

3.19 Wild Horse Management Areas

This section describes existing wild horse HMAs and HAs in the analysis area and discloses potential Project impacts on those HMAs and HAs.

3.19.1 Regulatory Background

Passage of the Wild Free-Roaming Horses and Burro Act (P.L. 92-195) in 1971 required the BLM to protect, manage, and control wild free-roaming horses and burros on public lands. The act requires the BLM to manage wild horses and burros in a manner designed to achieve and maintain a thriving natural ecological balance on public lands.

HMAs are areas designated within RMPs for wild horse management. HAs are those places where wild horses were counted but are not designated for wild horse management within a RMP. Appropriate management levels (AMLs) for wild horses and burros are established in accordance with objectives and management actions through Multiple Use Decisions. Multiple Use Decisions establish the appropriate minimum and maximum number of wild horses to be managed within each HMA. The BLM staff studies natural resources such as vegetation and wildlife habitat to help determine the AML, taking into consideration uses such as livestock grazing, wildlife use, recreation, and the BLM's multiple-use mission under FLPMA. Annual monitoring data are collected to evaluate progress toward meeting management objectives. When herd sizes exceed the AML or resource damages occur, animals are gathered and offered for adoption. Other factors such as drought, lack of forage, public nuisance, or wildland fire also may require the BLM to remove some animals from the range.

3.19.2 Data Sources

Information regarding wild horse resources within the analysis area was obtained from a review of existing published sources, RMPs, and applicable county land use plans. Current information regarding conditions in the HMAs/HAs was obtained from available GIS data, topographic maps, and internet-based tools including GoogleEarth™. A list of RMPs used in the development of this section is presented in **Table 1-3**. Vegetation species nomenclature is consistent with the NRCS Plants Database (NRCS 2013), unless otherwise specified.

Data sources include published maps and reports and internet websites of the USGS and UGS. Other data sources included academic and professional journals and publications. Livestock grazing allotment information was provided by the BLM FOs crossed by the various routes. There are no HMAs or HAs within NFS lands.

3.19.3 Analysis Area

The analysis area for wild horses comprises all HMAs or HAs with portions of land located within terminal areas, ground electrode areas, or transmission corridors (which represent the maximum area in which the proposed 250-foot-wide transmission line ROW and most construction disturbance would be located).

3.19.4 Baseline Description

The 9 wild horse HMAs/HAs shown in **Table 3.19-1** are located within the analysis area. These designated HMAs/HAs are located on BLM-administered land. During periodic wild horse roundups, BLM uses helicopters within the HMAs/HAs to assist in directing the horses into the designated collection areas. Due to the necessary use of helicopters, the BLM prefers that transmission lines located within HMAs/HAs be located parallel to existing transmission lines to the extent feasible.

Table 3.19-1 Wild Horse Herd Management Areas and Herd Areas within the Analysis Area

Location/Mgt Entity ¹	HMA/HA	Acreage	Description
Region I			
Wyoming/Rawlins FO	Adobe Town HMA	472,812	AML is 610-800 horses.
Colorado/Little Snake FO	Sand Wash Basin HMA	157,730	AML is 163 to 363 horses; population is about 350. The boundary of the HMA is fenced, except along SH-318, generally preventing wild horses from entering or leaving the HMA.
Region II			
Colorado/White River FO	Piceance-East Douglas Creek HMA	190,130	AML is 135 to 235 horses; 2010 population was about 265 within the HMA and 115 outside the HMA.
Colorado/White River FO	North Piceance HA	76,959	Managed for 0 to 10 years to provide forage for a herd of 0 to 50 horses in each HA. The objective for anything greater than 10 years would be to remove all wild horses from these areas; however, this decision currently is being challenged in court.
Colorado/White River FO	West Douglas Creek HA	123,387	Managed for 0 to 10 years to provide forage for a herd of 0 to 50 horses in each HA. The objective for anything greater than 10 years would be to remove all wild horses from these areas; however, this decision currently is being challenged in court.
Utah/Vernal FO	Hill Creek HMA	88,173	AML of 195.
Region III			
Utah/Cedar City District	Chloride Canyon HMA	63,683	2009 AML of 30, estimated horse population of 49.
Utah/Cedar City District	North Hills HMA	49,900	Managed in cooperation with the Dixie National Forest Pine Valley Ranger District's North Hills Wild Horse Territory (24,029 acres). Together, the combined area is referred to as the North Hills Wild Horse Management Plan Area and comprises 74,000 acres. 250 wild horses within the HMA and Wild Horse Territory. AML of 40-60. The Dixie National Forest Pine Valley Ranger District's North Hills Wild Horse Territory is not within the refined transmission corridor.
Nevada/Ely District	Eagle HMA	670,000	AML of 100 to 210 horses; 595 horses as of 2009.

