

COMMENTS OF THE PEBBLE LIMITED PARTNERSHIP
ON EPA REGION 10's REVISED PROPOSED DETERMINATION PURSUANT TO
SECTION 404(c) OF THE CLEAN WATER ACT
REGARDING THE PEBBLE DEPOSIT AREA, SOUTHWEST ALASKA

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I. Introduction

These comments are submitted on behalf of the Pebble Limited Partnership (“PLP”) in response to the U.S. Environmental Protection Agency (“EPA”) Region 10’s May 25, 2022 Revised Proposed Determination (“Revised Proposed Determination”) for the Pebble Deposit Area located in Southwest Alaska (“Pebble Deposit”) that was issued pursuant to Section 404(c) of the Clean Water Act (“CWA”). As explained in detail in these comments, EPA should withdraw its Revised Proposed Determination.

The Revised Proposed Determination is simply the latest in a long history of attempts by EPA to prohibit any kind of mining in the Bristol Bay area. EPA has been opposed to development of the Pebble Project since well before it conducted any scientific study of the area. Indeed, in 2014, EPA took the unprecedented step of issuing a Proposed Determination (the “2014 Proposed Determination”) before PLP had even filed a CWA permit application. When the pressures of litigation finally forced the agency to pause its evaluation of that 2014 Proposed Determination, PLP filed a permit application pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 with the U.S. Army Corps of Engineers (“USACE” or the “Corps”) Alaska District (“District”) for the purpose of developing a copper-gold-molybdenum porphyry deposit, which PLP subsequently updated during the application process (the “2020 Mine Plan”). Yet, rather than undertaking any objective evaluation of the proposed project, EPA issued the Revised Proposed Determination, making clear that its goal is to prevent *any* development of the Pebble Deposit, rather than to prevent any adverse effects to local or regional fish populations or fisheries.

The scaled-down 2020 Mine Plan advanced an environmentally sound mining proposal that would benefit the local and national economy. Indeed, PLP put significant resources into project design elements that would minimize potential impacts, including:

- The project footprint is smaller and more compact than prior conceptual plans;
- There are no major mine facilities in the Upper Talarik/Kvichak drainage;
- The tailings storage facility has enhanced safeguards, including a flow through design to prevent the build-up of water in the facility and added structural stability to the embankments. Additionally, pyritic tailings would be lined for storage during operations and returned to the pit at closure; and
- There is no use of cyanide in the mine operation.

These are just a few examples of mitigation and design features proposed by PLP to minimize the impacts of the Project, which were never considered in the hypothetical mine scenarios EPA evaluated when it first attempted to veto the Project in 2014.

USACE nonetheless denied PLP’s permit application on November 25, 2020. PLP filed an administrative appeal of the permit denial with the USACE Pacific Ocean Division on January 19, 2021, and that appeal remains pending. Despite there being no indication yet from USACE that it intends to issue a Section 404 permit, EPA has taken the unprecedented step of

issuing the Revised Proposed Determination to foreclose any possible development of the Pebble Deposit before USACE even has a chance to evaluate PLP's appeal.

At a time when the country is facing an increased demand for the very minerals that the Pebble Project can provide, EPA is taking this step based on nothing more than speculative concerns. The global energy market continues to change, with an increased push to move to renewable energy sources and replace internal combustion engine vehicles with electric and conversion vehicles. Renewable energy systems and electric vehicles utilize significantly more copper than conventional power and combustion engine vehicles. And the existing power infrastructure is rapidly deteriorating and in desperate need of modernization. Copper is vital to upgrading the electrical grid and is a key component in the clean energy technologies needed to respond to the global climate agenda. The current push to improve the energy infrastructure that is the backbone of the US economy will require minerals that are increasingly difficult to obtain. PLP is poised to help fill this need.

Against this backdrop, and for the reasons outlined below, there is no justification for EPA to proceed with the Revised Proposed Determination.

First, 404(c) action is unwarranted because it is premature. The Clean Water Act, EPA regulations, and past practice confirm that EPA's veto authority is limited to instances where USACE has indicated that it intends to issue a permit. USACE has not yet done so here, and has in fact denied PLP's permit application, which PLP is currently appealing. EPA retains its veto authority if the PLP permit decision is remanded to the District and USACE announces its intent to issue the permit, or if a new permit application is submitted and USACE announces its intent to issue that permit. But pursuing a veto in the absence of such an indication by USACE is contrary to law and EPA precedent.

Moreover, the regulations and EPA policy require that EPA exhaust specific measures during the permitting process to voice and address its concerns before issuing a Section 404(c) veto. EPA has not exhausted these steps here. Thus, EPA cannot invoke Section 404(c) the permit decision is remanded and EPA exhausts all of its elevation procedures. Given these legal and procedural deficiencies, EPA must withdraw the Revised Proposed Determination.

Second, EPA's proposal to restrict future development of the Pebble Deposit is legally and technically unsupportable. Congress only granted EPA the authority to prohibit or restrict *specific disposal sites* defined in a permit. Congress has never granted EPA the authority to set aside large areas of land, nor do EPA's regulations contemplate such authority. Despite this lack of authority, EPA now proposes to restrict disposal under Section 404(c) in a "disposal site" that is *309 square miles*. The 309-square-mile area proposed for restricting mining is over 23 times *larger* than the 2020 Mine Plan.¹ Thus, EPA's proposal does not restrict a *specific* disposal site. In fact, it is 66 times larger than the largest site designated in any prior Section 404(c) action. And beyond being legally indefensible, EPA's proposal is technically indefensible. The environmental impacts associated with the 2020 Mine Plan are significantly smaller than those

¹ See USACE, *Pebble Project Final Environmental Impact Statement* (July 2020) ("FEIS") (mine site of "8,391 acres of land").

predicted for the hypothetical scenarios assessed by EPA in the 2014 Proposed Determination. Yet, somehow, the area of restriction proposed by EPA in the Revised Proposed Determination has actually *grown* by 40 square miles. EPA does not explain how such reduced impacts justify imposing restrictions that are even larger and more untethered to the 2020 Mine Plan.

It is thus clear that EPA did not propose restrictions that were tailored to avoid any demonstrated impacts to local or regional fish populations or fisheries. Instead, motivated by a desire to stop any development of the Pebble Deposit, EPA chose to simply identify the broadest possible area where mining activity could occur and set it aside to preclude any future development, whether contemplated by PLP's permit application or not.

Third, under Section 404(c), EPA can only restrict disposal in specific waterbodies where EPA can demonstrate "that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas." 33 U.S.C. § 1344(c). No such demonstration has been made in the Revised Proposed Determination. EPA has not quantified any impact of mineral development at the Pebble Deposit on fish populations or fisheries, much less demonstrated the significance of any such effect on fish populations or fisheries. Instead, EPA states that mineral development at Pebble "could have" unacceptable effects. For example, EPA lists a range of factors that can impact the value of fish habitat, but notes that "because these considerations are impossible to predict with precision, a precautionary approach that maintains habitat structure and function is warranted."² In other words, EPA does not know and cannot determine what habitat is actually important to the fisheries, but is proposing to set aside the entire area from development just in case this impact is important and just in case the 2020 Mine Plan would cause such an impact that rises to the level of being unacceptable. But EPA does not have authority to set aside 309 square miles of state-owned land based on speculation and "precaution;" it is statutorily required to show that there "will" be an adverse effect, and that such an effect "will" be unacceptable. If the actual aquatic resource impacts cannot be adequately assessed based on the current data, EPA must generate new data that demonstrates actual unacceptable adverse impacts to fish populations or fisheries before it can pursue any 404(c) action.³

EPA has utterly failed to justify any action under 404(c), much less this extreme action of setting aside 309 square miles of state-owned land. For the reasons outlined more fully below, EPA should withdraw the Revised Proposed Determination and refrain from any further action under 404(c) with regard to the Pebble Deposit.

² Revised Proposed Determination at B-5.

³ PLP reserves the right to submit additional materials to supplement and support these comments.

II. Background

A. The Revised Proposed Determination Is the Result of a Long EPA Anti-Pebble Campaign

Although the Proposed Determination has been “revised,” the new document repeats many of the fundamental flaws of the 2014 version. EPA does not hide that it relies on its previous findings. It admits that it has been studying potential mining of the Pebble Deposit “for nearly two decades,” that the Revised Proposed Determination “is based upon this extensive record of scientific and technical information,”⁴ and that the Agency “continues to believe” the conclusions it reached in 2014.⁵

But the 2014 Proposed Determination was corrupted by bias, prejudice, collusion with anti-Pebble opponents, and inadequate scientific support. Ultimately, it reached a predetermined outcome based on a process EPA manipulated. It is thus not surprising that, in the Revised Proposed Determination, EPA reached essentially the same conclusions it did in 2014; both documents reflect the culmination of a years-long campaign within the Agency to kill the Pebble Project. EPA’s blatant bias and wrongdoing from the earlier process is evident throughout the Revised Proposed Determination.

Prior to issuing the 2014 Proposed Determination, EPA Headquarters and Region 10 held countless closed-door political advocacy meetings and shared hundreds of communications with anti-Pebble activists. These contacts were part of a much larger scheme, which began when EPA decided to veto the Pebble Project and to work with these activists to obtain the political cover necessary to defend their decision. As far back as 2009, a Region 10 ecologist, Phil North, who would later become a technical lead for the Bristol Bay Watershed Assessment (“BBWA”), wrote to other EPA officials concerning the agenda for EPA’s annual mining retreat. North wrote: “As you know, I feel that both of these projects [the Chuitna and Pebble mines] merit consideration of a 404C veto.”⁶ North’s “presentation outlined his intent to advocate for a preemptive veto before PLP submitted a permit application.”⁷ North then told his colleagues: “We should begin to identify the information needed for a review or [*sic*] 404(c) and begin to collect that information.”⁸ Region 10 showed interest in North’s plan, with one EPA employee, Mary Thiesing, suggesting that they “approach it as though there will be a 404(c)...”⁹ North and Thiesing were not alone. In sworn testimony, EPA officials testified that multiple leaders within Region 10, including Michael Szerlog, manager of the Aquatic Resources Unit, and Richard

⁴ *Id.* at ES 1.

⁵ *See, e.g., id.* at ES 9.

⁶ Ex. 1, The Cohen Group, *Report of An Independent Review of The United States Environmental Protection Agency’s Actions In Connection With Its Evaluation of Potential Mining In Alaska’s Bristol Bay Watershed* at 38 (Oct. 6, 2015) (“Cohen Report”).

⁷ Staff of H. Comm. on Oversight & Gov’t Reform, 114th Cong., *The U.S. Environmental Protection Agency’s Unprecedented 404(c) Action in Bristol Bay, Alaska* at 7 (2015) (“House Oversight Report”), <https://republicans-oversight.house.gov/wp-content/uploads/2015/11/2015-11-04-JC-CL-JJ-to-McCarthy-EPA-Bristol-Bay-due-11-181.pdf>.

⁸ *Id.*

⁹ *Id.* at 8.

Parkin, deputy director of the Office of Ecosystems, Tribal, and Public Affairs, were in favor of invoking 404(c) to block Pebble before the Agency had completed any scientific analysis.¹⁰

Knowing that 404(c) vetoes were rare and highly politicized,¹¹ EPA covered up its role in instigating the Section 404(c) process. EPA began by enlisting Jeff Parker, an anti-mine activist and attorney for several Alaska Native Tribes. Both the U.S. House Oversight Committee and EPA's own Office of Inspector General have concluded that in January 2010, North helped Parker draft a petition to EPA, signed by Parker's clients, requesting that the Agency initiate a 404(c) veto of the Pebble Project (the "Tribal Petition").¹² On May 21, 2010, Parker sent the Tribal Petition to EPA. EPA has long touted this Tribal Petition as the impetus for its decision to initiate a Section 404(c) veto of the Pebble Project.

At the very same time that North and Parker were drafting the Tribal Petition, EPA officials were crafting the Agency's veto strategy, all with Parker's assistance. In early 2010, before the Tribal Petition or any scientific analysis, EPA started drafting a policy document that outlined its options for a veto (the "Options Paper").¹³ Parker sent several ideas to North and others at EPA as they drafted this paper, several of which were adopted by EPA.¹⁴ In the end, the Options Paper read: "Region 10's Aquatic Resources Unit (ARU) believes that [the already available] information, as it relates to Bristol Bay and its watersheds, is sufficient to make a 404(c) determination now," and that "[w]aiting to make the determination does not seem necessary or a prudent use of anyone's resources."¹⁵ And Richard Parkin admitted that in a Region 10 briefing, he was "viewing [the Options Paper] as a background piece but" in his "pitch" he would be "going right back to a recommendation for option 3" – initiating a preemptive veto.¹⁶ Region 10 reached this conclusion despite there being no permit application and no scientific analysis of the project.

¹⁰ See, e.g., Deposition of Michael Szerlog at 76:23-77:18, *Pebble Ltd. P'ship v. EPA*, Case No. 3:14-cv-00171-HRH (D. Alaska Apr. 12, 2016) (admitting favoring using 404(c) on Pebble by 2010); Deposition of Phillip North at 91:14-92:2, *Pebble Ltd. P'ship v. EPA*, Case No. 3:14-cv-00171-HRH (D. Alaska Mar. 30, 2016) (indicating that Richard Parkin began supporting using 404(c) on Pebble by 2009 or 2010).

¹¹ Cohen Report at 42.

¹² House Oversight Report at 9-10; EPA Office of Inspector General, *EPA's Bristol Bay Watershed Assessment: Obtainable Records Show EPA Followed Required Procedures Without Bias or Predetermination, but a Possible Misuse of Position Noted*, Report No. 16-P-0082 at 15 (Jan. 13, 2016).

¹³ Cohen Report at App-91 to App-98.

¹⁴ House Oversight Report at 12.

¹⁵ Cohen Report at App-93, App-95.

¹⁶ *Id.* at 40; H. Comm. on Science, Space & Technology, Hearing - *Examining EPA's Predetermined Efforts to Block the Pebble Mine, Part II*, 114th Cong., Documents for the Record at 97 (2016) ("Science Committee Documents"), <https://docs.house.gov/meetings/SY/SY00/20160428/104889/HHRG-114-SY00-20160428-SD003.pdf>.

EPA then began to lay the groundwork for a veto. EPA produced a budget document for Fiscal Year 2011, calling for the requisite funds to “[i]nitiate the process and publish a CWA 404(c) ‘veto’ action for the proposed permit for the Pebble gold mine.”¹⁷ It then informed other relevant agencies of its decision. EPA prepared to brief the U.S. Fish and Wildlife Service (“FWS”) on its plan. In an internal FWS briefing document, it explained that EPA was seeking their support “when they use Section 404(c) of the Clean Water Act” to “prevent the [Pebble] project from receiving the necessary federal permits to develop a mine in the Nushagak and Kvichak watersheds.”¹⁸

While EPA had obtained the political cover necessary for a veto by recruiting the help of federal agencies and Parker, it recognized the need for scientific cover as well. Thus, EPA embarked on a campaign to solicit scientific data, policy suggestions, and briefings from other anti-Pebble activists. For example, throughout 2010, Trout Unlimited worked closely with EPA, preparing several briefings and offering the Agency considerable information about 404(c), including information on prior EPA vetoes.¹⁹ Then, after The Nature Conservancy (“TNC”) issued a Bristol Bay Ecological Risk Assessment, EPA repeatedly requested background, briefings, and more information on the study so it could use it as the basis for the Agency’s own analysis.²⁰ EPA even went so far as to invite several anti-Pebble scientists from TNC to meet with EPA and its contractors to discuss EPA’s “own risk assessment,” even though the Agency had not yet publicly disclosed its plan to conduct such an assessment.²¹ EPA continues to cite TNC studies in the Revised Proposed Determination.²²

Armed with all of this material from anti-Pebble sources, EPA sought to minimize its “litigation risk” by launching its own process of “information gathering and analysis...in order to support a decision to formally initiate...404(c).”²³ Thus, in February 2011, EPA announced its decision to conduct the BBWA to gather the information it would need to justify its veto. To achieve their goal, and because Pebble had not submitted a permit application to USACE, EPA designed three “hypothetical” mine scenarios that used outdated mining practices and then evaluated whether these contrived scenarios would cause adverse environmental impacts.

Designing a flawed analysis was not enough, however. EPA decided it also had put the right BBWA leaders in place. For example, the Agency appointed Richard Parkin to be the “team leader.”²⁴ Parkin was not an objective and disinterested leader. Indeed, in February 2011, as EPA was rolling out the BBWA, Parkin met with members of an Alaska Native Tribe and

¹⁷ Cohen Report at 45.

¹⁸ *Id.* at 44, App-111.

¹⁹ *Id.* at App-14.

²⁰ *Id.* at App-15 to App-16.

²¹ *Id.* at App-15.

²² *See, e.g.*, Revised Proposed Determination at 8-27 (citing TNC-published 2013 study by C. Woll and D. Albert titled, *A Preliminary Classification and Mapping of Salmon Ecological Systems in the Nushagak and Kvichak Watersheds, Alaska*).

²³ Cohen Report at 45, App-103.

²⁴ House Oversight Report at 5.

admitted to them that “while a 404c determination would be based on science – *politics are as big or bigger factor.*”²⁵

Parkin and North recruited like-minded authors. For example, Phil Brna, an FWS employee, co-authored a major appendix to the BBWA, despite previously expressing his excitement at the possibility of a Pebble veto, stating: “[t]his [*i.e.*, a decision barring Pebble] is going to happen and it’s going to get bloody. I am looking forward to it!”²⁶ The Revised Proposed Determination cites Brna’s work in several places.²⁷ Likewise, Alan Boraas, who conducted tribal outreach for the BBWA and authored the appendix on Traditional Ecological Knowledge, drafted several anti-Pebble Op-Ed pieces, concluding that “indigenous resistance” would kill the Pebble Project, and reflecting his view that the mine would result in “a few floaters in your salmon streams and a little mercury in your wild salmon.”²⁸ The Revised Proposed Determination also cites Boraas’s work throughout.²⁹

Finally, a draft of the BBWA incorporated and appended two anti-Pebble studies authored by Ann Maest. Maest attended several meetings with key EPA decision-makers on behalf of Pebble project opponents as part of the anti-Pebble campaign.³⁰ EPA relied on her work despite her overt hostility to Pebble. But Maest’s work was not just biased, it was unreliable. During the preparation of the BBWA, it became well known that Maest had admitted to submitting inaccurate expert reports in environmental litigation against Chevron in Ecuador beginning in 2006. *See* Witness Statement of Ann Maest ¶¶ 4, 9, 11-12, 27, 38-42, *Chevron Corp. v. Donziger*, Case No. 1:11-cv-00691-LAK (S.D.N.Y. filed Apr. 12, 2013); *id.* ¶ 50 (“I disavow any and all findings and conclusions in all my reports and testimony on the Ecuador Project.”). Maest’s wrongdoing in Ecuador was public knowledge when EPA relied on her work, but as public pressure mounted, EPA withdrew formal references to her work from the final BBWA “because accusations of fraud in another matter against Dr. Maest led to questions concerning the potential for fraud in” the studies relied upon by EPA.³¹

Throughout this process, EPA communicated hundreds of times with anti-Pebble campaign leaders and scientists to share information, technical studies and other intelligence relevant to EPA’s 404(c) strategy.³² For example, in April 2012, EPA hosted several anti-mine scientists with the purpose of “coordinat[ing] science research related to the fisheries of Bristol Bay and their relation to the” BBWA.³³

²⁵ Science Committee Documents at 121.

²⁶ Cohen Report at 44.

²⁷ *See, e.g.*, Revised Proposed Determination at 8-4.

²⁸ Cohen Report at 51 n.328 (citing Alan Boraas, *Murkowski risks salmon for gold mine*, Anchorage Daily News (Dec. 1, 2005)).

²⁹ *See, e.g.*, Revised Proposed Determination at 8-4.

³⁰ *See* Cohen Report at 55 n.355, 55 n.357, App-15, App-17.

³¹ EPA, Response to Peer Review Comments on the May 2012 and April 2013 Drafts of *An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska* at 49-50.

³² Cohen Report at 33-34, App. C.

³³ *Id.* at App-17.

In July 2014, EPA issued the 2014 Proposed Determination, relying on its conclusions in the final draft of the BBWA to give it the scientific cover it needed to fulfill its purpose of precluding any development of the Pebble Deposit. Despite the fundamental flaws and bias permeating the BBWA and 2014 Proposed Determination, the Revised Proposed Determination continues to tout these documents. The Revised Proposed Determination contains well over 100 citations to the BBWA, and where EPA does not explicitly cite the BBWA, it relies heavily on the same biased studies underlying the 2014 Proposed Determination. Indeed, the majority of the references are identical between the 2014 and Revised Proposed Determinations.

B. Every Independent Review of EPA’s Conduct Has Indicated that EPA Bias Infected the Outcome of the 2014 Proposed Determination

In 2014, Pebble retained Former U.S. Congressman, Senator, and Secretary of Defense William Cohen to conduct an independent review of EPA’s conduct with respect to the preparation of the BBWA and the 2014 Proposed Determination. Secretary Cohen served as both a Republican Congressman and the Secretary of Defense in a Democratic Administration. Thus, Secretary Cohen was selected for this review because of his unimpeachable reputation for independence, impartiality and credibility.

With the assistance of a preeminent law firm, Secretary Cohen launched his independent review. The Cohen team reviewed over 42,500 documents from multiple federal agencies and interviewed more than 60 witnesses, including former EPA employees.³⁴ Ultimately, Secretary Cohen issued a comprehensive report totaling 176 pages, including 618 footnotes documenting every factual statement in the report. Based on the conduct outlined above, plus additional evidence, Secretary Cohen concluded that his investigation “raise(s) serious concerns as to whether EPA orchestrated the process to reach a predetermined outcome; had inappropriately close relationships with anti-mine advocates; and was candid about its decision-making process.”³⁵ Secretary Cohen further stated that he had “concerns about various statements and actions by EPA suggesting an intent to invoke Section 404(c) even before it conducted an environmental assessment.”³⁶ Notwithstanding these findings, EPA has continued to rely on the BBWA and the 2014 Proposed Determination.

Secretary Cohen was not the only reviewer to conclude EPA acted inappropriately. In November 2015, the House Committee on Oversight and Government Reform issued a report following its lengthy investigation of EPA’s conduct. It concluded that blocking the Pebble Project was the goal all along: “EPA planned to halt mining activity in Bristol Bay well before receiving petitions from local tribes that urged EPA to take action. EPA’s claim that it took action under Section 404(c) in response to the tribal petitions is not true.”³⁷

And, in November 2014, after PLP sued EPA alleging the Agency violated the Federal Advisory Committee Act, a statute designed to ensure that special interests do not hijack agency decision-making processes to produce biased studies, the district court in Alaska found that PLP

³⁴ *Id.* at 4-5.

³⁵ *Id.* at ES 8.

³⁶ *Id.* at 2.

