RECEIVED
AUG 16 2017
BY:

WESTERN MINING ACTION PROJECT

Roger Flynn, Esq.,
Jeffrey C. Parsons, Esq.

P.O. Box 349
440 Main St. #2
Lyons, CO 80540
(303) 823-5738
Fax (303) 823-5732
wmap@igc.org

Via Certified Mail

August 3, 2017

Mr. Kerwin Dewberry, Supervisor
Coronado National Forest
300 W. Congress St.
Tucson, AZ 85701
kdewberry@fs.fed.us – also via email

Mr. Calvin N. Joyner, Regional Forester
U.S. Forest Service, Southwestern Region
333 Broadway SE
Albuquerque, NM 87102

Sonny Purdue, Secretary
U.S. Department of Agriculture
1400 Independence Avenue S.W.
Washington, D.C. 20250

Jeff Sessions, Attorney General
U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530-0001

Scott Pruitt, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N. W.
Mail Code: 1101A
Washington, DC 20460

Alexis Strauss, Acting Regional Administrator
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Misael Cabrera, Director
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007

ED_002020B_00040128-00001

Re: Sixty-Day Notice of Intent to Sue to Remedy Violations of the Clean Water Act in the Forest Service's Issuance of a Record of Decision and Amendment of the Coronado Land and Resource Management Plan for the Rosemont Copper Project

Dear Officials of the U.S. Department of Agriculture, EPA, and Arizona DEQ,

On behalf of Save the Scenic Santa Ritas, Center for Biological Diversity, Arizona Mining Reform Coalition, and the Sierra Club and its Grand Canyon Chapter (collectively, "SSSR"), I hereby provide you notice in accordance with the citizen suit provision of the Federal Water Pollution Control Act ("Clean Water Act" or "CWA"), 33 U.S.C. § 1365 (CWA Section 505), and its implementing regulations, 40 C.F.R. Part 100 et seq., of SSSR's intent to sue for violations of the CWA, 33 U.S.C. §§ 1251 et seq., arising from the U.S. Forest Service's (USFS) issuance of a Record of Decision (ROD) for the Rosemont Copper Project (or Mine) in Pima County, Arizona. The ROD was signed by Coronado Forest Supervisor Kerwin Dewberry on June 6, 2017. https://www.rosemonteis.us/files/final-eis/rosemont-feis-final-rod.pdf

> This ROD documents my decision and rationale for the selection of "Alternative 4 – Barrel Alternative" (referred to in this ROD as the "selected action"). Alternative 4 (Barrel Alternative or selected action) is described in chapter 2 of the FEIS. It is also described in detail in appendix A of this ROD. My decision includes the associated transportation system, design features, mitigation and monitoring measures as amended in this decision (appendix B of the FEIS and errata6), changes to the Arizona National Scenic Trail, and forest plan amendments (FEIS chapter 2, p. 117), as described in this document and the FEIS. My decision allows development of the Rosemont mineral deposit in a manner that is consistent with the selected action.

ROD at 12.

The Forest Service's ROD and authorization for Rosemont/Hudbay to implement the Plan of Operations, as revised by the ROD's chosen Alternative 4 for the Rosemont Project in the Final EIS, is in violation of an effluent standard and/or limitation as defined in CWA Section 505(f), and Sections 313 (33 U.S.C. § 1323) and 401 (33 U.S.C. § 1341) of the CWA by failing to ensure that the Project complies with all applicable CWA requirements, state and federal water quality standards, regulations, protections and requirements. The USFS Manual states that: "All newly approved Plans of Operations for mining operations on National Forest System lands must comply with the Federal Water Pollution Control Act of 1972, 33 U.S.C §§ 1251-1387 (Clean Water Act or CWA). Proposed mining activities, which can reasonably be expected to result in any discharges into waters of the United States are subject to compliance with CWA Sections 401, 402, and/or 404 as applicable." FSM § 2817.23a - Compliance With the Clean Water Act.

The Forest Service's 36 CFR Part 228 regulations require that the operator submit sufficient information to enable the Forest Service to ensure the operator's compliance with the Clean Water Act (CWA) and all applicable state and federal requirements to protect water quality (surface and ground water) and fisheries. *See* 36 CFR §§ 228.4(c)(3), 228.8(b), 228.8(e). In addition, CWA Section 313 imposes duties on the Forest Service to ensure that all activities permitted by the agency comply with all water quality protection requirements.

ED_002020B_00040128-00002

> Under the Clean Water Act, all federal agencies must comply with state water quality standards, including a state's antidegradation policy. 33 U.S.C. § 1323(a).

Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1153 (9th Cir. 1998). *See also* Marble Mountain Audubon Soc'y v. Rice, 914 F.2d 179, 182-83 (9th Cir. 1990); Oregon Natural Resources Council v. Lyng, 882 F.2d 1417, 1424-25 (9th Cir. 1989) ("The CWA also requires states to implement water quality standards with which federal agencies must comply."); Northwest Indian Cemetery Protective Ass'n v. Peterson, 795 F.2d 688 (9th Cir. 1986), *rev'd on other grounds sub. nom.* Lyng v. Northwest Indian Cemetery Protective Ass'n, 485 U.S. 439 (1988); NWF v. Corps of Engineers, 2004 WL 2211639 (9th Cir. October 4, 2004).

Unless the Forest Service withdraws its ROD for the Rosemont Project within 60 days of this letter, SSSR intends to challenge the ROD, FEIS, and related approval decisions in federal district court.

Failure to Comply With the Clean Water Act and All Environmental Laws, Standards and Requirements

As noted herein and in SSSR's, et al.'s previous comments and Objections (February 2014) which are incorporated herein, the project is predicted to violate numerous environmental laws and standards.[1] This is especially true for water quality. Under the CWA, the Organic Act and USFS mining regulations, the agencies cannot approve any mining plan that may result in such exceedances/violations. "Operator shall comply with applicable Federal and State water quality standards, including the requirements of the Federal Water Pollution Control Act [Clean Water Act], as amended (33 U.S.C. 1151 et seq.)." 36 CFR 228.8(b).

Yet the FEIS and ROD are based on the USFS' legal position that: "**The Forest Service does not have the responsibility or jurisdiction to determine whether or not the mine would degrade water quality or violate water quality standards.**" FEIS at 553. That is a fundamental misunderstanding of federal law and as such, renders the agency's analysis and conclusions regarding water quality and related issues (such as habitat and wildlife protection and impacts) unsupportable as a matter of law.

This argument was recently and squarely rejected by the federal courts in a decision from Montana, where the Forest Service had argued that the federal court could not rule on the USFS's ROD and EIS that had approved a mine despite evidence that it violated state water quality requirements:

> The Forest Service's approval of the Project despite noncompliance with Montana's nondegradation standards is arbitrary and capricious in violation of the Clean Water Act, the Organic Act, and NFMA.

Save Our Cabinets v. U.S. Dept. of Agriculture, ---F.Supp.3d---, 2017 WL2345667, *1 (D. Mont. 2017). The Court specifically noted the different legal position taken by plaintiffs and the

[1] SSSR's Objections are available on the USFS webpage for the Rosemont project at: http://www.rosemonteis.us/files/objection-letters/084_save_scenic_santa_ritas_et_al.pdf

ED_002020B_00040128-00003

USFS regarding whether CWA Section 313 created a separate and independent duty on the USFS to ensure that the Mine would comply with all state and federal water quality standards:

> According to the defendants, because the State of Montana has been delegated authority to issue discharge permits and has adopted water quality standards approved by the EPA, the State is the primary decisionmaker regarding compliance with the Clean Water Act, including compliance with state water quality standards. For that reason, they argue that the Forest Service properly determined that reliance on Montana DEQ's decisions constitutes compliance with Clean Water Act requirements.
>
> ...
>
> Plaintiffs argue that by deferring to the State's future permit process, despite the current record which predicts that State water quality standards will be violated, the Forest Service ignores Section 313's creation of a separate and independent duty on federal agencies to comply with all federal and state water quality standards, and that judicial review of current compliance is appropriate under the APA, *Idaho Sporting Cong'r*, 137 F.3d at 1153, and the Clean Water Act's citizen suit provision, *Rock Creek II*, 703 F.Supp.2d at 1163–65.

Save Our Cabinets, 2017 WL2345667, ** 5-6. The Court agreed with Plaintiffs' argument and rejected the Forest Service's position, holding that if the record shows a predicted violation of any state or federal water quality standard, the USFS's ROD violated the CWA and related laws. "[T]he data before the Court shows noncompliance for future stages of the Project. Approval of the Project despite the violation of Montana's water quality standards is arbitrary and capricious." Id. at *8.

This comports with the CWA, which in addition to the agencies' regulations, under CWA Section 313, the USFS cannot approve any activity that may result in a violation of a water quality standard.

> Under the Clean Water Act, all federal agencies must comply with state water quality standards, including a state's antidegradation policy. 33 U.S.C. § 1323(a). Judicial review of this requirement is available under the Administrative Procedure Act. Oregon Natural Resources Council v. U.S. Forest Service, 834 F.2d 842, 852 (9th Cir. 1987).

Idaho Sporting Congress, 137 F.3d at 1153; *see also* Marble Mountain Audubon Soc'y, 914 F.2d at 182-83; Oregon Natural Resources Council, 882 F.2d at 1424-25; Hells Canyon Presv. Council, 2006 WL at *4-5 (USFS mine approvals must comply with CWA standards).

EPA's antidegradation standards, which the USFS must ensure compliance with, requires that: "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained." 40 CFR § 131.12 (a)(1). As detailed herein, the agency has not ensured that all instream uses and water quality "shall be maintained." Indeed, as noted herein, the FEIS and ROD admits that many such uses in local streams will either be reduced or eliminated altogether.

