Appendix Z. Draft Environmental Impact Statement/Resource Management Plan Amendments Public Comments and Responses Part 6

Disclaimer: Some portions of this appendix are not fully Section 508 compliant. For help with any of the appendix content, please contact the Bureau of Land Management at 775-861-6491 and reference the Greenlink West Transmission Project EIS.

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ePLANNING

Comment Submission

Project: DOI-BLM-NV-0000-2022-0004-EIS - Greenlink West Transmission Project

Document: Draft EIS-RMP Amendments.pdf

Submission ID: DEIS-1-500348657

Comment

Audubon submits the uploaded comments

Upload File(s)

Files

GreenlinkWest_2023DEISComment-FINAL.pdf

Submitter(s)

Submitter 1

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Group or Organization Name: Audubon
Position: Director, Clean Energy Initiative
(Add me to the project mailing list) - ***YES***

Disclaimer

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment - including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

(Withhold my personally identifying information from future publications on this project) - ***YES***

Audubon

August 24, 2023

Brian Buttazoni, Planning & Environmental Specialist,
Bureau of Land Management
1340 Financial Boulevard,
Reno, NV 89502
Re: Comments on the DEIS for Greenlink West Transmission Project

Delivered via electronic mail to blm_nv_greenlinkwest@blm.gov

Dear Mr. Buttazoni,

Please accept and fully consider these comments on the Draft EIS for the proposed Greenlink West transmission project.

National Audubon Society (Audubon) protects birds and the places birds need now and in the future. Audubon's 16 state and regional offices, 32 nature centers and 23 sanctuaries, 450+ chapters, and partners have an unparalleled wingspan that reaches millions of people each year to inform, inspire, and unite diverse communities in conservation action. Our report, Survival by Degrees, shows 389 species of North American birds are at risk of extinction if we reach a global warming scenario of 3 degrees Celsius above pre-industrial levels. This research, which clearly identifies climate change as the biggest threat to birds, has made solutions to counteract climate change and achieve net-zero emissions by 2050 our top priority.

Audubon strongly supports the need for responsibly sited transmission development to meet our clean energy goals and mitigate climate change. Greenlink West would be an important component of that transition for Nevada and neighboring states and would also contribute to grid resilience as noted in the DEIS. We strongly support both objectives and welcome the opportunity to participate in a public process to ensure that the project is sited responsibly, that impacts are offset appropriately, and that the project becomes a catalyst for renewable energy development.

This project would use rights-of-way designated by the BLM as Section 368 West Wide Energy Corridors (WWECs). In our previous comments on Sections 4, 5, and 6 of the WWECs[1] we objected to the alignment of Corridor 18-224 between mileposts 106 and 165, recommending a shift to the east to better connect with Miller's Solar Energy Zone and avoid other resource impacts. The proposed route of Greenlink West remains within the existing alignment due to mining claims and other apparently insurmountable factors presented in the DEIS. We had no comments on the other WWECs that would be occupied by the project, and we strongly support Greenlink West's use of the WWECs; they have been defined through an inclusive and thorough process that, for the most part, led to optimal decisions.

[1] Defenders of Wildlife et al, Comments on Section 368 Energy Corridor Review Regions 4, 5 and 6 Report, p. 17 of 30

154.GG-1

Intersection with Important Bird Areas and Mason Valley Wildlife Management Area and Reducing Avian Collisions

As noted in the DEIS, the proposed alignment has relatively minor intersections with Oasis Valley and Walker Lake Audubon Important Bird Areas (IBAs). Walker Lake IBA, celebrated for supporting more than 10,000 water birds, is noted for concentrations of species vulnerable to collision with transmission lines.

Recommendation: avoid Walker Lake to the greatest extent possible

The BLM's identified preferred route around the north side of Mason Valley Wildlife Management Area (WMA) only just intersects the area. To further minimize collision mortality of vulnerable species along the north side of Mason Valley WMA, we support the anti-collision measures recommended in the Bird and Bat Conservation Strategy (BBCS), specifically to follow APLIC recommendations in these and other areas[2] for 1000 feet on either side of a wetland or water feature. The proposed commitment to use UV lighting if needed to further prevent collision is also encouraging. Additional monitoring to verify effectiveness in these areas and ensure that additional areas do not need marking is needed, however. Preconstruction, annual O&M, and monthly raven monitoring are not frequent enough to detect mortalities before scavenging could occur. We suggest installing automated collision detection systems like those used successfully on distribution lines in Hawaii.[3]

Recommendation: implement the anti-collision measures in the Bird and Bat Conservation Strategy and, in areas where line marking occurs near Important Bird Areas and Wildlife Management Areas, monitor for avian collisions to inform adaptive management

The DEIS states that Optical Groundwires (OPGW) capable of carrying digital data as well as protecting from lightning-caused outages will be used along with standard steel shield wire as the topmost layer of wires on all structures. Regarding marking these lines with Bird Flight Diverters (BFDs), the DEIS states "Bird flight diverters, high-visibility marking devices, or other collision diversion would be installed on transmission conductors and guy wires to reduce the potential for collisions." We think this statement may be inaccurate in that our experience shows that BFDs cannot be mounted on high voltage conductors because they introduce corona discharge issues. BFDs are instead mounted on the topmost layer of wires used for lightning protection that do not carry current, in this case composed of both steel and OPGW wires. It's unclear from the language in the DEIS if either or both of the ground protection wires would be marked. Although OPGW is thicker than steel shield wire and potentially more visible as a result, we are not aware of any research to support that line marking is not also needed on OPGW. The SunZia Southwest Transmission Project recently approved by the BLM committed to marking OPGW at the crossing of the Middle Rio Grande River in New Mexico, and we recommend this also be done in all areas currently identified for line marking in the DEIS.

Recommendation: verify that all overhead shield wires, including OPGW, would be marked in appropriate areas to minimize avian collision

[2] The areas committed to specifically are Walker, Amargosa, and Carson Rivers, Perk and Joggles Sloughs, Mason Valley WMA, and Las Vegas Wash

[3] Travers, M. et al. 2019. Power line minimization briefing document. Unpublished. Kaua'i Endangered Seabird Recovery Project (KESRP), Pacific Cooperative Studies Unit (PCSU), University of Hawai'i and Division of Forestry and Wildlife (DOFAW), State of Hawai'i Department of Land and Natural Resources

Potential Impacts to the Bi-state Population of Greater Sage-grouse

154.GG-2

Our main concern is that the GreenLink West transmission project would negatively impact the Bi-State Distinct Population Segment (DPS) of Greater Sage-Grouse, whose numbers are continuing to decline precipitously, which is currently listed as threatened with a critical habitat designation by court order, and which is under review by the US Fish and Wildlife Service.[4] Transmission lines adversely impact Greater sage-grouse by fragmenting the habitat and reducing breeding success. Protections afforded to this DPS must be sufficient to prevent further decline of this species as BLM is required under the Endangered Species Act (ESA) to protect listed species and the habitats on which they depend.[5]

Greater Sage-grouse depend on large areas of contiguous sagebrush to meet all seasonal habitat requirements (Connelly et al. 2011, Wisdom et al. 2011). Loss or fragmentation of sagebrush habitat is one of the reasons the Greater Sage-grouse were found to be warranted for federal protection in 2010. Minimum sagebrush patch size required to support populations, especially those as compromised as the Bi-State populations, is not well understood. Thus, disturbance (loss or fragmentation) of habitat should be avoided to the greatest degree possible.

The NV CA Greater Sage-Grouse Bi-State Distinct Population Segment Land Use Plan Amendment (LUPA) and Record of Decision (ROD) (2016) ("BSSG LUPA") requires that the BLM not authorize new high-voltage transmission lines and other developments in sage-grouse habitat, as these cause habitat fragmentation and/or degradation and can cause changes in habitat use.[6] The BSSG LUPA clearly states that BSSG habitat will be managed as an "avoidance area" and that "new high-voltage transmission line corridors, right-of-ways, facilities, or construction areas in habitat (outside of existing corridors) will not be authorized."[7]

Recommendation: BLM should avoid disturbance of Greater Sage-grouse habitat as much as possible – especially within priority habitat or population management unit boundaries (PMUs). Recognizing that this may not always be possible, BLM should use existing transmission line corridors and co-locate with existing lines wherever possible.

154.GG-3

Specifically, the proposed GreenLink West transmission line traverses the Mount Grant Population Management Unit (PMU). While it would be within a WWEC, the project data suggest that the line is not collocated with existing transmission and is associated with excessive road disturbance within one of Mount Grant's Priority Areas for Conservation (See Appendix for Map 1). Infrastructure is already flagged as being a "high" threat in this PMU.[8]

As proposed, there would be additional acres of ROW and road disturbance in the northern Mount Grant Priority Area for Conservation (PAC). The line must be collocated as shown in the lower PAC so as to add minimal new ROW and road disturbance for this route and to be in full compliance with the requirement in the BSSG LUPA.

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[4] US Fish and Wildlife Service. Service seeks public comment on 2013 bi-state sage-grouse proposed listing rule, initiates species assessment. https://www.fws.gov/press-release/2023-04/service-seeks-public-comment-2013-bi-state-sage-grouse-proposed-listing-rule

[5] Bureau of Land Management. https://www.blm.gov/programs/fish-and-wildlife/threatened-and-endangered/blm-role

[6] Bureau of Land Management. NV CA Greater Sage-Grouse Bi-State Distinct Population Segment Land Use Plan Amendment. 2016. https://eplanning.blm.gov/eplanning-ui/project/60909/510

[7] Ibid.

[8] Bi-State Sage Grouse. Risk Table. https://www.bistatesagegrouse.com/general/page/risk-table

Recommendation: change the alignment of the Fort Churchill-Harry Allen alternative and stay within the existing right-of-way where the line would pass through two Priority Areas for Conservation within the Mount Grant Population Management Unit; the deviation of the line from the existing ROW within the northern of these two PACs is inconsistent with the Bi-State Greater Sage-Grouse RMP

154.GG-3

A second area of potentially greater concern is the preferred Carson River Alternative C (See Appendix for Map 2), which is not within a WWEC or collocated with existing transmission lines and would carve a swathe of new disturbance close to recent sage-grouse activity within the Pine Nut Mountains PMU. This is purportedly to avoid rare plant impacts and impacts to roads used for military training. The logic of this tradeoff is inscrutable considering the conservation status of the Bi-State Sage-grouse and the particular situation in this PMU.

154.GG-4

This proposed route would add over 1500 acres of temporary and 500 acres of permanent disturbance within the PMU,[9] which already has a plethora of "high" risk factors – including but not limited to infrastructure, wind development, human disturbance, and invasive species (cheatgrass). Only 1.5% total disturbance is allowed in the Pine Nut Mountains PMU per the BSSG LUPA.[10] The contribution of the proposed disturbance to the existing disturbance already present, and whether this would be in compliance with BLM's management objectives, was not addressed in the DEIS. Regardless, the proposed additional disturbance is clearly unnecessary and must be avoided.

Recommendation: reject Carson River Alternative C which would place all three 345kV lines within three miles of a known lek and avoid any disturbance outside of existing rights-of –way within Pine Nut Mountains PMU.

154.GG-5

BLM should also analyze the proposed action for compliance with the limits on anthropogenic disturbance in the BLM BSSG LUPA as discussed above.

BLM must offer evidence in the NEPA analysis of whether or not the Greenlink West project would be in compliance with standards in the BSSG LUPA for limitations on anthropogenic disturbance.

Given the concerns over direct and indirect impacts of transmission lines on sage-grouse, the U.S. Fish and Wildlife Service recommends not building new transmission lines or expanding existing transmission lines within 5.0 miles of a lek within Priority Areas for Conservation.[11] Furthermore, the BLM BSSG LUPA includes a directive not to authorize tall structures - which BLM further defines to include transmission towers - within 4 miles of an active or pending lek.[12]

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[9] Manually calculated by Audubon using GIS analysis August 18, 2023

[10] From the BSSG LUPA: "The BLM is setting a total anthropogenic disturbance of no more than 3% of the total BSSG habitat on Federal lands within the Bodie Mountain/Grant, Desert Creek/Fales, and White Mountains population management unit boundaries (PMU) and a total anthropogenic disturbance of no more than 1.5% of the total BSSG habitat on Federal lands within the Pine Nut Mountains population management unit (PMU) boundaries."

[11] US Fish and Wildlife Service. GRSG Protective Buffer Recommendations for Transmission Lines. February 12, 2015. https://www.fws.gov/sites/default/files/documents/FWS%20GRSG%20Protective%20Buffer%20Recommendations%20for%20Transmission%20Lines.pdf

[12] BSSG LUPA Requirements: "Actions: Lands and Realty: 2. Subject to valid existing rights, do not install tall structures* that could serve as predator perches or decrease the use of the area within 4 miles of an active or pending lek.

154.GG-5

Based on expert knowledge of lek locations[13], the Carson River C alternative would place all three 345kV lines within 3 miles of a known lek. Further, the DEIS acknowledges the BLM's management objectives for the BSSG[14] yet states the following for the proposed action:

> "Proximity of Proposed Action to Leks: **Seven leks are located within four miles of the GLWP 345-kV transmission lines**, all present near Mill Canyon within the Pine Nut PMU (NDOW 2021b). The nearest lek is approximately 1.75 miles southwest of the 345-kV Fort Churchill-Mira Loma and Fort Churchill-Comstock Meadows #1 Transmission Lines, which would be collocated, and the nearest new access road is located approximately 1.8 miles from a lek." [emphasis added]

BLM must comply with the management objectives in the BSSG LUPA and not authorize tall structures within 4 miles of a Bi-state Greater sage-grouse lek. The BLM should have analyzed an alternative that met BLM management objectives for the BSSG, including consideration of whether it is possible to locate the line east of BSSG habitat (east of the Pine Nut Mountains PMU) using the existing WWEC.

The project commits to using structures and deterrents to discourage nesting and perching of Common Raven and other avian predators. If effective, this would be a model for other projects sited in areas where Greater Sage-Grouse and other species could be affected. However, use of designs that would completely prevent raven and raptor activity on structures is not committed to in the DEIS, which states that

> *It is anticipated that tubular tower structures would provide reduced perching and nesting opportunities for ravens and raptors in comparison to lattice type structures based upon the reduction in available surface area for perching. While predation would still likely occur under implementation of the anti-perching/ nesting mitigation measure, use of tubular structures with perch prevention devices would reduce the concentration of raven predation directly around and near the transmission structures in comparison to the Proposed Action. As discussed under the Proposed Action impact analysis, guyed lattice structures provide more area for ravens and other raptors to perch and build nests, and in turn, forage on animals and waste nearby.*

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*Tall structures – A wide array of infrastructure (e.g., poles that support lights, telephone and electrical distribution, communication towers, meteorological towers, and high-tension transmission towers) that have the potential to disrupt lekking or nesting birds by creating new perching/nesting opportunities and/or decreasing the use of an area. A determination as to whether something is considered a tall structure would be based on local conditions such as vegetation or topography."

Land Use Plan Modification: "The BLM is identifying a buffer distance for tall structures as 4 miles from active or pending leks. Specifically, tall structures, which could serve as predator perches, will not be authorized within 4 miles of an active or pending lek. The 4-mile lek buffer accords with other prescriptions of surface disturbance in sage-grouse habitat and is consistent with best science available." [emphasis added]

[13] Steve Abele, US Fish and Wildlife Service, pers. comm., June 28, 2023

[14] Discussion of Carson River Transmission Alternative B from the DEIS: "*This alternative would cross the planning area for the Land Use Plan Amendment for the Nevada and California Greater Sage-Grouse Bi-State Distinct Population Segment in the CCDO and Tonopah FO (BLM 2016b).* ***The Carson River Transmission Alternative B would not conform with the management objectives for the area, because the 2016 Land Use Plan Amendment does not allow tall structures to be installed within four miles of an active or pending lek and because the planning area is managed as a ROW avoidance area for new high-voltage transmission lines outside of existing corridors*** *(refer to Figure 3-1 through Figure 3-4).* ***The BLM considered but eliminated Carson River Transmission Alternative B from detailed analysis because it*** *would not respond to the purpose and need for the Proposed Action to provide electric system reliability and* ***would be inconsistent with the BLM's basic policy objectives for the management of the Bi-State sage-grouse.*** [emphasis added]

Regarding the use of perch deterrents to further discourage predator use of structures, the most intensive efforts to date have failed to eliminate perching completely, including a study in north central Nevada using specially designed perch discouragers.[15] The authors concluded:

> *Although the deterrents reduced the probability of avian predators perching on the towers, avian predators overcame the deterrents to take advantage of the height of the towers where no other perches of similar height existed. The perch deterrents as designed did not have the desired short-term effect on avian predators...*

Additionally, although tower structure may reduce perching, ravens are known to perch on the lines themselves creating an additional potential impact that must be minimized.

