

FINDING OF NO SIGNIFICANT IMPACT  
FHWA-WY-FONSI-13-01

**Rupe Hill Landslide along US 14**  
Crook County, Wyoming

**Wyoming Department of Transportation Project**  
DR41319

*Submitted pursuant to*  
42 U.S.C. 4332 (2) (c)

*Prepared For:*  
**U.S. Department of Transportation**  
**Federal Highway Administration**  
&  
**Wyoming Department of Transportation**



*Prepared By:*  
**HDR Engineering, Inc.**  
**HDR**

September 2013

FINDING OF NO SIGNIFICANT IMPACT  
FHWA-WY-FONSI-13-01

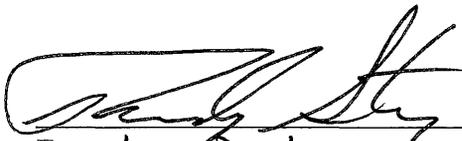
Wyoming Department of Transportation Project  
DR41319

Rupe Hill Landslide along US 14  
Crook County, Wyoming

September 2013

The Federal Highway Administration (FHWA) has determined that the Preferred Alternative (Alternative 2A)—which will realign an approximate one mile section of US 14 around the Rupe Hill Landslide—will have no significant impact on the human or natural environment. This finding of no significant impact is based on the Rupe Hill Environmental Assessment (FHWA-WY-EA-13-01) and subsequent comments received during the public and agency review period, which have been independently evaluated by the FHWA and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. The environmental assessment provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the environmental assessment.

Approved by:



For Joe Darley  
Federal Highway Administration  
2617 E. Lincolnway Suite D  
Cheyenne, WY 82001-5662

9/9/13  
Date

# CONTENTS

	Page No.
Introduction.....	1
Purpose and Need .....	1
Preferred Alternative—Alternative 2A.....	1
Summary of Impacts and Mitigation Measures—Preferred Alternative .....	3
EA Review and Availability.....	6
Updates and Clarifications to the EA .....	7
Chapter 3—Land Use .....	8
Chapter 3—Water Resources and Quality (Snow Accumulation) .....	8
Chapter 3—Wetland Impacts .....	8
Chapter 3—Vegetation and Wildlife.....	9
Chapter 3—Construction Effects and Mitigation Measures .....	9
Comments and Responses.....	9
Public Comments.....	10
Agency Comments .....	16

<b>Figures</b>	Page No.
Figure 1. Preferred Alternative—Alternative 2A.....	2

<b>Tables</b>	Page No.
Table 1. Summary of Mitigation Measures.....	3

<b>Appendices</b>
Appendix A. Public Notification
Appendix B. Public Hearing Materials
Appendix C. Media Articles
Appendix D. Comment Letters
Appendix E. On-Site Meeting With Page Lambert
Appendix F. Aquatic Resource Inventory [and Delineation] Report

## INTRODUCTION

---

The Wyoming Department of Transportation (WYDOT) has evaluated the impacts of realigning a segment of U.S. Highway (US 14) to address landslide concerns near Rupe Hill. The impacts and mitigation measures are described and documented in the environmental assessment (EA) dated June 2013. The EA was approved on June 14, 2013. The 30-day public and agency review period began on June 25, 2013, and ended on August 2, 2013.

The EA and this Finding of No Significant Impact (FONSI) were prepared in compliance with The National Environmental Policy Act (NEPA) and other applicable laws, Executive Orders, and related requirements. As required by NEPA, an environmental analysis was conducted, potential impacts associated with the proposed Project were documented, and mitigation measures were determined. No significant impacts were identified during the course of this environmental analysis.

## PURPOSE AND NEED

---

The purpose of the Project is to ensure long-term mobility, safety, and acceptable maintenance on US 14 in the vicinity of Rupe Hill. As documented in the EA, the Project will satisfy the following needs:

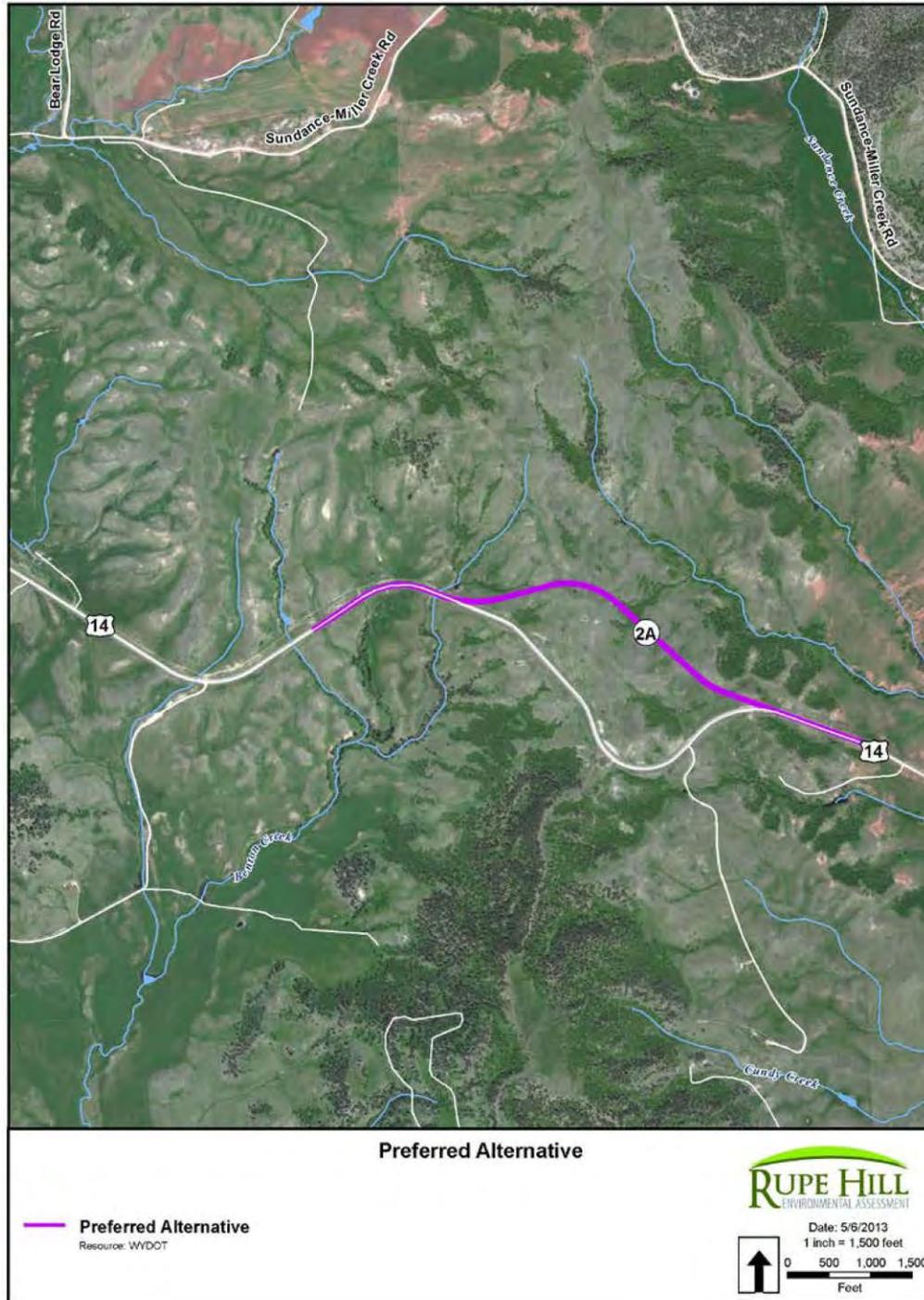
- Ensure long-term mobility and economic stability by preventing a road closure because of a landslide failure. A long-term road closure would severely affect local industries and residents and hinder emergency vehicle access.
- Provide safer conditions for passenger vehicles, trucks, and motorcycles.
- Eliminate maintenance costs because of landslide movement.

## PREFERRED ALTERNATIVE—ALTERNATIVE 2A

---

The Preferred Alternative would relocate an approximate one mile section of US 14 to avoid the landslide at Rupe Hill along US 14. It would also avoid all known landslides in the area. The alternative would leave existing US 14 at approximately mile post 198.3 and rejoin existing US 14 at approximately mile post 197.1 (Figure 1). This alternative would have a 12-foot travel lane in each direction and 6-foot shoulders matching the existing shoulder widths on the road. Existing access to private properties along US 14 would be maintained. More detailed information for this alternative is available in Table 1 of the EA.

Figure 1. Preferred Alternative—Alternative 2A



Alternative 2A meets purpose and need, meets project goals, minimizes impacts to landowners to the extent practicable, is feasible to construct, and has acceptable environmental impacts. It would avoid direct impacts to archeological resources, which are protected under Section 4(f). Although this alternative would result in a number of environmental impacts, including waters of the US, visual resources, vegetation, and wildlife habitat, none of these impacts are anticipated to rise to the level of not being able to be permitted or supported by a state or a federal resource agency.

Alternative 2A meets purpose and need, meets project goals, minimizes impacts to landowners to the extent practicable, is feasible to construct, and has acceptable environmental impacts.

## SUMMARY OF IMPACTS AND MITIGATION MEASURES—PREFERRED ALTERNATIVE

Table 1 summarizes the impacts associated with the Preferred Alternative, along with mitigation measures identified by WYDOT to eliminate or minimize social and environmental impacts as a result of the Preferred Alternative. A similar table was documented in the EA and provided at the public hearing. Based on comments received during the public availability period and additional environmental information from the recently completed aquatic inventory and waters of the US delineation, this table has been updated. These changes are discussed in the Updates and Clarifications to the EA section of this document.

Table 1. Summary of Mitigation Measures

Resource/Effect Category	Effect from Alternative 2A	Mitigation Measure
Land Use	<ul style="list-style-type: none"> <li>Alternative 2A would directly impact the land by the roadway and new right-of-way (25.8 acres) would be removed from grazing. The portions of the existing US 14 not needed to maintain landowner access (10 acres) can be reclaimed, and grazing would be allowed back on those properties.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will work with the landowners to evaluate the need for a stock pass for the new alignment that will allow continued access north and south of the new road to maintain agricultural use.</li> </ul>
Farmlands	<ul style="list-style-type: none"> <li>Overall agricultural use of the ranch land is not expected to change due to the realignment. Land directly impacted by the roadway and new right-of-way would be removed from grazing. Overall agricultural land use in the region is not compromised and is in accordance with the Crook County land use policy.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will work with the landowners to evaluate the need for a stock pass at the new alignment to allow continued access north and south of the new road.</li> </ul>

Table 1. Summary of Mitigation Measures

Resource/Effect Category	Effect from Alternative 2A	Mitigation Measure
Social	<ul style="list-style-type: none"> <li>Improved travel conditions and safety.</li> <li>No impact to community facilities or cohesion.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation required.</li> </ul>
Environmental Justice	<ul style="list-style-type: none"> <li>No disproportionately high or adverse impacts to minority or low-income populations</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation required.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>Improved travel conditions and a reliable transportation route for goods and services. Minor delays during construction could affect traffic.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will coordinate with local businesses during construction to minimize disruption. Construction phase information would be posted on moveable instant messaging signs, published in local newspapers, and advertised on local radio stations.</li> </ul>
Right-of-way	<ul style="list-style-type: none"> <li>25.8 acres of new right-of-way would be required for Alternative 2A. There would be no relocations. Most of the new right-of-way is currently used for grazing.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will provide compensation for landowners under WYDOT policies.</li> </ul>
Transportation	<ul style="list-style-type: none"> <li>Impacts to transportation would be positive.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation required.</li> </ul>
Geology and Soils	<ul style="list-style-type: none"> <li>Alternative 2A would require about 202,600 cubic yards of excavated soil (cutting slopes and filling low areas) and vegetation to be removed.</li> </ul>	<ul style="list-style-type: none"> <li>Geotechnical recommendations will be incorporated into the final design. Best management practices (BMPs) will be implemented to minimize soil erosion. Inclinator readings will continue to be monitored.</li> </ul>
Paleontology	<ul style="list-style-type: none"> <li>There is potential for impacts to fossil resources.</li> </ul>	<ul style="list-style-type: none"> <li>On-site monitoring will be completed during construction.</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>No long-term effects. Potential construction impacts resulting from dust and emissions from construction vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>Dust-control BMPs will be used during construction.</li> </ul>
Climate Change	<ul style="list-style-type: none"> <li>Greenhouse gas emissions would occur during construction. To the degree that GHG emissions have an impact on global climate, a decrease of construction fuel usage would result in a reduction of GHG emissions and,</li> </ul>	<ul style="list-style-type: none"> <li>Where possible and practical, shutting off construction equipment instead of allowing engines to idle would decrease fuel usage and resulting emissions.</li> </ul>