In addition, under the Organic Act, and the 36 CFR Part 228 regulations, the agency cannot approve an MPO unless it can be demonstrated that all feasible measures have been taken to

ED_002020B_00040128-00004

"minimize adverse impacts" on National Forest resources, including all measures to protect water quality and habitat. *See* Rock Creek Alliance v. Forest Service, 703 F.Supp.2d 1152, 1170 (D. Montana 2010) (Forest Service PoO approval violated Organic Act and 228 regulations by failing to protect water quality and fisheries).

Under the CWA and EPA regulations, water quality standards include the protection of beneficial uses. "A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses." 40 CFR § 131.2. The minimal designated use for a water body is the "fishable/swimmable" designation which "provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." 33 U.S.C. § 1251(a)(2).

> The text [of the CWA] makes it plain that water quality standards contain two components. We think the language of § 303 is most naturally read to require that a project be consistent with *both* components, namely, the designated uses *and* the water quality criteria. **Accordingly, under the literal terms of the statute, a project that does not comply with a designated use of the water does not comply with the applicable water quality standards.**

PUD No. 1 of Jefferson County v. Washington Dep't of Ecology, 511 U.S. 700, 714-15 (1994) (*italics* emphasis in original, **bold** emphasis added). Thus, the CWA prohibits any activity that will not fully protect all of the designated uses for that water body.

As the FEIS acknowledges (as noted herein), the mine also violates the CWA's/Arizona's "antidegradation" requirements. Antidegradation policies "shall, at a minimum, be consistent with . . . [e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." 40 CFR §131.12(a)(1). Under this regulation, "'no activity is allowable . . . which could partially or completely eliminate any existing use.'" PUD No. 1, 511 U.S. at 718-19 (*citing* EPA, Questions and Answers on Antidegradation 3 (Aug. 1985)).

In addition, because Davidson Canyon and Cienega Creek are designated "Outstanding Waters," the prohibitions against any degradation or impairment apply – something which the project cannot meet. *See* 40 CFR §131.12(a)(3) ("Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.")

As just one example, the FEIS admits that the Project could eliminate existing water quality uses and thus violate water quality standards protecting such uses, in Cienega Creek:

> Cienega Creek extends from its headwaters near Sonoita approximately 36 miles downstream, flowing through both the Las Cienegas National Conservation Area and the Cienega Creek Natural Preserve. Throughout much of this length, Cienega Creek exhibits perennial or intermittent stream flow, and an extensive gallery of cottonwood and willow is supported along the Creek. In addition, the flood plain of Cienega Creek contains the remnants of once-extensive cienegas, or areas of shallow groundwater and wetland complexes.

ED_002020B_00040128-00005

> Cienega Creek is noted for both scenic beauty and ecological significance. It forms an important connection for wildlife movement between sky islands in southern Arizona. It is one of the few remaining examples of a desert riparian community, exhibiting a high level of plant diversity in a relatively small geographic area. Pima County notes that the habitat along Cienega Creek supports more than 280 native species of mammals, birds, reptiles, amphibians, fish, and insects that either reside in or frequent the preserve and provides habitat for neotropical migratory birds, which seasonally use the area for nesting. The presence of perennial stream flow supports native frog and fish populations, including threatened and endangered species.
>
> The ecological, recreation, and cultural importance of Cienega Creek is tied irrevocably to its hydrology. Cienega Creek is valuable because it is a perennial riparian corridor. Predictions of impact to Cienega Creek are less certain than those for Empire Gulch and encompass a wide range of possibilities, from no impact at all, **to extensive dewatering and drying.** The timing is also uncertain, with possible changes occurring many decades or hundreds of years in the future. **Changes in the hydrology severe enough to cause dewatering of Cienega Creek are one possible outcome of the mine, and the likelihood of mine effects becoming severe enough to dewater Cienega Creek also increases with climate change and increased groundwater demand within the basin. If these severe effects were to occur, much of the value of Cienega Creek for recreation, wildlife habitat, scenic beauty, and cultural importance would be lost.**

FEIS at 547 (emphasis added). The agency further admits to the Project's potential, indeed certainty, of long-term loss of water quality and related uses:

> Upper Cienega Creek currently meets the regulatory definition of a wadeable, perennial stream. As such, **regulatory requirements specific to biological integrity (taxa richness, species composition, tolerance, and functional organization comparable to that of a stream with reference conditions in Arizona) and bottom deposits would need to be met.** The potential for reductions in stream flow would potentially drive water quality changes as well, as discussed earlier in this section. Results of the models are mixed. By 50 years after closure, only one modeling scenario out of five suggests that there would be an increase in the risk of low-flow conditions occurring. By 150 years after closure, four out of five modeling scenarios suggest that there would be an increase in the risk of low-flow conditions occurring. **By 1,000 years after closure, all modeling scenarios agree that there would some level of increase in the risk of low-flow conditions.**
>
> **These low-flow conditions would increase water temperature, increase nutrient loads, and decrease the assimilative capacity of the stream. Changes in these characteristics would have an effect on the aquatic biota and the characteristics of biological integrity listed above.**

FEIS at 554-55 (emphasis added). The USFS cannot fail to protect these resources simply by saying that it is "uncertain" whether the impacts may occur.

> [W]e [the federal courts] nonetheless have a responsibility to ensure that an agency's decision is not arbitrary. **It is not enough for the Service to simply invoke "scientific uncertainty" to justify its action.** As the Supreme Court has explained, "[r]ecognizing that policymaking in a complex society must account for uncertainty ... does not imply that it is sufficient for an agency to merely recite the terms 'substantial uncertainty' as a justification for its actions." State Farm, 463 U.S. at 52, 103 S.Ct. 2856. The Service must rationally explain why the uncertainty regarding the impact of whitebark pine loss on the grizzly counsels in favor of delisting now, rather than, for example, more study. *See* id. Otherwise, we might as well be deferring to a coin flip.

Greater Yellowstone Coalition v. Servheen, 665 F.3d 1015, 1028 (9th Cir. 2011)(emphasis added).[2] Also, the uncertainties concerning the extent of groundwater drawdown and its effect on riparian habitats does not relieve the Forest Service of the responsibility under NEPA to analyze the mitigation of likely impacts at the outset. South Fork Band Council v. U.S. Department of the Interior, 588 F. 3d 718 (9th Cir, 2009).

> BLM argues that an effectiveness discussion was not required because it is impossible to predict the precise location and extent of groundwater reduction, and that problems should instead be identified and addressed as they arise. But NEPA requires that a hard look be taken, if possible, *before* the environmentally harmful actions are put into effect. *National Parks & Conservation Association v. Babbitt*, 241 F.3d 722, 733 (9th Cir.2001).
>
> In this instance, the EIS states that BLM has identified fifty perennial springs and one perennial creek that are the most likely to dry up, though among these it is impossible to "conclusively identify specific springs and seeps that would or would not be impacted." **That these individual harms are somewhat uncertain due to BLM's limited understanding of the hydrologic features of the area does not relieve BLM of the responsibility under NEPA to discuss mitigation of reasonably likely impacts at the outset.** *See National Parks*, 241 F.3d at 733("lack of knowledge does not excuse the preparation of an EIS; rather it requires [the agency] to do the necessary work to obtain it.") Even if the discussion must necessarily be tentative or contingent, NEPA requires that the agency give some sense of whether the drying up of these water resources could be avoided.

South Fork Band Council, 588 F.3d at 727 (emphasis added). Here, the lack of an adequate analysis of the impacts to ground water, surface water, and their dependent resources noted herein, along with the lack of an adequate mitigation discussion (including effectiveness) violates NEPA (and the failure to protect these resources/uses violates the CWA).

---

[2] This rule applies to all of the instances noted herein, where the USFS fails to fully protect affected resources because the predicted impacts are based on modeling, or that long-term impacts are uncertain.

ED_002020B_00040128-00007

In addition to the potential violation of water quality standards and uses here admitted by the agency, the elimination of perennial flow of the Creek which "supports native frog and fish populations, including threatened and endangered species," violates the agency's duties under the ESA, Organic Act/Part 228, NFMA, and other laws requiring the protection of wildlife and fisheries and their habitat from mining operations.

The beneficial use/designated use protection is not limited to streams which support fish; a water body composed of solely plants and invertebrates is also protected under the antidegradation policy. Bragg v. Robertson, 72 F. Supp.2d 642, 662 n.38 (S.D. W. Va. 1999) (citing EPA, Water Quality Standards Handbook § 4.4) *reversed on other grounds* 248 F.3d 275 (4th Cir. 2001). By contributing to a loss of beneficial uses in aquatic life and its supporting habitat, and/or by directly violating stream standards, the project violates the stream standards and the antidegradation policy. As such, the operations cannot be authorized.