³⁷ House Oversight Report at 5.

had demonstrated a likelihood of success on its claims and granted PLP a preliminary injunction preventing EPA from taking any further action to veto the project until it adjudicated the merits of the case.³⁸ Indeed, at every turn, the court indicated its agreement with PLP, for example, denying EPA's motion to dismiss the case, finding that PLP had sufficiently alleged its claims, including making specific allegations of work by the various alleged advisory committees in drafting memoranda for the EPA, attending meetings that the EPA called and chaired, and providing advice and recommendations to the EPA.³⁹ Ultimately, EPA was forced to settle the litigation and permit PLP to file its Section 404 permit application.

As this history demonstrates, the Revised Proposed Determination is the fruit of a poisonous tree. In addition to being scientifically and legally flawed for independent reasons, withdrawal of the Revised Proposed Determination is necessary to restore trust in EPA's scientific decision-making processes.

C. PLP Filed a Permit Application That Complied with Section 404

In December 2017, PLP submitted its Section 404 permit application to USACE for the Pebble Project, which included the mine site at the Pebble Deposit and associated infrastructure including a transportation corridor. In 2018, USACE began the National Environmental Policy Act process for the application. Throughout the process, PLP worked with USACE and other government agencies, including EPA, to refine its application. USACE published a draft Environmental Impact Statement ("EIS") in March 2019, and, after further collaboration among PLP and the various agencies, including EPA, USACE published its final EIS ("FEIS") in July 2020. The FEIS concluded that the Pebble Project could be developed without "a measurable impact on fish populations" resulting from the mine.⁴⁰ The FEIS further found that the Pebble Project would provide numerous benefits to the Bristol Bay region and Alaska as a whole, including short- and long-term employment opportunities, millions of dollars in taxes, and royalty payments to the state government.⁴¹

A key part of PLP's application was its compensatory mitigation plan ("CMP"). During the permit application process, PLP prepared several versions of the CMP based on changing USACE direction. PLP's final CMP was submitted in November 2020, *see* ROD Attachment B-5 (the "November 2020 CMP"), and proposed preservation of a 112,445-acre Kuktuli Conservation Area in the Kuktuli River watershed. This would allow the long-term protection of a large and contiguous ecosystem that contains highly valuable aquatic and upland habitats, including 31,026 acres of aquatic resources within the national importance-designated Kuktuli River watershed. And this preservation plan was in addition to the extensive applicant-proposed mitigation for the Project – over 70 such measures are described in the FEIS.⁴² Despite this, USACE issued its Record of Decision ("ROD") denying PLP's application on November 25,

³⁸ Order, *Pebble Ltd. P'ship v. EPA*, Case No. 3:14-cv-00171-HRH, Dkt. 90 (D. Alaska Nov. 25, 2014).

³⁹ Order, *Pebble Ltd. P'ship v. EPA*, Case No. 3:14-cv-00171-HRH, Dkt. 128 (D. Alaska June 5, 2015).

⁴⁰ FEIS at 4.24-1.

⁴¹ *Id.* at ES 47 to ES 48, 4.3-6 to 4.3-7, 4.3-20.

⁴² *Id.* at Table 5-2.

2020. USACE concluded that “the proposed discharge does not comply with the 404(b)(1) Guidelines” and “the proposed project is contrary to the public interest.”⁴³ USACE also concluded that PLP’s November 2020 CMP was insufficient under USACE’s CWA regulations.⁴⁴ PLP appealed the permit denial on January 19, 2021, and that appeal is pending before the USACE Pacific Ocean Division.

III. EPA’s Proposal is Legally Unsupportable

A. EPA’s Veto is Premature Because USACE Has Not Yet Indicated its Intent to Issue the CWA Permit

The Revised Proposed Determination is premature because USACE has not yet indicated that it intends to issue a permit. Section 404 “gives the EPA authority to veto the Corps’ issuance of a . . . permit.” *Hill v. Boy*, 144 F.3d 1446, 1448 n.5 (11th Cir. 1998) (emphasis added). And EPA itself has admitted in prior Section 404 actions that its “authority may be used either to veto a permit *which the Corps has determined it would issue* . . . or to withdraw *an issued permit*.” See EPA, *Babb Drum Site; Proposed Settlement*, 53 Fed. Reg. 26859, 26860 (July 15, 1988) (emphasis added). In short, there is nothing here to veto, and the Revised Proposed Determination is an unauthorized attempt to skip to the end of the process to achieve EPA’s desired outcome.

Congress provided clear roles for EPA and USACE in Section 404. Under Section 404(b), a “*disposal site shall be specified for each such permit by the Secretary [of the Army].*” 33 U.S.C. § 1344(b) (emphasis added). EPA may only act under Section 404(c) “to deny or restrict the use of *any defined area for specification* (including the withdrawal of specification) *as a disposal site*, whenever [EPA Administrator] determines, after notice and opportunity for public hearings, that the discharge of such materials into *such area* will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.” 33 U.S.C. § 1344(c) (emphasis added). And “[o]nce the Corps has set forth its intention to issue a particular permit, the EPA is empowered to veto said permit.” *James City Cnty., Va. v. EPA*, 758 F. Supp. 348, 351 (E.D. Va. 1990), *aff’d, remanded in part on other grounds*, 955 F.3d 254 (4th Cir. 1992). It is thus USACE’s decision to issue a permit specifying a disposal site that triggers EPA’s veto authority and determines what EPA can actually veto.

EPA’s CWA regulations underscore this point. “Disposal site” is defined as “that portion of the waters of the United States where specific disposal activities *are permitted*.” 40 C.F.R. § 230.3(f) (emphasis added). Because Section 404(c) only permits EPA to deny or restrict the use of “any defined area for specification . . . as a disposal site,” it follows that EPA cannot invoke its veto authority until USACE indicates its intent to issue a permit specifying such disposal sites.

And EPA’s past vetoes have adhered to this statutory proscription, initiating Section 404(c) procedures *after* USACE has indicated its intent to issue a Section 404 permit. See, e.g., EPA, *Recommended 404(c) Determination for the M.A. Norden Permit Application* at 1, Mobile

⁴³ ROD at 2-1.

⁴⁴ *Id.* at B2-4.

District File No. AL80-00327-C (Jan. 13, 1984) (“Norden RD”) (USACE indicated intent to issue permit before EPA initiated Section 404(c) procedures); EPA, *Final Determination of the Assistant Administrator for External Affairs Concerning the Sweedens Swamp Site in Attleboro, MA Pursuant to Section 404(c) of the Clean Water Act* at App. A-3 (May 13, 1986) (same); EPA, *Recommended Determination to prohibit construction of Two Forks Dam and Reservoir Pursuant to Section 404(c) of the Clean Water Act* at 2 (Mar. 1990) (same).

Not surprisingly then, federal courts have time and again emphasized that EPA’s Section 404 authority is limited to “the issuance of permits.” *Hoffman Homes, Inc. v. Administrator, EPA*, 961 F.2d 1310, 1312 n.2 (7th Cir. 1992), *order vacated on other grounds*, 975 F.2d 1554 (7th Cir. 1992); *see also Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1525 (10th Cir. 1992) (“The EPA may veto the issuance of a permit which will have an ‘unacceptable adverse effect’ on, inter alia, a wetland ecosystem.”); *Hill*, 144 F.3d at 1448 n.5 (Section 404 “gives the EPA authority to veto the Corps’ issuance of a . . . permit.”) (emphasis added); *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 442 n.4 (4th Cir. 1996) (“The EPA has the authority to veto a decision by the Corps to issue a § 404 permit . . .”); *James City Cnty.*, 758 F. Supp. at 351 (“Once the Corps has set forth its intention to issue a particular permit, the EPA is empowered to veto said permit.”); *Menominee Indian Tribe v. EPA*, 360 F. Supp. 3d 847, 851 (E.D. Wisc. 2018) (“EPA retains oversight of the Section 404 permitting program and may veto the Corps’ approval of a permit . . .”), *aff’d*, 947 F.3d 1065 (7th Cir. 2020). The Revised Proposed Determination, without a permit to address, is thus a premature and improper exercise of Section 404 veto power.

EPA’s present attempt to exceed its statutory mandate is even more improper in light of recent Supreme Court precedent. In *West Virginia v. EPA*, the Supreme Court strengthened the principle that “[a]gencies only have those powers given to them by Congress, and ‘enabling legislation’ is generally not an ‘open book to which the agency [may] add pages and change the plot line.’” 142 S.Ct. 2587, 2609 (2022). Thus, EPA may not use Section 404(c)’s narrow grant of authority to veto permits before USACE has indicated its intent to issue such a permit and defining the area for specification as a disposal site. This is especially true when an agency’s claim of authority touches on a “major question,” or an area in which there is “economic and political significance” and on which Congress would presumably want a say in shaping policy. *Id.* at 2608-09. The Clean Water Act permitting process has profound economic and political significance in both Alaska and across the United States, as permits are major drivers of economic and community development. As such, before EPA expands its own power, there must be a “clear statement . . . that Congress intended to delegate authority of this breadth to regulate a fundamental sector of the economy.” *Id.* at 2605 (citation omitted). As the Court concluded, “[w]e presume that Congress intends to make major policy decisions itself, not leave those decisions to agencies.” *Id.* at 2609 (citation omitted). Congress’s intent in the Clean Water Act was to grant EPA *limited* authority in the permitting process, and EPA cannot expand that authority to suit its whims.

Finally, if PLP’s appeal is successful and USACE’s permit decision is remanded to the Alaska District for further consideration, EPA retains its full Section 404(c) authority. In other words, if USACE eventually decides to issue a permit that EPA demonstrates will have unacceptable adverse effects, the Agency can initiate a Section 404(c) veto at that time. EPA has

explicitly recognized this proper sequence of events: When it initially withdrew the 2014 Proposed Determination, EPA stated that, if EPA’s “concerns remain outstanding *when the Corps is ready to issue the permit*, . . . EPA will have an opportunity to consider exercising its section 404(c) authority at that time.” EPA, *Notification of Decision to Withdraw Proposed Determination to Restrict the Use of an Area as a Disposal Site; Pebble Deposit Area, Southwest Alaska*, 84 Fed. Reg. 45749, 45753 (Aug. 30, 2019) (“Proposed Determination Withdrawal”) (emphasis added). Waiting for the proper time to initiate such a veto does not pose any environmental risk. PLP cannot begin any construction or mine development without a permit. Thus, there is simply no legal or environmental benefit to proceeding with the Revised Proposed Determination, yet the costs and repercussions of this action are vast.

B. EPA Failed to Exhaust the 404(q) Elevation Procedures Prior to Issuing the Revised Proposed Determination

As described above, EPA’s authority to issue a Section 404(c) veto is limited. But, in addition to the regulatory requirements described above, and the factual requirements described below, the CWA requires EPA to exhaust its statutory and regulatory tools during the permit application process before exercising its veto power. In particular, EPA is required to follow specific steps during the permit application process to voice its concerns so that USACE can determine whether and how a permit can accommodate such concerns. Such an approach is consistent with EPA’s statements when it formulated its CWA regulations, its current policies, and its practice over the decades since the CWA was passed.

Since EPA initially promulgated its Section 404 procedures, the Agency has maintained that it should fully participate in the permit application process and raise concerns and objections to USACE during that process. EPA declared in 1976 that an “announcement of intent to start a 404(c) action will ordinarily be preceded by an objection to the permit application.” EPA, *Denial or Restriction of Disposal Sites; Section 404(c) Procedures*, 44 Fed. Reg. 58076, 58080 (Oct. 9, 1979) (“Section 404(c) Procedures”). EPA continued, “[i]t is not the Agency’s intention to hold back and then suddenly spring a veto action at the last minute.” *Id.* (emphasis added). EPA thus concedes, as it must, that a Section 404(c) veto “may be regarded as a tool of last resort,” which “implies that EPA will employ its tool of first resort, e.g. comment and consultation with the permitting authority *at all stages of the permit process.*” *Id.* (emphasis added). Indeed, the regulations themselves state, “[i]n cases involving a proposed disposal site for which a permit application is pending, it is anticipated that the procedures of the section 404 referral process will normally be exhausted prior to any final decision of whether to initiate a 404(c) proceeding.” 40 C.F.R. § 231.3(a) cmt.

EPA has now formalized these principles. In 1992, as directed by CWA Section 404(q), EPA and USACE executed a *Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army* (“1992 MOA”) that bound the two agencies to specific procedures for resolving potential disagreements. The 1992 MOA provided for a process for “elevation of specific individual permit cases . . . that involve aquatic resources of national importance [(‘ARNI’)].”⁴⁵ The 1992 MOA explicitly incorporates Section 404(c), stating that

⁴⁵ 1992 MOA § IV, https://www.epa.gov/sites/default/files/2015-03/documents/1992_moa_404q.pdf.

the cases for elevation are those “similar in magnitude to cases evaluated under Section 404(c) of the Clean Water Act.”⁴⁶

To guide the Agency’s process for raising concerns that correspond with Section 404(c), EPA has published a fact sheet that lays out clearly the steps the Agency must take.⁴⁷ When the EPA Regional Administrator believes that a permit “may result in substantial and unacceptable impacts to Aquatic Resources of National Importance,” they are to notify USACE via letter (a “may affect letter” or “3(a) letter”).⁴⁸ When the Regional Administrator believes that a permit’s discharge “will have substantial and unacceptable impacts to an ARNI,” they must notify USACE via letter (a “will affect letter” or “3(b) letter”), stating in detail why such impact will occur and how the permit should be “modified, conditioned, or denied” to protect the ARNI.⁴⁹ Upon receipt of a 3(b) letter, the USACE District Engineer will notify the EPA Regional Administrator if USACE intends to issue the permit despite EPA’s concerns.⁵⁰ Then, the Regional Administrator can decide to “elevate” the permit decision, allowing EPA to seek review by the Assistant Secretary of the Army, during which time the permit is held in abeyance.⁵¹ If, at that point, “the Assistant Secretary decides to proceed with the issuance of the permit over EPA’s objections, EPA decides whether to initiate a Section 404(c) ‘veto’ action.”⁵² Thus, as EPA’s own fact sheet lays out, it is *after* these agency coordination procedures are exhausted that EPA may then initiate procedures under Section 404(c).

EPA’s past practice is consistent with these requirements, as EPA had previously only exercised its Section 404(c) authority as a last resort, and only after it had reviewed a proposed USACE permit decision and granted USACE and the project applicant an opportunity to address EPA’s concerns through project amendments and/or mitigation measures. For example, in 1984, EPA prepared a Recommended Determination for the proposed construction of an office, warehouse, and storage yard on filled wetlands in Mobile, Alabama. *See Norden RD at 1.*⁵³ EPA objected to the permit application, with which the USACE District initially agreed. *Id.* at 2. But the USACE Division, with the support of Alabama’s governor, reversed the District decision. *Id.* USACE then notified EPA of its intent to issue a Section 404 permit, at which point EPA decided to invoke Section 404(q) to request review of the permit decision by the Assistant Secretary of the Army. *Id.* The Assistant Secretary denied EPA’s review request based on his determination that the objection was “not an issue of national importance.” *Id.* Only *then* did EPA initiate a Section 404(c) veto. *Id.*

⁴⁶ *Id.*

⁴⁷ EPA, *Clean Water Act Section 404(q) Dispute Resolution Process* (2015) (“EPA 404(q) Fact Sheet”), https://www.epa.gov/sites/default/files/2016-03/documents/404q_factsheet.pdf.

⁴⁸ EPA 404(q) Fact Sheet at 2.

⁴⁹ *Id.*; 1992 MOA § IV.3(b).

⁵⁰ EPA 404(q) Fact Sheet at 2.

⁵¹ *Id.*

⁵² *Id.*

⁵³ This action took place before 1992, but EPA made clear that it viewed its requirements under the then-existing Section 404(q) MOA as binding. *See Norden RD at 5* (describing the elevation process as necessary “[u]nder the Section 404(q) Memorandum of Agreement between EPA and the Department of the Army”).

As another example, EPA exhausted these procedures in the Russo Development matter as well. There, USACE submitted its Notice of Intent to Issue a permit to the Russo Development Corporation in December 1986. EPA, *Recommendation of the Regional Administrator Region II Concerning Wetlands Owned by the Russo Development Corporation in Carlstadt, New Jersey Pursuant to Section 404(c) of the Clean Water Act* at 5 (Jan. 19, 1988). EPA engaged in interagency consultation regarding the Agency's concerns, and when that consultation failed to yield a resolution, USACE issued a final Notice of Intent to Issue the permit. "In accordance with the 404(q) MOA" in place at the time, EPA requested "that the permit decision be reviewed at a level above the District Engineer." *Id.* After the Acting Assistant Secretary of the Army found that USACE had complied with the Section 404(b)(1) guidelines, it concluded that there was no basis for higher level review. *Id.* at 5-6. "Having exhausted these procedures to resolve [EPA's] concerns," EPA *then* initiated the Section 404(c) procedures. *Id.* at 6.

This is the normal course when EPA considers action under Section 404(c) for individual permits by a private entity. *See e.g.*, EPA, *Final Determination of the Administrator Concerning North Miami Landfill Site Pursuant to Section 404(c) of the Clean Water Act* at 3 (Jan. 19, 1981) (noting that the permit application was elevated under 404(q) and "[w]hen these discussions failed to resolve the matter," the Corps notified EPA of its intent to issue the permit, and as a result EPA initiated its Section 404(c) action); EPA, *Proposed Determination to Prohibit, or Deny Specification, or Use for Specification, of an Area as a Disposal Site*, 45 Fed. Reg. 51275, 51276 (Aug. 1, 1980) (describing communication between EPA and USACE). And for good reason. The requirement to pursue the Section 404(q) process before initiating 404(c) action facilitates predictability and agency coordination in permit decision-making, requiring EPA to work through its concerns with USACE before triggering "last resort" action under 404(c).

Initially, EPA's actions regarding the Pebble Project conformed with these requirements. EPA sent a 3(a) letter to USACE on July 1, 2019. But EPA decided *not* to send a 3(b) letter, suggesting that, in fact, EPA could not demonstrate that the project "will" have substantial and unacceptable impacts, the very standard that EPA must now satisfy to finalize its Section 404(c) veto. On May 28, 2020, EPA explained to USACE that it had decided not to issue a 3(b) letter, citing USACE's "extensive engagement with the EPA" during the process as well as a "commitment to continue this coordination into the future."⁵⁴ The established process was thus working as intended. Having concluded that it did not have sufficient information to demonstrate that the project would have unacceptable adverse effects such that a 3(b) letter was warranted, EPA cannot now pursue a Section 404(c) veto claiming that it believes there will be such effects.⁵⁵

⁵⁴ Letter from C. Hladick, EPA Regional Administrator, to Col. D. Hibner, USACE Alaska District Engineer (May 28, 2020) ("EPA 3(b) Decline Letter"), <https://www.epa.gov/sites/production/files/2020-05/documents/bristol-bay-404q-supplemental-comments-5-28-2020.pdf>.

⁵⁵ If the permit decision is remanded to the Alaska District, EPA will still have the opportunity to elevate and, if USACE indicates that it intends to issue a permit and EPA's concerns are not addressed, initiate Section 404(c) proceedings.

EPA’s public statements on the Pebble Project have also acknowledged that the 404(q) procedures must be exhausted before EPA initiates the veto process. When it withdrew the 2014 Proposed Determination in 2019, the Agency noted that:

[b]y initiating the 404(q) MOA process, EPA Region 10 is following an avenue to work with the Corps Alaska District throughout the permitting process to resolve concerns. If unresolved, EPA Region 10 can elevate to EPA headquarters, which can decide whether to engage with the Department of the Army.

Proposed Determination Withdrawal, 84 Fed. Reg. 45749, 45753 (emphasis added). EPA went further, stating: “there are other processes available now, including the 404(q) MOA process, for EPA to resolve any issues with the Corps as the record develops. *EPA believes these processes should be exhausted prior to EPA deciding, based upon all information that has and will be further developed, to use its section 404(c) authority.*” *Id.* (emphasis added).

EPA’s conclusion aligned with its regulations, which “contemplate that where there is a permit application pending, the Regional Administrator’s initial determination of whether the discharge ‘could’ result in an unacceptable adverse effect would be made after considering the record developed during its coordination with the Corps on the permit application.” *Id.* at 45751; *see also id.* at 45753 (concluding that “it is more appropriate to use well-established mechanisms to raise project-specific issues as the record develops during the permitting process and consider the full record before potential future decision-making on this matter”). Thus, the full USACE permitting process – including resolution of any pending appeals and exhaustion of all elevation procedures – should be complete before a Section 404(c) veto, EPA has admitted as much, conceding that “given . . . the language and structure of the 404(c) regulations, . . . the appropriate sequencing is to resolve technical issues *during the Corps’ permitting process* rather than through a separate 404(c) process . . . that does not reflect the full record.” *Id.* at 45754 (emphasis added); *see also id.* (“[C]onsistent with general administrative law principles for agency decision-making, EPA must consider *the entire record* of this proceeding.”) (emphasis added). EPA, thus, must allow the full permitting process to unfold, including any appeals, 404(q) procedures, and USACE’s notification of its intent to issue the permit, prior to initiating Section 404(c).

C. EPA Has Inherent Authority to Withdraw the Revised Proposed Determination

EPA incorrectly suggests that it was required to issue the Revised Proposed Determination because recent litigation forbids it from withdrawing the 2014 Proposed Determination. In support, EPA selectively cites a recent Ninth Circuit decision regarding the 2014 Proposed Determination,⁵⁶ even though that decision was based on a faulty premise, never corrected by EPA, and more importantly, does *not* require EPA to make such an affirmative environmental determination before withdrawing a proposed determination.

⁵⁶ Revised Proposed Determination at 2-14 (quoting *Trout Unlimited v. Pirzadeh*, 1 F.4th 738, 757 (9th Cir. 2021)).

The Ninth Circuit adopted the plaintiffs' assertion that "there [was] only one previous withdrawal of a proposed determination" prior to the withdrawal of the 2014 Proposed Determination here. *See Trout Unlimited*, 1 F.4th at 757. Despite being factually inaccurate, EPA stayed silent, allowing the Ninth Circuit to accept as true the plaintiffs' claim. Based on this, the court stated that the "fact that the agency's previous withdrawal was due to its reassessment of environmental effects supports our view that the regulations contemplate precisely that inquiry." *Id.*

But the Revised Proposed Determination itself shows that the Ninth Circuit was misled. EPA admits that "[i]n the 50 years since Congress enacted CWA Section 404(c), EPA has only initiated the process 30 times and only issued 13 final determinations."⁵⁷ Thus, in the *majority* of cases where EPA has issued a proposed determination, the Agency has decided *not* to finalize a veto. If EPA was only permitted to withdraw a proposed determination based on a substantive finding that there would be no unacceptable adverse effects, the Federal Register would contain at least 17 notices articulating EPA's findings to that effect. EPA has not pointed to any language in these other veto actions indicating that such a high burden is required. And no such burden is imposed by either the CWA or EPA's regulations. *See* 33 C.F.R. § 231.5 (authorizing Regional Administrator to "either withdraw the proposed determination or prepare a recommended determination").

