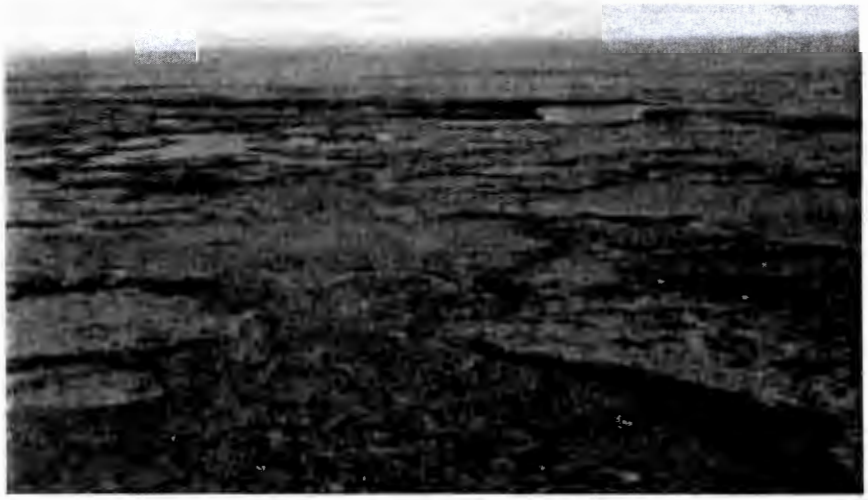
U S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

Protecting America's Waters

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 **January 13, 2016**



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Abbreviations

CWA	Clean Water Act
EPA	U.S. Environmental Protection Agency
HISA	Highly Influential Scientific Assessment
OIG	Office of Inspector General
OMB	Office of Management and Budget
ORD	Office of Research and Development
OW	Office of Water
PLP	Pebble Limited Partnership
QAPP	Quality Assurance Project Plan

Cover photo: The Bristol Bay, Alaska, watershed study area. (EPA photo)

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U.S. Environmental Protection Agency
Office of Inspector General

16-P-0082
January 13, 2016

At a Glance

Why We Did This Review

Based on congressional inquiries and hotline complaints, we conducted this review regarding the actions of the U.S. Environmental Protection Agency (EPA) and its decision to conduct an assessment of the Bristol Bay watershed in Alaska. We sought to determine whether the EPA conducted the assessment in a biased manner; predetermined the outcome; and followed policies and procedures for ecological risk assessment, peer review and information quality.

The Bristol Bay watershed, home to 25 federally recognized tribal governments, contains large amounts of copper and gold. The EPA conducted its watershed assessment from February 2011 through January 2014 to determine the significance of Bristol Bay's ecological resources and evaluate the potential impacts of large-scale mining on those resources.

This report addresses the following EPA goals or cross-agency strategies:

- *Protecting America's waters.*
- *Launching a new era of state, tribal, local, and international partnerships.*

Send all inquiries to our public affairs office at (202) 566-2391 or visit www.epa.gov/oig.

Listing of OIG reports.

EPA's Bristol Bay Watershed Assessment: Obtainable Records Show EPA Followed Required Procedures Without Bias or Predetermination, but a Possible Misuse of Position Noted

What We Found

Based on available information, we found no evidence of bias in how the EPA conducted its assessment of the Bristol Bay watershed, or that the EPA predetermined the assessment outcome. We also found that the EPA's assessment appropriately included sections on the three primary phases discussed in the agency's ecological risk assessment guidelines. Further, the EPA met requirements for peer review, provided for public involvement throughout the peer review process, and followed procedures for reviewing and verifying the quality of information in the assessment before releasing it to the public.

The EPA addressed guidelines and followed policies and procedures when conducting the Bristol Bay watershed assessment. We found no evidence of bias or a predetermined outcome. We did find a possible misuse of position by a Region 10 employee who retired in 2013.

We did find that an EPA Region 10 employee used personal nongovernmental email to provide comments on a draft Clean Water Act Section 404(c) petition from tribes before the tribes submitted it to the EPA. We found this action was a possible misuse of position, and the EPA's Senior Counsel for Ethics agreed. Agency employees must remain impartial in dealings with outside parties, particularly those that are considering petitioning or have petitioned the agency to take action on a matter. This employee retired from the EPA in April 2013.

Scope Limitations

In conducting our review, we obtained email records and documents from the agency and an external source. The agency was unable to provide all government emails for the retired employee. In addition, despite issuing a subpoena, we were unable to obtain additional personal emails for the retired employee. Our report therefore reflects findings based on available information.

Recommendations and Planned Agency Corrective Actions

We recommend that the EPA incorporate, in the agency's ethics training, examples of misuse of position in interactions with stakeholders, and define and incorporate in mandatory EPA tribal training the appropriate and ethical parameters of tribal assistance. We also recommend that the Regional Administrator, Region 10, issue a memo to staff emphasizing the importance of adhering to standards of ethical conduct, particularly when dealing with external parties with an interest in regulatory or administrative action. The agency agreed with all of our recommendations and proposed adequate corrective actions.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

January 13, 2016

MEMORANDUM

SUBJECT: 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

FROM: Arthur A. Elkins Jr.

TO: Avi Garbow, General Counsel
Office of General Counsel

Jane Nishida, Principal Deputy Assistant Administrator
Office of International and Tribal Affairs

Dennis McLerran, Regional Administrator
Region 10

This is our report on the subject evaluation conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA) based on congressional inquiries and hotline complaints. This report contains findings that describe problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

The EPA offices with responsibility for the recommendations in this report include the Office of General Counsel, the Office of International and Tribal Affairs, and Region 10.

Action Required

In accordance with EPA Manual 2750, your office provided acceptable corrective actions and milestone dates in response to OIG recommendations. All recommendations are resolved and no final response to this report is required.

We will post this report to our website at www.epa.gov/oig.

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Chapter 1
Introduction

Purpose

We received multiple congressional inquiries and hotline complaints regarding the actions of the U.S. Environmental Protection Agency (EPA) leading up to its decision to conduct its Bristol Bay watershed assessment. This included the processes the EPA used to develop and issue the resulting report, *An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska* (hereafter, "the assessment").[1] Based on these inquiries and complaints, we sought to determine whether the EPA adhered to laws, regulations, policies and procedures in developing its assessment. Specifically, we addressed:

- The reason the EPA conducted the assessment and whether there was any evidence that the EPA conducted the assessment in a biased manner or it had a predetermined outcome.
- Whether the EPA followed ecological risk assessment policies and procedures when conducting the assessment.
- Whether the EPA followed peer review policies and procedures.
- Whether the EPA followed the Information Quality Act and related policies and procedures.

