| 1 2 | National Mining Association; Nuclear Energy Institute, | } |
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| 3 | Plaintiffs; |) Civil No. 3:12-cv-08038-) DGC |
| | V. | |
| 4 | S.R.M. Jewell, Secretary of the Interior; | |
| 5 | et al., | |
| 6 | Defendants; | |
| 7 | and | |
| 8 | Grand Canyon Trust, et al., | |
| 9 | Defendant-Intervenors. | } |
| 10 | Northwest Mining Association, |) |
| 11 | Plaintiff, | } |
| 12 | V. |) Civil No. 3:12 -cv-0842-DGC |
| 13 | S.R.M. Jewell, Secretary, Department of | |
| 14 | the Interior; et al., | |
| 15 | Defendants; | |
| 16 | and | |
| 17 | Grand Canyon Trust, et al. | |
| 18 | Defendant-Intervenors. | \ |
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MOTION FOR SUMMARY JUDGMENT

Pursuant to Fed. R. Civ. P. 56, L.R. 56.1, and the Case Management Order (ECF 143) Plaintiffs Quaterra Alaska, Inc. (Quaterra), Arizona Utah Local Economic Coalition, on behalf of named member Mohave County, Arizona; (AULEC) file this motion for summary judgment to set aside the Department of the Interior (DOI) Secretary's Public Land Order 7787 (PLO 7787) which closed roughly one million acres of Forest Service (FS) and Bureau of Land Management (BLM) lands in Northern Arizona (hereafter Northern Arizona withdrawal or NAW) from operation of the Mining Laws, 30 U.S.C. §§28-42. Quaterra incorporates by reference the statements of fact and legal arguments of Northwest Mining Association (NWMA), National Mining Association (NMA) and Nuclear Energy Institute (NEI). As grounds for the motion for summary judgment, Plaintiffs establish that:

- The ROD violates both the Federal Land Management and Policy Act
 (FLPMA) and National Environmental Policy Act (NEPA) because:
- a. ROD findings are from a 2010 U.S. Geological Service Scientific Investigative Report 2010-5025 (SIR 2010-5025) which does not include (I) peer review changes for water quality findings, Statement of Facts (SOF) ¶47; (ii) expert National Park Service (NPS) hydrology comments that FEIS, which used the SIR 2010-5025, greatly exaggerates possible impacts to aquifers and the watershed, SOF¶48-49; (iii) excludes the robust regulatory system designed to preclude any risk of significant harm, ¶¶40-46; (iv) assumes impact to perched aquifers using assumptions at odds with the facts, ¶46; (v) assumes 'legacy of contamination' due to past uranium mining without disclosing that two sites were unreclaimed and levels were generally within EPA limits, except for one site. *Id.* ¶¶22-24; and (vi) SIR 2010-5025 study of ecotoxicity pathways stated that it was not intended to be used to reach conclusions or standards, SOF¶53;

- b. NAW justified due to possible harms that while improbable would be significant, even though the Final Environmental Impact Statement (FEIS) and underlying record contradict the risk of significant harm. ¶¶54-57;
- c. ROD cites need for more data to support the NAW but contradicts this need when it states that it need not comply with the unavailable information rule, 40 C.F.R. §1502.22, because the data are not essential for a decision, SOF¶13;
- d. The NAW violates FLPMA by using legislative boundaries to define the withdrawal when 120,000 acres of the North Parcel west of Kanab Creek is in another watershed, lacks significant resources, and is 30 miles from the Grand Canyon, SOF¶¶5, 19-20, and should have been excluded;
- e. The NAW estimate of resources lost and costs to the State and local communities grossly understated estimates of viable uranium resources due to unsupported facts and assumptions, and so the FEIS understates the social and economic impacts to the State and local governments, SOF¶¶58-66;
- f. Bureau of Land Management (BLM) did not reconcile conflicts with state and local government plans as required by both NEPA and FLPMA, SOF¶¶92-98;
- 2. The Secretary exceeds his authority and acts contrary to law by separately justifying the NAW on the basis that it would not possible to fully mitigate impacts on tribal beliefs and feelings about mining SOF¶¶12, 67-83.
- a. The NAW establishes protection for "traditional use areas" by adopting an extra-legal definition, SOF¶¶75-78;
- b. The conclusion that it is not possible to mitigate effects of mining is based on a premise that mining irreversibly alters how the Indians feel about the land or desecrates the land, SOF¶¶77-82;

- c. Precedent consistently limits protection to sites where historical, cultural and religious practices occur as opposed to the viewpoint that mining will irreversibly desecrate the areas generally associated with tribes;
- 3. Plaintiffs provide additional argument to support standing and to supplement the opposition to the Motion to Dismiss, Dkt. No. 72 and exhibits...

MEMORANDUM OF POINTS AND AUTHORITIES

I. ROD IS ARBITRARY AND CAPRICIOUS UNDER NEPA AND FLPMA

A. Standard of Review

"The appropriate inquiry under the [APA] is whether the agency's decision was 'arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with law." *N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006) (quoting 5 U.S.C. §706(2)(A). A federal agency decision, which misinterprets or relies on inaccurate or unsupported information, is arbitrary and capricious. *Natural Res. Defense Council v. U.S. Forest Service*, 421 F.3d 797, 806-07 (9th Cir. 2005).

When compliance of NEPA is at issue, an agency's decision will be reversed as arbitrary and capricious under the APA "if the agency relied on factors Congress did not intend it to consider, entirely failed to consider an important aspect of the problem, or offered an explanation that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *The Lands Council v. McNair*, 537 F.3d 981, 987 (9th Cir. 2008) (*en banc*) (internal quotations and citations omitted).

B. ROD's Conclusion That Risk of Harm is Significant Although Improbable Not Supported

The ROD states that the NAW is necessary because the USGS report (SIR 2010-5025) acknowledged uncertainty due to limited data and while there is a low probability of impacts, there is also potential high risk. Ex. 2, AR000009 (ROD). The quotes from the SIR 2010-5025 are modified by analysis of the existing regulatory system and other data which alter the potential for high risk.

 Chapter C Findings Undercut by Location and Data Quality Issues

SIR 2010-5025, Ch. B reported "Samples from 15 springs and 5 wells in the region contained dissolved uranium concentrations greater than the U.S. Environmental Protection Agency maximum contaminant level for drinking water." SOF¶26. The ROD repeats the same sentence.

Neither SIR 2010-5025 nor the ROD disclose that about 11 of the 15 the springs and at least one of the wells with dissolved uranium are not in the NAW. Several were quite a distance from the former mine sites. SOF¶27. About 11 springs, a well and a stream are associated with the abandoned Orphan Mine located on the South Rim. *Id.* The SIR 2010-5025 concludes that the lack of reclamation is a factor. SOF¶¶27-28. This too is omitted in the ROD.

The 2009 water samples that were taken within the NAW boundaries but did not correlate to mining (few and inconclusive). SOF¶30.

During the peer review, the data quality for the water samples was questioned. SOF¶47. The review recommended excluding data from the Hermit Mine and all of the data before 1990 due to issues of filtration, testing, and preservation. *Id.* The exclusion of the data slightly modified the conclusions both as to the percent of compliance and the number of samples. *Id.* The version of SIR

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2010-5025 Chapter C in the record does not appear to have been revised because it still shows the Hermit Mine violation data and the pre-1990s data.

2. Unknown Risks to Groundwater Exaggerated

The ROD's conclusion of the extent of the unknown data was contradicted by significant dissent from the NPS Water Resources Division in Fort Collins Colorado. SOF¶¶48-49. NPS expert hydrologist Larry Martin in a crisis of conscience refused to comment on the DEIS due to the exaggeration of potential impacts to the R-aquifer. Id. Martin stated that the DEIS in his professional opinion greatly exaggerated possible impacts to watershed and groundwater and otherwise obfuscated the effects of mining on the R-aquifer. Id. Martin also concluded that dilution and distance to the R-aquifer would attenuate any release of water from a mine, SOF¶48, which contradicts the conclusion regarding uncertainty and risk of great harm. Martin's detailed comments criticizing the assumptions and conclusions were reviewed and supported by his superiors even though the conclusions did not support the administration's policy. Id. As one example, Martin commented that the EIS use of the dissolved uranium data from the Orphan Mine (within the GCNP) was improper because it was not representative of mining conditions today and any pollutants will flow away from the park. SOF¶49. Notwithstanding the controversy, the BLM did not change the EIS. The Orphan Mine data was kept because it presented reasonably foreseeable impacts and conditions, SOF¶50.

Other commenters concluded there was little or no risk of contamination of the R-aquifer. The FEIS states that the Arizona aquifer protection permitting system protects any contact with the R-aquifer. SOF¶¶57, 94. There was agreement that the geologic character of Hermit and Supai formations prevent any contaminated water flowing to the R-aquifer. SOF¶¶37-38, 54-55.

Furthermore, the west portion of the North parcel is located in another watershed and groundwater basin. SOF¶¶5, 19-20. The surface water in the South Parcel would also drain away from the R-aquifer. SOF¶19, 56. Thus, there is no potential significant harm.

3. SIR 2010-5025 Excludes Existing Regulatory System

The Arizona Department of Environmental Quality (ADEQ) regulates uranium mining activities in Arizona. The ADEQ issues both federal and state water and air quality permits and sets environmental controls, financial assurance, and reclamation. ADEQ administers the Aquifer Protection Permit (APP) program and the Arizona Pollutant Discharge Elimination System (AZPDES) program to protect groundwater resources. See Ariz. Rev. Stat. §§49-241-251, 49-255-255.03; Ariz. Admin. Code §§R18-9-101-E323; R18-9-A901-C905. The Arizona Department of Water Resources (ADWR) requires a permit to drill or replace a water well and imposes conditions to limit cross contamination. Ariz. Rev. Stat. §§45-598-599; Ariz. Admin. Code §§R12-15-801-852.

By relying on the SIR 2010-5025 which did not assess the regulatory system for uranium mining in Arizona, the ROD's assumption of potential harm is flawed. The comments from the ADEQ and other state agencies strongly object to the NAW on the basis that the current system works well. SOF¶94. The state agencies rejected the estimates of water quality and groundwater impacts stating instead that the claimed risks and impacts to water quality and groundwater were addressed in the aquifer permit system. *Id.* As to perched aquifers, DEQ notes that one mine pierced a perched aquifer associated with a livestock pond and fully reclaimed it. *Id.* Thus, the risk of major harm to perched aquifers is contradicted by the DEQ direct experience.