Table 1. Summary of Mitigation Measures

Resource/Effect Category	Effect from Alternative 2A	Mitigation Measure
	therefore, lessen the impact to global climate change.	
Noise	<ul style="list-style-type: none"> <li>Noise levels at all receptor locations are below any NAC established by WYDOT; therefore no long term noise impacts. Short-term noise increases are expected during construction but would not affect any residences because there are no residences within several thousand feet of the road.</li> </ul>	<ul style="list-style-type: none"> <li>No long term mitigation measures are proposed. Construction contractors will be required to comply with all state and local regulations governing work hours, equipment noise levels, and noise resulting from on-site activities throughout construction.</li> </ul>
Water Resources and Quality	<ul style="list-style-type: none"> <li>No long-term changes to surface waters or groundwater. Minor short-term effects to surface water during construction from major stream crossings.</li> <li>No adverse effects to groundwater or floodplains.</li> </ul>	<ul style="list-style-type: none"> <li>Erosion-control measures will be implemented during construction. A hydraulics and hydrology analysis will be completed. Equipment staging, fueling, and maintenance will occur outside of riparian areas.</li> </ul>
Wetlands and Aquatic Resources	<ul style="list-style-type: none"> <li>Waters of the US would be crossed by the project; no wetlands were identified during the delineation survey so no impacts would occur to wetlands.</li> </ul>	<ul style="list-style-type: none"> <li>Compensatory mitigation is not expected to be necessary.</li> </ul>
Vegetation and Wildlife	<ul style="list-style-type: none"> <li>Removal of vegetation during construction could result in the potential spread of noxious weeds and temporary removal of wildlife habitat. Small amount of wildlife habitat converted to roadway use (15.8 acres for Alternative 2A).</li> <li>Increased potential of deer-vehicle collisions.</li> <li>Increased sedimentation in streams during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Disturbed areas will be re-vegetated using native plant species. WYDOT will consider the fence type that best supports wildlife and grazing interests. The fence type will be determined during final design. Erosion control measures will be implemented during construction.</li> </ul>
Threatened and Endangered Species	<ul style="list-style-type: none"> <li>Project not likely to adversely affect threatened or endangered species.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation is required.</li> </ul>
Cultural Resources	<ul style="list-style-type: none"> <li>No historic properties adversely affected.</li> </ul>	<ul style="list-style-type: none"> <li>If any cultural materials are discovered during construction, work in the area shall halt immediately, FHWA and SHPO staff will be contacted, and the materials will be evaluated by an</li> </ul>

Table 1. Summary of Mitigation Measures

Resource/Effect Category	Effect from Alternative 2A	Mitigation Measure
		archaeologist or historian meeting the requirements of the Secretary of the Interior’s Professional Qualification Standards (48 FR 22716, Sept. 1983).
Hazardous Substances	<ul style="list-style-type: none"> <li>None.</li> </ul>	<ul style="list-style-type: none"> <li>If during construction a hazardous substance is encountered, WYDOT will notify DEQ and properly dispose of the material. The contractor will be required to provide containment for accidental spills and solid wastes will be properly handled and disposed of off-site in an approved facility.</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>Potential for relocation of new Rangetel fiber-optic line</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will coordinate with utility owners during final design to avoid, minimize or relocate utility infrastructure.</li> </ul>
Aesthetics	<ul style="list-style-type: none"> <li>Little to no change for motorists traveling on US 14. New alignment will be visible to property owners; however, views of Warren Peak and Sundance Mountain would not change. Removal of vegetation during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Disturbed areas will be revegetated with native plant mixes.</li> </ul>
Construction Impacts	<ul style="list-style-type: none"> <li>Restricted access; fugitive dust.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will work with locals, logging businesses, USFS and at tourism locations on restricted access; implementation of BMPs.</li> </ul>
Indirect/Cumulative Impacts	<ul style="list-style-type: none"> <li>No substantial cumulative effects.</li> </ul>	<ul style="list-style-type: none"> <li>No additional mitigation required.</li> </ul>

## EA REVIEW AND AVAILABILITY

Prior to the EA being available for public review, WYDOT sent a newsletter to resource agencies, adjacent landowners, and individuals who expressed interest in the Project during scoping. The newsletter provided an update on the EA and expected time frame for the release of the EA. The newsletter is included in Appendix A of this document.

The EA was made available beginning on June 25, 2013, for a 30-day public and agency review that concluded August 2, 2013. The EA was available electronically at: [http://www.dot.state.wy.us/home/engineering\\_technical\\_programs/environmental\\_services/Nepa.html](http://www.dot.state.wy.us/home/engineering_technical_programs/environmental_services/Nepa.html).

The EA was also available at the WYDOT offices in Cheyenne, Sheridan, and Sundance and at the Crook County Library in Sundance.

Letters were mailed to resource agencies on June 24, 2013, to announce the availability of the EA and to seek comments on the EA from these agencies. The availability of the EA was announced via a paid advertisement in the Sundance Times on July 11 and July 18, 2013. Notices were also mailed to individuals in the vicinity of the Project and to individuals who expressed interest in the Project during Project scoping. Copies of these materials are included in Appendix A of this document.

An open forum public hearing was held on July 23, 2013, at the Sundance Bank Meeting Room, 207 North Second Street, Sundance Wyoming 82729, from 5:00 p.m. to 7:30 p.m. A total of eight individuals signed in at the hearing. Materials presented at the hearing are included in Appendix B of this document. A copy of the newspaper article reporting on the Project and public hearing is found in Appendix C. Comments received during the public hearing and comment period are found in Appendix D.

At the request of an affected landowner, a one-on-one on-site meeting was held on July 23, 2013, prior to the public hearing, to discuss the potential impacts of the alternatives carried forward in the EA, in particular the Preferred Alternative. A summary of discussion points from this meeting is included in Appendix E of this document.

## UPDATES AND CLARIFICATIONS TO THE EA

---

WYDOT received comments during the public hearing and comment period regarding the EA, including the preferred alternative and environmental analysis. Additionally, an aquatic resources survey and delineation was completed during the growing season. The resulting updates and clarifications to the EA follow. Only sections with changes are noted.

Quantities, calculations, slopes and acreages included in the EA are based on conceptual design for all the alternatives; this level of engineering allows for comparison of the alternatives at a comparable level of detail and with enough certainty to understand major environmental impacts or engineering constraints. These figures are likely to change and impacts further minimized as the design process continues. If, during final design, new information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated by the Environmental Assessment (EA), a supplemental EA will be prepared in accordance with 23 CFR 771.13.

## Chapter 3—Land Use

Under alternative 2A the approximate acreage of land to be reclaimed as stated in the EA is 14.0 acres. When considering the further west southern access point the approximate acreage reclaimed would be approximately 10.5 acres.

Under alternative 2F the approximate acreage of land to be reclaimed as stated in the EA is 12.3 acres. When considering the further west southern access point the approximate acreage reclaimed would be approximately 10.5 acres.

## Chapter 3—Water Resources and Quality (Snow Accumulation)

Snow accumulation and drifting was discussed during the on-site meeting held on July 23, 2013. Snow considerations and mitigation are typically developed during final design, because they normally do not result in moving the location of the alternative. However, because of the information discussed at the on-site meeting, WYDOT design staff reviewed the site in more detail for snow accumulation and possible design considerations.

Based on a portable weather station on I-90 not far from the Project, WYDOT has found that the area west of Sundance is a bowl formed by the mountains. This bowl condition forces the wind to blow equally in all directions (one day the wind would be blowing south, the next day the wind would be blowing north), causing snow to fill up the snow fences almost level on either side. However, along US 14 near Rupe Hill, there is likely a chute effect that will cause snow to blow along (parallel) the Preferred Alternative, rather than accumulating across (perpendicular) it; however the actual conditions are unknown.

WYDOT will install a portable weather station to be used to design and install snow accumulation mitigation features.

## Chapter 3—Wetland Impacts

WYDOT contracted Western Ecosystems Technology, Inc. (WEST) to perform an Aquatic Inventory and Delineation Report (Appendix F). In this report, dated August 13, 2013, WEST notes that no wetlands were observed. Waters of the US were identified, including an unnamed tributary to Chassoll Creek which is approximately 1.5 foot wide and occurs beneath a dense canopy of burr oak. This drainageway intersects the Preferred Alternative and permanent impacts would occur. During the final design process, WYDOT will determine how best to accommodate flows under the new highway alignment. If needed, coordination with the US Army Corps of Engineers will occur and a Section 404 permit will be obtained.

## Chapter 3—Vegetation and Wildlife

Under alternative 2A the approximate acreage of habitat converted as stated in the EA is 11.8 acres. When considering the further west southern access point the habitat converted would be approximately 15.8 acres.

Under alternative 2F the approximate acreage of habitat converted as stated in the EA is 13.6 acres. When considering the further west southern access point the habitat converted would be approximately 15.3 acres.

## Chapter 3—Construction Effects and Mitigation Measures

The two landowners to the south of the existing US 14 alignment, and access their property from US 14, would be indirectly and directly impacted from the Project. WYDOT will continue to provide legal access to these two properties. The alignment and length of the access roads to these properties would change and likely increase under either alternative. Because Alternative 2A would leave the existing US 14 alignment approximately 0.2 miles east of Alternative 2F, the increase in access road length for these two property owners could be as much as 0.2 miles longer under Alternative 2A, which is the Preferred Alternative. The specific alignment and length of these access roads will be determined during final design. Responsibility for maintaining these newly aligned access roads will be determined during final design and right-of-way negotiations. Other impacts to the southern land owners will include removal of the old pavement, removal of existing guardrail, and potentially modifying slopes.

## COMMENTS AND RESPONSES

---

Two written public and two agency comments were received during the 30-day public and agency review period. (Additional comments were received during the public hearing and at the on-site meeting held with Page Lambert on July 23, 2013.) A summary of written public and agency comments and responses follow. Copies of the actual comments received are included in Appendix D of this document.

## Public Comments

### Comment 1:

It's difficult for me to pinpoint my exact property line on the maps and how the construction may impact my access onto Highway 14. Please locate my property on your plat map and explain to me in detail if and how the projected project would change my access

### Response 1:

WYDOT will maintain all existing access to private properties along US 14. Once a Preferred Alternative is selected, WYDOT can begin the final design. During final design, and in consultation with the landowners and Crook County, WYDOT will develop the specific details of maintaining access to private properties. All affected property owners will be contacted.

### Comment 2:

I believe that for WYDOT to proceed with any realignment without gathering at least 5 years of data from the project area regarding the movement of the landslide, surface water measurements, etc., is irresponsible.

### Response 2:

Based on WYDOT's experience with landslides in the Sundance Formation in Northeast Wyoming, we believe that the Rupe Hill Landslide has the potential for a catastrophic failure resulting in prolonged road closure. We have sufficient data from surface mapping, drilling 21 test holes, and data from the six slope inclinometers and eleven groundwater monitoring wells to make an informed decision on whether to remediate or avoid this landslide.

WYDOT has been tasked with providing safe and reliable access along state maintained highways. Not mitigating the risks of this landslide, which has shown continued movement, would be counter to WYDOT's mission and would not serve the interests of local residents, industries and tourists who use this highway.

### Comment 3

I don't believe sufficient studies have been conducted regarding what impact Alternative 2A, Northern Realignment, which requires drastically altering and removing immense quantities of land never before disturbed, would have on the slide area identified to the north of Alternative 2A. This land slide area appears to be greater in mass than the Rupe Hill Landslide and I have not seen any studies about the impact to this slide area.

### Response 3

Alternate 2A (Preferred Alternative) avoids the landslide to the north, mentioned in the comment; therefore, there is no impact to the landslide. The northern landslide is shown on the Wyoming State Geological Survey landslide hazard map for the 1:24000 scale Sundance West Quadrangle. WYDOT Geology was aware of this landslide and during our field investigation confirmed its location and size. This landslide information was incorporated into the preliminary and refined alternatives so that any proposed alignment would avoid this landslide. Since Alternate 2A avoids the northern landslide, WYDOT does not anticipate any impacts to the stability of the northern landslide.

### Comment 4

The viewshed and esthetic qualities of my land will be grossly altered and negatively impacted, reducing the monetary, spiritual and emotional value of the entire parcel of land, not just the right-of-way acreage stated in the EA.

### Response 4

WYDOT applied a visual resource methodology for assessing visual impacts. The analysis looked at the entire road realignment and its context in landscape, including foreground, middle ground, and background views as well as multiple viewer groups. The full analysis is contained in Appendix E of the EA. The road will alter the foreground and middle ground views in the landscape but the background views which were given preference in comments received during scoping will remain intact. WYDOT consulted with Tribes regarding the documented spiritual and cultural elements of the land. These consultations are found in the cultural resource section and Appendix G of the EA.

Any effect of visual changes to the monetary value of the parcel of land will be assessed during the right-of-way acquisition phase of the project, in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

### Comment 5

I don't believe that WYDOT has accurately interpreted nor given adequate consideration to the concerns expressed by Darlene Conrad, Tribal Historic Preservation Officer (see Appendix F-17): "Both traditional cultural properties are of significance to the spirituality and culture of living native peoples. Rupe Hill and Sundance Hill may have a significant relationship to the cairns and rock alignments. I sincerely hope that the road construction does not take away from the integrity of the 2 sites." I believe any northern realignment WILL take away from the integrity of both sites.

### Response 5

Throughout project development and preparation of the EA, WYDOT consulted with the tribes. The response cited in this comment was received during Project scoping. Darlene Conrad, Tribal Historic Preservation Officer, provided the following response on June 3, 2013 regarding identification of Alternative 2A as the Preferred Alternative. The complete letter is found on page G-4 of the EA.

