

Afton Solar Energy Zone: Impact Assessment Summary Table

In Dona Ana County in southern New Mexico, Las Cruces District Field Office - 29,964 developable acres and up to 4,794 MW generation capacity identified in the Solar PEIS
Source: 2010 Draft and 2012 Final Solar PEIS for Afton SEZ (available at: <http://blmsolar.anl.gov/sez/nm/afton/>)

Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts ³
		Avoidance	Minimization	
Acoustics Section 12.1.15 ⁴	<p>Direct: Activities during construction and/or operation of solar facilities with thermal energy storage could cause noise levels exceeding background but below the EPA guideline of 55 dBA at the nearest residence (adjacent to the southeastern boundary of the SEZ).</p> <p>Indirect: The estimated noise level at the Aden Lava Flow WSA is below the significance threshold. Potential vibration impacts on the nearest residences would be negligible.</p> <p>Cumulative⁵: If multiple facilities were to be constructed close to the SEZ, residents nearby could be affected by the cumulative noise generated, particularly during construction and/or at night when the noise is more discernible due to relatively low background levels.</p> <p>Data Gaps⁶: Refined modeling would be warranted along with background noise measurements during project-specific assessments.</p>	<p>Solar facilities must be located far enough away from residences, or include engineering and/or operational methods such that county, state, and/or federal regulations for noise are not exceeded.</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Noise.pdf</p>	<p>Programmatic design features state that methods considered may include limiting the hours of daily activities, constructing noise barriers if needed and practicable, and coordinating with nearby residents.</p> <p>See other programmatic design features as URL under Avoidance column.</p>	<p>No (assuming use of technology and engineering controls).</p> <p>Generally impacts from solar development are expected to be temporary, localized, and readily mitigated onsite.</p>

¹ The impacts assessment assumed 80% of the SEZ area will be used for solar development.

² These columns give examples of avoidance and minimization measures that are specified in the Record of Decision for the Final Solar PEIS and will be required. Additional avoidance and minimization measures proposed by the BLM Interdisciplinary Team are listed and should be evaluated through project-specific environmental analyses. Monitoring is planned to verify the implementation and effectiveness of avoidance and minimization measures.

³ Residual or unavoidable impacts are residual effects that cannot be completely mitigated onsite by avoidance and/or minimization.

⁴ Section numbers are the same in both the Draft and Final Solar PEIS.

⁵ Sections 12.1.22.4 of the Draft and Final Solar PEIS address cumulative impacts, which consider ongoing and reasonably foreseeable activities in the vicinity of the SEZ such as wind, geothermal, mining, agricultural, and commercial development; new roads, traffic, and off-highway vehicle use; and infrastructure such as transmission lines and fences.

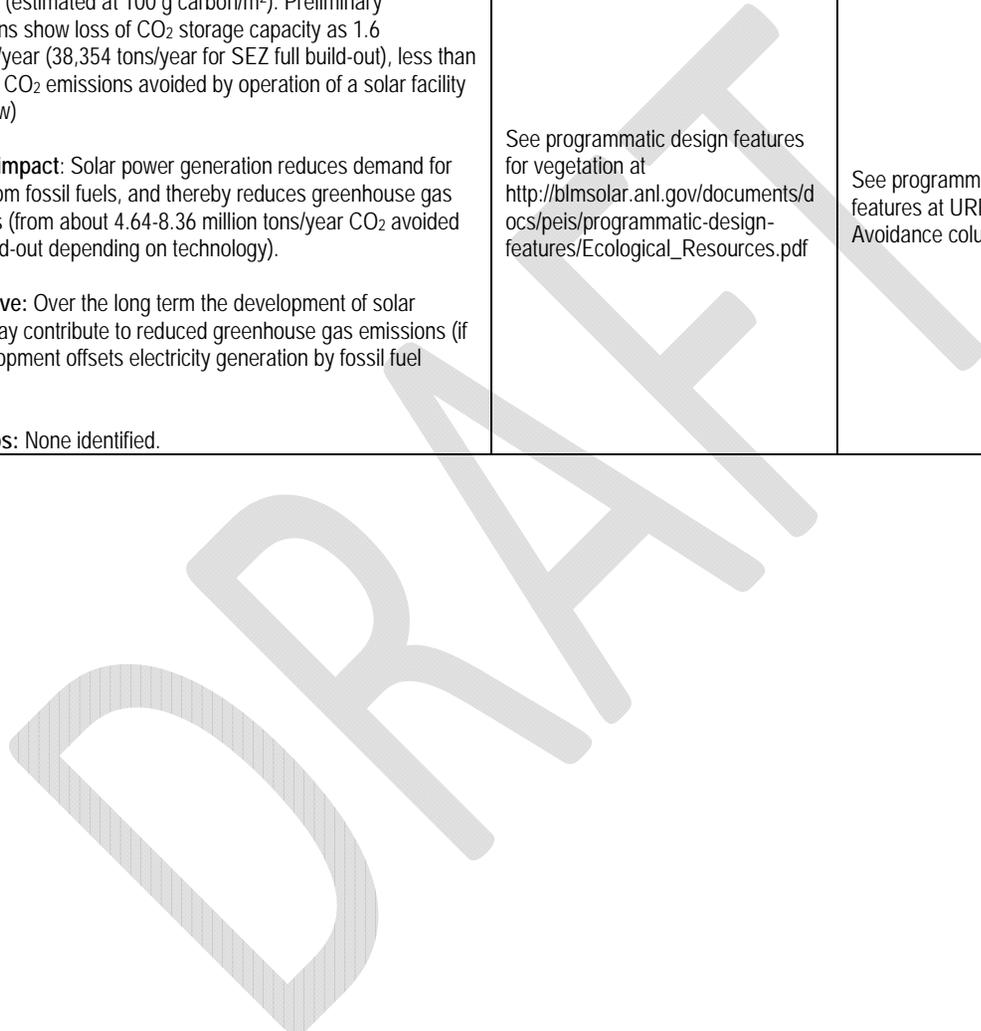
⁶ Data gaps have not been identified for all resources in this table. Additional data gaps may be identified during future SEZ or project-specific assessments.

