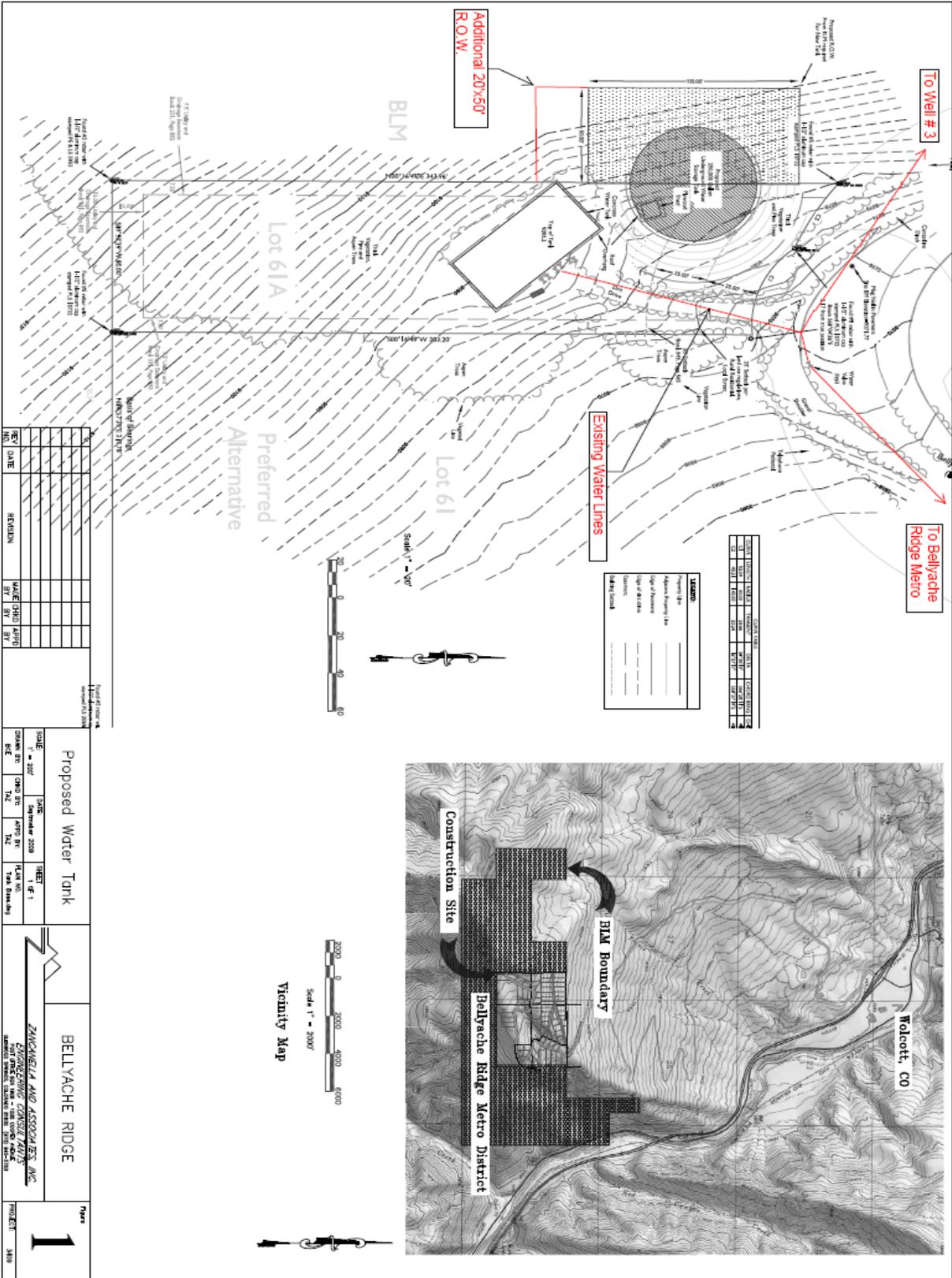
- e. Notwithstanding the expiration of this instrument or any renewal thereof, early relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.
3. Rental: For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.
  4. Terms and Conditions:
    - a. This grant is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2800, and all other applicable federal, state, and local laws, regulations, and standards.
    - b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.
    - c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
    - d. The plans, maps, and designs set forth in the Application, the map in Exhibit A, and Special Stipulations and Condition in Exhibit B, attached hereto, are incorporated into and made a part of this grant instrument as fully and effectively as if they were set forth herein in their entirety.
    - e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.
    - f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.