"I have reviewed WYDOT's report on the Rupe Hill slide and the northern realignment of Hwy 14 with variants 2A and 2F that address have impacts to sites 48CK759 and 48CK2171. Although there are no direct impacts to the sites, the view shed is affected. The Google earth imagery and the maps depicting the pavement slopes visibility were helpful in determining a response. The variant 2A has the lesser amount of visual intrusion on the 2 sites.

Unfortunately, there will always be visual intrusions to traditional cultural properties of significance to the spirituality and culture of living native peoples. Limiting the adverse effect to these ancestral sites is the better solution and allows agreement with the proposed Variant 2A because of the least visual affects to site 48CK2171 and no affect to 48CK759."

### Comment 6

Despite WYDOT's reassurance that all construction and reclamation would be carefully monitored and of the highest standards, during the walking tour on July 23, 2013, a drill hole approximately 12 inches in diameter and approximately 25 feet in depth, which was drilled in either January or February of 2013, had not been backfilled, pursuant to Condition #6 of the Permit to Investigate signed January 7, 2013:

“Permission is granted to drill seven (7) borings along the potential realignment route of Highway 14. The borings will be covered when WYDOT personnel is not present and will be backfilled within 24-48 hours.”

### Response 6

During the on-site meeting on July 23, 2013, a drill hole (13-3) was found that had settled approximately two feet. This eight inch diameter drill hole was backfilled with a shovel within 15 minutes after it was brought to WYDOT's attention, while the landowner was still on site. The following day, after confirming WYDOT had permission to enter the property the remaining drill holes (eight total) were checked for settling. Two additional drill holes had settled less than two feet and were backfilled. Settlement of drill holes is a common occurrence as it is very difficult to place the cuttings back at the same density as they were in-situ.

Settling is more common when drilling is completed during the winter. Per the landowner's request and as expressed during negotiations for permission to investigate Alternate 2A, WYDOT Geology drilled during the winter, when the ground was frozen, to limit disturbance to her property. The drill investigation occurred in January and February 2013. WYDOT utilized the 17-ton ATV drill rig and drilled a total of eight holes. During the walking tour on July 23, 2013, most of the drill sites were not visible as no tracks, ruts, or bent grass was present to indicate where the drilling had been done. The total disturbance to the property was restricted to the eight drill holes, each eight inches in diameter. The settling that was observed during that was promptly remedied.

### Comment 7

I strongly oppose the realignments being considered. My property is directly affected as the only legal access to the 161 acres lies in the section of US 14 that is being realigned. If either Alternative 2A or 2F proceed as outlined, we were just informed that there is an intention of abandonment of nearly a half mile of the existing highway on which is my only possible access. I have correspondence that states that WYDOT will maintain all existing access to private properties along US 14.

### Response 7

As stated in Chapter 1 of the EA - Purpose and Need, without taking action, the Rupe Hill landslide is expected to continue moving and result in a complete failure of US 14. Chapter 2 of the EA outlines why Alternative 2A and 2F are the only feasible alternatives to mitigating the continued landslide at Rupe Hill. WYDOT identified Alternative 2A as the Preferred Alternative.

All properties that have legal access off of US 14 will have a legal access after construction of the new alignment. WYDOT will continue to provide access to your property from the newly aligned US 14. Maintenance of the new access road has not been determined at this time. WYDOT will have to work with the land owners and Crook County to determine who will maintain the new longer access roads. These discussions will occur during the project development process.

### Comment 8

If the State and County's position is that the cost to maintain that stretch of road is too costly, how do they expect me, as an individual, to support that necessary maintenance. The private upkeep, maintenance would be totally unaffordable.

### Response 8

Maintenance of the new access road has not been determined at this time. Landowner impacts, if applicable, will follow the WYDOT standard right-of-way acquisition policy.

#### Comment 9

The steep grade as it lies would result in numerous washouts, (possible loss of use of the road entirely) which is our ONLY legal access. It would, essentially, land lock my property. The loss of and/or limited proper access and costs would greatly impact the current use of the property for grazing and possible future development resulting in substantial decreasing the value of the property, both near term and in the future.

#### Response 9

All properties that have legal access off US 14 will have a legal access after construction of the new alignment. WYDOT will continue to provide access to your property from the newly aligned US 14.

#### Comment 10

Safety is also a concern of mine. Removal of the road surface and guardrails would further expose the hillside to erosion and thus jeopardize further, and make more hazardous, the access I had when I purchased the property.

#### Response 10

During the removal of the old section of US 14 WYDOT will leave the road in a maintainable condition. During design, WYDOT will follow standard design procedures taking into consideration the exiting highway and terrain features.

## Agency Comments

### Crook County Commission

The Crook County Commission supported identification of 2A as the Preferred Alternative and urged WYDOT to move forward with the Project as quickly as possible because of the significance of US 14 for traffic in the county.

### Response to Comment

Thank you for your support of the Preferred Alternative.

### Wyoming Department of Game and Fish

WDGF reiterated concerns for deer passage and motorist safety and recommended a fence type and highway signs alerting motorists to potential collision hazards to ensure safe deer passage.

### Response to Comment

More information on wildlife impacts and suggested mitigation can be found in the Vegetation and Wildlife Section of the EA and in Table 1 of this Finding of No Significant Impact. WYDOT will work with WDGF as final design proceeds to determine the most appropriate mitigation for deer passage and motorist safety.

**Appendix A.  
Public Notification**

WYDOT NEWSLETTER



**RUPE HILL**  
ENVIRONMENTAL ASSESSMENT

## Newsletter #1

May 8, 2013

The purpose of the newsletter is to provide you with an update to the status of the Rupe Hill Environmental Assessment (EA) that FHWA and WYDOT are preparing.

**Location:** The Rupe Hill Landslide is located approximately three miles west from the Town of Sundance near Rupe Hill in Crook County Wyoming.

**Proposed Improvements:** WYDOT is proposing to repair or realign a segment of the United States Highway (US) 14 to address the landslide concerns.

**Purpose and Need of the Action:** The purpose of the project is to ensure long-term mobility, safety, and acceptable maintenance on US 14 in the vicinity of Rupe Hill. The Project is needed to ensure long-term mobility, safety, and economic stability along US 14 without on-going and increased maintenance. US 14 is an important transportation route for local traffic, regional industries, emergency services, and tourism. A long-term closure of the road is likely if corrective actions are not taken for the active landslide near Rupe Hill.

**EA Status:**

- WYDOT held a public scoping meeting in Sundance on December 3, 2012 to solicit public input on the project. At the meeting, WYDOT presented the purpose and need for the project and four preliminary alternatives (Figure 1).
- Following the public scoping meeting and based on input received regarding the northern realignment, WYDOT conducted an initial screening to determine which of the four preliminary alternatives met purpose and need, was feasible to construct, and if there are any environmental impacts that would be considered fatal flaws.
- WYDOT and its consultants continued collecting environmental, geotechnical, and historical information.
- WYDOT then refined the northern alternative and developed a range of six northern alternatives for a second level of screening (Figure 2). From this screening, WYDOT determined that two of the alternatives should be carried for detailed analysis in the EA, Alternative 2A and 2F (Figure 3).

WYDOT NEWSLETTER

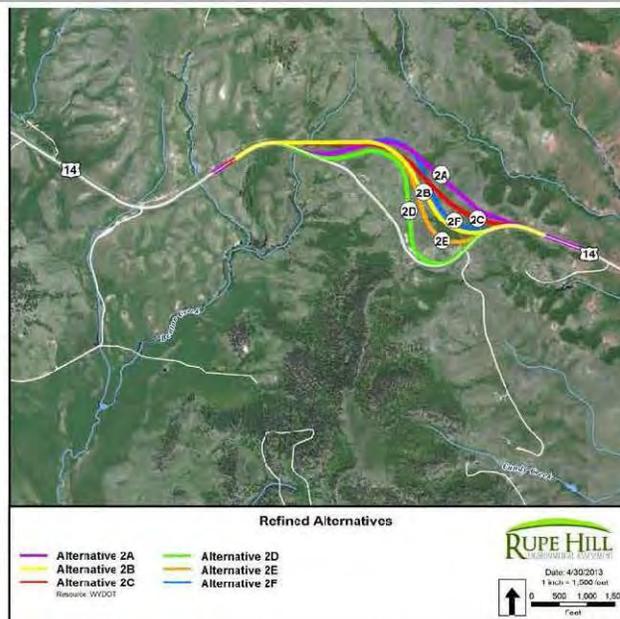


Figure 2: Refined Alternatives (Information is draft and is subject to change)

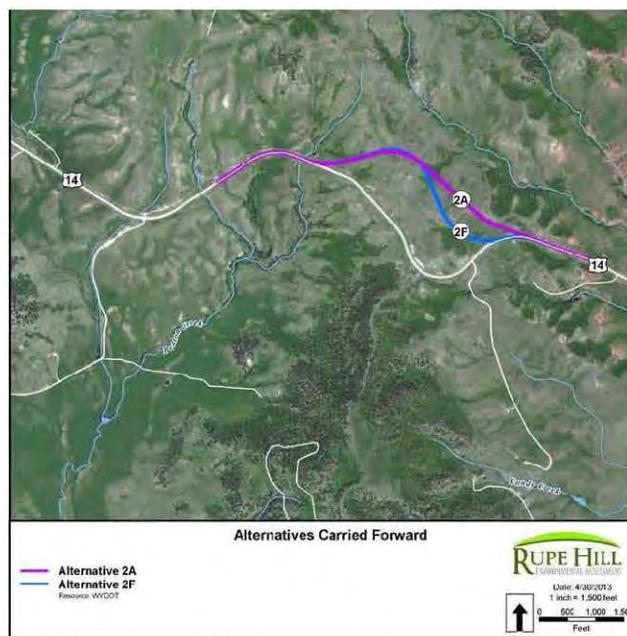


Figure 3: Alternatives Carried Forward in the EA (Information is draft and is subject to change)

WYDOT NEWSLETTER

- WYDOT is currently assessing the environmental effects of these alternatives. The alternatives screening and impact analysis will be documented in the EA and a preferred alternative will be selected based upon environmental, geotechnical, and historical impacts.

**Next Steps:**

- WYDOT is expecting to have the EA completed in June or early July disclosing a preferred alternative.
- There will be a 30-day comment period once the EA is released.
- A public hearing will occur approximately 10-20 days after the release of the EA to summarize the findings of the EA. The public hearing will also provide the public opportunity to ask questions and provide input on the EA.

In the meantime, if you have any questions or would like to be put on the email list for this project, please feel free to contact us at [dot-rupe-ea@wyo.gov](mailto:dot-rupe-ea@wyo.gov) or

Timothy Stark P.E.  
Wyoming Department of Transportation  
Environmental Services Engineer  
5300 Bishop Blvd  
Cheyenne WY 82009-3340

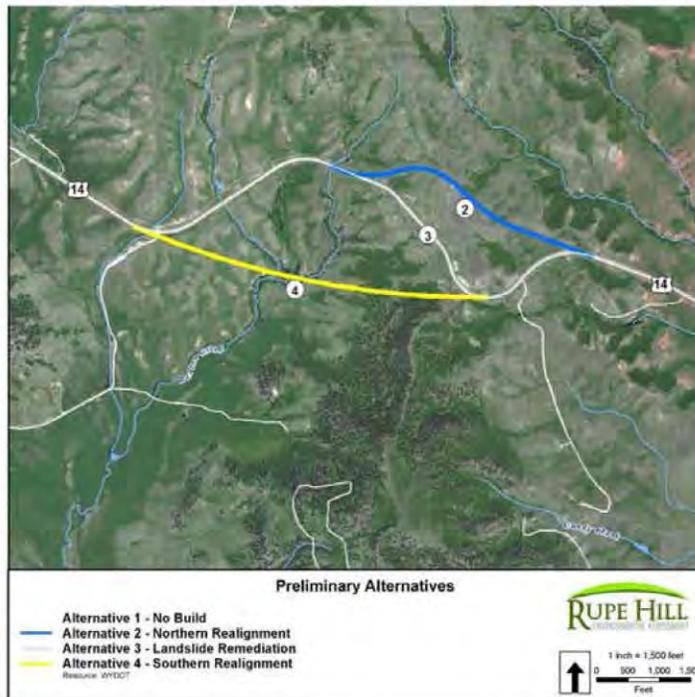


Figure 1: Preliminary Alternatives (Information is draft and is subject to change)

## PUBLIC NOTICE



The Wyoming Department of Transportation (WYDOT) in coordination with the Federal Highway Administration (FHWA) has prepared an Environmental Assessment (EA) to study the potential environmental impacts associated with work along a segment of U.S. Highway 14 (US 14) in Crook County also known as Rupe Hill Landslide Project. The EA describes the purpose of and need for the project, the alternatives considered, and potential impacts associated with the alternatives. WYDOT provided the opportunity for input on the project through a public scoping meeting in December 2012 and one-on-one discussions with potentially affected landowners. WYDOT and FHWA carried forward three alternatives for consideration in the EA. They identified Alternative 2A as the Preferred Alternative. WYDOT is seeking your input on the analysis in the EA and on the Preferred Alternative.