Further, while perching is an important factor that impacts Greater Sage-Grouse survival and the use of the habitat near tall structures, the structures in and of themselves are also known to decrease sage-grouse use of an area. The visual impact of tall structures on displacement of grouse population has been demonstrated.[16] The BLM should not solely rely on structures to deter perching – whose effectiveness has not been demonstrated – as its only measure to ensure that BSSG populations are not affected by the GreenLink West line. Rather, we reiterate again that BLM must follow its own management prescriptions as outlined in the BSSG LUPAs.

Recommendation: Avoid potential impacts of displacement of Bi-State Greater Sage-Grouse and comply with FWS and BLM recommendations by siting within existing rights-of-way and co-locating lines and following distances recommended from leks as recommended above. Where impacts cannot fully be avoided, monitor the efficacy of the specific monopole and H-frame structures and lines proposed to prevent avian predator perching and nesting as adaptive management and to inform future use of the structures.

154.GG-6

Potential Impacts to Other Species

Regarding other special status covered in the DEIS, our data shows that Golden Eagle nests are few and there are no Bald Eagles in the area. We also conclude that there is likely to be no habitat loss for Southwestern Willow flycatcher, Western yellow-billed cuckoo, or Yuma Ridgeway's rail.

The project could affect Burrowing Owl and Pinyon Jay, however, and we support the preconstruction surveys and avoidance of burrowing owl and pinyon jay nests as outlined in the BBCS. With the U.S. Fish and Wildlife Service's recent finding that federal protection for Pinyon Jays may be warranted, with the initiation of a 12-month status review, the BLM should review the proposed action with regard to its requirements under the ESA to avoid impacts to listed and proposed species and their habitat should the Pinyon Jay be listed. We note the acknowledgement in the DEIS that the proposed action will impact Pinyon Jay populations and habitat.[17]

154.GG-7

[15] Wendy M. Lammers and Michael W. Collopy "Effectiveness of Avian Predator Perch Deterrents on Electric Transmission Lines," Journal of Wildlife Management 71(8), 2752-2758, (1 November 2007). https://doi.org/10.2193/2005-752

[16] Kohl MT, Messmer TA, Crabb BA, Guttery MR, Dahlgren DK, Larsen RT, Frey SN, Liguori S, Baxter RJ. The effects of electric power lines on the breeding ecology of greater sage-grouse. PLoS One. 2019 Jan 30;14(1):e0209968. doi: 10.1371/journal.pone.0209968.

[17] From the DEIS: "Impacts of construction of the Proposed Action would result in impacts to pinyon jay populations ... pinyon-juniper habitat is relatively widespread within the Virginia and Flowery ranges and project actions would impact vegetation within a small portion of the overall range of the pinyon jay."

Recommendation: perform preconstruction surveys and review other actions to identify and avoid seasonal disturbance of Burrowing Owl and Pinyon Jay nesting areas during construction and operation.

154.GG-7

Potential Impacts to Other Resources

154.GG-8

The BLM must preserve its (or other surface management agency's) ability to decide whether and how to protectively manage wilderness resources and areas that may qualify for special designations through a public planning process. Such decisions could be impacted or foreclosed by granting rights-of-way through such areas if the action is inconsistent with the BLM's planning documents and management objectives for that resource.

Tule Springs Fossil Beds National Monument serves as an urban park that preserves the unique history of the ever-changing ecosystem of Upper Las Vegas Valley. Consistent with the tenets of DOI's America the Beautiful initiative, urban parks address the "Nature Gap", which reflects a lack of access to nature in urban, economically disadvantaged communities, and/or communities of color. Incursion of the right-of-way into the park would negatively impact the parks viewshed as well as degrade the users access to unencumbered nature.

Recommendation: BLM should protect resource values by avoiding land(s) with special designations, specifically Tule Springs Fossil Beds National Monument

Further, the proposed action has potential to intersect and impact historical, cultural and spiritual resources of significance, including crossing through more than one Native American Tribal reservation.

154.GG-9

BLM should maintain ongoing communication with parties entitled to participate in consultation under Section 106 of the NHPA including SHPO and/or THPO ACHP and Native American Tribes who might attached religious and cultural significances to historical properties in the area of potential effects. Additionally, the White House Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships, dated January 26, 2021, notes that honoring the commitments made to Tribes for more than two centuries is particularly vital now as our Nation faces crises related to health, the economy, racial justice, and climate change. The memorandum also reinforces the importance of Executive Order 13175 of November 6, 2000 (Consultation and Coordination With Indian Tribal Governments) obligating all executive departments and agencies with engaging in regular, meaningful and robust consultation with Tribal officials.

Recommendation: BLM should prioritize ongoing trust relationship between Tribes and the federal government.

Mitigation

Mitigation is a widely accepted regulatory tool. Sound mitigation policy provides agencies such as BLM with a structured, rational, and transparent framework for reviewing use requests and meeting their multiple use and sustained yield mandates. When fairly designed and implemented and evaluated at appropriate scales, mitigation policies can reduce conflict between conservation and land use activities.

BLM's proposed Conservation and Landscape Health rule requires mitigation. It provides that "authorized officers shall, to the maximum extent possible, require mitigation to address adverse impacts to important, scarce or sensitive resources." 88 Fed. Reg. 19583, 19603 (April 3, 2023) (to be codified at 43 C.F.R. § 6102.5-1(b)). The Federal Land Policy and Management Act (FLPMA) not only authorizes BLM to take such action; the Act arguably mandates such action. Implementation of the GreenLink West project must occur in accordance with consistent application of the BLM's own laws, regulations and guidance for mitigation,

including IM 2021-046, Mitigation Manual (1794-M), and the Mitigation Handbook (H-1794-1), which set standards and principles for compensatory mitigation.

With regard to the Bi-state Greater Sage-grouse population in particular, the BSSG LUPA requires mitigation of unavoidable impacts to habitat to a no net loss standard.[18] We note that even where the GreenLink West project might be co-located with existing lines, BSSG habitat would still be affected by short-term impacts (e.g. construction) and indirect impacts (e.g. visual disturbance leading to avoidance behavior and loss of functional habitat for the BSSG population). We fully anticipate that the BLM will seek to first avoid (e.g. by not locating the line in BSSG habitat) and then minimize (e.g. timing construction so as to limit impacts on seasonal use) before putting in place compensatory mitigation for unavoidable impacts (e.g. protecting or restoring priority habitat for the BSSG to compensate for impacts).

On avoidance, we underscore that the BSSG LUPA does not offer mitigation as an alternative for projects that cannot comply with the BSSG LUPA.[19] As the GreenLink West line as proposed is not consistent with the BSSG LUPA, we fully anticipate the BLM will consider modifications and alternatives to the proposed action that would bring the project into compliance. Given the current status of the BSSG population, the preparation of a site-specific RMP amendment would be wholly inappropriate.

Recommendation: BLM must require effective mitigation for any unavoidable impacts in coordination with the FWS and NDOW.

We support the preferred alternative with the modifications and recommendations specified above as providing benefits to climate, communities and conservation.

Not only is it possible for both wildlife and responsible clean energy development to coexist, but it is also absolutely critical. This can only be accomplished through meticulous and transparent collaboration between all parties: agencies, developers, and representatives or the public. We welcome a more inclusive and detailed process.

Thank you for the opportunity to comment and participate.

Garry George
Director, Clean Energy Initiative

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[18] From the BLM BSSG LUPA (2016): "When authorized land uses cause habitat loss or degradation, the BLM will require mitigation that provides a no permanent unmitigated net loss to the BSSG habitat. Analysis of mitigation will include consideration of any uncertainty associated with the effectiveness of such mitigation at both the project and habitat scales. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. For the Nevada portion of the habitat, the Forest Service and BLM have developed a framework to use the State's Conservation Credit System (CCS). The BLM may pilot the use of the CCS to enhance mitigation options, improve habitat on public lands managed by BLM Nevada by authorizing credit development projects. The Monitoring Strategy, Appendix A, describes the expected management approach to implement these standards." [emphasis added]

[19] From the BSSG LUPA: "As projects/activities are proposed on public land managed by the BLM, the authorized officer will determine if the proposal is consistent with the RMP (as amended). When a proposed project is found to be inconsistent with the management direction in the plan the BLM will consider several outcomes:

- Whether or not to analyze the proposal further;
- If the project proposal can be modified so that it is consistent with the RMP direction;
- If there are valid existing rights which influence the BLMs evaluation of the proposal;
- Alternatives to the proposed action that are consistent with the plan; and
- If the preparation of a site specific RMP amendment is warranted to authorize the proposal."

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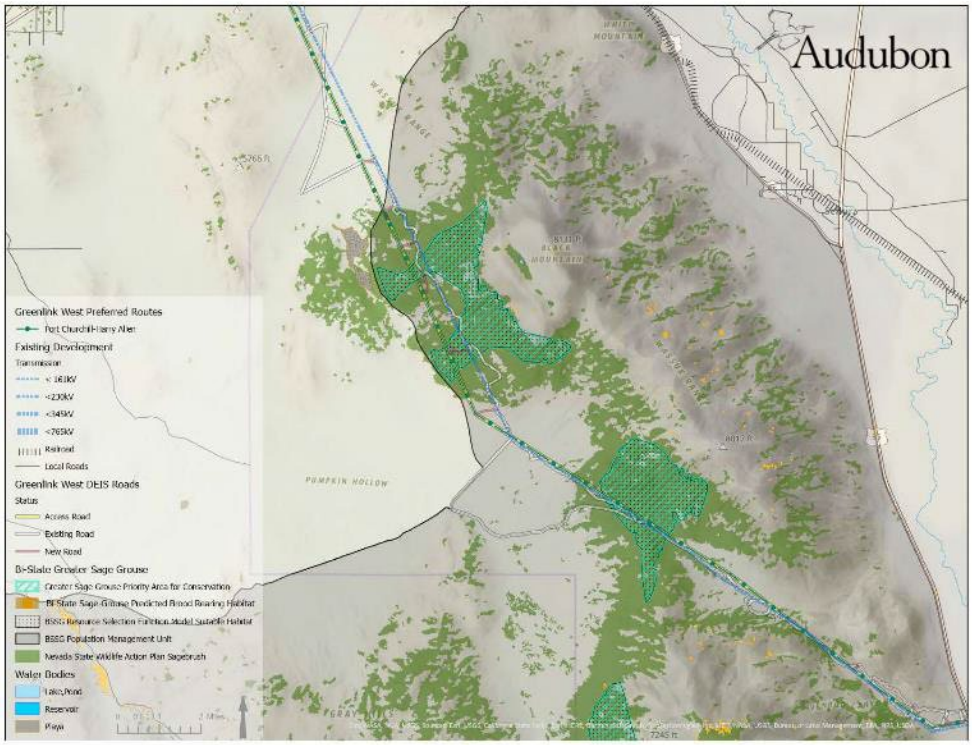
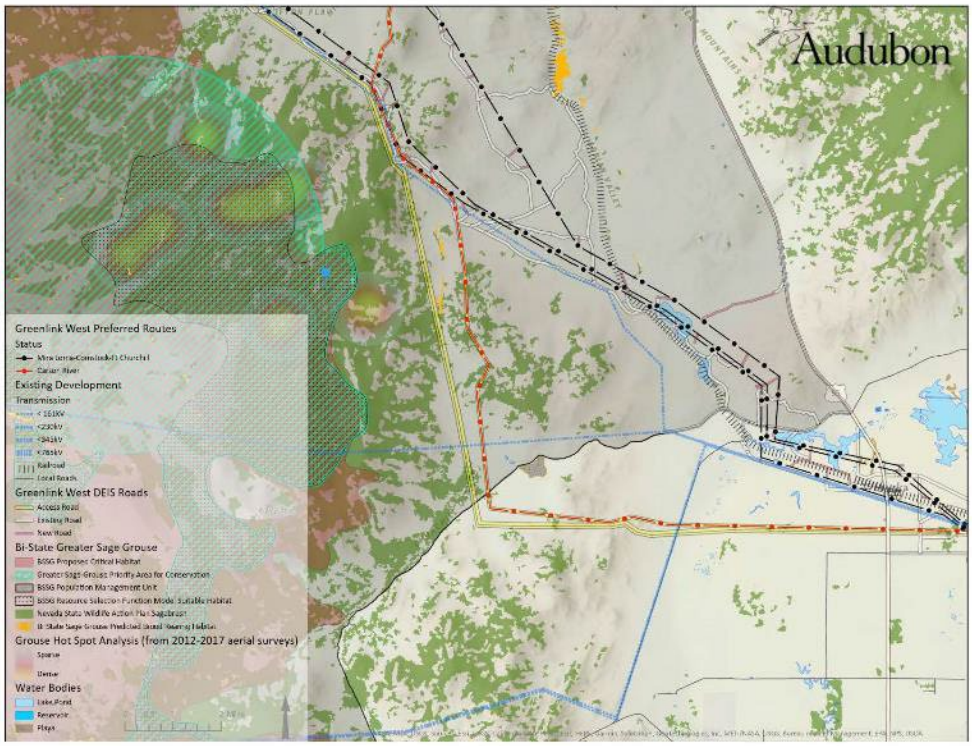
Appendix

Map 1. GreenLink West intersection with the Bi-State Sage-grouse Mount Grant Population Management Unit (PMU).



Map 2. GreenLink West intersection with the Bi-State Sage-grouse Pine Nut Mountains Population Management Unit (PMU).



Response to 154.GG Garry George Audubon Society

154.GG-1	See Master Response on Avian Collision Concerns.
154.GG-2	Section 3.1.3.1 of the Draft Environmental Impact Statement/Resource Management Plan Amendments (Draft EIS/RMPA) presented information regarding the listing status of the Bi-state sage-grouse and the current understanding of the effects of fragmentation of sagebrush habitat to the species. Section 3.1.4.2 of the Draft EIS/RMPA discussed the avoidance and minimization measures that would be taken by the applicant and mitigation measures required by the Bureau of Land Management (BLM). Table 3.9 of the Draft EIS/RMPA presented the milage of transmission line that would cross Bi-state sage-grouse habitat. Approximately 2.1 miles of Bi-state habitat would be crossed by the transmission line in the Mount Grant Population Management Unit (PMU). This area of potential direct impacts to Bi-state habitat is located within the West-wide Energy Corridor 18-224. Measures to minimize impacts to Bi-state sage-grouse included the Anti-Perching/Nesting mitigation measure in addition to Appendix C Environmental Management Measures (EMMs) and Appendix G Raven Management Plan. Areas of direct impact to Bi-state habitat from the Proposed Action are located within West-wide Energy Corridor 18-224 consistent with the 2016 Greater Sage-Grouse Bi-State Distinct Population Segment Land Use Plan Amendment (LUPA) and Record of Decision (ROD) ("BSSG LUPA"). Surface disturbance acreages within the Mount Grant PMU Bi-state habitat areas would be associated with access road improvements and would be limited to widening existing roads at the TV Hill microwave site. Implementation of EMM BSSG-13 in Appendix C of the Draft EIS/RMPA would require access road upgrades to be limited to the area necessary to accommodate construction activity. This comment has not resulted in a change to the document.
154.GG-3	The proposed transmission line right-of-way (ROW) through the area referenced in the comment would be collocated with an existing H-frame transmission line and would be located within a West-wide Energy Corridor (WWEC). The BLM Preferred Alternative would conform with the management objectives for the area, because the 2016 LUPA allows for tall structures to be installed within four miles of an active or pending lek in existing corridors (such as the WWEC). Within the area of Bi-state habitat crossed by the existing line and the proposed Greenlink West Transmission Project (GLWP) ROW, the distance between the existing line and proposed ROW varies from approximately 1,500 feet to 1,900 feet. The Proponent has designed the proposed ROW in this area to follow the existing transmission line, to the extent feasible due to steep terrain, and stay within the WWEC corridor consistent with existing regulations and industry standards for collocation separation distances. The Proponent has also designed the proposed ROW to utilize as much of the existing access road as possible in order to minimize additional fragmentation of sagebrush vegetation resulting from new access road segments. This comment has not resulted in a change to the document.

