# Appendix T - Off-Highway Vehicle Mitigation Examples

| **Nature of the conflict with routes and use of routes** | |
|---|---|
| | |
| **Conflict** | **Typical mitigation measures** |
| | Typical mitigation is in order of possible implementation, not all measures may be used and not all may be listed. |
| | Mitigation actions taken should be triggered as a result of monitoring and reaching identified thresholds. |
| | Monitoring should be done before, during and after mitigation measures are implemented to identify trends. |
| **Resource issues:** | |
| | |
| The physical location of a route is degrading riparian condition | 1. Relocate the route to avoid the area |
| | 2. Harden or raise the route above water level if route is necessary and unable to be relocated |
| | 3. Close the route if no suitable mitigation is possible and make a plan for reclamation |
| | |
| Human use associated with a route is degrading riparian condition | 1. Place information signs to request positive behavior (ie use only when dry etc) |
| | 2. Harden and/or raise the route above water level or place barriers to keep vehicle and people on routes |
| | 3. Relocate the route to allow riparian condition to improve |
| | 4. Close the route if no suitable mitigation is possible and make a plan for reclamation |
| | |
| Human use associated with a route is degrading desired plant communities | 1. Place signs to encourage vehicles and people to stay on routes |
| | 2. Conduct public outreach regarding noxious weeds and conserving vegetation |
| | 3. Fence the area or place barriers to manage people |
| | 4. Develop a program to improve desired plant community |
| | 5. Close the route and make a plan for reclamation |
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|---|---|
| Human use associated with a route is degrading water quality | 1. Review the situation to determine the source of degradation and monitor to determine severity |
| | 2. Place water control measures on the route |
| | 3. Take reasonable measure to further harden/stabilize the route |
| | 4. Reroute the route |
| | 5. Close the route if no suitable mitigation is possible |
| | |
| Human use on a route is determined to degrade a particular habitat | 1. Request certain behavior from route users through signs and other information |
| | 2. Place limitations of use on the route (time/season of use, type of use, number of users, behavioral requirements) |
| | 3. Reroute the route |
| | 4. Replace habitat to offset problems caused by human use, some methods could be: |
| | a. Augment food/water sources |
| | b. Place barriers along route to protect specific habitat features |
| | c. Relocate or expand reproduction sites to be away from the route |
| | 5. Close route if no suitable mitigation is possible, make plan for reclamation |
| | |
| Human use associated with a route is determined to degrade a Special Status Species' habitat | 1. Review management plans for the species and follow recommendations |
| | Design mitigation plans to address: |
| | 1) Temporary conditions |
| | 2) Seasonal conditions |
| | 3) Year round conditions |
| | 2. Develop specific mitigation measures based on the site if species management plan is insufficient |
| | 3. Close route if no suitable mitigation is possible, make a plan for reclamation |
| | |
| Human use associated with a route is determined to degrade Sonoran Desert Tortoise habitat | 1. Physically relocate habitat disturbances and/or schedule permitted activities to occur during dormant periods |
| (Maintaining No-Net Loss habitat policy) | 2. Engineer Tortoise fences and underpasses for Tortoise benefit |
| | 3. Acquire replacement habitat lands and funding for tortoise benefitting activities |
| | 4. Close unauthorized routes and make a plan for reclamation |
| | |
| Human use associated with a route is determined to degrade a Threatened and Endangered Species (T&E species) | 1. Initiate consultation with Fish and Wildlife Service |
| | 2. Review recovery plan, implement mitigations as defined in plan |

