

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 East Market Street
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-110-2011-0032-EA

CASEFILE/PROJECT NUMBER: COC74740

PROJECT NAME: Rio Blanco County Road 5 Improvement Project

LEGAL DESCRIPTION: Sixth Principal Meridian

T.1N., 97W.,
sec. 22, SE¹/₄NE¹/₄, N¹/₂SE¹/₄, SW¹/₄SE,
sec. 26, lots 10, 11,
sec. 27, lot 3, 8.
T.1S., 97W.,
sec. 11, SE¹/₄NW¹/₄,
sec. 28, NE¹/₄SW¹/₄.
T.2S, 96W.,
sec. 31, lot 1,
sec. 32, N¹/₂SW¹/₄.
T.2S., 97W.,
sec. 22, NW¹/₄NW
sec. 25, lot 12,
sec. 26, NW¹/₄NW¹/₄.
T.3S., 95W.,
sec. 7, SE¹/₄SW¹/₄, SW¹/₄SE,
sec. 8, SW¹/₄SW¹/₄.
T.3S., 96W.,
sec. 2, S¹/₂SW¹/₄,
sec. 3, lot 4, S¹/₂NE¹/₄,
sec. 11, SE¹/₄NE¹/₄,
sec. 12, NW¹/₄SW¹/₄.

APPLICANT: Rio Blanco County

ISSUES AND CONCERNS: Dust created during construction could impact vegetation or water resources. Soil disturbance could cause erosion, weed proliferation, or impact water quality. Traffic flow, existing utilities, and irrigation ditches could be impacted during construction. Access by livestock and wildlife may need to be controlled during the construction project and use of the road.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: Rio Blanco County (RBC) is proposing improvements to County Road (CR) 5 along the entire 43-mile route, from State Highway (SH) 13 to SH 64 (Figure 1), by implementing a series of improvement projects designed to make the roadway safer and able to accommodate heavy equipment transport. Rio Blanco CR 5 is the primary route in the Piceance Basin, providing access to residential, agricultural, and recreational land uses and potential oil and gas deposits in the Roan Plateau.

Development of oil and gas drilling sites is contributing to the safety concerns along CR 5 with increases in vehicle trips and, in particular, heavy equipment transport to and from drilling and processing activities in the area.

This Environmental Assessment (EA) covers a series of six improvement projects that include widening, passing lanes, intersection improvements at CR 3 and SH 24, a bridge replacement, and replacement of 17 stock passes. These projects are the initial set of CR 5 improvement projects to be undertaken by Rio Blanco County and would address the most serious roadway deficiencies. Projects 1 and 2b would be the first of the six projects to be implemented with construction scheduled to begin in 2011. A metes and bounds legal description for these two projects is show in Attachment 1 of this document. The remaining projects described in this EA would be initiated as funding becomes available. Subsequently, additional CR 5 projects beyond this set of six projects would be pursued as part of the overall program in future proposals as funding becomes available and will be addressed in future NEPA analyses.

The projects would occur on federal land managed by BLM, state land managed by the Colorado Division of Wildlife (CDOW), land that is privately owned, and existing Rio Blanco County rights-of-way. The project would require acquisition of additional rights-of-way and easements to accommodate construction. The BLM's review is of the segments of the improvement that cross BLM land, but the entire Proposed Action (including private and state land) is included for a comprehensive review of impacts to the environment. The County is reviewing and approving the improvement on private land through its land use regulations. The State of Colorado will review and provide approval for the projects that cross state wildlife areas.

Proposed Action: The CR 5 Project consists of a series of individual improvement projects including curve reduction, intersection, bridge replacement, passing lanes, and replacement of 17 stock passes. Individual project locations are described in Tables 1-A and 1-B and shown in Figures 2 through 7 for specific resources.

Project #1 Safety Improvements

Safety improvements include increasing the shoulder width (currently 0-2 feet) to 8 feet, flattening horizontal and vertical curves of the roadway (curve reduction) to allow for a design speed appropriate for present-day traffic volumes, increasing the clear zone along the side of the road, increasing the line of sight around curves, replacing culverts, and adding retaining walls to reduce the impacts. Two retaining walls would be added (from MP 11.4 to 11.6 and from MP 11.52 to 11.67) and would range in height from 5 – 20 feet.

Project #2a – Intersection Improvements

Upgrades to the existing CR 5 – CR 3 intersection (western intersection only) include reconstructing access roads along the corridor with better approach angles to improve driver visibility, adding left turn bays, and adding acceleration/deceleration lanes.

Project #2b – Intersection Improvements

Upgrades to the existing CR 5 – CR 24 intersection include reconstructing access roads along the corridor with better approach angles to improve driver visibility, adding left turn bays, and adding acceleration/deceleration lanes.

Project #3 – Stock Passes

Livestock passes would be replaced in 17 locations. Existing structures would be replaced with 10 x 10 foot concrete box culverts.

Project #4 – Bridge Replacement

An existing bridge (30 feet long and 30 feet wide) would be replaced with a bridge that is 100 feet long and 43 feet wide.

Project #5a and #5b – Passing Lanes

A passing lane would be added for approximately one mile in one direction then another passing lane would be added in the other direction for approximately one mile.

Project #6 – Widening

Improvements include increasing the shoulder width (currently 0-2 feet) to 8 feet, adding retaining walls and replacing culverts to improve drainage. The two retaining walls to reduce impacts to adjacent landowners (from MP 12.85 to 12.98 and from MP 14.52 to 14.59) would range in height from 5 to 10 feet.

Common to All Projects

As part of the Proposed Action, Rio Blanco County is incorporating project specific design features to minimize environmental impacts in the CR 5 project area. These features include weed control, erosion and sediment control, livestock fencing replacement, restoration of irrigation ditches, dust suppression, traffic control, and safeguards to prevent potential impacts to wetlands and paleontological resources. These features are included in the final design plans and construction specifications being prepared which will be submitted to BLM upon completion. Rio Blanco County will also prepare a weed control plan, emergency response plan, stormwater management plan, and reclamation plan.

The detailed construction plan set and the Stormwater Management Plan are in the project file at the WRFO and are available for review upon request.

Raptor surveys will be completed prior to construction for each project. Specific measures to minimize impacts are discussed in each resource section of this EA.

Table 1-A. County Road 5 Improvement Project Acreage *			
Project	Proposed new ROW on public (BLM) lands (acres)**	Temporary work areas on public lands (acres)	Proposed new ROW on private land (acres)
Project 1 Safety Improvements	10.14	0.46	5.21
Project 2a Intersection Improvements & Stock Pass 6	7.12	1.87	5.0
Project 2b Intersection Improvements	0	0	8.38
Project 3 and Stock Passes 5,7,9,10,11,12,13,14,15,16	10.62	8.82	30.89
Project 4 Bridge Replacement	1.23	0.27	0.51
Project 5a Passing Lanes and Stock pass 1	8.72	1.219	28.57
Project 5b Passing Lanes	3.945	2.23	7.16
Project 6 Widening & Stock Passes 2, 3, 4	12.50	4.755	23.74
TOTAL ACRES***	54.28	19.62	109.46

NOTES:

*: The projects will be constructed over multiple construction seasons. There may be minor changes to the acreage which would be addressed in the site specific analysis and authorization at that time.

** Unless otherwise noted, construction disturbance areas for each resource were calculated by overlaying the area of cut and fill needed for each improvement project over the resource. The total area is reported in the EA; however, part of the area is made up of existing CR 5 so the actual resource impact is less than shown in the EA. The total acreage impacted, including existing road, would be approximately 183.36 acres.

A FLPMA right-of-way will be issued for the existing RS2477 rights-of-ways and any non serialized but existing county roads that are affected by this action as well as the new disturbance on Federal lands. See Attachment A of this document for the metes and bounds description of Project 1 and Project 2b which are planned for construction in 2011. Specific legal descriptions will be developed for subsequent projects during site specific planning.

Table 1-B. County Road 5 Improvement Project Locations

Project	Location, Description (MP=mile post)	Land Ownership	Township	Range	Sections
#1 Safety Improvements	MP 10.80 to MP 11.75	BLM, private	3S	95W	7, 8, 17, 18
#2a Intersection Improvements	MP 17.34 to MP 17.99	BLM, private	2S	96W	31, 32
#2b Intersection Improvements	MP 26.67 to MP 27.15	Private	1S	97W	33
#3 Stock Passes	Location 1: MP 8.67 to MP 8.75	Private	3S	95W	9, 16
	Location 2: MP 12.65 to MP 12.70	Private	3S	96W	12, 13
	Location 3: MP 13.90 to MP 14.07	BLM, private	3S	96W	2, 11
	Location 4: MP 15.130 to MP 15.296	BLM, private	3S	96W	3
	Location 5: MP 15.74 to MP 15.88	BLM, private	3S	96W	3, 4
	Location 6: MP 17.71	BLM, private	2S	96W	32
	Location 7: MP 18.97 to MP 19.12	BLM, private	2S	96W, 97W	31, 36
	Location 8:*	N/A	N/A	N/A	N/A
	Location 9: MP 21.42 to MP 21.59	BLM, private	2S	97W	26, 27
	Location 10: MP 22.87 to MP 23.02	BLM, private	2S	97W	21, 22
	Location 11: MP 24.23 to MP 24.38	Private	2S	97W	9, 16
	Location 12: MP 25.37 to MP 25.52	BLM, private	2S	97W	4, 9
	Location 13: MP 27.74 to MP 27.90	BLM, private	1S	97W	28
	Location 14: MP 29.36 to MP 29.51	State	1S	97W	21, 22
	Location 15: MP 30.48 to MP 30.63	State	1S	97W	15
	Location 16: MP 32.85 to MP 33.0	Private	1S	97W	2
	Location 17: MP 36.59 to MP 36.76	BLM	1N	97W	22
#4 Bridge Replacement	MP 31.98	BLM, state, private	1S	97W	11
#5a Passing Lanes	MP 8.90 to MP 10.80	BLM, private	3S	95W	8, 9, 16
#5b Passing Lanes	MP 34.54 to MP 36.39	BLM, private	1N	97W	22, 26, 27, 35
#6 Widening	MP 12.84 to MP 14.94	BLM, private	3S	96W	2, 3, 11, 12, 13

*Location 8 was dropped from the project after analysis was completed.

Applicant Committed Mitigation Measures: Rio Blanco County included mitigation measures in their Proposed Action. These measures are attached as Exhibit A.

No Action Alternative: Under the No Action Alternative, BLM would deny the right-of-way grant application, and no road improvement projects along CR 5 between MP 0 (SH 13) and MP 42 (SH 64) would occur. The existing condition of the roadway would not change. Without the proposed projects, it is expected that the accident rate would continue to increase, portions of CR 5 may be temporarily closed, and area industry would be negatively affected.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: The proposed projects for CR 5 are needed to improve safety and traffic flow. Therefore, improvement projects were designed to address specific safety and traffic issues on the existing facility. However, Rio Blanco County considered relocating several miles of CR 5 to the north starting near Fourteen Mile Creek (MP 8) to the intersection at SH 13. This alternative would require extensive right-of-way and grading activities to build a new road. Within this new right-of-way, there would be greater impacts to wildlife habitat, vegetation, and grazing as well as large tracts of land under agreements for drilling activities. Therefore, this alternative was not carried forward for further consideration. In addition to the environmental impacts, the extensive amount of new right-of-way that would be needed and the high costs associated with building a new highway to provide access for development of energy resources in this area make consideration of an alternative that would provide a new roadway unreasonable.

NEED FOR THE ACTION: BLM's purpose and need for this action are established by the BLM's responsibility under the Federal Land Policy and Management Act (FLPMA) to respond to an applicant's request to maintain and improve their road system that crosses BLM land. The BLM is responsible for managing multiple uses on public lands in a manner that avoids, minimizes, reduces, or mitigates potential impacts to other resource values.

Rio Blanco County's objective for this action is to improve safety, enhance traffic flow, reduce maintenance requirements and costs, and provide a facility appropriate for a future increase in traffic volume to an existing two-lane roadway (CR 5 between SH 13 and SH 64) in Rio Blanco County, Colorado. The project is needed to address the following safety issues:

- Traffic operation at intersections
- Limited passing and pull-out opportunities
- Sub-standard intersection designs
- Sharp curves with limited sight distance
- Narrow, steep, and unpaved shoulders
- Limited locations with guardrails
- Functionally obsolete bridges with sub-standard bridge approach/guardrails
- Frequent conflicts between vehicles and animals (wildlife and livestock) crossing the road
- Deficient drainage systems to convey storm water runoff

The CR 5 corridor is a heavily used roadway with average daily traffic volumes that are expected to increase by 150 percent in the next 20 years (HDR 2010). This increase in traffic volume affects the flow along CR 5 at intersections because vehicles slow or stop to make turns from CR 5 onto other roads. Likewise, traffic flow is impeded when vehicles turning onto CR 5 must accelerate to reach the speeds of the vehicles traveling on the roadway. This condition is worst at

the CR5/CR3, CR5/CR26, and CR5/SH13 intersections. While an operational analysis shows that intersections between CR 5 and other county roads generally operate at acceptable levels, dedicated left and right turn lanes and acceleration lanes at these intersections helps promote smooth travel along CR 5 by removing slowing or stopped vehicles waiting to turn.

In addition to increasing traffic volumes and degrading intersection operations, the corridor experiences a high crash rate. Between 2001 and 2007, the crash rate on CR 5 was higher than other rural collectors in Colorado with most crashes involving one car and occurring at certain locations along the 42-mile corridor. The highest concentrations of crashes were found to occur between Cow Creek Road and Sprague Gulch Road, in the vicinity of the CR 26 intersection, between CR 24 and CR 76, and between CR 66 and SH 64. Several factors contribute to crashes, including poor sight distance, excess vertical curves, deteriorating shoulders, and drainage problems.

In addition, the growth in the oil and gas industry in the area has placed a higher demand on CR 5 as a support corridor for the transport of heavy and bulk equipment. The existing widths of stock passes and bridges are too narrow for the passage of certain equipment. In some cases, railings must be removed to allow for passage which contributes to delays. Present unsafe conditions, combined with the growing demand on the roadway for transport of heavy equipment, show the need for roadway and safety improvements to CR 5.

Decision to be made: The BLM White River Field Office (WRFO) will need to decide whether to authorize right-of-way grants for the six roadway improvements being proposed by Rio Blanco County and under what conditions.

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: White River Record of Decision (ROD) and Approved Resource Management Plan (RMP)

Date Approved: July 1, 1997

Decision Number/Page: Page 2-49

Decision Language: “To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values.”

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado BLM approved the Standards for Public Land Health. These 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. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below.

NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES

AIR QUALITY

Affected Environment: Based on a review of *Currently Designated Non-Attainment Areas for all Criteria Pollutants*, published by the Environmental Protection Agency (EPA 2010), most of Rio Blanco County is attaining air quality standards. The Proposed action is not within 10-miles of any special designation airsheds or non-attainment areas. Such designated areas or non-attainment areas may require special consideration or requirements for emissions from the air quality regulatory agencies of Colorado Department of Public Health and Environment (CDPHE) and the U.S. Environmental Protection Agency (EPA). Conformity rules only apply to projects within counties that are classified as either nonattainment or maintenance (i.e., having been nonattainment at some point in the last 20 years). Because Rio Blanco County has attainment status for all pollutants, Conformity (Transportation or General) Rules do not apply for criteria pollutants.

Although specific air quality monitoring data are not available for the project location, data have been collected in the region. The BLM recently established two air quality monitoring sites, one in Rangely and one in Meeker, which measure ozone, dust and nitrogen oxides. The cities of Grand Junction (southwest), Steamboat Springs (northeast), and Parachute (south) all host air quality-monitoring stations. Available monitoring data at these stations indicate that the area is likely to be in the attainment category most of the time, meaning that the ambient concentrations of criteria pollutants are less than the applicable air quality standards. However, it should be noted that not all criteria pollutants have been monitored at each site, there is not continuous monitoring of all criteria pollutants at any of the sites, and the atmospheric proximity to emissions and climate conditions at these monitoring sites are likely to be different.

Industrial facilities in White River basin include coal mines, soda ash mines, natural gas processing plants, and power plants. Due to these industrial uses, increased local population, and oil and gas development, emissions of air pollutants in the White River basin (primarily due to engine exhaust, dust from roads and exposed areas) are likely to increase into the future. Despite increases in emissions, overall air quality conditions in the White River basin are likely to continue to be good due to effective emission controls and strong atmospheric dispersion conditions. One exception is the winter inversions that form in the Rangely area. These winter inversions have resulted in 1-hr average ozone values and some 8-hr average ozone values that have exceeded 75 ppb. Ozone is a secondary pollutant, formed photochemically (by the sun) by combining volatile organic compounds (VOCs) and NO_x emissions.

Because the historic air quality in the White River basin has been good, small changes in air quality may have noticeable localized effects, especially on visibility. Regional influences on pollutants that contribute to ozone are also likely to continue to increase. The Colorado Air Pollution Control Division estimates that maximum levels (24-hour average) for particles 10 μm or less in diameter (PM₁₀) in rural portions of western Colorado like the Piceance Basin are near 50 micrograms per cubic meter (μg/m³). This estimate is below the 150 μg/m³ NAAQS for PM₁₀ (24-hour average).

The traffic increases and current and projected levels of service (LOS) at the CR 5 intersections with SH 13 and SH 64 would not trigger a requirement for hot spot modeling by the Colorado Department of Transportation. Typically, hot spot analysis is required when an intersection operates at LOS D or worse. Level of service is a qualitative measure of intersection functionality, based on average delay experienced at an intersection. Levels of service range from LOS A to LOS F, where LOS A describes a free-flow condition with little to no delay, while LOS F describes an unstable, breakdown flow with very high levels of delay.

Environmental Consequences of the Proposed Action: Air quality is not anticipated to degrade as a result of improvements to CR 5. Traffic associated with increased oil and gas development¹ is expected to increase by approximately 150 percent in the project area (HDR 2010). However, this increase in traffic is likely to occur regardless of road improvements proposed with this project.

The Proposed Action would be expected to result in an increase in inhalable particulate matter associated with fugitive dust during construction. Soil disturbance resulting from construction and heavy equipment is expected to cause increases in fugitive dust and inhalable particulate matter, specifically PM₁₀ and PM_{2.5}, in the project area and immediate vicinity. During these construction phases dust production is likely, especially when conditions are dry and/or windy. Increases in the following criteria pollutants: carbon monoxide, ozone (a secondary pollutant, formed photochemically by combining VOC and NO_x emissions), nitrogen dioxide, and sulfur dioxide would also occur due to combustion of fossil fuels during construction activities. These increased emissions would be temporary, would occur only during construction activities, and are not expected to exceed the Colorado Air Pollution Control Division dust standard for particulate matter or other pollutants.

Environmental Consequences of the No Action Alternative: Under the No Action Alternative, traffic increases would be the same as the Proposed Action and dust associated with construction would not occur.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

SOILS (INCLUDES A FINDING ON STANDARD 1)

Affected Environment: Soils within the study area are of the Rentsac, Rentsac-Redcreek, Rentsac-Piceance, and Yamac types (U.S.D.A. SCS 1982 as cited in GRI 2009). These soils are generally shallow to moderately deep, well-drained, and calcareous or alkaline. Because soils are generally shallow with low productivity they are suitable for grazing and wildlife habitat. Along Piceance Creek, Stewart Gulch, Black Sulfur Creek, Dry Fork Piceance Creek, Ryan Gulch, and other major drainages of the region have alluvial soils and can support irrigated pasture (Fox 1973: 111-19 as cited in GRI 2009).

BLM has identified fragile soils on BLM lands and a few areas outside of BLM ownership. Some soils along the CR 5 corridor are classified as fragile soils by BLM, which means they have shallow soils or high erosion potential and also have slopes greater than 35 percent. These areas are managed with a controlled surface use (CSU) stipulation that requires special

¹ This report did not consider air emissions associated with oil and gas development in the Roan Plateau. An analysis of these emissions can be found in the BLM EIS and RMPA prepared for drilling operations in the Basin.

consideration of engineering and reclamation plans in these areas. For resource maps see Attachment C - Soils Figures 1-6.

Environmental Consequences of the Proposed Action: Impacts to soils from the proposed the CR 5 projects would occur on fragile soils located throughout the corridor. Impacts would occur in areas where project limits are extended beyond the existing rights of way and where temporary construction easements are needed. Construction area impacts to fragile soils range from no impacts on some of the stock passes to up to 41.3 acres at Project 6. The construction disturbance area impacts have been buffered by an additional 100 feet for analysis. These impacts are summarized in the Table 2.

Table 2. Soils Impacts (acres)	
Project	Fragile Soils*
Project 1 Safety Improvements	8.4
Project 2a Intersection Improvements	12.0
Project 2b Intersection Improvements	12.0
Project 3 Stock Passes:	
Location 1	6.1
Location 2	3.0
Location 3	2.3
Location 4	4.9
Location 5	5.2
Location 6	5.9
Location 7	3.4
Location 8 **	2.1
Location 9	0.1
Location 10	2.6
Location 11	2.1
Location 12	1.3
Location 13	0.4
Location 14	0
Location 15	3.8
Location 16	0.3
Location 17	0.8
Project 4 Bridge Replacement	0
Project 5a Passing Lanes	29.5
Project 5b Passing Lanes	1.4
Project 6 Widening	41.3

*Impacts are measured within approximately 100 feet (30 meters) of the construction impact areas.

** Location 8 was dropped from the project after analysis was completed

Construction activities could affect soils in several ways including increased erosion, compaction, reduced fertility, and poor vegetation reestablishment. Typical sideslope treatment to widen the roadway or add passing lanes would be to excavate hillsides along the roadway, lay back the slopes, stabilize soils, and reclaim exposed soils. Crossings will include excavation of soils to install the new culvert or bridge, compaction of soils around the culvert or bridge

footings, stabilization measures and finally reclamation of the exposed soils. All soil disturbance will occur within the project boundaries. Direct impacts to soils include clearing, grading, and compaction from construction equipment and vehicles. Clearing would remove vegetative cover and expose soils to the effects of wind, rain, and runoff. Grading would mix soil horizons and the use of heavy equipment would compact soils. The effects of these activities would accelerate the erosional process, increase surface runoff in localized areas, and could result in discharges of sediment to waterbodies and wetlands that could subsequently adversely affect water quality.

The RMP for the WRFO states that activities on fragile soils are subject to surface use stipulation (BLM 2007). Much of the CR 5 corridor is designated for Controlled Surface Use 1 (CSU-1). The fragile soils affected by the CR 5 projects shown in Table 2 are designated for CSU-1. Surface disturbing activities in the CSU-1 areas require a plan that addresses soil productivity, restoration, and soil erosion prevention and additional resource protection (BLM 2007).

A Stormwater Management Plan (SWMP) for Projects 1 and 2b addresses the methods that will be used to protect soils from erosion; a separate SWMP will be prepared prior to construction for each of the remaining projects but will generally have the same stabilization practices. The SWMP, which is included in the Project's construction plan set, contains specific practices to stabilize slopes and reclaim areas disturbed during construction and are adequate to meet the requirements of CSU-1. (For specific techniques, please refer to the plans which are available for review in the file at the WRFO.) In general, temporary logs (wattles or fiber rolls), vegetation buffers, check dams, and silt fences will be used to reduce surface runoff above the disturbed area and slowing water that may concentrate along disturbed areas thus reducing erosion during storm events that may occur during construction and reclamation activities.

Slopes will be stabilized with vegetation when possible but retaining walls will also be used to reduce the amount of steep slopes that need to be disturbed to achieve a slope that can be successfully revegetated. Permanent seeding will be used to control runoff and erosion on disturbed areas. Drill seeding will occur on slopes flatter than 2:1 on the contour of the slope. On steeper slopes broadcast seeding will be used. Mulch and mulch tackifier will be used after seeding on all disturbed areas and soil retention blankets will be placed in areas with slopes 2:1 and steeper.

The SWMP will be continuously reviewed and modified and will be amended as needed to address such issues as materials handling and spill prevention, management of topsoil stockpiles, grading and slope stabilization, temporary stabilization, concrete washout, saw cutting, new inlet/culvert protection, and street cleaning. Inspections will be conducted during the project by the Rio Blanco County Inspector, Stormwater Engineering Manager, and Stormwater Manager at various construction stages to ensure the adequacy of stormwater management at each site.

Stabilization and reclamation activities should minimize the risk of potential impacts beyond the construction phase of the project. Restoring the productivity of these soils would be dependent on successful reclamation and proper construction practices which would be required of construction contractors. Proper handling and storage of topsoil would increase the success of reclamation and seeding. Erosion control measures implemented until reclamation is initiated would minimize the amount of soils migrating off-site and potentially becoming sediment in surface water streams. If there are locations where stabilization measures and/or reclamation practices fail or if an intense localized thunderstorm occurs before areas are reclaimed and

stabilized, some areas may experience localized erosion. These areas would be addressed through maintenance actions with RBC when identified.

Environmental Consequences of the No Action Alternative: Under the No Action Alternative, no soil disturbing activities would occur as a result of construction. However, natural erosion conditions and drainage problems associated with undersized culverts and pipes would continue in the project area (See Water Quality section).

Mitigation: Construction impacts to soil resources will be minimized by implementing measures for handling topsoil and subsoil, erosion control, compaction, and reclamation. These measures are included in construction plans and the SWMP and consist of stabilization and reclamation activities as summarized above (See Water Quality section for other mitigation measures).

Finding on the Public Land Health Standard for upland soils: With mitigation, the Proposed Action is unlikely to reduce the productivity of soils impacted by surface disturbing activities on public lands.