154.GG-4	Approximately 14,000 acres of the Pine Nut PMU was burned by the Adrian Fire in 2007, affecting the suitability as Bi-state sage-grouse habitat. Portions of the Carson River Transmission Alternative C would cross through this burned area. Additionally, no recent lek activity has been observed within this area according to data received from the Nevada Department of Wildlife. This information has been added to the Final EIS/Proposed RMPA in Section 3.1.4.2. PMU designations are for planning purposes, do not reflect suitable habitat boundaries for the species, and do not provide regulatory protection for the species. The proposed transmission right-of-way under the Carson River Transmission Alternative C would not be located in mapped Bi-state sage-grouse habitat and is not located within the Greater Sage-Grouse Bi-State Distinct Population Segment Land Use Plan Amendment and Record of Decision Management Area. Refer to Draft EIS/RMPA Section 3.1.3.1 for information on suitable habitat and see response to Comment 154.GG-2.
154.GG-5	See Master Response on Bi-State sage-grouse.
154.GG-6	Perch deterrents are not 100 percent effective at eliminating perching opportunity for ravens and raptors and that ravens may perch on the transmission lines. The Raven Management Plan (refer to Draft EIS/RMPA Appendix G) has been developed in coordination with the United States Fish and Wildlife Service and the Nevada Department of Wildlife and presents multiple measures to avoid and minimize potential impacts to both species. The Management Plan includes discussions of adaptive management options the Proponent may implement as new information and techniques become available for raven management. The Draft EIS/RMPA Section 3.1.4.2 discussed the avoidance and minimization measures taken by the Proponent and mitigation measures required by the BLM. Areas of direct impact to Bi-state habitat from the Proposed Action are located within West-Wide Energy Corridor 18-224 consistent with the 2016 Greater Sage-Grouse Bi-State Distinct Population Segment LUPA and ROD (“BSSG LUPA”). The BLM is not required under the National Environmental Policy Act to eliminate impacts but to disclose those impacts. This comment has not resulted in a change to the document.
154.GG-7	The Draft EIS/RMPA Appendix C EMMs BIO-19 and Table A-1 in Appendix A of the Bird and Bat Conservation Strategy (Appendix H) addressed the resource concerns to protect the burrowing owl and pinyon jay nests during construction and operation of the GLWP. This comment has not resulted in a change to the document.
154.GG-8	See Master Response on Tule Springs Fossil Beds National Monument.
154.GG-9	As described in Sections 1.6, 3.6.2.2, and 5.2 of the Draft EIS/RMPA, the BLM has been conducting consultation with Native American Tribes about the GLWP. This comment has not resulted in a change to the document.

Comment 155.KE Kevin Emmerich Basin and Range Watch

[EXTERNAL] Greenlink West DEIS comments

K. Emmerich <atomicquailranch@gmail.com>

Wed 8/23/2023 12:03 AM

To:BLM_NV_GREENLINKWEST <blm_nv_greenlinkwest@blm.gov>;Buttazoni, Brian L <bbuttazoni@blm.gov>;Helseth, Gregory L <ghelseth@blm.gov>

Cc:Laura Cunningham <lcunningham@westernwatersheds.org>

4 attachments (5 MB)

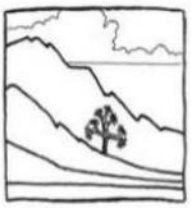
Crawford et al 2012-pygmy rabbit-predation.pdf; Holcomb et al-2021-Desert TortoiseCommon Raven Viable Conflict Threshold.pdf; Coates-et-al-2014-transmission-ravens.pdf; BRW-WWP-Greenlink West DEIS.pdf;

Greetings,

Please accept the comments and attachments on the Greenlink West Transmission Project - Greenlink West Transmission Project Draft Environmental Impact Statement/Resource Management Plan Amendment - DOI-BLM-NV-0000-2022-0004-EIS from Basin and Range Watch and Western Watersheds Project.

Thank you,

Kevin Emmerich
Basin and Range Watch
775-764-1080



Basin and Range Watch

Western Watersheds Project

August 23, 2023

ATTN: Brian Buttazoni
Bureau of Land Management
Nevada State Office
1340 Financial Blvd, Reno NV 89502-7147

Via email to BLM_NV_greenlinkwest@blm.gov

Re: Comments on the Greenlink West Transmission Project Draft Environmental Impact Statement/Resource Management Plan Amendment - DOI-BLM-NV-0000-2022-0004-EIS

Basin and Range Watch is a nonprofit working to conserve the Mojave and Great Basin deserts and to educate the public about the diversity of life, culture, and history of the ecosystems and wild lands of the desert.

Western Watersheds Project is a non-profit organization with more than 12,000 members and supporters. Our mission is to protect and restore western watersheds and wildlife through education, public policy initiatives, and legal advocacy.

1. General Comments

The Bureau of Land Management (BLM) is preparing an Environmental Impact Statement and Resource Management Plan Amendments (RMPA) for the right-of-way application submitted by NV Energy for the Greenlink West Project. The Greenlink West Project is proposed to be a system of new 525-kilovolt (kV), 345-kV, 230-kV, and 120-kV electric transmission facilities on private, state, and federal lands. The project would run from Apex to Reno through Clark, Nye, Esmeralda, Mineral, Lyon, Storey and Washoe counties.

155.KE-1

The DEIS is not complete and leaves out valuable information about types of poles sites, local master plans, visual resources, cultural resources, impacts to some remote regions (between Esmeralda and Hawthorn) etc. For example, how many of the VRM Classes are undetermined? 155.KE-1

The DEIS needs to provide a much better guide to using this DEIS and locating information. It appears to be rushed through too fast. There should be a supplemental EIS simply to cover all the details left out of this one.

The proposed large high-voltage transmission line would create significant impacts to western Nevada.

This badly-planned and rushed transmission line would also open up Amargosa Valley and other remote Nevada basins to widespread and uncontrolled solar development, on deserts that are a hotspot for Mojave desert tortoise, burrowing owls and desert kit foxes. During BLM meetings we raised the concerns about the many proposed utility-scale solar applications needing to be reviewed as connected actions to the Greenlink proposal.

We have continually asked that this giant transmission proposal with its significant impacts be delayed until the Nevada state-wide Resource Management Plan revisions are under public comment. BLM told us this would take too long. Energy planning across the U.S. has suffered from this lack of better planning, and a few years delay will not endanger climate goals—more likely the process of planning renewable energy would be made more efficient and less impactful to natural resources, and towns and communities in Nevada.

A better planning effort would slow down to consider nominated and needed conservation areas, such as Areas of Critical Environmental Concern. Right now the energy developers and Investor-Owned Utilities are driving the process, and conservation needs are being left out or minimized as a concern. This will only cause controversy and potential further delays as all stakeholders are not at the planning table.

Proponent Goals

The developer's goals for building Greenlink West are simply to construct transmission facilities to deliver the projected electric demand in Nevada and to facilitate access to BLM-titled Designated Lease Areas and Nevada Solar Energy Zones, contributing to Nevada's Renewable Energy Portfolio, and helping to meet the goal of 100 percent carbon-free resources by 2050. 155.KE-2

Greenlink West will connect to the Harry Allen Substation near Apex, Nevada. The DEIS should calculate how many megawatts moving through Greenlink West will be generated from natural gas. 155.KE-3

The Draft EIS should discuss in detail the carbon footprint of the 4 natural gas plants that power the substation.

The DEIS says Greenlink West is being built by Solar Energy Zones or Designated Lease Areas. To this day, only one of the Solar Energy Zones have generated interest from developers which is the Amargosa Solar Zone. There are approximately 245 square miles of solar projects associated with the Greenlink West proposal. All of those avoided all 3 of the solar energy Zones 155.KE-4

until the Amargosa SEZ leases were auctioned off. To this day, there is still no interest in the Gold Point and Millers Solar Energy Zones. These areas are seeing no interest even with the proposed solar leasing and fee updates because they have to compete for the leases.

155.KE-4

The EIS should be paused until the BLM can complete pending land use plans. BLM is currently reviewing a revision to the Western Solar Plan which could create several Solar Exclusion Zones in important areas with sensitive resources. BLM is also reviewing a proposed Conservation Rule which would make conservation a priority in Land Use planning. Because the Greenlink West will cut through areas with multiple valuable resources,

155. KE-5

The DEIS should be paused until all the Land Use plans can be resolved.

The BLM has announced that it has funding to review a Nevada-wide Resource Management Plan revision. This would help the public decide the best future for public lands management.

Land use planning can help define the latest values and issues involving these public lands. An RMP revision would require an updated analysis of these values and help the agency better decide the importance of this area. We would like to request that all NEPA review for this proposed project be paused until the Resource Management Plan can be revised.

The Federal Land Policy and Management Act (FLPMA) requires the BLM to maintain on a continuing basis an inventory of all public lands and their resources and other values (Inventories, Section 201). Planning, per FLPMA Section 202, instructs that the Secretary of the Interior shall, with public involvement and consistent with the terms and conditions of the Act, develop, maintain, and, when appropriate, revise land use plans which provide tracts or areas for the use of the public lands. The purpose of a Resource Management Plan (RMP) is to:

1. Allocate resources and determine appropriate multiple uses for the public lands;

2. Provide a strategy to manage and protect resources;

3. Establish systems to monitor and evaluate the health of resources and effectiveness of practices.

RMPs are like a public lands version of municipal zoning. The Bureau of Land Management evaluates and amends or revises its land-use plans in response to changing conditions and demands on the public lands, or when new components are added to the National Conservation Lands that it manages. Keeping a plan up-to-date helps ensure that the BLM manages the public lands in ways that meet the multiple-use and sustained yield goals that Congress has set for these lands. Examples of situations that may require new or changed land-use plan decisions include:

• New information or scientific knowledge about the environmental health of an area.

• Failure to meet the land health standards set out in the original plan.

• Requests for land uses that were not considered in the original plan.

Many older land-use plans, for example, did not consider the possible land-use needs of emerging renewable energy resources. The Las Vegas RMP is 25 years old, and in that timeframe, values, visitation and use of the area have changed

155.KE-5

Purpose and Need

BLM's purpose and need statement is narrow and only applies to the ROW/SF 299 application as well as a "need' to manage transmission on public lands.

155.KE-6

The Purpose and Need Statement should be rewritten and broadened to include the new conservation goals of the BLM's proposed Public Lands Rule. If the Purpose and Need Statement is broadened to include conservation goals, Conservation Alternatives can be considered. This is already a mandate under the Federal Land Policy and Management Act of 1976 (FLPMA), and the BLM should already be doing this.

The Public Lands Rule is a proposed BLM rule that would provide tools for BLM to protect and conserve public lands[1], bolstering conservation as an equal use in BLM's Multiple Use mandate. The Environmental Impact Statement (EIS) for Greenlink West should analyze how resources along the proposed high-voltage route would be better conserved, not simply used for energy extraction.

Climate Change and Greenhouse Gases

155.KE-7

The life cycle of mining iron ore and other metals for the construction of large transmission towers and electrical lines, substations, and microwave towers needs to be analyzed. This includes the open pit mining of ores, including heavy truck and machinery operated using fossil fuels, the smelting of iron ores and other ores to make metal, the transport emissions, and worker commute emissions.

The Greenlink West Project would have over 2,800 poles in total. It can take 40,000 to 60,000 pounds of steel just to build one transmission tower which could be 30,000 tons. What is the carbon footprint of melting all that steel? What is the copper carbon footprint in the transmission line?

The Greenlink transmission Projects are fossil fuel lines that will transmit natural gas electrons from existing natural gas power plants; solar projects hooking in do not negate this fact. The line will hook into natural gas power plants at Apex just north of Las Vegas and eventually transport power north to large tech servers and factories in the Reno-Sparks area. These natural gas power plants generate approximately 2,000 megawatts, and an analysis of CO2 impacts should be undertaken. In addition, life cycle analyses should be completed describing the steel manufacture for the power poles, transportation emissions, SF6 gas emissions, helicopter and diesel construction emissions, and the total carbon footprint of constructing such a massive powerline in remote wildlands, over mountain ranges, and through populous cities.

Biological Soil Crust

155.KE-8

[1] https://www.blm.gov/press-release/update-blm-releases-public-meeting-information-proposed-public-lands-rule

The DEIS states that biological soil crusts have not been documented in the Greenlink West project area. It is inaccurate for the BLM to assume this is not an impact. The soil crusts have not been documented because the BLM has not been organized enough to have any botanical surveys. If you would like, we can provide GPS coordinates on where we have found soil crusts on the proposed ROW in Tule Springs Fossil Beds National Monument, Corn Creek, Indian Springs Valley, Amargosa Valley, Oasis Valley and Sarcobatus Flat.

155.KE-8

Rare plants and vegetation

155.KE-9

Figure 1. White-margined penstemon in Amargosa Valley in the route proposed for Greenlink West, 2023. Photo: Kevin Emmerich. See the iNaturalist Amargosa Bioblitz in April 2023 for observations of this species: https://www.inaturalist.org/projects/2023-amargosa-valley-bioblitz

Botanical surveys have been poor or lacking along the Greenlink route proposal, with rare plants overlooked, bloom times missed, and new rain events potentially shifting seedbeds.

We suggest improved botanical survey protocols. See Appendix: Suggested New Botanical Inventory Protocols and Requirements.

Vegetation types and plant communities need to be mapped.

Mojave desert tortoise

155.KE-10

155.KE-10

The Mojave Population of the Agassiz's desert tortoise was listed as Threatened by the US Fish and Wildlife Service (USFWS) in 1990 followed by the designation of critical habitat in 1994. In 2000, the USFWS began systematically surveying tortoise populations in critical habitat and recovery unit areas to determine population trends. Based on their findings (USFWS 2015), which are briefly summarized in the table below.

Recovery Unit: Designated Critical Habitat Unit/Tortoise Conservation Area	Surveyed area (km²)	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km² (SE)	% 10-year change (2004–2014)
Western Mojave, CA	**6,294**	**24.51**	**2.8 (1.0)**	**–50.7 decline**
Fremont-Kramer	2,347	9.14	2.6 (1.0)	–50.6 decline
Ord-Rodman	852	3.32	3.6 (1.4)	–56.5 decline
Superior-Cronese	3,094	12.05	2.4 (0.9)	–61.5 decline
Colorado Desert, CA	**11,663**	**45.42**	**4.0 (1.4)**	**–36.25 decline**
Chocolate Mtn AGR, CA	713	2.78	7.2 (2.8)	–29.77 decline
Chuckwalla, CA	2,818	10.97	3.3 (1.3)	–37.43 decline
Chemehuevi, CA	3,763	14.65	2.8 (1.1)	–64.70 decline
Fenner, CA	1,782	6.94	4.8 (1.9)	–52.86 decline
Joshua Tree, CA	1,152	4.49	3.7 (1.5)	+178.62 increase
Pinto Mtn, CA	508	1.98	2.4 (1.0)	–60.30 decline
Piute Valley, NV	927	3.61	5.3 (2.1)	+162.36 increase
Northeastern Mojave	**4,160**	**16.2**	**4.5 (1.9)**	**+325.62 increase**
Beaver Dam Slope, NV, UT, AZ	750	2.92	6.2 (2.4)	+370.33 increase
Coyote Spring, NV	960	3.74	4.0 (1.6)	+ 265.06 increase
Gold Butte, NV & AZ	1,607	6.26	2.7 (1.0)	+ 384.37 increase
Mormon Mesa, NV	844	3.29	6.4 (2.5)	+ 217.80 increase
Eastern Mojave, NV & CA	**3,446**	**13.42**	**1.9 (0.7)**	**–67.26 decline**
El Dorado Valley, NV	999	3.89	1.5 (0.6)	–61.14 decline
Ivanpah, CA	2,447	9.53	2.3 (0.9)	–56.05 decline
Upper Virgin River	***115***	***0.45***	***15.3 (6.0)***	***–26.57 decline***
Red Cliffs Desert	*115*	*0.45*	*15.3 (6.0)*	*–26.57 decline*
Range-wide Area of CHUs - TCAs/Range-wide Change in Population Status	**25,678**	**100.00**		**–32.18 decline**

Figure 2. Summarizing the results of these surveys (USFWS 2015), 17 populations of Mojave desert tortoise are described occur in Critical Habitat Units (CHUs) and Tortoise Conservation Areas (TCAs), including 14 that are on lands managed by the Bureau of Land Management.

