Neil Levine (Colo. Bar No. 29083)
4404 Alcott Street
Denver, Colorado 80211
(303) 455-0604
nlevine@publicjustice.org

Aaron Paul (Colo. Bar No. 40422)
4404 Alcott Street
Denver, Colorado 80211
(303) 477-1486
apaul@grandcanyontrust.org

Marc Fink (Minn. Bar No. 343407)
209 East 7th Street
Duluth, Minnesota 55805
(218) 464-0539
mfink@biologicaldiversity.org

Roger Flynn (Colo. Bar No. 21078)
440 Main St., #2
Lyons, Colorado 80540
(303) 823-5738
wmap@igc.org

Counsel for Plaintiffs Grand Canyon Trust,
Sierra Club, and Center for Biological Diversity

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARIZONA

Grand Canyon Trust, et al., Plaintiffs, v. Heather Provencio, et al., Defendants, and Energy Fuels Resources, Inc., et al., Intervenor-Defendants.	Case No. CV-13-8045-PCT-DGC Plaintiffs Grand Canyon Trust, Center for Biological Diversity, and Sierra Club's Motion for Summary Judgment and Memorandum in Support Oral Argument Requested

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PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT

Plaintiffs Grand Canyon Trust, Center for Biological Diversity, and Sierra Club ("Plaintiffs") move for summary judgment under Fed. R. Civ. P. 56 on their fourth claim for relief, Am. Compl., ECF 115 at ¶¶ 89–92, for the reasons set out below.

MEMORANDUM OF POINTS AND AUTHORITIES

In 2012, the Forest Service determined that a mining company called Energy Fuels had "valid existing rights" to run a uranium mine, known as Canyon Mine, in a national forest just south of the Grand Canyon despite a two-decade-long ban on uranium mining around Grand Canyon National Park. The basic question the law required the Forest Service to answer in its validity determination was whether a "prudent person" would have a reasonable prospect of developing a profitable mine on the mining claims Energy Fuels had staked. The Forest Service answered yes. But it gave that answer without considering all mining costs—like the expense of building and monitoring a groundwater well at the mine, of sampling groundwater-fed springs that flow into the Grand Canyon's South Rim, of measuring radiation around the mine, of safeguarding California condors, of replacing wildlife habitat destroyed by the mine, of dealing with other environmental problems as they arise, and of building the mine before 2012. Federal law required the agency to consider these costs, and its failure to do so requires the validity determination to be set aside. The Court should accordingly grant summary judgment for Plaintiffs on their fourth claim for relief.

BACKGROUND

A. Hard Rock Mining in National Forests

The Mining Law of 1872 allows citizens to explore for and exploit "valuable mineral deposits" on unappropriated federal public lands. 30 U.S.C. § 22 ("Except as otherwise provided, all valuable mineral deposits in lands belonging to the United States … shall be free and open to exploration and purchase…."). Under the 1872 law, if a host of other requirements are met, a miner who discovers a valuable mineral deposit may

"locate" a claim to mine that deposit. *Id.* at § 26 (granting a possessory interest for the purpose of mining to those who properly locate claims). Deposits that are not valuable are not open to mining. *See Cameron v. United States*, 252 U.S. 450, 460 (1920).

Mining may also be foreclosed by withdrawing public lands from this open-entry framework. One way to make a "withdrawal" is set out in the Federal Land Policy and Management Act of 1976. 43 U.S.C. § 1714(a) (authorizing the Secretary of Interior to "make, modify, extend, or revoke withdrawals"). Withdrawals under FLPMA must be "subject to valid existing rights," Pub. L. 94-579 § 701(h), a proviso that allows valid, existing mining claims to survive a withdrawal while invalid claims are extinguished. A claim is invalid if a "valuable mineral deposit" has not been discovered on it. *See Wilderness Soc'y v. Dombeck*, 168 F.3d 367, 375 (9th Cir. 1999); *Ctr. for Biological Diversity v. U.S. Fish & Wildlife Serv.*, 2019 WL 3503330, *5 (D. Ariz. July 31, 2019). To be valuable, a deposit must, among other requirements, be "marketable," meaning that it can be "extracted, removed and marketed at a profit." *United States v. Coleman*, 390 U.S. 599, 600–03 (1968).

