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UNITED STATES DISTRICT COURT
DISTRICT OF NEVADA

WESTERN WATERSHEDS PROJECT; GREAT BASIN RESOURCE WATCH; BASIN AND RANGE WATCH; and WILDLANDS DEFENSE, Plaintiffs, vs. UNITED STATES DEPARTMENT OF THE INTERIOR; U.S. BUREAU OF LAND LAND MANAGEMENT; and ESTER M. McCULLOUGH, District Manager, BLM's Winnemucca Office, Defendants.	Case No.: COMPLAINT FOR VACATUR, EQUITABLE, DECLARATORY AND INJUNCTIVE RELIEF

INTRODUCTION

1. Plaintiffs, Western Watersheds Project (WWP), Great Basin Resource Watch (GBRW), Basin and Range Watch (BRW), and Wildlands Defense (WD), file this suit for vacatur, and equitable, declaratory and injunctive relief under the Administrative Procedure Act (APA), 5 U.S.C. §§ 701-706, Federal Land Policy Management Act of 1976 (FLPMA), 43 U.S.C. §§ 1701 *et seq.*, the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 *et. seq.*, other federal laws, and their implementing regulations and policies, challenging the decisions of the United States Department of the Interior (DOI) and its Bureau of Land Management (BLM) to approve the Thacker Pass Lithium Mine Project (Project/project or Mine/mine) and Plans of Operations, a large open pit mining project on public lands proposed by Lithium Nevada Corporation (LNC).

2. The Defendant Interior Department put the Project on an "expedited" track to "streamline environmental review" and provide for quick approval by the Trump Administration. *See* July 15, 2020 letter from Katharine Sinclair Macgregor, Interior Department to Larry Kudlow, Director of the National Economic Council. On January 15, 2021—five days before the end of the Administration—Ester M. McCullough, BLM District Manager for the Winnemucca District Office, approved the Project and its Plans of Operations in a "full force and effect" decision effective immediately.

3. In the rush to implement the Project, Defendants violated federal environmental statutes and swept under the rug the mine's serious environmental impacts.

4. Plaintiffs challenge the Record of Decision (ROD) approving LNC's two Plans of Operations (PoO): (1) for the mine itself; and (2) for the "North/South Exploration Project," both proposed in the same area. Plaintiffs also challenge the Final Environmental Impact Statement (FEIS) BLM prepared for the mine and exploration projects. The ROD was based on the FEIS, which was issued in December of 2020 by BLM's Winnemucca District, Humboldt River Field Office.

5. For these and the related reasons addressed herein, Plaintiffs ask this Court to declare that the ROD, FEIS, and Project approvals and decisions signed and prepared by BLM for the Project violate federal law. Plaintiffs ask this court to set aside/vacate and remand the decisions to the BLM, and enjoin any construction, operation, or development of the Project until the violations have been corrected.

The Thacker Pass Mine Project and Its Severe Impacts to Public Lands, Wildlife, and Public Resources

6. The Thacker Pass Mine Project will be one of the largest open pit mines in the region. Facilities associated with the mine include development of an open pit mine; waste rock storage facilities; a coarse gangue (valueless mineral) stockpile; a large processed tailings waste dump facility; groundwater pumping/dewatering, growth media stockpiles; haul and secondary roads; electrical transmission lines; and additional mine facilities to support mining and lithium production operations.

7. The mine will be developed over two "phases" spanning the 41-year "life" of the Project, although many environmental impacts will be permanent. Phase 1 would include construction of the mine facilities and mining and processing for the first 4 years of mine life. Phase 2 would occur from years 5 to 41 of the mine life, after which the Project would enter the reclamation and closure period (for a minimum of 5 years). The ROD also approves a new extensive exploration drilling project in the same area.

8. The Project area covers 17,933 acres of land. 10,468 acres are associated with the mine itself and 7,465 acres are associated with the exploration project.

9. Although the Project would have significant effects across the region, the total direct disturbance footprint would be approximately 5,695 acres. All Project operations would be located on public lands administered by the BLM, Winnemucca District (WD).

Facility			Disturbance Acres
Mine Pit			1,099.8
West WRSF			160.7
East WRSF			137.2
Mine Facilities, ROM Stockpile, Attrition Scrubbing			48.3
CGS			318.3
Processing Facility (Lithium and Sulfuric Acid Plant)			555.3
Clay Tailings Filter Stack			1,166.1
Mine Facilities Power Line, Quinn Power Line, and Water Supply			267.7
Exploration			300.0
Inter-facility Disturbance			1,641.4
Total			**5,694.8**

FEIS at 2-3, Table 2-1.

10. The mine pit would be roughly 400 feet deep. FEIS Figure 2-3. Approximately 230.0 million cubic yards (CY) of ore would be mined, and 190.2 million CY of waste rock material would be generated over the 41-year life of the mine. FEIS at 2-4. The total height of the West waste rock storage facility (WRSF) would be 482 feet. The total height of the East WRSF would be 208 feet. FEIS at 2-5. The coarse gangue material stockpile (CGS) would be 200 feet tall. FEIS at 2-7. The permanent clay tailings filter stack (CTFS) dump would hold 353.6 million CY of processed waste and be 350 feet high. FEIS at 2-9 to 2-10.

11. The open pit would be backfilled during the life of the mine. ROD at 3. At the end of mine life, the open pit would be completely backfilled. Id. However, due to the long-term effects of the Project's groundwater pumping and water use, the groundwater in the area would continue to be lowered by the mine into the indefinite future.

Severe Impacts to Water Resources

12. The mine will cause serious groundwater pollution. The FEIS predicts that the mine pit backfill would cause antimony in the groundwater to exceed the applicable Nevada water quality standard.

13. In its response to comments, BLM admitted that the Project will violate water quality requirements for antimony: "Geochemical modeling results indicate that pore water in backfill will exceed MCLs [Maximum Contaminant Levels] for longer than 20 pore volumes (Water Quantity and Water Quality Impacts report, Appendix P of this EIS)." FEIS at R-121.

14. Yet under FLPMA and BLM's mining regulations (43 C.F.R. Part 3809), BLM cannot approve mining operations that are predicted to violate water quality standards at any time.

15. Antimony is a federally-designated harmful pollutant. *See* U.S. Dept. of Health and Human Services, Agency for Toxic Substances and Disease Registry, Toxicological Profile for Antimony and Compounds, October 2019, https://www.atsdr.cdc.gov/ToxProfiles/tp23.pdf

16. Because of this predicted groundwater contamination, BLM should have, but did not, analyze or require mitigation to prevent the Mine from exceeding the Nevada water quality standard.

17. The U.S. Environmental Protection Agency (EPA) strongly criticized BLM's failure to adequately analyze impacts to water quality, and ensure against any potential exceedance of water quality standards:

> **Unmanaged Groundwater Quality Degradation**
> As explained in the Final EIS, **adverse effects to groundwater quality are expected from all action alternatives. Without mitigation, a plume of groundwater exceeding the Nevada Division of Environmental Protection Profile I Reference Values for antimony is expected to flow uncontrolled from the backfilled pit.** According to fate and transport modeling included in the EIS (Appendix P Part 1 p. 125-133), the preferred alternative (Alternative A) would result in a plume extending approximately one-mile (p. 4-26) downgradient of the pit 300-years post-closure at levels still above Profile I (Appendix P Part 1 p. 132-133).

"EPA'S DETAILED COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE THACKER PASS PROJECT, HUMBOLDT

COUNTY, NEVADA, JANUARY 4, 2020," at 1, contained in EPA's January 4, 2021 letter to BLM (EPA's Detailed Comments on FEIS)(emphasis added).

18. EPA further noted that the FEIS failed to adequately review mitigation required to prevent this contamination:

> While the Final EIS includes three conceptual options that have the potential to mitigate antimony groundwater contamination (Appendix P Part 1 p. 154-159), **the plans are not developed with an adequate level of detail to assess whether or how groundwater quality downgradient from the pit would be effectively mitigated.** In our comments on the Draft EIS, the EPA recommended more detailed information about how effective these potential mitigation options could be, and an evaluation of additional disturbance and impacts from implementing the proposed mitigation options (40 CFR 1508.25(a)(1)(iii)).

EPA's Detailed Comments on FEIS, at 1 (emphasis added). BLM never provided the required detailed information and analysis requested by EPA.

19. In addition to the contaminated water from the mine pit, seepage from the tailings waste facility is predicted to be very toxic with extremely high levels for over 20 constituents including uranium, radium, radioactivity, and very low pH (high acidity). "[A]luminum, arsenic, antimony, beryllium, cadmium, chromium, copper, fluoride, iron, lead, magnesium, mercury, nickel, sulfate, thallium, TDS, and zinc were leached under low pH conditions at concentrations above Profile I NRVs [Nevada Reference Values]." FEIS Appendix B, LNC Mine Plan at 41. Further, "testing indicate[s] that for the clay tailings sample, uranium, gross alpha and radium 226/radium 228 exceed the Profile IR NRVs." Id.

20. The FEIS does not analyze how this drainage will be treated nor provide sufficient details as to how this highly toxic and dangerous drainage will the managed, and for how long, to allow the public to evaluate the effectiveness of any future mitigation approach.

21. The FEIS failed to present information and analysis as to how long it is anticipated that drainage from both of these facilities will need to be captured and treated.

22. As noted below, BLM failed to provide any analysis or numbers at all regarding the financial costs needed for the long-term mitigation and treatment of these toxic waters, as required by BLM regulations.

23. The mine's groundwater pumping would also significantly harm local streams, springs, and wetlands. The mine's drawdown of the local aquifer covers, at a minimum, roughly 2.5 miles wide due to the pumping at the mine pit area, and roughly 2 miles across due to the pumping at the production well site near the east end of the Project site. FEIS Figure 4.3-8 (showing groundwater drawdown and affected waters that would suffer reduced or lost flows).

24. In addition to the large pumping and dewatering operations, the mine would consumptively use large amounts of water each year for the 41-year life of the mine: 2,600 AFA (acre-feet annually) during Phase I (years 1-4), and 5,200 AFA during Phase 2 (years 5-41). FEIS at 2-13. An Acre-Foot (AF) of water is approximately 325,851 gallons.

Unmitigated Wildlife Impacts

25. The mine and exploration Project will also result in severe and unmitigated impacts to protected and special status birds, wildlife, and plants in the Project area, including federally protected species and State of Nevada Species of Conservation Concern and At-Risk species, by permanently destroying irreplaceable habitats and cutting off connectivity between habitats to the north and south of the Project area. In its comments to BLM on the FEIS, the Nevada Department of Wildlife (NDOW) was very critical of the Project's impacts to wildlife: "We continue to find that the Preferred Alternative will likely result in adverse impacts to wildlife, ground and surface waters, and riparian vegetation within and outside the project area. These impacts include effects to an array of species and will likely have permanent ramifications on the area's wildlife and habitat resources." NDOW January 4, 2021 letter to Defendant Ester M. McCullough, BLM District Manager, at 1.

26. "Groundwater dependent habitats in the Montana Mountains north of the Project area boundary are critical to greater sage-grouse, Lahontan cutthroat trout, mule deer, pronghorn, and many other wildlife species. Given the arid nature of this region, water sources, riparian vegetation, and wet-meadow habitats are essential to wildlife and the loss or degradation of these areas will have significant negative impacts on wildlife populations." Id.

27. The FEIS acknowledges these significant and unmitigated impacts to wildlife:

> **Surface disturbance associated with mining activities and development of mine facilities**, including the open pits, WRSF, CGS and GMSs, CTFS, process plant and ancillary facilities, and roads, water lines, and power lines **would directly affect wildlife through the loss of potentially suitable habitat by vegetation removal, and removal of seeps and springs and seasonal water sources for wildlife.** For some species, disturbance would remove available habitat for the life of the mine, or longer depending on the success of reclamation. **Habitat loss or alteration would result in direct losses of some species, particularly smaller, less mobile species, or species requiring specific resources or habitat within the Project area.** Habitat loss could cause displacement of more mobile species (e.g., bats, birds), or generalist species into adjacent habitats. Most disturbance would occur within sagebrush communities, shrublands (e.g., greasewood, saltbush), native grassland, and invasive annual-dominated vegetation (Figure 4.5-2, Appendix A)."

FEIS at 4-34 (emphasis added).

28. But the generalized discussion of these impacts gives short shrift to potentially catastrophic impacts to the region's protected, sensitive, and vulnerable species.

29. One of the most critical concerns involves the Project's serious impacts to greater sage-grouse (GRSG or sage-grouse) that BLM failed to adequately analyze and mitigate against.

30. The greater sage-grouse is a ground-nesting bird known for its elaborate mating dance performed on breeding grounds called "leks," and imperiled by destruction and modification of its sagebrush habitats.

31. The Project area lies within Western Great Basin "Priority Area for Conservation" (PAC), identified by the U.S. Fish and Wildlife Service, and the GRSG Lone Willow Population Management Unit (PMU) designated by NDOW. Most of the Project area

is identified by BLM as Priority Habitat Management Area (PHMA) and General Habitat Management Area (GHMA) for GRSG. *See* FEIS at GF-18, Figure 4.18-8, Appendix A. PHMA is defined as BLM-administered lands identified as having the highest value to maintaining sustainable GRSG populations. FEIS at GF-18.

32. The Lone Willow PMU is largely "essential irreplaceable" habitat for sage-grouse, but 48 percent of the PMU burned in wildfires, mostly comprising the western half, degrading its value for the species. As a result, the eastern half of the PMU, which includes the Montana mountains, is of elevated importance, and provides high-quality habitat, just to the north of the Project area, and additional habitat to the south. The Project would sever these two portions of the PMU.

33. Sage-grouse have been documented in the Project area and use it for breeding, nesting, brood-rearing and winter habitats. According to the FEIS:

> There is one active lek (Montana-10) within 0.96 miles of the Project area, and three active lek sites within 3.1 miles of the Project area (Figure 4.5-10, Appendix A). NDOW lek observations have documented birds displaying at this lek within 0.75 miles of the proposed Project area (NDOW 2020).

FEIS at 4-42. Mapping shows six active and two inactive sage-grouse leks within or adjacent to the Project area. *See* FEIS Figure 4.5-10. Yet the FEIS does not disclose that there are additional active sage-grouse leks in the southeastern portion of the PMU.

34. Nearly the entire Project area occurs within moderate to high quality sage-grouse winter habitat, and the northwestern portion of the Project area, where the mine pit will be located, is high quality brood-rearing habitat. FEIS Figures N.2, N.3; *see also* FEIS at G-18 (describing habitat).

35. The FEIS does not disclose how the destruction of these important seasonal habitats, especially when considered cumulatively in light of the large fires that burned large portions of the PMU, will affect sage-grouse, either within the Project area, the PMU, or the Western Great Basin PAC.

36. In addition, noise levels associated with the Project at the Montana-10 and Pole Creek 01 leks are expected to exceed levels known to cause lek abandonment. The Montana-10 lek is one of the three largest leks in the Lone Willow PMU, where NDOW has stated that "the loss of this lek would likely be of high consequence to greater sage-grouse populations." FEIS at R-184 (NDOW comment to BLM on Draft EIS, #P830). But, the FEIS does not disclose how noise from the Project may cause or contribute to abandonment of this important lek, or affect sage-grouse populations in the Project area, within the PMU, or within the Western Great Basin PAC.

