



DEPARTMENT OF THE ARMY
OFFICE OF THE GENERAL COUNSEL
104 ARMY PENTAGON
WASHINGTON, DC 20310-0104



REPLY TO
ATTENTION OF

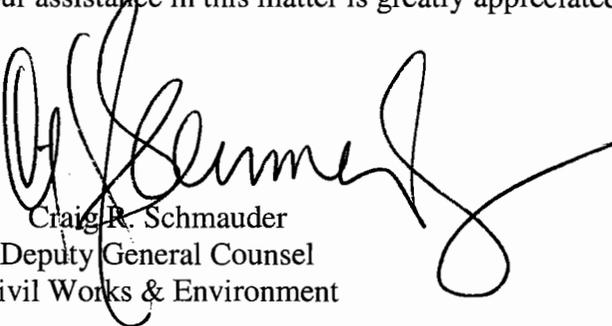
May 11, 2006

MEMORANDUM FOR CHIEF COUNSEL, U.S. ARMY CORPS OF ENGINEERS

SUBJECT: Northwest Environmental Advocates v. U.S. Army Corps of Engineers

Attached please find a Data Quality Act challenge in the above-referenced matter. I am forwarding this challenge to you for appropriate review and action on behalf of the Department of the Army.

I kindly request that you copy me on any correspondence relating to your disposition of this Data Quality Act challenge. Your assistance in this matter is greatly appreciated.



Craig R. Schmauder
Deputy General Counsel
Civil Works & Environment

Attachment:
As stated



DEPARTMENT OF DEFENSE
OFFICE OF GENERAL COUNSEL
1600 DEFENSE PENTAGON
WASHINGTON, DC 20301-1600

Handwritten signature and date: 4/27/06

APR 27 2006

MEMORANDUM FOR GENERAL COUNSEL, DEPARTMENT OF THE ARMY

SUBJECT: Northwest Environmental Advocates v. U.S. Army Corps of Engineers

Attached please find a Data Quality Act challenge in the above referenced matter. It is forwarded to you for appropriate action on behalf of the Department of Defense.

I appreciate your assistance in this matter.


Frank R. Jimenez
Deputy General Counsel
(Legal Counsel)

Attachment:
As stated



White Paper

**Before the U.S. Department of Defense
U.S. Army Corps of Engineers
WASHINGTON, D.C.**

**NORTHWEST ENVIRONMENTAL
ADVOCATES,**)
)
)
Complainant,)
)
v.)
)
U.S. ARMY CORPS OF ENGINEERS,)
)
Federal Agency.)
_____)

Docket No. _____
March 15, 2006
**Data Quality Act Challenge to
Final Supplemental Integrated Feasibility
Report and Environmental Impact
Statement for the Columbia River
Federal Navigation Channel
Improvement Project**

**COMPLAINT OF NORTHWEST ENVIRONMENTAL ADVOCATES
PURSUANT TO THE DATA QUALITY ACT OF 2000**

To: Dr. Linton Wells, Chief Information Officer
Department of Defense
6000 Defense Pentagon
Room E3194
Washington, D.C. 20310

Steven W. Boutelle, Chief Information Officer
Department of the Army
107 Army Pentagon
Room 1A271
Washington, D.C. 20310

Wil Berrios, Chief Information Officer
U.S. Army Corps of Engineers
441 G. Street, N.W.
Washington, DC 20314

Lawrence Di Rita, Principal Deputy Assistant Secretary of Defense for Public Affairs
Department of Defense
1600 Defense Pentagon
Washington, DC 20301-1600

Brigadier General Vincent K. Brookes, Chief of Public Affairs
U.S. Army
1500 Army Pentagon
Washington, D.C. 20310

*Arrived as is -
No envelope*

Carole Sanders, Chief of Public Affairs
HQ US Army Corps of Engineers
441 G Street, NW
Washington, DC 20314-1000

Lieutenant General Carl A. Strock, Chief of Engineers
U.S. Army Corps of Engineers Headquarters
441 G. Street, N.W.
Washington, DC 20314

CC: Dr. John Graham, Administrator
Office of Information and Regulatory Affairs
Office of Management and Budget
725 17th Street, NW
Washington, D.C. 20503

Pursuant to Section (b)(2)(B) of the Data Quality Act (hereinafter "DQA") of 2000, the U.S. Office of Management and Budget "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies," (hereinafter "OMB Guidelines"), 67 Fed. Reg. 8452, Feb. 22, 2002, and Section 3.3.4 of Attachment 1 of the Deputy Secretary of Defense's Memorandum dated February 10, 2003, "Ensuring the Quality of Information Disseminated to the Public by the Department of Defense" (hereinafter "DOD Memorandum"), Northwest Environmental Advocates (hereinafter "NWEA") hereby challenges certain information, data, analyses, and conclusions drawn in the document entitled "Final Supplemental Integrated Feasibility Report and Environmental Impact Statement for the Columbia River Federal Navigation Channel Improvement Project" published on January 28, 2003 by the Portland District, U.S. Army Corps of Engineers, on the World Wide Web at <http://www.nwp.usace.army.mil/issues/crcip/cms/final.asp> and supplemented by the Columbia River Channel Improvement Project Addendum, November 2003, published at <http://www.nwp.usace.army.mil/issues/crcip/cms/docs/final/addendum.pdf> (hereinafter collectively "FSEIS" or "Channel Deepening Project"). NWEA requests correction to this publicly disseminated information because it is not accurate, clear, complete, or unbiased. *See* DOD Guidelines at § 3.3.4. NWEA requests that, until the Army Corps of Engineers (hereinafter "Corps") complies with the provisions of the DQA, OMB Guidelines, and DOD Memorandum by completing an independent peer review of the information, data, analyses, and conclusions of the subject document, that the Department of Defense immediately disavow the analysis, withdraw the FSEIS, and to cease distributing or relying upon the published FSEIS.

I. STANDING

Northwest Environmental Advocates is a non-profit organization in Portland, Oregon that seeks to hold government agencies accountable for enforcing environmental laws, particularly with

regard to water quality in the Pacific Northwest. NWEA has a long history of working to protect the waters and habitat of the Lower Columbia and Willamette Rivers. NWEA has citizen members who live, work, and recreate in and around the Lower Columbia River, whose interests will be adversely affected by the illegal public dissemination of the information in the aforementioned document. NWEA also has raised concerns about the factual inaccuracies of portions of the illegally disseminated FSEIS, including aspects of the economic evaluation included therein, in its lawsuit against the Corps concerning whether this document violates the National Environmental Policy Act (NEPA).

In that lawsuit, NWEA has submitted a declaration from an economist, Ernie Niemi, of EcoNorthwest, that demonstrates the Corps' calculations and projections of economic benefit of the Channel Deepening project are grossly exaggerated. *See Attachment A, Declaration of Ernie Niemi, November 19, 2004.* Previously, NWEA sought the agreement of the Corps to re-evaluate its cost-benefit analysis due to significantly changed circumstances, which it declined to do. *See Attachment B, Letter to Lieutenant Colonel Carl A. Strock et al. from Todd D. True, Earthjustice, August 23, 2004.* Much earlier, NWEA attempted to persuade the Corps to address inadequacies of its economic analysis of the Channel Deepening project by demonstrating its failure to account for certain significant costs associated with the dredging. *See Attachment C, Letter to Secretary Louis Caldera, March 8, 2000 from Nina Bell, NWEA.* Subsequent to the filing of NWEA's lawsuit, and to the Corps' signing of the Record of Decision (ROD) based on the FSEIS, two events have further demonstrated that the Corps' evaluation of costs and benefits in the document are seriously and significantly flawed. These are discussed below. The unlawful public dissemination of the FSEIS, which is circulated internationally via the World Wide Web, and was not the subject of independent peer review, substantially and negatively affects the ability of any reputable economist hired by NWEA to address the alleged net economic benefits associated with the Channel Deepening project.

II. FACTS

In January, 2003, the Portland District of the U.S. Army Corps of Engineers published the Final Supplemental Integrated Feasibility Report and Environmental Impact Statement for the Columbia River Federal Navigation Channel Improvement Project on the following website: <http://www.nwp.usace.army.mil/issues/crcip/cms/final.asp>. In November 2003, the Corps supplemented this FSEIS with the Columbia River Channel Improvement Project Addendum, November 2003, at <http://www.nwp.usace.army.mil/issues/crcip/cms/docs/final/addendum.pdf>. In this FSEIS, the Corps bases its cost estimate of \$151 million for the Channel Deepening project, \$95 million of which is to be federal, on a two-year construction period. In response to a comment regarding this time frame, the Corps has explained that "from a least cost perspective, minimizing the construction costs reduces the overall cost of the project." Draft EIS, Volume II, August 1999, Corps' Response to Comments from the Oregon Department of Land Conservation and Development, under cover letter dated February 3, 1999. There is, in fact, no basis for the Corps to assert or assume that the Channel Deepening project will be constructed within this

two-year period for two fundamental reasons. First, the Corps has not yet received and is not likely in the future to receive the full allocations from Congress that are necessary for the agency to complete construction of the project within the two-year time frame upon which all the estimated and predicted costs are based. According to published news reports, in order to maintain its two-year time frame upon which all of its cost estimates are based, the Corps required \$15 million for FY 2005, \$40 million for FY 2006, and \$40 million for FY 2007. However, the Corps only received \$9 million, rather than \$15 million, for FY 2005, and only \$15 million, rather than \$40, for FY 2006. Likewise, the President's FY 2007 budget released this month includes only \$15 million. Therefore, there is no basis for believing that the optimistic schedule of appropriations upon which the Corps has based its entire cost projections is accurate, clear, complete, or unbiased. Likewise, there is no reason for believing that the resultant cost projections in the FSEIS themselves are accurate, clear, complete, or unbiased.

Second, the Corps has been forced to radically scale back its initial contract for the Channel Deepening project because it grossly underestimated the costs of the project. The Corps had combined portions of the Channel Deepening Project with operation and maintenance dredging of the Columbia River Navigation Channel and the Mouth of the Columbia River for a solicitation issued on February 10, 2005. The lowest total bid received by the Corps in response to this February solicitation, and opened on April 12, was 69 percent higher than the government estimate. *See* Attachment D, Abstract of Offers-Construction, Solicitation W912N-05-B-0002. For this reason, the Corps published a second solicitation on April 22, 2005, which reduced the Channel Deepening Project from 25 to 13 miles. *See* Attachment E, Abstract of Offers-Construction, Solicitation W9127N-05-B-0010. Even so, the lowest bidder for the three dredging projects was 17.95 percent over the government estimate.

Moreover, between the February 10 and April 22 solicitations, the Corps adjusted the government estimates for 7 of 13 line items upwards, making the final bids even higher as compared to the original government estimates for the February solicitation. For example, line item No. 2 for the April solicitation has a unit price of \$3.95 for each cubic yard of material as compared to line item No. 2 of the February solicitation with a unit price of \$3.42 per cubic yard. The difference between these two line items is that in the April solicitation less material will be dredged and the material is closer to the disposal site. This change in unit cost represents a 15 percent increase in the government estimate over a 10 week period for the most substantial part of the Channel Deepening Project included in the current contract. Of equal relevance is the Corps' withdrawal of a portion of the project that the bids demonstrated to be substantially more expensive than the Corps estimated. Line item No. 11 of the February solicitation is for removal of "consolidated material" between river miles 104 and 105. The government estimated cost for this action was \$4.32 per cubic yard. The bids on this came in at unit prices of \$17.15 and \$11.50, or 397 percent and 266 percent higher respectively than the government estimate. The Corps' response was to remove this action from the solicitation and postpone it. Postponing the work is not likely to reduce its costs. Nonetheless, these bids suggest that dredging the consolidated material will be significantly more costly than estimated by the Corps in its FSEIS.

Additional bases for this complaint are set out in Attachments A, B, and C which detail certain inadequacies in the Corps' evaluation of both costs and benefits associated with the Channel Deepening Project. These are incorporated by reference in this complaint and, in the interest of brevity, are not set out in detail herein.

III. LEGAL STANDARD

The United States Congress recognized a need to improve the quality of information disseminated to the public by the Federal Government. Section 515 of the FY 2001 Treasury and General Government Appropriations Act (Pub. L. 106-554, section 515, codified at 44 U.S.C. § 3516) and commonly referred to as the Data Quality Act, directed OMB to establish government wide standards in the form of guidelines designed to maximize the "quality," "objectivity," "utility," and "integrity" of information that federal agencies disseminate to the public. The Act also required agencies to develop their own conforming data quality guidelines, based upon the OMB model. *Id.* § 3516(b)(2)(A).

Federal agencies subject to the Paperwork Reduction Act, at 44 U.S.C. Chapter 35, were directed by OMB to: 1) issue their own guidelines ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency; and to 2) establish administrative mechanisms allowing affected persons to seek and obtain correction of information maintained and disseminated by the agency. Specifically, the OMB Guidelines at § III.2 state that "[a]s a matter of good and effective agency information resources management, agencies shall develop a process for reviewing the quality (including the objectivity, utility, and integrity) of information before it is disseminated" whereas the Guidelines at § III.4 state that "[t]he agency's predissemination review, under paragraph III.2, shall apply to information that the agency first disseminates on or after October 1, 2002." *See* Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies; Republication, 67 Fed.Reg. 8452 (Feb. 22, 2002).