The EA is available for public and agency review. The EA can be viewed at the WYDOT offices in Sheridan and Sundance, the Crook County Library in Sundance, or downloaded from the WYDOT Environmental Services webpage at:

[http://www.dot.state.wy.us/home/engineering\\_technical\\_programs/environmental\\_services/Nepa.html](http://www.dot.state.wy.us/home/engineering_technical_programs/environmental_services/Nepa.html)

A public hearing will be held on July 23, 2013 at the Sundance Bank Meeting Room, 207 North Second Street, Sundance, WY 82729 from 5:00 to 7:00pm. Comments on the EA will be accepted until August 2, 2013 and can be submitted to:

Timothy L. Stark, P.E.  
Wyoming Department of Transportation  
Environmental Services Engineer  
5300 Bishop Blvd.  
Cheyenne, WY 82009-3340  
Fax: 307-77-4193  
Email: dot-rupe-ea@wyo.gov

## PUBLIC NOTICE

**From:** nick.hines@wyo.gov [mailto:nick.hines@wyo.gov] **On Behalf Of** DOT RUPE-EA  
**Sent:** Friday, July 05, 2013 12:05 PM  
**To:** Duane Short; Gwen Booth; jnicolewales6@hotmail.com; johngritts@gmail.com; knudson@rtconnect.net; mamacher@live.com; Mark.Semlek@wyoleg.gov; Mary Flanderka; Matt.Fry@wyo.gov; morgane@crookcounty.wy.gov; narapahothpo\_2009@ymail.com; ogden.driskill@wyoleg.gov; pnyce@hotmail.com; readlindajacobs@mindspring.com; Rick Huber; sundowner@rangeweb.net; swenmik@hotmail.com; toddseeley@rangeweb.net; trohobby@hotmail.com; wjferrisiii@yahoo.com; Cheryl Wales; McAfee, Gina; Lutz-Zimmerman, Laura R.; Mark Lambert; Mark.Boushele@dot.gov; Nick Hines; Page Lambert; Phyllis Dugan  
**Subject:** Rupe Hill Notice of Availability

Sorry if you have already received this through physical mail but some people were only on the e-mail list.

The Wyoming Department of Transportation (WYDOT) in coordination with the Federal Highway Administration (FHWA) has prepared an Environmental Assessment (EA) to study the potential environmental impacts associated with work along a segment of U.S. Highway 14 (US 14) in Crook County also known as Rupe Hill Landslide Project. The EA describes the purpose of and need for the project, the alternatives considered, and potential impacts associated with the alternatives. WYDOT provided the opportunity for input on the project through a public scoping meeting in December 2012 and one-on-one discussions with potentially affected landowners. WYDOT and FHWA carried forward three alternatives for consideration in the EA. They identified Alternative 2A as the Preferred Alternative. WYDOT is seeking your input on the analysis in the EA and on the Preferred Alternative.

The EA is available for public and agency review. The EA can be viewed at the WYDOT offices in Sheridan and Sundance, the Crook County Library in Sundance, or downloaded from the WYDOT Environmental Services webpage at:

[http://www.dot.state.wy.us/home/engineering\\_technical\\_programs/environmental\\_services/Nepa.html](http://www.dot.state.wy.us/home/engineering_technical_programs/environmental_services/Nepa.html)

A public hearing will be held on July 23, 2013 at the Sundance Bank Meeting Room, 207 North Second Street, Sundance, WY 82729 from 5:30 to 7:30pm. Comments on the EA will be accepted until August 2, 2013 and can be submitted to:

Timothy L. Stark, P.E.  
Wyoming Department of Transportation  
Environmental Services Engineer  
5300 Bishop Blvd.

Cheyenne, WY 82009-3340  
Email: [dot-rupe-ea@wyo.gov](mailto:dot-rupe-ea@wyo.gov)

E-Mail to and from me, in connection with the transaction of public business, is subject to the Wyoming Public Records Act and may be disclosed to third parties.

## PUBLIC NOTICE

**From:** nick.hines@wyo.gov [mailto:nick.hines@wyo.gov] **On Behalf Of** DOT RUPE-EA  
**Sent:** Monday, July 15, 2013 12:17 PM  
**To:** jnicolewales6@hotmail.com; johngritts@gmail.com; knudson@rtconnect.net;  
mamacher@live.com; Mark.Semlek@wyoleg.gov; Matt.Fry@wyo.gov; morgane@crookcounty.wy.gov;  
narapahothpo\_2009@ymail.com; ogden.driskill@wyoleg.gov; pnyce@hotmail.com;  
readlindajacobs@mindspring.com; sundowner@rangeweb.net; swenmik@hotmail.com;  
todseeley@rangeweb.net; trohobby@hotmail.com; wjferrisiii@yahoo.com; Cheryl Wales; Duane  
Short; McAfee, Gina; Gwen Booth; Lutz-Zimmerman, Laura R.; Mark Gillett; Mark Lambert;  
Mark.Boushele@dot.gov; Mary Flanderka; Nick Hines; Page Lambert; Phyllis Dugan; Randy Strang;  
Rick Huber; Ronda Holwell; Scott Taylor; Timothy Stark; Tina Simpson; Warren Oyler  
**Subject:** Public Hearing Reminder for Rupe Hill

Reminder: A public hearing will be held on **July 23, 2013** at the Sundance Bank Meeting Room, 207 North Second Street, Sundance Wyoming 82729 from **5:00 to 7:00 pm**. It will be a open format meeting and you can stop by anytime between 5:00 and 7:00 pm. WYDOT personnel will be on site to answer questions and to take comments on the Rupe Hill Environmental Assessment. WYDOT will be accepting comments until August 2, 2013 at 5:00 pm

Thank You

E-Mail to and from me, in connection with the transaction of public business, is subject to the Wyoming Public Records Act and may be disclosed to third parties.

NEWSPAPER AD



## **PUBLIC OPEN HOUSE** **for the Rupe Hill Landslide Project** **Environmental Assessment**

**Tuesday, July 23, 2013 ~ 5:30 - 7:30 p.m.**  
**Sundance Bank Meeting Room**  
**207 North Second Street, Sundance, Wyoming**

The Wyoming Department of Transportation (WYDOT) in coordination with the Federal Highway Administration (FHWA) has prepared an environmental assessment (EA) to study the potential environmental impacts associated with work along a segment of US Highway 14 (US 14) in Crook County also known as Rupe Hill Landslide Project. The EA describes the purpose of and need for the project, the alternatives considered, and potential impacts associated with the alternatives. WYDOT provided the opportunity for input on the project through the public scoping meeting in December 2012 and one-on-one discussions with potentially affected landowners. WYDOT and FHWA carried forward three alternatives for consideration in the EA. They identified Alternative 2A as the Preferred Alternative. WYDOT is seeking your input on the analysis in the EA and the Preferred Alternative.

The EA is available for public and agency review. The EA can be viewed at the WYDOT offices in Sheridan and Sundance, the Crook County Library in Sundance, or download from the WYDOT environmental Services webpage at:

[http://www.dot.state.wy.us/wydot/engineering\\_technical\\_programs/environmental\\_services/proposed](http://www.dot.state.wy.us/wydot/engineering_technical_programs/environmental_services/proposed).

The meeting will be an open house style, you are invited to attend at your convenience.



For additional information about the open house or the Rupe Hill Landslide project, contact Warren Oyler, Resident Engineer, WYDOT in Sundance at 307 283-1135 or Ronda Holwell, WYDOT District 4 Public Involvement Specialist at 307 674-2356.

**Appendix B.  
Public Hearing Materials**

BOARDS

# Welcome!

WYDOT has prepared an environmental assessment (EA) on the Rupe Hill Project. The EA was prepared in compliance with the National Environmental Policy Act (NEPA). Tonight you have the opportunity to learn about and provide input on the Preferred Alternative. This alternative will remediate landslide risk on U.S. Highway 14 (US 14) near Rupe Hill area. The format of the meeting is open-house style. Representatives from the Project Team are available to answer questions and take comments.



### About the Rupe Hill Landslide

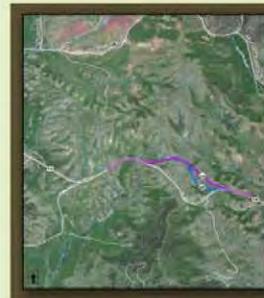
The Rupe Hill Landslide is located near Milepost 197.4 on US 14. It is approximately 1,000 feet in length and extends approximately 1,000 feet north of and approximately 500 feet south of the highway centerline. This is one of the largest landslides affecting a highway in Wyoming. The depth of the slide is 70 feet in places. The landslide is approximately 10 miles east of a similar landslide that damaged and forced a road closure along US 14 in 2011. Movement was first noticed near Rupe Hill in May 2011 and movement continues to occur. Movement was observed as recent as June 2013.

# Alternatives Carried Forward for Analysis

The purpose of the Project is to assure long-term mobility, safety, and acceptable maintenance on US 14 in the vicinity of Rupe Hill.

Following the project scoping and screening of preliminary alternatives, WYDOT and FHWA advanced three alternatives for consideration in the EA - two Build Alternatives (Alternative 2A and 2F) and the No Build Alternative in the EA.

WYDOT and FHWA established project goals to assist in analyzing the alternatives, including minimizing impacts to landowners, minimizing cut and fill, providing acceptable road grades, and minimizing impacts to sensitive environmental resources.



### Alternative 2A

Alternative 2A was developed to avoid all landslides. It would leave the existing US 14 at approximately mile post 197.3 and repair existing US 14 at approximately mile post 197.3. The alignment would have a maximum grade of 5.1 percent for 2,000 feet. Generally, steep grades are not desirable for the heavy truck traffic that flows under the 4,000-700 design guidelines for rural highways. This alternative would require approximately 200,000 cubic yards of excavation (cutting slopes and filling low areas) and approximately 20 acres of private property from two landowners. Based on these conceptual plans the cost estimate for this alternative would be approximately \$1.3 million.

Alternative 2A would avoid direct and indirect adverse impacts to archeological resources, protected under Section 107. This alternative would result in environmental impacts to visual resources, vegetation, and wildlife habitat. While adverse, these impacts are not considered significant under the CIO NEPA regulations.

### Alternative 2F

Alternative 2F would leave existing US 14 at approximately mile post 198.1 and repair existing US 14 at approximately mile post 197.3. This alternative would have a maximum grade of 8.0 percent for 1,100 feet. It would require approximately 337,000 cubic yards of excavation and approximately 20 acres of private property from three landowners. Based on these conceptual plans the cost estimate for this alternative would be approximately \$1.65 million.

Alternative 2F would impact archeological resources, protected under Section 107, visual resources, vegetation, and wildlife habitat. While adverse, these impacts are not considered significant under the CIO NEPA regulations.

### No Build Alternative

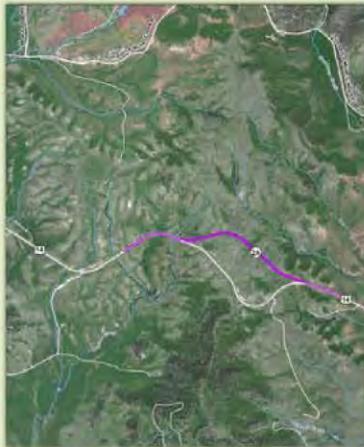
The immediate action would be spent to correct the landslide near Rupe Hill. It is anticipated that without action US 14 would continue to need to be maintained as the landslide erodes leaving about the existing road. Alternatively, the landslide could be avoided by the removal for an additional period of time.



BOARDS

## What is the Preferred Alternative?

Alternative 2A has been identified as the Preferred Alternative. Alternative 2A provides the best alignment with the least overall impacts to the natural, cultural, and social environments.



### Decision points for the Preferred Alternative

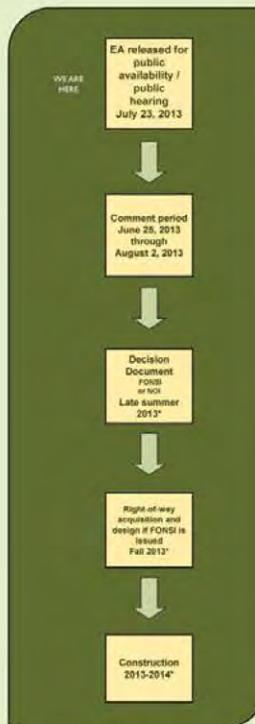
- Alternative 2A would not adversely affect historic properties.
- Alternative 2A would remove less land from wildlife habitat and grazing as more land could be reclaimed under existing US 14.
- Fewer landowners would be affected under Alternative 2A.
- Alternative 2A would require 100,000 less cubic yards of fill material during construction than Alternative 2F.
- Alternative 2A would cost approximately \$1.3 million compared to \$1.65 million for Alternative 2F.
- Based on geological testing, Alternative 2A has better soil conditions for building the required embankments than Alternative 2F.

## What are the Next Steps?

The preparation of an EA follows a detailed process (prescribed by the National Environmental Policy Act). The remaining steps are described below:

Tonight you have the opportunity to:

Review and comment on the EA, including social and environmental impacts and mitigation for the Project. WYDOT and FHWA will evaluate public and agency comments and data in the EA to determine if a Finding of No Significant Impact (FONSI) is appropriate or if an Environmental Impact Statement (EIS) will be prepared. The Notice of Intent (NOI) is the first step of the EIS.