37. Another critical wildlife species that will be significantly affected by the mine is the pronghorn antelope. The Project will destroy nearly 5,000 acres of pronghorn winter range for the life of the mine or longer, and 427 acres of summer range. It will also sever two critical pronghorn movement corridors. One facilitates seasonal access between limited use and winter range habitat to the south of the Project area and winter range, summer range, and year-round habitat to the north of the Project area. The other enables year-round daily movement of pronghorn between the Quinn River Valley to the east and the Montana Mountains to the west. The construction of Project facilities and the associated loss of habitat is likely to destroy some seasonal habitats and prohibit or impede pronghorn movement between other remaining year-round and seasonal habitats.

38. Yet the FEIS does not consider or disclose how severing these pronghorn movement corridors, or destroying nearly 5,000 acres of pronghorn winter range, will impact pronghorn populations. The FEIS does not analyze the cumulative effect the Project, coupled with other activities in the region, will have on pronghorn habitat and movement.

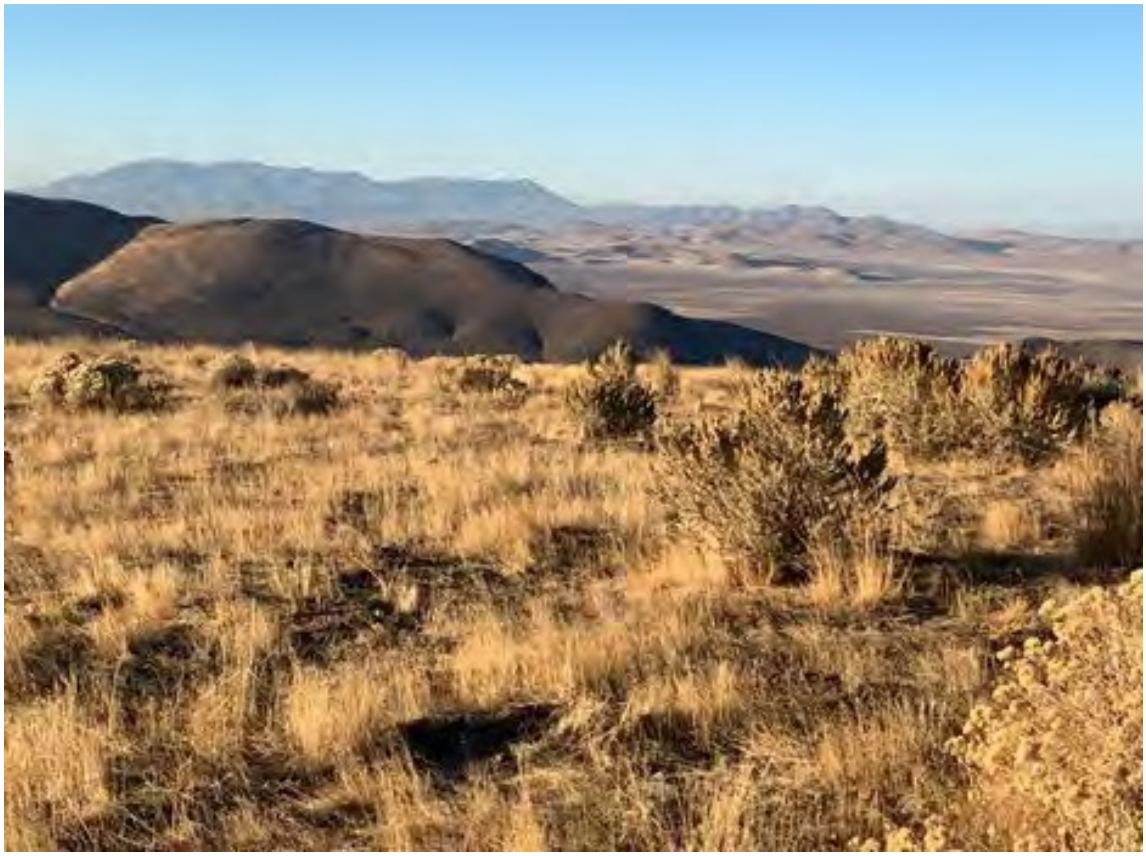
39. Other vulnerable and protected species that will be significantly affected include golden eagles, various amphibians, and springsnails—including the endemic King's River pyrg—dependent on the riparian areas and springs that will be dewatered or destroyed by the Project, as well as several sensitive plant species.

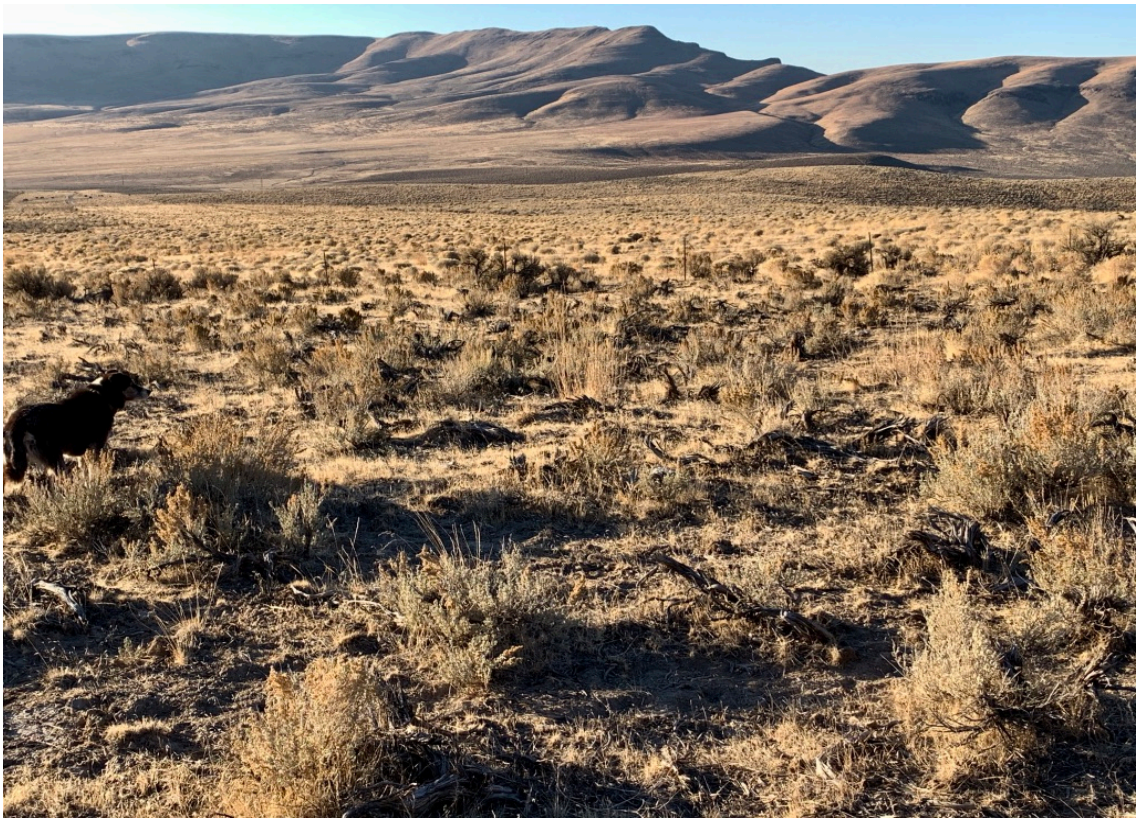
40. BLM also failed to adequately analyze the impacts to Lahontan Cutthroat Trout (LCT), which is protected under the federal Endangered Species Act (ESA), due to BLM's unsupported position that the Project will not have any effect on LCT in Crowley Creek, Pole Creek, and habitat within the Project area. BLM erroneously assumed that there was no LCT stream habitat that would be affected by the Project's dewatering and other operations while rejecting NDOW's recommendation that a quantitative buffer be included for Pole Creek, Crowley Creek, and spring sites.

Violation of Binding BLM Visual Protection Standards

41. The Project will result in unmitigated impacts to Nevada's rural visual landscape, in violation of the protective standards in BLM's Winnemucca District Resource Management Plan (RMP).

42. The following recent photos of the Project site depict the dramatic landscape and evidence why the area's scenic qualities are protected by the RMP standards:





43. Due to the Project's massive scale and impacts, BLM admitted that the Project will violate the Winnemucca RMP's Visual Resource Management (VRM) Class II protection standards:

> Overall, **the construction and operation of the Proposed Alternative would not meet the current VRM Class II objectives,** ***and would not conform with the existing ROD/RMP*** (see Section 1.5.3). The existing character of the landscape would not be retained, and the level of change to the characteristic landscape would be noticeable and likely attract the attention of the casual observer. Overall, the **construction and operation of Alternative A would not meet the current VRM Class II objectives,** ***and would not conform with the existing ROD/RMP*** (see Section 1.5.3).

FEIS at 4-101 (emphasis added). Almost the entire site is located within the lands protected by the VRM Class II standard. FEIS at Figure 4.15-1. Under FLPMA, BLM cannot approve activities on BLM-managed land that would violate the applicable RMP.

JURISDICTION AND VENUE

44. This is a suit pursuant to the APA, FLPMA, NEPA, and other federal statutes, regulations and requirements. Jurisdiction over this action is conferred by 28 U.S.C. §§ 1331 (federal question), 2201 (declaratory relief), and 2202 (injunctive relief).

45. Venue is proper in the District of Nevada pursuant to 28 U.S.C. §§ 1391 (b) and (e). The BLM Winnemucca District Office, and named Defendant Ester M. McCullough, who issued the FEIS and ROD, are located in Nevada. The Thacker Pass Project is located in Humboldt County, Nevada. Some or all Plaintiffs are located and reside in Nevada.

PARTIES

46. Plaintiff Western Watersheds Project (WWP) is a non-profit organization with more than 12,000 members and supporters whose mission is to protect and restore western watersheds and wildlife through education, public policy initiatives and legal advocacy. Western Watersheds Project has longstanding interests in public land management in Nevada and employs a Nevada-Oregon Director who lives in Nevada. Western Watersheds Project and its staff and members use and enjoy the public lands and their wildlife, cultural and natural resources for health, recreational, scientific, spiritual, educational, aesthetic, and other purposes, including in Nevada. Western Watersheds Project also has a direct interest in mineral development that occurs in areas with sensitive wildlife populations and important wildlife habitat, such as greater sage-grouse and designated sage-grouse habitat management areas. The Project would be located in and have affects to lands and waters where Western Watersheds Projects staff and members have enjoyed, and intend to continue enjoying in the coming months, camping, hiking, photographing natural high desert beauty, appreciating golden eagles, pronghorn, greater sage-grouse and other wildlife in the area. These uses will be immediately, irreparably, and significantly harmed by the Project and related operations.

47. Plaintiff Great Basin Resource Watch (GBRW) is a non-profit organization based in Reno, Nevada that is concerned with protecting the Great Basin's land, air, water, wildlife and communities from the adverse impacts of hardrock mining. GBRW members include ranchers, sportsmen, conservationists, and Native Americans dedicated to protecting the communities, land, air, water and Native American resources of the Great Basin. Members of GBRW have used, enjoyed, and valued the area of the Project, including the Project site, for many years. Members of GBRW hike, view and photograph wild plant and animal life, and generally enjoy using the area of the Project for recreational, historical, conservation, and aesthetic purposes. Members of GBRW intend on continuing to use and value the lands at, and affected by, the Project during 2021 and in future years. These uses will be immediately, irreparably, and significantly harmed by the Project and related operations.

48. Plaintiff Basin and Range Watch (BRW) is a non-profit organization working to conserve the deserts of Nevada and California and to educate the public about the diversity of life, cultures, and history of the desert, as well as sustainable local renewable energy alternatives. One of BRW's main goals is to identify the problems of large-scale mineral and energy extraction. We work to find solutions that will preserve our natural ecosystems, public lands, open spaces, and quality of life for local communities. Members of BRW hike, view and photograph wild plant and animal life, and generally enjoy using the area at the Project site for recreational, historical, conservation, and aesthetic purposes. Members of BRW intend on continuing to use and value the lands at, and affected by, the Project during 2021 and in future years. These uses will be immediately, irreparably, and significantly harmed by the Project and related operations.

49. Plaintiff Wildlands Defense (WLD) is a regional, membership, non-profit organization dedicated to protecting and improving the ecological and aesthetic qualities of the wildlands and wildlife communities of the western United States for present and future generations. WLD advances its mission by means of landscape

and wildlife monitoring, by media outreach, and with legal and administrative advocacy. WLD is headquartered in Hailey, Idaho, has members in several western states, including members that regularly focus on public land and wildlife preservation in the high desert ecosystem of the scenic and remote Nevada and Oregon border land region. As an organization and on behalf of its members, WLD has a particular interest in protection of biodiversity and conservation of rare species like pygmy rabbit, golden eagle, greater sage-grouse and Lahontan cutthroat trout, and in sustaining migratory birds. WLD members work and/or recreate throughout this area generally, and in the Project Area particularly. Members derive scientific, recreational, inspirational, spiritual, aesthetic, educational, journalistic, expressive and other benefits from the public lands, wildlife, ecosystems, and the sweeping beautiful wild landscape of the Montana Mountains region, and intend to visit and engage in these pursuits frequently in the immediate future. These uses will be immediately, irreparably, and significantly harmed by the Project and related operations.

50. In addition to the immediate and irreparable harm caused by the Project and BLM's approval of the Project, Plaintiffs, and their members, have been, and are being, irreparably harmed by BLM's failure to conduct a proper NEPA analysis and to fully involve the public, and Plaintiffs, and their members, in the required NEPA and FLPMA process.

51. Defendant Bureau of Land Management (BLM) is an agency of the Defendant United States Department of the Interior (DOI). The BLM/DOI has oversight responsibility for the federal lands affected by the Project. BLM's Winnemucca District Office issued the 2020 FEIS and the 2021 ROD.

52. Defendant Ester M. McCullough, the District Manager of the BLM Winnemucca District Office, was the Authorized Officer for the challenged FEIS and ROD. She is sued in her official capacity.

Failure to Comply with the Binding Resource Management Plan Under FLPMA

53. The mine and exploration projects will not comply with the Winnemucca RMP and related Sage Grouse RMP Amendment requirements. BLM's approval of this non-conforming Project violates FLPMA and its implementing regulations.

54. FLPMA requires that all activities approved by BLM comply with the requirements of the binding Resource Management Plans (RMPs), also known as "land use plans": "The Secretary shall manage the public lands under principles of multiple use and sustained yield, in accordance with the land use plans developed by him under section 1712 of this title when they are available." 43 U.S.C. § 1732(a).

55. FLPMA requires that: "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." 43 U.S.C. § 1701(a)(8).

56. A violation of the RMP is a violation of FLPMA. Or. Natural Res. Council Fund v. Brong, 492 F.3d 1120, 1128 (9th Cir. 2007) (BLM-approved project components "are inconsistent with the Plan and, consequently, violate FLPMA.").

57. Complying with the RMP is required by both the general land use conformity requirement of FLPMA, as well as BLM's duty under FLPMA to "prevent unnecessary or undue degradation" of the public lands. 43 U.S.C. § 1732(b).