The U.S. Army Corps of Engineers has not publish its guidelines for implementing the OMB's rules as required by October 1, 2002 in the OMB Guidelines. However, on March 26, 2003, the Deputy Secretary of Defense promulgated a Policy Memorandum entitled "Ensuring Quality of Information Disseminated to the Public by the Department of Defense" in order to comply with the OMB DQA requirement. The DOD Memorandum states, "Components [such as the Army Corps of Engineers] should not disseminate substantive information that does not meet a basic level of quality. An additional level of quality is warranted in those situations involving influential scientific, financial, or statistical analytical results that are 'capable of being substantially reproduced.'" *See* DOD Memorandum at § 3.1.1.2. As with the OMB Guidelines, to be consistent with the Act, component information releases are to be marked by utility, objectivity and integrity. *See* DOD Memorandum at § 3.2.2. Finally, scientific material not

subject to independent peer review is not presumptively objective. *See* DOD Memorandum at § 3.2.3.

The DOD Memorandum explains that the concept of objectivity focuses on whether the disseminated information is being presented in an accurate, clear, complete, and unbiased manner and as a matter of substance, is accurate, reliable and unbiased. DOD Memorandum at § 3.2.2.

The DOD Memorandum states that the concept of utility refers to the usefulness of the information to intended users, including the public. When the Corps reviews its information for dissemination, it must consider the usefulness of the information for its “reasonable and expected application.” DOD Memorandum at § 3.2.2.

The OMB issued a Final Information Quality Bulletin for Peer Review on December 15, 2004, (hereinafter “OMB Bulletin”) that provides insight into what constitutes acceptable peer review. The selection of participants in a peer review is based on expertise, with due consideration of independence and conflict of interest. OMB Bulletin at 3. The purpose of a peer review is, for example, to filter out biases and identify oversights, omissions, and inconsistencies. *Id.* Peer review also may encourage authors to more fully acknowledge limitations and uncertainties. *Id.* OMB encourages agencies to “to ensure that their peer review practices are characterized by both scientific integrity and process integrity” by providing for, among other considerations, expertise and balance of the panel members, transparency and openness, avoidance of real or perceived conflicts of interest, and a workable process for public comment. *Id.* at 12.

Finally, the DOD Guidelines state that where dissemination of financial information DOD deems to be “influential,” the agency requires “a higher quality standard than that of peer review.” DOD Guidelines at § 3.2.3.1. This higher quality standards requires the information to be “capable of being substantially reproduced in accordance with commonly accepted scientific, financial, or statistical standards.” *Id.*

IV. ARGUMENT

One “reasonable and expected application” of the information disseminated in the FSEIS is for use by the public to decide if the proposed Channel Deepening Project will produce a net benefit for federal taxpayers. In the absence of accurate, clear, complete or unbiased information, this review cannot be had. Moreover, members of Congress are expected to rely upon the conclusions of the Corps’ analysis to decide whether this is a project worthy of funding through the appropriations process. Finally, the Corps itself is required to use the information in evaluating whether the project meets the fiscal requirements of the Water Resources Development Act (WRDA) of 1996. *See* 33 C.F.R. § 2280 (“Maximum cost of projects. In order to insure against cost overruns, each total cost set forth with respect to a project for water resources development and conservation and related purposes authorized to be carried out by the Secretary in this Act or in a law enacted after the date of the enactment of this Act [enacted Nov.

17, 1986], including the Water Resources Development Act of 1988, or in an amendment made by this Act or any later law with respect to such a project shall be the maximum cost of that project, except that such maximum amount (1) may be increased by the Secretary for modifications which do not materially alter the scope or functions of the project as authorized, but not by more than 20 percent of the total cost stated for the project in this Act, in any later law, or in an amendment made by this Act or any later law . . .”). *See also*, Planning Guidance Notebook, April 22, 2000, ER1105-2-100 at 4-5(b) (“ Authorized Maximum Cost of Projects. Section 902 of the WRDA of 1986, as amended, legislates a maximum total project cost. Projects to which this limitation applies and for which increases in costs exceed the limitations established by Section 902, as amended, will require further authorization by Congress raising the maximum cost established for the project. No funds may be obligated or expended nor any credit afforded that would result in the maximum cost being exceeded, unless the House and Senate committees on Appropriations have been notified that Section 106 of the Energy and Water Development Appropriations Act of 1997 will be utilized. The maximum project cost allowed by Section 902 includes the authorized cost (adjusted for inflation), the current cost of any studies, modifications, and actions authorized by the WRDA of 1986 or any later law, and 20 percent of the authorized cost (without adjustment for inflation).”). If the costs are significantly understated and the benefits are overstated, the net project benefits projected in the FSEIS will lead to faulty conclusions concerning the Channel Deepening Project’s efficacy.

A further audience that can be reasonably expected to rely upon the information in the FSEIS are the legislatures of the States of Oregon and Washington which must pay a share of the cost of the Channel Deepening Project. The Corps itself intends to rely upon the projected net benefits in deciding whether the project should be constructed and to apply the legal restrictions on maximum total projects costs detailed above.

The economic analysis, both costs and benefits, upon which the information disseminated in the FSEIS is based fails to ensure and maximize the quality, objectivity, utility, and integrity of information disseminated by the agency as mandated by the DQA, its implementing regulations and relevant guidance. The cost estimates are based on a wholly unrealistic “optimistic” scenario that construction will be completed within two years, contrary to every indication of how long construction will actually take. When the Corps was presented with a public comment to the effect that it would be “extremely unlikely, based on realistic historical patterns (and the \$50 billion backlog of authorized Corps projects), that this project would receive full federal appropriation for construction over a two-year period,” the agency responded that it need not consider the effect of its overly optimistic time line on its cost estimates:

Conjecture regarding congressional priorities is outside the scope of the principles and guidelines that govern water resource development analyses. Congress has asked the Corps to provide an analysis that displays the benefits of a project compared to the costs required to achieve those benefits. The principles and guidelines that govern the work performed by the Corps establish a way to evenly

compare the benefits and costs of all Corps projects across the nation. When the Corps completes the record of decision, the President will decide whether or not to include the funding for the project in his budget, which is submitted to the Congress. It would not be appropriate for the Corps to presuppose what the President or the Congress will do with funding future appropriations. Congress will make funding decisions according to various national priorities; the Corps does not speculate on congressional funding decisions, and Corps policy prevents such speculation from being implemented in the cost estimating process.

FSEIS Volume 4, Stakeholder Comment SS-8, at Stakeholders/Special Interests-5, <http://www.nwp.usace.army.mil/issues/crcip/cms/docs/final/vol4/stake.pdf>. While the Corps is correct that it cannot and should not presuppose the future actions of the President or Congress, it remains responsible for the quality of the information it disseminates. In choosing to use a wholly unrealistic completion time frame, and choosing to not provide alternative time frames that would present a range of more realistic cost estimates, the Corps violated the DQA by presenting unrealistically low cost estimates that can never be achieved. These low cost estimates, in turn, affected the net benefits projected for the Channel Deepening Project.

Likewise, as discussed more fully in Attachment A, the FSEIS benefit estimates are similarly based on scenarios that fail to take risks and uncertainty into account and which subsequent developments have proven were serious flaws in the Corps' projections of benefits. The projected benefits fail to properly evaluate the risks associated with the projected shipping levels. Subsequent to the Corps' completion of the FSEIS, two thirds of the container shipping business from the Port of Portland was lost, a fact NWEA conveyed to the Corps in the fall of 2004, when requesting a reevaluation of the Channel Deepening Project's costs and benefits because the FSEIS had considered only a 14 percent possible loss. As detailed in the attachment, the loss of this container shipping results in a benefits to costs ratio that is less than one dollar for every federal dollar spent, specifically, a net loss of three cents for every dollar spent.

In addition, as set forth in Attachment A, the Corps failed to take into consideration the erosion and deterioration of the jetties at the mouth of the Columbia River, an essential part of the navigation channel, a problem the Corps' own engineers have concluded would cost from \$140 to \$250 million just to rehabilitate 20 percent of their length. Although the jetties are necessary to keep the shipping channel open, this staggering cost has not been factored into the economic analysis of the channel deepening project. As explained in Attachment A, accounting for even a fraction of those costs would significantly lower the economic benefits the Corps hopes to generate from this project. Further, the Corps omitted consideration of a soybean shipping facility located at the Port of Grays Harbor that began operation in 2004.

Attachments B and C contain information concerning the changed circumstances at the Port of Portland as well as the fact that the Corps failed to take into consideration the costs associated with its underestimates of dredging volumes and impacts of the Channel Deepening Project on

commercial fish and shell fishing. Taken individually, and as a whole, the omission from the Corps' economic evaluation results in project estimates that are grossly inaccurate, incomplete, and biased.

In addition, the FSEIS is unclear, contrary to DQA requirements. In November 2003 the Corps issued an Addendum to its FSEIS in which it announced major changes in the disposal location for the Channel Deepening Project. Columbia River Channel Improvement Project Addendum, November 2003, published at <http://www.nwp.usace.army.mil/issues/crcip/cms/docs/final/addendum.pdf>. The decisions shifts a significant amount of disposal from nearby in-river sites to a Deepwater disposal site, several miles off the coast. Nowhere in the document does the Corps actually state how much dredged spoils will be taken to the Deepwater site, instead merely noting that the ocean disposal site will be used for “[c]onstruction and additional O&M after the estuarine sites are used to capacity.” *Id.* at 7 (Table 2). Likewise, the Corps does not calculate the likely additional costs associated with hauling dredged spoils to the new Deepwater Site which, because of its distance from the point of dredging, will be more expensive than disposal within the Columbia River Estuary, as originally planned in the FSEIS. *See, e.g., id.* (“Ocean disposal site use: None during construction if the Lois Island ecosystem restoration feature is fully implemented; none anticipated during the first 20 years of maintenance if Miller-Pillar and existing disposal sites in the estuary are used.”). The Corps' failure to clearly state how much dredged material will be disposed of in the Deepwater site and the costs associated with that significant change in the project render the FSEIS unclear, biased, incomplete, and inaccurate contrary to DQA requirements.

The Corps' use of a so-called peer review panel for its economic analysis does not, by itself, render its economic analysis presumptively objective. First, DOD Guidelines state that financial information deemed “influential,” requires “a higher quality standard than that of peer review.” DOD Guidelines at § 3.2.3.1. This higher quality standards requires the information to be “capable of being substantially reproduced in accordance with commonly accepted scientific, financial, or statistical standards.” *Id.* The “peer review panel,” convened by the Corps, cannot by itself satisfy this requirement. As demonstrated in Attachment A, the errors in the Corps' analysis render it incapable of reproduction through such commonly accepted financial and accounting principles. Indeed, application of these principles, and the Corps' own guidance, to the analysis, yields a markedly different result – a negative cost-benefit ratio for the project. *Id.*

Second, DOD Guidelines hold that where “general scientific and research information, technical information that has been subjected to formal, independent, external peer review” has been disseminated, it is considered “presumptively objective.” Guidelines at § 3.2.3. Here, the Corps submitted its cost estimates to a review panel composed of three current and former Corps employees. The cost panel consisted of three members. Mr. Gregory Hartman, of Dalton, Olmsted and Fuglevand, Inc., Silverdale, Washington, is a former Corps employee who also teaches an annual Dredging Fundamentals Course and Corps Dredging Contract Administrators Course for Corps employees. Nancy Case O'Bourke likewise is a former Corps employee, who

worked with Mr. Hartman in his former firm, Hartman Consulting Inc. While it is impossible to assess from the biographical information provided by the Corps, it appears there likely is a connection between the contractual employment of Mr. Hartman and Ms. Case O'Bourke and the Army Corps. See <http://www.nwp.usace.army.mil/issues/crcip/cms/docs/seis/case.pdf>; <http://www.nwp.usace.army.mil/issues/crcip/cms/docs/seis/hartman.pdf>. Last, Benjamin Salamone, is a current Corps employee from the New Orleans, Louisiana Corps office. This panel cannot have been considered to have been capable of providing peer review in a formal, independent, or external sense if for no other reason than one of the three members is a current employee of the Corps and one works under contract to the Corps on an annual basis. The long-time affiliation with the Corps of the two remaining members, and their likely continuing relationship to the Corps, calls into serious question the independence of the panel.