B. Canyon Mine History

Canyon Mine sits on mining claims in the Kaibab National Forest just south of Grand Canyon National Park and just north of a site sacred to the Havasupai Tribe, called Red Butte. AR Doc. 533 at 10594, 10601. The area surrounding Red Butte too is of profound importance to the Havasupai and other tribes, including the meadow the mine has overtaken. *Id.* at 10601; AR Doc. 428 at 8016–24.

The Canyon Mine claims were staked in the late 1970s by a predecessor of Energy Fuels. AR Doc. 525 at 10487. About a half decade later, the claimant submitted a plan of operations to the Forest Service seeking permission to mine. AR Doc 2 at 193. The company's plan was to dig straight down for up to 2,100 feet, and then build horizontal workings at different depths into a vertical column of uranium next to the mineshaft. *Id.* at 202–204. On the surface, about 17 acres of the national forest were to be cleared and

fenced for mine infrastructure. *Id.* at 196, 209. In addition to buildings and mining equipment, this mine yard was to have one or more holding ponds for managing rain, snowfall, and water pumped out of the mine and was to house piles of waste rock and stockpiles of uranium ore. *Id.* at 205–09. Mined ore would be hauled about 300 miles to a mill in Utah, which would extract the uranium. *Id.* at 223; AR Doc. 525 at 10498.

Because this plan would "significantly affect[] the quality of the human environment," the Forest Service set about preparing an environmental impact statement under the National Environmental Policy Act. 42 U.S.C. § 4332(2)(C); AR Doc. 1 at 13. Two years later, in 1986, the Forest Service approved a modified plan of operations for the mine. AR Doc. 6. The agency made no inquiry into whether the claims were invalid for failure to discover a "valuable mineral deposit," AR Doc. 4 at 703–704, even though the law forbids mining claims on non-valuable deposits, *Cameron*, 252 U.S. at 460, and even though the Forest Service's Organic Act obliges it to protect national forests from destruction caused by mining invalid claims. *See Ctr. for Biological Diversity*, 2019 WL 3503330, *14–18 (holding that the Forest Service "abdicated its duty" to "preserve the forest from destruction" when it let a mining company use mining claims in the forest without considering whether the claims were valid).

Recognizing that Canyon Mine could squander and pollute groundwater, as well as irradiate the mine's surroundings, the Forest Service required the mine's operator to monitor groundwater and radionuclides in the air, soil, and water. AR Doc. 6 at 927–28 (monitoring requirements); AR Doc. 3 at 509–510, 530 (discussing groundwater pumping and treatment); AR Doc. 3 at 397–98, 404 (acknowledging groundwater is likely to be found in perched aquifers). The plan also required the company to replace dozens of acres of big-game-foraging habitat and a key watering source the mine would destroy. AR Doc. 6 at 925. And it reserved to the Forest Service the right to require the mining company to mitigate other threats to the environment as they arose. *Id.* at 924, 928.

In the next few years, the company built the mine's "major surface structures"—including an office, a warehouse, a head frame, a hoist, power lines, an evaporation pond,

and a well for monitoring and supplying groundwater. AR Doc. 439 at 8537; Roberts Decl. ¶ 11, ECF 31-1 (Apr. 15, 2013); Doc. 525 at 10500. In the early 1990s, however, after digging fifty feet of the mineshaft, the company halted its work and shuttered the mine indefinitely when it became evident that the price of uranium was too low to justify further expenditure of time and money. *See* AR Doc. 439 at 8546; Roberts Decl. ¶ 11, ECF 31-1. At that point, Energy Fuels' predecessors had spent "much more" than $6 million developing the mine, Roberts Decl. ¶ 17, ECF 31-1, and had mined no ore.