The loss of critical riparian areas also violates the USFS's own requirements for riparian and wetland protection. For example, the agency's overriding Objective for riparian areas that may be affected by a project requires the agency: "1. **To protect, manage, and improve riparian areas** while implementing land and resource management activities. 2. To manage riparian areas in the context of the environment in which they are located, recognizing their unique values." FSM § 2526.02 (emphasis added). The agency's policy requires it to:

> 1. Manage riparian areas in relation to various legal mandates, including, but not limited to, those associated with floodplains, wetlands, water quality, dredged and fill material, endangered species, wild and scenic rivers, and cultural resources.
>
> 2. Manage riparian areas under the principles of multiple-use and sustained-yield, while **emphasizing protection and improvement of soil, water, and vegetation, particularly because of their effects upon aquatic and wildlife resources. Give preferential consideration to riparian-dependent resources when conflicts among land use activities occur.**
>
> 3. Delineate and evaluate riparian areas prior to implementing any project activity. Determine geographic boundaries of riparian areas by onsite characteristics of water, soil, and vegetation.
>
> 4. Give attention to land along all stream channels capable of supporting riparian vegetation (36 CFR 219.27e).
>
> 5. Give special attention to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water. This distance shall correspond to at least the recognizable area dominated by the riparian vegetation (36 CFR 219.27e). **Give special attention to adjacent terrestrial areas to ensure adequate protection for the riparian-dependent resources.**

FSM § 2526.03 (emphasis added). *See also* FSM 2527.02 (requiring the USFS "To preserve and restore the natural and beneficial values of floodplains and wetlands.").[3] Due to the severe

[3] Thus, as noted herein, the USFS cannot simply defer its review and protection of wetlands to the CWA Section 404 process. It has a separate and independent duty to protect wetland areas.

adverse impacts to, and elimination of many, of riparian and wetland areas, the USFS cannot approve any of the action alternatives.

Also, the Project cannot be approved without the required adequate CWA Section 401 Certification. Hells Canyon Preservation Council v. Haines, 2006 WL 2252554, *4 (D. Or. 2006). Although the FEIS mentions that a 401 Certification would be required, there is no evidence that an adequate Certification can be obtained. At a minimum, approval of the ROD and MPO/PoO (mining plan of operations) should wait until the current Pima County legal challenge to the ADEQ's certification is resolved. This is due in part to the herein-noted predicted potential water quality violations and degradation/loss of beneficial uses.

Further, there are additional water quality concerns that have not been adequately addressed. For example, it does not appear that the agencies will require Rosemont to obtain NPDES permit coverage for the sediment and other pollutants discharged from the road culverts and other water management structures. As the Ninth Circuit has stated:

> Further, the term man-made "conveyance," the essential trigger for finding a "point source" under the CWA, is broadly defined. [W]hen stormwater runoff is collected in a system of ditches, culverts, and channels and is then discharged into a stream or river, there is a "discernable, confined and discrete conveyance" of pollutants, and there is therefore a discharge from a point source. In other words, runoff is not inherently a nonpoint or point source of pollution. Rather, it is a nonpoint or point source under § 502(14) depending on whether it is allowed to run off naturally (and is thus a nonpoint source) or is collected, channeled, and discharged through a system of ditches, culverts, channels, and similar conveyances (and is thus a point source discharge).

Northwest Environmental Defense Center v. Brown, 640 F.3d 1063, 1070-71 (9th Cir. 2011) (culverts directing stormwater flows are point sources subject to NPDES permitting) *overturned on other grounds* Decker v. Nw. Envtl. Def. Ctr., 133 S.Ct. 1326 (2013). The Ninth Circuit recently reiterated, in light of the Supreme Court's and its previous decision in those cases, that:

> The Court left intact our holding that "when stormwater runoff is collected in a system of ditches, culverts, and channels and is then discharged into a stream or river, there is a 'discernable, confined and discrete conveyance' of pollutants, and there is therefore a discharge from a point source" within the meaning of the Clean Water Act's basic definition of a point source in 33 U.S.C. § 1362(14).

Northwest Environmental Defense Center v. Decker, 728 F.3d 1085-86 (9th Cir. 2013).

Without the required CWA permits (and Section 401 Certification), the USFS cannot approve the Plan of Operations. *See* Dubois v. U.S. Dept. of Agric., 102 F3d 127, 1300 (1st Cir. 1996) ("the Forest Service was obligated to assure itself that an NPDES permit was obtained before permitting the [requested activity].").

Thus, the USFS must fully review the quality of the discharges of all culverts related to the roads and other Project facilities. Here, the FEIS does not fully review the quality of the waters that will be discharged from all culverts and similar Project point sources – in violation of NEPA. In addition, the FEIS and ROD's failure to ensure that all water quality standards, including all beneficial uses, will be protected at all times violates CWA Section 313, as well as

the Organic Act, and Part 228 regulations. As noted herein, the agency cannot escape its water quality protection duties, and its NEPA review duties, by deferring to future Arizona regulatory reviews.

In addition, the ROD authorizes Rosemont to divert jurisdictional waters around the mine site, without protecting the aquatic life and habitat in the stream reach to be moved, and without requiring NPDES coverage for the outfall from the constructed channel. As the Ninth Circuit has held, discharges from such mine diversion channels must be covered by an NPDES permit and be considered when determining whether a project meets all water quality requirements. Friends of Pinto Creek v. EPA, 504 F.3d 1007, 1015-16 (9th Cir. 2007). Although the FEIS mentions this diversion as a means to mitigate other water quality impacts (*e.g.*, keeping flows away from mine facilities), there is no analysis, or permit coverage, for this new water conveyance structure and discharge.

The FEIS and ROD commit a number of other additional and fundamental errors, especially regarding water quality. For example, the FEIS and ROD are based on the agency's belief that:

> **The Forest Service does not have the responsibility or jurisdiction to determine whether or not the mine would degrade water quality or violate water quality standards** in the Outstanding Arizona Water reaches; this determination responsibility lies with ADEQ. However, the Forest Service does have the responsibility to assess and disclose potential resource impacts.

FEIS at 553 (emphasis added). The FEIS repeats this position numerous times, *see e.g.*:

> [B]ased on discussions with ADEQ on preliminary drafts of the FEIS, it was made clear to the Coronado that **the responsibility and jurisdiction for assessing whether the mine meets antidegradation criteria lie with ADEQ. The person seeking authorization for a regulated discharge to a tributary to, or upstream of, an Outstanding Arizona Water (in this case Rosemont Copper) has the responsibility to demonstrate to the State of Arizona that the regulated discharge will not degrade existing water quality** in the downstream Outstanding Arizona Water. This demonstration by Rosemont Copper, and determination by the State of Arizona, has not yet been completed.

FEIS at 549 (emphasis added). The USFS further states its abdication of its water quality protection responsibilities:

> **The State of Arizona has the sole authority to make a determination about whether or not the proposed project would violate State water quality regulations** by degrading Outstanding Arizona Waters. The person seeking authorization for a regulated discharge to a tributary to, or upstream of, an Outstanding Arizona Water (in this case Rosemont Copper) has the responsibility to demonstrate to the State of Arizona that the regulated discharge will not degrade existing water quality in the downstream Outstanding Arizona Water. **This demonstration by Rosemont Copper, and determination by the State of Arizona, has not yet been completed**.

FEIS at 503, 512 (emphasis added).

These legal positions are incomplete and inaccurate, as recently held by the court in Save Our Cabinets discussed above. Although the Forest Service is correct that it has a duty under NEPA to review all impacts, it also has a separate and independent duty to ensure that all water quality requirements and standards are met – under the CWA, Organic Act, and Part 228 regulations. *See* Idaho Sporting Congress, 137 F.3d at 1153;*see also* Marble Mountain Audubon Soc'y, 914 F.2d at 182-83; Oregon Natural Resources Council, 882 F.2d at 1424-25; Hells Canyon Presv. Council, 2006 WL at *4-5 (USFS mine approvals must comply with CWA standards).

Although Arizona has its own water quality mandates, the USFS cannot delegate-away what Congress has entrusted with the USFS regarding operations on public lands (and operations approved by the USFS with off-site impacts). The fact that Arizona may issue permits for these activities does not eliminate the USFS's independent duties under the CWA, Organic Act/Part 228 and NEPA. "A non-NEPA document – let alone one prepared and adopted by a state government-cannot satisfy a federal agency's obligations under NEPA." South Fork Band Council v. Dept. of Interior, 588 F.3d 718, 726 (9th Cir. 2009) (citing *Klamath-Siskiyou Wildlands Center v. BLM,* 387 F.3d 989, 998 (9th Cir.2004)). . The same NEPA violation was found in Klamath-Siskiyou, 387 F.3d at 998, where the Ninth Circuit rejected as "without merit" identical arguments that an agency may excuse itself from its NEPA hard look duty where a "facility operates pursuant to a state permit under the Clean Air Act."

NEPA requires that the "Environmental impact statement shall state how alternatives considered in it and decisions based on it will or will not achieve the requirements of sections 101 and 102(1) of the Act [NEPA] and other environmental laws and policies." 40 C.F.R. § 1502.2(d). *See e.g.*, Montana Wilderness Ass'n v. McAllister, 658 F.Supp.2d 1249, 1256 (D. Mont. 2009)("By failing to explain how the changes meet the requirements of the Wilderness Study Act, the Forest Service violated NEPA. *See* 40 C.F.R. § 1502.2(d).").

NEPA regulations also require that environmental impacts "shall be discussed in proportion to their significance." 40 C.F.R. § 1502.2(b). "Significance" is measured in terms of context and intensity and includes "[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment." 40 C.F.R. § 1508.27(b)(10). *See* WildEarth Guardians v. Salazar, 880 F.Supp.2d 77, 93 (D.D.C. 2012)(Section 1508.27(b)(10) requires that an EIS analyze compliance with "laws imposed for the protection of the environment"). *See also* Coal. on Sensible Transp. Inc. v. Dole, 642 F.Supp. 573, 590 (D.D.C.1986)(characterizing 40 C.F.R. § 1508.27(b)(10) as "requir[ing] consideration of whether a project threatens a violation of federal, state, or local environmental laws."), *aff'd,* 826 F.2d 60 (D.C.Cir.1987).