**EXHIBIT A, MAPS AND DRAWINGS**





REV#		DATE	REVISION	MADE/CHG/APPD BY	BY	DATE	PROJECT AREA	BELLYACHE RIDGE METRO DISTRICT	EXHIBIT	1
SCALE		1" = 1000'	DATE	NOVEMBER 2009	SHEET	1 OF 1	ZANGANELLA AND ASSOCIATES, INC.		PROJECT: 25000	
DRAWN BY		TDRO	BY	PAPD	BY	TDRAWING	ENGINEERING CONSULTANTS		ALBUQUERQUE, COLORADO 81602-5700	



**EXHIBIT B , SPECIAL STIPULATIONS, COC35212**  
**Two Buried Water Tanks, Access Road, and Buried Water Pipeline**

1. The holder shall inform the Realty Specialist at least ten days prior to the commencement of construction under this grant. Contact the Colorado River Valley Field Office, Realty Specialist.
2. All activities shall be confined to the COC35212 right-of-way corridor.
3. The holder shall promptly remove and dispose in an authorized sanitary landfill, all waste generated by its activities. Waste includes, but is not limited to, human waste, trash, garbage, petroleum products, ashes and equipment. No burning of trash, brush, or any other material shall be allowed.
4. It is the holders responsibility to coordinate with all other rights-of-way holders and adjacent landowners to make sure any conflicts are resolved with both road and site improvement and future use and maintenance.
5. The authorized officer shall be notified at least 90 days prior to relinquishment or expiration of the ROW grant. The holder shall contact the authorized officer to arrange a joint inspection of the ROW. This inspection shall be held to determine if the ROW is in an acceptable condition. If it is not, then the holder shall be responsible for returning the ROW to a condition acceptable to the authorized officer. This shall be accomplished before relinquishment or expiration of the ROW.
6. This grant shall not be assignable without written permission of the authorized officer. This Grant may be renewed. If renewed, the Grant shall be subject to the regulation existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
7. Minimize fugitive dust production by utilizing a BLM approved dust suppressant (e.g. water) on disturbed areas and over access roads comprised of native surfaces during construction operations.
8. The contractor is to ensure equipment involved in land disturbing actions be clean of noxious weed seeds or propagative parts prior to entry on site. When working in areas with noxious weeds, equipment should be cleaned prior to moving off site.
9. Consistent with Executive Order 13186 and BLM Colorado guidelines, CRVFO has established a condition of approval (COA) applies to all activities resulting in the removal of vegetation and broad use of pesticides to protect BCC habitat during the nesting season. The COA would apply to activities between May 15 and July 15. The COA would consider the scale, type, and duration of the project; species potentially present; weather conditions; elevation and habitat types present; and type of motorized equipment to be used. An exception may be granted if nesting surveys indicate no nesting BCC species within 10 meters of the area to be disturbed. Due to the small scale of this project (approx. 1/2 acre) no COA would be applied.

10. Fuels and lubricants would be stored in appropriate containers and refueling would occur in designated areas.
11. The operator should utilize stormwater best management practices such as proper placement and installation of silt fencing, straw wattles, revegetation, surface roughening, etc... to effectively mitigate potential downstream water quality impacts. Discharge of fresh water onto public lands from storage tanks should not be permitted without a BLM approved erosion prevention plan.
12. Reshape all temporary work areas to preconstruction contours. Revegetate temporary work areas with BLM recommended seed mixture.
13. The construction of the proposed tank (60 feet in diameter and 15 feet tall) would remove approximately 0.25 acres of vegetation and temporarily remove an additional 0.25 acres of vegetation. The temporarily disturbed areas would be seeded with a mix of native grasses and noxious weeds would be controlled within the project area by the project proponent as outlined in the Terms and Conditions of the right-of-way grant
14. All disturbed surfaces shall be revegetated with the species found in the adjacent landscape. Woody debris and stone material generated during construction shall be saved and placed on the disturbed ground surfaced to provide color and texture and to also create microclimates, encouraging vegetation growth.
15. Preserve the existing coniferous and deciduous forest to screen the tank.
16. Spoils from the access road or tank shall not be side cast.
17. The National Historic Preservation Act (NHPA) requires that if newly discovered cultural resources are identified during project implementation, work in that area must stop and the agency Authorized Officer notified immediately (36 CFR 800.13). The Native American Graves Protection and Repatriation Act (NAGPRA), requires that if inadvertent discovery of Native American Remains or Objects occurs, activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice made to the BLM Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)). Further actions also require compliance under the provisions of NHPA and the Archaeological Resource Protection Act.
18. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall 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 ROW or on facilities authorized under this ROW 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 shall 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 shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government. The holder shall comply with applicable State standards for public health and safety, environmental protection and siting, construction, operation and maintenance, if these State standards are more stringent than Federal standards for similar projects. Part 117 shall 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 of spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