C. The Grand Canyon Mineral Withdrawal

Nearly two decades passed. In that time, ownership of the mine changed while it continued to lie dormant. *See* AR Doc. 439 at 8536. Then in 2009, the Secretary of Interior suspended uranium mining on about a million acres around Grand Canyon National Park—including the Canyon Mine claims—to study whether to withdraw the area under FLPMA. 74 Fed. Reg. 35,887 (July 21, 2009). After more than two years of analysis, the Secretary chose in January 2012 to withdraw the lands for two decades, the longest duration allowable. 77 Fed. Reg. 2317 (Jan. 7, 2012); 43 U.S.C. § 1714(c)(1). He did so after finding that radioactive-contamination risks to water sources and wildlife were "unacceptable," and that "[a]ny mining within the sacred and traditional places of tribal peoples may degrade the values of those lands to the tribes that use them" in a way that likely "could not be mitigated." AR Doc. 481 at 10317–18.

Meanwhile, in the wake of a brief spike in uranium prices and with the withdrawal decision looming, Energy Fuels' predecessor, a company called Denison Mines, notified the Forest Service that it wanted to do more work at the mine. *See* AR Doc. 10596; AR Doc. 445 at 8636–37 (explaining, in a government analysis for the withdrawal, that uranium prices since 1980 were usually below $20 per pound, save for a spike around 2007, after which prices fell). With a withdrawal and consequent validity determination in the offing that could extinguish Denison's decades-old and yet-unmined claims, an abnormally high uranium price was propitious for the company, for it is in that sort of

market when a mine stands the best chance of looking profitable.

D. The Forest Service's Validity Determination

In early 2012, shortly after Denison's notification and just after the withdrawal, the Forest Service completed a validity determination for Canyon Mine. AR Doc. 525. On the question of whether mining the uranium deposit at Canyon Mine could yield a profit, the Forest Service forecasted gross revenues by multiplying the amount of uranium the company thought it could mine by a projected selling price of $56 per pound, a figure derived from the three prior years' uranium prices. AR Doc. 525 at 10502–03, 10505. The agency then subtracted taxes and some costs and concluded that the uranium deposit had a net present value of about $17–$22 million, and that Energy Fuels therefore had valid existing rights to mine despite the 2012 withdrawal. *Id.* at 10505–06.

The company prepared a similar "economic study," which the Forest Service used and included wholesale in Appendix C to its validity determination. [redacted]

The profitability forecast would also have dropped substantially had the company and the Forest Service included all mining expenses in their calculations. The costs of monitoring groundwater and the environment around the mine were left out, as were the costs of mitigating harm to the environment and completing wildlife-conservation measures. AR Doc. 525 at 10500–506. Millions in past development costs were omitted too. *Id.* at 10500; Roberts Decl. ¶ 17, ECF 31-1.

The sole claim that now remains for disposition, *see Havasupai Tribe v. Provencio*, 906 F.3d 1155, 1162, 1167 (9th Cir. 2018), asserts that the Forest Service's validity determination impermissibly failed to account for all these costs and thus unlawfully found that Energy Fuels has "valid existing rights" to mine uranium at Canyon Mine. Am. Compl., ECF 115 at ¶¶ 89–92.

ARGUMENT

I. Standard of Review

The validity determination must be set aside under the Administrative Procedure Act if it was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2). An agency action or finding is arbitrary or capricious if the agency "entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or if the agency's decision is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Alliance for the Wild Rockies v. U.S. Forest Serv.*, 907 F.3d 1105, 1112 (9th Cir. 2018) (quoting *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

II. Plaintiffs have Article III standing.

Prior rulings by this Court and the Ninth Circuit have concluded that Plaintiffs, based on their members' declarations (ECF 20–24; 37-7, 37-8, 151-1, 151-2), have Article III standing to challenge the validity determination. *See* Order, ECF 166 at 13–16; *Havasupai Tribe*, 906 F.3d at 1162 n.3. These rulings are the law of the case, and cannot be disturbed. *See Nordstrom v. Ryan*, 856 F.3d 1265, 1270 (9th Cir. 2017).