This panel was asked by NWEA to consider whether the Corps had grossly underestimated the volume of dredged spoils but in the course of the few days in which it conducted its review, the panel did not have the time or expertise to do so. Columbia River Channel Improvement Project Technical Review of the Benefit and Cost Analysis in the Draft Supplemental Integrated Feasibility Report and Final Environmental Impact Statement Dated July 2002, at 15, 23. <http://www.nwp.usace.army.mil/issues/crcip/cms/docs/TechReviewReportFinal.pdf>. A gross underestimate of sediment volume would have a significant impact on the costs associated with the project. The basis for NWEA's concerns is set out in Attachment C, which includes a scientific report concerning the Corps' predictions of sediment volume to be dredged over the next 50 years.

Moreover, any presumption that information submitted to peer review is objective is rebuttable "based on a persuasive showing by a complainant in a particular instance." DOD Guidelines at § 3.2.3. The persuasive showing in this instance is the mere fact that the panel failed to consider that the costs for this project might rise in the extremely likely event that the construction was not fully funded to meet the two-year time line. In addition, the fact that the Corps' estimates, which the panel criticized as being too high, but nevertheless approved, turned out to have been gross underestimates when compared to the actual bids demonstrates that the Corps' cost panel failed to adequately and objectively evaluate the Corps' cost projections. The panel simply failed to consider the risks and uncertainties that have already caused significant cost increases in the project and are likely to cause further increases.

The Corps' failure to consider appropriate risks and uncertainties, errors in calculating likely costs and likely benefits, and other oversights, as detailed in Attachments A, B, and C and above, all constitute the Corps' disseminating information in direct violation of the DQA, the OMB guidelines, and the DOD Memorandum.

V. REQUESTED ACTION

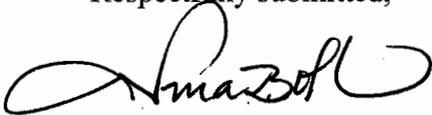
There is a high probability that the U.S. Army Corps of Engineers has released the information in the FSEIS in order to achieve some prejudicial result in its component processes. Accordingly, the U.S. Department of Defense must take affirmative steps to remove this disseminated information from public circulation and disavow its content until such time that a formal independent peer review is complete and its results are addressed. NWEA requests the DOD to direct that, until such time that the Corps complies with the provisions of the DQA, the OMB Guidelines, and the DOD Memorandum, the agency immediately disavow and withdraw from distribution the previously published FSEIS. NWEA further requests that the Corps be directed to not disseminate any further substantive information regarding the economic costs and benefits of the Channel Deepening project until such time as it has obtained an independent review.

VI. CONCLUSION

The lack of appropriations sufficient to maintain a two-year construction period, the Corps' seriously flawed cost estimates for certain phases of the project, and the flawed projections of both costs and benefits in the FSEIS demonstrate that the Corps' predictions of dredging and disposal costs in the FSEIS fail to meet the required quality of information disseminated to the public by federal agencies.

Each attachment to this complaint is incorporated by reference as to the breadth of the request for review and remedy requested. In the interest of brevity, we have not repeated in this complaint every detail that is set out in those attachments. As the DOD Guidelines state, a decision whether to reject the claim or correct the information should be made within 60 working days of receipt of the request. We look forward to hearing from you within that period of time.

Respectfully submitted,



Nina Bell, Executive Director
Northwest Environmental Advocates

P.O. Box 12187
Portland, OR 97212-0187
office: 503/295-0490
nbell@advocates-nwea.org
www.NorthwestEnvironmentalAdvocates.org

Attachment A - Declaration of Ernie Niemi, November 19, 2004.

Attachment B - Letter to Lieutenant Colonel Carl A. Strock et al. from Todd D. True,
Earthjustice, August 23, 2004.

Attachment C - Letter to Secretary Louis Caldera from Nina Bell, NWEA, March 8, 2000.

Attachment D - Abstract of Offers-Construction, Solicitation W912N-05-B-0002.

Attachment E - Abstract of Offers-Construction, Solicitation W9127N-05-B-0010.

1 TODD D. TRUE (WSB #12864)
AMY WILLIAMS-DERRY (WSB #28711)
2 Earthjustice
705 Second Avenue, Suite 203
3 Seattle, WA 98104
(206) 343-7340
4 (206) 343-1526 [FAX]
ttrue@earthjustice.org
5 awilliams-derry@earthjustice.org

HONORABLE RICARDO S. MARTINEZ

6 *Attorneys for Plaintiff Northwest Environmental*
7 *Advocates*

9 UNITED STATES DISTRICT COURT
10 FOR THE WESTERN DISTRICT OF WASHINGTON

11 NORTHWEST ENVIRONMENTAL)
ADVOCATES,)

Civ. No. 04-0666RSM

12 Plaintiff,)

DECLARATION OF ERNEST NIEMI

13 v.)

14 NATIONAL MARINE FISHERIES SERVICE)
and UNITED STATES ARMY CORPS OF)
15 ENGINEERS,)

16 Defendants,)

17 and)

18 THE PORTS OF VANCOUVER,)
WOODLAND, KALAMA, LONGVIEW,)
19 PORTLAND, AND ST. HELENS,)

20 Intervenor-Defendants.)

21
22
23
24
25 DECLARATION OF ERNEST NIEMI
26 (Civ. No. 04-0666RSM) - 1 -

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

1 I, ERNEST NIEMI, declare and state as follows:

2 I. INTRODUCTION AND SUMMARY

3 1. My name is Ernest Niemi. I'm an economist and vice president of
4 ECONorthwest, a consulting firm that provides analysis in economics, finance, planning, and
5 policy evaluation for businesses and governments. I received a Master of City and Regional
6 Planning from Harvard University. My professional experience includes analyzing the economic
7 consequences of resource-management decisions throughout the Pacific Northwest, and teaching
8 courses on economic development and benefit-cost analysis at the University of Oregon. I've
9 attached hereto, as Exhibit A, a copy of my vita.

10 2. I submit this declaration to explain technical economic concepts employed in the
11 Corps' analysis of the economic costs and benefits of the Channel Deepening Project (Project),
12 and to explain economic concepts and evidence that must be incorporated into the Corps'
13 analysis if it is to provide a full and accurate picture of the project's costs and benefits.

14 3. During the past three years, I have reviewed the Corps of Engineers' economic
15 analyses of the proposed Columbia River Channel Deepening Project (Project). In September
16 2002, I prepared a report commenting on the Corps' Draft Supplemental Environmental Impact
17 Statement (DSEIS). That report appears as Document 316 (C18906 - C18968) in the
18 Administrative Record for this case. In 2003, I evaluated the Corps' response to these comments
19 in its Final Supplemental Environmental Impact Statement (FSEIS), participated in a public
20 meeting with the Review Panel convened by the Corps to examine its economic analysis, and
21 discussed the panel's findings separately with three of the panel's members. In preparing this
22 declaration, I draw on this experience, my general knowledge of the economy of the Pacific
23 Northwest, and my review of information both within and outside the administrative record
24 submitted by the Corps regarding the economic aspects of the Project's potential impacts on

1 sedimentation and erosion at and near the mouth of the Columbia River.

2 4. I prepared this declaration in response to a request from Northwest Environmental
3 Advocates (NWEA), which asked me to review relevant information and determine whether or
4 not the FSEIS provides a misleading description of the Project's potential economic impacts.
5 Based on my findings, which I explain below, I conclude that it does.

6 5. My review of the FSEIS shows that many of the Corps' key assumptions and
7 calculations regarding the Project's economic costs and benefits are demonstrably incorrect.
8 This conclusion is supported by information available to, but ignored by, the Corps as it prepared
9 the FSEIS. It also is supported by events in the few months since the FSEIS was released, events
10 that highlight the Corps' failure to account adequately for many factors that are relevant to the
11 need for, and economic viability of, the Project. Because of the Corps' failure to account fully
12 for all relevant factors, its estimates of the Project's benefits, costs, and benefit-to-cost ratio do
13 not accurately represent the Project's economic consequences with any reasonable degree of
14 economic certainty. A full accounting of all the relevant factors would show, more likely than
15 not, that the Project's true costs exceed its benefits and its true benefit-to-cost ratio is less than
16 1.0.

17 **II. THE CORPS' ECONOMIC ANALYSIS FOR THE PROJECT MUST SATISFY**
18 **STANDARDS**

19 6. Two sets of standards apply to the Corps' economic analysis in the FSEIS. One
20 includes the generally accepted, professional standards that apply to analyses of this type and
21 govern the assessment of the accuracy, precision, and reliability of the analytical results. The
22 other includes specific guidance and obligations expressed in the Corps' regulations and
23 manuals.

24 7. The agency-specific standards include a requirement that, before proceeding with

1 the Project, the Corps must demonstrate, with reasonable certainty, that the Project's benefits to
2 the national economy will outweigh its costs.¹ Evaluation of the national economic benefits and
3 costs are to be addressed in the so-called National Economic Development (NED) account.

4 8. In Section III, I show that the Corps failed to account for all the relevant factors
5 that would determine the project's costs, if it were implemented. To complete a reasonably
6 accurate NED account, the Corps must provide a full accounting of costs and benefits that would
7 accrue to other projects or to third parties. This obligation is recognized clearly in the Corps'
8 manual. "Many economic activities provide incidental benefits to people for whom they were
9 not intended. Other activities indiscriminately impose incidental costs on others. These effects
10 are called externalities. ...**Negative externalities** make someone worse off without that person
11 being compensated for the negative effect. ...*The NED principle requires that externalities be*
12 *accounted for in order to assure efficient allocation of resources.*"²

13 9. The Corps also has an obligation to give a full accounting of the Project's
14 economic risks and uncertainties. This accounting should be broad, rather than narrow, in
15

16 ¹ "In the case of any water resources project-related study authorized to be undertaken by the
17 Secretary, the Secretary shall prepare a feasibility report Such feasibility report shall
18 describe, with reasonable certainty, the economic, environmental, and social benefits and
19 detriments of the recommended plan and alternative plans considered by the Secretary" 33
20 U.S.C. § 2282(a). "A plan recommending Federal action is to be the alternative plan with the
21 greatest net economic benefit consistent with protecting the Nation's environment (the [National
22 Economic Development] plan), unless the Secretary of a department or head of an independent
23 agency grants an exception to this rule." U.S. Water Resources Council. 1983. *Economic and*
24 *Environmental Principles and Guidelines for Water and Related Land Resources Implementation*
25 *Studies*, p. v. A copy of this agency guidance is available in the record at Corps AR Doc. 316,
26 (C18969 – C19115) at C18973.

² U.S. Army Corps of Engineers, Water Resources Support Center, Institute for Water
Resources. 1991. *National Economic Development Procedures Manual: Overview Manual for*
Conducting National Economic Development Analysis. IWR Report 91-R-11. October. pp. 21-
23 (bold emphasis in original, italics emphasis added). A copy of this agency guidance
document is available in the record at Corps AR Doc. 305 (C17684 – C17773) at C17713 –
C17715.

1 accordance with the guidance expressed by the agency's own manual: "It is the analyst's job to
2 identify, clarify, and quantify areas of risk and uncertainty *wherever possible*, especially for
3 those pieces of information which have a substantial influence on either the choice of an
4 alternative and/or its size and cost."³

5 10. The Corps' obligation to provide a full accounting of the Project's externalities
6 intersects with its obligation to provide a full accounting of the Project's risks and uncertainties.
7 This intersection emerges, for example, in the Project's potential environmental externalities,
8 i.e., externalities that manifest themselves through the Project's impacts on the environment. In
9 the next section, I show that the Corps did not fully account for the economic consequences of
10 environmental externalities, many of which will materialize as economic costs arising from the
11 Project's potential impacts on sedimentation and erosion at and near the Mouth of the Columbia
12 River and along the coast.

13 11. In Section IV, I show that the Corps failed to account for all the relevant factors
14 that would determine the Project's benefits, if it were implemented. I focus on the Corps' failure
15 to account for factors that indicate the amount of cargo shipped through the Columbia River
16 ports probably will be far less than the Corps' projections.

17 12. In Section V, I show that, by failing to account for all the relevant factors and
18 evidence, the Corps has produced an analysis that contains numerous logical and factual
19 inconsistencies. These inconsistencies cause the Corps to paint a portrait of the Project's
20 potential economic consequences that is implausible, out of line with generally accepted

21 _____
22 ³ U.S. Army Corps of Engineers, Water Resources Support Center, Institute for Water
23 Resources. 1991. *Guidelines for Risk and Uncertainty Analysis in Water Resources Planning*.
24 IWR Report 92-R-1. October, p. 17 (italics emphasis added). A copy of this agency guidance
25 document is included in the record at Corps AR Doc. 305 (C17774 - C17943) at C17798.

1 principles of economic analysis, and at odds with the Corps' fundamental obligation—to
2 describe the Project's impacts on the national output of goods and services.