Thus, in addition to the USFS's duties under the CWA, Organic Act, and other mandates noted herein to ensure compliance with all water quality requirements (and other environmental protection mandates), the agency has a duty under NEPA to fully analyze whether each and every applicable requirement will be met. Such analysis cannot be deferred to the future, especially to a state agency under no NEPA obligations.

For example, as noted herein, the discharges from the soil cover and waste rock are predicted to violate water quality standards and requirements. FEIS at 472-73, 548-553. Yet the "mitigation" measures proposed for these facilities are delegated to Rosemont's stormwater permit issued by Arizona, which "requires Rosemont Copper to select, design, install, and

ED_002020B_00040128-00011

implement control measures (including best management practices), as appropriate, to ensure the discharge meets applicable water quality standards. The permit does not dictate the specific control measures that must be implemented." FEIS at 473.

Despite the reliance on these measures/controls, these measures have yet to be fully reviewed by the USFS, or the public. As held by the Ninth Circuit, however, such NEPA review cannot be delegated to a state-issued environmental permit:

> BLM argues that the off-site impacts need not be evaluated because the Goldstrike facility operates pursuant to a state permit under the Clean Air Act. This argument also is without merit. A non-NEPA document -- let alone one prepared and adopted by a state government -- cannot satisfy a federal agency's obligations under NEPA. Klamath-Siskiyou Wildlands Center v. BLM, 387 F.3d 989, 998 (9th Cir.2004).

South Fork Band Council, 588 F.3d at 726. In addition, there is no analysis of the effectiveness of these mitigation measures, itself a fundamental NEPA violation.

> [NEPA] does require that an EIS discuss mitigation measures, with "sufficient detail to ensure that environmental consequences have been fairly evaluated." Methow Valley, 490 U.S. at 352, 109 S.Ct. 1835. An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective. *Compare* Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1381 (9th Cir.1998) (disapproving an EIS that lacked such an assessment) *with* Okanogan Highlands Alliance v. Williams, 236 F.3d 468, 477 (9th Cir.2000) (upholding an EIS where "[e]ach mitigating process was evaluated separately and given an effectiveness rating"). The Supreme Court has required a mitigation discussion precisely for the purpose of evaluating whether anticipated environmental impacts can be avoided. Methow Valley, 490 U.S. at 351–52, 109 S.Ct. 1835(citing 42 U.S.C. § 4332(C)(ii)). A mitigation discussion without at least *some* evaluation of effectiveness is useless in making that determination.

South Fork Band Council, 588 F.3d at 727 (rejecting EIS for open pit mine for failure to conduct adequate review of mitigation and mitigation effectiveness in mine EIS).

Overall, the USFS cannot approve any operation which has not "demonstrated" that the Project will comply with all water quality standards and protect all beneficial uses. Without this demonstration, which the FEIS admits has not been made, the FEIS violates NEPA as well as the USFS's substantive water quality protection responsibilities.

For the analysis the FEIS did conduct (albeit inadequately), the agency admits that the Project will degrade water quality and associated beneficial uses. For example, as noted herein, the Project (especially the groundwater pumping and loss of headwaters tributaries) will result in severe adverse impacts to Empire Gulch and Cienega Creek. FEIS at 546-547. For Empire Gulch, the Project is predicted to result in "changes that would occur in the type of vegetation and habitat in Empire Gulch, and the potential transition of the stream from perennial to ephemeral." FEIS at 546. The FEIS admits that:

> [I]mpacts to Empire Gulch are more certain to occur than those to other perennial streams, and most scenarios indicate that effects would be seen within 50 years of

> closure of the mine. These effects would gradually increase over time, likely affecting flow at the springs in Empire Gulch, stream flow within the Empire Gulch channel, and the riparian gallery present along the channel.

FEIS at 546. Instead of preparing a mitigation plan to prevent these serious impacts to water quality and wildlife (itself a NEPA violation per the mitigation requirements noted herein), the agency believes that it does not have any authority to mitigate or prevent these impacts. **"Due to the Forest Service's jurisdictional limitation that mitigation measures can be required only on NFS surface resources, no mitigation measures are proposed that would directly offset the impacts predicted to occur along Empire Gulch."** FEIS at 546 (emphasis added). Due to the lack of mitigation measures for other off-site streams (e.g., Cienega Creek), this position was adopted throughout the USFS' review of the Project. Note that this failure to even consider this mitigation not only violates the substantive laws noted herein, but the USFS's procedural duties under NEPA as detailed herein.

The USFS's self-imposed restriction on its environmental protection authority is not found in the law. Contrary to the FEIS and ROD, the Forest Service has the authority to impose mitigation measures to protect public resources, even if those impacts occur off of USFS lands.

The USFS offers no legal support for its determination that it does not have any authority over the off-site impacts from the Mine, as they are related to the agency's duties to manage and protect public land under the Property Clause of the U.S. Constitution and the Organic Act, among other authorities. This is true both for the review and approval of the PoO as well as for any ROW/SUP. "Congress may regulate conduct occurring on or off federal land which affects federal land." Duncan Energy Co. v. U.S. Forest Service, 50 F.3d 584, 589 (8th Cir. 1995) (citing , Kleppe v. New Mexico, 426 U.S. 529, 539 (1976); Minnesota v. Block, 660 F.2d 1240, 1249 (8th Cir.1981) (upholding Forest Service authority over private property interests). **"It is well established that [the Property Clause of the U.S. Constitution] grants to the United States power to regulate conduct on non-federal land when reasonably necessary to protect adjacent federal property or navigable waters."** U.S. v. Lindsey, 595 F.2d 5, 6 (9th Cir. 1979)(emphasis added).

The Supreme Court has recognized for over a century that Congress may regulate activity on private lands as a means of protecting public property. *See* Camfield v. United States, 167 U.S. 518 (1897); United States v. Alford, 274 U.S. 264, 267 (1927)("Congress may prohibit the doing of acts upon privately owned lands that imperil the publicly owned forests."). "[T]he power granted by the Property Clause is broad enough to reach beyond territorial limits." Kleppe v. New Mexico, 426 U.S. 529, 538 (1976).

As noted herein, the agency's illegally-cramped view of its authority in this case undermines its review of the impacts from the Project, as well as the documented (and admitted) failure of the agency to prevent or mitigate damage to significant public resources. This fatally flaws the FEIS and ROD and thus the agency cannot approve any action alternative unless and until it reconsiders the Project under the correct legal regime.

In addition to its failure to protect all existing stream uses and quality, the agency admits that direct discharges from mine facilities have the potential to violate water quality standards.

ED_002020B_00040128-00013

> The screening analysis for runoff from waste rock indicates that **two constituents may be elevated in mine runoff at levels that suggest they could present antidegradation problems: total and dissolved molybdenum, and total and dissolved sulfate.** The screening analysis for runoff from soil cover suggests that molybdenum and sulfate would not be elevated but that **dissolved arsenic, dissolved iron, and dissolved sodium could present antidegradation problems. In addition, dissolved and total mercury is substantially higher.** Most waste rock samples contained mercury concentrations below detection limits (74 out of 78 samples collected), but these detection limits are higher than surface water standards and therefore are not able to be incorporated into this part of the analysis. Many or even all of these unusable samples could have very low mercury concentrations. The usable samples include one sample with a very high concentration of mercury (0.03 mg/L). Because of the small number of usable samples, this single sample has a large influence on the predictions. However, it appears to be a legitimate sample, and it still **indicates a potential for degradation from stormwater interacting with soil cover.** The actual runoff water quality would be predicted to be a mix of the waste rock and soil cover estimates.

FEIS at 549 (emphasis added). *See also* Tables 111 and 112, FEIS at 548, 550-552.

> Predicted runoff water quality from waste rock and soil cover meets surface water quality standards in Barrel Canyon, or standards are already exceeded. Full analysis of antidegradation standards and compliance with surface water standards in the Outstanding Arizona Water reaches of Davidson Canyon and Cienega Creek is under the jurisdiction of ADEQ and has not yet been conducted. However, screening analysis developed by the Coronado suggests that molybdenum and sulfate may be elevated in mine stormwater runoff but are likely to be reduced in part by several mitigations, including waste rock segregation requirements (discussed in detail below, see table 112).

FEIS Table 111. *See also* FEIS at 472-473 (noting predicted exceedances of water quality standards).[4]

In addition to the repeated error that compliance with water quality standards is under the sole "jurisdiction of ADEQ," the USFS cannot rely on the fact that "standards are already exceeded." The Ninth Circuit has ruled that discharges into impaired streams (i.e., where "standards are already exceeded") cannot be allowed without a plan to remediate the exceedances and return the stream to standards. Friends of Pinto Creek v. EPA, 504 F.3d 1007 (9th Cir. 2007)(because such new discharges may "cause or contribute" to a violation of standards which are already exceeded, they are prohibited).

Here, neither the FEIS nor ROD contains any such plan or the required NEPA review of these exceedances. Further, the FEIS's reliance on mitigation measures that "are likely to reduce" these exceedances does not ensure that all water quality standards "shall be maintained and

[4] In addition to the failure to protect water quality, this passage admits that the "Full analysis of antidegradation standards and compliance with surface water standards … has not yet been conducted." As noted herein, such a failure to provide the requisite analysis violates NEPA.

protected." 40 CFR § 131.12 (a)(1). As such, the FEIS and ROD fail to ensure compliance with all water quality protection requirements.

Lastly, the FEIS admits that it failed to conduct any quantitative assessment of the cumulative impacts from other actions/activities that may adversely affect water quality in the affected waters. *See* herein NEPA discussion of cumulative impacts.