Regardless, Plaintiffs have standing. The validity determination has injured and continues to injure Plaintiffs' interests by allowing Energy Fuels to mine despite the withdrawal, and those injuries can be redressed by a Court order vacating the agency's determination, *see* Order, ECF 166 at 13–16; *Havasupai Tribe*, 906 F.3d at 1162 n.3, and by remanding for compliance with the procedural requirements for determining validity.

See Natural Res. Def. Council v. Jewell, 749 F.3d 776, 782–83 (9th Cir. 2014) (holding that redressability is established when agency compliance with procedural requirement could protect a plaintiff's concrete interests); *see also* 2d Supp. Clark Decl. ¶¶ 3–28; 2d Supp. Silver Decl., attached hereto, ¶¶ 2–20; Crumbo Decl., ECF 23, ¶¶ 4–11 (Apr. 11, 2013). Plaintiffs' injuries are also redressable because, even absent the withdrawal, the validity determination is a certification of claim validity, which insulates the company against a claims contest. This safe harbor provides considerable assurance that the government does not intend to require the company to clean up the mine and vacate the claims. A Court order setting aside the validity determination would thus redress Plaintiffs' injuries.

Indeed, if a Court order in this case led the Forest Service to revisit the validity determination, the Canyon Mine claims likely would be invalidated. For claims to be valid, the mineral deposit must be profitable to mine not only at the time of a withdrawal, but also when any validity determination is completed. *See Lara v. Sec'y of Interior*, 820 F.2d 1535, 1542 (9th Cir. 1987). In the past three years—the lookback period the Forest Service used in 2012 to calculate mining revenues, AR Doc. 525 at 10502—the price of uranium averaged just over $23 per pound. 2d Supp. Clark Decl. at ¶ 23. [redacted]

Added to that, as Plaintiffs predicted five years ago, Mem. Supp. Pls.' Mot. Summ. J. at 31–32, ECF 140-1 (Oct. 15, 2014), the company has now pierced a large perched aquifer while digging the mine, 2d Supp. Silver Decl. ¶ 10; 2d Supp. Clark Decl. ¶ 20. That has forced the company to incur costs to manage mine water that were not considered in the validity determination, such as trucking the water to the company's mill in Utah and using pumps and sprayers to mist excess mine water into the air and National

Forest. *Id.* If the Forest Service revisits its validity determination due to this lawsuit and considers these costs and revenues, the Canyon Mine claims likely would be invalidated, an outcome that would forestall mining and alleviate Plaintiffs' injuries.

III. The Forest Service failed to consider all relevant factors in assessing the validity of the Canyon Mine claims.

For a mining claim to survive a withdrawal the claimant must have discovered a "valuable mineral deposit" before the withdrawal that remains valuable when the government examines its validity. *Lara*, 820 F.2d at 1542. A valuable deposit is one that a prudent person would mine. *Cameron*, 252 U.S. at 459. This test requires a deposit to "be of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine." *Coleman*, 390 U.S. at 602 (quoting *Castle v. Womble*, 19 L.D. 455, 457 (1894)). To have a "valuable mine," a prudent mining company must be able to sell its minerals "at a price higher than the costs of extraction and transportation….' *Id*. That is, the minerals must be "marketable," meaning that they can be "extracted, removed and marketed at a profit." *Id.* at 600.