Background

Bristol Bay Watershed

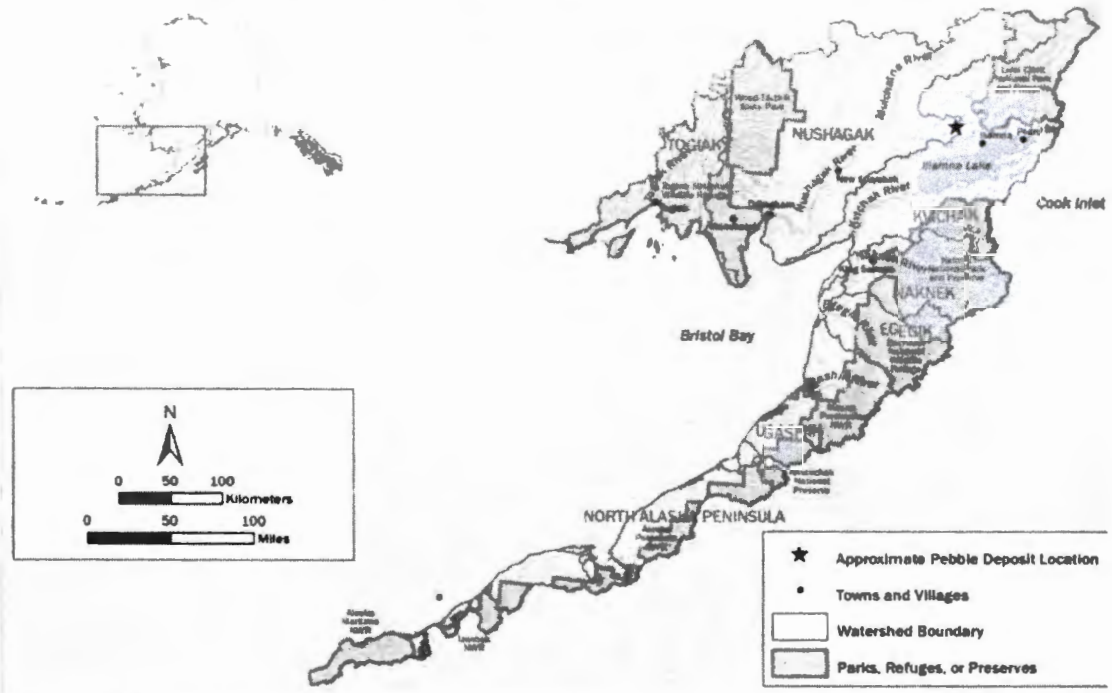
The Bristol Bay watershed is located in southwestern Alaska. According to the EPA, the watershed's streams, wetlands and other aquatic resources support world-class, economically important commercial and sport fisheries for salmon and other fishes, as well as a more than 4,000-year-old subsistence-based way of life for Alaska Natives. The area is home to 25 federally recognized tribal governments.

The Bristol Bay watershed also contains large mineral deposits. The Pebble deposit is the largest-known deposit in the area, and the most explored for future mining potential. The Pebble deposit contains large amounts of copper, gold and molybdenum.

Figure 1 shows a map of the Bristol Bay watershed.

[1] The full version of this assessment can be found on the EPA's website for Bristol Bay.

Figure 1: The Bristol Bay watershed, composed of the Togiak, Nushagak, Kvichak, Naknek, Egegik and Ugashik River watersheds and the North Alaska Peninsula



Source: EPA's proposed determination issued in July 2014.

The Pebble Limited Partnership

In 2001, Northern Dynasty Minerals Ltd. began studying the Bristol Bay watershed area for the purpose of undertaking mining activities in the Pebble deposit. According to EPA staff, they became aware of exploration in the area in the early 2000s. The EPA began working with Northern Dynasty in or about 2003 regarding the potential mine. In 2004, state and federal agency representatives[2] started reviewing study plans and attending annual meetings that Northern Dynasty sponsored.

In 2007, the Pebble Limited Partnership (PLP) was created by Northern Dynasty and Anglo American plc.[3] Since then, PLP has been the corporate entity exploring the idea of constructing a mine at the Pebble deposit.

Beginning in 2007, EPA representatives participated in various technical working groups with PLP to facilitate a coordinated process for reviewing and commenting on environmental and project design studies in advance of any permitting actions related to the Pebble Mine project. PLP suspended these technical working groups in early 2010.

[2] Among the representatives included were staff from the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the state of Alaska.

[3] Anglo American plc withdrew from the partnership in late 2013.

In February 2011, Northern Dynasty formally submitted information[4] to the U.S. Securities and Exchange Commission to develop a large-scale mine at the headwaters of Bristol Bay's Nushagak and Kvichak River watersheds. This information, along with preliminary mine details put forth by Northern Dynasty[5] and other information, was used by the EPA as the basis for developing various mining scenarios, included in the Bristol Bay watershed assessment.

Clean Water Act

The 1972 Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into waters of the United States. CWA Section 104(a) allows the EPA to conduct research, investigations and studies relating to the causes, effects, extent, prevention, reduction and elimination of pollution into waters of the United States. Per Section 104(b), the EPA can cooperate with other federal departments, state water pollution control agencies and individuals in the research, and then collect and publish research results. The EPA conducted the Bristol Bay watershed assessment under these authorities.

CWA Section 404 regulates the placement of dredged or fill material into waters of the United States, including wetlands. The U.S. Army Corps of Engineers or an approved state has responsibility for issuing CWA Section 404 permits. A CWA Section 404 permit would be required to discharge dredged or fill material associated with construction or operation of a mine at the Pebble deposit. Under CWA Section 404(c), the EPA:

> ...is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and [it] is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever [it] 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.

Before making such determination, the EPA shall consult with the U.S. Army Corps of Engineers. The EPA has used its CWA Section 404(c) authority 13 times to issue a final determination to restrict or prohibit disposal activities.

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[4] Referred to as SEC 2011.
[5] Referred to as Ghaffari et al. 2011.

Responsible Offices

The EPA offices with primary responsibility over the issues discussed in this report include:

- Office of Water (OW):
  - Immediate Office
  - Office of Wetlands, Oceans and Watersheds
- Office of Research and Development (ORD):
  - National Center for Environmental Assessment
  - National Health and Environmental Effects Research Laboratory
  - National Risk Management Research Laboratory
- Office of International and Tribal Affairs
  - American Indian Environmental Office
- Office of General Counsel
  - Ethics Office
- Region 10:
  - Regional Administrator's Office
  - Office of Ecosystems, Tribal and Public Affairs
  - Office of Regional Counsel
  - Alaska Operations Office

Within the Office of General Counsel, the Principal Deputy General Counsel is the Designated Agency Ethics Official.

Scope and Methodology

We conducted our review from May 2014 through October 2015 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our objective.

To address our objective, we reviewed relevant materials pertaining to the process used to develop the EPA's Bristol Bay watershed assessment, including policies and procedures for conducting such assessments. We reviewed the processes used to conduct the assessment, not the scientific content. We interviewed key staff within the EPA's OW, ORD, Administrator's Office and Region 10. We also interviewed a retired Region 10 Ecologist. In addition, with the assistance of our Office of Inspector General (OIG) Office of Investigations, we obtained email databases from the EPA's Office of Environmental Information for the employees

discussed below. After using search terms to narrow our focus, we reviewed 8,352 emails sent or received from January 1, 2008, through May 18, 2012, for:[6]

- The former acting Assistant Administrator for Water, given allegations regarding her involvement with a former employer.
- The Region 10 Regional Administrator, as he was the key regional decision maker in taking any CWA Section 404(c) action.
- A retired Region 10 employee, given allegations of the person's central and influential involvement in the EPA's decision to take a CWA Section 404(c) action. This employee, a GS-13 Ecologist, was responsible, at a staff level, for implementing and overseeing CWA provisions for portions of Alaska and was one of 20 authors of, and an EPA technical lead for, the assessment.

We reviewed these emails to look for any indications of bias in the EPA's actions leading up to the decision to conduct the assessment and any indications of bias during the assessment. We also looked for any evidence showing that the EPA predetermined the outcome of the assessment. In addition, for the former acting Assistant Administrator for Water, we also looked for documentation showing improper contact with her former employer. We did not find any instances of improper contact related to the scope of this review.