> The reasonably foreseeable actions discussed in the "Surface Water Quantity" resource section all have not only the potential to change the amount of surface water flows in the analysis area but would represent additional disturbance that could increase erosion in the analysis area, which would impact surface water quality. As a whole, these changes are unlikely to be significant when assessed in the context of the watershed as a whole.

FEIS at 480. Despite thus admitting that the reasonably foreseeable actions in the area would likely adversely affect water quality and related resources, the agency concludes, with no detailed analysis at all, that they are "unlikely to be significant when assessed in the context of the watershed as a whole." The FEIS repeats this error in the "Surface Water Quantity" section:

> Expansion of the limestone quarries in lower Davidson Canyon could further reduce surface water quantity beyond the reductions expected under the action alternatives, depending on surface water management plans for those facilities. However, because the area is relatively small, compared with the watershed, and would be required by the ASLD to be reclaimed after the mine is closed, the additional impacts to surface water quantity would be minimal and localized.

FEIS at 437. No evidentiary support or data is provided for these conclusions. This ignores not only the other mines in the area (see cumulative impacts discussion in the incorporated Objections), but the substantial environmental concerns, especially dealing with water quality/quantity and related issues raised by the EPA and Corps to these operations (see attached).

This fundamentally violates the agency's cumulative impacts duties under NEPA, but also fails to provide the requisite support for such a bald conclusion.

> [A]llowing the Forest Service to rely on expert opinion without hard data either vitiates a plaintiff's ability to challenge an agency action or results in the courts second guessing an agency's scientific conclusions. As both of these results are unacceptable, we conclude that NEPA requires that the public receive the underlying environmental data from which a Forest Service expert derived her opinion. In so finding, we note that NEPA's implementing regulations require agencies to "identify any methodologies used and [ ] make explicit reference by footnote to the scientific and other sources relied upon for conclusions" used in any EIS statement. 40 C.F.R. § 1502.24.

Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1150 (9th Cir. 1998). Thus, without an adequate cumulative impacts review, the agency's conclusion that water quality standards and uses would not be violated or degraded, and thus all laws including the Clean Water Act would not be violated, is without support and cannot stand.

ED_002020B_00040128-00015

As noted in SSSR's January 27, 2012 comments, and February 2014 Objections, the Project fails to comply with all water quality protective requirements. This includes the failure to comply with 40 CFR §§ 230.10(b), (c) and (d) of the CWA Section 404 Guidelines (and thus cannot be permitted as proposed, including the Barrel Alternative). The environmentally-damaging nature of the proposed project *(i.e.,* a large-scale, long-lasting, extractive mineral mine) and its geographic location *(i.e.,* large, high-functioning, undisturbed landscape) will combine to cause and/or contribute to significant, persistent degradation of the regional aquatic environment. This sensitive area is adjacent to both federal and local nature preserves, is home to ten federally listed species, and is a hydrologic source area for state designated Outstanding Resource waters. These aquatic resources are recognized as being of regional and national importance.

Contrary to the USFS's position, the FEIS and ROD fail to demonstrate compliance with the wetland/waters protection mandates of the CWA. As noted herein, this is required by the CWA itself as well as the Organic Act and Part 228 regulations. In addition, and independent of the CWA and the duties of the U.S. Army Corps of Engineers and EPA under CWA Section 404, the USFS must comply with all of the provisions of Executive Order of May 24, 1977, # 11990--Protection of Wetlands, 42 Fed. Reg. 26961. In that EO, the President required that:

> [I]n order to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative, it is hereby ordered as follows:
>
> **Section 1.** (a) Each agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; and (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities. (b) This Order does not apply to the issuance by Federal agencies of permits, licenses, or allocations to private parties for activities involving wetlands on non-Federal property.
> **Sec. 2.** (a) In furtherance of Section 101(b)(3) of the National Environmental Policy Act of 1969 (42 U.S.C. 4331(b)(3)) to improve and coordinate Federal plans, functions, programs and resources to the end that the Nation may attain the widest range of beneficial uses of the environment without degradation and risk to health or safety, each agency, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. In making this finding the head of the agency may take into account economic, environmental and other pertinent factors.

EO 11990 at 1. As noted herein, the FEIS and ROD fail to demonstrate compliance with these mandates.

The project will impact aquatic and wetland resources within Pima County's Cienega Creek Natural Preserve and the Bureau of Land Management's (BLM) Las Cienegas National Conservation Area (NCA). The National Landscape Conservation System was established to protect some of the most remarkable public lands in the American West. At its nearest point, the mine site lies only roughly 3 miles from the NCA. The Las Cienegas NCA was established by Congress and the President, in large part, to conserve, protect, and enhance the unique and nationally important aquatic, wildlife, vegetation, and riparian resources such as those in the Cienega Creek watershed. Six types of rare ecosystems are protected within the NCA, including aquatic ecosystems such as cienegas (marshlands), cottonwood- willow riparian wetlands, and mesquite bosques.

Impacts from the proposed Project include direct fill and secondary impacts which will result in the loss, conversion, and functional degradation of aquatic and terrestrial habitats over several thousand acres. The consequence of groundwater drawdown from the proposed mine pit is the indirect loss or conversion of hundreds of acres of riparian vegetation, including wetlands, and the drying of streams currently characterized by permanent flow. These large-scale shifts in the amount and species composition of riparian areas and the loss of stream surface flows is an example of an ecological regime shift; a large threshold change in the ecological state or condition of the Cienega Creek watershed to drier conditions.

The proposed project site supports at least 101.6 acres of waters, including wetlands associated with springs and seeps. The proposed project will adversely affect three types of Special Aquatic Sites (wetlands, sanctuaries, refuges, and riffle and pool complexes, *see* 40 C.F.R. §§ 230.40-45) as well as Tier 3 "unique waters"; portions of Davidson Canyon Wash and Cienega Creek are designated by the State of Arizona as "Outstanding Arizona Waters" (section 303 of the CWA and 40 C.F.R. § 131.12). EPA has identified these waters as "Aquatic Resources of National Importance" pursuant to the CWA § 404(q) MOA.

Filling streams, constructing the massive mine pit (2,900 feet deep), and land clearing disturbances will dramatically alter in perpetuity the topography and surface and subsurface hydrology within the Cienega Creek watershed. Placement of permanent fill and other mine-related features within this undisturbed landscape will fragment high-functioning blocks of aquatic and terrestrial wildlife habitat used as foraging and movement corridors, rendering surrounding habitats less suitable for fish and wildlife. For example, the U.S. Fish and Wildlife Service's biological opinion concludes that, because of the indirect effects of groundwater drawdown, the proposed project is likely to adversely affect designated critical habitat for the federally-listed endangered Gila chub and threatened Chiricahua leopard frog, and likely to adversely affect the federally-listed endangered Gila topminnow.

The proposed project will directly fill 39.97 acres of waters, including a largely undisturbed network of 18 linear miles of streams comprised of up to 154 individual drainages. In addition, five springs and their associated wetlands will be filled. EPA's Guidelines (40 C.F.R. § 230.11(h)) and the 2008 Mitigation Rule (40 C.F.R. § 230.93) clearly state the need to compensate for losses of waters due to secondary impacts. The requirement that secondary impacts be fully compensated is consistent with standard practice for projects of this magnitude and essential given that the range, extent, and severity of secondary adverse impacts upon aquatic resources are as significant as the direct impacts.

As described herein, secondary impacts have yet to be analyzed upstream of the mine and downstream of the mine beyond the confluence of Davidson Canyon and Cienega Creek. Moreover, the secondary impacts that are currently assessed by the Forest Service rely upon models that, while valid, lack the sensitivity to detect adverse impacts to much of the affected arid aquatic environment. These assessments will be necessary under the CWA/404 Guidelines to make defensible decisions regarding the regulatory restrictions on discharges and the possibility of mitigation.

As discussed herein, the proposed project site supports 101.6 acres of waters of which 39.97 acres will be directly impacted. The remaining 62 acres of waters on the proposed project site will likely be indirectly impacted. Some of these secondary impacts are accounted for with regard to reduced surface stormwater flows in Barrel and Davidson Canyons within the project area downstream of the mine site. However, there will also be secondary impacts to drainages upstream of the mine. These impacts include severing surface hydrology and connectivity, decreasing quality of wildlife habitat, and fragmentation of animal movement corridors. Secondary impacts to waters that lie upstream from the mine site need to be more completely quantified and ultimately mitigated.

Estimated indirect impacts to jurisdictional waters in Barrel and Davidson canyons downstream from the proposed mine due to modeled reductions in surface water volume resulting from the Rosemont Project include 28.4 acres during mine operation. The estimate shows impacts at the confluence of Cienega Creek and Davidson Canyon, but ceases its analysis at that confluence. Yet data showing an impact at this confluence is a signal that impacts are likely to extend some point beyond this confluence. Secondary impacts to waters downstream from the mine site include the reach of Cienega Creek from its confluence with Davidson Canyon downstream to Pantano Dam. Reductions in surface water flow volume have the potential to adversely affect other surface waters, including wetlands, in Cienega Creek downstream from the confluence of Davidson Canyon. These surface water impacts are likely to be significant, especially given the cumulative effects of predicted reductions in groundwater levels from the proposed mine pit.

Secondary effects on the aquatic environment include dramatic and persistent changes to surface hydrologic and hydraulic regimes driven by groundwater hydrology. For example, following mine closure the pit lake will continue to permanently divert, capture, and evaporate 35-127 acre-feet of mountain-front groundwater recharge in perpetuity. This natural groundwater would otherwise replenish sensitive downstream receiving waters. *See* Comment Letter from Pima County to U.S. Forest Service on PAFEIS, dated August 14, 2013) *available at* http://www.rosemonteis.us/files/cooperator-review/agency-comments/pima-county-comments-to-administrative-draft-feis.pdf. During active mining, the pit will cause significant losses to recharge between 18,000-26,000 acre-feet, or about 900-1300 acre-feet annually.

