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BEFORE THE DEPARTMENT OF WATER RESOURCES OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION FOR PERMIT NOS. 77-14378, APPLICATIONS FOR TRANSFER NOS. 85396, 85397, AND 85398, AND APPLICATION FOR EXCHANGE 85538 IN THE NAME OF PERPETUA RESOURCES IDAHO, INC.	**PROTESTANTS' JOINT RESPONSE IN OPPOSITION TO PERPETUA RESOURCES' EXCEPTIONS TO PRELIMINARY ORDER**

ACRONYMS

Bird	IDWR Order on Exceptions and Final Order *In re Application for Permit No. 74-16187 in the name of Kurt W. Bird or Janet E. Bird*
CDFW	California Department of Fish and Wildlife
cfs	cubic feet per second
EFSFSR	East Fork South Fork Salmon River
ESA	Endangered Species Act
Exceptions Petition	Perpetua's Exceptions to Preliminary Order, filed May 23, 2024
Ex.	Exhibit
IDFG	Idaho Department of Fish and Game
IDWR or Department	Idaho Department of Water Resources
IPDES	Idaho Pollutant Discharge Elimination System
NMFS	National Marine Fisheries Service
OSC	Office of Species Conservation
Perpetua or company	Perpetua Resources Idaho, Inc.
Petition for Reconsideration	Perpetua's Petition for Reconsideration, filed April 24, 2024
Preliminary Order	Officer Cefalo's Preliminary Order Approving Applications, filed April 10, 2024
Project	Perpetua's proposed Stibnite Gold Project
Protestants	Nez Perce Tribe, Save the South Fork Salmon, Inc., and Idaho Conservation League
Test.	Testimony from the December 11-15, 2023, hearing
Tr.	Transcript of December 11-15, 2023, hearing, attached as Exhibit A to the Declaration of Michael A. Lopez filed on January 31, 2024
USGS	United States Geological Survey

Protestants Nez Perce Tribe, Save the South Fork Salmon, and Idaho Conservation League ("Protestants") submit to the Director of the Idaho Department of Water Resources ("IDWR" or "Department") this joint response in opposition to Applicant Perpetua Resources, Inc.'s ("Perpetua" or "company") Exceptions to Preliminary Order ("Exceptions Petition") pursuant to IDAPA 37.01.01.720.02(e).

I. INTRODUCTION

On April 10, 2024, following a five-day hearing and after reviewing a voluminous record and closing briefs submitted by Protestants and Perpetua, Officer Cefalo issued a Preliminary Order Approving Applications ("Preliminary Order") and accompanying water permits with conditions for the proposed Stibnite Gold Project ("Project"). On April 24, Perpetua filed a Petition for Reconsideration ("Petition for Reconsideration"), seeking modification of Conditions 13 and 15 and elimination of Conditions 9, 10, and 14. Officer Cefalo issued an Order Denying Perpetua's Petition for Reconsideration on May 9, 2024. On May 23, 2024, Perpetua submitted its Exceptions to Preliminary Order ("Exceptions Petition"), complaining that Conditions 9, 10, 13, 14, and 15 "are not supported by evidence in the record, are duplicative, and have limited benefit to the public interest"[1] that "prevent Perpetua from utilizing its planned operational flexibility, prevent it from optimizing diversions during high flow periods, and unreasonably constrain mining operations contrary to Idaho water law."[2] Perpetua seeks removal of Conditions 9, 10, 13, and 14 from its water right permits and a dramatic curtailment of the fish habitat protection afforded by Condition 15. Perpetua's complaints are unavailing and should be rejected.

[1] Exceptions Petition at 9.
[2] Exceptions Petition at 12.

According to IDWR Proposed Rule 37.03.08.045.01.e.v, IDWR "will deny an application [for acquisition, transfer or exchange of a water right] that conflicts with the local public interest unless the project can be approved with conditions to resolve the local public interest conflict."[3]

In his Preliminary Order, Officer Cefalo found that "[t]here are many local public interest factors to consider in the EFSFSR watershed. It is in the local public interest to protect the aquatic resources, habitat, recreational opportunities, and aesthetic values…to protect, preserve, and restore Endangered Species Act ("ESA")-listed species…and [to] improve water quality in the watershed."[4] Officer Cefalo then explicitly found that "[e]vidence in the record confirms that Perpetua's proposed condition, alone [Condition 12], is not sufficient to preserve fish passage in Perpetua's tunnel fishway under all flow scenarios."[5] With respect to Meadow Creek, he found "[t]he primary area of concern for ground water pumping affecting stream flow is in the Meadow Creek drainage. Meadow Creek provides habitat for ESA-listed species."[6]

Officer Cefalo also acknowledged the local public interest factors directly related to the Project: improvements to water quality in the EFSFSR drainage through the clean-up and safe storage of legacy tailings; improvements to water quality from remediating the effects of the failed dam in the Blowout Creek drainage; and restoration of volitional fish passage to the upper reaches of the EFSFSR.[7]

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[3] Proposed Rule Text of Docket No. 37-0308-2301, 37-03-08-045.e.v., Idaho Department of Water Resources, https://idwr.idaho.gov/wp-content/uploads/sites/2/legal/Rule-37-03-08/20231004-370308-PROPOSED-RULE-FINAL.pdf (emphasis added). The Idaho Legislature has defined the local public interest as "the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource." Idaho Code § 42-202B(3). The local public interest includes the public's interest in the protection of fish and wildlife habitat. *Shokal v. Dunn*, 109 Idaho 330, 338, 707 P.2d 441, 449 (1985).

[4] Preliminary Order at 20.

[5] Preliminary Order at 22, 28, 29.

[6] Preliminary Order at 24.

[7] Preliminary Order at 20-21.

Officer Cefalo then exercised his broad discretion and affirmative duty under Idaho law to "weigh[] and balance[] the local public interest factors in this case" with information contained in the record.[8] He "determined that conditions should be included on the permit and transfer approvals to protect local public interest values in aquatic habitat and fish passage for ESA-listed species in the EFSFSR watershed."[9] In doing so, he clearly considered the Idaho Department of Fish and Game's ("IDFG") and Office of Species Conservation's ("OSC") recommendation that IDWR develop conditions in addition to Condition 12 proposed by Perpetua in order to ensure "[s]urface water diversions and infrastructure will not at any time impede the passage of any life stage of Chinook Salmon, Steelhead, Bull Trout, or Cutthroat Trout from the confluence of the EFSFSR and Sugar Creek upstream past the Point of Diversion."[10]

Officer Cefalo took Perpetua at their word and relied on the technical information and sworn testimony the company presented during the hearing to grant all of Prepetua's water rights applications and to ensure the company operational flexibility to meet its individual peak, industrial, and mining water demands.[11] Officer Cefalo also relied on Perpetua's technical information to develop and impose tailored conditions to protect the local public's interest in protecting fish passage and ESA-listed fish.

Despite Officer Cefalo's reliance on specific, technical evidence in the record, Perpetua now attempts to draw a parallel with the Department's Order on Exceptions and Final Order in *In re Application for Permit No. 74-1687 in the name of Kurt W. Bird or Janet E. Bird* ("*Bird*") and

[8] Preliminary Order at 29; "I.C. § 42–203A places upon the Director the affirmative *duty* to assess and protect the public interest." *Shokal v. Dunn*, 109 Idaho 330, 337, 707 P.2d 441, 448 (1985) (emphasis in original). "The determination of what elements of the public interest are impacted, and what the public interest requires, is committed to Water Resources' sound discretion."; *Id*. at 339, 450.

[9] Preliminary Order at 29.

[10] Preliminary Order at 21 (citing Ex. 206 at 1).

[11] Preliminary Order at 4-5, ¶¶ 24-28.

asserts that Officer Cefalo's conditions to protect the local public interest in anadromous and resident fish are not based on "target flows or specific data identifying the streamflow needed to provide optimum fish habitat."[12] Perpetua's reference to *Bird* in this case is misplaced.

The Idaho Supreme Court found in *Hardy v. Higginson* that "any conditions imposed by the [IDWR] must be supported by the evidence."[13] In *Bird*, IDFG and the Idaho Water Resources Board argued that all unappropriated flow, no matter the quantity, was required to provide habitat for ESA-listed species in the Lemhi Basin.[14] The Director disagreed, finding that the administrative record did not provide any technical information about the specific streamflows needed to maintain optimum levels of fish habitat in the upper Lemhi River during the snowmelt runoff period and thus requiring all unappropriated flows be used for fish habitat was not supported by the record.[15] Unlike *Bird*, Officer Cefalo did not find in this case that the local public interest required all unappropriated flow, or some other unquantified flow, to protect ESA-listed fish in the Project area. Rather, all of Officer Cefalo's conditions imposing flows to protect anadromous and resident fish are quantifiable, reliable, and based on specific scientific information in the evidentiary record provided by Perpetua and Protestants.

Perpetua also uses its Exceptions Petition to recast its representations at the hearing and present information that is contrary to evidence in the record regarding its operational surface and groundwater needs.[16] This is not appropriate or actionable. IDWR is bound by law to limit its consideration to information contained in the record and to resolve any conflicts between the

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[12] Exceptions Petition at 13 (citing *In re Application for Permit No. 74-16187 in the name of Kurt W. Bird or Janet E. Bird*, Order on Exceptions; Final Order (May 21, 2020).
[13] *Hardy v. Higginson*, 123 Idaho 485, 492, 849 P.2d 946, 953 (1993).
[14] *In re Application for Permit No. 74-16187 in the name of Kurt W. Bird or Janet E. Bird, Order on Exceptions; Final Order* (May 21, 2020) at 31 (internal citations omitted) (emphasis added).
[15] *Id*.
[16] Exceptions Petition at 10-11.

applications and local public interest by imposing conditions supported by information in the record. Perpetua's efforts now to introduce new or conflicting information via petition cannot change Officer Cefalo's findings of fact and his application of the law to those facts.

Now is also simply not the appropriate time for Perpetua to seek to modify its water right permits. Without a final mine plan, Perpetua is continuing to speculate in its Exceptions Petition, as apparently the company did at the hearing and in its Petition for Reconsideration, regarding its ultimate operational water needs. Once Perpetua has a final mine plan, Perpetua can file an application for amended water rights, as contemplated by Officer Cefalo's Condition 11.[17]

Contrary to Perpetua's assertions, the company's proposal to eliminate four of the conditions Officer Cefalo imposed to protect fish and to dramatically modify Condition 15 would result in water right permits that significantly conflict with the local public interest in maintaining fish habitat and passage in both Meadow Creek and the EFSFSR. Protestants, therefore, oppose Perpetua's Exceptions Petition and respectfully request that the Director deny it in full and affirm Officer Cefalo's April 10 and May 9, 2024, orders.

II. BACKGROUND

Prior to the hearing, Perpetua sent a "Request for Technical Assistance Review" to IDFG and OSC, seeking the agencies' review of the company's water right application for permit no. 77-14378 and Condition 12.[18] Perpetua's request included a technical memo "that describes restrictions to diversions that are protective of the resource and allow Perpetua Resources to maintain proposed operations under most streamflow conditions."[19] Although Perpetua now represents that they "consulted with [IDFG and OSC] to <u>develop</u> a condition that would provide

[17] Preliminary Order at 20.
[18] Exhibit ("Ex.") 206 at 3-4.
[19] Ex. 206 at 3.

consistent, volitional, fish passage [through their tunnel] above the Yellow Pine Pit" during low flows,[20] the technical assistance Perpetua requested and received from IDFG and OSC was limited to reviewing whether Perpetua's already-developed condition would ensure fish passage through their proposed tunnel fishway.[21]

After IDFG and OSC reviewed Perpetua's water right applications and proposed condition, they sent a joint letter to Officer Cefalo on August 2, 2022, with Perpetua's technical memorandum attached. The agencies' joint letter was not an unequivocal endorsement of Condition 12. Rather, it concluded the following:

> Perpetua's proposed measures will likely protect fisheries and aquatic habitat in the EFSFSR. In addition to measures and draft water right conditions outlined in Perpetua's technical memo, OSC and IDFG recommend that [IDWR] consider developing water right conditions for 77-14378 that would ensure fish passage at the Project such as the following examples:
>
> - Surface water diversions and infrastructure will not at any time impede the passage of any life stage of Chinook Salmon, Steelhead, Bull Trout, or Cutthroat Trout from the confluence of the EFSFSR and Sugar Creek upstream past the Point of Diversion.
> - Prior to water diversion and use, all Project fish screening must be installed per National Marine Fisheries Service criteria.[22]

The agencies also offered in their letter "to provide IDWR with technical assistance to inform decision-making and recommendations to avoid, minimize, or mitigate adverse Project effects on fish, wildlife, and recreation."[23]

[20] Exceptions Petition at 2, 8 (emphasis added).
[21] Ex. 206 at 3, 19.
[22] Ex. 206 at 1 (emphasis added) (internal citations omitted).
[23] Ex. 206 at 1-2.

Perpetua's suggestion that the IDWR and OSC somehow support Condition 12 as a standalone condition that would protect all fisheries resources because they forewent the opportunity to propose additional conditions is unpersuasive.[24] The fact that OSC and IDFG did not propose specific, additional conditions is a non-issue. The agencies' letter to IDWR expressly deferred the development of additional conditions to IDWR—the agency charged with issuing and conditioning water rights—while providing two examples of the types of additional conditions that might be helpful to protect fish passage. IDFG and OSC also offered their ongoing "technical assistance to inform decision-making and recommendations to avoid, minimize, or mitigate adverse Project effects on fish, wildlife, and recreation."[25] Furthermore, there is no information in the evidentiary record to suggest that Perpetua asked IDFG and OSC to comprehensively review all of their water rights applications or to develop additional conditions the agencies thought necessary to protect fisheries resources. Also, IDFG and OSC's silence with respect to Meadow Creek is likely attributable to the technical memorandum Perpetua asked them to review. That memorandum contained a passage indicating there would be no Project-related flow depletions in Meadow Creek: "The surface water diversion [on the EFSFSR] reduces groundwater pumping in the Meadow Creek valley thereby maintaining streamflow in Meadow Creek and the EFSFSR from Meadow Creek to the [point of diversion] that would otherwise be impacted from the groundwater supply wells."[26]

Perpetua also notes that IDFG and OSC did not protest their water rights applications. To the extent Perpetua is insinuating IDFG and OSC's support of the company's applications without

[24] Exceptions Petition at 8-9, 19, 28.
[25] Ex. 206 at 1-2.
[26] Ex. 206 at 5 (emphasis added).

any additional fish-related conditions,[27] Perpetua's interpretation conflicts with the recommendation in the agencies' letter. Protestants also observe that Perpetua did not present any witnesses from IDFG or OSC at the hearing to testify to their decision not to protest or the contents of their letter to Officer Cefalo. Perpetua also did not offer any evidence or testimony regarding why it did not follow up with IDFG and OSC to discuss and develop the additional conditions the agencies recommended for the company's water rights. It is, therefore, inappropriate for Perpetua to now suggest perspectives beyond what the agencies' expressly represented in their letter to IDWR.

III. ARGUMENT

A. Condition 9 is Supported by the Record and Protective of the Local Public Interest.

Perpetua's request to eliminate Condition 9, which limits the diversion rate at the company's proposed surface water point of diversion from the EFSFSR in Application for Permit 77-14378 ("River Pump") to 4.5 cubic feet per second ("cfs"), should be rejected for six main reasons.

The ***first*** is straightforward but important: Condition 9 reflects material representations Perpetua made in documentary evidence and through sworn testimony and upon which Officer Cefalo properly relied to craft permit conditions protective of the local public interest. As Perpetua acknowledges, the 4.5 cfs pump capacity "has been used by Perpetua for planning and design."[28] It underlies key documents and modeling in the record, including the Fishway Operations and

[27] Exceptions Petition at 9.

[28] Petition for Reconsideration at 13; Ex. 34 at 124 ("It is assumed that [Perpetua] will procure a water right for a maximum withdrawal rate of 4.5 cfs from EFSFSR."), 139, 143, 148; Ex. 47 at 2; Ex. 27a at 78 (Figure 6-20) (depicting additional water needs throughout life of the mine, with a maximum at Year 1 of about 1,800 gallons per minute).

Management Plan,[29] and hydraulic modeling,[30] which in turn underlie Officer Cefalo's finding of fact that "[t]he River Pump will have a capacity of approximately 4.5 cfs."[31] Perpetua's own witnesses referenced and confirmed the 4.5 cfs pump capacity in hearing testimony:

> [W]e see a peak diversion rate, based on the modeling, of 4.5 cfs to supply to the mill from freshwater sources. That doesn't mean that it's always going to be at four and a half. It's going to vary up to four and a half, but that's the calculated amount . . . .[32]

Additionally, Perpetua's Senior Engineer, Gene Bosley, testified that Perpetua does not have any use for a continuous diversion of 9.6 cfs from the EFSFSR point of diversion and that the River Pump intake as designed would not be able to handle more than 4.5 cfs:

> Q. . . . when you were referring to the 9.6 cfs water right application, you provided testimony that you have no use for that amount of water; is that correct?
>
> A. Yeah, not continuously.
>
> Q. And you provided testimony that the East Fork, South Fork Salmon River point of diversion intake cannot even handle more than 4.5 cfs; is that correct?
>
> A. That's right. You wouldn't get it all from there.
>
> Q. So you also stated that Perpetua's modeling shows that they will not need to divert more than about 4.5 cfs instantaneously from that point of diversion, correct, on the East Fork, South Fork?

[29] Ex. 34 at 124, 139.

[30] Ex. 47 at 2.

[31] Preliminary Order at 5.

[32] Scanlan Testimony ("Test."), Transcript of December 11-15, 2023, Hearing, attached as Exhibit A to the Declaration of Michael A. Lopez filed on January 31, 2024 ("Tr.") at 139; *see also id*. at 169-70 ("Q. Can you help us understand what you mean by peak estimates or peak demand? A. . . . [I]t said in this peak month we needed 4.5 cfs, that's where that comes from. Could be the average of that year was 2 cfs, but for various reasons, operational or climatic, there's times that we need four and a half in that instance.").

> A. Yeah. That's during normal operations, and if we needed a full nine, we get it from a combination of that and the supply well field and whatever active dewatering we have at the time.[33]

Perpetua's Site-Wide Water Balance Report further confirms that the company modeled its peak freshwater diversion demand to occur during Mine Year 1 and that peak demand did not exceed 4.5 cfs.[34] Mr. Stanaway's testimony corroborated this modeling in the Site-Wide Water Balance Report as well as Mr. Bosley's testimony. According to Mr. Stanaway, Perpetua looked to the EFSFSR as a diversion source to meet its full freshwater demand for the Project, which Mr. Stanaway estimated at 4 to 4.5 cfs, after modeling determined that the full freshwater demand could not be pulled from ground wells in the Meadow Creek drainage.[35]

All told, the record is replete with Perpetua's representations denying the need to divert more than 4.5 cfs from the EFSFSR except under unlikely operating scenarios.[36] At no point did Perpetua represent at the hearing, as they do now in their Exceptions Petition, that the company will need more than 4.5 cfs of freshwater during Project operation absent an unlikely catastrophic failure.[37] Although Mr. Stanaway testified that more freshwater would be required in the first four years of mining operations than in later years, Mr. Stanaway stated that:

> It will not be 9.6 as folks have been talking about. It's only sized for four and a half, running at four and a half would be pretty uncommon, but running [the pump] at all, it will be pretty common i[n] the first, say, four years when you see we have make-up needs in the first four or so years of operations. Once you get past the first four years or so it runs very seldom at all.[38]

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[33] Bosley Test., Tr. at 538-39. *See also* Ex. 34 at 124, 139 (stating a maximum withdrawal rate from the River Pump at 4.5 cfs); Ex. 47 at 2 ("Perpetua intends to supplement the site water balance with as much as 4.5 cfs of raw water from the EFSFSR.").

[34] Ex. 27a at 6-23 (Figure 6-20).

[35] Stanaway Test., Tr. at 190, 196, 198, 226, 274; Ex. 27a at 6-21; Stanaway Test., Tr. at 274.

[36] Bosley Test., Tr. at 538; Scanlan Test., Tr. at 140; Stanaway Test., Tr. at 226, 274.

[37] Exceptions Petition at 10; Scanlan Test., Tr. at 140.

[38] Stanaway Test., Tr. at 391-92 (emphasis added).

In sum, Perpetua represented the 4.5 cfs pump capacity to IDWR and the Protestants as an accurate and material component of the current Project design. Perpetua based its modeling on a 4.5 cfs maximum pump capacity. As Officer Cefalo stated in his denial of Perpetua's Petition for Reconsideration, "documents provided by Perpetua show a clear intent to limit the EFSFSR diversion to 4.5 cfs. None of the witnesses from Perpetua repudiated these documents. In fact, Perpetua's witnesses confirmed the 4.5 cfs diversion limit."[39]

Officer Cefalo's reliance on Perpetua's representations to craft Condition 9 was not in error. It now seems clear that Perpetua has not yet developed "final pump station designs" and may seek to increase its pump capacity.[40] Changes to pump capacity would cast numerous other related plans and assumptions from the record into doubt. To ensure full and fair evaluation of the local public interest, Perpetua's appropriate course of action will be to file an application for amendment pursuant to Condition 11 once it has developed a final pump station design, and the consequences of the redesign can be fully understood by IDWR, Protestants, and the public.[41]

Second, and separate from Perpetua's representations regarding River Pump capacity, Perpetua's claim of surprise that Officer Cefalo imposed Condition 9 lacks merit. Perpetua contends that "[p]rior to issuance of the Preliminary Order, Perpetua did not have notice of Conditions 9, 10, and 15, which materially impact water management at the [Project]. Had Perpetua been aware of the possibility of these conditions, the company asserts, it would have provided additional documentary evidence of the need to increase the rate of diversion above 4.5 cfs at the surface water intake."[42] But again, Officer Cefalo's Conditions 9 and 10 derive from

[39] Order Denying Petition for Reconsideration at 9.
[40] Petition for Reconsideration at 14.
[41] *See* Bosley Test., Tr. at 539 ("Q. So could Perpetua potentially replace intake to handle more in the future should the mine operations change? A. It could. It would be permitted just like anything else.").
[42] Exceptions Petition at 16.

Perpetua's own modeling and representations at the hearing and Condition 15 represents documented base flows for Meadow Creek of which there is no reason to believe Perpetua was not aware.