FARMLANDS, PRIME AND UNIQUE

Affected Environment: Lands adjoining the CR 5 corridor are used for irrigated agriculture and grazing. Cattle crossings are scattered along CR 5. Prime farmland soils are also present within the corridor along Piceance Creek (USDA 1979), but they are considered prime farmlands only if they are irrigated. Irrigation ditches have been constructed on private land along the corridor to facilitate agriculture, primarily hay production. Thirteen irrigation ditches have been identified on private land along CR 5 improvement areas. No prime farmlands exist on BLM or State lands.

Environmental Consequences: Construction of the proposed projects would impact prime farmland soils on several of the projects – projects 1, 2a, 4, 5a, 5b, 6 and stock passes 1, 6, 9, 10, 13, and 15. Irrigation occurs along Piceance Creek; however the prime farmland soil types extend into areas that are not irrigated. Some areas of prime farmland, which occur only on private lands that are irrigated, would be taken out of production due to construction of the proposed projects. The impacted areas would be longitudinal strips adjacent to CR 5 and these takes are not expected to adversely affect agricultural production in the area.

Irrigation ditches owned by five separate landowners² run adjacent to CR 5 within the project locations and would be affected by the improvements. Multiple segments of these ditches would be rerouted, but made fully functional, as part of the construction plans for each individual project.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

WASTES, HAZARDOUS OR SOLID

Affected Environment: Hazardous materials are defined by BLM as any substance, pollutant, or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, 42 USC 9601 et

² The landowners include: Piceance Creek Ranch, Robinson, Puckett Land Company, Encana Oil and Gas, and BLM.

seq., and its regulations. The definition of hazardous substances under CERCLA includes any “hazardous waste” as defined in the Resource Conservation and Recovery Act (RCRA) of 1976, as amended 42 USC 9601 et seq., and its regulations. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101(14), 42 USC 9601 (14), nor does the term include natural gas.

A search of the EPA’s Superfund National Priorities List (NPL) was conducted. No NPL sites are documented within the study area or within five miles of the study area (U.S. EPA CERCLIS 2009). A natural gas processing facility owned by Exxon Mobil Corporation is located on the north side of CR 24.

Environmental Consequences of the Proposed Action: Individual Environmental Site Assessments would be conducted where there is suspected contamination prior to obtaining right-of-way from private land. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used, and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. All applications of pesticides would be used in compliance with BLM requirements.

The Proposed Action would temporarily increase contributions to solid waste landfills. There is potential for trash to attract wildlife and to be blown off-site into adjacent lands. Solid wastes would be properly handled and disposed of off-site in an approved facility.

Environmental Consequences of the No Action Alternative: No hazardous or solid wastes would be generated under the No Action Alternative. Similarly, spills associated with construction equipment would not occur (CDOT 2011).

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: CR 5 is within the White River watershed basin and for most of its length follows Piceance Creek. The White River is located at the northern terminus of the study area along SH 64. Piceance Creek flows along CR 5 for most of the length of the corridor and joins the White River just west of the project terminus with SH 64. Several smaller tributaries (gulches and unnamed streams) flow into Piceance Creek from the surrounding basin; some of the larger perennial streams include Cow Creek, Stewart Gulch, Willow Creek, Black Sulphur Creek, Ryan Gulch and Dry Fork Piceance Creek. In addition to these surface waters, numerous irrigation agricultural ditches and water storage ponds are located on private properties along CR 5. For water resource maps see Attachment C - Water Figures 1-6. The following water segments may be impacted by this project:

Water Quality Classification Table*

Segment	Segment Name	Use Protected	Protected Beneficial Uses		
			Aquatic Life	Recreation	Agriculture
14a	Mainstem Piceance from the Source to Hunter Creek	No	Cold Water 1	Primary Contact	Yes
14b	Mainstem of Piceance Creek Hunter Creek to Ryan Gulch	No	Cold Water 1	Primary Contact	Yes
15	Mainstem of Piceance Creek Ryan Gulch to the White River	No	Warm 2	Primary Contact	Yes
16	All tributaries to Piceance Creek	No	Warm 2	Primary Contact	Yes

* Colorado Department Of Public Health And Environment, Water Quality Control Commission, Regulation No. 37 Classifications and Numeric Standards For Lower Colorado River Basin, Effective June 30, 2011

Segment 14a and 14b are protected for Cold Water 1. A cold water protection is protective of aquatic life, including trout, normally found in waters where the summer weekly average temperature does not frequently exceed 20 °C. In general, the water quality standards for class 1 warm or cold water are higher than for other aquatic uses. Segments 15 and 16 are protected for warm water aquatic life (Warm 2). The warm designation means the classification standards would be protective of aquatic life normally found in waters where the summer weekly average temperatures frequently exceed 20 °C. The Warm 2 designation means that it has been determined that these waters are not capable of sustaining a wide variety of warm water biota. These waters also have standards that are protective from primary contact recreation and agriculture.

Due to the soil conditions and topography of the region, large sediment loads are frequently washed from the hillsides and roadside embankments during minor storms. This heavy runoff from silt and shale deposits accumulates, often burying culverts and overtopping the roadway in some areas.

BLM has developed a system for assessing the functional condition of riparian-wetland areas and stream segments. Nonfunctional riparian-wetland areas do not provide adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows and do not reduce erosion or improve water quality, etc. Davis Gulch, Collins Gulch, and Piceance Creek are surface waters in the CR 5 corridor that have been assessed. The BLM determined that Piceance Creek near the northern terminus of CR 5 is in proper functioning condition for 0.5 miles and functional-at risk for an additional 0.8 miles (BLM 2007).

Rio Blanco County provides guidance to protect surface water quality through Section 255 (Standards for Water Quality, Stormwater and Drainage) of the Land Use Resolution. These regulations specify that a water quality management plan is to be developed that identifies sources of water pollution and strategies for preventing water quality degradation.

Piceance Creek: Waters of the U.S. and wetlands occur within the Piceance Creek as it flows from the Grand Hogback to the confluence with the White River at State Road 64, west of Meeker, Colorado. Piceance Creek meanders across the valley floor sometimes adjacent to CR 5 with adjoining wetlands and numerous contributing perennial, intermittent, and ephemeral

streams that drain from the Roan Plateau and the surrounding hillsides. The valley ranges from about 6,700 feet at the upstream extent of the road improvements (MP 8.9) descending westward and then northward to 5,850 feet at the downstream extent of the road improvements, a fall of about 850 feet. As the Piceance Creek meanders across the valley floor, withdrawals and diversion to pasture irrigation ditches are frequent along its course.

Groundwater: Unconsolidated and bedrock aquifers are present in the Piceance Basin surrounding CR 5. Alluvial aquifers exist along stream valleys such as the Piceance Creek. Bedrock aquifers are present in the Uinta and Green River formations, which are located along portions of CR 5 and outcrop between Dry Fork of the Piceance and the White River.

Environmental Consequences of the Proposed Action: Surface Water: Water quality could be adversely affected by increased sedimentation resulting from the removal of vegetative cover in construction areas, which would then increase the potential for soil erosion. Direct impacts would likely be greatest shortly after the start of construction activities and would decrease in time due to implementation of best management practices (BMPs) that would include design of effective temporary stabilization measures that would promote permanent natural vegetative stabilization and reclamation of disturbed areas. Construction activities would occur over a relatively short period of time. Impacts to surface water quality would be minimized through the implementation, monitoring, and necessary adjustment of BMPs prescribed in the stormwater management plan which would be prepared for the CR 5 projects. However, short-term and minor impacts may occur during storm events. Spill containment would also be noted in construction specifications to limit the risk of contaminants migrating off-site and degrading water quality in the Piceance Creek and the surrounding riparian area.

For construction of culverts and stock passes, pipe diameters would be increased as compared to the existing culverts to reduce the chance of culverts becoming clogged and buried by sediment. Also, no culverts smaller than 36 inches will be used to facilitate the movement of sediment below the road surface and to keep the culverts from getting silted in. Fifty-eight culvert crossings, 17 stock passes, and one bridge crossing over Piceance Creek are included in the projects that make up the Proposed Action. A preliminary hydraulic analysis was conducted for each of these crossings (HDR 2011a). Stock passes and culverts were designed to accommodate projected flow and minimize effects from sediment loading. Stock passes would also be designed to allow for safe passage of livestock. The need for outlet protection at each crossing was evaluated in the hydraulic analysis and recommendations for outlet protection in the form of RipRap types or energy dissipation methods were made according to the flow velocity expected at each location.

Improving the drainage of the culverts will allow more sediment to be deposited downslope from the road in sediment deltas below the culvert outlets. Sediment deposition would be enhanced by rip-rap aprons that would tend to dissipate the energy of the water at the outlet of the culvert by increasing surface runoff. Infiltration is also likely to be increased in these areas with energy dissipation. With the old culverts these drainage features would typically silt in during storm events and then maintenance would occur after the storm removing the sediment from the uphill side of the road to be redistributed throughout the right-of-way. Since the new drainage features will generally be less constraining to the flow of water and sediment it is likely they will better approximate natural conditions. It is also possible additional sediment will be transported to the mainstem of Piceance Creek due to this increased efficiency of crossings.

Since not all the culverts are sized to the 100 year storm event some might silt in on less common storms. Maintenance of these culverts between storms is critical to keep them functional and avoid overtopping of the road surface.

Irrigation ditches at projects 1, 2a, 2b, 5a, and 6 would be rerouted to accommodate CR 5 improvements. Rio Blanco County would work with individual landowners to reroute irrigation ditches and maintain agricultural production. The construction design proposed would ensure that the irrigation ditches would remain functional for decreed flows.

Senate Bill 40 (33-5-101-107, CRS 1973 as amended) requires any agency of the state to obtain wildlife certification from the CDOW when the agency plans construction in "...any stream or its bank or tributaries..." .Senate Bill 40 Certification from CDOW would be required for stream and wetland impacts on CR 5 prior to construction.

Groundwater: Based on mapped wells and springs within BLM's planning area, it appears that although some wells are situated near CR 5, they should not experience impacts from CR 5 improvements (BLM 2007). Widening or paving activities associated with improvements to CR 5 should have little, if any, impact to groundwater resources; however, ground-disturbing activities associated with bridge or major structure replacements could temporarily affect shallow aquifers or springs. Groundwater will likely be encountered during foundation construction at the culvert and bridge locations (Yeh 2010). Dewatering and/or diversion may be required in these areas prior to and during construction which would require a permit from CDPHE. Variations in groundwater conditions may occur seasonally. The magnitude of the variation will be largely dependent upon the amount of spring snowmelt, duration and intensity of precipitation, site grading changes, and the surface and subsurface drainage characteristics of the surrounding area.

Environmental Consequences of the No Action Alternative: No roadway or drainage improvements would be made under the No Action Alternative. Culverts would continue to be inundated by heavy sediment loads with an occasional topping of the CR 5 roadway.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

Finding on the Public Land Health Standard for water quality: With local design standards and a water quality management plan it is unlikely that the proposed CR 5 projects would result in an exceedence of state water quality standards. The proposed projects are likely to reduce sediment transportation to surface waters from the site because of drainage improvements.

FLOODPLAINS

Affected Environment: Floodplain development in Rio Blanco County is governed by Section 245 (Standards for Floodplains and Floodways) of the Land Use Resolution in compliance with the National Flood Insurance Program. County Road 5 crosses or is proximal to mapped floodplains in several locations. Piceance Creek is within a Zone A floodplain for the entire length it flows through the Piceance Basin.

Environmental Consequences of the Proposed Action: All of the CR 5 projects with the exception of the intersection improvements for project 2b and stock passes 9, 10, 11, and 17, would cross the 100-year floodplain. Rio Blanco County is designing drainage structures to accommodate the 100-year flood flow by increasing the structure size. All major structures associated with the stock passes meet the 100-year flood flow. Newly designed culverts on projects 5a and 5b and stock pass 16 would not be able to meet this standard as it would be cost prohibitive and would increase the level of impact to install structures that would meet this flow standard. The new structures would be an improvement over the existing condition, which do not meet 100-year flow standard.

Project 4 crosses the Piceance Creek at MP 31.85 which is in Zone A. To accommodate flows and account for the meander of the creek, the proposed new bridge span would be 100 feet, replacing the existing 30-foot span bridge (HDR 2011a). Due to the widening of the bridge span, there would be no rise to the 100-year water surface elevation and no impact to the 100-year floodplain. Where the project is within the floodplain, Rio Blanco County has reviewed the hydrology analysis prepared for the CR 5 projects as it relates to Section 245 of the Land Use Resolution and has approved the culverts that do not meet the 100-year flow standard because they are an improvement over current conditions.

Environmental Consequences of the No Action Alternative: Under the No Action Alternative, no construction would occur within floodplains; therefore, no impacts to floodplains would occur.

Mitigation: None.

Finding on the Public Land Health Standard for water quality: With adequate design considerations it is unlikely that the road improvements would result in adverse effects to floodplain function. The Proposed Action is likely to reduce sediment transportation to surface waters and floodplains through proper sizing of drainage structures and the Piceance Creek bridge. The active floodplain would continue functioning; vegetation would remain to capture and retain sediment and dissipate flood energies.

WETLANDS AND RIPARIAN ZONES (INCLUDES A FINDING ON STANDARD 2)

Affected Environment: Wetlands are defined as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are important biological resources that perform many functions including groundwater recharge, flood flow attenuation, erosion control, and water quality improvement. Wetlands and adjoining riparian areas are a source of substantial biodiversity and also function by providing wildlife habitat.

In the CR 5 project area, waters of the U.S., as regulated by the United States Army Corps of Engineers (USACE), include intermittent and ephemeral streams, irrigation ditches, wetlands, and other drainage areas associated with Piceance Creek (33 CFR Part 328). Wetlands and riparian zones are located along Piceance Creek and associated drainages along the CR 5 corridor.

Field surveys of the project area were conducted by HDR, Engineering Inc. over eight days in mid- to late September 2010. One perennial stream, 26 ephemeral streams, 13 irrigation ditch segments and 2 wetlands were identified within or near the construction limits of the project

area. As part of the field survey, wetland delineations were also conducted in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*. The field survey resulted in production of a draft report by HDR, Inc., *County Road 5, Rio Blanco County, Colorado, Wetland Delineation Report* (HDR 2011b).

Perennial Stream (Piceance Creek)

Piceance Creek is a perennial stream located within the Piceance Creek Watershed. The creek flows circuitously along the valley floor sometimes adjacent to CR 5 and is the primary receiving water body for the immediate area's various perennial and ephemeral streams, including Dry Fork Creek, Black Sulphur Creek, Willow Creek, Hunter Creek, and Cow Creek. In addition, Piceance Creek is the primary water source for a system of privately owned and maintained irrigation ditches. The riparian zone of Piceance Creek supports primarily herbaceous vegetation consisting of Nebraska sedge (*Carex nebrascensis*), bulrush (*Schoenoplectus americanus*), reedtop (*Agrostis alba*), blue-joint reed grass (*Calamagrostis canadensis*), and common reed (*Phragmites australis*) along with shrub species such as sandbar willow (*Salix interior*) and coyote willow (*Salix exigua*).

Ephemeral Streams (Arroyos and Gulches)

There are 28 ephemeral streams located along the CR 5 projects. A total of 17 of those streams coincide with stock passes and have large elevated bridges under the road to allow the passage of livestock. The remaining nine streams are conveyed under the road through culverts varying in diameter from 12 to 48 inches. These non-vegetated ephemeral waterways drain the neighboring mountain slopes and cross underneath CR 5 prior to discharging into Piceance Creek, irrigation ditches, or dispersing across the valley floor in alluvial fans. On the mountain sides, the streams are steep waterways usually referred to as washes, gulches, or arroyos with defined boundaries and rocky, gravelly bottoms. Vegetation bordering the ephemeral streams top-of-bank or ordinary high water limits typically consists of big sage brush (*Artemisia tridentia*), greasewood (*Sarcobatus vermiculatus*), common rubber rabbitbush (*Ericameria nauseosa*), and prickly Russian thistle (*Salsola tragus*). Most of these ephemeral streams are well-defined and highly eroded channels that result from typically severe and episodic storms. Numerous other non-jurisdictional small channels without a bed and very little defined embankment cross under the roadway through small culverts, or wash over or alongside the roadway as they flow to the valley floor.

Irrigation Ditches

There are 13 irrigation ditch segments identified along the course of the CR 5 improvements. The irrigation ditches are contiguous with Piceance Creek and convey and disperse surface water across pastures as they descend along the margins of the valley floor. These man-made features are considered jurisdictional because of their contiguous starts and endings with Piceance Creek. The irrigation ditches are on average about two to four feet wide and are often bordered by thick masses of herbaceous forbs and grasses consisting of canary reed grass (*Phalaris arundinacea*), fringed brome (*Bromus ciliatus*), and common rubber rabbitbush. Some of the ditches are contiguous with other ditches and water flows and levels are controlled by small mechanical weirs or sometimes impervious tarps or polyvinyl sheets that are anchored in the ditch channel as needed.

Wetlands

Two palustrine emergent wetlands are located along the CR 5 projects and adjacent to the Piceance Creek. Palustrine emergent wetlands are characterized as riparian wet meadow habitats found adjacent to and along perennial streams. They are dominated by herbaceous forbs and grasses that typically form a lush hydric groundcover characterized by Nebraska sedge, red-top, common reed, and salt grass (*Distichlis spicata*) with sporadic shrub growth. The adjoining uplands are primarily characterized by shrub species such as big-sage brush, greasewood, and common rubber rabbitbush.

Environmental Consequences of the Proposed Action: The USACE has not yet made a determination on whether the identified wetlands and other water features are waters of the U.S. or isolated wetlands. In the absence of the USACE's jurisdictional determination, all identified streams and wetlands would be treated as waters of the U.S.

Construction of the CR 5 projects would permanently impact some waters of the U.S. along the roadway. Impacts would be from construction outside of the existing roadway footprint. Table 3 summarizes the number of impacts to ditches, drainages, Piceance Creek, and wetlands for each project. Overall, 2.57 acres of waters of the U.S. would be permanently affected and 0.01 acre of Piceance Creek would be temporarily affected during construction of the bridge replacement on Project 4. This total reflects 0.56 acre of irrigation ditches, 1.37 acres of ephemeral drainage (contained at stock passes), and 0.65 acre of wetland.

Project	Irrigation Ditch		Ephemeral Drainage		Perennial Stream (Piceance Creek)		Wetland (Palustrine Emergent)	
	No.	Acreage	No.	Acreage	No.	Acreage	No.	Acreage
Project 1 Safety Improvements	1	0.03	1	0.03	0	0	0	0
Project 2a Intersection Improvements	2	0.05	0	0	0	0	0	0
Project 2b Intersection Improvements	2	0.10	0	0	0	0	1	0.16
Project 3 Stock Passes:								
Location 1	0	0	1	0.02	0	0	0	0
Location 2	0	0	1	0.06	0	0	0	0
Location 3	0	0	1	0.03	0	0	0	0
Location 4	0	0	1	0.03	0	0	0	0
Location 5	0	0	1	0.06	0	0	0	0
Location 6	0	0	1	0.30	0	0	0	0
Location 7	0	0	1	0.05	0	0	0	0
Location 8*	0	0	1	0.15	0	0	0	0
Location 9	0	0	1	0.04	0	0	0	0
Location 10	0	0	1	0.04	0	0	0	0
Location 11	0	0	1	0.06	0	0	0	0
Location 12	0	0	1	0.04	0	0	0	0
Location 13	0	0	1	0.03	0	0	0	0
Location 14	0	0	1	0.05	0	0	0	0

Project	Irrigation Ditch		Ephemeral Drainage		Perennial Stream (Piceance Creek)		Wetland (Palustrine Emergent)	
	No.	Acreage	No.	Acreage	No.	Acreage	No.	Acreage
Location 15	0	0	1	0.04	0	0	0	0
Location 16	0	0	1	0.07	0	0	0	0
Location 17	0	0	1	0.13	0	0	0	0
Project 4 Bridge Replacement	0	0	0	0	1	0.01	0	0
Project 5a Passing Lanes	3	.14	4	0.03	0	0	1	0.41
Project 5b Passing Lanes	0	0	3	0.07	0	0	1	0.08
Project 6 Widening	4	0.24	4	0.06	0	0	0	0
Total Acreage		0.56		1.37		0.01		0.65

* Location 8 was dropped from the project after analysis was completed.

Downstream wetland areas may be adversely affected because of sedimentation and nearby wetlands may be adversely affected through dewatering. Impacts to waters of the U.S. are expected to require permits from the USACE Grand Junction Regulatory Office. The level of impacts indicates that a Nationwide 14 Permit for ephemeral streams and wetland impacts and a Nationwide 40 Permit for irrigation ditches would be required.

Environmental Consequences of the No Action Alternative: No construction would occur under the No Action Alternative; therefore, there would be no impacts to wetlands or riparian zones.

Mitigation: Rio Blanco County will minimize impacts to wetlands and riparian areas by implementing the applicant committed mitigations measures in the attached Exhibit A.

Finding on the Public Land Health Standard for riparian systems: With the proper mitigation measures as proposed, the Proposed Action would not have any reasonable potential to influence the function or condition of waters of the U.S. or riparian values in the Piceance Creek Basin.

VEGETATION (INCLUDES A FINDING ON STANDARD 3)

Affected Environment: The project area varies in elevation from 5,730 to 7,200 feet, which falls within the Upper Sonoran and Transitional Zones. The three primary plant communities present are sagebrush shrubland, pinyon-juniper woodland, and mountain shrubland. A proportion of each type may have been altered by grazing (GRI 2009).

Sagebrush communities occur in the drainage bottom areas and in open parks on the surrounding ridge tops and talus slopes. Big sagebrush (*Artemisia tridentata*) dominates this plant community. Other shrubs present include: saltbush (*Baccharis halimifolia*), shadscale (*Atriplex confertifolia*), rabbitbrush (*Chrysothamnus viscidiflorus*), mountain mahogany (*Cercocarpus betuloides*), bitterbrush (*Purshia tridentate*), winterfat (*Krascheninnikovia lanata*), and greasewood (*Sarcobatus vermiculatus*) where saline soils are present. Prickly pear (*Opuntia humifusa*) is pervasive in the area. Common grasses present include: cheatgrass (*Bromus*

tectorum), western wheat (*Pascopyrum smithi*), bluebunch wheat (*Pseudoroegneria spicata*), needle-and-thread (*Hesperostipa comate*), Indian ricegrass (*Achnatherum hymenoides*), and junegrass (*Achnatherum hymenoides*) (USDA SCE 1982). During reconnaissance, stands of pinyon and juniper were observed on the ridges and talus slopes adjacent to the project study area.

Environmental Consequences of the Proposed Action: Overall, the proposed projects would result in a temporary disturbance to approximately 195 acres of vegetative cover as shown in Table 4. Disturbance areas vary by project with the greatest area of disturbance occurring with Project 6 (widening) where 32 acres of agricultural land would be disturbed. If this disturbance is promptly revegetated as stated in mitigation, there would be no adverse effect to the plant communities present. Vegetation that would be removed would be in strip areas along the existing roadway where native species diversity is lessened by an influx of invasive species and may be influenced by roadway maintenance. Impacts would be temporary during construction. There would be minor long-term impacts as the disturbed areas would be revegetated.

Table 4. Vegetation Impacts in Land Use and Land Cover Types (acres)			
Project	Agricultural Land (Cropland and Pasture)	Pinyon-Juniper (Evergreen Forest Land)	Rangeland (Shrub and Brush Rangeland)
Project 1 Safety Improvements	8.8	0.3	0.01
Project 2a Intersection Improvements	13.4	0.8	
Project 2b Intersection Improvements	0.5	0	9.9
Project 3 Stock Passes			
Location 1	4.2	0	
Location 2	0.3	0	3.4
Location 3	3.5	0	0
Location 4	4.8	0	0
Location 5	4.7	0	0
Location 6	6.8	0.8	0
Location 7	2.8	0	0
Location 8*	2.5	0.9	0
Location 9	0.02	2.6	0
Location 10	3.50	0.06	0
Location 11	0	1.2	2.7
Location 12	0	0	4.4
Location 13	0	0	4.2
Location 14	0.07	0	4.4
Location 15	0.1	0	3.4
Location 16	3.3	0	1.0
Location 17	0	0	5.9
Project 4 Bridge Replacement	2.5	0	1.1
Project 5a Passing Lanes	28.3	0	0
Project 5b Passing Lanes	0	5.4	15.4
Project 6 Widening	32.34	0	4.8

* Location 8 was dropped from the project after analysis was completed.

Environmental Consequences of the No Action Alternative: No construction would occur under the No Action Alternative; therefore, there would be no changes to vegetative communities.

Mitigation: In accordance with BLM (and Rio Blanco County) standards, at the completion of construction all disturbed areas will be recontoured and seeded with a native seed mix to initiate revegetation. Reclamation work and seeding would need to occur between September and March. Depending on the site, fencing reclaimed areas may be necessary to be installed by the contractor to keep livestock out of the area until seeded vegetation is established. Rio Blanco County will be responsible for installation and maintenance of this fencing and its removal when vegetation is adequately established (two to three growing seasons).

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial). Vegetation in the project area currently meets the standard. The proposed project would not result in a degradation of the existing condition and, therefore, the health of the resource would be maintained.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Within the project corridor and in the general vicinity of the projects, several invasive plant species are prominent including black henbane (*Hyoscyamus niger*), bull thistle (*Cirsium vulgare*), Canada thistle (*Cirsium arvense*), houndstongue (*Cynoglossum officinale*), musk thistle (*Carduus nutans*), Russian knapweed (*Acroptilon repens*), spotted knapweed (*Centaurea maculosa*), downy brome (*Bromus tectorum*), and common mullein (*Verbascum Thapsus*). The BLM has identified areas that are considered weed free areas within the project corridor. The weed free areas impacted are located near MP 32, around MP 35 - 37, and around MP 40.