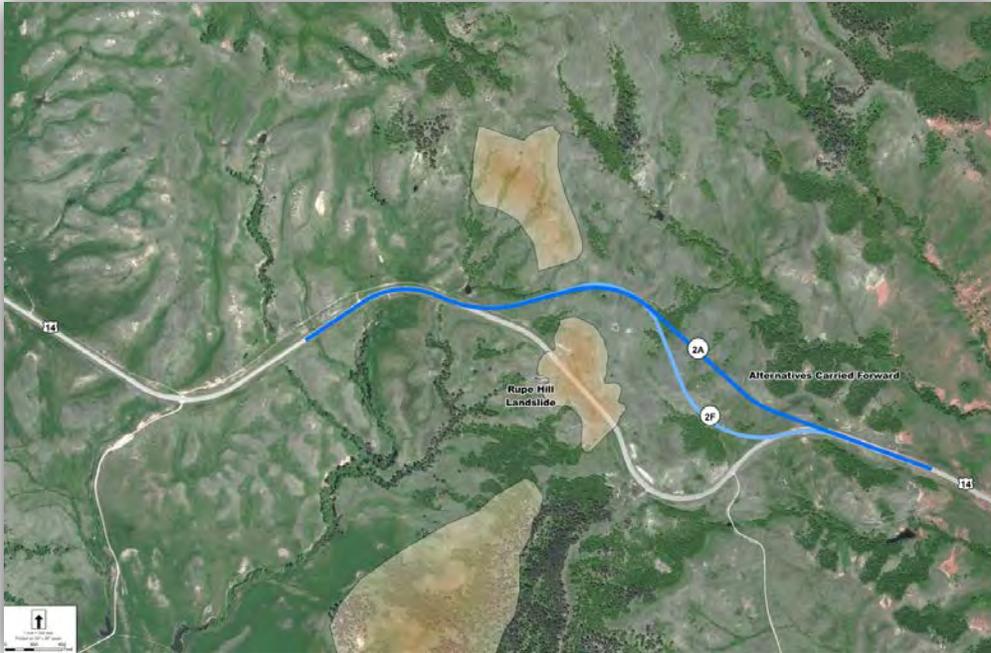


BE SURE TO FILL OUT YOUR COMMENT FORM!



\*Please note that dates are tentative and subject to change. Right-of-way acquisition, design, and construction will proceed if the FONSI is issued. If an NOI is published, an EIS will be prepared and the steps modified to reflect preparation of the EIS.

BOARDS



**HANDOUT**

**RUPE HILL**  
ENVIRONMENTAL SERVICES

**TONIGHT YOU WILL HAVE THE OPPORTUNITY TO:**

- View the EA and the evaluation of environmental effects for the alternatives carried forward: Alternative 2A and Alternative 2F.
- Learn about the Preferred Alternative, as identified by WYDOT and FHWA.
- Comment on the EA, environmental evaluation and potential effects to community and natural resources under the Preferred Alternative.

## Rupe Hill Landslide Environmental Assessment

JULY 23, 2013

### Why are we here tonight?

WYDOT and FHWA are presenting the Preferred Alternative for improvements to a segment of US Highway 14 (US 14) known as the Rupe Hill Landslide Project. Potential impacts have been studied, and are presented in the environmental assessment (EA), which is now available for public review. The National Environmental Policy Act (NEPA) requires an environmental document if federal funds are used to construct the project. The Project includes possible actions to remediate a section of US 14 in the vicinity of a landslide area, to assure future long-term longevity of the road. WYDOT is asking the public and agencies to comment on the EA findings including the environmental analysis and the Preferred Alternative. Comments should be submitted to WYDOT by August 2, 2013.

WYDOT Geology has conducted surface mapping and geotechnical investigation of the Rupe Hill landslide to characterize the landslide. This includes installing 5 slope inclinometers and 11 ground water monitoring wells both above and below US 14. The monitoring instruments have shown continued movement since the initial movement in 2011 was observed.




**What has happened with the Rupe Hill Landslide since last fall?**

### What Alternatives Were Carried Forward?

The purpose of the Project is to ensure long-term mobility, safety, and acceptable maintenance on US 14 in the vicinity of Rupe Hill. Following the project scoping and screening of preliminary alternatives, WYDOT and FHWA advanced three alternatives for consideration: two Build Alternatives (Alternative 2A and 2F) and the No Build Alternative in the EA. WYDOT and FHWA established Project goals to assist in analyzing the alternatives, including minimizing impacts to landowners, minimizing cut and fill, providing acceptable road grades, and minimizing impacts to sensitive environmental resources. The conceptual build alternatives are presented below. The alternatives differ in environmental effects, cost, and engineering/constructability constraints.



#### Alternative 2A

Alternative 2A was developed to avoid all landslides, it would leave the existing US 14 at approximately mile post 196.3 and repair existing US 14 at approximately mile post 197.1. This alternative would have a maximum grade of 9.1 percent for 2,000 feet. Generally, steep grades are not desirable for the heavy truck traffic but allowable under the AASHTO design guidelines for rural highways. The alternative would require approximately 202,600 cubic yards of excavation (cutting slopes and filling low areas) and approximately 28 acres of private property from two landowners. Based on these conceptual plans the cost estimate for this alternative would be approximately \$1.3 million.

Alternative 2A would avoid direct and indirect adverse impacts to archaeological resources, protected under Section 4(f). This alternative would result in environmental impacts to visual resources, vegetation, and wildlife habitat. These impacts are not considered significant under the CEQ/NEPA regulations.

#### Alternative 2F

Alternative 2F would leave existing US 14 at approximately mile post 196.1 and repair existing US 14 at approximately mile post 197.3. This alternative would have a maximum grade of 8.9 percent for 1,550 feet. It would require approximately 337,140 cubic yards of excavation and approximately 26 acres of private property from three landowners. Based on these conceptual plans the cost estimate for this alternative would be approximately \$1.65 million.

Alternative 2F would impact archaeological resources protected under Section 4(f), visual resources, vegetation, and wildlife habitat. These impacts are not considered significant under the CEQ/NEPA regulations.

### What is the Preferred Alternative?

WYDOT and FHWA identified Alternative 2A as the Preferred Alternative. Alternative 2A provides the best alignment with the least overall impacts to the natural, cultural, and social environments.





WYDOT used a combination of existing information and field data to assess impacts on the natural and human environment. The following resources were considered:

- Wetlands/Water Quality
- Wildlife
- Threatened/Endangered Species
- Agriculture
- Air Quality
- Noise
- Aesthetics
- Land use
- Historic Properties
- Paleontology
- Socioeconomics
- Soils/Geology
- Transportation

### Why is Alternative 2A Preferred?

Alternative 2A would not adversely affect historic properties.

Alternative 2A would remove less land from wildlife habitat and grazing as more land could be reclaimed under existing US 14.

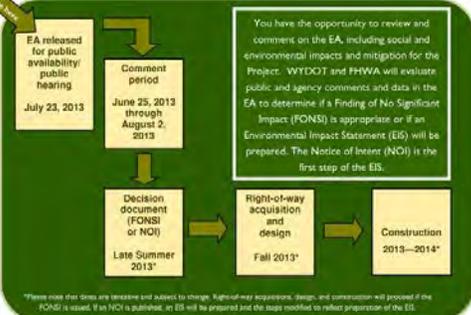
Fewer landowners would be affected under Alternative 2A.

Alternative 2A would require 100,000 less cubic yards of fill material during construction than Alternative 2F.

Alternative 2A would cost approximately \$1.3 million compared to \$1.65 million for Alternative 2F.

Based on geological testing Alternative 2A has better soil conditions for building the required embankments than Alternative 2F.

PAGE



### Where can I view the EA?

The EA can be viewed at the Crook County Library (414 East Main Street), the WYDOT office (224 South 29th), or can be downloaded from the WYDOT Environmental Services webpage at:

[http://www.wy.gov/infrastructure/transportation/transportation\\_programs/environmental\\_services/rupe\\_hill](http://www.wy.gov/infrastructure/transportation/transportation_programs/environmental_services/rupe_hill)

If you have questions regarding the Rupe Hill Landslide Project, please contact:

Ronda Holwell  
WYDOT—Public Involvement Specialist  
(307) 674-2300  
ronda.holwell@wyo.gov

Email Comments to:  
[Dot-rupe-ea@wyo.gov](mailto:Dot-rupe-ea@wyo.gov)




HANDOUT

**Table 3-12. Summary of Mitigation Measures**

Resource/Effect Category	Effect from Alternative 2A	Effect from Alternative 2F	Mitigation Measure
Land Use	<ul style="list-style-type: none"> <li>Alternative 2A would directly impact the land by the roadway and new right-of-way (25.8 acres) would be removed from grazing. The portions of the existing US 14 not needed to maintain landowner access (14.0 acres) can be reclaimed, and grazing would be allowed back on those properties.</li> </ul>	<ul style="list-style-type: none"> <li>Alternative 2F would directly impact the land by the roadway and new right-of-way (25.9 acres) would be removed from grazing. The portions of the existing US 14 not needed to maintain landowner access (15.3 acres) can be reclaimed, and grazing would be allowed back on those properties.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will work with the landowners to evaluate the need for a stock pass for the new alignment that will allow continued access north and south of the new road to maintain agricultural use.</li> </ul>
Farmlands	<ul style="list-style-type: none"> <li>Overall agricultural use of the ranch land is not expected to change due to the realignment. Land directly impacted by the roadway and new right-of-way would be removed from grazing. Overall agricultural land use in the region is not compromised and is in accordance with the Crook County land use policy.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will work with the landowners to evaluate the need for a stock pass at the new alignment to allow continued access north and south of the new road.</li> </ul>
Social	<ul style="list-style-type: none"> <li>Improved travel conditions and safety.</li> <li>No impact to community facilities or cohesion.</li> </ul>	<ul style="list-style-type: none"> <li>Same As Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation required.</li> </ul>
Environmental Justice	<ul style="list-style-type: none"> <li>No disproportionately high or adverse impacts to minority or low-income populations</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation required.</li> </ul>

HANDOUT

**Table 3-12. Summary of Mitigation Measures**

Resource/Effect Category	Effect from Alternative 2A	Effect from Alternative 2F	Mitigation Measure
Economic	<ul style="list-style-type: none"> <li>Improved travel conditions and a reliable transportation route for goods and services. Minor delays during construction could affect traffic.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will coordinate with local businesses during construction to minimize disruption. Construction phase information would be posted on moveable instant messaging signs, published in local newspapers, and advertised on local radio stations.</li> </ul>
Right-of-way	<ul style="list-style-type: none"> <li>25.8 acres of new right-of-way would be required for Alternative 2A. There would be no relocations. Most of the new right-of-way is currently used for grazing.</li> </ul>	<ul style="list-style-type: none"> <li>25.9 acres of new right-of-way would be required for Alternative 2F. There would be no relocations. Most of the new right-of-way is currently used for grazing.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will provide compensation for landowners under WYDOT policies.</li> </ul>
Transportation	<ul style="list-style-type: none"> <li>Impacts to transportation would be positive.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>No mitigation is needed for this resource.</li> </ul>
Geology and Soils	<ul style="list-style-type: none"> <li>Alternative 2A would require about 202,600 cubic yards of excavated soil (cutting slopes and filling low areas) and vegetation to be removed.</li> </ul>	<ul style="list-style-type: none"> <li>Alternative 2F would require about 337,160 cubic yards of excavated soil and vegetation.</li> </ul>	<ul style="list-style-type: none"> <li>Geotechnical recommendations will be incorporated into the final design. Best management practices (BMPs) will be implemented to minimize soil erosion. Inclinator readings will continue to be monitored.</li> </ul>
Paleontology	<ul style="list-style-type: none"> <li>There is potential for impacts to fossil resources.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>On-site monitoring will be completed during construction.</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>No long-term effects. Potential construction impacts resulting from dust and emissions from construction vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>Dust-control BMPs will be used during construction.</li> </ul>

HANDOUT

**Table 3-12. Summary of Mitigation Measures**

Resource/Effect Category	Effect from Alternative 2A	Effect from Alternative 2F	Mitigation Measure
Climate Change	<ul style="list-style-type: none"> <li>Greenhouse gas emissions would occur during construction. To the degree that GHG emissions have an impact on global climate, a decrease of construction fuel usage would result in a reduction of GHG emissions and, therefore, lessen the impact to global climate change.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>Where possible and practical, shutting off construction equipment instead of allowing engines to idle would decrease fuel usage and resulting emissions.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>Noise levels at all receptor locations are below any NAC established by WYDOT; therefore no long term noise impacts. Short-term noise increases are expected during construction but would not affect any residences because there are no residences within several thousand feet of the road.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>No long term mitigation measures are proposed. Construction contractors will be required to comply with all state and local regulations governing work hours, equipment noise levels, and noise resulting from on-site activities throughout construction.</li> </ul>
Water Resources and Quality	<ul style="list-style-type: none"> <li>No long-term changes to surface waters or groundwater. Minor short-term effects to surface water during construction from major stream crossings.</li> <li>No adverse effects to groundwater or floodplains.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>Erosion-control measures will be implemented during construction. A hydraulics and hydrology analysis will be completed. Equipment staging, fueling, and maintenance will occur outside of riparian areas.</li> </ul>
Wetlands and Aquatic Resources	<ul style="list-style-type: none"> <li>Less than 0.3 acres of wetlands affected. Adverse effects to wetlands would require a permit from the USACE</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>Mitigation will be determined during final design as part of USACE permit.</li> </ul>
Vegetation and Wildlife	<ul style="list-style-type: none"> <li>Removal of vegetation during construction could result in the potential spread</li> </ul>	<ul style="list-style-type: none"> <li>Removal of vegetation during construction could result in the</li> </ul>	<ul style="list-style-type: none"> <li>Disturbed areas will be re-vegetated using native plant species. WYDOT will</li> </ul>