Nor does the Ninth Circuit decision require such a substantive finding, contrary to EPA's claim. The Ninth Circuit actually acknowledged that EPA is authorized to withdraw a proposed determination based on "procedural protections that the Corps has afforded to the EPA." *Trout Unlimited*, 1 F.4th at 759. As discussed in the preceding section, the normal permitting process allows EPA's concerns to be addressed through coordination with USACE and other federal agencies. If EPA's concerns could be resolved through those procedural mechanisms, this, the court found would be a sufficient rationale for withdrawing the Proposed Determination. *See id.* Thus, EPA is not bound to a proposed determination forever. EPA has discretion to withdraw a proposed determination if it can address its concerns via other means, even without making any affirmative statement that there are unlikely to be unacceptable adverse effects. This view is in line with other court precedent, as well. In 2014, a federal court ruled that "EPA's ability to veto Section 404 Permits is discretionary and the EPA is not required to do so *even if* it finds 'unacceptable adverse impacts.'" *Ctr. for Biological Diversity v. USACE*, No. CV-14-1667, 2014 WL 12923196, at *4 (C.D. Cal. Sept. 26, 2014) (citing CWA Section 404(c)). If EPA has discretion *not* to issue a veto even if it finds unacceptable adverse impacts, it would make no sense for EPA to be required to find no such impacts to withdraw a veto. Thus, EPA is under no legal obligation to proceed with the Revised Proposed Determination, and it may withdraw it as premature and unsupported.

IV. EPA's Unsupported Assertions of Fishery Impacts Are Not Sufficient to Support Action under Section 404(c)

The Revised Proposed Determination is replete with numerous unsupported assertions that the development of the Pebble Deposit "could" cause unacceptable impacts on fishery areas. But unsupported supposition cannot satisfy Section 404(c)'s requirements. Section 404(c)

⁵⁷ *Id.* at 2-18.

requires EPA to establish that the discharge of dredged or fill material into waters of the United States **will have** an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.” 33 U.S.C. § 1344(c). Thus, EPA has the burden of demonstrating that any discharge “will have” such an adverse effect. *Bersani v. EPA*, 850 F.2d 36, 40 (2d Cir. 1988); *see also* EPA, *Guidelines for Specification of Disposal Sites for Dredged or Fill Material*, 45 Fed. Reg. 85336, 85338 (Dec. 24, 1980) (noting that the EPA Administrator “does have the burden to justify his action” under 404(c)); Section 404(c) Procedures, 44 Fed. Reg. 58076, 58080 (“EPA [has] the responsibility of establishing a basis for any subsequent determination of unacceptable adverse effects” under 404(c)).

Both the text and the legislative history of 404(c) make clear that Congress intended 404(c) to be a limited and constrained authority, with a high burden of proof. For example, the Conference Report explained:

The conferees agree that the Administrator of the Environmental Protection Agency shall have authority to prohibit specification of a site and deny or restrict the use of any site for the disposal of any dredge or fill material which he determines **will adversely affect** municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.

S. Rep. No. 92-1236, at 142 (1972) (Conf. Rep.), *reprinted in* 1 Legislative History of the Federal Water Pollution Control Act Amendments of 1972, at 325 (1973) (emphasis added). And the rest of the statute’s legislative history is consistent. House members made clear that “it is expected that disposal site restrictions or prohibitions shall be limited to narrowly defined areas where it can be **clearly demonstrated** that the discharge of dredged material at such specified location **will have an unacceptable adverse effect** on critical areas intended to be protected.” 118 Cong. Rec. 33,766 (1972), *reprinted in* 1 Legislative History of the Federal Water Pollution Control Act Amendments of 1972, at 236 (1973) (House debate) (emphasis added). Thus, EPA cannot meet its burden based on speculation or possibility; it must establish a strong degree of certainty that the effects “will” occur.

Courts have thus uniformly concluded that Section “404(c) provides that the Administrator of EPA may prohibit the specification of a disposal site ‘whenever he determines . . . that the discharge of materials into such area **will have** an unacceptable adverse effect.’”⁵⁸ *Bersani*, 850 F.2d at 40 (quoting 33 U.S.C. § 1344(c)) (emphasis added); *see also*

⁵⁸ A finding of “significant degradation” under the 404(b)(1) guidelines similarly must be based on facts, not conjecture. Section 230.10(c) provides that findings of significant degradation are to be “based upon appropriate *factual determinations, evaluations, and tests.*” 40 C.F.R. § 230.10(c) (emphasis added). In other words, such a finding must be based on facts and data, not speculation. Yet EPA’s significant degradation finding in the Revised Proposed Determination is also based on a recitation of speculative impacts that “could” occur without any substantiation. *See, e.g.*, Revised Proposed Determination at 4-47 (“extent of stream habitat losses . . . associated with the 2020 Mine Plan *suggest that* these losses would reduce the overall capacity and productivity of Coho and Chinook salmon in the *entire* NFK watershed”) (emphasis added).

James City Cnty., Va. v. EPA, 12 F.3d 1330, 1335 (4th Cir. 1993) (“We are presented then with the chore of determining whether EPA has the authority to justify its § 404(c) veto in this case solely on the basis that it **would cause** unacceptable adverse effects on the environment.”) (emphasis added).

Yet here EPA has ignored the plain language of the statute, the relevant legislative history, and the case law. Instead of demonstrating that the discharges associated with mining the Pebble Deposit **will have** an unacceptable adverse effect on fishery areas, EPA proposes to restrict the use of a sizable area of waters in the Bristol Bay watershed “because it *has reason to believe* that certain discharges of dredged or fill material into waters of the United States within these areas *could result* in unacceptable adverse effects on fishery areas.”⁵⁹ EPA bases its conclusions on a cascading chain of speculation:

The losses of and impacts on salmon habitat *could cause* the extirpation of unique local populations of Coho, Sockeye, and Chinook salmon that would affect the overall genetic diversity of each species. This reduction in genetic diversity *could adversely affect* the stability and sustainability of valuable subsistence, commercial, and recreational salmon fisheries. Subsistence harvests and recreational fishing of non-salmon species *could also suffer*.⁶⁰

As described below in Sections IV-VI, the alleged impacts EPA points to in support of the Revised Proposed Determination are based on speculation, not data. By contrast, the well-documented findings in the FEIS directly contradict EPA’s speculative concerns. The FEIS was developed over several years and in compliance with multiple federal statutes with input from state, tribal, and federal entities – including EPA – and is by far the most comprehensive government study of the Pebble Project. Put simply, it is the record on which a decision on Pebble must be made. In light of the FEIS’s well-documented findings, EPA cannot demonstrate that mining the Pebble Deposit *will have* unacceptable adverse effects on fishery areas.

Recognizing this, EPA chooses largely to ignore the FEIS’s findings. But EPA cannot disregard the factual findings of the FEIS because its conclusions contradict the Agency’s speculative beliefs. EPA “**must examine the relevant data and articulate a satisfactory explanation** for its action including a **rational connection between the facts found and the choice made.**” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (internal quotation and citation omitted) (emphasis added). “Conjecture cannot substitute for a reasoned explanation,” *Graphic Comm’ns Int’l. Union, Local 554 v. Salem-Gravure Div. of World Color Press, Inc.*, 843 F.2d 1490, 1494 (D.C. Cir. 1988), nor is “speculation” an adequate “replacement for the agency’s duty to undertake an examination of the relevant data and reasoned analysis,” *Horsehead Res. Dev. Co., Inc. v. Browner*, 16 F.3d 1246, 1269 (D.C. Cir. 1994); *see also Natural Res. Def. Council, Inc. v. EPA*, 859 F.2d 156, 210 (D.C. Cir. 1988) (“EPA offers no more than mere speculation to support its conclusion. These are not

The record does not support a finding of significant degradation or unacceptable adverse effect for any of the factors listed by EPA.

⁵⁹ *Id.* at 5-1 (emphasis added).

⁶⁰ *Id.* at 4-66 (emphasis added).

adequate grounds upon which to sustain an agency's action."); *Tanners' Council of Am., Inc. v. Train*, 540 F.2d 1188, 1193 (4th Cir. 1976) ("There is no evidence, however, in the record that would reveal the reasonableness of [EPA's] conclusion. To uphold these regulations, this Court would have to trust completely EPA's conclusions. The record, however, implies that these conclusions are the product of guesswork and not of reasoned decision-making."). Indeed, EPA itself concedes that a Section 404(c) determination requires "a reasonable likelihood that unacceptable adverse effects will occur," not "mere guesswork." Section 404(c) Procedures, 44 Fed. Reg. 58076, 58078. Yet by ignoring the weight of the FEIS, EPA is engaging in such guesswork.

EPA must thus reckon with the FEIS and either proceed in accordance with its findings or provide a strong *factual* basis for ignoring it. But in the Revised Proposed Determination, EPA has failed to present any empirical data, scientifically defensible analysis, or cause and effect linkage between the Pebble Project and the predicted downstream fishery impacts—much less a "rational connection." As discussed in the next section of these comments, EPA's statements about the importance of the headwaters streams surrounding Pebble to downstream ecosystems are unsupported, and in fact are contradicted by the record compiled by USACE.

In the end, the Revised Proposed Determination does not demonstrate a measurable, data-driven linkage between mineral development at Pebble and unacceptable adverse effects on local or regional fish populations or fisheries. The Agency's supposition and conjecture are no "substitute for a reasoned explanation." *Graphic Comm'ns*, 843 F.2d at 1494.

V. EPA Has Failed to Demonstrate Impacts on Fisheries Sufficient to Support the Revised Proposed Determination

In Section 4 of the Revised Proposed Determination, EPA lists four bases for taking action under 404(c):

- Adverse Effects of Loss of Anadromous Fish Streams;
- Adverse Effects of Loss of Additional Streams that Support Anadromous Fish Streams;
- Adverse Effects of Loss of Wetlands and Other Waters that Support Anadromous Fish Streams; and
- Adverse Effects from Changes in Streamflow in Downstream Anadromous Fish Streams.⁶¹

⁶¹ EPA alleges the same adverse effects under Sections 4.2 (Effects on Fishery Area) and 4.3.1 (Significant Degradation under 404(b)(1) Guidelines) of the Revised Proposed Determination, so PLP provides a combined response to both sections here.

But the alleged adverse effects listed under each of these topics are based on speculation, not science.⁶² In addition, while EPA asserts that each factor is an independent basis for action under 404(c), the four factors are interrelated and are, in fact, based on the same chain of speculation. For example, the invalidation of the findings on anadromous streams would call into question the validity of the determinations regarding other streams and wetlands. And EPA's faulty assumptions on streamflow also undermine EPA's alleged findings regarding stream and wetland impacts. Thus, as one factor fails, they all do.⁶³

As explained more fully below, all four bases are directly contradicted by the findings in the FEIS. EPA attempts to cast the FEIS findings aside, asserting "there is *no reason to expect*" that the baseline data relied upon in the FEIS "fully capture how much these factors vary over longer time scales and more finely resolved spatial scales, which means that FEIS conclusions . . . based on these data should be viewed as minimum estimates."⁶⁴ But, other than speculating that this data may not "fully capture" certain factors, EPA does not provide contrary data to demonstrate the FEIS data is under-representative. Instead, EPA simply chooses to assume that the baseline data may not fully capture impacts.

Based on this supposition, EPA then proclaims that there was insufficient data to "adequately support the FEIS conclusions about impacts to fishes."⁶⁵ But EPA admits that PLP's data "presents results of the most extensive fish-sampling regime that currently has been conducted in the South Fork Koktuli ("SFK"), North Fork Koktuli ("NFK"), and Upper Talarik Creek ("UTC") watersheds."⁶⁶ Moreover, EPA acknowledges that the existing data *undercounts*

⁶² A fuller discussion of the defects in EPA's Proposed Determination is attached. See Ex. 2, Kleinschmidt Group, *Comments on EPA's Proposed Determination on the Pebble Deposit Area, May 2022* (September 2022).

⁶³ Confusingly, EPA states that the Revised Proposed Determination is not based on any future mine expansion or cumulative impacts, but then reviews the cumulative impacts of the Expanded Mine Scenario anyway. See Revised Proposed Determination at 4-53 ("The Expanded Mine Scenario . . . is not a basis for this proposed determination. . . . However, the Guidelines also require EPA Region 10 to evaluate cumulative effects."). Since EPA explicitly states that the cumulative impacts of the Expanded Mine Scenario are not a basis for the Revised Proposed Determination, we will not spend much time commenting on that section. However, we note that the expanded mine scenario was considered in the FEIS for the project, and even with the cumulative impacts of the expansion included, USACE concluded: "Overall, the contribution of Alternative 1a to cumulative effects to aquatic resources, when taking other past, present, and RFFAs into account, would be minor to moderate in terms of magnitude, duration, and extent, given the documented habitat use by fish, existing habitat potential, and permit requirements regarding fish and aquatic habitat protection at stream crossing." FEIS at 4.24-70. EPA has provided no basis for a contrary finding regarding the cumulative impacts to fish from the Expanded Mine Scenario. Moreover, EPA fails to account for the fact that mining technology is constantly evolving, so a mining plan submitted decades from now will necessarily incorporate technological advances that will further mitigate the impacts of a larger mine.

⁶⁴ Revised Proposed Determination at B-8 (emphasis added).

⁶⁵ *Id.*

⁶⁶ *Id.* at B-5.

available streams and wetlands because PLP's subsequent high-resolution mapping has increased the identification of wetlands and streams in the area surveyed.⁶⁷ This means that there is even more habitat available for fish than existing mapping shows, reducing the potential impact of the project in terms of percentage of potential habitat lost.

Thus, contrary to EPA's supposition, the FEIS actually undercounts existing waterbodies and therefore *overstates* the percentage of wetlands and streams impacted by the project.⁶⁸ For example, the FEIS relies on National Wetlands Inventory ("NWI") mapping to establish the total wetlands/other waters acreage in the Headwaters Koktuli ("HK") watershed. NWI data for the HK watershed is not a reliable data source for detailed analyses, and is typically used only when no other data source is available. The FEIS determined that 2,158 acres of wetlands/other waters would be directly, permanently impacted in the HK watershed.⁶⁹ The FEIS applied this value against the total NWI reported acreage in the watershed (36,458) and found that direct, permanent impacts to wetlands/other waters within the HK Hydrologic Unit Code ("HUC") 10 watershed amount to 6% of that watershed.

But this reported acreage is now out of date. In preparing the November 2020 CMP, PLP collected highly detailed wetlands mapping for the HK watershed. Prior to the FEIS, wetlands mapping covering 87% of the HK watershed was provided to USACE. With the final CMP, PLP submitted detailed wetlands data for nearly all of the remaining portion of the HK. In total, PLP has provided detailed mapping for 99.7% of the full watershed.⁷⁰ This data shows 44,625 wetland/water acres in the HK (44,702 with NWI gaps), as compared to the NWI estimate of 36,458 acres. Thus, the prevalence of wetlands/waters is 23% higher than reported in the NWI.

⁶⁷ *Id.* at 3-8.

⁶⁸ In fact, the FEIS acknowledges that watershed mapping gaps likely mean that water resources in the area are likely underestimated. *See e.g.*, FEIS at 4.22-20 ("the area of wetlands and other waters presented for the UTC watershed is likely underestimated"), 4.22-21 ("Although NWI mapping covers the entirety of the Cook Inlet and Stariski Creek-Frontal Cook Inlet watersheds, coverage for the remaining six watersheds averages 53 percent, with a range of 6 percent to 95 percent. Therefore, the areas of wetlands and other waters presented for these watersheds are likely underestimated."), 4.22-22 ("Impacts to special aquatic sites and regionally important wetlands are calculated to represent 1 percent of waters and wetlands mapped in the Gibraltar Lake watershed; however, because only 6 percent of the Gibraltar Lake watershed has been mapped by NWI, the representation of impacts on the watershed scale is likely over estimated.").

⁶⁹ *See id.* at 4.22-25 (Table 4.22-3). PLP used the same value in its calculations.

⁷⁰ The remaining 0.3% results from discrepancies in the watershed boundaries used for analysis.

The more accurate percentage of the HK watershed impacted is 4.8%.⁷¹ Thus, the FEIS actually overstates the impact as a percentage of the entire watershed because it fails to use best available data. And, critically, EPA’s supposition that FEIS conclusions on impacts to fish “should be viewed as minimum estimates” is therefore baseless and contrary to the most up to date data.

Such assumptions permeate the Revised Proposed Determination. EPA lists a range of factors that can impact the value of fish habitat, but notes that “because these considerations are impossible to predict with precision, a precautionary approach that maintains habitat structure and function is warranted.”⁷² EPA does not have authority to set aside 309 square miles of state-owned land based on “precaution.” If the actual aquatic resource impacts cannot be adequately assessed based on the current data set, EPA must generate new data that demonstrates actual adverse impacts to fisheries before any 404(c) action can be pursued. Otherwise EPA is simply repeating the error it accuses USACE of – relying on data inadequate to support “conclusions about impacts to fishes.”⁷³

A. EPA Has Not Demonstrated That An Unacceptable Loss of Anadromous Fish Streams and Loss of Additional Streams that Support Anadromous Fish Streams Will Occur

EPA asserts that the permanent loss of 8.5 miles of anadromous fish streams at the mine site “would reduce the overall capacity and productivity of Coho and Chinook salmon in the entire NFK watershed.”⁷⁴ EPA also asserts that the loss of approximately 91.2 miles of additional streams “could” have unacceptable adverse effects on anadromous fishery areas in the SFK and NFK watersheds.⁷⁵ EPA claims this is based in part on the “crucial role that these

⁷¹ This table shows the calculations for the HK watershed assuming 2,158 acres directly impacted:

	Total Area		Mapped Wetlands	Impact Percentage
	Acres	%	Acres	%
Best Available Data				
PLP (field-verified)	170,105	99.7%	44,625	4.8%
NWI	527	0.3%	77	0.0%
	170,632		44,702	4.8%

⁷² Revised Proposed Determination at B-5.

⁷³ *Id.* at B-8.

⁷⁴ *Id.* at 4-47. EPA states the Revised Proposed Determination is based solely on adverse effects on anadromous fishery areas. Therefore, PLP has focused its comments on anadromous fishery impacts. While the Revised Proposed Determination “notes” that the loss of anadromous fish streams would also impact non-anadromous fish species, the FEIS found otherwise. FEIS at 4.24-46 (“impacts to anadromous *and resident fish populations* from these direct habitat losses would not be measurable, and would be expected to fall within the range of natural variability”).

⁷⁵ Revised Proposed Determination at 4-23.

headwater streams play in providing ecological subsidies to downstream anadromous fish streams.”⁷⁶

The Revised Proposed Determination suffers from the same fundamental flaw as the 2014 version: there is no quantification of impact on aquatic resources from the stream loss. The 2014 Proposed Determination assumed that damage to 5 miles of salmon bearing streams was unacceptable. In the Revised Proposed Determination, EPA similarly assumes the estimated stream losses for the 2020 Mine Plan are unacceptable. But nowhere in either the 2014 or the Revised Proposed Determination is there any quantification of the impact on the watershed or on the fish population of the loss of 5 miles of anadromous streams versus 8.5 miles of anadromous streams. The failure to include such an explanation is fatal to the conclusions reached. Science does not demand the outcome here; there is no quantification of risk that demands this outcome. Instead, EPA began with a predetermined outcome and manipulated the process to reach that result. The failure to actually quantify the risk of actual stream losses is fatal to the Revised Proposed Determination.

This failure is especially egregious because EPA’s conclusions that the stream losses at the mine site will cause unacceptable impacts to fish directly contradict the FEIS, which found no significant impacts to the population of fish or fish habitat in the Kaktuli. The FEIS provides:

Alternative 1a would not have measurable effects on the number of adult salmon returning to the Kvichak and Nushagak river systems as a result of project construction and operations, due the limited lineal footage of upper Kaktuli River fish habitat affected by placement of fill.⁷⁷

⁷⁶ EPA also overstates the “pristine” nature of the Bristol Bay region throughout the Revised Proposed Determination. *See, e.g., id.* at 2-20 (“The Bristol Bay watershed represents a largely pristine, intact ecosystem with outstanding ecological resources.”). As PLP discussed in its Comments to the 2014 Proposed Determination, the Bristol Bay region is not as intact or undisturbed by human activity as EPA posits. *See* Comments of the Pebble Limited Partnership on EPA Region 10’s Proposed Determination Pursuant to Section 404(c) of the Clean Water Act Regarding the Pebble Deposit Area, Southwest Alaska at 40-43 (Sept. 30, 2014), <https://www.regulations.gov/comment/EPA-R10-OW-2014-0505-3777>; *see also* PLP, Response to EPA’s February 28, 2014 Letter Initiating the Clean Water Action Section 404(c) Process for the Pebble Mine Project (Apr. 29, 2014), https://northerndynastyminerals.com/site/assets/files/4568/plp_response_to_final_bbwa_april2014.pdf. Rather than restate those points here, PLP incorporates its 2014 Comments (including exhibits) by reference. The entire basis for the Revised Proposed Determination is potential impacts to fish, yet every year about 70% of returning fish are harvested, so the ecological integrity of the area is hardly untouched. Another example of EPA’s overstatement: Iliamna Lake is not an “undeveloped lake.” Revised Proposed Determination at 3-2. There are six communities, numerous Native allotments, and summer camps on its shoreline, and substantial commercial traffic on the lake both in the summer and winter.

⁷⁷ FEIS at 4.6-9.

Mine site development would permanently remove approximately 22 miles of fish habitat in the North Fork Koktuli and South Fork Koktuli drainages. *The loss of habitat is not expected to have a measurable impact on fish populations based on physical habitat characteristics and fish density estimates in the affected reaches.*⁷⁸

The Revised Proposed Determination provides no new information that contradicts the FEIS findings on fish. Instead, EPA makes the unsupported assertion that the FEIS “likely underestimates both direct and indirect effects on fish habitat.”⁷⁹ As discussed above however, EPA’s supposition that “FEIS conclusions ... should be viewed as minimum estimates” is baseless.

In fact, the FEIS findings likely overestimate impacts. The FEIS findings are based on the anadromous downstream mileage known at that time, but the actual anadromous downstream mileage is higher. As discussed above, PLP submitted more detailed and complete data for the HK watershed with the November 2020 CMP. The updated CMP data indicate the prevalence of anadromous streams in the HK is about 20% higher than reported in the FEIS.⁸⁰ Thus, there is more fish habitat in these watersheds than what was reflected in the original baseline data, which in turn means the FEIS overstates impacts to fish habitat.

EPA also asserts that “the integrated effect that these [Pebble development] changes are predicted to have on fish habitat has not been assessed adequately.”⁸¹ But if the potential changes are not yet adequately known, they certainly cannot provide a basis for EPA to take the extreme action of restricting development in a 309 square mile area. If EPA believes there are questions around the impacts of the Pebble Project, it must develop data to answer those questions. Instead EPA simply assumes the worst, and uses those baseless assumptions to further its ultimate goal of restricting all future development of the Pebble Deposit.