Portions of sensitive and regionally significant downstream receiving waters, including Outstanding Arizona Waters, rely in part or whole on groundwater contributions to baseflow. Secondary impacts from project-related groundwater drawdown will reduce streamflows, increase water temperatures, and disrupt breeding, spawning, rearing, and migratory movements, or other critical life history requirements of fish and wildlife resources.

At a minimum, eleven springs are highly likely to be indirectly impacted due to groundwater drawdown. An additional 59 springs may be indirectly impacted due to drawdown. An additional 13 riparian areas associated with springs would be directly or indirectly disturbed

with high certainty and an additional 36 riparian areas associated with springs may be indirectly disturbed. Although not formally delineated, subsets of these riparian areas contain jurisdictional wetlands and other waters of the U.S. As noted in the EPA's Nov. 7, 2013 letter to the Corps of Engineers (copy to the USFS already in the administrative record):

> A June 2013 field inspection by EPA, BLM and Pima County staff estimates the presence of tens to hundreds of acres of jurisdictional waters/wetlands in the assessment area likely to be impacted by groundwater drawdown. To date, the geographic extent of potentially jurisdictional waters along Empire Gulch, Gardner Canyon, Cienega Creek, and the other noted waters, has not been formally delineated and therefore secondary impacts to jurisdictional waters have not been quantified.

EPA Letter at 4, n. 6 (attached). Modification to the water balance along portions of Davidson Canyon, Empire Gulch, Gardner Canyon, and Cienega Creek will adversely impact special aquatic sites. The 2,900-foot deep mine pit will permanently convert the hydrologic regime of the site from a water source area to a terminal sink, significantly lowering the surrounding regional aquifer. The pit will permanently reverse the natural direction of groundwater flow toward and into the mine pit, and away from the sensitive aquatic habitats in Las Cienegas NCA and Cienega Creek Natural Preserve. This will add to a baseline trend of decreasing groundwater, causing a permanent reduction of water in streams and wetlands along Empire Gulch, Mattie Canyon, Gardner Canyon, and Cienega Creek with potential adverse impacts to over 30 seasonal and perennial wetlands, and on which threatened and endangered aquatic habitat plants, fish, and wildlife depend.

Groundwater drawdown will result in stress and degradation of riparian habitat, including wetlands. The FEIS admits that indirect effects from the proposed mine project will change the composition of 1,071 acres of riparian vegetation along Empire Gulch *(i.e.,* 407 acres of hydroriparian) and Barrel and Davidson canyons. Several additional springs, seeps, streams, emergent marshes, and riparian areas within the project assessment area likely contain jurisdictional waters, including wetlands, which will be indirectly impacted by the proposed project, primarily from groundwater drawdown.[5]

---

[5] As noted in the EPA's November 7, 2013 letter:
"[F]or Empire Gulch and Cienega Creek all three groundwater models predict near- and long-term stream flow drawdown along Upper Cienega Creek. Comparing these projected model drawdowns with minimum monthly stream flows (2001-2010 period of record) for Upper Cienega Creek indicates that the predicted drawdown would cause the stream to go dry during critical low flow months (Chapter 3, Figure 70). The FEIS further concludes that a small change in stream flow could result in the loss of surface flow during these drought periods. In addition, the FEIS states that Upper Cienega Creek receives surface water [and groundwater] flow from Empire Gulch and the potential exists for a reduction in Empire Gulch stream flow to result in reductions in Cienega Creek's stream flow as well. Small amounts of groundwater drawdown could affect near-and long-term stream flow in Empire Gulch and Cienega Creek and hydrologic changes predicted for Empire Gulch from drawdown could have a potential effect on springs and stream flow, potentially shifting some or all of the stream length from perennial to intermittent. Pima County, as well as the BLM which manages the NCA, have expressed similar concerns regarding the secondary effects to Empire Gulch and Cienega Creek surface waters from groundwater drawdown (Comments submitted to the Forest Service by Pima County and BLM

All three groundwater models utilized by the Forest Service show an increasing, long-term trend of significant declines in groundwater levels due to the mine pit. Although there are limitations in groundwater model accuracy, the drawdown at Upper Empire Gulch Spring is within the accuracy of the models to predict *(i.e.*, 5- foot drawdown contour) and therefore, impacts to streamflow and wetlands from drawdown within Empire Gulch are reasonably certain and will be significant.

No compensatory mitigation plan compliant with the regulations has been prepared to date. A complete mitigation plan that satisfies each element of the 2008 Mitigation Rule will be necessary to comply with the CWA (including Section 404). Based on Rosemont's Conceptual Habitat Mitigation and Monitoring Plan Summary, dated on or about September 25, 2013, (Summary), proposed 404 mitigation consists of: 1) enhancement of waters and non-aquatic upland habitat at Cienega Creek below Pantano Dam, and, if necessary 2) conservation and establishment of waters at Sonoita Creek Ranch (SCR) and 3) conservation of a 160 acre parcel along a portion of Mulberry Canyon. These components are sequential; the SCR and Mulberry Canyon activities are presented as a contingency if an ILF [In Lieu Fee] project with sufficient credits is not available for Rosemont's purchase at Pantano Dam. To date, there is not any supporting documentation or assessment demonstrating the mitigation proposed to offset impacts to waters is compensatory. Also, such revised mitigation plans should have been in the Draft EIS, and as such any such consideration in the FEIS without full public review beforehand violates NEPA. *See also* Nov. 7, 2013 EPA letter and the issues raised therein for further evidence that the proposed project, even with Rosemont's proposed mitigation, cannot comply with the CWA.

There are significant flaws in Rosemont's plans for offsetting the proposed project's environmental harm. First, the proposals for offsetting lack an adequate functional assessment characterizing the services performed by streams/springs and wetlands directly and indirectly impacted by the proposed project, or of those resources at the proposed mitigation lands. Second, the compensatory mitigation proposals do not account for the interrelationship of the headwater streams and the surrounding terrestrial ecology and will not replace the high quality resources in the Cienega Creek watershed. Enhancement of existing waters and upland habitat (Pantano Dam) in the lower watershed would not offset the mine's impacts to high quality headwater streams. Third, despite some assurances inherent in ILF proposals, there is great ecological uncertainty in the Pantano Dam proposal. Based on the information to date, the proposed mitigation is grossly inadequate to compensate for mine impacts.

The FEIS notes that, with the exception of several springs in Davidson Canyon, isotopic data have not been made available to help determine the sources of water to springs in the analysis. Isotopic data for all potentially affected springs in Davidson Canyon would be invaluable. Does isotopic data exist for other potentially affected streams in Davidson Canyon or elsewhere in the study area? If such data is available, it should be acquired, analyzed, and incorporated into the revised DEIS.

---

on the PAFEIS, dated August 14, 2013). In addition, secondary impacts to intermittent surface flows are likely to occur in Box Canyon, Sycamore Canyon, Adobe Tank Wash, and Mulberry Canyon which all lie within the modeled 5-foot drawdown area (Comments submitted to the. Forest Service by Pima County on the PAFEIS, dated August 14, 2013)." EPA letter at 4, n. 8.

For individual springs and seeps for which there is insufficient data to determine the source of water and probable impact, the FEIS correctly assumes that there will be an impact. The same approach should be applied when discussing the scope of impacts related to groundwater drawdown, given that the results from the groundwater modeling contain uncertainty.

Several springs, seeps, streams, and riparian areas within the assessment area likely contain jurisdictional waters of the United States, including wetlands that will be indirectly impacted by the proposed project, primarily from groundwater drawdown. Although the FEIS estimates 407 acres of mapped hydroriparian habitat in the assessment area, a subset of these are jurisdictional waters of the United States that have not been delineated. For example, BLM staff estimate that over thirty perennial and seasonal wetlands of various acreages are associated with Cienega Creek within the Las Cienegas National Conservation Area (J. Simms, personal communication with Dr. Robert Leidy, EPA, June 2013), some or all of which may be waters of the U.S. *See* EPA August 1, 2013 Comments to USFS on Preliminary Administrative Draft FEIS, at 2 *available at* http://www.rosemonteis.us/files/cooperator-review/agency-comments/epa-comments-to-administrative-draft-feis.pdf.

The FEIS concludes that no seeps, springs, hydroriparian or mesoriparian habitat, areas with perennial stream flow, or critical areas that would be affected by groundwater drawdown were identified within or beyond the western model boundary. But the FEIS failed to clarify whether the required detailed surveys of springs and seeps, and other critical areas (similar to surveys conducted on the eastern slopes of the Santa Rita Mountains within the model boundaries) were conducted within and immediately adjacent to the western model boundary, particularly within the Santa Rita and Empire mountains.

Additional information regarding the potential adverse environmental consequence of seemingly small changes in groundwater levels must be added. The FEIS repeatedly characterizes changes in ground water levels of < 1 foot as "small." The use of the descriptors "small" or "very small" are not meaningful absent some relative measure of ecological significance or risk. Seemingly "small" changes in groundwater levels may have profound adverse effects on surface and shallow subsurface (*i.e.*, groundwater and hyporheic) flows. In part, this is because the wetted surface area of many aquatic habitats in the arid Southwest, including the Cienega Creek watershed, are characterized by shallow surface water depths (*e.g.*, << than a few inches), especially during the drier portions of the year (April-early July), and are, therefore, extremely susceptible to drying from small changes in groundwater levels. Significant changes to stream base flow are possible because, typically, inflow to streams originates from the topmost portions of the subsidizing aquifer; small declines in the water table can significantly reduce groundwater contributions that sustain stream flow.