This is an objective test, which looks at what a prudent person would need to do to develop a mine, not at a specific miner's unique situation. *Id.* at 602 (approving of marketability test's "objectivity"); *United States v. Pass Minerals*, 168 IBLA 115, 121 (2006) (holding that "objective standards" are focused on "the nature of the mineral deposit disclosed on the claim, and not on the attributes or circumstances of the claimant"). This rule is also one of "present marketability," a limitation imposed by the courts to thwart speculative claims based solely on hypothetical future profits or past profitability that has abated. *See Ideal Basic Indus., Inc. v. Morton*, 542 F.2d 1364, 1370 (9th Cir. 1976) ("The test of marketability is not satisfied by the existence of a possible market for the mineral at some future date under altered economic conditions."); *Mulkern v. Hammitt*, 326 F.2d 896, 898 (9th Cir. 1964) (holding that a once-valuable deposit may lose value and fail to "presently satisfy the test"). Present marketability, according to the

Interior Board of Land Appeals, means that "as a *present fact*, considering historic price and cost factors and assuming that they will continue, there is a reasonable likelihood of success that a paying mine can be developed." *United States v. Garcia*, 184 IBLA 255, 262 (Dec. 27, 2013). A "paying mine" is "one that recoups all of the claimant's expenditures…." *United States v. Freeman*, 179 IBLA 341, 345 (Aug. 11, 2010) (internal quotation omitted) *aff'd by* 83 F. Supp. 3d 173 (D.D.C. 2015).

When projecting profits under the marketability test, the cost of complying with environmental and reclamation laws must be taken into account. *Independence Mining Co. v. Babbitt*, 105 F.3d 502, 506–07 (9th Cir. 1997) ("Before a determination of validity can be made, a mineral examiner must … estimate the … cost of extracting, processing and marketing the minerals, including the costs of complying with any environmental and reclamation laws."); *Clouser v. Espy*, 42 F.3d 1522, 1530 (9th Cir. 1994) (observing that measures to "reduce incidental environmental damage" will increase operating costs and thereby affect claim validity); *United States v. E. K. Lehmann & Assoc.*, 161 IBLA 40, 104 n.25 (Mar. 16, 2004) ("It is well-established that the costs of compliance with … environmental laws … are properly considered in determining whether … the mineral deposit is presently marketable at a profit.").

A. The Forest Service disregarded the costs of environmental safeguards.

The Forest Service's validity determination impermissibly omitted the costs of environmental monitoring, mitigation, and wildlife-conservation measures.

The 1986 Plan of Operations, which is still in effect, requires Energy Fuels to monitor radiation around the mine, surface water in nearby streams, and groundwater beneath the mine. AR Doc. 6 at 924, 928; AR Doc. 3 at 527, 530, 588. Energy Fuels must take a year's worth of pre-operational samples to establish baseline radioactivity values. AR Doc. 3 at 527.[1] These samples are to include radiation measurements at a dozen

[1] The pre-operational sampling remained incomplete in 2012, Fed. Defs.' Opp. Pls.' Mot re. Admin. Record, ECF 95 at ECF pp. 5–6 (Nov. 1, 2013), despite the 1986 Plan's assertion that baseline data had already been gathered, AR Doc. 6 at 928.

places, quarterly radon testing, surface-water samples at the three largest springs on the Grand Canyon's South Rim and at other sources, and soil samples at a half dozen places. AR Doc. 3 at 527–28, 588. If mining were to begin, this monitoring would "continue until sufficient data is available to assure that there are no significant off-site radiological impacts." AR Doc. 6 at 928. The validity determination did not consider the cost of carrying out this monitoring program. *See* AR Doc. 525 (no discussion of monitoring).

The same is true of groundwater monitoring. The 1986 Plan required the mine's owner to sink a groundwater well into the deep, regional Redwall-Muav aquifer that feeds nearby springs in the Grand Canyon. AR Doc. 6 at 928; AR Doc. 3 at 530, 587. Regular samples from the well are to be used to determine whether the mine has contaminated the aquifer. AR Doc. 6 at 928. But neither the cost to build the well nor the cost of sampling it was accounted for in the validity determination. *See* AR Doc. 525 at 10500 (excluding construction cost as "sunk cost" and omitting monitoring costs).

The point of all this monitoring is to identify problems at the mine so that additional mitigation measures can be prescribed. AR Doc. 6 at 924 (observing that the monitoring program "will help determine the need to further modify the Plan of Operations to provide additional mitigation measures…"). So, if the mine were to contaminate groundwater, the Plan's treatment provisions would be triggered, obliging Energy Fuels to pay for "continuous pumping … until concentrations of the critical constituents are reduced to recommended [or comparable] drinking water standards…." *Id.* at 928. Or if groundwater were to infiltrate the mine, monitoring would determine what additional measures to take to protect the environment. Indeed, the Forest Service anticipated that groundwater would be encountered and might need to be pumped to the surface, potentially treated, and stored in the holding pond. *See* AR Doc. 3 at 476, 530–31. Yet the expense of these tasks, which are in addition to constructing the evaporation pond, were omitted from the Forest Service's profitability calculations. AR Doc. 525. These environmental-mitigation costs should have been accounted for, but were not.

The Forest Service likewise failed to consider the expense of wildlife-conservation

measures. The 1986 Plan of Operations required Energy Fuels to replace 32 acres of big-game-foraging habitat the mine has destroyed and a key watering source the mine has impaired or will impair. AR Doc. 6 at 925. Yet Energy Fuels had not completed these tasks by 2012. *See* AR Doc. 628 at 11874–75. Nor had it completed all the measures the government had prescribed for protecting California condors, such as making the evaporation pond inaccessible to condors. AR Doc. 507 at 10433–34; AR Doc. 501 at 10416. The costs of carrying out those wildlife-protection measures thus should have been, but were not, included in the Forest Service's cost estimates. AR Doc. 525.

These costs of environmental monitoring, mitigation, and operating related infrastructure are relevant factors that the law required the Forest Service to consider in forecasting whether the Canyon Mine deposit could be profitability mined. *Independence Mining*, 105 F.3d at 506–077. The agency's failure to do so was arbitrary, capricious, and not in accordance with the law. *See Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43.

B. Energy Fuels' cost estimates did not cover monitoring and wildlife-conservation.

Energy Fuels has argued that environmental monitoring and wildlife-conservation costs were considered in cost estimates the company sent the Forest Service and the agency adopted. EFR's Mem. Supp. Summ. J. at ECF p. 19, ECF 147-1 (Nov. 19, 2014) ("EFR's MSJ"). That argument cited to an "economic study" the company prepared and the Forest Service used and attached as Appendix C to its validity determination but initially left out of the record on the grounds that it was confidential. Roberts Decl. Supp. EFR's MSJ ¶¶ 7–9, ECF 147-2 (Nov. 19, 2014); *see* Pls.' Mot. Complete Admin. Record, ECF 202 (Apr. 5, 2019). [redacted]

The company's "monitoring obligations," Energy Fuels' executive vice president asserted, were included in the spreadsheet in a category labeled "Mining & Site G&A." Roberts Decl. ¶ 8, ECF 147-2. [redacted]

[redacted]

The company's declarant also asserted that the cost of wildlife-conservation measures was covered by the spreadsheet in a category labeled "Surface Facilities, rehab, impoundment, ore pad." Roberts Decl. ¶ 9, ECF 147-2. [redacted]

[redacted]

C. It was not permissible to exclude "sunk costs."

Both Defendants admit that the Forest Service did not consider the costs of building the groundwater-monitoring well and other pre-withdrawal expenses but defend that omission by arguing that these were "sunk costs" that do not count in determining profitability. *See* AR Doc. 525 at 10500 (explaining that "sunk costs" for completed development were omitted); EFR's MSJ at ECF p. 19, ECF 147-1 ("Costs … [of] construct[ing] the monitoring well … were excluded as sunk costs, because [it was] built

before the [validity] determination."). This defense is contrary to law, and the failure to account for "sunk costs" is an independent basis for reversal.