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The FEIS also contradicts the ROD where it concludes the state's aquifer protection program will protect the perched aquifers and springs or wells. SOF¶45. The ROD's focus on perched aquifers did not reflect potability or the rarity of an aquifer associated with a spring. Perched aquifers are used to reduce dust. SOF¶42.

4. Unavailable Information Rule Ignored

The ROD repeatedly refers to the lack of data to support the NAW. The Council on Environmental Quality (CEQ) rules provide that when information essential to the decision is unavailable and costs of obtaining it are not exorbitant, the agency must include it in the EIS. 40 C.F.R. §1502.22(a). DOI did not follow the unavailable information rule. It did not conclude that the costs of developing the unavailable information would be exorbitant. Instead, the ROD concludes that the lack of data is not essential to the decision, because the EIS uses "reasonably conservative assumptions" and relies on data from six mine sites. SOF¶13. If unavailable data is the most often cited reason for the NAW, it is not credible for DOI to conclude that such data are not essential or that conservative assumptions are a substitute.

Even assuming *arguendo* that the costs are exorbitant or the means of obtaining the information are unknown, the FEIS must address any "catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason." 40 C.F.R. §1502.22(b). The conservative assumptions do not meet §1502.22(b) "credible scientific evidence" and there is no discussion of catastrophic consequences.

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For example, the FEIS assumes that mining on the North Parcel will have a major impact on 13.3% of the perched aquifers, when a mine shaft intersects the the perched aquifers. SOF¶41. The FEIS contradicts this finding where it states the APP program protects aquifers from contamination. SOF¶45.

5. Soil Samples Misused

In support of the NAW, the ROD also states studies done in areas where operations temporarily suspended, "[u]ranium and arsenic consistently detected in mining areas above natural background levels." SOF¶14. SIR 2010-5025 Ch. B then describes the higher readings as a "varied legacy of contamination." SOF¶22. These sites have been on standby and are not reclaimed and the majority of samples are within EPA standards, and do not meet the definition of contamination. EPA defines contaminated sediments as

[S]oils, sand, organic matter, or minerals that accumulate on the bottom of a water body and contain toxic or hazardous materials that may adversely affect human health or the environment.

EPA's Contaminated Sediment Management Strategy, EPA-823-R-98-001, at 1 (April 1998).

With the exception of the flash flooding at Hack Canyon, the soil samples are generally within EPA standards for uranium and arsenic and cannot be described as contaminated. The origins of the transport of uranium bearing rock in Hack Canyon was debated. SIR 2010-5025 Chapter B refers to a 1984 flash flood and ACERT notes that this flood moved about 10-12 tons of rock. SOF¶23. Others stated that the soil movement may have come from earlier reclamation of the original Hack mine. SOF¶24. USGS rejected both comments but did not address how waste rock from Hack 1-3 was transported when the reclamation put the waste rock into the shaft and sealed it. SOF¶25.

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The SIR 2010-5025 Ch. B does acknowledge that the transported rock would not affect water quality due to dilution. Ex. 6, SIR 2010-5025 Ch. B, AR000111.

6. Ecotoxicity Pathways

The SIR 2010-5025 Chapter D also addressed whether increased radiation and exposure to trace elements would adversely affect plants and wildlife. SOF¶53. The report summarized existing literature and identified the data gaps noting that caution should be used when applying the information to plants or animals in Northern Arizona. The study was prepared on the assumption the FEIS would do a risk assessment. *Id.* The FEIS did not do a risk assessment so the questions raised in Chapter D were not used.

C. NAW Violates FLPMA

1. Boundaries Not Revised to Reflect Watersheds

BLM determined early in the process that portions of the NAW, most notably lands west of Kanab Creek were in a different watershed. SOF¶5. As BLM said several times, mining this area will not affect the Grand Canyon watershed, it lacks the resources, and it is 30 to 40 miles away from the GCNP. *Id.* A similar case was made for part o the South Parcel. BLM nevertheless did not change the scope of the withdrawal. More importantly, it never explained why it continued to keep the lands outside the watershed within the preferred alternative, when the purpose of the withdrawal was to protect the Grand Canyon Watershed.

2. Endowment and Viable Deposit Calculations Flawed

The SIR 2010-5025 Chapter A adjusted an assessment of the uranium endowment to reflect the NAW boundaries but did not alter the assumptions or methodology used in the 1990 Finch Report. SOF¶58. As one BLM employee put it, USGS did not do any original research it just recycled the 1990 report. *Id*.

The major issue however is that USGS worked from visible breccia pipes, just as was done in 1990. Quaterra and others objected on the basis that the current claims were located using aerial mapping and reconnaissance, not simply visible breccia pipes. By excluding hidden breccia pipes, USGS cut the likely endowment 250%. The principal author of SIR 2010-5025 Chapter A acknowledges that hidden pipes are a wild card and could change the results significantly. USGS did not change its estimates. Instead, USGS responded that the one hidden pipe in the control group accounted for the hidden pipes. Even USGS estimates the ratio is 3.65 hidden pipes for every visible pipe. SOF¶59.

The FEIS then reduced the USGS endowment by 85% relying on a single sentence from a 1987 Wenrich paper that hypothesized 10% of the breccia pipes were viable. The increase from 10% to 15% and broader range of mineral grades does not compensate for discounting the economic impacts by 45%.

The consequences for the assessment are significant. FLPMA requires BLM to provide a Mineral Report estimating the minerals within the area to be withdrawn and the cost to the local communities, the state and the Nation. 43 U.S.C. 1714(c)(2)(12). The Mineral Report the same endowment and development numbers as the SIR 2010-5025. Thus, the report significantly understated the loss in severance taxes to the state and communities as well as the loss to the nation.

3. Misstated Endowment and RFD Understates Social and Economic Impacts Analysis

NEPA requires that the EIS disclose not just the environmental impacts but the related social and economic impacts. 42 U.S.C. §4332(2)(C). FLPMA requires that the assessment of the withdrawal fully analyze the economic effects and the costs to the state and the local communities. 43 U.S.C. §1714(c)(2)(2) (economic impacts on communities, tribes and Nation). 1714(c)(2)(8) (effects on state, local Page 10

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government and regional economies). While the FEIS covers these topics, the conclusions would be quite different if the endowment and viable uranium deposits had used 50% of the endowment and the endowment had been revised to account for the hidden breccia pipes. In preparing an EIS, a federal agency must give economic and social impacts the same 'hard look' required for environmental impacts. Natural Res. Defense Council, 421 F.3d at 811-12.

BLM had, from the outset, a report prepared by TetraTech that documented the jobs, tax revenues and impacts to the state and local economies if the withdrawal were not adopted and if the withdrawal were adopted. The State of Arizona adopted those conclusions in its scoping comments.

The FEIS economic analysis discounted the report concluding instead that uranium mining would not add many jobs. The FEIS excluded from the analysis the impacts on northern Utah where many employees have lived. Most significantly from AULEC's perspective, the EIS did not account for the future severance tax payments that are now lost for more than 20 years. The FEIS only restated past severance taxes rather than projecting the severance taxes under Alternatives A, C and D. Since there has only been one mine producing since the fall of 2009 past severance taxes do not reflect what the state might receive.

II. FEIS FAILED TO IDENTIFY AND RECONCILE INCONSISTENCIES WITH LOCAL LAND USE PLANS

The CEQ regulations require an agency to discuss possible conflicts between the proposed action and the objectives of local land use plans and policies of the area, 40 C.F.R. §1502.16(c), and the extent to which such inconsistencies may be reconciled. 40 C.F.R. §1506.2(d); *Quechan Tribe of Ft. Yuman Indian Reservation v. U.S. Dep't of the Interior*, 927 F. Supp.2d 921, 946 (D. Cal. 2013).

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SOF¶18.

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Under FLPMA, the decision to withdraw one million acres of public land from multiple use is a major land management decision that amends the Arizona Strip RMP. 43 U.S.C. §1712(e). BLM must amend the RMP if a proposed action may change "the scope of resource uses" or change "the terms, conditions and decisions of the approved plan." 43 C.F.R. §1610.5-5; Klamath Siskiyou Wildlands v. Boody, 468 F.3d 549, 556 (9th Cir. 2006) (The decision to change the level of protection for the red tree vole based on new information altered the terms and conditions of the RMP, and was therefore considered an amendment. Id. at 556-60.). See Cloud Found. v. U.S. Bureau of Land Mgmt., 802 F.2d 1192, 1206-07 (D. Nev. 2011) ("[A]ny changes to resource allocations in an RMP must be developed through the official amendment process."). BLM must, therefore, coordinate with local governments, identify conflicts with local plans and policies, and attempt to reconcile them. 43 U.S.C. §1712(c)(9). This did not occur.

BLM initially concluded that the proposed NAW required a plan amendment. AR072789. Instead of disclosing how the proposed NAW would change the RMP, BLM is now issuing technical amendments.

The Arizona Strip RMP allowed mineral exploration and development on the public lands except where restricted by wilderness, withdrawals, or specific areas identified in the RMP. SOF¶1. The impacts to and from uranium mining were also an issue during the RMP process and uranium mining was specifically addressed with stipulations and/or mitigation measures, such as ACEC designation to protect cultural resources. The decision to withdraw the public lands in Northern Arizona changed the RMP resource allocations by closing more than 700,000 acres to

¹ The ROD incorrectly stated that mining was not an issue in the 2008 RMP.

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mining. Therefore, the withdrawal required an RMP amendment. *Klamath Siskiyou Wildlands*, 468 F.3d at 556; *Cloud Found*., 802 F.2d at 1206-07.

BLM must coordinate any RMP revision with the land use planning and management programs of other local governments. 43 U.S.C. §1712(c)(9). BLM must be apprised of local land use plans, consider how the proposed change affects those plans, resolve any inconsistencies between the federal land use plans and local plans, to the extent practicable and consistent with federal law, and provide for meaningful involvement of local government officials. *Id.*; 43 C.F.R. §§1610.3-1, 1610.3-2; *Am. Motorcyclist Ass'n v. Watt*, 534 F. Supp. 923, 936 (D. Cal. 1981). BLM must also document how a withdrawal affects local governments' interests and the regional economy. 43 U.S.C. §1714(c)(2)(2), (7), (8).