B. EPA Has Not Demonstrated That the Loss of Wetlands and Other Waters Will Have Unacceptable Adverse Effects

EPA asserts that the loss of approximately 2,113 acres of wetlands and other waters “could have unacceptable adverse effects on anadromous fishery areas in the SFK and NFK watersheds.”⁸² Alaska’s wetlands estate is almost wholly intact.⁸³ As such, the Pebble Project’s

⁷⁸ *Id.* at 4.24-1 (emphasis added).

⁷⁹ Revised Proposed Determination at B-17.

⁸⁰ See November 2020 CMP at 17, Figure 3-1 (regarding the additional probable anadromous mileage in the KCA). The total potential mileage is three times the total miles impacted by the mine footprint and would represent a 20% increase in the mileage protected in the preservation area.

⁸¹ Revised Proposed Determination at B-17.

⁸² *Id.* at 4-27.

⁸³ Alaska encompasses an area of 403,247,700 acres, including offshore areas. Total acreage of wetlands is 174,683,900 acres, which is 43.3 percent of Alaska’s surface area. In the lower 48

effects on wetlands would not have any discernible effect on overall wetlands habitat availability and ecosystem function in the region.

Indeed, the FEIS found that the project “would not be expected to have a measurable effect on fish numbers and result in long-term changes to the health of the commercial fisheries in Bristol Bay.”⁸⁴ Moreover, as discussed above, the FEIS overstates impacts to wetlands. While the FEIS estimated that the project would have direct, permanent impacts to 6% of the wetlands/other waters within the HK watershed, the more accurate percentage of the HK watershed impacted is actually 4.8%. Thus, EPA’s supposition that FEIS conclusions on impacts “should be viewed as minimum estimates” is baseless.

C. Changes in Streamflow

EPA asserts its belief that the 2020 Mine Plan will result in streamflow alterations greater than 20 percent of average monthly streamflow in approximately 29 miles of anadromous fish streams, which in turn “could have unacceptable adverse effects on anadromous fishery areas in the SFK and NFK watersheds.”⁸⁵ Instead of generating new data to demonstrate the impacts EPA alleges, EPA relies on speculation: “it is likely that the streamflow change analysis generally underestimates the extent to which streamflow in the SFK and NFK watersheds would be affected.”⁸⁶ Such supposition is not sufficient to support action under 404(c).

This is especially true where such suppositions are contracted by existing science. Extensive water modeling, based on years of data collection, demonstrates the Pebble Project would not harm the fishery or water resources of Bristol Bay. The FEIS states that flow rate changes would not be measurable downstream of the mine:

Therefore, the intensity of the impacts to surface water resources would be generally expected to result in changes in water quantity, likely within the limits of historic and seasonal variation.⁸⁷

The duration of impacts to surface water hydrology would vary from temporary to permanent. The geographic extent of the impact on the NFK and the SFK rivers may extend just below the confluence of the two rivers. After the flows combine at the confluence of the NFK and SFK rivers, discernable changes in flow would be unlikely and are expected to be within historic and seasonal variation in the Kaktuli River.⁸⁸

states, wetlands only occupy 5.2 percent of the surface area. *See* FWS, *Status of Alaska Wetlands* at 18-19 (1994), <https://www.fws.gov/wetlands/documents/status-of-alaska-wetlands.pdf>.

⁸⁴ FEIS at ES 87.

⁸⁵ Revised Proposed Determination at 4-28.

⁸⁶ *Id.* at B-10.

⁸⁷ FEIS at ES 63.

⁸⁸ *Id.* at 4.16-2.

With few exceptions, predicted changes in habitat in the modeled portion of the upper mainstem Kaktuli River (upstream of the Swan River) are near zero or positive, suggesting that project effects from flow changes would not negatively impact reaches downstream of the NFK and SFK confluence, or in UTC.⁸⁹

Rather than attack the substance of these conclusions, EPA attempts to undercut the FEIS findings on streamflow by questioning the use of average monthly changes. However, as EPA itself admits, “hydrologists consider monthly flows to be a critical component of a stream’s hydrograph.”⁹⁰

EPA also attempts to discount the FEIS findings on streamflow by questioning the watershed model assumptions and inputs.⁹¹ However, as demonstrated in the attached response from Knight Piesold Consulting,⁹² none of EPA’s critiques of the water modeling hold up to examination. For example, EPA asserts that “[t]he baseline watershed model was configured and calibrated prior to development of the groundwater model (MODFLOW) and was not updated to include any additional geologic or water table elevation data collected and used in the groundwater model.”⁹³ As explained in the Knight Piesold Report, however, EPA’s statement is incorrect:

The baseline watershed model was updated in 2019 in parallel with the numerical groundwater model update, and the two modelling groups worked collaboratively. The baseline watershed model updates consider the same hydrogeologic and hydrologic data that were incorporated into the groundwater model. ... The results from both models were combined to take advantage of the strengths of each model and thereby provide a good representation of the hydrology and hydrogeology of the Project area that is appropriate for understanding the potential impacts of mine development on the hydrologic system.⁹⁴

EPA also asserts that “streamflow changes due to well pumping and groundwater table depression are not considered,” but this statement is also incorrect.⁹⁵ As Knight Piesold explains, all surface water and groundwater flows in the mine footprint that are not diverted by non-contact water diversions were modeled as captured by the mine and unavailable for

⁸⁹ *Id.* at 4.24-13.

⁹⁰ Revised Proposed Determination at B-6.

⁹¹ *Id.* at B-8 to B-10.

⁹² Ex. 3, Knight Piesold Consulting, *Pebble Project – Response to EPA Comments on Proposed Determination* (June 22, 2022) (“Knight Piesold Report”).

⁹³ Revised Proposed Determination at B-8.

⁹⁴ Knight Piesold Report at 1-2. The baseline watershed model was calibrated to an extensive dataset of continuous records of surface flows at multiple nodes, and variations in flow conditions were modelled using a long-term (76-year) climate record and consideration of a very wide range of potential surficial conditions.

⁹⁵ Revised Proposed Determination at B-8.

downstream release until treated. In addition, “[p]otential impacts of groundwater table depression extending outside the mine site boundary were incorporated into the watershed model.”⁹⁶

EPA also attempts to question the numerical groundwater flow modeling undertaken by BGC Engineering USA Inc. (“BGC”). But EPA’s critiques of that model are similarly unfounded. EPA asserts that the “volume of groundwater pumping and the extent of groundwater table drawdown are likely underestimated for several reasons.”⁹⁷ However, as provided in the attached response from BGC,⁹⁸ EPA’s assertion is incorrect. BGC developed a robust three-dimensional numerical groundwater flow model for the Pebble Project.⁹⁹ In addition to groundwater flows reporting directly to the pit, active groundwater extraction was simulated using a combination of perimeter and in-pit wells.¹⁰⁰ The range of potential flows to the open pit were explored through sensitivity analysis, with specific sensitivity scenarios selected to estimate the “upper bound of plausible extraction rates” at the request of USACE.¹⁰¹ In addition, the potential impacts of mine site facilities other than the pit were considered where appropriate.¹⁰² EPA’s speculation that the groundwater flow model underestimates drawdown is baseless.

These are just a few examples of the multiple inaccuracies relied upon by EPA to try to undermine the FEIS conclusions that streamflow changes would not materially impact fisheries. EPA admits that PLP has developed a “significant amount of baseline environmental data,” including streamflow data.¹⁰³ However, EPA discounts this data, baldly asserting “there is *no reason to expect* that these data fully capture how much these factors vary over longer time scales and more finely resolved spatial scales, which means that FEIS conclusions ... based on these data should be viewed as minimum estimates.”¹⁰⁴ Such unsupported criticism is insufficient to meet EPA’s burden of proof under the CWA. The baseline data is incontrovertibly the most robust data set ever compiled on the Bristol Bay region. If EPA believes that the actual aquatic resource impacts from streamflow changes cannot be adequately assessed based on the current data set, EPA must generate new data that demonstrates actual adverse impacts to fisheries before any 404(c) action can be pursued. It cannot simply rely on speculation and conjecture as a basis for its Section 404(c) action.

⁹⁶ Knight Piesold Report at 2.

⁹⁷ Revised Proposed Determination at B-9.

⁹⁸ Ex. 4, BGC Engineering USA Inc., *Groundwater Enquiry Related to 2022 Proposed Determination for Pebble Deposit Area* (June 23, 2022).

⁹⁹ *See id.* at 1.

¹⁰⁰ *Id.* at 2.

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ Revised Proposed Determination at B-7.

¹⁰⁴ *Id.* at B-8.

D. EPA Has Not Demonstrated That the Portfolio Effect Will Have an Unacceptable Adverse Effect Sufficient to Justify a Veto

EPA asserts that “a substantial body of research supports the conclusion that a diversity of habitats is necessary for maintaining locally adapted populations that create a stock portfolio of individual species.”¹⁰⁵ While the connection between this portfolio effect and the bases for the Revised Proposed Determination is unclear, EPA seems to argue that the portfolio effect justifies taking a precautionary approach here. Thus, EPA assumes that *any* fish habitat loss in the area could be detrimental to salmon. However, this speculation regarding a potential portfolio effect is not supported by the record.¹⁰⁶ The FEIS found that there would be no discernable impact to the portfolio effect from the Project:

given the vast breadth and diversity of habitat (and salmon populations) in the Bristol Bay watershed, *impacts on the Portfolio Effect are certain but not likely to be noticeable in context of the Bristol Bay watershed.*¹⁰⁷

The Portfolio Effect is an observation that the Bristol Bay salmon run is produced from an abundance of diverse aquatic habitat; this diversity allows for a harvestable surplus even when some systems experience low abundance. . . . The term “Portfolio Effect” is taken from the concept of investment portfolios, where adding to the diversity of investments is thought to reduce risk (or the likelihood of occurrence of losses to the overall investment portfolio, even if some individual investments do not do well). Any loss of salmon production would have an effect on the Bristol Bay “portfolio,” similar to the way that financial losses by individual investments would have an effect on an investor’s portfolio. In this EIS, the effect to the Bristol Bay portfolio is considered by evaluating the amount of habitat and salmon production that would be lost. *No long-term measurable changes in the number of returning salmon are expected, nor is genetic diversity expected to change; therefore, the impact to the Portfolio Effect would not be discernable.*¹⁰⁸

Similarly, in response to DEIS comments on this issue, the District stated:

Given the breadth and diversity of habitat (and salmon populations) in the Bristol Bay watershed, the expected impacts of localized mine and transportation corridor development on the Portfolio Effect are

¹⁰⁵ *Id.* at 3-48.

¹⁰⁶ EPA’s statement that salmon can use diverse habitats because of “microevolution” supports the concept that salmon can adapt to changes in their environment. *Id.* at 3-46.

¹⁰⁷ FEIS at 4.24-47 (emphasis added).

¹⁰⁸ *Id.* at 4.24-47 n.1 (emphasis added).

not likely to be discernible; rather, the Portfolio Effect may help to minimize expected impacts of the mine development on Bristol Bay's salmon fishery.¹⁰⁹

EPA's discussion of the portfolio effect in the Revised Proposed Determination does nothing to contradict the conclusions in the FEIS. The FEIS demonstrates that fish habitat in the upper North Fork Koktuli reaches is proportionally small, and that the mine would not directly impact returning salmon numbers nor their ability to spawn/rear. The FEIS found that overall impacts would not be measurable and would fall within the range of natural variability.¹¹⁰ The FEIS acknowledges some flow-related impacts to habitat quantity, but many of those impacts are actually positive changes to habitat acreage. In mainstem reaches, "81 to 90 percent of expected changes in suitable spawning habitat would be positive, or within 2 percent of pre-mine conditions, with more predicted increases in habitat than decreases, for both anadromous and resident fish species in an average water year scenario."¹¹¹ EPA's discussion of the portfolio effect does not question or undermine these conclusions.

In EPA's May 28, 2020 letter informing the District that EPA would not be pursuing the 404(q) elevation process, EPA states that the permit record should reflect that the sockeye salmon in the Koktuli River is a genetically distinct population, citing an unpublished report from the Alaska Department of Fish and Game ("ADF&G").¹¹² However, ADF&G took exception to this characterization, responding that EPA's conclusion is not accurately based on the ADF&G report, but instead is "an EPA interpretation."¹¹³ ADF&G clarified that the Koktuli River population "represents one of four closely-related Nushagak River populations with a river-type life history in the baseline."¹¹⁴ Thus, this population contributes to the overall diversity of the Bristol Bay portfolio. But neither ADF&G nor USACE identified a risk from the Project to the fishery based on the portfolio effect.¹¹⁵

PLP retained R2 Resource Consultants in 2020 to evaluate that potential of a portfolio level effect on upper Koktuli Chinook and Coho salmon populations associated with the direct loss of freshwater salmon habitat due to Pebble mine development.¹¹⁶ R2 concluded:

Specific to this analysis, we see evidence of habitat heterogeneity expressed in the variation of physical and chemical habitat conditions within these headwater tributary habitats . . . In

¹⁰⁹ *Id.* at D-88.

¹¹⁰ *Id.* at 4.24-46.

¹¹¹ *Id.* at 4.24-14.

¹¹² See EPA 3(b) Decline Letter.

¹¹³ Ex. 5, Letter from D. Vincent-Lang, Comm'r, ADF&G, to C. Hladick, EPA Regional Administrator (June 1, 2020).

¹¹⁴ *Id.*

¹¹⁵ See *id.*; FEIS at 4.24-47 n.1 ("No long-term measurable changes in the number of returning salmon are expected, nor is genetic diversity expected to change; therefore, the impact to the Portfolio Effect would not be discernable.")

¹¹⁶ Ex. 6, R2 Resource Consultants, Inc., *The Portfolio Effect on Upper Koktuli River Coho and Chinook Salmon, White Paper* (June 2020).

accordance with the portfolio strategy, this habitat diversity will provide a basis for differential tributary responses to future environmental perturbations, will reduce the risk that these habitats will be unsuitable for salmon use in the future, and thus will be able to dampen potential effects on the upper Kaktuli River Chinook and Coho salmon populations.¹¹⁷

Therefore, the portfolio effect does not justify EPA's proposed approach of assuming that any fish habitat loss in the defined area could be detrimental to salmon.¹¹⁸ The FEIS correctly found that there would be no discernable impact to the portfolio effect from the Project.

E. EPA Overstates the Significance of the Impacts by Unduly Narrowing the Watershed Scale

EPA attempts to question the FEIS findings on fishery impacts by arguing that the FEIS "does not disclose impacts at the smaller, more relevant and appropriate scale where impacts would be measurable."¹¹⁹ But the approach taken in the FEIS was based on USACE and EPA guidance, which direct that watershed impacts should be evaluated at a larger scale for remote areas:

Watershed Scale. Certain environmental factors in Alaska suggest that larger watershed scales than are commonly used in the lower 48 states may be appropriate. These factors include, but are not limited to: (1) *large areas where wetlands remain relatively free from human alteration and opportunities for wetland restoration and enhancement are limited*; and (2) large wetland dominated areas where there is a lack of upland sites appropriate for establishing wetlands.¹²⁰

¹¹⁷ *Id.* at 17.

¹¹⁸ The statement that even the loss of one small discrete population of the hundreds they say exist "may" have more significant impacts than expected is an example of EPA's speculative reasoning that pervades the document. If the applicable standard is that habitat in the Bristol Bay region which effects even one distinct population of salmon cannot be impacted, then developments like the proposed hydroelectric project near Dillingham will never come to fruition. In addition, it is highly likely that natural events such as the 1912 Novarupta volcano eruption have eliminated some discrete populations in the past without affecting the overall fishery. Moreover, the commercial fishery harvests millions of salmon each year, likely a much greater threat to "discrete populations" than any mine plan for the Pebble Deposit could ever be.

¹¹⁹ Revised Proposed Determination at B-6.

¹²⁰ *Memorandum of Agreement Between the U.S. Environmental Protection Agency and the Department of the Army Concerning Mitigation Sequence for Wetlands in Alaska under Section 404 of the Clean Water Act* at 5 (June 15, 2018) ("2018 Alaska MOA") (emphasis added), https://www.epa.gov/sites/production/files/2018-06/documents/epa_army_moa_alaska_mitigation_cwa_404_06-15-2018_0.pdf.

It is undisputed that the Pebble Deposit is in a large area where wetlands remain relatively free from human alteration and opportunities for wetland restoration and enhancement are limited. Thus, the approach taken in the FEIS is more appropriate, and consistent with EPA’s prior policy statements.

In 2018, the Alaska District issued a “Compensatory Mitigation Thought Process” document, which also directs that HUC 10 or larger may be used for such remote locations:

As a starting point, all project managers should review the 10 digit watershed for the purposes of cumulative impacts and the determination of compensatory mitigation. There are reasons for expanding or reducing the area of analysis from the 10 digit HUC. For example, in populous areas such as the Municipality of Anchorage, it may not be possible to determine project impacts caused by a particular discharge at the 10 digit HUC level due to other activities and/or development within that same sub-watershed. In that instance, a project manager should review the 12 digit HUC (*this should be an exception, not a standard*). In extreme cases, the project manager may determine that it is only possible to identify specific project direct, indirect, and cumulative impacts at the individual reach level due to multiple overlapping impacts within the watershed. *In instances where the project is located in a more rural area without interference from other impacts, the project manager may expand the analysis to the 8 digit HUC.*¹²¹

Thus, the use of smaller scale HUC 12 is the exception in Alaska, and is only appropriate for urban, developed areas like Anchorage. Indeed, HUC 10 is the usual scale used to assess impacts and the adequacy of compensatory mitigation for projects outside the Anchorage or North Slope areas.¹²² For remote, undeveloped areas like the Pebble location, agencies are instructed to use a larger HUC, such as HUC 8 or 10.¹²³ The FEIS adheres to this approach, analyzing mine site impacts in the context of the two HUC 10 watersheds affected (Headwaters Koktuli River and Upper Talarik Creek).¹²⁴ EPA’s attempt to discredit the FEIS’s findings based on the watershed scale utilized is therefore baseless, as the FEIS’s use of HUC 10 scale directly adheres to applicable USACE guidance.

¹²¹ U.S. Army Corps of Engineers, *Alaska District Compensatory Mitigation Thought Process* at 9 (Sept. 18, 2018) (“Compensatory Mitigation Thought Process”),

<https://www.poa.usace.army.mil/Portals/34/docs/regulatory/2018MitigationThoughtProcess.pdf>.

¹²² *See, e.g.,* USACE, *Donlin Gold Project Joint Record of Decision and Permit Evaluation* at 6-12 (Aug. 13, 2018) (“Donlin ROD”) (“All four restoration projects are located in the same 10-digit HUC watershed as the majority of the permanent aquatic resources impacts from the Project.”),

<https://www.poa.usace.army.mil/Portals/34/docs/regulatory/Donlin%20Gold%20Corps-BLM%20Joint%20Record%20of%20Decision.pdf?ver=2018-08-13-191053-293>.

¹²³ *Compensatory Mitigation Thought Process* at 9.

¹²⁴ FEIS at ES 92.

To reach its desired result, EPA ignores applicable guidance and precedent by utilizing the narrow HUC 12 scale in the Revised Proposed Determination despite the remote context of the Pebble Deposit. For example, EPA finds that the permanent loss of 8.5 miles of anadromous fish streams “represents approximately 13 percent of the anadromous waters in the NFK watershed.”¹²⁵ The NFK watershed is not an officially designated US Geological Survey (“USGS”) watershed, and therefore is not designated by a USGS HUC. The NFK is instead is the combined area of the Groundhog Mountain HUC 12 and an unnamed HUC 12 (19030321104). EPA has failed to justify why the HUC 12 level was utilized in the Revised Proposed Determination, especially in this remote Alaskan context. EPA’s unexplained decision to restrict the watershed scale considered causes it to overstate impacts throughout the Revised Proposed Determination and renders the proposal arbitrary and unsupported.

VI. EPA Overstates Adverse Effects by Failing to Fully Consider Mitigation

EPA overstates the potential impacts of the Pebble Project by omitting key mitigation that would be required for any future development. First, because EPA is proposing to act before USACE has indicated its intent to issue a permit and before the state permitting agencies completed their review processes on the proposed permit application, the mitigation that would have been imposed by USACE and under the state permits and CWA Section 401 decisions was omitted from EPA’s consideration. Second, because EPA rejected *all* potential compensatory mitigation, no compensatory mitigation was factored into the analysis. EPA’s failure to factor in mitigation that would be required under state and federal permitting means the Revised Proposed Determination is based on future development that could never be authorized under any current permitting regime. In essence, EPA has manufactured another hypothetical project doomed to fail at the outset. This is improper.

A. EPA Failed to Factor in the Mitigation that would be Imposed by State Permitting

The State of Alaska has a robust permitting program for mines, which would have imposed significant mitigation on any mine plan for the Pebble Deposit, including mitigation for protecting aquatic resources. The ADF&G has permitting authority over activities potentially impacting fishery resources, including activities in anadromous streams. ADF&G is the expert agency on anadromous fish habitat in Alaska and the agency’s expertise includes determining the appropriate mitigation for impacts to anadromous or resident fish waterbodies. For example, any discharge permit issued by ADF&G would include conditions to ensure that the temperature of the discharge would not have a negative effect on fish. EPA ignores this basic fact of permitting and asserts that water treatment plant (“WTP”) discharges would significantly alter downstream water temperatures.¹²⁶ By failing to account for the mitigation that would be required by ADF&G, EPA overstates the potential impacts of the project to achieve its desired outcome.

In addition, EPA’s findings fail to include the State’s input under Section 401 of the Clean Water Act. The State of Alaska’s Section 401 certification would include conditions that would have further reduced any adverse impacts to aquatic resources. The conditions imposed

¹²⁵ Revised Proposed Determination at 4-47.

¹²⁶ *Id.* at 4-40.

by the State under Section 401 would further mitigate any potential downstream impacts from the mine site. Thus, for example, in Donlin, the USACE Alaska District factored in the permit conditions established by the State of Alaska in assessing the compliance of the Project with Section 404.¹²⁷ Based in part on the Section 401 conditions, the District found that, “[w]ith Applicant design features and inclusion of special conditions, the proposed Project would comply with this factor of the Guidelines.”¹²⁸ In this case, EPA has failed to explain why potential fishery impacts support any 404(c) action, since the FEIS found no such impact, and the Section 401 certification would even further ensure aquatic resources were protected. This highlights the premature nature of EPA’s Revised Proposed Determination. By acting now, with an incomplete picture of the conditions that would be imposed by USACE and the State if the Corps issued a notice of intent to grant the permit, EPA has manufactured a hypothetical project with overstated impacts that it can invoke to justify its Revised Proposed Determination.