HANDOUT

**Table 3-12. Summary of Mitigation Measures**

Resource/Effect Category	Effect from Alternative 2A	Effect from Alternative 2F	Mitigation Measure
	<p>of noxious weeds and temporary removal of wildlife habitat. Small amount of wildlife habitat converted to roadway use (11.8 acres for Alternative 2A and 13.6 acres for Alternative 2F).</p> <ul style="list-style-type: none"> <li>▪ Increased potential of deer-vehicle collisions.</li> <li>▪ Increased sedimentation in streams during construction.</li> </ul>	<p>potential spread of noxious weeds and temporary removal of wildlife habitat. Small amount of wildlife habitat converted to roadway use (13.6 acres for Alternative 2F).</p> <ul style="list-style-type: none"> <li>▪ Increased potential of deer-vehicle collisions.</li> <li>▪ Increased sedimentation in streams during construction.</li> </ul>	<p>consider the fence type that best supports wildlife and grazing interests. The fence type will be determined during final design. Erosion control measures will be implemented during construction.</p>
Threatened and Endangered Species	<ul style="list-style-type: none"> <li>▪ Project not likely to adversely affect threatened or endangered species.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No mitigation is recommended.</li> </ul>
Cultural Resources	<ul style="list-style-type: none"> <li>▪ No historic properties adversely affected.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Historic properties adversely affected.</li> </ul>	<ul style="list-style-type: none"> <li>▪ If any cultural materials are discovered during construction, work in the area shall halt immediately, FHWA and SHPO staff will be contacted, and the materials will be evaluated by an archaeologist or historian meeting the requirements of the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983).</li> <li>▪ A Memorandum of Agreement would be needed for Alternative 2F.</li> </ul>

HANDOUT

**Table 3-12. Summary of Mitigation Measures**

Resource/Effect Category	Effect from Alternative 2A	Effect from Alternative 2F	Mitigation Measure
Hazardous Substances	<ul style="list-style-type: none"> <li>None.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>If during construction a hazardous substance is encountered, WYDOT will notify DEQ and properly dispose of the material. The contractor will be required to provide containment for accidental spills and solid wastes will be properly handled and disposed of off-site in an approved facility.</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>Potential for relocation of new Rangetel fiber-optic line</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will coordinate with utility owners during final design to avoid, minimize or relocate utility infrastructure.</li> </ul>
Aesthetics	<ul style="list-style-type: none"> <li>Little to no change for motorists traveling on US 14. New alignment will be visible to property owners; however, views of Warren Peak and Sundance Mountain would not change. Removal of vegetation during construction.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>Disturbed areas will be revegetated with native plant mixes.</li> </ul>
Construction Impacts	<ul style="list-style-type: none"> <li>Restricted access; fugitive dust.</li> </ul>	<ul style="list-style-type: none"> <li>Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>WYDOT will work with locals, logging businesses, USFS and at tourism locations on restricted access; implementation of</li> </ul>

HANDOUT

**Table 3-12. Summary of Mitigation Measures**

Resource/Effect Category	Effect from Alternative 2A	Effect from Alternative 2F	Mitigation Measure
			BMPs.
Indirect/Cumulative Impacts	<ul style="list-style-type: none"> <li>▪ No substantial cumulative effects.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Same as Alternative 2A.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No additional mitigation recommended.</li> </ul>



**Appendix C.  
Media Articles**

# The Sundance Times

dotcom

- Home
- Local News
- State and Region
- Opinions
- Sports
- Obituaries
- Classifieds
- Advertise
- About Us
- Subscribe

ARCHIVES

Filter Month

WYOMING LEGAL NOTICES

Public notices that run in the Sundance Times and all Wyoming newspapers can be found here:  
Wyoming Public Notices

2013 FAIR SCHEDULE



Click for a printable version of the 2013 Crook County Fair schedule

Search & Hit Enter

MEMBER WYOMING PRESS ASSN



## WYDOT to address Rupe Hill landslide

By Sarah Pridgeon

One of the largest landslides affecting a Wyoming state highway is located just outside Sundance on Hwy 14. A thousand feet in length and up to 70 feet in depth, it has been moving constantly since 2011, prompting the Wyoming Department of Transportation to initiate a project to replace that portion of the road before it falls entirely. "We're doing this now because of the potential that the road could fall, which would impact a greater area," says Nick Hines, Environmental Coordinator. "We don't want anybody getting hurt."

The landslide is thought to be the result of flooding in the spring of 2011, caused by heavy rainfall and unprecedented snowpaks. It is similar to a landslide just ten miles east at Oudin Hill, which forced a road closure that same year.

"This project wasn't something that was on our radar to go do," comments Ronda Holwell, Public Relations.

"In 2011 we had huge wet slides and that entire portion slid and for us it's not feasible to fix it in its current location. We're reacting to what happened in 2011 and trying to mitigate and come up with a solution as quickly as possible."

The environmental assessment for the Rupe Hill Project was presented at a public meeting on Tuesday. It includes a preferred option and alternative to replace the affected section of road.

The eventual aim is to ensure the long-term safety, maintenance and mobility of the road in the Rupe Hill vicinity. Though the landslide might remain stable for several years, Crook County is historically a landslide area and there is no way to know if and when it will fall.

"This is just the way the good Lord put it together, it's just how it is. If it failed, we would have to close it. We've had landslides fall as far as 30 feet and there's no way to negotiate with that," says Stark.

"Things happen fast and it isn't going to be pleasant. It could be very inconvenient and expensive for the public."

The project has faced opposition from landowners in the vicinity, but has also met with encouragement from people who use the road.

"We even got a phone call asking why we weren't doing anything to fix the road yet," says Hines. "We said, well we are, but there's a process."

WYDOT has worked on the environmental study with the goal of minimizing impact on landowners and sensitive environmental resources and providing acceptable road grades, all with the minimum disruption to travel.

"The two things that came up in the environmental assessment were the location of wetlands and the location of archaeological sites," says Tim Stark, Environmental Services Engineer. "We looked at wetlands and other things to avoid. Some cairns were identified so they can be avoided during the design stage."

The preferred option will avoid the landslide area by building an entirely new section of road between mileposts 198.3 and 197.1, at a cost of \$1.3 million. This alternative would avoid both direct and indirect impacts on archaeological resources and would have a relatively insignificant impact on visual resources, vegetation and wildlife habitat.

It was selected as the preferred option because it will affect fewer landowners, require 100,000 fewer cubic yards of fill material and cost significantly less. Based on geological testing, it will also place the new section of road on better soil conditions for the required embankments.

The route will change very little for motorists and, while visible to property owners, will not change the views of Warren Peak or Sundance Mountain. It will also improve travel and provide a reliable transportation route for goods, services, tourism and emergency services.

The alternative would create a new section of road between mile post 198.1 and 197.3 for a higher cost of \$1.65 million and similar benefits, but greater potential adverse impacts. If neither is approved and WYDOT simply continues to maintain the road as it is, the landslide will continue to break apart.

GET ALL THE NEWS WITH AN E-SUBSCRIPTION



A full digital subscription is only \$30. Current print subscribers can add a digital subscription for just \$5. Click on: [digital.sundancetimes.com](http://digital.sundancetimes.com) for a demonstration or call us to set up your account.

FOLLOW US

FOLLOW US ON FACEBOOK

CONTACT US

The Sundance Times  
P.O. Box 400  
311 Main Street  
Sundance, WY 82729  
Phone: 307-283-3411  
Fax: 307-283-3332  
Email: [web@sundancetimes.com](mailto:web@sundancetimes.com)

WYDOT to address Rupe Hill landslide | Sundance Times

"It does need to be put on a different alignment because the foundation of the existing alignment is moving, so it's not a sound place to put it – it's going to fall," says Stark. WYDOT anticipates that it will need to purchase new land and rights-of-way to address the need for a new alignment and has already involved the landowners who may be affected. The current comment period, however, is focused mainly on the environmental issues associated with the project, while the details of construction will follow later this year, such as lane numbers and widths.

"Design will commence after this process and that's when all the nuts and bolts and the details will be worked out. We'll know an exact date and an exact location, we'll know exact fills and cuts of the road," said Stark.

The official closing date for public comment on the environmental study is August 2 but WYDOT will continue to accept comments for a reasonable time afterwards. Right-of-way acquisition and design will begin in the fall and the project is expected to break ground in 2014.

Construction, if the preferred alternative is chosen, should not greatly affect travel on the road except when the new section is tied in with the existing one, which will be done as quickly and with as little disruption as possible.

The environmental assessment is available online at [www.dot.state.wy.us](http://www.dot.state.wy.us) and at the Sundance Library. Comments can be directed to [dot-rupe-ea@wyo.gov](mailto:dot-rupe-ea@wyo.gov).

Through the design process we'll be having public meetings as well, but we'd like people to take the opportunity to comment now. This isn't going to be the last meeting, but don't wait until it's all sewn up already, get involved now," says Stark.



Comments are closed.

Appendix D.  
Comment Letters

AGENCY COMMENTS



**CROOK COUNTY BOARD OF COMMISSIONERS**

P.O. BOX 37  
SUNDANCE, WYOMING 82729-0037  
(307) 283-1323

July 15, 2013

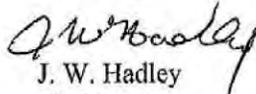
Timothy L. Stark, P.E.  
Wyoming Department of Transportation  
Environmental Services Engineer  
5300 Bishop Blvd.  
Cheyenne, WY 82009-3340

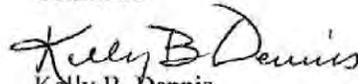
Dear Mr. Stark:

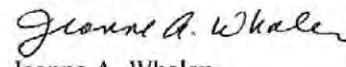
The Crook County Commission supports the findings of the WYDOT environmental assessment in choosing Alternative 2-Northern Realignment. In our previous letter we recommended this alternative. It looks like the most stable land area, and perhaps the most cost-effective way around the various landslide areas to the north and south of US 14. We continue to urge WYDOT to move forward on this project as quickly as possible as US 14 carries a significant amount of traffic in our county.

Thank you for your time and consideration.

Sincerely,

  
J. W. Hadley  
Chairman

  
Kelly B. Dennis  
Vice-Chairman

  
Jeanne A. Whalen  
Member



**WYOMING GAME AND FISH DEPARTMENT**

5400 Bishop Blvd. Cheyenne, WY 82006

Phone: (307) 777-4600 Fax: (307) 777-4699

wgfd.wyo.gov

**GOVERNOR**  
MATTHEW H. MEAD

**DIRECTOR**  
SCOTT TALBOTT

**COMMISSIONERS**  
MIKE HEALY – President  
RICHARD KLOUDA – Vice President  
MARK ANSELM  
AARON CLARK  
KEITH CULVER  
T. CARRIE LITTLE  
CHARLES PRICE

July 23, 2013

WER 13055  
Wyoming Department of Transportation  
Federal Highway Administration  
Environmental Assessment and Preferred Alternative  
U.S. Highway 14 - Rupe Hill Landslide Project  
Crook County

Timothy Stark  
Engineering Services Engineer  
Wyoming Department of Transportation  
5300 Bishop Boulevard  
Cheyenne, WY 82009-3340

Dear Mr. Stark:

The staff of the Wyoming Game and Fish Department has reviewed Environmental Assessment and Preferred Alternative concerning the U.S. Highway 14 - Rupe Hill Landslide Project in Crook County. We offer the following comments for your consideration.

**Terrestrial Considerations:**

We reiterate our comments from our previous letter of 12-18-2012. We are concerned for both deer passage and motorist safety and again recommend fencing conducive to safe passage by deer and highway signs alerting motorists to potential collision hazards.

**Aquatic Considerations:**

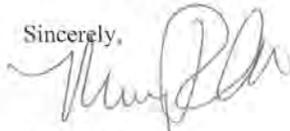
We provided aquatic comments in a letter dated December 18, 2012. We have no additional aquatic concerns.

*"Conserving Wildlife - Serving People"*

Timothy Stark  
July 23, 2013  
Page 2 of 2 - WER 13055

Thank you for the opportunity to comment. If you have any questions or concerns, please contact Joe Sandrini, Wildlife Biologist at 307-746-4646 or Scott Gamo, Staff Terrestrial Biologist, at 307-777-4509.