AULEC members were cooperating agencies throughout the EIS process Doc. 72-2, Johnson Decl. ¶14; SOF¶¶84, but they were excluded from the development of the alternatives, which is the heart of the EIS. 40 C.F.R. §1502.14. SOF¶91. The alternatives were discussed only after the federal agencies had determined the alternatives. See AR041806, 041807, 042828, 042829. The agendas for three of the cooperating agency meetings identified Alternatives Development as one issue to be discussed in the meetings, but the meeting notes show that this discussion was limited to a summary of federal agencies suggested alternatives. AR040828, 042474, 042905, 045651. The handouts for these meetings that summarized the RAC Recommendations on the alternatives and the Report on the EIS Alternative Development Workshops were further only provided to the cooperating agencies the day before or the day of the cooperating agency meetings. AR040827, 043016. The federal agencies also rejected a proposed cooperating agency meeting to develop the cooperators' recommendation on a preferred alternative. BLM stated that their preference and rationale were clearly made in the comments they submitted. AR067222. The Defendants failure to

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provide the Coalition members meaningful participation in the development of the alternatives violates FLPMA. 43 U.S.C. §1712(c)(9); 43 C.F.R. §§1610.3-1(a)(4).

The FEIS and the ROD admitted that the FEIS was inconsistent with Mohave County Resolution 2009-040 and Resolution 2008-10, as well as the Coalition's Resolution that opposed the withdrawal. AR001642-43 (NAW FEIS); AR000021 (NAW ROD). But BLM did not try much less make "every practicable" effort," to resolve these inconsistencies. See Doc. 72-2, Johnson Decl. ¶23, 29; Ex. 81, Johnson 2nd Decl. ¶28. The NAW conflicts with the Coalition members' land use plans and policies. Coalition member, Mohave County, requested coordination "on land use as a way to resolve the inconsistencies and to minimize harm to its interest in managing roads and air quality, and being in a position to fund other land use and environmental projects, such as desert tortoise protection." Ex. 81, Johnson 2nd Decl. ¶28. The Coalition members identified resolutions documenting opposition to the withdrawal and in support of the current RMP. AR034124 (Mohave County Resolution No. 2009-040); Doc. 72-2, Johnson Decl. ¶30. The Coalition members submitted comments that focused on the conflicts with local land use plans and policies, and the importance of uranium mining to the local governments' economies. AR003420 (San Juan County DEIS Comments), 044372 (Coalition Comments to DOI Secretary), 082169 (Kane County Comments to DOI Secretary). At a public hearing on September 7, 2011, the Coalition's counsel also informed BLM that the EIS did not describe the proposed withdrawal's inconsistencies with local land use plans and policies, nor did it analyze how these inconsistencies would be resolved. Ex. 81, Johnson 2nd Decl. ¶¶29-30; AR096782 (Scott Florence's Notes of Sept. 7, 2011 Public Hearing).

Scott Florence, Arizona Strip District Manager, acknowledged that the withdrawal was not consistent with local land use plans and polices, and that the

FEIS did not describe or attempt to resolve any inconsistencies. Ex. 81, Johnson 2nd Decl. ¶30.

The Defendants failure to describe the withdrawal's inconsistencies with local land use plans and policies, and to resolve these inconsistencies violates FLPMA and NEPA. 43 U.S.C. §1712(c)(9); 43 C.F.R. §§1610.3-1(a)(3), 1610.3-2(a); 40 C.F.R. §1506.2(d); *Am. Motorcyclist Ass'n*, 534 F. Supp. at 936. (The regulations require federal agencies to address how inconsistencies between a proposed action and local land use plans are addressed and resolved.)

III. PROTECTION OF AMERICAN INDIAN RESOURCES EXCEEDS STATUTORY AUTHORITY

The Interior Secretary exceeds his authority and acts contrary to law by separately justifying the NAW on the basis that it was not possible to mitigate impacts on affected American Indian religious beliefs and feelings about mining. SOF¶12, 70, 73-82. The NAW establishes protection for "traditional use areas," based on an extra-legal definition and American Indian beliefs that mining irreversibly alters the land or desecrates the land. SOF¶75-82. These premises lack statutory or regulatory support and are contrary to precedent that consistently limits protection of Indian cultural resources to sites where historical, cultural, and religious practices occur.

A. Existing Laws Protect American Indian Resources

The FEIS recognized the legal framework that protects American Indian resources. AR001912-13; 002221-29. The federal laws include the Archeological and Historic Preservation Act (AHPA) (recovery, protection, and preservation of historical and archeological data that might be lost or destroyed), 16 U.S.C. §§469, 469a-1, Archaeological Resource Protection Act (ARPA) (protection of archaeological resources and sites on public and Indian lands; 16 U.S.C. §§470aa-

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470mm; the Native American Graves Protection and Repatriation Act (NAGPRA) (protects and repatriates American Indian cultural items), 25 U.S.C. §3002(a); and the National Historic Preservation Act (NHPA) (evaluation of federal undertakings to avoid impacts on cultural or historical resources) 16 U.S.C. §470f. Traditional cultural properties (TCPs) may be eligible for listing on the National Register.16 U.S.C. §470a(d)(6)(A)-(B); 36 C.F.R. §800.2(c)(2). American Indian Religious Freedom Act (AIRFA), 42 U.S.C. §1996, provides for access to sacred sites. Access to sacred sites is also assured under Exec. Order No. 13007, 61 F.R. 26771 (1996).

B. NAW Protection of "Traditional Use Areas" Lacks Statutory or Regulatory Support

The ROD concludes that some impacts to tribal resources could not be mitigated because "any mining within the sacred and traditional places of tribal peoples may degrade the values of those lands to the tribes that use them." SOF¶78. Elsewhere the ROD notes that there is only one traditional cultural property, but that "the entire area is recognized as the traditional homeland and use area for seven tribes." *Id.* As argued by NEI and NMA, the purpose of the withdrawal to protect American Indian traditional use areas was not part of the notice of proposed withdrawal. The objective was identified only in the final ROD.

The ROD's finding is based on ethnographic or cultural landscapes areas that are linked to Indian cultures and traditions. SOF¶¶70, 75-82. Despite recognizing that these terms derived from literature and "are not intended to imply any kind of landscape level protection," (SOF ¶75), the ROD adopted the definition to support the withdrawal. The FEIS addressed the impacts mining would have on the American Indian cultural and ethnographic landscapes. SOF¶¶75-77. The

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FEIS concluded that due to the belief that mining wounds the earth, it is not possible to fully mitigate impacts. SOF¶78. This is in stark contrast to the FEIS' conclusion regarding cultural resources where it was found that any impacts to these resources would be fully mitigated. SOF¶71. The impacts on American Indian cultural landscapes are defined by how individuals would feel about the land during and after mining.

The broader term encompasses the NPS' view that tribal beliefs or values should enjoy the same protection as cultural sites. SOF¶¶79-82. Thus the tribes opposition to any mining is the basis to justify the NAW. SOF¶¶73-82. The NPS commented that the tribes had lost their culture landscapes due to past mining, the Snowbowl ski area, and other development on federal lands. SOF¶82.

The laws and regulations protect a wide range of cultural resources and identifiable sites that are sacred or traditionally important to American Indians. There is no basis to extend the same protection for sweeping areas of land based on cultural or ethnographic landscapes that lack boundaries.

The NPS comments demonstrate that the scope of protection adopted in the ROD exceeds any statutory authority and contradicts long established precedent. As the AGS Director wrote, the NPS viewpoint would give Indian tribes veto rights over all of the public lands. SOF¶83. The federal court reached a similar conclusion more than 20 years ago in Havasupai Tribe v. United States, 752 F. Supp. 1471, 1486 (D. Ariz. 1990), aff'd sub nom. Havasupai Tribe v. Robertson, 943 F.2d 32 (9th Cir. 1991). "Moreover, the Havasupai apparently have thousands of other religious sites within their former aboriginal lands. . . . Giving the Indians a veto power over activities on federal land that would easily require de facto beneficial ownership of some rather spacious tracts of public property." *Id.* at 1486 (internal quotations omitted). See also Navajo Nation v. U.S. Forest Service, 535 F.3d 1058, 1063-64 (9th Cir. 2007). The NAW provides the affected Indian tribes

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a "veto power" over the one million acres of public land based on values and feelings. See SOF¶¶70, 73-82.

The Ninth Circuit has also upheld a lower court's decision that BLM's approval of a mining project on Mt. Tenabo was not arbitrary or capricious because the project would not harm the areas specifically identified by the tribes as sacred. South Fork Band Council of Western Shoshone v. U.S. Dep't of Interior, 588 F.3d 718, 724 (9th Cir. 2009). In so holding, the court noted that Executive Order 13007 contemplates protecting ceremonial uses of sacred sites, but no tribe had "articulate[d] the manner in which they seek agency accommodation for the entire mountain." *Id.* Similar to this case, the Secretary of the Interior withdrew over one million acres of land from mining based on the cultural and religious significance that seven tribes place on the entire NAW area. SOF¶¶73-82. The FEIS also concluded that any impacts that mining may have on American Indian resources may not be mitigated due to the fact that any type of drilling on the earth is considered a "wound to the earth" that can never by remediated in the eyes of American Indian tribes. SOF¶¶70, 78. The FEIS and Secretary of Interior are seeking protection of the entire NAW area without articulating why such protections are warranted and without identifying specific sites, and instead they rely on the broad assertion that the entire area is a cultural landscape that must be protected to appease American Indian beliefs and feelings. This is contrary to the legal precedent.

IV. QUATERRA AND AULEC HAVE STANDING

A. Standard of Review

Standing has two components, Article III case or controversy and prudential standing. *City of Rialto v. West Cost Loading Corp.*, 581 F.3d 865, 877 (9th Cir. 2009). For Article III standing, a plaintiff must "demonstrate that he has suffered 'injury in fact,' that is 'fairly traceable' to the actions of the defendant, and that the

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injury will likely be redressed by a favorable decision." *Bennett v. Spear*, 520 U.S. 154, 162 (1997) (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992)). Prudential standing requires a plaintiff's injury-in-fact to be "arguably within the zone of interest" of the statute the plaintiff claims the agency violated. *Port of Astoria, Or. v. Hodel*, 595 F.2d 467, 474 (9th Cir. 1979) (internal quotations omitted).

Standing is an "indispensable part of the plaintiff's case" and must be supported at each stage of litigation. *Id.* At summary judgment, the plaintiff "must 'set forth' by affidavit or other evidence 'specific facts," which will be taken to be true. *Id.* Plaintiff need only show a genuine issue of material fact as to standing. *Cent. Delta Water Agency v. U.S.*, 306 F.3d 938, 947 (9th Cir. 2002).