No federal court has adopted the "sunk cost" principle the Forest Service asserts. Instead, the idea comes from a Bureau of Land Management handbook's digest of a few Interior Board of Land Appeals decisions. *See* AR Doc. 374 at 7438. But the Board's treatment of "sunk costs" in those decisions is unsound and contrary to binding Supreme Court precedent.

For over a century, the test for validity has turned on whether a prudent miner has a reasonable prospect of developing a "paying mine." *See Cameron*, 252 U.S. at 459 (citing *Chrisman v. Miller*, 197 U.S. 313, 322 (1905)). In *Coleman*, the Supreme Court made clear that a "paying," or valuable, mine is one that can turn a profit after accounting for mining costs: "Minerals which no prudent man will extract because there is no demand for them at a price higher than the costs of extraction and transportation are hardly economically valuable." 390 U.S. at 602. It is impossible to square the omission of "sunk costs"—costs incurred before a validity determination—with these controlling cases. Such a rule would allow a mining company to game the validity-determination and patenting process by doing pricey work before seeking a validity determination or patent, thereby transmuting real costs into "sunk costs" that vanish from the law's accounting but not the company's ledgers.

Whether a prudent person would mine a deposit depends on all the costs of mining, regardless of when they are incurred. The cost of building the groundwater well at Canyon Mine, for example, is not zero simply because it was incurred before the validity determination rather than after. And if that expense (along with all the other sunk costs the Forest Service ignored) were to drive costs above revenues, the deposit at Canyon Mine would be one that "no prudent man will extract because there is no demand for [it] at a price higher than the costs of extraction." *Coleman*, 390 U.S. at 602. In other words, "profit over cost" would not be presently realizable. *Ideal Basic Indus.*, 542 F.2d at 1369. No "paying mine" could presently be developed. *Cameron*, 252 U.S. at 459.

There would presently be no reasonable prospect of "success." *Coleman*, 390 U.S. at 602.

Energy Fuels has claimed that a validity determination examines "profit going forward" without "look[ing] back at or consider[ing] past or 'sunk costs.'" Jt. Matrix re. Sunk Costs, ECF 212, at 16. That premise comes from a Board ruling that allowed "earlier expenditures" to be disregarded, a decision that appears to reason that the "present marketability" test is only about whether a "present profit" can be made in excess of ongoing costs. *United States v. Mannix*, 50 IBLA 110, 119 (Sep. 24, 1980). But that reasoning is unsupported by the case law, which has never construed the "present marketability" requirement to allow for expungement of past expenses.

The point of requiring "present marketability" is to void mining claims that are based on a speculative future market or a past market that has vanished. *See Ideal Basic Indus.*, 542 F.2d at 1369–70; *Mulkern*, 326 F.2d at 897–98. The test asks whether a prudent mining company would make "further expenditures" based on what it can reasonably predict about the future and what it knows about the past, including how much it has so far spent. *Id.*; *Coleman*, 390 U.S. at 602. In other words, as the Board has often said, the question is whether "as a present fact, considering *historic price and cost* factors and assuming that they will continue, there is a reasonable likelihood of success that a paying mine can be developed." *Garcia*, 184 IBLA at 262 (emphasis added); *see also, e.g.*, *Freeman*, 179 IBLA at 348, 357; *United States v. McKown*, 181 IBLA 183, 193 (June 30, 2011); *United States v. Rannells*, 175 IBLA 363, 368 (Aug. 25, 2008).

The case the Board cited in *Mannix—Andrus v. Shell Oil Co.*, 446 U.S. 657 (1980)—"liberalized the traditional valuable mineral test" by exempting oil shale from the "present marketability" requirement and thus allowing for speculation about the future marketability of oil shale, a resource that has never been marketable. *Id.* at 660–63. But *Andrus* specifically reaffirmed that the traditional "present marketability" requirement continued to apply to "other minerals," not the "liberalized" test for oil shale. *Id.* at 672–73 n.11. And the Court did not rule that "present marketability" means that costs previously incurred can be ignored, even for oil shale claims. *Mannix* thus warped

the present-marketability requirement in a way that contradicts the body of federal cases requiring a reasonable prospect of developing a paying mine.

