

**LETTER**

Executive Office

Admiral James D. Watkins  
US Navy (retired)  
Chairman  
US Commission on Ocean Policy  
1120 20<sup>th</sup> Street N.W. Suite 200 North  
Washington, DC 20036

Dear Admiral Watkins,

In response to your 28 August 2002 letter and follow-up questions the New England District submits the attached information. This material is organized by the five responses to your letter, six additional responses to the verbal questions from the July 23 2002 panel on Regional Coordination of Ocean Policy and two Power Point presentations. The first Power Point presentation is the original material shown at the July meeting and the second one is submitted for your use in understanding the Inland Waterways System (per verbal request of the Commission). All of this material has also been sent electronically to your staff.

Please feel free to contact me at (978) 318-8222 or Bill Hubbard, Chief of the Environmental Resources Section at (978) 318-8552, for further discussion of any of these issues.

Sincerely,

Thomas L. Koning  
District Engineer

**Northeast Regional Meeting**  
**Boston, MA**  
**July 22-24, 2002**

**Follow-up Questions**

Colonel Thomas L. Koning  
District Engineer  
USACE- New England

General: Items 1 to 5 below are the responses to the issues submitted to Colonel Thomas L. Koning in the Admiral's 28 August 2002 letter. Items 6 through 11 under "Ocean Commission Follow-up Questions to USACE-NAE" is a written response to each of the verbal questions asked at the Boston meeting that required additional explanation.

1. ***Issue:*** Please identify inconsistencies and conflicts in ocean related laws.

*Discussion:* There are inconsistent testing, management and evaluation requirements for dredged material disposal related laws. These inconsistencies present varied public perception on the federal government's ability to manage ports and waterways and their dredging needs.

Disposal of dredged material into aquatic environments is regulated by Section 401 and 404 of the Clean Water Act (CWA) and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA). The CWA regulates disposal into inland waters and coastal waters, while the MPRSA regulates open ocean disposal. Thus, an offshore dredged material disposal site is regulated by one or both of the two Acts, depending on its location. The major differences between the regulations are (1) testing flexibility and (2) sediment management options. The CWA provides regulators a more flexible approach to project evaluation and management, whereas the MPRSA is much more prescriptive and also limits management options. This means that under MPRSA, project testing is almost always driven to very expensive (\$70,000-150,000 per analysis) analyses regardless of the size of a project or the nature of the sediments. There is almost no allowance for professional judgment. Further, under MPRSA the use of management techniques, such as capping, are not permissible.

Both of these factors can result in higher project costs under MPRSA than under CWA, even though both utilize the same basic tiered-testing approach to project evaluation. The prescriptive approach of MPRSA frequently results in decisions that might not otherwise occur had common sense and professional judgment been applied. Additionally, the CWA is better able to accommodate new technology and scientific discoveries, again because of the non-prescriptive approach that was adopted when this law and its regulations were created. Nonetheless, some of the potential technological advances are stymied by a tacit unwillingness to create even greater disparity between the approaches under the two laws.

The following three examples illustrate how the course of a project could be very different depending on which disposal site is receiving the dredged material, and, therefore, which regulations apply. The specific details of the examples are fictional, but the general principles apply to many actual projects.

**Example A.** A small marina needs about 6,000 cubic yards of dredging from its entrance channel. The marina owner has done alternatives evaluation. There is no nearby upland site available that can accept this material (a ½ acre site would be raised by 7 or more feet by placement of this volume). There is a sanitary landfill that would accept the sediment, but rehandling, transportation, and tipping fees would result in costs of about \$75 per cubic yard (a \$450,000 cost in addition to dredging costs). Dredging with open water disposal is estimated at \$9 per cubic yard, for a total cost of \$54,000. Upland disposal would be cost prohibitive for the marina. The marina owner decides to pursue a permit for open water disposal.

The owner coordinates with the Corps of Engineers district office and is required to take 5 samples for physical and chemical testing because there is reason to believe contaminants may be present. Consultant and laboratory services cost \$12,500. The Corps evaluates the laboratory data and finds that the material is a silty sand. All of the organic contaminants (PAHs, pesticides, PCBs) were below detection levels. Lead, mercury, zinc, cadmium, copper, and nickel were all detected in the sediments. The Corps compared the results to metals concentrations at the reference location. The marina sediment concentrations were all less than those in the reference samples.

*CWA evaluation.* The potential for unacceptable adverse effects on the marine environment is low. The material is suitable for unconfined disposal at the requested disposal site, and a permit is granted.