The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km2 and standard errors = SE), and the percent change in population density between 2004 and 2014. Populations below the viable level of 3.9 breeding individuals/km2 breeding individuals per square mile (assumes a 1:1 sex ratio) and showing a decline from 2004 to 2014 are in red.

The results of USFWS surveys in the table show that (a) 10 of 17 populations of the Mojave desert tortoise declined from 2004 to 2014; (b) 11 of 17 populations of the Mojave desert tortoise are no longer viable; and (c) these 11 populations represent 89.7 percent of the range-wide habitat in CHUs/TCAs, which encompass the best remaining tortoise habitats and populations.

6

The transmission project is not sited within Critical Habitat or a TCA, but this shows how much of a decline has occurred in those protected areas, and how tortoise habitat in other parts of the range of the species is equally important with densities that match Critical Habitat currently. A full analysis of impacts to tortoise should be included in the EIS, as this project has the potential to open up tens of thousands of acres of tortoise habitat to renewable energy development—a massive and significant impact.

155.KE-10

The DEIS at 3-198 states:

> Steel guyed-V lattice structures are proposed to be used in the Amargosa Valley area.

155.KE-11

The Amargosa Valley is Mojave desert tortoise habitat, and important connectivity habitat within the Eastern Mojave Recovery Unit. Much research has shown how lattice transmission towers attract ravens to perch and nest far out into valley bottoms and otherwise open habitat, allowing ravens to penetrate more deeply into tortoise habitat. Huge mortality from raven predation on juveniles and adult tortoises is a leading factor in the species' decline.

This conflicts with statements made in the DEIS that highlight how the construction of lattice towers in relatively pristine, open habitats can have significant impacts to tortoises:

> Raptors, including eagles, may use transmission towers for perching and nesting, and they prefer lattice towers that contain diagonal and horizontal bracing (APLIC 2006; Dixon et al. 2013). It is anticipated that under the anti-perching/nesting mitigation measures, eagles use of transmission structures would be slightly less in in desert tortoise and Bi-State sage-grouse habitat areas in comparison to the Action Alternatives without the mitigation measures because of the reduction in lattice structure types, which would reduce the number of potential nesting and perching structures available to eagles. (DEIS at 3-104)

> As described in Section 3.1 Federally Listed Species, an anti-perching/nesting mitigation measure would be implemented to replace guyed lattice towers with tubular H-frame towers to reduce the overall nesting and perching of ravens within sensitive habitat areas for Mojave desert tortoise and Bi-State sage-grouse. (DEIS at 3-95)

The DEIS claims that anti-perching mitigation measures in desert tortoise habitat include using tubular poles that discourage raven and raptor perching and nesting. Yet the DEIS at 3-49 says:

> The majority of the 525-kV transmission line associated with the Action Alternative would use guyed lattice structures rather than tubular H-frame or monopole structures. The anti-perching/nesting mitigation measure would convert approximately 151 miles of the lattice structures in Mojave desert tortoise recovery unit areas to H-frame structures, and approximately 13 miles of the lattice structures in Bi-State sage-grouse habitat areas to H-frame structures.

Why is the Amargosa Desert, which includes high-quality tortoise habitat, proposed for lattice towers?

This contradicts another statement in the DEIS at 40-41, which states:

155.KE-12

> The Mojave desert tortoise anti-perching/nesting mitigation measure would result in less impacts on Mojave desert tortoises because only tubular structures with perch and nesting deterrent devices on the structures would be used where the transmission line alignment would cross through the Eastern Mojave and Northeastern Mojave Recovery Units. For comparison, the Proposed Action without the mitigation measure would include 151 miles of lattice structures, while the anti-perching/nesting mitigation measure converts these 151 miles of lattice structures to tubular H-frame structures with perch and nesting deterrents. Use of tubular structures with perch and nesting prevention devices would reduce the concentration of raven predation directly around and near the transmission structures in comparison to the 151 miles of lattice structures proposed under the Proposed Action without the mitigation measure, minimizing impacts on individual Mojave desert tortoise and local populations. Use of tubular structures in Mojave desert tortoise habitat, combined with implementation of the GLWP Raven Management Plan (includes raven monitoring measures and use or perch deterrents; Appendix G) would decrease the impacts of the Proposed Action and the Losee A, TUSK B, and Beatty A, C, G, and K Transmission Line Route Group Alternatives on Mojave desert tortoises.

Amargosa Valley is in the Eastern Mojave Recovery Unit for the Mojave desert tortoise.

Coates et al. (2014) found raven abundance increased within 2.2 km of transmission lines. Raven predation poses a significant threat to tortoise populations.

Holcomb et al (2021) showed that expanding raven populations, subsidized by artificial nesting substrates such as transmission towers, is expected to compromise the inter-generational stability of desert tortoise populations as annual juvenile survival is suppressed through a combination of raven depredation and other sources of mortality. Parts of Critical Habitat Units are now seeing no recruitment of juvenile tortoises into adulthood solely because of artificially increased raven predation, the authors conclude. This tells us that every possible mitigation measure needs to be used to avoid and minimize raven predation in all tortoise habitats, including those areas outside of Critical Habitat, such as the Amargosa valley.

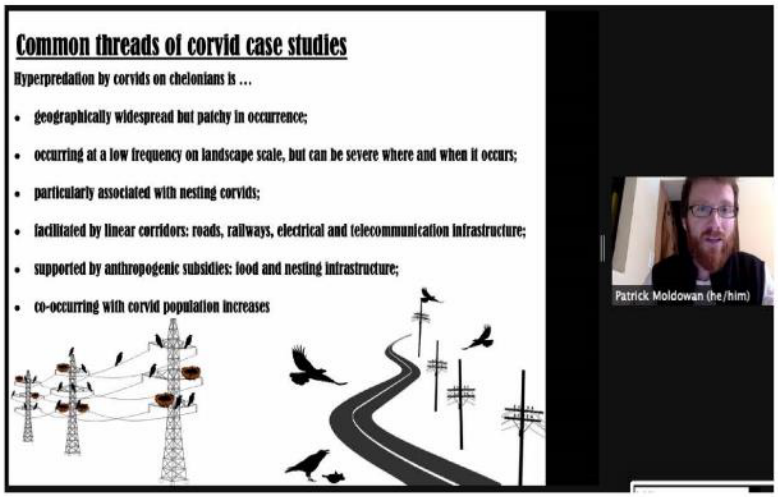


Figure 3. Screenshot of presentation by Patrick Moldowan at the February 2021 Desert Tortoise Council Symposium, held virtually.

Greater sage grouse

The imperiled Bi-State Distinct Population of greater sage grouse is in review for listing under the federal Endangered Species Act, yet BLM fails to avoid Priority Management Units with habitat for this bird. Instead, BLM proposed several unproven mitigation measures that will not fully eliminate collision hazards as sage grouse fly by transmission infrastructure, or raven perches. New roads and microwave towers will further fragment intact sage grouse habitats, pushing this species further into decline.

155.KE-13

In its May 17, 2022, Beatty, NV scoping meeting, BLM explained that during the Greenlink West environmental review process, many land use plans may need to be opened and amended, including the 2016 Nevada and California Greater Sage-Grouse Bi-State Distinct Population Segment Land Use Plan Amendment (LUPA) for the Carson City District and the Tonopah Field Office located in Nevada.

The Bi-State sage-grouse Distinct Population Segment of greater sage grouse as a whole is in sharp decline. The extreme drought of 2015-16 caused population crashes in several Priority Management Units (PMUs). Since 2014, Parker Meadow has been augmented with hens and broods to stave off extirpation of this local population.

Now that the Bi-State sage-grouse is once again a candidate for listing under the Endangered Species Act due to recent litigation[2], this taxon needs a more thorough review and higher level of

[2] https://www.westernwatersheds.org/2022/05/court-rules-federal-agency-wrongly-withdrew-bi-state-sage-grouse-protections/

protection. Simply attempting to amend this plan—which guides multiple agencies and stakeholders towards stabilizing and recovering the bird—in order to construct high-voltage lines over its mountain habitats--is simply unacceptable. Weakening the management of this declining taxon to allow a giant transmission line through its range is counter to the goals of recovery. New transmission creates a risk for catastrophic wildfires in sage grouse habitat. Increased drought and climate change greatly increase this risk. 155.KE-13

Large areas of the Pine Nut and Mount Grant PMUs are proposed to be crossed by the proposed high voltage transmission project and associated improved access roads. BLM failed to analyze other alternatives that do not cross Bi-State sage grouse habitat. Proposed critical habitat would be in the Greenlink construction zone, including Pine Nut and North Mono lake units. 155.KE-14

Habitat disturbance of intact sagebrush habitat, and collision mortality from transmission towers, wires, new microwave towers and associated infrastructure will not be mitigated by the suggested measures. 155.KE-15

> The DEIS admits at 3-21:
>
> This area of Bi-State sage-grouse habitat would be fragmented and degraded by the presence of the transmission line and access roads. Although these areas would be become available for use by this species once restoration is complete, sage-grouse have been documented to avoid areas of habitat where tall structures provide perching opportunity to avian predators. Areas that are successfully restored within the vicinity of the transmission line may not provide the same or similar value to pre-project conditions….
>
> And DEIS at 3-22:
>
> A ten year study conducted in central Nevada by Gibson et al. (2018) on the 345-kV Falcon to Gondor transmission line concluded that impacts from raven predation may result in habitat avoidance by sage-grouse to occur up to 7.8 miles from tall transmission lines and other elevated structures (Gibson et al. 2018).

We are surprised that the proponent is proposing lattice tower structures for Greenlink West across the east slope of the Wassuk Range, inside the Mount Grant PMU, and around Walker Lake (DEIS at 3-20). This will attract raven and hawk nesting and a potential increase in predation on sage grouse. Coates et al. (2014) found raven abundance increased within 2.2 km of transmission lines. The EIS needs to analyze tubular poles in these bird-rich areas.

The DEIS at 3-39 says that both the proposed action and the Anti-Perching/Nesting Mitigation mitigation measure action have impacts to Bi-State sage grouse. The mitigation option would have less lattice towers in sage-grouse habitat, but more structures. This seems to negate the mitigation. Structures provide perches and nest platforms for ravens, which prey on sage grouse and their chicks and eggs. More structure also provide a collision hazard for flying sage grouse.

The DEIS at 3-40 admits:

> Ravens have been documented to have a substantial impact on prey population dynamics even at low densities (Brusse and Coates 2018). Coates and Delehanty (2010) observed that an increase of 1 raven per 6.2 mile (10 kilometers)- transect was associated with a 7.4 percent increase in the odds of a greater sage-grouse nest failure.

155.KE-15

New infrastructure and ROWs do not avoid all development within greater sage grouse PACs. Especially concerning are the connected solar projects proposed along the Greenlink lines. All transmission infrastructure should avoid all PMUs.

155.KE-16

The Humboldt-Toiyabe National Forest plan amendment calls for management measures that minimize impacts to sage-grouse:

- No more than 3% surface disturbance per square mile, averaged across a 4.7-mile radius around sage grouse leks (AA-S-02).
- Authorize new roads only when necessary and minimize footprint in habitat (AR-S-01).
- Use existing roads and co-locate powerlines to minimize footprint of rights-of-way for valid existing rights (LUSU-S-01).
- Where feasible, bury powerlines in occupied habitat (LUSU-G-04).
- Do not grant new ROWs in occupied habitat (LUSU-S-01).
- Require proper containment and prompt removal of refuse to avoid attracting predators/scavengers (LUSU-S-09).

Growth-Inducing Impacts are not analyzed: we are told that the Reno-Sparks industrial areas are growing, needing more energy. But what needs to be carefully analyzed is whether supplying more power could cause urbanization impacts to spill over into greater sage-grouse habitat just to the north of Reno and Sparks, in GHMA-designated public lands. Specifically new right-of-way for cell towers, more transmission infrastructure, roads, and even small projects that cause habitat degradation by a thousand cuts.

Pygmy rabbit

The declining pygmy rabbit (*Brachylagus idahoensis*) is being petitioned by Western Watersheds Project and partners for listing as threatened or endangered under the federal

155.KE-17

Endangered Species Act[3]. This small rabbit is found throughout the sagebrush belt of Nevada, south to the Montezuma Range where we have observed this species in sagebrush habitats.

155.KE-17

Crawford et al. (2010) describe how avian predation is a leading cause of declines in pygmy rabbits.

Lattice towers are admitted to attract birds of prey, including hawks and eagles, as well as Corvids such as ravens, which all prey on pygmy rabbits. Bi-State sage grouse and Mojave desert tortoise habitat do not exclusively overlap pygmy rabbit habitat. Therefore, BLM needs to eliminate lattice towers as the proposed action because a large portion of pygmy rabbit habitat in sagebrush areas will be impacted by this tower design.

The DEIS at 3-371 says:

> The majority of the 525-kV transmission line associated with the Proposed Action would use guyed lattice structures rather than tubular H-frame or monopole structures.

Elsewhere the DEIS, at 3-234, mentions "guyed-V lattice structures," and "steel guyed-V lattice structures" (DEIS at 1-198).

This is unacceptable, and NV Energy is reverting to less wildlife-friendly transmission designs with Greenlink West.

Important Bird Areas

155.KE-18

Greenlink West will pass through 5 Important Bird Areas established by Audubon: the Spring Mountains, Oasis Valley, Mount Grant, Carson River Delta, and Walker Lake. The line will cause unavoidable collisions with birds and the cumulative impacts from solar projects include avian lake effect in which birds mistake solar panels for water and collide with them.[4]

Lahontan Cutthroat Trout

The DEIS state that only "approved" herbicides will be used in the vicinity of Lahontan Cutthroat Trout. There are no herbicides that are good for the species. Please review an alternative that uses no herbicides near trout habitat. Invasive weeds should be hand removed.

Invasive Plants

155.KE-19

Construction will bring in a rush of invasive weeds which will compete with native plants. NV Energy may use herbicides to control weeds and herbicides will kill native species. This should be analyzed.