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IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

-----  
Signature of Holder

-----  
Allen B. Crockett, *Acting* Associate Field Manager

-----  
Name and Title

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Effective date of Grant)

**FONSI**  
**DOI-BLM-CO-N040-2010-0045-EA**

The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The proposed action with any approved mitigation measures result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

**DECISION RECORD**

DECISION: It is my decision to approve the application for a right-of-way COC35212 Amendment 1 for an additional 250,000-gallon water tank.

RATIONALE:

1. Approval of the proposed action is validating the rights granted with the Federal Land Policy and Management Act.
2. The environmental impacts have been mitigated with measures included in the attached stipulations.

MITGATION MEASURES:

Minimize fugitive dust production by utilizing a BLM approved dust suppressant (e.g. water) on disturbed areas and over access roads comprised of native surfaces during construction operations.

The contractor is to ensure equipment involved in land disturbing actions be clean of noxious weed seeds or propagative parts prior to entry on site. When working in areas with noxious weeds, equipment should be cleaned prior to moving off site.

Consistent with Executive Order 13186 and BLM Colorado guidelines, CRVFO has established a condition of approval (COA) applies to all activities resulting in the removal of vegetation and broad use of pesticides to protect BCC habitat during the nesting season. The COA would apply to activities between May 15 and July 15. The COA would consider the scale, type, and duration of the project; species potentially present; weather conditions; elevation and habitat types present; and type of motorized equipment to be used. An exception may be granted if nesting surveys indicate no nesting BCC species within 10 meters of the area to be disturbed. Due to the small scale of this project (approx. 1/2 acre) no COA would be applied.

Fuels and lubricants would be stored in appropriate containers and refueling would occur in designated areas.

The operator should utilize stormwater best management practices such as proper placement and installation of silt fencing, straw wattles, revegetation, surface roughening, etc... to effectively mitigate potential downstream water quality impacts. Discharge of fresh water onto public lands from storage tanks should not be permitted without a BLM approved erosion prevention plan.

Reshape all temporary work areas to preconstruction contours. Revegetate temporary work areas with BLM recommended seed mixture.

The construction of the proposed tank (60 feet in diameter and 15 feet tall) would remove approximately 0.25 acres of vegetation and temporarily remove an additional 0.25 acres of vegetation. The temporarily disturbed areas would be seeded with a mix of native grasses and noxious weeds would be controlled within the project area by the project proponent as outlined in the Terms and Conditions of the right-of-way grant

All disturbed surfaces shall be revegetated with the species found in the adjacent landscape

Woody debris and stone material generated during construction shall be saved and placed on the disturbed ground surfaced to provide color and texture and to also create microclimates, encouraging vegetation growth.

Spoils from the access road or tank shall not be side cast.

The National Historic Preservation Act (NHPA) requires that if newly discovered cultural resources are identified during project implementation, work in that area must stop and the agency Authorized Officer notified immediately (36 CFR 800.13). The Native American Graves Protection and Repatriation Act (NAGPRA), requires that if inadvertent discovery of Native American Remains or Objects occurs, activity must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice made to the BLM Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)). Further actions also require compliance under the provisions of NHPA and the Archaeological Resource Protection Act.

The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall 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 ROW or on facilities authorized under this ROW 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 shall 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 shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government. The holder shall comply with applicable State standards for public health and safety, environmental protection and siting, construction, operation and maintenance, if these State standards are more stringent than Federal standards for similar projects. Part 117 shall 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 of spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

NAME OF PREPARER: Carole Huey

SIGNATURE OF AUTHORIZED OFFICIAL:



Allen B. Crockett  
Acting Associate Field Manager

9-14-10

Date