B. Quaterra's Standing

Within the North Parcel of the NAW, Quaterra holds an estimated 500 unpatented mining claims and Exploration Permits on seven sections of school trust lands. Doc. 72-1, Spiering Decl. ¶7. Since 2005, Quaterra has invested over \$12 million on the exploration and drilling programs for its mining claims. Id. at ¶¶7, 9-11, 19. Quaterra has a legally protected property interest in its unpatented mining claims and state land leases. *U.S. v. Shumway*, 199 F.3d 1093, 1098-99 (9th Cir. 1999); *Rogers v. U.S.*, 575 F. Supp. 4, 7-8 (D. Mont. 1982).

The Notice of Segregation and NAW abruptly changed Quaterra's exploration and drilling program. Doc. 72-1, Spiering Decl. ¶¶12, 14-19, 24-31. These decisions froze all activity because the threat of a validity exam on its claims would add substantial costs, delays, and uncertainty to development. *Id.* 43 C.F.R. §3809.100. Quaterra, like other affected companies, did not exercise its NOIs and suspended further investment. Doc. 72-1, Spiering Decl. ¶12, 16. The NAW also prevents Quaterra from locating any new claims. *Id.* at ¶19.

The NAW and the applicable regulations deny Quaterra access to its mining claims without the costly and uncertain validity exam, preclude location of new claims, reduce the value of its investment made to date, cost Quaterra substantial time and money, and put at risk those claims not yet drilled. *Id.* at ¶¶16, 18-19, 29-31. While drilling is indefinitely suspended until a mineral examination occurs, Quaterra must continue to pay the annual maintenance fees of \$140,000 and state lease rentals. Doc. 72-1, Spiering Decl. ¶32. The denial of access, and additional regulatory delay and expense are injuries-in-fact traceable to the NAW.

A decision setting aside the NAW would allow Quaterra to develop its mining claims as it originally planned without a mandatory, expensive and time-consuming mineral examination. Even if the DOI were to again propose the withdrawal, the requirement that it address the relevant factors and conform to federal law would reasonably exclude a significant portion of the North Parcel. The record suggests there was substantial support to exclude public lands west of Kanab Creek. SOF¶¶5, 19-20 (Coconino County DEIS Comments); (concerns about North Parcel withdrawal justification).

Quaterra's injuries to its unpatented mining claims fall within the zone of FLPMA's interest. 43 U.S.C. §§1701(a)(12) (manage public lands to implement the Mining and Minerals Policy Act of 1970, 30 U.S.C. §21a); 1712(c)(1) (mineral development is one of five major multiple uses). See *Am. Motorcyclist Ass'n v. Watt.*, 534 F. Supp. at 932 (D. Cal. 1981) *aff'd* 714 F.2d 962 (9th Cir. 1983); Doc. 87, Order on Mot. to Dismiss at 28.

C. AULEC's Standing

AULEC has standing to sue on behalf of its member Mohave County, because Mohave has standing to sue in its own right, the Coalition seeks to protect interests that are germane to its purpose, and the lawsuit does not require the participation of individual members. *Hunt v. Wash. State Apple Adver. Comm'n*,

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432 U.S. 333, 343 (1977). The claims asserted are germane to AULEC's purposes of facilitating the local governments' coordination and participation in the EIS process and consolidating the counties' resources to limit the serious economic, environmental, and social impacts of the withdrawal. Doc. 72-2, Johnson Decl. ¶3. AULEC's requested declaratory and injunctive relief does not require individual member participation. See Hunt, 432 U.S. at 344; Spindex Physical Therapy USA, Inc. v. United Healthcare of AZ, 661 F. Supp.2d 1076, 1084 (D. Ariz. 2009).

AULEC member Mohave County identified how the NAW injures its interests in land management, environmental protection, and revenue and economic interests. ECF Doc. 72-2, Johnson Decl. ¶¶7-16, 24, 27, 31-37; Ex.81, Johnson 2nd Decl. ¶¶27-34. Mohave County is authorized by state law to develop and enforce environmental standards, to develop plans to conserve the natural resources and protect air and water quality, and to protect the local economy. Doc. 72-2, Johnson Decl. ¶¶7-13. The County's plan to reduce particulate emissions to improve the air quality through road improvement projects in the eastern part of the County have been suspended due to lack of revenues that followed the notice of segregation. Id. at ¶¶11, 32-33, 35; Ex. 81, Johnson 2nd Decl. ¶¶14, 20. Mohave County's management and protection of the desert tortoise and its habitat has also been impacted by lack of revenues. Ex. 81, Johnson 2nd Decl. ¶¶14, 21-26. The NAW injures the County's economic interests by reducing severance taxes paid by the mining companies to the State and distributed to the County, costing the County about 1,078 new jobs and keeping the local governments from earning about \$40 million annually from payroll. Doc. 72, Ex.2, Johnson Decl. ¶¶27, 36. Economic reports forecast that Mohave County would take in \$168 million in state severance taxes. Id. These environmental, land management, and economic interests are all proprietary interests of the County and satisfy the injury-in-fact test.

City of Sausalito v. O'Neill, 386 F.3d at 1197-99; Am. Motorcyclist Ass'n, 534 F. Supp. at 932.

AULEC documents how Defendants violated the procedural rules under both NEPA and FLPMA by failing to coordinate with local governments, to weigh their comments, and, to the extent possible, to reach consistency between the federal action and local land use plans and policy. 42 U.S.C. §§4331(a), 4332(2)(C); 43 U.S.C. §§1712(a), 1712(c)(9), 1714(c)(2)(7), 1739(e); 40 C.F.R. §§1502.9(b), 1502.16(c), 1506.2(d). *City of Sausalito*, 386 F.3d at 1197 (quoting *Citizens for Better Forestry v. U.S. Dep't of Agric.*, 341 F.3d 961, 969-70 (9th Cir. 2003)).

The cooperating agency Memorandum of Understanding recognized the expertise of Mohave County and other AULEC members in "natural resources and environmental quality." Ex. 80. AULEC members were granted cooperating agency status to address a wide range of issues including environmental quality and land management. There was however scant coordination and no effort to reduce conflicts between the NAW and the county plans. Doc. 72-2, Johnson Decl. ¶14. DOI recognized that the NAW conflicted with the counties' interests and plans but never sought to resolve or minimize the conflicts. Ex. 81, Johnson 2nd Decl. ¶¶27-30. For instance, BLM assured the counties that the economic deficiencies the counties identified were corrected in the FEIS. *Id* at ¶33. SOF¶¶89-90. Instead, the FEIS reduced its estimated economic impacts by almost half, in contradiction with the AULEC members' comments. *Id*.

A procedural injury must be tied to a concrete interest that is threatened by the failure to comply with a procedural requirement. *City of Sausalito*, 386 F.3d 1186 at 1197. Mohave County developed and implements environmental standards through its General Plan. Doc. 72-2, Johnson Decl. ¶¶7-13. DOI's failure to coordinate and to resolve inconsistencies with local plans threatens Mohave County's concrete environmental, land management, and economic

interests, which FLPMA and NEPA were intended to protect. NEPA requires federal agencies to consider the comments and views of local agencies that "are authorized to develop and enforce environmental standards." 42 U.S.C. §4332(2)(C); 40 C.F.R. §§1502.9(b), 1502.16(c), 1506.2(d). FLPMA requires BLM to coordinate and resolve conflicts with public land management. 43 U.S.C. §§1712(a), (c)(9); 1739(e).

The NAW threatens Mohave County's concrete interests in implementing its General Plan by directly cutting off significant severance tax revenues. Without revenues otherwise paid to Mohave County, it cannot fully implement its land use plans such as improving dirt roads to reduce air emissions. Doc. 72-2, Johnson Decl. ¶¶15-16, 24, 27, 32-37; Ex. 81, Johnson 2nd Decl. ¶¶14, 20, 26, 28. Mohave County would use the increased revenues to improve the 1,277 miles of unpaved public roads, thereby improving the air quality and reducing soil erosion in the County. Doc. 72-2, Johnson Decl. ¶¶11, 33; Ex. 81, Johnson 2nd Decl. ¶¶14-20. The County would also be able to address management and protection of the desert tortoise and its habitat. Ex. 81, Johnson 2nd Decl. ¶¶14, 21-26, 28.

In establishing redressability, AULEC need only show that the decision could be influenced by correcting an agency's decision. *Citizens for Better Forestry*, 341 F.3d at 975-76 (standards for redressability and immediacy are relaxed for procedural injuries). An order setting aside the withdrawal would ensure that Defendants followed the legally required procedures, in particular, reducing conflicts with local land use plans and interests, and actual coordination with local governments that would resolve the inconsistencies with local plans.

NEPA requires federal agencies to coordinate with and to consider the comments and views of local governments that "are authorized to develop and enforce environmental standards." 42 U.S.C. §4332(2)(C); see 42 U.S.C. §4331(a), 40 C.F.R. §§1502.9(b), 1502.16(c), 1506.2(d). As a local government

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with land use planning and environmental protection authority, Mohave County falls within the zone of interests that NEPA was designed to protect. See *California v.* Block, 690 F.2d 753, 776 (9th Cir. 1982); City of Davis v. Coleman, 521 F.2d 661, 672 (9th Cir. 1975). AULEC establishes a concrete interest through Mohave County's General Plan, which provides for concrete actions to improve air quality, a NEPA interest. See Douglas County v. Babbitt, 48 F.3d 1495, 1501 (9th Cir. 1995); City of Davis, 521 F.2d at 672.

FLPMA requires public lands to be managed to protect the environmental, air, and water resources, as well to promote "multiple use and sustainable yield." 43 U.S.C. §§1701(a)(8), 1712(c)(1), (5). FLPMA also requires close coordination and involvement for land management decisions and reduction in land use conflicts. 43 U.S.C. §§1701(a)(6), 1712(a), 1712(c)(9), 1714(c)(2)(7), 1739(e). AULEC's claimed injuries to its members environmental, land management, economic, and procedural interests fall within the zone of interests that FLPMA was designed to protect. See State of Utah v. Babbitt, 137 F.3d 1193, 1216 (10th Cir. 1998); Am. Motorcyclist Assoc, 534 F. Supp. at 932; Doc. 87, Court's Order on Mot. to Dismiss at 28.