In the decades after deciding *Mannix*, the Board has favorably cited the sunk-cost holding only a few times and without scrutiny. *See United States v. Copple*, 81 IBLA 109, 129 (May 30, 1984); *United States v. Collord*, 128 IBLA 266, 288 n.24 (Mar. 10, 1994); *United States v. Clouser*, 144 IBLA 110, 131–32 (May 22, 1998). In at least *Collord* and *Clouser*, the citations were dicta; there was no suggestion that any "sunk costs" were relevant to the outcome. *See* 128 IBLA at 278–88 (discussing only prospective development of mining claims); 144 IBLA at 128–34 (holding claims invalid even without accounting for the "sunk cost" of existing workings).

When *Mannix*'s implications have been scrutinized, moreover, its reasoning has not fared well. One of the upshots of *Mannix* was that equipment a miner bought before a validity determination no longer counted when determining profitability. *See Clouser*, 144 IBLA at 132 (concluding that *Mannix* "impliedly overruled" an earlier, contrary decision holding that pre-owned equipment was a relevant expense). But that holding has since been squarely rejected by a recent, thoughtful Board opinion, *United States v. Armstrong*, 184 IBLA 180, 216–20 (Oct. 31, 2013), which is backed up by other Board cases preceding *Mannix* and *Clouser*. *See United States v. Feezor*, 130 IBLA 146, 222 (Aug. 4, 1994); *United States v. Garner*, 30 IBLA 42, 67 (Apr. 18, 1977).

These decisions reason that there is an opportunity cost of putting mining equipment to use when it could be sold or used elsewhere, and that expense, therefore, must be considered in evaluating profitability. *Armstrong*, 184 IBLA at 216–20. That makes sense, given the objective nature of the test for discovery of a valuable mineral deposit. *Id.* at 217–18 ("[Under the] objective prudent man standard[,] what is required to extract, process, and market the mineral on a particular claim is the same no matter who mines it."). The same rationale applies equally to assets that are fixed on the claims—like a groundwater well or evaporation pond—since any prudent mining company would objectively need them to run its mine. And these decisions also show that Energy Fuels is

mistaken to claim that validity determinations do not "look back at or consider past or 'sunk costs,'" ECF 212 at 16, for if that were true, the expense of already-owned equipment would not count.

The Forest Service's failure to include the cost of building the groundwater well and other pre-2012 expenses was arbitrary, capricious, and not in accordance with law. It is an independent basis on which to the validity determination should be set aside. *See Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43.

CONCLUSION

Because the Forest Service's validity determination was legally deficient, judgment should enter against the Defendants on Plaintiffs' fourth claim. The validity determination should be set aside, and all activity at the Canyon Mine should be enjoined until the Forest Service completes a new validity determination.

Respectfully submitted this 11th day of September, 2019.

s/ Aaron M. Paul
Aaron M. Paul
Grand Canyon Trust
4404 Alcott Street
Denver, Colorado 80211
(303) 477-1486
apaul@grandcanyontrust.org

Neil Levine (Colo. Bar No. 29083)
Public Justice
4404 Alcott Street
Denver, Colorado 80211
(303) 455-0604
nlevine@publicjustice.net

Marc Fink (Minn. Bar No. 343407)
Center for Biological Diversity
209 East 7th Street
Duluth, Minnesota 55805
(218) 464-0539
mfink@biologicaldiversity.org

Roger Flynn (Colo. Bar No. 21078)
Western Mining Action Project
440 Main St., #2
Lyons, Colorado 80540
(303) 823-5738
wmap@igc.org

Counsel for Grand Canyon Trust, Center for Biological Diversity and Sierra Club