3 III. THE CORPS HAS UNDERSTATED THE COSTS ASSOCIATED WITH THE
4 PROJECT'S ENVIRONMENTAL EXTERNALITIES

5 13. The Corps concludes in the FSEIS that the Project would have no environmental
6 externalities that impose costs worth incorporating into its economic analysis. That is, it
7 concludes there would be no environmental consequences with significant economic effects from
8 the Project's impacts on 50 acres of riparian forest, 172 acres of agricultural lands, and 16 acres
9 of wetlands.⁴ It also concludes there would be no significant economic effects from the Project's
10 impacts that "[i]ncrease salinity;" cause "[s]hort-term increase in turbidity & sediment
11 suspension;" disturb "additional bottom habitat;" affect "benthic habitat;" affect 50 "riparian"
12 acres at "7 upland [sediment] disposal sites;" affect 24 acres of "wetlands" at three disposal sites;
13 impact "general wildlife" on "287 acres at 5 new disposal sites;" mitigate for "257 acres
14 agricultural, 5 acres riparian, & 24 acres wetland losses;" change "[f]orested land/open space" to
15 "disposal site use;" change "[a]gricultural land" to "disposal site uses at 5 locations;" and have
16 "[m]inor additional impacts" on aesthetics, air quality, noise, and the commercial fishery.⁵
17 Moreover, it concludes there would be no environmental consequences with significant
18 economic effects from dredging and removing millions of cubic yards of dredge material from
19 the river system.

20 14. To reach these conclusions the Corps either discounts or ignores altogether
21 considerable evidence indicating that the Project would generate negative environmental
22 externalities. Without consideration of that evidence, the Corps' economic analysis cannot

23 ⁴ FSEIS, p. 4-15 (AR Doc. 6 at C176).

24 ⁵ FSEIS, pp. 4-16 to 4-18 (AR Doc. 6 at C177 – C179).

1 describe, with reasonable certainty, the Project's full economic costs. My review of these
2 externalities indicates that fully integrating the negative environmental externalities into the
3 analysis would materially reduce the Project's benefit-to-cost ratio.

4 15. This finding is illustrated, for example, by evidence regarding the Project's
5 potential externalities on sedimentation and erosion. The FSEIS overlooks information
6 regarding costs associated with the Project's potential, adverse externalities on sedimentation and
7 erosion at and near the mouth of the Columbia River (MCR). The nature of the Corps' treatment
8 of these externalities in the FSEIS was summarized in comments on the FSEIS submitted to the
9 Corps and entered into the record on behalf of the Columbia River Alliance for Nurturing the
10 Environment (CRANE). Those comments are available in administrative record at AR Doc. 298.
11 The attachments to those comments are included in the administrative record at AR Doc. 305-
12 306.

13 16. Credible evidence indicates that erosion at and near the MCR has significant
14 economic consequences and that there is a well-recognized and documented probability that the
15 Project would exacerbate these consequences. The Corps' own researchers, in a study of erosion
16 affecting the jetties at the MCR, concluded that channel-deepening is one of the causes of the
17 erosion: "Erosional impacts to ebb and inner shoals include equilibrium adjustments subsequent
18 to jetty construction, *progressive navigational channel deepenings*, and several significant El
19 Nino/La Nina decades."⁶

20 17. Another researcher, with the Washington Department of Ecology, has described

21 _____
22 ⁶ Moritz, H.R., H.P. Moritz, J.R. Hays, and H.R. Sumerell. 2003. "100-Years of Shoal Evolution
23 at the Mouth of the Columbia River: Impacts on Channel Structures, and Shorelines."
24 Proceedings of the Coastal Sediments Conference 2003, p. 14 (*italics emphasis added*). Excerpts
25 of that Report are attached as Exhibit B.

1 more directly a linkage between dredging above the MCR, i.e., above river mile 3 where the
2 channel-deepening project will occur, to erosion at or near the MCR and along coastal
3 Washington.

4 “Because the rate of river sand extraction is suspected to be greater than the river
5 sand supply, it could be assumed that the sand removed from the estuary [river
6 mile 3-30] is primarily sand that has entered through MCR from the littoral [i.e.,
7 coastal] environment. If this assumption is correct, then the present rates of
8 erosion of the littoral environment would increase in the future.”⁷

9 “The proposed channel deepening project and associated dredged material
10 disposal plan for the next 20 years does not consider the use of sand to reduce
11 coastal erosion and deterioration of the Columbia River jetties. Instead, 9.5
12 million cubic yards of sand from the construction of the deepening project in the
13 lower estuary is proposed to be placed in the Lois Island Embayment and Millar
14 Pillar pike [pile] dikes, as environmental restoration sites, or if that turns out to be
15 not environmentally acceptable, in the proposed Deep Water Site, where it is
16 entirely lost to the system.”⁸

17 18. In addition, the Washington State Department of Ecology, in its comments on the
18 DSEIS, described the connection between the proposed dredging and erosion:

19 “In review of all the available data and literature it has become evident that the
20 cumulative [e]ffect of human intervention has converted the Columbia River
21 estuary from a source of sand to the littoral cell to a sink of sand that draws in and
22 accumulates sand from the coastal zone. The proposed channel deepening project
23 and proposed 20-yr dredged material disposal plan enhances the capacity of the
24 estuary to function as a sink for coastal sand, thus maintaining, and likely
25 increasing, erosion along the beaches of Washington and Oregon. Not only does
26 this erosion cause the loss of public and private land, infrastructure and resources,
the erosion also actively undermines the very stability of a fundamental federal
navigation facility—the Columbia River jetties. Until there is a radical shift in
dredged material disposal practices whereby dredged sand is kept within the
active transport system and is managed in a way to reduce the losses of coastal

21 ⁷ Kaminsky, G. 2000. “A Review of Columbia River Dredging Past Practices and Recent
22 Proposals.” *Southwest Washington Coastal Erosion Workshop Report 2000*. G. Gelfenbaum
and G.M. Kaminsky (eds). June, pp. 53-60, p. 54. Excerpts attached at Exhibit C.

23 ⁸ Kaminsky, G. 2003. “Doing Columbia River Regional Sand Management.” personal
24 communication (email) to McKillop, Doris J NWP, et al. June 18, 2003. A copy of that e-mail is
attached as Exhibit D.

1 sand into the estuary, the maintenance of the Columbia River navigation project
2 will come at the cost of deterioration of these federal, state and local amenities.”⁹

3 19. The full nature of the risks and costs associated with the Project’s potential
4 impacts on erosion remains unknown because the Corps did not acknowledge them, let alone
5 analyze and quantify them, in the FSEIS. The available evidence shows, however, that even a
6 slight increase in erosion stemming from the Project would generate risks of substantial
7 economic costs for the Corps and others. Some of this evidence shows the risks and costs of
8 damage to federal assets and the Corps’ maintenance operations are high. For example, in their
9 2003 report on current risks to the jetties from erosion, researchers from the Corps concluded:
10 “The cost of rebuilding Pacific NW jetties is prohibitive: \$5,000-\$70,000 per foot length,
11 depending on location of structure and exposure environment. If only 20% of each existing
12 MCR jetty was to be rebuilt, it would cost \$140-\$260 million.”¹⁰

13 20. Other evidence shows the general magnitude of the risks and costs that erosion
14 near the MCR poses to other public assets and resources, such as roads and bridges. These
15 examples illustrate the nature of the current problem:

- 16 • In comments on the Draft Supplemental Environmental Impact Statement
17 (DSEIS) for the Project, the Washington Department of Fish and Wildlife
18 stated, “In the past 10 years nearly 100 million dollars has been spent by
19 the Federal government to control erosion and mitigate damages to the
20 jetty system and public infrastructure in Grays Harbor and Pacific
counties, all caused by starvation of sediment as identified in the coastal
erosion study.”¹¹
- Washington State Park officials expect that, by 2010, erosion will lead to
the loss of most of Benson Beach, immediately north of MCR, and the

21 ⁹ FSEIS Vol.4 Comments and Responses, State-40 (Corps AR Doc. 9 at C1480).

22 ¹⁰ Moritz, H.R., H.P. Moritz, J.R. Hays, and H.R. Sumerell. 2003. “100-Years of Shoal
23 Evolution at the Mouth of the Columbia River: Impacts on Channel Structures, and Shorelines.”
Proceedings of the Coastal Sediment Conference 2003, p. 9.

24 ¹¹ FSEIS, Vol. 4, at State –68 (comment S-133) (Corps AR Doc. 9 at C1508).

1 area shoreward.¹²

- 2 • During the winter of 2002-03, the Corps dumped 125,000 cubic yards of
- 3 dredge spoils at the south jetty of Grays Harbor, north of the MCR, to
- 4 stave off an impending breach. Had the breach occurred, ocean waves
- 5 would have had a direct path to and imposed damage on Westport's main
- 6 downtown marina district.¹³
- Recent damage from erosion affecting SR 150, near North Cove/Cape
- 7 Shoalwater, has caused damages totaling almost \$30 million.¹⁴
- In 2000, the Corps spent \$1.5 million to move 145,000 cubic yards of sand
- 8 to provide the Shoalwater Tribe 1-2 years of protection against erosion.¹⁵

9 21. Erosion also poses risks and costs to private landowners. The costs incurred by

10 property owners near the MCR have, to my knowledge, not been tabulated. That the costs may

11 be sizeable, however, is indicated by a national study, which found that property owners along

12 the entire Pacific Coast of the U.S. incur losses of \$110 million annually from coastal erosion.¹⁶

13 22. Mitigating the erosion problems apparently is possible, but it will be costly.

14 Researchers from the Corps found that redesigning programs for disposing of dredged materials

15 could diminish erosion problems at the jetties and elsewhere:

16 "Improved management of dredged material placement can stabilize sand shoal

17 erosion, defer expensive jetty repair, feed the littoral system, and optimize the

18 dredging disposal program at MCR. Using up to 3 million cubic meters (4 mcy)

19 per year of dredged sand to shore-up the tidal shoal and forego jetty

20 ¹² Anonymous. 2001. "Coastal Erosion: Massive erosion predicted. Five-year study forecasts

21 loss of accreted beaches unless sand supply surges." *Chinook Observer*. July 11.

22 <http://www.crcwater.org/issues12/20010713erosion.html> accessed September 16, 2003. (Exhibit

23 E).

24 ¹³ Pulkinnen, L. 2003. "Man-made fix for man-made problem?" *The Local Daily World Local*

25 *News*. January 18. <http://www.thedailyworld.com/archive/2003/01/18/LocalNews/news1.html>

26 accessed November 18, 2004 (Exhibit F).

¹⁴ Newell, Colin. 2003 Personal communication to Kristin Lee. October 1. (Exhibit G)

¹⁵ Shomo, A. 2000. "Tribe hopes to slow erosion." *The Local Daily World Local News*.

October 8. <http://www.thedailyworld.com/archive/2000/10/08/news/news1.html>. accessed

November 18, 2004 (Exhibit H).

¹⁶ H. John Heinz III Center for Science, Economics, and the Environment. 2000. "Chapter 5:

The Economic Impacts of Erosion." *Evaluation of Erosion Hazards*. Federal Emergency

Management Agency. April, pp. 111-140, p. 130 (excerpts attached as Exhibit I).

1 'reconstruction' appears to offer a superior method (economically and
2 holistically) for maintaining MCR navigation."¹⁷

3 23. Direct repairs to the jetties themselves are also required. According to the Corps,
4 "[c]urrently, both jetties contain highly degraded areas at critical locations that could fail
5 (breach) during a storm event that occurs, on average, about every 5-years."¹⁸ The Corps
6 recently estimated that repairing only the "critical degraded areas at the North and South jetties is
7 estimated to cost approximately \$14.1 million."¹⁹ These repairs could reasonably be considered
8 essential to the Channel Deepening Project because "[a] failure in either structure could severely
9 impact navigation between the Columbia River estuary and the Pacific Ocean."²⁰

10 24. In other research, the Corps conducted a pilot study that provides an estimate of
11 the cost of actions commensurate with this proposal. Specifically, the study examined the
12 feasibility of placing sand on Benson Beach, immediately north of the north jetty, with the
13 expectation that doing so would mitigate erosion at and north of the MCR. The Corps concluded
14 that the exercise was "technically sound" and the costs per cubic yard would be about \$5 greater
15 than disposing the material in the ocean, either near the north jetty or at a deep-water site 8 miles
16 offshore.²¹

17 ¹⁷ Moritz, H.R., H.P. Moritz, J.R. Hays, and H.R. Sumerell. 2003. "100-Years of Shoal
18 Evolution at the Mouth of the Columbia River: Impacts on Channel Structures, and Shorelines."
19 Proceedings of the Coastal Sediments Conference 2003, p. 14. (Exhibit B).

20 ¹⁸ U.S. Army Corps of Engineers, Portland District: Overview of Columbia River Jetties Repair,
21 Overview, <http://www.nwp.usace.army.mil/issues/jetty/cms/home.asp> accessed Nov. 15, 2004.

22 ¹⁹ U.S. Army Corps of Engineers, Portland District, Columbia River Jetties Repair, Frequently
23 Asked Questions <http://www.nwp.usace.army.mil/issues/jetty/cms/faq.asp> accessed Nov. 15,
24 2004.

25 ²⁰ U.S. Army Corps of Engineers, Portland District: Overview of Columbia River Jetties Repair,
26 Overview, <http://www.nwp.usace.army.mil/issues/jetty/cms/home.asp> accessed Nov. 15, 2004.