*MPRSA evaluation.* Mercury and cadmium are on the list of contaminants that may not be disposed unless they are present in trace amounts (§227.6). Existing policy does not allow for consideration of reference levels in defining trace concentrations, even though these metals are present as part of the natural sediment geology. Therefore, a determination of trace levels can only be made by doing biological testing prescribed in the regulations. The marina owner is informed that biological testing (water column toxicity, benthic phase toxicity, and bioaccumulation assay) must be conducted on two composite samples. The estimated cost of the testing is \$125,000, 2.3 times the estimated dredging cost. The marina owner cannot afford testing costs at this level and defers the project. This results in reliance on the tides for safe passage through the channel and an increased risk of groundings and personal injury for the general boating public.

**Example B.** Same marina as in prior example.

The organic contaminant concentrations are the same as in the prior example. All of the metals concentrations are the same as in the prior example, except for zinc, which is four times higher than in the reference sediments.

*CWA evaluation.* The marina owner is provided with two options: conduct 10-day amphipod toxicity testing of the sediments or accept a condition that the sediment be capped. Estimated cost for the toxicity testing of two samples is \$7,000.

Bioaccumulation testing is not deemed necessary because research has shown that zinc does not biomagnify in food webs. The marina owner accepts the provision for capping rather than conduct the additional testing. A permit is issued with special conditions for capping the sediments with an isolation cap.

*MPRSA evaluation.* Current policy does not consider capping to be an option under these regulations (EPA Region I letter on Providence Harbor, December 7, 1994). The marina owner is given the same response obtained in example A.

**Example C.** Same marina as in first example. All of the organic contaminants (PAHs, pesticides, PCBs) were below detection levels except for PCBs. Lead, mercury, zinc, cadmium, copper, and nickel were all detected in the sediments. The Corps compared the results to naturally occurring levels at the reference location. The marina sediment metal concentrations were all less than reference concentrations. PCBs were about 1.5 times higher than reference levels.

*CWA evaluation:* Corps and EPA researchers have developed rapid, inexpensive cell and gene assays that can reliably predict toxicity and bioaccumulation. The marina owner is provided with a sampling and testing plan with an estimated cost of \$5,000 or the option of capping the sediments. The marina owner elects to do the additional testing, and the results do not predict unacceptable levels of toxicity or bioaccumulation. The material is determined suitable for unconfined disposal at the requested disposal site, and a permit is granted.

*MPRSA evaluation:* The use of cell and gene assays does not meet the existing requirements of §227.27 *c* and *d* that specify the use of “appropriate sensitive organisms.” There is not sufficient flexibility to use the newly developed assays in lieu of those prescribed in the regulations. The applicant is provided with the same testing requirements as in example A.

The discrepancies between the requirements of the two regulations are unfounded on science and need to be addressed. The CWA is less expensive to implement and yet sufficiently protects the environment and human health, primarily through offering testing flexibility and a broader range of safe sediment management options. The public would be better served by an MPRSA that incorporates the successes of the CWA or a single law that regulates dredged material in all aquatic environments.

**Recommendations:** The Commission should examine the federal regulations for dredged material disposal to allow testing flexibility and sediment management options that are economically efficient (considering cost and time) while still affording adequate resource protection..

2. **Issue:** At the public hearing, it was noted that the Commission has been thinking about government mechanisms and structures to coordinate ocean policy. The question was raised about how to achieve and integrate the Gulf of Maine and other regional approaches. First, offer your views from a regional perspective and then look at the issue from a national perspective. Will this take legislative changes and are there overlapping mandates from various legislation?

**Discussion:** The ability of Federal and state agencies to form regional workgroups around a particular topic is key to an effective government. There are many such groups; the most effective are the regional dredged material management groups and the Coastal America partnership. These groups draw from the numerous agencies that may have an interest in a particular topic (e.g. dredged material disposal or aquatic habitat restoration). Agencies should not be changed nationally around particular topics – e.g. a national dredging agency or a national aquatic habitat restoration agency. That would produce too many narrowly focused agencies. The Commission instead should be looking to create broader agencies by combining smaller agencies within federal Departments for efficiency. The commission should then examine overlapping legislation and make sure there are regional workgroups functioning in support of the topic and that all agencies (especially military) are attending these groups. There may be a need for legislation to force all agencies to spend staff time on these regional workgroups, assuring appropriate representation from each federal Department.

**Recommendations:** The Commission should compare and evaluate existing regional workgroups. The positive and negative aspects of each group's approach should be summarized and a template for forming future regional workgroups (by legislation or by consensus) should be made available to decision makers.