Sincerely,



Mark Konishi  
Deputy Director

MK/mf/gb

cc: USFWS  
Paul Mavrakis, Sheridan Region  
Joe Sandrini, Casper Region  
Justin Binfet, Casper Region

## PUBLIC COMMENTS

From: **BOB RUDDLE** <[ruddle9430@msn.com](mailto:ruddle9430@msn.com)>  
Date: Mon, Jul 1, 2013 at 11:09 AM  
Subject: Rupe Hill, Wyoming  
To: "[dot-rupe-ea@wyo.gov](mailto:dot-rupe-ea@wyo.gov)" <[dot-rupe-ea@wyo.gov](mailto:dot-rupe-ea@wyo.gov)>

My name is Robert Ruddle and I have just received a notice from WYDOT in regards to Alternative 2A on the upcoming project on Hwy.14 in Crook County, also known as the Rupe Hill Landslide Project. I had previously received a Newsletter #1 with maps and alternative options.

I own 161 acres of land on Rupe Hill and am located out-of-state and will not be able to attend the July 23rd public hearing in Sundance and was wondering if you could address a question for me:

It's difficult for me to pinpoint my exact property line on the maps and how the construction may impact my access onto Highway 14. Please locate my property on your plat map and explain to me in detail if and how the projected project would change my access.

Thank you.

Robert Ruddle  
[ruddle9430@msn.com](mailto:ruddle9430@msn.com)

**From:** [nick.hines@wyo.gov](mailto:nick.hines@wyo.gov) [mailto:[nick.hines@wyo.gov](mailto:nick.hines@wyo.gov)] **On Behalf Of** DOT RUPE-EA  
**Sent:** Friday, July 05, 2013 8:29 AM  
**To:** BOB RUDDLE; Warren Oyler  
**Subject:** Re: Rupe Hill, Wyoming

Dear Mr. Ruddle,  
WYDOT will maintain all existing access to private properties along US 14. Once a Preferred Alternative is selected, WYDOT can begin the final design. During final design, and in consultation with the landowners and Crook County, WYDOT will develop the specific details of maintaining access to private properties. Warren Oyler is the WYDOT Resident Engineer in Sundance and is one of the people who will be talking with the landowners regarding their access. I would recommend contacting him. His phone number is 307-283-1135 and his email is [warren.oyler@wyo.gov](mailto:warren.oyler@wyo.gov).

Thank You

Nick Hines  
Environmental Coordinator, WYDOT  
5300 Bishop Blvd., Cheyenne, Wyoming 82009-3340  
Office (307) 777 4156  
Fax (307) 777 4193

----- Forwarded message -----

From: **Page Lambert** <[page@pagelambert.com](mailto:page@pagelambert.com)>

Date: Fri, Aug 2, 2013 at 3:26 PM

Subject: RE: Rupe Hill Notice of Availability

To: Timothy Stark <[timothy.stark@wyo.gov](mailto:timothy.stark@wyo.gov)>

Cc: DOT RUPE-EA <[dot-rupe-ea@wyo.gov](mailto:dot-rupe-ea@wyo.gov)>, Nick Hines <[nick.hines@wyo.gov](mailto:nick.hines@wyo.gov)>, Mark Lambert <[mlambert@fs.fed.us](mailto:mlambert@fs.fed.us)>

Dear Mr. Stark,

Pursuant to the email below regarding Environmental Assessment (EA) for the WYDOT project known as the Rupe Hill Landslide, and the open house style “public hearing” held in Sundance, Wyoming on July 23, 2013, and the onsite tour with numerous members of the WYDOT staff on that same day, and as one of the landowners most severely impacted by the proposed re-alignment of Highway 14 through my private property, please accept and record these formal comments:

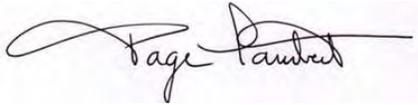
1. I, Page Lambert, still strenuously object to any realignment of Highway 14 that adversely affects and encroaches on my private property rights.
2. I believe that for WYDOT to proceed with any realignment without gathering at least 5 years of data from the project area regarding the movement of the landslide, surface water measurements, etc., is irresponsible;
3. I don't believe sufficient studies have been conducted regarding what impact Alternative 2A, Northern Realignment, which requires drastically altering and removing immense quantities of land never before disturbed, would have on the slide area identified to the north of Alternative 2A. This land slide area appears to be greater in mass than the Rupe Hill Landslide and I have not seen any studies about the impact to this slide area.
4. The viewshed and esthetic qualities of my land will be grossly altered and negatively impacted, reducing the monetary, spiritual, and emotional value of the entire parcel of land, not just the right-of-way acreage stated in the EA.
5. I don't believe that WYDOT has accurately interpreted nor given adequate consideration to the concerns expressed by Darlene Conrad, Tribal Historic Preservation Officer (see Appendix F-17): “Both traditional cultural properties are of significance to the spirituality and culture of living native peoples. Rupe Hill and Sundance Hill may have a significant relationship to the cairns and rock alignments. I sincerely hope that the road construction does not take away from the integrity of the 2 sites.” I believe any northern realignment WILL take away from the integrity of both sites.

6. Despite WYDOT's reassurance that all construction and reclamation would be carefully monitored and of the highest standards, during the walking tour on July 23, 2013, a drill hole approximately 12 inches in diameter and approximately 25 feet in depth, which was drilled in either January or February of 2013, had not been backfilled, pursuant to Condition #6 of the Permit to Investigate signed January 7, 2013:

“Permission is granted to drill seven (7) borings along the potential realignment route of Highway 14. The borings will be covered when WYDOT personnel is not present and will be backfilled within 24-48 hours.”

7. I reserve the right to express additional concerns and add additional comments to this document at a future date and during future proceedings.

Sincerely,



Page Lambert

*Page Lambert*

Connecting People with Nature  
Connecting Writers with Words  
26037 Mountain View Road  
Golden, CO 80401  
[page@pagelambert.com](mailto:page@pagelambert.com)  
[www.pagelambert.com](http://www.pagelambert.com)  
cell/work: [303.842.7360](tel:303.842.7360)

**From:** Timothy Stark [mailto:timothy.stark@wyo.gov]  
**Sent:** Monday, August 05, 2013 1:27 PM  
**To:** Page Lambert  
**Cc:** DOT RUPE-EA; Nick Hines; Mark Lambert  
**Subject:** Re: Rupe Hill Notice of Availability

Thank you Page for taking the time and formulating comments on this project through the federal NEPA process. Your comments will be entered in as an official comment. Your comments are very well thought out. Thank you for taking the time by inviting WYDOT staff on your land and sharing your life. Your deep loving emotions for the land with its family history was well received by me and others. It is now WYDOT's duty to assess and evaluate your comments. It won't be easy. If you have any further questions, please do not hesitate to ask. Thank you again.

From: **BOB RUDDLE** <[ruddle9430@msn.com](mailto:ruddle9430@msn.com)>  
Date: Thu, Aug 15, 2013 at 1:15 PM  
Subject: Re: Rupe Hill  
To: "[nick.hines@wyo.gov](mailto:nick.hines@wyo.gov)" <[nick.hines@wyo.gov](mailto:nick.hines@wyo.gov)>

To: Nick Hines, Environmental Coordinator, WYDOT  
Re: Rupe Hill Landslide Project

Per our phone conversation from the office of Warren Oyler this morning, August 15th, I would like the following comments included in the Rupe Hill Assessment process.

I strongly oppose the realignments being considered. My property is directly affected as the only legal access to the 161 acres lies in the section of US 14 that is being realigned. If either Alternative 2A or 2F proceed as outlined, we were just informed that there is an intention of abandonment of nearly a half mile of the existing highway on which is my only possible access. I have correspondence that states that WYDOT will maintain all existing access to private properties along US 14.

If the State and County's position is that the cost to maintain that stretch of road is too costly, how do they expect me, as an individual, to support that necessary maintenance. The private upkeep, maintenance would be totally unaffordable. The steep grade as it lies would result in numerous washouts, (possible loss of use of the road entirely) which is our **ONLY** legal access. It would, essentially, land lock my property. The loss of and/or limited proper access and costs would greatly impact the current use of the property for grazing and possible future development resulting in substantial decreasing the value of the property, both near term and in the future.

Safety is also a concern of mine. Removal of the road surface and guardrails would further expose the hillside to erosion and thus jeopardize further, and make more hazardous, the access I had when I purchased the property.

Please note these comments/concerns and confirm receipt of this correspondence.

Sincerely,

Robert Ruddle

From: **Nick Hines** <[nick.hines@wyo.gov](mailto:nick.hines@wyo.gov)>  
Date: Thu, Aug 15, 2013 at 3:17 PM  
Subject: Re: Rupe Hill  
To: BOB RUDDLE <[ruddle9430@msn.com](mailto:ruddle9430@msn.com)>  
Cc: Timothy Stark <[timothy.stark@wyo.gov](mailto:timothy.stark@wyo.gov)>

Good Afternoon Robert,  
Thank you for the comments and the phone discussion this morning. Your comments will be added to the decision document for this project and will become part of the public record.

Thank you for your comments  
Nick

Nick Hines  
Environmental Coordinator, WYDOT  
5300 Bishop Blvd., Cheyenne, Wyoming 82009-3340  
Office [\(307\) 777 4156](tel:(307)777-4156)  
Fax [\(307\) 777 4193](tel:(307)777-4193)

Appendix E.  
On-Site Meeting With Page Lambert

## **NOTES FROM FIELD TRIP ON JULY 23, 2013**

Page Lambert requested that WYDOT personnel meet her on her property to walk the two possible alignments and answer questions that she had. Attendees on this trip included:

WYDOT: Rhonda Holwell, Nick Hines, Sandy Pecenka, Julie Francis, Tim Stark, Warren Oyler, Levi Dacar, Scott Taylor, Scott Henderson, Mark Falk, David Vanderveen

HDR: Gina McAfee, Laura Lutz-Zimmerman

### **SUMMARY OF DISCUSSION:**

1. Page asked that the attendees take a few moments to observe the land and the views.
2. Page asked where the archaeological sites are? She has found a number of arrowheads. Julie Francis pointed out the cairns and discussed the Lakota properties. The 2F alignment is more visible from these properties. 2A is less visible. The tribes have expressed concern about the effects to these properties from 2F.
3. Page asked if any plant surveys were done this spring. Nick responded that the wetland delineators will be on site the week of July 29.
4. Page indicated that 2F allows for more privacy—protects more of the viewshed and would be on a south facing slope. Would 2A be more of a challenge from a snow removal perspective? Page indicated that they receive a lot of snow in the area where 2A would be located.
5. Page asked if 2A would be a problem as it relates to the landslide on Chatfield Ridge.
6. David indicated that 2F has larger cuts and fills and soils that are more clay. 2A has smaller cuts and fills with sandier soils
7. Warren said that more geological data would be helpful, but not essential to the design process. Page said we could postpone the decision for more data collection, but Warren said that was not necessary.
8. Will drainageways be affected? Culverts will be placed and existing drainageways will be maintained.
9. The existing road will be ripped up, re-graded to a natural condition and reseeded.
10. Page said that some folks have expressed concern that WYDOT contractors are not careful or considerate in their work. Warren indicated that he tried to make sure contractors are doing their work in a responsible manner. Page indicated that with Warren and Levi in town, that will help.
11. Could trees be planted to protect privacy?
12. Page asked if there was any political pressure to improve the road for tourism. To improve views of Devil's Tower? Warren responded that the only political pressure he is aware of is what would happen if the road fails.

13. Page recommended we be more careful of our language—so it doesn't seem like a decision has already been made
  14. The ROW process will look at any remnant parcels. Will aesthetics be a consideration?
- Page thanked everyone for attending. She appreciates the time we took to visit the site and answer questions.

**Appendix F.**  
**Aquatic Resource Inventory [and Delineation] Report**

**Aquatic Resources Inventory [and Delineation] Report**

**DR41319**

**RUPE HILL SLIDE REPAIR**

**CROOK COUNTY, WYOMING**

*Prepared for:*

Wyoming Department of Transportation  
5300 Bishop Blvd  
Cheyenne, WY 82009

*Prepared by:*



Kurt Flaig  
Western EcoSystems Technology, Inc.  
415 W. 17<sup>th</sup> St. Suite 200  
Cheyenne, WY 82001

August 13, 2013

**TABLE OF CONTENTS**

PROJECT AREA.....1  
METHODS .....1  
RESULTS .....1  
IMPACTS .....2  
LITERATURE CITED.....3

**LIST OF TABLES**

**Table 1. Drainage features within the project realignment corridor and descriptions. ....2**

**LIST OF APPENDICES**

**APPENDIX A**  
**FIGURE**  
**APPENDIX B**  
**PHOTOS**

## **PROJECT AREA**

The Wyoming Department of Transportation (WYDOT) is proposing to reroute a section of U.S. Route 14, located approximately 3.5 miles west of Sundance, Crook County, Wyoming. Two potential alignments, each about 1 mile in length, are being evaluated. The purpose of this survey was to identify potential wetland and waters of the U.S. (WUS) features in the project corridor. The stretch is currently identified as the Rupe Hill Slide Repair (DR41319). This report summarizes wetland and waters of the U.S. findings along the two, 1-mile realignments.

The project area is located within the Black Hills region of northeastern Wyoming. Land uses in the surrounding area include agriculture (livestock and hay production), recreation, and timber management. Topography in the project area ranges from rolling to steep and includes several ephemeral drainage features. No named drainages occur along the two realignments, but a tributary to Benton Creek occurs immediately west of the project corridor and 2 tributaries to Chassoll Creek occur north and southeast of the project corridor. Soils along the project corridor are primarily composed of clay and are formed in residuum and or alluvium weathered from shale (NRCS 2013).

## **METHODS**

Prior to conducting fieldwork, a thorough review of U.S. Geological Survey (USGS) topographic maps, aerial photography, and U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps for the project area was conducted. Based on this review, all areas identified as wetland or that could potentially support wetlands were field verified. Additionally, all areas identified as perennial or intermittent waterbodies were investigated for waters of the U.S. status.

## **RESULTS**

No wetlands were identified in the NWI map review and no wetlands were encountered along the proposed project realignment corridor. Two waters of the U.S. (wus) were recorded along the project corridor (Table 1; Appendix A: Figure). Neither of the two drainages is identified as a blue line channel on USGS. WUS 1 intersects both realignment corridors and drains north into a tributary to Chassoll Creek. It features an approximately 1.5-foot wide defined channel and occurs beneath a dense canopy of burr oak (Appendix B: Photo 1).

WUS 2 occurs to the south of the southern alignment and may or may not be located within the proposed cut-fill limits (Appendix A: Figure). The upper reach of WUS 2 features a defined channel approximately 1.5 feet wide and occurs within burr oak woodland (Appendix B: Photo 2). The downstream portion of the drainage is culverted beneath an old ranch road and abruptly fans out into an upland grassland approximately 50 feet downstream of the culvert (Appendix A: Figure). At this point there is no defined bed or bank (Appendix B: photos 3 and 4). Because this drainage feature has no defined channel and no apparent downstream hydrologic connection

to other waters of the U.S. it may not meet the ACOE criteria for waters of the U.S., however, jurisdiction for WUS features is the sole responsibility of the ACOE.

Four swale-like drainage features were recorded within the project realignment corridor (Appendix A: Figure). None of these swales featured a defined channel or showed evidence of any periodic flow. Photographs of the NDBB (no defined bed and bank) features and the two WUS features are provided in Appendix A.

**Table 1. Drainage features within the project realignment corridor and descriptions.**

Drainage ID	Description
WUS 1	Unnamed tributary draining into tributary to Chassoll Creek; drainage intersects both proposed realignment corridors (Appendix B: Photo 1).
WUS 2	Unnamed drainage to south of southern realignment; drainage swales out below culvert and has no apparent downstream hydrologic connection to other waters of the U.S. (Appendix B: photos 2-4).
NDBB 1	Swale-like drainage with no defined channel and no evidence of periodic flow; burr oaks occur along the drainage (Appendix B: photos 5-6).
NDBB 2	Swale-like drainage with no defined channel and no evidence of periodic flow; upland grassland occurs within the swale (Appendix B: Photo 7).
NDBB 3	Swale-like drainage with no defined channel and no evidence of periodic flow; upland grassland occurs within the swale (Appendix B: Photo 8).
NDBB 4	Swale-like drainage with no defined channel and no evidence of periodic flow; upland grassland occurs within the swale (Appendix B: Photo 9).
NDBB 5	Swale-like drainage with no defined channel and no evidence of periodic flow; upland grassland occurs along within swale (Appendix B: Photo 10).

## IMPACTS

Temporary construction-related impacts to wetlands will proceed according to Best Management Practices (BMP's) as defined in Wyoming Standard Specifications, Section 111. BMP's will be used to control grading-caused sedimentation. Final determination regarding jurisdictional status of waters of the U.S. will be determined by the Corps. It is likely that construction of the proposed project will result in permanent loss of some waters of the U.S. but would not likely exceed any mitigation threshold.

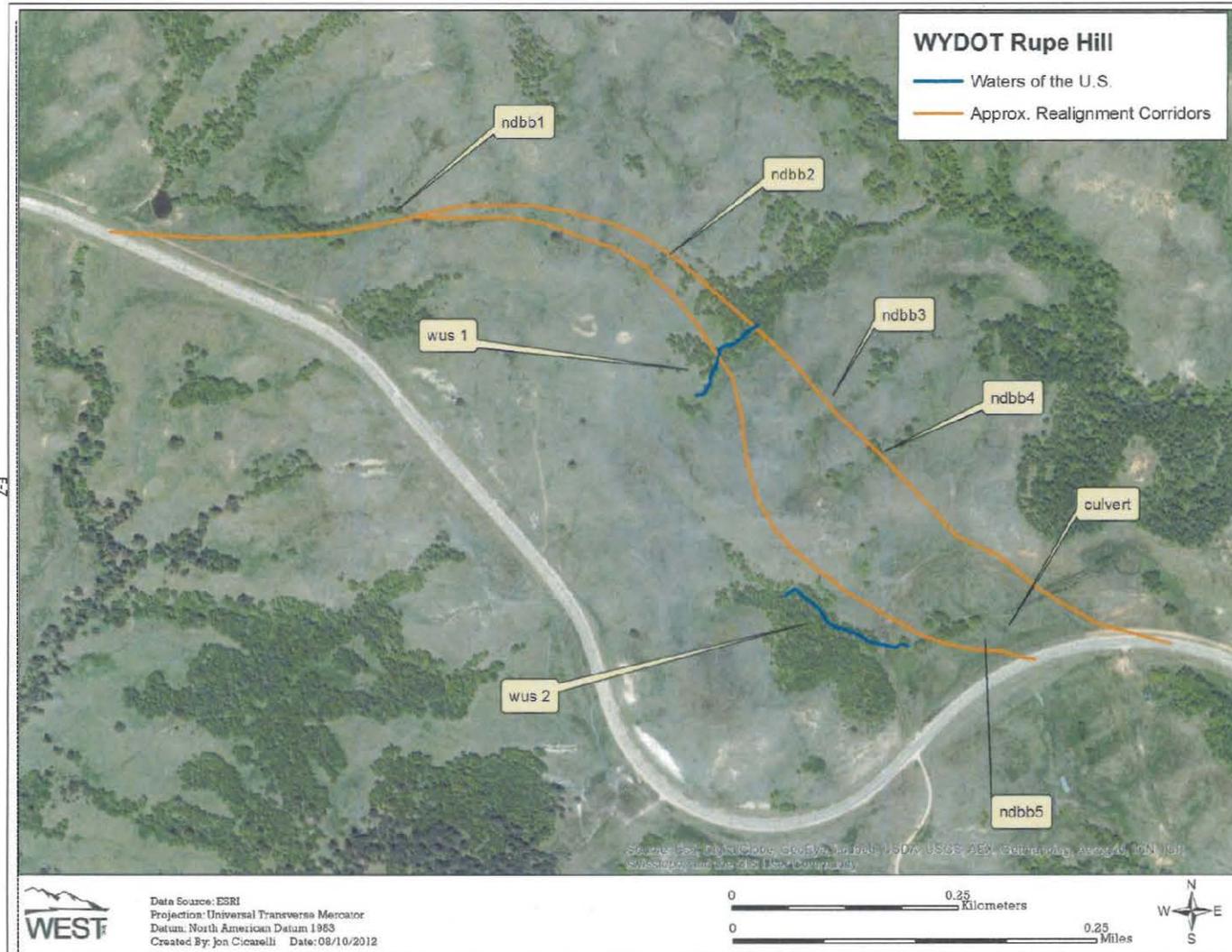
## **LITERATURE CITED**

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed [08/06/13].

U.S. Fish and Wildlife Service. 2011. National Wetlands Inventory; Wetlands Online Mapper. Available at: <http://www.fws.gov/wetlands/Data/GoogleEarth.html>.

U.S. Geological Survey. 2009. The USGS Store. Map Locator. Available at: [http://store.usgs.gov/b2c\\_usgs/usgs/maplocator/.do](http://store.usgs.gov/b2c_usgs/usgs/maplocator/.do)

**APPENDIX A  
FIGURE**



**APPENDIX B  
PHOTOS**



Photo 1: Unnamed tributary (WUS-1).



Photo 2: Upstream portion of WUS-2.



Photo 3: Culvert outlet along WUS-2.



Photo 4: Downstream portion of WUS-2; swales out into upland grassland.

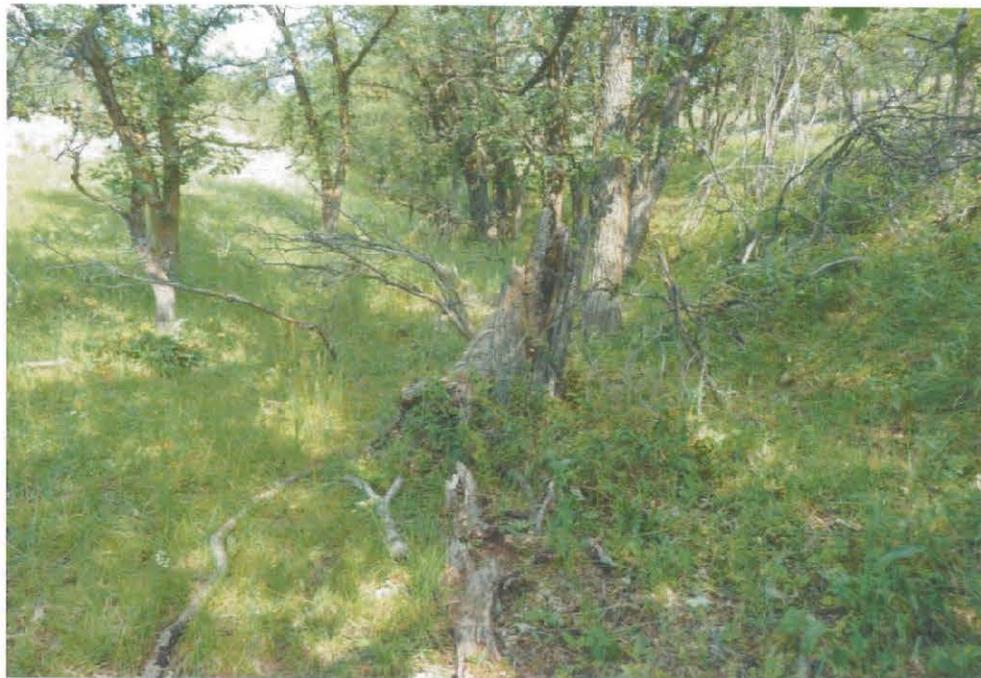


Photo 5: Downstream section of NDBB 1; considered but rejected as potential WUS.



Photo 6: Upstream section of NDBB 1; considered but rejected as potential WUS.



Photo 7: NDBB 2; considered but rejected as potential WUS.



Photo 8: NDBB 3; considered but rejected as potential WUS.

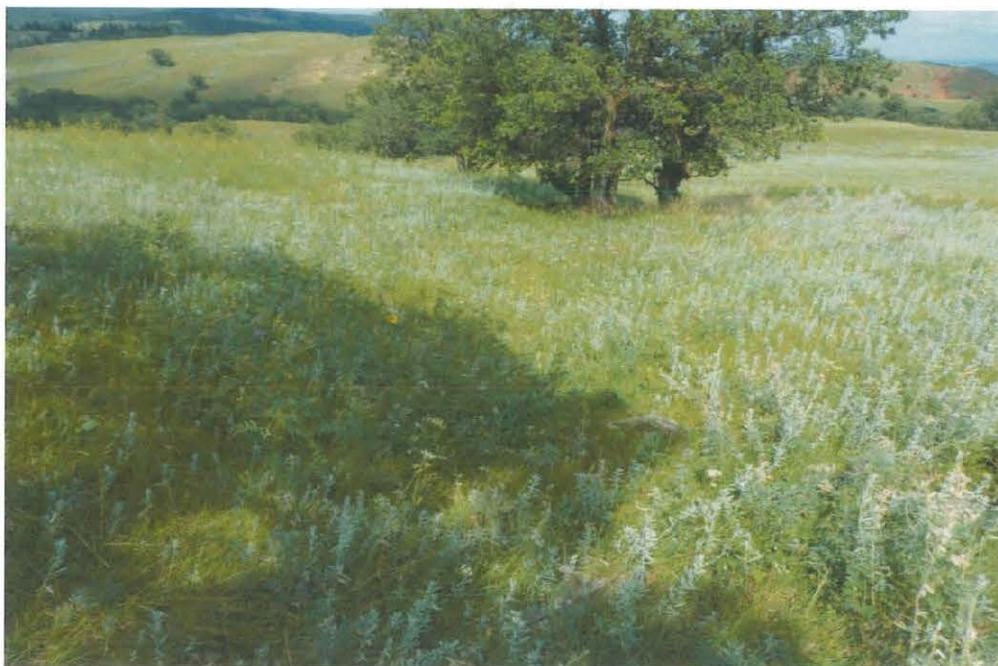


Photo 9: NDBB 4; considered but rejected as potential WUS.



Photo 10: NDBB 5; considered but rejected as potential WUS.