Moreover, Perpetua has the operational flexibility to divert 4.5 cfs of freshwater year-round, even with Conditions 9, 10, and 15 in place. According to Perpetua's own modeling, the company's highest peak total freshwater diversion need (diversion from the EFSFSR plus diversions from supply wells) for any given year the mine is less than 4.5 cfs.[43]

Condition 10—which imposes a 31-acre feet per month diversion rate on groundwater wells upstream of the River Pump—is based on the company's own modeling and representations at the hearing regarding its maximum diversion rate from the industrial supply wells in the Meadow Creek drainage.[44] And, even if Conditions 10 and 15 operated to completely restrict diversion from the supply wells (which were modeled at a maximum instantaneous rate of 0.5 cfs),[45] Perpetua would still be able to divert 4.5 cfs—above its full modeled peak freshwater demand of about 4 cfs—from the EFSFSR.[46]

Perpetua claims that with Conditions 9, 10, and 15 its "aggregate water withdrawals would be curtailed to 4.5 cfs or less, not the 9.6 cfs requested."[47] But that is not the case. Officer Cefalo granted Perpetua's request for a total of 9.6 cfs.[48] Perpetua's own modeling showed that the request for 9.6 cfs was based on the company's non-simultaneous peak diversion need associated with ore

[43] Ex. 27a at 6-23; Stanaway Tr. at 198.
[44] Stanaway Test., Tr. at 224-226, 272, 274; Ex. 27a at 6-21.
[45] Ex. 27a at 6-21.
[46] Ex. 27a at 6-21 ("The most intensive need for additional water occurs in the first few years of mining where peaks of 1,800 gpm are seen."); *see also id.* at 6-23 (Figure 6-20). "Figure 6-20 represents the remainder that would be sourced from the surface water intake." *Id.* at 6-21.
[47] Exceptions Petition at 15.
[48] Permit 77-14378; *see also* Preliminary Order at 4, ¶ 24 (recognizing 4.3 cfs from pit dewatering).

processing (4.5 cfs) dust control (0.1 cfs), drilling activities (0.1 cfs), and pit dewatering (4.3 cfs).[49] Perpetua's own modeling also shows that water would come from the combination of collected contact water (which is not part of the water rights applications), pit dewatering (4.3 cfs), and freshwater sources (supply wells and surface diversion from the EFSFSR) (4.5 cfs).[50] According to Perpetua, pit dewatering is a "major water supply source to satisfy Project water demand"[51] and makes up approximately half of the total water requested under application no. 77-14378.

None of Officer Cefalo's conditions—operating alone or combined—affect Perpetua's ability to withdraw water from pit dewatering up to the maximum 4.3 cfs that was modeled, or up to a total of 9.6 cfs allowed under the permit. Rather, Officer Cefalo simply curtailed Perpetua's ability to divert their full 9.6 cfs from the EFSFSR to protect fish passage, consistent with Perpetua's representations regarding their combined (supply well and surface water) freshwater needs for every year of their proposed Project.

Third, Perpetua's claim that Condition 9 can be eliminated because Condition 12, alone, is sufficient to protect streamflow, fish habitat, and fish passage is not supported by the record.[52] Perpetua has provided no reliable information in the record regarding how low flows in the EFSFSR above the confluence with Sugar Creek can drop with Condition 12 in place under the full range of possible flow scenarios. Furthermore, Dr. Kaiser testified that the efficacy of Condition 12 depends on the EFSFSR's proportional flow contribution to the condition's point of quantification, which is measured at the confluence with Sugar Creek, and that the EFSFSR's proportional flow contribution to the point of quantification is quite variable from year to year—

[49] Ex. 1g at 52.
[50] Ex. 27a at 6-17–6-24.
[51] Ex. 27a at 5-2, 6-23.
[52] Exceptions Petition at 14.

ranging from 42 to 67 percent.[53] She further testified that once flows at the point of quantification drop below the 23 cfs, even when the EFSFSR is contributing 60 percent of the flow, flows in the EFSFSR can drop below historical minimums.[54]

Perpetua's argument that Condition 9 can be eliminated because Condition 12 is sufficient to protect streamflow also ignores Officer Cefalo's finding that "[e]vidence in the record confirms that Perpetua's proposed condition, alone, is not sufficient to protect fish passage in the fishway under all flow scenarios."[55]

Fourth, Condition 9 provides additional protections to the public interest beyond Conditions 13 and 14. Officer Cefalo imposed it as part of a suite of conditions that work in concert to protect fish passage in the EFSFSR:

> Consistent with the comments from IDFG and OSC, and to avoid impacts to local public interest factors, this order adopts additional diversion limits as described above. First, the River Pump is limited to a maximum diversion rate of 4.50 cfs. Second, Perpetua must maintain a minimum bypass flow of 7.25 cfs downstream of its River Pump from June 30 to September 30 and a minimum bypass flow of 5.00 cfs at all other times of the year. These additional diversion limits adequately protect fish passage through the tunnel fishway and support fish passage in the reach between the fishway outlet and the confluence of EFSFSR and Sugar Creek.[56]

Condition 9 provides a needed safeguard on Conditions 13 and 14 that limit flow depletions in the EFSFSR downstream of Perpetua's River Pump to ensure fish passage.

Fifth, limiting surface water diversions from the EFSFSR is consistent with the conservation of water resources. Perpetua's evidence is replete with statements regarding the

[53] Kaiser Test, Tr. at 1027-28.
[54] Kaiser Test, Tr. at 1030.
[55] Preliminary Order at 22; Order Denying Petition for Reconsideration at 8.
[56] Preliminary Order at 29 (emphasis added).

preferential use of diverted contact water and reclaimed water to meet ore processing water demands.[57] Officer Cefalo found that Perpetua's water management plan was consistent with the conservation of water resources because it "relies heavily on contact water captured for water quality purposes and recycled water, minimizing the diversions from ground water and the EFSFSR."[58] And, Condition 9 only limited Perpetua's diversion of freshwater resources to the amount Perpetua represented it would divert and modeled it would divert. Removing Condition 9 and allowing a full 9.6 cfs to be withdrawn from the EFSFSR would be contradictory with these representations and inconsistent with Officer Cefalo's finding that the water right is consistent with the conservation of water resources.

Sixth, Condition 9 also prevents impacts to fish from large, instantaneous changes in streamflow. As Ryan Kinzer and Michael Ackerman explained in their September 11, 2023 expert fisheries report for Protestant Nez Perce Tribe, large changes in flow in either direction can either strand fish in flow scenarios or flush fish downstream when flows suddenly increase.[59] Limiting the instantaneous diversion rate to 4.5 cfs decreases the risk of impeding passage or stranding fish as a result of significant and fast changes in flows.[60]

Condition 9 was based on material representations made by Perpetua in documentary evidence and statements made during testimony at the hearing, including that Perpetua did not need to divert more than 4.5 cfs from the EFSFSR as any point in their Project absent an

[57] Ex. 1g at 26; Ex. 27a at 5-15–5-16; Scanlan Test., Tr. 138-39, 150-51; Stanaway Test., Tr. at 189-90.

[58] Preliminary Order at 26; *see also Id.* at 5, ¶ 28 ("'The most significant [SGP] water use will be for ore processing during operations, which accounts for 97 percent of the total water usage for the life of the project and includes tailings management.' Ex. 26 at 84. 'The primary source of water to be used in the ore processing circuit will be water recycled from the TSF.' *Id.* 'During normal operations, it is anticipated that, on average, approximately 80 percent . . . of the water used for ore processing will be reclaim[ed] water while the remaining 20 percent will [come from freshwater sources].' *Id.*"

[59] Ex. 201 at 13.

[60] Ex. 201 at 3, 13.

emergency. Moreover, Condition 9 clearly furthers the protection of the local public interest. The condition should remain undisturbed.

B. Conditions 10 and 15 Are Based on Substantial Evidence and Both Provide Needed Protection for ESA-Listed Chinook Salmon and Bull Trout.

At the hearing, Protestants provided substantial evidence that protecting fish habitat in Meadow Creek is in the local public interest. Meadow Creek is home to ESA-listed Chinook salmon, ESA-listed bull trout, rainbow trout, and west slope cutthroat trout[61] and provides critical spawning and rearing habitat for ESA-listed bull trout and Chinook salmon,[62] the latter of which the Nez Perce Tribe has been outplanting in Meadow Creek since 2000.[63] Bull trout occupy almost all of Meadow Creek.[64]

Officer Cefalo agreed with Protestants, finding that it is "the local public interest to protect the aquatic resources, habitat, recreational opportunities, and aesthetic values of the [EFSFSR] watershed [and] to protect, preserve, and restore ESA-listed species in the watershed."[65] He further found that "Meadow Creek provides habitat for ESA-listed species," and "[t]he primary area of concern for ground water pumping affecting stream flow is in the Meadow Creek drainage."[66] Conditions 10 and 15 reflect and account for these findings.

Perpetua now argues that: (1) there is no evidence in the record to support Condition 15; (2) Officer Cefalo misinterpreted Perpetua's plans for pumping their industrial supply wells around Meadow Creek; and (3) the flow protections provided by Conditions 10 are duplicative of those

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[61] Keller Test., Tr. at 902-904; Kinzer Test., Tr. at 1071.
[62] Ex. 201 at 4.
[63] Keller Test., Tr. at 898-900, 917-18, 921. "[W]e out-plant adult Chinook Salmon up there because it is a -- it is a quality habitat that those fish used to have access to, and we want to make sure that it's being fully utilized." Kinzer Test., Tr. at 1086.
[64] Keller Test., Tr. at 902-903; Kinzer Test., Tr. at 1071, 1085-86, 1180.
[65] Preliminary Order at 20.
[66] Preliminary Order at 24.

provided by Condition 15 because suitable fish habitat only exists in the reach protected by Condition 15.[67]

Protestants oppose elimination of Condition 10 and modification of Condition 15 and address each of Perpetua's arguments below. Protestants first note, however, that IDWR Proposed Rule 45.01.e requires IDWR to deny an application that conflicts with the public interest if conditions cannot resolve the conflict.[68] To Perpetua's benefit, Conditions 10 and 15 resolve the conflict in Meadow Creek while still affording Perpetua the flexibility to meet its operational water demands. Perpetua's peak mill diversion demand is 4.5 cfs.[69] With Perpetua's plans for water storage and the treatment and reuse of dewatering and contact water,[70] Perpetua has the capability to supplement its water needs during restrictive periods under Conditions 10 and 15. Additionally, Perpetua's own analysis of its industrial water needs[71] shows that each peak industrial water demand[72] can be met during the restrictive periods imposed in Conditions 10 and 15.[73]

1. Condition 15 is supported by substantial evidence in the record.

Condition 15 is specifically intended to protect the local public interest in fish habitat in the downstream reach of Meadow Creek—the portion Perpetua proposes to line with a

[67] Exceptions Petition at 17, 24, 26-27.

[68] Proposed Rule Text of Docket No. 37-0308-2301, 37-03-08-045.e.v., Idaho Department of Water Resources, https://idwr.idaho.gov/wp-content/uploads/sites/2/legal/Rule-37-03-08/20231004-370308-PROPOSED-RULE-FINAL.pdf. The Idaho Legislature has defined the local public interest as "the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource." Idaho Code § 42-202B(3). The local public interest includes the public's interest in the protection of fish and wildlife habitat. *Shokal v. Dunn*, 109 Idaho 330, 338, 707 P.2d 441, 449 (1985).

[69] Ex. 1g at 16.

[70] Ex. 1g at 16; Ex. 25b at 2-2, 2-5, 3-8–310.

[71] Ex. 25b at 3-9–3-10.

[72] Ex. 1g at 16.

[73] Ex. 1g at 51-58; Scanlan Test., Tr. at 138-41; Scanlan Test., Tr. at 162. Note that Perpetua's full freshwater demand–0.5 cfs from supply wells and 4.0 cfs from surface water diversions from the EFSFSR–were modeled to be a maximum (peak) demand in Mine Year 1. Ex. 27a at 6-21, 6-23.

geosynthetic liner. This reach begins slightly above the confluence of Blowout Creek and Meadow Creek and stretches downstream to the confluence of Meadow Creek and the EFSFSR.[74]

Protestants provided significant evidence at the hearing that flow reductions in Meadow Creek could harm fish. Mr. Kinzer and Mr. Ackerman's expert fisheries report established that the quantity and timing of Perpetua's proposed groundwater diversions in Meadow Creek have the potential to impact spawning and rearing of Chinook salmon and bull trout there.[75] Mr. Kinzer testified to the potential effects during the hearing:

> A primary concern . . . is reduction in fish habitat. Fish obviously require water, so as we -- as we lower the water levels we also, you know, lower fish habitat.[76] There's some secondary concerns that impact fish survival. Stream temperatures can definitely impact fish survival.[77] There's been shown in the literature [a] relationship between flow and productivity [defined as the number of offspring per adult spawner]. Productivity seems to decrease as flows decrease specifically along this reach upstream of the Yellow Pine Pit where we are out-planting the fish[.] [T]here's a concern of red[d] dewatering. Fish do have the ability to move and go into different areas to seek out refuge and can withstand some impacts. Red[ds]s do not. Red[d]s are very static and as the water decreases it can affect them and the survival of the eggs inside the red[d].[78]

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[74] Stanaway Test., Tr. at 257-260, 270-271; Ex. 63 at 3-11.

[75] Ex. 201 at 5-8; Kinzer Test., Tr. at 1081 ("Focusing on the Meadow Creek area, so kind of upstream and moving downstream, the number one concern was just the impact of all the groundwater wells on fish habitat. We were concerned about just overall loss of water throughout that reach, and the fish that were residing in that area. Those points of diversions of those groundwater wells match up very closely to our Chinook Salmon runs that we see in that area. That's the area that those fish prefer.").

[76] Mr. Kinzer's expert report states: "Reductions in flow have been found to reduce foraging opportunities and growth, increase mortality by reducing available habitat, alter feeding behaviors and associated food webs, and often change stream temperatures from optimal conditions (NOAA 2021b). Additional effects to fish include, but are not limited to, changes in water quality and chemistry (NOAA 2017), hindered fish passage (Thompson 1972), increased mortality from density dependence, scouring of redds from increased anchor ice during winter low-flow months, and/or dewatering of redds during critical egg incubation months." Ex. 201 at 4.

[77] "The concern that I have is that the water -- the water withdrawals would drive temperatures up and, you know, consequently kind of push these lines up higher up onto that Y axis and into that red level where fish are going to have a harder time surviving out there. . . . [I]t's established in the literature that generally water withdrawals will drive temperatures up. So I think that's a pretty common, common thing." Kinzer Test., Tr. at 1128.

[78] Kinzer Test., Tr. at 1072-73.

Mr. Keller also testified for Protestant Nez Perce Tribe that when Chinook salmon spawn, they lay their eggs in redds they construct "high in the water column so they're very close to the surface of the water. You know, and so you just have to have good consistent flow over those red[d]s in order to have those eggs survive."[79]

Mr. Kinzer and Mr. Ackerman also expressed dismay at Perpetua's failure to acknowledge and mitigate these concerns:

> [Perpetua]'s lack of concern, or evaluation, of their proposed water rights' effects on ESA-listed fish habitat is troubling; particularly during low flow scenarios. [Perpetua] has not proposed water withdrawal limits or minimum stream flow conditions for impacted streams upstream of the EFSFSR surface water diversion. Without withdrawal limits or established minimum stream flows for all reaches, [Perpetua] could divert almost all of the flow in Meadow Creek causing a complete loss of fish habitat. Existing steelhead redds, created during higher stream flows, would be dewatered in early summer months, and the gravels necessary for Chinook salmon and bull trout spawning would be dry.[80]

Mr. Kinzer and Mr. Ackerman also noted that Perpetua had developed and provided very little information useful for assessing the potential effect of flow reductions in Meadow Creek on fish habitat.[81] As a result, Mr. Kinzer and Mr. Ackerman "conducted [their] evaluation of the potential impacts to aquatic species and their habitat in a data-limited environment."[82] Nevertheless, they "developed two ways to understand and kind of bookend the potential effects" of Perpetua's withdrawals on fish habitat in Meadow Creek with the data available.[83] For these

[79] Keller Test., Tr. at 896.
[80] Ex. 201 at 8. *See* Kinzer Test., Tr. at 1086-87.
[81] Ex. 201 at 2-5.
[82] Ex. 201 at 2. In its Exceptions Petition, Perpetua states that "[t]he Protestants failed to offer evidence of the streamflow needed to provide fish habitat in Meadow Creek above Blowout Creek, and instead found it 'difficult ... to fully understand and predict impacts to fish and their habitat caused by [Perpetua's] proposed water withdrawals.' Ex. 216 at 2." Exceptions Petition at 18. Protestants note for the record that Ex. 216 was not admitted into the evidence.
[83] Kinzer Test., Tr. at 1087; *See id.* at 1094.

analyses Mr. Kinzer and Mr. Ackerman used, where possible, "local data from the EFSFSR headwaters or from adjacent watersheds; however, when local data were not available, [their] assessments leveraged non-local (e.g., regional) data, reviews of the scientific literature, and/or expert judgment."[84]

Based on their analyses, Mr. Kinzer and Mr. Ackerman concluded that "[g]iven the location and proposed amount of water that is possible for diversion under [Perpetua's] proposed water rights, approximately all of Meadow Creek surface water could be removed with the exception of the spring months May and June. This would result in an assumed 100% loss of critical habitat for ESA-listed species."[85] They also concluded that "[f]or 10 months in the year Meadow Creek median flows are less than 10 cfs; if the full water right was used in Meadow Creek during these months, approximately 90% of the adult spawning and incubation habitat would be lost."[86]

Although Mr. Kinzer and Mr. Ackerman were not able, with the data and analysis provided by Perpetua, to propose an exact flow requirement in Meadow Creek, Mr. Kinzer testified at hearing the IDWR should "[t]hink[] about setting minimum [in]stream flows that would allow fish habitat to persist at a suitable level for fish and make impacts minimal."[87]

Based on this information presented at hearing regarding the local public interest in fish habitat in Meadow Creek, Officer Cefalo found that a primary concern for Meadow Creek is flow depletion resulting from Project-related groundwater pumping.[88] He explicitly declined, however, to include a condition "requiring Perpetua to construct a new Meadow Creek channel with a liner"

[84] Ex. 201 at 2.
[85] Ex. 201 at 5.
[86] Ex. 201 at 18.
[87] Kinzer Test., Tr. at 1099; *See* Ex. 201 at 8.
[88] Preliminary Order at 24.

as the company proposes to do.[89] Noting that stream channel alteration is governed by a separate part of Idaho Code, Officer Cefalo elected to instead preserve fish habitat through the downstream reach of Meadow Creek by requiring Perpetua to maintain a minimum bypass flow of 3.0 cfs whenever the company is diverting groundwater from wells in the Meadow Creek drainage.[90]

Although Officer Cefalo's Condition 15 is based on substantial evidence in the record, Perpetua proposes that various components of the Condition be changed, namely: a) instead of requiring a 3.0 cfs minimum bypass flow whenever groundwater diversions are occurring in Meadow Creek, require constant 95% exceedance flows for August through April, based on United States Geological Survey ("USGS") gage #13310850, and flows well below 95% exceedance flows for USGS gage #13310850 for May through July;[91] b) instead of requiring a continuous minimum bypass flow when diversions are occuring, require a year-round daily average stream flow; c) move the point of compliance downstream in Meadow Creek; and and d) eliminate Condition 15 from Permit 77-7285. Protestants address Perpetua's arguments in turn below.

a) Officer Cefalo's imposition of a 3.0 cfs minimum bypass flow when Perpetua is diverting from groundwater wells is supported by the record.

Officer Cefalo derived a minimum bypass flow of 3.0 cfs from his finding that "[b]ase flows in Meadow Creek range between 2.0 cfs and 3.0 cfs in low to average water years."[92] For this finding, Officer Cefalo cited Protestant Nez Perce Tribe's September 11, 2023, Expert Witness

[89] Preliminary Order at 24.

[90] Preliminary Order at 24. Notably, Mr. Stanaway testified for Perpetua that there will still be flow depletions in Meadow Creek due to diversions from the industrial supply wells in the Meadow Creek drainage, even after Perpetua installs a liner under Meadow Creek. Stanaway Test., Tr. at 260.

[91] Exceptions Petition at 22. Table 1 in Mr. Kinzer and Mr. Ackerman's September 11, 2023 expert report provides 95% exceedance flows for USGS gage #13310850. Ex. 201 at 5. When you compare the flows depicted in this table to the flows proposed by Perpetua in their Exceptions Petition, you can see large differences in flows for May through July. 95% exceedance flows at USGS gage #13310850 for May are 16.2 cfs, for June are 10.2 cfs, and for July are 3.8 cfs. Perpetua is proposing 2.3 cfs for May, June, and July. Ex, 201 at 5; Exceptions Petition at 22.

[92] Preliminary Order at 9.