B. EPA Failed to Incorporate Any Compensatory Mitigation into its Analysis

EPA claims that 404(c) “does not direct EPA to consider mitigation.”¹²⁹ EPA also asserts that mitigation is not “relevant” because “there is no permit requiring mitigation and ... USACE expressly rejected PLP’s proposed mitigation.”¹³⁰ However, any future permit for development of the Pebble Deposit would include compensatory mitigation. And since EPA’s Revised Proposed Determination restricts future development that might be permitted by USACE, EPA must factor in compensatory mitigation. EPA’s failure to do so improperly stacks the deck against the Pebble Project – EPA assesses project impacts without factoring the countervailing mitigation that would be imposed by any future permit. EPA’s failure to develop and assess the net effects of a scientifically credible compensatory mitigation program designed to address residual impacts on aquatic habitat and wetlands invalidates the Agency’s proposed regulatory action. *See Motor Vehicle Mfrs.*, 463 U.S. at 43 (agency action is arbitrary and capricious where agency “entirely failed to consider an important aspect of the problem”).¹³¹

Compensatory mitigation is a critical component of the Section 404 program, with a long history of demonstrated ecological value. EPA and USACE issued a final rule on compensatory mitigation in 2008, based on a directive for such a regulation in the National Defense Authorization Act For Fiscal Year 2004, Pub. L. 108–136 § 314(b) (2003) (“NDAA”). In that Act, Congress instructed the USACE to maximize the opportunities for compensatory mitigation:

To the maximum extent practicable, *the regulatory standards and criteria shall maximize available credits and opportunities for mitigation*, provide flexibility for regional variations in wetland

¹²⁷ Donlin ROD at 6-19 to 6-21.

¹²⁸ *Id.* at B2-22.

¹²⁹ Revised Proposed Determination at 4-67.

¹³⁰ *Id.*

¹³¹ To the extent that EPA’s rejection of any compensatory mitigation is based on the “pristine nature” of the Bristol Bay Region, EPA’s contention that, if nothing needs restoration, then mitigation opportunities do not exist is not supported by law, precedent, or policy.

conditions, functions and values, and apply equivalent standards and criteria to each type of compensatory mitigation.

NDAA § 314(b)(1) (emphasis added). In the subsequent rulemaking issued jointly by EPA and the USACE, the agencies explained, “compensatory mitigation is a critical tool in helping the federal government to meet the longstanding goal of ‘no net loss’ of wetland acreage and function.” USACE & EPA, *Compensatory Mitigation for Losses of Aquatic Resources*, 73 Fed. Reg. 19594, 19594 (Apr. 10, 2008) (“2008 Mitigation Rule”). Therefore, based on the statute and EPA’s own regulations and policy, EPA must fully consider the potential for compensatory mitigation to offset unavoidable project effects on aquatic habitat and wetlands for the Pebble Project.

In addition, USACE and EPA also have specifically recognized that there must be particular flexibility in compensatory mitigation policy for Alaska, given its unique physiographic characteristics.¹³² The agencies clarified the regulatory flexibility that would be applied to reflect unique circumstances in Alaska, including that “avoiding wetlands may not be practicable where there is a high proportion of land in a watershed or region which is wetlands”:

The Clean Water Act Section 404 regulatory program provides a significant degree of flexibility in making permit decisions to reflect circumstances throughout the Nation, including Alaska. Where it is not practicable to avoid wetlands, or to restore or create wetlands, such measures are not required under the Section 404 program. . . . Given this flexibility, Alaskans should be assured that discharges of dredged or fill material into wetlands will be evaluated in a reasonable manner, consistent with the National goal of fair, flexible, and effective protection of the Nation’s wetlands resources.¹³³

In other words, USACE and EPA recognized that Alaska is a unique ecological setting, where avoiding wetlands would rarely be possible and where compensatory mitigation would require more flexibility. The point of the memorandum was to be clear that the fact that Alaska’s wetlands are largely intact **would not** mean that development would be precluded or that Section 404 permits could not be approved. Instead, the Section 404 program requirements would need to be applied more flexibility in Alaska to **ensure** that Section 404 permits could be evaluated “reasonably.”

The preamble to the 2008 Mitigation Rule explicitly recognized the continuing applicability of the May 13, 1994 guidance regarding Alaska. 73 Fed. Reg. 19594, 19619. In addition, the preamble to the 2008 Mitigation Rule noted that:

¹³² Memorandum from Robert H. Wayland, III, to Alvin L. Ewing, Alaska Operations Office, U.S. Env’tl. Prot. Agency Region X, *Statements on the Mitigation Sequence and No Net Loss of Wetlands in Alaska* at 2 (May 13, 1994), <https://dec.alaska.gov/media/13267/1994-wetlands-initiative.pdf>.

¹³³ *Id.* at 5 (emphasis added).

Flexibility in compensatory mitigation requirements is needed to account for regional variations in aquatic resources, as well as state and local laws and regulations. There also needs to be flexibility regarding the requirements for permittee-responsible mitigation. Practicability is an important consideration when determining compensatory mitigation requirements.

Id. at 19617. This policy of flexibility was further solidified with the 2018 “Memorandum of Agreement Between the US Environmental Protection Agency (EPA) and the Department of the Army Concerning Mitigation Sequence for Wetlands in Alaska under Section 404 of the Clean Water Act” (“2018 Alaska MOA”).¹³⁴ The 2018 Alaska MOA provides guidance regarding flexibilities that exist in the mitigation requirements for 404 permits, and how those flexibilities should be applied in Alaska:

Given the unique climatological and physiographic circumstances found in Alaska, it is appropriate to apply the inherent flexibility provided by the guidelines to proposed projects in Alaska. Applying this flexibility in a reasoned, commonsense approach will lead to effective decision-making and sound environmental protection in Alaska.¹³⁵

The Alaska District’s Compensatory Mitigation Thought Process further explains the District’s approach to compensatory mitigation. The Thought Process document provides that “it may be appropriate to identify compensatory mitigation options over a larger watershed scale given that compensation options are frequently limited at a smaller watershed scale” in Alaska.¹³⁶

Ignoring legal precedent and its own past practice, EPA asserts that it can make a Section 404(c) determination without factoring in compensatory mitigation. However, Congress has directed that compensatory mitigation be fully and flexibly considered under Section 404. *See* NDAA § 314(b). And EPA and USACE have implemented that requirement in their Section 404 regulations and policies. *See* 33 C.F.R. § 325.1(d)(7) (404 application to include compensatory mitigation statement); 33 C.F.R. § 332.1(c)(3) (“Compensatory mitigation for unavoidable impacts may be required to ensure [compliance] with the Section 404(b)(1) Guidelines.”); *see* also 40 C.F.R. § 231.2(e) (incorporating “relevant portions of the section 404(b)(1) guidelines” into the definition of adverse effect in EPA’s Section 404(c) regulations). Given Congress’s clear direction, and EPA’s own regulatory requirements, the Agency cannot claim that Section 404(c) is exempt from Congress’s mandate to consider compensatory mitigation in the context of Section 404.

EPA’s argument that it can ignore compensatory mitigation also ignores its own longstanding practice of evaluating compensatory mitigation in past 404(c) actions. *See, e.g.,* EPA, *Modification to the 1985 Clean Water Act Section 404(c) Final Determination for Bayou aux Carpes* at 11 (May 28, 2009) (“Based on the minimum mitigation that the Corps has

¹³⁴ The 2018 Alaska MOA replaced the 1992 and 1994 Guidance. 2018 Alaska MOA at 1.

¹³⁵ *Id.* at 3.

¹³⁶ Compensatory Mitigation Thought Process at 10.

committed to . . . EPA believes that any discharges . . . would not result in unacceptable adverse effects.”); EPA, *Modification of the March 21, 1988, Russo Development Corporation Section 404(c) Final Determination* at 3 (Sept. 7, 1995) (amending final determination based on compensatory mitigation plan). EPA’s argument that it can ignore compensatory mitigation in this case is therefore baseless.

C. EPA’s Reasons for Rejecting PLP’s Proposed Compensatory Mitigation Plans are Baseless

EPA’s identification of alleged deficiencies in PLP’s CMP does not mean that EPA can assume no compensatory mitigation would be imposed in a future permit. At a minimum, EPA should have factored in some mitigation into the analysis.

EPA evaluated two compensatory mitigation plans submitted by PLP to USACE.¹³⁷ EPA asserts that “both plans fail to adequately mitigate the adverse effects . . . to an acceptable level.”¹³⁸ Based on this erroneous position, EPA based the Revised Proposed Determination on the *unmitigated* impacts of the 2020 Mine Plan, and the *unmitigated* impacts of any future mine plan. However, EPA’s basis for failing to factor in any compensatory mitigation is entirely unsupported.

1. EPA’s Reasons for Rejecting the January 2020 CMP Are Baseless

PLP spent significant time and resources developing compensatory mitigation options for the Section 404 permitting process, including a series of mitigation plans to respond to changing direction from the USACE Alaska District. In January 2020, PLP submitted a draft CMP that was developed in response to District guidance and precedent. Since no on-site compensatory mitigation opportunities are available due to the Pebble site’s remoteness and the lack of disturbance in the watersheds, the January 2020 CMP focused on off-site opportunities that benefit anadromous streams and water quality in the larger watersheds associated with the Project. The CMP identified three compensatory mitigation opportunities that were available and practicable for the Project in the larger affected watersheds:

Community wastewater improvement projects: off-site, out-of-kind water quality restoration opportunities that would enhance water quality in the Bristol Bay region by improving wastewater collection and treatment systems in drainages with identified needs. Discharges from properly designed systems could improve the quality of water in poorly functioning drainages downstream of the discharges, improving regional water quality.¹³⁹

¹³⁷ PLP actually developed a series of six different CMPs during the three-year 404 permitting process in an attempt to respond to changing direction from the USACE Alaska District. Since EPA only discusses two of the CMPs in the Revised Proposed Determination, we will only respond regarding those two specific plans.

¹³⁸ Revised Proposed Determination at 4-67.

¹³⁹ PLP, Pebble Project Draft Compensatory Mitigation Plan at 30, Dkt. ID EPA-R10-OW-2022-0418-0014 (Jan. 2020).

Removing Pacific salmon fish passage barriers: removing Pacific salmon fish passage barriers associated with undersized or damaged culverts in the Cook Inlet and Bristol Bay areas. A large amount of Pacific salmon habitat can be restored through a single fish passage improvement. The proposed plan would compensate the Project's riverine wetlands losses by rehabilitating up to 8.5 miles of streams containing Pacific Salmon habitat through replacement of undersized or damaged culverts with a substantial multiplier.¹⁴⁰

Removing marine debris from Kamishak Bay: removing marine debris accumulated on beaches in Kamishak Bay in Cook Inlet. Marine debris pose hazards to wildlife through entanglement and ingestion and can damage habitat. The proposal would result in the rehabilitation of 7.4 miles of coastal marine wetlands and marine habitat in Kamishak Bay.¹⁴¹

PLP's proposed combination of wastewater facility improvement projects, restoration of fish habitat, and cleanup of coastal habitats constituted a robust and practical mitigation approach that fully met Section 404's requirements.

EPA faults the January 2020 CMP because much of the work would occur in other watersheds.¹⁴² But as discussed above, USACE and EPA guidance specifically recognize that off-site and out of kind mitigation is often appropriate in Alaska, given the limited restoration opportunities. Since no on-site compensatory mitigation opportunities are available (other than preservation) due to the Pebble site's remoteness and the lack of disturbance in the watersheds, the January 2020 CMP appropriately focused on off-site opportunities that benefit anadromous streams and water quality in the larger watersheds associated with the Project.

The CMP's off-site and out-of-kind compensatory mitigation proposal was also consistent with mitigation proposed and approved for other major development projects in Alaska, including:

- Oil Search Alaska's CMP for oil exploration and development activity in the North Slope includes a project to improve village wastewater treatment facilities in the native village of Nuiqsut.¹⁴³
- Alaska LNG's CMP includes wastewater treatment improvement projects.¹⁴⁴

¹⁴⁰ *Id.* at 30-31.

¹⁴¹ *Id.* at 31.

¹⁴² Revised Proposed Determination at 4-69.

¹⁴³ USACE, *Record of Decision & Permit Evaluation, Nanushuk Development Project* at 31, POA-2015-00025 (May 14, 2019).

¹⁴⁴ Alaska LNG, *Wetlands Compensatory Mitigation Plan* at 23 (Nov. 8, 2019), <https://www.poa.usace.army.mil/Portals/34/docs/regulatory/publicnotices/2019/Attachment%206%20-%20Wetlands%20Compensatory%20Mitigation%20Plan.pdf?ver=2019-12-26-182619-223>.

- Donlin Gold’s CMP includes permittee-responsible mitigation preservation outside of the impact watershed and far from the project site because of the lack of sufficient available mitigation bank and in-lieu fee program credits.¹⁴⁵
- For the Greater Mooses Tooth Two Development Project, Alpine Satellite Development, USACE determined that mitigation in the form of avoidance and minimization measures were sufficient and compensatory mitigation was not required for the project. Nonetheless, the applicant requested USACE include, as a special condition to the permit, a project to help restore stream flow at culverts located south of Nuiqsut.¹⁴⁶

EPA did not initiate a Section 404(c) veto in these instances and EPA has not articulated any reason why the mitigation proposed by PLP is insufficient when it failed to veto these other large development proposals in Alaska.

EPA has therefore failed to justify its complete rejection of the January 2020 CMP. Even if EPA found some elements of the plan inadequate, EPA should have factored in some combination of compensatory mitigation into its analysis in the Revised Proposed Determination. EPA’s failure to do so is arbitrary as it is without question that compensatory mitigation would be required for any future mine plan in the area.

2. EPA’s Reasons for Rejecting the November 2020 CMP Are Equally Baseless

EPA’s complaints about the November 2020 CMP are equally unavailing. The November 2020 CMP was developed based on USACE’s direct guidance. In an August 20, 2020 letter, the District informed PLP that “...in-kind compensatory mitigation within the Koktuli River watershed will be required to compensate for all direct and indirect impacts caused by discharges into aquatic resources at the mine site.”¹⁴⁷

PLP’s November 2020 CMP was compiled based on the input from the District, as well as the 2008 Compensatory Mitigation Rule, 33 C.F.R. 332, and Alaska-specific compensatory mitigation guidance. To compensate for the permanent and unavoidable impacts to aquatic resources associated with the mine site, transportation corridor, and port site, PLP proposed preservation of a 112,445-acre Koktuli Conservation Area in the Koktuli River watershed.¹⁴⁸ The preservation of the Koktuli Conservation Area would allow the long-term protection of a large and contiguous ecosystem that contains highly valuable aquatic and upland habitats, including 31,026 acres of aquatic resources within the national importance-designated Koktuli

¹⁴⁵ See Donlin ROD § 6.2.

¹⁴⁶ USACE, *Proposed Greater Mooses Tooth Two Development Project Joint Record of Decision and Permit Evaluation* at D5.1 (Oct. 2018), https://eplanning.blm.gov/projects/nepa/65817/160123/195768/Record_of_Decision_with_cover_page.pdf.

¹⁴⁷ Letter from D. Hobbie, USACE Regional Regulatory Division Chief, to J. Fueg, PLP (Aug. 2020) (“USACE August 2020 CMP Letter”).

¹⁴⁸ November 2020 CMP at 7.

River watershed. Preservation of the Koktuli Conservation Area would also remove the threat to, and prevent the decline of, aquatic resources in the Koktuli River watershed from potential future actions, therefore ensuring the sustainability of fish and wildlife species that depend on these aquatic resources, while protecting the subsistence lifestyle of the residents of Bristol Bay and commercial and recreational sport fisheries. In response to the District's direction, the mitigation work plan included implementation of Site Protection through a deed restriction, rather than a lease, and also included additional detail on monitoring, long-term management, and costs/financial assurance.¹⁴⁹

The 129-page CMP was submitted to the District on November 4, 2020. It took the District just five days to review the document and deem it "insufficient." PLP was not informed of the rejection of the CMP until it received the permit denial decision on November 25, 2020. Thus, PLP was never given an opportunity to address any of the alleged deficiencies listed by the District.

EPA states that it "agrees" with the bases cited by USACE for rejecting the November 2020 CMP. However, if EPA had taken a closer look at the slap-dash "deficiencies" listed by USACE in the ROD, it would have readily seen that they are counter to USACE guidance and precedent. In fact, some of the "deficiencies" are factually incorrect or are based on a failure to review the entire CMP. As explained below, none of the alleged deficiencies listed by USACE or EPA justify rejection of the November 2020 CMP.

Port Site Mitigation: EPA cites USACE's finding that "[n]o compensatory mitigation was proposed by the applicant to offset impacts from the port site."¹⁵⁰ However, the proposed mitigation in the November 2020 CMP included the port impacts. On the very first page, the November 2020 CMP states "[f]or the purposes of this document, *the port*, road corridor, and the natural gas pipeline are collectively referred to as transportation infrastructure."¹⁵¹ Directly thereafter it provides that the proposed mitigation is to compensate for "the mine site and transportation corridor."¹⁵² The November 2020 CMP therefore included the port site as part of the transportation corridor and impacts from the port site are included within the transportation facility impact numbers.¹⁵³ Section 6 of the November 2020 CMP describes how all project impacts, including transportation facility impacts, would be mitigated through preservation of the Koktuli Conservation Area.¹⁵⁴

Preservation Waiver: EPA repeats the USACE District's assertion that a waiver is required since preservation is the sole form of compensatory mitigation in the November 2020 CMP.¹⁵⁵ However, a preservation-only CMP was required based on the District's direction in its August 20, 2020 letter, which stated that "in-kind compensatory mitigation within the Koktuli

¹⁴⁹ *Id.* at 9-12, 30.

¹⁵⁰ Revised Proposed Determination at 4-70.

¹⁵¹ November 2020 CMP at 1.

¹⁵² *Id.* at 2.

¹⁵³ *Id.* at 1.

¹⁵⁴ *Id.* at 21.

¹⁵⁵ Revised Proposed Determination at 4-70.

River Watershed will be required to compensate for all direct and indirect impacts caused by discharges into aquatic resources at the mine site.”¹⁵⁶ Since it was well understood that opportunities for wetland restoration, creation or enhancement would not be reasonable due to existing conditions within the Koktuli watershed, the only option left was a preservation CMP. The August 20 letter thus documented that the District had already decided that preservation was the appropriate mitigation mechanism.

EPA fails to explain why PLP would need to specifically request a waiver after having been informed by USACE that preservation was required for compensatory mitigation. The regulations do not require that an applicant specifically *request* a waiver for a preservation-only CMP, instead providing:

Where preservation is used to provide compensatory mitigation, *to the extent appropriate and practicable* the preservation shall be done in conjunction with aquatic resource restoration, establishment, and/or enhancement activities. This requirement *may be waived by the district engineer where preservation has been identified as a high priority using a watershed approach described in paragraph (c) of this section*, but compensation ratios shall be higher.

33 C.F.R. 332.3(h)(2) (emphasis added). The regulations make no mention at all of requesting a waiver or the mechanism for making such a request. Instead, the regulation simply provides that the District can issue a waiver, without a specific request from the applicant, where preservation has been identified as a high priority using a watershed approach. That is exactly what occurred here – after multiple discussions with PLP concerning mitigation, the District directed PLP to use preservation based on a watershed approach.

Moreover, contrary to EPA’s suggestion, the November 2020 CMP contains more than sufficient information to demonstrate the appropriateness of preservation. Section 332.3(h)(1) provides the criteria for when preservation may be used, and each is specifically addressed in the November 2020 CMP.¹⁵⁷ To the extent a waiver request was necessary, the CMP therefore provided the basis for the request.

Level of Detail: EPA cites the USACE’s assertion that the November 2020 CMP lacked sufficient detail. However, the detail required in a preservation-only CMP is significantly less than a CMP based on restoration or enhancement. For example, out-of-kind restoration like waste water treatment plant modifications may require significant detail to explain the existing status and conditions, the technical rehabilitation and improvement work proposed, and how the work will result in improved water quality. Preservation is a simpler mechanism that requires less explanation – the conservation area is being preserved from future disturbance to protect existing aquatic resources. While the scale of PLP’s proposed preservation project is large, the fundamental details of the preservation-only plan are no different than for a smaller site – that is, what is the ecological value of the site, how is it threatened, and how the site will be protected

¹⁵⁶ USACE August 2020 CMP Letter at 1.

¹⁵⁷ November 2020 CMP at 3-4.

and monitored. Furthermore, PLP's CMP does not skimp on facts or detail – the 129-page CMP contains significant information and technical details, including all of the elements required under the regulations. The appendices to the CMP offer even greater detail. For example, the CMP includes a Kaktuli Conservation Area Wetlands and Waterbodies Delineation Report, which describes and delineates aquatic resource boundaries within the entire 112,445-acre conservation area.

Performance Standards: EPA also cites the District's finding that the CMP failed to include ecological performance standards, such as a functional assessment.¹⁵⁸ In 2013, years before an application was even filed, PLP inquired about potential functional assessment methodologies that could be applied to the Pebble Project. The District responded in 2014, noting that there was no functional assessment methodology approved for Alaska.¹⁵⁹ Thus, for consistency with the FEIS impacts analysis, and based on the unimpacted nature of the proposed preservation area, the metric of acres was used as an ecological performance standard in the CMP. The CMP also included acres of regionally important wetlands protected under the CMP for consistency with the FEIS.

Using acres as a performance standard is consistent with Section 332.5, which provides “[t]he approved mitigation plan must contain performance standards that will be used to assess whether the project is achieving its objectives ... so that the project can be objectively evaluated to determine if it is ... attaining any other applicable metrics (e.g. acres).” 33 C.F.R. § 332.5. The Preamble to the 2008 Mitigation Rule states that “[p]erformance standards will vary by aquatic resource type and geographic region” and “must be developed on a project-by-project basis.” 73 Fed. Reg. 19594, 19643. Because no functional assessment methodology had been approved, PLP was forced to rely on other means for valuation. Based on the unprecedented scale of the Kaktuli Conservation Area preservation project, and the unimpacted nature of the preserved wetlands, acres are an appropriate metric for ecological performance.

Indeed, other Alaska projects have been approved by the District, and not vetoed by EPA, where no functional assessment was required and acres were used as an appropriate substitute. For example, the Ambler Road ROD provides: “The implementing regulations do not require that a functional assessment be used to evaluate a permit application nor to determine compensatory mitigation...When no functional assessment is available ..., other measures such as acres, may need to be used.”¹⁶⁰ Thus, EPA's allegation that the CMP's performance standards were “not compliant” is baseless.

¹⁵⁸ Revised Proposed Determination at 4-72.

¹⁵⁹ See also FEIS Comment Response Matrix, Response to EPA Comments on DEIS § 4.22 at 1 (“A functional assessment will not be prepared for this proposed project or this EIS.”); FEIS Comment Response Matrix, Response to EPA Comments on DEIS § 3.22 at 9 (“There is no existing functional assessment tool or methodology that covers the analysis area. The wetlands in the analysis area are considered to be functioning at maximum capacity given the lack of human disturbance in the analysis area.”).

¹⁶⁰ U.S. Dep't of Interior et al., *Ambler Road Joint Record of Decision* at F-10 (July 2020), https://eplanning.blm.gov/public_projects/57323/200091317/20022329/250028533/Ambler%20Road%20Record%20of%20Decision.pdf.