58. BLM's FLPMA regulations require that all resource management decisions "shall conform to the approved [land use] plan." 43 C.F.R. § 1610.5-3(a).

59. BLM "shall take appropriate measures . . . to make operations and activities under existing permits, contracts, cooperative agreements or other instruments for occupancy and use, conform to the approved [land use] plan . . . ." *See* id. § 1610.5-3(b). 43 C.F.R. § 1601.0-5(b) defines "conformity" as requiring that "a resource management action shall be specifically provided for in the plan, or if not specifically mentioned, shall be clearly consistent with the terms, conditions, and decisions of the approved plan or plan amendment." "Consistent," in turn, is defined as requiring that

management actions "will adhere to the terms, conditions, and decisions of officially approved and adopted resource related plans . . . ." Id. § 1601.0-5(c).

60. There is no general exemption from the FLPMA RMP requirements for mineral operations. As BLM has recognized, mining must comply with all RMP provisions. Mineral Policy Center v. Norton, 292 F.Supp.2d 30, 49 (D.D.C. 2003) ("when BLM receives a proposed plan of operations under the 2001 rules, pursuant to Section 3809.420(a)(3), it assures [sic] that the proposed mining use conforms to the terms, conditions, and decisions of the applicable land use plan, in full compliance with FLPMA's land use planning and multiple use policies.").

61. Despite these FLPMA requirements, BLM erroneously based the ROD and FEIS on its position that because LNC has filed mining claims across the entire site and is conducting mining-related operations, BLM is exempt from complying with the applicable RMP requirements.

Violation of RMP Requirements for the Protection of the Greater Sage-Grouse

62. The GRSG is a species subject to binding protective standards in the BLM's Record of Decision and Resource Management Plan for the Winnemucca District, as well as the Nevada and Northeastern California Greater Sage-Grouse Approved RMP Amendment (September 2015) (and associated approvals and implementations). (Collectively, the Winnemucca ROD/RMP and NV/NE CA ARMPA). It is a sagebrush obligate, which means it relies upon large expanses of intact sagebrush habitat to survive. But with these habitats becoming increasingly scarce due to the conversion to industrial uses, fire, and other stressors, sage-grouse have declined to 10 percent of their former abundance and have been eradicated from at least 44 percent of their historic range.

63. With the specter of listing the bird under the Endangered Species Act looming, the BLM and U.S. Forest Service embarked on a west-wide planning strategy covering approximately 67 million acres of federal lands to impose adequate sage-grouse protections in their planning documents to conserve the species. BLM convened a

National Technical Team (NTT) to identify science-based sage-grouse conservation measures and the NTT's December 2011 Report remains the best available science on sage-grouse conservation measures to this day. https://www.fws.gov/greatersagegrouse/documents/Reports/GrSG_NTT_Report.pdf

64. The NTT Report recommended withdrawing sage-grouse priority habitats from mineral entry based on risk to sage-grouse and its habitat from conflicting locatable mineral potential and development. Id. at 24. It further recommended "[m]ake any existing claims within the withdrawal area subject to validity patent exams or buy out." Id.

65. Meanwhile, the U.S. Fish and Wildlife Service convened a "conservation objectives team," (COT) which, in March 2013, issued a report that identified and mapped sage-grouse "priority areas for conservation" (PACs), maintaining the integrity of which is "the essential foundation for sage-grouse conservation." The PACs were based initially on State "key habitat maps" derived from breeding bird density maps and lek counts, nesting areas, and habitat distribution data. The COT recommended avoiding "new mining activities and/or any associated facilities within occupied habitats, including seasonal habitats." COT Report, 49.

66. Through BLM's planning process, BLM similarly identified "Priority Habitat Management Areas" (PHMAs), "General Habitat Management Areas" (GHMAs), and, applicable in Nevada and California, "Other Habitat Management Areas" (OHMAs). PHMAs are "BLM-administered lands identified as having the highest habitat value for maintaining sustainable GRSG populations" and BLM claims they "largely coincide" with the U.S. Fish and Wildlife Service PACs, although in truth large areas of habitats identified as PACs were omitted from PHMA and GHMA. Great Basin (GB) ROD at 1-15 (U.S. Dept. of Interior, Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana Nevada and Northeastern California Oregon Utah, September 2015).

67. Meanwhile, GHMAs are "BLM-administered GRSG habitat that is occupied seasonally or year-round and is outside of PHMAs"; and OHMAs are "BLM-administered land in Nevada and Northeastern California, identified as unmapped habitat…that is within the Planning Area and contains seasonal or connectivity habitat areas." GB ROD at 1-15.

68. In 2015, BLM's planning process culminated in the Approved Resource Management Plan Amendments (ARMPAs) adopted through two Records of Decisions (RODs) that grafted sage-grouse protections onto BLM RMPs throughout most of sage-grouse range, including the Winnemucca RMP at issue here. The Nevada/Northeastern California ARMPA adopted through the Great Basin ROD set forth specific management direction regarding sage-grouse protections to be applied in PHMAs, GHMAs, and OHMAs.

69. Most or all of the Project area is PHMA. FEIS Figures 4.5-11 and -12 ("GRSG Amendment Habitat Mapping"). The Project area lies within the Lone Willow Population Management Unit (PMU) designated by the Nevada Department of Wildlife (NDOW). FEIS at 4-43. Much of that PMU is categorized as **"essential irreplaceable habitat,"** which the FEIS ignores. https://www.fws.gov/nevada/nv_species/documents/sage_grouse/392012-Maps/Printable_Greater_Sage-Grouse_Habitat_Categorization_Map.pdf (emphasis added). Virtually the entire Lone Willow PMU, including all or nearly all of the Project area, is within the Western Great Basin "priority area for conservation" (PAC).

70. Recognizing the importance of preserving expanses of interconnected sagebrush habitats for sage-grouse, the sage-grouse Amendment to the Winnemucca RMP seeks to "avoid, minimize, and mitigate" any effects to sage-grouse by avoiding new disturbance or else minimizing or mitigating any disturbance. Objective SSS 4, NV/NE CA ARMPA at 2-6. It requires BLM to attempt to site projects outside of sage-grouse habitats, or else in the least suitable sage-grouse habitats or within or

adjacent to the footprint of other infrastructure. MD SSS-1 (NV/NE CA ARMPA at 2-6).

71. To minimize impacts, the Winnemucca RMP and NV/NE CA ARMPA cap disturbance in high-value sage-grouse Priority Habitat Management Areas (PHMAs), such as that at the Project site, at 3 percent at both the PMU scale and the project scale. *See* N-5 (discussing MD SSS 2A).

> **Manage discrete anthropogenic disturbances, whether temporary or permanent, so they cover less than 3 percent of 1) biologically significant units (BSUs; total PHMA area associated with a GRSG population area (see Appendix A, Figure 2.2) and 2) in a proposed Project analysis area.** See Appendix E, Disturbance Cap Guidance, for additional information on implementing the disturbance cap, including what is and is not considered disturbance and how to calculate the proposed Project analysis area, as follows: 1. **If the 3 percent human disturbance cap is exceeded on all lands (regardless of ownership) in PHMAs in any given BSU, then no further discrete human disturbances (subject to applicable laws and regulations, such as the 1872 Mining Law, as amended, and valid existing rights) will be permitted, by BLM** within GRSG PHMA in any given BSU until the disturbance has been reduced to less than the cap (see Nevada exception under MD SSS 2 a. 3. Appendix E).

FEIS Appendix N at N-5 (emphasis added).

72. Where impacts cannot be avoided, the Winnemucca RMP and NV/NE CA ARMPA also require that BLM "ensure mitigation that provides a net conservation gain to the species," such as the use of the State of Nevada Conservation Credit system. MD SSS 2B (PHMA) (NV/NE CA ARMPA at 2-7, 2-8). Despite this requirement, BLM never analyzed or required this "net conservation gain" for sage grouse at Thacker Pass.

73. In addition, the RMP mandates the application of specified Required Design Features (RDFs) to protect sage grouse. MD SSS 2B (NV/NE CA ARMPA at 2-8). BLM must apply lek buffer distances identified in the USGS report, Conservation Buffer Distance Estimates for Greater Sage-Grouse—A Review Open File-Report 2-14-1239 (Manier et al. 2014). MD SSS 2D (NV/NE CA ARMPA at 2-8). Seasonal restrictions "will be applied" to manage surface-disturbing activities and uses to prevent

disturbances to GRSG during seasonal life-cycle periods. MD SSS 2E (NV/NE CA ARMPA at 2-8 to 2-9).

74. The ARMPA also includes strict noise limits and requires that authorizations and permits must limit noise from activities to a maximum of 10 decibels above ambient sound levels at least 0.25 miles from active and pending leks, from 2 hours before to 2 hours after sunrise and sunset during the breeding season. MD SSS 2F (NV/NE CA ARMPA at 2-9).

75. Further, where "triggers" are reached, as is the case in the Lone Willow PMU where the Project lies, BLM must also take additional management or mitigation actions set forth in MD SSS 17 through 24.

76. The Project does not comply with these requirements.

77. There is no evidence that BLM required LNC to site Project facilities outside of PHMA and GHMA, locate the surface-disturbing activities in non-habitat or in the lowest quality habitat, or locate Project facilities within or adjacent to existing infrastructure, as it is required to do "whether in accordance with a valid existing right or not." *See* MD SSS-1. Therefore, BLM has not complied with the "avoid, minimize, mitigate" objective set forth in the NV/NE CA ARMPA.

78. BLM has admitted that disturbance in the Project area already surpasses the 3 percent threshold beyond which no further disturbance may be authorized. The Project will disturb 1.12 percent of PHMAs within the PMU and will raise disturbance in the Project area from 4.4 percent to 12 percent. FEIS at N-5; N-17. In fact, the Project would completely span the southeastern portion of the PMU, severing the southernmost portion of the PMU from the rest of the PMU. *See* Figure 4.5-1. Plaintiffs provided BLM with studies showing that isolating sage-grouse populations by fragmenting habitat in this way leads to their extirpation and thus, the Project will effectively shrink the habitat and sage-grouse population in the PMU. BLM essentially ignored these studies in the FEIS and ROD.

79. BLM has never convened a technical team to determine whether the Project can be modified to a "net conservation gain" to the species, as is required to meet the criteria for an exception to the three percent disturbance cap. *See* NV/NE CA ARMPA at E-2.

80. Nor has BLM required or ensured mitigation that provides a "net conservation gain" to the species. Indeed, BLM has admitted that LNC has purchased no permanent conservation credits to offset the effects of permanent groundwater drawdown from the mine that will affect surface water used by sage-grouse in the Project area for the foreseeable future. FEIS at 4-54. Under the ARMPA, BLM is not free to simply disregard its obligation to ensure that impacts to GRSG are mitigated where they cannot be avoided.

81. BLM also failed to apply several Required Design Features (RDFs), including all of the locatable minerals-specific RDFs. *See* FEIS Table N.4.

82. BLM failed to apply lek buffer distances, seasonal restrictions, and noise limits required by the ARMPA. This failure is likely to have significant impacts to sage-grouse.

83. For instance, the Nevada Department of Wildlife, in comments to BLM on the DEIS, specifically stated that the Project would violate the noise limits in the ARMPA and could have significant negative effects on the Montana-10 and Pole Creek 01 leks as well as the Lone Willow PMU:

> The calculations predict that **project related noise at these leks will exceed BLM ARMPA standards** and result in potential impacts. Increased noise at sage-grouse leks has been shown to have negative effects on lek attendance, with likely implications to sage-grouse populations. Current research indicates that as noise levels reach 10 dBA L50 above natural background levels (Pre-Project L90), sage-grouse lek attendance declines and lek abandonment can occur. Thus, **the anticipated project related noise increases at Montana-10 and Pole Creek 01 could have significant negative effects on these leks and the Lone Willow PMU.** Based on average lek attendance, the Montana-10 lek is one of the three largest leks in the Lone Willow PMU and **the loss of this lek would likely be of high consequence to greater sage-grouse populations.**

FEIS at R-184 (comment #P830) (emphasis added). In response, BLM relied on a potential future "noise monitoring plan" to purportedly reduce these impacts. Id. But,

as NDOW noted, such future potential plans would not ensure that the ARMPA noise standards would be met.

> While we appreciate DEIS's inclusion of noise reduction measures and restricting high noise activities to times less critical to wildlife, **this does not change the model's predictions that important thresholds will be exceeded**. We recommend that additional details for monitoring, mitigation, and adaptive management be determined in advance of the Final EIS to address the potential noise impacts on these leks.

Id. (emphasis added). Despite these serious concerns, BLM claimed that any monitoring plan or mitigation would be purely voluntary and that BLM did not have to comply with the ARMPA standards:

> Development of a noise monitoring plan may help in identifying activities that produce high noise levels and recommend timing restrictions during critical breeding periods (March-May); however, **these measures would be *voluntary* actions. The proposed project is a non-discretionary 43 CFR 3809 action and BLM's discretion is limited to preventing unnecessary and undue degradation, and *may not impose timing or operational restrictions directed under the 2015 GRSG ARMPA*.**

FEIS at R-184 to 185 (Response to NDOW comment #P831)(emphasis added).

84. Similarly, some of the Project disturbance falls within the 3.1-mile lek buffer, which are to be applied as required conservation measures to address impacts to leks. NV/NE CA ARMPA at B-2. It is well-known that the effects of mining extend well beyond the surface footprint of the mine facilities themselves, disturbing sage grouse and displacing them from otherwise undisturbed habitats up to 3.1 miles away. Applying the 3.1 lek buffer distance helps to avoid some of these effects.

85. BLM dismissed its obligation to comply with these requirements, and indeed all of the other sage-grouse RMP Amendment requirements, based on the unsubstantiated assertion that they are "not applicable" because LNC's unpatented mining claims at issue here confer "valid existing rights." *See, e.g.,* FEIS at 4-45, N-25, N-6, N-9, N-18, Table N.4.

86. BLM's position is that it must approve the Project because it "is a non-discretionary" action, based on the erroneous assumption that LNC has "valid existing rights" under the 1872 Mining Law to conduct all of its operations on public lands at the site.

87. Yet, outside of the fact that LNC holds unpatented mining claims across the Project site, BLM has offered no evidence that those claims are "valid" or that BLM has determined whether the lands underlying these claims, especially the thousands of acres to be buried by the waste/tailings dumps, satisfy the Mining Law's strict test for "valid existing rights." If BLM had complied with the NTT Report's recommendation that locatable mineral claims be examined for validity, it could have determined whether these assertions are true, but it did not.

88. Even if BLM's unsupported assumption that LNC holds "valid existing rights" were correct (which it is not), the agency is still under an obligation to impose mitigation measures to protect imperiled wildlife under its duty to "prevent unnecessary or undue degradation" under FLPMA. And it must still comply with the ARMPA direction to "avoid, minimize, mitigate" impacts to sage-grouse by siting projects outside of sage-grouse habitat, or else in the least-suitable habitat, or within the footprint of existing infrastructure.