We observed many invasive, non-native plant species along the project proposed routes, including red brome (*Bromus madritensis* var. *rubens*), cheatgrass (*Bromus tectorum*), Mediterranean grass (*Schismus barbatus*), African mustard (*Malcomia africana*), Indian hedgemustard (*Sisymbrium orientale*), saltlover (*Halogeton glomeratus*), Russian thistle (*Salsola*

[3] https://westernwatersheds.org/wp-content/uploads/2023/03/FINAL-030623-Pygmy-Rabbit-ESA-listing-petition-WWP-v2.pdf

[4] Hathcock 2018.pdf (energy.gov)

tragus), bassia (*Bassia hyssopifolia*) and redstem stork's bill (*Erodium cicutarium*). We found red brome and *Schismus* to be present in our field trips, and all these species could increase with soil disturbance during construction activities. We are concerned that herbicides will be used to control these exotic invasive plant outbreaks under the solar field, which could do significant damage to native grasses, forbs, and other native plants present. This should be analyzed. 155.KE-19

Water Resources

The applicant should develop a detailed erosion and sedimentation control plan, and a flood risk control plan now for public review. Widespread alluvial flooding events and sheetwash deposition occurs. Analysis of how towers and new roads will be impacted by floods and erosion should be included. 155.KE-20

Air Quality and Dust

We are also particularly concerned about the compromised air quality that will most likely result from the construction of this project. 155.KE-21

The land rush of large solar projects all over the southwestern US has resulted in expedited approval of many of these projects. In most of the cases, the developers have not adequately mitigated the fugitive dust that has resulted in the removal of large acreages of vegetated desert lands. We are concerned that industrial construction in the region will compromise the air quality to the point where not only visual resources, but public health will be impacted. The cumulative dust and particulate emissions should be analyzed for the combined transmission project and associated utility-scale renewable energy projects.

We are also concerned that the applicant will have no choice but to use more water in an already over-drafted aquifer to control the large disturbance they intend to create with new roads, construction on 474 miles of new construction, roads, and a 600-foot-wide construction right-of-way along the main high-voltage line. Where will dust suppression water come from along the line?

Visual Resources

The transmission line would create visual impacts in several Nevada BLM districts. Irreversible visual impacts could be inflicted upon the North Las Vegas Valley, the Desert National Wildlife Refuge, Spring Mountains Recreation Area, the Specter Range, Amargosa Valley, Oasis Valley, Sarcobatus Flat, Lida Valley, Big Smokey Valley, Gold Mountain, the Mina area, Walker Lake, Wassuk Range, Ft. Churchill, and Mason Valley. The impacts are expected to be big enough for BLM to downgrade Visual Resource Management (VRM) Class designations to allow for industrial development in scenic areas of public lands. 155.KE-22

Due to these impacts, a few land use plans would need amendments. Since July, 2021, the BLM has been talking about a Nevada State-wide Resource Management Plan revision. These revisions would help the public become involved more in these processes.

Maps need to be made showing VRM class areas. VRM 2 areas are present in portions of the proposed route, and BLM tells us in meetings these will need to be downgraded. For example,

the Tonopah BLM district was not able to locate all of the VRM Class maps in the area when they were asked. Equally, the line will cut through some VRM Class III lands. The project manager at the public meeting stated that even some of the Class III lands the line would cross would require amendments

155.KE-22

This is the **VRM Class II Objective:** *To retain the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.*

This is the **VRM Class III Objective:** *To partially retain the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.*[5]

We request that certain VRM Classes be reviewed and upgrade to VRM Class II under our ACEC/Conservation Alternative.

If BLM approves the project, the Land Use Plan amendments would need to retain the lower VRM Class to accommodate the solar project. This is another example of why the project should be put on hold until a final decision can be made on the Nevada State-wide RMP Revision.

For the Tule Springs Fossil Beds National Monument, it would be *impossible* to mitigate any visual impacts that would be inflicted on the monument by this transmission project. Mitigation options that would be considered would be:

155.KE-23

1. Shorten the height of the poles. The poles would be up to 180 feet tall. If they were shortened, the view from longer distances may be mitigated, but the line would be closer to the ground and the visual disturbance would be unacceptable for visitors within the monument.

2. Bury the line.

3. Paint the line a blending color so it is not as visible: This would still create a huge visual contrast, cast unsightly shadows and possibly reflect in moonlight. Plus, camouflaging the color may cause more raptor collisions.

Public Health and Safety

155.KE-24

Building a transmission project so close to private residences could create health problems. Electric fields are created by differences in voltage: the higher the voltage, the stronger will be the resultant field. Magnetic fields are created when electric current flows: the greater the current, the stronger the magnetic field. The BLM and NV Energy said they would not build the

[5] https://blmwyomingvisual.anl.gov/vr-mgmt/blm/

Greenlink Project near residential areas in North Las Vegas for this very reason. We request the same consideration for other communities. 155.KE-24

All potential health and safety concerns should be detailed in analysis.

Wildfire Hazard 155.KE-25

The transmission line would cross Highway 95 and springs, meadows, native alkaline grasslands, and potentially riparian woodlands. If there is an accident such as a windstorm causing treefall or tower collapse, that would create a potential wildfire danger in drought-ridden fuels. This could be a significant wildfire risk for the residents living in areas along the proposed route. This needs a thorough and detailed analysis due to the many human communities along the proposed transmission route.

Burying lines should be explored as an alternatives in order to keep people safe from transmission ignitions to fuel, such as PG&E is exploring.[6]

Socioeconomic Impacts 155.KE-26

NV Energy and their supporters claim that ratepayers' increased bills to pay the billions of dollars to construct the Greenlink transmission projects will somehow be made up for in temporary construction jobs. Yet to us, this is comparing apples to oranges. A few temporary construction jobs to build the high-voltage lines, often in our experience by highly-trained out-of-state workers, does not balance the skyrocketing cost in 5 years to Nevada residents who must shoulder this un-needed transmission cost on their electricity bill—and these are often low- and middle-income workers who will not see any benefit from this short-term construction deal.

The Greenlink West transmission project alone could easily cost $2 Billion (and most likely more), based on earlier estimates of long 500 kV lines at a Renewable Energy Transmission Initiative 2.0 meeting in 2016.[7]

Nevada's electricity rate design is regressive, meaning the poorest people are paying more of their overall income to just keep the lights on.

Utilities profit by building more and more expensive power lines, such as this Greenlink proposal. For example, California's investor-owned utilities charged ratepayers nearly $20 billion in transmission line projects between 2010 and 2019 and collected more than S20 billion in profits over a similar time period.[8]

The visual impacts would be located near the residential areas of the Tule Springs Fossil Beds National Monument, Oasis Valley, Sarcobatus Flat, and areas to the north, and this of course can

[6] https://www.npr.org/2021/07/21/1019058925/utility-bury-power-lines-wildfires-california

[7] https://www.basinandrangewatch.org/RETI2.html

[8] CA Public Utilities Commission: Utility Costs and Affordability of the Grid of the Future ($20 billion in transmission costs from 2010-19 pp. 39, Table 11; $4.336 in 2021 transmission spending and rate of increase p. 36; 1$/$3.50 profit p. 37). $20B profit figure from utility 10-K filings, itemized here.

impact their quality of live as well as their property values. Property values go up near national monuments. Values will decline near large transmission lines.

155.KE-26

A complete socioeconomic analysis should be undertaken to allow Nevadans to see how the project would impact their quality of life and costs, compared to any small benefit.

Equity and Environmental Justice

155.KE-27

Utilities have lobbied against every major proposal to help marginalized communities adopt solar and battery storage: affordable housing solar incentives, community solar, microgrids, on-bill financing and more.[9]

Further developing energy projects on intact desert lands fails to implement the President Executive Order "On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government." This order would allow for "advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality."[10]

Local desert communities and rural areas should not bear the burden of renewable energy build-out. There are smarter alternatives based on science and environmental justice.

Privileged urban load center communities (cities) should contribute to the solution of climate change by shifting renewable energy generation to the Built Environment with Distributed Energy Resources (DERs), including rooftop solar, solar carports over the abundant desert parking loss, energy efficiency, and energy conservation.

Utility-scale solar projects in remote desert areas do not benefit underserved communities, and may actually cost them higher electric bills because of the passed-on costs of new and upgraded transmission infrastructure. DER policies can easily favor shared community benefits, such as with solar gardens that serve apartment complexes, and local community empowerment with rooftop solar and parking lot solar engineering jobs and training to increase build-out in urban core areas. But these urban DER pushes need legislative support that avoids favoritism of corporate solar developers seeking cheap public lands leases, and utilities seeking higher profits from building more and more pricey transmission lines.

De facto privatization of public lands occurs when utilities build giant high-voltage transmission lines and solar companies obtain associated and connected 30-year leases of thousands of acres of desert in a right-of-way, and erect 8-foot-tall chain-link fences topped with barbed wire, and often guards hired to patrol the energy plant. Accessibility of public lands has been an issue not

[9] Partial list of initiatives utilities lobbied to kill or weaken: Affordable housing solar incentives (AB 693 - Eggman, 2015); Low-income feed in tariff (AB 1990 - Fong); Community solar (SB 843 - Wolk, 2013; SB 43 - Wolk, 2013; CPUC implementation); Microgrids (SB 1339, CPUC implementation)

[10] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/

well addressed, and this concern would be avoided with Distributed Generation alternatives instead of public lands development for renewable energy. 155.KE-27

The cost-shift of ratebasing transmission-building is of great concern to us, especially as ratepayers who can ill-afford higher monthly electric bills during inflation and supply shortages will shoulder the cost of construction of the Greenlink West Transmission Project. 155.KE-28

Public Utility Commissions (PUCs) serve as a replacement for the competitive market. In exchange for granting the exclusive right to sell electricity in a given service territory, PUCs determine how much the utility is allowed to invest and in what, how much it can charge, and what its profit margin can be. This is called the "regulatory compact."[11]

The rate base is the book value, after depreciation, of the generation, distribution, and transmission infrastructure owned and operated by the utility for the provision of electric service. Utilities earn a regulated Rate of Return (ROR) on rate base based on their capital structure, debt interest rates, and authorized return on equity (ROE). This ROR is the main source of profit for regulated utilities. Other things being equal, a larger rate base results in a higher net profit for the utilities.

The allowed rate of return (return on assets) drives a utility's profitability. Expenses are simply passed through, including fuel in cases where regulated utilities own power plants. Critics have brought up that so-called "rate of return regulation" does not properly motivate utilities to operate efficiently. By having a set rate of return, utilities essentially are incentivized to make unnecessary investments (such as new transmission lines) in order to increase their rate base and therefore, their profits – called the Averch-Johnson effect. They also have limited incentive to keep expenses in check if those costs are simply passed through to customers.

Specifically, Jamison (no date at 3) states that:

> The emphasis on cost recovery in rate of return regulation is the source of the concern that
>
> companies may not operate efficiently. For example, if the regulator allows a rate of return that is higher than what the company actually needs to ensure that shareholders continue to provide capital for investment, the company could increase its returns to shareholders by making unnecessary investments (if the regulator does not catch the company doing so). This is called the Averch-Johnson effect….

We estimate the approximate cost of the Greenlink West Transmission Project to be in the range of $2 Billion and possibly more based on the associated microwave towers and other communications devices. This cost will be rate based and NV Energy will pass on the cost to ratepayer's bills. This cost passed onto marginalized communities in Nevada should be analyzed. Investments by regulated utilities must be useful to current ratepayers for the provision of utility service. Investments must also be prudently incurred to justify asking ratepayers to pay for them and their associated rates of return.

[11] https://blog.aee.net/how-do-electric-utilities-make-money

Lands With Wilderness Characteristics

155.KE-29

An earlier transmission corridor study along the Greenlink West route noted several Lands with Wilderness Characteristics overlapped the corridor. The EIS must analyze how the Greenlink West line, roads, ROW, and associated laydown areas, microwave towers, and substations would impact these important intact landscapes. From Argonne National Laboratory:

> NV-050-306A lands with wilderness characteristics overlaps 809 acres (MP 89 to MP 90), re-route the corridor to the west to avoid. NV-050-306A lands with wilderness characteristics overlaps 2001 acres (MP 90 to MP 94), re-route the corridor to the west. NV-050-330B lands with wilderness characteristics overlaps 1,813 acres (MP 120 to MP 124). NV-050-320 lands with wilderness characteristics overlaps 1.734 acres (MP 125 to MP 128). NV- 050-336A lands with wilderness characteristics overlaps 2,697 acres (MP 134 to MP 140), re-route corridor to the east. NV-050-03R-15 lands with wilderness characteristics overlaps 1,219 acres (MP 146 to MP 149), re-route corridor to the northeast. NV-050-352A lands with wilderness characteristics overlaps 682 acres (MP 163 to MP 167), re-route the corridor to the northeast. NV-050-363 lands with wilderness characteristics overlaps 1,669 acres (MP 207 to MP 210) re-route the corridor to the west (comment on abstract).[12]

[12] https://corridoreis.anl.gov/documents/docs/corridor-abstracts/corridor-18-224.pdf

Figure 4. Approximately 1,399 acres of the eastern portion of the Project Area are in the Yucca Mountain Lands with Wilderness Characteristics unit (NV-050-363), pictured above in the photograph.

Recreation Management Areas

155.KE-30

Humming transmission lines create a consistent noise impact. This will impact hikers and other visitors. Noise from construction and helicopters will be a nightmare for visitors and local people. This needs to be analyzed.

In the application to the BLM, the Project Proponent NV Energy has applied for a 600-foot-wide temporary Right-of-Way (ROW) for construction and a 200-foot-wide permanent ROW for operations and maintenance. These long-lasting and permanent impacts should be thoroughly

analyzed, as these linear disturbances could open up new unplanned and unanalyzed routes for off-highway vehicles.

155.KE-30

At the Beatty, NV May 17 BLM public meeting, it was stated that OHV race groups have approached BLM to use these linear ROWs and the construction and laydown areas for the transmission project as their own staging areas for races. This needs analysis. This would also be a connected action to the proposed action. Please evaluate dust, safety and other environmental impacts associated with a new high-speed race route on the Greenlink West corridor. Would high-speed racers collide with transmission towers?

Local Government Designations

155.KE-31

Local towns and communities need to be included in regional planning so that any proposed transmission infrastructure does not conflict with local government land uses, maps, and plans. The Beatty Town Advisory Board has undertaken years of planning for local recreation and route designations in its Town boundary which overlaps land managed by BLM.

Cumulative Impacts

Clearly, 230 square miles of solar applications associated with the Greenlink West Project are cumulative impacts. For the Greenlink West Draft EIS, BLM should review public land impacts, endangered species impacts, archeological impacts, environmental justice impacts all associated with these large-scale solar applications. It is probable that BLM ignored this issue because the rule was only recently revised. BLM is required to do this now.

The Solar Project Applications Are Connected Actions

155.KE-32

Please review the associated solar applications for Greenlink West as "Connected Actions".

Under the Code of Federal Regulations, connected actions are actions that are directly a result of a specific proposed action.

> (1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:
>
> (i) Automatically trigger other actions which may require environmental impact statements.
>
> (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.
>
> (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

40 CFR § 1508.25 - Scope. | CFR | US Law | LII / Legal Information Institute (cornell.edu)

According to BLM: Analysis of Connected Actions under the National Environmental Policy Act | Bureau of Land Management (blm.gov)

(see BLM 2018)

The following paragraphs revise BLM NEPA Handbook (H-1790-1) Section 6.5.2.1 (page numbers 45-48):

155.KE-32

> Connected actions are those proposed Federal actions that are "closely related" and "should be discussed" in the same NEPA document (40 CFR 1508.25 (a)(1)). Proposed actions are connected if they automatically trigger other actions that may require an environmental impact statement; cannot or will not proceed unless other actions are taken previously or simultaneously; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification (40 CFR 1508.25 (a)(1)). Connected actions are limited to Federal actions that are currently proposed (ripe for decision). Actions that are not yet proposed are not connected actions but may need to be analyzed in the cumulative effects analysis if they are reasonably foreseeable.

Because there are nearly 230 square miles of public lands solar energy applications associated with the Greenlink West Transmission Project, they are connected actions to the upcoming draft EIS.

The Greenlink West Project would need to build three major substations designed to connect several thousand acres of large-scale solar on to the grid.

With a few exceptions, all the SF-299 applications for solar energy in the area say they must hook into the Amargosa, Esmeralda or Ft. Churchill Substations - all being built for the Greenlink West Transmission Project. These solar applications would not be pouring into the BLM offices if a large high-voltage new transmission project was not being actively proposed and reviewed. Otherwise, the remote basins have no transmission infrastructure capable of carrying any utility-scale solar generation to load centers. Each of these large-scale solar project applications will need an EIS and would not proceed unless Greenlink West is built.