¹ There are no wild horse HMAs/HAs in Region IV.

Sources: BLM 2014a,b, 2012a-d, 2011, 2010, 2009, 2008a-c, 1997.

3.19.5 Impacts to Wild Horse HMAs and HAs

3.19.5.1 Impacts from Terminal Construction and Operation

Northern and Southern Terminals

There are no HMAs/HAs within or near the Northern or Southern Terminal siting areas.

Southern Terminal Near IPP (Design Option 2)

Under Design Option 2, the Southern Terminal would be located near the IPP in Utah instead of at the Marketplace Hub in Nevada and the ground electrode system would be within 50 miles of the IPP in Millard County, Utah. Design Option 2 would have no effects on HMAs/HAs because there are no HMAs/HAs within the siting areas for the relocated Southern Terminal or electrode bed facilities.

Substation Near IPP (Design Option 3)

Under Design Option 3, a substation would be located near the existing IPP substation in Utah for AC operation until phase two of the Project is completed. This substation would not affect any HMAs/HAs because there are no HMAs/HAs within the proposed location for the substation.

3.19.5.2 Impacts Common to All Alternative Routes and Associated Facilities

In general, impacts to wild horses and HMAs/HAs would result from noise and increased human activity during installation of the transmission line towers, clearing and grading of existing and new access roads, vehicle operation in areas where overland travel would occur, and use of temporary laydown areas. Construction activities and operation of the transmission line could affect the ability of the BLM to conduct future wild horse gathers in and near the transmission line area. Each HMA/HA is discussed separately by region below.

Design Option 2

Design Option 2 would involve modifications of proposed transmission facilities that would apply to all alternatives. Under Design Option 2, the transmission line would be AC along the southern portion of the line, from the Southern Terminal near the IPP to the Marketplace Hub in Nevada. Unlike DC power lines, AC transmission lines can cause induced current in nearby objects, such as fences or other equipment in very close proximity to the transmission line. In order to minimize the potential for electric shock, fences and other structures with metal surfaces located within 300 feet of the centerline would be grounded. All metal irrigation systems and fences that parallel the AC transmission line for distances of 500 feet or more within 300 feet of the centerline would be grounded. Additionally, all fences that cross under the AC transmission line also would be grounded (**Appendix D**). Section 3.18, Public Health and Safety, provides more information regarding impacts from AC lines.

Design Option 3

Design Option 3 also would involve modifications of proposed transmission facilities that would apply to all alternatives. Under Design Option 3, Phase I, AC transmission lines would be constructed instead of DC transmission lines from the Northern Terminal in Wyoming to IPP in Millard County, Utah. Under Phase 2, the AC transmission lines would be converted to DC and additional DC transmission lines would be constructed from IPP in Millard County, Utah to Eldorado Valley, south of Boulder City, Nevada (Marketplace Hub). Impacts to wild horses would be the same as described above for Design Option 2; however, the impacts would apply to the northern portion of the line from the Northern Terminal in Wyoming to the substation at IPP in Millard County, Utah. Section 3.18, Public Health and Safety, provides more information regarding impacts from AC lines.

3.19.5.3 Region I

Within Region I, two HMAs would be impacted by the alternative routes. **Table 3.19-2** provides a summary of acreage impacts. The Salt Wells Creek HMA would not be affected by the proposed Project route or its alternatives.