Report, prepared by Mr. Kinzer and Mr. Ackerman. The report provides a table with the 5%, 50%, and 95% exceedance flows for the portion of Meadow Creek upstream of Blowout Creek[93] and concludes that "[t]he median monthly flow, calculated from a 3-day rolling mean of daily averages (using the historical record and downloading from USGS), in Meadow Creek ranges from 2 to 40 cfs."[94] The 95% exceedance flows depicted in Mr. Kinzer and Mr. Ackerman's table are under 2.0 cfs for six months of the year.[95]

Officer Cefalo also explained his rationale for requiring Perpetua to maintain a 3.0 cfs minimum bypass flow when the company is diverting from groundwater wells in his denial of Perpetua's Petition for Reconsideration: "After the snowmelt run-off period ends, the flow in Meadow Creek drops to base flow conditions. Median base flows in Meadow Creek are between approximately 2.0 cfs and 3.0 cfs. Ex. 201 at 6. Because of the significant impact of the project on the hydrology of the Meadow Creek watershed, the Officer Cefalo drafted a condition requiring Perpetua to maintain the upper end of the median base flow in Meadow Creek to pump ground water from the basin."[96] Officer Cefalo further reasoned that "[t]here is nothing in statute or rule requiring the Department to use 95% exceedance flows as a benchmark when drafting conditions to protect local public interest elements."[97]

Perpetua now argues "there is no evidence in the record to support a finding that a flow of 3.0 cfs is necessary to protect the public interest in Meadow Creek"[98] and blames Protestants for "fail[ing] to offer evidence of the streamflow needed to provide fish habitat in Meadow Creek

[93] Ex. 201 at 5.
[94] Ex. 201 at 5.
[95] Ex. 201 at 5.
[96] Order Denying Petition for Reconsideration at 3.
[97] Order Denying Petition for Reconsideration at 3.
[98] Exceptions Petition at 17.

above Blowout Creek."[99] Nevertheless, Officer Cefalo's decision to impose a 3.0 cfs minimum bypass flow is supported by evidence in the record, provided by Protestants, regarding fish biology. Mr. Keller testified that resident bull trout reside in these streams year-round.[100] Mr. Kinzer testified that the primary concerns for fish when flows are decreased are reduced habitat, survival, increased stream temperatures, and decreases in productivity.[101] Additionally, Mr. Kinzer stated that fish could move and "withstand some impacts" but their redds (nests) cannot.[102] And, Mr. Kinzer also testified that there is high-quality habitat in the reach protected by Condition 15,[103] which was corroborated by Perpetua in its Request for Technical Assistance Review that it sent to IDFG and OSC.[104] Perpetua itself has characterized 95% exceedance flows as "a very rare occurrence with the vast majority of flows exceeding this value."[105] This means that, historically, fish only had to survive stream flows at 95% exceedance levels 5% of the time.[106] Setting a condition at a 95% exceedance flow requires fish to withstand more than "some impact" and potentially forces fish to survive 100% of the time in flows that reduce habitat and survival, decrease productivity, and dewater redds. Officer Cefalo's decision to use median base flows, as represented in the record,[107] is, therefore, eminently reasonable to protect the public interest in fish productivity and survival.

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[99] Exceptions Petition at 18. Protestants note for the record that Perpetua supports this assertion by quoting from Ex. 216, which was not admitted into the evidence at hearing.
[100] Keller Test., Tr. at 895.
[101] Kinzer Test., Tr. at 1072-1073.
[102] Kinzer Test., Tr. at 1073
[103] Kinzer Test., Tr. at 1085-86, 1172-73.
[104] Ex. 206 at 5, 6.
[105] Ex. 64 at 2-2; *See* Stanaway Test., Tr. at 327.
[106] "[T]he 95 percent exceedance flow . . . is a low flow condition that occurs only 5 percent of the time." Ex. 63 at 3-18.
[107] Ex. 201 at 16 (emphasis added).

Perpetua also notes that "neither the IDFG, nor OSC, ever asserted that any measures needed to be taken to protect flows in Meadow Creek" and ascribes their silence to Meadow Creek's "degraded status."[108] This claim cannot go unanswered. Perpetua stated in the Request for Technical Assistance it sent IDFG and OSC that "[t]he surface water diversion [on the EFSFSR] reduces groundwater pumping in the Meadow Creek valley thereby maintaining streamflow in Meadow Creek and the EFSFSR from Meadow Creek to the [point of diversion] that would otherwise be impacted from the groundwater supply wells."[109] It seems obvious to Protestants that IDFG and OSC's silence with respect to protections for Meadow Creek flows is a direct result of Perpetua's representation that streamflow in Meadow Creek would be "maintained," and not a lack of interest or concern on the part of IDFG and OSC for protecting Meadow Creek flows.

Officer Cefalo clearly decided, when he mandated the maintenance of a minimum bypass flow of 3.0 cfs in Meadow Creek, that he was not going to mandate the lowest historical flows.[110] Instead he chose to impose a more average base flow condition based on information in the record. This was an eminently reasonable decision and one justified by the substantial local public interest in maintaining sufficient water in Meadow Creek for fish to survive and spawn.

b) The imposition of USGS gage #13310850 95% exceedance flows for August through April and flows well below those 95% exceedance flows for May through July is not supported by the record.

Perpetua proposes that IDWR modify Condition 15 to require 95% exceedance flows—based on USGS gage #13310850 flow data—for August through April and proposes that IDWR

[108] Exceptions Petition at 19.
[109] Ex. 206 at 5.
[110] Order Denying Petition For Reconsideration at 3 ("Because of the significant impact of the [P]roject on the hydrology of the Meadow Creek watershed, the hearing officer drafted a condition requiring Perpetua to maintain the upper end of the median base flow in Meadow Creek to pump groundwater from the basin").

impose a 2.3 minimum bypass flow for May, June, and July.[111] Perpetua's proposal is not supported by information in the record for the following reasons.

First, USGS gage #13310850 is located upstream of the confluence with Blowout Creek and thus flows based on this gage are not representative of 95% exceedance flows for the reach of Meadow Creek protected by Condition 15.[112] They are necessarily lower. Because Blowout Creek increases Meadow Creek's water volume downstream of USGS gage #13310850, IDWR can safely assume that monthly 95% exceedance flows for the reach of Meadow Creek covered by Condition 15 would be higher than those calculated at USGS gage #13310850.[113] Protestants do not believe the actual 95% exceedance flows for the full reach of Meadow Creek covered by Condition 15 can be found in the record.

Second, after defending the imposition of 95% exceedance flows based on USGS gage #13310850, Perpetua does not explain their deviation from 95% exceedance flows for May through June or point to any information in the record that would support subjecting ESA-listed fish to these extremely low flows. These are critical months for juvenile salmonid outmigration, when the fish are typically aided by higher seasonal flows.[114] A flow of 2.3 cfs during the higher spring-flow months of May, June and July, as Perpetua proposes, is well below the 95% exceedance flows based on USGS gage #13310850. In May, 95% exceedance flows for USGS gage #13310850 are 16.2 cfs, 10.2 cfs in June, and 3.8 cfs in July.[115]

Third, assuming Perpetua's proposal represented actual 95% exceedance flows for August through April for the reach of Meadow Creek covered by Condition 15, Perpetua points to no

[111] Exceptions Petition at 22.
[112] Petition for Reconsideration at 8, Figure 1.
[113] Exceptions Petition at 22.
[114] Ex. 29 at 31-33.
[115] Ex. 201 at 5, Table 1.

information in the record to support its claim that "[i]n the absence of evidence to the contrary, it is appropriate to utilize 95% exceedance flows as a minimum flow condition as these flow levels will ensure that Meadow Creek is not dewatered, and will provide flows that are representative of natural conditions."[116] And, as Officer Cefalo reasoned in his denial of Perpetua's Petition for Reconsideration, "[t]here is nothing in statute or rule requiring the Department to use 95% exceedance flows as a benchmark when drafting conditions to protect local public interest elements."[117] Although Perpetua claims that "[u]tilizing 95% exceedance flows is consistent with guidance from the National Marine Fisheries Service ("NMFS") for evaluating fish passage and habitat effects,"[118] Perpetua is misusing the NMFS Anadromous Salmonid Passage Facility Design criteria that are referenced in Perpetua's McMillen Jacobs Associates technical memorandum.[119] The technical memorandum specifically states: "[n]ote that these criteria are specifically for fishways, adult trapping systems, and culverts. . . ."[120] The NMFS Design criteria do not apply to natural stream reaches or for the establishment of minimum stream flows.

Fourth, Perpetua implies that the flow rates in their proposed Condition 15 would only apply to 700 feet of Meadow Creek, between the Idaho Pollutant Discharge Elimination System ("IPDES") outfall and the confluence with Blowout Creek. Thereafter, Perpetua implies, flows would be higher because of the flow contribution from Blowout Creek, but they offer no guarantee of a minimum flow downstream of Blowout Creek in excess of their proposed 95% exceedance flows. Perpetua's proposed Condition 15 does not preclude the company, however, from simply

[116] Exceptions Petition at 23.
[117] Order Denying Petition for Reconsideration at 3.
[118] Exceptions Petition at 23 (emphasis added). The National Marine Fisheries Service or NMFS is also referred to as "NOAA" or "NOAA Fisheries."
[119] Ex. 46 at 5 (emphasis added).
[120] Ex. 46 at 5.

diverting the extra flow contributed by Blowout Creek, especially if Condition 10 was to be eliminated.[121]

Perpetua's proposal to modify Condition 15 to impose 95% exceedance flows from August through April in Meadow Creek, based on USGS gage #13310850 flow data, and much lower flows in May, June, and July is simply not supported by the record or protective of the high-quality habitat in Meadow Creek.

c) Continuous daily flows are more protective of fish than daily average flows.

Perpetua proposes that Condition 15 be modified to only require the company to maintain a daily average of 95% exceedance flow—based on USGS gage #13310850 flow data—between August and April.[122] This proposal could significantly affect flow rates over a 24-hour period in Meadow Creek. Under a daily average flow regime, flows can drop well below the average for periods of time and rise well above the average, so long as the daily average is met. Should very low flows occur for any period of time during the day, it could affect fish and dewater Chinook salmon redds in Meadow Creek. As Mr. Keller testified, redds need "good consistent flow… in order to have those eggs survive."[123]

d) The partial fish passage barrier should be the point of quantification for Condition 15 and <u>not</u> Perpetua's proposed IPDES outfall.

Perpetua proposes that IDWR move the upper compliance point for Condition 15 slightly downstream "from a largely undefined fish passage barrier to a specific point of compliance-the

[121] Exceptions Petition at 22.
[122] Exceptions Petition at 22.
[123] Keller Test., Tr. at 896.

IPDES outfall."[124] Condition 15 currently applies from the "existing fish passage barrier" location above the confluence of Meadow Creek and Blowout Creek to the confluence of Meadow Creek and the EFSFSR.[125] Perpetua proposes that IDWR move the upper point of Condition 15 reach downstream by 100 yards to its planned outfall location for their IPDES permit with the IDWR[126] because "Perpetua will not have the ability to augment flows in the short reach between the fish passage barrier and the IPDES outfall."[127] Perpetua claims that because it will not have the ability augment flow and since "baseflows naturally fall below 3.0 cfs for approximately seven months of the year . . . [it] cannot, by the terms of the condition, use flow augmentation to meet the requirements of Condition 15 when flows are below 3.0 cfs, and will have to cease groundwater pumping in Section 15."[128] Perpetua then goes on to catastrophize the affect this limitation will have on the company: "In addition to the loss of water supply caused by cessation of groundwater pumping, loss of groundwater pumping for dewatering will effectively limit mining of the Hangar Flats pit contrary to Perpetua's plan of restoration and operations and the flexibility requested in its application."[129]

Perpetua also sought to move the upstream point of compliance for Condition 15 to its planned IPDES outfall in its Petition for Reconsideration.[130] Officer Cefalo declined Perpetua's

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[124] Exceptions Petition at 4, 12, 23. Protestants note that Officer Cefalo did not state a specific point of compliance as Perpetua claims, instead Officer Cefalo's Condition 15 requires that "during times when the right holder is diverting ground water under this right from any of the wells…the right holder shall ensure a flow of at least 3.0 cfs in Meadow Creek from the existing fish passage barrier located above the confluence of Meadow Creek and Blowout Creek to the confluence of Meadow Creek and EFSFSR." Officer Cefalo also included Condition 16 which, in part, requires an annual report of diversion amounts and daily streamflow rates at points on Meadow Creek at several points—just above the confluence with Blowout Creek and just above the confluence with EFSFSR among others. Perpetua has not challenged Condition 16.

[125] Preliminary Order at 24.

[126] Exceptions Petition at 12.

[127] Exceptions Petition at 12, 19.

[128] Exceptions Petition at 12.

[129] Exceptions Petition at 12.

[130] Petition for Reconsideration at 3, 4, 6.

request, however, because "[t]he record does not include the details of the IPDES permit. It is not clear whether the IPDES permit allows the outfall to be moved around within a larger area or if it is confined to a specific location. Because of the ambiguity in the record about the actual location of the IPDES outfall, Condition 15 was drafted with reference to a specific location, the existing fish passage barrier."[131]

Officer Cefalo was correct that Perpetua did not clarify in the record whether it has applied for an IPDES permit, let alone been granted a permit by the Idaho Department of Environmental Quality that establishes the IPDES outfall's specific location. And, Perpetua provides no such clarification now. Thus, it would be inappropriate to impose as Condition 15's point of compliance a mine feature, the IPDES outfall, for which the location has yet to be determined.

Protestants also note that although Perpetua insists at several points in its Exceptions Petition that its mine may deviate in other respects from the mining plan it presented at hearing,[132] the company has not provided IDWR with an explanation as to why its planned IPDES outfall location cannot be moved or why it cannot otherwise pump water upstream from its IPDES outfall to augment flows at the partial fish barrier.

From a fish-protection perspective, ensuring adequate streamflow at the "fish passage barrier" is important because it is actually just a partial fish passage barrier. As Mr. Keller testified, "the fish passage barrier" is only a barrier for Chinook salmon. Bull trout can make it past the barrier.[133] Moving the point of compliance downstream could result in very low or no flows in the reach between the partial fish passage barrier and the point of compliance. Were this to happen, it could prevent bull trout from utilizing the full extent of their habitat in Meadow Creek.

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[131] Order Denying Petition for Reconsideration at 4.
[132] Exceptions Petition at 10-11, 16, 25-26.
[133] Keller Test., Tr. at 902-903; Kinzer Test., Tr. at 1071, 1085-86, 1180.

e) Condition 15 should apply to Permit 77-7285.

Finally, Perpetua proposes that Condition 15 be eliminated from Permit 77-7285.[134] Perpetua tacitly concedes in its Exceptions Petition that streamflow protections should apply, albeit in a modified form, to the 0.5 cfs of groundwater pumping authorized under Permit 77-14378.[135] And yet, the company proposes that 0.5 cfs of groundwater pumping from the Meadow Creek drainage under Permit 77-7285 be exempted from Condition 15, arguing that "this right should be available, as it historically has been, in years when streamflow augmentation is not available (i.e., late in the reclamation phase when water treatment is no longer operating) and when streamflow augmentation is generally not needed because large volumes of groundwater are not being diverted under Permit No. 77-14378."[136]

Were IDWR to agree to simply eliminate Condition 15 from Permit 77-7285, the omission could undermine the flow protections on Permit 77-14378 for the life of the Project. Without Condition 15 on Permit 77-7285, Perpetua would be able to pump up to 0.5 cfs, or 30.2 acre-feet per year, of groundwater in the Meadow Creek drainage without any flow protections for fish habitat in Meadow Creek. And, with all the conditional modifications Perpetua proposes for Meadow Creek (elimination of Condition 15 on Permit 77-7285, elimination of Condition 10, and modified Condition 15 for Permit 77-14378), Perpetua could potentially divert up to 9.6 cfs in a given month from groundwater wells in the Meadow Creek drainage, resulting in unknown consequences (but presumably resulting in significant flow depletion).[137]

[134] Exceptions Petition at 24.
[135] Exceptions Petition at 22.
[136] Exceptions Petition at 24.
[137] Scanlan Test., Tr. at 154, 168-169.

Perpetua's proposal simply ignores Officer Cefalo's finding that a "primary area of concern for groundwater pumping affecting stream flow is in the Meadow Creek drainage"[138] and Mr. Stanaway's own testimony on behalf of Perpetua that there will still be flow depletions in Meadow Creek due to diversions from the industrial supply wells in the Meadow Creek drainage, even after Perpetua installs a liner under Meadow Creek.[139] Perpetua's proposal also ignores Officer Cefalo's logic in his denial of Perpetua's Petition for Reconsideration:

> [T]he Department must consider the entire project when evaluating the local public interest. Application for Transfer 85397 (for water right 77-7285) proposes to add twelve points of diversion to the right, significantly expanding the area of impact for the ground water pumping. Further pumping ground water under water right 77-7285 is intended to benefit the entire mining project which includes the construction of a tailings storage facility in the Meadow Creek watershed, and the dewatering of the Hangar Flats area, which will substantially alter the hydrology of the Meadow Creek watershed. Therefore, it is appropriate to include Condition 15, which is intended to protect local public interest values in the entire Meadow Creek watershed, on water right 77-7285.[140]

Allowing Perpetua to divert groundwater in the Meadow Creek drainage under Permit 77-7285, without any flow protections for Meadow Creek, would require IDWR to ignore the substantial information in the record regarding groundwater diversions' effects on Meadow Creek and the importance of flow protections for ESA-listed fish in Meadow Creek. By retaining Condition 15 for Permit 77-7285, IDWR will help ensure there are baseline flow protections for fish habitat in Meadow Creek.

Officer Cefalo's Condition 15 is supported by substantial evidence in the record. Protestants oppose Perpetua's proposed modifications.

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[138] Preliminary Order at 24.
[139] Stanaway Test., Tr. at 260; *See* Preliminary Order at 10.
[140] Order Denying Petition for Reconsideration at 4.

2. Condition 10 is necessary to protect occupied fish habitat in Meadow Creek.

Officer Cefalo imposed Condition 10 to "attenuate the effects of groundwater pumping on areas outside of the lined section [of Meadow Creek]"[141] and to protect the local public interest in ESA-listed fish habitat,[142] which he clearly explained in his denial of Perpetua's Petition for Reconsideration.[143] Perpetua argued in its Petition for Reconsideration that Condition 10 is not necessary to maintain flow in Meadow Creek because the "31-acre foot per month limit of Condition 10 was based on modeling that suggested that 0.5 cfs could be withdrawn from the Meadow Creek well field without adverse impacts on Meadow Creek" and "Condition 10 is not necessary as it is designed to maintain flow in Meadow Creek, which is already covered in Condition 15."[144] Officer Cefalo clearly this argument in clear terms:

> Condition 15 only protects the base flow in Meadow Creek from the existing fish passage barrier, located just upstream of the confluence with Blowout Creek, to the confluence with EFSFSR. The unlined section of Meadow Creek is upstream of the existing fish passage barrier. Condition 10 serves a separate purpose from Condition 15 by preventing ground water pumping impacts to the unlined section of Meadow Creek through a monthly volume limit on pumping near the unlined section.[145]

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[141] Preliminary Order at 10.

[142] Preliminary Order at 10, 24. Mr. Stanaway testified for Perpetua that there will still be flow depletions in Meadow Creek due to diversions from the industrial supply wells in the Meadow Creek drainage, even after Perpetua installs a liner under Meadow Creek. Stanaway Test., Tr. at 260.

[143] Order Denying Petition for Reconsideration at 3.

[144] Petition for Reconsideration at 4.

[145] Order Denying Petition for Reconsideration at 3. "Based on maps offered into the record by Perpetua, there will be an unlined section of Meadow Creek, approximately one-half mile in length, in the same area where the thirteen industrial supply wells will be constructed. *Id*.; Stanaway Test., Tr. at 257-60. Pumping from the industrial supply wells could have an impact on this unlined section of Meadow Creek. *Id*.; *see also* Ex. 206 at 14 (describing a potential 1-to-1 impact on stream flow from ground water pumping). According to the ground water modeling report from Perpetua, 0.5 cfs could be pumped from the industrial supply wells without impacting the flow in Meadow Creek." *Id*. at 2.

Perpetua now argues that it "never intended to limit groundwater diversions from industrial supply wells to 0.5 cfs or 31 acre-feet per month" and that Officer Cefalo based the 0.5 cfs average monthly diversion limitation in Condition 10 on a mistaken belief that the company intended to so limit its withdrawals.[146] Perpetua also contends that Officer Cefalo mistakenly believed that he needed to impose Condition 10 because of his additional mistaken belief that the section of Meadow Creek upstream of Perpetua's proposed liner contains ESA-listed species.[147] According to Perpetua, fish are only present in one reach of Meadow Creek that is upstream of the section Perpetua proposes to line and that will be affected by diversions from the industrial supply wells—the riprap-lined channel around the Spent Ore Disposal Area or "SODA."[148] Perpetua further argues that this reach "lacks cover or spawning substrate and does not provide quality fish habitat."[149] Neither of these arguments are supported by the record.

First, Perpetua's testimony at hearing does support that Perpetua intends to limit groundwater diversions from industrial supply wells to 0.5 cfs or 31 acre-feet per month. Mr. Stanaway affirmatively testified for Perpetua that the company intended to limit withdrawals from its industrial supply wells to 0.5 cfs or 31 acre-feet per month. Mr. Stanaway explained that when the modeling team attempted to model the Project's full freshwater demand from the proposed industrial supply wells[150] in the Meadow Creek drainage, the "model crashed, the system tanked."[151] According to Mr. Stanaway, the model crashed because "the model can't find [a] solution because there's essentially no more water there" and "[t]hat was a situation that would

[146] Exceptions Petition at 25.
[147] Exceptions Petition at 25.
[148] Exceptions Petition at 27.
[149] Exceptions Petition at 27 (internal citations omitted).
[150] Protestants note that eleven industrial supply wells were proposed in the modeling report yet thirteen industrial supply wells were proposed in the application for water right 77-14378. The impact of this change is unknown.
[151] Stanaway Test., Tr. at 225.

essentially lead to the stream drying up."[152] As a result, the modeling team tested "what would be a safe yield from the supply wells, and it came out to be that that 0.5 cfs [of groundwater diversion] was an acceptable combination of reducing stream flow impacts and still obtaining a quantity of water that was needed by the project."[153] At one point during his testimony Mr. Stanaway remarked "you can see that . . . a decision that was made that supply wells here would be limited to a 0.5 cfs."[154] It also bears noting that Perpetua input a maximum monthly diversion rate of 0.5 cfs of groundwater into its other hydraulic modeling for the Project, suggesting its intention to limit diversions from its industrial supply wells to 0.5 cfs or 31 acre-feet per month.

Second, the record also supports Officer Cefalo's finding that groundwater pumping may affect flows in unlined reaches of Meadow Creek where ESA-listed fish are present. In the Request for Technical Assistance Review Perpetua sent to IDFG and OSC, the company assumed a one-to-one impact on streamflow from groundwater diversions.[155] Additionally, Mr. Stanaway testified on behalf of Perpetua at hearing that groundwater pumping creates a cone of depression that can lead to flow depletions in area streams.[156] He said, "[s]o even with the liner, a cone depression can extend up-gradient of that, and because the industrious supply wells are further up in the drainage then you can have that cone depression extend essentially up gradient of the head of that liner. . . . in absence of that liner would have that direct connection to surface water."[157] Based on this evidence, Officer Cefalo was right to conclude that groundwater pumping from the industrial supply wells likely would affect flows in Meadow Creek upstream of the lined section. Officer

[152] Stanaway Test., Tr. at 272, 274.
[153] Stanaway Test., Tr. at 226; *See* Ex. 27a at 6-21 ("0.5 cfs was determined from the groundwater flow model as an amount that could be withdrawn without adverse impacts on Meadow Creek.").
[154] Stanaway Test., Tr. at 224 (emphasis added).
[155] Ex. 206 at 14.
[156] Stanaway Test., Tr. at 258, 260, 270.
[157] Stanaway Test., Tr. at 260.