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<p>Air Quality Section 12.1.13</p>	<p>Direct: Fugitive dust and equipment exhaust emissions during construction could result in exceedance of National Ambient Air Quality Standards (NAAQS) for particulate matter (PM) at SEZ boundaries. Specifically, predicted 24-hour PM₁₀ and 24-hour and annual PM_{2.5} concentrations could exceed AAQS at the SEZ boundaries and in the immediate surrounding areas during construction of solar facilities. High PM₁₀ concentrations would be limited, however, to the immediate areas surrounding the SEZ boundary and would decrease quickly with distance.</p> <p>Generation of fugitive dust may result in exposure to respirable particulates and/or microbes (human health impacts). Based on Wind Erosion Groups identified in the Solar PEIS, the majority of the soils on the SEZ (60%) are characterized as having high potential for wind erosion, and the rest of the SEZ soils are characterized as having moderate potential for wind erosion.</p> <p>Indirect: Decreased visibility in nearby residential or specially-designated areas due to elevated PM levels from soil disturbance/grading during construction.</p> <p>Cumulative: Cumulative effects due to dust emissions would be greatest if multiple solar projects had overlapping construction periods.</p> <p>Data Gaps: Monitoring for PM during all phases of development would be required to ensure levels remain below permitted limits.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Air_Quality_Climate.pdf</p>	<p>Dust suppression measures will be implemented during all phases of development (construction, operations, and decommissioning).</p> <p>See programmatic design features at URL under Avoidance column.</p> <p>Also recommend evaluation of solar panel mounting and other disturbance minimizing technologies in project-level NEPA alternatives (e.g., no grading of the site, retention of maximum native vegetation, use of low emission vehicles, placing gravel on roads, use of "drive and crush" installation).</p> <p>Recommend re-vegetation of the SEZ with native vegetation to increase soil stability as a plan of development feature to further minimize the amount of grading and surface disturbance and promote reduced dust emissions and PM levels.</p>	<p>No. Dust suppression design features and any necessary NMED Air Quality Permits would be employed. Potential offsite mitigation measures tied to restoring vegetation communities would further stabilize soils in other areas.</p>

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<p>Climate Change Section 5.11.4 of DPEIS for soil storage capacity; 12.1.13 for emissions avoided</p>	<p>Direct: Possible impact through loss of carbon storage capacity of the soil (estimated at 100 g carbon/m²). Preliminary calculations show loss of CO₂ storage capacity as 1.6 tons/acre/year (38,354 tons/year for SEZ full build-out), less than 1% of the CO₂ emissions avoided by operation of a solar facility (see below)</p> <p>Positive impact: Solar power generation reduces demand for energy from fossil fuels, and thereby reduces greenhouse gas emissions (from about 4.64-8.36 million tons/year CO₂ avoided at full build-out depending on technology).</p> <p>Cumulative: Over the long term the development of solar energy may contribute to reduced greenhouse gas emissions (if the development offsets electricity generation by fossil fuel plants).</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features for vegetation at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>No. Impacts are likely to be positive. No mitigation likely needed.</p>



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<p>Cultural Section 12.1.17</p>	<p>Direct: Direct impacts on significant cultural resources could occur in the SEZ. 58 cultural resource sites have been identified in the surveyed area, at least 2 are eligible for listing in the NRHP.</p> <p>In addition, several nearby Areas of Critical Environmental Concern (ACECs) have been designated for purposes including protection of significant cultural resources: Los Tules ACEC is 1 mi to the east of the SEZ, Organ Franklin Mountain ACEC is 6 mi east, and Robledo Mountain ACEC is 9 mi north. The distance from the SEZ to the El Camino Real de Tierra Adentro National Historic Trail (El Camino Real NHT) is 6 mi (10 km). The distance from the SEZ to the Butterfield Trail Special Management Area is 5 mi (8 km) and the distance to the actual trail is 8 mi (13 km). Visual impacts to these areas of cultural significance may be associated with solar development in the SEZ. See further discussion under Visual Resources.</p> <p>Indirect: Erosion impacts on the cultural landscape outside of the SEZ resulting from land disturbances and modified hydrologic patterns; increased accessibility and potential for damage to eligible sites in the non-development area as well as outside of the SEZ.</p> <p>Cumulative: Eligible sites could be impacted in the SEZ and adjacent areas.</p> <p>Data Gaps: Only 1,840 acres (7.4 km²), about 6% of the SEZ, has been surveyed for cultural resources. The Section 106 consultation process must also be completed at the project level and has the potential to result in additional information to consider. Visual impacts are possible to historic trails and possibly other NRHP-listed properties. Additional analysis on the visual effects of solar development would be needed prior to development.</p>	<p>Avoidance of significant cultural resources clustered in specific areas which retain sufficient integrity is recommended.</p> <p>For projects in the Afton SEZ that may be located within the viewshed of El Camino Real NHT and/or the Butterfield Trail, a National Trail inventory should be conducted to determine the area of possible adverse impact on resources, qualities, values, and associated settings of the trail, to prevent substantial interference, and to determine any areas unsuitable for development. Residual impacts should be avoided, minimized, and/or mitigated to the extent practicable according to program policy standards.</p> <p>See other programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Cultural.pdf</p>	<p>Reducing visual impacts on the El Camino Real NHT, the Butterfield Trail, and Mesilla Plaza National Historic Landmark would also reduce impacts on these cultural resources. Coordination with trails associations and historical societies regarding impacts on El Camino Real NHT, the Butterfield Trail, and Mesilla Plaza, as well as other NRHP-listed properties is recommended if visual impacts are identified.</p> <p>See programmatic design features at URL under Avoidance column.</p>	<p>Maybe, depending on survey⁷ results. Section 106 of NHPA will be followed, which requires that adverse effects to historic properties be resolved prior to occurrence of direct impacts from project activities.</p> <p>Procedures to handle inadvertent discoveries will be addressed through the Section 106 process in a monitoring and discovery plan developed during the right-of-way process.</p>

⁷ In this instance, the term survey is used to generally describe activities needed to determine if adverse effects on cultural resources may occur if a project is developed within the SEZ. This would include cultural inventories and visual analyses for identifying if significant segments of the El Camino Real NHT or the Butterfield Trail, or NRHP-eligible or -listed properties with an important visual setting would be impacted by solar development.