Monitoring: EPA repeats USACE’s erroneous statement that only one monitoring event was included in PLP’s November 2020 CMP.¹⁶¹ In fact, PLP’s plan included monitoring every five years. The CMP provides:

To meet the requirements of 33 CFR 332.4(c)(11), a third party will conduct monitoring activities and submit reports to confirm compliance with the Site Protection Instrument. These activities will occur *every 5 years* following the completion of monitoring activities described in Section 10, Monitoring Requirements (33 CFR 332.4(c)(10)), starting in Year 10 (5 years after completion of the monitoring period) and continuing through Year 95.¹⁶²

The five-year schedule is based on the lack of expected change in the remote KCA area, balanced with safety considerations and an attempt to minimize noise disturbance from helicopter-supported site visits. The assertion that only one monitoring event was included in the November 2020 CMP is just plain wrong and demonstrates the lack of care EPA took in evaluating PLP’s proposed mitigation elements.

Site Protection Instrument and Length of Protection: EPA adopts the District’s allegation that a 99-year deed restriction is not “permanent protection.”¹⁶³ However, the approach proposed by PLP is consistent with USACE regulations, guidance and precedent.

A deed restriction is specifically listed in the Site Protection Instrument Handbook as a suitable instrument for protection and has been used on other Alaska projects.¹⁶⁴ For example, a deed restriction was deemed adequate for the preservation projects approved for the Donlin project – a CMP that the District provided to PLP as a model.¹⁶⁵ And, significantly, EPA did not seek to veto the Donlin project based on its use of a deed restriction.

Moreover, the CMP regulations contemplate that preservation of governmental land can be treated differently than private land. *See* 33 C.F.R. § 332.7(a). There are good reasons for this. Governmental agencies often have the resources to actively manage and police lands under a CMP as well or better than third parties enforcing rights under a conservation easement. Governmental agencies may also be restricted in their ability to assign or delegate management authority to third parties. This flexibility with respect to compensatory mitigation on

¹⁶¹ Revised Proposed Determination at 4-72.

¹⁶² November 2020 CMP at 28.

¹⁶³ Revised Proposed Determination at 4-73.

¹⁶⁴ USACE, *Compensatory Mitigation Site Protection Instrument Handbook for the Corps Regulatory Program* at 6-7 (July 2016) (“Site Protection Instrument Handbook”), https://www.epa.gov/sites/production/files/2017-01/documents/site_protection_instrument_handbook_august_2016.pdf. Deed restrictions are also listed in the *Compensatory Mitigation Thought Process* as appropriate preservation instruments. *See Compensatory Mitigation Thought Process* at 16.

¹⁶⁵ *See* Donlin ROD at 6-9 (“The applicant proposes to protect this area long term through deed restriction.”).

governmental lands is recognized in the regulation governing the site protection instrument. *See id.* Because the Kuktuli Conservation Area would be on state land, the District and EPA are incorrect in singling out the absence of a third-party conservation holder as a reason for deeming the CMP “non-compliant.”

The suggestion that a deed restriction for 99 years is non-compliant because it is not “permanent” is also misplaced. The regulations require that the site protection instrument provide “long term” protection. *Id.* And more fundamentally, the relevant regulations contemplate different approaches for governmental lands than private lands. On governmental lands, CMPs can be effectuated through a wide variety of restriction, including land management plans, which by their very nature are not “permanent.” The regulations appropriately recognize that the goal of “long term protection” can be achieved through a range of options on governmental lands, recognizing the different tools available to federal, state, and local governments. *Id.* The Site Protection Instrument Handbook makes clear that deed restrictions are one of these options.¹⁶⁶ PLP had engaged in preliminary discussions with the State and identified a presumptive path, subject to State review and approval, to obtain an interest in the affected lands and impose the restrictions contained in the CMP through a deed restriction achieving “long term” site protection (for at least 99 years). The November 2020 CMP thus fully met applicable requirements for a preservation plan for governmental lands.

In the end, many of the “deficiencies” identified by EPA in the November 2020 CMP are actually implementation and documentation steps that are generally developed later in the process. For example, EPA faults the CMP for failing to provide a site protection instrument and supporting real estate information like title insurance, performance standards, support for the cost estimate, and financial assurance.¹⁶⁷ In point of fact, a description of all of these elements is included in the November 2020 CMP, including the site protection instrument (deed restriction), Maintenance Plan, Long-Term Management Plan, and Financial Assurance.¹⁶⁸ The CMP properly describes the necessary elements and provides that some components will be submitted for approval closer to construction. The regulations provide that CMPs should include “a description” of the site protection instrument, maintenance plan, long-term management plan, and financial assurances. 33 C.F.R. § 332.4(c). The regulations do not require that these elements be finalized and approved at the time of the CMP or permit issuance, but instead “in advance of, or concurrent with, the activity causing the authorized impacts.” 33 C.F.R. § 332.7(a)(5). That is exactly the approach taken in PLP’s November 2020 CMP.

The rejection of the CMP on this basis is also contrary to precedent. In the Donlin ROD, for example, the District approved, and EPA did not veto, a project with a CMP that included a preservation component and specifically allowed the site protection instrument and other information to be developed and submitted post-permit.¹⁶⁹ Instead of rejecting the Donlin CMP as “non-compliant,” the Donlin ROD includes special conditions that require the submission “prior to initiation of construction” of draft performance standards, a site protection instrument

¹⁶⁶ Site Protection Instrument Handbook at 6-7.

¹⁶⁷ *See* Revised Proposed Determination at 4-70 to 4-73.

¹⁶⁸ November 2020 CMP at 9-12, 25, 28-30.

¹⁶⁹ Donlin ROD at 6-16.

and supporting real estate information like title insurance, detailed cost estimates, draft financial assurance, and a long-term management plan.¹⁷⁰ The lack of these components did not preclude approval of the CMP in past cases like Donlin, and did not cause EPA to initiate the Section 404(c), yet somehow became fatal with respect to Pebble.

EPA also asserts the November 2020 CMP does not meet the requirements for preservation because it does not involve removal of threat.¹⁷¹ However, the CMP clearly documents the threat to the area to be preserved:

Development trends could result in a demonstrable threat of loss or substantial degradation due to human mineral extraction activities in both active and inactive claims that might not otherwise be expected to be restricted. Flour gold in the gravel bars has been documented in the lower Koktuli River at two inactive placer deposits (USGS 2020a). The upper reaches of the watershed include seven mineral prospects, including the Pebble deposit location, for copper, gold, molybdenum, silver, lead, and zinc (USGS 2020a). The U.S. Geological Survey (USGS) has identified the conservation area as having potential for the discovery of porphyry copper deposits, epithermal vein deposits, intermediate-level intrusion-related gold deposits, and a variety of other types of mineral deposits.¹⁷²

Active State mining claims held by PLP currently occupy 38,520 acres (34 percent) of the conservation area, while lapsed claims held by other parties previously occupied an additional 25,709 acres (23 percent) (Figure 3-2). ... Except for 17 privately owned Native allotments, all the lands in the watershed are owned by the State of Alaska, and are managed for multiple uses, including mining. The Koktuli Conservation Area will preserve 112,445 acres within the Koktuli River watershed and remove the threat of development from the protected areas.¹⁷³

The November 2020 CMP also includes a full explanation of why preservation of the Koktuli Conservation Area is appropriate for preservation under the criteria of 33 C.F.R. 332.3(h). EPA's assertion that the area to be preserved is not threatened is baseless.

EPA asserts the November 2020 CMP is deficient because "preservation does not replace lost ecological functions or area."¹⁷⁴ But preservation is a long-recognized compensatory

¹⁷⁰ *Id.* at 6-16 to 6-17.

¹⁷¹ Revised Proposed Determination at 4-72 to 4-73.

¹⁷² November 2020 CMP at 9.

¹⁷³ *Id.*

¹⁷⁴ Revised Proposed Determination at 4-73.

mitigation strategy that is specifically identified as an option in USACE and EPA regulations and guidance. And preservation by design involves preserving *other* natural resources in the watershed, not replacing aquatic resources, functions or area directly impacted by the project.¹⁷⁵ The regulatory definition of “preservation” makes this clear, noting that “preservation does not result in a gain of aquatic resource area *or functions*.” 33 C.F.R. § 332.2.

Moreover, PLP proposed preservation of a 112,445-acre area would protect a large and contiguous ecosystem that contains highly valuable aquatic and upland habitats, including 31,026 acres of aquatic resources within the national importance-designated Kuktuli River watershed.¹⁷⁶ This preservation area would protect resources, including streams and wetlands, with similar ecological functions to those impacted by the Pebble Project. EPA’s finding that preservation is inadequate in this case therefore appears to be another example of EPA applying a new standard to Pebble: preservation may be an option for other projects but not for Pebble. Moreover, as discussed above, a preservation CMP was developed based on the District’s direction. It rings hollow for EPA to assert that PLP’s plan was deficient for relying on preservation when PLP was specifically directed to undertake that approach.

Finally, EPA states that the November 2020 CMP is somehow deficient because impacts at the mine site could degrade the downstream resources proposed for preservation.¹⁷⁷ These alleged impacts rely on the same faulty line of speculation regarding downstream impacts discussed above – the FEIS did not find significant downstream impacts from the project in any watershed, including in the Kuktuli River watershed where the preservation area was proposed.¹⁷⁸ Moreover, even if there were some minor downstream impacts in the preservation area, this does not invalidate the preservation plan. The plan would still preserve the natural resources in the preservation area from any development, thus precluding any impacts from mining or other development in that area. In point of fact, there is always the potential for some indirect impacts to preservation areas, such as air deposition, noise or light pollution from nearby development. A preservation plan can never remove all potential impacts that might occur from adjacent development, and that is not a legal requirement. EPA’s efforts to impose more stringent requirements on the Pebble Project than are required under their own regulations and guidance render the Revised Proposed Determination arbitrary.

¹⁷⁵ See, e.g., EPA, *The Mitigation Sequence Methods of Compensatory Mitigation* at 1 (preservation appropriate “when the resources to be preserved contribute significantly to the ecological sustainability of the watershed”), https://www.epa.gov/sites/default/files/2015-08/documents/compensatory_mitigation_factsheet.pdf.

¹⁷⁶ November 2020 CMP at i.

¹⁷⁷ Revised Proposed Determination at 4-73.

¹⁷⁸ See, e.g., FEIS at 4.24-1 (“Mine site development would permanently remove approximately 22 miles of fish habitat in the North Fork Kuktuli and South Fork Kuktuli drainages. *The loss of habitat is not expected to have a measurable impact on fish populations based on physical habitat characteristics and fish density estimates in the affected reaches.*”) (emphasis added).

D. EPA's Position that There are No Other Adequate Compensatory Mitigation Measures is Unsupported

EPA provides “for informational purposes” an Appendix C that cursorily addresses other potential compensatory mitigation. Based on its cursory review, EPA concludes that “known compensation measures are unlikely to adequately mitigate effects . . . to an acceptable level.”¹⁷⁹

Section 4 of Appendix C provides an overall critique of compensatory mitigation for offsetting impacts to fish habitat. EPA characterizes research as finding that “simply achieving compliance with all regulatory requirements does not ensure that ecological functions are replaced.”¹⁸⁰ Section 4 of Appendix C concludes with the following quote:

It is important to acknowledge that it is simply not possible to compensate for some habitats. Therefore, the option to compensate for HADDs [harmful alteration, disruption or destruction to fish habitat] may not be viable for some development proposals demanding careful exploration of alternative options including redesign, relocation, or rejection.¹⁸¹

This sounds an ominous note for future projects – regulatory compliance may no longer be adequate and permit applications may be rejected because fishery habitat impacts cannot be adequately compensated for. But if current regulatory requirements are inadequate to meet the CWA's intent, EPA and USACE must amend the applicable regulations and apply those new requirements prospectively. EPA's attempt to instead apply new standards in a project-specific decision violates basic principles of administrative law. *See, e.g., Ford Motor Co. v. FTC*, 673 F.2d 1008 (9th Cir. 1981) (“To allow the order to stand . . . would create a national interpretation [] and in effect enact the precise rule the FTC has proposed, but not yet promulgated.”); *Environmental Integrity Project v. EPA*, 425 F.3d 992, 996-97 (D.C. Cir. 2005) (unannounced reinterpretation of regulatory authority amounts to “a surprise switcheroo on regulated entities” and such a “flip-flop complies with the APA only if preceded by adequate notice and opportunity for public comment”); *W. States Petroleum Ass'n v. EPA*, 87 F.3d 280, 284 (9th Cir. 1996) (“EPA must clearly set forth the ground for its departure from prior norms so that we may understand the basis of the EPA's action and judge the consistency of that action with the EPA's mandate.”).

The upshot of EPA's position appears to be that no compensatory mitigation, alone or in combination, could ever be adequate for impacts within the Bristol Bay watershed. But the Bristol Bay region is not a designated wilderness area that has been set aside from development and EPA does not have authority under the CWA to prevent all development in the region simply because it believes the area is a “high-quality habitat.”¹⁸²

¹⁷⁹ Revised Proposed Determination at 4-68, 4-73, C-1.

¹⁸⁰ *Id.* at C-31 to C-32.

¹⁸¹ *Id.* at C-32.

¹⁸² *Id.*

Moreover, EPA’s argument that the Bristol Bay watershed is too pristine for appropriate compensatory mitigation opportunities to be successfully permitted and implemented is contrary to practice and precedent. In Appendix C, EPA describes the kinds of compensatory mitigation techniques that are commonly used to offset residual project effects on fishery habitat and then, without any scientific basis, goes on to dismiss these techniques as “unlikely to adequately mitigate effects described in this proposed determination to an acceptable level.”¹⁸³ EPA arrives at this conclusion despite decades of documented success of aquatic habitat enhancement projects in salmon ecosystems and regulations that permit both on- and off-site locations for compensatory mitigation as well as in-kind and out-of-kind mitigation measures. Many examples exist where human intervention has been proven to enhance fish productivity and abundance: by moderating extreme low or high flows, by enhancing naturally poor water quality conditions, by re-watering naturally de-watered habitat areas or re-connecting barren streams and ponds with otherwise high-quality conditions to existing habitat, etc. As fishery experts Bailey and Buell found:

The track record for successful mitigation of potential impacts to salmon and resident fish species in settings like that surrounding the Pebble deposit is very long, very comprehensive and very clear. Methods are available, they are appropriate, they do work, states and federal agencies are firmly committed to implementation of these methods over a wide array of landscapes, and outcomes are demonstrable and have been demonstrated.¹⁸⁴

In fact, EPA itself has supported fish passage and habitat restoration projects. For example, EPA is part of the inter-agency Puget Sound Federal Task Force. The Task Force issued an action plan in May 2022 that “reflects high mutual interest and substantial coordination and collaboration in several areas, including, for example: riparian protection and restoration; fish passage restoration; restoration project permit streamlining; green infrastructure and stormwater; science and monitoring; and habitat protection and restoration.”¹⁸⁵ Thus, EPA’s sudden complaints about fish passage and habitat restoration projects ring hollow.

EPA erroneously asserts that well-established and time proven aquatic habitat enhancement techniques just won’t work in the Bristol Bay area and has refused to consider any benefits that might accrue from *any* compensatory mitigation plan. EPA’s biased conclusions on compensatory mitigation result in a gross exaggeration of impacts and are thus an invalid basis for the proposed prohibition and restrictions. Any attempt to take regulatory action based on the existing record, and without full consideration of mitigation, would be arbitrary and capricious. *See Motor Vehicle Mfrs.*, 463 U.S. at 43 (agency action is arbitrary and capricious where agency “entirely failed to consider an important aspect of the problem”).

¹⁸³ *Id.* at C-33.

¹⁸⁴ Ex. 7, J.W. Buell & R.E. Bailey, *Mitigation and EPA’s Bristol Bay Watershed Assessment Final Assessment* at 15-16 (Apr. 23, 2014).

¹⁸⁵ Puget Sound Federal Task Force, *Action Plan 2022-2026* at 2-3 (May 2022), <https://www.epa.gov/system/files/documents/2022-06/puget-sound-federal-task-force-action-plan-2022-2026.pdf>.

In the end, EPA's position that no compensatory mitigation measures are adequate, even in combination, flies in the face of applicable mitigation guidance, which recognize that compensatory mitigation measures must be applied flexibly in Alaska given its high percentage of unimpacted wetlands. EPA's refusal to apply such flexibility sets a dangerous precedent that effectively precludes development, even on state lands specifically designated for mineral development. Moreover, it reverses years of work by the State, USACE and EPA to ensure a reasonable path forward for future development. The challenges regarding 404 permitting in Alaska are in no way unique to the Pebble Project, or even the Bristol Bay Region, and EPA's attempt to hold the Pebble Project to a stricter standard on compensatory mitigation will create significant regulatory uncertainty that will impact development throughout the State.

VII. EPA's "Other Considerations" Do Not Support 404(c) Action

EPA discusses several factors under "Other Considerations," but explicitly states that none of those factors are a basis for the Revised Proposed Determination.¹⁸⁶ Because they are not a basis for the Revised Proposed Determination, we will not spend much time on them here. However, we note that none of these factors were found to involve significant impacts in the FEIS.

For example, EPA lists recreational impacts in Section 6.1.2, but the FEIS found impacts on recreation to be insignificant:

Recreational use at the mine site is estimated to be low; use consists of some sport hunting, sport fishing, and occasional snow-machining. . . . The acres directly impacted do not see much recreational use and the magnitude of impacts would be measured by the small number of users that would be displaced to other nearby state or federal lands where similar recreation opportunities and settings exist.¹⁸⁷ . . .

[T]he mine site and immediate surrounding area is not popular for sport hunting, fishing, and other recreation uses and potential users would be displaced to other state lands in the area with similar habitat.¹⁸⁸

Thus, the record does not support a finding of significant adverse effect on recreation, including recreational fishing.

Similarly, EPA lists public water supplies as a factor in Section 6.1.3, but there is no record support for the notion that the Project impacts public water supplies. The FEIS indicates that impacts to shallow groundwater at the mine site would be limited to the capture zone and thus would be treated prior to discharge.¹⁸⁹ The FEIS similarly found impacts to surface water

¹⁸⁶ Revised Proposed Determination § 6.1.

¹⁸⁷ FEIS at 4.5-4.

¹⁸⁸ *Id.* at 4.5-5.

¹⁸⁹ *Id.* at 4.18-27.

quality to be insignificant, finding that with Alaska state permit conditions and mitigation “direct and indirect impacts of treated contact waters to off-site surface water are not expected to occur.”¹⁹⁰ The FEIS also found that “dust deposition would not result in exceedances of the most stringent water quality criteria (see Table K3.18-1) when added to baseline conditions or WTP outflow conditions.”¹⁹¹

EPA also lists spills as a consideration in Section 6.2, including the potential impacts of a catastrophic tailings storage facility (“TSF”) failure.¹⁹² The record in this case demonstrates that the risk of a catastrophic TSF release is not reasonably foreseeable, and therefore any impacts from such an event are not “probable impacts.” In the FEIS, the District reviewed estimates of the probability of tailings dam failures, which range from one failure for every 714 dam-years to 250,000 dam-years.¹⁹³ The FEIS found that the proposed Pebble design significantly reduces the risk of these types of failures: “The Applicant’s bulk TSF design is different than that of most other historic and current TSFs. The proposed design is especially distinct when compared to most historic mines that have experienced large failures.”¹⁹⁴ As discussed in the FEIS, the tailings storage facilities that have been shown to be the most robust and resistant to failure are those that have periodic technical review by qualified engineers throughout the lifetime, including after closure.¹⁹⁵ The Alaska Dam Safety Program would require this periodic technical review throughout the life of the proposed facility.¹⁹⁶ Thus, the already low risk of dam failure would be further reduced by the safety measures that will be in place for the Project. After evaluating the design of each embankment, and assessing the likelihood of a wide range of potential failure modes, the probability of a full breach of the bulk or pyritic TSF tailings embankments was assessed to be extremely low, and therefore was not reasonably foreseeable. The FEIS found: “the probability of a full dam breach to be very low for the bulk TSF (i.e., would require a lengthy causal chain of unlikely events).”¹⁹⁷ EPA’s speculative statements about the risk of a catastrophic TSF failure thus have no support in the record and do not rise to the level of probable impacts that may be evaluated under Section 404(c).

VIII. The Proposed Prohibitions and Restrictions are Designed to Prohibit Any Development of the Pebble Deposit Rather Than to Avoid Any Unacceptable Adverse Effects

EPA proposes to “prohibit the specification of waters of the United States within the mine site footprint for the 2020 Mine Plan located in the SFK and NFK watersheds as disposal sites for the discharge of dredged or fill material for the construction and routine operation of the

¹⁹⁰ *Id.* at ES 70.

¹⁹¹ *Id.* at 4.18-20.

¹⁹² Revised Proposed Determination at 6-6 to 6-14.

¹⁹³ FEIS at 4.27-102.

¹⁹⁴ *Id.* at K4.27-4 (“The Applicant has proposed a design for the bulk TSF that would minimize surface water storage above the tailings and promote unsaturated, or dryer, conditions in the bulk tailings through drainage provisions.”).

¹⁹⁵ *Id.* at 4.27-103.

¹⁹⁶ *Id.* at 4.27-103.

¹⁹⁷ *Id.* at ES 100.

2020 Mine Plan.”¹⁹⁸ In addition, EPA proposes to “restrict the use of certain waters of the United States within the SFK, NFK, and UTC watersheds for specification as disposal sites for the discharge of dredged or fill material for the construction and routine operation of any future plan to mine the Pebble deposit that would either individually or collectively result in adverse effects similar or greater in nature and magnitude to those associated with the 2020 Mine Plan.”¹⁹⁹ The restriction would apply to an area that encompasses certain headwaters of the SFK, NFK, and UTC watersheds and includes approximately 309 square miles.

In the Revised Proposed Determination, EPA states that the proposed discharge restriction “applies only to specified discharges...associated with mining the Pebble Deposit.”²⁰⁰ Yet the alleged adverse impacts are based on wetland and stream losses and streamflow changes, which are not impacts specific to the Pebble Deposit or even mining. For example, if EPA is correct that the loss of 8.5 miles of anadromous streams anywhere in this entire 309 square mile area would lead to unacceptable effects on fisheries, then that should apply to any development that causes such losses, whether it be a road, a pipeline, or a residential development. EPA has failed to explain why mining the Pebble Deposit specifically is prohibited, but other activity in the same area, including mining another deposit, would not be prohibited or restricted even if the activity had equivalent impacts.

The CWA authorizes EPA to take action under Section 404(c) only when EPA has demonstrated that a specific project will have “an unacceptable adverse effect” on specific, identified aquatic resources. 33 U.S.C. § 1344(c); *see also James City Cnty.*, 758 F. Supp. at 352 (“EPA has not met its statutory duty of showing that the discharge necessary for the Ware Creek Reservoir will have an unacceptable adverse effect”). EPA’s regulations define an “unacceptable adverse effect” as an “impact on an aquatic or wetland ecosystem which is likely to result in significant degradation of municipal water supplies (including surface or ground water) or significant loss of or damage to fisheries, shellfishing, or wildlife habitat or recreation areas.” 40 C.F.R. § 231.2(e).