Cefalo also reasonably assumed ESA-listed fish may be present in those unlined reaches based on Mr. Keller's testimony that ESA-listed bull trout occupy areas of Meadow Creek beyond the portion Perpetua intends to line and, in fact, "occupy almost the entire reach and really high up into Meadow Creek."[158] Mr. Kinzer also testified to the presence of bull trout, cutthroat trout, and rainbow trout in the reaches of Meadow Creek above the reach Perpetua proposes to line.[159]

Third, the record does not support Perpetua's assertion that Officer Cefalo "misinterpreted the record with regard to the extent to which Condition 10 will protect fish habitat"[160] because the "unlined section of Meadow Creek is a rock chute that has very little to no value as fish habitat. To the extent that the Officer was concerned about effects to fish habitat upstream of the rock lined channel, those concerns are unfounded."[161]

Officer Cefalo's Preliminary Order makes clear that he used his broad discretion and affirmative duty under Idaho law to assess and protect the local public interest in fish habitat by imposing limited, reasonable, and workable conditions that are based on substantial evidence in the record.[162] He decided to impose Condition 10 based on information in the record that fish could be affected by flow depletion resulting from the company's groundwater pumping and Perpetua's own groundwater flow model, which found that "'0.5 cfs was….an amount that could be withdrawn without adverse impacts on Meadow Creek'"[163] and, therefore, will afford flow protection to ESA-listed bull trout habitat as well as cutthroat habitat in Meadow Creek.[164] Without the limit found in Condition 10, Perpetua could potentially pump enough groundwater to

[158] Keller Test., Tr. at 902-903.
[159] Kinzer Test., Tr. at 1071, 1085-86, 1180.
[160] Exceptions Petition at 26.
[161] Exceptions Petition at 26 (internal citations omitted); *see* Exceptions Petition at 18.
[162] *Shokal v. Dunn*, 109 Idaho 330, 337, 339, 707 P.2d 441, 448, 450 (1985); *Hardy v. Higginson*, 123 Idaho 485, 492, 849 P.2d 946, 953 (1993).
[163] Preliminary Order at 10 (citing Ex. 27a at 76).
[164] Preliminary Order at 10; Order Denying Petition for Reconsideration at 2 (citing Ex. 27a at 76).

significantly affect Meadow Creek stream flows upstream of the reach protected by Condition 15 where bull trout are present.

Protestants also believe Condition 10 provides important reporting and conservation benefits. Under Condition 16, Perpetua "shall provide the Department with an annual report summarizing the diversion amounts and flow rates for the previous calendar year."[165] Consequently, with Condition 10 in place, IDWR and other interested parties will be able to track withdrawals from Perpetua's proposed industrial supply wells in the Meadow Creek drainage to assess effects on Meadow Creek flows and aquatic resources upstream of the Condition 15 reach. Condition 10 also incentivizes the conservation of water at the Project site. Given the local public interest in fish habitat in Meadow Creek, Perpetua should be using the water it obtains from the Hangar Flats Pit dewatering wells (and other excess mine-impacted water collected from other site dewatering operations and contact water collection) for beneficial use—such as for milling or to supplement Meadow Creek stream flows—rather than simply releasing treated water downstream and pumping fresh groundwater from the industrial supply wells in the Meadow Creek drainage to satisfy industrial water needs.[166] By restricting the industrial supply wells located in the Meadow Creek drainage to a safe withdrawal rate, Condition 10 incentivizes Perpetua to conserve the water already impacted by mining operations from the Hangar Flat Pit and other site operations during mining.[167]

Protestants oppose Perpetua's proposed elimination of Condition 10.

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[165] Preliminary Order at 26.

[166] Scanlan Test., Tr. at 132, 139; Bosley Test., Tr. at 392.

[167] Such an incentive appears appropriate in light of Terry Scanlan's testimony regarding Perpetua's dewatering wells and mill diversion demand: "[T]here's times where you've got a lot more water being pumped than can be used, and so you have to discharge that. Treat it and discharge it, which is costly. So you don't want to do that if you can avoid it." Scanlan Test, Tr. at 158.

C. Conditions 13 and 14 Are Fully Supported by the Record and Protect the Local Public Interest.

In accordance with IDFG and OSC's recommendation, Conditions 13 and 14 work in tandem to ensure year-round fish passage for anadromous and resident fish through Perpetua's tunnel fishway and also ensure a minimum flow through the natural reach just downstream. Condition 13 requires Perpetua to allow at least 7.25 cfs of water past the EFSFSR River Pump point of diversion from June 30 to September 30, thereby providing passage for adult Chinook salmon and bull trout through Perpetua's proposed tunnel fishway. Condition 14 calls for 5.0 cfs in Perpetua's proposed tunnel fishway from October 1 to June 29, providing passage for steelhead, bull trout, and westslope cutthroat trout.

According to Perpetua, these conditions are "contrary to evidence in the record" and unnecessary to protect the public interest.[168] Perpetua's assertions have no merit. As discussed below, Officer Cefalo based Conditions 13 and 14 directly on evidence Perpetua itself developed and presented at hearing and on Perpetua's own design and modeling of flows through the tunnel fishway, and his conditions are responsive and give deference to IDFG and OSC's expert recommendation to IDWR.

1. Officer Cefalo properly relied on IDFG and OSC's recommendation to impose water right conditions in addition to Condition 12 ensuring volitional fish passage.

As discussed above, on August 2, 2022, IDFG and OSC responded to Perpetua's request for technical assistance with a clear recommendation for water rights conditions, in addition to Condition 12, that would ensure volitional fish passage.[169] Perpetua understands the

[168] Exceptions Petition at 27.

[169] Ex. 206 at 1 ("OSC and IDFG recommend that [IDWR] consider developing water right conditions for 77-14378 that would ensure fish passage at the Project such as the following example[]: Surface water diversions and infrastructure will not at any time impede the passage of any life stage of Chinook Salmon, Steelhead, Bull Trout, or Cutthroat Trout from the confluence of the EFSFSR and Sugar Creek upstream past the Point of Diversion.").

recommendation as calling for volitional fish passage.[170] And, Officer Cefalo properly used the recommendation to establish conditions ensuring volitional fish passage:

> Consistent with Proposed Rule 45.01.e.iii, the hearing officer "will give due regard to expertise of other state and federal regulatory agencies charged with assessing individual [local public interest] issues." Part of the mission of IDFG and OSC is to protect, preserve, and restore ESA-listed species.[171]

Perpetua never contested IDFG and OSC's recommendation—at least not until Officer Cefalo used it as a basis for Conditions 13 and 14. Indeed, the record is replete with Perpetua's assurances that it would comply with the agencies' recommendation. For example, on July 11, 2023, Perpetua responded to IDFG and OSC's recommendation by transmitting updated fish passage studies with the assertion that "the tunnel fishway and the reach of the EFSFSR from the tunnel outlet to Sugar Creek reach of the EFSFSR will be passable to the four species of interest (Chinook salmon, bull trout, steelhead, and Westslope cutthroat trout) within their respective migration periods under most conditions during mining."[172] Perpetua's witnesses also stood by the recommendation in sworn hearing testimony.[173] Perpetua's argument now—that IDFG and OSC's recommendation was somehow unwarranted or unreasonable[174]—therefore lacks credibility. Officer Cefalo did not err by relying on the recommendation to develop Conditions 13 and 14.

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[170] Stanaway Test., Tr. at 307, 312; Bosley Test., Tr. at 488-89.

[171] Preliminary Order at 22. Protestants note that the IDFG and OSC recommendation accords with NMFS policy in favor of volitional passage. Bosley Test., Tr. 558.

[172] Ex. 219 at 2.

[173] Stanaway Test., Tr. 364; Bosley Test., Tr. 489.

[174] Exceptions Petition at 28. Notably, Perpetua does not take issue with Officer Cefalo's reliance on the state agencies' recommendation, but rather with the recommendation itself, claiming that "fish passage 'at any time' and 'of any life stage' is not even required by NMFS[, which] requires that fishways should be designed to pass fish at the 95% exceedance flow during periods when migrating fish are normally present." Exceptions Petition at 28. Looking beyond the flaws in the argument—central of which is its lack of support in the record—the point remains that Perpetua has not questioned the recommendation until now, and in fact represented to the IDFG and OSC (albeit wrongly) that Condition 12 satisfied their recommendation. *See* Ex. 219 at 9-10.

2. Officer Cefalo properly based Condition 13 on Perpetua's own tunnel fishway flow modeling.

Condition 13—the 7.25 cfs minimum bypass flow during times of upstream adult Chinook salmon and bull trout passage—is fully supported by the record, and specifically by Perpetua's own flow modeling data.

As part of its technical consultation with IDFG and OSC, Perpetua committed to undertake additional low flow modeling of its tunnel design with reference to relevant fish passage criteria.[175] Perpetua enlisted McMillen Jacobs Associates, which conducted supplemental modeling with reference to the NMFS criteria specific for weir-type fish passage ways such as the proposed tunnel.[176] These criteria require one foot of water depth over weir crests to provide for adult Chinook passage, as well as water velocities below species' burst speeds (6.6 feet per second for bull trout, and 22 feet per second for Chinook).[177]

The 2022 McMillen Jacobs report ("McMillen Jacobs (2022)") found that a flow of 7.25 cfs was the minimum necessary flow through the designed tunnel fishway to maintain NMFS's 1-foot depth criteria for weir-type fish passage ways for Chinook salmon.[178] McMillen Jacobs also found that the existing 95% exceedance flow, coupled with the proposed water right and Condition 12, would amount to just a 6.6 cfs flow through the tunnel fishway—below the bottom of McMillen Jacobs' confidence interval for fish passage shown in Figure 5 of the report.[179]

[175] Ex. 206 at 13.
[176] Ex. 47 at 3.
[177] Ex. 46 at 5-7.
[178] Ex. 47 at 12.
[179] Ex. 47 at Figure 5.

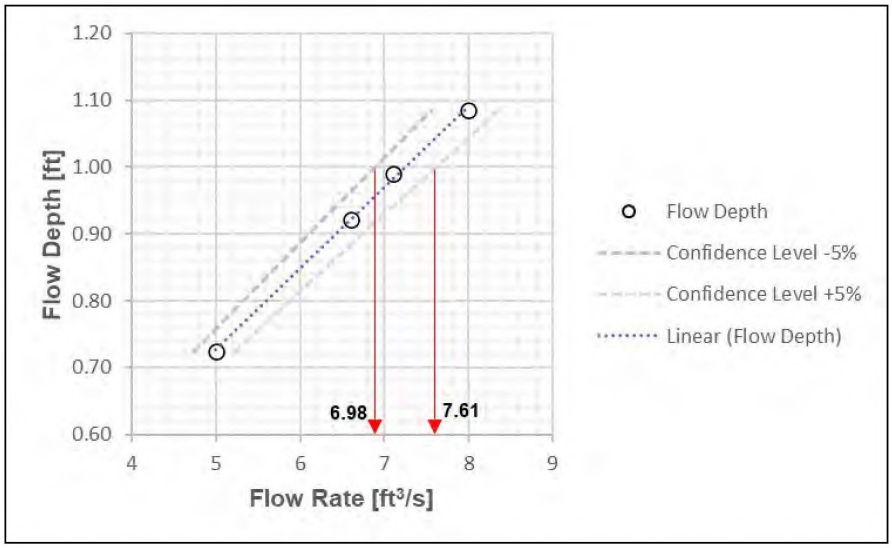

Figure 5. Case study results for estimating the flow rate corresponding to 1 foot depth

McMillen Jacobs clearly shows that the anticipated flows through the proposed tunnel with the water right and just Condition 12 will not meet NMFS's stated design criteria for upstream Chinook salmon and bull trout passage.

Rather than adjust either its tunnel design or its proposed condition (now Condition 12) to ensure at least 7.25 cfs flows through the tunnel, Perpetua instead inappropriately relied on a different study, Rio ASE (2023b), to justify maintaining lower flows than those required by the NMFS criteria through the tunnel fishway. In the latter study, Rio ASE modeled the 6.6 cfs flow through the natural reach of the EFSFSR downstream of the proposed tunnel.[180] Rio ASE had evaluated hydraulic conditions (depth and velocity) during low flows through this natural riverbed using fish passage guidelines for instream riffles in natural stream reaches set forth by the California Department of Fish and Wildlife ("CDFW Guidance"). The CDFW Guidance provides a 0.9 foot minimum depth criteria for adult Chinook salmon passage.[181]

[180] Ex. 219 Attach. C.

[181] Kinzer Test., Tr. at 1101-1103. A fuller explanation of Rio ASE (2023b), as well as the companion study Rio ASE (2023a), which modeled the relevant 95% exceedance flow with Condition 12 at 6.6 cfs, can be found in the Protestants' Joint Post-Hearing Brief, filed January 31, 2024, at 27-30, included with this filing as Appendix A.

Perpetua misrepresented these studies to the Governor's Office of Energy and Mineral Resources, IDFG, and OSC. In its July 11, 2023, letter to updating the agencies on its technical assistance request, Perpetua wrote,

> Results from the CFD [computational fluid dynamics] simulations indicate that a flow rate of 7.25 cfs is required to achieve the 1-foot weir flow depth over a 15-inch-wide weir. At 6.6 cfs (the bull trout and Chinook salmon 95% exceedance flow), the depth over the weir is slightly greater than the Chinook salmon minimum depth of 0.9 feet (California Department of Fish and Wildlife 2017). . . . Hence, CFD modeling demonstrates that the simple modification of reducing the fishway weir notch width to 15 inches results in hydraulic conditions that are passable by Chinook salmon down to their 95 percent exceedance flow, and by the other three species of interest down to 5 cfs (well below their respective 95 percent exceedance flows).[182]

These representations are wrong. As discussed above and confirmed in testimony, McMillen Jacobs (2022) shows Perpetua's water right with just Condition 12 will not ensure flows meeting NMFS's 1-foot depth criteria at 95% exceedance flows.[183] To get around this fact, Perpetua wrongly pointed to the 0.9-foot depth criteria found in the CDFW Guidance for natural streams, suggesting that CDFW Guidance is applicable to the tunnel fishway, and erroneously concluded that a 0.9-foot depth over the tunnel fishway weir—which is attainable with Condition 12—will ensure upstream passage for Chinook salmon and bull trout. The misdirection occurs in this sentence in the July 11, 2023, letter to the Governor's Office of Energy and Mineral Resources: "At 6.6 cfs (the bull trout and Chinook salmon 95% exceedance flow), the depth over the weir is slightly greater than the Chinook salmon minimum depth of 0.9 foot (California Department of Fish and Wildlife 2017)."[184] This misdirection also continued at the hearing through testimony

[182] Ex. 219 at 9.
[183] Tr. at 1174–78.
[184] Ex. 219 at 9-10. Perpetua's expert repeated this misrepresentation at hearing. *See* Stanaway Test., Tr. at 308-12.

from Perpetua's witnesses.[185] The CDFW Guidance's' 0.9' criteria simply does not apply to the weir-type fishway found in Perpetua's proposed tunnel.[186]

Officer Cefalo identified Perpetua's error in his Preliminary Order. He correctly found that the one-foot weir depth from NMFS Design criteria provides "the depth needed for safe passage for adult Chinook salmon," through Perpetua's tunnel fishway and further recognized that the CDFW criteria for riffles does not apply to constructed fish passageways such as the proposed tunnel fishway.[187]

Troublingly, Perpetua now doubles down on the misrepresentations it made in its July 11, 2023, letter to the state of Idaho and at the hearing. Perpetua's Exceptions Petition contains a series of consecutive misstatements, which on their own demonstrate a remarkable lack of either attention or candor, to set up the same misrepresentations Officer Cefalo identified and dismissed in his preliminary order: misapplication of the CDFW Guidance criteria to the proposed tunnel, and the assertion that 6.6 cfs, and not 7.25 cfs, will ensure upstream fish passage for Chinook salmon and bull trout.[188]

First, Perpetua asserts that "[a]lthough the NMFS guidance suggests that one foot of flow should be maintained over the weirs, the NMFS guidance is general to all fishways and does not provide species-specific depth criteria."[189] But the NMFS Design criteria used by McMillen Jacobs applies to constructed fish ladder-type passageways such as the proposed tunnel fishway, and provides a number of species-specific criteria, including flow depth.[190]

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[185] Bosley Test., Tr. at 513-517.
[186] Tr. at 762.
[187] Preliminary Order at 22.
[188] Exceptions Petition at 30.
[189] Exceptions Petitionat 31.
[190] Ex. 46 at 5-7; Ex. 47 at 3-4, 15; Bosley Test., Tr. at 676.

Second, Perpetua claims that since "Idaho has not issued fish passage criteria," its experts "looked to the next closest state that provides species-specific passage criteria, which is California."[191] Not only is that not what Perpetua's experts did but, again, the NMFS Design criteria contains species-specific depth criteria.[192] Perpetua's contractor McMillen Jacobs evaluated fish passage upstream for Chinook salmon and bull trout through the tunnel fishway using NMFS Design criteria for ladder-type passageways, not CDFW Guidance criteria for natural stream beds.[193] Perpetua then decided to rely on the CDFW Guidance criteria to assert that upstream fish passage would occur at lower flows than those required to meet the NMFS criteria.

Third, Perpetua claims its expert Rob Richardson from Rio ASE testified that "because the tunnel is a type of step pool, application of the CDFW Guidance to evaluate passage *in the fishway* and the reach below is inherently conservative."[194] That is not what Mr. Richardson said. Mr. Richardson's reference to a "step pool system" referred to the natural riverbed downstream of the tunnel.[195] He and Rio ASE "didn't evaluate the tunnel" or suggest that the CDFW Guidance for natural stream and riverbed can be applied for constructed fishways.[196]

To restate points from Protestants' Joint Post-Hearing Brief, filed January 31, 2024, "[t]his is not an inconsequential error. The tunnel consists of a series of weirs, not just one which will be out of compliance [with NMFS's Design criteria]. Moreover, redesigning the proposed tunnel to meet fish passage at anticipated flows will involve juggling a number of variables, not least of which will be to ensure slow enough velocities for bull trout while also providing sufficient depth

[191] Exceptions Petition at 29. Perpetua repeats the same misstatements about NMFS and CDFW fish passage criteria on page 31 of its Exceptions Petition to argue against Condition 14.
[192] Ex. 46 at 5-7; Ex. 47 at 3-4, 15; Bosley Test., Tr. at 676.
[193] Ex. 47 at 3-4.
[194] Exceptions Petition at 30 (citing Richardson Test., Tr. at 745) (emphasis added).
[195] Richardson Test., Tr. at 745.
[196] Richardson Test., Tr. at 755.

for adult Chinook salmon.[197] Most importantly, the error undermines a key assurance from Perpetua to the state of Idaho about one of the most significant, widely shared concerns about the project's effects on the public interest." Ultimately, Perpetua's argument that Condition 13 does "not provide significant additional protections for fish passage beyond Condition 12" rings hollow.[198] Condition 12 does not ensure sufficient flows to meet NMFS's Design criteria for fishway passage for adult Chinook and bull trout.[199] Only Condition 13 provides this assurance.

3. Officer Cefalo properly based Condition 14, which provides fish passage for all life stages of Chinook salmon, steelhead, bull trout, and Westslope cutthroat trout, on Perpetua's own record evidence.

As with Condition 13, Officer Cefalo based Condition 14, which provides a 5.0 cfs minimum bypass flow from October 1 to June 29, on McMillen Jacobs (2022), Perpetua's supplemental modeling of flows through the proposed fishway tunnel. Officer Cefalo did not err in doing so: McMillen Jacobs (2022) provides the only information in the record identifying acceptable low flows to provide passage for fish outside of the adult Chinook salmon and bull trout upstream migration period. For "smaller non-anadromous species such as Cutthroat trout," McMillen Jacobs (2022) identifies 5.0 cfs in its evaluation of "what the lower limits of passability through the fishway for these and other species might be" for October through June.[200]

Indeed, Perpetua represented this number to the state of Idaho as the minimum flow to allow fish passage for steelhead, bull trout, and Cutthroat trout. In its July 11, 2023, letter transmitting McMillen Jacobs (2022) to the Governor's Office of Energy and Mineral Resources

[197] Protestants' Joint Post-Hearing Brief at 33. As with the River Pump redesign discussed with respect to Condition 9, a tunnel redesign would change material facts on which the parties and public relied, and upon which Officer Cefalo based Conditions 13 and 14. Were Perpetua to redesign its tunnel, the company would need to avail itself to Condition 11 and file an application for amended water rights.
[198] Exceptions Petitionat 28.
[199] McMillen Jacobs also found that the existing 95% exceedance flow, coupled with the proposed water right and Condition 12, would amount to just a 6.6 cfs flow through the tunnel fishway. Ex. 47 at Figure 5.
[200] Ex. 47 at 15.

for distribution to IDFG and OSC, Perpetua wrote that the modeling showed passage "by the other three species of interest down to 5 cfs."[201]

As Officer Cefalo rightly noted, despite McMillen Jacobs' inappropriate reliance on CDFW Guidance to develop the 5.0 minimum flow, McMillen Jacobs (2022) remains "the best evidence in the record for the flow required to ensure safe, timely, and effective fish passage for bull trout, steelhead, and westslope cutthroat trout."[202]

4. Condition 12 alone will not prevent the EFSFSR flows from dropping below 5.0 cfs.

Condition 12 alone will not, as Perpetua claims, "ensure…at least 5.0 cfs of flow during steelhead, bull trout, and westslope cutthroat trout migration."[203] Officer Cefalo addressed this argument thoroughly in his Order Denying Perpetua's Petition for Reconsideration. In it, he provided an example of a day—February 8, 2019—in which Condition 12 would not alone maintain 5.0 cfs in the river if Perpetua was to divert the maximum allowable water under its water right and Condition 12.[204] He found that flows in the EFSFSR would drop below the company's surface water point of diversion to 4.62 cfs, and rightly concluded that "Condition 12, by itself, is not sufficient to guarantee a minimum bypass flow of 5.0 cfs in all conditions."[205]

Perpetua now takes issue with what it characterizes as Officer Cefalo's reliance "on a particular day" to demonstrate that Condition 12 would not necessarily prevent the EFSFSR under all flow conditions from dropping below 5.0 cfs.[206] According to Perpetua, Officer Cefalo should

[201] Ex. 219 at 10.
[202] Order Denying Petition for Reconsideration at 7 (internal citations omitted).
[203] Exceptions Petition at 30. Perpetua's reference to Westslope cutthroat trout "migration" misses the fact that the species, as well as year-round resident fish including non-anadromous bull trout, do not have migration periods in the same sense as anadromous species.
[204] Order Denying Petition for Reconsideration at 8.
[205] Order Denying Petition for Reconsideration at 8.
[206] Exceptions Petition at 31.

have evaluated 95% exceedance flows.[207] But Perpetua misses the point: Officer Cefalo used the example to illustrate that "Condition 12, by itself, is not sufficient to guarantee a minimum bypass flow of 5.0 cfs in all conditions."[208] It was "simply intended to show a scenario where flow in the EFSFSR could drop below 5.0 under Condition 12," and it succeeds in doing so.[209] Perpetua does not argue otherwise.