89. Moreover, BLM has the duty under FLPMA to mitigate adverse impacts:

> Although other Federal and State agencies regulate various aspects of mining under other statutes, BLM has its own responsibilities under FLPMA and the mining laws to protect the resources and values of the public lands from unnecessary or undue degradation.
> …
> [S]ections 302(b) and 303(a) of FLPMA, 43 U.S.C. 1732(b) and 1733(a), and the mining laws, 30 U.S.C. 22, provide the BLM with the authority to require mitigation. **Mitigation measures fall squarely within the actions the Secretary can direct to prevent unnecessary or undue degradation of the public lands. An impact that can be mitigated, but is not, is clearly unnecessary.**

65 Fed.Reg. 69998, 70053 (November 21, 2000)(Preamble to BLM's 43 C.F.R. Part 3809 mining regulations)(emphasis added).

90. But BLM decided not to comply with the requirements of the Winnemucca RMP as amended, or to ensure that effects to sage-grouse from the Plan were fully mitigated. Thus, the Project violates the Winnemucca RMP and NV/NE CA ARMPA, as well as FLPMA.

Violation of RMP Visual Resource Protection Requirements

91. Similarly, BLM also erroneously based the ROD and FEIS on its position that because LNC has filed mining claims across the entire site, it is exempt from the Winnemucca RMP's Visual Resource protection standards.

92. FLPMA requires the protection of scenic values, requiring that "the public lands be managed in a manner that will protect the quality of the...scenic...values...." 43 U.S.C. §1701(a)(8). "[N]atural scenic … values" are one of the resources for which public land should be managed. 43 U.S.C. §1702(c).

93. The Winnemucca RMP implements these mandates by requiring that projects authorized by BLM must comply with the following: for "Visual Resources (VRM) Goal: Manage public land actions and activities to provide protection of the visual values and scenic quality of existing landscapes consistent with the Visual Resource Management (VRM) class objectives." RMP at 2-44. https://eplanning.blm.gov/public_Projects/lup/47537/58077/62876/06_Chapter_2_RMP.pdf

94. According to the Winnemucca RMP's Final Environmental Impact Statement, at ES-22, BLM is required to protect the area's designated scenic resources:

> Visual Resources. In general, all alternatives would involve actions that maintain or improve the quality of visual resources. In addition to relying on the visual resource contrast rating system to preserve the overall scenic quality of BLM-administered land, specific actions also maintain or improve visual resources involving air, water, flora, fauna, wildland fire, cultural resources, minerals, and recreation.

https://eplanning.blm.gov/public_Projects/lup/47537/58354/63145/Winnemucca_Proposed_RMP_FEIS_Volume_1.pdf

95. The FEIS described BLM's Visual Resource Management and Protection processes.

> The BLM created *Manual 8400 – Visual Resource Management* as guidance to develop a comprehensive inventory and related management objectives for public lands. **The objective of Visual Resource Management (VRM) is to manage public lands in a manner which would protect the quality of the scenic (visual) values of these lands.** A VRM analysis systematically identifies and evaluates visual resources to determine the appropriate level of impacts and management. Visual values are identified through the VRM Inventory, Manual Section 8410, and are considered with other resource values in the Resource Management Planning (RMP) process.

FEIS at 4-98 (emphasis added).

96. Most of the Thacker Pass area is designated VRM Class II. According to the FEIS for the Thacker Pass Mine:

> The objective of VRM Class II is to retain the existing character of the landscape, while keeping the level of change to the characteristic landscape low. Management activities may be seen but should not attract attention of the casual observer. The objective is that changes in the landscape repeat the basic elements of form, line, color, and texture found in the predominant natural features.

FEIS at 4-99.

97. "BLM's Winnemucca District Office concluded that the Thacker Pass Project boundary falls primarily within VRM Class II per the 2015 Record of Decision and Resource Management Plan for the Winnemucca District Planning Area, with an exception to the east end of the Project area which fall within VRM Class III (BLM 2015a)." FEIS at 4-98 to 99.

98. BLM admits that the Project will violate these VRM requirements in the Winnemucca RMP:

> **Overall, the construction and operation of the Proposed Alternative would not meet the current VRM Class II objectives, and would not conform with the existing ROD/RMP** (see Section 1.5.3). The existing character of the landscape would not be retained, and the level of change to the characteristic landscape would be noticeable and likely attract the attention of the casual observer. Overall, the construction and operation of Alternative A would not meet the current VRM Class II objectives, and would not conform with the existing ROD/RMP (see Section 1.5.3).

FEIS at 4-101.

99. As detailed herein, under FLPMA, BLM cannot approve actions that will violate its own RMP.

100. In response to Plaintiffs' extensive comments highlighting how the Project would violate the VRM requirements of the RMP, BLM simply stated: **"Thank you for your comment,"** with no analysis or response. *See* Comments P645-656, FEIS at Appendix R at 143-146 (emphasis added). This is a bald dismissal, not a response.

101. This violates the agency's duties under NEPA to fully respond to all substantive comments. Under the controlling NEPA regulations, BLM "shall assess and consider" and "shall respond" to comments. 40 C.F.R.§ 1503.4(a). "Consider" means "to investigate and analyze; 'consideration' encompasses an affirmative duty to investigate and compile data, and a further duty to incorporate that data into a detailed reasoned analysis." City of Davis v. Coleman, 521 F.2d 661, 679 (9th Cir. 1975). The APA requires agencies to adequately respond to all significant public comments as a "fundamental tenet of administrative law." NRDC v. EPA, 859 F.2d 156, 188 (D.C. Cir. 1988).

102. BLM understood that, because the Project would violate the RMP's VRM standards, in order to legally approve the Project, it would have to amend the RMP to remove these requirements.

103. BLM's January 21, 2020 Notice of Intent (NOI) to prepare the EIS was released in the Federal Register. BLM acknowledged that if the Project would violate the RMP VRM standards, the RMP would have to be amended to change those requirements.

> A Land Use Plan Amendment addressing visual resources would be included with the Project and analyzed in the EIS if visual resource issues cannot be mitigated during the exploration, construction, and operation of the Project to conform with the visual resource management class-2 designation in the current RMP, approved in 2015.

85 Fed. Reg. 3413, 3414 (Jan. 21, 2020).

104. Yet BLM never amended the RMP, despite admitting that the Project would violate the RMP standards.

105. BLM regulations allow for amendments to RMP's but require at least a 90-day public comment period: "Ninety days shall be provided for review of the draft plan and draft environmental impact statement." 43 C.F.R. §1610.2(e).

106. In this case, BLM issued the Draft EIS on July 29, 2020 and provided for only a 45-day comment period. 85 Fed. Reg. 45651 (July 29, 2020). The DEIS contained no mention of BLM's previously-stated need to amend the RMP, despite acknowledging that the Project would violate the VRM standards.

107. Neither the ROD nor the FEIS explains why the RMP was never amended, as BLM stated it was required to do in its Federal Register Notice, or how BLM can approve a Project that violates the Visual Protection Standards in the RMP.

BLM Cannot Violate the RMPs Based on an Unsupported Belief that LNC Had "Valid Existing Rights" under Federal Mining Laws

108. As noted, BLM erroneously based its failure to comply with the RMP on the mistaken view that LNC's mere filing of mining claims at the site precludes the agency from ensuring compliance with the RMP because LNC has "valid existing rights" under the 1872 Mining Law. *See, e.g.,* FEIS at 4-45, N-25, N-6, N-9, N-18, Table N.4.

109. Yet "valid existing rights" under the Mining Law can only accrue to the company if these claims satisfy the requirements of the 1872 Mining Law for occupancy and possession rights. "A mining claimant has the right to possession of a claim only if he has made a mineral discovery on the claim." Lara v. Secretary of the Interior, 820 F.2d 1535, 1537 (9th Cir. 1987). *See also* Davis v. Nelson, 329 F.2d at 845 (9th Cir. 1964)("right to occupation and purchase of the lands" is limited to only those lands "in which valuable mineral deposits are found.").

110. The ROD authorizes LNC to permanently occupy the public lands with the placement of the waste rock, stockpiles, and tailings waste on the company's mining claims. The Mining Law limits the permanent use and development of mining claims on public lands to only those lands that contain a "valuable mineral deposit." "All **valuable mineral deposits** in lands belonging to the United States … shall be free

and open to exploration and purchase, **and the lands in which they are found** to occupation and purchase." 30 U.S.C. § 22 (emphasis added).

111. Only upon the discovery of a "valuable mineral deposit," within the boundaries of each mining claim does the claimant have rights to permanently use and occupy those public lands. "Thus, although a claimant may explore for mineral deposits before perfecting a mining claim, without a discovery, the claimant has no right to the property against the United States or an intervenor. 30 U.S.C. § 23 (mining claim perfected when there is a 'discovery of the vein or lode'); *see also Cole v. Ralph,* 252 U.S. 286, 295–96 (1920)." Freeman v. Dept. of Interior, 37 F.Supp.3d 313, 319 (D.D.C. 2014). "If there is no valuable mineral deposit beneath the purported unpatented mining claims, the unpatented mining claims are completely *invalid* under the 1872 Mining Law, and no property rights attach to those invalid unpatented mining claims." Center for Biological Diversity v. U.S. Fish and Wildlife Service, 409 F.Supp.3d 738, 748 (D. Ariz. 2019)(emphasis in original).

112. To satisfy the discovery requirement necessary for possessory and occupation, "the discovered deposits must be of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine." U.S. v. Coleman, 390 U.S. 599, 602 (1968). This economic test for claim validity necessarily includes the consideration of all costs necessary to develop, process, transport, and market the mineral, including costs to protect public land and the environment. "[I]t must be shown that the mineral can be extracted, removed and marketed at a profit." Id.

113. There is no evidence in the record that the mining claims covering the thousands of acres of public lands approved for the tailings, stockpiles, waste rock dumps, and other non-extractive operations are valid under the Mining Law.

114. The Project site is covered by over 300 mining claims, each slightly over 20 acres. *See* Appendix A to LNC Plan of Operations for the Thacker Pass Mine.

115. BLM has not inquired into, or determined, whether the mining claims at the Project site are valid.

116. BLM has not inquired into, or determined, whether the lands to be used outside of the mine pit for the waste and tailings dumps and other non-extractive operations contain valuable mineral deposits under the Mining Law.

117. In addition to the lack of any evidence that the claims to be used for waste rock dumps, tailings waste facilities, and other non-extraction operations away from the mine pit are valid under the Mining Law, the evidence in the record shows that the lands covered by these claims do not contain the requisite valuable deposit of a locatable mineral (i.e., those minerals subject to claiming under the 1872 Mining Law).

118. Under the Surface Resources and Multiple Use Act of 1955, "common varieties" of minerals, such as rock, gravel, and stone, are not locatable (i.e., cannot be legitimately claimed) under the Mining Law. 30 U.S.C. § 611. Lands consisting of "common varieties" cannot, then, have any "valid existing rights" under federal mining laws.

119. BLM has not determined whether the lands to be used for the waste rock dumps, the tailings waste facility, stockpiles, and other non-extractive operations contain locatable minerals or common variety minerals.

120. Based on the geologic information in the FEIS, the lands to be covered by the large ancillary waste and processing facilities away from the lands covering the proposed mine pit do not contain the requisite valuable and locatable mineral deposits. At minimum, there is no support in the FEIS for BLM's position that LNC has satisfied the Mining Law's requirements for "valid existing rights" to use and possess public lands for permanent disposal of mine waste, stockpiles, and tailings – in violation of the VRM and wildlife protection requirements of the applicable RMPs.

Failure to Ensure Compliance With Environmental Protection Laws and Policies.

121. In approving projects like the mine, BLM also must comply with environmental protection laws and policies, including NEPA and FLPMA.

122. NEPA is our "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a).[1]

123. Congress enacted NEPA to ensure that federal agencies, before approving a Project, (1) consider and evaluate all environmental impacts of their decisions and (2) disclose and provide an opportunity for the public to comment on such environmental impacts. 40 C.F.R. §§ 1501.2, 1502.5. "NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. § 1500.1(b). This review must be supported by detailed data and analysis – unsupported conclusions violate NEPA. *See* Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1150 (9th Cir. 1998); N. Plains v. Surface Transp. Bd., 668 F.3d 1067, 1075 (9th Cir. 2011)(conclusions must be supported by reliable studies).

124. To this end, NEPA requires federal agencies to prepare a detailed Environmental Impact Statement (EIS) for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C).

125. An EIS must include a full and adequate analysis of environmental impacts of a Project and alternatives and take a "hard look" at the direct, indirect, and cumulative impacts of the Project and its alternatives, resulting from all past, present, and reasonably foreseeable future actions. 40 C.F.R. §§ 1508.7, 1508.8, 1508.9, 1508.25(c).

126. NEPA requires that the FEIS fully review and determine how the Project will comply with all relevant federal and state environmental and public land laws. *See* 40 C.F.R.

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[1] The national NEPA regulations were recently revised, which became effective on September 14, 2020. 85 Fed. Reg. 43304-43376 (July 16, 2020). However, because BLM conducted its NEPA review for this Project before the new regulations became effective, the NEPA regulations existing prior to September 14, 2020, at 40 C.F.R. Part 1500, apply here. *See, e.g.,* FEIS at 5-1, quoting 40 C.F.R. §1508.7 for the requirement to analyze, and definition of, "cumulative effects," from the previous NEPA regulations.

§ 1502.2(d) (requiring an EIS to state how alternatives and decisions "will or will not achieve the requirements of . . . other environmental laws and policies.")

127. FLPMA requires that: "In managing the public lands the Secretary [of Interior] shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b).

128. Failure to conduct a proper NEPA analysis violates not only NEPA, but FLPMA's mandate to prevent "unnecessary or undue degradation, or UUD", which is a fundamental requirement of BLM's review of proposed mining plans under FLPMA. As the Interior Department has held:

> **Like NEPA, the [UUD] definition requires BLM to consider the nature and extent of surface disturbances resulting from a proposed operation and environmental impacts on resources and lands outside the area of operations**. Kendall's Concerned Area Residents, 129 IBLA 130, 140-41 (1994); Nez Perce Tribal Executive Committee, 120 IBLA 34, 36 (1991); see Sierra Club v. Hodel, 848 F.2d 1068, 1078, 1091 (10th Cir.1988) (nondegradation duty is mandatory). … [M]ost disturbed land at the mine sites is public land and other public land is adjacent to them. **To the extent BLM failed to meet its obligations under NEPA, it also failed to protect public lands from unnecessary or undue degradation**.

Island Mountain Protectors, 144 IBLA 168, 202, 1998 WL 344223, * 28 (Interior Board of Land Appeals, IBLA)(internal citations omitted, emphasis added).

129. To prevent unnecessary and undue degradation, BLM must ensure that all environmental protection standards will be met at all times. 43 C.F.R. § 3809.5 (definition of "Unnecessary of Undue Degradation" prohibited under FLPMA includes "fail[ure] to comply with one or more of the following: … Federal and state laws related to environmental protection.")

130. As part of its duties to prevent UUD and irreparable harm to public land resources under FLPMA, BLM has established a national policy to protect designated Sensitive Species.

The objectives of the BLM special status species policy are:

> A. To conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species.
> B. To initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA.

U.S. Dep't of the Interior BLM, Special Status Species Mgmt. Manual 6840 at 3 (2008) ("Special Status Species Manual").