We also completed other steps, as described in Appendix A, to address the four sub-objectives.

Scope Limitations

We are reporting scope limitations for this review. We could not review all emails from the retired Region 10 employee's EPA email address. Region 10 identified 25 months of missing emails for the retired employee that overlapped with the 52-month time period of our review (January 1, 2008, through May 18, 2012). As a result, we are unable to draw any specific conclusions related to that employee's emails during that period. This limitation applies to the findings discussed in Chapter 4 of this report.

In June 2014, the EPA notified the National Archives and Records Administration of this potential loss of electronic documents. In March 2015, the EPA provided a follow-up report related to the gap in email records. On June 24, 2015, the National Archives and Records Administration provided a letter to the EPA stating that it believes the EPA acted appropriately in addressing the absence of

[6] We obtained email databases from EPA's Office of Environmental Information in the fall of 2014. Those databases included information available at the time of retrieval. If an employee had deleted emails prior to our retrieving the database, those deleted emails were not available. The EPA also provided us access to emails collected in response to Freedom of Information Act and congressional requests. We did not perform a detailed review of these emails but rather searched for information as needed. We also received and reviewed emails provided to us by an attorney who represented six federally recognized tribes.

email as an unauthorized and accidental loss of federal records. The letter closed the file on this matter, stating that the EPA complied with the requirements governing the reporting of allegations of possible loss of federal records.

We also attempted to obtain access to the retired employee's personal email records regarding Bristol Bay activities because we found that the employee had used personal email to review the draft petition. We issued a subpoena to the former employee's legal counsel, as we could not identify the former employee's location. The former employee's legal counsel refused service, stating that she was not authorized to accept service on behalf of her client.

Chapter 2
EPA's Bristol Bay Watershed Assessment

Events That Led to EPA's Decision to Conduct the Bristol Bay Watershed Assessment

From 2007 through 2010, EPA representatives participated in technical working groups with PLP. One EPA participant was the EPA Region 10 GS-13 Ecologist based in Alaska whose responsibilities included conducting CWA Section 404 permit reviews and enforcement, wetland monitoring and assessment, and grants management; and general outreach and collaboration with federal, state, local and tribal partners on wetlands protection and restoration. This Region 10 employee—who had retired effective April 30, 2013—told us that he initiated discussions with his supervisor and EPA managers on the possible use of CWA Section 404(c) for the Pebble Mine project based on his job duties listed in his performance standards and his experience with mining.

The CWA Section 404(c) process could restrict, prohibit, deny or withdraw the use of an area as a disposal site for dredged or fill material. Discussions were initiated prior to the receipt of a May 2010 tribal petition. The idea to use CWA Section 404(c) eventually was briefed to, and considered by, the Region 10 Administrator and the then EPA Administrator Lisa Jackson. In January 2010, EPA staff briefed then Administrator Jackson on the proposed Pebble Mine project and various options for EPA involvement, with one option being a CWA Section 404(c) process.

On May 21, 2010, the EPA received a petition from six federally recognized tribal governments requesting that the EPA initiate a CWA Section 404(c) process to identify wetlands and waters in the Kvichak and Nushagak river drainages where discharges associated with potential large-scale mining could be prohibited or restricted. Following this letter, three additional federally recognized tribal governments signed on to this letter. The EPA also received letters from multiple stakeholders expressing their interest and concerns regarding potential EPA action to protect Bristol Bay fishery resources. Some requests favored immediate action to comprehensively protect Bristol Bay via any tools available, including CWA Section 404(c). Others favored a targeted CWA Section 404(c) action that would restrict only mining associated with the Pebble deposit. These stakeholders included additional tribes, other tribal organizations and others.

Also in 2010, the EPA received requests to refrain from taking action under CWA Section 404(c). These requests included those that asked for more time to understand potential implications of mine development in the Bristol Bay watershed, and others that requested that the EPA wait until formal mine permit applications had been submitted and an environmental impact statement

developed. These stakeholders included federally recognized tribal governments, other tribal organizations, the Governor of Alaska, and attorneys representing PLP.

In June 2010, EPA staff presented a briefing on the proposed Pebble Mine project to the EPA Region 10 Administrator. In August 2010, EPA staff gave a presentation to the then Deputy Assistant Administrator for Water and a presentation to the then Senior Policy Counsel to the Administrator. The presentation for the then Senior Policy Counsel included discussion of future options, including a possible CWA Section 404(c) process.

We found that there were discussions within the EPA prior to the assessment regarding the following three options on how to respond to the requests:

1. Take no action under CWA Section 404(c) at that time.
2. Initiate the CWA Section 404(c) process ("intent to issue notice of proposed determination").
3. Gather additional scientific information through a public process.

Some in Region 10 believed that option 1 was the best way to respond to requests, while others believed option 2 was the best response.[7] In November 2010, another briefing was given to then EPA Administrator Jackson, during which option 3 was recommended. On February 7, 2011, the Region 10 Administrator issued a news release announcing the agency's decision to conduct the ecological risk assessment. The assessment—a collaboration among EPA Region 10, OW and ORD—sought to determine the significance of Bristol Bay's ecological resources and evaluate the potential impacts of large-scale mining on those resources. According to the EPA, since some of the requests specifically referenced the use of CWA Section 404(c), it was expected that this scientific information-gathering effort would provide a base of information for any agency decision on whether to use CWA Section 404(c), either immediately or in the future.

After the announcement, the EPA formed an Intergovernmental Technical Team of federal, state and tribal governmental representatives to provide opportunities to contribute and review information. The purpose of the team was to bring together experts with scientific and traditional ecological knowledge who could

[7] We obtained an EPA Office of Water budget document entitled "FY11 Proposed Investment: Bristol Bay 404(c)" that, according to OW's principal technical lead on Bristol Bay, was developed in November or December 2010 to inform funding priority discussions taking place within OW. This document states, "Region 10 believes that additional information gathering and analysis must be completed in order to support a decision to formally initiate [a] 404(c). It's still possible that a veto will not prove necessary, but a decision to move forward has created the need for upfront analysis and outreach regardless." According to the OW technical lead, at the time the budget document was developed, the agency had not yet decided how it would proceed. In the event that an option with an expedited schedule was selected, this budget document estimated potential immediate funding needs. The OW technical lead said that this document was used internally within OW, and was not used to request funding from the Administrator. The OW technical lead also said that all budget documents were revised once a version of option 3 was selected.

provide input on the collection and evaluation of scientific and technical information for the assessment.

Issuance of EPA's Bristol Bay Watershed Assessment

In May 2012, the EPA issued its initial draft assessment for public review and comment and received approximately 233,000 comments. In seeking public comment on this draft, the EPA held eight public meetings. After the issuance of the initial draft assessment, an external peer review was also conducted, consisting of a panel of 12 scientific experts. In April 2013, the EPA issued its revised draft assessment for public review and comment and received approximately 890,000 comments. The EPA also reconvened the 12 scientific experts to evaluate whether the revised draft responded to the experts' comments on the initial draft assessment.

On January 15, 2014, the EPA published the final assessment. According to the EPA, the assessment did not reflect any conclusions or judgments about the need for or scope of potential government action, nor did it offer or analyze options for future decisions. Rather, it was intended to provide a characterization of the biological and mineral resources of the Bristol Bay watershed, increase understanding of the risks from large-scale mining to the region's fish resources, and inform future government decisions. Throughout the process, the EPA also consulted with tribal governments in the Bristol Bay area. According to the EPA, they invited all 31 federally recognized tribes in the area to consult with them, and 20 tribes participated in these tribal consultations.