²¹ U.S. Army Engineer District, Portland. 2002. *Placement of Dredged Material on Benson Beach: Evaluation of Alternative Dredged Material Disposal Methods for Maintenance Dredging at the Mouth of the Columbia River, OR and WA.* p. 6, available from

1 25. Taken together, this evidence indicates:

- 2 • Erosion problems at and near the MCR are significant. They have been
3 made worse by past deepening and maintenance of the channel and there
4 is a recognized risk, which cannot properly be dismissed, that the Project
5 would make them even worse.
6 • Researchers from the Corps have concluded that some of the problems can
7 be mitigated by strategically placing 4 million cubic yards of dredged
8 material per year at or near the jetties.
9 • Repairing only the critical areas of the jetties would cost up to \$14.1
10 million.
11 • A pilot study found that one alternative, placing dredged material on
12 Benson Beach, would cost \$5 per cubic yard more than dumping it in the
13 deep ocean, which the Corps currently plans to do, if the Project were
14 implemented.
15 • Hence, at least one of the potential strategies for responding to erosion
16 problems attributable in some part to channel-deepening—including what
17 is proposed as part of the Project—could cost \$20 million per year.²²

18 26. The Corps' analysis in the FSEIS of the Project's costs and benefits did not
19 account for any economic relationship between the Project and the MCR. This, despite the fact
20 that the economic benefits, if any, of a deepened channel upriver from the MCR cannot be
21 reaped if the jetties should fail or the MCR should become clogged. Thus, expenditures on the
22 Project and the expenditures necessary to keep the jetties and the MCR functioning fit together
23 as hand-in-glove. Each imposes externalities on the other. To provide a full accounting of the
24 Project's costs and benefits, the Corps' analysis of the Project must be expanded to incorporate
25 these externalities explicitly.

26 27. Accounting fully for environmental externalities could substantially alter the
27 Corps' calculation of the Project's benefit-to-cost ratio. Indeed, incorporating just the

28 <https://www.nwp.usace.army.mil/op/n/projects/mcr/docs/reports/bbreport.pdf> (visited Nov. 15,
29 2004).

30 ²² 4 million cubic yards times \$5 per cubic yard = \$20 million. Perhaps the costs of mitigating
31 erosion would be lower, if the Corps employed technologies different from those employed in
32 the pilot study. Evidence in the FSEIS indicates, however, that the costs would not be lower than
33 about \$2.50 per cubic yard, and the total annual costs would not be lower than about \$10 million.

1 externalities associated the Project's impacts on erosion at and near the MCR could reduce the
2 ratio to less than 1.0. As I understand its November, 2003, *Addendum* to the FSEIS, the Corps
3 currently calculates the benefit-to-cost ratio is 1.66, reflecting the Corps' estimate that the
4 Project would yield annual benefits of \$18.8 million, incur annual costs of \$11.3 million, and
5 generate net annual benefits of \$7.5 million. These numbers, however, exclude any costs
6 associated with the Project's impacts on erosion at and near the MCR, and exclude any
7 consideration of what might be necessary to keep the MCR open to ships so they can access a
8 deepened channel upriver of the MCR. To incorporate the erosion-related externalities into its
9 analysis, the Corps should complete these steps:

10 1. *Account for known erosion-related damages stemming from the Project.* As I explain above, in comments on the DSEIS, the Washington Department of Fish and
11 Wildlife stated that the federal government has been spending about \$10 million per year
12 during the past decade to cope with erosion problems stemming from a lack of sufficient
13 sand and other sediment in the littoral (coastal) system of southwestern Washington.
Through further analysis, the Corps should be able to estimate the future costs and
determine the portion of these attributable to the Project.

14 2. *Account for erosion-related risks stemming from the Project.* As I explain
15 above, researchers from the Corps have estimated that deepening the navigation channel
16 contributes to some degree to the probability that the jetties would fail and, if they
17 should, the cost of rebuilding them would be \$5,000 – \$70,000 per linear foot. Through
18 further analysis, the Corps should be able to quantify the risk that the Project poses to the
19 jetties and estimate the expected value of the rebuilding cost associated with this risk.
Even apart from this long-term risk, short-term repair of the jetties is estimated to cost
\$14.1 million. Because the Project depends on these successful repairs to generate any
benefit, the Corps should determine what portion of these should be incorporated in its
benefit-to-cost ratio.

20 3. *Account for costs to mitigate the erosion-related damages and risks*
21 *stemming from the Project.* As I explain above, the Corps' researchers estimated that
22 erosion risks could be mitigated by placing 4 million cubic yards (mcy) of dredged sand
23 annually to "stabilize shoal erosion, defer expensive jetty repair, feed the littoral system
24 and optimize the dredging disposal program at MCR." The Corps' Benson Beach project
25 estimated the cost of such efforts to be \$5 per mcy, indicating the total annual cost would
26 be \$20 million. Through further analysis, the Corps should be able to quantify the cost of
a mitigation program and determine the portion of these attributable to the Project.

1 28. If, after taking these steps, the Corps determines that the additional annual costs to
2 the Project exceed \$7.5 million, the Project's benefit-to-cost ratio would fall below 1.0. As
3 things currently stand, however, neither the Corps nor members of the public can assess the size
4 of these costs, insofar as the Corps has not discussed or attempted to quantify them in the FSEIS.

5 29. Because the expenditures associated with each of these missing costs are so high,
6 including any one of them in the cost-benefit analysis has the potential to alter the Project's
7 benefit-to-cost ratio dramatically. For example, if the Corps included in its economic analysis
8 just the \$20 million cost indicated by its own Benson Beach Project to help mitigate erosion
9 problems affecting the jetties and the coast of southwestern Washington, then, all else equal, the
10 Project's annual cost would rise to \$31.3 million and the net annual benefit would be negative
11 \$13.5 million per year (the Corps' estimate of benefits, \$18.8 million, minus its estimate of costs,
12 \$11.3 million, minus \$20 million for erosion mitigation). That possibility would yield a benefit-
13 to-cost ratio of 0.60. In other words, for every 60 cents of benefit produced by the Project, the
14 cost to the national economy would be one dollar. Insofar as there is some risk that spending
15 \$20 million annually would not solve all the erosion problems, the benefit-to-cost ratio would be
16 even smaller.

17 IV. THE CORPS HAS OVERSTATED THE BENEFITS ASSOCIATED WITH THE
18 PROJECT'S POTENTIAL IMPACTS ON THE TRANSPORTATION OF CARGO

19 30. Events since the release of the FSEIS demonstrate that the Corps erred
20 substantially when it estimated the Project's potential benefits. The Corps's estimate of the
21 Project's benefits rests on its projections of the amount of cargo that would be shipped through
22 the Columbia River ports. Events at the Port of Portland during the past year have reduced the
23 current shipments of containerized cargo far below the Corps' expectations and markedly
24 reduced the likelihood that future shipments will meet the Corps' projections. Events to the

1 north, at the Port of Grays Harbor, have reduced the likelihood that future shipments of soybeans
2 through ports on the Columbia River will meet the Corps' projections. These events confirm that
3 the FSEIS fails to account for all the factors relevant to a sound economic analysis and that the
4 Corps inadequately assessed the risks and uncertainties inherent in its projections. The impacts
5 of these events on shipments of cargo and on the Project's benefits are so far outside the
6 boundaries of the Corps' analysis in the FSEIS that the analysis must be redone if it is to describe
7 the Project's benefits with reasonable certainty and without being misleading.

8 31. The FSEIS states that the Project would generate economic benefits solely by
9 reducing the costs of shipping cargo through the Columbia River ports: "The benefits of
10 improving the navigation channel would result from reductions in transportation costs for each
11 commodity."²³ The Corps concluded, however, that the amount of cargo shipped is not
12 dependent on the Project: "The analysis does not assume that, if the channel is deepened,
13 shippers will be more disposed to use Columbia River ports." ... [T]he same vessels with the
14 same capacities and design drafts will call Portland with or without deepening."²⁴

15 32. In other words, with or without the Project, the Corps assumes that the same ships
16 will carry the same cargo, but, with the Project they will do so at a lower vessel-operating cost.

17 33. The Corps estimates that the Project would generate benefits of \$18.8 million per
18 year. Of this amount, it attributes \$11.7 million, or about two-thirds of the total, to its
19 predictions of shipments of containerized cargo. It attributes an additional \$1.0 million to its
20 predictions of shipments of soybeans. For each type of cargo, however, the Corps overlooked
21 relevant factors that must be taken into account before its analysis can estimate benefits with

22 _____
23 ²³ FSEIS, Volume 1, 4-22 (Corps AR Doc. 6 at C183).

24 ²⁴ Corps of Engineers. 2002. *Corps of Engineers Response to Review Panel Comments*.
November 12, pp. 3-7. (Attached as Exhibit J).

1 reasonable certainty.

2 34. Regarding containerized cargo, the Corps overlooked the likelihood that the
3 volume would drop dramatically. Shortly after the FSEIS was released, however, two of three
4 shipping lines that carried containerized cargo announced that they no longer would call at the
5 Port of Portland. Their withdrawal reduces the amount of containerized cargo flowing through
6 the Port of Portland for the foreseeable future by two-thirds, relative to the amount the Corps
7 assumed in its analysis. All else equal, the withdrawal also reduces the benefits the Corps
8 attributed to containerized cargo by two-thirds, or \$7.8 million, from \$11.7 million to \$3.9
9 million. This reduction, in turn, reduces the Project's total annual benefits from \$18.8 million to
10 \$11.0 million. When this amount is compared with even the Corps's incomplete estimate of the
11 Project's annual costs, \$11.7 million, the Project's benefit-to-cost ratio falls from 1.66, as
12 reported in the FSEIS, to 0.97.

13 35. Regarding soybeans, the Corps overlooked the development of a competing port
14 facility nearby, at the Port of Grays Harbor. This facility, which began service in 2004, focuses
15 on the export of soybeans and was developed through a partnership between the Port of Grays
16 Harbor and Ag Processing Inc (AGP), which identifies itself as "the largest soybean-processing
17 cooperative in the world."²⁵

18 36. This facility represents a significant competitor for ports on the lower Columbia
19 River, insofar as it is sufficiently closer to the markets of the Pacific Rim, so that a ship stopping
20 at Grays Harbor rather than at a port on the lower Columbia River would save two-day's travel
21 time. It has not been in operation long enough to determine the extent to which this advantage
22 will enable it to siphon soybean cargo away from the ports on the lower Columbia River.

23 _____
24 ²⁵ Van Dyke, J. 2004. "Gateway to World Markets." *Feed&Grain*. March.

1 Whatever it siphons off, however, would reduce the Project's benefits beyond the reductions
2 associated with the loss of containerized cargo. If it were to siphon all of the soybean cargo, and
3 the loss of containerized cargo were as I describe in the preceding paragraph, then, all else equal,
4 the Project's annual benefits would decline from \$11.0 million to \$10.0 million, and the benefit-
5 to-cost ratio would fall further, from 0.97 to 0.88.

6 37. Note that, according to the Corps, these reductions in cargo shipments and, hence,
7 in the Project's benefits are independent of the Project itself: implementing the Project would not
8 cause more containers or soybeans to flow through the Columbia River ports. With or without
9 the Project, the same ships would carry the same cargo. Thus, with or without the Project, recent
10 events indicate that the amount of cargo shipped through these ports will be far less than the
11 Corps' predictions.

12 38. The Corps had an opportunity to anticipate and analyze the reductions in cargo in
13 its analysis of "Risk and Uncertainty" (FSEIS, Exhibit M, pp. 42-48). It did not seize this
14 opportunity. Instead of anticipating a two-thirds reduction in containerized cargo before the
15 Project's completion, the worst-case scenario considered by the Corps was a 14 percent
16 reduction.²⁶ Instead of anticipating the impacts that the soybean-export facility at the Port of
17 Grays Harbor could have on soybean exports through the Columbia River ports, the Corps
18 ignored the facility altogether—even though development of the facility was underway while the
19 Corps was preparing the FSEIS. The discussion of "Risk and Uncertainty" in the FSEIS does
20 not even consider the possibility that actual soybean exports through the Columbia River ports

21 www.feedandgrain.com, accessed November 1, 2004.

22 ²⁶ As a base-case scenario, the Corps assumed that the Port of Portland would initially capture
23 65.6 percent of the containerized cargo in the area the Corps considers the port's hinterland, or
24 service territory, and this rate would drop to 50 percent over 20 years as cargo shifted to ports
elsewhere. As a worst-case scenario, the Corps considered a constant 50 percent capture rate.

1 would fall short of the Corps' base-case projections.