Table 3.19-2 Impacts to Region I HMAs/HAs by Alternative

HMA	Alternative I-A	Alternative I-B	Alternative I-C	Alternative I-D
Adobe Town HMA				
Miles / acres refined transmission corridor (% HMA)	13 / 2,908 (<1%)	13 / 2,897 (<1%)	NA	6 / 402 (<0.1%)
ROW clearing / construction / operations (acres)	488 / 268 / 56	488 / 268 / 56	NA	98 / 55 / 11
Sand Wash Basin HMA				
Miles / acres refined transmission corridor (% HMA)	0 / 0 (0%)	0 / 0 (0%)	NA	0 / 0 (0%)
ROW clearing / construction / operations (acres)	0 / 15 / 6	0 / 15 / 6	NA	0 / 15 / 6

Alternative I-A (Applicant Proposed)

Under Alternative I-A, two HMAs would be affected by construction and operation of the transmission line.

Approximately 13 miles of the refined transmission corridor would cross the 472,812-acre Adobe Town HMA and there would be 2,908 acres (less than 1 percent of the HMA) within the refined transmission corridor. This area represents the full area in which transmission alignment shifts could occur and where most construction disturbances would occur. Up to 488 acres (less than 0.1 percent of the HMA) of ROW vegetation removal could occur in the HMA. This area would be subject to surface disturbance and/or vegetation removal and maintenance that could affect forage for wild horses. Approximately 268 acres (less than 0.06 percent of the HMA) would be disturbed for tower placement, support areas, or road development during the construction phase; a third of that disturbance (about 56 acres) would be permanent. The land area within the HMA that would not be affected by tower placement or road development (about 99 percent of the HMA) would remain available for wild horse forage and shelter. All water sources would be completely avoided (i.e., spanned by aerial crossing). Any areas of temporary disturbance would be restored to pre-construction contours and restored with BLM-approved seed mixtures (see **Appendix C; Table C.1-1, VEG-2**).

The refined transmission corridor for Alternative I-A would not cross the 157,730-acre Sand Wash Basin HMA; however, road construction or support area development could potentially occur beyond the refined transmission corridor that could affect the HMA. Based on modeled estimates, there could be up to 15 acres (less than 0.01 percent of the HMA) of potential disturbance associated with support areas or road development during construction; about half of that disturbance (approximately 6 acres) could be permanent. However, over 99.9 percent of the HMA would remain available for wild horse forage and shelter. Construction also could affect use of CR-75, which is a primary route for public wild horse viewing.

Wild horses within the HMAs also would be subject to noise and increased human activity during installation of the transmission line towers, clearing and grading of existing and new access roads, vehicle operation in areas where overland travel would occur, and use of temporary laydown areas and tensioning sites. Depending on area topography, noise and human activity would generally be confined to the refined transmission corridor (2,908 acres within the Adobe Town HMA); the refined

transmission corridor would not cross the Sand Wash Basin HMA. However, these effects could extend beyond the refined transmission corridor for road or construction support site development. Noise would attenuate to background levels within about 1 mile of disturbance areas (assuming no additional attenuation through topography). Construction disturbances would likely last 3 to 12 weeks, depending on the length of time it takes for the line to be constructed across the HMA.

Construction activities and operation of the transmission line could affect the ability of the BLM to conduct future wild horse gathers in and near the transmission line area. However, no gathers currently are planned within either HMA.

Alternative I-B (Agency Preferred)

Under Alternative I-B, impacts to the Adobe Town HMA would be similar to those described under Alternative I-A, but the refined transmission corridor would affect slightly less acreage (11 fewer acres compared to Alternative I-A). Based on modeled estimates, the potential area affected beyond the refined transmission corridor for ROW clearing, construction, and operation would be the same as Alternative I-A.

Impacts to the Sand Wash Basin HMA would be the same as described under Alternative I-A.

The two Tuttle Ranch Micro-siting Options 3 and 4 would not change impacts to wild horses as described above since there are no HMAs in the vicinity.

Alternative I-C

Alternative I-C would not cross any designated HMAs.

Alternative I-D

Alternative I-D would cross about 6 miles of the Adobe Town HMA. Impacts would be similar to those described under Alternative I-A, except that the refined transmission corridor would cross about 86 percent fewer acres of the HMA (2,506 acres less than Alternative I-A) and there would be fewer acres potentially affected beyond the refined transmission corridor (approximately 20 percent of Alternative I-A's modeled estimates for ROW clearing, construction and operation acreages).

Impacts to the Sand Wash Basin HMA would be the same as those described under Alternative I-A.