In this case, EPA has not demonstrated any unacceptable adverse effects because the Agency has been unable to quantify any impacts of mine development on any local or regional fish population or fishery. Thus, EPA has not met its burden to demonstrate that discharge of fill into particular streams or waterbodies at the Pebble Deposit *will cause unacceptable adverse effects to particular downstream resources*. *See Bersani*, 850 F.2d at 40 (EPA bears “[t]he **burden** of proving that the discharge **will have** an ‘unacceptable adverse effect.’”) (emphasis added); *see also* Section 404(c) Procedures, 44 Fed. Reg. 58076, 58078 (recognizing that EPA bears the “responsibility of establishing a basis for any subsequent determination of unacceptable adverse effects”).

EPA cannot take action under Section 404(c) without demonstrating adverse effects, *as defined in the CWA and implementing regulations*. In other words, EPA can only take such action where it has demonstrated that the discharge, and any secondary impacts such as flow

¹⁹⁸ Revised Proposed Determination at A-2.

¹⁹⁹ *Id.*

²⁰⁰ *Id.* at ES 1.

reduction, *will* result in unacceptable adverse effects on local or regional fish populations or fisheries. For example, changes in downstream flows are a factor to be considered under the Section 404(b)(1) guidelines, 40 C.F.R. § 230.11(b), but a change in downstream flow alone is insufficient to justify action under 404(c) – the Agency must still demonstrate that the change in water flow will have an unacceptable adverse by causing a “significant loss of or damage to fisheries, shellfishing, or wildlife habitat or recreation areas.” 40 C.F.R. § 231.2(e). EPA has made no such demonstration in the Revised Proposed Determination.

Instead, EPA engaged in a result-driven analysis. EPA defined the restrictions in terms of the Agency’s desire to forbid any development of the Pebble Deposit, rather than based on the specific impacts to the ecosystem/fisheries.²⁰¹ With this result-driven approach, EPA fails to comply with its obligations under Section 404(c) to determine the degree of impacts that would cause unacceptable adverse effects to local or regional fish populations or fisheries. EPA has asserted the significance of certain headwater streams and wetlands based on third-party literature and the mere presence of fish, while rejecting the site-specific and relevant data that would have allowed it to make a definitive and scientifically defensible assessment. But, ultimately, the Revised Proposed Determination does not demonstrate empirically and quantitatively that mineral development at Pebble *will* result in an unacceptable adverse effect on local or regional fish populations or fisheries.

A. The Proposed Defined Area for Restriction is Overbroad

EPA was delegated a narrow window of authority under Section 404(c) of the CWA. As the D.C. Circuit explained, Section 404(c) “affords EPA two distinct (if overlapping) powers to veto the USACE’s specification: EPA may (1) ‘prohibit the *specification* (including the withdrawal of *specification*) of any *defined area* as a disposal site’ or (2) ‘deny or restrict the use of any *defined area* for *specification* (including the withdrawal of the *specification*).” *Mingo Logan Coal Co. v. EPA*, 714 F.3d 608, 614 n.2 (D.C. Cir. 2013) (quoting 33 U.S.C. § 1344(c)) (emphasis added). And EPA may take such action only after determining “that the discharge of such materials into *such area* will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.” 33 U.S.C. § 1344(c) (emphasis added).

The legislative history of the CWA further illuminates Congress’s intent to grant authority to EPA only to veto or restrict *specific* disposal sites. The Senate Debate on the Conference Report explained that the Committee found that EPA “should have the veto over the *selection of the site for dredged spoil disposal* and over any *specific spoil* to be disposed of in any *selected site*.” 118 Cong. Rec. 33,699 (1972), *reprinted in* 1 Legislative History of the Federal Water Pollution Control Act Amendments of 1972, at 161, 177 (1973) (Senate Debate) (emphasis added). The House Debate on the Conference Report similarly provided that “it is expected that disposal site restrictions or prohibitions *shall be limited to narrowly defined*

²⁰¹ See, e.g., *id.* at 5-3 (EPA “focused on areas where mine claims are held” rather than where ecological impacts have been demonstrated).

areas.” 118 Cong. Rec. 33,766 (1972), *reprinted in* 1 Leg. History 236, 236 (emphasis added).²⁰²

Thus, Congress only granted EPA authority to prohibit or restrict specified disposal sites under Section 404(c), not to set aside large areas of land. As the Supreme Court held in *Coeur Alaska Inc. v. Southeast Alaska Conservation Council*, the CWA “gives the EPA authority to ‘prohibit’ any decision by the Corps to issue a permit for a particular disposal site.” 557 U.S. 261, 274 (2009) (emphasis added); *see also Mingo Logan Coal*, 714 F.3d at 610 (“Subsection 404(c) authorizes the Administrator, after consultation with the Corps, to veto the Corps’ disposal site specification.”) (emphasis added). Despite this clear statutory directive, EPA has now asserted authority to restrict disposal under Section 404(c) in a “disposal site” that is 309 square miles.²⁰³ This is far from a specific disposal site. In fact, 309 square miles is more than 23 times the size of the entire mine site in the 2020 Mine Plan.²⁰⁴ To put this proposed disposal site in perspective, the site is more than three times the size of the land area of the City of Seattle (83.7 sq. miles). The disposal site proposed in this case is 66 times larger than that designated in any prior Section 404(c) action. The largest disposal site in any final Section 404(c) determination was for the Bayou aux Carpes site in Louisiana, where the disposal site was defined as 3000 acres, or 4.68 square miles. *See Final Determination of the Assistant Administrator for External Affairs Concerning the Bayou aux Carpes Site Pursuant to Section 404(c) of the Clean Water Act*, 50 Fed. Reg. 47267, 47628 (Nov. 15, 1985).

Under the CWA, EPA should have first identified whether there are particular levels of impacts to specific waterbodies that would involve unacceptable adverse effects. In this case, EPA did not make any real effort to delineate a specific disposal site, but instead simply drew a line around large portions of three watersheds and imposed broad restrictions within those watersheds, with no scientific assessment of consequent effects on fish populations.

It is clear that the Defined Area for Restriction proposed by EPA is not based on science, but instead is based on the Agency’s goal of preventing any development of the Pebble deposit. In the Revised Proposed Determination, EPA provides that the proposed Defined Area for Restriction is based on EPA’s “belief” that “future plans to mine the Pebble Deposit could result in unacceptable adverse effects on anadromous fishery areas anywhere in the NFK, SFK and UTC watersheds.”²⁰⁵ In other words, EPA defined the disposal site to include any waterbody within a 309 square mile area to ensure that it was able to preclude *any* development of the Pebble deposit. However, the CWA authorizes EPA to take action under Section 404(c) only when EPA has demonstrated that a specific disposal activity at a specific site will have “an unacceptable adverse effect.” 33 U.S.C. § 1344(c); *see also James City Cnty.*, 758 F. Supp. at

²⁰²See also H.R. 11896 (Mar. 27, 1972), in 1A Legislative History of the Water Pollution Control Act Amendments of 1972, at 325 (1973) (“It is expected that until such time as feasible alternatives methods for disposal of dredged or fill material are available, unreasonable restrictions shall not be imposed on dredging activities essential for the maintenance of interstate and foreign commerce.”).

²⁰³ Revised Proposed Determination at 5-3.

²⁰⁴ See FEIS at 4.5-4.

²⁰⁵ Revised Proposed Determination at 5-2.

352 (“EPA has not met its statutory duty of showing that the discharge necessary for the Ware Creek Reservoir will have an unacceptable adverse effect”). EPA has not demonstrated any unacceptable adverse effects in the Revised Proposed Determination because the Agency has been unable to quantify impacts of any mine plan, current or future, on any local or regional fish population or to relate the significance of any such change on any Bristol Bay fishery – commercial, subsistence or sport.

EPA identified the broadest possible area where mining activity could occur at the Pebble Deposit and then defined the disposal area as broadly as possible to preclude such an operation. EPA’s proposal amounts to an attempt to “zone” a 309 square mile area of state-owned land as permanently protected from development.²⁰⁶ Congress did not give EPA such broad authority.

B. The Proposed Defined Area for Restriction is Vague and Unworkable

EPA’s proposed Defined Area for Restriction is impermissibly broad and vague; aimed at precluding all development within the area rather than avoiding any demonstrated impacts to fish. EPA proposes to “restrict the use of certain waters of the United States within the SFK, NFK, and UTC watersheds for specification as disposal sites for the discharge of dredged or fill material for the construction and routine operation of *any future plan* to mine the Pebble deposit that would *either individually or collectively* result in adverse effects similar or greater in nature and magnitude to those associated with the 2020 Mine Plan.”²⁰⁷

EPA does not explain how this vague standard will be applied to future projects. The standard is unworkable because a future applicant will not be able to predict whether its proposed development “would *either individually or collectively* result in adverse effects similar or greater in nature and magnitude to those associated with the 2020 Mine Plan.” For example, would a future applicant’s compensatory mitigation plan be factored in to demonstrate reduced impacts? If a future application proposed a footprint 10% smaller and impacted 10% fewer wetlands, would that project still be prohibited? These restrictions and definitions do not provide a workable standard for any future applicant to predict what is or is not prohibited within the Defined Area for Restriction.

EPA also does not explain what would be included in assessing “collective” impacts. But by including “collective” impacts, EPA has provided a way to prevent any future development in the 309 square mile area. Any future mine plan, no matter how small, could be deemed to contribute to adverse effects similar to those associated with the 2020 Mine Plan if the plan is viewed collectively with any other present or future development in a 309 square mile area.

EPA has thus crafted overly broad and vague restrictions that preserve its authority to find any future mining development to be prohibited under 404(c). Such vagueness and excessive flexibility violates the Administrative Procedure Act (“APA”). *Talk Am., Inc. v. Mich. Bell Tel. Co.*, 564 U.S. 50, 69 (2011) (Scalia, J., concurring) (it defeats the principles of the APA and administrative law to permit “the agency to enact vague rules which give it the power, in future adjudications, to do what it pleases.”); *see also Trinity Broad. of Fla., Inc. v. FCC*, 211

²⁰⁶ For example, EPA states that “entire landscapes are involved” to protect fisheries. *Id.* at 4-11.

²⁰⁷ *Id.* at A-2 (emphasis added).

F.3d 618, 628 (D.C. Cir. 2000) (asking whether “a regulated party acting in good faith would be able to identify, with ascertainable certainty, the standards with which the agency expects parties to conform”).

IX. EPA’s Consideration of the Costs of this Proposed Action is Materially Inadequate

EPA asserts it is not required to consider the costs of its action under 404(c).²⁰⁸ However, EPA must consider both the costs and benefits of this proposed action under the APA and Supreme Court precedent.

It is a fundamental principle of administrative law that federal “administrative agencies are required to engage in reasoned decisionmaking.” *Michigan v. EPA*, 576 U.S. 743, 750 (2015). To engage in reasoned decision-making, an agency must consider *all* of the factors that are relevant to the particular decision at issue. *Id.* In other words, an agency must consider each “important aspect of the problem.” *Motor Vehicle Mfrs.*, 463 U.S. at 43. And it must articulate a “rational connection” between the factors considered and the choice it made. *Id.*

As a general rule, the costs of an agency’s action are a relevant factor that the agency must consider before deciding whether to act. *See Michigan*, 576 U.S. at 751-52. In *Michigan v. EPA*, the Supreme Court was unanimous in articulating this principle. The Court divided 5-4 only on whether the agency had in fact considered costs. *Id.* at 765 (Kagan, J., dissenting) (“I agree with the majority – let there be no doubt about this – that EPA’s power plant regulation would be unreasonable if the Agency gave cost no thought *at all*.”).

An agency must consider costs because reasoned decision-making requires the agency to evaluate whether a proposed action would do more good than harm. As the Supreme Court has emphasized, the costs imposed by the agency’s action are an integral part of that calculus: “Consideration of cost reflects the understanding that reasonable regulation ordinarily requires paying attention to the advantages and the disadvantages of agency decisions.” *Id.* at 753. Contrary to EPA’s position, Section 404(c) *does* require the consideration of costs. The statute authorizes EPA to act only when it determines there will be an “unacceptable” adverse effect. 33 U.S.C. § 1344(c). To determine whether a particular action would have “unacceptable” consequences, there necessarily must be a balancing of costs and benefits. *See Michigan*, 576 U.S. at 752 (finding that the term “appropriate” is a broad and all-encompassing term that “naturally and traditionally includes consideration of all the relevant factors,” including costs) (quotation omitted). Thus, EPA must consider costs in evaluating whether there will be an “unacceptable” adverse effect and before exercising its Section 404(c) authority.²⁰⁹

²⁰⁸ EPA spends no time on costs in the Revised Proposed Determination itself. *See id.* § 6.4. Instead, EPA includes a separate document in the docket on the consideration of potential costs. *See EPA, Consideration of Potential Costs Regarding the Clean Water Act Section 404(c) Proposed Determination for the Pebble Deposit Area, Southwest Alaska, Public Comment Draft* at 4 (May 2022) (“Consideration of Potential Costs”) (“Although not required, EPA has considered the potential costs of a CWA Section 404(c) action in this instance.”).

²⁰⁹ Even if EPA were correct that the consideration of cost is not required under 404(c), EPA chose to consider cost in this proceeding, and that analysis is therefore subject to comment and judicial review. *See Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, 985 F.3d 1032,

EPA’s “Consideration of Potential Costs” document is woefully inadequate. EPA provides a one-sided discussion outlining, and overstating, the potential benefits of its proposed action, with only minimal attention given to concrete costs associated with its proposal.²¹⁰ Considering that EPA is proposing to restrict all future development of the world’s largest undeveloped copper deposit in a 309 square mile area, one would expect that the consideration of costs of that action would be fulsome.²¹¹ It is not. Despite ignoring many of the costs of its proposed action, EPA simply declares that the Agency “has considered the potential costs of a CWA Section 404(c) action,”²¹² with no indication of how various costs and benefits were weighed, if at all.

EPA argues that the costs of precluding development are speculative because of “the significant regulatory and financial uncertainty” regarding such development.²¹³ But if EPA believes that this regulatory and financial uncertainty makes it unlikely that the project ever gets developed, then the “benefits” of the Revised Proposed Determination are equally unlikely to come to fruition. In other words, if development of the Deposit is so uncertain, there simply is no benefit to invoking 404(c) since no harm from development will ever occur. EPA completely ignores the inconsistency in its own argument. Instead, EPA assumes that the “costs” of the Revised Proposed Determination are speculative because the project may not advance due to permitting and financing challenges, while assuming that “benefits” of the Revised Proposed Determination are assured. EPA acknowledges that this is not the standard federal agency approach to assessment of economic impacts,²¹⁴ but this is an understatement – EPA’s assumption that the benefits of its proposed action will necessarily accrue, but that the costs may not, is a fundamentally flawed approach to cost-benefit analysis.

Moreover, EPA’s underlying assumptions are belied by the record. The record demonstrates the Pebble Project would have significant, long-term economic benefits to local communities, the region, the state, and the nation. As described below, the overall economic

1048 (D.C. Cir. 2021) (“because the Corps chose to perform such a calculation and then relied on it throughout its analysis, it cannot dispel serious doubts about its methods by explaining that it could have forgone such a calculation in the first place”).

²¹⁰ Among the benefits of the Revised Proposed Determination listed by EPA are “non-use value,” where EPA points to polling showing opposition to the project as support for the “non-use” benefits of the Revised Proposed Determination. Consideration of Potential Costs at 40-42. It is unclear how such “polling” is relevant to a decision under Section 404(c). Section 404(c) requires a fact-based determination, not a popularity contest.

²¹¹ EPA fails to address the full cost of precluding all future development of the Pebble Deposit. EPA has proposed to prohibit the 2020 Mine Plan and to preclude all future development of the Pebble Deposit within a 309 square mile area. The Consideration of Potential Costs document focuses only on the costs associated with prohibiting the 2020 Mine Plan but fails to address the full scope and costs of EPA’s drastic proposed action precluding development in the much larger 309 square mile area.

²¹² *Id.* at 4.

²¹³ *Id.* at 5.

²¹⁴ *Id.*

benefits of the Pebble Project will be substantial, including increased income, employment, and educational attainment. The FEIS found significant local and state revenue, including “mining license taxes, corporate income taxes, property taxes, sales taxes, borough severances taxes, and production royalty payments.”²¹⁵ EPA provides no new data to contradict these findings. Instead EPA relies on speculation to downplay the costs of precluding development in a 309 square mile area. For example, EPA asserts that if Pebble is not built, then the economic benefits would just transfer to some other hypothetical business ventures elsewhere in the economy, so there is no net loss of economic benefit.²¹⁶ This baseless statement implies that no economic development anywhere truly creates new value because some other development could come along elsewhere. Such vague and unsupported suppositions do not reflect reasoned decision-making. EPA’s failure to account for the Project’s *long-term* beneficial impacts to the local and state economies, as well as the overall need for the resources to be gained from the Project, require withdrawal of the Revised Proposed Determination.

A. EPA Fails to Weigh the Full Costs of the Revised Proposed Determination, Including the Foregone Benefits to Local Communities

The local economic benefits of the Pebble Project are clear and much-needed. Yet EPA fails to fully account for the loss of such local benefits in evaluating the effect of its Revised Proposed Determination. If finalized, the Revised Proposed Determination would lead to the loss of five year-round jobs for Alaska Natives and numerous part time jobs available to Alaska Natives at current activity levels. As the FEIS found, the “increase in job opportunities, year-round or seasonal employment, steady income, and lower cost of living ... would have beneficial impacts on the EIS analysis area, especially for [local] communities.”²¹⁷ If, however, EPA finalizes its Revised Proposed Determination it would result in the loss of hundreds of jobs that would have been available to Alaska Natives, as well as millions of dollars of contracting opportunities available to Alaska Native Corporations during construction, operation and closure of the mine. The significant revenue benefits to the local communities are undisputed: During operations, the Project would generate \$27 million annually in severances taxes for the Lake and Peninsula Borough (“LPB”), a majority of whose residents are Native Alaskans. The Project would also generate annual property tax revenue to the Kenai Peninsula Borough based on assessed value of project-related real property.²¹⁸ The project dividend payments would provide the area with significant economic development resources, as described in the attached IHS Markit Report.²¹⁹

The FEIS fully documents the Project’s positive, long-term socioeconomic impacts in the region:

²¹⁵ FEIS at 4.3-10.

²¹⁶ Consideration of Potential Costs at 6.

²¹⁷ FEIS at ES 54 to ES 58.

²¹⁸ *Id.* at ES 48.

²¹⁹ Ex. 8, IHS Markit, *Economic Contribution Assessment of the Proposed Pebble Project to the US National and State Economics* at 17-18 (Feb. 2022) (“IHS Markit Report”).

- Communities near the mine site and ferry/port terminals would likely see a beneficial impact of **higher employment rates**.²²⁰
- The project is likely to **reduce transportation costs** (thereby reducing the cost of living) to communities near the transportation corridor, should arrangements be made to allow controlled public use of the mine and port access roads and spur roads.²²¹
- Communities adjacent to the natural gas pipeline . . . would have the opportunity to connect to the pipeline. For heating buildings, natural gas would be less expensive than diesel heating oil, which would **lower the cost of living**.²²²
- [E]mployment through the project would have **beneficial economic effects on minority and low-income communities** lasting for the life of the project.²²³
- **[I]ndirect employment opportunities** would increase from the services that would be needed to support construction and operations activities (e.g., air services, goods, and supplies).²²⁴
- Local employment opportunities could **offset current trends of outmigration** in some communities and provide service fee revenue to maintain or even **improve community infrastructure**.²²⁵
- [A]n increased revenue stream to the LPB, along with stabilization of population levels attributable to employment opportunities, . . . could result in **improvements to community health care facilities** throughout the borough.²²⁶
- The income earned by residents close to the mine working for PLP was **greater than the income earned for commercial fishing**, indicating that even the limited employment during the exploratory phase had large impacts on the communities.²²⁷
- [W]ages earned would likely be higher than the median household incomes of the potentially affected communities (see Section 3.3, Needs and Welfare of the People—Socioeconomics), which would be an **improvement to the welfare of the community members**.²²⁸
- [A]n increase in tax revenue to the LPB and the education programs supported by PLP could **benefit schools** and the student population. In addition, local employment

²²⁰ FEIS at ES 47 (emphasis added).

²²¹ *Id.* at ES 48 (emphasis added).

²²² *Id.* at ES 53-ES 54 (emphasis added).

²²³ *Id.* at ES 53 (emphasis added).

²²⁴ *Id.* at 4.3-5 (emphasis added).

²²⁵ *Id.* at 4.3-6 to 4.3-7 (emphasis added).

²²⁶ *Id.* at 4.3-8 (emphasis added).

²²⁷ *Id.* at 4.3-10 (emphasis added).

²²⁸ *Id.* at 4.3-10 (emphasis added).

opportunities associated with the project could reduce population decline in some communities, which could allow schools at risk of closing to remain open.²²⁹ . . . It may also allow the school district to offer expanded services such as the expansion of vocational education.²³⁰

In sum, the record demonstrates the significant, long-term socioeconomic benefits of the Project to local communities, including jobs, infrastructure, health, education and decreased cost of living. EPA fails to explain why the speculative harms to fisheries alleged in the Revised Proposed Determination are not offset by the jobs, revenue and other demonstrated benefits of the Project to local communities. The Agency's failure to account for the disparate costs on these local communities if its Revised Proposed Determination is finalized flouts its obligation to consider environmental justice in its decision-making process. *See* Exec. Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (Feb. 11, 1994).

EPA's assumptions about negative impacts on subsistence are unsupported.²³¹ Most importantly, the FEIS found no impact to fish and game resources available for subsistence harvests or commercial fisheries.²³² Similarly, while EPA asserts that the project's transportation corridor would "disrupt access to subsistence resource areas,"²³³ in actuality the corridor would improve access for subsistence activities.²³⁴

EPA also claims that increased employment in the area due to the project "may also reduce the time available for subsistence."²³⁵ Local people who are employed by the Project would continue to be able to participate in subsistence-related activities because PLP committed to the use of rotational shifts.²³⁶ EPA's assumption that the Project would negatively impact subsistence is directly contradicted by the FEIS, which demonstrated that high paying jobs improve subsistence success:

The effect of income on subsistence success (i.e., subsistence production) is evident among households with unique demographic structures. The magnitude of the effect of income is such that in

²²⁹ *Id.* at 4.3-12 (emphasis added).

²³⁰ *Id.* at ES 48 (emphasis added).

²³¹ Consideration of Potential Costs § 5.10 (assuming that Revised Proposed Determination will increase availability of fish and other subsistence resources).