131. BLM policy acknowledges its duty under FLPMA to protect Sensitive Species:

> It is in the interest of the BLM to undertake conservation actions for such species before listing is warranted. It is also in the interest of the public for the BLM to undertake conservation actions to improve status of Sensitive Species so sensitive recognition is no longer warranted. By doing so, BLM will have greater flexibility in managing public lands to accomplish native species conservation objectives and other legal mandates.
> …
> In compliance with existing laws, including the BLM multiple use mission as specified in the FLPMA, the BLM shall designate Bureau sensitive species and implement measures to conserve these species and their habitats, including ESA proposed critical habitat, to promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA.

BLM Special Status Species Manual at 36.

https://www.ntc.blm.gov/krc/uploads/1110/BLM%20MS%206840%20Special%20Status%20Species%20Management%20Dec%202008.pdf

132. BLM failed these duties, as it never determined whether the Project and its alternatives would fully "achieve … all relevant environmental laws and policies." 40 C.F.R. § 1502.2(d). At a minimum, the FEIS never analyzes: (1) whether, and how, the Project will fully comply with all applicable RMP provisions; (2) whether, and how, all water and air quality standards will be met at all times; and (3) whether, and how, BLM will comply with substantive State and Federal laws and its own policies that mandate protection of wildlife and plants.

Failure to Ensure Compliance With Water Quality Standards

133. As noted, to comply with FLPMA's mandate to prevent UUD, approved projects must comply with water quality standards. *See* 43 C.F.R. § 3809.420(b)(4) (listing Performance Standards that must be met, including the requirement that "All operators shall comply with applicable Federal and state water quality standards, including the Federal Water Pollution Control Act [Clean Water Act], as amended (30 U.S.C. 1151 *et seq*.)."

134. The Winnemucca RMP also requires compliance with all water quality standards:

> **GOAL: Manage for healthy watersheds across the landscape. Protect and maintain watersheds so they appropriately capture, retain, and release water of quality that meets State and national standards. Ensure public lands are capable of providing long-term sustainable water for local community needs and for land management activities, while minimizing impacts on the local ecosystem hydrologic functions and processes.**
>
> **Objective WR 1:** Manage BLM and BLM-authorized activities and uses to prevent degradation of water quality beyond established standards, as specified in the Nevada Water Pollution Control Regulations (NRS Ch. 445A) and the Memorandum of Understanding (MOU) of September 2004 between BLM and the State of Nevada, Division of Environmental Protection. This memorandum concerns diffuse source water pollution and the Nevada State 208 Water Quality Plan.

RMP at 2-7 (emphasis in original).

135. BLM failed to meet these requirements because antimony, a harmful pollutant in the mine pit backfill, will be released into the groundwater that will exceed water quality standards.

136. BLM admitted that: "Geochemical modeling results indicate that pore water in [the mine] backfill will exceed MCLs [Maximum Contaminant Levels] for longer than 20 pore volumes (Water Quantity and Water Quality Impacts report, Appendix P of this EIS)." FEIS at R-121.

137. Because saturated groundwater that would flow from the pit backfill would exceed standards, BLM was prohibited from approving the Project, as under FLPMA and

BLM's mining regulations (43 C.F.R. Part 3809), BLM cannot approve an operation that is predicted to violate water quality standards.

138. The backfilled pits are expected to have through-flowing groundwater when they fill, and would thus be long-term sources of pollutants to down-gradient groundwater. As GBRW stated in its comments on the Draft EIS (Comment P570): "The groundwater model used to support the DEIS does recognize the backfilled pits as long-term pollution sources, and include an estimate for the extent of the antimony plume that will exceed the 0.006 mg/L MCL out to 300 years beyond closure." *See also* FEIS Figure 6.10. "Antimony 0.006 mg/L isopleth through time (proposed action)," Piteau Associates 2020, FEIS Thacker Pass Lithium Mine Project Appendix P Part 4).

139. To purportedly prevent these violations, the FEIS relies on as-yet-undefined future plans not subject to public NEPA and FLPMA review. *See* BLM Response to P572: "Potential impacts to groundwater water quality downgradient from the backfilled pit would be addressed as outlined in Mitigation WR-3 provided in Section 4.3.2 of EIS."

140. The "Mitigation WR-3" cited in the BLM response is "Groundwater Quality Monitoring and Groundwater Quality Management Plans," which states that "in the event that constituent concentrations exceed established regulatory thresholds at one or more established compliance monitoring points, and the exceedance is attributable to contamination originating from mine facilities or operations, LNC would provide the BLM and NDEP with a groundwater quality management plan for review and approval" (FEIS pg. 4-26, Section 4.3.2 "Recommended Mitigation and Monitoring").

141. Plaintiffs had specifically requested BLM to provide these plans during the NEPA process, but BLM refused. *See* GBRW Comment P572: "Present a model for an alternative closure option for the backfilled pits that prevents the release of pollutants in a groundwater plume, such as a period of active pumping and treating of pore

water until the discharge from the waste-rock backfill is below the groundwater MCLs."

142. Since the FEIS predicts the exceedances of acceptable water quality levels, this reliance on future, as-yet-unreviewed plans violates NEPA and FLPMA.

143. The U.S. Environmental Protection Agency (EPA) strongly criticized BLM's failure to adequate analyze impacts to water quality, and ensure against any potential exceedance of water quality standards:

> **Unmanaged Groundwater Quality Degradation**
> As explained in the Final EIS, **adverse effects to groundwater quality are expected from all action alternatives. Without mitigation, a plume of groundwater exceeding the Nevada Division of Environmental Protection Profile I Reference Values for antimony is expected to flow uncontrolled from the backfilled pit.** According to fate and transport modeling included in the EIS (Appendix P Part 1 p. 125-133), the preferred alternative (Alternative A) would result in a plume extending approximately one-mile (p. 4-26) downgradient of the pit 300-years post-closure at levels still above Profile I (Appendix P Part 1 p. 132-133).

"EPA'S DETAILED COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE THACKER PASS PROJECT, HUMBOLDT COUNTY, NEVADA, JANUARY 4, 2020," at 1, contained in EPA's January 4, 2021 letter to BLM (EPA's Detailed Comments on FEIS)(emphasis added).

144. EPA further noted that the FEIS failed to adequately review mitigation required to prevent this contamination:

> While the Final EIS includes three conceptual options that have the potential to mitigate antimony groundwater contamination (Appendix P Part 1 p. 154-159), **the plans are not developed with an adequate level of detail to assess whether or how groundwater quality downgradient from the pit would be effectively mitigated.** In our comments on the Draft EIS, the EPA recommended more detailed information about how effective these potential mitigation options could be, and an evaluation of additional disturbance and impacts from implementing the proposed mitigation options (40 CFR 1508.25(a)(1)(iii)).

Id. (emphasis added).

145. EPA highlighted how BLM failed to respond to these serious concerns:

> In response, the BLM stated that options for blending/discharge and active treatment "have not been evaluated, and therefore may not be feasible for consideration as mitigation for the Final EIS" (Appendix R p. R-180). **Therefore, conclusions in the Final EIS that groundwater quality management plans would "effectively mitigate impacts to groundwater quality downgradient from the pit" (p. 4-25) are not adequately supported**.

Id. (emphasis added).

146. EPA criticized BLM for failing to meet its environmental protection responsibilities at the Mine: "**Without detailed information about mitigation and its efficacy, it is unclear how a Record of Decision could state that all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted.**" Id. (emphasis added).

147. EPA also noted that LNC recently submitted a new mitigation plan that purportedly reduces the ground water pollution – but that this plan was submitted long after the NEPA public review process ended:

> On December 16, 2020, the EPA received a revised version of the Plan of Operation's Appendix H, "Thacker Pass Project Monitoring Plan," during the first Water Resources Technical Advisory Group meeting. **This revised monitoring plan includes a new potential future mitigation option for groundwater quality impacts that was not discussed in the Draft or Final EIS.** This option involves preferentially placing oxide gangue in saturated portions of backfill to reduce the solute load of antimony as compared with the action alternatives in the current EIS. This is not currently a condition of approval or commitment in the Draft ROD, even though the option "may reduce or attenuate antimony mass prior to discharge from the backfill" (Appendix P Part 1 p. 154), which could substantially decrease the modeled 300-year impacts.

Id. (emphasis added).

148. In addition, both the waste rock dump and the tailing facility are potential sources of long-term pollution. As noted above, "aluminum, arsenic, antimony, beryllium, cadmium, chromium, copper, fluoride, iron, lead, magnesium, mercury, nickel, sulfate, thallium, TDS, and zinc were leached under low pH conditions at concentrations above Profile I NRVs [Nevada Reference Values]." FEIS Appendix B, LNC Mine Plan at 41. Further, "testing indicate[s] that for the clay tailings sample, uranium, gross alpha and radium 226/radium 228 exceed the Profile IR NRVs." Id.

149. Thus, seepage from the tailings facility will violate Nevada water quality standards and must be captured and treated. LNC recognizes the potential to contaminate groundwater and is proposing to have a water impervious liner for the tailings facility to capture the seepage. FEIS Appendix B at 41 (LNC mining plan). Yet the lifetime and details regarding this liner are not mentioned in the FEIS, so the public was not able to evaluate how long, and if, it will purportedly prevent groundwater contamination.

150. For example, the FEIS does not provide any estimate of the volume and rate of drainage initially and over time. According to the FEIS, LNC will direct tailings drainage to the processing facility to be used in the extraction of lithium and other minerals during active mining. After mining is completed seepage is to be directed to a lined collection pond with the assumption that evaporation will be sufficient to prevent overflow from the pond and to eventually reduce the volume of toxic solution so that the ponds can be converted to evapotranspiration cells. FEIS at 4-15.

151. Yet there is no detailed information or analysis on the time frame and volume of drainage, so the public has no way to evaluate this mitigation plan. There is no analysis of the potential for toxic drainage to occur after the lifetime of the liner. LNC states that the tailings facility is designed to be a "zero discharge" facility, but the FEIS does not analyze how the design will ensure a "zero discharge" outcome indefinitely.

152. For example "evaporation cells" are intended to be the final reclamation for tailings drainage, but the level of toxicity is so high in the drainage that the cells are likely to remain a threat to people and wildlife indefinitely. FEIS at 4-15. But there are no details as to how these cells can be reclaimed to avoid this long-term threat.

153. Further, as explained below, BLM has yet to account for the costs for the construction, operation, and maintenance of this treatment, which should have been included in the reclamation/closure financial guarantee/bond in the ROD, as required by FLPMA and the 43 C.F.R. Part 3809 regulations.

Failure to Ensure Compliance With Air Quality Standards

154. The FEIS and ROD do not ensure compliance with all applicable air quality standards, as required by FLPMA. Nor did BLM fully review all air quality issues as required by NEPA.

155. As noted, failure to comply with air quality standards violates FLPMA because it constitutes UUD. *See, e.g.,* 43 C.F.R. § 3809.5 (definition of "Unnecessary of Undue Degradation" prohibited under FLPMA includes "fail[ure] to comply with one or more of the following: … Federal and state laws related to environmental protection."); *id*. § 3809.420(b)(4) (listing Performance Standards that must be met, including the requirement that "All operators shall comply with applicable Federal and state air quality standards, including the Clean Air Act (42 U.S.C. 1857 *et seq*.)."

156. It also violates the Winnemucca RMP, which requires compliance with all air quality standards:

> **AIR QUALITY (AQ)**
> **GOAL: Meet all applicable local, state, tribal and national ambient air quality standards and regulations under the Clean Air Act (as amended).**
> **Objective AQ 1:** Manage BLM actions and land use authorizations to prevent significant deterioration of Federal Class 1 areas and from exceeding air quality standards specified by the State of Nevada, Division of Environmental Protection or other applicable federal, state, or local air quality standards.

RMP at 2-6 (emphasis in original).

157. In their comments on the DEIS, Plaintiffs specifically raised the serious air quality concerns to BLM, describing how the sulfur dioxide emissions analysis is inadequate. For example, in Table 4.10, the DEIS, and then the FEIS, claimed that in Phase I the facility would emit only 75.8 tons per year (TPY) of sulfur dioxide (SO_2) for the 337,895 tons of sulfur anticipated to be burned to produce the sulfuric acid..

158. But, as Plaintiffs pointed out, no currently-existing technology is capable of achieving this reduction in emissions as asserted by BLM and LNC. According to the national "Acid Plant Database," Rio Tinto's Kennecott Copper smelter in Utah is "the cleanest in the world" and "captures 99.9% of the sulfur dioxide emissions produced." The

same document from the "Acid Plant Database" listed the emissions concentration at <100 ppm in SO_2. DKL Engineering, Inc., "Sulphuric Acid on the Web", http://www.sulphuric- acid.com/sulphuric-acid-on-the-web/home.htm, an online sulfuric acid database, last updated June 29, 2020. Kennecott Data Sheet from January 27, 2018 (viewed December 27, 2020).

159. LNC is thus proposing an acid plant that will purportedly be on the order of 5 to 10 times cleaner in SO_2 than the current state-of-the-art industry standard and the "cleanest in the world."

160. Nevertheless, the FEIS assumes these massive emissions reductions will be achieved based upon application of "state-of-the-art" technology—without identifying what that technology is:

> In order to minimize the emissions from the sulfuric acid plant, **LNC has committed to installing a state-of-the-art scrubbing control**, which is above customary industry standard. As a result, the sulfur dioxide and acid mist emissions from the sulfuric acid plant will be well below the emission standards (4 pounds SO2 per ton of acid produced and 0.15 pounds H2SO4 per ton of acid produced) in the Code of Federal Regulations, Title 40, Part 60 (40 CFR 60), Subpart H, Standards of Performance for Sulfuric Acid Plants. **While the exact scrubbing system has not yet been determined**, LNC has committed to installing a control that, at the minimum, meets the emission levels used in this analysis.

FEIS, App. K at 6-7 (emphasis added). Since the FEIS does not disclose what this technology will be, and indeed it "has not yet been determined," neither the public nor the agency can fairly assess the likely effectiveness on this technology as a mitigation for sulfur dioxide emissions, in violation of NEPA and FLPMA. Neither BLM nor the public has any assurance that the technology actually exists.

161. BLM failed to explain how the effectiveness of these measures can be determined from so little information. Under NEPA and FLPMA, BLM must fully analyze, detail, and confirm the effectiveness of such purported mitigation measures.

162. Plaintiffs requested that BLM provide the required specifics to be able to analyze whether the acid plant emissions are likely to meet the goals listed in the FEIS. But BLM refused to provide this required evidence, and the FEIS adds no specific data or analysis on the scrubbing technology, such as its application in another operational acid plant or reasonably scalable laboratory test data.

163. Further, even if the purported "state-of-the-art technology" were capable of achieving the emissions reductions projections in Phase 1, BLM nevertheless assumes that SO_2 emissions will essentially remain the same in Phase 2, despite the fact that production would be doubled.

164. LNC claims, and BLM assumes, that the projected process emissions from the acid plant for critical air pollutants are largely identical for both Phase 1 and Phase 2. "[T]he total process emissions show only a small increase between Phases 1 and 2." FEIS Appendix K, at 8. *See* Tables 3 and 4 in Appendix K, showing that the SO_2 emissions for Phase 1 at 76.2 tons/year vs. 76.8 tons/year for Phase 2.