Alternative Ground Electrode Systems in Region I

A ground electrode system of approximately 600 acres in size would be necessary in Region I within approximately 100 miles of the Northern Terminal as discussed in Chapter 2.0. The ground electrode system alternative locations in Region I are depicted in Chapter 2.0 in **Figure 2-21**. The five potential locations, all of which are located in the BLM Rawlins FO in Wyoming, are not within or near HMAs or HAs.

Region I Conclusions

Alternative I-A would have the most impact on wild horses, affecting about 1 percent of one HMA, the Adobe Town HMA, and having potential to affect less than 0.01 percent of another HMA, the Sand Wash HMA, from potential road construction beyond the refined transmission corridor. Alternative I-C would have the least impacts as it does not cross any designated HMAs.

3.19.5.4 Region II

Within Region II, four HMAs/HAs would be affected by alternative routes. The HMAs/HAs crossed by the alternatives in Region II are summarized in **Table 3.19-3**.

Table 3.19-3 Impacts to Region II HMAs/HAs by Alternative

HMA	Alternative II-A	Alternative II-B	Alternative II-C	Alternative II-D	Alternative II-E	Alternative II-F	Alternative II-G
Piceance-East Douglas Creek HMA							
Miles/ acres refined transmission corridor (% HMA)	NA	1 / 381 (0.2%)	1 / 381 (0.2%)	NA	NA	NA	NA
ROW clearing / construction / operations (acres)	NA	43 / 24 / 5	43 / 24 / 5	NA	NA	NA	NA
North Piceance HA							
Miles/ acres refined transmission corridor (% HMA)	NA	6 / 2,631 (3%)	6 / 2,631 (3%)	NA	NA	NA	NA
ROW clearing/ construction/ operations (acres)	NA	342 / 179 / 35	342 / 179 / 35	NA	NA	NA	NA
West Douglas Creek HA							
Miles/ acres refined transmission corridor (% HMA)	NA	13 / 2,778 (2%)	13 / 2,778 (2%)	NA	NA	NA	NA
ROW clearing/ construction/ operations (acres)	NA	367 / 220 / 49	367 / 220 / 49	NA	NA	NA	NA
Hill Creek HMA							
Miles/ acres refined transmission corridor (% HMA)	NA						
ROW clearing/ construction/ operations (acres)	NA	NA	NA	0 / <1 / <1	NA	0 / <1 / <1	NA

Alternative II-A (Applicant Proposed)

Alternative II-A would not cross any designated HMAs/HAs. The Fruitland and Strawberry IRA micro-siting options would not affect wild horses, as there are no HMAs or HAs within the micro-siting locations.

Alternative II-B

Under Alternative II-B, approximately 1 mile of the refined transmission corridor would cross the 190,130-acre Piceance-East Douglas Creek HMA. There would be 381 acres (less than 0.2 percent of the HMA) within the refined transmission corridor, which represents the full area in which transmission alignment shifts could occur and where most construction disturbances would occur. Up to 43 acres (less than 0.1 percent of the HMA) of ROW vegetation removal could occur in the HMA. This area would be subject to surface disturbance and/or vegetation removal and maintenance that could affect forage for wild horses. An estimated 24 acres would be disturbed for tower placement, support areas, or road development during construction, 5 acres of which would be permanent. The land area in the HMA that would not be affected by tower placement or road development (over 99.9 percent of the HMA as modeled) would remain available for wild horse forage and shelter and all intermittent streams, waterholes, or reservoirs used by wild horses would be completely avoided (i.e., spanned by aerial crossing). Any areas of temporary disturbance would be restored to pre-construction contours and restored with BLM approved seed mixtures (see **Appendix C; Table C.1-1, VEG-2**). Wild horses within the Piceance-East Douglas Creek HMA also would be subject to noise and increased human activity during installation of the transmission line towers, clearing and grading of existing and new access roads, vehicle operation in areas where overland travel would occur, and use of temporary laydown areas and tensioning sites. Depending on area topography, noise and human activity would generally be confined to the refined transmission corridor (381 acres, or 0.2 percent of the HMA), but could extend beyond this area for road or construction support site development. Noise would attenuate to background levels within 1 mile of disturbance areas (assuming no additional reductions through topography). Construction

disturbances would likely last 3 to 12 weeks, depending on the length of time it takes for the line to be constructed across the HMA.