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| | 3. Close route if no suitable mitigation is possible, make a plan for reclamation | | | | | | |
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| Dust caused on or near a route violates county, state or federal regulations | 1. Determine a short term solution | | | | | | |
| | a. Monitor situation and determine severity of the problem | | | | | | |
| | b. Close the route or area temporarily to stop dust generation | | | | | | |
| | c. Stabilize the route using a county approved method | | | | | | |
| | d. Place signs requesting a certain behavior (ie no wheel spin, reduce speed) | | | | | | |
| | 2. Determine a long term solution | | | | | | |
| | a. Change formal maintenance interval on route consistent with use level | | | | | | |
| | b. Develop a localized outreach program | | | | | | |
| | c. Implement new technology as part of an area wide plan | | | | | | |
| | d. Close route if suitable dust control is not possible, make plan for reclamation | | | | | | |
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| Human use associated with a route is causing unnatural erosion rates | 1. Review the route to determine cause and monitor to determine severity | | | | | | |
| | 2. Place water control measures on the route | | | | | | |
| | 3. Take reasonable measure to further harden or stabilize the route | | | | | | |
| | 4. Reroute the route | | | | | | |
| | 5. Close the route if no suitable mitigation is possible | | | | | | |
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| **Social Issues:** | | | | | | | |
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| Speed differential causes conflict between recreationists and/or local residents | 1. Place signs to raise awareness of lawful uses of the area. | | | | | | |
| | 2. Monitor situation on the ground and request law enforcement support if necessary | | | | | | |
| | 3. Conduct public outreach in an attempt change behavior | | | | | | |
| | 4. Review terrain and improve sight distances if possible | | | | | | |
| | 5. Redesign traffic flow by separating uses or limit by type or time of use | | | | | | |
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| Sound level causes conflict between recreationists and/or local residents | 1. Place signs to raise awareness of sound issues | | | | | | | | | | |
| | 2. Monitor situation on the ground and request law enforcement support if necessary | | | | | | | | | | |
| | 3. Conduct public outreach in an attempt change behavior | | | | | | | | | | |
| | 4. Implement "Quiet Time" of use restrictions | | | | | | | | | | |
| | 5. Reroute traffic to mimimize conflict | | | | | | | | | | |
| | 6. Place sound reducing barriers if applicable | | | | | | | | | | |
| | 7. Close route if no suitable mitigation is possible | | | | | | | | | | |
| | | | | | | | | | | | |
| A route causes unacceptable changes to the desired Recreation Opportunity Spectrum(ROS) setting (ex. unplanned OHV play areas, large party sites, dump sites, resource theft) | 1. Investigate the cause and implement signage and law enforcement as necessary | | | | | | | | | | |
| | 2. Design mitigation plans to address: | | | | | | | | | | |
| | 1. Short term conditions | | | | | | | | | | |
| | a. Implement new signing and public outreach to explain desired setting | | | | | | | | | | |
| | b. Implement temporary use restrictions(ex. No overnight camping) | | | | | | | | | | |
| | c. Issue emergency closure order, address conditions during closure | | | | | | | | | | |
| | 2. Long term conditions | | | | | | | | | | |
| | a. Implement better signing and mapping protocols for this area | | | | | | | | | | |
| | b. If no suitable mitigation is possible, ammend RMP to close the area | | | | | | | | | | |
| | 3. Close areas near the route contributing to the unacceptable changes such as unplanned | | | | | | | | | | |
| | OHV play areas, large party sites, dumping sites, resource theft etc | | | | | | | | | | |
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| A proposed route is out of compliance with the Visual Resource Management(VRM) classification of the area | 1. Evaluate the potential for and implement a method to make the route less noticeable such as landscaping. | | | | | | | | | | |
| | 2. If no suitable mitigation is possible, construction would not be allowed | | | | | | | | | | |
| | | | | | | | | | | | |
| A route causes unacceptable impacts to cultural or archeological resources | 1. Stabilize the resource and begin data recovery | | | | | | | | | | |
| | 2. Fence one or both sides of the route to keep vehicles from pulling off the route onto a site | | | | | | | | | | |
| | 3. Interpret the resource to gain public support for protection | | | | | | | | | | |
| | 4. Work with AZ Site Stewards program for monitoring, increase law enforcment presence | | | | | | | | | | |
| | 5. Reroute the route to avoid further disturbance of the site | | | | | | | | | | |