2 39. The Corps' failure to assess, with reasonable certainty, the risks associated with
3 its projections of future cargo flows was pointed out in comments on the draft SEIS.²⁷ For
4 example, I encouraged the Corps to consider, in its analysis of uncertainties, a scenario that
5 includes several things simultaneously falling far short of expectations, among them a shortfall in
6 containerized cargo, which would occur because, "The shipping industry concentrates container
7 traffic through a few West Coast hub ports, not including Portland, and even with the deeper
8 channel, container traffic on the Columbia River falls substantially short of the expectations
9 expressed in the DSEIS."²⁸ The Corps, however, elected to respond to these comments by
10 constructing separate, worst-case scenarios for individual aspects of the project (only one thing
11 would fall short of expectations), and by considering no more than a 14 percent reduction in
12 containerized cargo.

13 V. THE CORPS' ECONOMIC ANALYSIS EXHIBITS SIGNIFICANT
14 INCONSISTENCIES STEMMING FROM ITS FAILURE TO CONSIDER ALL
15 RELEVANT FACTORS AND EVIDENCE

16 40. As it overlooked important factors and evidence relating to its economic
17 assessment of the Project, the Corps generated several serious inconsistencies in its analysis and
18 worked itself into several analytical corners from which there is no escape but to start again. I
19 describe some of the overlooked factors and evidence in the preceding sections. Here, I first
20 describe some others and then describe the resulting inconsistencies in the Corps' analysis. I

21 FSEIS, Exhibit M, pp. 43-45 (Corps AR Doc. 8 at C1225).

22 ²⁷ ECONorthwest. 2002. *Ambiguities and Errors in the Corps of Engineers' Economic Analysis
23 of its Proposal to Deepen the Channel of the Lower Columbia River*. September, pp. 16-18, and
24 39-41 (Corps AR Doc. 316, at C18945 – C18947).

25 ²⁸ ECONorthwest. 2002. *Ambiguities and Errors in the Corps of Engineers' Economic Analysis
26 of its Proposal to Deepen the Channel of the Lower Columbia River*. September, pp. 40-41.
(Corps AR Doc. 316 at C18947).

1 also show how the inconsistencies cause the Corps to paint a picture of the economy that is
2 implausible and to estimate benefits that are irrelevant to the National Economic Development
3 (NED) account.

4 41. The inconsistencies become clear by considering the Corps' treatment of the
5 Project's interactions with foreign entities and with ports elsewhere in the U.S. The relationship
6 with foreign entities becomes important because the Corps has assumed that, with the Project or
7 without it, the same vessels would carry the same cargo. If this assumption is true, then the only
8 direct economic consequence of the Project would be a reduction in the operating costs of the
9 vessels calling at the Columbia River ports. There would be no increase in cargo shipped from
10 or to these ports, and no shift in the composition of cargo.

11 42. Currently, all vessels calling at these ports are owned by foreign companies, a
12 pattern unlikely to change in the foreseeable future. Foreign ownership of the vessels raises the
13 possibility that the Project's direct benefits—the reductions in the vessels' operating costs—
14 would accrue to them rather than to U.S. entities. Benefits accruing to foreign entities would lie
15 outside the focus of the NED account, which sets the guidelines governing the Corps's analysis,
16 and focuses solely on the costs and benefits to the U.S. economy, exclusive of impacts on foreign
17 entities and economies: "The national economic development (NED) account displays changes
18 in the economic value of the *national* output of goods and services."²⁹ To the extent that foreign
19 vessel owners would capture some or all of the savings in operating costs, their portion of the
20 Project's benefits would bring about no change in the economic value of the national output of
21 goods and services and, hence, it should be excluded from the Corps' NED analysis.

22
23 ²⁹ U.S. Water Resources Council. 1983. *Economic and Environmental Principles and*
24 *Guidelines for Water and Related Land Resources Implementation Studies*, p. v. (italics
emphasis added).

1 43. To show that the Project would increase the national output of goods and services,
2 the Corps must demonstrate how reductions in the operating costs of vessels owned by foreign
3 entities would be conveyed to those U.S. shippers who would use these vessels to transport their
4 goods. The Corps, however, fails to show how this conveyance would occur. In response to my
5 comment on the Draft Supplement EIS (DSEIS), that ambiguities in the Corps' analysis left open
6 the possibility that the cost savings would remain with foreign vessel owners, the Corps
7 acknowledged that some conveyance would occur: "The assertion that all cost reductions would
8 automatically go to vessel owners is inconsistent with market realities."³⁰ But the Corps
9 disregarded the larger issue of whether or not some of the cost reductions would accrue to
10 foreign entities and, if so, how much and how this would alter the Corp's analysis of the
11 Project's benefits, costs, and benefit-to-cost ratio. In an extensive critique of the DSEIS I
12 pointed out the importance of knowing what share of the transportation-cost savings would be
13 enjoyed by U.S. entities, rather than remaining with foreign vessel owners or, alternatively, being
14 passed to the foreign purchasers of the products being shipped from the U.S.³¹ The FSEIS,
15 however, offers no quantitative estimate of the savings enjoyed by U.S. entities.

16 44. This failure indicates that the Corps has not estimated the portions of
17 transportation-cost savings that would accrue to foreign and domestic entities. Thus, in one
18 place the Corps asserts that it knows about the "market realities" that mean the foreign vessel
19 owners would share with U.S. shippers the transportation-cost savings resulting from the Project,
20 but it then does not demonstrate that it has estimated the extent of the sharing or the implications
21 for its estimation, in the NED account, of the benefits the national economy would reap from the

22 _____
23 ³⁰ FSEIS, vol. 4, Stakeholders/Special Interests – 108 (Corps AR Doc. 9 at C1633).

24 ³¹ ECONorthwest. 2002. *Ambiguities and Errors in the Corps of Engineers' Economic analysis of its Proposal to Deepen the Channel of the Lower Columbia River*. September. Corps AR

1 Project. If the share accruing to foreign entities were large, the benefits accruing to the U.S.
2 economy would be far smaller than the Corps represents.

3 45. The Corps' failure to quantify the sharing of the reduction in vessel-operating
4 costs also has other implications. Any share of the cost saving received by U.S. shippers would
5 materialize as a reduction in their costs of shipping goods overseas. Economic principles dictate
6 that, in response to lower shipping costs, U.S. shippers would increase the amount they would
7 ship. Thus, if U.S. shippers were to receive a significant portion of the reduction in vessel-
8 operating costs, it is reasonable to assume, contrary to the Corps' assumption, that the amount
9 shipped through the lower Columbia River ports would increase, not remain the same, if the
10 Project were implemented. Moreover, it would be reasonable to assume that at least some of any
11 increase in cargo shipped through the Columbia River ports would come at the expense of other
12 U.S. ports elsewhere where shipping costs had not been reduced. The farmer with access to two
13 different ports would choose to maximize profit by sending more of his product through the
14 cheaper port, in the lower Columbia. Thus, by asserting both that shippers would receive a share
15 of the savings in vessel-operating costs, and that the amount of cargo shipped would remain
16 unchanged, the Corps created for itself an analytical inconsistency. I and others have described
17 this state of affairs to the Corps. For example: "[T]he Corps has ventured into multi-port issues
18 by considering Portland's capture (from Tacoma) and benefits to non-Portland cargo (mostly
19 from Tacoma). Moreover, the Corps has assumed there would be no cargo growth in large part to
20 avoid a multi-port analysis, and that assumption leads to an inescapable analytic dilemma"³²
21 The Review Panel also told the Corps that, "Although apparently reasonable at the time, the
22

23 Doc. 316 at C18946 – C18947.

24 ³² *Review Panel Comments and Benefit Review Team Opinions on Responses*. January 10, 2003,
p. 3. (Attached as Exhibit K).

25 DECLARATION OF ERNEST NIEMI
26 (Civ. No. 04-0666RSM) - 21 -

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

1 absence of a multi-port analysis is no longer reasonable in light of recent information.”³³

2 46. The Corps disregarded these and similar comments and failed to describe, with
3 reasonable certainty, the Project’s full economic consequences. Instead, in the FSEIS it
4 resolutely and unreasonably held to inconsistent positions:

- 5 • The Corps states that the Project’s benefits would manifest themselves as lower operating
6 costs for vessels owned by foreign entities, but it then treats the accrual of benefits to
7 foreign entities as benefits within the NED account, even though the NED account
8 explicitly focuses solely on the *national* output of goods and services in the U.S.
- 9 • The Corps states that shippers would see lower shipping costs, but it then assumes,
10 contrary to economic principles, that shippers would not respond by increasing the
11 amount shipped.
- 12 • The Corps states that the Project would annually generate benefits of \$18.8 million, in the
13 form of reductions in shipping costs, but it then assumes that benefits of this magnitude
14 would have no impact: the same cargo would be shipped on the same vessels, with or
15 without the Project.
- 16 • The Corps states that the Project would reduce the costs of shipping cargo through the
17 ports on the lower Columbia River, but it then assumes the reduced costs would have no
18 impacts on the amount of cargo shipped through other U.S. ports.

19 47. These positions are not reasonable, and by building the FSEIS around them, the
20 Corps has rendered its analysis untenable and fundamentally misleading.

21 VI. CONCLUSION

22 48. The economic analysis the Corps presents in the FSEIS overstates the Project’s
23 potential benefits and understates its potential costs. Correcting either of these flaws would,
24 more likely than not, reduce the Project’s benefit-to-cost ratio below 1.0. Correcting both of
25 them would reduce it even further. If the Corps were to account fully for information it ignored
26 or discounted in the FSEIS, as well as for events since the FSEIS was released, it could not
show, with reasonable certainty, that the Project would yield a net increase in the national
economy, as measured in the National Economic Development (NED) account.

49. The Corps’ failure to account fully for all factors and evidence relevant to its

³³ *Corps of Engineers Response to Review Panel Comments*, p. 3, supra, at n.24.

1 economic analysis generates internal inconsistencies sufficiently significant to render its findings
2 unreasonable and indefensible. The Corps can correct these inconsistencies only by reworking
3 the analysis in a manner that fully addresses all aspects of the Project's potential benefits and
4 costs.

5 Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true
6 and correct. Executed on this 19th day of November, 2004, at Eugene, Oregon.

7
8
9 
ERNEST NIEMI

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26



EARTHJUSTICE

BOZEMAN, MONTANA DENVER, COLORADO HONOLULU, HAWAII
INTERNATIONAL JUNEAU, ALASKA OAKLAND, CALIFORNIA
SEATTLE, WASHINGTON TALLAHASSEE, FLORIDA WASHINGTON, D.C.
ENVIRONMENTAL LAW CLINIC AT STANFORD UNIVERSITY

Lieutenant General Carl A. Strock,
U.S. Army Corps of Engineers
Headquarters
441 G. Street, NW
Washington, DC 20314

Brigadier General William T. Grisoli
U.S. Army Corps of Engineers
Northwestern Division
P.O. Box 2870
Portland, Oregon 97208-2870

Colonel Richard W. Hobernicht
U.S. Army Corps of Engineers
Portland District
P.O. Box 2946
Portland, OR 97208-2946

August 23, 2004

On behalf of Northwest Environmental Advocates (“NWEA”), we request your response indicating whether the U.S. Army Corps of Engineers (“Corps”) intends to withdraw the Record of Decision (“ROD”) and prepare a supplemental environmental impact statement under the National Environmental Policy Act (“NEPA”) for the proposed Columbia River Navigation Channel Improvement Project (“Project”) in light of significant new information.¹

On January 9, 2004, the Corps issued a ROD approving the Project in Oregon and Washington. In the ROD, the Corps adopted a modified version of its “Environmentally Preferred Plan” for channel deepening contained in the January 28, 2003 “Final Supplemental Integrated Feasibility Report and Environmental Impact Statement (“FSEIS”).

Since that time, significant new information has rendered the Corps’ evaluation of the costs and benefits – and hence, the environmental impacts – of the Project stale and inaccurate. For example, on July 15, 2004, Hyundai Merchant Marine announced that it would pull out of the Port of Portland by mid-September. On August 12, 2004, “K” Line followed by announcing that it would end service to Portland by December, 2004. See Attachments A and B. According to the companies, neither of these decisions had anything to with the depth of the Columbia River channel. Both cited market forces and shipping times as the reasons for their withdrawals.

¹ On February 2, 2004, NWEA and American Rivers sent a similar letter asking whether the Corps planned to prepare an SEIS based on changes to the Project that were announced for the first time in the ROD. The groups have never received a response to that inquiry but that inquiry and the issues raised in it are incorporated into this inquiry by this reference.

Hanjin Shipping is the only container carrier that remains in service at the Port of Portland. Moreover, there are some indications that Hanjin might not remain for long.²

NEPA's implementing regulations require a supplemental environmental impact statement ("SEIS") whenever "(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. §§ 1502.9(c)(1)(i), (ii).

The withdrawal of two of the three shipping lines that carry containers in the Columbia River channel in the over one and half years since the SEIS was issued triggers the duty to perform a supplemental EIS. The Corps' analysis of the economic benefits expected from channel deepening relied heavily on transportation cost savings that were expected to accrue to foreign-owned container vessels which, in theory, would be passed on to U.S. businesses. Regardless of the fundamental problems with the Corps' analysis, the departure of two of the three container vessel operators from the Port of Portland raise serious questions about the Corps' predictions for container shipping,³ cast doubt on Hanjin's continued use of the Project, and significantly undermine the Corps' estimate of benefits to be derived from the Project. In fact, it is likely that this new information alone upsets the Corps' projection of a net gain for the regional and national economy. At the very least, the departure of these two carriers ensures that the touted benefits from channel deepening will not materialize for many more years than projected, further undermining the validity of the Corps' economic analysis.