None of the Solar projects have made NEPA, but they are all submitted as SF-299 applications for the BLM. Nothing has been approved or really looked at in detail yet. According to the developers, they are all feasible because they meet the Variance requirements and could plug into the new transmission line. Since the line would have associated substations built with it, the projects are feasible to hook into it. We do not think they are feasible over the resource damage they would cause.

Are the public lands solar projects not feasible but for the transmission project? Or are those projects already approved and will go in regardless of the transmission project? If it's the former it's a connected action.

But the Purpose & Need statement itself doesn't determine whether projects are connected to the proposed action. BLM's NEPA handbook identifies the relevant factors, and there's nothing in that excerpt about Purpose & Need statements.

The EIS should fully review all connected and cumulative impacts that would result from a Record of Decision issued to approve Greenlink West.

Alternatives

Under the National Environmental Policy Act, BLM is required to consider a "Reasonable" range of alternatives. For the purposes of NEPA, Reasonable means those alternatives which may be feasibly carried out based on technical, economic, environmental and other factors. Under Section 102 of FLPMA, Conservation is a priority: *"the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use."* Because environmental factors must be considered when selecting alternatives, we would like to request the following alternatives with less environmental impacts.

Conservation Alternatives

155.KE-33

A conservation alternative would deny the permit for Greenlink West, use Plan Amendments to designate stronger protections on the public lands proposed for the project. This amendment could allow for the nominations of Areas of Critical Environmental Concern and upgrade the VRM Class from VRM Cass III to VRM Class II. The objective of VRM Class II is to: "To retain the existing character of the landscape. Allowed Level of Change: The level of change to the 1 https://www.blm.gov/press-release/update-blm-releases-public-meeting-information-proposed-public-lands-rule characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer." Equally, the conservation alternative could be divided into different sections of the line and be divided into multiple conservation alternatives.

Smaller Transmission Line Alternative

155.KE-34

The BLM should review an alternative that reduces the size of Greenlink West to a 345 kV transmission line. This would be a smaller line and have smaller impacts to raptors, golden eagles, bald eagles, desert tortoise, white margin beardtongue, migratory birds, bi-state sage grouse, pronghorn, wild horses, visual resources and cultural resources. A 345 kV line would be smaller and easier to consider for an underground alternative. A 345 kV alternative could alleviate the problems for the Tule Springs Fossil Beds National Monument by utilizing existing poles. A 345 kV line would also reduce the amount of land that could be converted to solar and wind energy and thus save more habitat from destruction. A 345 kV line would provide less opportunities for ravens and other subsidized predators. A smaller line would make impacts to Amargosa Valley, the Esmeralda region and Mason Valley much less. A 245 kV project only could reduce impacts to the Mason Valley Wildlife Management area, and Walker Lake, and reduce visual impacts to the Atwood Preserve (7J Ranch), Scotty's Junction and Ft. Churchill would be lessened.

Partial Underground Line Alternatives

Most sage grouse management plans recommend that transmission lines be buried in sage grouse habitat. Transmission can cause collision and direct kills to sage grouse. Exploring underground alternatives on parts of the line could mitigate damages to sage grouse and visual resources. At

public meetings, BLM said that burying a transmission line is too expensive and at one point did say it has never been done before. This is clearly not accurate[13]. While it is expensive, it has been done in California and Japan. It would not be feasible to bury the entire line, but this alternative should be considered in short parts of the proposed ROW that have visual and sage grouse impacts.

155.KE-34

A No Action Alternative is a Reasonable Alternative

Because a "reasonable alternative" can be carried out based on environmental factors, BLM should consider the No Action Alternative as a Reasonable Alternative. Traditionally, the BLM does a very minimal job of analyzing the No Action Alternative, but if the goals of conservation are carried through, No Action is the better alternative for this project. The BLM's proposed new rule points in this direction. For example, the Need for remote energy projects can be examined by considering the potential energy output of Distributed Energy. In 2020, the nation of Vietnam installed 9 GW of rooftop solar onto their local grid.[14] In comparison, the expected capacity for Greenlink West would be 5 GW. BLM must review the No Action Alternative in greater detail.

There are several potential pinch points, including the Walker River Indian Reservation, the Hawthorne Army Depot, the Black Mountain-Pistone Cultural Area, and mountains on the north end, as well as through Beatty and the Tule Springs Fossil beds National Monument-North Las Vegas region. These large problems alone require BLM to choose the No Action Alternative.

2. <u>Regional Greenlink West Alternatives:</u>

155.KE-35

Losee

The Losee Alternative A is located on VRM Class III lands but a Plan Amendment could upgrade the VRM Class to VRM Class II. The region is recognized for the scenic quality being adjacent to the Desert National Wildlife Refuge. Again, the VRM Class was established in 1997 and vales have changed in 26 years.

Tule Springs Fossil Beds National Monument

155.KE-36

Paleontological Resources:

The TUSK Transmission Line Route Group Alternatives include alternatives within the TUSK and those that avoided the TUSK. TUSK Transmission Alternative A, the initial Proposed Action, TUSK Transmission Alternative B, and the current Proposed Action would involve different structure and location options within the TUSK along the TUSK boundary adjacent to Moccasin Road (extension of El Capitan Way to the east for approximately 1.5 miles). TUSK Transmission Alternative A would consist of 11 delta monopoles, centered on a 100-foot by 100-foot maintenance pad (refer to Figure 2-6). The initial Proposed Action would consist of eight delta

[13] Brian Williams Guides Planning for the SOO HVDC Underground Transmission Line (personsofinfrastructure.com)

[14] Vietnam rooftop solar records major boom as more than 9GW installed in 2020 - PV Tech (pv-tech.org)

monopoles, centered on a 100-foot-by 100-foot maintenance pad (refer to Figure 2-6). The delta monopoles would be Greenlink West Project Draft EIS/RMP Amendments Chapter 2 May 2023 Page 2-20 approximately 120 feet tall.

155.KE-36

The DEIS claims that development would only occur 5 feet into the Tule Springs Fossil Beds National Monument but there would also be 100-foot pads, guy wires and in total, disturbance would be 100 feet inside the National Monument. The extreme weight of the poles along with the guy wires to hold the poles up will most likely damage fossil resources extensively.

Ground penetrating radar studies have detected major anomalies under the monument lands at approximately 3 sites along the preferred alternative. Any digging, boring or bulldozing will destroy these fragile fossils. According to BLM: *3-Dimentional (3-D) imaging revealed that the anomalies at one of the study locations in the GLWP ROW were consistent with the skull and limb bone of a member of the elephant family.*

155.KE-37

The BLM did not fully consider all the impacts and should reexamine alternatives that will not damage fossils.

The primary legislation pertaining to fossils from NPS and other federal lands is the Paleontological Resources Preservation Act of 2009 (PRPA) (16 U.S.C. § 470aaa 1-11) which was enacted on March 30, 2009 within the Omnibus Public Land Management Act of 2009.

PRPA directs the Department of Agriculture (U.S. Forest Service) and the Department of the Interior (National Park Service, Bureau of Land Management, Bureau of Reclamation, and Fish and Wildlife Service) to manage and protect paleontological resources on Federal land using scientific principles and expertise. The Secretary shall develop appropriate plans for inventory, monitoring, and the scientific and educational use of paleontological resources, in accordance with applicable agency laws, regulations, and policies. These plans shall emphasize interagency coordination and collaborative efforts where possible with non-Federal partners, the scientific community, and the general public.

We understand that complete paleontological surveys have not been completed and would like to see the DEIS timeline delayed over this until this can be completed.

While the National Monument legislation allows for an energy corridor within the NPS border, the park's enabling legislation and general management plan does not allow for any damage to fossils period. Any attempts to excavate fossils would take years. The Greenlink West Project should be delayed until fossils can be located completely and until a complete excavation plan can be made. The BLM and NPS have stated they are not aware of any plans to excavate fossils. The BLM falsely claims development would only impact 5 feet of the park unit.

The enabling legislation that establishes the energy corridor states that only "renewable" energy can run through the corridor. *"Instructs the Secretary to issue to: (1) a qualified electric utility a 400-foot right-of-way for the construction of high-voltage transmission facilities identified as the Renewable Energy Transmission Corridor on the map entitled "North Las Vegas Valley Overview" (the map);"*

It is already illegal to build Greenlink West through the national monument because Greenlink West will hook into the Harry Allen Substation. The Harry Allen substation accommodates 4 natural gas generating facilities. It is impossible to separate electrons at a substation so Greenlink West will carry fossil fuel which is a violation of the legislation creating the Tule Springs Fossil Beds National Monument. 155.KE-37

BLM said they would not consider Alternative G because it would add 70 million dollars to the NV Energy price tag. BLM does not work for NV Energy and they have the funding to pay for this. BLM should not value NV Energy's budget over protection of paleontological resources.

The BLM has claimed that A mapping error placed the renewable energy transmission corridor across private property (south of the section line rather than north), which Congress does not have the authority to do and there was an existing residential development there at that time.

Nobody, including the National Park Service is aware of such a mapping error. The area they are talking about was previously BLM land and auctioned off for Las Vegas growth as disposal lands. The alternative through TUSK just can't be worked out without breaking 2 or 3 laws.

Cultural Concerns: 155.KE-38

Native American tribes have clearly opposed the Greenlink West line through the Tule Springs Fossil Beds National Monument. Concerns have been raised by the Moapa Paiute, the Las Vegas Paiute and the Hopi Tribe among others.

THE HOPI TRIBE

Timothy L. Nuvangyaoma
CHAIRMAN

Clark W. Tenakhongva
VICE-CHAIRMAN

September 20, 2021

Derek Carter, Superintendent
National Park Service, Tule Springs Fossil Beds National Monument
601 Nevada Highway.
Boulder City, Nevada 89005

Dear Superintendent Carter,

This letter is in response your correspondence dated August 9, 2021, regarding the Greenlink West Transmission Line Project. The Hopi Cultural Preservation Office appreciates the National Park Service (NPS)'s solicitation of our input and your efforts to address our concerns.

The Hopi Tribe claims cultural affiliation to earlier identifiable Ancestral Pueblo cultural groups in Nevada. The Hopi Cultural Preservation Office supports the identification and avoidance of our ancestral sites, and we consider the prehistoric archaeological sites of our ancestors to be "footprints" and Traditional Cultural Properties. We are interested in consulting on any proposal that has the potential to adversely affect Ancestral Pueblo prehistoric sites.

We understand the NPS has been notified by the Bureau of Land Management that Nevada Power Company and Sierra Pacific Power Company dba NV Energy are pursuing the construction and operation of the Greenlink West transmission line and BLM have identified a preferred alterative for the proposed line inside Tule Springs Fossil Beds National Monument.

We share the concern about impacts from a new transmission line in the park that would potentially impact paleontological resources, cultural resources, visual resources, wildlife movements, invasive species populations, natural sound-scapes and visitor access.

We have reviewed the enclosed briefing statement and support the enabling legislation for the park and routing the line in the existing corridor rather than through NPS lands. We object to BLM conducting a public meeting presenting a preferred alternative for the transmission line inside the park, and

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not identifying NPS lands or acknowledging this alignment is outside the existing transmission corridor and world require a ROW from the NPS. We also understand BLM has accepted an application for a utility-scale solar project immediately southwest of the park's north unit.

To enable you in planning and avoiding any potential impacts to cultural and natural resources significant to the Hopi Tribe, please keep us informed of these BLM rogue actions, and how we can support the public, NPS, and elected officials in opposing them. Thank you for your consideration.

Respectfully,

Stewart B. Koyiyumptewa, Program Manager/THPO
Hopi Cultural Preservation Office

xc: Secretary of the Interior
Jan Childress, BLM
Director, BLM
Director, NPS
Nevada State Historic Preservation Office

Figure 5. 2021 letter from the Hopi Tribe opposing the Greenlink West line through the TUSK monument.

Construction of the line through the monument lands will disturb fine, silty clay formations and will create fugitive dust issues for the residents living near the monument as well as visitors to the monument.

155.KE-39

Valley Fever is a problem that has occurred in Clark County. Of the 368 cases of Valley Fever confirmed in Nevada from 1992 to the present, 336, or 90 percent of them, occurred in Clark County, Todd said. The number of cases is increasing because more people are moving into the areas where the disease is common. [15]

The Scenic Quality Rating for Visual Resources is surprisingly low for BLM lands near TUSK. It is listed as 11 or less total score when it should be 18.5 or more.

155.KE-40

The visual simulations in Appendix are very inadequate and undermine the actual visual impacts of the area. The visual simulation of the preferred alternative is

The VRM Class on BOM lands surrounding TUSK is VRM Class III which is a weak designation and was made in 1997 – 17 years after the establishment of the National Monument. Obviously the scenic values of the area have increased due to urban growth and a new national monument. The BLM should use the Plan Amendment to upgrade the VRM Class to VRM Class II which has an objective of: *"retaining the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer.*

[15] Valley Fever: Hidden threat in wind - Las Vegas Sun Newspaper

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Wildlife and rare Plants:

155.KE-41

Constructing the line will require new roads and extensive cleared areas. This will impact species like burrowing owls, desert tortoise, Gila monster, kit fox, American badger, Western Joshua tree, Las Vegas bear poppy, Las Vegas buckwheat and other rare plants. The EIS should map and detail all sensitive, rare, and threatened and endangered species along the proposed route.

Corn Creek Area

155.KE-42

The region between TUSK and Indian Springs has a high scenic quality. It is largely designated as VRM Class III and is withing the viewshed of the Desert National Wildlife Refuge, the Tule Springs Fossil Beds National Monument and the Spring Mountains recreation area.

The BLM should use the Plan Amendment to upgrade the area to VRM Class II. Again, these VRM Classes are outdated and designated before there was even a TUSK monument in the area.

Corn Creek at the Desert Wildlife Refuge supports a variety of regional birds. A list should be made of all the potential bird fatalities that could occur from Greenlink near Corn Creek.

Northwest Substation Upgrade

155.KE-43

"The existing Northwest Substation in Clark County would be expanded west of the existing substation and require an additional area of approximately 17 acres. Substation expansion and transmission line work would be on both BLM-administered land and private property."

What is the reason for the upgrade and what cumulative impacts may be associated with this upgrade? At one point, BLM did accept a solar application from EDF Renewables called Northwest Solar but would later cancel the application because it was in BLM disposal lands. Are there plans to develop more energy in this region? Are there plans for more solar within the Las Vegas Paiute Reservation besides Snow Canyon Solar?

Cactus Springs, Indian Springs and Mercury Valley

155.KE-44

There are no alternatives discussed or evaluated through any of these areas.

The BLM could discuss and 345 kV alternatives that could reduce visual and cumulative impacts or equally alternatives that will move the line further away from the community of Indian Springs.

The DEIS is suggesting that a large construction yard will be built near Cactus Springs, Nevada but the DEIS provides very little detail about this.

How close would the construction yard be to the riparian area?

How much vegetation will be removed for the construction yard?

What rare plants are located on the construction yard?

Are Gila monsters located on the construction yard?

Are desert tortoises located on the construction yard?

Are archeological sites located on the construction yard?

Will all vegetation be scraped off the construction yard?

Will invasive weeds be controlled with herbicide?

BLM needs to review an alternative that will move this construction yard away from Cactus Springs.

What will the newer cumulative impacts on local wildlife be from both the Greenlink West Project and the Gridliance upgrade regarding subsidized predators?

155.KE-44

Water:

There are two solar applications located in the region in the Indian Springs that say they may hook onto the Amargosa Substation with a long gen-tie line. This would be a hydrology cumulative impact because each would need to use construction water. Solar projects need project from 300 acre feet to over 1,000 acre feet to control dust on project construction sites. The projects are called Vegas Valley Solar (9,000 acres) and Kawich Solar (4,300 acres). The area is one of the identified "Mega-channels" for Devil's Hole where water passes though faults in the Spotted Range to Amargosa Valley.