EPA Issued Notice of Intent to Make a CWA Section 404(c) Determination

On February 28, 2014, the Region 10 Administrator sent a letter to the U.S. Army Corps of Engineers, the state of Alaska, and PLP stating the agency's intent to proceed under its CWA Section 404(c) regulations to review potential adverse environmental effects of discharges of dredged and fill material associated with mining the Pebble deposit. According to the EPA, it based this action on available information, including data collected as a part of the agency's assessment, mine plans submitted to the U.S. Securities and Exchange Commission, and materials provided by PLP. The EPA also said this action was in response to petitions from the public.

On July 18, 2014, EPA Region 10 issued a proposed determination to restrict the use of certain waters in the Bristol Bay watershed for disposal of dredged or fill material associated with mining the Pebble deposit. The EPA received about 670,000 public comments on its proposed determination. In August 2014, the EPA held seven public hearings in Alaska on its proposed determination.

In November 2014, a federal judge in Alaska issued a preliminary injunction, based on allegations related to the Federal Advisory Committee Act, stopping the EPA from continuing with its CWA Section 404(c) process. If the injunction is lifted, the Region 10 Administrator can either withdraw the proposed determination or prepare a recommended determination. As of January 11, 2016, the injunction was still in place and a recommended determination had not been issued, nor had the proposed determination been withdrawn.

Chapter 3
Obtainable Records Showed No Evidence of Bias or Predetermination, and EPA Followed Policies and Procedures While Conducting Assessment

Obtainable records showed no evidence of bias in how the EPA conducted the Bristol Bay watershed assessment or that the EPA predetermined the outcome of the assessment to result in initiating a CWA Section 404(c) process. Also, regarding allegations that the assessment did not follow requirements for ecological risk assessments, peer review and information quality, we found that:

- The assessment included sections on the three primary phases discussed in the agency's ecological risk assessment guidelines.
- The EPA followed recommended EPA and Office of Management and Budget (OMB) procedures for peer review of highly influential scientific assessments (HISAs).[8]
- The EPA followed agency policies and guidance for reviewing and verifying the quality of information in the assessment before its release to the public.

Obtainable Records Showed No Evidence of Bias or Predetermination Related to How EPA Conducted Assessment

Based on available information, interviews, and review of emails we were able to obtain, we found no evidence of bias in how the EPA conducted the assessment. We also found no evidence that the EPA predetermined the outcome of the assessment to initiate a CWA Section 404(c) process in the Bristol Bay watershed. There were EPA staff and managers who were considering a CWA Section 404(c) process prior to the EPA's official announcement to conduct the assessment, but we did not uncover any evidence of a predetermined outcome in any of the documents or emails we reviewed or interviews we conducted.

EPA Addressed Guidelines on Risk Assessment, and Followed Procedures on Peer Review and Information Quality

Ecological Risk Assessment

The EPA's *Guidelines for Ecological Risk Assessment* (1998) define ecological risk assessment as a process that evaluates the likelihood that adverse ecological

[8] A scientific assessment is considered "highly influential" if the agency or OMB's Office of Information and Regulatory Affairs determines that the dissemination could have a potential impact of more than $500 million in any 1 year on either the public or private sector or that the dissemination is novel, controversial, precedent-setting, or has significant interagency interest.

effects may occur or are occurring as a result of exposure to one or more stressors. The guidelines note that the EPA designs and conducts ecological risk assessments to provide information to risk managers about the potential adverse effects of different management decisions. We found that the Bristol Bay watershed assessment included sections on the three primary phases discussed in the agency's ecological risk assessment guidelines, and Table B-1 in Appendix B includes our analysis of how the assessment addressed each phase.

Peer Review

The EPA's 2006 peer review policy states that the EPA strives to ensure that the scientific and technical bases of its decisions are based upon the best current knowledge and that they are credible. The policy notes that peer review—a process based on the principles of obtaining the best technical and scientific expertise with appropriate independence—is central to sound science. The EPA requires peer review of all scientific and technical information intended to inform or support agency decisions. The EPA's peer review policy further requires that influential scientific information, including HISAs such as the Bristol Bay assessment, be peer reviewed in accordance with the agency's Peer Review Handbook. We found that the following peer review work was conducted regarding the Bristol Bay watershed assessment.

Primary Review. The EPA tasked a contractor with conducting an external peer review of the agency's May 2012 draft assessment. In the performance work statement, the EPA required that the contractor's work be in compliance with the EPA Peer Review Handbook. The contractor assembled a 12-member external panel of reviewers in such fields as mine engineering, salmon fisheries biology and Alaska native cultures. The contractor conducted an external peer review panel meeting August 7–9, 2012, and invited the public to provide oral testimony during the first day. As part of the peer review, the panel had access to public comments received during the public comment period following release of the May 2012 draft assessment, as well as oral comments made during the August 2012 peer review meeting. The same 12 external peer reviewers conducted a follow-on peer review of the EPA's April 2013 revised draft assessment, and the EPA provided another 60-day public comment period following the release of the April 2013 draft assessment.

Supplemental Review. During public comment on the May 2012 draft, the EPA received feedback on additional technical reports to consider for the final assessment, seven of which the EPA identified as relevant and potentially useful to the assessment. Because the seven suggested reports had not been peer reviewed, the EPA arranged for the same contractor to conduct a supplemental "letter" peer review of each report in November and December 2012. The contractor selected 15 reviewers, two of whom were also on the external peer review panel for the May 2012 draft. The EPA ultimately

cited five of the seven supplemental reports in the final assessment. The EPA did not cite the other two reports due to questions concerning their quality and the reputation and objectivity of one of the coauthors of the two reports.

Tables in Appendix B show our analysis that the EPA followed OMB (Table B-2) and agency (Table B-3) requirements during the primary and supplemental peer reviews—specifically for HISAs, transparency and conflict of interest.

In addition, we sought perspectives from all 12 external peer reviewers on the EPA's peer review process. We received responses to our questions from 11 of the 12 external peer reviewers. Overall, they found the process sufficient. Reviewers stated they had either no or very limited contact with the EPA. Table 1 below notes additional responses.

Table 1: External peer reviewer responses

OIG Questions	Responses	
	No	Yes
Found the EPA's charge questions to be appropriate.	1	10 (91%)
Found the peer review schedule to be appropriate given the scope/charge.	1	10 (91%)
Found that the process included adequate opportunities for public involvement.	0	10 (100%)[9]
Found the external peer review panel was balanced in terms of reviewer expertise.	0	11 (100%)
Thought the EPA adequately addressed external peer review comments.	1	10 (91%)

Source: OIG summary of information obtained from 11 external peer reviewers.

All three "no" responses were provided by the same peer reviewer. This reviewer thought the charge questions were confining in terms of scope and that the EPA might have received broader viewpoints had charge questions not been so limiting. The reviewer also felt that the peer review schedule did not provide enough time initially to review the assessment and provide comments. The reviewer also did not believe the EPA fully addressed his comments on the first draft, although the reviewer could not recall specific comments he felt went unaddressed. The reviewer said he raised concerns to the EPA on the supplemental papers described above and that the EPA did not follow the usual peer review process on the supplemental papers. According to ORD, it has no "usual" process for conducting peer reviews of non-agency reports. No other peer reviewers expressed these concerns.