V. CONCLUSION

For the reasons stated above, Plaintiffs urge this Court to find the NAW unlawful and to set it aside.

| 1 | Dated: December 6, 2013. |
|---------------------------------|---|
| 2 | Respectfully Submitted, |
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| 8 9 | Attorneys for the Plaintiffs Quaterra Alaska, Inc.; Quaterra Resources, Inc.; and the Arizona Utah Local Economic Coalition on behalf of named member, the Board o Supervisors, Mohave County, Arizona. |
| 10 | |
| 11 | CERTIFICATE OF SERVICE |
| 12 | I hereby certify that I have caused the foregoing Motion for Summary Judgment, Memorandum in Support, the Statement of Facts and Appendix to be |
| 13 | served upon counsel of record through the Court's electronic service system |
| 14 | (ECF/CM) and by first class mail to Gregory Yount at the following address: 807 West Butterfield Road, Chino Valley, Arizona 86323. |
| 15 | , |
| 16 | Dated: December 6, 2013. |
| 17 | /o/ Constance E. Brooks |
| 18 | <u>/s/ Constance E. Brooks</u> Constance E. Brooks C. E. Brooks & Associates, P.C. |
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| 1 2 | National Mining Association; Nuclear) Energy Institute, | |
| 3 | Plaintiffs;) | Civil No. 3:12-cv-08038-DGC |
| 4 |) v.) | |
| 5 | S.R.M. Jewell, Secretary of the Interior;) et al.,) | |
| 6 |) Defendants;) | |
| 7 | and) | |
| 8 | Grand Canyon Trust, <i>et al.</i> ,) | |
| 9 |) Defendant-Intervenors.) | |
| 10 | Northwest Mining Association,) | |
| 11 | Plaintiff,) | |
| 12 |) v.) | Civil No. 3:12-cv-0842-DGC |
| 13 | S.R.M. Jewell, Secretary, Department of) | |
| 14 | the Interior; <i>et al.</i> , | |
| 15 | Defendants;) | |
| 16 | and) | |
| 17 | Grand Canyon Trust, <i>et al.</i> | |
| 18 | Defendant-Intervenors.) | |
| 19 | Quaterra Alaska, Inc., Arizona Utah) Local Economic Coalition, on behalf of) | |
| 20 | member the Board of Supervisors,) Mohave County, Arizona;) | Civil No. 3:12-8075-DGC |
| 21 | Plaintiffs; | |
| 22 | v.) | |
| 23 | S.R.M. Jewell, Secretary of the Interior;) et al. | |
| 24 | Defendants; | |
| 25 | and) | |
| 26 | Grand Canyon Trust, <i>et al.</i> | |
| | Defendant-Intervenors. | |
| 27 | —————————————————————————————————————— | |
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Existing Land Management and Regulatory Scheme

- 1. The Arizona Strip Resource Management Plan of 2008 (2008 RMP) designated or expanded Areas of Critical Environmental Concern (ACEC) to protect cultural and sacred resources. Ex. 1, AR 082691, 082726-27, 082751, 082850-51, 082847-082854. The ACECs protect unique cultural and heritage sites, geologic features, and sensitive or listed plants and include Johnson Spring, Lost Mountain Spring, Moonshine Ridge, Kanab Creek, and Marble Canyon. Id. The ACECs require special surface use limits, including no Off-Highway Vehicle use, rights-ofway avoidance, and mitigation measures to protect resources. *Id.* AR082847-54. The 2008 RMP FEIS addressed the cumulative effects of future uranium mining, *Id.* at AR083174, -205, -224, -332, -334, -382-3, -436, -446, -464, -535, -538, -670, and proposed withdrawal from future mining. *Id.* AR083809.
- The 2008 RMP Final Environmental Impact Statement (FEIS) states that "erosion-related impacts are effectively controlled under existing regulations; therefore, the overall impact to stream function in all three parcels would be expected to be negligible but might be moderate in some locations." Ex. 3, AR002089. Soil, water, and flood related controls are designed for site specific hydrologic conditions, as shown by the regulations in the Ex. 3, AR002072, and remove concern regarding flood or wind blown contamination from mining activities.
- 3. Modern uranium mining techniques and modern regulatory structure result

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- in no to negligible adverse impacts on water quality, air quality, or land resources. Ex. 39, AR003308.
- 4. Under the Bureau of Land Management (BLM) rules, surface conditions are returned to their natural state during reclamation, as shown by the Hermit Mine, the only mine developed after 1984 and fully reclaimed. Hermit Mine site's average uranium concentration is below levels known to naturally occur in the region and none of the arsenic soil samples exceeded these levels. Ex. 6, AR000110-14.

Proposed Withdrawal

- 5. The NAW boundaries were based on Cong. Raul Grijalva's bill, which correlated to the mining claims filed as of 2008. Ex. 3, AR001623. The boundaries do not reflect resources, aquifers or delineation of the Grand Canyon watershed except to exclude private and state lands or minerals. Ex. 9, AR072824. As a result 120,000 acres of the North parcel west of Kanab Creek is not in the Grand Canyon watershed and aquifer flows are northwesterly. Ex. 10, AR072832.
- 6. DOI described "the purpose of a 20-year withdrawal of public lands from locatable hardrock mineral exploration and mining is to protect the Grand Canyon Watershed, whose waters, if contaminated, may harm natural, cultural, and social resources." Ex. 3, AR001625; Ex. 11, AR000545. The term "'cultural" resources "[was used] in an inclusive manner meaning not just archy or Native American resources but the entire social/lifestyle/recreation values people hold dear in the study area." Ex. 12, AR072835.
- 7. The Purpose and Need for the DEIS and FEIS state:
 - Surface water and groundwater including seeps springs wells and runoff that may ultimately flow into the Colorado River which is used for agricultural municipal commercial domestic and recreational purposes by people throughout the southwestern United States. Cultural resources including prehistoric and historic sites places of traditional religious and cultural importance including Traditional Cultural Properties and other places of significance to American Indians.

- 1 Ex. 11; see also Ex. 3, AR001625.
 - 8. DOI did not identify a preferred alternative. Ex. 11, AR000490, AR000594.
 - 9. DOI received more than 290,000 comments, all but 1% were form letters.
- 4 Coconino County, which opposed mining, recommended excluding land west of
- 5 Kanab Creek from the North Parcel of the NAW. Ex. 63, AR003343-50. The
- 6 Arizona Resource Advisory Council (RAC) changed its position to oppose the
- 7 NAW. Ex. 13, AR008076.
- 8 10. The Secretary announced the preferred alternative on June 21, 2011, when
- 9 he approved an emergency withdrawal. Ex. 14, AR003651; 76 Fed. Reg. 37826
- 10 (2011).

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- 11 11. The NAW closes 1,006,545 acres to mining: North Parcel (549,995 acres)
- 12 | is adjacent to the Kaibab Forest already closed to mining and the GCPNM; South
- 13 Parcel (322,096 acres) is located in Kaibab National Forest; and East Parcel
- 14 (134,454 acres) on public land east of GCNP and adjacent to VCNM and the
- 15 Navajo Reservation. Ex. 2, AR 000004, 000008.

16 Record of Decision

- 17 | 12. The ROD lists four reasons for the withdrawal: (1) uncertain effects to
- 18 surface and ground waters and risk of significant harm; (2) potential impacts to
- 19 tribal resources which could not be mitigated, because mining within sacred and
- 20 traditional places of tribal peoples may degrade the values of those lands; (3)
- 21 potentially 11 mines will proceed even with the NAW, so mining will in fact continue
- 22 | and benefit the communities; and (4) the circumstances and unique resources
- 23 | located in this area support a cautious and careful approach. Ex. 2, AR000009.
- 24 13. Notwithstanding lack of data, the ROD concluded that the unavailable
- 25 information was not essential to the decision because data from six former mine
- 26 sites and the conservative assumptions were sufficient. Ex. 2, AR000010.
- 27 | 14. The ROD noted that studies and in areas where operations temporarily

- 1 suspended, "[u]ranium and arsenic were two elements consistently detected in the
- 2 areas disturbed by mining in quantities above natural background levels." Ex. 2,
- 3 AR000009. The ROD also cites dissolved uranium in 15 springs and 5 wells. *Id.*
- 4 15. The ROD rejected comments that the NAW embraced the richest uranium
- 5 deposits. Ex. 2, AR000018. The ROD finds that the comment was not
- 6 peer-reviewed and did not provide geological information.
- 7 16. The comments correlated uranium drill records to breccia pipes in relation
- 8 to the geologic formations found in the NAW. Ex. 18, AR005359-5362; see also
- 9 Ex. 22, AR059912-938.
- 10 17. The ROD prohibits any use of the mining claim surface without a mineral
- 11 examination to prove that sufficient quantity and quality of ore is exposed to support
- 12 investment. Ex. 2, AR000006-7.
- 13 | 18. The ROD and the FEIS did not consider the Arizona Strip RMP land use
- 14 decisions because "uranium mining was not a major issue at the time it was being
- 15 written." Ex. 2, AR000019. *Cf.* SOF ¶2.
- 16 | 19. District Manager Scott Florence commented on the ROD rationale:
- There is much we do know about the geo-hydrology of the south parcel which has been studied extensively. . . . there is a ground water divide from which water moves north (to the canyon) or south (away from the canyon). . . . In addition, there were very few, if any, resource values or concerns in these areas." Ex. 34, AR081794. BLM
 - resource values or concerns in these areas." Ex. 34, AR081794. BLM Chris Horyza responded that [Florence's comments] "weaken the rationale for the withdrawal decision (as it has been suggested to us)
 - even further. Id.
 - 20. Florence later commented on the draft ROD: "The data evaluated for 1,014
- water samples from 428 sites indicate that about 70 sites have exceeded the
- primary or secondary maximum contaminant levels for certain major ions and trace
- elements, such as arsenic, iron, lead, manganese, radium, sulfate, and uranium."
- He interpreted the report to read the "95% of all samples were below the EPA 26
- standard for dissolved uranium and of the 70 sites, these were exceeded only for

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- 1 arsenic, ion, lead and sulfide (not dissolved uranium and the others listed)." Ex. 35,
- 2 AR081796. There appears to be discrepancies between the USGS Report and the
- 3 USGS Fact sheet on the correct wording, but no changes were made because it
- 4 directly quoted the USGS Report. In the same email chain, Florence wrote:

areas on the northeast and west portions of the north parcel that I pointed out have low resource values, are 40-45 miles from the canyon and/or don't drain into the canyon at all total about 200,000

acres. . . . groundwater movement in the northeast end of the north parcel is to the north . . . away from the canyon.

