

**EPN Comments on EPA's Proposed Determination To Prohibit and Restrict  
the Use of Certain Waters Within Defined Areas as Disposal Sites;  
Pebble Deposit Area, Southwest Alaska**

Docket No.: EPA-R10-OW-2022-0418

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Founded in 2017, the [Environmental Protection Network](https://www.epa.gov/environmental-protection-network) (EPN) harnesses the expertise of more than 550 former Environmental Protection Agency (EPA) career staff and confirmation-level appointees from Democratic and Republican administrations to provide the unique perspective of former regulators and scientists with decades of historical knowledge and subject matter expertise.

As described in more detail below, EPN fully supports the EPA Region 10 issuance of a Recommended Determination under Section 404(c) of the Clean Water Act (CWA) to prohibit and restrict the designation of the areas in the Bristol Bay watershed for the discharge of dredged or fill material into jurisdictional waters of the US as part of the Pebble mining operation in Bristol Bay, Alaska. The 2022 Bristol Bay Proposed Determination provides a detailed analysis of the potential impacts of the mining with supporting documentation and, as discussed below, meets the criterion for issuing a Section 404(c) Final Determination. The watershed in Bristol Bay, including rivers, streams, and wetlands in the area, supports the world's largest sockeye salmon fishery and provides for a subsistence-based way of life that has sustained Alaskan Native communities for thousands of years.

**Background – Clean Water Act Section 404(c)**<sup>1</sup>

Section 404(c) of the CWA (33 USC Section 1344(c)) and the implementing regulations (40 CFR Part 231) authorize EPA to take actions to prohibit the designation of (specification of) any area of the waters of the US for the discharge of dredged or fill material where such action would have “unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife or recreational areas.”<sup>2</sup> This includes the authority to restrict the designation of sites for the discharges of dredged or fill material where the same, similar, or greater impacts would occur if the site were to be used for mining. EPA approaches the use of Section 404(c) carefully and deliberately. EPA has used the Section 404(c) procedures judiciously over the history of the CWA, issuing a total of 13 Section 404(c) Final Determinations.

The implementing regulations, 40 CFR Part 231, sets out the procedures that EPA must follow “in prohibiting or withdrawing the specification, or denying, restricting, or withdrawing the use for specification, of any defined area as a disposal site for dredged or fill material...”<sup>3</sup> The regulations also set

<sup>1</sup> For a full analysis of the Section 404(c) process and requirements and a list with references of all actions issued to date see: <https://www.epa.gov/cwa-404/restriction-disposal-sites-under-cwa-section-404c>

<sup>2</sup> (c) Denial or Restriction of use of Defined Areas as Disposal Sites - The Administrator is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such material will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife or recreational areas...

<sup>3</sup> 40 CFR Section 231.1(a).

up specific procedures and requirements for issuing a Proposed Determination (40 CFR Section 231.3), seeking public comments and holding hearings (40 CFR Section 231.4), issuing the Recommended Determination (40 CFR Section 231.5), and issuing the Administrator's Final Determination (40 CFR Section 231.6). As described in more detail below, based on our review of the process followed, the historical record, and the 2022 Proposed Determination and supporting documents, we agree with the findings in the 2022 Proposed Determination as presented by Region 10. The mine proposed in the Section 404 permit application, as reflected in the 2020 Mine Plan, should be prohibited and any other mining in the identified watershed that would have the same, similar, or greater level of impacts should be restricted.

### **Description of the Bristol Bay Watershed, the Pebble Mine, and the Impacted Resources**

The Executive Summary provides a good description of the Bristol Bay area and the potential mining impacts.<sup>4</sup> The Bristol Bay Watershed includes six major watersheds: the Togiak, Nushagak, Kvichak, Naknek, Egegik, and Ugashik River watersheds, along with a series of smaller watersheds all draining from the North Alaska Peninsula. (see Figure ES-1, Executive Summary 2022 Proposed Determination). The Pebble deposit, which is the subject of the Proposed Determination, is located in the headwaters of the Bristol Bay watershed and underlies portions of the South Fork Koktuli River (SFK), North Fork Koktuli River (NFK), and Upper Talarik Creek (UTC) watersheds. (see Figures ES-2, ES-3 and ES-4, Executive Summary 2022 Proposed Determination). The proposed mine that is the subject of the Section 404(c) review is based on the revised mine plan (2020 Mine Plan) submitted to the US Army Corps of Engineers (Corps) by Pebble Limited Partnership (Pebble) for permitting in 2020. These three streams that would be directly impacted by the mining operation are a highly significant element of the headwaters of two of the largest rivers in the Bristol Bay watershed, the Nushagak and Kvichak Rivers (Figure ES-2). The Nushagak and Kvichak River systems produce approximately 50% of the sockeye salmon that return to Bristol Bay each year.