3. **Issue:** Is there currently a Federal regional mechanism where federal partners with ocean related interests and responsibilities regularly meet to discuss the issue of mutual concern or interest?

**Discussion:** As stated above the regional dredged material management and Coastal America groups are excellent examples of topic related forums that effectively integrate state and federal agencies missions.

**Recommendations:** The Commission should use these two groups success to accomplish the recommendations of item 3 above.

4. **Issue:** Are the geographic regions of most Federal entities the same, or are there significant differences? If there are differences, does this hamper interagency coordination and is there a need to reconsider this structure?

**Discussion:** Most agencies in the Northeast have similar regional structures. Sometimes regional coverage is too large, such as all of the northeast states being the regional

territory of an agency (versus just the six New England states). Most effective is the New England state geographic organization. New England regional structure is used with EPA and USACE District, while North Atlantic Division of the Corps overlaps with USFWS and NMFS northeast regions. NRCS has a state-by-state focus. It may be useful to create a regional government management committee that includes Coastal Zone Management and NRCS entity that can speak regionally for those agencies.

**Recommendations:** The Commission should align all federal agency organizations by consistent region. Those agencies with a state only focus should incorporate a regional management board to interface with the new regional entities.

5. **Issue:** What are your thoughts on expanding the role of the states in managing coastal waters beyond 3 nautical miles? Do the States have the institutional and fiscal capability to do this? If so what should be the level of their role in managing Federal waters?

**Discussion:** State waters overlap with federal waters for the first three miles from the territorial sea baseline. This assures federal and state interests are represented in ocean management issues. Offshore of the 3-mile limit the waters are truly a public common resource. The ability of states to effectively control ocean waters is doubtful. A major increase in state funded agencies would be necessary, without a taxable return to the states. Therefore, the ocean waters should remain only in the federal control.

**Recommendations:** The Commission should maintain the existing overlap of ocean and state waters and maintain the end of state jurisdiction at the existing 3 mile limit.

**Ocean Commission Follow-up Questions to USACE-NAE Expanding on the questions asked in Boston**

6. **Issue:** Should the Corps be both a Regulator and a Water Resource Developer?

**Discussion:** The Corps is given a charge to be technically objective in the pursuit of water resources development. Whether it is the granting of a permit to the public or a large navigation, flood damage reduction or ecological restoration project, the USACE uses the National Environmental Policy Act as well as many publicly reviewed USACE Regulations to make the best decision. The same laws and regulations apply to permit decisions and civil works water resource development (e.g. Marine Protection, Research and Sanctuaries Act; Clean Water Act, etc.). There is federal resource agency oversight on all activities, as well as state Water Quality Certification and Coastal Zone Management Consistency concurrence. Public notices and scoping meetings occur throughout the process. The expertise of in-house staff engineers and scientists is available for every decision. This is the best way to assure effective water resources conservation. If the agency assigned to manage permits for water resource development only has a paradigm of conservation, then the permit program will be biased to preservation. Objective analysis of technically complex water resource development projects is a key quality of the USACE staff.

**Recommendations:** The Corps should remain both a regulator and a water Resource Developer. By doing one job, you in effect do the other. The checks and balances of state and federal agencies ensures coordination is effective.

7. **Issue:** What is the state (O+M needs) of the Inland Waterways system (and the Commission wants the public to realize the importance of this system)?

**Discussion:** The Inlands Waterways System is critical to the US economy, moving 15% of intercity freight (including 50% of grain exports, 20% of coal for electricity) cargo of the US every year. This system provides a low cost and efficient transportation mechanism with few environmental impacts. Its aging infrastructure is in need of modernization. Lock downtime has doubled since 1991 to over 122,500 hours in 1999. There are 24 critical locks that average 1-12 hours of delay per transit. These delays cost industry over \$155 million annually. Additionally, traffic at 9 of these locks exceeds 75% of estimated capacity, and only two locks have larger capacity replacement locks construction underway. Larger modern locks are costly -- \$200 million to over \$1 billion – and limited available funding slows construction and postpones new starts. Funding will continue to be a major challenge to system modernization over the next century. This backlog of public infrastructure maintenance threatens the national transportation efficiency of the nation. The public should be educated in the importance of this system; elected official support would then be forthcoming to save this critical infrastructure.

(Note – HQUSACE prepared the attached Power Point to further these points)

**Recommendations:** The Commission should educate the public on the importance of the Inlands Waterways System.

8. **Issue:** Will the Corps (and MARAD) review and comment on the Marine Transportation section of their 16 July 2002 report?  
And also Issue from ADM Watkins: Look at the paper recently added to the website and comment is the Commission is asking the correct questions.