Information Quality

We found that the EPA followed policies and guidance for reviewing and verifying the quality of information in the assessment before its release. ORD accomplished this through its quality assurance, peer review and clearance

[9] One of the 11 did not provide a response to this question.

processes. Peer review (discussed above) is a major element of how ORD directly addresses the question of whether the type, quantity and quality of the data and information used in assessments are appropriate for their intended use.

The EPA hired a contractor to perform environmental data analyses related to the baseline condition of the Bristol Bay watershed, potential mining scenarios, and fisheries; and to do a predictive risk assessment for the effects of mining on salmon and non-salmon fish. The ORD required this contractor to develop two quality assurance project plans (QAPPs)—one for the draft report and one for the final. The EPA's quality policy requires that all environmental data used in decision making be supported by an EPA-approved QAPP. This applies to both EPA offices and contractors. The QAPP provides a project-specific "blue-print" for obtaining the type and quality of environmental data needed for a specific decision or use.

Both QAPPs developed for the Bristol Bay watershed assessment included all necessary elements from the *EPA Requirements for Quality Assurance Project Plans* (2001, re-issued 2006). These requirements include basic information (e.g., what the quality assurance activities are and who is responsible) as well as what standards will be used to evaluate the data used or produced. For example, the QAPP for the final report identifies how and by whom the initial, technical and quality assurance reviews of analyses and final products will occur. The QAPP for the draft report also includes copies of the contractor's standard operating procedure for conducting literature searches for technical data, acceptance factors, and guidelines for evaluating secondary data.

Both QAPPs for the assessment were approved by the EPA's Quality Assurance Managers in accordance with the ORD's National Center for Environmental Assessment Quality Management Plan (2007, 2013). Under the *EPA Requirements for Quality Assurance Project Plans*, the contractor was responsible for oversight and implementing the quality assurance activities in the EPA-approved QAPPs for the assessment. We did not review contractor oversight or implementation.

For HISAs such as the Bristol Bay assessment, the EPA followed the appropriate ORD Quality Management Plan clearance processes before releasing the draft and final reports to the public. The final assessment report includes both a cautionary statement about using report data for other than its intended purpose (Chapter 1) and a readily identifiable section (Chapter 14) that discusses data quality and limitations as required by the *EPA Quality Manual for Environmental Programs* (2000). In addition, the final assessment incorporates the five elements that the EPA's Information Quality Guidelines (2002)[10] recommend, including in any final influential scientific risk assessment that is presented to the public. See Table B-4 in Appendix B for our analysis.

[10] EPA *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency* (October 2002).

Chapter 4
Possible Misuse of Position May Have Occurred Prior to the Assessment

We found an instance in which an EPA Region 10 employee used his personal nongovernmental email to review and provide comments on a draft CWA Section 404(c) petition from tribes before they submitted it to the EPA. This action is a possible misuse of position under the *Standards of Ethical Conduct for Employees of the Executive Branch*. Whether the employee's actions resulted in an actual misuse of position depends on other considerations that we were unable to discern. The employee's supervisor told us that he was not aware that the employee had taken such action and he would not have allowed the employee to interact the way he did. The supervisor thought it inappropriate that the employee would review a draft petition that the agency could later act upon.

Possible Misuse of Position by EPA Employee Involved With Petition

Prior to six federally recognized tribes submitting their petition to the EPA on May 21, 2010, an attorney representing the tribes sent a draft version of the petition, along with other documents, to a Region 10 GS-13 Ecologist's personal email, and asked him to review it. This retired employee, at a staff level, was responsible for implementing and overseeing CWA provisions for portions of Alaska and was one of 20 authors of, and an EPA technical lead for, the assessment. This petition requested that the EPA initiate a CWA Section 404(c) process in the Bristol Bay watershed.

The tribal attorney sent the petition in an email to the EPA Region 10 employee's nongovernmental personal email account on January 8, 2010. The attorney again sent it on March 1, 2010, and March 11, 2010. On March 11, 2010, the Region 10 employee replied using his personal email saying he would look it over. The attorney again emailed the petition to the Region 10 employee on April 11, 2010. On April 12, 2010, using his personal email, the Region 10 employee replied to the attorney with suggested edits to the tribes' CWA Section 404(c) petition letter.[11] The Region 10 employee provided six edits on word choice and one comment to add some language on ecological effects not directly related to fisheries. The final tribal petition letter sent to then EPA Administrator Jackson included changes suggested by the Region 10 employee.

The agency did not receive the petition from the tribes requesting that the EPA take CWA Section 404(c) action until May 21, 2010. While reviewing the Region 10 employee's official EPA emails, we found that he forwarded the initial

[11] We also found an instance where this Region 10 employee was informed by another external party, via email to his EPA work email dated April 14, 2010, that a CWA Section 404(c) action request would be coming to the EPA.

email from the attorney dated January 8, 2010, to his EPA work email address on July 7, 2010. However, we found no evidence that the Region 10 employee forwarded the email in which he provided edits to his EPA work email account.[12]

There is no requirement in the CWA or the EPA's regulations pertaining to a process for petitions for CWA Section 404(c). According to OW staff, letters and petitions requesting that the EPA initiate a CWA Section 404(c) action are entered into the agency's Correspondence Management System. OW staff said that this petition from the tribes followed this process.

As set forth in the *Standards of Ethical Conduct for Employees of the Executive Branch*,[13] employees shall not use their public office for their own private gain or for the gain of those with whom they are affiliated in a nongovernmental capacity, and shall endeavor to avoid any actions creating the appearance that they are violating the law or the ethical standards. Whether particular circumstances create an appearance that the law or these ethical standards have been violated shall be determined from the perspective of a reasonable person with knowledge of the relevant facts.

The Region 10 employee's job duties included providing advice and assistance to tribal governments on matters relating to the development, execution and monitoring of environmental protection policies, plans and programs. According to the EPA, this person was the only EPA employee working from a small office remotely located in Alaska, where telecommunication challenges occasionally required the employee to conduct EPA work using his personal email account.

When reviewing the draft petition, it was not clear whether the Region 10 employee participated in a personal or official capacity. It was also not clear whether commenting on the draft petition using personal email was allowable under the job duties of the Region 10 employee. The employee's supervisor stated that while the employee was allowed to talk with tribes and interact with them based on his responsibilities, the supervisor did not approve the employee's action to review and comment on the draft petition. In fact, the supervisor stated that the employee never asked if he could review the petition, so the supervisor was unaware that the employee reviewed it. The supervisor told us that he would not have allowed the employee to interact with an external attorney in this manner and said that it seems inappropriate that the employee would review a draft petition that the agency could later act upon. As discussed in Chapter 2, the EPA decided to conduct the assessment instead of initiating the CWA Section 404(c) process in 2011.

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[12] Other than the January 8, 2010, email, the other emails discussed in this section were provided to us by an attorney who represented the six federally recognized tribes. As mentioned in Chapter 1, Scope Limitations, we attempted to obtain access to this employee's personal email records but were unable to legally obtain access. We do not know if this instance is isolated.

[13] The U.S. Office of Government Ethics published the standards on August 7, 1992, and the regulation became effective on February 3, 1993.

We also asked various other EPA officials involved with the assessment if they were aware that the Region 10 employee had reviewed the draft petition. In all cases, EPA officials said that they were not aware of it until we brought it to their attention. Region 10's Regional Counsel stated that staff interacting with tribes are not always aware of the boundaries with tribes when staff seek to meet government-to-government trust responsibilities.

