Forest Plan standards and guidelines are provided below along with italic text that explains how this project complies with the Forest Plan direction. The FEIS Appendix F also contains excerpts of Desired Conditions and Objectives relevant to this project.

2.2 Terrestrial Ecosystems and Plant Species

Standards

2.2.65 The construction of new permanent roads and utilities must not occur in protected areas in order to protect the ecological integrity of the terrestrial ecosystems within them, prevent ecosystem fragmentation, prevent the disruption of wildlife travel corridors, and prevent the establishment and spread of invasive plants.

No new road construction in protected areas is proposed. .

Guidelines

2.2.70 Ground-disturbing management activities should not occur on lands that have a high potential for mass movement, including lands associated with SJNF and TRFO soil survey map units 254, 386, 606, 720, 926, 20511D, 30506D, 34301D, 34306D, 34506D, 50803D, 50806D, 70806D, 70807D, 74803D, 80604D, 80803D, and 80804D, or lands that display evidence of slope instability, unless site-specific field analysis indicates that mass movement is not likely to occur on those lands.

If roads are considered a "ground disturbing management activity" then the guideline would not be followed for <u>all</u> road segments on the minimum road system because mass movement could potentially occur in some areas and can also be considered "likely." However, it is necessary to maintain open roads across soils types with a potential for mass movement in order to provide access for recreation and forest management in the RWD area. These roads provide access that cannot be provided without crossing these soil types. Re-locating will not reduce impacts given the topography and engineered character of the existing alignments. Slides or slump events provide an opportunity for appropriate stabilization efforts, and these efforts can be designed to realize appropriate safety standards and long term cost savings (FEIS Section 3.4, 3.12 and 3.16).

2.2.72 Agency actions should avoid or otherwise mitigate long-term adverse impacts in terrestrial ecosystems that have plant communities with G1 or G2 NatureServe Plant Community conservation status ranks in order to maintain the ecological integrity of those rare plant communities.

One G2 plant (Arizona Willow) has the potential to occur in the project area but that potential is low because soils are of alluvium origin and not of volcanic origin. Long term adverse impacts to terrestrial ecosystems that support other willow species are not anticipated and would be improved in the Lone Cone and Fish Creek areas (FEIS Section 3.5).

2.3 Terrestrial Wildlife

Guidelines

2.3.59 Projects or activities that adversely impact pronghorn (*Antilocapra americana*) and elk production areas should be limited or avoided. This will keep reproductive success from being negatively impacted from management activities by using access restrictions during the following periods:

- Pronghorn: May 1–July 1
- Elk: May 15–June 30

Motor vehicle use on roads and trails creates a disturbance impact to elk that are in proximity to roads or trails. However, habitat beyond the influence of the roads and trails is not affected. As stated in the FEIS, Section 3.6, "Based on the analysis of security areas and associated cover and forage along with connectivity, habitat effectiveness for elk is maintained across all alternatives". Therefore restricting motor vehicle use of roads and trails from May 15th to June

30th is not necessary to meet the intent of guideline to keep reproductive success from being negatively impacted from management activities. See also the description of how this project meets Forest Plan guideline 2.13.9 regarding route densities in elk production habitat.

2.3.60 Management activities and access should be limited or avoided in critical winter range, severe winter range, and winter concentration areas for pronghorn, elk, and mule deer during the following times to keep survival and reproduction from being negatively impacted (see Figures 2.3.1, 2.3.2, and 2.3.5):

- Pronghorn: December 1–April 30
- Elk: December 1–April 30
- Mule deer: December 1–April 30

There is no Mule Deer Winter Concentration, Mule Deer Severe Winter Range, Mule Deer Critical Winter range or Pronghorn habitat in the RWD area. There is limited elk winter habitat identified in the RWD area and winter habitat is not affected during the winter months. There is no Bighorn Sheep production or Bighorn sheep winter habitat in the RWD area. (FEIS Section 3.6)

2.3.62 **Ungulates:** Projects or activities in big game critical winter range, winter concentration areas, severe winter range, production areas, and important migration corridors should be designed and conducted in a manner that preserves and does not reduce habitat effectiveness within those mapped areas.

2.3.63 **Ungulates:** In order to provide for healthy ungulate populations capable of meeting state population objectives, anthropomorphic activity and improvements across the planning area should be designed to maintain and continue to provide effective habitat components that support critical life functions. This includes components of size and quality on the landscape providing connectivity to seasonal habitats (wildlife travel corridors), production areas, critical winter range, severe winter range, and winter concentration areas, along with other habitat components necessary to support herd viability.

In order to address Forest Plan guidelines 2.3.62 and 2.3.63 an analysis of habitat effectiveness and wildlife security was undertaken. If security areas exist, the next question was whether or not the habitat within those security areas was effective, and whether or not there was connectivity between the security areas. The analysis results determined a 'yes' answer to both these questions. There is effective habitat and connectivity. Changes due to selection of Alternative B (Modified) for other reasons further enhances this situation, increasing security areas by 3% when comparing to Alternative A, the existing condition (FEIS Chapter 3, Section 3.63)

2.13 Access and Transportation Management - Route Densities for Wildlife Habitat

2.13.29 Road and Motorized Trail Density Guideline for Ungulate Production Areas, Winter Concentration Areas, Severe Winter Range and Critical Winter Range on SJNF land: The intent of this guideline is to ensure no net loss of existing habitat effectiveness within the areas listed below. In order to maintain wildlife habitat effectiveness of SJNF lands, road and motorized trail densities should be addressed when analyzing and approving management actions that affect motorized routes. Where management actions would result in road and motorized trail densities exceeding 1 mile/square mile on SJNF lands in the areas listed below, actions should be designed to maintain habitat effectiveness on SJNF lands throughout each mapped polygon. Habitat effectiveness for this guideline is considered maintained when road densities within the CPW mapped areas on SJNF lands listed below are less than or equal to 1 mile/square mile. When road densities exceed 1 mile/square mile within the CPW mapped

areas on SJNF lands listed below, densities should not be increased without mitigation designed to maintain habitat effectiveness.

Roads used to develop route density calculations include roads on NFS lands only, regardless of road ownership, that are a) open year-long or seasonally to public use and b) closed to public use, but are used for administrative access or are authorized by contract, permit, or other written authorization. Included in these calculations are maintenance level 2–5 NFS roads. Also included for this calculation are NFS trails that are designated for motorized use.

Roads and motorized trails with design features sufficient to maintain habitat effectiveness (such as seasonal closures that are determined to be sufficient mitigation), as determined by the USFS biologist, should not be used for final density calculations.

Non-motorized trails and those roads that are closed to all motorized use and/or are in storage are not used for route density calculations. Temporary roads to be used for 5 years or less are not included in these calculations.

Two Elk Production Area polygons were evaluated. Both polygons contained acres within and outside of the RWD project area. Using the entire polygon and following the protocol above, one production area had a route density of 0.55 miles per square mile and the production area polygon had a route density of 0.78 miles per square mile. Because the existing condition fell below 1 mile per square mile and the proposed action proposed only reductions in total miles, this was identified as a 'non-issue' and was not calculated further for each alternative. FEIS Section 3.6.

In addition, in May of 2018, a new GIS query of route densities in production areas was completed for the motorized roads and trails in this final decision. This query displayed that route densities in the one production area polygon would be 0.80 mi per square mile, and the other production area polygon would be 0.48 miles per square mile. Under the final decision, both polygons display route densities lower than the 1 mile per square mile guideline in the Forest Plan.

Winter use occurs at the lowest elevations primarily in the Groundhog area and not across the entire project area (FEIS page 135). Mapped winter habitats are small polygons that occur in strips near Hwy 145. Because of the private land, a calculation of route densities on National Forest land was not undertaken.

2.4 Riparian and Wetland Ecosystems

Standards

2.4.19 Long term adverse effects to the hydrology, soils, and vegetation of fens and hanging gardens from management activities in or adjacent to them (including motorized travel, road construction, water pumping, and peat removal) must not occur.

2.4.20 Agency actions in protected areas must not adversely affect the long-term ecological integrity of the riparian area and wetland ecosystems within them.

2.4.21 Management actions must not cause long-term change away from desired conditions in riparian or wetland vegetation communities.

No road construction or actions to remove water or peat are proposed under any alternative. Routes that alter waterflow patterns in and around wetlands have been identified for

decommissioning, downgrade to lower maintenance level, realignment, or trail infrastructure development. Short term impacts are addressed and do not lead to long term changes in ecological integrity. Long term ecological integrity of riparian areas and wetland ecosystems is maintained (FEIS Chapter 3, Section 3.2). All potential fen locations were field verified (FEIS Appendix H) and long term adverse effects would not occur.

2.5 Aquatic Ecosystems and Fisheries

Guidelines

2.5.23 Except where barriers are beneficial and necessary to achieve conservation goals for certain aquatic species, fragmentation of aquatic habitats and isolation of aquatic species should be avoided.

A restoration project will remove a barrier and achieve conservation goals for greenback cutthroat trout (Spring Creek) FEIS Section 3.3.

2.5.24 Sediment delivery to streams occupied by MIS or threatened, endangered, or sensitive species should be avoided.

Currently, the waters within the Rico-West Dolores Landscape meet water quality standards for sediment. Alternative B (Modified) will reduce the risk of sediment delivery to the streams occupied by fish species because both road and trail stream crossings would be reduced. Design Features are also used and the USFWS concurred with a 'not likely to adversely affect' finding for threatened fish species (FEIS Section 3.3, and BA in Project File).

2.5.25 Activities that may cause sedimentation to amphibian habitats should be minimized.

Sedimentation to amphibian habitat is minimized through application of project design features and the final decision's trail realignment, infrastructure development and reconstruction. The potential for sedimentation is further reduced by removing roads, converting roads to trails, and removing one user group from some trails. (FEIS Section 3.2 and 3.6)

2.6 Water Resources

Standards

2.6.30 Activities must not be allowed within aquatic management zones that will cause a long-term change from desired conditions. The protection or improvement of riparian values, water quality, aquatic community, and for long-term stream health in these areas must be emphasized. Aquatic management zones have a minimum horizontal width from the top of each bank of 100 feet or the mean height of the mature late-seral vegetation, whichever is greater.

A long-term change from desired conditions is not anticipated (FEIS Chapter 3, Section 3.2)

Guidelines

2.6.32 Roads and trails that are removed from the SJNF transportation network, as well as maintenance level 1 roads (i.e., roads that have been closed to the public but may be used in the future principally for administrative purposes), should be treated sufficiently where no further management intervention would be necessary in order to sustain long-term natural processes. This will avoid future risks to watershed functions, water quality, and/or aquatic habitat. Sufficient treatments may include removal of unstable fills, effective and permanent breaching of drainage ditches, elimination of persistent in-sloped road surfaces; complete removal of stream-crossing structures and associated fills with restoration of floodplains, and the maintenance or restoration of fish passages.

Decommissioning methods for unneeded roads are identified. Priorities for road reconstruction and decommissioning are assigned to areas of wetland concerns (Lone Cone, Tin Can Basin, FR149/Bolam Pass, and Spring Creek Culvert) See FEIS Section 2.3.4 Design Features and Section 3.2.

2.13 Access and Transportation Management – Road Densities for Water Quality and Watershed Health

Guidelines

2.13.27 Road Density Guideline for Water Quality and Watershed Health on SJNF Lands: In order to protect water quality and watershed function, road densities on SJNF lands should not exceed 2 miles/square mile within any U.S. Geological Survey (USGS) 6th level Hydrologic Unit Code (HUC) watershed. In order to protect major surface source water protection areas for municipalities within USGS 6th level HUC watersheds, road densities on NFS lands should not exceed 1.5 miles/square mile. If new road construction is necessary on NFS lands within an area exceeding this density guideline, management actions should be considered that would result in post-construction road densities that are equal to or less than the pre-construction density. The following parameters and constraints will be used to calculate road density for water quality and watershed health:

2.13.27a Roads used to develop road density calculations include those roads on NFS lands only, regardless of road ownership, that are a) open year-long or seasonally to public use and b) closed to public use, but are used for administrative access or are authorized by contract, permit, or other written authorization. Included in these calculations are NFS maintenance level 2–5 roads. Non-motorized and motorized trails and those roads that are closed to all motorized use and/or are in storage are not used for road density calculations. Temporary roads to be used for 5 years or less are not included in these calculations.

2.13.27b Road densities will be calculated within USGS 6th level HUC watersheds on NFS lands only.

2.13.27c Municipal watersheds are USGS 6th level HUC watersheds where the surface source water intake exists for an incorporated town, city, or other municipality with a public water supply. The MOU between the USFS Region 2 and the CDPHE states, “Revised Forest Plans will provide direction and desired conditions for municipal supply watersheds/source water areas to protect water quality while allowing for multiple use outputs (per 36 CFR 251.9 and FSM 2542).”

2.13.27d Data used for density calculations will be based on the best available information at the time of analysis.

Route densities are below the recommended 1 mile per square mile for all watersheds currenty (FEIS Chapter 3, Section 3.2.2). A further, slight, reduction will occur in Alternative B (Modified).

2.7 Livestock and Rangeland Management

No standards and guidelines specific to roads and trails

2.8 Invasive Species

No standards or guidelines specific to roads and trails

2.9 Timber and Other Forest Products

No standards or guidelines specific to roads and trails

2.10 Insects and Disease

No standards or guidelines specific to roads and trails

2.11 Fire and Fuels Management

No standards or guidelines specific to roads and trails

2.12 Air Quality

No standards or guidelines specific to roads and trails

2.13 Access and Travel Management

Standards

2.13.21 SJNF and TRFO road construction and reconstruction must be designed and constructed in accordance with the most recent applicable agency design and construction direction, as well as applicable Federal Highway Administration adopted design standards for the corresponding transportation facility.

No road construction or reconstruction is proposed

Guidelines

2.13.25 Road and trail maintenance investment on SJNF lands should be prioritized by a travel analysis that categorizes investment priority based on route value to public lands and loss of agency investment, as well as risk to the environment and the traveling public. The following risk categories and strategies should be used to categorize management and investments:

• **High-Value/Low-Risk Routes:** The route condition should be preserved through annual maintenance. Roads in this category that have high value for private access should be considered for transfer to the appropriate jurisdictional managing entity.

There are 0 miles of this type of road in the RWD area.

• **High-Value/High-Risk Routes:** These routes should receive first priority for investment and maintenance funding (in order for them to be restored to appropriate standard[s] and to reduce resource risks). Roads in this category that have a high value for private access should be considered for transfer to the appropriate jurisdictional managing entity.

There are 10 miles of this type of road in the RWD area and most are proposed to be maintained. FEIS Section 3.16

• **Low-Value/High-Risk Routes:** These routes should receive the highest priority in order to reduce maintenance level or maintenance intensity. Roads in this category may be considered for conversion to trails or otherwise be considered for decommissioning.

There are 6.3 miles of this type of road in the RWD area. Roads in this category and the Medium Risk/Medium Benefit category were evaluated. Some roads were proposed to convert to trail or be decommissioned. (FEIS Section 3.16)

• **Low-Value/Low-Risk Routes:** These routes should receive the lowest priority for maintenance funding. Consideration should be given to converting the roads to trails. These routes should be considered for decommissioning or reduction in maintenance level or intensity.

There are 50.2 miles of this type of road in the RWD area – Most are ML1 stored roads. Approximately 30 miles are proposed for decommissioning and the remainder will remain in storage to provide for long term forest management needs (FEIS Section 3.16).

2.14 Recreation

Guidelines

2.14.64 Summer and winter ROS maps should guide project-specific decisions and implementation activity. These maps define broad physical, social, and administrative settings for the entire SJNF and TRFO. Site-specific analysis is necessary ensure desired setting conditions are applied at the project level.

Under the final decision, there are no motorized roads or trails that fall within semiprimitive nonmotorized settings on the Forest Plan ROS map. Motorized roads and trails all fall within

semiprimitive motorized or roaded natural settings identified on the Forest Plan ROS map. Other characteristics of the roads and trails such as surface and signing are in keeping with semiprimitive settings because they are not highly developed or paved. There is a high degree of interaction with the natural environment, as well as asense of remoteness. Trails provide challenge and opportunities for self-reliance. Administrative actions within this area are intermittent (example vegetation management projects).

For the reasons above proposals to refine the ROS maps in the Forest Plan for this project area are not carried forward in the final decision.

2.15 Scenery and Visual Resource Management

Standards

2.15.13 On USFS lands, all resource management activities must be consistent with the established scenery objectives shown on Figure 2.15 unless a decision (with supporting rationale) is made to deviate from the management guidance in a site-specific NEPA decision.

Scenery is not impacted broadly because this project would not result in changes to vegetation, nor would it result in newly built features such as buildings. No new road construction is proposed. Trail features and trail impacts such as rutting and braiding are addressed under trail maintenance and feasibility in the Recreation section of the FEIS. Therefore, a separate analysis of scenery is not included. (FEIS Section 3.1) .

Guidelines

2.15.18 Straight line-of-sight road construction should be avoided. Roads through wooded areas should be designed in order to follow a curvilinear path using natural topography. Road construction across ridge tops should be avoided where it may cause a visual contrast in the landscape or where it may add skyline alterations that are visually obvious.

No road construction is proposed

2.16 Heritage and Cultural Resources

Guidelines

2.16.22 Activities that could adversely affect sites eligible or potentially eligible for the NRHP should avoid these sites by a minimum of 300 feet, unless otherwise specified by the Authorized Officer, and/or unless other mitigating measures are developed. If a project is specified by the Authorized Officer to be within 100 feet of an eligible or unevaluated site, all ground-disturbing activity should be monitored by a qualified archaeologist.

Portions of trails are in immediate vicinity of sites eligible for the NRHP or 'Needs Data' sites. In areas where this occurs survey and evaluation by the District archaeologist would be needed prior to any re-alignment or trail widening. With these measures in place no adverse effects are anticipated. FEIS Section 2.3.4 and 3.8.

2.17 Paleontological Resources

No direction specific to roads and trails. Paleontological resource impacts were not identified as an issue for this area

2.18 Lands and Special Uses

Guidelines

2.18.19 NFS roads, where private use substantially dominates public use, should be conveyed to the appropriate local government jurisdiction.

No opportunities exist for jurisdictional transfer. The West Dolores road is already under easement to Dolores County.

Management Area 3 (MA 3): Natural Landscapes with Limited Management

Allowable Uses

Motorized (summer): Restricted (motorized travel may occur in some MA 3 locations on designated routes)

Approximately 2/3rds of the RWD area falls within MA3 and this MA includes the Colorado Roadless areas. Motorized use would occur on designated trails only.

Management Area 4 (MA4): High Use Recreation

Allowable Uses

Motorized Summer – Allowable

Management Area 5 (MA 5): Active Management

Allowable Uses

Motorized (summer): Allowable

National Recreation and Scenic Trails and National Historic Trails

Guidelines

3.11.11 Other resource activities should be designed in order to meet scenic quality objectives for these special designation trails (generally, a foreground and middle-ground of very high to high scenic integrity or VRM Class II).

No changes to vegetation within the foreground or middle ground of these trails would occur. Trail Class 2 or 3 trails provide high scenic integrity. Prohibitions on cross country travel will prevent new bare ground routes within foreground and middle ground. Trail maintenance will address spots of braiding or trenching.

Scenery on either side of the Calico NRT is not affected by this project.

3.7 Recommended Wilderness Areas

No changes are proposed under any alternative for the portions of the Hermosa CRA and Lizard Head CRA recommended for wilderness designation. No roads exist within these areas. No trails are currently designated for motor vehicle use within these areas and none are proposed.

MA2 - Rico Special Management Area

Allowable Uses

Motorized (summer): Restricted to motorized routes and trails designated within the Rico area

Motorized use of roads and trails is restricted to designated routes under all Alternatives.