**Discussion:** In the areas of navigation, flood damage reduction and ecological restoration the commission has established an extensive set of questions. We offer the following opinions:

#### Topic 2: POLLUTION/WATER QUALITY

Issue 7 – Items a and b were answered above, for item c we would note that in the latter quarter of the last century the Corps stewardship role was greatly enhanced by making environmental restoration an equal mission to the existing navigation and flood damage reduction mission of the Corps. USACE has begun restoring aquatic habitats, which clearly improves the stewardship ethic in the agency.

#### TOPIC 4: COASTAL ZONE MANAGEMENT

Issue 9 – The primary impediment to habitat restoration is the lack of local cost share to match the federal program dollars. An innovative Corporate Wetlands Restoration Partnership has been established by the Coastal America partnership to increase the non-federal funds available to the coastal communities. This type of public/private partnership should be encouraged. (see <http://www.CWRP.org>).

#### TOPIC 5: NONLIVING MARINE RESOURCES

Issues 1 through 6 – all are pertinent to our statements regarding non-extraction activities in ocean waters.

#### TOPIC 8: TECHNOLOGY AND MARINE OPERATIONS

Marine Related Commerce and Transportation Issues – Issues 3 and 5 are particularly important to the Corps. The maintenance of harbor channels and anchorages requires dredged material disposal. In the northeast many of our harbors are contaminated from upland sources. The contamination is not generated by the Corps, but our navigation programs, often cost shared with ports and state agencies, must pay excessive per cubic yard costs to manage the disposal of contaminated dredged material. Therefore, port development is related to pollution abatement. The dischargers of contaminants such as metals (electroplating) waste into the watershed should be held financially accountable for the increased navigation dredged material disposal costs. In regards to the development of navigation features, we have had numerous successful projects (e.g. Boston and Providence) that adhered to the NEPA procedures to balance all stakeholders concerns. It is this balance that results in an acceptable project.

#### TOPIC 9: INVESTMENT AND FEDERAL GOVERNMENT ORGANIZATION

Issue 1 – Our comments about partnering and using the highly effective Coastal America partnership as a model for good governance applies to this issue.

**Recommendations:** The Commission should continue with these questions and publish a national dialogue on each issue.

9. **Issue:** Issue from Ms. Barrone: How do we make regionalization and mandates for cooperation work? How do we enact policy to make it happen?

**Discussion:** In order to enact policy for regional agencies to cooperate, the commission must find a metric for the output of the regionalized effort and then base the agency budget on the success of the regionalized cooperative effort. (See also below answer regarding partnerships).

**Recommendations:** The Commission should recommend a regional forum for interagency cooperation be mandates. The success of these forums should be quantitatively measured.

10. **Issue:** Issue from Mr. Koch: Why does partnership need to be mandated? Why shouldn't we just consolidate all these disparate activities into one agency?

**Discussion:** It is the intent of our government structure to keep agency missions separate so a priority can be instituted for any mission by increasing (or decreasing) funding – under the control of elected officials. There are numerous agencies with subtle mission differences. In the arena of aquatic ecological restoration, for example, there are programs at the federal level to deliver restoration funding to agricultural lands (Natural Resources Conservation Service - NRCS); funds granted to local communities to encourage small fisheries restorations (National Marine Fisheries Service- NMFS); and programs that deliver large, sometimes ecosystem level (e.g. Everglades or Mass/Cape Cod Bays) restorations (US Army Corps of Engineers – USACE). Each responsible agency is best situated to deliver their particular program to their service constituents.

Another factor in considering agency mission overlap is the difference between mission (authority) and administration priority (appropriation). The legislative reviews in the budget cycles can increase or decrease a particular agency's role in any government service's delivery by simply changing the appropriations to that agency's program. Instead of consolidating various sub-units of agencies, the commission should consider increasing the budgets of those agencies that collaborate to assure all available government services are brought to bear on a particular coastal issue. This would require a metric by which government success is measured, not just a single agency's success in delivering a particular appropriation.

**Recommendations:** The Commission should not consolidate all of the disparate government activities into one agency. They should recommend cross agency partnerships with regional implementation.

11. **Issue:** Issue from Dr. Coleman: Please identify and send in the inconsistencies that we see in the two existing statutes of CWA and MPRSA

**Discussion and Recommendations:** See above Item 1: concerning dredging project evaluation differences between the Clean Water Act and the Marine Protection, Research, and Sanctuaries Act.