We found no evidence that any law was violated, but possible misuse of position did result from the Region 10 employee's actions. The EPA's Senior Counsel for Ethics agreed that this was a possible misuse of position. Whether the employee's actions resulted in an actual misuse of position depends on other considerations that we were unable to discern because we could not access all of the employee's work emails and nearly all personal emails of the employee. In addition, although we interviewed the former Region 10 employee after his retirement, we were unable to ask any questions related to this issue as we had not uncovered the issue at the time of the interview. As we do not know the current location of the former employee, we contacted the employee's legal counsel to see if the employee would answer additional questions, but did not receive a response from the legal counsel. We were also unable to discern specific distinctions in the employee's job duties as they relate to communication with and assistance to tribal governments. As this employee is retired, no administrative action can be taken.

Conclusion

We found that an EPA Region 10 employee used personal nongovernmental email to provide comments on a draft CWA Section 404(c) petition from tribes before they submitted it to the EPA. This action was a possible misuse of position. Agency employees must remain impartial in dealings with outside parties, particularly those that are considering petitioning or have petitioned the agency to take action on a matter.

Recommendations

We recommend that the Principal Deputy General Counsel in the Office of General Counsel—the EPA's Designated Agency Ethics Official:

1. Incorporate in the EPA's ethics training examples of misuse of position in interactions with stakeholders related to the OIG's findings in this report.

We recommend that the Assistant Administrator for International and Tribal Affairs:

2. Work with the EPA's Designated Agency Ethics Official (the Principal Deputy General Counsel) to define appropriate and ethical parameters of tribal assistance and include that in EPA's mandatory tribal training.

We recommend that the Regional Administrator, Region 10:

3. Issue a memo to Region 10 staff emphasizing the importance of adhering to the *Standards of Ethical Conduct for Employees of the Executive Branch*, particularly when dealing with external parties with an interest in requesting or petitioning the EPA to take regulatory or administrative action.

Agency Comments and OIG Evaluation

On November 10, 2015, the agency provided a coordinated response to our draft report on behalf of Region 10, the Office of International and Tribal Affairs, the Office of General Counsel, the Office of Water, and the Office of Research Development (see Appendix C). The agency agreed with all three recommendations and proposed adequate corrective actions. While the EPA did not initially provide a date in its response for taking action on Recommendation 2, we followed up with the agency and the agency subsequently provided a satisfactory date of November 2016 for taking the corrective action.

The agency also provided technical comments on the draft report. Where appropriate, we incorporated changes to the report based on the agency's technical comments.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS						POTENTIAL MONETARY BENEFITS (in $000s)	
Rec. No.	Page No.	Subject	Status[1]	Action Official	Planned Completion Date	Claimed Amount	Agreed-To Amount
1	17	Incorporate in the EPA's ethics training examples of misuse of position in interactions with stakeholders related to the OIG's findings in this report.	O	Principal Deputy General Counsel, Office of General Counsel	10/31/16		
2	17	Work with the EPA's Designated Agency Ethics Official (the Principal Deputy General Counsel) to define appropriate and ethical parameters of tribal assistance and include that in EPA's mandatory tribal training.	O	Assistant Administrator for International and Tribal Affairs	11/30/16		
3	18	Issue a memo to Region 10 staff emphasizing the importance of adhering to the *Standards of Ethical Conduct for Employees of the Executive Branch*, particularly when dealing with external parties with an interest in requesting or petitioning the EPA to take regulatory or administrative action.	O	Regional Administrator, Region 10	1/31/16		

O = Recommendation is open with agreed-to corrective actions pending.
C = Recommendation is closed with all agreed-to actions completed.
U = Recommendation is unresolved with resolution efforts in progress.

Details on Scope and Methodology

The overall objective of our review was to determine whether the EPA adhered to laws, regulations, policies and procedures in developing its assessment of potential mining impacts on ecosystems in Bristol Bay, Alaska. Specifically, we addressed:

- The reason the EPA conducted the assessment and whether there was any evidence that the EPA conducted the assessment in a biased manner or it had a predetermined outcome.
- Whether the EPA followed ecological risk assessment policies and procedures when conducting the assessment.
- Whether the EPA followed peer review policies and procedures.
- Whether the EPA followed the Information Quality Act and related policies and procedures.

We reviewed the processes used to conduct the assessment, not the scientific content. The EPA began its assessment in February 2011 and issued its final assessment report in January 2014. Our review encompassed this entire timeframe and the time leading up to the decision to conduct the assessment.

Documents and Interviews

We reviewed the following criteria documents:

- Clean Water Act Sections 104(a) and (b) and 404(c).
- Key materials on EPA's Bristol Bay website, including:
  - EPA's final watershed assessment, *An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska* (January 2014).
  - EPA's *Proposed Determination of the U.S. Environmental Protection Agency Region 10 Pursuant to Section 404c of the Clean Water Act, Pebble Deposit Area, Southwest Alaska* (July 2014).
- Ecological risk assessment guidance, including the EPA's:
  - Training materials on watershed ecological risk assessment.
  - Framework for Ecological Risk Assessment (February 1992).
  - Guidelines for Ecological Risk Assessment (April 1998).
  - Framework for Cumulative Risk Assessment (May 2003).
  - Guidance for Risk Characterization (February 1995).
  - Risk Characterization Handbook (December 2000).
- Peer review guidance, including:
  - OMB's Final Information Quality Bulletin for Peer Review (December 2004).
  - EPA's Peer Review Policy (January 2006).
  - EPA's Peer Review Handbook 3rd Edition (December 2009).
  - EPA's conflict of interest review process for contractor-managed peer reviews of highly influential scientific assessments (March 2013).
  - ORD Policies and Procedures Manual (September 1995).
- Information quality guidance, including:

    - The Information Quality Act (2000).
    - EPA's Quality Policy (2008), Procedure for Quality Policy (2008), quality management and quality assurance project plans and additional guidance documents.
    - *EPA Quality Manual for Environmental Programs* (2000).
    - EPA's *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Environmental Protection Agency* (2002).
    - *EPA Requirements for Quality Assurance Project Plans* (2001, re-issued 2006).
- Tribal policies and procedures, including:
    - Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments* (November 2000).
    - *EPA Policy for the Administration of Environmental Programs on Indian Reservations* (November 1984).
    - *EPA Policy on Consultation and Coordination with Indian Tribes* (May 2011).
    - *EPA Region 10 Tribal Consultation and Coordination Procedures* (October 2012).
- Ethics and scientific integrity guidance, including:
    - U.S. Office of Government Ethics *Standards of Ethical Conduct for Employees of the Executive Branch* (July 2011).
    - EPA's Scientific Integrity Policy (enacted February 2012).
    - White House guidance on scientific integrity (issued in March 2009) and implementing guidance from the Office of Science and Technology Policy (December 2010).
- Relevant prior OIG reports and testimony before the House Committee on Science, Space and Technology, and House Committee on Natural Resources.
- Materials from PLP.

We interviewed:

- EPA staff and managers in:
    - Region 10
        - Regional Administrator and Deputy Regional Administrator.
        - Technical Lead for the Assessment
        - Personnel within the Regional Counsel's Office; the Office of Ecosystems, Tribal and Public Affairs; and the Alaska Operations Office.
        - Retired employees, including the former project manager for Bristol Bay, regional mining coordinator, and an ecologist.
    - OW
        - Former acting Assistant Administrator.
        - Technical Lead for the assessment.
        - Chief of Staff.
        - Assistant to the Chief of Staff.
        - Staff from the Office of Wetlands, Oceans and Watersheds.
    - ORD
        - Principal Technical Lead for the assessment.
        - Principal Investigator for the assessment.
        - Peer Review Leader.