Perpetua makes two additional arguments against Condition 14. First, the company argues that "[b]between September 30 and April 1, the only fish that may require passage are juvenile salmonids."[210] But these are not the only fish requiring passage at this time. Officer Cefalo squarely addressed this argument in his denial of Perpetua's Petition for Reconsideration, noting the presence of steelhead, resident Westslope cutthroat trout, and resident bull trout.[211]

Second, Perpetua argues that "fish are adaptive and passage will not be blocked by short-term reductions below minimum flow targets, which is why NMFS does not require fishways to pass fish at the lowest possible flows."[212] But of course, passage will be blocked by reductions below minimum flows. And more to the point, Perpetua modeled its proposed tunnel to determine the lowest possible flow to ensure fish passage.[213] Faulting Officer Cefalo for relying on its own modeling to set a minimum flow defies logic and common sense.

Like Condition 13, Condition 14 offers necessary protections for fish passage that Condition 12 does not. Perpetua's claims of error are baseless.

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[207] Exceptions Petition at 32.
[208] Order Denying Petition for Reconsideration at 8.
[209] Order Denying Petition for Reconsideration at 8.
[210] Exceptions Petition at 31. Perpetua similarly argues a page later that "the only fish that may be passing in February are juvenile salmon, passing downstream, which require a significantly lower depth [for passage] that could still be achieved at this reduced flow." Exceptions Petition at 32.
[211] Order Denying Petition for Reconsideration at 7 (citing Ex. 29 at 33-34; Bosley Test., Tr. at 376; Keller Test., Tr. at 895, 912; Kinzer Test., Tr. at 1085-86, 1180).
[212] Exceptions Petition at 32.
[213] *See* Ex. 47.

III. CONCLUSION

Now is also simply not the appropriate time for Perpetua to seek to modify its water right permits. Once Perpetua has a final mine plan, Perpetua can file an application for amended water rights, as contemplated by Officer Cefalo's Condition 11.[214] For this and the reasons above, the Protestants request that the Idaho Department of Water Resources deny Perpetua's Exceptions Petition.

DATED this 6th day of June, 2024.

/s/ Michael A. Lopez
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Attorney for Nez Perce Tribe

/s/ Amanda W. Rogerson
Amanda W. Rogerson
Attorney for Nez Perce Tribe

/s/ Julia S. Thrower
Julia S. Thrower
Attorney for Save the South Fork Salmon, Inc. and Idaho Conservation League

[214] Preliminary Order at 20.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 6th day of June, 2024, I caused a true and correct copy of the foregoing document to be served by email, addressed to the following:

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APPENDIX A

Protestants' Joint Post-Hearing Brief, filed January 31, 2024

June 6, 2024

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BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATIONS FOR PERMIT NOS. 77-14377, 77-14378, 77-14379, APPLICATIONS FOR TRANSFER NOS. 85396, 85397, 85398, AND 85399, AND APPLICATION FOR EXCHANGE 85538 IN THE NAME OF PERPETUA RESOURCES IDAHO, INC.	**PROTESTANTS' JOINT POST-HEARING BRIEF**

TABLE OF CONTENTS

ACRONYMS

AFY	acre feet per year
cfs	cubic feet per second
Department	Idaho Department of Water Resources
EFSFSR	East Fork South Fork Salmon River
Ex.	Exhibit
ICL	Idaho Conservation League
IDFG	Idaho Department of Fish and Game
IDWR	Idaho Department of Water Resources
NOAA	National Oceanic Atmospheric Administration
OSC	Office of Species Conservation
Perpetua	Perpetua Resources Idaho, Inc.
SSFS	Save the South Fork Salmon
Tr.	Transcript of December 11-15, 2023, Hearing
Tribe	Nez Perce Tribe

I. INTRODUCTION

Over the course of the hearing in the above captioned applications,[1] the Nez Perce Tribe ("Tribe"), Save the South Fork Salmon, Inc. ("SSFS"), and Idaho Conservation League ("ICL") (collectively "Protestants") presented compelling evidence that Perpetua Resources Idaho, Inc.'s ("Perpetua") water right applications for the proposed Stibnite Gold Project, even with Perpetua's proposed water right condition, will reduce surface flows in the East Fork South Fork Salmon River ("EFSFSR") headwaters to stream flows that are lower than the historical minimum in most months. Protestants also presented compelling evidence that Perpetua has not met its several burdens under Idaho state law required for issuance of water rights: Perpetua failed to present compelling evidence that there is sufficient water in the EFSFSR headwaters to render its proposed project economically feasible or to demonstrate that its proposed project will protect the local public interest in aquatic resources and their habitat, recreation, and aesthetic values. Perpetua's also failed to provide the Idaho Department of Water Resources ("IDWR" or "Department") with the specific information—data, modeling, and other analyses—necessary for IDWR to evaluate the full impact of Perpetua's requested water rights on fish, fish habitat, and water quality in the EFSFSR headwaters during the estimated multi-decade life of the project and develop water right conditions that are protective of the public interest in aquatic resources, recreation, and aesthetic values.

Protestants detail their argument below with the aid of a hearing transcript prepared at Protestants' request (hereinafter referred to as "Tr.") and filed concurrently herewith as Exhibit "A" of the Declaration of Michael A. Lopez.

[1] The hearing before the Idaho Department of Water Resources was held December 11-15, 2023, in Boise, Idaho.

II. BACKGROUND

On October 8, 2021, Perpetua filed Applications for Permit 65-24089, 77-14377,[2] 77-14378,[3] 77-14379,[4] and 77-14381, and Applications for Transfer 85396,[5] 85397,[6] 85398,[7] and 85399[8] with IDWR. On November 15, 2021, Perpetua filed Application for Exchange 85538.[9] In December 2021, the Tribe, Save the South Fork Salmon, Inc., and Idaho Conservation League filed protests against all above-referenced applications. The Tribe, SSFS, and ICL subsequently withdrew their protests of Perpetua's Applications for Permit 77-14381 and 65-24089.[10]

Perpetua currently holds four existing water rights: 77-7141 is for domestic purposes; 77-7122 authorizes 0.33 cubic feet per second ("cfs") and 7.1 acre-feet per year ("AFY") from the EFSFSR; 77-7285 authorizes 0.5 cfs and 30.2 AFY from groundwater; and 77-7293 authorizes 0.25 cfs up to 20 AFY from an unnamed stream locally referred to as Hennessy Creek.[11] Perpetua has also applied for two new water rights that relate to these existing water rights. Perpetua's water right Application No. 77-14377 requests a diversion rate of 0.20 cfs from up to four groundwater wells for domestic uses at the man camp and is proposed to be in combination with the existing water right 77-7141, which authorizes 0.20 cfs for domestic uses.[12] The existing water right 77-7141 does not have enough volume to cover Perpetua's anticipated domestic uses at the man

[2] Ex. 1f.
[3] Ex. 1g.
[4] Ex. 1h.
[5] Ex. 1a.
[6] Ex. 1c.
[7] Ex. 1e.
[8] Ex. 1b.
[9] Ex. 1d.
[10] The Tribe withdrew its protests on April 28, 2023; SSFS withdrew its protests on June 12, 2023, and ICL withdrew its protests on December 20, 2023.
[11] Tr. at 125.
[12] Tr. at 127.

camp.[13] Application No. 77-14379 requests a diversion rate of 0.06 cfs from groundwater for domestic uses at the truck shop mill facilities.[14]

The application for the largest volume of water is 77-14378, which seeks 9.6 cfs and 600 acre-feet of storage from runoff, groundwater, and the EFSFSR "to satisfy industrial water demand consisting of ore processing, dust control, drilling water, and dewatering of mine workings."[15] Perpetua's water right Application No. 77-14378 will provide the "bulk of the industrial water use" for the Stibnite Gold Project.[16] Additionally, the application seeks to "capture and store diffuse runoff that has contacted mining facilities (i.e., contact water)" in stormwater ponds, developed mine pits, and a tailings storage facility "to prevent discharge of contaminants to streams."[17] This application is sourced by contact water, groundwater from up to 50 dewatering and supply wells, and surface water from the EFSFSR.[18]

A hearing was held regarding Protestants' protests from December 11 - 15, 2023, in Boise, Idaho.

III. LEGAL STANDARDS

Under Idaho Code § 42-203A, the Director of the Idaho Department of Water Resources must determine with respect to all applications for water rights whether the application will conflict with the local public interest,[19] defined by the Idaho Legislature as "the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource."[20] Under IDWR's Administrative Code 37.03.08.40.04(c), the applicant bears the

[13] Tr. at 129.
[14] Tr. at 130-131.
[15] Ex. 1g at 16.
[16] Tr. at 132.
[17] *Id.*
[18] Tr. at 126, 133.
[19] Idaho Code § 42-203A(5)(b)(e).
[20] Idaho Code § 42-202B(3); See *Hardy v. Higginson*, 123 Idaho 485, 489–90 (1993) ("Regarding the Director's conclusion that the protestants in this case were proper parties despite the fact that they do not have water rights in

ultimate burden of proof for all the factors set forth in Idaho Code § 42-203A, including whether the appropriation will "conflict with the local public interest."[21]

Under IDWR's Administrative Code, the criteria for determining whether a project will conflict with the local public interest includes "[t]he effect the project will have on the economy of the local area affected by the proposed use as determined by the employment opportunities, both short and long term, revenue changes to various sectors of the economy, short and long term, . . . the stability of revenue and employment gains, [and t]he effect the project will have on recreation, fish and wildlife resources in the local area affected by the proposed use."[22] The Idaho Legislature has further declared that the term "public interest" includes the preservation of minimum streamflow to protect "fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, transportation and navigation values, and water quality."[23]

The Idaho Supreme Court has interpreted Idaho Code § 42-203A(5) as imposing "the affirmative *duty* on the Director [of IDWR] to assess and protect the public interest."[24] In *Shokal*

Box Canyon, we find the case of *Shokal v. Dunn,* 109 Idaho 330 (1985), to be instructional. In *Shokal,* this Court found that the legislature intended the public interest on the local scale to include the public interest elements listed in Idaho Code § 42–1501 which includes the protection of fish and wildlife habitat. The Court further stated: 'By using the general term "the local public interest," the legislature intended to include any locally important factor impacted by proposed appropriations. . . . For example, in an area heavily dependent on recreation and tourism *or specifically devoted to preservation in its natural state,* [IDWR] may give great consideration to the aesthetic and *environmental ramifications* of granting [or amending] a permit which calls for substantial modification of the landscape or stream.' In this case, the Box Canyon area is designated by the BLM as an Area of Critical Environmental Concern (ACEC). The values justifying the ACEC designation include the identification of four candidate threatened and endangered aquatic species, one of which is the Shoshone sculpin, and the scenic and unique natural qualities of the area. Clearly, the protection of this habitat falls within the local public interest as defined in *Shokal.* The protestants, although having no water rights within Box Canyon, sought to protect these locally important factors and thus their interests were properly considered by the Director." (internal citations omitted).

[21] IDAPA 37.03.08.40.04.c.

[22] IDAPA 37.03.08.045.01.e.i, ii.

[23] "Legislative purpose—Minimum stream flow declared beneficial use" Idaho Code § 42-1501. "Not only is the term "public interest" common to both §§ 42–1501 and 42–203A, and the two sections common to the same title 42 (Irrigation and Drainage—Water Rights and Reclamation), but also the legislature approved the term "public interest" in both sections on the *same day,* March 29, 1978. Clearly, the legislature in § 42–203A must have intended the public interest on the local scale to include the public interest elements listed in § 42–1501: "fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, transportation and navigation values, and water quality." *Shokal v. Dunn*, 109 Idaho 330, 338 (1985) (internal citations omitted).

[24] *Shokal v. Dunn*, 109 Idaho 330, 337 (1985) (italics in original).

v. Dunn the Idaho Supreme Court declared, quoting the New Mexico Supreme Court, that "the 'public interest' should be read broadly in order to 'secure the greatest possible benefit from [the public waters] for the public'"[25] and that common sense dictates that the local public interest also includes a proposed appropriation's "harm to others . . . discouraging waste, [and] encouraging conservation."[26] The Idaho Supreme Court also stated that IDWR "is precluded from issuing a permit for a water appropriation project which, when completed, would violate the water quality standards of the Department of Health and Welfare" without a water right condition granting IDWR "continuing jurisdiction over compliance with the conditions of the permit, including suspension or revocation of the permit for proven violations of the permit's conditions regarding water quality."[27]

The Idaho Supreme Court in *Shokal* also stated, quoting Idaho District Judge Schroeder: "'The burden of proof is upon the applicant to show that the project is either in the local public interest or that there are factors that overweigh the local public interest in favor of the project.'"[28] "The relevant elements [of the local public interest] and their relative weights will vary with local needs, circumstances, and interests" and the "determination of what elements of the public interest are impacted, and what the public interest requires, is committed to [IDWR's] sound discretion."[29]

According to the Idaho Administrative Code, "[a]n application which the Director determines will conflict with the local public interest will be denied unless the Director determines that an over-riding state or national need exists for the project or that the project can be approved with conditions to resolve the conflict with the local public interest."[30] Alternatively, the Director

[25] *Id.* at 338.
[26] *Id.*
[27] *Id.* at 452.
[28] *Id.* at 339.
[29] *Id.*
[30] IDAPA 37.03.08.045.01.e.iii (emphasis added); Idaho Code § 42-203A(5).

"may partially approve and grant a permit for a smaller quantity of water than applied for."[31] Protestants are unaware of any Idaho court, including the Idaho Supreme Court, that has further defined what factors can "overweigh the local public interest," what factors constitute an "over-riding state or national need" or what test IDWR or courts should apply to determine if the local public interest is outweighed.

"Permit conditions arising from the local public interest review should be based on specific information in the record, not on speculation or assertions of indeterminate impacts."[32] The IDWR Director cannot rely on conditions imposed by a federal agency.[33] Rather the IDWR Director must impose the conditions they think necessary and supported under Idaho law.[34]

IV. ARGUMENT

A. Protestants and public witness testimony demonstrated there is a local public interest in maintaining flows in the EFSFSR to protect aquatic resources and habitat, recreation, and aesthetic values.

As discussed above, "local public interest" is defined as "the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource."[35] "[T]he focus of the director must be trained on the interests of the local people affected by a proposed water use.[36] Although the Director may consider economic information in the local public interest review, economic information is not necessarily in the public interest "simply

[31] Idaho Code § 42-203A(5).
[32] Order on Exceptions; Final Order, *In the Matter of Application for Permit No. 74-16187 in the Name of Kurt W. Bird or Janet E. Bird* (May 21, 2020) at 28-29 (*citing Hardy v. Higginson*, 123 Idaho 485, 491 (1993)).
[33] *See* Final Order Denying Application for Permit, *In the Matter of Application for Permit No. 13-7697 in the Name of Twin Lakes Canal Co.* (Oct. 18, 2012), at 6 (holding that deferring to a federal agency "on matters of the local public interest" "would result in an impermissible, wholesale abdication of the director's responsibilities related to the local public interest").
[34] *Hardy*, 123 at 491–92.
[35] Idaho Code § 42-202B(3).
[36] Final Order Denying Application for Permit, *In the Matter of Application for Permit No. 13-7697 in the Name of Twin Lakes Canal Co.* (Oct. 18, 2012), at 7 (emphasis in original).

because the activity happens to use water"[37] and, in this case, the Hearing Officer has determined that economic benefits of the project are "outside of the local public interest review."[38]

Review of the testimony provided by Perpetua, Protestants, and public witnesses at the hearing demonstrates that there is a local public interest in protecting aquatic resources and habitat, recreation, and aesthetic values in the area that would be affected by Perpetua's water right applications and proposed project.

Several witnesses for Protestants testified to the local public interest in maintaining flows in the EFSFSR to protect fisheries and aquatic habitat and preserve recreational and aesthetic resources. The South Fork Salmon watershed, including the EFSFSR, is an important and historical watershed that supports three fish species listed under the Endangered Species Act—Chinook salmon, steelhead, and bull trout—as well as others, including longnose dace, sculpin, and white fish.[39] The local public uses in the proposed Stibnite mine area rely heavily on sufficient water in the EFSFSR to sustain the fisheries resource, contribute to the local community's quality of life, and support Tribal interests in continued restoration of fisheries resources and aquatic habitat on the EFSFSR throughout the project area.

Wes Keller, a fisheries employee for the Tribe, testified that the Tribe, as a sovereign government and co-manager of the fisheries resource, expends millions of dollars annually in the South Fork Salmon River Watershed, including the EFSFSR sub-watershed, to advance its fisheries department's foundational mission of restoring anadromous and resident fish throughout the Columbia and Snake Basins.[40] The Tribe's management actions include spawning ground

[37] Final Order Denying Application for Permit, *In the Matter of Application for Permit No. 13-7697 in the Name of Twin Lakes Canal Co.* (Oct. 18, 2012), at 7 (*quoting* Statement of Purpose, H.B. 284 (2003)). *See also* Tr. at 20 (Hearing Officer stating that economic benefits of the project "is outside of the local public interest review").
[38] Tr. at 20.
[39] Tr. at 892.
[40] Tr. at 887, 888.

surveys, fish presence monitoring, partnering with the Idaho Department of Fish and Game to move Chinook salmon to spawn in Meadow Creek, and habitat improvements such as bridge and culvert replacements and road improvements and decommissioning.[41]

Mr. Keller further testified that the Tribe has actively participated in the review of the proposed Stibnite Gold Project since 2011 and did not formally oppose the project until 2018, following years of principled evaluation and technical analysis.[42] The Tribe protested Perpetua's water right applications in December of 2021 because of its concern that surface and groundwater withdrawals in the headwaters of the EFSFSR could harm aquatic resources, including Endangered Species Act-listed Chinook salmon and steelhead and bull trout, and westslope cutthroat trout, a species of concern.[43]

John Robison, ICL's Public Lands Director, testified that, in addition to many members that don't reside in Valley County but value and go to the public lands in the Stibnite mine area, ICL has several hundred members residing in Valley County and that the proposed water right intersects with several of ICL's areas of work, including wild fish, water quality, recreation, and quality of life issues.[44] ICL members go to the EFSFSR to recreate and fish.[45] Robinson himself goes fishing for bull trout in the area where he was "stunned" by the "amazing resource with the South Fork and East Fork, South Fork," and testified that bull trout are an "amazing predator[ ]" and "fascinating fish."[46]

> It's just a very special place. * * * [I]t's been notable, both by the Forest Service and others for things, but it's one of these places where people go when they're looking to get a way and they are looking to basically the closest thing you can get to this combination

[41] Tr. at 897, 898, 899.
[42] Tr. at 909.
[43] Tr. at 904.
[44] Tr. at 789, 790, 807.
[45] Tr. at 807.
[46] Tr. at 807, 834.

> of class III, IV, V whitewater and the cancer of seeing Bull Trout, Salmon or Steelhead. . . . And then also having these vast interconnected landscapes. It's right next to the Frank Church [River of No Return Wilderness]. You've got infinite [sic] roadless areas right there, so you've got the sense of it being super remote, just enough for a trip there. And, again, the fisheries, scenic recreational (inaudible) are there.[47]

As a result of these member interests, ICL has been involved in several restoration and access management "collaboratives designed to try and improve fisheries, water quality conditions, and provide reasonable access" in the Payette National Forest and around the Stibnite mine area.[48]

Frederick Coriell, founder and Board member of SSFS, testified of the importance of the South Fork Salmon River watershed to the organizational interests of "supporting the ecological services of the ecosystem and cultural resources of that area.[49] A significant portion of SSFS membership and supporters consist of Valley County residents that are "avid fishers . . . in there very frequently fishing" who "enjoy floating on the river."[50]

> So we have members that fish in the upper East Fork, and we have members that fish in Sugar Creek. That fish at the confluence of Sugar Creek and East Fork, South Fork Salmon River. We have members that snorkel. Yet, people like snorkeling. . . . Down below the lower South Fork, and snorkeling meaning we like to look for fish.[51]

Mr. Coriell himself has been "using the watershed [ ] pretty consistently since 2002 for either whitewater kayaking or fishing or camping or hiking . . ."[52]

Ryan Kinzer, the Tribe's fisheries expert witness, testified that there are Endangered Species Act-listed fish present in the direct location or vicinity of Perpetua's proposed points of

[47] Tr. at 807, 808.
[48] Tr. at 790.
[49] Tr. at 850.
[50] Tr. at 850, 851, 852, 853.
[51] Tr. at 853.
[52] Tr. at 850.

diversion.[53] Mr. Kinzer testified that there are juvenile steelhead and bull trout present in the EFSFSR the entire year,[54] that Chinook salmon spawn in Meadow Creek,[55] and there are bull trout present in Meadow Creek upstream of its confluence with upstream of Blowout Creek.[56]

Protestants' witnesses testified that the proposed water right would change the nature of the public water resource dramatically, and the local public has a strong interest in maintaining sufficient flow in the EFSFSR to maintain the fisheries resources for aesthetic, recreational, scientific, and tribal purposes.