155.KE-45

Damage to Point of Rocks:

The Greenlink West Project will cut over the Point of Rocks area west of Cactus Springs. The area has important habitat for desert bighorn sheep and chuckwallas. It also contains valuable archeology sites. Blasting the Greenklink West project through this area will destroy habitat, cultural sites and directly kill chuckwallas. The area should be avoided and protected through a plan amendment under the Cactus Springs Area of Critical Environmental Concern proposal.

155.KE-46

Figure 6. Chuckwalla at Point of Rocks, April, 2023. Photo: Kevin Emmerich.

Desert Tortoise/Biological Resources:

155.KE-47

See our larger section on desert tortoise for complete details, but the Greenlink West line will pass through an area the BLM and Fish and Wildlife Service have identified as "the most crucial desert tortoise connectivity area in Nevada". The Greenink West Project will:

Destroy habitat for the desert tortoise

Create a cumulative demand for solar projects in desert tortoise habitat.

Create perches for subsidized predators such as ravens.

Figure 3-5. Mojave Desert Tortoise Recovery Units and GLWP 2021 and 2022 Survey Observations

Figure 7. The map show that surveyors found a large number of tortoises along the Greenlink line through the Las Vegas, Indian Springs and Mercury Valleys.

In September of 2022, Basin and Range Watch along with Western Watersheds Project submitted a 58,000 acre Cactus Springs Area of Critical Environmental Concern[16] nomination to the Bureau of Land Management starting from the riparian area of Cactus Springs to the Spotted Range in the Mercury Valley. The nomination was intended to protect outstanding biological resources in the area including desert tortoise connectivity. It is our understanding that the BLM is completing the review of the relevance and importance criteria and we are confident the nomination meets these criteria.

155.KE-47

[16] Cactus Springs ACEC.pdf (basinandrangewatch.org)

Figure 8. Map of the 58,000 acre Cactus Springs Area of Critical Environmental Concern that Greenlink West would be built through.

The ACEC would protect desert tortoise connectivity, high cactus density, rare plants, visual resources, riparian areas, migratory bird habitat and groundwater resources. 155.KE-47

The Cactus Springs wetlands supports a number of migratory birds and water birds. The Greenlink West line will create additional collision and mortality factors for these birds.

Surprisingly, we can find no reference to the ACEC nomination in the Greenlink West DEIS or the appendices. A Plan Amendment is being made for the Cactus Springs Area of Critical Environmental Concern in the Bonanza Solar Project Draft EIS. This is literally the same area.

Rare plants: 155.KE-48

The DEIS fails to mention of analyze the rare Parish club-cholla (*Grusonia parishii* or *Corynopuntia p.*) which is found on alluvial fans near Cactus Springs in Clark County, on the proposed route of the Greenlink West project. This is a mat-forming cholla with limited distribution in southern Nevada, southwestern California, and disjunct populations in Arizona. The narrow-range, and highly scattered populations make this cactus vulnerable to local extirpation. The EIS needs to analyze this species with respect to cumulative impacts—a portion of the Pahrump Valley population has already been destroyed by the Yellow Pine Solar Project now under construction. Other solar project applications are proposed on thousands of acres of Parish club-cholla populations, in Parhump Valley and northeastern Clark County, Nevada[17].

[17] http://www.efloras.org/object_page.aspx?object_id=13347&flora_id=1

Conservationsists may seek endangered species listing for this taxon because of the accelerated development of habitat from renewable energy and transmission projects. 155.KE-48

Visual Resources:

Will the VRM Class II (orange color) lands in the below map be downgraded to VRM Class IV? Will this encourage more destructive development in the area for the future? 155.KE-49

Figure 9. Visual Resource map of las Vegas to Indian Springs.

The region has high valued visual resources including Cactus Springs, the west unit of the Desert National Wildlife Refuge, the Mt. Stirling Wilderness Study Area and Cold Creek. These KOP's should defiantly be added to the DEIS.

Because the Las Vegas Resource Management Plan is outdated by 26 years and there is a new ACEC nomination, the BLM should consider upgrading the VRM Class from East Las Vegas Valley to Mercury Valley to VRM Class II in one of the Greenlink West Plan Amendments.

An additional KOP should be added from the community of Indian Springs.

Photo P43 in the KOP simulations fail to show the full contrast of this visual impact. The simulation undermines the actual impact.

Amargosa Valley

The BLM has long targeted the Amargosa Valley for green energy sprawl and the obstruction has always been lack of transmission. The agency is so Hell-bent on approving massive infrastructure in this region that conservation and local communities have taken the obvious back seat. Any local concerns about solar sprawl are only taken semi-serious by BLM and those of us who are concerned about the future of this area are treated like obstructionists. It is a large area with a long history and the BLM Tonopah Office has already acknowledged that the area will see very big impacts and as a result. 155.KE-50

Amargosa Microwave Tower: 155.KE-51

There is one alternative on private land and one on BLM land – both of which are very close to the Longstreet Casino. The tower would be visually intrusive and potentially impair the experience of people staying at the hotel. The hotel has a lake with a scenic desert backdrop and

the microwave tower will attract attention. Did NV Energy or BLM evaluate the economic impacts this may have on tourism? Did BLM evaluate the potential avian collisions with the tower? The tower could also serve as a perch for subsidized predators. Ash Meadows National Wildlife Refuge accommodates over 300 migrating birds per year. The Longstreet has an artificial lake that attracts water birds. According to the personnel of the Longstreet Casino, NV Energy never bothered to discuss the visual impacts of this tower with hotel management of adjacent home owners. They also say there will be a second tower built close by (possibly by Valley Electric) and the BLM has not reviewed these cumulative impacts in the DEIS.

155.KE-51

The DEIS states that no cultural sites are located on the microwave tower site, but the area could be considered a Cultural Landscape to Native Americans.

Rare plants:

The Greenlink West project will pass through one of only 4 known distinct population centers of White-margin beardtongue (*Penstenom albomarginatus)*

155.KE-52

The BLM, NV Energy and contractor Powers Engineering failed to survey for this plant after it had one of its most extensive blooms. Strong winter rains in 2022 and 2023 resulted in a super-bloom of this species in Amargosa Valley.

Greenlink West would cut directly through the habitat in Amargosa Valley.

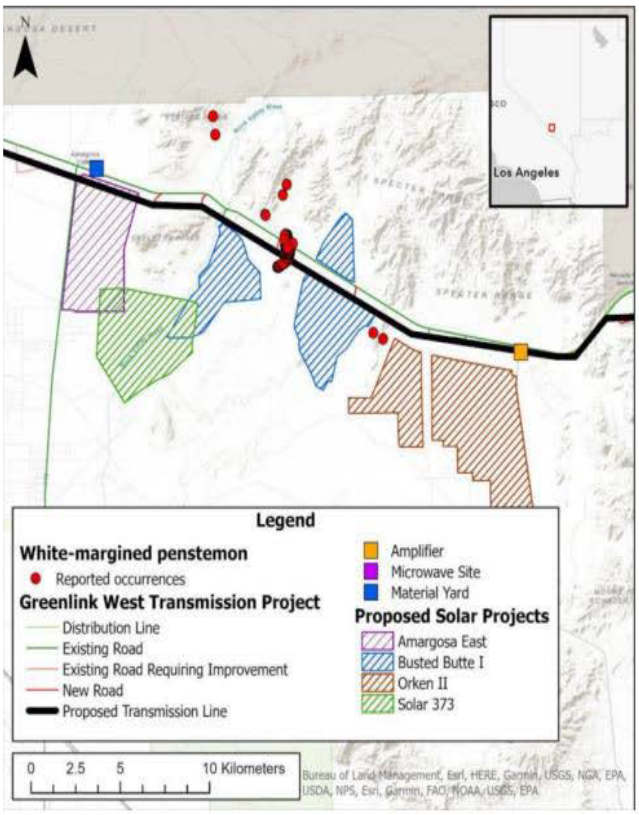


Figure 10. Photo of White-margin beardtongue habitat in Amargosa Valley (Center for Biological Diversity).

Greenlink West will cause habitat loss, alter drainage channels and cause erosion, bring in invasive weeds like Sahara mustard.

155.KE-52

In spite of the species having the best bloom in years, BLM and NV Energy missed the window in April to survey for the species. Surveys still did not take place by August. The entire habitat experienced an intense heatwave during July, 2023. Missing the survey window will now result in surveyors finding traces of dried out plants. We have to wonder if the neglect was intentional because we requested BLM do this 3 times.

The DEIS at 3-75 admits that a larger portion of the Greenlink West project would impact this rare plant, including 7% of the Nye County population, which represents one of only four local populations globally:

> The GLWP would impact portions of the Nye County population that occurs near US 95 between the Nevada National Security Site and the Ash Meadows NWR. Approximately

> 13.9 acres and 4.5 acres within the temporary and permanent ROW areas, respectively, would occur within documented occurrences for the white-margined beardtongue. The Proposed Action may impact approximately 7.2 percent (18.4 acres of the 257 acres documented) of the Nye County population through habitat loss (NDNH 2021). Impacts to the white-margined beardtongue include habitat degradation (e.g., increases in dust and introduction of invasive species), alteration of behavior patterns of the species pollinators and herbivores, and loss of pollinator habitat. These impacts of construction of the Proposed Action would result in localized impacts to only a small portion of the Nye County population for the white-margined beardtongue, and EMMs (Appendix C. BIO-1, BIO-6, BIO-8, BIO-21 through BIO-23, BIO-38 through BIO-44) would establish pre-construction surveys and avoidance of the species, measures to manage both dust and invasive species, and restore habitats following construction.

155.KE-52

The DEIS says that 7.2 percent of the population would be impacted by Greenlink, but BLM will build a road, disturb the area and create a corridor for invasive weeds like Sahara mustard. The cumulative impacts will disturb more than 18.4 acres.

There are also approximately 60,000 acres of large-scale solar applications in the region that is suitable habitat for the species.

The BLM has not developed an alternative that avoids this habitat. The conservation organization Center for Biological Diversity filed as petition with the Fish and Wildlife Service to list the species as Endangered under the Endangered Species Act.

The BLM must develop an alternative that avoids this habitat, otherwise, the agency will play a major role in the potential extinction of the species.

The BLM must also wait for several land use plans to be resolved before permitting such destructive infrastructure. The DEIS says that Greenlink West will remove 7 percent of the habitat for this species? Why not avoid it? It would cost NV Energy more, but they can afford that.

New rare plant surveys should be undertaken because the seedbed may have shifted with large and widespread flooding and desert sheetflow in August 19-21, 2023, across southern Nevada from the remnants of Hurricane Hilary. Seeds may have moved with sediment shift.

Endangered Species:

Yuma clapper rail, Southwest Willow flycatcher and Yellow Billed Cuckoo all have the potential to collide with transmission towers and the microwave tower near the Longstreet Casino. All are federally endangered. The close proximity to Ash Meadows National Wildlife Refuge makes Amargosa Valley a migratory bird hotspot.

155.KE-53

Desert Tortoise Habitat:

The Southern part of the Armargosa Valley has been identified as Priority One Desert Tortoise Connectivity Habitat.

155.KE-54

155.KE-54

"Priority 1" Least-cost corridor modeling identified potential habitat linkages between existing conservation areas that have the best chance of sustaining connectivity for desert tortoise populations. To identify these linkages, USFWS began with U.S. Geological Survey's (USGS) Mojave desert tortoise habitat potential model (Nussear et al. 2009), and developed a cost surface where higher habitat potential equaled a lower cost to the desert tortoise."

Some of the habitat is also Priority 2 Connectivity Habitat.

"Priority 2" Other blocks of habitat with the greatest potential to support populations of desert tortoises, outside least cost corridors, may also have important value to recovery. Based on the USGS model, USFWS identified areas of contiguous, high-value desert tortoise habitat as "Priority 2" lands for conservation of desert tortoise within the context of the Final Solar PEIS. These lands were identified by beginning with the highest habitat potential, and including all habitat down to 0.6 that could be reached from the highest potential starting habitat (i.e., 0.6-1.0), excluding small, unconnected "islands."

The Greenlink West Transmission Project will run through both of these habitats. In April 2023, we move the below adult female off the highway and it ended up right in the path of the Greenlink West Project.

Figure 11. Mojave desert tortoise in Amargosa valley, Nevada, near the route proposal. April 2023. Photo: Kevin Emmerich.

37

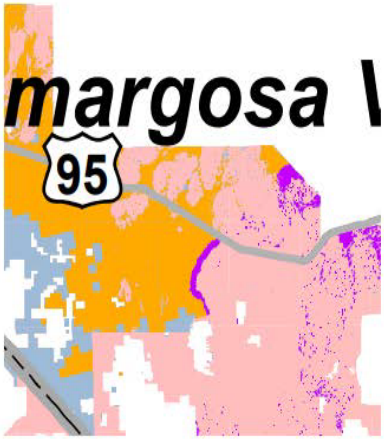


Figure 12. Map showing Priority One (purple) and Two (orange) Connectivity Habitat in Amargosa Valley

Greenlink will also create a spread of invasive weeds which and not nutritious for desert tortoises and perches for subsidized predators such as ravens. Is NV Energy planning to fence off Hwy 95 as mitigation? 155.KE-54

Greenlink will create new roads that will be used by off-highway vehicle recreationists which can result in habitat loss and direct mortality for desert tortoises. This will also encourage off-highway vehicle use. As mitigation, BLM should close all roads built for the Greenlink West project except for people working on the project.

Avian Impacts:

Greenlink West will be built in the Southern Amargosa Valley and could cause avian impacts for birds flying to Ash Meadows National Wildlife Refuge. 155.KE-55

Bighorn Sheep Wintering Habitat:

Greenlink West will be built on wintering desert bighorn sheep habitat near the Specter Range. How will this impact use from desert bighorn sheep? 155.KE-56

Surface Hydrology Disturbance:

Several washes draining into Amargosa Valley will have now transmission line poles built in the vicinity. How will the power poles disrupt surface hydrology flow, how will this be mitigated and how will it impact groundwater recharge?

Cultural Resources:

Greenlink West will block and tarnish the view of mountain ranges from the flat lands of Amargosa Valley. These views are considered "Cultural Landscapes: by local tribes such as the Timbisha/Shoshone and Pahrump Paiute. 155.KE-57

A cultural landscape embodies the associations and uses that evoke a sense of history for a specific place. Physical features of cultural landscapes can include trees, buildings, pathways, site furnishings, water bodies – basically any element that expresses cultural values and the history of a site.

155.KE-57

Visual Resources:

155.KE-58

The majority of the Greenlink West route is situated in VRM Class III designations in A Amargosa Valley. There are VRM Class II lands near the Rhyolite Ghost Town Because of this, BLM must downgrade the VRM Class through Plan Amendments. The VRM simulations include simulations of lattice towers, but BLM has determined that no lattice towers will be sited in Amargosa Valley. The objective of VRM Class III is to: *partially retain the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer.*

In general, the visual simulations do not capture the full contrast of the proposed project. More KOP Simulations should be included including more from the Crystal area, the Specter range and one from Rhyolite ghost town.

A Plan Amendment is required from both the Southern Nevada BLM office and Battle Mountain BLM office to downgrade the VRM Class for the Greenlink West Project. The BLM has targeted the Amargosa Valley for green energy sprawl and it is likely that BLM will continue to downgrade VFRM Classes in the region to enable more solar projects. This gets the ball rolling for a very bad precedent.

These same Plan Amendments can be used to upgrade the VRM Class to VRM Class II in some of the more outstanding scenic areas of Amargosa Valley. These viewsheds include Big Dune, Mesquite ACEC, Lava Dune, Rhyolite, Funeral Mountains, etc.

Kit Fow, Burrowing Owl:

155.KE-59

We have lived in this area for 33 years and can say it is a very good habitat for both kit foxes and burrowing owls. How many kit fox and burrowing owl burrows have been located in the path of Greenlink West? What is the collision hazard for burrowing owls?

Amargosa Substation:

155.KE-60

Permanent outdoor lighting would be limited to areas required for operations, maintenance, safety, and security and would be anti-glare, shielded, and directed downward to the extent possible.