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<p>Ecology: Vegetation Section 12.1.10</p>	<p>Direct: Development will adversely affect characteristic vegetation (e.g., creosotebush, honey mesquite and snakeweed, and Soap tree yucca) through destruction and loss of habitat. Development will result in small impacts to the following vegetation types which comprise the SEZ: Chihuahuan Mesquite Upland Scrub, Chihuahuan Mixed Desert and Thornscrub, and Chihuahuan Stabilized Coppice Dune and Sand Flat Scrub. Potentially sensitive habitats on the SEZ include wetlands, desert dry washes, and playas. Development, including vegetation removal, land clearing, grading, and changes in surface water flow may alter soils and vegetation communities and result in the establishment of invasive species and noxious weeds within the SEZ.</p> <p>Indirect: Loss of native vegetation, increased surface water runoff and related erosion, or through the introduction of invasive species. Establishment of noxious weeds in the SEZ may result in their spreading to adjacent areas. Indirect impacts on wetlands outside the SEZ could occur. Indirect impacts from groundwater use on communities in the region that depend on groundwater, such as wetlands and riparian habitats along the Rio Grande floodplain, could also occur.</p> <p>Cumulative: Solar energy development could be a contributor to cumulative impacts on some vegetation communities, depending on the type, number, and location of other developments in the region.</p> <p>Data Gaps: Direct impacts could still occur on unmapped wetlands within the developable areas of the SEZ.</p>	<p>SEZ-specific programmatic design features require that all wetland, dry wash, playa, riparian, succulent, and dune communities and large blocks of unfragmented grassland within the SEZ shall be avoided to the extent practicable, and any impacts minimized and mitigated in consultation with appropriate agencies. (Note – The Solar PEIS ROD identified 742 acres of floodplain and intermittent and dry lake within the SEZ as non-development areas). Any yucca, agave, ocotillo, cacti and other succulent plant species that cannot be avoided will be salvaged. A buffer area will be maintained around wetland, dry wash, playa, and riparian habitats to reduce the potential for impacts.</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf</p>	<p>SEZ-specific programmatic design features require the following:</p> <p>Use of appropriate engineering controls to minimize impacts on wetland, dry wash, playa, and riparian habitats, including downstream occurrences, resulting from surface water runoff, erosion, sedimentation, altered hydrology, accidental spills, or fugitive dust deposition to these habitats. Appropriate buffers and engineering controls will be determined through agency consultation.</p> <p>Consideration of other minimization measures including avoiding travel through weed-infested areas; inspecting and cleaning vehicles and equipment; limiting ground disturbance; avoiding the creation of soil conditions that promote weed germination and establishment; and disposing of seed and plant parts.</p> <p>Limiting groundwater withdrawals to reduce the potential for indirect impacts on groundwater-dependent communities, such as wetland or riparian communities associated with the Rio Grande floodplain.</p> <p>See other programmatic design features under Avoidance column.</p>	<p>Yes. Development would result in direct removal or disturbance of these native plant communities, special soil environments, and the ecosystem services they provide.</p>

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<p>Xero-Riparian Areas⁸ Section 12.1.10</p>	<p>Direct: Development will adversely affect characteristic xeroriparian vegetation (e.g., honey mesquite, littleleaf sumac) through destruction and loss of habitat. Sensitive habitats on the SEZ include desert dry washes and playas. Note: Revisions to the proposed SEZ boundaries between draft and final Solar PEIS eliminated several wetlands).</p> <p>Indirect: Loss of native vegetation due to dust deposition from construction and operations, increased surface water runoff and related erosion, or through the introduction of invasive species. Establishment of noxious weeds in the SEZ may result in their spreading to adjacent areas. Indirect impacts on wetlands could occur</p> <p>Cumulative: Solar energy development could be a contributor to cumulative impacts on some vegetation communities, depending on the number and location of other developments in the region.</p> <p>Data Gaps: Direct impacts could still occur on unmapped wetlands within the developable areas of the SEZ if present.</p>	<p>SEZ-specific programmatic design features require the following</p> <p>All xero-riparian areas within the SEZ will be avoided to the extent practicable, and any impacts minimized and mitigated in consultation with appropriate agencies. A buffer area will be maintained around these areas to reduce the potential for impacts.</p> <p>Undisturbed buffer areas and sediment and erosion controls will be maintained around wetlands on the SEZ.</p> <p>Development will avoid, to the extent practicable, any additional wetlands identified during future site-specific fieldwork.</p> <p>The use of heavy machinery and pesticides will be avoided within the immediate catchment basins for wetlands on the SEZ.</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf</p>	<p>SEZ-specific programmatic design features require the following:</p> <p>Use of appropriate engineering controls to minimize impacts on xero-riparian areas, including downstream occurrences, resulting from surface water runoff, erosion, sedimentation, altered hydrology, accidental spills, or fugitive dust deposition to these habitats. Appropriate buffers and engineering controls will be determined through agency consultation.</p> <p>See programmatic design features.</p>	<p>Maybe. Depends on the degree of avoidance and engineering controls. Development may alter ephemeral stream channels that can alter natural water flow; impacting groundwater recharge, ecological habitats, and riparian vegetation communities.</p> <p>Many impacts to riparian areas can be mitigated onsite by avoiding development in riparian areas and by the installation of engineering controls on surface water runoff/erosion.</p>

⁸ Although riparian areas do not occur on the SEZ, this SRMS considers xero-riparian areas to include dry washes, playas, and depressions dominated by honey mesquite.