165. There is no evidence to support these bold assumptions, particularly since the "state-of-the-art" technology to be applied is "undetermined." BLM's assumption that emissions will stay the same at doubled production, without the required evidentiary support, is arbitrary and capricious.

166. Thus, the FEIS failed to establish that all air quality standards can be met with clear data and analysis in violation of NEPA and FLPMA.

Failure to Take a Hard Look at Baseline Conditions and Impacts to Wildlife

167. The FEIS failed to take a hard look at impacts from the proposed mine to Threatened, Sensitive and other special status birds, wildlife, and plants in the Project area, including State of Nevada Species of Conservation Concern and At-Risk species.

BLM does not have adequate baseline information to understand special status and imperiled species' presence in, and use of, the Project area and thus, to analyze how they will be affected by the mine development.

168. The establishment of the baseline conditions of the affected environment is a fundamental requirement of the NEPA process, because an inadequate environmental baseline precludes an accurate assessment of Project impacts. Or. Nat. Desert Ass'n v. Jewell, 823 F.3d 1258 (9th Cir. 2016). "[W]ithout [baseline] data, an agency cannot carefully consider information about significant environment impacts. Thus, the agency fails to consider an important aspect of the problem, resulting in an arbitrary and capricious decision." N. Plains Resource Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1085 (9th Cir. 2011).

169. In many cases, the biological information about the species is so vague as to render the analysis and any proposed mitigation meaningless. Plaintiffs provided detailed scientific information on the baseline conditions and impacts to the affected species, which were largely ignored by BLM.

Greater Sage-Grouse

170. As noted above, the Project will have serious impacts to greater sage-grouse that BLM has failed to consider or address. The Project will completely sever the southern half of the eastern portion of the Lone Willow PMU from the northern portion—an effect BLM overlooked in its sage-grouse analysis. And, according to NDOW, noise from the Project may also have significant effects to the Montana-10 and Pole Creek 01 leks, which in turn would affect the sage-grouse population in the Lone Willow PMU, but BLM failed to disclose or consider those likely effects.

171. Moreover, while the FEIS admits that significant effects to sage-grouse are anticipated from the Project, it fails to provide basic information necessary to determine what those effects will be. It does not disclose baseline sage-grouse populations in the Project area and in the PMU or describe how they use seasonal habitats in the Project area. The FEIS does not even disclose which Priority Area for Conservation (PAC) the PMU is in, although it is within the Western Great Basin PAC, which extends into Oregon and California. Without this baseline information, the FEIS fails to provide sufficient information to assess impacts to the bird from likely destruction of the populations at Thacker Pass and the southeastern portion of the Lone Willow PMU. And, because there is no adequate baseline, monitoring to discern changes to sage-grouse populations in the Project area would be meaningless. Plaintiffs provided to BLM several resources concerning the need to consider effects to sage-grouse seasonal habitats at both landscape and local level scales to adequately discern impacts to the birds, but these were ignored by BLM.

172. The FEIS also does not disclose where leks are located relative to different types of development and how they may be impacted. For instance, as NDOW pointed out in comments: "Based on average lek attendance, the Montana-10 lek is one of the three largest leks in the Lone Willow PMU and the loss of this lek would likely be of high consequence to greater sage-grouse populations." FEIS at R-184. But the FEIS does not disclose how the impacts from the development of the Project within a mile of this critical lek will likely affect sage- grouse populations in the Project area, the PMU, or the PAC.

173. Indeed, even though the FEIS discloses that, according to projections by NDOW, noise from the Project will likely exceed levels known to cause declines in lek attendance on two leks in the Project area, the FEIS does not disclose what those impacts will be. *See* FEIS at 4-53. NDOW commented that noise from the Project could cause the critical Montana-10 lek to be abandoned, which would likely have population-level effects that BLM never considered. BLM refused to apply the 3.1

mile lek buffer recommended by the best available science to insulate sage-grouse from the effects of locatable mineral development. Plaintiffs likewise submitted numerous studies to BLM showing drastic sage-grouse population declines and lek abandonment in response to disturbance from energy development and mining, but these were again ignored by BLM.

174. The Project area will be subject to long-term dewatering post-mine, which will likely affect wet meadows used by sage-grouse during the brood-rearing season, but the compensatory mitigation planned contains no permanent credits to offset those impacts. *See* FEIS at 4-45. The lack of permanent mitigation credits means that long-lasting, persistent impacts to sage-grouse from the open pit mine are unaddressed.

175. Thus, many statements in the FEIS and in the BLM's response to comments claiming the effects of the Project on sage-grouse will be fully mitigated through conservation credits are false. For example, the FEIS states in response to comments: "The [Conservation Credit System] provides a regulatory mechanism for GRSG habitat protection that ensures habitat effects from anthropogenic disturbances (debits) are *fully compensated* by long-term enhancement and protection of habitat that result in a net benefit for the species." FEIS at R-106, R-135 (emphasis added). But this is inaccurate and misleading as BLM does not require full compliance with all needed Credits and understates the impacts to sage-grouse from the Mine.

176. The FEIS also fails to consider reasonably foreseeable effects to sage-grouse from the Project. For instance, it does not consider effects to sage-grouse from cutting off the southeastern part of the PMU from the rest of the PMU, either to sage-grouse populations in the PMU or to sage grouse population in the PAC of which the PMU is part. Nor does it discuss effects to sage-grouse populations from likely decreases in attendance or abandonment of the Montana-10 and Pole Creek 01 leks due to unmitigated noise and disturbance from the Project.

177. The FEIS also does not consider effects of the Project in light of the effects of wildfire that eliminated 48 percent of the sagebrush habitat in the PMU. The FEIS

never discusses how much viable sage-grouse habitat remains in this PMU post fire, and how impacts from the mine would affect the remaining habitat.

178. The FEIS also does not disclose effects to sage grouse from permanent destruction of nesting and brood-rearing habitat from mine-caused groundwater drawdown—effects that are not offset in any way by the planned mitigation.

179. Indeed, the FEIS does not disclose how impacts to any sage-grouse seasonal habitats in the Project area are likely to affect the species. Plaintiffs submitted scientific studies regarding sage-grouse habitat needs, including their use of seasonal habitats, but these were again ignored by BLM.

Golden Eagles

180. Golden eagles are protected under both the Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668-668c (BGEPA), and the Migratory Bird Treaty Act, 16 U.S.C. §§ 703-712 (MBTA). Both laws prohibit "take" without permits. The BGEPA's definition of "take" includes disturbance, defined in later regulation as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, injury to an eagle, a decrease in productivity, or nest abandonment." 50 C.F.R. § 22.3.

181. The Project's eagle nest surveys for the Thacker Pass mine were conducted in 2018 and 2019 with a 10-mile buffer and an additional surveyed area beyond that going out to about 20 miles to the south of the Project. *See* Thacker Pass Eagle Conservation Plan at 10. Additional surveys with a 2-mile buffer were proposed for 2020. Thacker Pass Eagle Conservation Plan at 10. Within the 10-mile buffer, 10 territories were considered occupied in 2018 and 10 were considered occupied in 2019. Four territories were considered occupied during the 2020 survey that used the new two-mile buffer. FEIS at 4-57.

182. Nevertheless, the FEIS concludes that only one nest is likely to be disturbed to an extent that take is likely. FEIS at 4-57. As Plaintiffs explained to BLM, this conclusion is too low given the many nests, potential alternate nests and territories in the immediate area. For example, FEIS Figure 4.5-16 shows three golden eagle

territories overlapping the Project area, and concludes that two are unoccupied based on a single year of nest data, which does not accurately reflect golden eagle research.

183. Overall, BLM did not respond in the FEIS to the substantive comments and questions about golden eagles and the Bird and Bat Conservation Strategy that Plaintiffs raised in their comments on the DEIS. These concerns include potential disturbance "take" continuing after the end of the five-year take permit, potential "take" greater than authorized by the proposed take permit, the large number of eagle nests in the area, avoidance and minimization measures, monitoring and review of monitoring, research showing that golden eagle take is as likely to happen at alternate golden eagle nests as at used golden eagle nests, the need to base nest risk data on multiple years of data and not just one, and the need to install underground new powerlines at the Project site to reduce risk to eagles and greater sage-grouse.

Pronghorn

184. Nearly the entire Project area is within pronghorn winter range. FEIS Figure 4.5-7. The FEIS discloses that potential direct effects to pronghorn from the Project include the loss of 427 acres of summer range and 4,960 acres of winter range over the life of the mine or longer, depending on the success of reclamation. Two pronghorn movement corridors lie within the Project area. These corridors facilitate access between limited use and winter range habitat to the south of the Project area and winter range, summer range, and year-round habitat to the north of the Project area, and daily movement between the Quinn River Valley and the Montana Mountains. The construction of Project facilities and the associated loss of habitat is likely to prohibit or impede pronghorn movement between seasonal habitats and during daily movement.

185. The FEIS does not consider or disclose how severing these pronghorn movement corridors, or destroying nearly 5,000 acres of pronghorn winter range, will impact local pronghorn populations. The FEIS' consideration of impacts to pronghorn from the mine development appears limited to vague generalizations like the following:

"Surface disturbance associated with mining activities and development of mine facilities…would directly affect wildlife through the loss of potentially suitable habitat by vegetation removal, and removal of seeps and springs and seasonal water sources for wildlife" and "Surface disturbance would also result in habitat fragmentation. Habitat fragmentation can affect species use of the area by reducing the landscape size for species that require large breeding or foraging ranges, increasing barriers to migration or movement, changing abiotic and biotic factors making the habitat less suitable, and reducing access to resources and potential mates." FEIS at 4-34.

186. But these generalizations do not address the effect of severing pronghorn migration corridors or destroying winter range on pronghorn.

187. While the FEIS appears to attempt to minimize the impact of the habitat destruction that will occur by comparing the amount of habitat to the total amount of habitat in the regional Hunt Unit 31, it does not consider the significance of this specific pronghorn habitat to the local pronghorn population. Plaintiffs submitted detailed evidence addressing the effects of severing pronghorn migration corridors or destroying winter range for BLM's consideration but the agency largely ignored these issues in the FEIS.

Amphibians

188. Although the FEIS discloses that western toad, Columbia spotted frog, and northern leopard frog—all Sensitive Species that BLM is mandated to conserve by its own policy and by FLPMA—may be present in the Project area, no amphibian surveys were conducted for the Project and no mitigation measures for amphibians were adopted. The only amphibians specifically discussed in the FEIS is the western toad, and the FEIS paradoxically claims that impacts to the toad are unlikely while simultaneously admitting that "Western toads may be prevented from moving through disturbed upland habitats located between the limited amounts of aquatic/riparian

habitat in the Project area." FEIS at 4-48. Thus, impacts to Western toads are likely, but the FEIS ignores those impacts.

189. The FEIS lacks an adequate baseline upon which to analyze Project effects to amphibians from the mine development and has adopted no measures to avoid impacts to amphibians, even though the mine will lower the water table, affecting perennial and ephemeral waterbodies that these species use. The FEIS fails to even mention numerous amphibians that are likely to be present in the Project area.

Springsnails

190. Two species of springsnails were found in the Project area during wildlife surveys, the Kings River pyrg (*Pyrgulopsis imperialis*) and the turban pebblesnail (*Fluminicola turbiniformis*). *See* FEIS Appendix G unnumbered page 129 of 133. The Kings River pyrg is a critically imperiled endemic species at high risk of extinction (NatureServe conservation score G1, N1, S1), and the turban pebblesnail is a vulnerable species at moderate risk of extinction or elimination (NatureServe conservation score G3,S3). The Kings River pyrg is on the State of Nevada's At Risk Tracking List of imperiled species, which are considered at highest risk of extirpation or extinction. The turban pebblesnail is on the State of Nevada's Watch List of species of long-term concern. The FEIS does not disclose these At Risk and Watch List statuses, instead merely describing the springsnails as "NDOW species of conservation priority." FEIS Appendix G at unnumbered page 120 of 133. In addition, the Kings River pyrg's high risk of extinction is nowhere discussed in the FEIS.

191. The FEIS does not provide clear information as to the number of Kings River pyrg that were found, how many springs contained them, or which springs contained them, thus making it impossible for anyone, including BLM, to accurately assess risk to the pyrg from the Mine. Instead, the FEIS merely states: "Springsnails were surveyed at 13 undeveloped springs in the survey area. During surveys for springsnails, the Kings River pyrg (Pyrgulopsis imperialis) was found at all springs collected." FEIS

Appendix G at unnumbered page 129 of 133. Since the Kings River pyrg is an endemic species only known to exist in 13 locations, the local area might contain the **entire known population** of the Kings River pyrg. *See* Conservation Strategy for Springsnails Summary Reports at 4. Threats and stressors to springsnails include water depletions, like the dewatering effects associated with the Mine. NDOW asked in its FEIS comments for monitoring of five of the 13 springs where Kings River pyrg were found to be present, but the ROD contains no commitment to monitoring those springs. NDOW FEIS comments at 4-5. *See also* Wildlife Resource Consultants, Lithium Nevada 2018 Springsnail (*Pyrgulopsi*s spp.) Survey, at p. 7, December 19, 2018.

192. Instead of disclosing and discussing springsnail threats, stressors, and extinction risk, the FEIS fails to mention either the Kings River pyrg or the turban pebblesnail by name in its impacts analysis and states that there will be no direct impacts to springsnails. FEIS at 4-48, 4-50. As for indirect impacts, the FEIS directs the reader to section 4.5.3 (potential impacts of groundwater drawdown to wildlife). But that section does not disclose whether there will be indirect impacts to springsnails or that the potential indirect impacts to wildlife in the Project area may include extinction. FEIS at 4-53 to 4-55. Nor does the FEIS propose any mitigation specifically for springsnails, or explain how the Kings River pyrg will maintain its representation, resiliency, and redundancy, which are all necessary for population integrity and species survival.

Lahontan Cutthroat Trout

193. BLM also failed to analyze the baseline conditions and impacts to Lahontan cutthroat trout (LCT), which is protected under the federal Endangered Species Act (ESA), 16 U.S.C. §§ 1531 *et seq.*, due to the agency's unsupported position that the Project will not have any effect on LCT in Crowley Creek, Pole Creek, and related habitat within the Project area. BLM erroneously assumed, in contradiction of the record, that there

was no LCT stream habitat that would be affected by the Project's dewatering and other operations.

194. BLM approved the ROD based on the FEIS's inadequate, incomplete, and, in several cases, incorrect analysis and collection of the baseline streamflow data and, thereby failed to consider the likely impacts of the Mine on the LCT populations in Pole Creek and Crowley Creek.

195. BLM also elected not to apply quantitative buffers to Pole Creek, Crowley Creek, and spring sites in the Project area as requested by NDOW to protect LCT.

196. In reliance on the flawed data provided by the company's consultants, BLM did not consult with the U.S. Fish and Wildlife Service (FWS), based on BLM's erroneous belief that there would "no effect" to LCT from the mine, including the mine's large-scale dewatering of the regional aquifer.