Mr. Coriell testified that as a river person and fisherman, he is aware that "flows in the East Fork, . . . whether it's above Sugar Creek, up at the mine site at Meadow Creek, most of the year are very close to that 9.6" cfs flow rate and that this "significant amount . . . would have a significant impact . . . on fisheries and aquatics and other recreational resources up there."[57] "[W]e are concerned here aout what is occurring during mining operations to the stream flows, the potential impacts to the fish from decreased stream flows from those withdrawals."[58] Even with the proposed condition offered by Perpetua, "the flows in the river . . . would be less than what was necessary to be protective of those fish."[59]

> I think that we all recognize these fish are listed as threatened. They are imperiled. . . . [S]tressing them any more than they are dealing with now, if we do that too much the[re] may not even be fish to come back to the site to benefit from these potential long-term benefits. * * * And if we don't have fish, our members' interests are harmed because they like to . . . snorkel, especially up by the mine site – or not by the mine site but in the East Fork up there, look for Bull Trout and other fish. We have members and supporters that fish in the area as well. So if we dewater the river enough even during mining operations to the point where the fish are impacted where

[53] Tr. at 901.
[54] Tr. at 895.
[55] Tr. at 899.
[56] Tr. at 902-903.
[57] Tr. at 861, 862.
[58] Tr. at 868.
[59] Tr. at 867.

> they just aren't there in the future, that really affect the local public interest of being able to sue that place to engage in those activities. * * * I think there's nonfinancial benefit and esthetic benefit, a spiritual benefit, to be able to go to a place like that. Catch fish, see fish. And I think that's equally as important. . . . It goes back to [SSFS's] mission of ecological, cultural, economic, resources. That's all tied together.[60]

Mr. Keller testified that over the last two years, the Tribe has carefully examined Perpetua's proposed water rights, proposed condition, and associated information to understand their effects on anadromous and resident species and their habitat. The Tribe has provided evidence that water withdrawals will be significant and concerning for aquatic resources, even applying Perpetua's proposed water right condition.[61, 62, 63]

The public witness testimony confirmed that some Valley County residents and other Idahoans share many of the same interests in the public water resource, and concerns of how the proposed water use may impact those interests as those advanced by the Protestants.

Mr. Ted McManus, who lives in McCall,[64] testified as follows:

> Many of us who have really tight connections with the East Fork of the South Fork and South Fork of the Salmon. We've hiked and fished on the East Fork and the South Fork for many, many years. I can think of experiences like during the DOVID pandemic when the East Fork and the South Fork were kind of a respite for us and our family to [be] able to go down there and have a place that we didn't have to think about that kind of thing. I also taught my son hao to family fish on the East Fork of the South Fork. . . . We've camped on the East Fork many times and also just passing through there on the way to monumental to go hiking in the Frank Church Wilderness or to Big Creek visiting friends there. So I've spent a lot of time in this area. It's an area of great beauty and even wildness, despite the fact that there's a road paralleling it. And that's a rare thing that you can have a place that is so wild and so spectacular even with a road right there. . . . It's a place where families and fisherman can go and

[60] Tr. at 868, 869, 870.
[61] Tr. at 1081, 1091, 1093, 1094, 1096, 1097, 1122, 1128, 1129, 1136.
[62] Tr. at 1027, 1028, 1030, 1031.
[63] Tr. at 958, 962, 963.
[64] Tr. at 992.

> spend time there. But I believe that that – that requires – that recovery of the river requires sufficient water in the river to flush out and dilute any toxicity from the mining. So if a water permit of 10 cfs is issued it probably will imperil the river and its ability to recover from its history of mining and abuse. . . . And restoring these fisheries and not taking water from them for short-term gains are really going to pay off in our future.[65]
>
> I want to finish really quickly with a quote from my 18-year-old son who has always loved the East Fork . . . So he said that the East Fork of the South Fork is a truly natural place, which is rare these days. He says, the fisherman doesn't have to think so much about flow and water temperature because it's free flowing. And there's relatively minimal extraction of water for industry, unlike some other rivers in Idaho and Montana, like the Bitterroot River that are drawn down so far that fish are dieing [sic] and fishing isn't allowed on certain days in order to protect the fish. And he says, let's not let that happen in Valley County.[66]

Likewise, Mr. Kyle Smith testified that the EFSFSR area is a really special place.[67] Mr. Smith has "spent the greater part of two decades there" kayaking, camping, fishing, and skiing in the area, and sees a greater value in that area than just what is industrial value."[68] Mr. Dan Ostermiller, of McCall,[69] testified:

> One of the determinates for moving here was the beauty of the area, the wilderness, and we all enjoy kayaking and rafting. * * * I've enjoyed kayaking the East Fork, South Fork. * * * I would also like to see Salmon return in those type of numbers. . . . So really what I'm going to ask this board is maybe can you insure that there's adequate amount of water so that the Salmon can return, so that the fry can be raised here and they can return to the oceans. The real

[65] Tr. at 992, 993.
[66] Tr. at 994.
[67] Tr. at 996, 997.
[68] Tr. at 997, 998.
[69] Tr. at 1001, 1002.

> gold mine is in our fish and our natural waterways and recreation. So I would tend to support that more than a gold mine.[70]

Mr. Zac Sears, a professional fishing guide from Riggins, Idaho,[71] testified:

> Witnessing one of these mighty [steelhead] fish can have long-lasting impacts on an angler, and many claim to have caught the fish of a lifetime on the Salmon River. Catching an Idaho Steelhead is something every Idaho angler must experience and not just for this generation but for generations to come. To have these fish in our rivers is world renowned and celebrated, and Steelhead are an intrinsic right of Idahoans. Reducing close to 10 cfs in the headwaters of the East Fork with resulting degradation of fish habitat is a violation of this intrinsic right. Diminishing spawning incubation, rearing, and migration grounds could have – could affect river communities like Riggins where fish are essential economic driving force. These fish are part of our iconic river communities. Steelhead are a part of Idaho and have sustained a way of life for people who have lived here for thousands of years.[72]

Mr. Sears has two decades recreating year-round in the Stibnite area, including snorkeling and fishing in the East Fork of the South Fork, observing 30-inch bull trout, steelhead, Chinook salmon, West Slope cutthroat trout, and the "diversity of incredible fish" that provides him with "great esthetic value."[73] Mr. Sears testified that "[r]educing flow in the East Fork could have a major impact on a variety of recreation activities."[74]

> A large part of why I choose to recreate in this area is because of the water quality in these high mountain streams. I'm able to observe more fish and wildlife high in the watershed where water temperatures are cooler, and fish can find refuge from the warm river temperatures lower in the watershed. I fear that reducing flow in the East Fork without [sic] a warming impact and reduced water quality not only in this part of the watershed but for miles

[70] Tr. at 1002, 1003.
[71] Tr. at 1004.
[72] Tr. at 1004, 1005.
[73] Tr. at 1005.
[74] *Id.*

> downstream. . . . I am greatly concerned that the way of life of many Idahoans is threatened by impairing parts of the upper watershed.[75]

Mr. Gary Brown testified on behalf of the local Trout Unlimited chapter based out of McCall,[76] stating that "[w]e consider it an area of special interest. [M]ost of the folks that I know that fish or even recreate, they look forward to it every year into the East Fork and the South Fork. Some of them camp. Some of them fish, just a variety of things."[77] Mr. Brown expressed concern that withdrawing 9.6 cfs could have significant impacts on river flow:

> I've looked at the flow levels from last summer, which was a higher flow year because of the amount of rain that we got. And there were a lot of times that that river was down into the lower teens, so you're talking low river year you could or low water year you could totally dilute certain stretches of the river if that much water is drawn off, and so concerned about that obviously. Trout Unlimited's mission is the cold water species and protecting cold water habitat. And this is a big – this winter mountain country is some of the best habitat going. Idaho can raise Salmon like nothing else. . . . Our folks are concerned about the mining – not so much anti-mining but concerned about the adverse effects.[78]

Mr. Michael Gibson, also from Trout Unlimited, testified to the organization's missions and the importance of maintaining "the availability of proper habitat for Trout and Salmon" in the EFSFSR.[79] The organization designated the South Fork Salmon River watershed as a priority watershed, and expressed the importance of the watershed to the state and local chapters of Trout Unlimited for its accessibility and popular fisheries for its members.[80] "Its location and habitat

[75] Tr. at 1005, 1006.
[76] Tr. at 1007.
[77] Tr. at 1007, 1008.
[78] Tr. at 1009.
[79] Tr. at 1010, 1011.
[80] Tr. at 1011.

make it a strong hold for native Bull Trout, West Slope Cutthroat, Salmon, and Steelhead, and it has historic significance of the indigenous people of Idaho."[81]

Finally, Mr. Nick Kunath of McCall and the Conservation Program Director for Idaho Rivers United testified about how "places like the East Fork . . . are disappearing or being changed beyond recognition."[82] Mr. Kunath's first trip the EFSFSR impacted him immensely:

> [I] definitely realized how impactful this first trip to the East Fork would be for me And driving (inaudible) summit down to the south Salmon to the East Fork drainage I felt like I was transported to what I imag[ined] like driving around the high Sierras in California or other destinations that I had only seen in kayaking firms or trip reports. Places that I have only dreamed of being able to paddle or kayak before that but only intensified (inaudible) the banks of, you know, what I can only describe as one of the cleanest rivers I had ever seen.[83]

> I've filled much of my life both professionally and personally around the ability to be able to return to the East Fork and South Salmon canyon. And it goes beyond just hiking to me. (Inaudible) weekends when I head up to Yellow Pine, East Fork to paddle with friends and maybe get a few lap in (inaudible) majority of my time sitting on the banks of the river fishing, just enjoying this place that means so much to me . . . I'm confident that if you were to ask any of the hundreds of folks who have had the privilege of paddling the East Fork and South Salmon every summer, they all have similar remarks truly how special in nature this area is. And whether it's the opportunity to see nature or (inaudible) wildlife, crystal clear waters or having, frankly, some of the best whitewater in the lower 48, it's truly unparalleled.[84]

This testimony from Protestants' and public witnesses demonstrates that there is a local public interest in the area affected by Perpetua's water right applications. It also shows that a reduction in stream flow in the EFSFSR, due to an issuance of the requested water right, conflicts with the local public interest of maintaining sufficient water flow in the EFSFSR around the

[81] Tr. at 1011.
[82] Tr. at 1014.
[83] Tr. at 1014.
[84] Tr. at 1015, 1016.

Stibnite mine area to support fishing, recreation, and the aesthetic and scenic value derived from a free-flowing river through a rugged, wild area. It further shows that a reduction in streamflow has a very real chance of conflicting with the local public interest in maintaining sufficient water flow in the EFSFSR to support fisheries resources and aquatic habitat and in preserving the benefits derived from the Tribe's decades-long fisheries restoration work, as well as work by ICL, SSFS, Trout Unlimited, and Idaho Rivers United in the EFSFSR and the larger South Fork Salmon River watershed.

Perpetua, on the other hand, has not met its burden of demonstrating that there is a local public interest in the proposed use of this public water resource. Perpetua's claims of "improv[ing] existing environmental conditions, especially with respect to water quality and fish and wildlife migration, populations and habitat"[85] are not directly related to proposed water withdrawals and are not proposed as part of the water right applications to mitigate potential impacts to the public interest. Perpetua's witnesses provided significant testimony related to the company's plan to improve fish passage by constructing a nearly mile-long tunnel to allow fish to swim past the Yellow Pine pit to upper reaches of the EFSFSR. However, this proposed tunnel is not directly related to their proposed water use and is not being proposed as part of Perpetua's water right applications as mitigation for the impacts to the local public interests. Rather, testimony from Perpetua's Vice President of Permitting, Mr. Alan Haslam, detailed how the company's restoration

[85] Ex. 23 at 1-2.

plans are part of a larger "mine plan" called the ModPRO2[86] that has yet to be permitted by federal agencies.

B. Perpetua has not satisfied its burden of showing that Application No. 77-14378 is in the local public interest under Idaho Code § 42-203A(5) and IDAPA 37.03.08.40.04.

1. Perpetua has not shown a need for or modeled impacts of the full amount of water it has requested.

Perpetua has applied for water rights to divert, in total, 10.94 cfs of surface and groundwater from or around the EFSFSR. But Perpetua, through their expert reports and testimony, has not shown they need the full amount of water requested, which is 3 times their estimated average annual diversion rate; they didn't model the impacts to streamflow for the full amount they requested, but instead modeled a diversion rate 7 times less than the full amount of water they requested; and, they never demonstrated how their impacts to streamflow will impact fish habitat or fish passage.

To start, Perpetua over-calculated the amount of water they need for their mine, requesting about 3 times more than the anticipated average monthly operation. Ms. Betsy Semmens testified for the Tribe and SSFS that Perpetua's modeling shows that the 9.6 cfs rate was derived by summing the estimated *peak* water demand for mill diversion demand (4.5 cfs), dust control (0.7 cfs), drilling water (0.1 cfs), and excess dewatering water (4.3 cfs) in any given year of mine operation.[87] However, Mr. Scanlan admitted that these individual estimated peak water demands are not instantaneous; in other words, the individual peak demands are very unlikely to occur at the same time.[88] In fact, Mr. Scanlan confirmed that Perpetua's model of the anticipated average monthly operational water needs for each mine year[89] shows that they only need an average, total

[86] *See* Tr. at 37-46 (discussing "restoration" elements in the ModPRO2 as the "entire mine project").
[87] Tr. at 169, 938.
[88] Tr. at 140, 938.
[89] Tr. at 203.

continuous diversion rate of about 3.2 cfs (2,272 AFY)—approximate 3 times more than requested in Application No. 77-14378.[90]

Mr. Scanlan admitted that Perpetua does not need 9.6 cfs on a continuous basis but maintained that they will need access to an instantaneous diversion of 9.6 cfs for "operational flexibility," for example, when the reclaimed water system is inoperative.[91] He also stated, however, stated that there are other options for meeting a requirement to access an instantaneous diversion of 9.6 cfs, like using water from storage, or to reduce operations to stay within the water right,[92] or building redundancy in the system to prevent equipment failure from requiring the full diversion rate.[93]

Mr. Scanlan also testified for Perpetua that it is indeed normal—"that's the way it is"[94]—to not have a volume cap when a permit is issued because "you establish that through the beneficial use process."[95] He further affirmed that "there is a possibility [that beneficial use] wouldn't be established for 15 years[96] and acknowledged that the permit, if issued as requested in the water right application, would have no restrictions on where Perpetua can divert from—i.e., "the source of water is not constrained in any way under the permit application."[97]

However, Perpetua never modeled the impacts to streamflow in the EFSFSR from either a continuous or instantaneous withdrawal of the maximum diversion rate requested from either surface flow alone, groundwater alone, or a combination of withdrawals from both.[98] Rather, Perpetua only modeled the impacts to streamflow in the EFSFSR of a diversion rate of only

[90] Tr. at 141, 170, 940-41.
[91] Tr. at 140.
[92] Tr. at 182.
[93] Tr. at 164.
[94] Tr. at 167.
[95] Tr. at 167.
[96] Tr. at 168.
[97] Tr. 168-69.v
[98] Tr. at 942, 946, 950.

1.37 cfs—about 7 times less than the maximum request diversion rate of 9.6 cfs.[99] Testimony from Perpetua indicated that the reason they did not model effects on streamflow from the full 9.6 cfs was because it was an unrealistic operational condition—that they would never need that much water.[100] However, Mr. Bosley testified that Perpetua would need the full amount for instantaneous demand.[101] But without a model of the full requested amount, Perpetua cannot show that issuance of the permit will not conflict with the local public interest in maintaining sufficient streamflows in the EFSFSR to maintain fisheries habitat and fish passage.

There is also no way to know what the cumulative effects would be on groundwater levels and streamflow if they were to use the full water right,[102] or how flows will be impacted depending on whether surface or groundwater diversions are prioritized.[103] Although Perpetua claims that it will prioritize groundwater diversions over surface water withdrawals,[104] Mr. Stanaway testified that "[a]daptive management may require adjustments to the diversion rate by source during operations."[105] Neither Perpetua's application for 9.6 cfs nor any modeling performed by Perpetua, however, indicates what sort of conditions could or should be placed on the water right to ensure that streamflows in the EFSFSR are maintained to protect the local public interest.

Finally, as discussed more fully below, although Perpetua modeled the impacts to streamflow from a 1.37 cfs diversion rate, it never collected data or modeled the effects of such a withdrawal on fish habitat or fish passage of either this diversion rate or any other rate up to the full water right requested in their applications,[106] making it impossible to demonstrate that any

[99] Tr. at 946-47.
[100] Tr. at 951.
[101] Tr. 417
[102] Tr. at 949.
[103] Tr. at 952-54.
[104] Tr. 189-90, 220, 315
[105] Tr. at 220.
[106] Ex. 201.

amount of a water right will not conflict with the local public interest in maintaining fish habitat and passage. The Tribe's fisheries expert report states:

> Reductions in flow have been found to reduce foraging opportunities and growth, increase mortality by reducing available habitat, alter feeding behaviors and associated food webs, and often change stream temperatures from optimal conditions (NOAA 2021b). Additional effects to fish include, but are not limited to, changes in water quality and chemistry (NOAA 2017), hindered fish passage (Thompson 1972), increased mortality from density dependence, scouring of redds from increased anchor ice during winter low-flow months, and/or dewatering of redds during critical egg incubation months.[107]

As the application is currently written, water withdrawals may be sourced from storage, the EFSFSR, groundwater wells, or any combination thereof, and up to a continuous rate of 9.6 cfs without any boundaries or limits. None of the modeling provided by Perpetua accounts for the potential impacts to streamflow in the EFSFSR and resulting impacts to fish habitat and fish passage from an unbounded water right. "Operational flexibility" does not excuse Perpetua from demonstrating that their proposed water right will not conflict with the local public interest.

2. Perpetua's analysis illustrates that streamflow conditions in the EFSFSR will be extremely low during critical periods of fish occupancy and passage.

Using gage data at the EFSFSR above Sugar Creek from 2015 (the second lowest water year), Figure 13 of Perpetua's fisheries rebuttal report depicts the range of diversion rates and potential streamflow impacts from the proposed water condition.[108] According to Figure 13 and confirmed by Mr. Stanaway's testimony, the blue line represents the gaged streamflow of the EFSFSR from the top of the tunnel all the way downstream to the confluence of Sugar Creek minus the expected diversion rate, and the black line represents Perpetua's proposed minimum fish flow

[107] Ex. 201 at 4; *see also* Tr. at 1081.
[108] Tr. at 285; Ex. 63 at 3-17.

criteria of 6.6 cfs for that same section of the EFSFSR.[109] The intersection of the blue and black lines represents the point at which flows in the EFSFSR drop to the 6.6 cfs fish passage threshold.[110] According to the graph and Mr. Stanaway's testimony, that point of intersection occurs in late August.[111] In other words, by late August, streamflows drop below Perpetua's own proposed streamflow criteria for fish passage when fish are unquestionably in the system.

When asked about the discrepancy between his testimony and the figure in the Perpetua's expert fisheries rebuttal report regarding the month of when streamflows drop below Perpetua's fish passage criteria, Mr. Stanaway dismissed the "month and a week"[112] difference as unimportant, a "pittance of cfs there,"[113] and that "we are hovering at that line through the entire year or above."[114] A close examination of Figure 13, however, shows that the line does not just hover at or above 6.6 cfs between late August and late September—it appears to drop below that threshold at times during that critical period.

What is more, Mr. Stanaway also dismissed the possibility that a lower flow year would result in streamflows that intersect or drop below Perpetua's fish passage criteria even sooner than late August, maintaining that "it's too much conjecture…without looking at the data."[115] Perpetua, however, failed to model this very likely and real scenario despite data from a lower flow year (2021) being available. The gage data in Figure 13 were from the second lowest flow year on record. It is reasonable to assume that in a lower flow year, streamflows could drop below

[109] Tr. at 286-87.
[110] Tr. at 287.
[111] *Id.*
[112] Tr. at 288.
[113] Tr. at 290.
[114] Tr. at 289.
[115] Tr. at 291.

Perpetua's fish passage criteria even earlier in the year. Perpetua thus failed to provide a true and accurate picture of how the proposed water diversions will impact fish passage.[116]

Even in a high flow year, Perpetua's data (Figure 15 of Perpetua's fisheries rebuttal report) showed that the streamflows in the EFSFSR when the maximum allowable diversion rate was taken into account, could drop below Perpetua's fish passage criteria in September.[117] Mr. Stanaway, however, dismissed this characterization, maintaining that the figure reflects monthly data, and is not a constant monthly diversion rate, although admitting that an instantaneous diversion rate of 9.6 cfs may occur during that period.[118]

And finally, the flows dropping below Perpetua's proposed 6.6 cfs fish passage criteria threshold is also highly likely because Perpetua's simulated streamflows are monthly averages, and do not reflect the true daily variability in flows which drop lower than those presented.

3. Perpetua has not analyzed the effects from its proposed diversion to fish habitat, despite the high likelihood diversions will cause significant degradation to, and loss of fish habitat.