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<p>Invasive & Noxious Weeds Section 12.1.10</p>	<p>Direct: Development, including vegetation removal, land clearing, grading, changes in surface water flow, and dust deposition may alter soils and vegetation communities and result in the establishment of invasive species and noxious weeds within the SEZ. African rue is present on the SEZ.</p> <p>Indirect: Loss of native vegetation due to dust deposition from construction and operations, increased surface water runoff and related erosion, or through the introduction of invasive species. Establishment of noxious weeds in the SEZ may result in their spreading to adjacent areas.</p> <p>Cumulative: Solar energy development could be a contributor to cumulative impacts on some vegetation communities, depending on the number and location of other developments in the region.</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf</p>	<p>Programmatic design features for weed control state that methods considered may include avoiding travel through weed-infested areas; inspecting and cleaning vehicles and equipment; limiting ground disturbance; avoiding the creation of soil conditions that promote weed germination and establishment; and disposing of seed and plant parts.</p> <p>See programmatic design features at URL under Avoidance column.</p> <p>A weed management plan should be developed that addresses inventory, monitoring, mitigation, and treatment of noxious / invasive weeds consistent with existing land use plans, the Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic EIS, and the ENVIRONMENTAL ASSESSMENT DOI-NM-BLM-L000-2011-0169-EA.</p> <p>Weed Free seed should be used to support re-vegetation efforts, control invasive species, and prevent wildfires. Any reseeding efforts shall be consistent with IM 2006-073.</p>	<p>Maybe. Onsite mitigation will reduce, but not eliminate, the potential for invasive species. The degree of disturbance creates a significant opportunity for the establishment of invasive species and weeds.</p>
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<p>Ecology: Terrestrial Wildlife and Aquatic Biota Section 12.1.11</p>	<p>Direct: Loss of habitat and connectivity for several species of amphibians, reptiles, mammals, bats, and invertebrates. Game species occurring within the SEZ include mule deer, quail, and dove. Ground disturbance, fugitive dust generated by project activities, lighting, vegetation clearing, spread of invasive species, accidental spills, harassment, and impacts on ephemeral washes could impact wildlife within the SEZ. Impacts from noise on wildlife could occur.</p> <p>Indirect: Outside the SEZ, impacts could occur from habitat loss or modification, increased human presence in the area, surface runoff, dust, noise, lighting, or accidental spills.</p> <p>Cumulative: Cumulative effects on some species could rise to a level of moderate, given the large acreages potentially disturbed and depending on the type, number, and location of other developments in the region.</p> <p>Data Gaps: Impacts on terrestrial wildlife from construction noise would have to be considered on a project-specific basis for some species.</p>	<p>Impacts on wash, riparian, playa, rock outcrop, and wetland habitats, which may provide more unique habitats for some species, should be avoided, minimized, or mitigated.</p> <p>Wetlands, washes, and riparian areas identified during site-specific surveys will be avoided to the extent practicable.</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>Yes. Development of the Afton SEZ will likely impact up to 29,964 acres of wildlife habitat. Level of site grading and disturbance to native vegetation would be the primary driver of residual impact to functional habitat for full build-out of SEZ. In addition, loss of range improvements resulting from solar development would also adversely affect wildlife.</p> <p>Little can be done onsite to mitigate the loss of up to 29,964 acres of general wildlife habitat.</p>

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<p>Ecology: Migratory Birds Section 12.1.11.2</p>	<p>Direct: Loss of individuals, habitat, and connectivity for several species protected under the Migratory Bird Treaty Act. Noise, lighting, and vegetation clearing could impact migratory birds using the SEZ. There is potential for water birds to be attracted to solar fields (because they look like water) and collide with solar panels. Burning of wings in the solar radiation field between heliostats and power towers has been observed. There may also be impacts on night sky that may alter bird migratory behavior and habitat use. Priority migratory bird species that may occur on or near the SEZ include Bell's vireo, prairie falcon, Swainson's hawk, northern harrier, loggerhead shrike, and crissal thrasher.⁹</p> <p>Indirect: Outside the SEZ, impacts could occur from habitat loss.</p> <p>Cumulative: Impacts to migratory birds could occur; depending on the number and location of other developments in the region.</p> <p>Data Gaps: Additional research needed on solar development impacts on migratory birds, including whether birds are attracted to solar fields because they look like water. Impacts on migratory birds from construction noise would have to be considered on a project-specific basis.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf</p> <p>Effects to individual migratory birds and bird nests can be avoided by not constructing during the breeding season. Timing limitation should be enforced from May 15-July 15 for any surface disturbing activities to protect migratory bird nesting and brood rearing. If construction takes place during the breeding season, nest surveys will be conducted.</p>	<p>Programmatic design features state that restrictions on timing and duration of activities in coordination with the BLM, USFWS, and other appropriate agencies will be considered to minimize impacts on nesting birds (especially passerines and listed species).</p> <p>See other programmatic design features at URL under Avoidance column.</p> <p>Also recommend implementation of technologies that minimize the amount of reflective surfaces, or alter how the surfaces are perceived by wildlife (such as panel spacing), that will reduce the "lake effect" in attracting migratory birds and other wildlife.</p> <p>In addition, wetland creation outside the area of solar energy development may reduce the number of birds potentially attracted to the solar facility.</p>	<p>Yes. Some level of bird injury/fatality has been observed for all types of solar facilities (through collisions with equipment or from burns). Research is ongoing to quantify impacts and identify effective mitigation measures.</p>

⁹ Priority migratory bird species for the SEZ will be determined based on those species discussed in RMPs for the Las Cruces District Office and through consultation with the BLM IDT.

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<p>Ecology: Plant Special Status Species Section 12.1.12</p>	<p>Direct: No Endangered Species Act (ESA)-listed species have been identified that have suitable habitat within the SEZ. One BLM-sensitive plant (sand prickly-pear, <i>Opuntia arenaria</i>) has previously been reported on the SEZ, but it is not known if it still occurs there. No other BLM-sensitive or state-listed plant species have been reported on, or have suitable habitat in, the SEZ.</p> <p>If sand prickly-pear does occur in the SEZ, ground disturbance, land clearing and grading, fugitive dust generated by project activities, and the spread of invasive species may result in loss of its habitat or loss of individual plants.</p> <p>Indirect: Indirect impacts to individuals and habitat outside of the SEZ could occur from surface runoff, dust, or accidental spills. There could be indirect impacts to habitat for the sand prickly-pear cactus.</p> <p>Cumulative: There would be no cumulative impacts on special status plant species unless they are discovered during pre-disturbance surveys (cumulative impacts then might be due to habitat destruction and overall development and fragmentation of the area).</p> <p>Data Gaps: Pre-disturbance surveys are required to determine if and where sand prickly-pear occurs.</p>	<p>Following pre-disturbance surveys, any populations of sand prickly-pear discovered will be avoided to the extent practicable.</p> <p>See other programmatic design features at http://blmsolar.anl.gov/documents/docs/pets/programmatic-design-features/Ecological_Resources.pdf</p>	<p>See other programmatic design features at URL under Avoidance column.</p>	<p>Maybe, if surveys reveal sand prickly-pear or other special status species on the SEZ and occupied habitat cannot be avoided.</p>