        - Peer Review Coordinator and Quality Assurance Manager.
    - Administrator's Office
        - Deputy Chief of Staff.
        - Former Senior Policy Counsel to the Administrator.
    - Office of General Counsel
        - Senior Counsel for Ethics.
- Three external peer reviewers of the draft Bristol Bay watershed assessment (obtained responses via email from the other nine).
- Chief Executive Officer for PLP.
- Alaska Attorney General and Assistant Attorney General.
- Former legal counsel to Alaska Native tribes that petitioned the EPA to take CWA Section 404(c) action.
- Tribal representatives of the United Tribes of Bristol Bay and from Alaska Native Corporations (Iliamna Development Corporation and Alaska Peninsula Corporation).
- Members of the Intergovernmental Technical Team from the U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and National Park Service.

Appendix B

Analysis of Assessment's Adherence to Procedures for Ecological Risk Assessment, Peer Review and Information Quality

Table B-1: Ecological risk assessment phases addressed in the Bristol Bay watershed assessment

Phase	*Procedural guidance* and OIG analysis
1. Problem Formulation	*This phase results in three products: (1) assessment endpoints[14] that adequately reflect management goals and the ecosystem they represent, (2) conceptual models that describe key relationships between a stressor[15] and assessment endpoint, and (3) an analysis plan.* The assessment included sections on the three primary phases discussed in this guidance. The assessment has two main sections, one of which is problem formulation (Chapters 2-6). While the EPA did not develop separate assessment endpoint and analysis plan documents, the EPA described endpoints in Chapter 5 and the analysis plan throughout problem formulation in Chapters 2–6. EPA OW and ORD staff said they focused the assessment on the endpoint of large-scale porphyry copper mining effects on salmon fisheries.[16] The EPA worked with the individual participants on the Intergovernmental Technical Team to scope the assessment by developing and updating a conceptual model[17] based on input from team participants. Chapter 6, Section 6.4, summarizes this model. The EPA met with several stakeholders as the agency formulated the assessment, including PLP and tribal interests.
2. Analysis 3. Risk Characterization	*Analysis examines risk, exposure and effects, and their relationships between each other and ecosystem characteristics. Risk characterization clarifies these relationships to reach conclusions on the occurrence of exposure and the adversity of existing or anticipated effects.* The assessment included sections on the three primary phases discussed in this guidance. The assessment has two main sections, one of which is risk analysis and characterization (Chapters 7–14). We evaluated the assessment against the EPA's "Risk Characterization Handbook" (2000) and met with EPA ORD's Principal Technical Lead and Principal Investigator and discussed whether the assessment met the 12 elements[18] of risk characterization listed in the handbook. They described how the assessment met 11 of 12 elements. They said that the remaining element ("policy choices") was not required because the assessment was not a decision document. We believe the EPA's responses were adequate.

Source: OIG analysis.

[14] The EPA's "Guidelines for Ecological Risk Assessment" (1998) defines endpoints as "explicit expressions of the actual environmental value that is to be protected, operationally defined by an ecological entity (e.g., a species, community, or ecosystem) and its attributes."

[15] In the assessment, the EPA defines stressors as "physical or chemical entities that may directly induce a response of concern."

[16] In the assessment, the EPA said one endpoint was the "abundance, productivity, or diversity of the region's Pacific salmon and other fish populations."

[17] A conceptual model is a written description and a visual representation of predicted relationships between ecological entities and the stressors to which they may be exposed.

[18] The 12 elements are: (1) key information; (2) context, (3) sensitive subpopulations, (4) scientific assumptions, (5) policy choices, (6) variability, (7) uncertainty, (8) bias and perspective, (9) strengths and weaknesses, (10) key conclusions, (11) alternatives considered, and (12) research needs.

Table B-2: Adherence to OMB's "Final Information Quality Bulletin for Peer Review"

Procedural requirement	OIG analysis
Ensure transparency by making available to the public the charge to peer reviewers; the peer reviewers' names; the peer reviewers' reports; and the agency's response to the peer reviewers' reports.	**Primary:** Via Federal Register notice, the EPA provided public comment periods of 14 and 21 days, respectively, for the nominations of peer review panelists and the EPA's charge questions to reviewers. The EPA made peer reviewers' names publicly available in various sources, and the agency's archived Science Inventory website included both the peer review report and the agency's response.
	Supplemental: The EPA did not publicly announce that supplemental peer review took place until the EPA released the April 2013 draft assessment, at which time the agency publicly released the peer reviewer's reports along with the reviewed reports themselves. ORD's Principal Technical Lead said that public disclosure and comment were not needed because the reports were not agency products and the decision to use them as part of the assessment had yet to be made. He said the assessment team wanted input from technical reviewers to assess whether the reports were based upon good science and, if not, understand any potential limitations associated with the documents.
Provide a link to the peer review reports on the Science Inventory website.	**Met for both the primary and supplemental reviews.**
Include the review in the Peer Review Agenda for HISAs (Science Inventory).	**Met for both the primary and supplemental reviews.**
Prepare and post on the Science Inventory a written response to the peer review report explaining the agency's agreement or disagreement with the views expressed; the actions undertaken to respond to the report; and the reasons the agency believes those actions satisfy any key concerns.	**Primary:** The EPA released "response to comments" reports following the May 2012 and April 2013 drafts. Each "response to comments" report included a summary of the comment made, the source of the comment, the EPA's response (agree/disagree), and any changes in the draft to address the comment.
	Supplemental: While the Science Inventory site contains the seven reports and the "letter" peer reviewer's comments on each, the site does not have any EPA "response to comments" on the agency's agreement or any actions as a result of the comments. ORD's Principal Technical Lead said that the EPA did not cite the supplemental reports until peer reviews showed that the data cited were sound.

Source: OIG analysis.

Table B-3: Adherence to EPA's "Peer Review Handbook"

Procedural requirement	OIG analysis
Conduct an external peer review and list names and affiliations of reviewers in the peer review report.	**Met for both the primary and supplemental reviews.**
Ensure that charge questions meet essential elements of a charge.	**Met for both the primary and supplemental reviews.**
For a contractor-managed review, ensure that EPA: • Obtains stakeholder input and provides the list of charge questions to the contractor. • Reviews the contractor's list of potential reviewers for conformance to work assignment specifications and any conflicts of interest. • Ensures that the Statement of Work addresses conflict of interest as a matter bound by contractual clause. • Ensures that the conflict of interest inquiry took place and appears in the peer review record. • Provides background material to the contractor to distribute to peer reviewers (i.e., the EPA limits direct contact to the contractor's designated representative and does not have general contact with the contractor's staff or peer reviewers).	**Primary:** The EPA had a 21-day public comment period for the charge questions prior to the EPA distributing the questions to the contractor. EPA ORD reviewed the contractor's list of external peer reviewers' qualifications and potential conflicts of interest, and the contractor narrowed the list of candidates based on the EPA's review. The contractor's Statement of Work included specific tasks and deliverables on conflict of interest, and EPA ORD's Peer Review Leader ensured that the conflict of interest inquiry took place before review of both the first and second extramural review drafts, and that it was documented in the peer review record. The Statement of Work noted that the contractor was to distribute documents to reviewers. It also required limited engagement between the EPA and reviewers at the public peer review meeting (except for minor clarifications) to prevent the EPA from biasing or influencing reviewers' discussions. Further, the peer review report described what background materials the contractor provided to reviewers.
	Supplemental: The EPA met all of the procedural requirements except for obtaining stakeholder input on the charge questions. As noted in Table B-2 above, the EPA did not publicly announce the supplemental peer review until after it had been completed. ORD's Principal Technical Lead said that public disclosure and comment were not needed because the reports were not agency products and the decision to use them as part of the assessment had yet to be made.