Perpetua has not demonstrated that its requested water right and proposed condition will maintain streamflow conditions in the EFSFSR to protect resident and anadromous fish. Reduced streamflows reduce fish habitat availability, stream ecosystems fish depend on, and impair fish passage, causing harm to fish species.[119] Reduced streamflows can also increase stream temperatures, which affect fish survival.[120] Furthermore, scientific literature has shown a relationship between streamflow and fish productivity, which is defined as the number of offspring

[116] Tr. at 290-91.
[117] Tr. at 291-92.
[118] Tr. at 292.
[119] Tr. at 1072.
[120] *Id.*

per adult spawner.[121] Specifically, the literature has demonstrated that fish productivity declines as streamflows decline.[122]

The Tribe's fisheries experts sought to understand the immediate effects of Perpetua's water withdrawals on fish habitat, and particularly on habitat in Meadow Creek.[123] After reviewing materials from the SDEIS, the Tribe's fisheries experts found it difficult to disentangle all the proposed mine actions from the actual water right.[124] They recognized that it was "probably going to be impossible to get precise estimates of fish habitat loss given the fact that there was missing information."[125] Despite the lack of information, the Tribe's fisheries experts were able to identify harmful effects to fish based on Perpetua's proposed water right using two evaluation methods.[126] The Tribe's fisheries experts' first analyzed how habitat would be impacted by assuming that the proportion of water removed from the stream would equate to the proportion of habitat affected.[127] Their second analysis used data collected by the U.S. Forest Service in Sugar Creek to relate flows to fish habitat using a metric called weighted usable area.[128]

The first analysis used the same assumption used by Perpetua's experts: that groundwater withdrawals would have an immediate and one-to-one impact on streamflow.[129] The Tribe's fisheries experts concluded that the full 9.6 cfs water withdrawal from groundwater wells hydraulically connected to Meadow Creek would "essentially remove all of the water from Meadow Creek," even during high flow periods.[130] Perpetua's own modeling seems to agree with

[121] Tr. at 1074.
[122] Tr. at 1073.
[123] Tr. at 1084.
[124] Tr. at 1083, 1084.
[125] Tr. at 1079.
[126] *Id.*
[127] Tr. at 1087-1088.
[128] Tr. at 1088.
[129] Tr. at 1089.
[130] Tr. at 1091.

this evaluation, as water withdrawals greater than 0.5 cfs within the Meadow Creek area caused their hydrologic model to crash.[131]

The Tribe's fisheries experts' second analysis, the Instream Flow Incremental Method Physical Habitat Simulation models, was used by the U.S. Forest Service in Sugar Creek to relate flows to fish habitat in Meadow Creek.[132] This analysis also used the same one-to-one groundwater-to-surface water impact assumption referenced above, and an additional assumption that spawning habitat and flows in Sugar Creek would be similar to spawning habitat and flows in Meadow Creek.[133] The Tribe's fisheries experts concluded that the water right application for 9.6 cfs water, which could be withdrawn from groundwater wells hydraulically connected to Meadow Creek, would reduce juvenile and adult spawning habitat in Meadow Creek by 80% and 90%, respectively.[134]

The Tribe's fisheries experts contend that to understand existing fish habitat conditions in Meadow Creek, habitat surveys similar to those cross-sectional stream surveys done in the downstream reaches of the EFSFSR by Rio ASE should be conducted.[135] Based on those cross-sectional stream surveys, hydraulic models should be constructed to understand what the flows and depths would be in the stream reach and then relate that information to fish habitat.[136]

Finally, with respect to habitat the Tribe's fisheries experts evaluated flow-specific productivity for Johnson Creek because of the lack of similar information for the EFSFSR watershed.[137] They found a significant relationship between productivity (i.e., Johnson Creek

[131] Tr. at 225.
[132] Tr. at 1091.
[133] Tr. at 1091-1094.
[134] Tr. at 1094.
[135] Tr. at 1095.
[136] Tr. at 1095.
[137] Tr. at 1134.

juvenile abundance to Johnson Creek adults) and average September flows.[138] Specifically, productivity declined as streamflows declined.[139]

4. Perpetua has not shown that there will be sufficient water to provide fish passage up the EFSFSR to Meadow Creek

In addition to habitat impacts, Perpetua's application for permit poses significant risk to fish passage through two reaches of the EFSFSR: the confluence of Sugar Creek upstream to the outlet of the proposed tunnel (hereinafter, the "downstream reach"), and through the proposed tunnel itself.

Fish passage through these two reaches is of paramount concern to the Tribe. The river network upstream provides spawning and rearing habitat for Chinook salmon, bull trout, steelhead, and Westslope cutthroat trout.[140]

Fish passage is also a central concern for the state of Idaho. In response to Perpetua's June 2022 request for technical assistance, IDFG and OSC sent an August 2, 2022, letter recommending volitional passage for all life stages of Chinook Salmon, steelhead, bull trout, and cutthroat trout from the EFSFSR and Sugar Creek confluence upstream of the EFSFSR past Perpetua's surface water point of diversion.[141]

In its 2022 request for technical assistance, Perpetua committed to undertake a number of studies on fish passage through the proposed tunnel and downstream reach. On July 11, 2023, Perpetua followed up with a letter to the Governor's Office of Energy and Mineral Resources that transmitted four of the studies—(1) a technical memorandum from BioAnalysts to Perpetua dated October 13, 2022; (2) technical memorandum from Rio ASE to Perpetua dated March 21, 2023

[138] Tr. at 1134.
[139] Tr. at 1134.
[140] Tr. at 894-895, 900-901.
[141] Ex. 206; Tr. at 306-07.

titled, "Stibnite Gold Project updated fish passage flows" (hereinafter, "Rio ASE (2023a)"); (3) technical memorandum from Rio ASE to Perpetua dated March 21, 2023 titled "Stibnite Gold Project fish passage evaluation" (hereinafter, "Rio ASE (2023b)"); and (4) December 9, 2022 technical memorandum from McMillen Jacobs to Perpetua titled "Supplemental tunnel hydraulic modeling" (hereinafter, "McMillen Jacobs (2022)").[142] The letter discusses fish passage criteria for adult Chinook Salmon and other species at 6.6 cfs,[143] and assured of fish passage at these flows, particularly through the proposed tunnel.

These studies do not, however, provide such assurance. As discussed below, the studies for the downstream reach only provide a measure of change in relative risk to fish passage through an already-degraded stretch. Additionally, modeling of the proposed tunnel shows that 95% exceedance flows with the applied-for water right and condition would be insufficient to meet applicable fish passage criteria. Taken together, Perpetua has not shown that fish will be able to pass the EFSFSR from the confluence with Sugar Creek up to Perpetua's proposed tunnel.

a. Perpetua has not shown that fish will be able to pass from the EFSFSR reach above the EFSFSR and Sugar Creek confluence to the tunnel entrance.

To evaluate fish passage downstream of the tunnel, Rio ASE began by modeling flows in the EFSFSR with and without the applied-for water rights with conditions at expected times of Chinook salmon, steelhead, and bull trout upstream passage. As shown in Table 5, below, this study, Rio ASE (2023a), found in relevant part that the 95% exceedance flow of 10.1 cfs would be reduced to 6.6 cfs Application for Permit and proposed OSC and IDFG conditions.[144] This

[142] Ex. 219 Attach. A-D; Tr. at 309-10.
[143] Tr. at 310.
[144] Ex. 219 Attach. B at 8 (Table 5).

reduction in the 95% exceedance flow would be at a minimum for the 15 years of the mine life and potentially for the life of the water right.

Table 5. Summary of Proposed 95% and 5% Daily Average Exceedance Discharge Values Based on 1997-2022 Data With and Without Water Rights Conditions Applied (cfs).

Chinook – Adult Upstream Passage			
Gage/Site Location	**95% w/out WR[1]**	**95% w/ WR**	**5%[2]**
Sugar Creek	7.5	7.5	40.5
EFSFSR US Sugar Creek (Tunnel Inlet)	10.1	6.6	57.4
EFSFSR DS Sugar Creek (Point of Quantification)	17.5	14.0	97.9
Steelhead – Adult Upstream Passage			
Gage/Site Location	**95% w/out WR**	**95% w/ WR**	**5%**
Sugar Creek	8.1	8.1	138.3
EFSFSR US Sugar Creek (Tunnel Inlet)	10.0	6.4	244.7
EFSFSR DS Sugar Creek (Point of Quantification)	18.0	14.4	383.0
Bull Trout – Adult Upstream Passage			
Gage/Site Location	**95% w/out WR**	**95% w/ WR**	**5%**
Sugar Creek	7.4	7.4	29.3
EFSFSR US Sugar Creek (Tunnel Inlet)	10.1	6.6	41.5
EFSFSR DS Sugar Creek (Point of Quantification)	17.5	14.0	70.9

Rio ASE then collected cross-sectional stream measurements on average every 7.5 feet along the downstream reach, and developed a hydrologic model to evaluate the water depth and velocity at these transects at different flow volumes.[145] Rio ASE evaluated that information using fish passage criteria for instream riffles in natural stream reaches set forth by the California Department of Fish and Wildlife, which provides a 0.9 foot depth criteria for adult Chinook Salmon.[146] For each transect, Rio ASE determined which would meet the passage criteria (and thereby be "in compliance") and which would not (and thereby be "out of compliance").[147]

Rio ASE used 6.6 cfs to model the streamflow through the reach and calculated a percent of the stream reach that was in compliance or not.[148] But importantly, 6.6 cfs is <u>not</u> a minimum

[145] Tr. at 1105.
[146] Tr. at 1101-1103.
[147] Tr. at 1106.
[148] *Id.*

streamflow to ensure fish passage. It is simply a single modeled flow derived from calculating the 95% exceedance at the relevant time of Chinook salmon and bull trout upstream passage, minus the proposed water right with the proposed condition.[149]

Rio ASE summarized the results of its study, Rio ASE (2023b), in Table 11.[150] The results show the relative difference between percentage of the reach meeting minimum depth criteria (0.9' for Chinook) at the existing 95% exceedance flows and those flows minus proposed withdrawals with conditions. The Tribe's experts, on review of Rio ASE (2023b), found that its authors did not fully apply the stated methodology. [151] The Tribe's fisheries experts reached out to Rio ASE with their concerns, then re-summarize the data.[152] Table 2 in Exhibit 201 shows the updated results,

[149] Tr. at 1106-1107.
[150] Ex. 219 Attach. C at Table 11.
[151] Further review of the literature cited by Rio ASE revealed that the original intent of the authors was to consider additional information to determine compliance for passage, including that for each transect, at least 25% of the total transect width must be above 0.9'and a continuous portion equaling at least 10% of its total width must be above 0.9' Tr. at 1106-1107.
[152] Tr. at 1109; Ex. 201 at Table 2.

which are not in dispute: a considerable decline in the percentages of the downstream reach that would remain in compliance to fish passage criteria—59% in compliance to just 46%.[153]

Reach	Conditions	Reach Length In Compliance (ft)	Reach Length (ft)	% Stream Length In Compliance
EFSFSR DS YPP	Existing	955.4	1616.5	59.1
EFSFSR DS YPP	Proposed	749.3	1616.5	46.4
EFSFSR DS Sugar	Existing	180.5	221.1	81.6
EFSFSR DS Sugar	Proposed	154.7	221.1	70
Sugar	Existing	283.5	831.6	34.1
Sugar	Proposed	283.5	831.6	34.1

The issue with Rio ASE (2023b) for purposes of this protest is not with the application of the methodology (which the Tribe's experts understand as a good faith mistake), but with what the methodology fundamentally says (and does not say) about fish passage. Rio ASE (2023b) gives two causes for concern about fish passage in the downstream reach. First, it shows that a significant increase in the percentage of the reach—more than half—will be out of compliance with the fish passage criteria.[154] Second, it does not provide a minimum flow necessary to ensure fish passage in the downstream reach. This was confirmed in testimony of Perpetua's expert witness from Rio ASE, Rob Richardson. When asked, "Does this evaluation allow[] us to determine a minimum stream flow for the reach below the tunnel that would guarantee passage for adult fish," Mr. Richardson unequivocally replied, "No."[155]

Feasible methodologies do exist to determine a minimum flow for fish passage in the downstream reach. The Tribe's experts provided two in their September 11, 2023 expert report,

[153] Tr. at 1110.
[154] *See* Ex. 201 (Table 2).
[155] Tr. at 760.

and which Mr. Kinzer explained in his testimony—the Thompson (1972) methodology used in a more limited way by Rio ASE, as well as a methodology used in Baxter (1961) that uses percentages of annual flow.[156] But Perpetua has not used these or similar methodologies to determine a minimum flow, or that allow for a full understanding of the effects of the proposed water right with condition on fish passage in the downstream reach.

5. Perpetua has not shown that fish will be able to pass the EFSFSR reach through the proposed tunnel.

As with the downstream reach, Perpetua has not provided assurance of fish passage through its proposed tunnel. Perpetua's supplemental modeling study of the tunnel, McMillen Jacobs (2022), bears this out. The study used a different fish passage criteria than that used by Rio ASE to evaluate the downstream reach—the National Oceanic Atmospheric Administration's ("NOAA") criteria specific to weir-type fish passage ways such as the proposed tunnel.[157] The NOAA criteria require 1 foot of water depth over weir crests to provide for adult Chinook passage, as well as water velocities below species' burst speeds (6.6 feet per second for bull trout, and 22 feet per second for Chinook).[158]

McMillen Jacobs (2022) found that a flow of 7.25 cfs would be the minimum necessary to maintain the 1' depth criteria for Chinook salmon.[159] The existing 95% exceedance with the water right and condition applied would amount to just 6.6 cfs—below even the bottom of the confidence interval shown in Figure 5.[160]

[156] Ex. 201 at 10; Tr. at 1111–1112.
[157] Ex. 47 at 3.
[158] Ex. 30 at 5.
[159] Ex. 47 at 12.
[160] Ex. 47 at Figure 5.

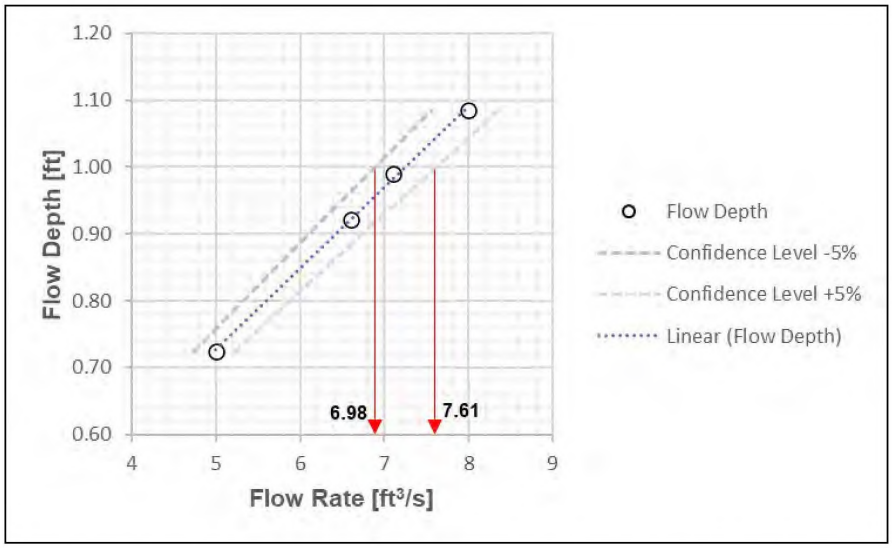

Figure 5. Case study results for estimating the flow rate corresponding to 1 foot depth

Thus, Perpetua's own study of tunnel modeling thus shows that the anticipated flows through the proposed tunnel will not meet stated design criteria for fish passage.

Perpetua appears to have misrepresented these studies' to the state of Idaho. In the July 11, 2023, letter to the Governor's Office of Energy and Mineral Resources, Perpetua wrote,

> Results from the CFD simulations indicate that a flow rate of 7.25 cfs is required to achieve the 1-foot weir flow depth over a 15-inch-wide weir. At 6.6 cfs (the bull trout and Chinook salmon 95% exceedance flow), the depth over the weir is slightly greater than the Chinook salmon minimum depth of 0.9 feet (California Department of Fish and Wildlife 2017). A total fishway flow of 5 cfs leads to a weir flow depth of approximately 5.8 ft/sec (below bull trout burst speed and other species' sustained speed), and a hydraulic drop from pool to pool of approximately 0.64 feet. At a 2-foot hydraulic drop and 19 cfs flow rate, maximum velocities are less than 6.6 ft/sec (bull trout burst speed). Hence, CFD modeling demonstrates that the simple modification of reducing the fishway weir notch width to 15 inches results in hydraulic conditions that are passable by Chinook salmon down to their 95 percent exceedance flow, and by the other three species of interest down to 5 cfs (well below their respective 95 percent exceedance flows).[161]

[161] Ex. 219 at 9.

Perpetua's representation about Chinook salmon passage through the proposed tunnel is pure misdirection. As discussed above and confirmed in testimony, McMillen Jacobs (2022) shows that the proposed tunnel will not meet the 1-foot depth criteria at anticipated flows of 6.6 cfs.[162] To get around this fact, Perpetua wrongly points to the 0.9 foot depth criteria taken from the California Department of Fish and Wildlife Guidance for natural streams as applicable to the tunnel. The misdirection occurs in the sentence. "At 6.6 cfs (the bull trout and Chinook salmon 95% exceedance flow), the depth over the weir is slightly greater than the Chinook salmon minimum depth of 0.9 foot (California Department of Fish and Wildlife 2017)."[163] The 0.9' criteria does not, however, apply to the weir-type fish passageway.[164]

At hearing, Perpetua doubled down on its error. Mr. Stanaway testified that he contributed to drafting the letter,[165] and that the attached studies formed the bases for Perpetua's assertion of fish passage at 6.6 cfs.[166] Mr. Stanaway testified that "stream flows are anticipated to be maintained above or very near to the 6.6 cfs rate that is demonstrated to be sufficient for fish passage in the hydraulic modeling of the tunnel and for fish habitat in the reach from the tunnel outlet to Sugar Creek."[167] He also testified that this statement in the report is supported by citation to McMillen (2022), Rio ASE (2023a), and Rio ASE (2023b) and confirmed that the statement includes upstream passage of the four species IDFG and OSC expressed concern for: adult Chinook Salmon, bull trout, steelhead, and cutthroat trout.[168]

[162] Tr. at 1174–78.
[163] Ex. 219 at 9-10.
[164] Tr. at 762.
[165] Tr. at 308-309.
[166] Tr. at 310.
[167] Ex. 63 at 3-18; Tr. at 311.
[168] Tr. at 311-12.

Neither the July 11, 2023, letter nor Mr. Stanaway's testimony is correct. McMillen (2022) clearly shows that Perpetua's anticipated flows during adult Chinook salmon passage through the proposed tunnel will not meet passage criteria for the species.

This is not an inconsequential error. The tunnel consists of a series of weirs, not just one which will be out of compliance. Moreover, redesigning the proposed tunnel to meet fish passage at anticipated flows will involve juggling a number of variables, not least of which will be to ensure slow enough velocities for bull trout while also providing sufficient depth for adult Chinook salmon. Most importantly, the error undermines a key assurance from Perpetua to the state of Idaho about one of the most significant, widely shared concerns about the project's effects on the public interest.

C. Perpetua has not satisfied its burden under Idaho Code § 42-203A(5) and IDAPA 37.03.08.40.04 of showing that there are factors or an overriding state or national need for the project that outweigh the local public interest in favor of the Application.

To demonstrate national support for the proposed Stibnite Gold Project, Perpetua's fact witness, Alan Haslam, testified that the proposed Stibnite Gold Project, if permitted, aims to produce "about 4.5 million ounces of gold and roughly a hundred—just under 150 million pounds of antimony, as well as—as well as some silver."[169] Mr. Haslam further testified that the Department of Defense has awarded Perpetua two grants "to assist [Perpetua] with permitting and construction readiness" in connection with production of antimony for which Mr. Haslam claims other potential sources in the United States are not "close to being able to be in production."[170]

Mr. Haslam's testimony appears to imply that Perpetua's proposed Stibnite Gold Project is both indispensable for U.S. military production purposes and that the expedited permitting of the project is endorsed by the Department of Defense. Mr. Haslam testified on behalf of Perpetua

[169] Tr. at 22.
[170] Tr. at 23.

as a fact witness, however, not as an expert on domestic or international antimony supply or its military or domestic applications and Perpetua provided no testimony from the Department of Defense or other evidence in the record to independently corroborate Mr. Haslam's claims regarding the nature and extent of the Department of Defense's purported interest in the Stibnite Gold Project. Perpetua has, therefore, not presented evidence of an overriding national need for the project.

To demonstrate state support for the proposed Stibnite Gold Project, Mr. Haslam testified to a 2018 bipartisan Joint Memorial adopted by the Idaho Legislature in support of expedited approval of the proposed Stibnite Gold Project.[171] The Joint Memorial does not express a position, let alone an overriding state need, regarding whether Perpetua's proposed project outweighs the state's local public interest in the preservation of minimum streamflows to protect "fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, transportation and navigation values, and water quality", memorialized in Idaho Code § 42-1501. Moreover, the Joint Memorial is a nonbinding measure without force and effect under Idaho law and, therefore, should not be considered as a basis for overriding other important public interest factors found in Idaho and federal law, including protection and restoration of ESA-listed fish in the Salmon River Basin.

Finally, Mr. Haslam's testimony suggested that Perpetua's proposed project enjoys overwhelming local support, citing to some local jurisdictions who signed a community agreement with Perpetua and submitted letters of support.[172] This is not an accurate characterization of community support for the proposed project. Local support for the project is decidedly mixed. Mr. Coriell testified for SSFS that the City of McCall declined to sign community agreements with

[171] Ex. 72.
[172] Tr. at 70-71.

Perpetua or submit letters of support for their project.[173] Moreover, any support that was expressed by local communities was given for the draft mine plan,[174] and there is no indication that these communities were focused on, or even understood the extent of, the proposed use of the public water resource at issue is this proceeding or how water diversions might impact the local public interest in fisheries, aquatic habitat, recreation, and aesthetic values. This mixed support for Perpetua's proposed mine plan certainly does not constitute a factor that should outweigh the local public interests in favor of Perpetua's water right applications.

Perpetua has therefore failed to meet its burden of showing that there are any factors that overweigh the local public interests at stake in favor of its applications.

D. Perpetua has not provided sufficient data and science to enable IDWR to determine whether issuance of the permit with the proposed condition will not conflict with the local public interest under the standards articulated in *Hardy v. Higginson*, IDAPA 37.03.08.045.01.e.iii, and Idaho Code § 42-203A(5).

1. Perpetua has not demonstrated that flows under its proposed condition will protect fish habitat or ensure fish passage in the EFSFSR.