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<p>Ecology: Special Status Animal Species Section 12.1.12</p>	<p>Direct: Ground disturbance, land clearing and grading, and fugitive dust generated by project activities would result in loss of special status animal species habitat, if present, and might result in loss of individual animals. Impacts from noise on special status wildlife could also occur.</p> <p>No Endangered Species Act (ESA)-listed species have been identified that have suitable habitat within the SEZ. Solar PEIS analyses indicated that development on the SEZ could directly disturb individuals or populations of three additional BLM-sensitive special status animal species (American peregrine falcon, western burrowing owl, and western small footed myotis).</p> <p>Indirect: Indirect impacts to individuals and animal habitat outside of the SEZ could occur due to surface runoff, dust, noise, lighting, or accidental spills.</p> <p>Cumulative: There could be cumulative impacts on some special status animal species due to habitat destruction and overall development and fragmentation of the area.</p> <p>Data Gaps: Pre-disturbance surveys are required to identify the presence and abundance of special status species.</p>	<p>Compliance with the Bald & Golden Eagle Protection Act would be ensured and Eagle Take Guidance would be followed (if necessary).</p> <p>Based on data from required pre-disturbance surveys, disturbance to suitable habitats would be avoided to the extent practicable.</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf</p>	<p>If avoidance is not possible for some species, translocation of individuals from areas of direct effects or compensatory mitigation may be employed.</p> <p>Regarding avoidance and minimization onsite, consultation with the U.S. Fish & Wildlife Service will be conducted to address the potential for impacts on ESA-listed and proposed species and to identify mitigation measures for implementation.</p> <p>See other programmatic design features at URL under Avoidance column.</p>	<p>Yes. Animal SSS along with other wildlife represent a basic component of the ecosystem.</p> <p>Level of site grading and disturbance to native vegetation would be the primary driver of residual impact to functional habitat for full build out of the SEZ.</p>

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<p>Environmental Justice Section 12.1.20</p>	<p>Direct: Based on 2010 census data there is a minority population within a 50-mile (80 km) radius of the SEZ, so any adverse impacts of solar projects could affect this population. There are low income block groups within a 50-mile radius of the SEZ, but the overall population within that radius does not meet the criteria to be considered low income.</p> <p>Adverse impacts that might disproportionately affect minority and low income populations include reduced water quality and availability for agricultural and livestock uses and loss of lands for livestock grazing;</p> <p>Indirect: None identified.</p> <p>Cumulative: Contributions from solar development in the SEZ would likely be small and would not be expected to significantly contribute to cumulative impacts on minority and low income populations within the 50-mile geographic extent of effects.</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Environmental_Justice.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>Maybe, relative to livestock grazing.</p>

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		Avoidance	Minimization	
<p>Hydrology: Surface Water Section 12.1.9</p>	<p>Direct: Land clearing, land leveling, vegetation removal, and spills and runoff associated with development of the SEZ could increase surface runoff, reduce infiltration/recharge, cause loss of ephemeral stream networks, cause a reduction in evapotranspiration rates, increase sediment transport (by water), change sediment transport (by wind), and degrade water quality. The Afton SEZ is within the Lower Rio Grande Basin. Two ephemeral channels within the Afton SEZ were classified with moderate sensitivity to land disturbance.</p> <p>Disturbance to ephemeral stream channels within the Afton SEZ should not pose a significant impact on the critical functions of groundwater recharge, sediment transport, flood conveyance, and ecological habitat.</p> <p>Indirect: Indirect impacts from development and groundwater use on intermittent/ephemeral surface water features could occur.</p> <p>Cumulative: Alterations to ephemeral stream networks can alter groundwater recharge and surface runoff processes potentially impacting the basin-scale water balance and water quality aspects of water features receiving surface runoff.</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Water.pdf</p>	<p>Programmatic design features require project-specific Storm water Pollution Prevention Plans that control site drainage, erosion, and sedimentation related to storm water runoff.</p> <p>See other programmatic design features at URL under Avoidance column.</p>	<p>No. Onsite design features and engineering controls would be developed to control surface water runoff and erosion from the project site. Design features would be constructed to not significantly alter natural water flow or water infiltration, and to minimize erosion potential.</p>
<p>Hydrology: Water Quality and Groundwater Availability Section 12.1.9</p>	<p>Direct: Groundwater withdrawals for development may cause declines in groundwater elevations that can impact water availability for surface water features, vegetation, ecological habitats, and regional groundwater flow paths. The SEZ is located in the Lower Rio Grande Groundwater Basin where available groundwater occurs primarily in basin-fill deposits. Disturbance to ephemeral stream channels within the Afton SEZ should not pose a significant impact on the critical functions of groundwater recharge.</p> <p>Indirect: Groundwater withdrawals for solar energy facilities may affect other groundwater users in the basin.</p> <p>Cumulative: Cumulative impacts on groundwater could occur when combined with other future developments in the region.</p> <p>Data Gaps: None identified.</p>	<p>Groundwater analyses suggest that full build-out of wet-cooled technologies is not feasible.</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Water.pdf</p>	<p>For mixed-technology development scenarios, any proposed wet-cooled projects should utilize water conservation practices.</p> <p>See programmatic design features at URL under Avoidance column.</p>	<p>No. It is possible for impacts on groundwater aquifers to be avoided or minimized. Design features would be constructed to not significantly alter natural water flow, water infiltration, or groundwater recharge and to minimize erosion potential.</p>

Afton Solar Energy Zone: Impact Assessment Summary Table

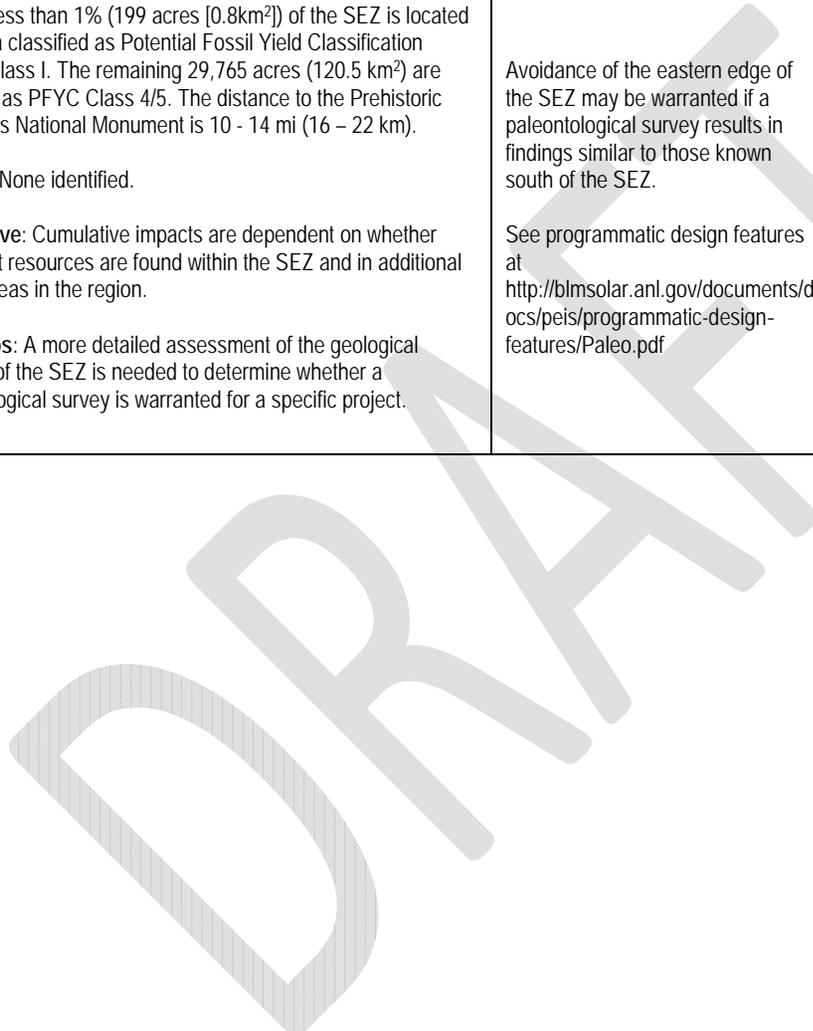
Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
Lands & Realty Section 12.1.2	<p>Direct: Development of 80% of the SEZ could disturb 23,971 acres (121 km²). About 5,216 acres (21 km²) of the southern portion of the Afton SEZ overlaps a designated Section 368 energy corridor. There is an existing 345kV line in the corridor. This existing corridor will be used primarily for the siting of transmission lines and other infrastructure. Any use of the corridor lands within the Afton SEZ for solar energy facilities, such as solar panels or heliostats, must be compatible with the future use of the existing corridor. The BLM will assess solar projects in the vicinity of existing corridor on a case-by-case basis. The BLM will review and approve individual project plans of development to ensure compatible development that maintains the use of the corridor.</p> <p>The proposed Southline transmission corridor is located partially within the 368 corridor within the SEZ.</p> <p>Indirect: Increased traffic and increased access to previously remote areas also could change the overall character of the landscape. It is possible that if the public lands are developed for solar energy production, the 18,128 acres (73 km²) of state land in and near the SEZ could be developed in a similar manner if the state chooses to consider such development.</p> <p>Cumulative: Projects within the SEZ would make only a small contribution to cumulative impacts because of its relatively small size.</p> <p>Data Gaps: None identified.</p>	<p>Consider avoiding entire 368 corridor to account for most ROWs in the SEZ.</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Lands_and_Realty.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>No. By regulation, any new activity must occur in deference to existing rights. Thus, potential impacts would be avoided.</p>

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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
<p>Livestock Grazing Section 12.1.4.1</p>	<p>Direct: Afton SEZ is located within Black Mesa (59% in SEZ), Home Ranch (28%), Aden Hills (20%) and La Mesa (6%) grazing allotments. The West La Mesa and Little Black Mountain allotments have fewer than 20 acres (0.08 km²).</p> <p>Grazing would be excluded from the areas developed for solar energy production as provided for in the BLM grazing regulation. This would include reimbursement of the permittee for the portion of the value for any range improvements in the area removed from the grazing allotment (IM 2011-181).</p> <p>Indirect: None identified.</p> <p>Cumulative: Other development in the area of the SEZ could result in cumulative impacts on grazing.</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Rangeland_Resources.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>Yes. Reductions to allotments are expected. Also, there is potential for loss of permittee-funded range improvements.</p>
<p>Military & Civilian Aviation Section 12.1.6</p>	<p>Direct: Although no designated military training routes or special use airspace are located above the SEZ, military activities are known to occur above the SEZ.</p> <p>The Las Cruces International Airport is more than 5 miles (8 km) north of the SEZ.</p> <p>Indirect: None identified.</p> <p>Cumulative: None identified.</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Military_Civilian_Aviation.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>No</p>
<p>Minerals Section 12.1.8 and Section 12.1.24 of the Final PEIS</p>	<p>Direct: There are no locatable mining claims within the SEZ. The SEZ has been withdrawn from mineral entry for a period of 20 years, precluding impacts from locatable mining activities.</p> <p>Indirect: None identified. However, there are two mining operations adjacent to the eastern boundary of the SEZ.</p> <p>Cumulative: None identified.</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Mineral_Resources.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>No</p>

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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
<p>Paleontology Section 12.1.16</p>	<p>Direct: Less than 1% (199 acres [0.8km²]) of the SEZ is located in an area classified as Potential Fossil Yield Classification (PFYC) Class I. The remaining 29,765 acres (120.5 km²) are classified as PFYC Class 4/5. The distance to the Prehistoric Trackways National Monument is 10 - 14 mi (16 – 22 km).</p> <p>Indirect: None identified.</p> <p>Cumulative: Cumulative impacts are dependent on whether significant resources are found within the SEZ and in additional project areas in the region.</p> <p>Data Gaps: A more detailed assessment of the geological deposits of the SEZ is needed to determine whether a paleontological survey is warranted for a specific project.</p>	<p>Avoidance of the eastern edge of the SEZ may be warranted if a paleontological survey results in findings similar to those known south of the SEZ.</p> <p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Paleo.pdf</p>	<p>Programmatic design features require that the BLM will be notified immediately upon discovery of fossils. Work will be halted at the fossil site and continued elsewhere until qualified personnel, such as a paleontologist, can visit the site. He/she will determine if the site is significant and make recommendations for collection or other resource protection, if warranted.</p> <p>See programmatic design features at URL under Avoidance column.</p>	<p>No. Design features will reduce the risk that any paleontological resources that are discovered will be destroyed.</p>



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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
<p>Public Access and Recreation Section 12.1.5</p>	<p>Direct: Some roads and trails run through the SEZ and may be closed or rerouted due to solar development. The area supports backcountry driving, OHV use, hiking/walking, birdwatching, and small game hunting. Development could affect public access along OHV routes designated as open and available for public use. The area is close to La Cruces and there is easy access to the area from both I-10 on the north and a county road on the south.</p> <p>Indirect: Indirect effects on recreation use could occur on lands near the solar facilities, primarily the Aden Hills OHV area located adjacent to the western boundary of the SEZ which receives about 10,000 visitor days of use per year. People seeking more rural or primitive surroundings for recreation may experience a reduction in recreational opportunities and/or a degraded recreational experience. See further discussion under Visual Resources.</p> <p>Visual impacts are possible for the following Special Recreation Management Areas (SRMAs), which are within 25 miles of the SEZ: the Butterfield Trail SRMA, Dona Ana Mountains SRMA, and Organ/Franklin Mountains SRMA. See further discussion under Visual Resources.</p> <p>Cumulative: Multiple developments in the vicinity of the SEZ could cumulatively reduce recreational opportunities.</p> <p>Data Gaps: Visual contrasts to the Tortugas Mountain Recreation Area were not analyzed in the Solar PEIS, but this area is subject to visual contrast from solar development in the SEZ, and will be included in the ongoing visual analysis.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Public_Access_and_Recreation.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>Maybe. Development may impact hunting permits on state lands in and near the SEZ.</p>