How would this impact bats and migrating birds? The substation will be 109 acres and create unavoidable collision hazards.

This is also a night time visual impact. There is no KOP of night lighting in the DEIS.

As the DEIS points out, the 109 acres substation will block sand transport for the Lava Dune. The Lava Dune supports a diversity of rare plants, reptiles, insects and small mammals.

At one point, the Lava Dune was being considered for an Area of Critical Environmental Concern, under BLM's pending revision of the Southern Nevada Resource Management Plan in 2014. BLM eventually cancelled the revision in 2018 which left the Lave Dune with no protection. The Amargosa Substation should be moved away from the Lava Dune and the BLM should consider designating the area as an ACEC in the Plan Amendment associated with the Greenlink West Project. The nomination was already submitted to BLM. Pushing the Greenlink West Project though in the area without providing some kind of mechanism of protection for Lava Dune is not the responsible way to manage conservation areas. BLM's proposed Conservation Ruling seeks to make conservation one of the main "Actions" in NEPA reviews. It is more than reasonable to ask for a conservation plan amendment for the Lava Dune.

155.KE.60

The substation will permanently remove 109 acres of desert tortoise habitat. The substation will create multiple perches for subsidized predators.

The substation will create avian collision hazards for migratory birds between Ash Meadows National Wildlife Refuge and Oasis Valley, Nevada.

Cumulative Impact and Connected Actions:

155.KE-61

Associated with the Greenlink West Project are about 70 large-scaale solar and wind applications taking up approximately 250 square miles – about 120 of those square miles in Amargosa Valley, Nevada. Because the bulk of the solar applications identify the Amargosa Substation as their main hookup potential, these solar applications are Connected Actions to the Greenlink West Transmission Project.

Connected actions are those proposed Federal actions that are "closely related" and "should be discussed" in the same NEPA document (40 CFR 1508.25 (a)(1)). Proposed actions are connected if they automatically trigger other actions that may require an environmental impact statement; cannot or will not proceed unless other actions are taken previously or simultaneously; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification (40 CFR 1508.25 (a)(1)). Connected actions are limited to Federal actions that are currently proposed (ripe for decision). Actions that are not yet proposed are not connected actions but may need to be analyzed in the cumulative effects analysis if they are reasonably foreseeable.[18]

[18] Analysis of Connected Actions under the National Environmental Policy Act | Bureau of Land Management (blm.gov)

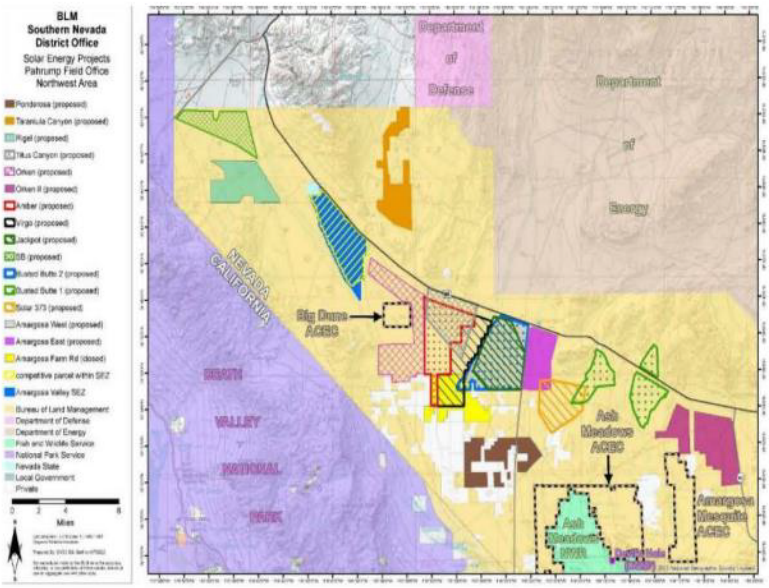


Figure 13. Map of free-for-all solar land rush applications in Amargosa Valley, Nevada

155.KE-62

A Cumulative Impact *"results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or nonfederal) or person undertakes such other actions."*[19]

The cumulative impacts from green energy applications associated with Greenlink West will:

1. Damage wildlife habitat for desert tortoise, kit fox, kangaroo rats, desert iguanas, bighorn sheep, desert tortoise, horned lizard's, endemic beetles on Big Dune, Mojave fringe-toed lizard, etc. Large solar built near Ash Meadows and Oasis Valley will cause an avian "lake effect" which will cause birds, some endangered, to crash into solar panels.
2. Damage habitat for rare plants like White-margin beardtongue, Ash Meadows Endangered Species by creating a massive invasive plant seedbank.
3. Create huge fugitive dust issues and create Valley Fever threats for local people.
4. Cause socio-economic impacts by lowering property values in Amargosa Valley.
5. Alter surface hydrology and cause flooding in unexpected areas. (Some applications have 40 mile wash cutting through them!)
6. Use up way too much water for the construction phase. Both the BLM and Fish and Wildlife Service have calculated that 15,000 acre feet of water would be needed if all the solar applications in Amargosa Valley were developed. The Amargosa Basin is over drafted by

[19] 40 C.F.R. § 1508.7

17,000 acre feet already! Most of the applications are within a 25 mile radius of Devil's Hole – home of the rarest, most endangered species in the world, the Devil's Hole pupfish. State Law 1197 prohibits major water withdraw within 25 miles of Devil's Hole. This will also lower local well levels.

7. Create horrible visual eyesores for Death Valley National Park, Amargosa Valley and the town of Beatty.

155.KE-62

Cumulative Impacts of upgrading the Gridliance Project in the same area should also be considered.

In June, 2023, BLM auctioned off nearly 24,000 acres of public land leases to NV Energy, Leeward Energy and Nextera Energy. Despite strong objections from the community of Amargosa Valley and Nye County, BLM is pushing to develop parcels next to the community and by Lathrop Wells. NV Energy purchased the leases for the Amargosa Solar Energy Zone. While the community agreed not to object to developing the Solar energy Zone, NV Energy came to a meeting in Beatty and said that their two parcels totaling over 6,000 acres would only need 40-acre feet of water during the construction phase. As BLM is aware, this is a gross underestimate and developing that much land would probably need over 1,000-acre feet. This water is simple not available and if NV Energy is going to lie about this, this is only the beginning of a long, untrustworthy relationship with the local community. A sad preview of things to come.

Beatty/Oasis Valley

155.KE-63

Construction Yard:

Please provide an alternative that removes the 25-acre construction yard away from the south entrance of town. The town of Beatty does utilize tourism to maintain it economy. Having an industrial construction yard at the south entrance of town sends out a negative message to tourists considering a stay in Beatty. This could hurt the local motels.

155.KE.64

It is good that BLM eliminated Alternative F as it would have hurt more ranches and private property owners, but the Preferred Alternative will still cross over private land against the will of the landowner. BLM's response to this is" the landowner has no say of what would be approved in the air above the land." The BLM has chosen to hurt a local landowner over selecting the Alternative closest to the NTTR Air Force Base – Alternative I.

155.KE-65

Who is responsible for wildfire on private land if the lines go down? NV Energy did have their lines collapse for the One Line shortly after it was built. What would be the response time is a wildfire breaks out on the (Atwood) 7-J Ranch? There is no fire plan for this region in the DEIS.

155.KE.66

We would like BLM to reconsider Alternative I as a preferred Alternative over Alternative A. The Air Force should not have the final say. In 2010, the Air Force objected to the Crescent Dunes Solar power tower north of Tonopah but were forced to live with it because of Senator Harry Reid. This proves that they can maintain their operations with this kind of infrastructure. Placing infrastructure next to the NTTR base makes sense.

The DEIS does not discuss the recent finding in the Federally Endangered Spring loving centaury *(Zeltnera nemophila)* in wetlands very close to the Preferred Alternative for Greenlink West.

155.KE-67

The DEIS should provide a bird species list for the Oasis Valley and a list of birds likely to be impacted by 120 foot plus poles being directly strung over the ranch.

Equally, the BLM should provide a list of invasive weeds that could move onto 7-J Ranch from the disturbance inflicted from Greenlink.

Beatty, Nevada has developed a Master Plan that utilizes the tourism for Death Valley National Park, spectacular scenery, historic elements, mountain bike trails and other recreational trails to boost its economy. But like the other regions along Greenlink West, the Resource Management Plan is outdated and fails to consider visual resources being important for tourism. As a result, the BLM has classified most of the Oasis Valley as VRM Class IV, the lowest quality visual classification.

The objective of VRM Class IV is to: *provide for management activities, which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention.*

The BLM should consider an Open Space Alternative in a Plan Amendment for the Oasis Valley that denies the ROW for Greenlink West and upgrades the VRM Class to VRM Class III which would allow for some economic development but maintain the scenery. The Beatty Master Plan and popularity increase all happened after the low VRM Class was designated.

155.KE-68

The Greenlink West Project will cut through Lands With Wilderness Characteristics along the Amargosa River, Mountain Bike Area and extending 2 miles east.

155.KE-69

The Greenlink West Project will cut through active mining claims at the objection of the mining companies. How will this be worked out?

Building Greenlink West so close to the Amargosa River will cross over multiple Native American Cultural sites. It will be impossible to avoind all of these sites.

BLM should consider an alternative in Oasis Valley that would divide the Greenlink West Project into 2 230 kV lines which would be much smaller and it would be more feasible to consider underground alternatives for both of these lines.

155.KE-70

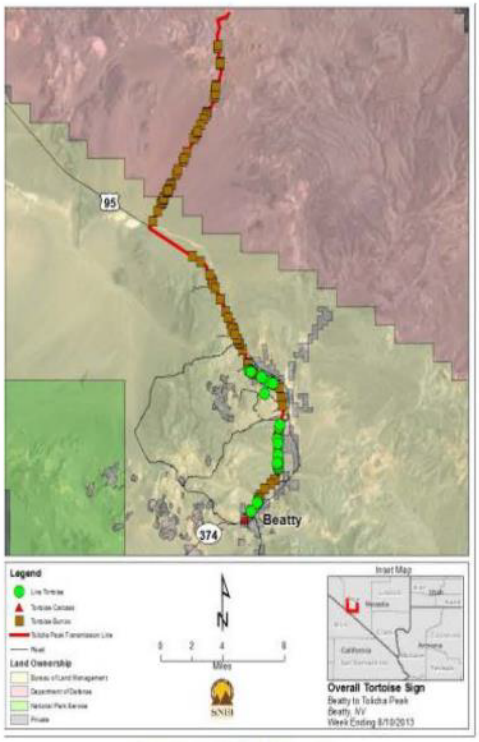
Desert Tortoise:

155.KE-71

The Beatty region area of desert tortoises represents a healthy population that needs more study, and may represent an area that needs further conservation in light of climate change corridors for future population corridor climate refugia.

In 2012, BLM approved the Tolicha Peak Transmission line north and west of Beatty. During desert tortoise surveys, far more were found than expected including along the path pf Greenlink West.

155.KE-71



Overall Tortoise Encounter Map

Figure 14. 2012 map of tortoise sign located

Construction of the Greenlink West line is likely to impact bighorn sheep, pronghorn, raptors, Golden Eagle and even Amargosa toads where it crosses the Amargosa River in Oasis Valley.

155.KE-72

The project will be built directly and near Amargosa Toad Habitat.

The local community will see no benefits or power from Greenlink West and a No Action Alternative is in the best interest of Beatty, Nevada.

155.KE-73

The DEIS states that 107 sites eligible for the NHPA would be impacted by Greenlink West in Oasis Valley and 23 would be adversely impacts. BLM also identifies 43 acres of private land that would potentially have cultural sites in the path.

155.KE-74

Oasis Valley Biodiversity:

155.KE-75

The Oasis Valley in Nevada lies along the Amargosa River and has numerous springs, marshes, riparian areas, and meadow grasslands with rare plants. It is a birding hotspot as well, for waterbirds and Neotropical migratory birds, as well as resident and breeding desert species. The area supports a high number of nesting golden eagles (*Aquila chrysaetos)* in the surrounding mountain ranges. A large high-voltage transmission line through this area would have large impacts to bird life, as well as potentially increase raven nesting. Ravens are predators on bird nests and desert tortoises.

155.KE-75

Oasis Valley is a hotspot for biodiversity and The Nature Conservancy has purchased four properties to conserve and restore to maintain biological resources in the area. Sensitive species locally include the Amargosa toad (*Anaxyrus nelsoni*), Oasis Valley speckled dace (*Rhinichthys osculus* ssp.), and several spring snail species, some of which may be new to science (Family Hydrobiidae).

A new breeding Bell's vireos (*Vireo bellii)* has been discovered and encouraged through riparian restoration. Potential breeding habitats for Federally Endangered Southwestern willow flycatcher (*Empidonax traillii extimus*), and Western yellow-billed cuckoo (*Coccyzus americanus* Distinct Population Segment) are also present with ongoing restoration work of riparian and wetland habitat. How will large transmission lines impact these species and current habitat restoration projects?

Bald and Golden Eagles:

155.KE-76

The Nevada Division of Wildlife has identified 35 raptor nests within 10 miles of the Silicon gold exploration project area east of Beatty and 5 golden eagle nests within 4 miles of the project area. One of the nests was occupied. The project site has excellent foraging habitat for eagles and many other species of raptors. The transmission project's close proximity to Oasis Valley increases the potential for diversity of raptors.

Bighorn sheep:

155.KE-77

The Bare Mountains harbors one of the best populations of desert bighorn in the state of Nevada. We have no detailed discussion of the impacts to bighorn sheep of all the new roads, construction equipment, noise, habitat fragmentation, or water resource impacts.

Socioeconomic Resources and Environmental Justice:

155.KE-78

Greenlink West will adversely impact the scenery, recreational opportunities, mountain bike trails, tourism revenue all of which are important to Beatty. There is no specific analysis on how the project will impact the tourism economy of Beatty in the DEIS.

The town of Beatty has a Master Plan[20] and this has been left out of the appendices. How many other towns have master plans that the DEIS overlooked?

[20] Microsoft Word - Beatty_AP_2014-05-12_BTAB.docx (nyecountynv.gov)

The long-term goals of the plan encourage tourism and protecting open space values with key planning principles – not converting the area into an energy sacrifice zone.

155.KE-78

These Key Planning Principles include:

Key Planning Principles Through multiple town meetings the community identified core values that underlie the following key planning principles used to develop this Plan: Our Community Identity

• Protect and enhance Beatty's community identity and promote the historical downtown as the community focal point.

• Protect Beatty's small town charm by concentrating development in a compact manner within the original townsite where infrastructure is available to support development.

• Preserve significant historic buildings and encourage integration of historic buildings into new developments.

• Enable the community to maintain the characteristics that make it a desirable location to live, work and raise a family. Our Growth and Development

• Promote development within the Historic Townsite, infill development and a mix of uses thereby maximizing use of existing infrastructure.

• Improve the variety of commercial establishments in the community and ensure their appropriate location.

• Encourage the rural lifestyle by preserving very large lot areas for ranching and other agricultural uses. • Encourage continued community health and development and promote economic diversification by developing the Beatty Airport and Bullfrog industrial park, tourism/ecotourism, mining, agriculture and renewable energy resources.

• Identify and protect critical areas of open space, wildlife habitat and significant natural and historic resources, while accommodating new growth in a manner which maximizes the use of existing infrastructure, encourages all transportation opportunities and creates housing and job opportunities for residents of all ages and income levels.

• Continue to promote Beatty's identity as a leading tourist destination, and ensure that historical and cultural resources associated with Beatty's mining and railroad history are protected and preserved.

Sarcobatus Flat

155.KE-79

There are numerous archeological sites on the Sarcobatus Flat in the vicinity of the proposed transmission project. We have been told by the Timbisha/Shoshone through personal communication that there is no place to move Greenlink West that will not destroy some archeology sites. The sites are largely composed of worked obsidian chips and are very extensive.

Impacts to the archaeological sites are unavoidable: