

**U.S. Department of the Interior
Bureau of Land Management**

**Preliminary Environmental Assessment
DOI-BLM-NV-L030-2009-0045-EA
August 3, 2009**

**SR-317 Highway Reconstruction Project
by the
Federal Highway Administration &
Nevada Department of Transportation**

***Location:
Caliente to Elgin, Lincoln County, Nevada***

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This Environmental Assessment (EA) has been prepared to analyze the Nevada Department of Transportation's (NDOT) proposal to reconstruct State Route 317 from Caliente to Elgin in Lincoln County, Nevada. NDOT is acting on behalf of the Federal Highway Administration (FHWA).

The EA is a site-specific analysis of potential impacts that could result with the implementation of the Proposed Action or No Action Alternative. The EA assists the Bureau of Land Management (BLM) in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any "significant" impacts could result from the analyzed actions. "Significance" is defined by NEPA and is found in Chapter 40 of the Code of Federal Regulations (CFR) §§1508.27. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of "Finding of No Significant Impact" (FONSI).

This document is tiered to the *Ely Proposed Resource Management Plan/Final Environmental Impact Statement (RMP/EIS)* released in November 2007. Should a determination be made that implementation of the proposed or alternative actions would not result in "significant environmental impacts" or "significant environmental impacts beyond those already addressed in the RMP/EIS", a FONSI will be prepared to document that determination, and a Decision Record issued providing the rationale for approving the chosen alternative.

1.1 Background:

SR-317 is a rural two-lane highway in Lincoln County, Nevada which begins near Elgin, runs north through Rainbow Canyon and ends at the junction of US-93 in Caliente. The highway is parallel to the Meadow Valley Wash (MVW), crossing it at several locations. Several emergency contracts have been executed since 1975 to repair flood damage to SR-317 caused by MVW peak flow events. The 100-year flood event that occurred January 2005 (which the USGS estimated to be around 8,000 cfs) eroded roadway fill embankments and washed out several sections of highway, resulting in the closure of SR-317. Several reaches of stream channel were altered with an estimated 65% of the riparian vegetation within Rainbow Canyon impacted (Meadow Valley Wash Post-Flood Vegetation Assessment, 2005). Emergency work was performed soon after the flood to repair the road to a serviceable condition; however the highway was not restored to State highway safety standards and several sections still pose a hazard to motorist travel. The close proximity of the highway to MVW at several locations has left the highway susceptible to flood damage even during lower volume peak events.

1.2 Purpose of the Proposed Action:

The BLM's purpose in considering approval of the application to transfer BLM land for the highway reconstruction of SR-317 is to assure it is a legitimate use of the public lands. Legitimate uses are those that are authorized under the Federal Land Policy and Management Act (FLPMA) of 1976, or other Public Land Acts, while preventing undue and unnecessary degradation to the land.

1.3 Need for the Proposed Action:

The need for the proposed project is to reconstruct SR-317 to meet State highway safety standards. The road is technically closed because it does not meet highway safety standards and is rapidly degrading. Forty-one sections of roadway are missing, cracked, undercutting and failing. In addressing this need, acquisition of additional right-of-way is necessary. The BLM's need is to consider approval of the application for right-of-way transfer to allow for the reconstruction of SR-317 as a response to its mandate under the FLPMA to manage the public lands for multiple use in a manner which recognizes the Nation's need for the construction and maintenance of safe highways.

1.4 Conformance with BLM Land Use Plan(s):

This action is in conformance with the Ely Resource Management Plan (August 2008).

1.5 Relationship to Statutes, Regulations, or other Plans:

- The transfer of land from BLM to FHWA for highway purposes is authorized in Title 23 U.S.C. Sections 107(d) and 317 (Title 23).
- This document is prepared for compliance with the National Environmental Policy Act of 1969 (NEPA).
- A Memorandum of Understanding (MOU), November 2007, between NDOT, BLM, and the Federal Highway Administration (FHWA), and the BLM-FHWA Interagency Agreement executed in 1982 defines the roles of each agency in relationship to NEPA and Title 23 land transfers.

The following documents are incorporated by reference:

- NDOT Construction Plans for SR-317 Highway Reconstruction.
- Biological Assessment for this project prepared by NDOT, October 2008.
- Biological Opinion for this project issued by the U.S. Fish and Wildlife Service, File No. 84320-2009-F-0038.
- U.S. Army Corp of Engineers Permit Application (33 CFR 325) for this project submitted January 2009 by NDOT.
- U.S. Army Corp of Engineers Permits (SPK-2008-1451-SG) issued May 2009 for this project.
- Cultural Resources Inventory Negative Report, Federal Antiquities Permit # N-39794, NDOT Report #LN06-013R, BLM Report #CRR 4-1623(N), prepared by NDOT, August 2006.
- Meadow Valley Wash Post-Flood Vegetation Assessment, prepared by Bio-West, Inc. for BLM, September 2005.

1.6 Identification of Issues:

While many issues may arise during scoping, not all of the issues raised warrant analysis. Issues raised through scoping are analyzed if:

- Analysis of the issue is necessary to make a reasoned choice between alternatives.
- The issue is significant (an issue associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of impacts).

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- If there is a disagreement about the best way to use a resource, or resolve an unwanted resource condition, or potentially significant effects of a proposed action or alternative.

Scoping was conducted by an interdisciplinary (ID) team that analyzed the potential consequences of the Proposed Action. Potential impacts to the following resources/concerns were evaluated in accordance with criteria listed above to determine if detailed analysis was required. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the Ely District BLM in particular.

Resource/Concern	Issue(s) Analyzed (Y/N)	Rationale for Dismissal from Detailed Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	N	There would be temporary increased particulate matter (dust) resulting from the Proposed Action. The affected area is not within an area of non-attainment or areas where total suspended particulates or other criteria pollutants exceed Nevada air quality standards. Direct, indirect or cumulative impacts do not approach a level of significance. Detailed analysis is not required.
Cultural Resources	N	A BLM Class III cultural resource survey of this highway was conducted in 1985 (NDOT LN85-016T). Eleven (11) sites were identified and recorded. The 2006 evaluation (NDOT LN06-013R/BLM 4-1263(N)) stated there will be no effect to historic properties and a reevaluation of these properties was reviewed again by NDOT and the Caliente BLM archaeologist in July 2009. Because of their proximity to the project, three sites warranted buffered areas in the Area of Potential Effect (APE). The buffered areas will be staked by NDOT before work begins (under the construction specials), therefore “no historic properties will be affected” (36CFR800.44 (d)(1)).
Forest Health	N	Project does not meet HFRA criteria.
Migratory Birds	Y	The area is a designated Important Bird Area (IBA) and utilized by migratory birds for foraging and nesting.
Rangeland Standards and Guidelines	N	No change.
Native American Religious and other Concerns	N	
FWS Listed or proposed	Y	The site is inhabited by the federally listed endangered

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for listing Threatened or Endangered Species and critical habitat.		southwestern willow flycatcher during their breeding season. Formal Section 7 consultation occurred, resulting in a Biological Opinion that the action is not likely to jeopardize the continued existence of the species. No critical habitat for this species is present.
Areas of Critical Environmental Concern	Y	Project is within the Lower Meadow Valley Wash ACEC.
Wastes, Hazardous or Solid	N	NDOT Hazardous Materials Specialists surveyed the project area in December 2008 and no hazardous materials or waste sites were found. Reportable quantity releases of all hazardous or regulated materials will be reported to federal and state authorities as required by 40 CFR 302.6 as well as NDOT Environmental Services Division. Resultant impacted material will be remediated and/or disposed in accordance with applicable state and federal requirements.
Water Quality, Drinking/Ground	Y	Meadow Valley Wash would be affected by the project.
Environmental Justice	N	No minority or low-income groups would be disproportionately affected by health or environmental effects.
Floodplains	Y	Work will occur within the floodplain.
Farmlands, Prime & Unique	N	Not present.
Wetlands/Riparian Zones	Y	No wetlands are affected by the project. The project would impact 4.8 acres of riparian vegetation adjacent to Meadow Valley Wash.
Invasive Non-native Species	Y	There are several noxious and invasive weed species found in and around the project area. The amount of ground disturbance associated with this project could impact the size and density of these infestations or could serve to introduce new weeds to the area.
Wilderness/WSA	N	Not present. The road provides access to the Clover Mountain Wilderness to the east.
Heritage Special Designations	N	Not present.
Human Health and Safety	N	Safety standards are strictly adhered to during construction to protect the workers and public traveling through the construction zone. Safety meetings occur once a week with all workers on site.
Wild and Scenic Rivers	N	Not Present.
Special Status Species	Y	The Federal candidate species Western yellow-billed cuckoo occurs within the area. BLM sensitive species