²³² FEIS at ES 51 ("Overall, impacts to fish and wildlife would not be expected to impact harvest levels. Resources would continue to be available because no population-level decrease in resources would be anticipated."), ES 86-ES 87. In addition, EPA states that "in principle" there exists the potential for the project to impact Bristol Bay salmon prices, Consideration of Potential Costs at 21, but provides no basis for contradicting the FEIS conclusion that such price impacts were unlikely.

²³³ *Id.* at 42-43 (Table 5-10).

²³⁴ FEIS at 4.9-7 to 4.9-8.

²³⁵ Revised Proposed Determination at 6-24.

²³⁶ FEIS at 5-19 ("A shift schedule would be established to enable local employees to maximize opportunities to remain active in subsistence harvest activities.").

many communities, 30 percent of households produce 70 percent of the subsistence harvest. These “super households” are distinguished because they include multiple working-age males, tend to have high incomes, and often are involved in commercial fishing. These three factors support high-producing households to be able to combine subsistence activities with paid employment and to arrange considerable labor in flexible ways that maximize harvests of subsistence foods, which are then shared with other households in the community and region.²³⁷

Despite this, EPA assumes, without support, that the Revised Proposed Determination will lead to benefits to minority communities from increased access to income from sustainable salmon fisheries. But the FEIS found no impact to the commercial fisheries.²³⁸ And EPA does not demonstrate otherwise. Thus, there is no basis to assume that the Revised Proposed Determination would increase local access to fisheries jobs.

The bottom line is that the Pebble Project would increase options and opportunities for local communities, while the Revised Proposed Determination forever erases one of the only avenues for employment and economic opportunities for the area. For local communities that are facing extreme unemployment and high costs of living, this is a very significant cost of the Revised Proposed Determination that has not been adequately addressed.

The significant local socioeconomic benefits of the Pebble Project are demonstrated in the record, including jobs, economic activity, tax revenues, energy and transportation infrastructure, lower cost of living, and education. EPA has failed to account for the full costs of erasing these benefits in the Revised Proposed Determination.

B. EPA Fails to Account for the Economic Costs of the Revised Proposed Determination to the State

EPA is even more dismissive with regard to the Pebble Project’s economic benefits to the State. The record demonstrates clear, significant, long-term economic benefits to local communities, the region, and the state. The FEIS found that “the project would provide *long-term* beneficial impacts to the economy from employment and income *in the region and state.*”²³⁹

EPA makes only a single, passing reference to the State’s revenue from the Project: “the 2020 Mine Plan ... would produce increased economic outcomes for the State of Alaska.”²⁴⁰ EPA provides no further discussion about the potential economic opportunities and benefits that

²³⁷ *Id.* at 4.9-11. The FEIS also found that impacts on subsistence could be reduced with planned periods of leave options during subsistence harvest periods. *Id.* at 4.4-9.

²³⁸ *Id.* at ES 86-ES 87.

²³⁹ *Id.* at 4.3-10.

²⁴⁰ Consideration of Potential Costs at 50 (no mention about the potential for economic opportunity to the state from using the land for mining).

would accrue to the State and its residents.²⁴¹ With Alaska facing extensive public discussions about the need to diversify the State’s revenue stream, this is a major omission. The FEIS clearly documents the tax and other economic benefits of the Project:

- [A]n estimated \$64 million annually in state corporate taxes during the operations phase. It was estimated that the operations phase could also generate \$41 million annually from State mining license taxes. . . . The project could generate \$20 million annually (in 2011 dollars) in state royalty payments during the operations phase.²⁴²
- Overall, the project would provide long-term beneficial impacts to the economy from employment and income in the region and state.²⁴³
- The project would generate \$25 million annually in state taxes during the construction phase, and an estimated \$64 million annually in state corporate taxes during the operations phase. . . . the project could generate \$20 million annually . . . in state royalty payments during the operations phase.²⁴⁴

EPA ignores these economic benefits, without explanation or justification.

EPA also ignores that the State designated the lands where the Pebble Project would be located are designated for the express purpose of mining and economic development.²⁴⁵ As the FEIS provides, “the public also has an interest in improving the economy of the state, in the creation of jobs in the state, and in the extraction of natural resources for the benefit of the state. This is demonstrated by scoping comments, which indicated a desire to bring economic opportunity and jobs to the region, as well as by policy language in the Alaska State Constitution and Alaska Statutes encouraging development of the state’s mineral resources consistent with the public interest.”²⁴⁶ EPA’s utter failure to consider the economic benefits of the Project to the State is arbitrary and unsupportable.

²⁴¹ *See id.*

²⁴² FEIS at 4.3-11.

²⁴³ *Id.* at 4.3-10.

²⁴⁴ *Id.* at 4.3-11. In addition, 25% of the state royalty payments from the Project would be allocated to the Alaska Permanent Fund, *see* Alaska Constitution Art. IX, § 15, which means all Alaskans would benefit from the Project.

²⁴⁵ FEIS at 3.2-13 (“The Bristol Bay Area Plan divides the Bristol Bay area into 20 regions with management units. The mine site would be in Region 6. The transportation corridor would be in regions 6, 8, and 10 under Alternative 1a; regions 6, 9, and 10 under Alternative 1; and regions 6, 8, and 9 under Alternative 2 and Alternative 3. At the mine site, Region 6 is designated for mineral development, among other uses; and managed to ensure that impacts to the anadromous and high-value resident fish streams are avoided, reduced, or mitigated as appropriate in the permitting processes.”); *id.* at 4.2-5 to 4.2-6 (“The project would generally be consistent with the plan’s goals for the use of subsurface resources, which call for making metallic and non-metallic minerals available to contribute to the mineral inventory and independence of the US generally and Alaska specifically, while protecting the integrity of the environment and affected cultures.”).

²⁴⁶ *Id.* at 1-4.

C. EPA Grossly Underestimates the Economic Value of the Pebble Project

The economic value of the Pebble Project is vast. As described more fully in the IHS Markit Report, the Project would involve significant contributions to Alaskan, national and other state economies:

- The Initial Phase would support 12,569 jobs across the United States, almost half of which (49%) would be filled by Alaskans. Jobs supported during the Operations Phase would receive wages totaling \$461.1 million annually under the Proposed Project and \$1,018.6 million under the potential future expansion. This indicates an annual average wage of about \$80,000; almost 40% higher than the US annual average wage of \$57,300. IHS Markit estimated direct workers in the mine would receive annual wages of \$115,000.²⁴⁷
- Sourcing of fuel and supply barge activity is expected to be centered in Washington State, leading to strong economic contributions in the west coast states.²⁴⁸
- Purchases of specialized mining equipment is expected to flow towards midwestern states such as Illinois, resulting in over 38% of the jobs supported during the initial project phase accruing to other US regions.²⁴⁹
- The Pebble Project production could meet between 6.3% and 11.1% of US copper demand, translating to annual contributions between \$350 million and \$610 million in downstream copper sales and 850 to 1,500 additional jobs.²⁵⁰

EPA does not provide data or facts to contradict the demonstrated and vast economic benefits of the Pebble Project. Instead, EPA simply argues that the economic value of the Project is uncertain, and therefore must be discounted.

Indeed, EPA's Costs Consideration Document is replete with errors and faulty assumptions that EPA utilizes to discount the costs of its proposed action and overstate its "benefits." The following are just a few examples:

- Section 4.2 discusses uncertainty around capital estimate and economics, and seems to suggest such uncertainty means the economic benefits of the mine must be discounted. Standard practice in cost benefit evaluations is to assume the base case and then provide sensitivities for equivalent better and worse cases. EPA's approach of discounting project benefits based on uncertainty is not a valid cost benefit analysis method.

²⁴⁷ IHS Markit Report at 19.

²⁴⁸ *Id.*

²⁴⁹ *Id.*

²⁵⁰ *Id.* at 16.

- EPA speculates that because Northern Dynasty Minerals is a Canadian company, and the project is “in close proximity to Canada,” some economic benefits of the project may not accrue to the US.²⁵¹ But the level of economic value of the project to local, state and national economies in the US is well-established, including in the FEIS. Moreover, some of the economic benefits of any major project or commercial exercise would fall overseas – this is a global economy after all. But this does not diminish the value of the Project within the US. EPA cannot discount well-documented projections of economic benefit based on mere speculation that some other benefits may occur outside of the US.
- EPA asserts that if the Pebble Project is not built, then the economic benefits would just transfer to other business ventures elsewhere in the economy, so there is no net loss of economic benefit. But EPA does not point to a single alternative mining project in the US that would have a commensurate level of economic benefit, it simply speculates that such projects could exist. EPA’s baseless statement implies that no economic development anywhere truly creates new value.
- EPA states that the economic multiplier effects are unknown, but this is inaccurate. Economic multipliers have clearly been outlined in various venues, most recently in the IHS Global report.²⁵²
- EPA relies on the Borden review of the Preliminary Economic Assessment (“PEA”) as a basis for questioning the economic benefits of the Pebble Project. But Borden is a geologist, not an economist. Despite having no qualifications on this topic, EPA gave his input on the PEA more weight than the authors of the report who are qualified to opine on such matters.²⁵³
- In Section 6.1, EPA states that owners’ costs and contingency are not considered due to the lack of regional activity that they generate. This demonstrates a lack of understanding as to what these costs are. Contingency is spent the same as any other capital and is included to address uncertainty or “known unknowns” in the estimate. Similarly, many owners’ costs (*e.g.* regulatory compliance related activities) result in local expenditures.

EPA’s lack of reasoning and evidentiary support for these points demonstrate that its motivations were not to engage in an objective analysis of the Pebble Project, but instead to bolster its decision to veto the Project.

²⁵¹ Consideration of Potential Costs at 17.

²⁵² IHS Markit Report at 16.

²⁵³ Consideration of Potential Costs at 12.

D. EPA Fails to Consider the Economic Benefits of, and Public Need for, the Extracted Minerals

EPA provides almost no accounting for the value of the extracted minerals from the Project, including the downstream impacts. EPA states that it “expects” impacts to commodity prices of precluding this development to be “negligible,” but provides no substantiation for that statement.²⁵⁴ Considered in the context of the national and global supply chain, EPA’s determination is irresponsible.

Copper “is essential to all energy transition plans. But the potential supply-demand gap is expected to be very large as the transition proceeds.”²⁵⁵ The Project could supply a significant portion of the country’s requirements for copper, which is central to a low carbon future, as well as important minerals such as rhenium and molybdenum. The FEIS demonstrates the need for these minerals:

Rhenium is a critical mineral listed in EO 13817 that is present at the Pebble deposit ...

Mineral needs are assessed in terms of precious metals resource extraction in an international market and global context (USACE 2017). From the broad, macroeconomic scale, the stated project need is reflected in the demand for copper, gold, and molybdenum. The proposed project would result in a 20-year beneficial effect on the public’s mineral needs for copper, gold, and molybdenum in this context. . . .

Copper is used in a variety of products and industries, including electrical and electronic products, industrial equipment, building construction, automobiles, and appliances. . . . The worldwide copper usage has tripled over the last 50 years and growth in the worldwide demand for copper is projected to continue (ICSG 2019).

Gold is used for the production of jewelry, electronics, and electrical components, official coins, and other uses (USGS 2005). . . . Worldwide consumption of gold grew by almost 8 percent per year between 1980 and 1999, and by an average of 2.8 percent per year between 1992 and 2002 (USGS 2005).

The most common use of molybdenum is the production of alloy steels and superalloys, enhancing hardness, strength, and resistance to corrosion. Examples of uses of these alloys include in food

²⁵⁴ *Id.* at 50.

²⁵⁵ Ex. 9, IHS Markit, *The Future of Copper – Will the Looming Supply Gap Short-Circuit the Energy Transition?* at 9 (July 2022) (“*IHS Future of Copper*”).

handling equipment, in automobile parts, in construction equipment, and in heavy construction (USGS 2010).²⁵⁶

The national and global economies require copper now more than ever. Copper is critical to the transition to renewable energy sources, updating electrical grids, electric vehicles, and solar and wind energy production.²⁵⁷ The International Energy Agency has projected that, to achieve the Paris Climate Agreement goals, demand for copper for power lines alone will double by 2040, and overall copper demand during that time will grow by 40%.²⁵⁸ And to meet that demand, currently operating or under-construction copper mines will only meet 80% of copper demand by 2030.²⁵⁹ “As the most cost-effective conductive material, copper sits at the heart of capturing, storing and transporting these new sources of energy.”²⁶⁰ Thus, even if EPA’s estimates were valid, given the global deficit in copper supply, a 1% impact to global copper supply and 12% to U.S. copper supply, are hardly “negligible.”²⁶¹

The downstream impacts of EPA’s proposed action are vast, and yet are nowhere considered in the Revised Proposed Determination. Recent studies show “that by 2035 the United States will be importing between 57% and 67%—that is up to two thirds—of its copper needs.”²⁶² If the Pebble Project is not developed, the US will have to rely on increased production overseas, including in China. Yet, EPA completely fails to consider the costs of outsourcing future mineral development to places with less robust regulatory protections than the US. EPA has been careful to bolster every possible perceived benefit of its Revised Proposed

²⁵⁶ FEIS at 4.1-27.

²⁵⁷ See, e.g., IHS Markit Report at 3 (“Copper is integral to micro grids and smart grids; it is vital to energy storage technologies; electric vehicles require more copper than their conventional counterparts; and it helps collect, store, and distribute solar and wind energy.”); *id.* at 6 (“Copper is needed at every level of the new electrical grid and is hugely important in the clean energy technologies required to respond to the global climate agenda.”); Ex. 10, RFC Ambrian, *The Pathway for Copper to 2030: Copper Market Analysis* at 20 (May 2022) (“RFC Ambrian Report”) (“[A]n area of significant growth for copper over the next decade will be increased demand for the decarbonisation of energy. Copper plays a central role across every stage of this by enabling renewable energy generation technologies, implementation of EV battery technology, and connection to grid.”); Ex. 11, Goldman Sachs, *Green Metals: Copper is the New Oil* at 1 (Apr. 13, 2021) (“Goldman Sachs Report”) (“moving the global economy toward net zero emissions remains a core driver of the structural bull market in commodities demand, in which green metals – copper in particular – are critical”); Ex. 12, Citi Research, *Copper Book: 2021-2030 Outlook* at 4 (Oct. 7, 2021) (“Copper consumption from the power generation, electric vehicle and grid storage sectors is set to rise by around 4.6mt over the coming decade.”).

²⁵⁸ See Int’l Energy Agency, *The Role of Critical Minerals in Clean Energy Transitions* at 5, 8 (March 2022), <https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-52b6d9a86fdc/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf>.

²⁵⁹ See *id.* at 11.

²⁶⁰ Goldman Sachs Report at 1.

²⁶¹ See, e.g., RFC Ambrian Report at 24 (predicting a market deficit for copper of about 1.9 Mt in 2030).

²⁶² IHS *Future of Copper* at 13.

Determination and its failure to even acknowledge many of the significant costs of the Revised Proposed Determination are telling.

X. EPA’s Revised Proposed Determination Would Establish a Dangerous Precedent that Will Substantially Deter Investment in Other Major Projects

Finalizing this Revised Proposed Determination would establish a dangerous precedent under Section 404 that will substantially deter investment in other major projects requiring Section 404 permits, potentially resulting in enormous impacts to the U.S. economy.

First, the size of the disposal site is unprecedented and an order of magnitude greater than any previously designated. Second, the overbroad and unworkable restrictions proposed would effectively preclude any impacts to waterbodies within the 309 square mile area. EPA’s proposed action to preemptively set aside a vast tract of land from any development under Section 404(c) would undermine the entire Section 404 permitting process. EPA is effectively proposing to use the Section 404(c) process for zoning – imposing such broad restrictions over a wide area that effectively no development will be possible.

Such action is beyond EPA’s authority. It also creates significant regulatory uncertainty for all major development projects that require Section 404 permits. Development companies and investors understand the risks of legitimate environmental regulation and permitting. However, investors expect the permitting process to be followed, so that a project has a full opportunity to present its plans, defend its science, and modify the project to meet any legitimate regulatory concerns. The financial risk of backing a project that requires a Section 404 permit is significantly increased if a possibility exists that entire watersheds could be vetoed by EPA. The potential harm resulting from decreased domestic and foreign investment is significant: USACE processes approximately 60,000 permits a year, and, according to some estimates, roughly \$220 billion of investment per year depends on these permits. EPA should respect the permitting process that Congress established, as to usurp the USACE’s (and State’s) role here will only serve to undermine the legitimacy and predictability of the Section 404 permitting process.

XI. If Finalized, the Revised Proposed Determination Would Constitute a Taking

The Revised Proposed Determination effectively nullifies PLP’s legally protected property interests in its leased mineral claims at the Pebble Deposit. Accordingly, it would constitute a taking under the Fifth Amendment, and EPA, if it continues to finalize the veto, must pay PLP just compensation.

If finalized, the Revised Proposed Determination would have a devastating and complete economic impact, destroying all economic use of PLP’s mineral rights. Such mineral rights are protected from uncompensated government taking. *United Affiliates Corporation v. United States*, 143 Fed. Cl. 257, 263 (Fed. Cl. 2019).

PLP has invested hundreds of millions of dollars in preparing to develop the Pebble Deposit. The proposed restrictions would completely prevent PLP from developing the Pebble Deposit at all, as development of the current mine site footprint is necessary for any future

development at the deposit. EPA is thus proposing to take PLP's valuable property and must either compensate PLP or withdraw the Revised Proposed Determination.

XII. The Revised Proposed Determination Violates Federal Statutes Protecting the Rights of the State of Alaska and Alaska Natives

The Revised Proposed Determination violates the statutory framework that recognizes Alaska's unique history, protects its land, and safeguards its resource development rights. In 1959, Congress passed the Alaska Statehood Act, which sought to provide the newly-formed state of Alaska with resources to allow it to become self-supporting. As part of that Act, Congress authorized Alaska to select certain lands from the federal government. The express purpose of these land grants was to provide Alaska with title to valuable mineral deposits. *Udall v. Kalerak*, 396 F.2d 746, 749 (9th Cir. 1968) ("The purpose of the land grants under the [Alaska Statehood] Act is to serve Alaska's overall economic and social well-being[, and] some of the lands so selected will probably be used to protect mineral deposits."). The Act also provided that any mineral deposits granted to Alaska "shall be subject to lease by the State as the State legislature may direct." Alaska Statehood Act § 6(i), Pub. L. No. 85-508, 72 Stat. 339 (1958).

In 1976, Alaska, the federal government, and Cook Inlet Region, Inc. executed the Cook Inlet Exchange, by which Alaska obtained title to the area that includes the Pebble Deposit, and which allowed the federal government to establish Lake Clark National Park and Preserve. The Exchange allowed Alaska to select lands that were previously withdrawn and designated for conservation. *See* Cook Inlet Exchange Legislation, Pub. L. 94-204 § 12(b), 89 Stat. 1145 (1976). Under the Cook Inlet Exchange, lands selected by the State had the same status as if originally selected under the Alaska Statehood Act, including the provision permitting the State to lease such lands. *See id.* ("All lands granted to the State of Alaska pursuant to this subsection shall be regarded for all purposes as if conveyed to the State under and pursuant to section 6 of the Alaska Statehood Act."). The Exchange thus gave Alaska the right to select and manage lands, including by designating them for mineral development, and leasing such lands. *See id.* § 112(d)(1). Alaska did just that. Since 1984, Alaska has designated the Pebble Deposit and surrounding lands specifically for mineral development.²⁶³ The Revised Proposed Determination effectively removes Alaska's ability to develop land that the federal government recognized as critical to the State's mineral future, violating the balance struck in the Alaska Statehood Act and Cook Inlet Exchange.

Moreover, the Revised Proposed Determination violates the Alaska National Interest Lands Conservation Act ("ANILCA"), enacted in 1980. ANILCA requires federal agencies to consult and cooperate with State agencies to balance conservation measures with Alaska's natural resource development interests. *See* 16 U.S.C. § 3181 *et seq.* The Revised Proposed Determination attempts no such balance. Further, ANILCA specifically requires Congressional approval for any further federal withdrawal of public land in Alaska. *See* 16 U.S.C. § 3213(a).

Finally, the Revised Proposed Determination violates the Federal Land Policy and Management Act ("FLPMA"). 43 U.S.C. § 1701 *et seq.* Under the FLPMA, "Congress retains

²⁶³ *See* Alaska Dep't of Natural Resources, *Bristol Bay Area Plan for State Lands* at 3-106 (Sept. 2013) (designating "Pebble" land unit as "Mineral" for its "significant resources").

the *sole authority* to withdraw land parcels larger than 5,000 acres from mining permanently.” *Chilkat Indian Vill. of Klukwan v. Bureau of Land Mgmt.*, 399 F. Supp. 3d 888, 899 n.31 (D. Alaska 2019) (emphasis added). EPA’s action withdraws nearly 200,000 acres from potential development, far more than 5,000 acres that trigger Congressional approval under the FLPMA. EPA cannot usurp Congressional authority in this regard.

Using Section 404(c) to restrict development of the Pebble deposit also runs afoul of the Alaska Native Claims Settlement Act (“ANCSA”). 43 U.S.C. § 1601 *et seq.* Under ANCSA, Alaska Native Corporations are required to develop and manage their lands to the benefit of their shareholders. As described more fully in Section IX above, the Pebble Project would provide a much needed boost to struggling local communities, including employment and tax payments that would offer resources for schools, health facilities and other community infrastructure.²⁶⁴ The significant revenue benefits to the local communities are undisputed: “The Project would generate \$27 million annually in severances taxes for the LPB during operations, and annual property tax revenue to the Kenai Peninsula Borough based on assessed value of project-related real property.”²⁶⁵ Any 404(c) action limiting the ability to develop the Pebble Deposit denies Native Corporations the ability to fulfill this requirement and erases one of the only hopes for development and economic growth in their communities.

EPA cannot use Section 404(c) authority to undermine Congress’s explicit intent to protect Alaskans’ interests. All conveyances to the State under the Alaska Statehood Act and Cook Inlet Exchange were subject to the condition that the State reserved its rights to all the underlying mineral resources within those lands.²⁶⁶ And the grant to the State of all mineral lands through these bargains are rendered meaningless if the State cannot develop them. As the FEIS recognized:

the public also has an interest in improving the economy of the state, in the creation of jobs in the state, and in the extraction of natural resources for the benefit of the state. This is demonstrated by scoping comments, which indicated a desire to bring economic opportunity and jobs to the region, as well as by policy language in the Alaska State Constitution and Alaska Statutes encouraging development of the state’s mineral resources consistent with the public interest.²⁶⁷

Taken together, these statutes clearly protect Alaska’s right to develop state-owned lands. EPA’s Revised Proposed Determination would erase the State’s legally protected interests in the development of lands intentionally acquired and designated for mineral development. EPA lacks such authority.

²⁶⁴ FEIS at ES 54.

²⁶⁵ *Id.* at ES 47-ES 48.

²⁶⁶ Alaska Statehood Act § 6(i); Pub. L. No. 94-204 § 12(d)(1).

²⁶⁷ FEIS at 1-4.

XIII. Conclusion

For the reasons provided above, EPA Region 10 should withdraw the Revised Proposed Determination.