The proposed primary mining operation includes four major elements: “(1) the mine site situated in the SFK, NFK, and UTC watersheds (Figure ES-3); (2) the Diamond Point port; (3) the transportation corridor, including concentrate and water return pipelines; and (4) the natural gas pipeline and fiber optic cable.” (ES-5, Executive Summary). A review of Figure ES-3 shows the geographic extent of the mining operation and impacts in the watershed.

The Pebble deposit is a large, low-grade porphyry mineral deposit that contains copper-, gold-, and molybdenum-bearing minerals. Since the materials are low grade (lower concentration), the quantity of ore that needs to be mined to be economical is much larger than if the material was more concentrated. As a result, the impacts to the system are significant. Because the mine is in the headwaters of the systems where the anadromous fish return to spawn each year, the impacts directly affect the entire fishery resource (see discussion below).

Pebble's Section 404 permit application was limited to the 2020 Mine Plan, which the Corps has denied. This denial is currently under appeal. It is important to note that the 2020 Mine Plan does not address other future plans to mine in other areas of the Pebble deposit that are owned by Pebble and that would have the same, similar, or even greater adverse effects of the same nature and magnitude as the 2020 Mine Plan. The Proposed Determination addresses those impacts by restricting the use of areas of the Pebble deposit not included in 2020 the Mine Plan (see discussion below). Details concerning the Pebble deposit and the extent

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<sup>4</sup> See also Sections 2.1 and 3 of the Proposed Determination.

of the 2020 Mine Plan are discussed in Section 2 of the 2022 Proposed Determination.

The Proposed Determination has a fully developed discussion of the Bristol Bay watershed and the resource, and specific impacts that mining could have on the natural resources of the area, as well as the use of those resources by Alaskan Native subsistence fishermen and recreational and commercial fishermen. In addition to providing habitat for numerous fish, birds, and terrestrial mammals, the Bristol Bay watershed supports the production of all five species of Pacific salmon found in North America, including the sockeye. Bristol Bay's salmon populations are entirely anadromous. The salmon hatch and rear in the freshwater systems and migrate to the sea to grow to adult size, then return upstream to the freshwater systems to spawn and die. The watershed supports the largest wild sockeye salmon fishery in the world. Within the Bristol Bay watershed, approximately half of the sockeye salmon production is from the systems that would be impacted by the mine—the Nushagak River and Kvichak River watersheds. These watersheds are also home to two Alaskan Native cultures who rely on the salmon fishery for 52% of their subsistence harvest and have been an integral part of their culture for 4,000 years. There are 14 Alaskan Native villages within these watersheds.

The direct effects from placement of dredged and or fill material in the aquatic habitats as well as indirect effects those discharges may have on the rivers, streams, and wetlands would result in the total loss of aquatic habitats important to the anadromous fish population and these Native Alaskan cultures. The headwaters of the Nushagak and Kvichak river system provide important habitat areas as well as other ecosystem services that sustain the fisheries in Bristol Bay. Permanent destruction of the areas identified in the Proposed Determination would undoubtedly create unacceptable adverse effects on one of the world's most important salmon fisheries.<sup>5</sup>

### **History and Current Status of the Section 404(c) and the Corps Permitting at the Pebble Mine**

The Bristol Bay Pebble deposit and mine have a long and complicated history of review under the CWA. As a result of this lengthy process, EPA and others have studied the Bristol Bay watershed and the Pebble deposit extensively, providing ample support for the current Proposed Determination. A summary of this history follows.

In early 2014, EPA completed a multi-year assessment of Bristol Bay and issued a final assessment of the potential impacts that a mining development at a large scale would have on the Bristol Bay wildlife and fisheries.<sup>6</sup> This included the potential impacts on Alaska Native cultures in the region. This review and assessment led to a Proposed Section 404(c) Determination issued in July 2014 which identified the potential impacts associated with the proposed large-scale mine. Pebble filed suit against EPA challenging the Proposed Determination. In May 2017, EPA entered into a Settlement Agreement with Pebble Limited Partnership to resolve the litigation, providing Pebble the opportunity to apply for a Section 404 permit from the Corps for the mine. EPA also agreed to withdraw the 2014 Proposed Determination and not move forward with the next step in the Section 404(c) process, issuing a Recommended Determination. Pebble

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<sup>5</sup> See Section 4, Proposed Determination.