Source: OIG analysis.

Table B-4: EPA's recommended elements for presenting influential risk assessment information

	Information quality element	OIG review of the final assessment report
1	Each population addressed by any estimate of applicable human health risk or each risk assessment endpoint, including populations if applicable, addressed by any estimate of applicable ecological risk.	Chapter 5 states the EPA considered three endpoints in this assessment: (1) the abundance, productivity or diversity of the region's Pacific salmon and other fish populations; (2) the abundance, productivity or diversity of the region's wildlife populations; and (3) the health and welfare of Alaska Native cultures.
2	Expected risk or central estimate of human health risk for the specific populations affected or the ecological assessment endpoints.	Chapter 5 states that expected risks to salmon and other fish populations are evaluated in terms of direct effects of mining on habitat. Chapters 12 and 13 explain that "data are insufficient to predict wildlife population impacts"; as a result, the report qualitatively considers impacts via the loss of both salmon as a food source and marine-derived nutrients as a source of productivity. Chapter 12 says that for Alaska Native cultures, the initial effect of a mine accident or failure would be the loss or decrease of subsistence and salmon resources downstream; the magnitude of subsistence loss or geographic disruption cannot be quantified. Chapter 13 provides examples of subsistence uses of fish and wildlife potentially affected for each mining scenario described in the report.
3	Each appropriate upper-bound or lower-bound estimate of risk.	For salmon and other fish, Chapter 13 estimates risk in terms of potential direct losses in habitat: between 43.2km (lower-bound) and 69.5km (upper-bound) of streams; 1.28km^2 (lower-bound) and 2.06 km^2 (upper-bound) of water bodies; and 7.9km^2 (lower-bound) and 27.1km^2 (upper-bound) of wetlands. The report states that it only considers indirect impacts for wildlife and Alaska Native cultures due to insufficient data. As a result, the risk cannot be quantified by upper- and lower-bound estimates for wildlife and Alaska Native cultures.
4	Each significant uncertainty identified in the process of the assessment of risk and studies that would assist in resolving the uncertainty.	Chapter 14, "Integrated Risk Characterization," identifies and describes uncertainties for the overall assessment and the mine designs and scenarios used. Sections within the individual chapters also address any significant uncertainties associated with that specific element of the assessment.
5	Peer-reviewed studies that support, are directly relevant to, or fail to support any estimate of risk and the methodology used to reconcile inconsistencies in the scientific data.	Chapter 15: References list all source documents used and organized by report chapter. Generally, the references used in the assessment report were either internally or externally peer reviewed.

Source: OIG analysis.

Agency Response to Draft Report

[November 10, 2015]

MEMORANDUM

SUBJECT: Response to Office of Inspector General Draft Report No. OPE-FY14-0039 "EPA's Bristol Bay Watershed Assessment: Obtainable Records Show EPA Followed Required Procedures Without Bias or Predetermination, But Possible Misuse of Position Noted," dated October 26, 2015

FROM: Kevin Minoli, Principal Deputy General Counsel
Office of General Counsel

Jane Nishida, Principal Deputy Assistant Administrator
Office of International and Tribal Affairs

Dennis McLerran, Regional Administrator
Region 10

TO: Carolyn Copper, Assistant Inspector General
Office of Program Evaluation

Thank you for the opportunity to respond to the issues and recommendations in the draft subject audit report. Following is a summary of the Environmental Protection Agency's (EPA or Agency) overall position, along with its position on each of the report recommendations. The Agency agrees to implement the three recommendations provided by the Office of Inspector General. We are providing our response to those recommendations and estimated completion dates. For your consideration, we are also including technical comments in the attachment to supplement this response. The EPA is providing this coordinated response on behalf of Region 10, the Office of International and Tribal Affairs, the Office of General Counsel, the Office of Water, and the Office of Research and Development.

The EPA recognizes the OIG staff's diligence in conducting this evaluation and learning about the history of the Agency's development of the Bristol Bay Watershed Assessment. The EPA appreciates the OIG's comprehensive evaluation, including the review of an extensive volume of information provided by the EPA and other parties. The EPA worked thoroughly to provide the full spectrum of information sought by the OIG including guidance documents, policies, and procedures, briefing materials, access to EPA employees and officials, access to email databases and calendars, external correspondence, meeting participant lists, and the EPA responses to Congressional document requests.

AGENCY'S OVERALL POSITION

The EPA acknowledges the OIG's findings that in conducting the Bristol Bay Watershed Assessment, the EPA successfully followed ecological risk assessment, peer review, and Information Quality Act policies and procedures. We are pleased that the OIG found no evidence of bias by the EPA in its development of the Bristol Bay Watershed Assessment. The OIG's findings are consistent with the EPA's intent to conduct a public process that accounted for all perspectives and engaged all interested stakeholders to ensure that the resulting document was a valuable scientific resource. In addition to creating and maintaining an open and transparent process, the EPA also sought to guarantee that the assessment incorporated high quality data and that all findings were scientifically sound by conducting an independent, external peer review process. We appreciate your coordination with Region 10, the Office of International and Tribal Affairs, the Office of General Counsel, the Office of Water, and the Office of Research and Development.

AGENCY'S RESPONSE TO REPORT RECOMMENDATIONS

The EPA has reviewed the recommendations of the OIG and we concur with all recommendations. We are providing our response to those recommendations and estimated completion dates.

Agreements

No.	Recommendation	High-Level Intended Corrective Action(s)	Estimated Completion Date
1	Incorporate in the EPA's ethics training examples of misuse of position in interactions with stakeholders related to the OIG's findings in this report.	The Office of General Counsel/Ethics will address misuse of position in upcoming ethics training. In particular, the training will include at least one example of collaboration with stakeholders and the ethical role of employees.	For the 2016 annual ethics training, to be launched in October 2016.
2	Work with the EPA's Designated Agency Ethics Official (the Principal Deputy General Counsel) to define appropriate and ethical parameters of tribal assistance and include that in EPA's mandatory tribal training.	Coordinate with OGC/Ethics for them to write at least one slide to be included in mandatory tribal training that explains the ethical obligations of EPA employees when working with stakeholders.	For the next "Working Effectively with Tribal Governments" Training.
3	Issue a memo to Region 10 staff emphasizing the importance of adhering to the *Standards of Ethical Conduct for Employees of the Executive Branch*,	The Regional Administrator will issue a memo to Region 10 staff emphasizing the importance of ethical integrity in carrying out regional activities, and in adhering to the *Standards of Ethical Conduct for*	January 2016

	particularly when dealing with external parties with an interest in requesting or petitioning the EPA to take regulatory or administrative action.	*Employees of the Executive Branch*, particularly when dealing with external parties with an interest in requesting or petitioning the EPA to take regulatory or administrative action.	

CONTACT INFORMATION

If you have any questions regarding this response, please contact David Allnutt, Director, Office of Ecosystems, Tribal and Public Affairs, EPA Region 10 at (206) 553-2581.

Attachment

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