The validity of the Corps' economic analysis is fundamental because economic need is the purported driver for the Project. Indeed, under the requirements set by Congress, the Project cannot move forward without a demonstration that its benefits outweigh its costs. See Water Resources Development Act of 1986, 33 U.S.C. § 2201 et seq. As discussed in more detail in the complaint in Northwest Environmental Advocates v. NMFS, Civ. No. 04-666-RSM, the Project threatens to further damage already degraded salmon and steelhead habitat in the Columbia River estuary, mobilize toxic pollutants, and add to the problem of erosion on the Washington and Oregon coasts. If there is no need for the Project because its costs outweigh its

² As reported in THE OREGONIAN, the Oregon Department of Agriculture (ODA) has completed a draft report funded by the U.S. Department of Agriculture, that was stimulated, at least in part, on observations by ODA that both Hyundai and Hanjin have invested in container ships that are too large for even a deepened channel. See Attachment C ("Shippers Weigh Container Options" THE OREGONIAN (Aug. 16, 2004)); see also Draft Report for Industry Review, "Utilizing Inland Waterway, Coastal and Open Ocean Barging of Containerized Agricultural Products to Overcome Existing Service Deficiencies and Increased Transportation Costs." Grant Agreement 12-25-G-0403, Oregon Department of Agriculture, Agricultural Development and Marketing Program, (Aug.12, 2004).

³ For example, the withdrawal of Hyundai and "K" Line demonstrates that the Corps' analysis of risk and uncertainty in the SEIS was seriously lacking. A more complete discussion of the legal and analytical errors in the Corps' environmental and economic analyses is contained in Plaintiffs First Amended Complaint for Declaratory and Injunctive Relief in Northwest Environmental Advocates v. NMFS, Civ. No. 04-666-RSM (W.D. Wash.) (filed June 14, 2004).

benefits – as recent events indicate may well be the case – then each of these environmental impacts can be avoided.

Withdrawal of the ROD and preparation of a SEIS, including an opportunity for public comment, is appropriate and necessary in this circumstance. Accordingly, we are requesting confirmation that the Corps will withdraw its January 9, 2004 ROD and will prepare a supplement to the 2003 SEIS for the Columbia River Channel Deepening Project.

We request a written response by September 15, 2004. If you do not respond by that date, we will assume that the Corps does not intend to withdraw the ROD or prepare a supplemental EIS and is not accepting further public comment on the Channel Deepening Project. If you have any questions concerning this letter, please do not hesitate to contact me at (206) 343-7340. We look forward to your prompt response.

Sincerely,

Todd D. True
Earthjustice
705 Second Avenue, Suite 203
Seattle, WA 98104
(206) 343-7340
(206) 343-1526 [FAX]

ttrue@earthjustice.org

*Attorney for Northwest
Environmental Advocates*

NORTHWEST ENVIRONMENTAL ADVOCATES



March 8, 2000

Louis Caldera
Secretary of the Army
101 Army Pentagon
Washington, D.C. 20310-0101

Re: Columbia and Willamette River Navigation Improvement Project:
Request for an Independent Economic Evaluation

Dear Secretary Caldera:

The Portland District of the Army Corps of Engineers has proposed a project to deepen the Columbia and Willamette River Navigation Channels (Navigation Project) from 40 feet to 43 feet over a total of 115.1 miles. During the development of the Final Environmental Impact Statement (Final EIS)¹ last fall, hundreds of comment letters were received by the Corps. Issues related to the overall economic benefit of this project were raised in those comments but were largely ignored. Since the close of the public comment period, various agencies have raised additional issues that affect the cost of the Navigation Project, and therefore its cost/benefit ratio. Given recent reports concerning problems with the Corps' economic justification process, we believe it is appropriate for the costs associated with the Columbia/Willamette Navigation Project to be revisited. By this letter we are requesting an independent economic review of this Navigation Project. Such an analysis should include, at a minimum, the following essential factors:

1. The Corps Has Grossly Underestimated Dredging Volumes for Columbia River Channel Deepening.

The Corps has grossly underestimated the volume of dredged materials that will be generated by the proposed Columbia/Willamette Navigation Project.² There are three primary reasons for this. First, the Corps bases the dredging estimates in its Final EIS on a period with atypically low river flows, thereby significantly underestimating dredging volumes. (Dredging volumes are directly correlated with sediment transport which are directly correlated with flows.) Second, the Corps fails to account for new sand entering the Lower Columbia River, arguing that its dredging activities will almost exclusively

¹ Integrated Feasibility Report for Channel Improvements and Environmental Impact Statement, Columbia and Lower Willamette River Federal Navigation Channel, August, 1999.

² Northwest Fisheries Science Center, Memorandum to Rick Applegate from John E. Stein, Re: Lower Columbia River Channel Deepening Project, December 2, 1999, Appendix 2, "Summary Review of US Army Corps of Engineers Columbia River Channel Deepening Environmental Impact Statement, Issued August 1999," David Jay, Center for Coastal and Land-Margin Research, Department of Environmental Science and Engineering, Oregon Graduate Institute, November 12, 1999.

address existing sand that is moving around in the system. This premise is contrary to measurements made by the U.S. Geological Survey in the 1960s that demonstrate substantial levels of sand transport into the Lower Columbia River; it is also contrary to estimates made by a number of other scientists. These two faulty premises result in the likelihood that actual dredging volumes of the Navigation Project would be 80-200 percent greater than volumes projected by the Corps in its Final EIS. Third, channel deepening is likely to reduce the ability of the river system to transport materials out of the estuary and into the ocean.

The inconsistency between the Corps' estimates and reality is already obvious. Actual dredging in the last four years (1996-1999) has averaged more than 175 percent of the average dredging volumes predicted in the Final EIS for the Navigation Project. Likewise, the Final EIS estimates for the Navigation Project dredging volumes are approximately 10 percent lower than actual maintenance dredging volumes from an unusually dry fifteen-year period (1980-1995).

The Corps' dredging estimates for the Navigation Project appear to be seriously flawed. As a result, the Final EIS fails to consider the true economic costs of dredging, dredged spoil disposal, and disposal sites, as well as the environmental costs of dredged spoil disposal and its effects on fish and wildlife. This issue requires independent analysis.

2. The Corps Fails to Address the Effect of Postponing or Eliminating the Willamette River Portion of the Project.

The Portland Harbor area of the Lower Willamette River is significantly more contaminated with toxic chemicals than was previously believed during the scoping, data collection, and analysis phases of the Navigation Project's review pursuant to the National Environmental Policy Act (NEPA). In fact, the Portland Harbor is now known to be contaminated sufficiently to be designated a federal Superfund site, unless the U.S. Environmental Protection Agency (EPA) finds that a State-led equivalent can meet the legal requirements of CERCLA. Despite this information, the Corps concluded in its Final EIS that this dredging project will pose no harm to human health and the environment.

Although the Chief of Engineers' report³ notes that the Corps has opted to delay the Portland Harbor portion of the Navigation Project, it fails to tell Congress that the Corps also has requested reviewing agencies (e.g., Oregon Department of Environmental Quality Clean Water Act §401 certification, National Marine Fisheries Service Endangered Species Act §7 consultation) to withhold consideration of that portion. In fact, since investigations by state and federal agencies into the scope, nature, and extent of the toxic contamination are just beginning, it is premature to

³

Chief of Engineers' Report, Columbia and Lower Willamette Rivers Federal Navigation Channel, December 23, 1999.

evaluate whether channel deepening will be appropriate for or compatible with this part of the river system. Uncertainty surrounding the status of the proposed action to deepen the Portland Harbor calls into question the accuracy of the cost-benefit analysis contained in the Final EIS. First, according to both the Corps and to EPA, if the Portland Harbor is designated under CERCLA, the Corps will not include it in the Navigation Project. However, the Corps has never adjusted the economic analysis of the Final EIS to address the possibility that that portion may be removed entirely from the project. Second, the Corps has not evaluated the significant additional expenses of dredging the Portland Harbor by preparing a contingency budget or a disposal plan to address the matter of contaminated sediments, should the EPA approve a state alternative to Superfund designation.

Clearly the Final EIS does not adequately address the economic implications raised by the pending remediation decisions for the Portland Harbor. As such, the economic justification of the Navigation Project is seriously flawed.

3. The Corps Has Not Evaluated the Costs of Extensive Ecosystem Restoration Now Required by the National Marine Fisheries Service (NMFS).

The Navigation Project, as envisioned in the National Marine Fisheries Service (NMFS) Biological Opinion,⁴ is far more costly than the project as described in the Final EIS.⁵ Pursuant to the Endangered Species Act (ESA) consultation, NMFS is requiring a package of studies, on-going monitoring, and habitat restoration not contemplated originally. The Final EIS does not estimate the costs of this package, because it was completed prior to development of the Biological Opinion and the Corps' amended Biological Assessment.⁶

In addition, the Corps has not analyzed the risks of consultation being reinitiated by NMFS pursuant to the ESA during implementation of the Navigation Project. NMFS' Biological Opinion clearly indicates that the agency retains authority to reinitiate consultation and potentially withdraw its approval of the project. The prospect of taxpayers' footing the bill for a partially deepened river requires evaluation.

Further, because the Corps has delayed the Portland Harbor portion of the Navigation Project, the Biological Opinion evaluates only the impacts of deepening the Columbia River and fails to consider the impacts of dredging the Portland Harbor. Therefore, potential measures that may be

⁴ Biological Opinion and Conference Report, Columbia River Navigation Channel Deepening, December 16, 1999.

⁵ Final EIS at 4-70 - 4-80.

⁶ The Corps' amended Biological Assessment is not dated.

required to ensure that deepening the Portland Harbor will not jeopardize the continued existence of ESA-listed species have not yet been identified and as such, no estimation of the costs of such measures has been developed by the Corps.

4. The Corps Has Not Assessed Losses to the Crabbing Industry and Commercial and Sport Fisheries.

According to the Columbia River Crab Fisherman's Association, plans to dump dredged sediments over 9,000 acres of productive benthic habitat on the ocean floor will cause an estimated loss of 87,230,000 pounds of crab to the local crab fleet over the life of the project.⁷ The excessive size of the ocean disposal site more than doubles the potential for loss of prime marine habitat and mortality to crab and bottom fish. Ocean disposal will have a highly significant cumulative impact to the unique and irreplaceable near shore marine environment. Likewise, loss of both shallow- and deep-water habitat in the estuary from dredging and dredged spoil disposal will cause losses to declining fish populations of species including salmon, sturgeon, and smelt. Despite these known losses, the Final EIS included no economic evaluation of impacts to crab, groundfish, or salmon from ocean disposal, flow lane disposal, or estuarine island disposal. Likewise, the Final EIS did not consider the effect on the economy of the Lower Columbia River that would be sustained by the commercial and recreation fishing and shellfishing industries. Since these human and natural resource impacts were not included in the economic justification, the benefits of the project have been overestimated. A quantitative analysis of these adverse impacts must be conducted to fully understand the economic costs associated with this project.

It is worth noting that the net economic benefits of this project are minuscule compared to the federal tax dollars spent each year on salmon recovery. According to the Corps' Final EIS, this project will contribute an additional \$17 million each year to the region's economy. In contrast, the federal treasury is spending nearly \$500 million each year on salmon recovery efforts in the Columbia River Basin. According to NMFS, this Navigation Project will unquestionably further degrade an already malfunctioning estuarine ecosystem system. In other words, this project will make current salmon recovery efforts more difficult and therefore will require yet even greater funds for salmon restoration.

It is clear from the foregoing that the economic analysis for the Columbia and Willamette Rivers' channel deepening project is not complete. Therefore, we urge you to include these omissions in an independent economic review of the current channel deepening project, including the recent amendments made to meet Endangered Species Act concerns. We further request that you

⁷

Columbia River Crab Fisherman's Association, Final EIS Comments, November 22, 1999.

Louis Caldera, Secretary of the Army

March 8, 2000

Page 6

Representative Peter Visclosky

Representative Ron Packard

Representative Rodney Frelinghuysen

Representative Wayne T. Gilchrest

Jennifer Belcher, Washington Commissioner of Public Lands

Kelly D. White, Chair, Washington Fish & Wildlife Commission

Governor John Kitzhaber

Governor Gary Locke

Donald Sampson, Columbia River Inter-Tribal Fish Commission

Kathy Taylor, Columbia River Estuary Study Team

Christine Valentine, Oregon Division of State Lands

Colonel Randall J. Butler, Portland District, Army Corps

Louis Caldera, Secretary of the Army
March 8, 2000
Page 5

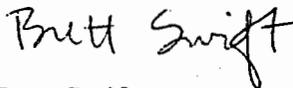
withdraw the Chief Engineers Report that represents to Congress that such analysis has been completed until such time as these issues are fully evaluated.