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| | 6. Close the route if no mitigation is possible, make a plan for reclamation | | | | | | |
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| Human use on a route causes unacceptable impacts to a designated wilderness (ex. vehicle trespass) | 1. Improve signage along wilderness boundary | | | | | | |
| | 2. Implement short sections of fence in problem areas | | | | | | |
| | 3. Use technology to gather information for more detailed action | | | | | | |
| | 4. Use volunteers and law enforcement to improve compliance along boundaries | | | | | | |
| | 5. Place time of use limits on the route to encourage lawful use (ie daytime use only) | | | | | | |
| | 6. Close the route if no mitigation is possible | | | | | | |
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| **NLCS units** | | | | | | | |
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| Human use on a route outside wilderness causes unacceptable impacts to a designated wilderness (ex. vehicle trespass) | 1. Improve signage along wilderness boundary | | | | | | |
| | 2. Secure funding and resources to rehabilitate areas attracting trespass | | | | | | |
| | 3. Implement short sections of fence in problem areas | | | | | | |
| | 4. Use technology such as remote cameras and infrared counters to gather data for more detailed action | | | | | | |
| | 5. Engage volunteers and law enforcement to improve compliance along boundaries | | | | | | |
| | 6. Place time of use limits on the route to encourage lawful use (ie special event use only) | | | | | | |
| | 7. Close the route if no mitigation is possible, make a plan for reclamation | | | | | | |
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| Human use on a route in a National monument causes, or is expected to cause, harm to monument objects. | | | | | | | |
| | | | | | | | |
| Archeological resources | 1) Stabilize the site and begin data recovery. | | | | | | |
| (in monument) | 2) Engineer fences and barriers to protect site if these features won't attract vandalism | | | | | | |
| | 3) Close the route if no mitigation is possible, make a plan for reclamation | | | | | | |
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| Biological resources - habitat | 1) Protect the objects through the use of temporary closures until the situation can be mitigated. | | | | | | |
| (in monument) | 2) Develop mitigation plans for: | | | | | | |
| | a. Short term conditions such as special events and unusual weather events that change visitor behavior | | | | | | |
| | Typical mitigations: | | | | | | |
| | | 1) Implement habitat improvement projects with AZ Game and Fish Dept. | | | | | |
| | | 2) Issue a temporary closure order for the area | | | | | |
| | b. Long term conditions such as increasing visitation due to development or increased popularity of the area | | | | | | |
| | Typical mitigations: | | | | | | |
| | | 1) Implement visitor management tools to guide visitors to more developed areas | | | | | |
| | | 2) Implement resource conservation plans specific to the area. | | | | | |
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| Soil and Air resources | 1) Implement interpretive signage and possibly speed limits to reduce dust and soil loss from dusting/erosion | | | | | | |
| (in monument) | 2) Engineer water control features on the route; ensure intended access maintenance level is maintained | | | | | | |
| | 3) Use methods to reduce dust and/or harden the route to minimize soil loss/dust (within ROS allocation) | | | | | | |
| | 4) Issue temporary closure orders for seasonal conditions (excessive wet or dry conditions) | | | | | | |
| | 5) Close route if no mitigation is possible, make a plan for reclamation | | | | | | |
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# Appendix U – Special Status Species

Special status species (other than federally listed), their status, habitat and occurrence in the planning area are described in the following table:

| Common Name | Classification | Occurrence and Habitat Use in Planning Areas |
|---|---|---|
| **Mammals** | | |
| Allen's Big-eared Bat | BS | Potential to occur, roosts in caves and mines |
| Big Free-tailed Bat | BS | Potential to occur, roosts in caves and mines |
| California Leaf-nosed Bat | S | Occurs seasonally roosts in caves and mines |
| Cave Myotis | BS | Occurs seasonally roosts in caves and mines |
| Fringed Myotis | BS | Occurs seasonally roosts in caves and mines |
| Long-eared Myotis | BS | Potential to occur, roosts in caves and mines |
| Long-legged Myotis | BS | Potential to occur, roosts in caves and mines |
| Little Brown Bat | BS | Potential to occur, roosts in caves and mines |
| Pocketed Free-tailed Bat | BS | Potential to occur, roosts in caves and mines |
| Red Bat | S | Potential to occur, roosts in riparian trees |
| Small-footed Myotis | BS | Potential to occur, roosts in caves and mines |
| Southern Yellow Bat | S | Potential to occur, roosts in trees |
| Spotted Bat | S | Extremely rare, roosts in crevices, caves and mines |
| | | |
| **Birds** | | |
| American Bittern | S | Potential to occur, riparian areas |
| Baird's Sparrow | S | Potential to occur during migration |
| Belted Kingfisher | S | Uncommon along riparian areas, non-breeding |
| Burrowing Owl | BS | Uncommon but widespread in relatively open areas |
| Common Black-Hawk | S | Nests in large trees in riparian areas |

| Common Name | Classification | Occurrence and Habitat Use in Planning Areas |
|---|---|---|
| Ferruginous Hawk | S | Uncommon in winter or during migration |
| Great Egret | S | Uncommon along riparian areas and at Lake Pleasant |
| Least Bittern | S | Uncommon along riparian areas and at Lake Pleasant |
| Loggerhead Shrike | BS | Fairly common all habitats |
| Northern Goshawk | S | Potential to occur, higher elevations |
| Osprey | S | Uncommon along riparian areas, non-breeding |
| Peregrine Falcon | S | Uncommon or wintering, no breeding documented |
| Pine Grosbeak | S | Uncommon wintering |
| Snowy Egret | S | Uncommon along riparian areas and at Lake Pleasant |
| Sprague's Pipit | S | Potential to occur during migration |
| White-faced Ibis | BS | Infrequent in winter, uses riparian and stock tanks |
| | | |
| **Amphibians and Reptiles** | | |
| Arizona Skink | S | Mid elevation chaparral and along some riparian areas |
| Arizona Toad | S | Seasonally and locally common, lower elevations, around water |
| Chuckwalla | BS | Locally common, lower elevation boulder areas |
| Gila Monster | BS | Widespread but uncommon, generally below 5,000 feet in elevation |
| Lowland Leopard Frog | S | Riparian areas, springs and stock tanks, populations are generally down and some local populations have disappeared over the past 10 years due to the spread of chytrid fungus |
| Mexican Garter Snake | S | Historic along Agua Fria River, not documented there in over 10 years, may be extirpated, riparian areas with abundant emergent vegetation |
| Rosy Boa | BS | Widespread but uncommon, lower elevation boulder areas |
| | | |
| **Fishes** | | |
| Desert Sucker | BS | Common, deeper pools in most perennial streams |
| Longfin Dace | BS | Common, most streams with perennial water |
| Speckled Dace | BS | Upper elevations of Sycamore, Little Ash and Dry Creeks on the AFNM |

| Common Name | Classification | Occurrence and Habitat Use in Planning Areas |
|---|---|---|
| | | during wet years. During dry years, distribution recedes upstream to National Forest reaches of these streams. |
| | | |
| **Plants** | | |
| Giant Sedge | BS | Lower elevation springs, seeps and riparian areas |
| California Flannelbush | BS | Rare on canyon slopes 3,500-6000 feet in elevation |
| Murphey Agave | BS | Sonoran Desertscrub generally between Lake Pleasant and Black Canyon City. Associated with prehistoric Native American sites. |

Scientific names are presented in Appendix H.

Classification

BS - BLM Sensitive, Updated BLM Sensitive Species List for Arizona (Instruction Memorandum No. AZ-2000-018, Change 1)

S - State Sensitive, Wildlife of Special Concern in Arizona (AGFD, Draft 1996)

# Appendix V – Additional Information for the Black Canyon Utility Corridor

Changes made in Alternative E from the DRMP/DEIS to the PRMP/FEIS for the Black Canyon Utility Corridor are analyzed in this appendix. The following is a table that compares resources within the two corridor proposals:

**Table 1 – Comparison of Resources by Corridor**

| **Resource** | | **DRMP/DEIS Alt. E Corridor** | **PRMP/FEIS Alt E. Corridor** |
|---|---|---|---|
| Riparian Habitat | Antelope Creek | 1.6 miles | 2 miles |
| | Black Canyon Creek | 1.2 miles | 1.6 miles |
| | Bumble Bee Creek | 0.7 miles | 0.7 miles |
| | *Total* | 3.5 miles | 4.3 miles |
| | | | |
| Routes | Primary Road Paved | 0.1 miles | 0.1 miles |
| | Primary Road Unpaved | 4.2 miles | 6 miles |
| | Secondary Road Paved | 1.3 miles | 1.3 miles |
| | Secondary Road Unpaved | 2 miles | 3.9 miles |
| | Single Track | 2.8 miles | 0.7 miles |
| | Tertiary Road Unpaved | 58.6 miles | 74.5 miles |
| | *Total* | 68.8 miles | 86.3 miles |
| | | | |
| Desert Tortoise Habitat | Category 2 | 1480 acres | 1540 acres |
| | Category 3 | 860 acres | 820 acres |
| | *Total* | 2340 acres | 2360 acres |
| | | | |
| Vegetation Communities | Great Basin Mixed Grass – Mixed Scrub | 160 acres | 270 acres |
| | Interior Chaparral – Mixed Evergreen Sclerophyll | 2050 acres | 2190 acres |
| | Interior Chaparral (Mixed)– Mixed Grass – Scrub | 1030 acres | 1840 acres |

| | | | |
|---|---|---|---|
| | Complex | | |
| | Interior Chaparral – Shrub Live Oak – Pointleaf Manzanita | 0 acres | 10 acres |
| | Semi Desert Mixed Grass-Mixed Scrub | 1300 acres | 1440 acres |
| | Sonoran Palo Verde- Mixed Cacti- Mixed Scrub | 11,840 acres | 12,210 acres |
| | *Total* | 16,380 acres | 17,960 acres |
| | | | |
| Area of Corridor Potentially Visible (as calculated from GIS viewshed analysis) | Observation points at: | | |
| | Black Canyon City | 600 acres | 640 acres |
| | Interstate 17 | 9050 acres | 9390 acres |
| | Spring Valley | 140 acres | 190 acres |
| | Sunset Point | 3800 acres | 5170 acres |
| | | | |
| Area containing wilderness characteristics | | 540 acres | 740 acres |
| | | | |
| Black Canyon Trail | 1969 Secretary of Interior Designated corridor | 80 acres | 80 acres |
| | 1996 Proposed or Constructed Trail | 0 miles | 4.7 miles |

The table above shows the revised corridor location in the PRMP/FEIS would contain 0.8 more miles of riparian habitat than the corridor in Alternative E of the DRMP/DEIS.

The revised corridor would contain 17.5 miles more vehicle routes, 15.9 miles more tertiary unpaved routes, which constitute the majority of routes used by recreationists.

The revised corridor would contain 60 acres more of category 2 desert tortoise habitat and 40 acres less of category 3 habitat.

The vegetation communities within each corridor are very similar in extent with small changes in acres for the revised corridor as compared with the corridor analyzed in Alternative E of the DRMP/DEIS.

VRM inventory conducted for the DRMP/DEIS placed the entire area in an inventory class II. Design limitations of most utilities that would be constrained to use utility corridors make them difficult or impossible to conform to VRM class II standards. Viewshed analysis was conducted using GIS data using observation points in four locations – Black Canyon City, Sunset Point Rest Area, along Interstate 17, and from the

community of Spring Valley. Comparison of the two corridors shows visibility of either corridor is similar from all locations, with slightly more acres of the revised corridor being visible from all locations than the Alternative E corridor. Visibility acres cannot be added to determine total visibility of each corridor because many places may be visible from more than one location.

Both corridors have some area that was inventoried as containing wilderness characteristics and would be allocated to maintain those characteristics in the Preferred Alternative of the DRMP/DEIS. The corridor described in the DRMP/DEIS encompasses 540 acres with these characteristics, whereas the revised corridor location would encompass 740 acres, 200 additional acres.

The Black Canyon Trail was dedicated by the Secretary of Interior in 1969. As a consequence of changing land jurisdiction, the actual location of the trail has deviated from the original secretarial order. The table above compares how much of both the secretarial trail corridor and the current trail location fall within each corridor. Each of the utility corridors contains the same number of acres of the Secretarial trail corridor, while the revised corridor contains 4.7 miles of current trail.

There are no existing or proposed Special Area Designations within either corridor proposal.

There are no known paleontological resources within either corridor proposal.

There is no Wild Horse or Burro Herd Management Areas within either corridor proposal.

No energy resources are known to occur within either of the corridor proposals. The primary purpose of a utility corridor is to support the transmission of energy from areas of production to consumers.

**Impacts**

Impact analysis conducted in the DRMP/DEIS pertaining to utility corridors in general and the Black Canyon Utility corridor specifically can be found in document sections:

- Impacts to lands and realty can be found in section 4.7.2,
- Impacts to soils in 4.8.2,
- Impacts to air quality in 4.9.2,
- Impacts to water quality in 4.10.2,
- Impacts on biological resources in 4.11.2,
- Impacts on cultural resources in 4.12.2,
- Impacts on paleontological resources in 4.13.2,
- Impacts on recreation resources in 4.14.2,
- Impacts on visual resources in 4.15.2,
- Impacts on rangeland management in 4.16.2,

- Impacts on minerals and energy resources in 4.17.2,
- Impacts on fire and fuels resources in 4.18.2,
- Impacts on wild horses and burros in 4.19.2,
- Impacts on travel management in 4.20.2,
- Impacts on wilderness characteristics in 4.21.2,
- Impacts on the social and economic conditions of the area in 4.22.1.

The revised corridor location would be in essentially the same area as the one in the preferred alternative of the DRMP/DEIS and the impacts would be essentially the same as described in Chapter 4. As a result, the overall cumulative effects of either corridor on resources and uses would be equivalent.