197. Yet the ESA requires such consultation when BLM takes an action (such as reviewing and approving a mine plan) that "may affect listed species or critical habitat" for that species. Karuk Tribe of California v. U.S. Forest Service, 681 F.3d 1006, 1020 (9th Cir. 2012) *citing* 16 U.S.C. §1536(a)(2) and *quoting* 50 C.F.R.§402.14(a). "We have previously explained that 'may affect' is a 'relatively low' threshold for triggering consultation." Karuk Tribe, 681 F.3d at 1027.

198. Due to the ESA's jurisdictional requirement that Plaintiffs may not assert a failure-to-consult claim under the ESA before providing BLM, FWS, and related officials with 60 days' notice, Plaintiffs intend to promptly file such notice and, if BLM does not comply with the ESA within those 60 days, amend this Complaint to add such claim under the ESA.

199. In any event, however, the FEIS' erroneous determination that there will be "no effect" from the Mine on LCT or its habitat violates NEPA's and FLPMA's mandates that BLM fully and accurately analyze all baseline conditions and environmental impacts of the Mine.

Failure to Adequately Analyze Cumulative Impacts

200. As noted, NEPA requires BLM to consider cumulative impacts associated with actions it approves. "'Cumulative impact' is the impact on the environment which 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 non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7.

201. As the Ninth Circuit held: "[i]n a cumulative impact analysis, an agency must take a 'hard look' at *all* actions' that may combine with the action under consideration to affect the environment. *Te–Moak Tribe of W. Shoshone of Nev. v. U.S. Dep't of Interior*, 608 F.3d 592, 603 (9th Cir. 2010)." Great Basin Resource Watch, 844 F.3d at 1104 (emphasis in original). BLM failed to do that here.

202. The FEIS fails to adequately analyze the cumulative impacts from the other proposed activities within the cumulative effects study area on wildlife, air quality, and other potentially affected resources.

203. NEPA's obligation to consider cumulative impacts extends to all "past," "present," and "reasonably foreseeable future actions." 40 C.F.R. § 1508.7. This analysis must include Project-specific cumulative data, a detailed quantified assessment of other projects' combined environmental impacts, and objective quantification of the impacts from other past, existing and proposed activities within the Cumulative Effect Study Area (CESA). Great Basin Resource Watch, 844 F.3d at 1104-06.

204. The FEIS acknowledges the large "Cumulative Effects Study Area" for critical resources that will be affected by the Project:

Table 5.1. Cumulative Effects Study Areas by Resource

Resource	CESA Description	CESA Name	Size of CESA (acres)
Water Resources	Effect Model Domain	Groundwater CESA	288,501
	Quinn River and Kings River Valley hydrographic basins	Surface Water CESA	596,480
Vegetation and Wetlands	Quinn River and Kings River Valley hydrographic basins	Vegetation CESA	596,480
General Wildlife	NDOW Hunt Unit 031	Recreation CESA	86,104
Special Status Species – GRSG	Lone Willow PMU	GRSG CESA	480,106
Special Status Species – Eagles	Project area and a 10-mile buffer	Eagle CESA	218,391
Special Status Species – LCT	Quinn River and Kings River Valley hydrographic basins	LCT CESA	596,480

FEIS at 5-1.

205. BLM lists some of the other activities within the Thacker Pass CESA:

Table 5.2. Surface Disturbance Associated with Past and Present Actions and RFFAs within the Resource CESAs

Action	Past and Present Disturbance (acres)	Projected RFFA Disturbance (acres)	Total Disturbance (acres)
Mines and Quarries			
National Mine Exploration Project1	-	200	200
Moonlight Uranium Mine	14.6	-	14.6
Kings Valley Clay Mine	50.5	-	50.5
Sand and Gravel Operations	24	-	24
Utilities and Infrastructure			
Roads	12,485	-	12,485
Railroads	1,479	-	1,479
Communication Sites	249	-	249
Transmission Lines	4,209	-	4,209
Other			
Wildfires	22,459	-	22,459
Total	**40,970**	**200**	**41,170**

FEIS at 5-2.

206. Yet the FEIS contains little, if any, of the detailed analysis of these and other past, present, and reasonably foreseeable future activities within the CESA that may cumulatively affect these resources.

207. BLM simply lists the acreages of these activities, with no detailed impacts analysis:

> Reasonably Foreseeable Future Actions
> RFFAs for the Thacker Pass Lithium Mine EIS cumulative effects analysis include other projects or actions that potentially affect those resources that would be affected by the Proposed Action during the same period of time (including final reclamation). RFFAs for which disturbance acreages can be quantified are presented in Table 5.2 and RFFAs for which disturbance acreages are unknown are described below. RFFAs identified in this section must also have been determined by the BLM as having a reasonable likelihood of moving forward towards development and to be located within the boundaries of the various CESAs for the Proposed Action.
>
> Other development predicted in the Winnemucca District Resource Management Plan that could contribute to cumulative effects includes renewable energy facilities, utility and road rights of way, vegetation treatments and hazardous fuels reduction, spread and invasion of noxious weeds, continued changes and possible intensification to Nevada's climate in association with global climate change, and increasing wildfire occurrence and intensity.

FEIS at 5-3.

208. The Ninth Circuit recently rejected a similarly cursory analysis contained in another BLM EIS for a large open pit mine in Nevada:

> **[I]n a cumulative impact analysis, an agency must take a 'hard look' at all actions" that may combine with the action under consideration to affect the environment.** *Te–Moak Tribe of W. Shoshone of Nev. v. U.S. Dep't of Interior*, 608 F.3d 592, 603 (9th Cir. 2010) (emphasis added). Furthermore, **simply listing all relevant actions is not sufficient.** Rather, "some quantified or detailed information is required. Without such information, neither the courts nor the public ... can be assured that the [agency] provided the hard look that it is required to provide." *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1379 (9th Cir. 1998).

Great Basin Resource Watch v. BLM, 844 F.3d 1095, 1104 (9th Cir. 2016)(emphasis added).

209. NEPA requires "mine-specific . . . cumulative data," a "quantified assessment of their [other projects] combined environmental impacts," and "objective quantification of

the impacts" from other existing and proposed operations in the region. Great Basin Mine Watch v. Hankins, 456 F.3d 955, 971-74 (9th Cir. 2006). The Ninth Circuit in Great Basin Mine Watch v. Hankins specifically rejected BLM's argument that a list of other projects and their acreages satisfied NEPA's cumulative impacts analysis requirements: "A calculation of the total number of acres to be impacted by other projects in the watershed is a necessary component of a cumulative effects analysis, but is not a sufficient description of the actual environmental effects that can be expected." Id. at 973 (citations omitted).

210. For example, the FEIS does not even mention the ongoing McDermitt lithium drilling project just to the north across the Oregon border that will have significant impacts on sage grouse, pronghorn, and other wildlife species. https://company-announcements.afr.com/asx/jrl/25f78400-278c-11eb-ac8c-2e2b57e0ab13.pdf (Nov. 16, 2020) (depicting and describing drilling and activities over thousands of acres).

211. For the sage grouse, BLM arbitrarily cuts off its review of cumulative impacts at the Nevada/Oregon border, limiting its review to only the "Lone Willow PMU" which ends at the border. FEIS at 5-1. Yet the Lone Willow PMU is part of a larger sage grouse PAC (Priority Area of Conservation) that does not end at the OR-NV state line. *See* U.S. Fish and Wildlife Service, 2013, Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, at 14 (Figure 2. Sage-grouse management zones (Stiver *et al*. 2006) and Priority Areas for Conservation (PACs)). https://www.fws.gov/greatersagegrouse/documents/COT-Report-with-Dear-Interested-Reader-Letter.pdf

212. The FEIS also arbitrarily truncates its review of cumulative impacts to other wildlife at the Oregon/Nevada border, even though it is obvious that wildlife movement and impacts do not recognize such an arbitrary line. For example, the FEIS limits its consideration of cumulative wildlife impacts to "General Wildlife" to just the "NDOW Hunt Unit 031" covering the "Recreation CESA" of just 86,104 acres. FEIS

at 5-1 (Table 5.1 "Cumulative Effects Study Areas by Resource,"). Yet BLM provides no analysis as to why the "Hunt Unit" area comprises all of the affected wildlife resources. There is no analysis to support these arbitrary limits to cumulative impacts to wide-ranging species such as migratory pronghorn.

Failure to Adequately Analyze Mitigation Measures and Their Effectiveness

213. NEPA requires DOI/BLM to fully analyze mitigation measures, their effectiveness, and any impacts that might result from their implementation. NEPA regulations require that an EIS: (1) "include appropriate mitigation measures not already included in the proposed action or alternatives," 40 C.F.R. § 1502.14(f); and (2) "include discussions of: . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(f))." 40 C.F.R. § 1502.16(h). As noted herein, that did not occur in this case.

214. NEPA requires that DOI/BLM review mitigation measures as part of the NEPA process -- not in some future decision shielded from public review. *Id*.

> Putting off an analysis of possible mitigation measures until after a project has been approved, and after adverse environmental impacts have started to occur, runs counter to NEPA's goal of ensuring informed agency decisionmaking. *See Robertson*, 490 U.S. at 353, 109 S.Ct. 1835 ("Without [a reasonably complete] discussion [of mitigation], neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.").

Great Basin Resource Watch, 844 F.3d at 1107.

215. BLM has the duty under FLPMA to mitigate all adverse impacts:

> Although other Federal and State agencies regulate various aspects of mining under other statutes, BLM has its own responsibilities under FLPMA and the mining laws to protect the resources and values of the public lands from unnecessary or undue degradation.
> …
> [S]ections 302(b) and 303(a) of FLPMA, 43 U.S.C. 1732(b) and 1733(a), and the mining laws, 30 U.S.C. 22, provide the BLM with the authority to require mitigation. **Mitigation measures fall squarely within the actions the Secretary can direct to prevent unnecessary or undue degradation of the public lands. An impact that can be mitigated, but is not, is clearly unnecessary.**

65 Fed.Reg. 69998, 70053 (November 21, 2000)(Preamble to BLM's 43 C.F.R. Part 3809 mining regulations)(emphasis added).

216. The FEIS and ROD do not contain the required analysis of mitigation measures for the affected resources, nor a credible analysis of the effectiveness of these measures.

217. For the predicted groundwater pollution, as noted above, EPA found that the FEIS lacked the required analysis:

> While the Final EIS includes three conceptual options that have the potential to mitigate antimony groundwater contamination (Appendix P Part 1 p. 154-159), **the plans are not developed with an adequate level of detail to assess whether or how groundwater quality downgradient from the pit would be effectively mitigated.** In our comments on the Draft EIS, the EPA recommended more detailed information about how effective these potential mitigation options could be, and an evaluation of additional disturbance and impacts from implementing the proposed mitigation options (40 CFR 1508.25(a)(1)(iii)).

EPA's Detailed Comments on FEIS at 1 (emphasis added).

218. EPA highlighted how BLM failed to respond to these serious concerns:

> In response, the BLM stated that options for blending/discharge and active treatment "have not been evaluated, and therefore may not be feasible for consideration as mitigation for the Final EIS" (Appendix R p. R-180). **Therefore, conclusions in the Final EIS that groundwater quality management plans would "effectively mitigate impacts to groundwater quality downgradient from the pit" (p. 4-25) are not adequately supported**.

Id.

219. EPA criticized BLM for failing to meet its environmental protection responsibilities at the Mine: "**Without detailed information about mitigation and its efficacy, it is unclear how a Record of Decision could state that all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted.**" *Id*. (emphasis added).

220. EPA also noted that LNC recently submitted a new mitigation plan that purportedly reduces the ground water pollution – but that this plan was submitted long after the NEPA public review process ended. "This revised monitoring plan includes a new potential future mitigation option for groundwater quality impacts **that was not discussed in the Draft or Final EIS**." *Id*. (emphasis added).

221. The FEIS also does not include any plans for public review regarding the needed mitigation for the long-term treatment of the toxic seepage from the tailings facility, as noted above.

222. Under NEPA, BLM cannot rely on purported mitigation measures to comply with environmental protection standards when those mitigation measures have not been subject to public review. "[A] post-EIS analysis – conducted without any input from the public – cannot cure deficiencies in an EIS." Great Basin Resource Watch, 844 F.3d at 1104.

223. Likewise, EPA specifically criticized the lack of such analysis for wildlife mitigation, for instance:

> **The Final EIS did not include a mitigation, monitoring, and adaptive management plan for wildlife mitigation measures** SSS-1 to SSS-9 (p. 4-62 to 4-65). Although the updated Plan of Operations included a monitoring plan in Appendix H, this did not include information on these measures. The EPA is concerned that several of these measures require additional monitoring and adaptive management to ensure mitigation success, such as creating the artificial burrowing system for western burrowing owls (SSS-7; p. 4-64, 65) and roosting bat habitat (SSS-9; p. 4-65).

EPA Detailed Comments on FEIS, at 2 (emphasis added).

224. The FEIS also assumes that compensatory mitigation will fully address impacts to sage-grouse, even though LNC has purchased no permanent conservation credits to offset permanent dewatering from the mine that will affect water resources sage-grouse need for brood-rearing and summer habitats.

Failure to Determine the Project's Reclamation Costs and Financial Assurances

225. In the ROD, BLM approved LNC's Plan of Operation for the Projects (both the Mine and the Exploration project) without determining the reclamation and related costs as required by BLM's FLPMA mining regulations.

226. BLM mining regulations require that all activities in the Plan of Operations be covered by a "financial guarantee" that "must cover the estimated cost as if BLM were to contract with the third party to reclaim your operations according to the reclamation plan, including construction and maintenance costs for any treatment facilities necessary to meet Federal and State environmental standards." 43 C.F.R. § 3809.552(a).

227. The "reclamation cost determination" made by BLM is the amount of monies that must be covered by the financial guarantee. 43 C.F.R. § 3809.554. Financial guarantee instruments can take the form of "surety bonds," cash, "irrevocable letters of credit from a bank or financial institution," "certificates of deposit or savings accounts," "negotiable United States Government, State and Municipal securities or bonds," "Investment-grade rated securities," or insurance with a "rating of 'superior' or an equivalent from a nationally recognized insurance rating service." 43 C.F.R. § 3809.555(a)-(f).

228. The required Reclamation Cost Estimate (RCE) submitted by the operator forms the basis for the reclamation cost determination made by BLM. "The BLM FO [Field Office] or other delegated AO [Authorized Officer] issues a written determination of the named operator's reclamation cost estimate (RCE) and required bond amount for existing and/or proposed disturbance on the specified operations." BLM Surface Management Bond Processing Handbook, H-3809-2, at II-1.

229. BLM's "Surface Management Handbook, H-3809-1" which governs the review and approval of mining operations, requires that the reclamation cost determination be made and established at the time the ROD approving the mining plan is issued.

> A decision approving a Plan of Operations and stating the conditions of approval must be sent to the operator by certified mail, return receipt requested. **The decision must state the estimated reclamation cost determination and the financial guarantee amount.** The decision must also remind the operator that

> surface disturbing activity cannot begin until the financial guarantee has been accepted and obligated by the BLM.

BLM Handbook H-3809-1, at 4-45 (emphasis added).