The refined transmission corridor would cross 6 miles of the 76,959-acre North Piceance HA and 13 miles of the 123,387-acre West Douglas HA. Impacts to these HAs would be similar to those identified for the Piceance-East Douglas Creek HMA, but would affect a greater portion of both of these HAs, as discussed below.

The refined transmission corridor would encompass 2,631 acres of the North Piceance HA (3 percent of the HA). Up to 342 acres (0.4 percent of the HA) of ROW vegetation removal could occur in the HA. This area would be subject to surface disturbance and/or vegetation removal and maintenance that could affect forage for wild horses. Approximately 179 acres (0.2 percent of the HA) would be disturbed for tower placement, support areas, or road development during the construction phase; a fifth of that disturbance (approximately 35 acres) would be permanent.

The refined transmission corridor would encompass 2,778 acres of the West Douglas HA (3 percent of the HA). Up to 367 acres (0.3 percent of the HA) of ROW vegetation removal could occur within the HA. Approximately 220 acres (0.2 percent of the HA) would be disturbed for tower placement, support areas, or road development during the construction phase; about 49 acres (20 percent) would be permanent.

Construction activities and operation of the transmission line could affect the ability of the BLM to conduct future wild horse gathers in and near the transmission line area. As of September 2011, the BLM White River FO proposed to gather approximately 382 wild horses from the Piceance-East Douglas Creek HMA. Additionally, as of 2012, there were approximately 185 wild horses within the West Douglas Creek HA, and BLM was awaiting the Decision Record for a proposed emergency gather of excess horses due to ongoing drought conditions. The BLM also has indicated that it may be necessary to conduct multiple gathers (pursuant to NEPA analysis) in the West Douglas Creek HA over the duration of drought conditions (BLM 2012c). The following mitigation is proposed to reduce impacts to planned gathers:

WH-1: *Construction activities would be suspended as needed during wild horse gathers, as determined through consultation with the BLM.*

Application of **WH-1** would reduce impacts to wild horse management during construction, but would not mitigate for the impacts to gathers during operation of the line. The refined transmission corridors would cross the Piceance-East Douglas Creek HMA and North Piceance HA near their western borders, leaving the majority of the HMA and HA unaffected. The 250-foot-wide transmission line ROW would bisect the western portion of the West Douglas HA. Presence of a transmission line in this area would affect the use of helicopters for the gather of wild horses.

Alternative II-C

Impacts to HAs and HMAs under Alternative II-C would be the same as described under Alternative II-B because the routes and mileages are the same.

Alternative II-D

The refined transmission corridor for Alternative II-D would not cross any designated HMAs. However, there is potential for about 1 acre of road construction or support area development to occur within the 88,173-acre Hill Creek HMA, of which a fraction would be permanent. This is less than 0.1 percent of the HMA. Forage would not be appreciably reduced, but the noise and human activity could affect wild horses within about 1 mile of these areas (the maximum distance in which noise would attenuate to background levels without additional reductions through topography). This

disturbance would likely last 3 to 12 weeks, depending on the length of time it takes for the line to be constructed across the HMA.

Alternative II-E

Alternative II-E would not cross any designated HMAs or HAs.

Alternative II-F

Impacts to HMAs and HAs would be the same as under Alternative II-D.

Alternative II-G (Agency Preferred)

Alternative II-G would not cross any designated HMAs or HAs.

Alternative Variation in Region II

The Reservation Ridge Alternative Variation would not cross any designated HMAs or HAs.

Alternative Connectors in Region II

The Lynndyl, IPP East, Castle Dale, Price, and Roan Cliffs Alternative Connectors would not cross any designated HMAs or HAs.

Region II Series Compensation Stations (Design Option 3)

If Design Option 3 were implemented, a series compensation station would be necessary along the AC-configured alternative routes of Region II. There are three potential sites for the series compensation station, each corresponding to specific alternative routes. Upon completion of Phase 2 of Design Option 2, when there is no further utility for the station, it would be deconstructed and reclaimed to the original condition. These series compensation station alternatives are depicted in **Figure 2-3**.

There are no HMAs and HAs along the alternative route near the proposed locations for Series Compensation Station 1 or 2. The proposed location for Series Compensation Station 3 would be about 6 miles from the area within the Hill Creek HMA where roads for Alternatives II-D and II-F could be located and where some surface disturbance is proposed (see **Table 3.19-3**, and Section 3.19.5.4). There would be no impacts to the Hill Creek HMA from construction and operation of the compensation station as long as the location is not moved within the HMA. The following mitigation is proposed to eliminate impacts to HMAs if the site is relocated during on-the-ground Project siting.

WH-2: *Series compensation stations shall not be sited in any HA or HMA.*

Region II Conclusions

Alternatives II-B and II-C would have the most impact on wild horses, crossing about 3 percent of two HAs, the North Piceance and West Douglas HAs, and less than one percent of one HMA, the Piceance-East Douglas Creek HMA. Alternatives II-A, II-E, and II-G would not affect any HMAs/HAs. Alternative II-D and Alternative II-F would not cross any HMAs, but would have potential to affect less than 0.1 percent of one HMA, the Hill Creek HMA, through road development.

3.19.5.5 Region III

Within Region III, three HMAs would be impacted by the alternative routes. **Table 3.19-4** provides a summary of acreage impacts to the HMAs within Region III.

Table 3.19-4 Impacts to Region III HMAs/HAs by Alternative

HMA	Alternative III-A	Alternative III-B	Alternative III-C	Alternative III-D
Chloride Canyon HMA				
Miles/ acres refined transmission corridor (% HMA)	2 / 537 (0.8%)	NA	NA	NA
ROW clearing/ construction/ operations (acres)	155 / 76 /10	NA	NA	NA
North Hills HMA				
Miles/ acres refined transmission corridor (% HMA)	NA	0 / 0	0 / 0	0 / 0
ROW clearing/ construction/ operations (acres)	NA	0 / 12 / 3	0 / 11 / 2	0 / 12 / 3
Eagle HMA				
Miles/ acres refined transmission corridor (% HMA)	NA	0 / 0	0 / 0	0 / 0
ROW clearing/ construction/ operations (acres)	NA	0 / <1 / <1	0 / <1 / <1	0 / <1 / <1

Alternative III-A (Applicant Proposed)

Under Alternative III-A, approximately 2 miles of the refined transmission corridor would cross the 63,683-acre Chloride Canyon HMA. There would be 537 acres (less than 0.8 percent of the HMA) within the refined transmission corridor. This area represents the full area in which alignment shifts could occur, and where most construction disturbances would occur. Up to 155 acres (0.2 percent of the HMA) of ROW vegetation removal could occur in the HMA. This area would be subject to surface disturbance and/or vegetation removal and maintenance that could affect forage for wild horses. Approximately 76 acres (0.01 percent of the HMA) would be disturbed for tower placement and road development during the construction phase; approximately 10 acres of this would be permanent. The land area in the HMA that would not be affected by tower placement or road development (over 99.9 percent as modeled) would remain available for wild horse forage and shelter. All water sources would be completely avoided (i.e., spanned by aerial crossing). Any areas of temporary disturbance would be restored to pre-construction contours and restored with BLM approved seed mixtures (see **Appendix C; Table C.1-1, VEG-2**).

Wild horses within the Chloride Canyon HMA also would be subject to noise and increased human activity during installation of the transmission line towers, clearing and grading of existing and new access roads, vehicle operation in areas where overland travel would occur, and use of temporary laydown areas and tensioning sites. Depending on area topography, noise and human activity would generally be confined to the refined transmission corridor (537 acres, or 0.8 percent of the HMA), but could extend beyond these areas for road or construction support site development. Noise would attenuate to background levels within 1 mile of disturbance areas (assuming no additional attenuation through topography). This disturbance would likely last 3 to 12 weeks, depending on the length of time it takes for the line to be constructed across the HMA.

Construction activities and operation of the transmission line could impact the ability of the BLM to conduct future wild horse gathers in and near the transmission line area. Application of **WH-1** would reduce impacts to wild horse management during construction, but would not mitigate for the impacts to gathers during operation of the line.

Alternative III-B

The refined transmission corridor for Alternative III-B would not cross any designated HMAs. However, up to 12 acres of road construction or support area development could occur within the 49,900-acre North Hills HMA and less than 1 acre could occur within the 670,000-acre Eagle HMA. These acreages comprise less than 0.1 percent of these HMAs. Forage would not be appreciably reduced, but the noise and human activity could affect wild horses within about 1 mile of these areas (the maximum distance in which noise would attenuate to background levels without additional

reductions through topography). This disturbance would likely last 3 to 12 weeks, depending on the length of time it takes for the line to be constructed across the HMA.

Application of **WH-1** would reduce impacts to wild horse management during construction, but would not mitigate for the impacts to gathers during operation of the line.

Alternative III-C

Impacts under Alternative III-C would be the same as under Alternative III-B except that slightly less acreage (5.5 percent) of the North Hills HMA would be within the refined transmission corridor.

Application of **WH-1** would reduce impacts to wild horse management during construction, but would not mitigate for the impacts to gathers during operation of the line.

Alternative III-D (Agency Preferred)

Impacts under Alternative III-D would be the same as under Alternative III-B.

Alternative Variations in Region III

Under the Pinto Alternative Variation, the refined transmission corridor would not cross any designated HMAs; however, less than 1 acre of road construction or support area development could occur within the Chloride Canyon HMA, of which a fraction would be permanent. These types of impacts would be the same as the comparable portion of Alternative III-A, but the surface disturbance acreage would be much less (1 percent of the construction disturbance and 10 percent of the operations disturbance of Alternative III-A) and no ROW clearing would occur. The Ox Valley East and West Alternative Variations would not cross any HMAs.

Alternative Connector in Region III

The Moapa, Avon, and Arrowhead Alternative Connectors would not cross any HMAs.

Alternative Ground Electrode Systems in Region III

A ground electrode system of approximately 600 acres in size would be necessary in Region III within approximately 100 miles of the Southern Terminal as discussed in Chapter 2.0. The ground electrode system alternative locations in Region III are depicted in Chapter 2.0 in **Figure 2-23**. The seven potential locations are not within or near HMAs or HAs.

Region III Series Compensation Stations (Design Option 2)

If Design Option 2 were implemented, a series compensation station would be necessary along the AC-configured alternative routes of Region III. There are three potential sites, each corresponding to a specific alternative route. These series compensation station alternatives are depicted in **Figure 2-2**. The proposed location for the Series Compensation Station 1 would be about 9 miles from the area where Alternative II-A crosses into the Chloride Canyon HMA and where construction and operation surface disturbances are proposed (see **Table 3.19-4**, and Section 3.19.5.5). There would be no impacts to the Chloride Canyon HMA from construction and operation of the compensation station as long as the location is not moved within the HMA during pre-construction siting. There are no HMAs and HAs along the alternative route near the proposed Series Compensation Station 2 or Station 3 locations. Application of **WH-2** would avoid impacts to HMAs from any possible relocation during on-the-ground Project siting.

Region III Conclusions

Alternative III-A would have the most impact on HMAs; the refined transmission corridor would cross about 1 percent of one HMA, the Chloride Canyon HMA. Alternatives III-B, III-C, and III-D would not

cross any HMAs, but have potential for road construction on less than 0.1 percent of two HMAs, the North Hills HMA and Eagle HMA.

3.19.5.6 Region IV

There are no wild horse HMAs/HAs within Region IV.

3.19.5.7 Residual Impacts

Residual effects to HMAs/HAs from the transmission line would be the same as those described under each action alternative and would consist primarily of loss of vegetation and forage as well as potential impacts to wild horse gathers due to the presence of a transmission line that could impinge upon helicopter use in portions of the HMA/HA.

3.19.5.8 Irreversible and Irretrievable Commitments of Resources

All operation impacts to the values of HMAs/HAs described above would be irretrievable until transmission line decommissioning, after which time the full value of impacted HMAs/HAs would be reclaimed. However, it should be noted that reclamation activities may have limited success in areas with poor soils, some vegetation communities would take years to reestablish, and some areas may never return to their former vegetation cover and composition. As such, these impacts may represent an irreversible commitment of vegetation resources.

3.19.5.9 Relationship between Local Short-term Uses and Long-term Productivity

Implementation of the Project would result in the use of portions of some HMAs/HAs as ROW corridors. Long-term productivity of the HMAs/HAs would be largely unaffected except for areas where reclamation may have limited success.

3.19.5.10 Impacts to Wild Horses from the No Action Alternative

Under the No Action Alternative, the Project would not be developed. There would be no impacts to HMAs/HAs beyond existing conditions and trends.