The FEIS acknowledges that predicted increases in temperatures and reduced precipitation resulting from climate change will continue to reduce the quantity of stormwater and groundwater available for use by riparian vegetation; result in shifts from perennial to intermittent flow along upper Cienega Creek and Empire Gulch; and increase the vulnerability of springs and riparian vegetation. The FEIS does not, however, adequately characterize potential cumulative effects from project-related groundwater drawdown and increasing demand for groundwater as a result of residential and commercial growth within the context of drought and projected climate change. Currently, only 13 percent of the length of Cienega Creek within the preserve exhibits a wetted channel during the driest portion of the year (*i.e.*, June) on the heels of

the ongoing drought. The FEIS should reflect the latest science on climate change by explicitly acknowledging the moderate-to-high levels of confidence of the latest climate change science model predictions for the American Southwest. If, as the FEIS admits, prolonged droughts similar to the ongoing Southwestern drought brought on by climate change could result in similar shifts from perennial to intermittent flow along upper Cienega Creek and Empire Gulch, then the potential additive/cumulative adverse effects from the project and other water demands on streams, wetlands, and riparian areas in the context of climate change should be clearly discussed in the revised DEIS.

The groundwater analysis area extends east of Cienega Creek, yet seeps, springs, streams, wetlands, and riparian areas that may lie east of Cienega Creek were not inventoried or assessed for potential effects of groundwater drawdown. Over 30 perennial and seasonal wetlands of various acreages are associated with Cienega Creek within the Las Cienegas National Conservation Area (BLM staff estimate). According to BLM, the majority of these wetlands are adjacent to Cienega Creek between Cinco Canyon and Oak Tree Canyon, and include the Cienequita, Spring Water, and Cinco Ponds wetlands. Other wetlands are found upstream of the Mattie Gulch and Cienega Creek confluence (*i.e.*, Cold Spring wetland). Many of these wetlands and aquatic features would likely qualify as jurisdictional waters of the United States. If there are potential project effects on Cienega Creek from groundwater drawdown, it follows that there would also be potential effects from groundwater drawdown on these waters, as they are immediately adjacent and hydrologically connected to Cienega Creek. The revised DEIS should describe these aquatic features adjacent to Cienega Creek, identify their likely CWA jurisdictional status, and indicate what the potential impacts to these features may be.

The FEIS does not include a discussion of the federal CWA or Department of Army regulations as influencing or guiding the analysis of biological resources. In particular, there is no reference to the CWA 404(b)(1) Guidelines and Restrictions on discharge, most notably 40 C.F.R. § 230.10(b)(3): adverse effects on endangered species; and (c): significant degradation of waters of the United States; and 40 C.F.R. § 230.11(g) and (h) determination of cumulative and indirect/secondary effects on aquatic ecosystems. There is no discussion of impacts to jurisdictional waters of the United States impacted by the project.

The FEIS does not discuss the extensive riverine and palustrine wetland systems within and adjacent to Empire Gulch, Gardner Canyon, and Cienega Creek that will or may be indirectly impacted by the proposed action. Many of these wetlands are likely to be jurisdictional waters of the United States, but the reach and extent of federally regulated wetlands have not been delineated; therefore, the extent of indirect impacts to these waters has yet to be determined.

The discussion of hydroriparian vegetation types does not acknowledge that portions of this vegetation type include jurisdictional wetlands regulated under the federal CWA. The reach and extent of these federally regulated wetlands have not been delineated; therefore, the extent of indirect impacts to these waters has yet to be determined in violation of NEPA.

The indirect/secondary effects of reduced aquifer recharge and bank storage from the proposed action on downstream waters in Davidson Canyon and Cienega Creek are potentially significant, as aquifer recharge is important in maintaining surface flows and shallow subsurface water levels for aquatic organisms and riparian vegetation and wetlands. The failure to provide quantified analysis of reductions in aquifer recharge violates NEPA as noted herein. Estimates of pre- and post-project aquifer recharge have been conducted for several development scenarios in the

adjoining San Pedro River watershed (for example see (1): Levick L., et al. 2006. Simulated changes in runoff and sediment in developing areas near Benson, Arizona. U.S. EPA Office of Research and Development, Las Vegas, NV, and USDA Agricultural Research Service, Tucson, AZ, EPA/600/R-06/158 and ARS/1873; (2): Goodrich D.C. et al. 2004. Comparison of methods to estimate ephemeral channel recharge, Walnut Gulch, San Pedro River Basin, Arizona. Pp. 77-99 In Recharge and Vadose Zone Processes: Alluvial Basins of the Southwestern United States, ed. By F.M. Phillips, J.F. Hogan, and B. Scanlon, Water Science and Application 9, Washington D.C.). These sources are noted in EPA's August, 2013 comments to the USFS on the Preliminary Administrative Draft Final EIS.

The FEIS does not adequately support the statement that mitigation measures compensate for impacts to waters of the U.S. Implementation of the mitigation measures described in the FEIS and discussed herein would not fully compensate for the proposed project's impacts to waters of the United States (waters) (40 C.F.R. 230 Subpart J). *See* EPA August, 2013 comments to the USFS (detailing the inadequacies of Rosemont's proposed mitigation measures). The substantial loss and degradation of water quality and other aquatic ecosystem functions are likely if the proposed mine is constructed. Of particular concern is that the geographic extent of indirect effects to waters from groundwater drawdown related to the mine dewatering is not fully known, in part because waters have not been fully delineated within the assessment area. In the absence of a full delineation of waters, it is not possible to provide adequate compensatory mitigation for indirect effects.

As stated in the 404(b)(1) Guidelines, no discharge of dredged or fill material shall be permitted if it causes or contributes to violations of an applicable state water quality standard (40 C.F.R. § 230.10(b)(1)). Reductions in stream flows, alterations in sediment transport, groundwater drawdown, and increases in the concentrations of pollutants have the potential to degrade water quality (*e.g.,* warm water aquatic wildlife) and the aquatic ecosystem. The proposed project does not comply with the restriction on discharge as required by the Guidelines. Indirect effects may also result in significant degradation to outstanding natural resource waters in violation of applicable water quality standards.

Any degradation of Davidson Canyon and Cienega Creek water quality would be significant because they are designated as high quality waters that constitute Outstanding National Resource Waters due to their exceptional recreational and ecological significance to the State of Arizona. The State of Arizona classifies Davidson Canyon and Cienega Creek as Arizona Outstanding Waters (AOWs), also referred to as Tier III waters under federal anti-degradation policy. Arizona's anti-degradation rules provide that the "[d]egradation of an AOW ... is prohibited." AAC R18-11-107. This provision is consistent with federal anti-degradation requirements, which provide that water quality shall be maintained and protected in Tier III waters, and that the water quality in Tier III waters may not be lowered to accommodate economic or social development in the area where the waters are located. 40 C.F.R. § 131.12(a).

As discussed herein, the proposed project's potential to result in reduction in stream flows to Davidson Canyon Wash and Cienega Creek, its alteration of sediment transport, groundwater drawdown, and contribution of metals such as selenium represents a failure to maintain and protect existing water quality in those AOWs. This would be inconsistent with applicable antidegradation policy. The 404(b)(1) Guidelines at 40 C.F.R. § 230.10(b)(1) restrict discharges that would violate applicable State water quality standards (which include anti degradation policies) in waters. Such significant degradation of the aquatic ecosystem in Outstanding

Natural Resource Waters is also not consistent with the 404(b)(1) Guidelines at 40 C.F.R. §§ 230.10(c) and 230.11(h).

The FEIS notes that mitigation measures, both onsite and offsite, can help offset effects in the project area. Yet the proposed mitigation would not effectively offset all impacts, and significant impacts to habitat and some species would remain. As noted herein, the development of two ILF programs and land conservation are not adequately compensatory. Further, while certain design features may qualify as mitigation for the NEPA analysis, this form of mitigation is related to impact avoidance and minimization, not compensation. Section 404 of the CWA requires "mitigation" to consist of all three, with compensation required for impacts that are not avoidable (*e.g.*, through design features). The proposed mitigation is insufficient to meet the restrictions on discharge required by the Guidelines at 40 C.F.R. § 230.10(d) and 40 C.F.R. § 230.12(a)(3)(iv).

Independent of the requirements to avoid, minimize and, finally, compensate for impacts, the 404(b)(1) Guidelines prohibit discharges which will cause or contribute to significant degradation of waters of the United States. In consideration of the mitigation measures described in the FEIS, the direct and indirect/secondary impacts from discharges of dredged or fill material from the proposed project will not be adequately offset. As a result, these impacts are likely to cause or contribute to significant degradation of waters.

The FEIS (albeit lacking in many requirements as noted herein) shows that the proposed project will result in significant degradation because it will have significant direct and indirect/secondary effects on the structure and function of the aquatic ecosystem such as: significant adverse effects to regional water circulation and fluctuation; and significant adverse effects to aquatic organisms due to reduced flows, increased water temperatures, suspended sediments and potential increases in selenium contamination. The proposed project will also result in significant degradation to waters, including the "Outstanding Waters" of Davidson Canyon and Cienega Creek. These impacts are substantial and unacceptable impacts to aquatic resources of national importance.