Section 261 of the Rio Blanco County Land Use Resolution requires the application of management standards for ground-disturbing activities to prevent the establishment of noxious weeds.

Environmental Consequences of the Proposed Action: Three weed free areas would be crossed by the construction impact area. These impacted areas range from 1.5 acres at project 4 (bridge replacement), 4 acres at a stock pass 17, and 6 acres at project 5b (passing lanes). Vegetation removal and soil disturbance during construction would create optimal conditions for the establishment of noxious and invasive plant species. Construction equipment could also facilitate the dispersal of noxious and invasive weed seeds resulting in the establishment of noxious and invasive plants in previously weed-free areas. Other consequences could include reduction in overall visual character of the area, site specific competition with or elimination of native plants, reduction of wildlife habitats, increased soil erosion, and loss of forage for livestock and wildlife. Impacts would be minimized by implementing preventative and remedial noxious weed management and revegetation measures.

Environmental Consequences of the No Action Alternative: No ground disturbance or construction activities would occur under the No Action Alternative; therefore, there would be no additional impacts from invasive or non-native species.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (INCLUDES A FINDING ON STANDARD 4)

Affected Environment: According to the U.S. Fish and Wildlife Service (FWS) county level list of federally threatened and endangered species, two threatened species and one candidate species are known or believed to be found in Rio Blanco County, as shown in Table 5 and described below.

Table 5. Federally-Listed Threatened and Endangered Plant Species in Rio Blanco County				
Common Name	Latin Name	Status	Recorded Near Project	Project Effect
Dudley Bluffs bladderpod	<i>Physaria congesta</i>	Threatened	Yes	Surveys pending 2011
Dudley Bluffs (Piceance) twinpod	<i>Physaria obcordata</i>	Threatened	Yes	Surveys pending 2011
White River beardtongue	<i>Penstemon scariosus albifluvis</i>	Candidate	No	No Effect

Dudley Bluffs bladderpod (*Physaria congesta*) and Dudley Bluffs twinpod (*Physaria obcordata*) species have been found near and along the CR 5 corridor on shale slopes. Green River Formation shale slopes are potentially suitable habitat for the Dudley Bluffs bladderpod and Dudley Bluffs (Piceance) twinpod; both are federally-listed threatened plants. Occurrences of the Dudley Bluffs twinpod have been documented along CR 5. Based on BLM records, known occupied habitat is greater than 200 meters from the existing road for most of the projects. White River beardtongue (*Penstemon scariosus* var. *albifluvis*) occurs in semi-barren areas with xeric, shallow, fine textured soils associated with oil shale. It is found in pinyon-juniper/desert shrub and mixed desert shrub communities. It flowers from late May through June (Franklin 1995). The BLM noted its distribution along Raven Ridge and westward along the White River into Utah, mainly on exposures of the Green River Formation. Colorado Natural Heritage Program (CNHP) data does not document any occurrences of this species along CR 5. Based on known habitats along CR 5 there is no suitable habitat for this species (Klish 2011).

In addition to federally listed species, there are eight BLM sensitive species that occur in the White River Field Office planning area. Only species that are located near the project area are noted in Table 6 and described below.

Table 6. The BLM Sensitive Plant Species in Rio Blanco County and CNHP Rare Plant Element Occurrences near the Projects			
Common Name	Latin Name	BLM Sensitive	Location near Project
Piceance bladderpod	<i>Lesquerella parviflora</i>	Yes	nearest occurrence is west of Deer Gulch ACEC

Table 6. The BLM Sensitive Plant Species in Rio Blanco County and CNHP Rare Plant Element Occurrences near the Projects

Common Name	Latin Name	BLM Sensitive	Location near Project
Barneby's thistle	<i>Centaurea solstitialis</i>	No	near 2b, 5a
Fremont's beardtongue	<i>Penstemon fremontii</i> Torr. and A. Gray ex A. Gray	No	near 1, 5a, 6
Many-stem stickleaf	<i>Mentzelia albicaulis</i>	No	near 5a
Mountain wildmint	<i>Monardella odoratissima</i>	No	CR 5
Western Slope Grasslands		No	near 1, 2b, 5a, 6
Cold Desert Shrublands		No	near 1

The CNHP maps and tracks the occurrence of plant species according to a national ranking system (called element occurrences). Based on this data, there have been occurrences of two sensitive plant species in the project vicinity but located well outside of the project areas described in this EA. However, CNHP identified areas of very high biodiversity significance between MP 1 and 15, near MP 17, between MP 18 and MP 23, between MP 24 and MP 36 (mixed with outstanding biodiversity significance), and between MP 28 and MP 29. Areas of outstanding biodiversity significance were noted between MP 24 and MP 26 (mixed with areas of very high biodiversity significance), near MP 27, and between MP 20 and MP 27. The projects would pass through these areas but the areas are primarily associated with Piceance Creek and the ACECs outside of the road corridor.

Environmental Consequences of the Proposed Action: Based on existing plant survey data, projects 1, 5a, 6, 2a, and stock pass locations 1 through 9 are unlikely to affect the federally protected Dudley Bluffs bladderpod or Dudley Bluffs twinpod: spot checks in spring 2011 have been completed and verified this determination. The surface disturbances would not affect directly or indirectly the species or alter the basis for the establishment of the Dudley Bluffs ACEC.

Based on survey data collected in 2010 for Ryan Gulch and Dudley Bluffs ACEC, there would be no effect for project 2b and stock passes 10 through 12 because the surveyed plant populations are located greater than 200 meters but less than 600 meters from these project disturbance locations. No additional work is needed for these projects.

Surveys have been conducted in 2011 for projects 4, 5b, and stock pass locations 13 through 17. Plants were observed at the northern most polygon near Yellow Creek. Occupied habitat has now been mapped further east than was previously documented. Dudley Bluffs twinpod was observed approximately 175 meters from CR 5 and in several new areas within the 600m survey buffer.

Table 7.

Projects	Previously Surveyed	Distance from plants	Need Additional Survey
1, 5a, 6, 2a, stock passes 1-9	Yes	>600 meters	No
2b, stock passes 10-12	Yes	>200m but < 600m	No
4, 5b, stock passes 13-17	Yes	<200m	Yes

Informal consultation would be required for projects within 600 meters of the listed plant species and would be completed after spring surveys. Surveys would be completed during the flowering seasons for these plants; the Dudley Bluffs bladderpod flowers between April and May with fruit set from late May into June and the Dudley Bluffs twinpod flowers in May and June. Informal consultation with FWS would continue unless a plant population is found within 200 meters of these project areas.

Formal consultation with the FWS will be necessary for projects 4, 5b and stock passes 13-17 where plants are found within 200 meters of the project location. Consultation will require follow-up spring surveys and the development of mitigation measures to be completed in time for the consultation process to be concluded before the anticipated construction. The applicant should plan to conduct formal consultation well in advance of the desired construction start date since formal consultation with the FWS may take a minimum of 135 days after the BLM has prepared and submitted a complete Biological Assessment.

Projects 1, 2b, 5a, and 6 may disturb or remove western slope grasslands or cold desert shrublands. The impacts would be minimal as the elements are present along an existing road corridor.

Environmental Consequences of the No Action Alternative: No project would be constructed under the No Action Alternative; therefore, no impacts to special status plant species would occur.

Mitigation: Construction would not begin in 2011 until BLM issues specific project based approval (i.e., Notice to Proceed) based on the outcome of informal consultation for those projects within 600 meters of listed plant species. Based on 2011 survey results, for projects 4, 5b and stock passes 13-17, where plants are found within 200 meters, formal consultation with the FWS will occur after spring surveys. For those future projects, construction would not occur until BLM issues specific project based approval (i.e., Notice to Proceed) based on the outcome of a Biological Assessment and formal consultation with FWS. Consultation will require follow-up spring surveys and the development of mitigation measures to be completed in time for the consultation process to be concluded before the anticipated construction. The applicant should plan to conduct formal consultation well in advance of the desired construction start date since formal consultation with the FWS may take a minimum of 135 days after the BLM has prepared and submitted a complete Biological Assessment.

Reclamation of surface disturbances in occupied, suitable or potential habitat for special status plants will use locally gathered stock or genetic stock from locally gathered native species.

Finding on the Public Land Health Standard for Threatened & Endangered species: The Proposed Action and No Action Alternative would have no influence on populations or habitats of plants protected under the Endangered Species Act or BLM sensitive species. Therefore, the public land health standard for threatened and endangered plant species would be maintained.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (INCLUDES A FINDING ON STANDARD 4)

Affected Environment: According to the FWS county level list of federally threatened and endangered species, six endangered species, one threatened species, and two candidate species, are known to or are believed to be found in Rio Blanco County. None are known to inhabit or derive important use from the project area³. Designated critical habitat for the Colorado pikeminnow is located along the 100-year floodplain of the White River. Water depletions in the Upper Colorado River and San Juan River Basins may affect fish species and/or critical habitat in downstream reaches in other states.

The BLM has identified 24 sensitive species as occurring within the WFRO administrative boundaries; however, many of them do not occur in the project area. Species that occur in the project area are shown in Table 7 (BLM 2007). Those species that have the highest potential to occur in the project area are discussed below. Many of these species have also been identified by the state of Colorado as threatened, endangered, or species of concern (CDOW 2011).

Table 7. The BLM Sensitive Species and Colorado Special Status Species in Rio Blanco County

Common Name	Latin Name	BLM Status	Colorado Species of Concern	Occurrence near Project Area
Northern Goshawk	<i>Accipiter gentilis</i>	Sensitive		pinyon-juniper woodlands
Barrow's Goldeneye	<i>Bucephala islandica</i>	Sensitive		ponds along Piceance Creek
Brewer's Sparrow	<i>Spizella breweri</i>	Sensitive		sagebrush communities
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	--	Special Concern	near mouth of Piceance Creek
Long-billed Curlew	<i>Numenius americanus</i>	Sensitive	Special Concern	irrigated hayland along Piceance Creek
White-faced Ibis	<i>Plegadis chihi</i>	Sensitive		irrigated hayland
Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	Sensitive		rock crevices
Big Free-tailed Bat	<i>Nyctinomops macrotis</i>	Sensitive		rock crevices
Fringed Myotis	<i>Myotis thysanodes</i>	Sensitive		rock crevices
Flannelmouth Sucker	<i>Catostomas latipinnis</i>	Sensitive	Special Concern	Piceance Creek
Mountain Sucker	<i>Catostomas platyrhynchus</i>	Sensitive	Special Concern	Piceance Creek
Midget Faded	<i>Crotalus viridis</i>	Sensitive	Special Concern	possible distribution on rock

³ Reference for the species accounts/profiles are included in the reference cited section.

Table 7. The BLM Sensitive Species and Colorado Special Status Species in Rio Blanco County

Common Name	Latin Name	BLM Status	Colorado Species of Concern	Occurrence near Project Area
Rattlesnake	<i>concolor</i>			outcrops in sagebrush communities
Colorado River Cutthroat Trout	<i>(Oncorhynchus clarkii pleuriticus)</i>	Sensitive	Special Concern	Piceance Creek
Northern Leopard Frog	<i>Rana pipiens*</i>	Sensitive	Special Concern	Piceance Creek
Great Basin Spadefoot	<i>Spea intermontana</i>	Sensitive		found within boundaries of project disturbance

*Records based on CNHP element occurrences and BLM records. Plant surveys would be conducted in Spring 2011 as noted in above.

Northern goshawk: Goshawks are a relatively rare resident in the White River Resource Area. In general this species prefers to nest in contiguous aspen stands or spruce-fir/aspen mix stands. Within the last several decades however, approximately half a dozen nests have been found in low to mid elevation (6500 ft) pinyon-juniper woodlands throughout the Piceance Basin. Based on incidental observations of birds during the summer months, the birds are probably more common than the breeding records indicate. Goshawks establish breeding territories as early as March and begin nesting by the end of April. Nestlings are normally fledged and independent of the nest stand by mid-August. The nearest known goshawk nest is just under one mile from the project area.

Peregrine falcon: This species generally prefers to nest on cliffs ranging from about 50–200 meters. Peregrines typically nest on ledges with dirt, sand, or fine gravel substrate. Nesting is initiated in early April, with most young fledged by the end of June or early-July. The nearest known peregrine falcon nest, which has been occupied for several years, is located over one mile from the project area.

Townsend’s big-eared bat, big free-tailed bat, and fringed myotis: Although the distribution of these bats is poorly understood, recent acoustic surveys in the Piceance Basin and along the lower White River have documented the localized presence of Townsend’s big-eared and big free-tailed bat along larger perennial waterways. These bats typically use caves, mines, bridges, and unoccupied buildings for night, nursery, and hibernation roosts, but in western Colorado, single or small groups of bats use rock crevices and tree cavities. Although mature conifers suitable as temporary daytime roosts for small numbers of bats are widely available in the project area, there are no unoccupied buildings, underground mines or known caves in the project area. Birthing and rearing of young for these bats occurs in May and June, and young are flighted by the end of July. The big free-tailed bat is not known to breed in Colorado.

Brewer’s sparrow: Brewer’s sparrows are common and widely distributed in virtually all big sagebrush and mixed brush communities throughout the project area. These birds are typically one of the most common members of these avian communities and breeding densities probably range between 10-40 pairs per 100 acres. Typical of most migratory passerines in this area, nesting activities normally take place between mid-May and mid-July.

Midget faded rattlesnake: The midget faded rattlesnake occurs solely within the Green River Formation of Wyoming, Utah, and Colorado and is typically associated with bedded sandstone outcrops and fallen mid-slope slabs on south to southeast facing exposures. In general, this species is found in high, cold deserts dominated by sagebrush with some greasewood, juniper, and other woody plants occurring as secondary vegetation. These snakes emerge from hibernacula (dens) in mid-April. Gravid females and juveniles tend to remain in rock outcrop habitat in close proximity to their dens (20-200 meters) throughout the summer and early fall months, while males and non-reproductive females disperse an average of 1 km from the den. All snakes return to their den sites in mid to late October. South-facing rock slabs and/or rock outcrops found throughout the project area may potentially support populations of this species.

Northern leopard frog: This species prefers wet meadows and banks and/or shallows of creeks and streams. Breeding occurs in shallows or seasonally flooded areas adjacent to permanent streams around early to late May. Northern leopard frogs have been documented in the lower BLM-administered reaches of Piceance Creek.

Environmental Consequences of the Proposed Action: The CR 5 projects would have no effect on terrestrial threatened or endangered species or their associated habitats. Endangered fish species may be affected but would not be adversely affected through water depletions for construction activities. Specific to water depletion activities, BLM prepared a Programmatic Biological Assessment (PBA) that addresses water depleting activities in the Colorado River Basin in July 2008. In response to BLM's PBA, the FWS issued a Programmatic Biological Opinion (PBO) (#ES/GJ-6-CO-08-F-0010) on February 25, 2009, which determined that water depletions from the Colorado River Basin resulting from BLM actions described in the PBO are not likely to jeopardize the continued existence of the Colorado pikeminnow, humpback chub, bonytail, and razorback sucker or result in the destruction or adverse modification of their critical habitat. The PBO addresses internal and external BLM projects including impoundments, diversions, water wells, pipelines, and spring developments.

The FWS determined that projects that fit under the umbrella of the PBA would avoid the likelihood of jeopardy and/or adverse modification of critical habitat for depletion impacts to the Upper Colorado River Basin if they deplete relatively small amounts of water (less than 100 acre feet (AF)). The BLM makes a one-time contribution to the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program) in the amount equal to the average annual acre-feet depleted by each project. The PBO instructed BLM to make an annual payment to the National Fish and Wildlife Foundation (NFWF) to cover all BLM authorized actions that result in water depletions. The Rio Blanco County Road 5 Improvement Project would deplete approximately 9 AF annually. This project has been entered into the White River Field Office water depletion log which will be submitted to the Colorado State Office (COSO) at the end of the fiscal year. The COSO is responsible for paying depletion fees based on the annual statewide total.

Although there is not specifically recorded data on bat species near CR 5, it is possible that Townsend's big-eared bat, big free-tailed bat, and fringed myotis may be found near the individual projects and could be disturbed during construction. Where trees are removed, it is possible that roosts could be permanently affected. The effect, however, would be minimal because few trees would be removed.

It is highly unlikely the proposed action will influence northern goshawk nesting activities. Woodlands involved in the proposed action are younger-aged and typically do not provide suitable nest substrate for this species. Additionally, all woodland involvement (~12 acres; isolated patches) is located adjacent to CR 5 which provides little in the way of suitable habitat for most wildlife species. Similarly, the proposed action is not expected to have any effective influence on nest success of peregrine falcon. The nearest known nest is over one mile from any of the proposed project locations.

Fish and amphibian species including the mountain and flannelmouth sucker and the northern leopard frog occur in and along Piceance Creek. Potential impacts, however, would be limited to construction disturbance and would be minimal with implementation of erosion control measures. Project 4, replacement of an existing bridge, is the only project that directly affects Piceance Creek. The replacement bridge would be designed to allow fish passage so there would be no long-term impacts to fish species. Fish species may avoid this area of the creek during construction. Erosion control measures would be implemented to prevent sediment from reaching the creek and surrounding riparian areas. Spill containment, as noted in construction specifications prepared for the project, limit the risk of contaminants migrating off-site and degrading water quality in the Piceance Creek and the surrounding riparian area.

The Colorado River cutthroat trout is a BLM sensitive and state species of concern. The CDOW provides species distribution data within Colorado. Cutthroat trout distribution covers several drainages in the northern portion of the CR 5 corridor between MP 21 and MP 40. Only Project 4, the Piceance Creek crossing is within the cutthroat distribution area, but impacts from construction activities would be similar to those of the mountain and flannelmouth sucker, discussed above.

There is potential for reptile species, such as the midget faded rattlesnake and the Great Basin spadefoot, to be minimally affected by the project. The proposed improvements only slightly expand the existing road and its existing negative effects on reptile foraging habitat and reptile deaths caused by vehicles. There is potential for an increase in rattlesnake or spadefoot mortality during construction because of additional vehicle activity.

Environmental Consequences of the No Action Alternative: The project would not be constructed under the No Action Alternative; therefore, no impacts to special status animal species would occur.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

Finding on the Public Land Health Standard for Threatened & Endangered species: The Proposed Action and No Action Alternative would have no influence on populations or habitats of animals protected under the Endangered Species Act. The project area currently meets applicable land health standards for sensitive animal species at the landscape scale. Neither the Proposed Action nor the No Action Alternative would detract from the current status of meeting these standards.

MIGRATORY BIRDS

Affected Environment: As noted in the vegetation section, the larger CR 5 corridor consists of three communities: sagebrush-shrubland, pinyon-juniper woodland, and mountain shrubland in the Upper Sonoran transitional zone. Large areas along Piceance Creek are irrigated

for agriculture uses. Along the hillsides pinyon-juniper woodlands are present. Stock passes cross CR 5 in several locations, typically using natural gulches. Immediately adjacent to CR 5, the vegetation is primarily mixed sagebrush/grasslands, which are dominated by many weedy species as noted in the Invasive, Non-native Species section.

These sagebrush and pinyon-juniper communities support nesting functions of a wide array of breeding migratory birds, most of which return to breed by early May. Nesting activity is largely completed by mid-July. There are a dozen or more species that nest or may nest in the project area however, those species recognized by the FWS as having higher conservation concern are limited to pinyon jay (*Gymnorhinus cyanocephalus*), juniper titmouse (*Baeolophus ridgwayi*) and Brewer's sparrow (*Spizella breweri*). These species are distributed in suitable habitats at appropriate densities throughout the overall project area. It should be noted that nest densities are likely reduced immediately adjacent to the roadway corridor due to heavy vehicle traffic and conversion to large agricultural areas. The long-billed curlew and white-faced ibis are seasonal migrants and may be found in wetland habitats adjacent to CR 5. The last known observation for the long-billed curlew was in the 1970s.

During a site visit, several migratory bird species were observed. Species observed include: belted kingfisher (*Ceryle alcyon*), great horned owl (*bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), black-billed magpie (*Pica hudsonia*), golden eagle (*Aquila chrysaetos*), mountain bluebird (*Sialia currucoides*), cliff swallow (nest) (*Petrochelidon pyrrhonata*), savannah sparrow (*Passerculus sandwichensis*), and rough-legged hawk (*Buteo lagopus*). While the golden eagle was the only the FWS listed Birds of Conservation Concern observed, it is likely that these species are in the area as suitable habitat is present (noted above).

There are several historic red-tailed hawk and golden eagle nests that are located along the rock faces that immediately border the project area. These nests range in distance from approximately 60 meters to approximately 300 meters from several of the proposed improvement projects. (See discussion on sensitive raptor species in the Threatened, Endangered, and Sensitive Species section above). Raptor nests or fledging habitat have been identified and protected with stipulations within a half-mile of some of the proposed CR 5 project locations (BLM 1999). Raptor nest surveys would be required prior to construction of any the CR 5 projects to determine the presence of active nests.

While no longer listed under the Endangered Species Act, the bald eagle (*Haliaeetus leucocephalus*) is still protected under the Bald and Golden Eagle Act. The CDOW has identified a winter bald eagle roost site in the vicinity of MP 7 (approximately one and half miles from project 5a and stock pass 1). There are two bald eagle roosts along the White River; however, the nearest project to these sites is stock pass location 17 and project 5b, which are several miles from these roost sites. An active nest was observed in 2010 in Township 3S, Range 96W, Section 4, approximately 0.25 miles from stock pass locations 4 and 5 and Project 6. Both winter range and winter foraging areas for the bald eagle are located along the White River and Piceance Creek and follow the entire CR 5 corridor. The nearest summer foraging area is approximately three miles from the project area.

Environmental Consequences of the Proposed Action: The Proposed Action would have a minor impact on bird species and associated habitats (see Table 4 for the amount of land cover affected by project). The projects included in the Proposed Action would impact small strips of vegetation adjacent to the existing roadway where disturbance from human activity is present

due to traffic on CR 5. Thus, the project is not likely to have increased long-term effects on migratory bird species over current conditions. Generally, construction would occur during the summer months and may overlap the nesting season. If active nests are present, construction will be restricted. County road 5 is a heavily traveled, paved road and nest densities are likely to be reduced to some degree within 300 feet of the road. Birds that nest in close proximity are likely accustomed to human disturbance; however, during construction, species may avoid areas where construction crews are active.

Raptor nest surveys would be completed prior to construction of any the CR 5 projects to determine the presence of active nests. If an active nest is located, appropriate timing stipulations may be applied depending on distance of the nest from construction activities. Birds nesting in close proximity to the CR 5 corridor are likely accustomed to some traffic and human disturbance.

An active bald eagle nest was observed in 2010 in Township 3S, Range 96W, Section 4 within 1,300 feet of stock pass locations 4 and 5 and project 6. The nest would be revisited prior to construction of these locations. If the nest is found to be active, no construction activities would be permitted until the young have fledged and left the nest stand. None of the proposed CR 5 projects would occur near the identified winter and summer foraging areas. In addition, construction would not occur during the winter roosting period. No direct or indirect impacts to bald eagles would occur as a result of the Proposed Action.

Environmental Consequences of the No Action Alternative: The project would not be constructed under the No Action Alternative; therefore, no impacts to migratory birds or raptors would occur.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: Piceance Creek, the primary aquatic system in the CR 5 project area, parallels the roadway for the majority of its length. Based on limited sampling of select BLM reaches, Piceance Creek supports populations of speckled dace, mountain sucker, and flannelmouth sucker. In addition, northern leopard frogs were common on the lowest BLM stream reach near the White River confluence. It is possible that additional fish species are located within private stream reaches. The mainstem of Piceance Creek and tributaries to Piceance Creek are protected for warm water aquatic life (Warm 2). (See the Water Quality Section of this EA.)

Environmental Consequences of the Proposed Action: With the exception of Project 4, the CR 5 projects would occur adjacent to Piceance Creek. Other projects would be near Piceance Creek, but retaining walls would be constructed to avoid any direct impacts to the creek. Only Project 4, the Piceance Creek bridge replacement, would occur at the creek. The bridge would span the ordinary high water mark of the creek. Retaining walls would be constructed along CR 5 on each end of the bridge. Construction activities would occur adjacent to the creek for construction of the bridge and retaining walls and could cause temporary impacts associated with removing the old bridge and grading for construction of the new bridge. With the application of erosion control measures (i.e., BMPs), prevention of sediment into the creek, and

properly sized culverts that provide for fish and other aquatic organism passage, it is unlikely that these projects would impact the function or condition of the Piceance Creek channel or resident aquatic species. The fish species are all warm water and sediment tolerant and are adapted to relatively high sediment loads. The replacement of undersized culverts and crossing structures with larger structures would likely benefit fish in the long term by improving habitat connectivity and providing for movement among microhabitats.

Environmental Consequences of the No Action Alternative: No construction or alteration to Piceance Creek would occur under the No Action Alternative; therefore, there would be no impacts to aquatic wildlife.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial). The BLM-administered reaches of Piceance Creek are considered to be marginally meeting the land health standards for aquatic communities. Much of this is due to historical and current irrigation practices and conversion into agricultural fields on privately owned reaches upstream. Implementation of erosion control measures would prevent impacts to the existing function and condition of Piceance Creek. Neither the Proposed Action nor the No Action Alternative would have any reasonable potential to influence aquatic systems or associated habitats and therefore would not further detract from the meeting of the land health standards for aquatic communities.

WILDLIFE, TERRESTRIAL (INCLUDES A FINDING ON STANDARD 3)

Affected Environment: The CR 5 corridor provides habitat for a variety of big game and nongame wildlife species. Mule deer and elk are key terrestrial species found in the area because sagebrush shrublands, pinyon-juniper woodlands, and agricultural meadows along Piceance Creek provide important forage and cover resources during the winter months.

Mule deer (*Odocoileus hemionus*). The low elevation sagebrush and pinyon-juniper communities that encompass the entire project area have been categorized by the CDOW as mule deer severe winter range, a specialized component of winter range that periodically supports virtually all area deer under the most severe winter conditions (i.e., extreme cold and heavy snowpack). These ranges typically receive the heaviest use from January through April. The CDOW considers severe winter range to be of highest priority for protection from development disturbance because these areas are considered vital to sustaining mule deer populations in Colorado.

Migration patterns have been designated by CDOW to serve as an indication of the general direction of the movements of migratory ungulate herds. In general, the mule deer migration routes near CR 5 tend to follow the general direction of Piceance Creek and its larger tributaries. One migration route crosses CR 5 in a diagonal line between MP 1 and MP 4. Migration routes that pass near CR 5 (at approximately MP 6 and MP 9) are less than one mile from the CR 5 corridor. Migration routes located further from CR 5 are also present at MP 9, 12, and 35. Other parallel routes follow CR 5 approximately two miles west of the roadway near MP 18 - 19, MP 22 - 24, and near MP 33 (See Attachment C - Wildlife Figures 1-5). The CDOW has identified a

need for a wildlife crossing near MP 36; Rio Blanco County is coordinating with CDOW on this wildlife crossing for construction during subsequent phases of CR 5 improvements.

Because of the presence of mule deer range and migration routes, the entire CR 5 corridor is a CDOW designated mule deer highway crossing. Mule deer highway crossings are areas where these animals typically cross roads, and pose potential conflicts between these animals and motorists. More than six highway mortalities per mile of highway per year is a guide that may be used to indicate likely mule deer highway crossings. Specific data has not yet been compiled to show the number of animal/vehicle collisions that have been tracked by the Rio Blanco County Sheriff's office. However, a snapshot data count completed by Rio Blanco County's consultant within the last two years documented 43 deer carcasses present along CR 5. The carcasses, indicative of an animal/vehicle collision, were found between MP 9 and MP 40. Eighteen carcasses were observed between MP 14 and MP 17; near stock passes 3, 4, and 5. Four carcasses were observed near MP 30 (near stock pass 15), and another four were observed near MP 33 (near stock pass 16). Three carcasses were noted near MP 40 (White River bridge).

Elk (*Cervus canadensis*). With the exception of an approximately 1.5 mile stretch (1N, 97W sections 26, 27, and 35) that intersects elk winter concentration areas, the entire project lies within elk general winter range. These ranges are typically occupied from October through early January.

A resident elk population is located within five miles of the CR 5/SH 64 intersection. Two CDOW designated migration routes are within ½ mile of the CR 5/SH 13 intersection and an additional parallel route is located within seven miles of CR 5 between MP 2 and MP 24 (See Attachment C - Wildlife Figures 1-5).

Although the Rio Blanco County Sheriff's office has not compiled specific data on the number of animal/vehicle collisions along CR 5 and CDOW has not designated CR 5 as an area of conflict between elk and motorists, a snapshot data count completed by Rio Blanco County's consultant within the last two years documented two elk carcasses near MP 39.5. Elk range is present along CR 5; however, given the lack of animal collision data, it is difficult to determine where elk crossings should be located.

Black bear, mountain lion, and wild turkey are other important terrestrial species with range within and near the CR 5 corridor. However, these species do not require special management considerations for any of the CR 5 projects proposed. Other mammals known to occur in the study area include: coyotes, bobcats, red fox, mountain cottontails, white-tailed jackrabbit, rock squirrel, badger, and skunk.

The distribution and abundance of small mammal populations are poorly documented within the project area; however, species that are likely to occur in this area display broad ecological tolerance and are widely distributed throughout the Resource Area. Trapping efforts undertaken in 2010 indicate a high tendency, in both sagebrush and pinyon-juniper communities for more generalized species such as deer mouse and least chipmunk. No narrowly distributed or highly specialized species or subspecific populations are known to occur in the project area.

The CR 5 corridor crosses through the Piceance State Wildlife Area (SWA) in two locations: from MP 28 to MP 31 (Square S Ranch Unit) and from MP 37 to MP 39 (North Ridge Unit). The Square S Ranch Unit and the North Ridge Unit SWAs are primarily managed for the preservation and conservation of wildlife species and their habitat. The management priority of a

SWA is to provide protection, enhancement, restoration and management of aquatic and terrestrial habitat that are critical to the survival of Colorado's wildlife species (CDOW 2007).

Environmental Consequences of the Proposed Action: Because CR 5 is an existing and heavily traveled road crossing through wildlife habitat, the impacts associated with upgrading this roadway in selected locations would be minor. A small loss of wildlife habitat would occur immediately adjacent to CR 5 due to the proposed action. Table 4 provides the impacts to land cover (by project). The habitat immediately adjacent to CR 5, however, is not considered high quality or heavily used by wildlife populations. The proposed projects would impact approximately eight acres of the Square S Ranch Unit for the stock pass replacements at stock pass locations 14 and 15.

Rio Blanco County is working with CDOW and BLM to develop appropriate wildlife crossing measures and fencing that would reduce mortality by facilitating mule deer and elk migration across CR 5. In particular, Rio Blanco County is considering a wildlife crossing near MP 16. This area is not affected by the proposed projects but would be considered in subsequent phases.

During construction of the CR 5 projects, there would be an increase in noise and human activity caused by construction vehicles and crews. Although some wildlife may avoid the specific project areas during construction, the level of activity is likely to be negligible to wildlife that use the area because they are accustomed to the existing heavy traffic volumes and drilling activities along CR 5.

Mapped migration routes provide data regarding the migration pattern of large numbers of mule deer in the Piceance Basin. The CDOW determined that a loss of these routes would change migration patterns. An identified migration corridor is located between MP 38 and MP 40. This corridor corresponds closely to the Piceance SWA. Structures in this area (e.g. structure 36.75) should be designed to accommodate mule deer passage. Long-term impacts to migration should be improved with the proposed wildlife structure. Construction would occur primarily during the summer months outside of the heavy use periods for severe winter range.

Environmental Consequences of the No Action Alternative: No construction or alteration would occur under the No Action Alternative; therefore, there would be no impacts to terrestrial wildlife.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic). Overall, the project area is generally within the land health standards for terrestrial wildlife communities. Small areas of habitat would be disturbed and removed for the proposed projects; however, it is not expected to interfere with the continued meeting of the land health standards for terrestrial wildlife communities.

WILD HORSES

Affected Environment: Wild horses on BLM-administered lands are protected under the Wild and Free Roaming Horse and Burro Act of 1971, as amended (Public Law 92-195) and 43 CFR 4700 (Protection, Management, and Control of Wild and Free-Roaming Horses and Burros). The White River ROD/RMP (BLM 1997) includes an implementation plan for wild horse management. The wild horses are managed by BLM to provide a healthy, viable breeding

population with a diverse age structure. Between MP 38 and 39, CR 5 crosses the Piceance East Douglas Herd Management Area (HMA). The HMA is managed for a wild horse herd of 135 to 235 animals on 190,130 acres to ensure that a thriving ecological balance is maintained for all plant and animal species on that range.

Environmental Consequences of the Proposed Action: The closest project to this area would be stock pass 17, which is approximately 0.6 mile north of this HMA boundary. Consequently, there would be no impacts to the Piceance East Douglas HMA as a result of the proposed CR 5 projects.

Environmental Consequences of the No Action Alternative: No impacts to HMAs would result from the No Action Alternative.

Mitigation: None.

CULTURAL RESOURCES

Affected Environment: A literature review for known cultural resources in the project area was made through the BLM Field Offices and the Colorado Historical Society’s Office of Archaeology and Historic Preservation. This literature review was based largely on Grand River Institute’s Class III (intensive) cultural resource inventory of the existing County Road 5 corridor for EDAW/AECOM⁴ (White River Field Office Cultural Resource Inventory Report [WRFO CRIR] #10-11-16, State Historic Preservation Office [SHPO] # RB.LM.R1195). The literature review found that 89 sites and isolated finds were recorded within approximately one mile of the discrete survey areas. Thirty archaeological sites, linear site segments, and Isolated Finds were identified in or near the project area (Table 9). Sixteen sites or site segments were previously determined potentially eligible for the National Register of Historic Places (NRHP). Based on the results of the aforementioned Class III inventory, it was determined that the current project would fully avoid ten sites. The remaining six sites within or adjacent to the present study area were reevaluated as part of the current CR 5 project. The search also indicated that 70 previous inventories have been completed within and near the CR 5 project areas.

Table 9. Cultural Resources				
Site (5RB.)	Project	Segment/Site Eligibility and Date	Property Affected	Management Action
123	4	E - off. 10/27/2004	No: avoided	Avoidance stipulated
2658	3	NE - off. 3/9/2010	No: avoided	Avoidance stipulated
2888 (IF)	2a	NE - categorical (IF)	N/A	N/A
2969 (IF)	3	NE - categorical (IF)	N/A	N/A
3403.1	3	NE - off. 1/26/2009	N/A	N/A
3403.2 (previously 3753.1)	4	ND - off. 3/4/2010	No: avoided	Avoidance stipulated
3403.3 (previously 3753.2/4817.1)	4	ND - off. 3/4/2010	No: avoided	Avoidance stipulated

⁴ “Class III Cultural Resource Inventory Report for the Rio Blanco County Road 5 Project in Rio Blanco County, Colorado for EDAW/AECOM,” GRI Project No. 28115, 4 February 2010. White River Field Office Cultural Resource Inventory Report [WRFO CRIR] #10-11-16, State Historic Preservation Office [SHPO] # RB.LM.R1195.

Table 9. Cultural Resources				
Site (5RB.)	Project	Segment/Site Eligibility and Date	Property Affected	Management Action
3403.4 (previously 3753.3/4817.2)	4	Does not support / site: ND - current	No: avoided	No further work
3404.1	3	NE - off. 1/26/2009	N/A	N/A
3405.1	3	NE - off. 1/26/2009	N/A	N/A
3780.1	5a	NE - off. 7/11/1995	No: avoided	No further work
3781.1	1,5a	Does not support / site: ND - current	Yes: <i>no adverse effect</i>	No further work
4159.1	6	E - off. 3/9/2010	No: avoided	Avoidance stipulated
4615 (IF)	5b	NE - categorical (IF)	N/A	N/A
4769	3	NE - off. 3/5/2010	N/A	N/A
4771	3	NE - off. 3/5/2010	No: avoided	No further work
4773	3	E - off. 3/5/2010	No: avoided	Avoidance stipulated
5175 (IF)	3	NE - categorical (IF)	N/A	N/A
5360.2	1	ND - off. 3/5/2010	No: avoided	Avoidance stipulated
5636.1	3	NE - off. 7/28/2008	No: avoided	Avoidance stipulated
5636.2	2a	ND - off. 3/5/2010	No: avoided	Avoidance stipulated
6340.1	1	Does not support / site: ND - current	Yes: <i>no adverse effect</i>	No further work
6341	5a	ND - current	No: avoided	Avoidance stipulated
6342	3, 6	ND - off. 3/5/2010	No: avoided	Avoidance stipulated
6343.1	3,6	Does not support / site: ND - current	Yes: <i>no adverse effect</i>	No further work
6344	3	NE - off. 3/10/2010	N/A	N/A
6347.1	3	Does not support / site: ND - current	Yes: <i>no adverse effect</i>	No further work
6351.1	5b	ND - off. 3/5/2010	No: avoided	Avoidance stipulated
6354.1	3	ND - off. 3/5/2010	No: avoided	Avoidance stipulated
6711 (IF)	6	NE - categorical (IF)	N/A	N/A

E = eligible for nomination to or listing on the National Register of Historic Places (NRHP)

NE = not eligible for nomination to or listing on the National Register of Historic Places

ND = Need Data, there is insufficient information to make a determination of NRHP eligibility

Off = Officially, consultation with the Colorado State Historic Preservation Office resulted in an official determination of eligibility

IF = Isolated Find, a single artifact or small collection of artifacts from a single source e.g. shards from a bottle or pot.

In December 2010 and January 2011, a Class III (intensive) cultural resource inventory of the proposed Rio Blanco County Road 5⁵ projects was conducted by Grand River Institute in order to meet the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321), the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701), the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa et seq., as amended), and Section 106 (36 CFR Part 800.8 Coordination with the NEPA) of the National Historic

⁵ “Class III Cultural Resource Inventory Report For The Proposed County Road 5 Improvements (2010 – 6 Projects) In Rio Blanco County, Colorado For HDR Engineering”, GRI Project No. 2010-99, 12 January 2011. WRFO CRIR #11-11-01, SHPO #RB.LM.R1227.

Preservation Act (NHPA) of 1966 (16 U.S.C. 470, as amended). These laws are concerned with the identification, evaluation, and protection of fragile, non-renewable evidences of human activity, occupation and endeavor reflected in districts, sites, structures, artifacts, objects, ruins, works of art, architecture, and natural features that were of importance in human events.

The Class III cultural resource inventory evaluated six sites identified for further review: one historic ranch (5RB6341), one historic road segment (5RB3753.3) and four historic ditch segments (5RB3781.1, 5RB6340.1, 5RB6343.1, and 5RB6347.1) that occur in or adjacent to the inventory boundaries. These sites were reevaluated as part of the CR 5 projects. Additionally, one historic isolate was newly identified and recorded. The vegetation near the historic sites is predominantly native grass with rabbitbrush and sagebrush. The surrounding hills are covered with pinyon and juniper.

Site **5RB6341** is the Piceance Creek Ranch located near the mouth of Story Gulch in the Piceance Basin at an elevation of 6,620 feet. The site is in excellent condition and is a good example of a working western ranch that has remained continuously occupied since its inception. At least two of the structures (the barn and original log cabin) appeared to be historic and possess integrity of design, materials, and workmanship. It has been determined potentially eligible for NRHP listing (Needs Data) by the BLM and Colorado SHPO.

Site **5RB3404.4 (previously referred to as 5RB3753.3)** is a segment of the original Piceance Creek Road located west of and adjacent to the present CR 5. The segment of the old road exists because the original route in this area was abandoned due to upgrading that eliminated a sharp curve. This segment is barely visible on the landscape and does not contain any features. Site 5RB3753 has been determined potentially eligible for NRHP listing (Needs Data) by the BLM and Colorado SHPO, though segment 5RB3753.3 does not support the site's potential eligibility.

Site **5RB3781.1** is a segment of the Herwick and Mooney Ditch. The site lacks demonstrable association with persons or events important in history and lacks integrity in design, materials, and workmanship. Site 5RB3781 has been determined potentially eligible for NRHP listing (Needs Data) by the BLM and Colorado SHPO, though segment 5RB3781.1 does not support the site's potential eligibility.

Site **5RB6340.1**, the Walsh and Spaulding Ditch HG 1, parallels CR 5 at the mouth of Story Gulch in the Piceance Basin. It is at 6,620 feet in elevation. The site is not associated with people important in history but may be significant to the study of the Euroamerican settlement of the Piceance Basin. Site 5RB6340 has been determined potentially eligible for NRHP listing (Needs Data) by the BLM and Colorado SHPO, though segment 5RB6340.1 does not support the site's potential eligibility.

Site **5RB6343.1** is a segment of the Oldland Ditch No. 2 and the Oldland Ditch No. 3. The ditch segment was originally recorded by Conner and Archuleta in 2008. The ditches are contiguous and are located between King Gulch and Jessup Gulch in the Piceance Basin at an elevation of 6,430 feet. These ditch segments are associated with a prominent pioneer family of the Piceance Basin and may inform research into the Euroamerican settlement of the area.

Site **5RB6347.1** is a segment of an unnamed ditch located near the mouth of McKee Gulch in the Piceance Basin. The ditch segment was originally recorded by Conner and Archuleta in 2008. The recorded segment lies at an average elevation of 6,200 feet. The site lacks demonstrable

association with persons or events important in history and lacks integrity in design, materials, and workmanship.

Environmental Consequences of the Proposed Action: Sites avoided, sites avoided by stipulation and sites impacted but not adversely affected are listed by project in Table 9. The BLM determined that project 2b does not meet the definition of a federal undertaking for the purposes of the NHPA Section 106 review, so is not addressed in this section.

Project 1 would directly impact sites 5RB.6340.1 and 5RB.3781.1 but would have no adverse effect on the sites as all present and potentially applicable aspects of the sites' integrity would be maintained. In addition, 5RB.5360.2 would be avoided by project design, and as stipulated.

Project 2a may but would likely not affect 5RB.2888, an Isolated Find categorically not eligible for NRHP listing. This project would avoid 5RB.5636.2 by project design, and as stipulated.

Stock pass locations (Project 3) 1-2, 4-7, 11-12, and 14-17 would avoid all sites potentially eligible for NRHP listing. (Location was dropped from this project.) There would be no adverse effect to sites 5RB.6343.1 and 5RB.6347.1, as all present and potentially applicable aspects of the sites' integrity would be maintained. Potentially eligible sites 5RB.4773, 5RB.5636.1, 5RB.6342, 5RB.6354.1 would be avoided by project design, and as stipulated. Site 5RB.2969 (IF), 5RB.3403.1, 5RB.3404.1, 5RB.3405.1, 5RB.4769, 5RB.4771, 5RB.5175 (IF), and 5RB.6344 may or may not be impacted by the undertaking, but are all categorically or officially not eligible for NRHP listing. Site 5RB.2658 (Miller Hill Cemetery), also not eligible, would be avoided by project design.

Project 4 would avoid 5RB.123, 5RB.3753.1, and 5RB.3753.2 by project design and as stipulated. Site 5RB.3753.3 will be avoided by project design, though avoidance will not be stipulated (i.e., no further work is necessary).

Project 5a would have no adverse effect on Site 5RB.3781.1 as all present and potentially applicable aspects of the site's integrity would be maintained. Site 5RB.6341 would be avoided by project design, and as stipulated. Site 5RB.3780.1 would be avoided by project design and is officially not eligible for NRHP listing.

Project 5b would avoid 5RB.6351.1 by project design and as stipulated. Site 5RB.4615 (IF) may be affected, but is categorically not eligible for NRHP listing.

Project 6 would have no adverse effect on site 5RB.6343.1 as all present and potentially applicable aspects of the site's integrity would be maintained. Sites 5RB.4159.1 and 5RB.6342 would be avoided by project design, and as stipulated. Site 5RB.6711 (IF) may or may not be avoided by the proposed activities, but as an isolate it is categorically not eligible for the NRHP.

In sum, there would be no adverse effect on 5RB.3781.1, 5RB.6340.1, 5RB.6343.1, or 5RB.6347.1. There would be no effect on 5RB.3753.3, 5RB.6341, and 5RB.4159.1.

Environmental Consequences of the No Action Alternative: No construction to CR 5 would occur under the No Action Alternative; therefore, impacts to cultural resources would not occur.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

As SHPO concurrence has not yet been obtained for work within site 5RB4159.1 (the Gerald Oldland Ranch), further work will be necessary for Project #6. Unless Project #6 is reduced in scale to fully avoid 5RB4159.1, it will be necessary to formulate a Treatment Plan and/or Memorandum of Agreement addressing potential impacts to 5RB4159.1. These documents must be approved by the BLM and Colorado SHPO as part of Project #6's required Section 106 review before BLM can issue specific project based approval (i.e. Notice to Proceed).

PALEONTOLOGY

Affected Environment: The BLM uses the Potential Fossil Yield Classification (PFYC) to classify paleontological resource potential on public lands in order to assess possible resource impacts and mitigation needs for Federal actions involving surface disturbance, land tenure adjustments, and land-use planning. The CR 5 project areas exist in an area currently mapped as the Uinta Formation and Quaternary Modern Alluvium (Tweto 1979). The BLM has classified the Uinta Formation as PFYC 4 formation meaning it is known to produce quantities of scientifically important fossil resources. The Quaternary Modern Alluvium Formation is PYFC 2 which has sedimentary geologic units that are not likely to contain vertebrate fossils or scientifically significant invertebrate fossils.

Environmental Consequences of the Proposed Action: Any excavations into the underlying bedrock have the potential to unearth scientifically valuable fossil resources and vertebrate fossils protected under the Paleontological Resources Protection Act (P.L. 111-01). Paleontological monitoring is required to mitigate these potential impacts only when excavations into underlying bedrock are made.

Environmental Consequences of the No Action Alternative: No improvement projects to CR 5 would occur under the No Action Alternative; therefore, impacts to paleontological resources would not occur.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

ELEMENTS NOT PRESENT OR NOT AFFECTED: There are no Native American religious concerns associated with the Proposed Action. Native American Consultation letters were sent to the Eastern Shoshone, Southern Ute, Uintah and Ouray Reservation Ute, and Ute Mountain Ute tribes on December 20, 2010. Follow-up phone calls on February 23, 2011 and March 3, 2011 only reached the Southern Ute Tribe's NAGPRA coordinator. In his opinion, the Southern Ute Tribe has no concerns about the project. No other responses to letters, voicemail messages, or email messages have been received as of March 3, 2011. The correspondence log is filed at the WRFO.

A review of U.S. Census data showed no concentrations of minority or low-income populations in the project area. There are no environmental justice concerns associated with the Proposed Action.

OTHER ELEMENTS: For the following elements listed in Table 10, only those brought forward for analysis are further addressed.

Table 10. Other Elements			
Other Element	N/A or Not Present	Applicable or Present, No Impact	Applicable and Present and Brought Forward for Analysis
Visual Resources			X
Fire Management			X
Forest Management	X		
Hydrology/Water Rights		X	
Rangeland Management			X
Realty Authorizations			X
Recreation			X
Access and Transportation			X
Geology and Minerals		X	
Areas of Environmental Concern			X
Wilderness	X		
Wild and Scenic Rivers	X		
Cadastral	X		
Socio-Economics		X	
Law Enforcement		X	

VISUAL RESOURCES

Affected Environment: The proposed road improvements would occur along an existing county road that is heavily used to access oil and gas development in the Roan Plateau (not located directly along CR 5). Agriculture (grazing) is the primary land use along the corridor and approximately 60 percent of the corridor is located adjacent to parcels of private land. The BLM lands administered by the WRFO surround the private land along the corridor. The visual setting of the area is a two-lane county road bordered by a landscape dominated by sage shrublands/grasslands and low-growing juniper and pinyon pines at upper elevations with intermittent agricultural, residential, and oil and gas land uses, the White River, and Piceance Creek. County road 5 has not been designated by the County or the State as a scenic corridor.

The BLM lands located along CR 5 are considered Visual Resource Management (VRM) Class III areas. The objective of a Class III area is to partially retain the existing character of the landscape; therefore, the level of change to the characteristic landscape should be moderate.

Environmental Consequences of the Proposed Action: The proposed projects are improvements to the existing roadway and would not change the visual character of the roadway setting or how it is perceived by the casual observer. The Proposed Action is, therefore consistent with the existing VRM III classification. Construction activities would change the visual nature of the landscape; however, these changes would be temporary, and the setting

would be restored upon project completion. Restored areas would be consistent with unchanged areas in terms of texture, color, scale, and form.

Environmental Consequences of the No Action Alternative: No construction or changes to CR 5 would occur under the No Action Alternative; therefore, there would be no impacts to visual resources.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

FIRE MANAGEMENT

Affected Environment: The CR 5 corridor is the primary route/road for access into the Piceance Basin for any fire response. Use of secondary routes into the area would increase response times by at least an hour. The CR 5 corridor has been classified as a Fire Regime Condition Class (FRCC) 2 which has the following attributes (BLM 2007):

- Fire regimes have been moderately altered from their historical range.
- The risk of losing key ecosystem components has increased to moderate.
- Fire frequencies have departed from historical frequencies (either increased or decreased) by more than one return interval. This results in moderate changes to one or more of the following: fire size, frequency, intensity, severity, or landscape patterns.
- Vegetation attributes have been moderately altered from their historical range.

A large area immediately to the east of the CR 5 corridor is designated as FRCC Condition Class 3. In these areas, fire regimes and vegetation attributes have been altered significantly and the risk of losing key ecosystems is high.

According to the Northwest Colorado Fire Program Fire Management Plan, the CR 5 corridor is located in “polygon B7”, and contains large tracts of private grazing lands intermingled with BLM lands. It supports significant stands of sagebrush, other mountain shrub, and rangeland. The primary objective of this polygon is to protect big game severe winter range and key sage-grouse habitat. It is an area of high priority wildfire suppression.

Environmental Consequences of the Proposed Action: The CR 5 projects are located throughout the corridor and construction of each would occur at different times with Project 1 and 2b being the first under construction. Temporary traffic delays may occur during certain construction operations when traffic is stopped or slowed which could cause slower response times to fires in the area.

Environmental Consequences of the No Action Alternative: No construction activities would occur under the No Action Alternative; therefore, no impacts to fire management would be experienced.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

RANGELAND MANAGEMENT

Affected Environment: Livestock grazing on rangeland occurs on private lands and BLM allotments throughout the corridor. Grazing allotments are areas of land where livestock graze and generally consists of federal rangelands, but throughout the Piceance Basin, especially along CR 5, includes private lands. The BLM stipulates the number of livestock and season of use for each allotment. There are five allotments affected by the CR 5 projects: Oldland Gulch, Little Hills, Hatch Gulch, Square S, and North Dry Fork.

Environmental Consequences of the Proposed Action: All but one of the proposed projects would affect land on the five allotments as shown in Table 11 by acreage.

Table 11. Grazing Allotment Impacts (acres)					
Project	Oldland Gulch	Little Hills	Hatch Gulch	Square S	North Dry Fork
Project 1 Safety Improvements	2.9	0	0	0	0
Project 2a Intersection Improvements	3.9	3.6	0	0	0
Project 2b Intersection Improvements	0	0	5.7	0	0
Project 3 Stock Passes					
Location 1	0	0	0	0	0
Location 2	0.7	0	0	0	0
Location 3	3.4	0	0	0	0
Location 4	4.0	0	0	0	0
Location 5	3.4	0	0	0	0
Location 6	1.8	2.6	0	0	0
Location 7	0	0.9	0	0	0
Location 8*	0	3.0	0	0	0
Location 9	0	1.3	0	0	0
Location 10	0	0.06	0	0	0
Location 11	0	0	2.4	0	0
Location 12	0	0	3.0	0	0
Location 13	0	0	0.1	0	0
Location 14	0	0	0.08	0	0
Location 15	0	0	0.1	0	0
Location 16	0	0	0	2.5	0
Location 17	0	0	0	4.0	1.8
Project 4 Bridge Replacement	0	0	0	1.4	0
Project 5a Passing Lanes	1.1	0	0	0	0
Project 5b Passing Lanes	0	0	0	12.2	0.2
Project 6 Widening	27.4	0	0	0	0
Total	48.6	11.46	11.38	20.1	2
Total BLM Land in Allotment	11,094	32,508	9,440	79,501	21,463
Percent of BLM Land Affected	0.44	0.04	0.12	0.03	0.01

* Location 8 was dropped from the project after analysis was completed.

The amount of acreage that would be affected in each of the grazing allotments is very low relative to the size of the allotment. Overall, project impacts range from 0.01 percent of the North

Dry Fork Allotment to 0.44 percent of the Oldland Gulch Allotment. Land that would be used for the proposed projects would be from small strips next to the roadway and would not affect the grazing value of the allotment.

If construction occurs during the period when livestock are grazing, the animals may avoid the areas near the CR 5 projects because of increased noise and vehicle activity. However, virtually the entire route is fenced on both sides of the road. Maintaining the functionality of the fence throughout construction activities would be crucial as livestock would likely be present. Throughout the construction phase, there should be little to no affect to livestock use in the area as the majority of construction would occur within existing right-of-way and in areas immediately adjacent to the roadway.

Environmental Consequences of the No Action Alternative: No construction would occur under the No Action Alternative; therefore, there would be no impacts to rangeland management.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

Existing fencing would be rerouted around construction sites and built to BLM specifications prior to the start of construction activities and maintained throughout construction to ensure livestock are not able access the roadway. Communicate general construction dates to landowners (as related to their property) and maintain necessary communication throughout that phase to minimize livestock related conflicts.

RECREATION

Affected Environment: The CR 5 projects are within the White River Extensive Recreation Management Area (ERMA). The BLM custodially manages the ERMA to provide for unstructured recreational activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use. Near the CR 5 corridor, hunting and hiking are the most predominant recreational activities, but no formal recreation facilities are located in this area. The CR 5 corridor is a primary access route to remote areas of BLM land in the WRFO for popular activities such as hunting, hiking, fishing, and off-highway vehicle activities.

Environmental Consequences of the Proposed Action: Recreational areas would not be affected by the Proposed Action and access to BLM land would be maintained. During construction, some areas may be more difficult to access due to detours; however, access impacts would be temporary and hunters and hikers would most likely temporarily avoid these areas. Because the construction projects are localized and individual projects would be constructed at different times, it is not anticipated that impacts to passive recreational activities in the area would occur.

Environmental Consequences of the No Action Alternative: No construction activities would occur under the No Action Alternative; therefore, impacts to recreation would not occur.

Mitigation: The holder shall follow the applicant committed mitigation in the attached Exhibit A.

ACCESS AND TRANSPORTATION

Affected Environment: County road 5 is a 42-mile two-lane roadway in Rio Blanco County providing a western access and link between SH 64 and SH 13 that connects to Interstate 70. County road 5 provides a local link to SR 13, but more importantly, provides a route to an extensive area of BLM land used for oil and gas development, grazing, hunting, and other recreational activities.

Environmental Consequences of the Proposed Action: The combination of projects that make up the Proposed Action include approximately 9 miles of roadway. Individual projects would be constructed at different times depending on funding. Projects 1 and 2b would be constructed in 2011 with other projects to follow as funding is secured. Construction on CR 5 would cause occasional traffic delays due to construction activity which would be most prevalent during the summer months; hunting season visitors may be affected between late-August and December. However, CR 5 would remain open during construction, allowing access to all BLM land and to all intersecting county and state roads. An approved traffic control plan would be implemented during construction.

Environmental Consequences of the No Action Alternative: The No Action Alternative would not involve construction and would therefore not impact access and transportation.

Mitigation: The holder shall follow the applicant committed mitigation in Exhibit A.

REALTY AUTHORIZATIONS

Affected Environment: Rio Blanco County holds existing rights-of-way under Revised Statute (R.S.) 2477 for segments of CR 5 crossing public lands. Additionally, there are existing linear rights-of-way (phone, power, oil and gas facilities) and oil and gas leases or agreements within the proposed right-of-way for the CR 5 projects. These rights-of-way and agreements are listed in Table 12.

Environmental Consequences of the Proposed Action: Because the improvement projects would expand the road beyond the width and/or length of the existing R.S. 2477 rights-of-way, the CR 5 projects described in this EA would be replaced with a FLMPA right-of-way; except project 2b and stock passes 1, 2, 11, 12, 14, 15, and 16 which are not located on BLM land and have been determined to be independent actions. These actions are addressed as cumulative effects in this document. The FMPLA grant has been serialized as COC74740. The additional right-of-way area that would be required beyond the existing authorizations, more or less, for each project is listed for public and private land; temporary construction easement areas are also included. These rights-of-way would need to be updated with FLMPA right-of-way grants as each project is authorized. Rio Blanco County is exempt from rental payments (43 CFR Part 2806.14 [b]).

Construction of the road improvements would over-lap some existing utilities and pipelines, requiring protection during construction and/or rerouting the facilities. Rerouting could be accomplished within the existing rights-of-way and would not require adjustment of the affected grants. If the holder chooses to reroute their equipment outside of their current right-of-way, the holder would need to apply to the BLM for appropriate analysis and authorization. Rio Blanco County will coordinate with utility providers that would be affected by the CR 5 projects. The County began coordination meetings with utility companies in late January 2011.

Project	Existing CR 5 ROW (Serial Number)	Existing rights-of-way or oil and gas leases potentially affected by project	Proposed FLMPA ROW grant (serial number)	Proposed ROW on public land (acres)	Temporary Easement
Project 1 Safety Improvements	COC 008363	COC 047666X (Exxon Mobil) COD 0035711 (Exxon Mobil) COC 0014840 (Qwest) COC 039347 (WREA) COC 0123311 (Public Service Co)	COC74740	10.14	0.46
Project 2a Intersection Improvements	COC 007699	COC 06992X (Exxon Mobil) COC 047666X (Exxon Mobil) COC 070638 (Exxon Mobil) COC 0014840 (Qwest) COC 039347 (WREA) COC 057571 (CO Interstate Gas) COC 034278 (Williams Field Services) COC 056213 (Williams Field Services) COC 062884 (Encana Oil and Gas) COD 0038003 (Mobil Oil Corp)	COC74740	7.12	1.87
Project 2b Intersection Improvements	No	N/A	Private Land	0	0
Stock pass 1	No	N/A	Private Land	0	Included in Project 5a
Stock pass 2	No	N/A	Private Land	0	Included in Project 6
Stock pass 3	No	COC 047666X (Exxon Mobil) COD 0035678 (Mobil Oil) COC 0014840 (Qwest) COC 039347 (WREA)	COC74740	Included in Project 6	Included in Project 6
Stock pass 4	COC 007700	COC 047666X (Exxon Mobil) COD 0035678 (Mobil Oil) COC 0014840 (Qwest) COC 039347 (WREA)	COC74740	Included in Project 6	Included in Project 6
Stock pass 5	COC 007700	COC 047666X (Exxon Mobil) COD 0035678 (Mobil Oil)	COC74740	0.80	1.38

Project	Existing CR 5 ROW (Serial Number)	Existing rights-of-way or oil and gas leases potentially affected by project	Proposed FLMPA ROW grant (serial number)	Proposed ROW on public land (acres)	Temporary Easement
Stock pass 6	COC 007699	COC 047666X (Exxon Mobil) COC 0014840 (Qwest) COC 057571 (CO Interstate Gas) COC 056213 (Williams Prod. RMT Co)	COC74740	Included in Project 2a	Included in Project 2a
Stock pass 7	COC 002066	COC 047666X (Exxon Mobil) COC 0037964B (Mobil Oil) COC 050072 (WREA) COC 069158 (Parachute Pipeline) COC 064978 (WREA)	COC74740	0.73	1.03
Stock pass 8	No*	COC 047666X (Exxon Mobil) COC 069547X (Exxon Mobil) COC 073289 (Exxon) COC 071536 (Overland Pass Pipeline Co)	COC74740	n/a	n/a
Stock pass 9	No	COC 069547X (Exxon Mobil) COC 061468 (Exxon Mobil) COC 0014840 (Qwest) COC 066509 (Encana Oil and Gas) COC 0500072 (WREA) COC 039347 (WREA)	COC74740	0.94	0.70
Stock pass 10	Yes	COC 047666X (Exxon Mobil) COC 061468 (Exxon Mobil) COC 0014840 (Qwest) COC 0124497 (Public Service Co) COC 070684 (Whiting Oil and Gas Corp)	COC74740	0.64	0.75
Stock pass 11	No	N/A	Private Land	0	0.92
Stock pass 12	COC 002067	COC 047666X (Exxon Mobil) COC 069547X (Exxon Mobil) COD 0035679 (Mobil Oil) COD 062806 (Exxon Mobil) COC 062186 (Transcolorado Gas Trans Co) COC 0123685 (Questar Pipeline) COC 052705 (CO Interstate Gas Co)	COC74740	1.00	1.41

Project	Existing CR 5 ROW (Serial Number)	Existing rights-of-way or oil and gas leases potentially affected by project)	Proposed FLMPA ROW grant (serial number)	Proposed ROW on public land (acres)	Temporary Easement
Stock pass 13	COC 001173	COC 069547X (Exxon Mobil) COC 060722 (Exxon Mobil) COC 070863 (WREA) COC 068936 (Entrega Gas Pipeline) COC 063989 (Entrega Gas Pipeline) COC 061921 (WREA) COC 073401 (Exxon Mobil) COC 0096918 (Qwest) COC 072663 (Exxon Mobil) COC 074148 (White River Hub LLC) COC 064632 (WREA) COC 070654 (Qwest) COC 070128 (Enterprise Prod.Oper. LP) COC 074641 (Encana Oil and Gas) COC 071058 (Enterprise Gas Proc. LLC) COC 069157 (Exxon Mobil) COC 073610 (Exxon Mobil) COC 062884 (Encana Oil and Gas) COC 07105801 (Enterprise Gas Proc.LLC)	COC74740	0.59	0.62
Stock pass 14	No	N/A	State Land	3.40	0.58
Stock pass 15	No	N/A	State Land	2.52	0.48
Stock pass 16	No	N/A	Private Land	0	0.95
Stock pass 17	COC 007697	COC 071142X (Exxon Mobil) COC 071586 (Exxon Mobil) COC 068936 (Entrega Gas Pipeline) COC 052705 (CO Interstate Gas Co) COC 018423 (Rocky Mountain Natural Gas Co) COC 0096918 (Qwest)	COC74740	No ROW Proposed	No ROW Proposed
Project 4 Bridge Replacement	COC 007698	COC 071142X (Exxon Mobil) COC 070639 (Exxon Mobil) COC 018423 (Rocky Mountain Natural Gas Co)	COC74740	1.23	0.27

Project	Existing CR 5 ROW (Serial Number)	Existing rights-of-way or oil and gas leases potentially affected by project	Proposed FLMPA ROW grant (serial number)	Proposed ROW on public land (acres)	Temporary Easement
		COC 068936 (Entrega Gas) COC 039361 (WREA) COC 0096918 (Qwest)			
Project 5a Passing Lanes	COC 008363	COC 047666X (Exxon Mobil) COD 0035711 (Exxon Mobil) COC 0014840 (Qwest) COC 039347 (WREA) COC 1023311 (Public Service Co)	COC74740	8.72	1.219
Project 5b Passing Lanes	COC 007697	COC 071142X (Exxon Mobil) COC 071586 (Exxon Mobil) COC 060816 (Exxon Mobil) COC 063726 (Exxon Mobil) COC 063772 (Exxon Mobil) COC 070980 (BOPCO LP) COC 067021 (Exxon Mobil) COC 018423 (Rocky Mountain Natural Gas) COC 0096918 (Qwest) COC 0011409 (Northwest Pipeline) COC 07441801 (Northwest Pipeline) COC 052705 (CO Interstate Gas Co.) COC 067021 (Exxon Mobil)	COC74740	3.945	2.23
Project 6 Widening	COC 002371, COC 007700, COC 008363	COC 047666X (Exxon Mobil) COD 0035678 (Mobil Oil) COD 0052120 (Mobil Oil) COD 0035664 (Mobil Oil) COC 0014840 (Qwest) COC 039347 (WREA)	COC74740	12.50	4.755

Mitigation: All activities shall comply with all applicable local, State, and Federal laws, statutes, regulations, standards, and implementation plans. This includes acquiring all required Federal, State, and/or local permits, effectively coordinating with existing facility ROW holders, and implementing all applicable mitigation measures required by each permit.

The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.

For each project to be built after 2011, a specific project based approval (i.e. Notice to Proceed) shall be issued after the necessary updated resource surveys and consultation with SHPO and FWS are completed for that project and before construction begins.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Several Areas of Critical Concern (ACEC) cross the CR 5 corridor or are located near CR 5 including Dudley Bluffs, Deer Gulch, Ryan Gulch, and White River Riparian ACECs. Ryan Gulch is located approximately one-quarter mile south of CR 5 between MP 24.5 and MP 28, near Project 2b and stock pass 13. Dudley Bluffs is located north of CR 5 between MP 22 and MP 26.5 near stock passes 10, 11, and 12. Existing CR 5 crosses through corners of the Dudley Bluffs ACEC between MP 22 and 26. The Dudley Bluffs ACEC is designated by BLM to protect threatened and endangered species, sensitive plants, and remnant vegetation associations. Deer Gulch and White River ACECs are located more than a mile from any of the CR 5 projects

Environmental Consequences of the Proposed Action: Approximately 0.5 acre of the Dudley Bluffs ACEC would be affected by CR 5 improvements at stock passes 10 and 12. The project would clip the edge of this ACEC on the east side of CR 5 at two locations. Based on the impact analysis for threatened and endangered species, surface disturbance would not directly or indirectly affect the Dudley Bluff bladderpod or Dudley Bluff twinpod which were the basis for the establishment of the Dudley Bluff ACEC. Therefore, the Proposed Action would have no impact on the ACEC. Reclamation of surface disturbances would use locally gathered or genetic stock from locally gathered native species.

Environmental Consequences of the No Action Alternative: The No Action Alternative would not involve construction and would therefore not impact ACECs.

Mitigation: None.

CUMULATIVE IMPACTS SUMMARY:

Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development, including the Proposed Action, has not exceeded the cumulative impacts from the foreseeable development analyzed in the PRMP/FEIS for activities on BLM land. The proposed CR 5 improvements would occur on private land as well as BLM land. Neither the improvements on BLM land nor private land would exceed the cumulative impacts described in the PRMP/FEIS.

Additional improvements to CR5 are anticipated in the future but no specific plans have been developed. While Oil Shale Research, Development, and Demonstration projects are currently authorized, no commercial development is reasonably foreseeable.

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CONSULTATION, PREPARATION, AND REVIEW

PUBLIC MEETINGS

A public meeting was held for the CR 5 improvements on November 18, 2008. Additional public meetings and coordination would be conducted as part of a Special Use Permit Application which requires approval by Rio Blanco County.

AGENCY CONSULTATION

The following agencies were consulted formally and/or informally through personal discussion during preparation of this document:

Bureau of Land Management
U.S. Fish and Wildlife Service
Colorado State Historic Preservation Officer
Colorado Division of Wildlife
Rio Blanco County Commissioners
Rio Blanco County Planning
Rio Blanco County Road and Bridge Department

PREPARERS

This Environmental Assessment was prepared by HDR, Inc. (a third party contractor) with direction and independent review by BLM resource specialists in the White River Field Office. Oversight was provided by BLM staff at several stages of the project. Two Interdisciplinary Team reviews of the project were conducted with meetings held in the Meeker BLM office.

Preparers are listed below.

BLM Project Manager:

Linda L. Jones, Realty Specialist
White River Field Office
220 East Market St.
Meeker CO 81641

Rio Blanco County:

Van Pilaud, P.E., Road and Bridge Engineer
Jeff Madison, Planning Director/Natural Resource Specialist
570 Second Street
Meeker, CO 81641

Primary Contractor to BLM:

HDR, Inc.
303 East 17th Avenue, Suite 700
Denver, CO 80203-1256

Project Team:

Bahram Seifipour, P.E., Senior Transportation Manager
Dan Miller, Senior Environmental Scientist
Laura Lutz-Zimmerman, Environmental Scientist
Connie Heitz, Senior Environmental Planner
Britton Marchese, Environmental Scientist

Other Third Party Contractors to BLM Providing Technical Preparation Support:

Carl Conner, Principle Investigator
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Mike Klish, Principal Environmental Scientist
Amy Wilsey, Biologist/Environmental Scientist
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2516 Foresight Circle #1
Grand Junction, Colorado 81505

INTERDISCIPLINARY REVIEW:

Project Team			Date Reviewed	
Name	Title	Area of Responsibility	Initial	Final
BLM Oversight				
Linda Jones	Realty Specialist	Project Lead; Realty Authorizations	Draft 2/2/11	5/3/11
Paul Daggett	Mining Engineer	Geology and Minerals	x	4/26/11
Lisa Belmonte	Wildlife Biologist	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife; Wetlands and Riparian Zones	Draft 2/2/11	05/03/11
James Roberts Carol Dawson Mary Taylor	Assistant Field Manager CSO BLM Botanist Rangeland Mgmt Spec	Areas of Critical Environmental Concern; Threatened and Endangered Plant Species	x	5/13/11
Jim Michels and Chad Schneckenburger	Senior Natural Resource Specialist and Recreation Planner	Recreation; Wilderness; Access and Transportation; Visual Resources	Draft 3/9/11	x
Matthew Dupire Mary Taylor	Rangeland Management Specialist	Vegetation; Invasive, Non-Native Species; Rangeland Management	Draft 2/3/11	4/27/11
Geoffrey Haymes	Archeologist	Cultural and Paleontological Resources	Draft 3/4/11	5/3/11
Bob Lange	Hydrologist, Soil Water Air Program Lead	Air Quality; Water Quality, Surface and Ground; Hydrology and Water Rights; Soils; Wastes, Hazardous or Solid	Draft 3/10/11	4/20/11
Jim Michels	Forester/ Fire / Fuels Specialist	Fire Management, Forest Management	Draft 3/9/11	5/25/11
Melissa Kindall	Range Technician	Wild Horse Management	x	5/14/11

COMPLIANCE/MONITORING: On-going compliance inspections and monitoring will be conducted by WRFO staff during and after construction. Specific mitigation developed in the associated Environmental Assessment will be followed.

NAME OF PREPARER: Linda Jones

NAME OF ENVIRONMENTAL COORDINATOR: Heather Sauls

Finding of No Significant Impact/Decision Record (FONSI/DR)

DOI-BLM-CO-110-2011-0028-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analysis of the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) 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.

HDR Engineering, Inc, an environmental and engineering consulting firm, with the guidance, participation, and independent evaluation of the Bureau of Land Management (BLM) prepared this document. The BLM, in accordance with 40 CFR 1506.5 (a) and (c), is in agreement with the findings of the analysis and approves and takes responsibility for the scope and content of this document.

DECISION/RATIONALE: It is my decision to authorize a right-of-way for the proposed road improvements to Rio Blanco County Road as described in the attached EA in order to meet transportation and safety needs of the public in a manner that avoids, minimizes, reduces, or mitigates potential impacts to other resource values. This decision is contingent on meeting all mitigation measures and monitoring requirements listed below and the applicant committed mitigation measures in Exhibit A:

MITIGATION MEASURES

1. Construction impacts to soil resources will be minimized by implementing measures for handling topsoil and subsoil, erosion control, compaction, and reclamation. These measures are included in construction plans and the SWMP and consist of stabilization and reclamation activities as summarized above.
2. In accordance with BLM (and Rio Blanco County) standards, at the completion of construction all disturbed areas will be recontoured and seeded with a native seed mix to initiate revegetation. Reclamation work and seeding would need to occur between September and March. Depending on the site, fencing reclaimed areas may be necessary to be installed by the contractor to keep livestock out of the area until seeded vegetation is established. Rio Blanco County will be responsible for installation and maintenance of this fencing and its removal when vegetation is adequately established (two to three growing seasons).
3. Based on 2011 survey results, for projects 4, 5b and stock passes 13-17, where plants are found within 200 meters, formal consultation with the FWS will occur after spring surveys. For those projects, construction would not occur until BLM issues specific project based approval (i.e., Notice to Proceed) based on the outcome of a Biological Assessment and formal consultation with FWS. Consultation will require follow-up spring surveys and the

development of mitigation measures to be completed in time for the consultation process to be concluded before the anticipated construction. The applicant should plan to conduct formal consultation well in advance of the desired construction start date since formal consultation with the FWS may take a minimum of 135 days after the BLM has prepared and submitted a complete Biological Assessment.

4. Reclamation of surface disturbances in occupied, suitable or potential habitat for special status plants will use locally gathered stock or genetic stock from locally gathered native species.

5. As SHPO concurrence has not yet been obtained for work within site 5RB4159.1 (the Gerald Oldland Ranch), further work will be necessary for Project #6. Unless Project #6 is reduced in scale to fully avoid 5RB4159.1, it will be necessary to formulate a Treatment Plan and/or Memorandum of Agreement addressing potential impacts to 5RB4159.1. These documents must be approved by the BLM and Colorado SHPO as part of Project #6's required Section 106 review before BLM can issue a specific project based approval (i.e. Notice to Proceed).

6. All activities shall comply with all applicable local, State, and Federal laws, statutes, regulations, standards, and implementation plans. This includes acquiring all required Federal, State, and/or local permits, effectively coordinating with existing facility ROW holders, and implementing all applicable mitigation measures required by each permit.

7. The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.

8. For each project to be built after 2011, a specific project based approval (i.e., Notice to Proceed) shall be issued after the necessary updated resource surveys and consultation with SHPO and FWS are completed for that project and before construction begins.

9. Rio Blanco County shall follow the applicant committed mitigation in the attached Exhibit A.

SIGNATURE OF AUTHORIZED OFFICIAL:



Field Manager

DATE SIGNED:

06/02/11

ATTACHMENTS:

- Exhibit A – Applicant Committed Mitigation
- Attachment A – Legal Descriptions
- Attachment B – Project Maps
- Attachment C – Resource Maps

Exhibit A – Applicant Committed Mitigation

Air, Water, Soils

1. Prior to construction, Rio Blanco County will prepare a project-specific mitigation plan to minimize air quality impacts and will obtain the appropriate permits from the Colorado Department of Public Health and Environment (CDPHE) for individual CR 5 improvement projects where necessary.
2. As individual CR 5 improvement projects are developed, coordination with BLM will be undertaken for work near water bodies deemed to be “functional at-risk” or “nonfunctional” to ensure that no further degradation occurs as a result of the project, including:
 - Providing for erosion-resistant surface drainage by adding necessary drainage facilities prior to rain or snow events. When erosion in disturbed areas is anticipated, sediment barriers would be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. Locate culverts or drainage dips (waterbreaks) in such a manner as to avoid discharge onto unstable terrain such as headwalls or slumps. Provide adequate spacing of these drainage features to avoid accumulation of water in ditches or road surfaces. Rio Blanco County will patrol areas susceptible to road or watershed damage during and after periods of high runoff and monitor culvert installations to ensure proper placement and adequate armoring of inlets and outlets.
 - Rio Blanco County will keep road inlet and outlet ditches, catchbasins, and culverts free of obstructions, particularly before and during spring runoff.
 - Leave the disturbed area in a condition that provides drainage with no additional maintenance.
 - Rio Blanco County will work with individual landowners to reroute irrigation ditches to maintain agricultural production and decreed flows.

Farmland, Wetlands, Vegetation, Weeds, T&E Plants

3. Rio Blanco County will work with individual property owners to reroute irrigation ditches and return them to a functional state so agricultural production will not be disrupted. Prime farmland soils would be avoided when reasonably possible. All areas within prime farmland soils compacted by construction operations which would no longer be needed after construction would be restored and topsoil would be returned to pre-construction depths and locations.
4. Rio Blanco County will minimize impacts to wetlands and riparian areas by implementing the following mitigations measures:
 - Obtain a Section 404 permit from the USACE for activities that would require removal or modification of stream channels classified as waters of the U.S. For approval of the project, the project will need to avoid and minimize impacts to waters of the U.S. to the extent practicable.
 - Install and maintain erosion control structures to minimize potential for sediment runoff into surface waters or drainages.

- Prohibit storage of hazardous materials, chemicals, fuels, lubricating oils, concrete coating, and refueling activities within 200 feet of wetland or riparian areas.
5. Construction activities would comply with BLM and Rio Blanco County stipulations to reduce the potential occurrence and proliferation of invasive and non-native species. As individual projects are developed, site-specific surveys for noxious weeds and weed free areas will be developed in accordance with Section 261 of the Rio Blanco County Land Use Resolution. Site-specific noxious weed treatment and monitoring plans will also be developed and disturbed areas would be revegetated.
 6. BLM would require compliance with the following stipulations to lessen the potential impact from noxious and invasive plant species:
 - Construction equipment to be washed prior to entering the project area. Additionally, when construction activities encounter a noxious weed infestation, equipment should be washed before proceeding (and spreading the weeds) beyond the immediate area.
 - Conduct pre-work weed surveys.
 - Continuously survey weeds before the project is started in the spring and after the project is completed in the fall and ensure that all hay, straw, and seed used for reclamation is certified free of noxious weeds.
 - Treat weeds using BLM approved methods along the right-of-way if weeds are detected. For weed treatments on BLM lands, Pesticide Use Proposals (PUPs) would be completed and approved by the WRFO. Pesticide Application Records (PARs) would be submitted to WRFO by October 31st every year weed treatments occur.
 -
 7. For projects 1, 5a, 6, 2a, and stock pass locations 1 through 9 **spot checks** for both Dudley Bluffs bladderpod and Dudley Bluffs twinpod were completed in the spring of 2011 to determine potential affects. For projects 4, 5b, and stock pass locations 13 through 17 **surveys** were completed in 2011 to determine the potential effect. Informal consultation would be required for all projects within 600 meters of the listed plant species and would be conducted after spring surveys. If a plant population is found within 200 meters of these project areas during spring surveys; formal consultation with FWS would be required.
 8. In order to minimize potential impacts on rangeland and livestock, Rio Blanco County will require mitigation measures that include the following:
 - Seed disturbed areas as discussed in the Vegetation section.
 - Control noxious weeds as discussed in the Invasive, Non-Native Species section.
 - Wherever heavy traffic is expected, it may be necessary to install cattleguards with adjacent gates. Cattleguards would be installed above the existing grade and all such cattleguard/fence work would conform to BLM/CDOW specifications.

Wildlife

9. Rio Blanco County will require that the construction water provided by the contractor is obtained from Piceance Creek or White River in accordance with the stipulations in the PBO and is recorded accordingly with the COSO. Any necessary permits to withdraw water will be obtained by the contractor.
10. Raptor surveys will be conducted prior to construction of individual improvement projects, should construction occur during nesting season (December 15 – August 15 or until young have fledged). Surveys will be conducted using approved BLM survey protocol and results will be provided to BLM biologists prior to initiation of construction activities. Appropriate timing stipulations would be applied depending on nest status, proximity of nest to construction activities, and whether or not construction activities are coincident with the nesting season (TL-01, 02, 04 and NSO-02, 03, 05). These timing stipulations would be subject to exception/modification provisions addressed in the WRFO RMP. The BLM timing restrictions will also be implemented for active raptor nests outside of BLM lands and in accordance with the Migratory Bird Treaty Act (MBTA).
11. Retaining walls will be constructed to avoid direct effects to the creek. Erosion control measures and BMPs will be implemented to prevent sediment from entering the creek.
12. When implementing individual CR 5 improvement projects, Rio Blanco County will coordinate with BLM to ensure that fish are provided adequate passage with larger culverts or major structures and measures will be taken to prevent sediment from entering water bodies where fish populations are present. The bridge replacement at Project 4 would be designed to provide safe fish passage.
13. No construction activities will be allowed from January 1 through April 30 to avoid unnecessary disturbance on mule deer severe winter ranges. All wildlife crossings and fencing associated with the Proposed Action will be designed to facilitate big game crossing of the CR 5 corridor. All design features for big game crossings and fencing (new or replacement) must be approved by CDOW and BLM prior to installation.

Wastes, Hazardous and Solid

14. Rio Blanco County will follow the Colorado Department of Transportation Standard Specifications for Road and Bridge Construction, Section 250, to minimize impacts from hazardous or solid waste (CDOT 2011). The following measures will be required of the construction contractor:
 - Comply with all federal, state and/or local laws, rules, and regulations addressing the emission of and/or the handling, use, and release of any substance that poses a risk of harm to human health or the environment.
 - Maintain construction sites and all facilities in a sanitary condition at all times; promptly dispose of waste materials at an appropriate waste disposal site.
 - Report all emissions or releases that may pose a risk of harm to human health or the environment to the BLM White River Field Office at (970) 878-3800.

- Provide for the immediate clean-up and testing of air, water (surface and/or ground), and soils contaminated by the release of any substance that may pose a risk of harm to human health or the environment.
- Prepare a spill prevention plan according to construction specifications.

Cultural, Paleontology

15. Mitigation of the impact to the ditch segments will include reconstruction of the disturbed portion of the ditch along the side of CR 5, thus maintaining their integrity of setting, feeling, and association. It is possible that important cultural resources not visible on the surface could be encountered during the construction of the project facilities. To mitigate potential impacts to such resources, the following measures would be implemented to modify the Proposed Action:

- The holder is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing archaeological sites, or for collecting artifacts.
- If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery will cease, and the BLM WRFO Archaeologist will be notified immediately. Work may not resume at that location until approved by the Authorized Officer (AO). The proponent will make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed.
- Unless previously determined in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the State Historic Preservation Officer, select the appropriate mitigation option within 48 hours of the discovery. The proponent, under guidance of the BLM, will implement the mitigation in a timely manner. The process will be fully documented in reports, site forms, maps, drawings, and photographs.
- The BLM will forward documentation to the SHPO for review and concurrence.
- Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone and written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), activities in the vicinity of the discovery would be stopped and protected for 30 days or until notification to proceed is received from the AO.
- Sites 5RB.123, 5RB.2658, 5RB.3403.2 (formerly 5RB.3753.1), 5RB.3403.3 (formerly 5RB.3753.2), 5RB.4159.1, 5RB.4773, 5RB.5360.2, 5RB.5636.1, 5RB.5636.2, 5RB.6341, and 5RB.6342 will be avoided by all ground disturbing activity. Shapefiles or maps of these site boundaries will be provided to authorized project personnel by WRFO archaeologists, upon request. If further review of refined project location data, contrary to the BLM's analysis of available inventory data, indicates that any of these sites could potentially be impacted by construction

activities, the operator may 1) modify the project area to fully avoid the site boundaries as recorded, 2) retain an archaeological contractor to monitor construction, who will provide addendum reports to the BLM demonstrating that the extent of surface disturbance fully avoided the presently-recorded or refined boundaries of the sites noted above, or 3) retain an archaeological contractor to develop a Treatment Plan for the affected site(s), which will serve as the basis for a Memorandum of Agreement between the BLM and SHPO regarding possible damage to historic properties. Under the latter option, the operator must avoid ground disturbing activities in the vicinity of the affected site(s) until an agreement has been reached between the BLM and Colorado SHPO over treatment of the affected site(s) or all responsibilities under NRHP Section 106 have otherwise been fulfilled.

16. Any excavations into the underlying bedrock (native sedimentary stone) must be monitored by a permitted paleontologist. The monitoring paleontologist must be present before the start of excavations that may impact bedrock. The following stipulations would be required for construction:

- The permittee is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
- If any paleontological resources are discovered as a result of operations under this authorization, the proponent or any of his agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.
- Any excavations into the underlying native sedimentary stone must be monitored by a permitted paleontologist. The monitoring paleontologist must be present before the start of excavations that may impact bedrock.

Visual, Recreation, Access, Transportation

17. Contractors will be required to minimize fugitive dust and maintain construction areas by storing trash and other materials and siting slash/debris piles in low visibility areas if possible.

18. Information regarding construction projects (specifically, detours or construction delays) will be posted by Rio Blanco County and BLM.

19. A construction phasing plan would be implemented for the CR 5 projects to maintain vehicular access for the duration of construction. Construction documents would require the contractor to maintain at least one lane of traffic open at all times during the day and, when possible, two lanes open during non-working hours. Information related to the project construction schedule and location will be made available via Rio Blanco County and BLM websites.

Fire, Forestry

20. County Road 5 will be open throughout construction on all projects. Potential impacts to access for fire fighting will be mitigated through limited roadway blocks or detours during the fire season from late-August through mid-September; however, access to adjoining county roads and BLM trails would be maintained to allow for emergency vehicles and fire management.
21. Contractors will be required to have an approved project specific fire management plan for accidental ignitions prior to starting work at any construction site. During construction, there shall be fire suppression equipment ready for use in the event of an accidental fire ignition as a result of construction. Fire suppression actions shall be taken in the area as directed by project specific fire management plan. In the event of an accidental ignition or natural ignition resulting in a wildland fire involving vegetation, the contractor or a representative will contact Craig Fire Dispatch so that a qualified fire crew can evaluate the situation for the safety of all crews in the area and determine the appropriate management action. If a fire extinguisher has been used, the contractor must tell the incoming crews the location of use to prevent accidental inhalation.

Attachment A Legal Descriptions

Projects 1 and 2b To be constructed in 2011

Parcel No. 1-100

A parcel of land in the SW1/4SW1/4 of Section 8 and the SE1/4SE1/4 of Section 7, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:
Beginning at the southwest corner (aluminum cap LS 9019) of said Section 8, whence the south 1/4 corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 8 bears S87°54'11"E, 2623.44 feet;
Thence S87°54'11"E, along the south line of said SW1/4SW1/4, 254.33 feet;
Thence N63°37'15"E, 484.65 feet;
Thence 668.64 feet along the arc of a curve having a radius of 1485.47 feet and a central angle of 25°47'24", the chord of which bears N55°25'44"E, 663.01 feet;
Thence N42°32'02"E, 572.88 feet to a point on the east line of said SW1/4SW1/4;
Thence N1°58'59"E, along said east line, 207.72 feet;
Thence S42°32'02"W, 640.28 feet;
Thence S90°00'00"W, 634.30 feet;
Thence S0°00'00"W, 451.84 feet;
Thence S63°37'15"W, 336.56 feet to a point on the south line of said Section 7;
Thence S88°50'24"E, along said south line, 18.99 feet to the point of beginning,
Containing 8.72 acres, more or less.

Parcel No. 1-101

A parcel of land in the S1/2S1/2 of Section 7, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:
Commencing at the southwest corner (BLM brass cap) of said Section 7, whence the southeast corner (aluminum cap LS 9019) of said Section 7 bears S88°50'24"E, 5311.63 feet;
Thence S88°50'24"E, along the south line of said Section 7, 2413.40 feet to the true point of beginning;
Thence S88°50'24"E, along said south line, 885.26 feet;
Thence 213.85 feet along the arc of a curve having a radius of 900.28 feet and a central angle of 13°36'35", the chord of which bears N68°11'41"W, 213.34 feet;
Thence N74°59'58"W, 134.58 feet;
Thence 395.75 feet along the arc of a curve having a radius of 910.29 feet and a central angle of 24°54'35", the chord of which bears S84°02'38"W, 392.64 feet;
Thence S71°35'21"W, 175.46 feet to the point of beginning,
Containing 1.45 acres, more or less.

Parcel No. TE-1-101

A temporary easement in the SW1/4SW1/4 Section 8, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:

Commencing at the southwest corner (aluminum cap LS 9019) of said Section 8, whence the south 1/4 corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 8 bears S87°54'11"E, 2623.44 feet;
Thence N54°34'10"E, 1289.04 feet to the true point of beginning;
Thence S42°32'02"W, 86.03 feet;
Thence N47°27'58"W, 80.03 feet;
Thence N42°32'02"E, 86.03 feet;
Thence S47°27'58"E, 80.03 feet to the point of beginning,
Containing 0.16 acres, more or less.

Parcel No. 4-102

A parcel of land in the NW1/4 of Section 17 and the N1/2 of Section 18, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:

Beginning at the northwest corner (aluminum cap LS 9019) of said Section 17, whence the north 1/4 corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 17 bears S87°54'11"E, 2623.44 feet;
Thence S87°54'11"E, along the north line of said NW1/4, 254.33 feet;
Thence S63°37'15"W, 311.51 feet;
Thence 222.61 feet along the arc of a curve having a radius of 2420.77 feet and a central angle of 5°16'08", the chord of which bears S60°59'11"W, 222.53 feet;
Thence S58°21'07"W, 694.75 feet;
Thence N24°26'49"W, 37.04 feet;
Thence 571.13 feet along the arc of a curve having a radius of 572.98 feet and a central angle of

Parcel No. TE-1-102

A temporary easement in the SW1/4SW1/4 Section 8, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:

Commencing at the southwest corner (aluminum cap LS 9019) of Section 8, Township 3 South, Range 95 West of the 6th P.M., whence the south 1/4 corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 8 bears S87°54'11"E, 2623.44 feet;
Thence S87°54'11"E, 254.33 feet to the true point of beginning;
Thence N63°37'15"E, 173.14 feet;
Thence 289.71 feet along the arc of a curve having a radius of 1485.47 feet and a central angle of 11°10'28", the chord of which bears N62°44'12"E, 289.25 feet;
Thence S32°51'02"E, 68.22 feet;
Thence S22°19'04"W, 27.66 feet;
Thence N70°47'14"W, 70.30 feet;
Thence 228.39 feet along the arc of a curve having a radius of 1515.48 feet and a central angle of 8°38'04", the chord of which bears S63°57'35"W, 228.17 feet;
Thence S63°37'15"W, 116.59 feet to a point on the south line of said Section 8;
Thence N87°54'11"W, along said south line, 62.94 feet to the point of beginning,
Containing 0.35 acres, more or less.
RLS 36574) of said Section 8 bears S87°54'11"E, 2623.44 feet;
Thence S60°06'09"W, 903.32 feet to the true point of beginning;
Thence 101.29 feet along the arc of a curve having a radius of 672.08 feet and a central angle of 8°38'05", the chord of which bears S65°45'29"W, 101.19 feet;
Thence N26°15'27"W, 41.48 feet;
Thence N63°44'33"E, 96.88 feet;
Thence S31°38'53"E, 45.24 feet to the point of beginning,
Containing 0.1 acres, more or less.

Parcel No. TE-4-105

A temporary easement in the NE1/4NE1/4 of Section 18, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:

Commencing at the southwest corner (aluminum cap LS 9019) of Section 8, Township 3 South, Range 95 West of the 6th P.M., whence the south 1/4 corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 8 bears S87°54'11"E, 2623.44 feet;
Thence S51°52'43"W, 908.69 feet to the true point of beginning;
Thence S58°21'07"W, 112.86 feet;
Thence S24°26'49"E, 34.13 feet;
Thence N63°44'33"E, 117.66 feet;
Thence N31°38'53"W, 44.62 feet to the point of beginning,
Containing 0.1 acres, more or less.

Parcel No. TE-4-106

A temporary easement in the NE1/4NW1/4 of Section 18, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:

Commencing at the northwest corner (BLM brass cap) of said Section 18, whence the northeast corner (aluminum cap LS 9019) of said Section 18 bears S88°50'24"E, 5311.63 feet;
Thence S86°46'08"E, 2463.64 feet to the true point of beginning;
Thence S72°47'43"E, 34.56 feet;
Thence S71°49'46"W, 180.46 feet;
Thence S18°24'39"E, 31.01 feet;
Thence S71°49'46"W, 70.02 feet;
Thence N18°24'39"W, 51.02 feet;
Thence N71°49'46"E, along the existing right-of-way line of Rio Blanco County Road No. 5, 222.39 feet to the point of beginning,
Containing 0.16 acres, more or less.

Parcel No. TE-4-107

A temporary easement in the NW1/4NW1/4 of Section 17 and the NE1/4NE1/4 of Section 18, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:
Commencing at the southwest corner (aluminum cap LS 9019) of Section 8, Township 3 South, Range 95 West of the 6th P.M., whence the south 1/4 corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 8 bears S87°54'11"E, 2623.44 feet;
Thence S87°54'11"E, along the south line of said Section 8, 254.33 feet to the true point of beginning;
Thence S87°54'11"E, 62.94 feet;
Thence S63°37'15"W, 366.83 feet;
Thence 219.85 feet along the arc of a curve having a radius of 2390.76 feet and a central angle of 5°16'08", the chord of which bears S60°59'11"W, 219.77 feet;
Thence S58°21'07"W, 181.01 feet;
Thence S16°33'54"W, 69.40 feet;
Thence N78°24'40"W, 20.01 feet;
Thence N31°38'53"W, 62.55 feet;
Thence N58°21'07"E, 247.33 feet;
Thence 222.61 feet along the arc of a curve having a radius of 2420.77 feet and a central angle of 5°16'08", the chord of which bears S60°59'11"W, 222.53 feet;
Thence N63°37'15"E, 311.51 feet to the point of beginning,
Containing 0.6 acres, more or less.

Parcel No. TE-4-108

A temporary easement in the N1/2N1/2 of Section 18, Township 3 South, Range 95 West of the 6th P.M., more particularly described as follows:
Commencing at the northwest corner (BLM brass cap) of said Section 18, whence the northeast corner (aluminum cap LS 9019) of said Section 18 bears S88°50'24"E, 5311.63 feet;
Thence S86°18'13"E, 2546.82 feet to the true point of beginning;
Thence N71°35'21"E, 89.85 feet;
Thence 832.23 feet along the arc of a curve having a radius of 760.24 feet and a central angle of 62°43'17", the chord of which bears N77°03'01"W, 791.30 feet;
Thence S45°41'22"E, 392.04 feet;
Thence 298.82 feet along the arc of a curve having a radius of 740.24 feet and a central angle of 23°07'44", the chord of which bears S57°15'14"E, 296.79 feet;
Thence N25°03'28"E, 22.21 feet;
Thence S66°46'20"E, along the existing right-of-way line of Rio Blanco County Road No. 5, 36.60 feet;
Thence S21°23'51"W, 55.02 feet;
Thence 78.78 feet along the arc of a curve having a radius of 628.00 feet and a central angle of 7°11'14", the chord of which bears S65°00'33"E, 78.72 feet;
Thence 270.23 feet along the arc of a curve having a radius of 770.24 feet and a central angle of 20°06'06", the chord of which bears S55°44'25"E, 268.85 feet;
Thence N45°41'22"W, 392.04 feet;
Thence 783.40 feet along the arc of a curve having a radius of 730.23 feet and a central angle of 61°28'04", the chord of which bears N76°25'24"W, 746.37 feet;
Thence S18°44'48"W, 120.49 feet;
Thence N75°47'00"W, 39.24 feet;
Thence N18°24'39"W, 105.05 feet to the point of beginning,
Containing 1.3 acres, more or less.

Parcel No. 13-550

A parcel of land in the SW1/4NW1/4 of Section 33, Township 1 South, Range 97 West of the 6th P.M., more particularly described as follows:

Commencing at the west 1/4 corner (BLM aluminum monument) of said Section 33, whence the northwest corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 33 bears N01°33'03"E, 2677.72 feet;

Thence N85°51'50"E, 764.71 feet to the true point of beginning;

Thence S89°30'54"E, 189.77 feet;

Thence N3°37'30"E, 189.34 feet to a point on the east line of a parcel of land described in reception no. 291241;

Thence S0°31'41"W, 206.55 feet to the southeast corner of said parcel;

Thence N89°27'17"W, 200.00 feet to the southwest corner of said parcel;

Thence N0°31'41"E, 17.28 feet to the point of beginning,

Containing 0.1 acres, more or less.

Parcel No. 14-550

A parcel of land in the W1/2W1/2 of Section 33, Township 1 South, Range 97 West of the 6th P.M., more particularly described as follows:

Commencing at the west 1/4 corner (BLM aluminum monument) of said Section 33, whence the northwest corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 33 bears N01°33'03"E, 2677.72 feet;

Thence N85°51'50"E, 764.71 feet to a point on the westerly boundary line of a parcel of land described in reception no. 291241, said point being the true point of beginning;

Thence S00°31'41"W, along said westerly boundary line, 17.28 feet to the southwest corner of said parcel;

Thence S89°27'17"E, along the southerly boundary line of said parcel, 200.00 feet to the southeast corner of said parcel;

Thence N00°31'41"E, along the easterly boundary line of said parcel, 206.55 feet;

Thence N03°37'30"E, 493.10 feet;

Thence N01°06'01"E 819.81 feet;

Thence 190.40 feet along the arc of a curve having a radius of 6835.48 feet and a central angle of 1°35'45", the chord of which bears N05°43'13"W, 190.39 feet;

Thence N24°32'39"W, 80.77 feet;

Thence 280.96 feet along the arc of a curve having a radius of 6432.03 feet and a central angle of 2°30'10", the chord of which bears N08°29'05"W, 280.94 feet;

Thence N09°44'10"W, 319.10 feet;

Thence N80°15'19"E, 120.04 feet;

Thence S09°44'10"E, 319.12 feet;

Thence 398.51 feet along the arc of a curve having a radius of 6552.08 feet and a central angle of 3°29'05", the chord of which bears S07°59'38"E, 398.45 feet;

Thence S08°17'08"E, 529.03 feet;

Thence 607.07 feet along the arc of a curve having a radius of 6592.09 feet and a central angle of 5°16'35", the chord of which bears S00°59'13"W, 606.85 feet;

Thence S03°37'30"W, 1298.71 feet;

Thence 339.58 feet along the arc of a curve having a radius of 520.53 feet and a central angle of 37°22'43", the chord of which bears S22°18'52"W, 333.59 feet;

Thence S23°35'34"W, 373.16 feet;

Thence 290.83 feet along the arc of a curve having a radius of 3311.05 feet and a central angle of 5°01'58", the chord of which bears S21°04'35"W, 290.74 feet;

Thence N71°25'32"W, 170.05 feet;

Thence 305.73 feet along the arc of a curve having a radius of 3481.11 feet and a central angle of 5°01'55". the chord of which bears N21°04'36"E. 305.63 feet:

Thence N23°35'34"E, 354.60 feet;

Thence N14°31'06"E, 650.95 feet;

Thence N03°37'30"E, 266.92 feet;

Thence N89°30'54"W, 506.78 feet;

Thence N00°29'06"E, 120.04 feet;

Thence S89°30'54"E, 303.56 feet to the point of beginning,

Containing 16.12 acres, more or less.

Parcel No. TE-14-550

A temporary easement in the W1/2SW1/4 of Section 33, Township 1 South, Range 97 West of the 6th P.M., more particularly described as follows:

Commencing at the west 1/4 corner (BLM aluminum monument) of said Section 33, whence the northwest corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 33 bears N01°33'03"E, 2677.72 feet;
Thence S52°52'32"E, 1084.56 feet to the true point of beginning;
Thence S14°31'06"W, 318.74 feet;
Thence S23°35'34"W, 354.60 feet;
Thence 305.73 feet along the arc of a curve having a radius of 3481.11 feet and a central angle of 5°01'55", the chord of which bears S21°04'36"W, 305.63 feet;
Thence S71°25'32"E, 44.42 feet;
Thence S18°49'00"W, along the existing right-of-way line of Rio Blanco County Road No. 5, 28.91 feet;
Thence N71°26'42"W, 81.87 feet;
Thence N43°09'31"W, 17.89 feet;
Thence N46°50'29"E, 17.57 feet;
Thence 314.66 feet along the arc of a curve having a radius of 3526.12 feet and a central angle of 5°06'47", the chord of which bears S21°02'11"W, 314.56 feet;
Thence N23°35'34"E, 351.02 feet;
Thence N14°31'06"E, 267.62 feet;
Thence N29°37'11"W, 47.26 feet;
Thence N60°22'49"E, 19.58 feet;
Thence S75°28'54"E, 63.87 feet to the point of beginning,
Containing 1.09 acres, more or less.

Parcel No. TE-14-551

A temporary easement in the NW1/4SW1/4 of Section 33, Township 1 South, Range 97 West of the 6th P.M., more particularly described as follows:

Commencing at the west 1/4 corner (BLM aluminum monument) of said Section 33, whence the northwest corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 33 bears N01°33'03"E, 2677.72 feet;
Thence S84°22'32"E, 652.28 feet to the true point of beginning;
Thence S89°30'54"E, 147.13 feet;
Thence S00°29'06"W, 65.02 feet;
Thence N89°30'54"W, 40.01 feet;
Thence N00°29'06"E, 38.01 feet;
Thence N89°30'54"W, 107.12 feet;
Thence N00°29'06"E, 27.01 feet to the point of beginning,
Containing 0.13 acres, more or less.

Parcel No. TE-14-552

A temporary easement in the SW1/4NW1/4 of Section 33, Township 1 South, Range 97 West of the 6th P.M., more particularly described as follows:

Commencing at the west 1/4 corner (BLM aluminum monument) of said Section 33, whence the northwest corner (no. 6 rebar and aluminum cap RLS 36574) of said Section 33 bears N01°33'03"E, 2677.72 feet;

Thence N85°04'04"E, 652.57 feet to the true point of beginning;

Thence N00°29'06"E, 26.95 feet;

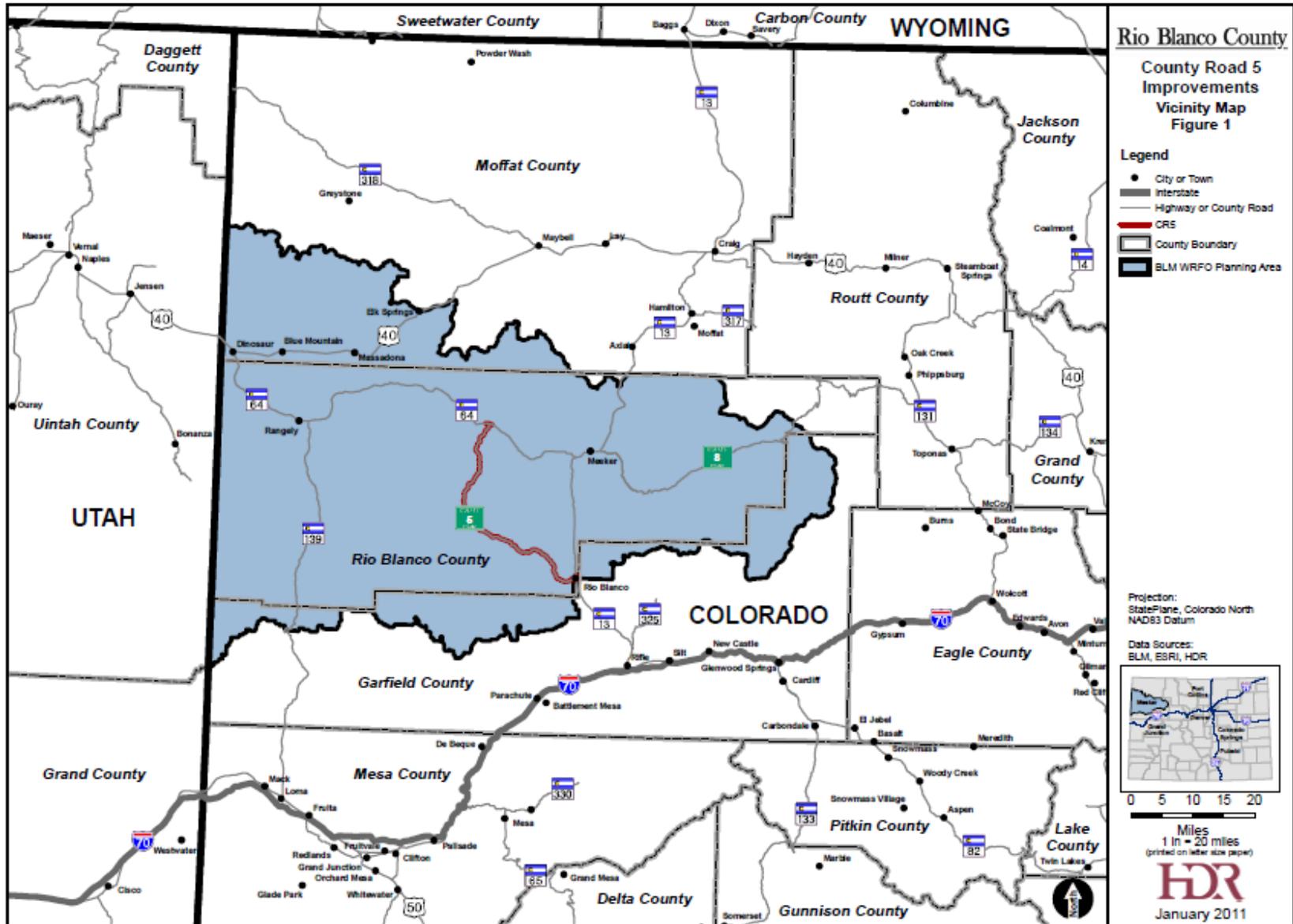
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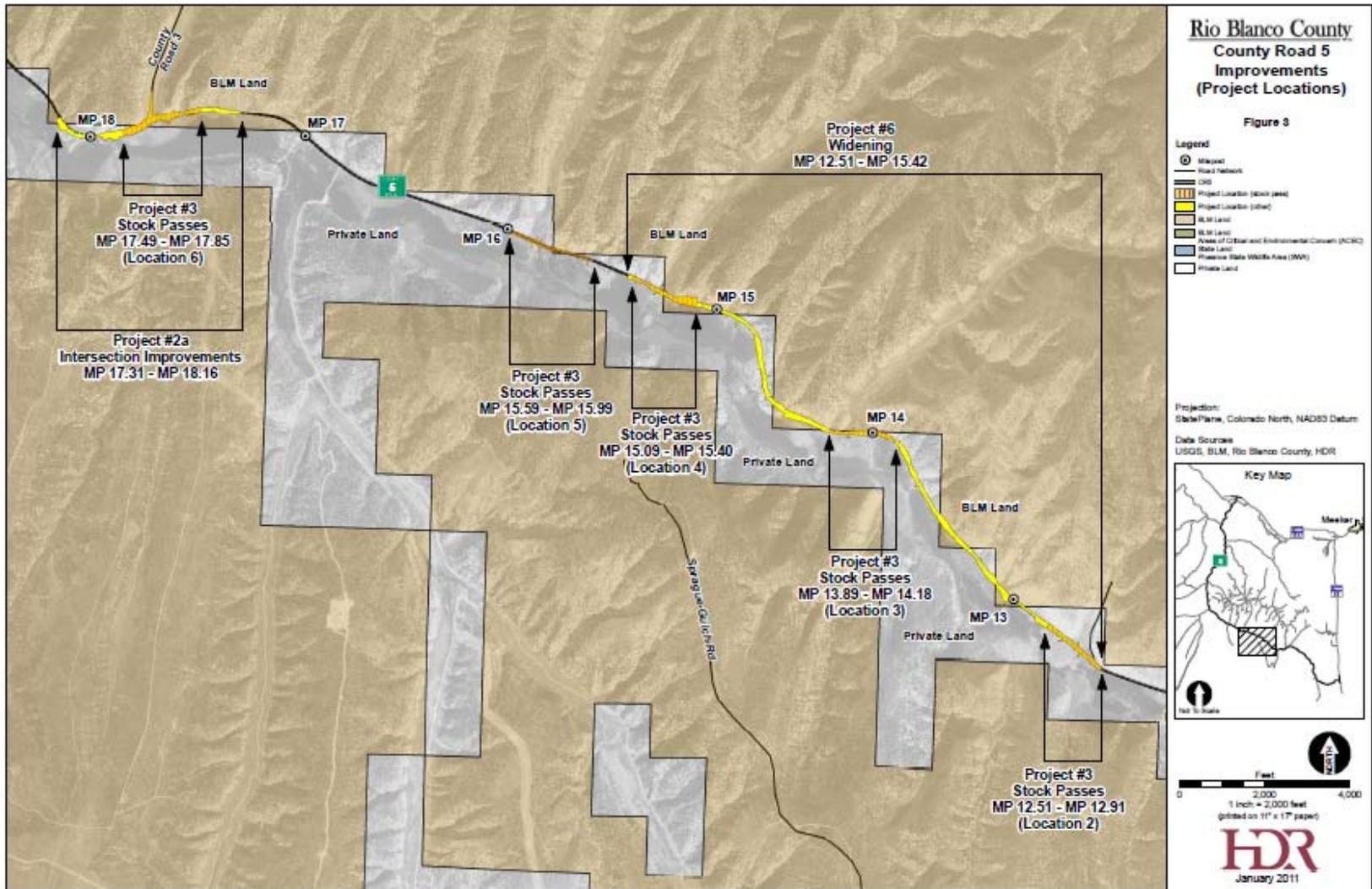
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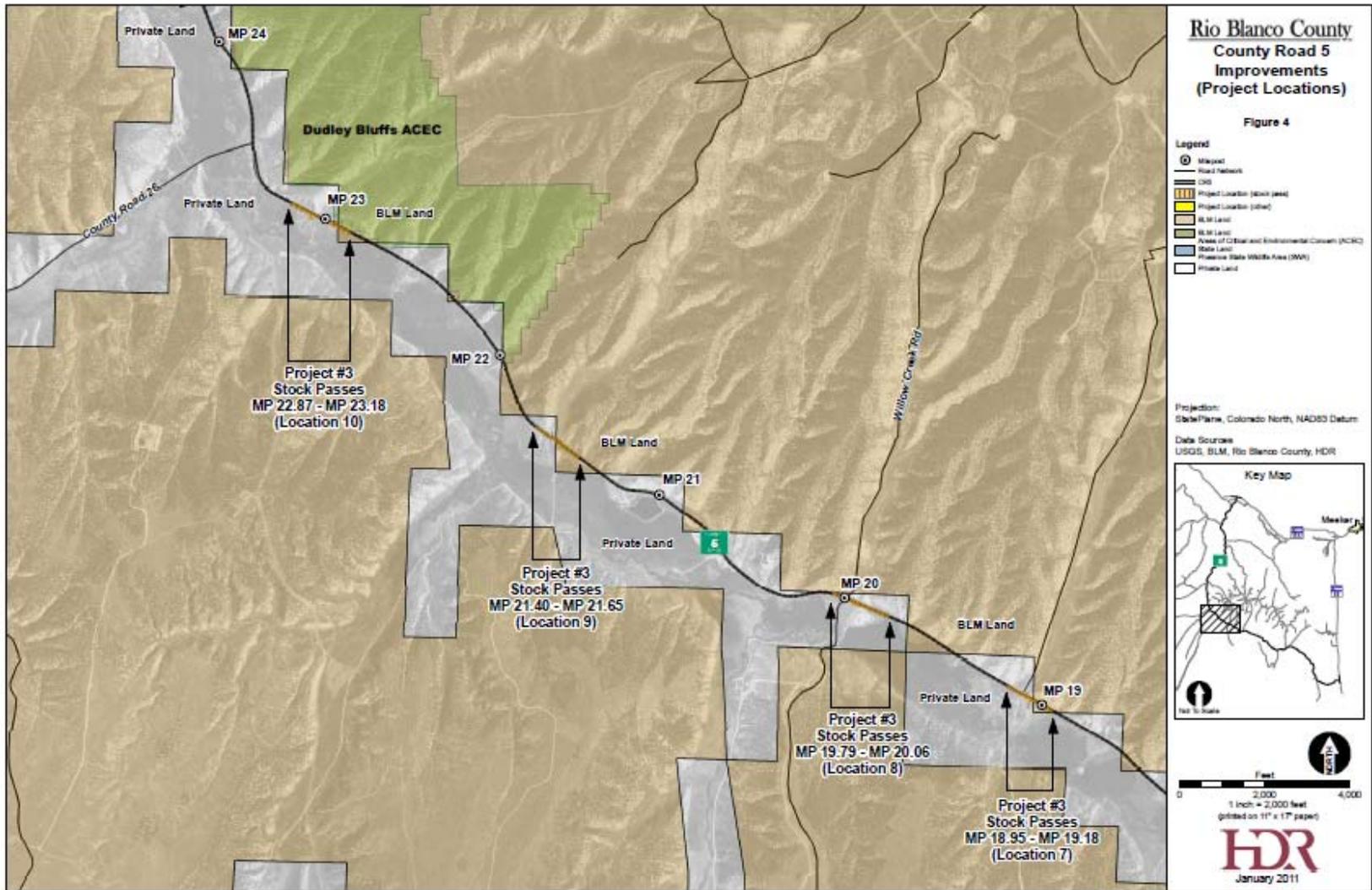
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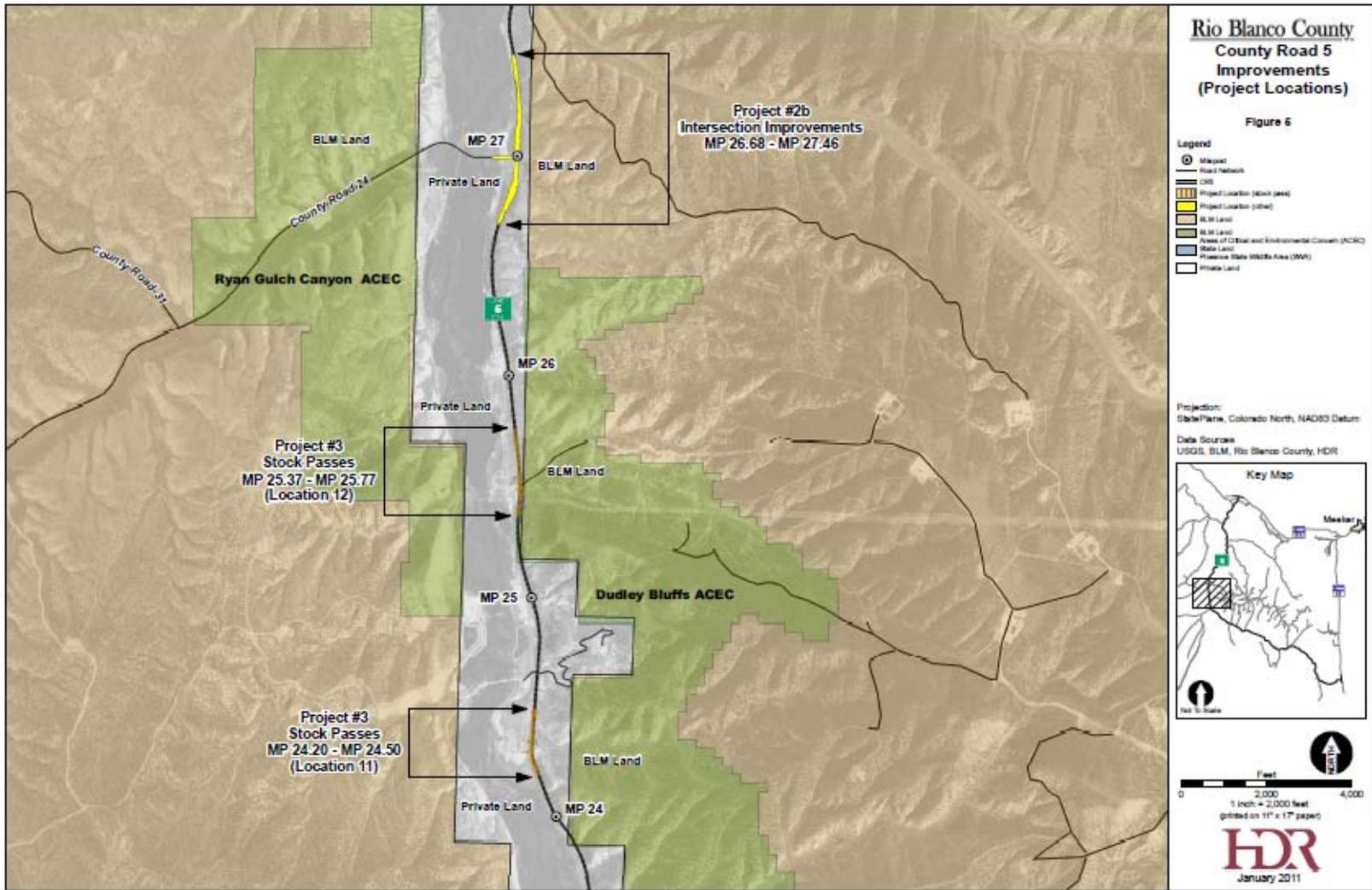
Containing 0.02 acres, more or less.

Attachment B
Project Location Figures 1-6





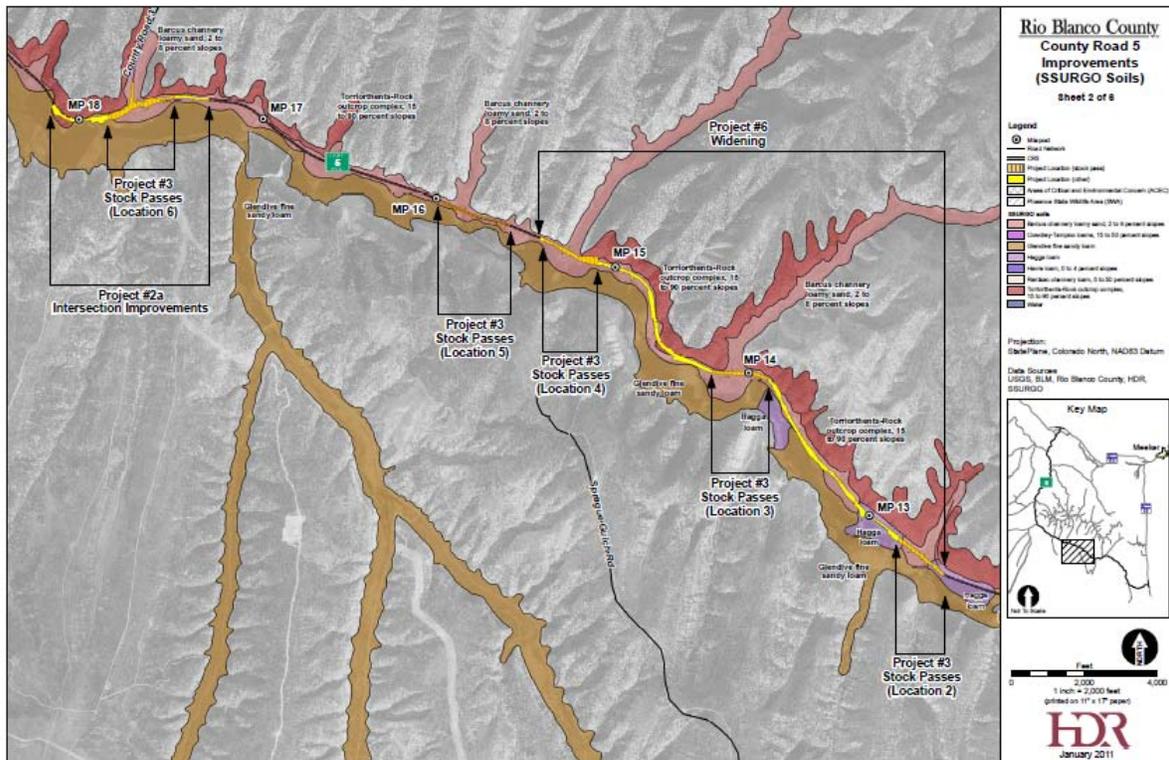
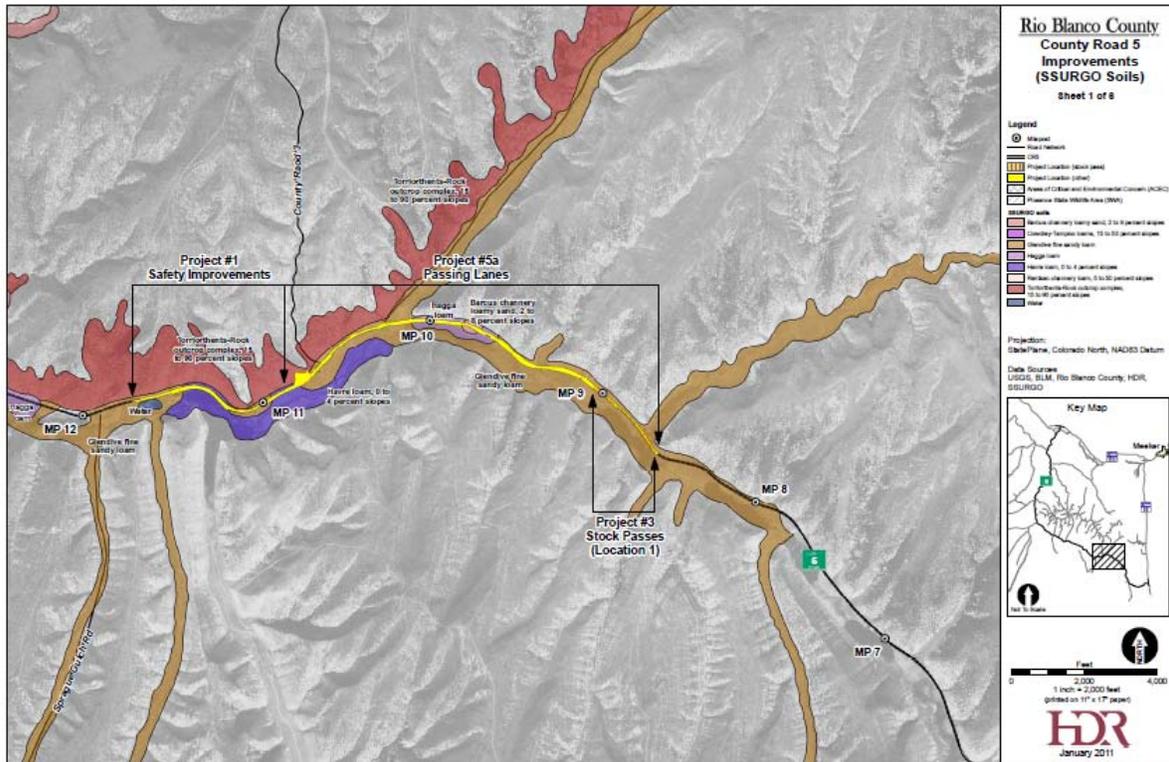




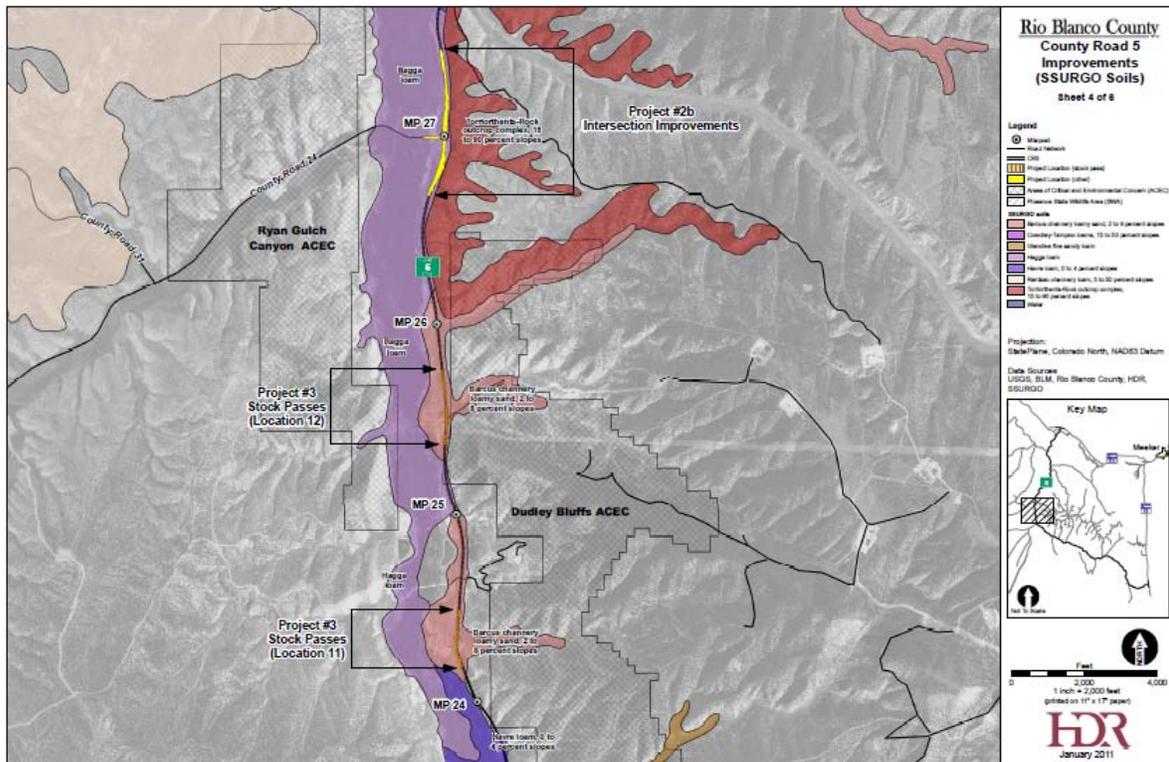
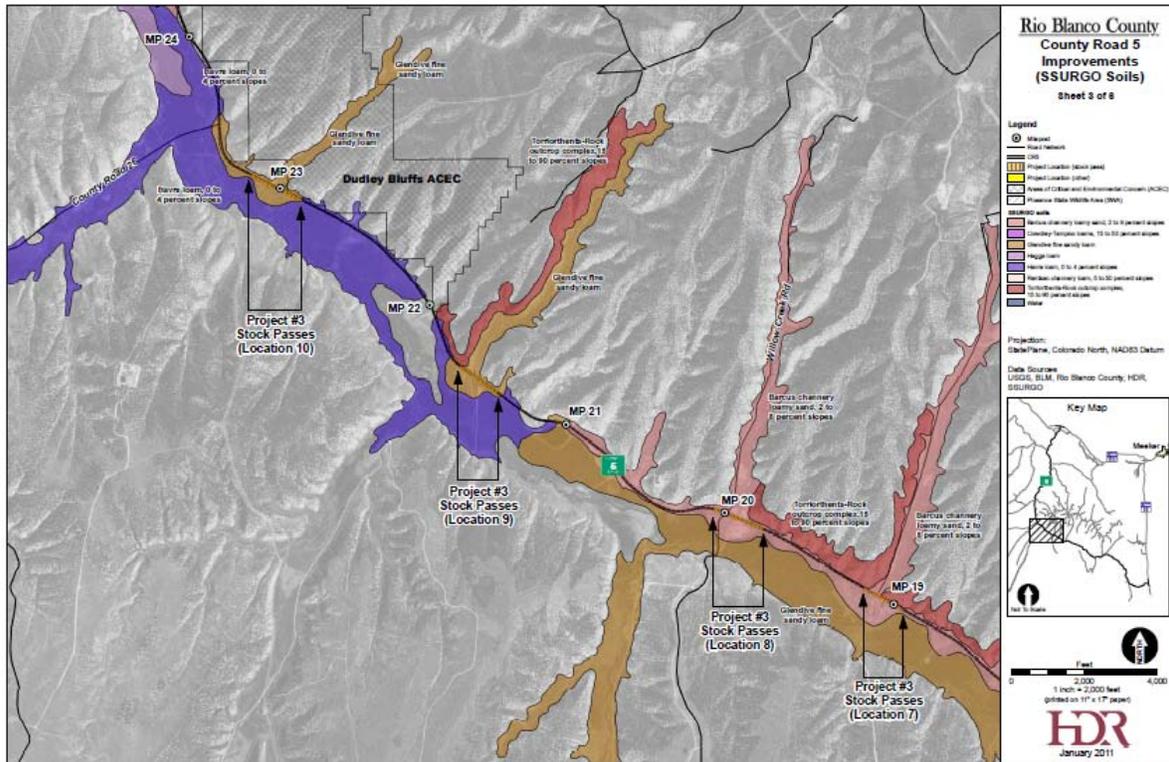
Attachment C

**Resource Maps for
Soils, Water Resources, and Wildlife Corridors**

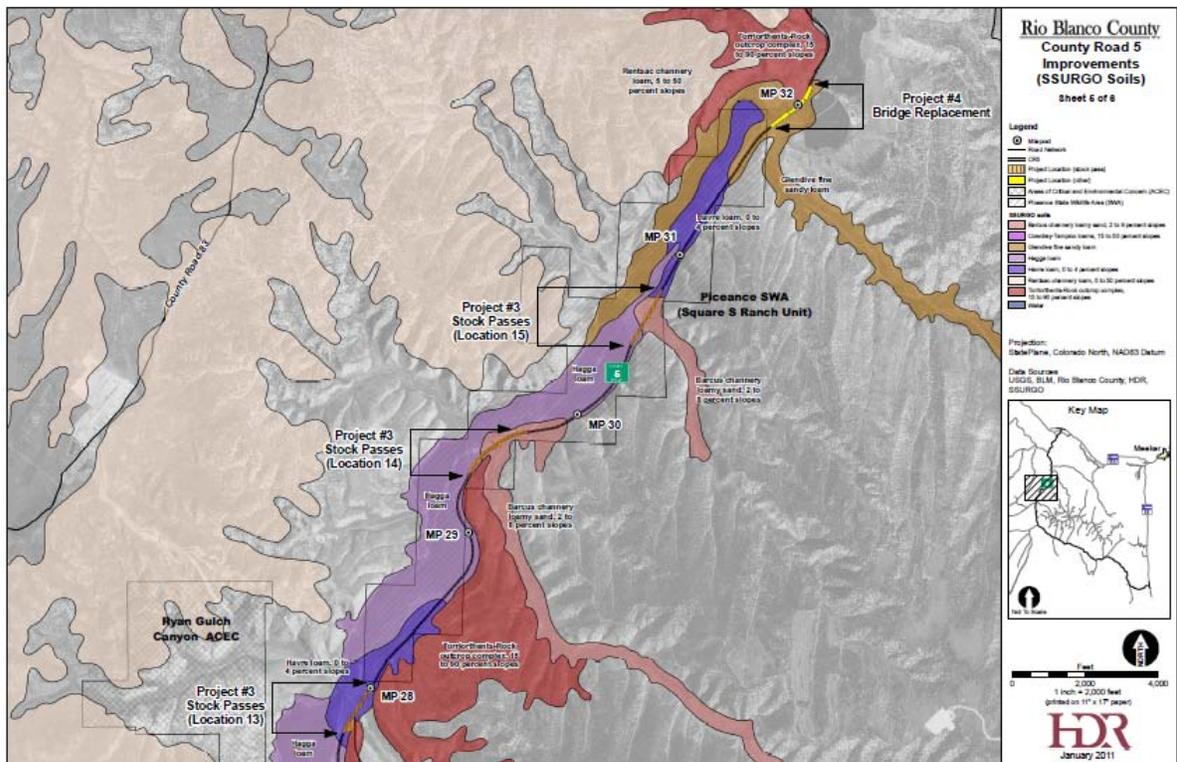
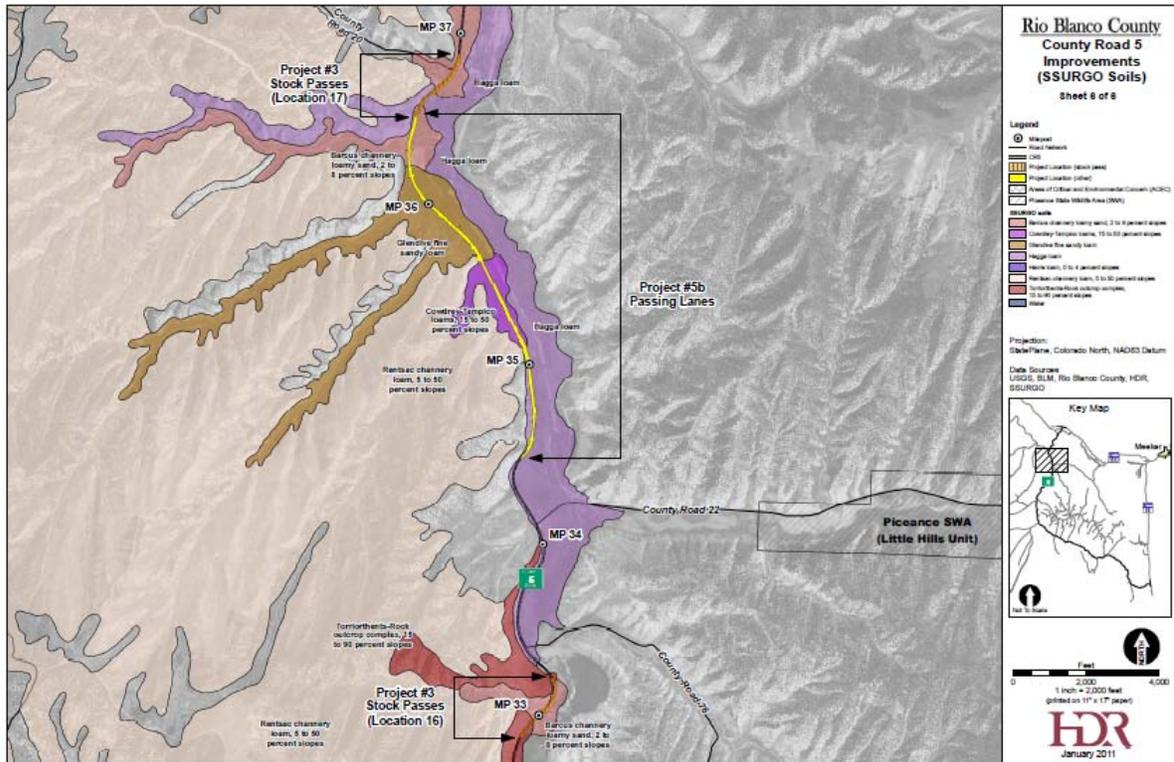
Soils Figures 1-2



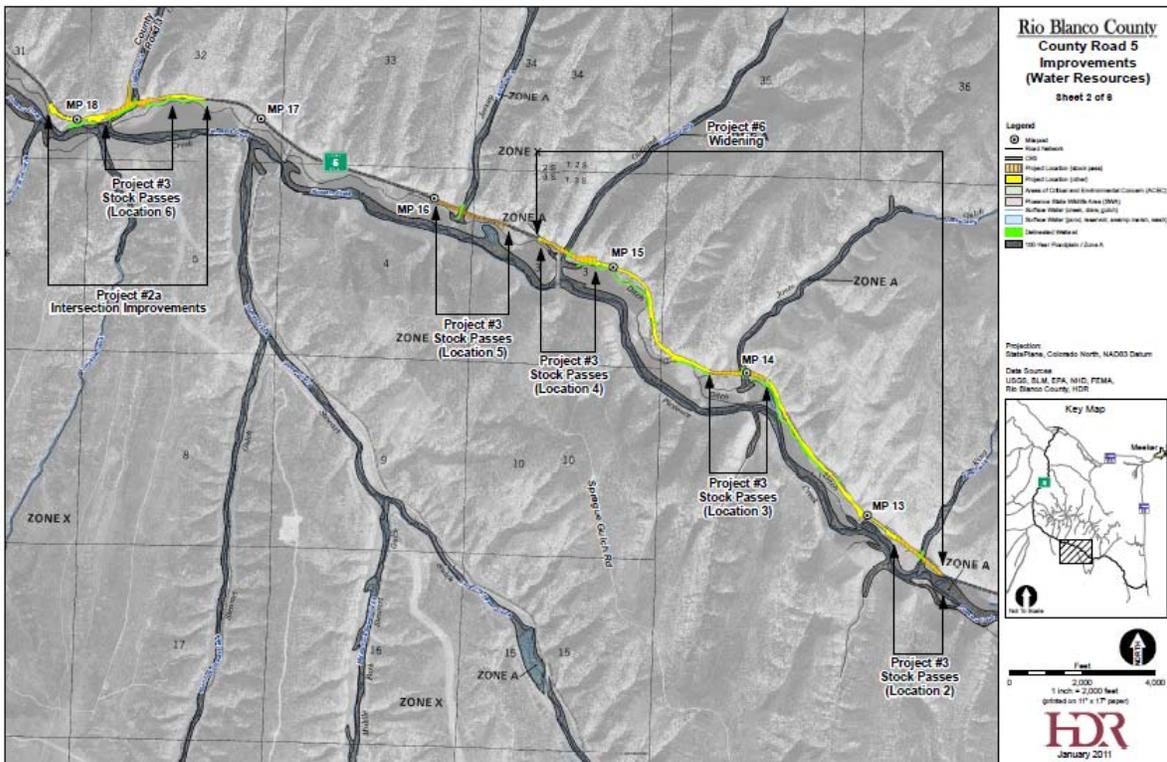
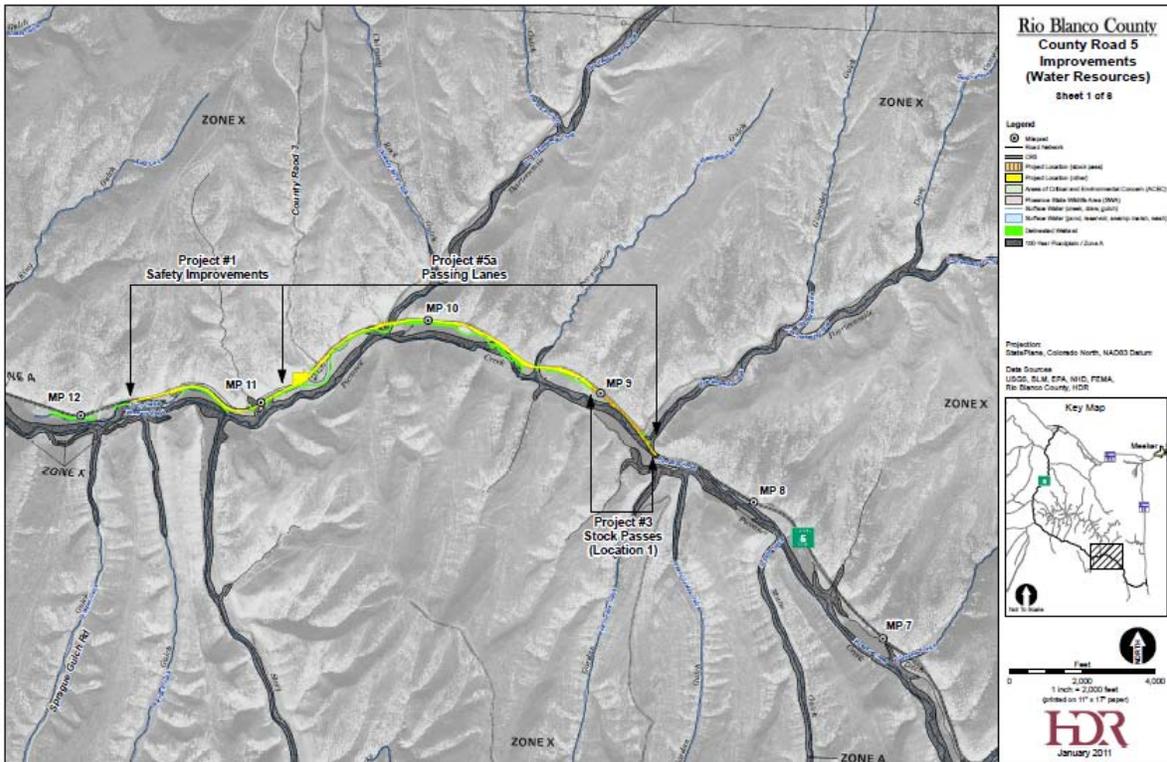
Soils Figures 3-4



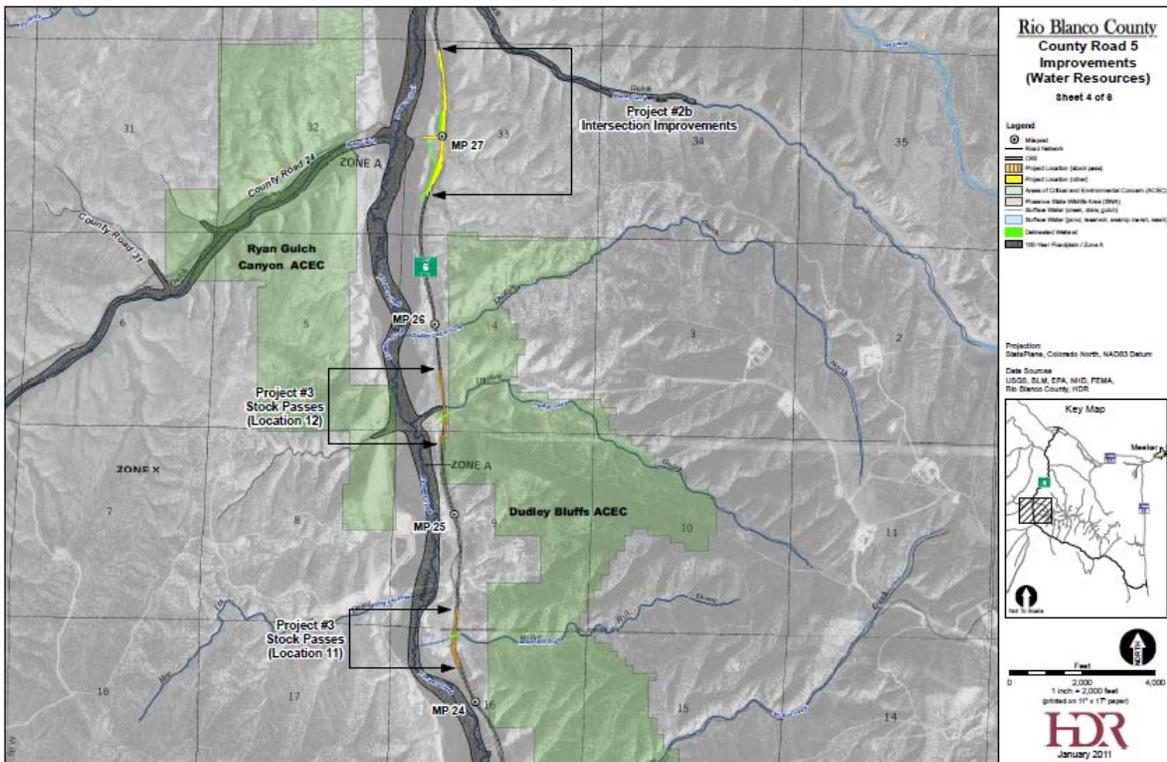
Soils Figures 5-6



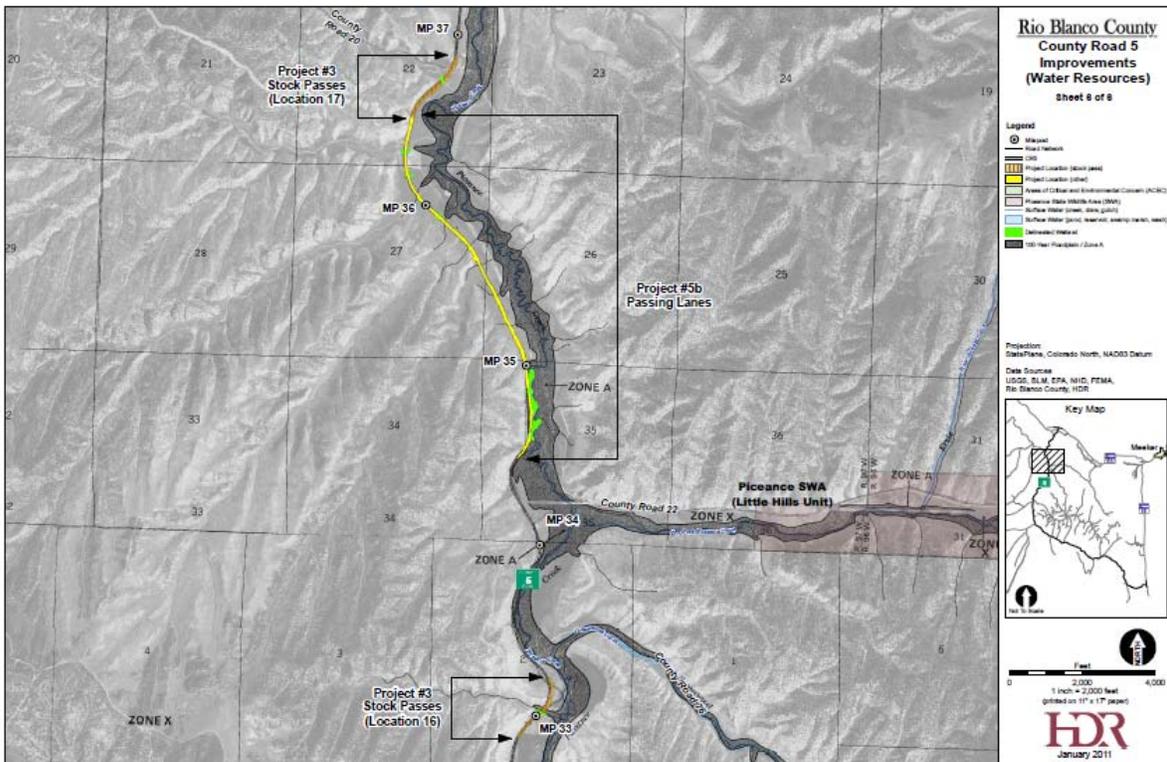
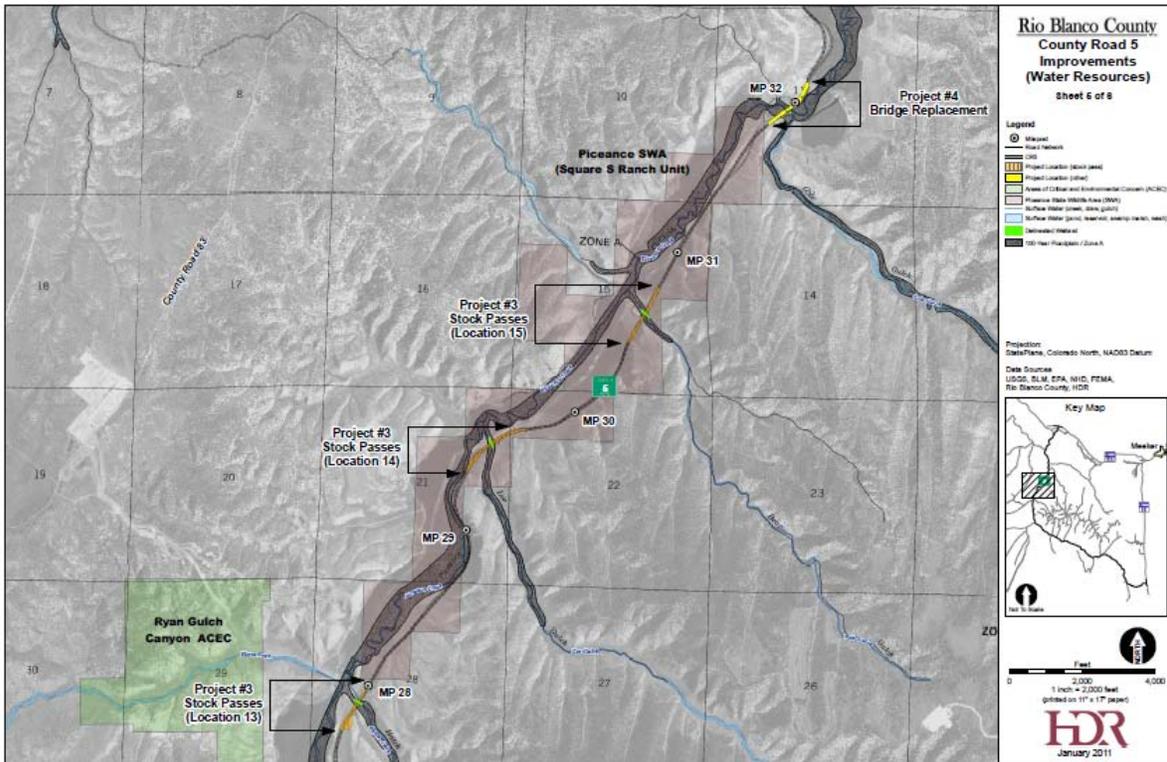
Water Resources Figures 1-2



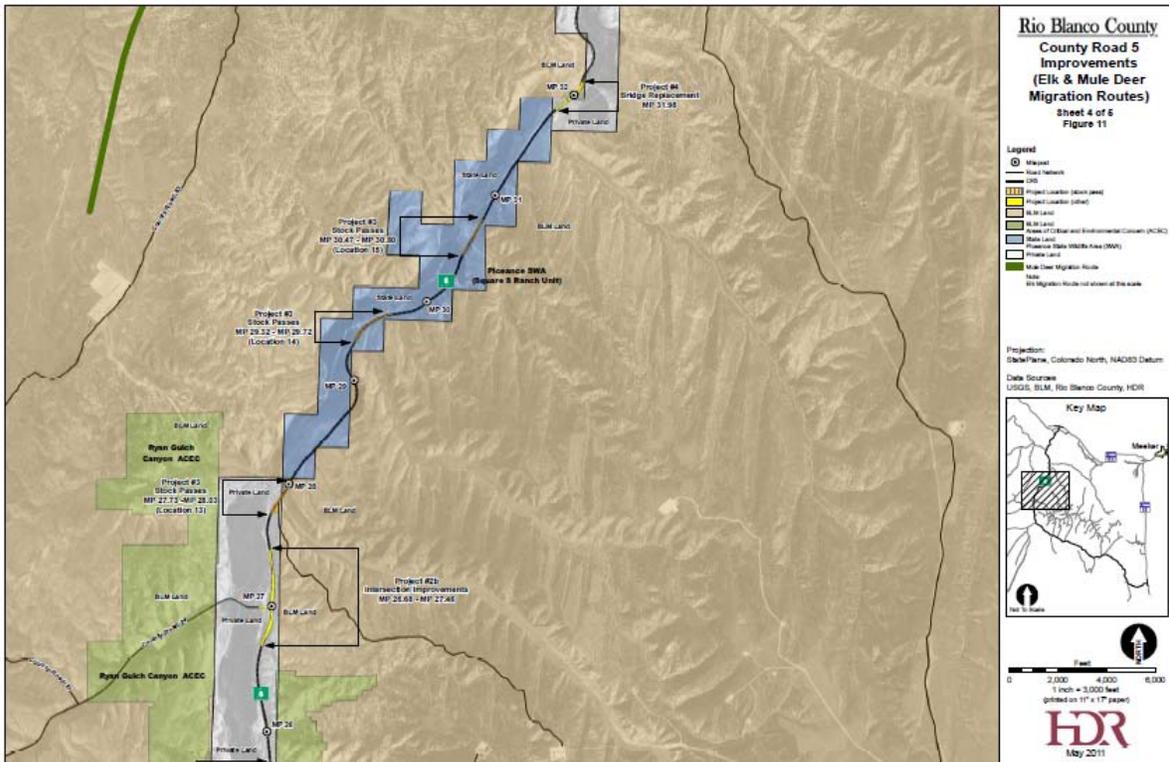
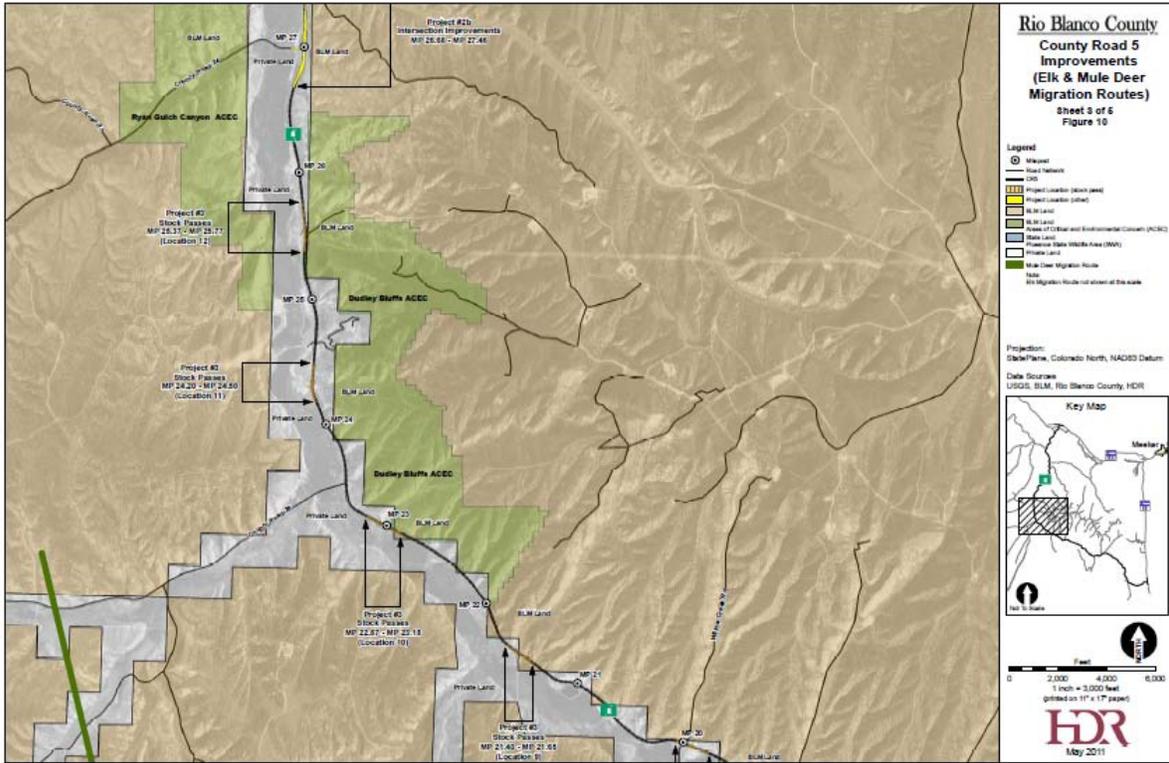
Water Resources Figures 3-4



Water Resources Figures 5-6



Wildlife Corridor Figures 3-4



Wildlife Corridor Figure 5