<sup>6</sup> For a complete history of the Bristol Bay Section 404(c) process including links to all the relevant documents see: USEPA Bristol Bay 404(c) Timeline. <https://www.epa.gov/bristolbay/bristol-bay-404c-timeline>

submitted an application for a Section 404 permit to the Corps in December 2017. In January 2018, EPA formally suspended the Section 404(c) process. In February 2019, the Corps issued a Draft Environmental Impact Statement (DEIS) inviting public comments and a Section 404 permit public notice. In June 2019, EPA headquarters issued a memorandum to Region 10 directing the Region to resume actions to withdraw the 2014 Proposed Determination. In July 2019, EPA Region 10 issued a Notice of Decision to Withdraw Proposed Determination in the Federal Register.

Twenty tribal, fishing, environmental, and conservation groups challenged the EPA withdrawal of the 2014 Proposed Determination in US District Court in Alaska. The District Court dismissed the matter, finding that EPA's decision to withdraw the Proposed Determination was not reviewable. In June 2021, the 9th Circuit Court of Appeals reversed the District Court and remanded the matter, finding that EPA can only withdraw a Proposed Determination "if the discharge of materials would be unlikely to have an unacceptable adverse effect."

On August 24, 2020, the Corps issued a Determination finding that the proposed Pebble mine project "would likely result in significant degradation of the environment and would likely result in significant adverse effects on the aquatic system or human environment." The Corps concluded that the mine as proposed could not be permitted under Section 404 of the CWA and denied the permit. In September 2021, following the 9th Circuit Court of Appeals Decision that found that EPA can withdraw a Proposed Determination but only in limited circumstances, the US Department of Justice filed a notice in the District Court that EPA intended to request that the 2019 withdrawal of the Proposed Determination be vacated and remanded to EPA. In October 2021, the District Court granted the remand to EPA and vacated the 2019 withdrawal of the 2014 Proposed Determination.

The reinstatement of the 2014 Proposed Determination restarted the Section 404(c) process, triggering the regulatory process and required deadlines found in 40 CFR Part 231. Consistent with the regulations, on November 23, 2021, EPA published an announcement in the Federal Register extending the deadline to prepare a revised Proposed Determination until May 31, 2022, announcing the next steps in the process including considering available new information.

In January 2022, EPA Region 10 announced the agency's intent to issue a revised Proposed Determination by May 31, 2022, to ensure there was adequate time for the EPA to give full consideration to the available information. On May 26, 2022, EPA Region 10 published the "Clean Water Act 404(c) Proposed Determination to prohibit and restrict the use of certain waters in the Bristol Bay Watershed (South Fork Koktuli River, North Fork Koktuli river, and Upper Talarik Creek watersheds) as disposal sites for the discharge of dredged or fill material associated with mining the Pebble Deposit." In addition, EPA Region 10 held public hearings on June 16-17, 2022, in Dillingham and Newhalen, Alaska, as well as a virtual hearing on June 16. In accordance with Section 404(c) and the implementing regulations, EPA has indicated it will fully consider all public comments received by September 6, 2022.

### **Description of the Pebble Mine Area Covered and the Proposed Prohibitions Outlined in Section 404(c)**

The 2020 Mine Plan that is part of the Section 404 permit under appeal identifies the areas that will be directly impacted by the construction and operation of the Pebble mine. These impacts are specifically described in the 2022 Proposed Determination.<sup>7</sup>

In the Proposed Determination, Region 10 notes that “[t]he direct effects (i.e., resulting from placement of fill in aquatic habitats) and certain secondary effects of such discharges (i.e., associated with a discharge of dredged or fill material, but not resulting from the actual placement of such material) would result in the total loss of aquatic habitats important to anadromous fishes. These losses are the result of the construction and routine operation of the various components of the mine site, including the open pit, bulk TSF, pyritic TSF, power plant, WMPs, WTPs, milling/processing facilities, and supporting infrastructure. According to the FEIS and ROD, discharges of dredged or fill material to construct and operate the mine site proposed in the 2020 Mine Plan would result in the total loss of approximately 99.7 miles (160.5 km) of stream habitat, representing approximately 8.5 miles (13.7 km) of anadromous fish streams and 91.2 miles (146.8 km) of additional streams that support anadromous fish streams. Such discharges of dredged or fill material also would result in the total loss of approximately 2,113 acres (8.6 km<sup>2</sup>) of wetlands and other waters that support anadromous fish streams.”<sup>8</sup> EPA Region 10’s findings regarding the unacceptable adverse effects on anadromous fishery areas are fully detailed and supported in Section 4 of the 2022 Proposed Determination.