Perpetua proposes a voluntary low flow restriction on diversions to be placed on water right 77-14378 as a condition of permit approval.[175] Perpetua maintains this water right condition is to minimize the impact Perpetua's water use has on fish habitat.[176] The flow condition provides: "Net diversions from the EFSFSR and groundwater under water rights 77-7122, 77-7285, 77-7293, 77-14378 shall not cause more than 20 percent depletion to the unimpaired streamflow in the EFSFSR below its confluence with Sugar Creek when unimpaired streamflow is less than 25 cfs.[177] For purposes of this condition: (1) Percent depletion is equal to net diversion divided by

[173] Tr. at 855-56.
[174] *See* Tr. at 70-71 (discussing support letters submitted for the supplemental draft environmental impacts statement).
[175] Ex. 14 at PRI0000119.
[176] Ex. 14 at PRI000014.
[177] Ex. 14 at PRI000014.

unimpaired streamflow; (2) Net diversion is the sum of groundwater and EFSFSR diversions minus discharge of treated water to the EFSFSR and its tributaries; (3) Unimpaired streamflow is defined as the gaged flow at Sugar Creek, plus the gaged flows at the EFSFSR above Sugar Creek, plus the net diversion from the EFSFSR and groundwater under water rights 77-7122, 77-7285, 77-7293, and 77-14378; (4) Calculations shall be based on running 3-day averages of net diversions and gaged stream flows; and (5) Diversion rate from the EFSFSR surface intake Point of Diversion shall not exceed 20 percent of the unimpaired EFSFSR streamflow below its confluence with Sugar Creek (point of quantification).[178]

Dr. Kaiser reviewed Perpetua's water rights applications and the associated impacts on stream flows on the EFSFSR, including Perpetua's proposed water right condition, in her expert report.[179] Dr. Kaiser's report concludes that Perpetua's water use will result in historically low flows in the EFSFSR, even with Perpetua's proposed condition, for 9 out of 12 months of the year.[180] Using data from the EFSFSR above Sugar Creek which is downstream of the proposed surface water point of diversion, Dr. Kaiser testified that in her report she calculated 95 percent exceedance flows (statistically likely low flows) from the monthly simulated stream flows that would both occur from mining and if the mine did not occur based on Perpetua's calibrated Stibnite Hydrologic Site model.[181] Dr. Kaiser explained that she included 95% exceedance flows using daily historic observations from the USGS gage, the associated impact if Perpetua were to use its full requested water right, and the impact of the full water right with the proposed condition when the flows are at those exceedance values.[182] She noted that, while she calculated exceedance values

[178] Ex. 14 at PRI000014.
[179] *See* Ex. 215.
[180] Tr. at 1031.
[181] *Id.*
[182] *Id.*

using 10.43 cfs instead of 9.6 cfs and used daily instead of monthly averages, she had verified that those differences did not affect the conclusion contained in her expert report.[183] During cross examination, Dr. Kaiser acknowledged that Perpetua would likely not use it's full water right continuously for 24-hours-a-day, seven days-a-week, but her analysis demonstrates instantaneous impact on the EFSFSR above its confluence with Sugar Creek, and nothing in the water right application or proposed condition would protect these instantaneous streamflow conditions.

Dr. Kaiser further testified to the conclusion in her expert report that Perpetua's simulated streamflow values in their SHSM model do not sufficiently capture low flow conditions that have been observed in the historical record.[184] She explained that Perpetua's representation of the low flow period in its modeling as occurring from November to February is not correct. Again, using the 2021 USGS gage data, which is the lowest water year on record, Dr. Kaiser testified that the low flow period in 2021 started at the end of August, not in November. She then performed a similar demonstrative exercise for 2015 and 2021, showing in both years the low flow period is not limited to November through February.[185] This supported analysis in Dr. Kaiser's expert report that showed that Perpetua's simulated no action SHSM model was not representative of historical conditions (Table 3) and highlighted that they did not evaluate the model throughout the year, which is a common practice in hydrology.[186] Dr. Kaiser also testified that Perpetua's modeling relies on monthly averages, which do not actually show the daily variation in streamflows around that average.[187] She opined that Perpetua's use of a monthly statistic, particularly during low flow

[183] Tr. at 1032-33.
[184] Tr. at 1034.
[185] Tr. at 1035.
[186] Tr. at 1037.
[187] Tr. at 1038.

conditions, are going to represent higher flow conditions than the true variability and exceedance probabilities that come from daily values.[188]

2. Perpetua's rationale for locating the point of quantification below the EFSFSR and Sugar Creek confluence does not align with Perpetua's stated purpose for the proposed condition—to protect stream flows in the EFSFSR, including upstream of Sugar Creek.

Perpetua's expert, Dan Stanaway, testified that the purpose of the proposed water right condition is "to limit diversions when stream flows are low [during] the time of the year most critical to number of fish species, so that stream flow is maintained in the stream and the function of the system is maintained for those fish species."[189] He added: "An important purpose of the proposed condition is to protect this passage in the East Fork, South Fork Salmon River."[190]

Perpetua's experts' testimony justifying the location of the proposed water condition's point of quantification, however, suggests a conflicting picture at odds with protecting stream flows in the EFSFSR for fish. Terry Scanlan testified that Sugar Creek is approximately a third of the flow in the EFSFSR below the confluence with the EFSFSR.[191] Mr. Scanlan explained that Perpetua chose to place the point of compliance below, rather than above, the confluence of the EFSFSR and Sugar Creek "because there could be impacts to Sugar Creek because there is dewatering for the West End Pit that's the Sugar Creek Drainage . . . [s]o to be all encompassing for the project, we went downstream in the project to make that our point of compliance. And so we're at 20 percent of the combined Sugar Creek and East Fork, and that's what we picked."[192]

[188] Tr. at 1038.
[189] Tr. at 281.
[190] *Id.*
[191] Tr. at 156.
[192] *Id.*

He added, "[i]f we had been upstream, it would have been a higher number. It would have been 25 or 30 percent, but it still gets us to the same place."[193]

Mr. Stanaway offered similar testimony, maintaining that "we are looking at the project site as a whole and . . . therefore a point of quantification below the impacted area would be the most applicable metric to assess impacts to the EFSFSR, South Fork Drainage as a whole." And although Mr. Stanaway admitted that that monitoring diversions as close to the point of diversion as possible is appropriate,[194] he dismissed as an "administrative burden" and "not a feasible situation because there could be…subbasin limitation from one diversion to another" the notion of having multiple points of compliance at Sugar Creek, the EFSFSR upstream of Sugar Creek, and Meadow Creek.[195]

During cross examination, Mr. Stanaway admitted that there is generally more streamflow as one travels downstream on the EFSFSR proportionally as a percentage, and therefore less flow impact (as a percentage) from proposed water diversions.[196] Specifically, Mr. Stanaway acknowledged that more streamflow impact can occur proportionally as a percentage upstream in Meadow Creek and the EFSFSR around Meadow Creek than at the point of quantification below the confluence of the EFSFSR and Sugar Creek.[197] This further highlights how the proposed point of quantification downstream is not sufficient to protect streamflows higher in the system.

Conflicting statements in Mr. Stanaway's hydrology rebuttal report also raise substantial doubts about the appropriateness of locating the point of quantification for the proposed water condition below the confluence of the EFSFSR and Sugar Creek. Mr. Stanaway's report states:

[193] Tr. at 156-57.
[194] Tr. at 294-295.
[195] Tr. at 295-296.
[196] Tr. at 282.
[197] Tr. at 283-84.

"As Yellow Pine and West End Pit dewatering and contact water management may affect stream flows between the tunnel inlet and the point of quantification, the proposed point of quantification below Sugar Creek provides the most comprehensive measurement point."[198] The same report, however, goes on to state: "Yellow Pine Pit and West End Pit dewatering are a *marginal* contribution to overall water supply" and the latter would "occur predominantly in the very tail end" of the mine life.[199]

In summary, Perpetua's proposed condition, by its own terms, is designed to protect fish and fish habitat in the EFSFSR, including upstream of Sugar Creek, during all life stages. Perpetua's experts' testimony pointing to the need to capture basin-wide impacts in placing the point of quantification below the confluence of Sugar Creek neither appropriately accounts for site-specific flow impacts on the EFSFSR above Sugar Creek nor adequately explains why the impacts of marginal dewatering from the Sugar Creek drainage must be quantified below its confluence with the EFSFSR.

3. Perpetua's proposed point of quantification obscures water withdrawal effects on the EFSFSR above its confluence with Sugar Creek.

To evaluate Perpetua's proposed condition's point of quantification, Dr. Kaiser testified that she analyzed in her report how the point of quantification and the associated withdraws would impact flows in the EFSFSR (Table 3).[200] Dr. Kaiser concluded in her report that "the addition of Sugar Creek stream flows at the point of quantification obscures the impact of Perpetua's water use on the EFSFSR."[201]

[198] Ex. 64 at 2-3.
[199] *Id.* (emphasis added)
[200] Tr. at 1025.
[201] *Id.* at 1028.

Dr. Kaiser testified that the proportion of flow the EFSFSR contributes to the total flow at the point of quantification is not consistent through time; it varies both within a single year and across multiple years.[202] Using demonstratives interpreting USGS gage data from the second lowest streamflow year on record (2015), Dr. Kaiser testified that the proportion of flow from the EFSFSR at the point of quantification below the confluence of Sugar Creek is not consistent through time; it can range from 45 percent up to 67 percent within a given year and can range across multiple years.[203] Dr. Kaiser then used a similar demonstrative using 2021 USGS gage data—the lowest water year on record—and USGS gage data for an average water year (2022) to testify that the proportion of flow contributed by the EFSFSR to Perpetua's proposed point of quantification is not consistent through time; even in an average water year EFSFSR flows can drop to 42 or 43 percent of the total contribution.[204]

Dr. Kaiser testified that these demonstrative examples underscore the analysis provided in her expert report that locating the point of quantification below the confluence of the EFSFSR and Sugar Creek inadequately accounts for the actual flows on the EFSFSR above Sugar Creek and, therefore, does not ensure those upstream EFSFSR flows are adequately protected when flows downstream at the point of quantification drop below 25 cfs. On average, the EFSFSR contributes 60% of the flow at the point of quantification and under this assumption, Perpetua's proposed condition does not maintain adequate flows in the EFSFSR above Sugar Creek, even when flows at the point of quantification are up to or above 31 cfs.[205] Dr. Kaiser further concluded that once the streamflow drops to proposed 23 cfs, the corresponding EFSFSR flows above the confluence of Sugar Creek drop below the historical minimum, assuming those flows are contributing 60

[202] *Id.*
[203] Tr. at 1026-1028.
[204] *Id.*
[205] Tr. at 1029-1030.

percent of the overall flow. Dr. Kaiser also testified that when the EFSFSR contributes a below-average flow of 55% at the proposed point of quantification, the proposed condition does not protect streamflows in the EFSFSR once the combined flows at the point of quantification are below the 25 cfs threshold. In fact, if Perpetua uses its full water right of 9.6 cfs, flows in the EFSFSR drop below the historical minimum when combined flows at the point of quantification drop below 34 cfs, let alone the 25 cfs threshold. Given the historic variability in flow contribution from the EFSFSR that Dr. Kaiser illustrated during the hearing, she concludes that Perpetua's proposed condition does not protect low flow conditions in the EFSFSR using the point of quantification below the EFSFSR and Sugar Creek confluence.[206] Perpetua's own hydrology expert conceded that, even with the proposed condition, flows in the EFSFSR could drop below 7 cfs.[207]

Based on her analysis, Dr. Kaiser recommended that any point of quantification for a water right condition should not be located below the confluence of the EFSFSR and Sugar Creek as currently proposed by Perpetua and should instead be located proximal to the point of diversion to allow evaluation of the direct impacts on the EFSFSR.[208]

Dr. Kaiser's expert recommendation is not extraordinary or even unreasonable as she noted in her report that "[i]n the Boise River Basin, the Water District 63 watermaster recently installed real-time monitoring equipment on all [Points of Diversion] from the Boise River to more accurately capture diversion rates."[209]

4. Perpetua's proposed condition double-counts water.

[206] *Id.*
[207] Tr. at 250.
[208] Tr. at 1031.
[209] Ex. 215 at 12.

As described by the Protestants' groundwater expert, Perpetua is double-counting their treated water discharges because the water is already accounted for at the gage, but Perpetua is also including it as part of their net diversions to calculate unimpaired streamflow.[210] If Perpetua is including their treated water discharges as part of their net diversions to calculate unimpaired streamflow because they do not anticipate that water will reach the summed gaged flow at the point of quantification, what assurance do the Protestants have that any water will reach the point of quantification?

5. IDFG and OSC did not endorse Perpetua's condition as fully protective of fish.

In 2022, Perpetua reached out to the Governor's Office of Energy and Mineral Resources ("OEMR") seeking IDFG's and OSC's technical review of their Application No. 77-14378, contained in a technical memo dated June 27, 2022.[211] This request resulted in an August 2, 2022, letter from OSC and IDFG to IDWR.[212] In their joint letter to IDWR, OSC and IDFG did not simply endorse Perpetua's proposed condition. Rather, they stated that "OSC and IDFG have determined that Perpetua's proposed measures will likely protect fisheries and aquatic habitat in the EFSFSR" but recommended that "[i]n addition to measures and draft water right conditions outlined in Perpetua's technical memo, [IDWR] consider developing water right conditions for 77-14378 that would ensure fish passage at the Project site such as:

> - Surface water diversions and infrastructure will not at any time impede the passage of any life stage of Chinook Salmon, Steelhead, Bull Trout, or Cutthroat Trout from the confluence of the EFSFSR and Sugar Creek upstream past the Point of Diversion.
> - Prior to water diversion and use, all Project fish screening must be installed per National Marine Fisheries Service criteria (see National Marine Fisheries Service. 2022.

[210] Tr. at 963.
[211] Ex. 206 at PRI0004700, PRI0004706.
[212] Ex. 206 at PRI0004698.

> NOAA Fisheries WCR Anadromous Salmonid Design Manual, NMFS, WCR, Portland, Oregon: https://media.Fisheries.noaa.gOv/2022-06/anadromous-salmonid-passaae-design-manual-2Q22.pdn.[213]

It should be further noted that Perpetua's June 27, 2022, and July 11, 2023, letters to OEMR both disclose that Perpetua itself did not believe that the condition would be protective of fish and allow it to maintain operations under all conditions:

> We are attaching the technical memo and associated proposed water right condition for IDFG and OSC review that describes restrictions to diversion that are protective of the resource and allow Perpetua Resources to maintain proposed operations under most streamflow conditions.[214]

It should also be noted that Perpetua's expert, Mr. Dan Stanaway, testified on cross-examination at hearing that he "cannot unequivocally say" that the proposed condition would provide year-round volitional passage in the EFSFSR for all life stages of each fish species upstream from the confluence of Sugar Creek to the point of diversion.[215] "There could be conditions where flows could be lower."[216]

On September 28, 2023, OSC and IDFG transmitted an updated technical memorandum from Perpetua regarding their proposed condition to IDWR with a cover letter.[217] The OSC and IDFG September 28, 2023, cover letter restated the same water right condition recommendations as those included in their original August 2, 2022, letter to IDWR—they recommended that IDWR impose additional conditions to ensure that Perpetua's water diversions will not impede fish passage from the confluence of Sugar Creek upstream past the point of diversion.[218] Consequently,

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[213] Ex. 206 at 1 (emphasis added).
[214] Ex. 206 at 3; *see also* Ex. 219 at 1 (emphasis added).
[215] Tr. at 308.
[216] Tr. at 308.
[217] Ex. 219a. Protestants received this letter for the first time on December 13, 2023, during the hearing. Tr. at 882-883.
[218] Ex. 219a. Protestants note that Exhibit 219a was not provided in response to discovery requests and Protestants were not provided the letter prior to the hearing. The Hearing Officer admitted the letter against Protestants' objections to admission of the letter as evidence. *See* Tr. at 882-883.

there is no evidence in the record that IDFG and OSC unequivocally supported or endorsed Perpetua's proposed condition as protective of fish.

6. Protestant Tribe explained the scientific analysis Perpetua still needs to complete to enable IDWR to issue water right conditions that protect the public interest in aquatic resources.

Ryan Kinzer and Michael Ackerman, the Tribe's fisheries experts, emphasized in their expert report dated September 11, 2023, that without more thorough scientific habitat evaluations, "the exact magnitude of [Perpetua's] water withdrawal impacts on fish is unknowable."[219] Mr. Kinzer further testified at hearing that "[t]here wasn't information available to us [to estimate fish habitat loss] in a way that we thought was going to allow us to really draw [a] conclusion."[220] Mr. Kinzer also summarized in his testimony at hearing, the additional data collection and science he and Mr. Mike Ackerman believe is needed to determine effects from Perpetua's proposed water right applications on fish.

For Meadow Creek, Mr. Kinzer testified that there are a number of different ways one could estimate the effects of Perpetua's water right applications on fish habitat. According to Mr. Kinzer, "[t]here's life cycle models that you can use. There's habitat suitability models. . . . [Y]ou could conduct an IFIM PHABSIM evaluation in Meadow Creek specifically if you wanted to get at the true relationship of flows to habitat in Meadow Creek."[221] Mr. Kinzer further testified that in order to conduct these various life cycle models, Perpetua would need to complete habitat surveys of Meadow Creek, such as the cross-sectional surveys Perpetua's contractor Rio ASE conducted for the EFSFSR downstream of Perpetua's proposed tunnel, with associated hydrologic

[219] Ex. 201 at 4.
[220] Tr. at 1079; *see also* Tr. at 1136.
[221] Tr. at 1094; *see also* Tr. at 1137.

models "to understand kind of what the flows and depth would be in the stream reach, velocities of flow, and relating that to actual habitat."[222]

For the EFSFSR reach between Perpetua's proposed tunnel and the EFSFSR's confluence with Sugar Creek, Mr. Kinzer testified that Perpetua could use the data they have already collected to estimate minimum stream flows for fish passage through the reach using the Thompson 1972 or Baxter 1961 papers.[223]

Finally, Mr. Kinzer and Mr. Ackerman noted in their September 11, 2023, expert report that Perpetua did not provide any information "on how proposed water withdrawals are expected to influence stream temperatures, particularly during summer and winter months, and in the context of climate change. Stream temperature outside of optimum temperatures or at sub-lethal levels can reduce salmonid growth, increase stress, affect reproduction, or create disease problems (EPA 2003)."[224] During his testimony, Mr. Kinzer stated that "temperature thresholds, that would eliminate or reduce water diversions as these streams start to approach these temperature thresholds for fish" should be considered.[225] Mr. Kinzer also recommended at hearing that Perpetua complete a flow to fish productivity analysis to better understand the effect of water withdrawals on fish.[226]

E. Perpetua has not demonstrated that its proposed project will meet mandatory Idaho water quality standards.

Perpetua has failed to meet their burden demonstrating their proposed project or their water withdrawals will meet mandatory Idaho water quality standards for arsenic, antimony, mercury,

[222] Tr. at 1095.
[223] Tr. at 1111-1113.
[224] Ex. 201 at 3.
[225] Tr. at 1128-1129.
[226] Tr. at 1135-1136.

and water temperature.[227] Perpetua's expert water quality report briefly mentions models (i.e., the Stream and Pit Lake Network Temperature model, the Site-Wide Water Chemistry computer model, and the Stibnite Gold Project Water Management Plan) that Perpetua used to evaluate the proposed ModPRO2 mine plan's effect on 75 water quality parameters, including those four referenced above.[228] However, none of these models were introduced into the administrative record. Furthermore, Doug Durbin, Perpetua's water quality expert, testified that he never reviewed Perpetua's water right applications when writing his expert report.[229] Based on such limited information and a flawed water quality report, IDWR simply cannot evaluate whether Perpetua's proposed project or the project's water withdrawals will meet mandatory Idaho water quality standards. As a result, IDWR cannot be certain that Perpetua's project when complete will not violate Idaho water quality standards and is, therefore, precluded from issuing a permit without a water right condition ensuring future compliance with Idaho water quality standards.[230]

F. IDWR cannot rely on federal agencies to impose water quality conditions or quantity conditions to resolve conflicts with the public interest, under Hardy v. Higginson.[231]

The plain language of Idaho Code § 42-203A provides that IDWR has the responsibility to review water rights applications to ensure that issuance of a permit does not conflict with the local public interest. "As recognized by the legislature, this definition intentionally vests in the director of IDWR the authority to balance local public interest values when considering a water right application."[232] "[T]he determination of which local public interests are impacted and balancing those impacts is left to the sound discretion of IDWR."[233] Any suggestion by Perpetua, therefore,

[227] Ex. 58 at 2.
[228] Ex. 58 at 3-5.
[229] Tr. at 592.
[230] *Shokal v. Dunn*, 109 Idaho 330, 452 (1985).
[231] *Hardy v. Higginson*, 123 Idaho 485, 491–92 (1993).
[232] Final Order Denying Application for Permit, *in the Matter of Application for Permit No. 13-7697 in the Name of Twin Lakes Canal Co.* (Oct. 18, 2012), at 5 (*citing* Statement of Purpose, H.B. 284 (2003)).
[233] *Chisholm v. Idaho Dep't of Water Res.*, 142 Idaho 159, 164 (2005).

that IDWR can, in issuing these water right permits, rely on other federal or state agencies that have primary jurisdiction over the protection of ESA-listed fish species or water quality standards[234] is "an impermissible, wholesale abdication of the director's responsibilities related to the local public interest."[235]

V. CONCLUSION

Perpetua did not satisfy its burden of proof for its water right applications with respect to the public interest factor set forth in Idaho Code § 42-203A(5)(e). Perpetua did not demonstrate that its applications are either in the local public interest because they will protect aquatic resources and their habitat, recreation, and aesthetic values or that there are factors that overweigh the local public interest in favor of the project."[236] Perpetua also failed to provide sufficient information for IDWR to adopt Perpetua's water right condition or develop and issue water rights conditions that protect the public interest in compliance with the standard in *Hardy v. Higginson*.[237] Perpetua's applications, therefore, should be denied.

DATED this 31st day of January 2024.

/s/ Michael A. Lopez
Michael A. Lopez
Attorney for Nez Perce Tribe

/s/ Amanda W. Rogerson
Amanda W. Rogerson
Attorney for Nez Perce Tribe

/s/ Julia S. Thrower
Julia S. Thrower
Attorney for Save the South Fork Salmon,

[234] Tr. at 638 (discussing the likelihood that NOAA fisheries and Fish and Wildlife Service would have additional measures put in place to protect fish).
[235] Final Order Denying Application for Permit, *in the Matter of Application for Permit No. 13-7697 in the Name of Twin Lakes Canal Co.* (Oct. 18, 2012), at 6.
[236] *Shokal v. Dunn*, 109 Idaho 330, 339 (1985).
[237] *Hardy v. Higginson*, 123 Idaho 485, 491–492 (1993).

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 31st day of January 2024, I caused a true and correct copy of the foregoing document to be served by email, addressed to the following:

Idaho Department of Water Resources
Western Regional Office
2735 W. Airport Way
Boise, ID 83 705
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