- 8 Ex. 36, AR081803. Later Horyza wrote there is no "way to strengthen the rationale
- 9 for the withdrawal and still make these factual points in the ROD." Ex. 35,
- 10 AR081799.
- 11 | Effects of Uranium Mining on Water and Soils
- 12 Soils
- 13 21. The USGS assumed the task of developing data relevant to the proposed
- 14 withdrawal including estimating the amount of uranium resources within the
- 15 proposed and previously withdrawal areas, investigating the environmental effects
- 16 of previous mine operations, and compiling available toxicological information on
- 17 exposure pathways and biological effects of uranium and associated decay
- 18 products relevant to species occurring in the region. Ex. 6, AR000066. USGS
- 19 produced its report entitled Hydrological, Geological, and Biological Site
- 20 | Characterization of Breccia Pipe Uranium Deposits in Northern Arizona, SIR 2010-
- 21 | 5025 (SIR-2010-5025).
- 22 | 22. SIR 2010-5025, Ch. B found a "varied legacy of contamination" from mining
- 23 | in the Kanab Creek area. The soil 'contamination' was dust from three standby
- 24 mine sites, except for Hack Complex, and reclaimed mines, Hermit and Pigeon.
- 25 The soil exceeded background levels next to mine sites but were generally within
- 26 | EPA limits. Ex. 6, AR000184-185, AR000190-191.
- 27 | 23. SIR 2010-5025 Ch. B concluded that flash floods eroded a terrace and

- 1 carried waste rock from Hack 1 into the ephemeral streambed. Ex. 6, AR000111.
- 2 24. Other experts suggested that the soil transport could have come from the original Hack mine reclamation, next to Hack 1. Reclamation for Hack 1-3 put the waste rock into the mine shaft rather than covering it with soil. Ex. 28, AR042327.
 - 25. Otton rejected criticism of the conclusion: "[I]t is clear that much larger volumes of reclaimed waste rock have been moved down channel by flood events since reclamation was finished." Ex. 29, AR067443-44. BLM does not address the fact that waste rock was put in the shaft. Energy Fuels Nuclear (EFN) spent \$800,000 on reclamation and did not leave waste rock. Ex. 28, AR042327.
- 10 Water

- 26. Chapter C of SIR 2010-5025 compiled more than a thousand water samples
 to determine the correlation between dissolved uranium and trace elements and
 mining. It found:
 - Samples from 15 springs and 5 wells in the region contained dissolved uranium concentrations greater than the U.S. EPA maximum contaminant level for drinking water. These springs and wells are close by or in direct contact with mineralized ore bodies, and those concentrations are related to natural processes, mining, or to both.
 - Ex. 6, AR000202. The study could not correlate the exceedances to mining other than the Orphan mine. The ROD uses the same statement regarding dissolved uranium without including the lack of correlation.
 - 27. SIR 2010-5025 Ch. C does not explain that about 11 of the 15 springs and at least one well are not located in GCNP. Ex. 6, AR000241, AR000244. As displayed on the maps, Figures 9 and 10, springs with exceedances are near the Orphan Mine within the GCNP. *Id.*
 - 28. Congress confirmed purchase of the Orphan Mine 1962 and mining ceased in 1979. Public Law 87-457. NPS initiated reclamation in September 2008, although Energy Fuels Nuclear offered to reclaim it in the 1980s. Ex. 3, AR002454. Its unreclaimed condition and location on an exposed canyon face two miles from

- the Colorado River on the South Rim of GCNP facilitated runoff and contamination 1 2 of Horn Spring and Horn Creek. Ex. 6, AR000242.
- 3 29. Mining at the Orphan mine occurred before modern environmental laws and 4 regulations that significantly reduced environmental impacts. Ex. 19, AR008523.
 - 30. USGS also collected groundwater samples in 2009 from 24 sites in August and September 2009 to evaluate connections with the R-aguifer and the Coconino Aguifer. The mineral concentrations detected correlated to geographic area and groundwater source but "[r]elations of uranium and 13 other trace elements to mining activity were few and inconclusive." Ex. 6, AR000202.
- "[W]ater chemistry in mined area similar to that of nominated areas (limited data set). The limited samples (n=24) indicate dissolved uranium concentrations 12 in areas without mining generally similar to those with active or reclaimed mines."
- 13 Ex. 30, AR003950-51.

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- Redwall-Muav Aquifer 14
- 15 32. The depth to water in regional Redwall-Muav Limestone aquifer system 16 ranges from 2,500 feet to more than 3,800 feet below land surface. Ex. 20, 17 AR003888.
- 18 The FEIS states that "AAC Title 12, Chapter 15, Article 8 requires proper 19 construction and abandonment of wells to prevent cross-contamination of different 20 aquifers." Ex. 3, AR002060-61. Both the R-aquifer and perched aquifers are 21 protected by these regulations which were adopted in 1984. Id.
- 22 34. The FEIS concludes that radionuclide migration to the R-aquifer is highly 23 unlikely and would be mitigated based on site-specific conditions. Ex. 3, 24 AR002072-73. Distance and dilution mitigate impacts to the R-aquifer. Ex. 24, 25 AR006820; see also Ex. 43, AR042839; Ex. 33, AR042831.
- 26 35. SIR 2010-5025 Ch. C also addressed potential impacts to the R-aquifer but 27 could not correlate recharge or water movement to the R-aquifer, which is more

than 1,000 feet below the base of a typical uranium mine. The mine is between and and 1500 feet from the surface. Ex. 6, AR000202; Ex. 3, AR002065-66, AR002053. The R-aquifer flows north towards Utah where it lies thousands of feet below the surface. Ex. 3, AR002063. The FEIS concludes that mining would have

minimal impacts on the quantity of the water in the R-aquifer. Ex. 3, AR002069.

- 36. The FEIS addressed theoretical contamination from downward migration of surface or ground waters to the R-aquifer through fractures, faults, sinkholes, or breccia pipes. The FEIS concluded such migration is unlikely based on the region's hydro-geologic features. Ex. 3, AR002053. The R-aquifer is covered by a 1,000-foot thick, unsaturated and practically impermeable layer of Supai Group Sandstone. Ex. 3, AR002601.
- 37. Spencer and Wenrich prepared a report on water movement within perched aquifers to the R-aquifer and concluded that it is unlikely that water would move from breccia pipes to an aquifer. Ex. 28, AR042327.
- 38. SWCA the EIS contractor reported that after refining the hydro-geological models:

there isn't much basis for concern about pollution of the regional (Redwall) R-aquifer because of the distance of most mines from the discharge springs in the lower Kanab Ck and capacity for dilution. On the south parcel there are many springs that discharge from the R aquifer close to the rim but the direction of flow turns south as you move away from the rim. On the east parcel, because of its small size and proximity to the discharge points in the canyon there is more concern. The main concerns on the north parcel are effects to small springs that would be associated with perched water tables.

- Ex. 43, AR042839. BLM considered revising NAW using hydro-geological models to reduce the NAW size. Ex. 44, AR043021.
- 39. The FEIS concludes that "deep drilling operations are projected to represent no impact or a negligible impact to R-aquifer water quality." Ex. 3, AR002069. The finding reflects factors of dilution and distance, such as speed of water moving through a fissure and the distance, as well as the Supai formation that sits above

- 1 the R-aquifer. Fissures and cracks are less likely to allow water movement due the
- 2 geology at the pipe that tends to seal itself and the Supai formation is less
- 3 permeable.
- 4 Perched Aquifers
- 5 40. SIR 2010-5025 Ch. C also addressed effects of mining on perched aquifers.
- 6 Ex. 6, AR000102. "Perched aquifer zones in the proposed withdrawal area are
- 7 characterized as being commonly small, thin, discontinuous and generally
- 8 dependent on annual recharge to sustain yield to springs and wells." Ex. 3,
- 9 AR002053.
- 10 41. The FEIS assumes uniform drilling in the North Parcel to conclude 13.3% of
- 11 the perched aquifers may be intersected by drilling and that it may be a major
- 12 | impact on springs since there is less dilution. Ex. 3, AR001689, 002063.
- 13 | 42. Perched aquifers may be used at a mine site to control dust. Montgomery
- 14 & Associates reported that the "[p]yrite cap was usually encountered at top of ore
- 15 body, which caused any perched groundwater to be highly mineralized and
- 16 non-potable. Ex. 31, AR043807-808. Most perched aquifers are not connected
- 17 to a spring and are of poor quality. *Id.*
- 18 | 43. Blind breccia pipes have no cone of depression to trap water for the
- 19 development of perched aguifers so the risk of impacts to perched aguifers from
- 20 blind breccia pipe uranium mining is substantially lower. Ex. 22, AR059912.
- 21 | 44. The FEIS appendices list springs and wells associated with a perched
- 22 | aquifer for the North Parcel within the NAW. Ex. 5, AR002860-62. Only eight
- 23 springs are classified as perennial, three as intermittent or ephemeral. Id.
- 24 Appendix D lists wells registered with Arizona Department of Water Resources
- 25 (DWR), although many are not in use. Ex. 4, AR002827-002858. Depth is the only
- 26 information that may connect the wells to the location of perched aguifers. Ex. 5,
- 27 AR002860-62.

- 45. The FEIS states that there is minimal risk of impact to perched aguifers "because the regulations are protective of groundwater, deep drilling operations that occurred after the regulations were . . . are considered to represent no impact or a negligible impact to the quantity and quality of perched groundwater available to perched aguifer springs or wells." Ex. 3, AR002074.
- 46. The FEIS states, drilling will temporarily affect quantity of water in a perched aguifer where operations drill into the trapped water. Ex. 3, AR002061.
- 47. USGS peer review found that the quality of uranium data was robust and reliable but there were data quality issues related to the older samples. Ex. 20, AR003893, 3894. Hoffman recommended that USGS exclude the data from the Hermit Mine and all pre-1990s data. Id. If the SIR 2010-5025 Chapter C were changed the conclusion would state "In re-evaluation 68% of 473 samples had values less than 5 ug/L; 90% of samples had values less than 17.7 ug/L and 95% had values less than 29 ug/L." Ex. 20, AR003895. The SIR 2010-5025 Ch. C retains the original data, and the FEIS and ROD used the original conclusions.
- 48. Larry Martin NPS hydrologist declined to provide comments on the DEIS because he concluded that "potential impacts grossly overestimated and even they are very minor to negligible." Ex. 24, AR006820. Martin's comments generated controversy within NPS but after careful review, his superiors agreed with his conclusions. Bill Jackson wrote:

This is obviously a touchy case where the hard science doesn't strongly support a policy position. Probably the best way to "finesse" this would be fall back on the "precautionary principle" and take the position that in absence of even more complete certainty that there is no connection between uranium mines and regional ground water."