In conclusion, “EPA Region 10 believes the discharge of dredged or fill material for the construction and routine operation of the 2020 Mine Plan could result in unacceptable adverse effects on anadromous fishery areas in the SFK and NFK watersheds. In this regard, EPA makes four independent unacceptability findings, each of which is based on one or more factors, including the large amount of permanent loss of anadromous fish habitat (including spawning and breeding areas); the particular importance of the permanently lost habitat for juvenile Coho and Chinook salmon; the degradation of additional downstream spawning and rearing habitat for Coho, Chinook, and Sockeye salmon due to the loss of ecological subsidies provided by the eliminated anadromous fish streams; and the resulting erosion of both habitat complexity and biocomplexity within the SFK and NFK watersheds, which are key to the abundance and stability of salmon populations within these watersheds. This conclusion supports the proposed prohibition described in Section 5.1 of the 2022 Proposed Determination.”<sup>9</sup>

EPN has reviewed these findings and fully supports the Region 10 analysis and conclusions, and the issuance of the 2022 Proposed Determination prohibiting the specification of identified areas for the discharge of dredged or fill material under Section 404(c), and endorses the issuance of a Recommended Determination consistent with the Proposed Determination.

### **Description of Proposed Restrictions Outlined in the Section 404(c) Proposed Determination**<sup>10</sup>

With respect to the 2020 Mine Plan, in addition to the prohibitions described above, EPA Region 10 recognized that Pebble also owned additional land as well as mineral rights in areas of the Bristol Bay watershed that were not subject to the current Section 404 permit application. These areas in the SFK,

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<sup>7</sup> See Section 5.1, Proposed Determination.

<sup>8</sup> Executive Summary at ES-10 and ES-12.

<sup>9</sup> Executive Summary at ES-11

<sup>10</sup> See Section 5.2, Proposed Determination.

NFK, and UTC watersheds also overlay the Pebble deposit and could potentially be mined. Region 10, consistent with Section 404(c)<sup>11</sup> and based on the same record supporting the prohibitions, concluded “that discharges of dredged or fill material associated with future plans to mine the Pebble deposit could result in unacceptable adverse effects on anadromous fishery areas anywhere in the SFK, NFK, and UTC watersheds if the effects of such discharges are similar or greater in nature and magnitude to the adverse effects of the 2020 Mine Plan described in Section 4.2.1 through 4.2.4 of the 2022 Proposed Determination.”<sup>12</sup> EPN has fully reviewed the proposed restrictions and supports the Region 10 efforts to protect this valuable resource. We agree that the use of restrictions of this type, when fully supported by the facts, are consistent with Section 404(c).

### **Summary of next steps in the 404(c) process**

The public comment period for the Proposed Determination closes on September 6, 2022. EPA Region 10 held public hearings on June 16 and 17, 2022. Under the implementing regulations, 40 CFR Part 231, within 30 days of the closure of the public comment period, the Regional Administrator or his designee shall either withdraw the Proposed Determination or prepare and submit to the Administrator a Recommended Determination along with the administrative record as specified in 40 CFR Section 231.5(d) and (e).<sup>13</sup> These steps are fully described in the Proposed Determination at Pp 1-1 - 1-2.

### **Conclusion**

Based on our review of the 2022 Proposed Determination and the associated record, EPN concurs with the conclusions made that the proposed mine operation would have unacceptable adverse effects on the anadromous fisheries and other natural resources in the watershed. We support the Region 10 issuance of the Section 404(c) Determination prohibiting the specification of the site identified in the 2020 Mining Plan. We also support the restriction on the specification of any other mining activities in the Pebble deposit in the identified Bristol Bay watershed that would have the same, similar, or more extensive impacts. We encourage the Regional Administrator to submit a Recommended Determination to the Assistant Administrator for Water for consideration.<sup>14</sup>

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<sup>11</sup> Under Section 404(c), the Administrator has the authority to “restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such material will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife or recreational areas...”

<sup>12</sup> See ES-13.

<sup>13</sup> On September 6, 2022, EPA Region 10, consistent with the applicable regulations under 40 CFR Section 231.8, extended the time period to withdraw the Proposed Determination or prepare a Recommended Determination until no later than December 2, 2022, in order to review and respond to all submitted comments. (See 87 FR 54498). EPN Supports this approach.

<sup>14</sup> Under the regulations, the Regional Administrator is authorized to sign and issue the proposed determination and the recommended determination. Although there had been a one-time delegation from the Administrator to the EPA General Counsel for the earlier 404 (c) actions related to Pebble, on May 17, 2022, that delegation was withdrawn and the existing delegation from the Administrator to the Assistant Administrator for water remains effective. See fn11, Proposed Determination at Pp 1-2.