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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
Socioeconomics Section 12.1.19	<p>Direct: Impacts to local economy as a result of expenditures of wages and salaries and the collection of state sales and income taxes. From 263 to 3,488 direct construction jobs and 52 to 1,044 direct operations jobs could be created (least for PV; most for parabolic trough facilities). Adverse impacts could occur due to the need for services for new workers during project construction and operation (e.g., housing, police, firefighters).</p> <p>Four grazing allotments could be reduced in size due to solar development within the SEZ, which could have adverse socioeconomic effects on allotment holders. See discussion under Livestock Grazing.</p> <p>Indirect: From 544 to 7,193 indirect construction jobs and 22 to 700 indirect operations jobs could be created. Impacts from project wages and salaries, and tax revenues subsequently circulating through the economy would be minor.</p> <p>Cumulative: Impacts overall would be positive, through the creation of additional jobs and income. The negative impacts, including some short-term disruption of rural community quality of life, are expected to be small.</p> <p>Data Gaps: None identified.</p>	See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Socioeconomics.pdf	<p>See programmatic design features at URL under Avoidance column.</p> <p>Additionally, onsite mitigation could include requiring developers to secure agreements for local government services as a condition of "Notice to Proceed".</p>	<p>Maybe, relative to livestock grazing.</p> <p>For grazing, impacts would depend on mitigation measures implemented on the basis of project-specific NEPA.</p>

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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
<p>Soils/Erosion Section 12.1.7</p>	<p>Direct: Impacts on soil resources would occur mainly as a result of ground-disturbing activities (e.g., grading, excavating, and drilling), especially during construction of a solar project. These include removal of topsoil, soil compaction, soil horizon mixing, soil erosion and deposition by wind, soil erosion by water and surface runoff, sedimentation, and soil contamination. Soils within the SEZ are predominantly the wink loamy fine sand and fine sand of soil series Wink Pintura complex, and the Onite-Pajarito, Wink-Harrisburg, and Simona-Harrisburg associations. Because of their fine-grained texture, they are moderately to highly susceptible to wind erosion.</p> <p>Soil contamination from spills could occur, and disturbance of soils (particularly subsurface calcic soils) may produce fugitive dust.</p> <p>Indirect: Disturbance of soil can lead to introduction of invasive species. Elevated PM levels offsite could result from soil disturbance/ grading activities during construction.</p> <p>Cumulative: Cumulative impacts would occur from the disturbance of several renewable energy projects, connecting linear facilities, and other projects in the vicinity of the SEZ, but would be limited through application of design features.</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Soil_Geologic_Hazards.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p> <p>Programmatic design features require project-specific Storm water Pollution Prevention Plans that control site drainage, erosion, and sedimentation related to storm water runoff.</p> <p>Also recommend re-vegetation of the SEZ with native vegetation to increase soil stability as a plan of development feature to further minimize the amount of grading and surface disturbance and promote reduced dust emissions and PM levels.</p> <p>In addition, a Project Inspector should be hired and construction crews should be educated to stay on designated roads and minimize the construction of new roads to minimize soil disturbance and compaction.</p>	<p>Maybe. Soils represent a basic component of the ecosystem. Solar development on the SEZ is expected to result in a residual loss of sensitive soils and soil functions. Onsite design features and engineering controls would be developed to control surface water runoff and erosion from the project site.</p> <p>Offsite soil improvements and stabilization would primarily occur as a by-product of regional mitigations measures for vegetation and invasive and noxious weeds.</p>

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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
<p>Special Designations Section 12.1.3</p>	<p>Direct: The following areas with special designations have been identified within 25 miles of the SEZ could be impacted by solar development: the Organ Mountains/Desert Peaks National Monument (NM; established in 2014), Aden Lava Flow WSA, Las Uvas Mountains WSA, Organ Mountains WSA, Organ Needles WSA, Pena Blanca WSA, Robledo Mountains WSA, West Potrillo Mountains/Mt. Riley WSA, Dona Ana Mountains ACEC, Organ/Franklin Mountains ACEC, Robledo Mountains ACEC, Prehistoric Trackways NM, Kilbourne National Natural Landmark, El Camino Real NHT, Sierra Vista National Recreation Trail (NRT), and Baylor Canyon NRT.</p> <p>The Aden Lava Flow WSA/Organ Mountains-Desert Peaks National Monument is closest to the SEZ and would be the most affected. Most of the remaining areas, although farther away from the SEZ, are higher in elevation and thus could have a clear view of solar development in the area. Impacts could include adverse visual effects on the viewsheds (including impacts on night sky viewing), and visibility impacts due to dust generation. See further discussion under Visual Resources.</p> <p>Visual impacts to the El Camino Real NHT and the Butterfield Trail (under study for NHT designation) are possible.</p> <p>Indirect: None identified.</p> <p>Cumulative: Development of solar facilities and other facilities may result in cumulative effects, particularly visual impacts, on Special Designations.</p> <p>Data Gaps: Visual contrasts to the Sierra Vista NRT and the Baylor Canyon NRT were not analyzed in the Solar PEIS, but these areas are subject to visual contrast from solar development in the SEZ, and will be included in the ongoing visual analysis, which will assess impacts to all of the areas listed above.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/SDAs_and_LWC.pdf</p>	<p>The SEZ-specific design features for visual resources should be adopted, as they would provide some protection for visual related impacts on all Special Designations.</p> <p>Also recommend restricting solar technology to parabolic trough and PV to avoid major visual impacts from power tower facilities.</p> <p>See programmatic design features at URL under Avoidance column.</p>	<p>Yes, for some Special Designations, pending further assessment of visual impacts. Additionally, residual impacts will be evaluated during project level NEPA based on locations of development within the SEZ and project features.</p>

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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
<p>Special Designations – Lands with Wilderness Characteristics Section 12.1.3</p>	<p>Direct: A recently maintained inventory of wilderness characteristics of public lands within the SEZ found that these lands do not contain wilderness characteristics.</p> <p>Indirect: None; no nearby land meeting criteria for wilderness characteristics have been identified.</p> <p>Cumulative: Cumulative impacts would be possible if lands with wilderness characteristics were identified in the vicinity of the SEZ.</p> <p>Data Gaps: None identified.</p>	<p>Programmatic design features include a requirement to consider options to avoid, minimize, and/or mitigate impacts to lands with wilderness characteristics as part of the project-specific environmental impact analysis, in coordination with the BLM.</p> <p>See other programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/SDAs_and_LWC.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>No,</p>
<p>Transportation Section 12.1.21</p>	<p>Direct: Development will add traffic to existing roads serving the area. The volume of traffic on I-10 could represent an increase in traffic of about 24% percent during construction. Local road improvements would be necessary in any portion of the SEZ near I-10 that might be developed so as not to overwhelm the local roads near any site access point(s). Similarly, any access to portions of the SEZ using State Route 28 or 478 may require road improvements on State Route 28, 478 or other local access roads.</p> <p>Indirect: None identified.</p> <p>Cumulative: Cumulative impacts to traffic could occur with multiple developments in the region.</p> <p>Data Gaps: None identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Transportation.pdf</p>	<p>Programmatic design features state that improvements to local roads to accommodate additional traffic should be considered.</p> <p>See other programmatic design features at URL under Avoidance column.</p>	<p>Maybe, depending on locations of projects within the SEZ. Need to preserve access for recreation, grazing, and mining. Through a combination of avoidance, design features, and the establishment of alternative access routes to these areas, most impacts will be short-term and can be adequately mitigated onsite.</p>

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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
Tribal Concerns Section 12.1.18	<p>Direct: Afton SEZ lies within the traditional range of the Eastern Band of the Chiricahua Apache. The culturally important landscape includes places such as the Potrillo and Florida Mountains and Salinas Peak. The impacts on resources important to Tribes fall into two major categories: impacts on the landscape and impacts on discrete localized natural and cultural resources. Impacts may be visual, acoustic, or demographic. It is unlikely that avoidance of all resources would be possible.</p> <p>Indirect: General habitat loss with vegetation clearing and water reduction that could affect species and ecosystem health.</p> <p>Cumulative: None identified.</p> <p>Data Gaps: Government-to-Government consultation for projects will be required to determine issues of Tribal concern.</p>	<p>The following SEZ-specific programmatic design features for avoidance will be required:</p> <p>Known human burial sites and petroglyphs and/or pictographs will be avoided. Where there is a reasonable probability of encountering undetected human remains and associated funerary objects by a solar project, the BLM will conduct government-to-government consultation with tribes before the project is authorized, in order to provide general guidance on the treatment of any cultural items that might be exposed. The BLM will develop a Native American Graves Protection and Repatriation Act (NAGPRA) Plan of Action prior to any ground disturbing activities within historic properties to address any discoveries of human remains, funerary object or objects of cultural patrimony</p> <p>Culturally important plant and wildlife species and visual intrusion on sacred sites will be avoided to the extent practicable.</p> <p>See other programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Native_American_Concerns.pdf</p>	<p>See programmatic design features at URL under Avoidance column.</p>	<p>Maybe. Consultation on project applications will determine whether regional mitigation for Tribal Concerns is warranted.</p>

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Resource/Issue	Afton Solar Energy Zone Impacts ¹	On-site Mitigation ²		Residual Adverse Impacts? ³
		Avoidance	Minimization	
<p>Visual Section 12.1.14</p>	<p>Direct: The Visual Resource Inventory (VRI) value for most of the SEZ is VRI Class IV, indicating low visual values. The far northwestern portion of the SEZ is VRI Class III, indicating moderate relative visual values. Development will adversely impact visual resources including night skies.</p> <p>The Solar PEIS and subsequent analysis of visually sensitive areas (VSAs) identified moderate to strong visual contrasts for the Organ Mountains-Desert Peaks National Monument, the Prehistoric Trackways National Monument, the Aden Lava Flow WSA, the Organ Mountains WSA, the Organ Needles WSA, the Peña Blanca WSA, the Robledo Mountains WSA and ACEC, the West Potrillo Mountains/Mt. Riley WSA, the Aden Hills SRMA, the Organ/Franklin Mountains SRMA and ACEC, and the Kilbourne Hole National Natural Landmark. In addition to these areas, impacts on other lands and resource areas were evaluated. Moderate to strong visual contrasts were identified for locations on or along I-25, I-10, U.S. 70, N.M. 404, the communities of La Mesa and East Las Cruces, Magdalena Peak, and two privately owned ranches near the SEZ. Negligible to weak visual contrasts were identified for the Butterfield Trail; I-25; I-10; U.S. 70; and the communities of Las Cruces, University Park, Mesilla, Doña Ana, Radium Springs, Organ, Spaceport City, San Miguel, La Union, Mesquite, Vado, Chamberino, Berino, Anthony, and El Paso (Texas).</p> <p>The Final Solar PEIS found there were likely to be minimal to weak visual contrasts from solar development in the SEZ visible from the El Camino Real NHT and the Butterfield Trail (under study for NHT designation). The magnitude of these impacts (primarily visual) would depend on the integrity and historical significance of the segment of the Trail from which solar development could be seen.</p> <p>Indirect: None identified.</p> <p>Cumulative: If several projects become visible from one location, or in succession as viewers move through the landscape (such as driving on local roads), these cumulative impacts may make the area less visually appealing.</p> <p>Data Gaps: Visual contrasts to the Sierra Vista NRT, the Baylor Canyon NRT, and the Tortugas Mountain Recreation Area were not analyzed in the Solar PEIS, but these areas are subject to visual contrast from solar development in the SEZ, and will be included in the ongoing visual analysis, which will assess impacts to all of the areas listed above for which moderate to strong visual contrasts were identified.</p>	<p>See programmatic design features at http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Visual.pdf</p>	<p>Special visual impact mitigation should be considered for solar development on lands in the SEZ visible from and within 5 mi (8 km) of the Aden Lava Flow WSA/Organ Mountains-Desert Peaks National Monument.</p> <p>Also recommend restricting solar technology to parabolic trough and PV to avoid major visual impacts from power tower facilities.</p> <p>See other programmatic design features at URL under Avoidance column.</p>	<p>Yes. While onsite mitigation and technology restrictions caused by solar facilities within the SEZ, these would not likely reduce impacts to less than moderate or strong levels for nearby viewers. Potential residual impacts on individual VSAs will be identified through the ongoing visual analysis.</p>