We look forward to hearing from you soon. Please feel free to call either one of us at 503/295-0490 if you have any questions about the substance of this letter.

Sincerely,



Nina Bell, Executive Director
Northwest Environmental Advocates



Brett Swift
American Rivers, Northwest Office

Encl. Science Center Report

cc: Senator Slade Gorton
Senator Patty Murray
Representative Jay Inslee
Representative Jack Metcalf
Representative Brian Baird
Representative Richard "Doc" Hastings
Representative George Nethercutt
Representative Norm Dicks
Representative Jim McDermott
Representative Jennifer Dunn
Representative Adam Smith
Senator Gordon Smith
Senator Ron Wyden
Representative Earl Blumenauer
Representative Peter DeFazio
Representative Darlene Hooley
Representative Greg Walden
Representative David Wu
Representative Joe Knollenberg

4. ISSUING OFFICE: WE12X-05-S-0012 2/10/2005 4/12/2005
 DISTRICT ENGINEER, PORTLAND DISTRICT, CORPS OF ENGINEERS
 P.O. BOX 2846, PORTLAND, OR 97208-2848
 PROJECT TITLE: Columbia River Channel Improvement Project Phase I dredging

1. CERTIFY THAT I HAVE OPENED, READ, AND RECORDED ON THIS ABSTRACT ALL OFFERS RECEIVED IN RESPONSE TO THIS SOLICITATION.
 SIGNATURE: GEORGE WILLIAMS, BID OPENING OFFICER
 DATE SIGNED: 12-30-05

5. NUMBER OF ADDENDA ISSUED: 12
 6. GOVERNMENT ESTIMATE (CHECK A, B, OR C AND COMPLETE D, E, AND F.)
 A. HIRER LABOR: NO. 1: NO. 2: NO. 3: A. OFFEROR: NO. 4: OFFEROR: NO. 5: OFFEROR: NO. 6: OFFEROR:
 B. REASONABLE CONTRACT (WITH NO PROFIT): YES
 C. REASONABLE CONTRACT (INCLUDING PROFIT): YES
 D. ADDENDA ACKNOWLEDGED: YES
 E. ADDENDA ACKNOWLEDGED: YES
 F. ADDENDA ACKNOWLEDGED: YES

7A. ITEM NO.	7B. DESCRIPTION OF QTY. EST.	7C. QUANTITY	7D. UNIT	7E. PRICE	7F. ESTIMATED AMOUNT	7G. PRICE	7H. ESTIMATED AMOUNT	7I. PRICE	7J. ESTIMATED AMOUNT	7K. PRICE	7L. ESTIMATED AMOUNT	7M. PRICE	7N. ESTIMATED AMOUNT
0001	Mobilization and Demobilization	1	JOB	XXX	\$ 2,405,883.00	XXX	\$ 5,810,000.00	XXX	\$ 11,200,000.00				
0002	CRCI - RM 3+00 to RM 17+28 CR, DWS Disposal	1,500,000	Yc3	5.42	\$ 8,130,000.00								
0003	CRCI - RM 17+28 to RM 21+20, IV & FL Disposal	500,000	Yc3	1.29	\$ 649,500.00								
0004	CRCI - RM 21+20 to RM 23+23, IV & FL Disposal (Optional)	250,000	Yc3	1.45	\$ 362,500.00								
0005	CRCI - RM 23+20 to RM 25+10, IV & FL Disposal (Optional)	180,000	Yc3	1.56	\$ 280,800.00								
0006	CRCI - RM 25 to RM 104+20, OREGON Rehandle, Hayden Is. (Optional)	310,000	Yc3	2.68	\$ 830,800.00								
0007	RM 104+20, OREGON Rehandle, Increment for Gateway Disposal (Optional)	450,000	Yc3	-0.53	\$ (238,500.00)								
0008	CRCI - RM 97+40 to RM 104+20, OREGON Rehandle, Increment for Gateway Disposal (Optional)	450,000	Yc3	-0.52	\$ (234,000.00)								
0009	CRCI - OR Slough RM 0+00 to RM 1+00, OREGON Rehandle, Hayden Island (Optional)	330,000	Yc3	1.76	\$ 580,800.00								
0010	CRCI - CR Slough RM 0+00 to RM 3+00, OREGON Rehandle, Increment for Gateway Disposal (Optional)	330,000	Yc3	-0.25	\$ (82,500.00)								

0011	CRCI - RM 104+20 to RM 105+25, Consolidated Material	330,000	Yd3	4.32	\$ 1,654,800.00	\$17.15	\$ 6,668,500.00	\$11.60	\$ 4,485,000.00
0012	MCR - Site E Disposal	1,000,000	Yd3	1.20	\$ 1,200,000.00	\$1.45	\$ 1,450,000.00	\$1.50	\$ 1,500,000.00
0013	MCR - Site E Disposal (Optional)	500,000	Yd3	1.20	\$ 600,000.00	\$1.40	\$ 700,000.00	\$1.25	\$ 625,000.00
0014	MCR - Increment for MCR Disposal (Optional)	500,000	Yd3	0.00	\$ (50,000.00)	\$0.00	\$ -	\$0.00	\$ 5,000.00
0015	MCR - Increment for MCR Disposal (Optional)	500,000	Yd2	0.81	\$ 405,000.00	\$0.85	\$ 425,000.00	\$0.60	\$ 300,000.00
0016	MCR - Increment for MCR Disposal (Optional)	500,000	Yd2	0.81	\$ 405,000.00	\$0.85	\$ 425,000.00	\$0.60	\$ 300,000.00
0017	MCR - Increment for MCR Disposal (Optional)	250,000	Yd3	0.81	\$ 202,500.00	\$0.85	\$ 212,500.00	\$0.60	\$ 150,000.00
0018	MCR - Increment for MCR Disposal (Optional)	250,000	Yd3	0.81	\$ 202,500.00	\$0.85	\$ 212,500.00	\$0.60	\$ 150,000.00
0019	CR Maintenance - RM 25 to 26, 1/4 & FL Disposal, Etc Measure (Optional)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
0019AA	First 150,000 CY	150,000	Yd3	1.30	\$ 195,000.00	\$1.50	\$ 246,000.00	\$0.90	\$ 185,000.00
0019AB	Over 150,000 CY	150,000	Yd3	1.30	\$ 195,000.00	\$1.50	\$ 246,000.00	\$0.90	\$ 185,000.00
0020	CR Maintenance - RM 28 to 29, 1/4 & FL Disposal, Etc Pre/Post Survey (Optional)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
0020AA	First 180,000 CY	180,000	Yd3	1.30	\$ 187,500.00	\$1.55	\$ 247,500.00	\$1.40	\$ 210,000.00
0020AB	Over 180,000 CY	180,000	Yd3	1.30	\$ 187,500.00	\$1.55	\$ 247,500.00	\$1.40	\$ 210,000.00
0021	CR - Tronett Miles (Optional)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
0021AA	First 100 Miles	100	Mi	186.69	\$ 13,669.00	\$210.00	\$ 21,000.00	\$120.00	\$ 12,000.00
0021AB	Over 100 Miles	100	Mi	186.69	\$ 13,669.00	\$210.00	\$ 21,000.00	\$120.00	\$ 12,000.00
	TOTAL SCHEDULE NO. 1				\$ 16,232,151.00		\$ 30,652,400.00		\$ 38,500,400.00
	ACCURANCE LIMITATION - DAYS				60		60		60
	INFORMALITIES								

STANDARD FORM 1419 (10-3)

1419-101

NSN 7540-01-150-0051

W9127N-05-B-0010 4/22/2005 4/29/2005
 I CERTIFY THAT I HAVE OPENED, READ, AND RECORDED ON THIS ABSTRACT
 ALL OFFERS RECEIVED IN RESPONSE TO THIS SOLICITATION.

4. ISSUING OFFICE
 DISTRICT ENGINEER
 PORTLAND DISTRICT, CORPS OF ENGINEERS
 P.O. BOX 2946
 PORTLAND, OR 97208-2946

5. PROJECT TITLE
 2005 Maintenance Dredging & Columbia
 River Channel Improvement Project

SIGNATURE
 GEORGE WILLIAMS, BID OPENING OFFICER
 DATE SIGNED
 29-Apr-05

8. GOVERNMENT ESTIMATE
 (CHECK A, B, OR C AND COMPLETE
 D, E, AND F.)

A. HIRED LABOR
 B. REASONABLE CONTRACT
 (WITHOUT PROFIT)
 C. REASONABLE CONTRACT
 (INCLUDING PROFIT)

9. OFFERS
 NO.1
 A. OFFEROR
 Great Lakes Dredge & Dock
 2122 York Road
 Oak Brook, IL 60523
 B. BID SECURITY
 Yes

NO.2
 A. OFFEROR
 Manson Construction Co.
 5209 East Marginal Way S.
 Seattle, WA 98134
 B. BID SECURITY
 Yes

NO.3
 A. OFFEROR
 Bean Stuyvesant, LLC
 PO BOX 51118
 New Orleans, LA 70151-1118
 B. BID SECURITY

C. ADDENDA ACKNOWLEDGED
 C. ADDENDA ACKNOWLEDGED
 C. ADDENDA ACKNOWLEDGED

6. NUMBER OF ADDENDA ISSUED
 LB LB LB

7A. ITEM NO.	7B. DESCRIPTION OF OFFER	7C. EST QUANTITY	D. UNIT	E. UNIT PRICE	F. ESTIMATED AMOUNT	D. UNIT PRICE	F. ESTIMATED AMOUNT	D. UNIT PRICE	F. ESTIMATED AMOUNT
0001	Mobilization and Demobilization	1	JB	XXX	\$ 942,155.00	XXX	\$ 935,000.00	XXX	\$ 4,333,900.00
0002	CRCI - RM 3+00 to RM 14+45 Columbia River (CR), DWS Disposal	1,000,000	Yd3	3.95	\$ 3,950,000.00	\$4.67	\$ 4,670,000.00	\$3.00	\$ 3,000,000.00
0003	CRCI - RM 14+45 to RM 16+25, IW & FL Disposal	475,000	Yd3	1.47	\$ 698,250.00	\$1.74	\$ 826,500.00	\$1.80	\$ 855,000.00
0004	CRCI - RM 95 to RM 97+40, OREGON Rehandle, Gateway Disposal (Optional)	450,000	Yd3	1.83	\$ 823,500.00	\$2.10	\$ 945,000.00	\$1.65	\$ 742,500.00
0005	CRCI - RM 97+40 to RM 104+20 OREGON Rehandle, Gateway Disposal (Optional)	460,000	Yd3	1.48	\$ 680,800.00	\$1.95	\$ 897,000.00	\$1.40	\$ 644,000.00
0006	MCR - Site E Disposal	1,000,000	Yd3	1.20	\$ 1,200,000.00	\$1.46	\$ 1,460,000.00	\$1.45	\$ 1,450,000.00
0007	MCR - Incremental for NJ Disposal (Optional)	500,000	Yd3	-0.10	\$ (50,000.00)	-\$0.02	\$ (10,000.00)	\$0.00	\$ -
0008	CR Maintenance - RM 17 to 95, IW & FL Disposal, Pre/Post Survey, (Optional)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
0008AA	First 100,000 CY	100,000	Yd3	1.42	\$ 142,000.00	\$1.60	\$ 160,000.00	\$1.50	\$ 150,000.00
0008AB	Over 100,000 CY	100,000	Yd3	1.42	\$ 142,000.00	\$1.60	\$ 160,000.00	\$1.25	\$ 125,000.00
0009	CR Maintenance - RM 17 to 95, IW & FL Disposal, Pre/Post Survey, (Optional)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
0009AA	First 100,000 CY	150,000	Yd3	1.38	\$ 207,000.00	\$1.65	\$ 247,500.00	\$1.70	\$ 255,000.00
0009AB	Over 100,000 CY	150,000	Yd3	1.38	\$ 207,000.00	\$1.65	\$ 247,500.00	\$1.40	\$ 210,000.00
0010	CR- Transit Miles (Optional)	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
0010AA	First 100 Miles	100	Mi	136.69	\$ 13,669.00	\$210.00	\$ 21,000.00	\$200.00	\$ 20,000.00

3	Over 100 Miles	100	MI	136.69	\$	13,669.00	\$210.00	\$	21,000.00	\$200.00	\$	20,000.00	200	\$	20,000.00
	TOTAL SCHEDULE NO. 1			\$	8,970,043.00	\$	10,580,500.00	\$	11,771,500.00		\$	16,322,150.00			
	ACCEPTANCE LIMITATION - DAYS			60		60									
	INFORMALITIES														

STANDARD FORM 1419 (10-3)

1419-101

NSN 7540-01-150-0981

RECEIVED
 2007 APR -4 A 10: 25
 DOD GENERAL COUNSEL