- 24 Ex. 26. AR006830.
- 25 NPS hydrologist Larry Martin criticized the inclusion of the Orphan Mine data 26 because it overstated the impacts from uranium mining on water quality. Ex. 21, 27 AR004219. Martin wrote:

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data from Horn Creek which is affected by unreclaimed mine site immediately adjacent to canyon rim and projected to represent anticipated future conditions that could occur from mining breccia pipes several miles from the rim and on the opposite side of the groundwater divide. if contaminants did flow from the future mine sites to the regional R aguifer, flow would be toward the south and away from the canyon.

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- 50. USGS defended use of the Orphan Mine data as representative of mining conditions and reasonably foreseeable impacts. Ex. 27, AR066752; Ex. 20, AR003893.
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- 8 51. The FEIS cites Orphan mine as evidence of the uncertainty of hydrogeologic 9 conditions below mine sites, even though the NAW does not have similar
- 10 hydrogeologic conditions. Ex. 6, AR000242; Ex. 3, AR001766, AR002064.
- 11 52. NPS commented throughout the EIS process that studies showing lack of
- 12 adverse impact should not be construed as concluding that "mining exploration and
- 13 development does not impact critical resources in the Grand Canyon watershed."
- 14 Ex. 64, AR003997; Ex. 45, AR004114; Ex. 46, AR003544.
- 15 SIR 2010-5025 Ch. D addressed potential ecotoxicity based on literature
- 16 survey. SIR 2010-5025 Ch. D, Hinck, et al., Biological Pathways of Exposure and
- 17 Ecotoxicity Values for Uranium and Associated Radionuclides. Ex. 6, AR000399-
- 18 000411. The report cautions that it cannot be used to make conclusions regarding
- 19 pathways or impacts of uranium exposure on wildlife and vegetation. Id.
- 20 Factual Contradictions Between ROD and FEIS / Record
- 21 54. Even when data analysis showed no impact, the FEIS assumed: "If an
- 22 impact is possible, but cannot be quantified, it must be assumed that the impact
- 23 might or might not exceed thresholds for drinking water, which would constitute as
- 24 much as a major impact." Ex. 32, AR082484.
- 25 Based on the SIR 2010-5025 and other reports, the federal cooperators did 26 not believe there was a factual basis to withdraw the NAW to protect the R-aquifer.
 - The precipitation in the north parcel is estimated to be between 1 and

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12 per year for the hydrology studies it is assumed to have of precipitation per year. The discharge for each spring was rounded up to the nearest GPM. There are no wells in the perched zones dilution calculation was completed for the Redwall Muav aguifer using the following assumptions average pump of 3-5 GPM concentration of 4 ug/l per minute and 18 mines total within the 20-year time frame. This information was used to determine how much spring discharge would be needed to dilute the concentration of dissolved uranium in water source enough to return water to drinking water quality. The dilution calculation came to 250 GPM. The springs in the area are easily at that level. Based on this there is no basis for withdrawing the north parcel based on contamination of the Redwall Muav aguifer since even looking at the worst-case scenario reveals numerous opportunities for dilution to occur. The levels seen for arsenic were less than the multiples allowed for drinking water therefore less discharge would be required to meet drinking water standards for arsenic.

- Ex. 33, AR042831; see also Ex. 43, AR042839-40.
- 11 \ 56. The meeting minutes express the view that there was sound basis to reduce
- 12 the size of the South Parcel. "On the south parcel there are many springs that
- 13 discharge from the aquifer close to the rim but the direction of flow turns south as
- 14 you move away from the rim." *Id*.
- 15 | 57. The SIR 2010-5025 data analysis did not reflect current law or regulations.
- 16 Ex. 6, AR000057. BLM assumed that the FEIS had to incorporate existing law and
- 17 rules. Ex. 62, AR072730.
- 18 Endowment and Reasonable Foreseeable Development

advanced remote sensing techniques.

- 19 | 58. USGS an estimated 375 million pounds of mineable uranium within the NAW
- 20 or 164,000 Tons. Ex. 6, AR000092. These calculations used the data from USGS
- 21 Circular 1051 (Finch et al. 1990) adjusted for a smaller land area. BLM explained:

They recycled the 1990 Finch estimate of uranium endowment with some slight corrections for acreage. If you go back to the 1990 Finch estimate: the USGS took a control plot on the North parcel centered

around Hack-Pinenut, estimated a per square mile endowment on that

control plot, and then extrapolated the endowment to the entire area. If the South parcel feels like it comes up short in discoveries, it could

be that the 1990 Finch estimate was in error in extrapolating Hack-Pinenut to the south parcel. Or it could also be that the exposure

of breccia pipes is different on the South, with more blind pipes that have little surface expression and will only come to discovery with

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Ex. 37, AR072856.

59. The FEIS and SIR 2010-5025 Ch. A excluded blind breccia pipes even though potentially significant.

Hidden breccia pipe are wild card in resource estimates; one exploration exec reports 2-3 hidden pipes are present for every 1 that have surface expression; no way of evaluating at this time Surface estimate usually low by factor 2.5:1 based upon drilling v. final production is the claim but the actual ratio given in Chapter A is 3.65:1 based on consultant report evaluating 6 mined deposits (sample small and thus error bars on this estimate of ratio may be large).

- Ex. 38, AR045625-045628.
- 60. Quaterra calculated the mineralized breccia pipe density at different stratigraphic levels in the Grand Canyon and surrounding area to prove that there may be 220 mineralized breccia pipes within the NAW.¹ Ex. 22, AR059922. Using survey data, Quaterra assumed half of the mineralized pipes are economically viable and using the historic estimate of 3 million pounds per developed breccia pipe, the total economically viable uranium potential in the NAW could total 330 million pounds, not the 45 million pounds estimated by the FEIS. *Id.* at 9-11.
- 61. Nearly all known mineralized pipes in the region have been found in a north-south trending mineralized "corridor." The withdrawal boundaries were based on located mining claims as of 2008. "More than three dozen pipes have been drilled outside of the corridor by Energy Fuels Nuclear. The pipes had large and well developed structures but lacked significant mineralization." *Id.*
- 62. Relying on SIR 2010-5025 Ch. A's analysis, the reasonable foreseeable development team (RFD) assumed only 15% of the uranium endowment would be economic. Ex. 77, AR005144. This conclusion lacks any supporting data and contradicts other information that breccia pipe uranium grades are among the highest in the US.

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²⁷ BLM recognized Gene Spiering's expertise. Ex. 77, 78, 79, AR005144; AR043893; AR043814.

63. The BLM Mineral Examiner's report concludes:

Failure to develop uranium resources on the subject lands that have the potential of becoming part of the second most important uranium-producing region in the United States has far reaching economic implications, which are beyond the scope of this report.

The BLM Mineral Report classifies the uranium potential of the NAW as "(H/D)"; the highest classification for potential and level of certainty. Ex. 57, AR000416.

- 64. The FEIS responded that Hack 2 was a surrogate for hidden breccia pipes. Ex. 3, AR002427. This response would assume a ratio of one hidden pipe for every three pipes, while all of the comments suggested the ration was 2.5 or 3.65 to one. There are only three pipes in the Hack Complex, since Hack 1 mined the original Hack pipe. Ex. 8, AR081657.
- 65. The FEIS concluded that the withdrawal will not impair 12% of the most favorable endowment, but will "seriously affect the potential development of the only uranium mineralized area" on federal lands. *Id.* Ex. 5, AR002860-002862. USGS 2010-5025 did not consider data developed since 1990. Ex. 6, AR000092.
- 66. Omission of more recent data, (Ex. 22, AR059920-24) failure to estimate for hidden breccia pipes, withdrawal boundaries based on located claims 86-87, which reflect industry determinations of potential, and misuse of the Wenrich study to adopt the 15% cut off are all errors that understate the viable uranium resource. Ex. 8, AR081718-9. The higher endowment further shows that mining would be a long-term industrial activity providing jobs and income for 42 years, not the 20 years assumed in the FEIS. Id.

Cultural Resources

67. The NAW area includes reservations and traditional/cultural sites for the Hualapai or Walapai (Hualapai: Hwalbáy[1]), Hopi, Havasupai, Southern Paiute, Zuni and Navajo Nation tribes. All tribes were cooperating agencies and were consulted pursuant to NHPA/ARPA rules. Ex. 3, AR002323.

68. The FEIS described cultural resources by landscape and site.

The Kanab Plateau and House Rock Valley are encompassed by the Grand Canyon Regional Landscape of the Southern Paiute. The Kanab Plateau parcel includes the Kanab Creek ecoscape, Kanab Creek, Kanab Creek Ghost Dance site, Yellowstone and Antelope Spring, trails, and resource areas. The House Rock parcel includes the Colorado River, pre-Euro-American trail systems, Aesak cultural landscape, resource areas, Cane Ranch, Mormon Honeymoon Trail. The Tusayan parcel includes Red Butte, resource areas, Hopi Trails, and Navajo cultural landscapes.

- Ex. 3, AR002214-21; Ex. 47, AR042951. The sites listed for the Kanab Plateau are included in ACECs under the 2008 RMP. *Supra* ¶2.
- 69. The FEIS addresses the potential impacts of mining on cultural historic and archaeological resources and concludes that such impacts are negligible due to existing laws and regulations that either require avoidance or mitigation of any impacts. Depending on the individual location of mines, cultural resources may not be disturbed at all. Ex. 3, AR002215.
- 70. The FEIS also concludes that traditional cultural practices and sacred physical tribal sites and objects are protected from direct and indirect impacts of mining activities under FLPMA, NEPA, the ARPA, the NHPA, NAGPRA, the RLUIPA, as well as several corresponding regulations. Ex. 3, AR002216, AR002223. The remaining Native American resources discussed in the FEIS which may not be mitigated, are individual sensibilities, specifically, the belief that mining the earth for commercial gain is "wounding" the earth. Ex. 3, AR002221.
- 71. The regulations require a cultural resources inventory prior to all mining activities that involve surface disturbance. The FEIS concludes that there would be "no cumulative impacts to cultural resources are anticipated under Alternative A, [the No Action alternative]." Ex. 3, AR002216-2218.
- 72. SWCA commented: "drill sites can be moved, at least to a point, to avoid sensitive resources (we've done that here)." Ex. 47, AR050279. "Seems misleading to say any of the hundreds of sites could be potentially impacted....