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		Meadow Valley Wash desert sucker, Meadow Valley Wash speckled dace, desert bighorn sheep, southwestern toad, Needle Mountains milkvetch, gray vireo, yellow-breasted chat, and Lucy’s warbler occur within the project area.
Fish and Wildlife	Y	Channel re-alignment may affect fish species. Vegetation removal may affect wildlife species.
Wild Horses	N	No herd management areas (HMA) occur within the project area. HMA occur to the North and Herd Areas to the South.
Soils/Watershed	Y	Highway stabilization and restoring the wash to its original channel would have a positive affect on the watershed. Mitigation monies would fund a geomorphological study which contributes to watershed knowledge and baseline information for planning conservation measures.
Visual Resources	N	No VRM designation. The project will not affect the scenic view of Rainbow Canyon. Road re-construction is not introducing additional structures.
Grazing Uses/Forage	N	No change. Project area will exclude cattle during construction. Project will include installation of cattle guards in pre-flood locations.
Land Uses	N	Highway re-construction will be to pre-flood standards, with no additional capacity or change in configuration.
Transportation/Access	Y	Transportation access will improve.
Recreation Uses including Back country Byways, Caves, Rockhounding Areas	N	No change or enhancement. The road is a Backcountry Byway and provides access to recreational areas and points-of-interest. Construction activities would temporarily affect access to recreation areas. Completed project would improve safe travel.
Public Safety	Y	Improved public safety.
Fire Management	N	No change.
Socioeconomics	N	No change.
Paleontological Resources	N	No change.
Water Resources (Water Rights)	N	No change.
Mineral Resources	N	No change.
Vegetative Resources (Forest or Seed Products)	N	Not present.

2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

2.1 Introduction:

In order to meet the purpose and need of the proposed project in a way that resolves the issues, NDOT has evaluated the Proposed Action and No Action Alternative. These alternatives are presented below. The potential environmental impacts or consequences resulting from the project implementation are analyzed in Chapter 3 for each of the identified issues. Maps of the project area are included in Appendix A.

2.2 Alternative A - Proposed Action:

This project would reconstruct portions of SR-317 from Milepost LN 37.1 to 58.1, between Caliente and Elgin in Southern Lincoln County, Nevada. The 21-mile rural 2-lane highway is parallel to MVW at the bottom of Rainbow Canyon. The roadway traverses: T04S R67E, Sections 7, 18, 19; T04S R66E Sections 24, 25, 26, 34, 35; T05S R66E Sections 2, 3, 10, 15, 22, 26, 27, 34, 35; T06S R66E Sections 2, 11, 14, 23, 25, 26, 36; T07S R66E Sections 1, 12; T07S R67E Section 7 MDB&M.

The NDOT Roadway Design Project Team identified 41 locations where the highway sustained damage that was not repaired during the emergency reconstruction project. The work proposed at each location typically includes: reconstruction of embankment slopes; a new pavement structural section; installation of new pipes, culverts, and/or concrete overflow/flowover sections; roadside ditch recreation; and addition of soil cement and/or rip-rap to fill embankments to protect the embankment and roadway from erosion during high flows. The construction staging areas will be within the SR-317 right-of-way and temporary easements. Construction is expected to take one year, from December 2009 to the end of 2010.

This project includes 20 areas with potential to affect to MVW and federally listed species habitat. The location, type of impact, and impacted acreage are described in Appendix B. The effects are associated with MVW channel realignments, roadway embankment construction and reinforcement, and installation of structures where the roadway crosses the wash. Two types of channel realignments are proposed: 1) re-establishing the wash along the roadway embankment and 2) returning the wash to its original channel (pre-2005 flood event). The contractor would determine the specific method of accomplishing the work, following NDOT guidelines for best management practices for working in waterways (BMP).

In general, where the wash would be re-established along the roadway embankment, the water would be isolated in its current location using a combination of soil and silt fence or portable precast concrete barriers (PPCB). When the new lines and grades of the channel are done, the water would be diverted to the newly graded channel area. The diversion structures would remain in place while the remaining excavation takes place with the water now diverted on the other side. The remaining roadway embankment and rip rap work would also be done while the water is diverted. Once the remaining portion of the channel is complete and all improvements are finished, the diversion structures would be removed with a hydraulic excavator from the roadway surface.

Where the wash would be restored back to its original channel, if needed, the original channel would be cleared of debris and minimally graded to allow for low flow conditions. Once the cleanup is done, the wash would be cut over where it jumped from its original channel. This work would be done with the minimal amount of disturbance necessary to allow for water flow in a meandering fashion.

In areas where the wash could be affected by construction or construction is affected by the wash, temporary river diversions would be constructed to isolate the work zone from the waterway. Temporary water crossings may also be installed within the right-of-way if needed to move equipment from one side of the wash to the other. Temporary water diversions and crossings would allow for fish passage. The river diversions and temporary water crossings would follow NDOT Water Quality Standards BMP specifications for installation, maintenance and removal. A temporary river diversion isolates the work zone from river flow. According to NDOT's Water Quality Erosion and Sediment Control Program policy, temporary water pollution controls are not incorporated into the project design as NDOT has developed a "Construction Site Best Management Practices Manual" (BMP Manual). All contracts must conform to the minimum requirements in the BMP Manual since it is part of the contract specifications. Fact sheet NS-5 "Clear Water Diversion" outlines NDOT's minimum requirements for managing flows for construction in or near live water bodies and is available at http://www.nevadadot.com/reports_pubs/StormWater/default.asp.

NDOT engineers anticipate that the river diversions would be created by placing PPCBs wrapped in a layer of impermeable geotextile material on top of a series of large gravel bags beginning upstream from the work zone. Two rows form an artificial channel that extends past the work area, returning to the wash downstream. This provides a dry work area. If necessary, a temporary water crossing may be installed to move large equipment over the stream channel. The crossing would allow for fish passage. Linear sediment controls (i.e. silt fence) would be installed along all disturbed toes of fill/banks to minimize sedimentation into the wash. Dewatering may be required to create a dry work zone. Sediment-impacted water would be treated and discharged downstream of the work zone pursuant to the Nevada Division of Environmental Protection's (NDEP) issued Temporary Working in Waterways/Discharge Permit. NDEP reviews and approves the contractor's Best Management Practices plan before issuing the Temporary Working in Waterways/Discharge Permit.

The appropriate permits to comply with the Section 404 of the Clean Water Act have been obtained from the U.S. Army Corp of Engineers (USACE). An application to obtain Section 401 Water Quality Certification from NDEP has been submitted. The Contractor will obtain a "Stormwater General Permit" and a "Temporary Working in Waterways Permit. Solid waste (e.g. asphalt and concrete) would be removed and disposed of in accordance with applicable laws or regulations.

The project would include the use of an existing 100-acre material site adjacent to the Kane Springs Road 0.5 miles south of Elgin. The site is in T07S, R67E, Section 18, and is identified as LN 09-01 by NDOT and N-60370 and N-52869 by BLM. No excavation

would occur on the north side of the Kane Springs Road to protect cultural resources. The site is in the upland zone and does not contain desert tortoise, southwestern willow flycatcher, or Western yellow-billed cuckoo habitat.

Restoration activities would follow NDOT standard contract specification BMPs for erosion control, clean water standards, and native landscape revegetation. All disturbed areas would be stabilized and revegetated where appropriate.

2.3 Alternative B - No Action:

The highway reconstruction would not occur and the road would continue to degrade. This would result in a permanent road closure. A permanent road closure is not a viable alternative since people live along the road and there is no other access to their homes. Consequently, this action is analyzed within this document as a comparative reference for analysis.

2.4 Alternatives Considered, but Eliminated from Further Analysis:

Since this is a road re-construction project with project funding limitations and requirements as well as right-of-way constraints, NDOT roadway design engineers designed the project to put the roadway back to its pre-flood location as much as possible. Consequently, no additional alternatives were considered.

3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

3.1 Introduction

This chapter presents the potentially affected existing environment (i.e., the physical, biological, social, and economic values and resources) of the impact area.

3.2 General Setting

SR-317 is a 21-mile road segment from Caliente south to Elgin in Lincoln County Nevada. The road parallels MVW in Rainbow Canyon. A Union Pacific Railroad line also shares the valley bottom. Adjoining land is checkerboard public and private ownership (see maps in Appendix A). The road is a scenic route and designated BLM Backcountry Byway with viewing opportunities for wildlife, historic sites, and access to recreational opportunities including, hiking, climbing, and OHV use. It provides access to Kershaw-Ryan State Park, a few homes, several ranches with agricultural fields and cattle grazing operations, a motocross dirt track south of Elgin, a gypsum mine, and an organic orchard.

The project is within the Lower Meadow Valley Wash Watershed of the Colorado River Basin hydrographic region. Springs, drainages, and irrigation ditches flow into and out of the main MVW channel. Rainbow Canyon is flanked by the Clover Mountains to the east and the Delamar Mountains to the west.

The project spans the transition from Woodland and Shrub-Covered Low Mountains of the Central Basin and Range to Mojave High Elevation Mountains of the Mojave Basin and Range Ecoregions. The valley bottom is riparian, dominated by willow and cottonwood, along MVW transitioning to upland vegetation, with the highway traversing elevations from 3425' to 3785' within both zones. Adjacent upland vegetation is dominated by sagebrush, transitioning to pinyon-juniper woodlands mid-slope on both sides of the canyon. The area is utilized by a wide range of migratory and resident fauna, including aquatic, reptilian, amphibian, mammalian, and avian species.

3.3 Resources/Concerns Analyzed

3.3.1 Resource 1: Migratory Birds.

3.3.1.1 Affected Environment.

The Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703-711) protects all native birds found commonly in the United States, with the exception of native game birds. Executive Order 13186, signed January 10, 2001, directs federal agencies to protect migratory bird species by integrating bird conservation principles, measures, and practices.

Species protected by the MBTA with a potential to occur within or near the project area include: lesser nighthawk (*Chordeiles acutipennis*), common poorwill (*Phalaenoptilus nuttallii*), white-throated swift (*Aeronautes saxatalis*), black-chinned hummingbird (*Archilochus alexandri*), ladder-backed woodpecker (*Picoides scalaris*), Northern flicker (*Colaptes* sp.), Say's phoebe (*Sayornis saya*), ash-throated flycatcher (*Myiarchus cinerascens*), Cassin's kingbird (*Tyrannus vociferans*), Western kingbird (*Tyrannus verticalis*), Bell's vireo (*Vireo bellii*), gray vireo (*Vireo vicinior*), Western scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), violet-green swallow (*Tachycineta thalassina*), cliff swallow (*Petrochelidon pyrrhonota*), verdin (*Auriparus flaviceps*), rock wren (*Salpinctes obsoletus*), canyon wren (*Catherpres mexicanus*), Bewick's wren (*Thryomanes bewickii*), blue-gray gnatcatcher (*Polioptila caerulea*), American robin (*Turdus migratorius*), Northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), Lucy's warbler (*Vermivora luciae*), yellow warbler (*Dendroica petechia*), yellow-rumped warbler (*Dendroica coronata*), common yellowthroat (*Geothlypis trichas*), yellow-breasted chat (*Icteria virens*), summer tanager (*Piranga rubra*), western tanager (*Piranga ludoviciana*), spotted towhee (*Pipilo maculatus*), black-chinned sparrow (*Spizella atrogularis*), black-throated sparrow (*Amphispiza bilineata*), song sparrow (*Melospiza melodia*), black-headed grosbeak (*Pheucticus melanocephalus*), blue grosbeak (*Guiraca caerulea*), Lazuli bunting (*Passerina amoena*), red-winged blackbird (*Agelaius phoeniceus*), Western meadowlark (*Sturnella neglecta*), yellow-headed blackbird (*Xanthocephalus xanthocephala*), great-tailed grackle (*Quiscalus mexicanus*), brown-headed cowbird (*Molothrus ater*), Bullock's oriole (*Icterus bullockii*), house finch (*Carpodacus mexicanus*), lesser goldfinch (*Carduelis psaltria*), and house sparrow (*Passer domesticus*). The aforementioned species were recorded on the Meadow Valley North American Breeding Bird Survey Route, which is located near the project area (Sauer et al. 2008). Additionally, MVW is a designated Important Bird Area of Nevada that provides habitat and a migration corridor

for riparian and desert species. The wash contains habitat for year-round residents, seasonal breeding birds, and migrants.

3.3.1.2 Impact Analysis

Removal of vegetation, riparian vegetation in particular, would affect the foraging, nesting, and potentially breeding, habits of birds in the project area. A total of 4.8 acres of riparian vegetation would be removed as a result of this project. Vegetation removal in riparian and upland areas would occur within the highway right-of-way to accommodate construction activities, including highway shoulder reconstruction, bank stabilization, and stream channel realignment. This vegetation removal would occur outside of avian bird nesting season (April 1 to August 31) to minimize impacts to resident and migratory birds.

Based on the rapid regeneration of willows following the 2005 flood, it is anticipated that the willows would naturally regenerate along MVW. NDOT biologists would monitor the project area for 3 years. If, after the first year, it appears that regeneration is not occurring naturally, NDOT would conduct restoration activities to revegetate where possible. Soil cement is being used for steep slope embankment reinforcement and erosion control, so these areas would not have vegetation.

3.3.2 Resource 2: Threatened and Endangered Species.

3.3.2.1 Affected Environment.

This project is within the Pahrnagat Management Unit of the Lower Colorado Recovery Unit for the southwestern willow flycatcher (*Empidonax traillii extimus*), (SWFL) a species federally listed as Endangered. Surveys conducted since 1996 indicate the presence of birds within the project area during breeding and nesting season (May through August).

FHWA, as the lead federal agency with the U.S. Army Corp of Engineers (USACE) as a cooperating agency, initiated Section 7 consultation with the U.S. Fish and Wildlife Service (FWS) in September 2008. The Biological Assessment submitted to the FWS describes surveys, details project effects as well as the avoidance, minimization and mitigation measures which are part of the project's scope of work. No designated critical habitat for SWFL occurs within the project area.

3.3.2.2 Impact Analysis.

A total of 4.80 acres of suitable and potential riparian habitat for the SWFL would be affected by this project. Within the areas of disturbance, 2.84 acres are suitable SWFL habitat, 1.75 is adjacent to suitable habitat, and 0.21 acres is potential habitat. The Biological Assessment found that the project may affect, and was likely to adversely affect, the SWFL through indirect effects of riparian habitat removal. In March 2009, the FWS issued a Biological Opinion (84320-2009-F-0038), with a finding that the proposed project was not likely to jeopardize the continued existence of the SWFL. This conclusion is based on the following:

- Riparian vegetation removal would occur when the flycatchers are not expected to be in the area.
- Most of the habitat to be disturbed by the project is anticipated to naturally recover.
- The project area consists of an existing road with adjacent habitat previously disturbed from the 2005 flood event, thus flycatcher habitat affected by this project is not optimal habitat at present time.

In addition, NDOT is funding a project to benefit the SWFL and its habitat in the vicinity of the project (\$12,000 per acre of riparian habitat disturbance - \$57,600).

3.3.3 Resource 3: Areas of Critical Environmental Concern (ACEC).

3.3.3.1 Affected Environment.

This project is within the newly created Lower Meadow Valley Wash ACEC. For this ACEC, the Ely RMP states “road maintenance is limited to the designated roadway; shoulder borrow/ditch construction is [to] be limited to only that necessary to ensure public safety and serviceability of the road.”

3.3.3.2 Impact Analysis.

The roadway reconstruction is designed to meet highway safety standards at the pre-flood level. No additional capacity, widening, or change of alignment is proposed. This project meets the Ely RMP requirement for road maintenance within the ACEC.

3.3.4 Resource 4: Special Status Species.

3.3.4.1 Affected Environment.

The following BLM sensitive species could occur in Rainbow Canyon and may be affected by this project: Meadow Valley Wash desert sucker (*Catostomus clarki* ssp.), Meadow Valley Wash speckled dace (*Rhinichthys osculus* ssp.), desert bighorn sheep (*Ovis canadensis nelsoni*), southwestern toad (*Bufo microscaphus*), Needle Mountains milkvetch (*Astragalus eurylobus*), gray vireo (*Vireo vicinior*), yellow-breasted chat (*Icteria virens*), and Lucy’s warbler (*Vermivora luciae*). The federal candidate species, Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), also occurs in Rainbow Canyon.

Yearly surveys conducted by NDOW indicate that a high density of Meadow Valley Wash desert suckers inhabit the wash, particularly near the central channel realignment. Detailed species information, survey data, and references are included in the Biological Assessment.

3.3.4.2 Impact Analysis.

Measures to minimize impacts to the gray vireo, yellow-breasted chat, Lucy’s warbler, and Western yellow-billed cuckoo are reflected in the Migratory Birds section above.

The Meadow Valley Wash desert sucker, Meadow Valley Wash speckled dace, and southwestern toad would be impacted in the 3 channel realignment areas. To minimize effects, channel realignment activities, including river diversions and dewatering operations would not be done during fish spawning season (March 15 to May 30).

NDOT would contact NDOW fisheries biologists prior to channel dewatering to determine if a fish salvage operation should be performed. If warranted, the fish salvage operation would be coordinated and carried out by NDOW with NDOT and other agency personnel assistance.

Desert bighorn sheep may be displaced or avoid the area during construction. The Meadow Valley Wash drainage itself is probably not utilized frequently by desert bighorn sheep. The elevation ranges listed for the plant Needle Mountains milkvetch (4600-5750 feet) are somewhat higher than the elevation of the project area, therefore, the plant may not occur within the project area.

3.3.5 Resource 5: Fish and Wildlife.

3.3.5.1 Affected Environment.

The area provides habitat for a wide range of animals, including mule deer (*Odocoileus hemionus*), coyotes (*Canis latrans*), kit fox (*Vulpes macrotis*), bobcats (*Lynx rufus*), and mountain lions (*Felis concolor*). The canyon bottom is year-round habitat for mule deer with both sides of the canyon considered crucial summer range by NDOW.

3.3.5.2 Impact Analysis.

This project may have a temporary spatial effect on deer movement patterns since deer may avoid areas near construction sites. The use of riprap and soil-cement for roadway embankment reinforcement and stabilization are not ‘wildlife friendly’ from the perspective of wildlife utilization. However, it would create a wider clear zone adjacent to the roadway, which improves sight distance for motorists. It also would discourage animals from lingering adjacent to the road. This may result in fewer animals killed by vehicles on the roadway.

3.3.6 Resource 6: Riparian Zones.

3.3.6.1 Affected Environment.

The project spans the transition from Woodland and Shrub-Covered Low Mountains of the Central Basin and Range to Mojave High Elevation Mountains of the Mojave Basin and Range Ecoregions. The valley bottom is riparian transitioning to upland vegetation, with the highway traversing elevations from 3425’ to 3785’ within both zones.

Bio-West Inc. published a “Meadow Valley Wash Post-flood Vegetation Assessment” for the BLM in September 2005. Their study area covered 85 miles from 1 mile north of Caliente to the confluence of Meadow Valley Wash and the Muddy River near Glendale, Nevada. The vegetation types in the project area include the following riparian vegetation types: arrowweed shrubland, bush seepweed shrubland, cattail marsh, coyote willow shrubland, desert willow shrubland, Fremont cottonwood forest, mixed marsh, mixed wet meadow, red willow forest and shrubland, riparian forest, riparian forest tamarisk woodland mix, saltgrass grassland, seepwillow shrubland, and tamarisk woodland.

3.3.6.2 Impact Analysis.

A loss of 4.8 acres of riparian habitat would occur as a result of this project. This acreage is distributed in segments along the 21 mile length of the project. The largest contiguous disturbances are the channel realignments, which should have some natural vegetation regeneration after the project is completed. The project would perpetuate and expand the existing habitat fragmentation caused by the highway, widening the linear width of disturbance since the roadway and the embankment would not support vegetation. Appendix B describes the locations and area of habitat loss in detail.

3.3.7 Resource 7: Noxious and Invasive Weed Infestations.

3.3.7.1 Affected Environment.

The following Nevada State Listed noxious weeds (NRS 555) occur along MVW within Rainbow Canyon:

<i>Centaurea stoebe</i>	Spotted knapweed
<i>Conium maculatum</i>	Poison hemlock
<i>Lepidium draba</i>	Hoary cress
<i>Lepidium latifolium</i>	Tall whitetop
<i>Onopordum acanthium</i>	Scotch thistle
<i>Tamarix spp.</i>	Salt cedar
<i>Tribulus terrestris</i>	Puncturevine

The following non-native, invasive weeds occur along MVW within Rainbow Canyon:

<i>Bromus diandrus</i>	Ripgut brome
<i>Bromus tectorum</i>	Cheatgrass
<i>Cirsium vulgare</i>	Bull thistle
<i>Convolvulus arvensis</i>	Field bindweed
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Erodium cicutarium</i>	Filaree
<i>Kochia scoparia</i>	Kochia
<i>Marrubium vulgare</i>	Horehound
<i>Salsola kali</i>	Russian thistle
<i>Sysimbrium altissimum</i>	Tumble mustard
<i>Tragopogon dubius</i>	Yellow salsify
<i>Verbascum thapsus</i>	Common mullein

3.3.7.2 Impact Analysis.

Disturbance of native soils and vegetation allows opportunistic invasive or noxious weed species to invade. If these species are not controlled, they may prevent reestablishment of native species in the disturbed areas in addition to moving into undisturbed areas and out-competing the native vegetation. The likelihood of invasive or noxious weed invasion

increases if weeds species are present on adjacent sites or if seeds are transported from an invaded area to a disturbed area by equipment or soil movement.

Some salt cedar would be removed as a consequence of roadway construction, however this project does not include specific salt cedar removal components due to the potential of increased effect to SWIFL habitat. The contractor would be required to develop a Noxious & Invasive Weed Management Plan for this project, which would include weed identification, control, and monitoring as well as following best management practices to prevent weed introduction and spread. The NDOT contracts with Tri-County Weed Control for yearly noxious weed surveys and treatment in Lincoln County, including along SR-317.

3.3.8 Resource 8: Watershed: Hydrology, Floodplain, and Water Quality.

3.3.8.1 Affected Environment.

The MVW is an intermittent waterway whose headwaters originate from the Wilson Creek Range and the White Rock Mountains north of Pioche. The MVW flows in a southerly direction over 180 river miles before discharging into the Muddy River near Glendale, which in turn discharges into Lake Mead east of Las Vegas in Clark County. The MVW resides in the Lower Colorado Region hydrologic unit (HUC 15010013) within a watershed estimated at 2540 mi². Tributaries to the MVW include Clover Creek, Cottonwood Wash and Antelope Canyon. Flood capacity has decreased along several reaches of the MVW, which can be attributed (in part) to the placement of highway (state and county), railroad and municipal infrastructure. Other impacts to the wash include flow diversions for agricultural activities and numerous beaver-constructed impoundments.

The average annual discharge of the MVW is about 9.9 ft³/s (cfs), ranging from 2.6 cfs in September to 32 cfs in March.¹ Recorded annual peak discharges range from 4.1 to 8,000 cfs. The MVW is subject to periodic flooding, with 13 stream flow events \geq 1,000 cfs recorded since 1951, including the 2005 flood event which resulted in an estimated peak discharge of 8,000 cfs.²

The section of the MVW between Caliente and Rox was added to Nevada's 2006 303(d) List of Impaired Waters for boron, total phosphorus and water temperature, all of which are designated as low priorities for TMDL development.

3.3.8.2 Impact Analysis.

NDOT's project design entails reconstructing SR-317 back to its pre-2005 flood alignment, installing hydraulic upgrades and enhancing flood protection. Construction activities would impact the MVW, Acklin Canyon Drainage (ephemeral tributary to the MVW) and two springs/seeps (intermittent/perennial tributaries to the MVW). Hydraulic work would consist of removing and replacing corrugated metal pipe (CMPs), installing RCB/dip section overflow sections, installing road embankment protection,

¹ Stream flow data was obtained from USGS stream gage #09418500.

² USGS Fact Sheet 2006-3124, October 2005

placement of riprap and stream channel reconstruction (including the installation of meandering, low flow channels for energy dissipation). The 10-year design event (~2000 cfs) was used as the point of reference for roadway slope protection and the start of stream overflow at the RCB/dip section overflow areas.

Construction activities and resultant post-construction conditions are expected to have minimal impacts to water quality. Pulsed sediment plumes could be released during the installation and removal of temporary stream diversion structures. Stream flows within newly constructed stream channel areas could experience increases in sediment concentration until channel stability is achieved. Construction equipment fluids could enter the waterways via equipment leaks. At a minimum, the contractor would be required to select and install BMP's illustrated in NDOT's "Storm Water Quality Construction Site Best Management Practices Manual" to prevent (or reduce to the maximum extent practical) construction site stormwater discharge (http://www.nevadadot.com/reports_pubs/Water_Quality/). The Contractor would obtain a Construction Stormwater Permit and a Temporary Working in Waterways/Discharge Permit issued by NDEP, Bureau of Water Pollution Control. The Contractor would develop and implement a stormwater pollution prevention plan (SWPPP). A BMP plan would also be developed specifically addressing temporary stream diversions.

Stormwater runoff from SR-317 would occur as sheet flow and, in most cases, is expected to infiltrate into adjacent soil areas or evaporate rather than discharge into the MVW. Opportunities for stormwater runoff would be limited due to low average annual precipitation (8.78 in.) and associated measureable precipitation frequency (average annual number of days where precipitation is ≥ 0.10 in. is 25).³ However, stormwater discharge from SR-317 entering receiving waters could contain pollutants such as sediment, metals, hydrocarbons, pesticides and inorganic nutrients.

Static groundwater levels near the project area range 4-141ft.⁴ with an average of 30 ft. Groundwater is primarily utilized for irrigation, domestic, recreation and monitoring purposes. Precipitation and underflow from Lake Valley constitute the primary groundwater inputs.⁵ Localized, temporary groundwater drawdown may occur as a result of pumping for construction purposes; however long term impacts to groundwater resources are not anticipated.

3.3.9 Resource 9: Transportation and Public Safety.

3.3.9.1 Affected Environment.

The roadway, as it exists right now, is a public safety hazard. Forty-one segments of road are damaged, including places where the asphalt is missing or undercut, cracked, and falling down. Although the road is technically closed, local residents and railroad personnel need to use it for access to areas within the canyon. The road has a low volume

³ Precipitation data obtained from the Western Regional Climate Center "Caliente" station and the National Oceanic and Atmospheric Administration Precipitation Frequency Atlas 14.

⁴ Nevada Division of Water Resources Well Log Database

⁵ Ground-Water Resources – Reconnaissance Series Report 27, USGS, July 1964

of use, but it is the only access to the area between Caliente and Elgin. Kane Springs Road, an improved gravel road, connects SR-317 to US 93 south of Alamo. This route is used as a short-cut for people travelling from Caliente to Las Vegas or Mesquite.

3.3.9.2 Impact Analysis.

Reconstruction of the roadway would improve the transportation system in this area, bring the roadway up to State highway safety standards so that it can be re-opened to the public and eliminate the public safety hazards that presently exist.

4.0 CUMULATIVE IMPACTS

4.1 Introduction

As required under NEPA and the regulations implementing NEPA, this section analyzes potential cumulative impacts from past, present, and reasonably foreseeable future actions combined with the Proposed Action within the area analyzed for impacts in Chapter 3 specific to the resources for which cumulative impacts may be anticipated. A cumulative impact is defined as “the impact which results from the incremental impact of the action, decision, or project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 Code of Federal Regulations 1508.7).

4.2 Past Present and Reasonably Foreseeable Future Actions

Past Actions: Union Pacific Rail line reconstruction and improvements in Rainbow Canyon removed upland and riparian vegetation.

The creation of the Lower Meadow Valley Wash ACEC was created to provide additional protection to wildlife and habitat.

Present Actions: Condor Canyon Habitat Management Plan upstream of Caliente was created to maintain viable native fish populations and their habitat.

The Ely BLM District Integrated Weed Management Plan identifies actions to be taken on BLM land to prevent and control the spread of noxious weeds. NDOT has a contract with Tri-County Weed Control to monitor, survey, and treat noxious weed infestations in Lincoln, Nye, White Pine, and Clark Counties.

The BLM issues OHV Special Recreation Permits (SRPs) in addition to OHV casual use by the public.

Reasonable Foreseeable Future Actions: Lincoln County is working on acquiring right-of-way between Elgin and Rox so that they can repair and maintain the road in this location. Meadow Valley Gypsum Mine south of Elgin may increase operations. Fixing and re-opening the road would make the area more accessible to the recreational public

and people travelling between Las Vegas and Caliente. The number of OHV SRPs may increase. Guzzlers for wildlife use will be constructed in the mountains flanking the canyon. Department of Energy (DOE) has proposed a rail line upstream of this project.

4.3 Cumulative Impact Analysis

4.3.1 Resource/Concern 1: Fish and Wildlife, including Threatened and Endangered Species, Special Status Species, and Migratory Birds.

This area was severely affected by the 2005 flood and the subsequent railroad and highway emergency reconstruction. The greatest disturbance was to the riparian vegetation, and consequently, southwestern willow flycatcher and yellow-billed cuckoo habitat. This project would create additional disturbances. In the Biological Assessment, the habitat designation and disturbance was based on the 2003 pre-flood survey classification. So, the 2.84 of the 4.80 acres of habitat removal represents areas where suitable habitat once occurred. In reality, it's a mixture of suitable habitat and potential habitat making its way back to suitable habitat, which is classified as disturbed habitat in the 2005 vegetation assessment. Regardless of habitat classification, the project would affect 4.80 acres of habitat, of which 1.80 acres would be permanently affected by construction.

All projects within the area, including the proposed DOE rail line, create habitat loss and fragmentation. The construction activities harass wildlife, and can cause them to change their movement patterns, adding additional stressors to their existence, which makes them more vulnerable to disease and predation. Although these affects are temporary, they are cumulative and can reduce overall population densities in the immediate area.

This is a highway reconstruction project designed to bring an existing roadway up to highway safety standards, not a new highway. The roadway use will continue regardless of whether this project is completed or not. Once construction is completed, however, it is likely more people would access the area. More people may mean more harassment of wildlife, particularly if OHV use increases and the vehicles have access to the wash. On the positive side, the bank reinforcement would discourage vehicles from leaving the roadway, preserving habitat.

On a broader scale, the Pahrnagat Wildlife Refuge to the West maintains riparian and wetland habitat for wildlife, including SWFL. The Meadow Valley Wash Technical Review Team is coordinating activities, conducting research, and compiling information on resources within the watershed which would assist in developing conservation strategies that benefit wildlife, riparian, and water resources.

This proposed project does add to the cumulative impacts affecting wildlife during construction. However, it is a pre-existing roadway, and this project does not change that condition, and construction activities are scheduled to minimize direct effects to sensitive fish and avian species. Only 1.80 acres of non-contiguous riparian habitat will be permanently affected by this project. Consequently the cumulative effects of this project in conjunction with the past, present, and future actions does not pose a threat to the long-term viability of fish or wildlife species in the area.

4.3.2 Resource/Concern 2: Noxious and Invasive Weeds.

The cumulative effects of land disturbance are loss of native vegetation to bare ground, which creates a niche for invasive species establishment. In Nevada, cheatgrass and Russian thistle, both annual invasive species, readily colonize disturbed sites. These species are more fire-prone than native perennial grasses and shrubs, increasing fire frequency and intensity. Generally, invasive species do not provide adequate forage or cover for wildlife, rendering areas less suitable for wildlife. Since invasive species spread easily, their establishment along disturbed areas like roadways and cleared areas can also increase the likelihood of weed infestations spreading along into undisturbed lands.

The rise in noxious weed infestations and their capacity to out-compete native vegetation has created a need for increased noxious weed management efforts. Land management agencies, including BLM and NDOT have developed noxious and invasive weed management plans which coordinate detection, control, and monitoring activities. This area is monitored and treated for noxious weeds by NDOT and that work will continue during and after the project. Consequently it is unlikely this project will contribute to the introduction of new noxious weeds into the area.

4.3.3 Resource/Concern 3: Public Safety and Transportation.

NDOT’s primary objective is to construct and maintain safe transportation systems. The cumulative impact of more traffic on a roadway is a greater need to maintain the roadway for public safety. Although this roadway has low traffic volume, it is a State Route under NDOT jurisdiction and subject to State highway safety standards. It also serves as access to homes, businesses, and recreational facilities. The cumulative effect of not reconstructing the road is a degradation of the roadway and an increased risk to public safety since people are using the road even though it is technically closed. Reconstructing the road improves the transportation system and improves public safety on and along the roadway. This project has a positive cumulative effect on the improvement of the transportation system in Lincoln County for the benefit of the local residents as well as the travelling public.

5.0 CONSULTATION AND COORDINATION

5.1 Persons, Groups and Agencies Consulted

Name	Purpose & Authority for Consultation	Findings and Conclusions
Nevada State Historic Preservation Office (SHPO)	Consultation for undertakings as required by the National Historic Preservation Act (16 USC 1531)	The cultural survey report was sent to SHPO in August 2006 with a determination of no adverse effect. No response was received within 30 days from the submission of any of the reports. Consultation is therefore considered to be closed.
U.S. Fish & Wildlife Service	Endangered Species Act Section 7 Formal Consultation	Biological Opinion issued in March 2009 (84320-2009-F-0038), with a non-jeopardy finding.
U.S. Army Corp of Engineers	Clean Water Act Section 404 Permit for impacts to Waters of the U.S.	Corp issued Nationwide 03, 14, 18 Permits, May 2009.

5.2 List of Preparers

5.2.1 BLM:

Name	Title	Responsible for the Following Section(s) of this Document
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Joseph M. David	Planning & Environmental Coordinator	NEPA Compliance
Alicia Styles	Wildlife Biologist	Threatened & Endangered Species, Migratory Birds, ACEC, Fish & Wildlife, Protected Species
Melanie Peterson	Environmental Protection Specialist /HazMat/Safety	Public Safety, Hazardous Materials
Bonnie Million	Noxious Weed Specialist	Noxious Weeds
Zachary Peterson	Forester	Forestry & Riparian
Shirley Johnson	Rangeland Management Specialist	Rangeland
Dave Jacobson	District Wilderness Planner	Wilderness
Lynn Wulf	Archaeologist	Cultural Resources
Mark D'Aversa	Hydrologist	Soils, Water Quality, Floodplains, Riparian/Wetlands

5.2.2 Non-BLM

Name	Title	Responsible for the Following Section(s) of this Document
Lori Bellis	Project Lead, NDOT	Biological Resources & Document Preparation
James Murphy	Water Quality Specialist, NDOT	Water Quality, Hydrology, Floodplain
Rob Piekarz	Hazardous Materials Specialist, NDOT	Hazardous Materials
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Halana Salazar	PLS, Manager, Right-of-Way Engineering, NDOT	Right-of-Way
Steve Bird	P.E., Senior Roadway Design Engineer, NDOT	Project Design, Transportation, Public Safety
Cliff Creger	Senior Archaeologist & Cultural Resource Manager, NDOT	Cultural Resources
Jim Bunch	Archaeologist, NDOT	Cultural Resources
Patricia Brisbin	Socio-economic Specialist & NEPA coordinator	Document Review

5.3 Additional Contacts

Name	Title	Agency
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Christy Klinger	Wildlife Biologist	NDOW
Christiana Manville	Biologist	USFWS
Michael Burroughs	Biologist	USFWS
Amy LaVoie	Biologist	USFWS
Patricia McQueary	Chief	US Army Corp of Engineers
Eric Miskow	Biologist	NNHP

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6.2 Acronyms

BLM-Bureau of Land Management
BMP-Best Management Practice
CFR-Code of Federal Regulations
DR-Decision Record
EA-Environmental Assessment
EIS-Environmental Impact Statement
ESA-Endangered Species Act
FHWA-Federal Highway Administration
FLPMA-Federal Land Policy and Management Act
FONSI-Finding of No Significant Impact
FWS – Fish and Wildlife Service
ID-Interdisciplinary
IM-Instructional Memorandum
MTBA-Migratory Bird Treaty Act
NDOT-Nevada Department of Transportation
NDEP-Nevada Division of Environmental Protection
NDOW-Nevada Department of Wildlife
NEPA-National Environmental Policy Act
NNHP-Nevada Natural Heritage Program
RMP-Resource Management Plan
USACE – Army Corp of Engineers
USGS-U.S. Geological Survey

**Finding of No Significant Impact
For
SR-317 Highway Reconstruction Project
by the
Federal Highway Administration &
Nevada Department of Transportation
DOI-BLM-NV-L030-2009-0045-EA**

Introduction

This project would reconstruct portions of SR-317 from Milepost LN 37.1 to 58.1, between Caliente and Elgin in Southern Lincoln County, Nevada. The 21-mile rural 2-lane highway is parallel to MVW at the bottom of Rainbow Canyon. The roadway traverses: T04S R67E, Sections 7, 18, 19; T04S R66E Sections 24, 25, 26, 34, 35; T05S R66E Sections 2, 3, 10, 15, 22, 26, 27, 34, 35; T06S R66E Sections 2, 11, 14, 23, 25, 26, 36; T07S R66E Sections 1, 12; T07S R67E Section 7 MDB&M.

The NDOT Roadway Design Project Team identified 41 locations where the highway sustained damage that was not repaired during the emergency reconstruction project. The work proposed at each location typically includes: reconstruction of embankment slopes; a new pavement structural section; installation of new pipes, culverts, and/or concrete overflow/flowover sections; roadside ditch recreation; and addition of soil cement and/or rip-rap to fill embankments to protect the embankment and roadway from erosion during high flows. The construction staging areas will be within the SR-317 right-of-way and temporary easements. Construction is expected to take one year, from December 2009 to the end of 2010.

This project includes 20 areas with potential to affect to MVW and federally listed species habitat. The location, type of impact, and impacted acreage are described in Appendix B. The effects are associated with MVW channel realignments, roadway embankment construction and reinforcement, and installation of structures where the roadway crosses the wash. Two types of channel realignments are proposed: 1) re-establishing the wash along the roadway embankment and 2) returning the wash to its original channel (pre-2005 flood event). The contractor would determine the specific method of accomplishing the work, following NDOT guidelines for best management practices for working in waterways (BMP).

In general, where the wash would be re-established along the roadway embankment, the water would be isolated in its current location using a combination of soil and silt fence or portable precast concrete barriers (PPCB). When the new lines and grades of the channel are done, the water would be diverted to the newly graded channel area. The diversion structures would remain in place while the remaining excavation takes place with the water now diverted on the other side. The remaining roadway embankment and rip rap work would also be done while the water is diverted. Once the remaining portion

of the channel is complete and all improvements are finished, the diversion structures would be removed with a hydraulic excavator from the roadway surface.

Where the wash would be restored back to its original channel, if needed, the original channel would be cleared of debris and minimally graded to allow for low flow conditions. Once the cleanup is done, the wash would be cut over where it jumped from its original channel. This work would be done with the minimal amount of disturbance necessary to allow for water flow in a meandering fashion.

In areas where the wash could be affected by construction or construction is affected by the wash, temporary river diversions would be constructed to isolate the work zone from the waterway. Temporary water crossings may also be installed within the right-of-way if needed to move equipment from one side of the wash to the other. Temporary water diversions and crossings would allow for fish passage. The river diversions and temporary water crossings would follow NDOT Water Quality Standards BMP specifications for installation, maintenance and removal. A temporary river diversion isolates the work zone from river flow. According to NDOT's Water Quality Erosion and Sediment Control Program policy, temporary water pollution controls are not incorporated into the project design as NDOT has developed a "Construction Site Best Management Practices Manual" (BMP Manual). All contracts must conform to the minimum requirements in the BMP Manual since it is part of the contract specifications. Fact sheet NS-5 "Clear Water Diversion" outlines NDOT's minimum requirements for managing flows for construction in or near live water bodies and is available at http://www.nevadadot.com/reports_pubs/StormWater/default.asp.

NDOT engineers anticipate that the river diversions would be created by placing PPCBs wrapped in a layer of impermeable geotextile material on top of a series of large gravel bags beginning upstream from the work zone. Two rows form an artificial channel that extends past the work area, returning to the wash downstream. This provides a dry work area. If necessary, a temporary water crossing may be installed to move large equipment over the stream channel. The crossing would allow for fish passage. Linear sediment controls (i.e. silt fence) would be installed along all disturbed toes of fill/banks to minimize sedimentation into the wash. Dewatering may be required to create a dry work zone. Sediment-impacted water would be treated and discharged downstream of the work zone pursuant to the Nevada Division of Environmental Protection's (NDEP) issued Temporary Working in Waterways/Discharge Permit. NDEP reviews and approves the contractor's Best Management Practices plan before issuing the Temporary Working in Waterways/Discharge Permit.

The appropriate permits to comply with the Section 404 of the Clean Water Act have been obtained from the U.S. Army Corp of Engineers (USACE). An application to obtain Section 401 Water Quality Certification from NDEP has been submitted. The Contractor will obtain a "Stormwater General Permit" and a "Temporary Working in Waterways Permit. Solid waste (e.g. asphalt and concrete) would be removed and disposed of in accordance with applicable laws or regulations.

The project would include the use of an existing 100-acre material site adjacent to the Kane Springs Road 0.5 miles south of Elgin. The site is in T07S, R67E, Section 18, and is identified as LN 09-01 by NDOT and N-60370 and N-52869 by BLM. No excavation would occur on the north side of the Kane Springs Road to protect cultural resources. The site is in the upland zone and does not contain desert tortoise, Southwestern Willow Flycatcher, or Western Yellow-billed Cuckoo habitat.

Restoration activities would follow NDOT standard contract specification BMPs for erosion control, clean water standards, and native landscape revegetation. All disturbed areas would be stabilized and revegetated where appropriate.

Finding of No Significant Impact

Based on the analysis of potential environmental impacts contained in EA DOI-BLM-NV-L030-2009-0045-EA, I have determined that the Proposed Action, as described in the EA, will not significantly affect the quality of the human environment and that an Environmental Impact Statement (EIS) is not required prior to approval of the proposed reconstruction of SR-317.

This finding is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27 with regard to the context and the intensity of impacts as discussed in the EA.

Context

The BLM has the authority to transfer land from BLM to FHWA for highway purposes as authorized in Title 23 U.S.C. Sections 107(d) and 317 (Title 23).

Intensity:

1) Impacts that may be both beneficial and adverse: The Environmental Assessment has analyzed and disclosed both beneficial and adverse impacts of the Proposed Action. These impacts combined do not amount to any significant impacts.

2) The degree to which the Proposed Action affects public health or safety: The Proposed Action does not affect public health or safety either adversely or in a significantly beneficial manner. Safety standards will be strictly adhered to during construction to protect the workers and public traveling through the construction zone. Safety meetings will occur once a week with all workers on site.

3) Unique characteristics of the geographic area such as proximity to historical or cultural resources, parks lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: There are no parks lands, prime farmlands, wild and scenic rivers, or wetlands within the Proposed Action site. The project would impact 4.8 acres of riparian vegetation adjacent to Meadow Valley Wash. Though the project will occur within the Lower Meadow Valley Wash ACEC, no additional capacity, widening, or

change of alignment is proposed. Historic and cultural resources identified in the proposed area were reviewed and analyzed. No effects to unique characteristics of the geographic area such as proximity to historic or cultural resources were identified.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial: Effects on the quality of the human environment from the Proposed Action are not likely to be controversial. The proposed highway reconstruction is located along a previously-disturbed area, would not interfere long-term with the current use of public lands in the region, and is in conformance with the designated land use.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks: No unknown risk or potential risks have been identified for the proposed highway reconstruction.

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The Proposed Action is in conformance with current BLM policies and management direction and is not expected to set a precedent or establish principals for future projects beyond those which are currently in place. Any future projects within the Proposed Action area or in surrounding areas will be fully analyzed as a separate action and independently of the Proposed Action.

7) Whether the action is related to other actions with individually insignificant, but cumulatively significant impacts: Based on the conditions set forth in this Finding of No Significant Impact, no significant impacts will occur due to the Proposed Action. The subsequent land use would be regulated by local, state, and federal regulations as applicable; therefore, no significantly cumulative impacts are anticipated.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources: Historic properties are known to be present within the proposed area. Based on detailed analysis, this proposal will not adversely affect districts, sites, highways, structures, or other objects listed or eligible for listing. Nor will the proposed project cause loss or destruction of significant scientific, cultural, or historical resources. All proposed undertakings associated with the issuance of this permit, which could adversely impact an archaeological or historic resource, will be subject to full compliance with Section 106 of the National Historic Preservation Act.

9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973: In March 2009, the FWS issued a Biological Opinion (84320-2009-F-0038), with a finding that the proposed project was not likely to jeopardize the continued existence of the SWIFL.

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10) Whether the action threatens a violation of Federal, State, local or tribal law or requirements imposed for the protection of the environment: This action is consistent with federal, state, local, and tribal laws and other requirements for the protection of the environment. All agencies were properly notified of the Proposed Action and given appropriate comment time to respond.

Rationale for Decision

1) The proposal to transfer land from BLM to FHWA for highway purposes as authorized in Title 23 U.S.C. Sections 107(d) and 317 (Title 23).

2) The Proposed Action is consistent with the Ely District Record of Decision and Approved Resource Management Plan (RMP) signed in August of 2008.

3) The Proposed Action is also consistent with all other federal, state, local, and tribal policies and plans to the maximum extent possible.

State, county, and local agencies, tribal agencies, and various organizations were informed about the proposed SR-317 Highway Reconstruction Project. The Draft EA was posted on the Ely BLM website for one week for public information and comments.

This document is available upon request to the Caliente Field Office, U.S. Highway 93 Building #1, P.O. Box 327, Caliente, NV 89008.

Approved by:

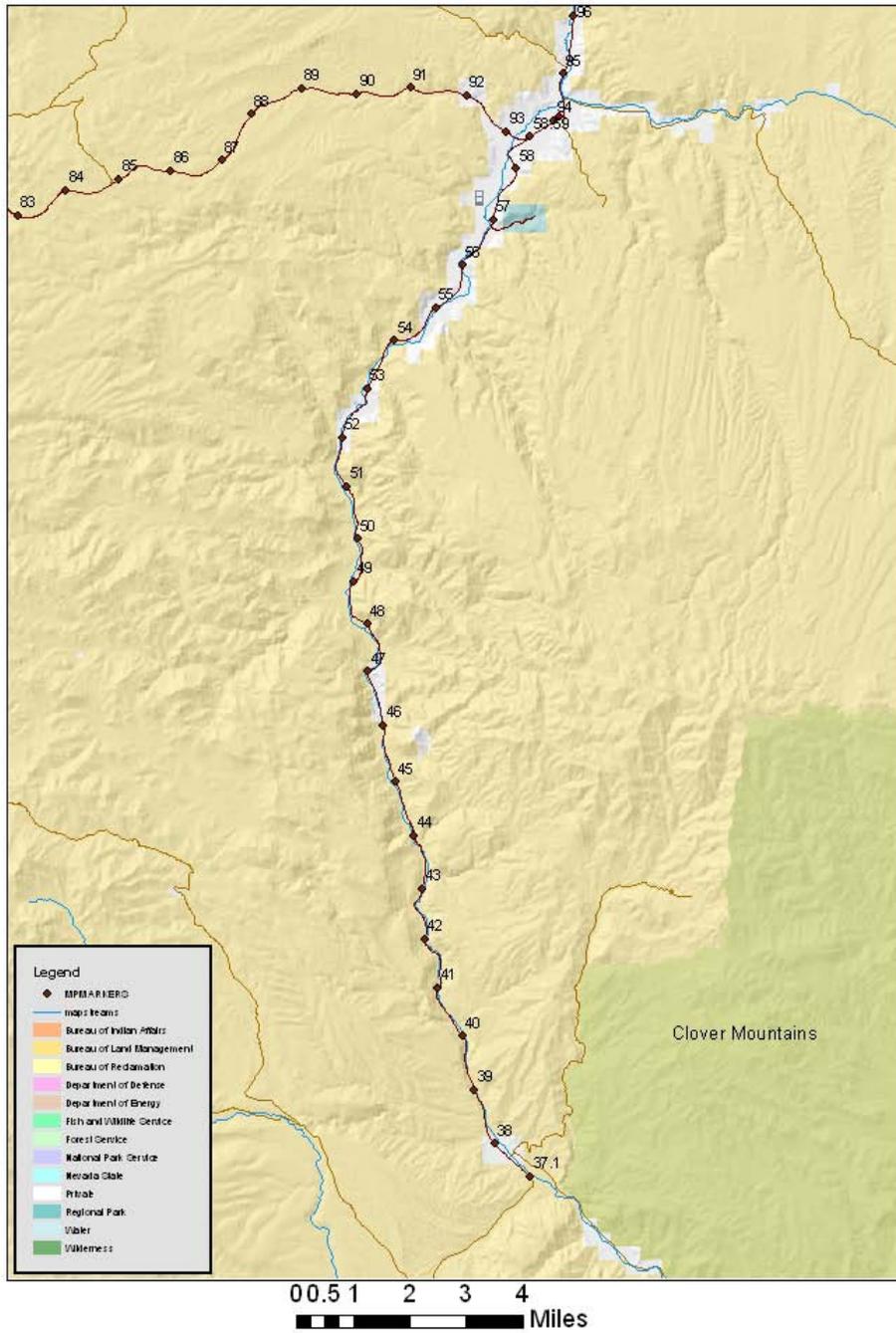
Victoria Barr
Field Manager
Caliente Field Office

Date

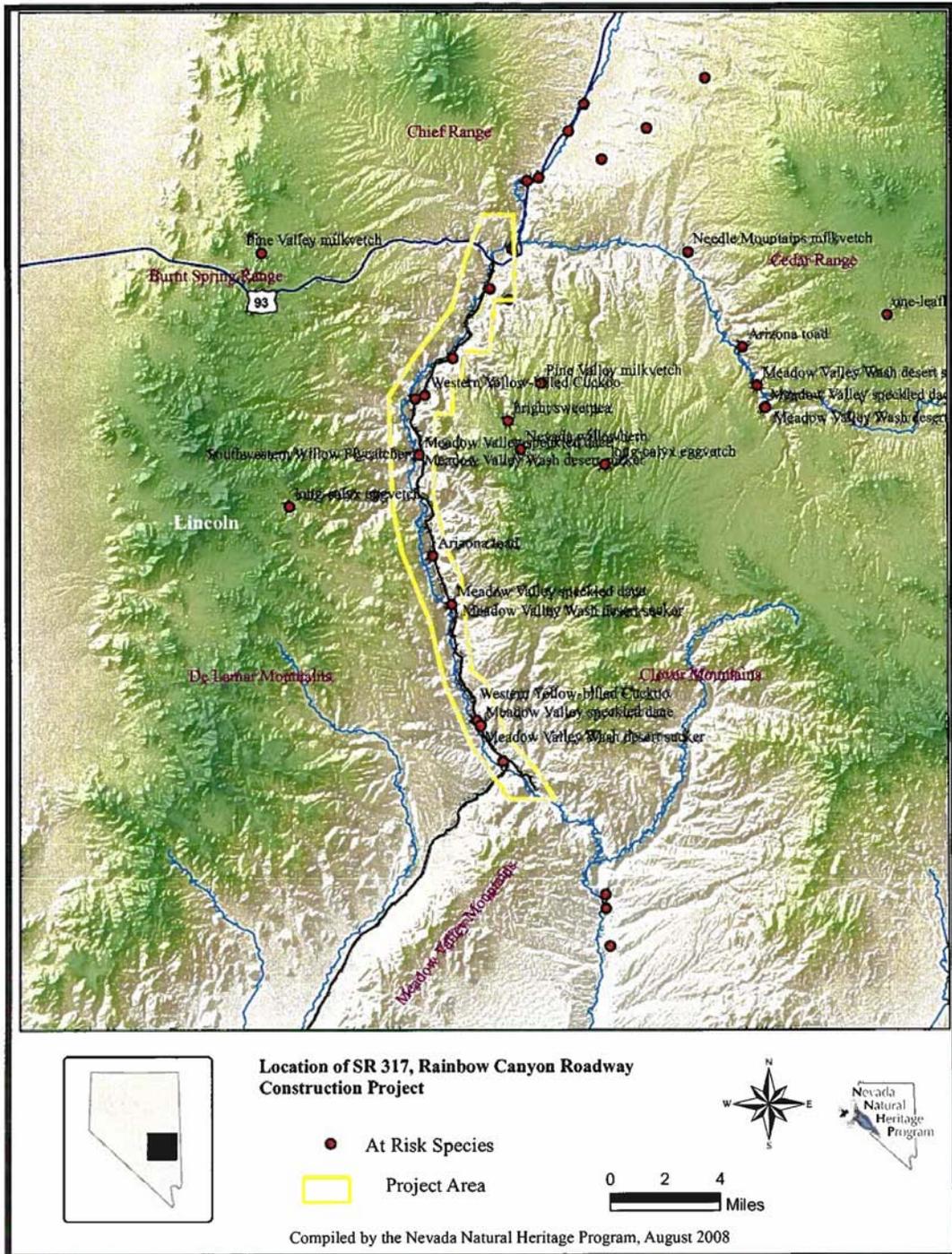
Appendix A

Maps

SR-317 Rainbow Canyon



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Appendix B
Impacts Detail

Appendix B

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SR 317 - Meadow Valley Wash - Riparian and Wash Impacts Description

Station 1037+85 to 1040+85 (MP ~ 55.86)

Remove existing 10' CMP, construct concrete overflow section, install 14' x 3' precast RCB, construct riprap apron. A temporary river diversion will be required.

Station 918+00 to 921+00 (MP ~ 53.55)

Reconstruct existing dip-section, construct concrete overflow section, install 14' x 3' precast RCB, construct riprap apron. A temporary river diversion will be required.

Station 700+79 to 701+52 (MP ~ 49.20)

Construct riprap apron within unnamed, ephemeral drainage terminating into the Meadow Valley Wash.

Station 580+63 (MP ~ 46.84)

Replace existing 36" CMP. This may require a temporary river diversion.

Station 578+33 (MP ~ 46.79)

Replace existing 36" CMP. This may require a temporary river diversion.

Station 549+00.00 to 558+60.56 (MP ~ 46.33)

Construct road embankment protection.

Station 532+47.21 to 539+19.92 (MP ~ 45.99)

Construct road embankment protection.

Station 504+99 to 510+00 (MP ~ 45.57)

Construct road embankment protection.

Station 465+50 to 472+49.92 (MP ~ 44.84)

Construct road embankment protection.

Station 408+90 to 411+50 (MP ~ 43.74)

Remove existing 10' CMP, replace with Class 700 riprap (abandoning existing channel upstream and downstream of culvert), excavate new stream channel, construct concrete overflow section, install 14' x 3' precast RCB, construct riprap apron.

Station 399+96.21 to 406+70.00 (MP ~ 43.60)

Construct road embankment protection.

Station 362+85.62 to 388+00.00 (MP ~ 43.07)

Construct road embankment protection.

Station 328+61.75 to 318+41.25 (MP ~ 42.09)

Construct new 20' wide flat bottom ditch, abandon a portion of the existing channel, construct road embankment protection, install riprap dike.

Station 291+78.00 to 294+78.00 (MP ~ 41.52)

Appendix B

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SR 317 - Meadow Valley Wash - Riparian and Wash Impacts Description

Reconstruct existing dip section, construct concrete overflow, install 14' x 3' RCB, construct riprap apron. A temporary river diversion will be required.

Station 272+75 to 276+13 (MP ~ 41.16)

Remove existing 10' CMP, construct concrete overflow, install 14' x 3' RCB, construct riprap apron. A temporary river diversion will be required.

Station 262+03.53 to 272+75.00 (MP ~ 40.82)

Construct road embankment protection.

Station 204+55.82 to 221+00 (MP ~ 40)

Construct road embankment protection.

Station 162+44.24 to 183+00 (MP ~ 39.23)

Stream channel realignment, construct road embankment protection. Within the newly aligned stream channel a low flow channel will be constructed. A temporary river diversion will be required.

Station 158+44.24 to 162+44.24 (MP ~ 39)

Construct road embankment protection.

Station 146+97.80 to 158+44.24 (MP ~ 38.6)

Stream channel realignment, construct road embankment protection. A low flow channel will be constructed within the newly aligned stream channel. A temporary river diversion will be required.

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Appendix B

SR 317 - Meadow Valley Wash - Riparian and Wash Impacts Description

Station	Milepost	Suitable Habitat (ft ²)	Adjacent to Suitable Habitat (ft ²)	Potential Habitat (ft ²)	USACE Area (ft ²)	USACE Fill (yd ³)	USACE Excavation Area (ft ²)	USACE Excavation (yd ³)	Fill Type
1037+85 to 1040+85	55.86	0	0	0	1190	25.9 18.1	0 0	0 0	Concrete and borrow Class 400 and/or 550 riprap
918+00 to 921+00	53.55	2900	0	0	1190	25.9 18.1	0 0	0 0	Concrete and borrow Class 400 and/or 550 riprap
700+79 to 701+52	49.2	0	0	0	1750	32.4	0	0	Class 700 riprap
580+63	46.84	0	0	0	225	4.2	0	0	CMP and borrow
578+33	46.79	0	0	0	150 1886	2.8 17.5	0	0	CMP and borrow Borrow
549+00 to 558+60.56	46.33	11783	0	0	8649 5766	320.3 213.6	0 0	0 0	Soil cement Class 700 riprap
532+47.21 to 539+19.92	45.99	0	5900		4920 4080	91.1 75.6	0 0	0 0	Soil cement Class 700 riprap
504+99 to 510+00	45.57	1252	0	0	1200	22.2	0	0	Class 700 riprap
465+50 to 472+49.92	44.84	0	0	0	412.5 412.5	7.6 7.6	0 0	0 0	Soil cement Class 700 riprap
408+90 to 411+50	43.74	210	70	150	430 400 300 840	14.8 11.1 31.1	0 0 5200 0	0 0 2425 0	Abandoned channel Class 700 riprap (culvert removal footprint) Class 700 riprap (upstream of removed culvert) New channel Concrete (new RCB)
399+96.21 to 406+70.00	43.6	0	19614	0	435 4350	16.1 161.1	0 0	0 0	Soil cement Class 700 riprap
362+85.62 to 388+00	43.07	9027	27361	0	7349 2204.7	272.1 81.7	0 0	0 0	Soil cement Class 700 riprap

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Appendix B

SR 317 - Meadow Valley Wash - Riparian and Wash Impacts Description

Station	Milepost	Suitable Habitat (ft ²)	Adjacent to Suitable Habitat (ft ²)	Potential Habitat (ft ²)	USACE Area (ft ²)	USACE Fill (yd ³)	USACE Excavation Area (ft ²)	USACE Excavation (yd ³)	Fill Type
328+61.75 to 318+41.25	42.09	3823.3	3566.1	0	11869.5				Abandoned Channel
		26500	0	0			21200	1190	New channel Class 700 riprap dyke
					246	9.1			
291+78 to 294+78	41.52	0	0	0	1500	55.6	0	0	Concrete (New RCB footprint)
					750	27.8	0	0	Class 700 riprap
272+75 to 276+13	41.16	0	0	0	630	23.3	0	0	Concrete (New RCB footprint)
					420	15.6	0	0	Class 700 riprap
262+03.53 to 272+75	40.82	4375.5	0	0	0	0	0	0	Soil cement and riprap
204+55.82 to 221+00	40	0	0	8832.9	0	0	0	0	Soil cement and riprap
162+44.24 to 183+00	39.23	28596.5	16937	0	4729	175			
					7402	274			
							19738	3340	Soil cement Class 700 riprap Channel excavation (existing fill material)
								230	Borrow (Fill material for new channel)
158+44.24 to 162+44.24	39	510.2	0	0	0	0	0	0	
146+97.80 to 158+44.24	38.6	34709.3	2653.3	0	2292	85			
							6761	1530	Class 700 riprap (no soil cement impacts) Channel excavation (existing fill material)
								140	Borrow (Fill material for new channel)
Total		123686.8	76101.4	8982.9	77978.2	2136.3	52899	8855	
		2.84 acres	1.75 acres	0.21 acres	1.79 acres		1.21 acres		