230. In addition, due to the need to treat the contaminated water releases from the Project, from both the mine pit and the tailings, BLM is required to establish a Long-Term Funding Mechanism for the Project. *See* BLM Guidelines for Establishing a Long Term Funding Mechanism (LTFM); 43 C.F.R. § 3809.552(c). "[Y]ou must establish a trust fund or other funding mechanism available to BLM to ensure the continuation of long-term treatment to achieve water quality standards and for other long term, post-mining maintenance requirements. The funding must be adequate to provide for construction, long-term operation, maintenance, or replacement of any treatment facilities and infrastructure, for as long as the treatment and facilities are needed after mine closure. BLM may identify the need for a trust fund or other funding mechanism during plan review or later." 43 C.F.R. § 3809.552(c).

231. Despite this, the ROD does not contain the required reclamation cost determinations, including the LTFM, for the operations approved in the ROD.

232. The FEIS contains the Reclamation Cost Estimate (RCE) for the "Thacker North South Exploration Project." FEIS Appendix B. But, critically, neither the ROD nor the FEIS mention the RCE for the much larger and extensive Mine Project.

233. Although the company acknowledged that the RCE was required, it admitted that none was submitted:

> Per 43 CFR 3809 and NAC 519A.365, operators are required to provide the BLM and NDEP with a Reclamation Cost Estimate. **The Reclamation Cost Estimate will be prepared at a later date** when the Plan review and approval process has progressed to the point where the BLM, NDEP, and LNC (the operator) can anticipate what the approved Plan might look like. Per 43 CFR 3809.401(d), the operator will submit the Reclamation Cost Estimate during the appropriate time during the Plan review and approval process.

LNC mine plan, Appendix J (emphasis added).

https://eplanning.blm.gov/public_projects/1503166/200352542/20023464/250029668/Appendix%20J%20Insert_508.pdf

234. The BLM in Nevada regularly follows BLM's reclamation financial requirements for the determination of the reclamation cost estimate in decisions approving mining Plans of Operations. *See* Decision approving the Prospect Mountain Mine Project southwest of Eureka. In approving the Plan of Operations for that mine, BLM stated:

> **AMOUNT OF FINANCIAL GUARANTEE**
> This office has determined that the amount of $489,175 is sufficient to meet all anticipated reclamation requirements for the Project.
> …
> The operator must submit an acceptable financial guarantee in the amount of $489,175 to the Bureau of Land Management.

July 12, 2019 "Decision, Plan of Operations Approval, Determination of Required Financial Guarantee Amount [Prospect Mountain Project]," at 3-4. https://eplanning.blm.gov/epl-front-office/Projects/nepa/108000/176864/215537/20190712_Gullsil_ProspectMtn_DecisionRecord.pdf (viewed February 8, 2021).

235. Yet as noted above, BLM failed to make these required determinations in the ROD for the Project, which approved the two Plans of Operations for the mine and exploration project.

236. For another large mine in Nevada, BLM's ROD approving the plan of operations established the reclamation bond and LTFM. For the Mount Hope Project, BLM accepted the company's RCE and the 2012 ROD approving that company's Plan of Operations included the required reclamation cost determination. The 2012 for the Mount Hope Project, the BLM ROD "determined that the required financial guarantee amount is hereby set at $73,360,363 for the 7,992 acres of surface disturbance on public and private lands associated with the first three years of operations for the Project (NVN-082096), as described in the Plan. The proponent

must provide a financial guarantee in this amount using one or more of the acceptable financial guarantee instruments listed under 43 CFR § 3809.55." BLM Mount Hope 2012 ROD at 30.

237. In addition, BLM's Mount Hope 2012 ROD established a Long-Term Funding Mechanism for the Project:

> Pursuant to the Guidelines for Establishing a Long Term Funding Mechanism (LTFM) and in accordance with 43 CFR § 3809.552(c), the BLM has determined that a LTFM will be required for post-reclamation obligations (including long-term monitoring and mitigation) associated with the closure process of the Mount Hope Project. …
>
> The LTFM will include the establishment of a trust fund that is implemented through *The Mt. Hope Project Long-Term Irrevocable Trust* and the *Mt. Hope Project Long-Term Trust Agreement* (collectively "Agreements"). EML will fund the initial amount of the trust fund in the amount of $271,912. The initial funding amount was calculated based on the projected costs of implementing the above-described post-reclamation requirement for approximately 500 years. Total cost of the mitigation and monitoring over the 500 year period is anticipated to be $83,202,396. The creation and funding of the LTFM does not preclude BLM from requiring further reclamation, monitoring or mitigation pursuant to 43 CFR § 3809 should conditions warrant.
>
> Funding requirements are currently being finalized and, upon acceptance by the BLM, all funding mechanisms must be put in place in accordance with the Agreements. Documentation of such funding shall be provided to the Bureau of Land Management, Nevada State Office, Branch of Minerals Adjudication, 1340 Financial Blvd., Reno, NV 89502-7147.

BLM 2012 ROD for the Mount Hope Project at 31.

238. Yet, at Thacker Pass, BLM failed to analyze or include any such financial requirements for public review, or as part of the FEIS or ROD.

239. EPA specifically faulted BLM for failing to comply with the reclamation bonding requirements, especially given the need for long-term mitigation and treatment of the water pollution from the Thacker Pass Project:

> **Funding for Long-Term Post-Closure Water Management**
> The EPA has expressed concerns through the NEPA process regarding the adequacy of funding for long-term post-closure management. Given that management of antimony would be required in perpetuity, it is important to demonstrate that sufficient financial resources would be available to ensure

> successful implementation of post-closure WPCP monitoring and mitigation commitments. It is important to evaluate the likelihood that required mitigation will be implemented, and we believe that financial assurance is a critical tool for this evaluation.
>
> BLM's Guidelines for Establishing a Long-Term Funding Mechanism states that if an EIS identifies water quality issues requiring long-term treatment that the "district/field manager must require a financial guarantee to address those PRO [post-reclamation obligations]."3 Therefore, it remains unclear why an LTFM has not been disclosed, discussed, or evaluated in the NEPA process. We strongly encourage the BLM to discuss the need for an LTFM in the ROD.

EPA Detailed Comments at 2-3.

240. EPA also requested that the ROD specify these financial requirements:

> ***Recommendations for the ROD:***
> Commit to an LTFM if required by the activities and conditions in the WPCP to monitor and mitigate for antimony groundwater contamination in perpetuity. Determine an appropriate level of funding for post-closure management monitoring and disclose the specific mechanism that would be established for the preferred alternative. Analyze the adequacy of the disclosed funding amount and funding mechanism to ensure that all financial obligations would be met and all required mitigation will be completed. Include projected costs for any post-closure activities and discuss whether the BLM would impose a requirement on the mine operator, LNC, to establish a trust fund or other funding mechanism to ensure post-closure care, in accordance with 43 CFR 3809 and BLM's H-3809-1 Surface Management Handbook.

Id. at 3.

241. Despite this, BLM refused to include any information on the reclamation bond or LTFM in the ROD approving the Project.

242. BLM's failure to include the reclamation cost bond/financial guarantee amount for either the Plans of Operations for the Mine or the Exploration violates FLPMA and its implementing regulations, as well as the public comment and review requirements of NEPA.

CLAIMS FOR RELIEF

FIRST CAUSE OF ACTION

Violation of FLPMA – Violation of the Wildlife Provisions of the Controlling Resource Management Plans

243. The allegations in the previous paragraphs are reasserted as if fully stated herein.

244. The ROD, FEIS and Project approvals do not comply with the Winnemucca RMP and the applicable RMP for protection of the Greater Sage Grouse as required by FLPMA. In particular, the ROD will allow for destructive development in sage-grouse habitats that exceeds the project-level three percent disturbance cap, without applying the criteria required to deviate from that cap, and without applying noise limits, lek buffers, or required design features, or fully offsetting impacts to sage-grouse through compensatory mitigation.

245. Instead, BLM based its review and approval of the Project on an erroneous legal assumption that LNC had statutory rights to conduct all of their proposed operations, including the permanent use and occupation of public lands for the waste rock and tailings dumps, without the necessary factual evidence to support the establishment of those rights, thus failing to properly review and regulate the Project under FLPMA to protect public resources and the public interest, in violation of FLPMA and its implementing regulations.

246. BLM's actions and omissions noted above regarding its review and approval of the Thacker Pass Project violate FLPMA and its implementing regulations. BLM's actions and omissions in reviewing and approving the Project are arbitrary, capricious, an abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations, within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-706.

SECOND CAUSE OF ACTION

Violation of FLPMA – Violation of the Visual Resource Provisions of the Controlling Resource Management Plan

247. The allegations in the previous paragraphs are reasserted as if fully stated herein.

248. The ROD, FEIS and Project approvals violate the Winnemucca RMP's Visual Resource (VRM) requirements as required by FLPMA.

249. BLM would have needed to complete an RMP Amendment to legally move forward with the Project but did not.

250. Instead, BLM based its review and approval of the Project on an erroneous legal assumption that LNC had statutory rights to conduct all of their proposed operations, including the permanent use and occupation of public lands for the waste rock and tailings dumps, without the necessary factual evidence to support the establishment of those rights, thus failing to properly review and regulate the Project under FLPMA to protect public resources and the public interest, in violation of FLPMA and its implementing regulations.

251. BLM's actions and omissions noted above regarding its review and approval of the Thacker Pass Project violate FLPMA and its implementing regulations. BLM's actions and omissions in reviewing and approving the Project are arbitrary, capricious, an abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations, within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-706.

THIRD CAUSE OF ACTION

Violation of FLPMA and NEPA – Review and Approval of the Project Based On Unsupported Assumptions of LNC's "Valid Existing Rights" Under the 1872 Mining Law

252. The allegations in the previous paragraphs are reasserted as if fully stated herein.

253. BLM based its review and approval of the Project on an erroneous legal assumption that LNC had statutory "valid existing rights" to conduct all of their proposed operations, including the permanent use and occupation of public lands for the waste rock and tailings dumps, without the necessary factual evidence to support the establishment of those rights, thus failing to properly review and regulate the Project under FLPMA to protect public resources and the public interest, in violation of FLPMA, NEPA, and their implementing regulations.

254. BLM's actions and omissions noted above regarding its review and approval of the Thacker Pass Project violate FLPMA and its implementing regulations. BLM's actions and omissions in reviewing and approving the Project are arbitrary, capricious, an abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations, within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-706.

FOURTH CAUSE OF ACTION

Violation of NEPA and FLPMA – Failure to Adequately Analyze Mitigation Measures and Their Effectiveness

255. The allegations in the previous paragraphs are reasserted as if fully stated herein.

256. In the ROD and FEIS, BLM failed to adequately and accurately analyze mitigation measures, and the effectiveness of those measures, as required by NEPA and FLPMA.

257. BLM's actions and omissions noted above regarding its review and approval of the Project, violate NEPA, FLPMA and their implementing regulations. BLM's actions and omissions in reviewing and approving the Project are arbitrary, capricious, an abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations,

within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-706.

FIFTH CAUSE OF ACTION

Violation of NEPA and FLPMA – Failure to Adequately Analyze Direct, Indirect, and Cumulative Impacts

258. The allegations in the previous paragraphs are reasserted as if fully stated herein.

259. In the FEIS and ROD, BLM failed to adequately and accurately analyze the Project's direct, indirect and cumulative impacts to wildlife, air and water resources, and all other potentially affected resources, as required by NEPA and FLPMA.

260. BLM's actions and omissions noted above regarding its review and approval of the Project, violate NEPA, FLPMA, and their implementing regulations. BLM's actions and omissions in reviewing and approving the Project are arbitrary, capricious, an abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations, within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-706.

SIXTH CAUSE OF ACTION

Violation of NEPA and FLPMA – Failure to Adequately Analyze Background/Baseline Conditions

261. The allegations in the previous paragraphs are reasserted as if fully stated herein.

262. In the FEIS and ROD, BLM failed to adequately and accurately analyze the background/baseline conditions of resources that will be potentially affected by the Project, including wildlife and water and air quality, as required by NEPA and FLPMA.

263. BLM's actions and omissions noted above regarding its review and approval of the Project, violate NEPA, FLPMA, and their implementing regulations. BLM's actions and omissions in reviewing and approving the Project are arbitrary, capricious, an

abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations, within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-706.

SEVENTH CAUSE OF ACTION

Violations of NEPA and FLPMA – Failure to Ensure Compliance with Air and Water Quality Standards and Protect Public Resources

264. The allegations in the previous paragraphs are reasserted as if fully stated herein.

265. BLM's determination that the Project will comply with all applicable air and water quality standards, based on an erroneous and factually-deficient NEPA analysis was arbitrary and capricious, made without the consideration of all relevant factors, and violates FLPMA and its implementing regulations.

266. BLM's actions and omissions in reviewing and approving the Project are arbitrary, capricious, an abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations, within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-706.

EIGHTH CAUSE OF ACTION

Violation of FLPMA and NEPA – Failure to Determine Reclamation Costs and Related Financial Assurances

267. The allegations in the previous paragraphs are reasserted as if fully stated herein.

268. BLM's failure to determine the amount of the Project's full reclamation and related costs, as well as the Long Term Funding Mechanism (LTFM), as part of the ROD's approval of the Plan of Operation violates FLPMA its implementing regulations.

269. BLM's failure to determine the amount of the Project's full reclamation and related costs as part of the ROD's approval of the mining Plan violates FLPMA, NEPA, and their implementing regulations.

270. DOI/BLM's actions and omissions in reviewing and approving the Project and ROWs are arbitrary, capricious, an abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations, within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-706.

NINTH CAUSE OF ACTION

Violation of FLPMA – Authorizing Unnecessary or Undue Degradation

271. The allegations in the previous paragraphs are reasserted as if fully stated herein.

272. The violations of NEPA, FLPMA, and other laws/regulations noted in this Complaint constitute "unnecessary or undue degradation" (UUD) that FLPMA prohibits. BLM's failure to protect public resources as detailed above also violates the UUD standard.

273. BLM's actions and omissions noted above regarding its review and approval of the Thacker Pass Project, violate NEPA, FLPMA and its implementing regulations.

274. BLM's actions and omissions in reviewing and approving the Project are arbitrary, capricious, an abuse of discretion, not in accordance with law, without observance of procedure required by law, and in excess of statutory jurisdiction, authority, or limitations, within the meaning of the judicial review provisions of the APA. 5 U.S.C. §§ 701-70

REQUEST FOR RELIEF

WHEREFORE, Plaintiffs pray that this Court:

A. Declare that BLM's actions, omissions, and decisions reviewing and approving the Thacker Pass Project (including the Mine and Exploration Projects) and related actions violate NEPA, FLPMA, and their implementing regulations;

B. Pursuant to the APA, set aside and Vacate the ROD, FEIS, and Project approvals.

C. Enjoin Defendants, their agents, servants, employees, and all others acting in concert with them, or subject to their authority or control, from proceeding with any aspect of the Thacker Pass Project, pending full compliance with the requirements of federal law;

D. Grant Plaintiffs their costs and reasonable attorneys fees incurred in bringing this action, pursuant to the Equal Access to Justice Act (EAJA), 28 U.S.C. §2412 et seq., and any other applicable statutory or equitable principles; and

E. Grant such further relief this court deems just and proper.

Respectfully submitted this 26th day of February, 2021.

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