
Supplement to the FEIS

1.1 PURPOSE OF THIS SUPPLEMENT

The Viveash Fire Salvage Final Environmental Impact Statement (FEIS) was completed in June of 2002 and the Record of Decision signed on July 24th, 2002. The Regional Forester received a number of appeals of this decision. On November 4th, 2002 the Appeal Deciding Officer affirmed the Responsible Official's decision on the Viveash Fire Salvage and reversed the decision on the independent road management activities with the following direction:

- Evaluate and disclose the scenic effects of the independent road management actions described on page 2-11 of the FEIS
- Upon completion of this analysis related to the independent road management actions, circulate the supplemental environmental document for review/comment and issue a new decision under 36 CFR §215.

Therefore, the purpose of this supplement is to disclose the scenic effects of the independent road management actions only. The effects of the road management activities on other resources are contained within the Viveash Salvage FEIS and will not be repeated here.

1.2 PROPOSED ACTION

As stated in the FEIS on page 1-4 these road projects are not connected to the salvage proposal. They are considered similar actions, that, when viewed with the salvage actions, have similarities that provide a basis for evaluating their environmental consequences together.

Road Realignments

These activities would involve closing or decommissioning a portion of a road and constructing a new road or segment in a different location.

- Murphy's private land access would remove approximately 5 miles of existing roadway in the Willow Creek Watershed and replace it with approximately 1.5 to 2 miles of new road located upslope. The existing road along Willow Creek would be closed and parts of it would be decommissioned. The new road would be constructed to reduce current erosion and sedimentation in Willow Creek and to improve access to private land.
- A portion of Forest Road (FR) 86 would be realigned. The realignment covers approximately 1.5 miles beginning at the junction of FR 86/92 and ending at the Manzanares Creek crossing. The realigned segment of road would have a Maintenance Level (ML) of 3, which allows for sedan passage with some rider comfort. The purpose of the realignment of this portion of FR 86 is to move the road to a better location for resource protection and public safety. The existing road is located in the bottom of Tijeras Canyon, which leads to water runoff and stream sedimentation even during moderate runoff events. This makes the road unusable

and creates a safety hazard for people who may attempt to drive on it during a runoff event.

- FR 86 from the Manzanares Creek crossing to the Bull Creek crossing would also be realigned for 2.3 miles, resulting in a stable and maintainable surface that would protect streams and water quality without requiring ML 3 maintenance standard.
- Approximately 1 mile of FR 92 within the Rito de la Osha Creek would be realigned away from the stream channel and the old section closed or decommissioned. Culverts would be installed at all stream crossings of tributaries in this realigned section. Portions of FR 92 in the Project Area would also be upgraded, with 13 miles of road becoming ML 2 (allowing passage of high-clearance vehicles) and 7 miles becoming ML 3 for use by passenger vehicles.

Bridge or Culvert Replacement/Construction

- Bull Creek private land access (Tapia property) would require construction of a bridge or culvert where FR 86 crosses Bull Creek. The crossing is near the end of FR 86 and is presently a low water crossing of Bull Creek. This proposal would serve to provide access to private land in the Bull Creek area and protect the stream channel and water quality of Bull Creek.
- The FR 86 culvert at Cow Creek would be replaced with a larger arch culvert. The current culvert is undersized for the high volume of water and debris that pass through it during runoff events. Replacing the culvert with a larger one would reduce the risk of failure and consequent damage to the stream and the road.
- Three concrete bridges over Cow Creek on FR 92 would be replaced. This would serve to straighten the road alignment and increase vehicle safety at the crossings. These bridges were built in the 1960s and while structurally sound, have been affected by the flooding. Replacing these bridges will improve debris passage and enhance public safety.
- A temporary crossing of FR 92V at Elk Creek would be constructed for harvest activities and would be removed following all the proposed management actions.

Decommissioning Activities

Decommissioning of a road is a process that involves more than preventing access with a gate. In the Proposed Action, decommissioning a road would include removal of culverts, restoration of drainages, and re-vegetation.

- The FR 92V system, which includes 12.5 miles of road and seven stream crossings, would be decommissioned following management actions. Decommissioning of this system would include removing culverts, installing waterbars and dips, and barricading the road with berms or boulders. This would reduce open road density in the Cow Creek area which would meet the Santa Fe National Forest Plan (Forest Plan) standards designed to improve watershed and wildlife habitat conditions. The FR 92V system is not necessary for public or private land access.

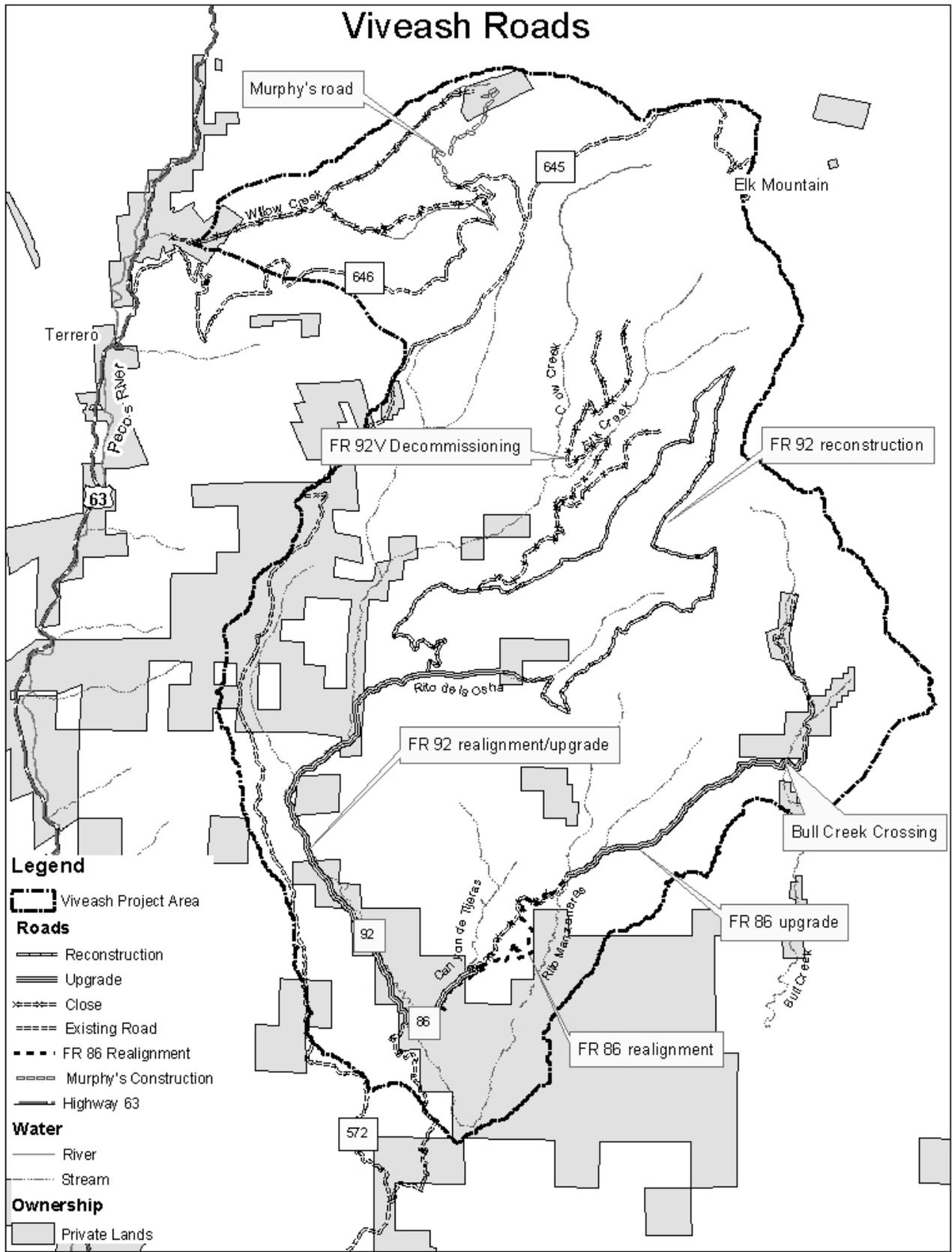


Figure 1: Viveash Roads

1.3 VISUAL QUALITY ISSUE

This issue was raised as a comment to the DEIS and as appeal point of the ROD. While the DEIS and FEIS did disclose the effects of the salvage (including reopening roads) on visual quality, the effects of the road realignments, reconstruction and decommissioning were not presented.

1.4 AGENCY OBJECTIVES & MANAGEMENT DIRECTION

The road projects lie within four distinct management areas. (A, B, D & E) Specific management direction for Visual quality exists within each of these management areas.

The Road 86 realignment, the reconstruction of FR 86 to Bull Creek, and the first 3.8 miles of the FR 92 reconstruction fall within Management Area E (Santa Fe National Forest Plan). Management Area E is to be managed for dispersed recreation opportunities, as well as for timber and firewood production. Direction for Management Area E is to maintain a Visual Quality Objective of Partial Retention (SFNF Plan Pg. 117).

The remaining 17.2 miles of the reconstruction/realignment of FR 92 fall within Management Areas A and B (Santa Fe National Forest Plan). Management Areas A is to be managed for timber production and wildlife habitat. Management Areas B is to be managed for wildlife habitat improvement and key species protection. The road reconstruction is not within the foreground views of any of the sensitive viewpoints and there falls within areas with a Visual Quality Objective of Modification and Maximum Modification(SFNF Plan Pg. 99, 103).

The Murphy road falls in Management Area D. Management Area D is to be managed for enhancement of visual quality and developed recreation opportunity. Management Area D is to be managed for a Visual Quality Objective of Retention, which refers to landscapes where deviations are not evident and the valued landscape character appears intact. (SFNF Plan Pg. 113). The Murphy Road is within the background views from the highway 63 corridor at a sight distance of 3.25 miles.

Forest Service scenery management direction for roads consists of 3 primary objectives in shaping the visual experience:

1. To design an alignment that harmoniously integrates the road into the landscape without unsightly visual and scenic impacts, relieves the driver of monotony and provides a positive visual experience.
2. To clarify and strengthen the driver's orientation to the landscape, to offer him a picture which is well-structured, distinct and as far-ranging as possible. A driver should be able to locate himself, the transportation system, and the major features of the landscape; to recognize those features with surety; and to sense how he is approaching and moving past them.
3. To deepen the observer's grasp of the meaning of his environment and to help him understand the use, history or nature of the surrounding landscape.
(Forest Landscape Management Vol. 2, Ch.4, Roads p.7)

4. Our direction dictates that the size of cut and fill slopes should be minimized, to reduce contrasts. (Nat. For. Landscape Mgmt Vol.2 Ch.4 Roads pp. 10-16).

1.5 MITIGATION MEASURES

A number of mitigation measures will be employed to reduce impacts to visual quality.

They are:

- Slash generated by clearing for the roadwork (FR 86, FR 92) will be disposed of so that it will not be evident within 1 year of the project's completion (National Forest Landscape Management Vol 2, Ch. 1. The Visual Management System, p. 32)
- Stumps which are visible in the Immediate Foreground would be cut no higher than 6" and so that the cut face angles away from the road.(FR 86, FR 92)
- Drilling, when required to remove bedrock(FR 86 only), will strive for broken faced rock effect and will avoid the vertical drill lines. Large rocks in the cut slope will be retained for interest.
- Cut and fill slopes greater than 1 1/2:1 will be treated (seeded and mulched) to restore vegetation and soil stability, which reduces the contrast between the disturbed areas and the natural landscape. (FR 86 and Murphy's)
- Treatment such as angling the cut of the culvert to match the slope or armoring the pipe with riprap will be used to reduce the aesthetic impacts of the culverts (FR 86 and FR 92).

2.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

2.1 AFFECTED ENVIRONMENT: FR 86 REALIGNMENT

This road section lies within the Tijeras sub watershed, less than ½ mile northeast of the intersection of FR 86 with FR 92. See Figure 2, on right. The area receives light recreation use.

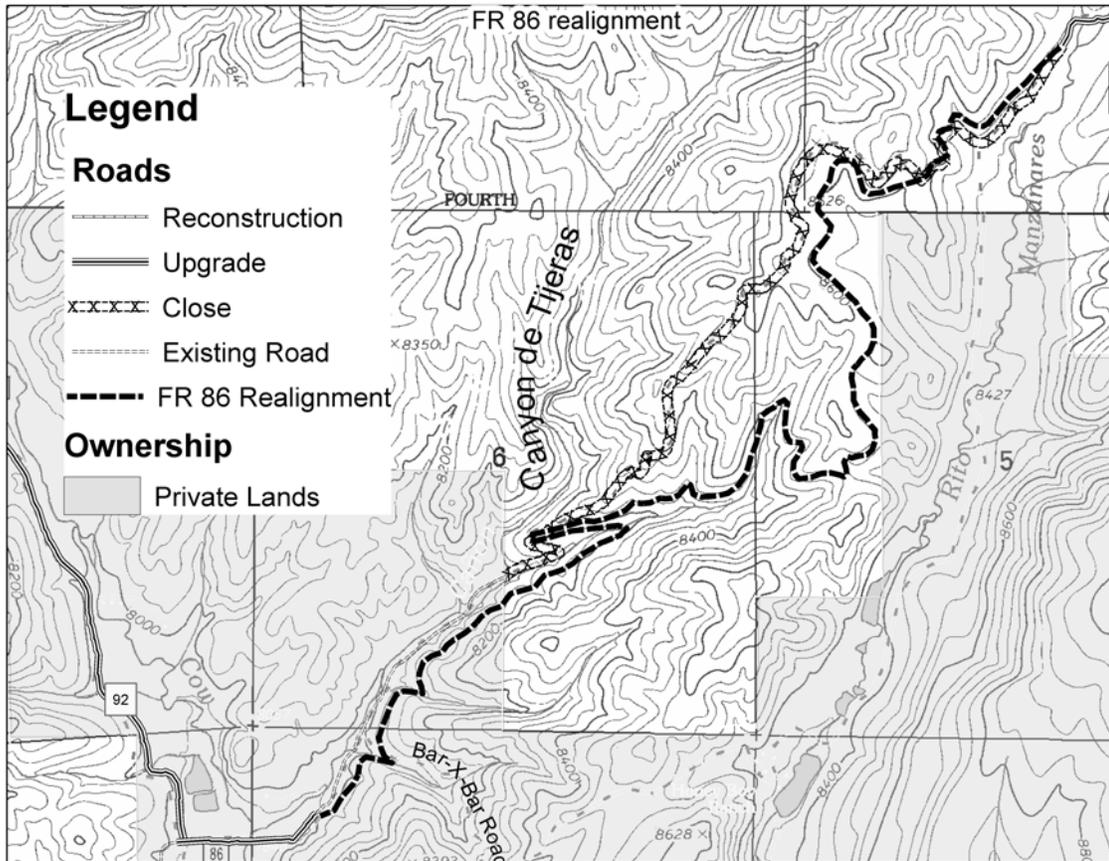


Figure 2: Road 86 Realignment map

The existing viewshed consists of riparian meadow. The foreground is dotted with private homes and cabins, and fences. Steep sided, heavily forested hills rise on either side, narrowing as one proceeds northeast. At the far end of this segment, the road switchbacks up a hillside, to run along a ridge.

Currently the section of existing road runs in a drainage bottom through private land and does not have an authorized right of way. Operationally it is a Maintenance Level 2 Road with an objective of Maintenance Level 3. (Personal communication with Pat Leyba, Forest Engineer, SFNF) It is not heavily used but often rutted and in places is 3' lower than the surrounding land. It crosses Tijeras Creek over culverts and rock gabions. The road is fenced with barbed wire on either side to contain traffic. When Tijeras Creek is at

high stage, it flows onto the road as it seeks the path of least resistance. Debris from the flooding and piles of dirt and rock removed from the road are noticeable along the 86 road corridor.



Figure 3:View across Cow Creek from FR 92 looking up Tijeras canyon.

The proposed alignment of the new road segment will cross the hillside running diagonally (N-E to S-W) along the south of this drainage. The landscape has a high degree of scenic integrity along the corridor of new construction. It currently appears unaltered and natural. It is forested with mixed conifer lightly interspersed with scrub oak, a common and uniform vegetation pattern across the hillside.

The hillside is steep with bedrock protruding, and averaging a 40% slope. The slope is broken by 5 drainages, 2 substantial, and an entrance road to the Bar X Bar Ranch.

2.2 ENVIRONMENTAL CONSEQUENCES: FR 86 REALIGNMENT

2.2.1 Direct and Indirect Effects

The proposal (as mitigated) would create a landscape character that would appear slightly altered, but would meet the VQO of partial retention. This is consistent with the Forest

Plan's direction for Management Area E and would not impact the long-term scenic integrity.

Given the low traffic volume and limited time a view of the new road could be seen, the long-term effects would be minimal. There exist only a few points along the road where the new road segment would be visible. They are:

- From the intersection with FR 92. There would now be two roads visible instead of one with about 1/3 mile visible.
- From the intersection with the Bar X Bar Ranch road which would be limited to 100'-200' segments in the viewshed.
- From viewpoint 2 (Fig. 1) with a sensitivity of level 1 (NF Land. Mgmt. Vol. 2, Ch. 1,
- The Visual Mgmt Sys, pp. 18-21), patches of cut and fill would be visible constantly.

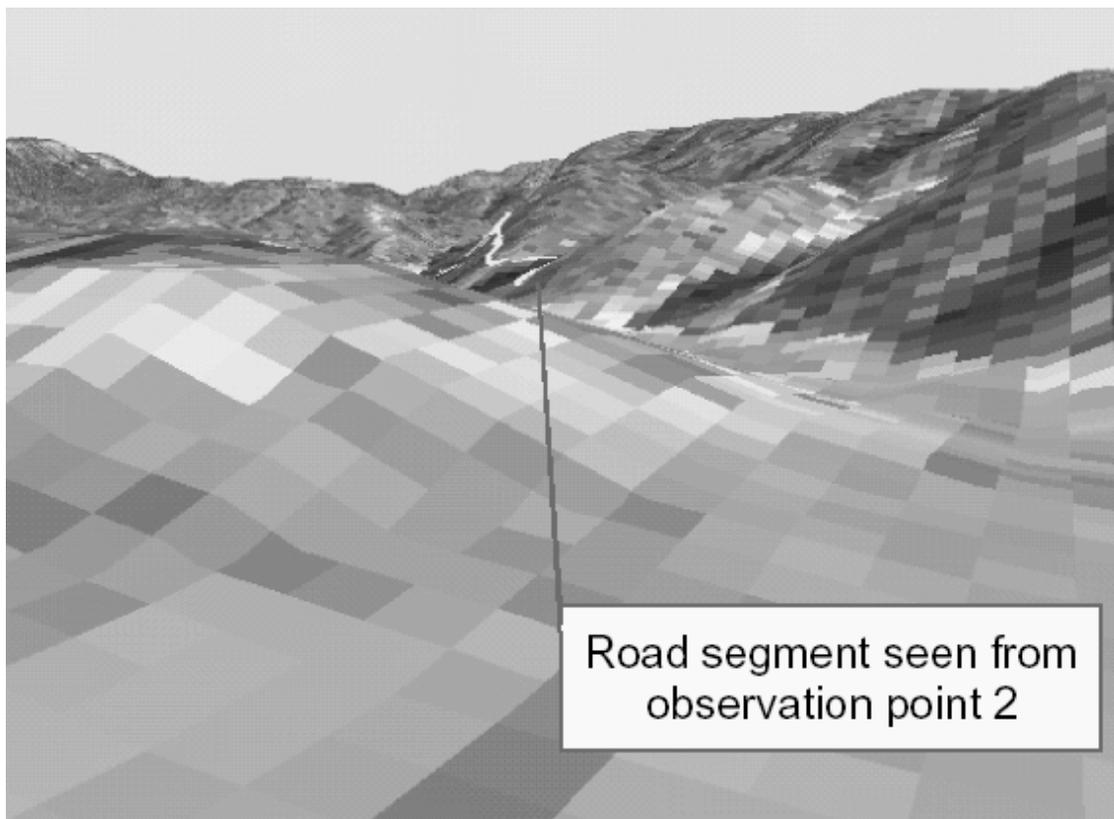


Figure 4: This computer generated view depicts the road as viewed from viewpoint 2

From those viewpoints, the new alignment undulates along the hillside minimizing the linear impact but it would not be visually subordinate to the landscape being viewed. The bench cuts would not maintain the form; color or texture of the surrounding densely forested hillsides. These cuts would look very light colored and chalky in contrast to the dark green and brown of the trees and organic litter on the top of undisturbed soil. The size of cut, which is almost continuous, average 12' but ranges from 6' to as tall as

27'(see figure 5 below for cut and fill profile). While these cuts are large, this impact would diminish to some extent after a year or two when ground vegetation would be expected to re-establish over the bare soil.

In the very short-term (during construction) there would be some noticeable visual disturbance, which would be softened and reduced over time. For example, during construction, raw piles of earth and construction equipment would be present and detract from the expected visual character. Erosion control methods may also create both short term and long term scenic impacts through variation from the expected color, pattern and texture.

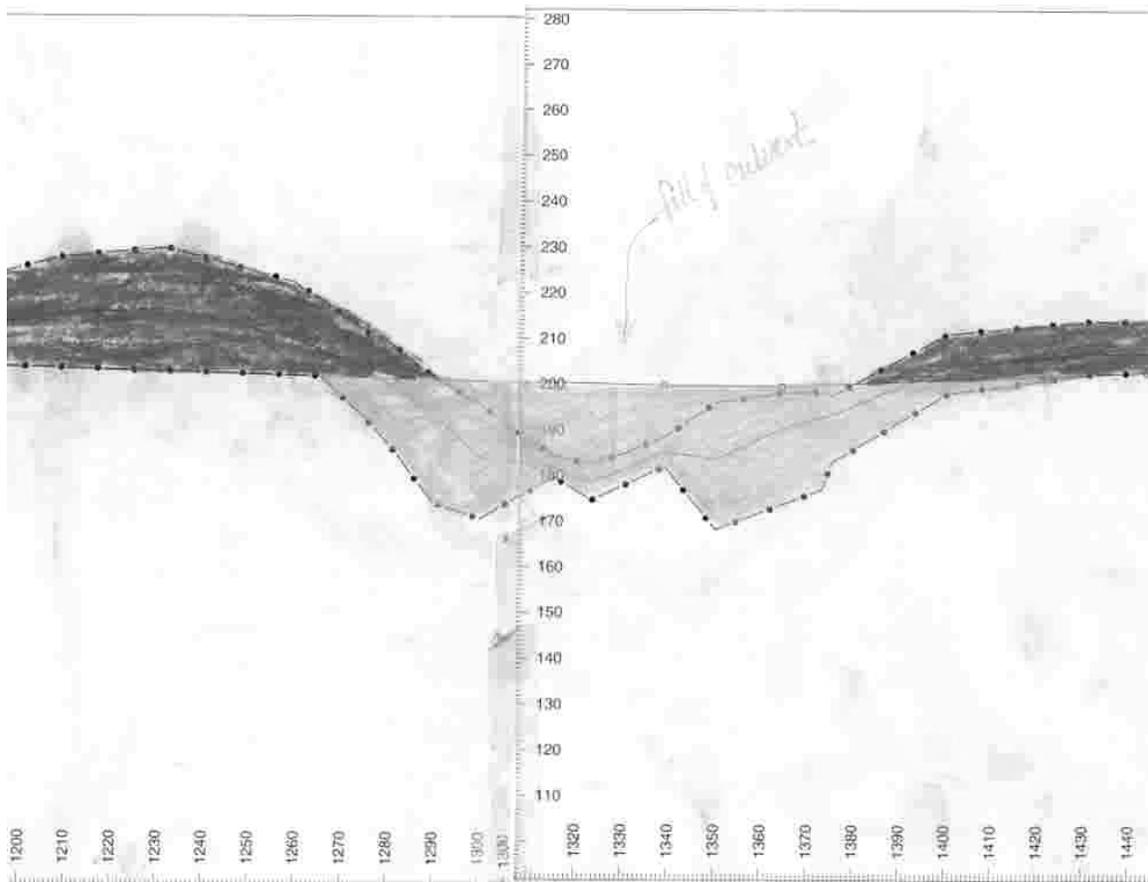


Figure 5: Segment of cut & fill for Tijeras section of Bull Creek Road. Scale indicates feet in equal horizontal and vertical scale.

Overall, the effects to scenic quality would be mostly temporary in nature, coinciding with the new road construction and should not be visible within a year or so after the project completion. This is consistent with the partial retention VQO standard for this management area.

2.2.2 Cumulative Effects

There are a couple of events that have changed or altered the area of the Road 86 realignment. The Viveash Fire, which visually altered the landscape within the Cow

Creek and Tijeras Canyon. And the construction and building on private lands both before and since the fire.

Flooding after the fire drastically changed this area by producing eroded streambeds, debris piles and ash deltas along the creeks. One can still see piles of debris that was removed from FR 86 in an effort to keep this road open after the flooding. The Hillsides themselves have been altered with nearly all the overstory trees killed on the north side of FR 86.

The construction of private homes and outbuildings in the area and on-going motorized uses (on and off of roads) has also added to visual impacts in the forest environment.

The effects of the FR86 realignment coupled with these other impacts would not cumulatively reduce the current scenic quality of the area. There are no reasonably foreseeable future projects in this area that would add to cumulative impacts.

2.3 AFFECTED ENVIRONMENT: FR86 TO BULL CREEK CROSSING

This road section runs from Manzanares Creek to the Bull Creek Crossing, approximately 3 miles (Refer to figure 5 on next page). The area receives light recreation use.

The existing viewshed consists of riparian meadow near the crossings of Manzanares and Bull creeks. Steep sided, heavily forested hills rise on either side of the road between these two points with the road low on the slope within the canyon.

Operationally the road is a Maintenance Level 2 Road with an objective of Maintenance Level 3. (Personal communication with Pat Leyba, Forest Engineer, SFNF) It is not heavily used but often very rough in spots

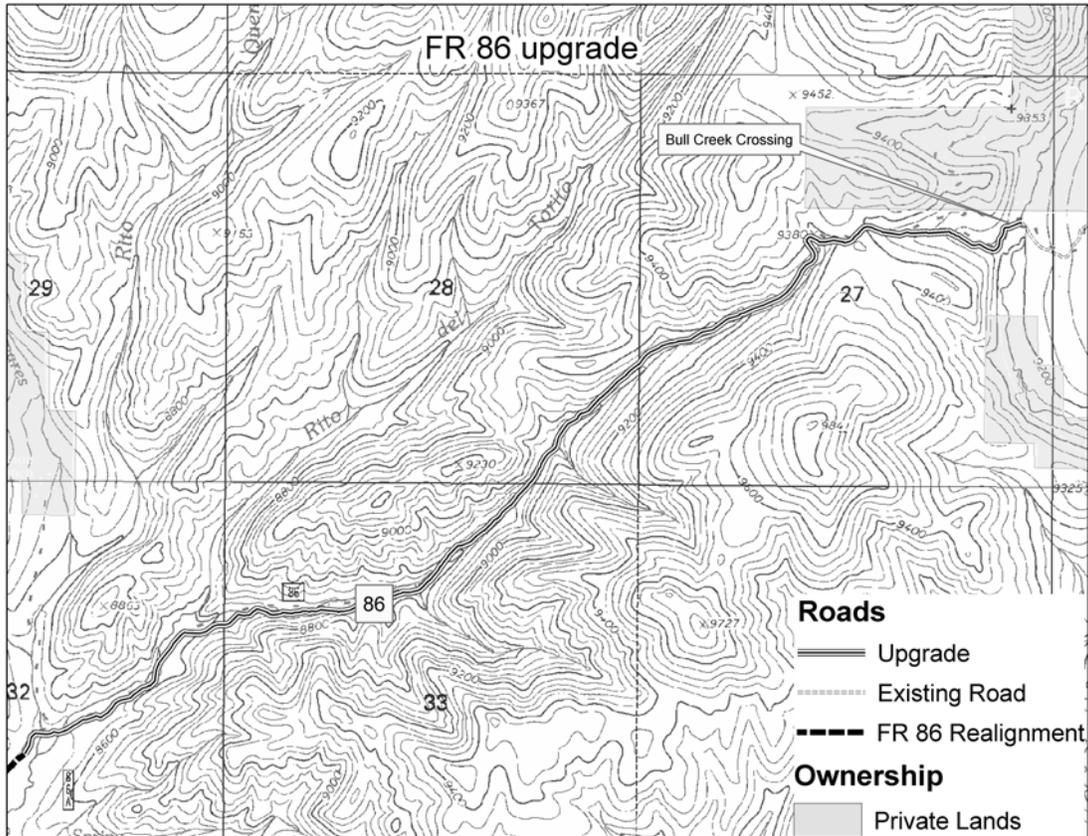


Figure 6: FR 86 upgrade map

The upgrading of the road will occur within the existing alignment. The landscape has a high degree of scenic integrity with only the road and powerline as man-made objects. It currently appears unaltered and natural. It is forested with mixed conifer lightly interspersed with scrub oak, a common and uniform vegetation pattern across the hillside. At Bull Creek the road fords the stream. A cabin, the road and crossing are foreground views as one proceeds down the road to the crossing.

2.4 ENVIRONMENTAL CONSEQUENCES: FR86 TO BULL CREEK CROSSING

2.4.1 Direct and Indirect Effects

The proposal (as mitigated) would create a landscape character that would appear slightly altered, but would meet the VQO of partial retention. This is consistent with the Forest Plan’s direction for Management Area E and would not impact the long-term scenic integrity.

Upgrading the road from a ML 2 to a ML 3 would produce some larger cuts and short term effects from the reconstruction itself. Given the low traffic volume and limited time a view of these cuts are visible (as one progresses along the road itself), the long-term effects would be minimal.

The culvert/bridge at Bull Creek would be a new feature on the landscape. This would be visible as one descends into Bull Creek itself. From this viewpoint, the new crossing would be apparent until the fills for the bridge become re-vegetated. Once this has occurred, the crossing would become visually subordinate to the landscape being viewed.

Overall, the effects to scenic quality would be mostly temporary in nature, coinciding with the road and crossing construction and should not be visible within a year or so after the project completion. This is consistent with the partial retention VQO standard for this management area.

2.4.2 Cumulative Effects

As discussed in section 2.2.2, the Viveash Fire visually altered the landscape within the area. The fire and flooding effects were somewhat less in Manzanares and Bull Creeks though. The effects of the roadwork coupled with these other impacts would not cumulatively reduce the current scenic quality of the area. There are no reasonably foreseeable future projects in this area that would add to cumulative impacts.

2.5 AFFECTED ENVIRONMENT: FR 92 RECONSTRUCTION

This roadwork would occur over the length of FR 92.(approximately 21 miles) (Refer to page 2-9 of the Viveash Fire Salvage EIS, Figure 2-3, Preferred Alternative Map). The area receives light recreation use.

The existing viewshed ranges from riparian meadow near cow creek to high elevation areas of burned spruce forest on the slopes near Elk Mountain.

The first 7 miles will be reconstructed/ realigned. Operationally the road in this area is a Maintenance Level 2 Road with an objective of Maintenance Level 3. (Personal communication with Pat Leyba, Forest Engineer, SFNF). For the first few miles of the road is along a riparian meadow. The foreground is here is dotted with private homes, cabins, and fences. Steep sided, heavily forested hills rise on either side, narrowing as one proceeds north. The road proceeds through a steep walled canyon, which was moderately to heavily burned in the Viveash fire. The road itself as well as the Cow Creek campground (dispersed) is the most visible man-made elements once in the canyon. The campground and the FR 92 comprise the sensitive viewpoints on the 92 system.

The upper 14 miles will only be reconstructed to a ML 2. This road receives very little recreation use except during hunting seasons. The skyline trail passes near the upper portion of the 92 road. A small portion of the road is barely visible through the burned trees.

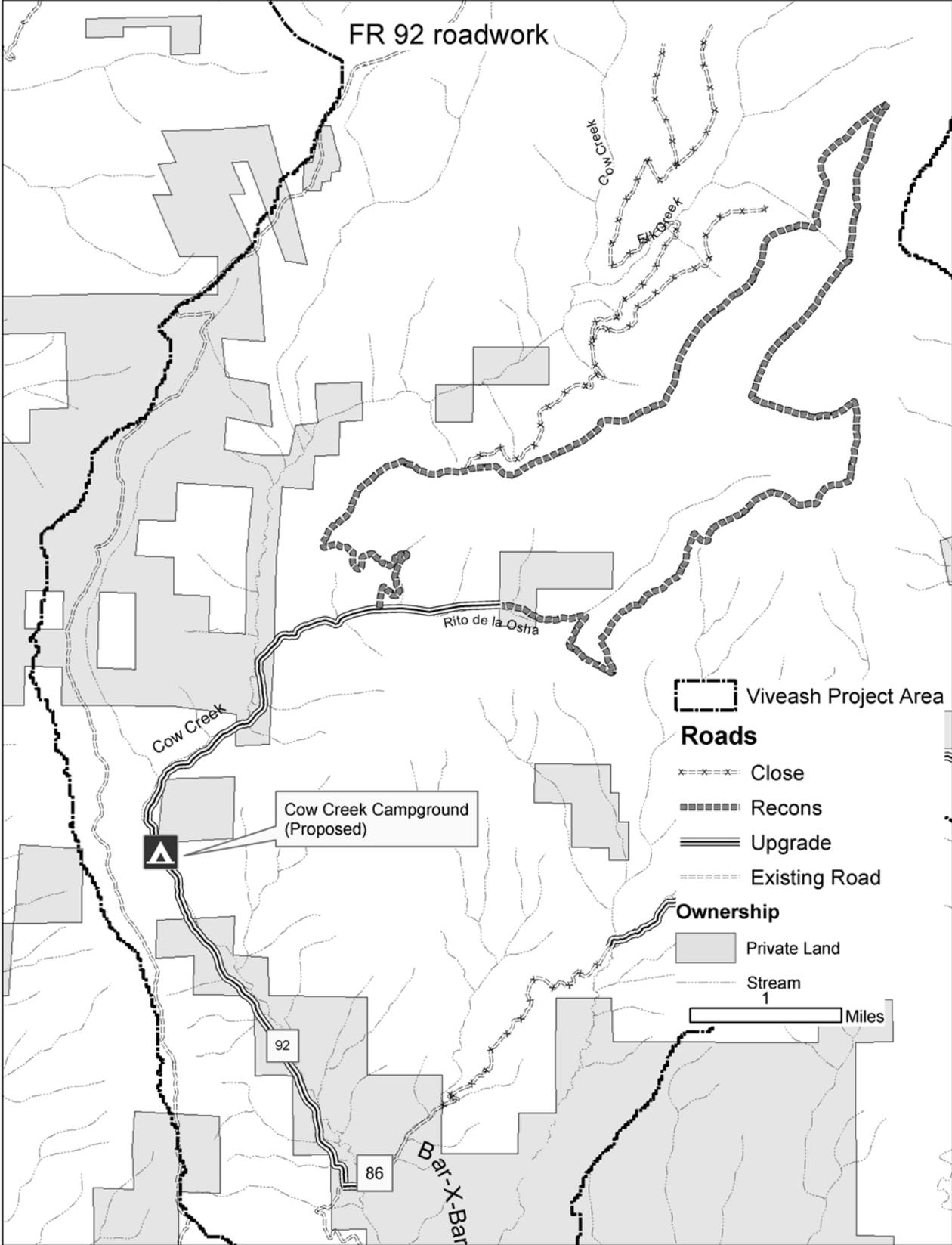


Figure 7: FR 92 Roadwork

2.6 ENVIRONMENTAL CONSEQUENCES: FR 92 RECONSTRUCTION

2.6.1 Direct and Indirect Effects

The realignments and upgrading the road from a ML 2 to a ML 3 would produce some larger cuts and short term affects from the reconstruction itself. Given the relatively modest traffic volume and limited time a view of these cuts are visible (as one progresses along the road itself), the long-term effects would be minimal.

The bridges and much of the reconstruction work on the uppermost 14 miles would be apparent only during the first season of work.

Overall, the effects to scenic quality would be mostly temporary in nature, coinciding with the road and bridge construction and should not be visible within a year or so after the project completion. This is consistent with the partial retention VQO standard for this management area.

2.6.2 Cumulative Effects

The 92 road was greatly affected by the Viveash Fire, which visually altered the landscape within the area. The fire and flooding effects were prominent along Cow Creek and the Rito de la Osha. Debris in the form of rocks, soil and wood was deposited on the roadbed after each flood event. This debris was removed and usually



Figure 8: Debris from the flooding along FR 92

piled along the road and is still visible in along

these two creeks. However, the realignment and reconstruction will reduce the amount of debris deposited on the road and also reduce the visual effects.

Another potential effect to the visual quality of the area is the reconstruction of the Cow Creek campground. This project would, at least while under construction reduce the visual quality of the foreground views as one drives through the campground. These effects would be very localized and would occur only for a short time. In the longer term, as the area continues to recover from the fire and the reconstruction projects(both the road and campground) these “man made” elements will become more as it was pre-fire and more in harmony with natural views.

2.7 AFFECTED ENVIRONMENT: MURPHY'S

The proposed realignment is in the upper reaches of the Willow Creek watershed. There are no trails, roads, private homes or other sensitive developments in the area with the exception of the benefiting landowner. The new construction crosses approximately one mile of National Forest and approximately .25 mile of the affected owner's private land. Most of the existing and proposed road runs through aspen stands on the northwest side of a ridge with moderately sloping hillsides. The groundcover consists largely of organic matter and grasses, with some shrubs and wildflowers. A portion of FR 645E that is to be closed, parallels Willow Creek for about 4 miles.

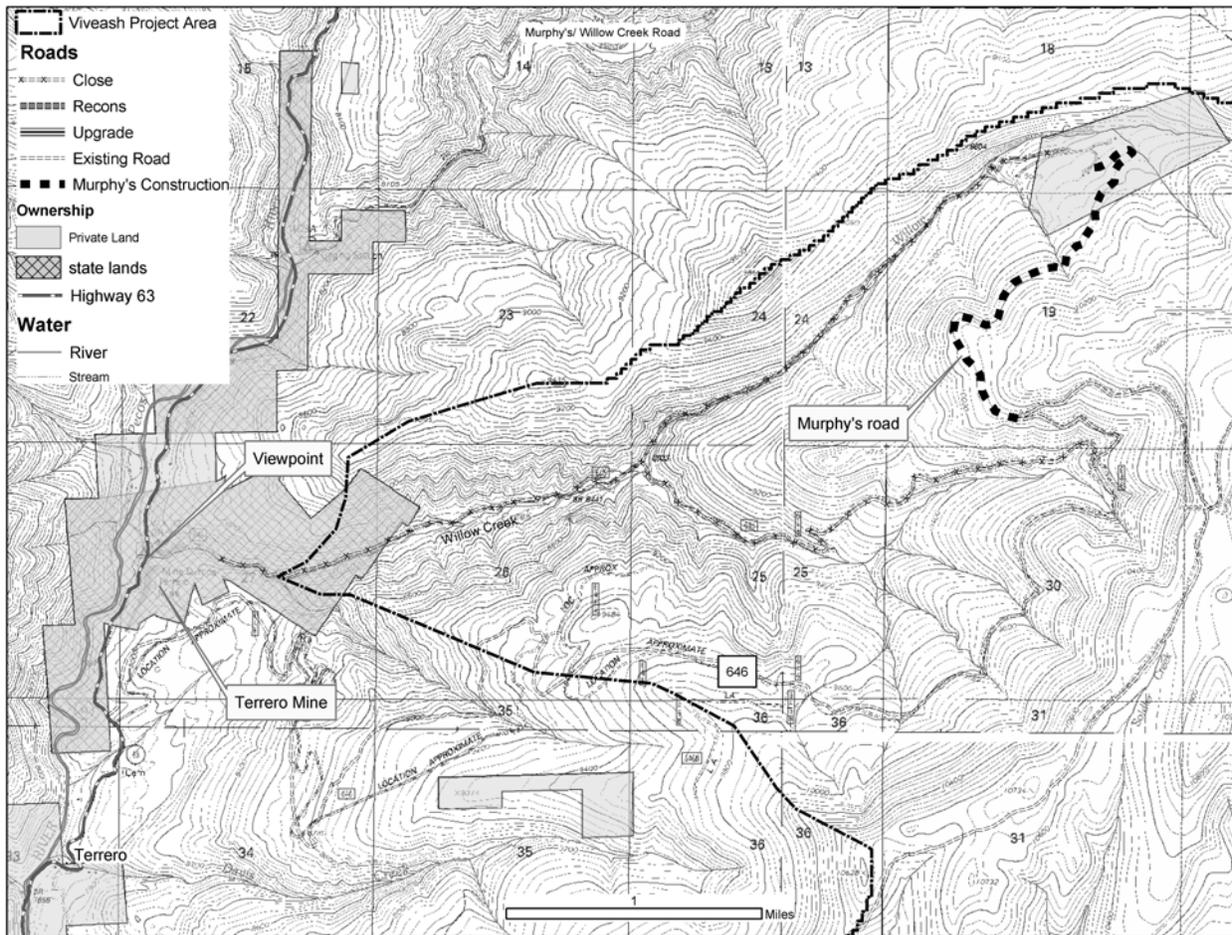


Figure 9: Murphy road

2.8 ENVIRONMENTAL CONSEQUENCES: MURPHY'S

2.8.1 Direct and Indirect Effects

This road would have a only a slight effect on the scenic qualities of the landscape, primarily because it is not readily visible to the public. The sensitive viewshed is the Pecos Canyon and the state highway. The Murphy road cannot be seen from the viewpoint of Willow Creek and State Road 63 (see figure 9). The view from this point is

blocked by the canyon wall of Willow Creek. The new road is also not visible from any system trails, recreation sites, homes or other key viewpoints within the Pecos Corridor. The location of Murphy road, at the top of a steep sloped ridge, makes it difficult, if not impossible to see from below because of the angle of view .

The road would be visible from other areas within the general forest environment. From the ridge to the north of Willow Creek and from FR 646 the road would appear as a broken line along the hillslope in the middle-ground or background view. This line would not be highly contrasting to the adjacent vegetation. It would simply appear as a linear break in the canopy. Neither of these locations are considered sensitive viewpoints. FR 646 is a popular road during hunting season and does see some use by visitors driving to view the Fall colors.

The road comes into foreground view approximately 8 miles along the FR 646 (about a 45 minute drive) From here the new road corridor would be visible during road construction. For a short time this would create a condition with low scenic integrity because it would appear at least moderately altered with piles of earth and construction equipment in the foreground. The color of the road and the cuts would contrast to the dark grey-brown color of the natural ground, which is covered with organic matter and grasses. Seeding and mulching treatments to reduce the contrast along the clearing limits would blend the disturbed areas into the natural landscape more quickly, and effects would begin to soften within 2-3 years (SFNF Plan, p.113).

In summary, the project would be consistent with meeting the Visual Quality Objective of Retention because the project is not within sight of a sensitive viewpoint and the short term effects would be visible by only a few people that would venture up the 646 road.

2.8.2 Cumulative Effects

The Davis Willow Timber sale and the Terrero Mine remediation are two past actions that have had an affect on the visual quality of the Willow Creek viewshed. The timber sale created some additional roads visible from the upper part of the viewshed. The Murphy road would also be visible in this portion of the viewshed, although not from any sensitive viewpoint. Near the



Figure 10: View of the Terrero mine remediation from Highway 63. The Murphy Road is not visible from this point.

bottom of Willow creek, Highway 63 is a sensitive viewpoint. The mine remediation efforts both past and ongoing dominate the foreground views. The Murphy road is not visible from this point and would not contribute to cumulative visual quality effects.

References

USDA Forest Service. April 1974. National Forest Landscape Management Vol. 2, Ch.1. The Visual Management System

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USDA Forest Service. 1987. Santa Fe National Forest Plan

USDA Forest Service. 1977. National Forest Landscape Management Vol.2, Ch.4 Roads

Foster-Wheeler Environmental Corp. 2002. Viveash Fire Area Roads Analysis