The FEIS concludes that any stormwater discharge would not result in an impact to the downstream Outstanding Water because ADEQ's issuance of coverage under the Multi-Sector General Permit (MSGP) would not allow it. FEIS at 473. Yet this conclusion cannot be reached until the required Storm Water Pollution Prevention Plan (SWPPP) has been submitted and accepted by ADEQ under the MSGP requirements. The SWPPP must demonstrate that any discharge will not degrade water quality in the downstream OAW. For the purposes of NEPA, it cannot be assumed that mitigation measures applied under the SWPPP would be fully effective without foreknowledge of the nature of the mitigation and control measures that would be employed. As noted herein, the failure to review and analyze these future mitigation measures, and their effectiveness, violates NEPA.

Many of these failures and violations have been expressly noted by the EPA and Corps, yet no change to the proposed Project has been made by the Forest Service in response. At a minimum, the failures/violations described in the above-noted EPA comments, as well as the documents summarized below (and included in this letter on computer flash drive) must be corrected in

order to have the ROD and EIS comply with the CWA and federal and state law.[6]

CONCLUSION

For the reasons set forth in this letter, the Objections, and documents and comments incorporated by reference, the Rosemont Project as authorized in the Forest Service ROD will violate applicable state and federal water quality standards and requirements and the CWA and its implementing regulations. Accordingly, the Forest Service's ROD and any approval of a plan of operations consistent with mine alternative 4 violates the CWA and the Forest Service's own governing statutes and regulations. Unless the Forest Service revokes its ROD within 60 days of this letter, the parties to this notice letter will institute a legal action to challenge those Forest Service actions in federal district court.

Sincerely,

Roger Flynn
Attorney for SSSR, et al.

Address of Notifying Groups:

Save the Scenic Santa Ritas
Gayle Hartmann, President
8987 E. Tanque Verde, #309-157
Tucson, Arizona 85749

The Arizona Mining Reform Coalition
Roger Featherstone, Director
P.O. Box 43565
Tucson, Arizona 85733

Center for Biological Diversity
Randy Serraglio, Southwestern Conservation Advocate
P.O. Box 710
Tucson, Arizona 85733

The Sierra Club
Sandy Bahr, Director
Grand Canyon Chapter
202 East McDowell Road, Suite 277
Phoenix, Arizona 85004
Aaron Isherwood, Managing Attorney
Sierra Club
2101 Webster St., #130
Oakland, CA 94612

---

[6] These are the same documents submitted for the record by SSSR, et al. in its letter to Supervisor Dewberry dated May 23, 2017, and are included again herein for convenience and review by all parties.

ED_002020B_00040128-00025

Index of Additional Rosemont documents – included with May 23, 2017 letter from SSSR and the Center for Biological Diversity to Coronado Forest Supervisor Kerwin Dewberry.

December 30, 2013: In a letter to the Army Corps, Pima County stated that the Rosemont mitigation proposal fails because it cannot produce the necessary mitigation credits due to an unpredictable and insufficient long-term water supply.
(Letter from Pima County to the Army Corps – 12/30/2013)

February 28, 2014: The Army Corps sent a letter to Rosemont Copper Company stating that Rosemont failed to provide a mitigation plan that focuses on restoration and enhancement of watersheds to compensate for the destruction of about 70 acres of wetlands that would occur by construction of the mine. The letter gave Rosemont a specific deadline to submit such a plan.
(Letter from Army Corps to Rosemont Copper – 2/28/2014)

April 4, 2014: Pima County wrote the Arizona Department of Environmental Quality regarding ADEQ's certification that Rosemont would not violate the Clean Water Act. The County said the certification was based on "faulty information" in the Coronado National Forest's (CNF) Final Environmental Impact Statement (FEIS) and "unsubstantiated opinions in documents provided by Rosemont Copper Company."
(Letter from Pima County to ADEQ - 4/4/2014)

April 4, 2014 Letter from the Arizona Game and Fish Department to the Arizona Department of Environmental Quality raising 16 concerns about the mine's potential impact on Davidson Canyon and Cienega Creek and the current lack of detailed water quality analyses of the waterways in the context of the Section 401 water quality certification for the proposed Rosemont Copper Mine.
(Letter from the Arizona Game and Fish Department to ADEQ – 4/4/2014)

April 7, 2014 Letter from the Army Corps of Engineers to the Arizona Department of Environmental Quality raising significant questions about the adequacy of the agency's draft Section 401 water quality certification for the proposed Rosemont Copper Mine.
(Letter from Army Corps of Engineers to the Arizona Department of Environmental Quality – 4/7/2014)

April 7, 2014: EPA similarly wrote to ADEQ regarding the certification issued by the state agency stating that it "believes the draft...certification and supporting information provide an insufficient basis from which to conclude existing water quality will be maintained", that ADEQ's proposal would not "prevent water quality degradation in Davidson Wash and Cienega Creek," and that "the risk of water quality degradation remains high."
(Letter from EPA to ADEQ – 4/7/2014)

May 13, 2014: The Army Corps once again put Rosemont on notice that its plan to mitigate the impacts to southern Arizona's water resources from the

ED_002020B_00040128-00026

	proposed mine fall short. The Army Corps stated, "that the proposed compensatory mitigation would not fully compensate for the unavoidable adverse impacts that would remain after all appropriate and practicable avoidance and minimization measures have been achieved." (Letter from Army Corps to Rosemont Copper – 5/13/2014)
August 1, 2014	Congressman Raul Grijalva sent a letter to the Assistant Secretary of Army sharing his concerns regarding Rosemont's application for a Clean Water Act Section 404 permit and the resulting adverse impacts that would occur to southern Arizona's water resources. (Letter from Rep. Grijalva to the Department of Army, 8/1/2014)
August 26, 2014	The LA District Engineers sent Hudbay a letter acknowledging the change in ownership from Augusta to Hudbay. The letter also noted that Rosemont's concept of using a In-Lieu Fee (ILF) project would likely not be able to be done within the timeframe of regulatory consideration for the Rosemont 404 permit application. (Letter from Army Corps to Hudbay – August 26, 2014)
April 14, 2015	EPA Region IX sent the Arizona Department of Environmental Quality (ADEQ) a letter highlighting concerns with the state's 401 water quality certification of the proposed Rosemont Mine. (Letter from EPA to ADEQ – 4/14/2015)
July 27, 2015	The EPA contracted with Dr. G. Mathias Kondolf, a noted expert on Hydrology, environmental geology, environmental impact assessment, and riparian zone management, to prepare a report that concluded that the Rosemont mitigation plan once again falls short of what's legally required under the Clean Water Act and Section 404. (Report from Dr. Mathias Kondolf Reviewing Hudbay's Conceptual Design for Sonoita Creek – July 27, 2015)
October 28, 2015	Save the Scenic Santa Ritas sent a letter/documents to the LA District Engineer of the US Army Corps of Engineers providing technical information showing that the project cannot be sufficiently mitigated, among other legal problems. (Letter from SSSR to the Army Corps – 10/28/2015)
May 16, 2016	The Center for Biological Diversity (CBD) commissioned Integrated Hydro Systems, LLC and requested that Robert Prucha, PhD, review available studies and evaluate/assess potential impacts of the proposed Rosemont Mine to the Las Cienegas National Conservation Area (LCNA). The Study concluded that there are a number of significant concerns with the hydrological modeling upon which the Forest Service relied to support its conclusion that the pumping will have only limited impacts on water resources within the LCNCA. (Report from Integrated Hydro Systems, LLC – 5/16/2016)

ED_002020B_00040128-00027

September 23, 2016	The Commander of the South Pacific Division of the Army Corps of Engineers sent Hudbay a letter indicating that he was going to review the Rosemont 404 application in light of the fact that the Arizona Governor objected to the LA District Engineer's recommendation for denial. (Letter from the Army Corps to Hudbay – 9/23/2016)
October 21, 2016	Pima County sent a letter to the U.S. Army Corps of Engineers San Francisco regional office urging it to uphold the Corps' Los Angeles district recommendation to deny Rosemont Copper's Clean Water Act permit request. (Letter from Pima County to the Army Corp – October 21, 2016)
December 28, 2016	The Commander of the US Army Corps of Engineers' South Pacific Division sent a letter to Hudbay Minerals reiterating the agency's reasons for recommending denial of the Sec. 404 permit for the proposed Rosemont Mine. Additionally, in this letter the Corps addressed Hudbay's recently raised questions about regulatory jurisdiction noting that jurisdiction was initially asserted by Rosemont's own consultants and accepted by the Corps. (Letter from the South Pacific Division to Hudbay Minerals – December 28, 2016)
May 5, 2017	Letter from Pima County Administrator Chuck Huckelberry to the Corps of Engineers and EPA Region IX requesting that the federal government not issue Rosemont a 404 permit that is based on a "legally and technically flawed" 401 certification issued by the state of Arizona. (Letter from Pima County Administrator Chuck Huckelberry to the Corps of Engineers and EPA Region IX – May 5, 2017)
May 5, 2017	On May 5, Pima County filed an appeal of the Arizona Department of Environmental Quality's (ADEQ) administrative decision to issue a Section 401 Water Quality Certification in Maricopa County Superior Court. The suit asserts that ADEQ violated state law in 2015 when it issued this certification. (Copy of Pima County's pleading in Maricopa County Superior Court, 5/5/2017)
May 9, 2017	Letter from Pima County Administrator Chuck Huckelberry to the CNF Supervisor Kerwin Dewberry stating it was "premature" to issue the Final ROD until after the Army Corps decides on whether to issue the 404 permit and further requesting a review of the impacts by two wildfires that swept through 48,000 acres including portions of the Rosemont project area including the Empire Gulch, Barrel Canyon and Davidson Canyon watersheds. (Letter from Pima County Administrator Chuck Huckelberry to CNF Supervisor Kerwin Dewberry – May 9, 2017)

ED_002020B_00040128-00028