- 1 and is really not a good impact analysis. It would be impossible to impact all those
- 2 sites with the acreage of disturbance even if intentionally locating mining on top of
- 3 cultural sites. Doesn't consider any mitigation and loses distinction among
- 4 | alternatives." Ex. 47, AR050286.
- 5 American Indian Resources or Cultural Landscapes
- 6 73. All of the tribes opposed uranium mining and supported the NAW. The
- 7 detailed comments identified specific sites as sacred or having cultural significance.
- 8 See Ex. 3, AR001905-22.
- 9 | 74. The comments did identify land areas that were historically important: (1) a
- 10 108 mile stretch along the south side of the Grand Canyon and the Colorado River,
- 11 for the Hualapai, Ex. 7, AR003369 (2) all of Arizona for the Hopi, (3) lands within
- 12 ∥ and around the Grand Canyon for the Hopi and Havasupai, Ex. 7, AR003366,
- 13 | [Hopi] (4) the Grand Canyon for the Navajo Nation, and (5) all of northern Arizona
- 14 | for the Southern Paiute. Ex. 3, AR001916; Ex. 7, AR003388, AR003394.
- 15 | 75. In the NAW FEIS, "The concept of 'cultural landscape' or 'ethnographic
- 16 | landscape' is taken from scholarly literature and is used in the EIS exclusively in
- 17 this sense. These terms are not intended to imply any kind of landscape level
- 18 protection." Ex. 3, AR001916; Ex. 49, AR069464; Ex. 75, AR073041. The Solicitor
- 19 reviewed the definition of "cultural landscape" and "ethnographic landscape". Ex.
- 20 49, AR0069464. Connie Stone foresaw years of litigation over the term. *Id.*
- 21 | 76. The FEIS discusses cultural resources in Chapter 3, 3.11 and cumulative
- 22 | impacts in Chapter 4, 4.11. Ex. 3, AR001905-001912, 002214-002219. The FEIS
- 23 concludes that existing regulations fully mitigate impacts on cultural resources. Ex.
- 24 | 3, AR002216, 002218.
- 25 | 77. The FEIS discusses Indian resources in FEIS 3.12 and impacts in 4.12. Ex.
- 26 | 3, AR001912-001922, AR002219-002229. The FEIS defines American Indian
- 27 resources as places that are important to American Indian cultures and traditions,

- 1 and may be "individual landforms or large landscapes; they may be associated with 2 sacred beings or ancestors, places where people came and still come to hunt game 3 or gather plant resources, or archaeological sites." Ex. 3, AR001583, AR001912. 4 They include "cultural landscapes; rivers, creeks, and springs; known activity areas; 5 and trails and subsistence areas." *Id.* See Ex. 3, AR002221. The FEIS also uses 6 the term "ethnographic landscape." See Ex. 3, AR001583, AR001905, AR001912, 7 AR001916. Cultural resources are defined as a "physical phenomena associated 8 with past or present cultures and include archaeological sites and historic buildings 9 and structures, as well as places of traditional and cultural importance." Ex. 3, 10 AR001905. See Ex. 3, AR002214.
 - 78. The FEIS concludes that due to the belief that mining wounds the earth it is not possible to fully mitigate impacts. Ex. 3, AR002221-002223, AR002225. The ROD also concluded that "any mining within the sacred and traditional places of tribal peoples may degrade the values of these lands to the tribes that use them." Ex. 2, AR000009. Despite only recognizing one traditional cultural property, the ROD states that "the entire area is recognized as the traditional homeland and use are for seven tribes." Ex. 2, AR000011.
 - 79. NPS commented that the tribal perspective believed that "each hole drilled into the earth is a wound to the earth and there is a cumulative impact to drilling hundreds/thousands of these holes for exploratory drilling projects. Full mine operations or exploratory drilling have the same adverse impact from a tribal perspective." Ex. 50, AR004345; see also Ex. 51, AR043769.
- 23 80. Based on NPS comment, the FEIS replaced the word "beliefs" with "Thus,
 24 Alternative A would result in the most considerable impacts to tribal sense of place,
 25 value, attitudes about the study area." Ex. 52, AR004350.
 - 81. The conclusion that reclamation would not 'restore the setting and integrity' of a traditional cultural property' reflects NPS views. Ex. 53, AR004501; see also

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- Ex. 54, AR076343. ("[T]he primary issue is with drilling into the earth, a cultural taboo, which is seen as irreversible desecration of these sites.")
 - 82. In the same comments, NPS stated:
 - 1) Each tribe has sacred places across the landscape, 2) Most of these are not on tribal land, 3) These places are being steadily impacted (Snowbowl, Woodruff Butte, Taylor, Mt Graham, etc), 4) Tribes see this as inhibiting their ability to practice their religion and a methodic destruction of their culture."
 - Ex. 54, AR076342. SWCA appears to agree but one person commented that some of the sites listed are a bit far removed to include in the EIS. *Id*.
 - 83. Other cooperators questioned the phrase "wounding the earth." AGS Singh wrote: "if there was a cultural site a federal agency would not grant a permit to mine there. A site survey for archeological materials is conducted before the site is approved." As to DEIS 4.12, Singh wrote:
 - if perception of adverse effects is as important as a physical impact, this becomes a no-win situation." and "Any wounding of the earth through drilling or mining. How does this square with wells that they drill for water? Coal mining is being conducted in the Black Mesa; with many tribal persons employed there. Many local persons helped locate uranium deposits in the Four Corners area in the 1940s and 1950s and work in them.
- 17 Ex. 55, AR052123.
- 18 Coordination

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- 19 84. The AULEC members except for Garfield County and Fredonia signed cooperating agency agreements in February 2010. Ex. 80, AR056730-056781.
- 21 85. AULEC members scheduled a public hearing on the NAW regarding the
- 22 economic impacts and invited Scott Florence. Ex. 66, AR069454; Ex. 67,
- 23 AR069459.
- 24 | 86. Two uranium mills can process uranium from NAW, Shootaring in Garfield
- 25 County and White Mesa Mill in San Juan County. These mills are important to the
- 26 local economies. Uranium mining would bring the second mill out of stand-by
- 27 status. Ex. 65, AR003420; Ex. 8, AR081668.

- 1 87. The FEIS did not consider the newer mill in Garfield County even though the
- 2 shorter distance would reduce emissions and hauling and would provide income
- to southern Utah communities. Ex. 3, AR002253-54. 3
- 4 88. Without the withdrawal, uranium mining would contribute \$168 million to
- 5 Arizona over a 42-year period from severance taxes alone. Corporate and
- 6 individual income tax revenues would contribute another \$2 billion over the same
- 7 time period. The NAW will cost the State of Arizona nearly 400 jobs directly related
- 8 to mining and 688 jobs indirectly related to mining. Ex. 56, AR004627.
- 9 89. Local and state governments commented that the FEIS understated the
- 10 economic impacts. Ex. 58, AR044372; Ex. 65, AR003420. BLM redid the
- 11 economic impacts analysis but cut the impacts significantly. Ex. 59, AR068620; Ex.
- 12 60, AR003590.
- 13 90. FEIS cited current severance taxes statewide for years 2005 to 2010, but did
- 14 not project severance taxes from uranium mining. Ex. 3, AR001986-89. Only one
- 15 mine produced uranium in the NAW in 2009 and 2010.
- 16 91. Coalition cooperating agencies were not invited to the federal agency
- 17 cooperating agency meetings, including the alternative development meetings. Ex.
- 18 68, AR040664; Ex. 69, AR040666; Ex. 33, AR042829.
- 19 92. BLM added the word "coordination" to a cooperating agency agenda for the
- 20 first time in May 2011. Ex. 61, AR066645. BLM recognized that the NAW conflicted
- 21 with the local government plans and objectives but did not try to reconcile conflicts.
- 22 See Ex. 3, AR001642-43.
- 23 Position of State of Arizona
- 24 93. All Arizona agencies, except for AzGFD opposed the NAW. The Arizona
- 25 legislature adopted resolutions opposing the NAW. Ex. 70, AR066677; Ex. 71,
- 26 AR035277.
- 27 94. The Arizona Department of Environmental Quality (DEQ) strongly questioned

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the conclusions in the FEIS.

As the lead regulatory agency responsible for protection of Arizona's environment, ADEQ closely regulates uranium mining activities in Northern Arizona. The environmental risks posed by mining in Arizona have been successfully managed by both state and federal environmental requirements currently in place. The State of Arizona has adopted the Aquifer Protection Permit program specifically designed to protect its precious groundwater resources. . . . DEIS does not give full consideration to modern uranium mining technology or ADEQ issued permits that require environmental controls, financial assurance, and reclamation.

Ex. 39, AR003308. DEQ questioned the DEIS's basis for impacts to perched aquifers or R-aquifers because it was contrary to the agency's observation of one minor perched aquifer due to a livestock pond. *Id.* at AR003309. The assumption of 1 gpm of water draining with 400 ug/L reaching the R-aquifer is unsupported. *Id.* Also, the assumption in SIR 2010-5025 that recharge between the surface and the R-aquifer will carry radionuclides fails to distinguish between mines and natural recharge. *Id.* at AR003310.

- 95. AGS concluded that a thirty metric ton load of uranium could be dumped into the Colorado River and the levels of radiation and arsenic would still be within EPA standards. Ex. 72, AR003319, AR003327-28. Donald Bills, principal author of SIR 5025 Ch. C did not disagree. Ex. 73, AR052126.
- 96. The Colorado River has a natural concentration of uranium of 4 parts per billion (ppb), amounting to 86,000 to 176,400 pounds of uranium carried annually. Ex. 72, AR003324, AR003326.
- 97. The Arizona Land Department estimated that the withdrawal would cost the state between \$1.5 million and \$18.5 million per mine that would have been developed on the 35 school sections. *Id.* at AR003315; Ex. 74, AR003302.

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| 1 | 1 December 6, 2013. | |
| 2 | Respectfully Submitted, | |
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| 9 | Attorneys for the Plaintiffs Quaterra Alaska, Inc.; Quaterra Resources, Inc.; and the Arizona Utah Local Economic Coalition on behalf of named member, the Board o Supervisors, Mohave County, Arizona. | |
| 10 | | |
| 11 | CERTIFICATE OF SERVICE | |
| 12 | I hereby certify that I have caused the Statement of Facts in Support of the | |
| 13 | Motion for Summary Judgement and the Appendix to be served upon counsel of | |
| 14 | record through the Court's electronic service system (ECF/CM) and by first class | |
| 15 | mail to Gregory Yount at the following address: 807 West Butterfield Road, Chino Valley, Arizona 86323. | |
| 16 | 6 | |
| 17 | 7 Dated: December 6, 2013 | |
| 18 | 8 /s/ Constance E. Brooks | |
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| 28 | Page 21 Plaintiffs' Statement of Facts in Support of Motion for Summary J | udgment |