A comparison of these impacts is listed below.

- The corridor represents an improved location to long term management of major rights-of-way. The corridor allows for further development of utility projects to meet the demand of the large and rapidly growing Phoenix Greater Metropolitan Area, while confining those utility projects to an area where environmental impacts can be minimized.
- Development of utilities within either corridor could disturb soils in the same ways by creating increased erosion and reduced productivity. Impacts to soils would be essentially the same in either corridor proposal.
- Construction activities associated with development of utilities within either corridor could degrade air quality by contributing pollutants to the air and increasing the emission of fugitive dust. Removal of vegetation and exposure of the soil surface to wind erosion can also contribute to air quality degradation. Air quality impacts would be essentially the same in either corridor proposal.
- Water quality degradation is most likely to occur due to soil erosion increasing turbidity of streams. Water quality impacts would be essentially the same in either corridor proposal.
- The issuance of utility rights-of-ways and their development can cause destruction of wildlife habitat and, depending on the type of development, could degrade habitat quality through fragmentation and increased human activities. Both proposals would have no effect to any listed threatened, endangered, proposed or candidate species of plant or wildlife. No known listed species nor critical habitat for any listed species occurs within either corridor proposal. The riparian areas along Antelope Creek and Bumble Bee Creek are in both corridor alternatives so the potential impacts would be similar. The desert tortoise habitat at the southern end of the area is included in both corridors so the potential impacts would be similar. The total amount of wildlife habitat is essentially the same for both alternatives thus the potential impacts to wildlife habitat would be unchanged.
- Existing information indicates that there would be little difference between the two alternatives as they affect cultural resources. Adjustments were made to the corridor boundaries to exclude known sensitive cultural resources from the revised corridor. Neither alternative would constrain any proposed cultural resource related uses or management actions.
- Utility development can affect recreation by increasing or reducing access to areas and primarily through changing the characteristics of the landscape by creating new roads or other facilities. Both corridor proposals are in the same general area and would generally have the same impacts to recreation.

- Allocation of a utility corridor itself has no affect on the Black Canyon Trail.
- Development of utilities within either corridor has the same potential for degrading visual resources. The boundary of the revised corridor proposal was purposely kept west of the rim of Black Mesa so as to minimize the potential visibility of future utility developments from both Interstate 17 and the Sunset Point Rest Area, a popular scenic overlook for the area.
- Limitations of access to minerals along with the physical facilities associated with the utility can affect potential mineral extraction. However, since both corridors are in the same general area, impacts to mineral resources would be essentially the same.
- Development of utilities within a corridor has the potential to increase fire occurrence and have both short and long term effects to fuels. Because both corridors are in the same general area, containing the same fire potential and regimes, the impacts of either corridor would be the same.
- During construction and during the operation and maintenance of equipment and facilities, existing public access points may be closed or restricted and some new routes may be created. Either corridor would have essentially the same impacts to travel management.
- Development of utilities in areas that contain wilderness characteristics could potentially degrade the quality of those characteristics. Though the revised corridor location contains more acres of allocation to maintain wilderness characteristics, (740 acres versus 540 in the DRMP/DEIS corridor) potential impacts are essentially the same for each corridor.
- The revised corridor location potentially improves long term economic conditions in central Arizona by providing a more suitable location for future utility development than the corridor analyzed in the DRMP/DEIS. Limitations or constraints to energy transmission to the Greater Phoenix Metropolitan Area could have broad economic impacts. By relocating the corridor to be suitable for more types of utility development, those potential impacts could be avoided.
- Development of utility projects is often controversial in nearby communities for reasons of visibility of the utility facilities and potential safety issues both during construction and long term operations. Since both corridors are essentially the same in relation to communities in the area, the social affects of either corridor would be the same.

Cumulative Impacts

- Both corridor proposals would exclude future utility development from the monument, limiting cumulative impacts to outside the monument.
- Within either corridor, the potential cumulative impacts of utility development would be the same.
- At present, another known major action currently being analyzed in the area is the future expansion of Interstate 17 from 4 lanes (two each direction.) Several alternatives are being studied for this expansion. If the I-17 expansion proposal were to select lanes along Bumblebee Creek or in that valley area, they would be constructed in either corridor proposal which would create additive effect of the roadway and future utilities. This affect could degrade visual resources, recreation experiences, and could change the overall character of the area. However, the cumulative affects would be essentially the same for either corridor.