

Friends of Merrymeeting Bay

P.O. Box 233

Richmond, ME 04357

207-666-3372

www.friendsofmerrymeetingbay.org

March 19, 2011

Comments via E-mail

Robert L. Green, Jr., Project Manager
Division of Land Resource Regulation, Bureau of Land and Water Quality
Maine Department of Environmental Protection
312 Canco Road, Portland, Maine 04103
Robert.Green@maine.gov

RE: US Army Corps of Engineers NRPA/CWA Section 401 permit application for Maintenance Dredging of the Kennebec South of Bath, Maine with disposal in the Kennebec Narrows in 95-100 feet of water north of Bluff Head.

Dear Bob,

Please accept these Friends of Merrymeeting Bay (FOMB) comments regarding the USACE dredge/disposal project referenced above. We also incorporate by reference those comments submitted by FOMB member Dot Kelly. FOMB respectfully requests intervener status in this proceeding.

Friends of Merrymeeting Bay is a membership based 501(c)(3) organization formed in 1975 whose mission is to preserve, protect and enhance the unique ecosystems of Merrymeeting Bay. FOMB accomplishes this mission through research, advocacy, education and land protection. FOMB members use the proposed project area for recreational and commercial fishing purposes, navigation, scientific study, education and work actively to protect valuable habitat in and near the project area.

The Bay is the only body of water in Maine providing spawning and nursery habitat to all twelve diadromous fish species found in the Gulf of Maine. Some of these, shortnose sturgeon and Atlantic salmon are endangered species while others, i.e. Atlantic sturgeon, rainbow smelt and alewives are threatened or species of concern. Merrymeeting Bay is the largest staging area north of Chesapeake Bay for migratory waterfowl and is home to about a dozen rare plant species living in the inter-tidal zone. The Bay has the second highest concentration of bald eagles in the state. Our organization and members are clearly affected by the proposed project and have a direct and substantial stake in the outcome. The proposed project area is not far downstream of Merrymeeting Bay and is part of the Kennebec River transit corridor through which every fish and marine mammal heading to or from the Bay and tributary points upstream must pass.

While Ms. Kelly provides great detail in a number of her comments particularly around quantitative and qualitative characteristics of spoils and how they effect the lower Kennebec, we will limit our current comments to:

1. USACE violations of state water quality statute-past and proposed.
2. Proposed downgrade in classification-Maine and Clean Water Act issues.
3. 40 CFR Section 404 (b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.
4. Endangered Species and Marine Mammal Protection Acts.

We reserve the right to present in future proceedings, discussion and evidence covered by of any or all of the following **PERTINENT LAWS, REGULATIONS, AND DIRECTIVES:**

Clean Water Act, as amended (33 U.S.C. 1251 et. seq.)
Code of Federal Regulation, Title 40 Part 230 Section 404 (b)(1)
Marine Protection Research and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.)
Code of Federal Regulation, Title 33, Parts 335 through 338
National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347)
Fish and Wildlife Coordination Act (16 U.S.C. 661-667e)
Fish and Wildlife Act of 1956 (16 U.S.C. 742a, et. seq.)
Migratory Marine Game-Fish Act (16 U.S.C. 760c-760g)
Coastal Zone Management Act of 1972 (16 U.S.C. 1456)
National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.)
Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)
Marine Mammal Protection act of 1972, as amended (16 U.S.C. 1361 et seq.)
Clean Air Act, as amended (42 U.S.C. 7401 et. seq.)
Estuary Protection Act (16 U.S.C. 1221 et. seq.)
Federal Water Project Recreation Act, as amended (16 U.S.C. 460L-12 et. seq.)
Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 460L et. seq.)
Magnuson-Stevens Fishery Conservation and Management Act as amended by the Sustainable Fisheries Act of 1996 (16 U.S.C. 1801 et seq.)
Water Resources Development Acts
Executive Order 11988, Floodplain Management, 24 May 1977
Executive Order 11990, Protection of Wetlands, 24 May 1977
Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, 11 February 1994

1. USACE violations of state water quality statute-past and proposed.

Title 38, §469 of Maine Statute classifies the Phippsburg waters of this proposed disposal site as SA. The site is part of an SA corridor encompassing the entire Kennebec within Phippsburg [*(1) Tidal waters east of longitude 69°-50'-05" W. and west of longitude 69°-47'-00"W. – Class SA.*] and Georgetown. It is unclear whether SA waters extend north to the Chops where Class B begins, whether estuarine waters change to SB in Bath or whether the northerly portion containing the dredge site remains unclassified.

In any case, the area of possible spoils discharge is SA. As defined in 38MRSA §465-B, there can be no direct discharge of pollutants to Class SA waters in this situation.

1. Class SA waters. Class SA shall be the highest classification and shall be applied to waters which are outstanding natural resources and which should be preserved because of their ecological, social, scenic, economic or recreational importance.

A. Class SA waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as free-flowing and natural. [2003, c. 227, §6 (AMD) .]

B. The estuarine and marine life, dissolved oxygen and bacteria content of Class SA waters shall be as naturally occurs. [1985, c. 698, §15 (NEW) .]

C. There may be no direct discharge of pollutants to Class SA waters, except for the following:

(1) Storm water discharges that are in compliance with state and local requirements;

(2) Discharges of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety using materials and methods that provide for protection of nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this subparagraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website; and

*(3) An overboard discharge licensed prior to January 1, 1986 if no practicable alternative exists. [2009, c. 654, §7 (AMD) .]
[2009, c. 654, §7 (AMD) .]*

In 2006, the US Supreme Court in *SD Warren v. Maine Board of Environmental Protection* discussed and ruled on the issues and definitions of discharge and pollutants. [*S. D. Warren Co. v. Me. Bd. of Env'tl. Prot.*, 126 S. Ct. 1843 (2006)]. Here they were dealing only with the movement of water through a dam and still found this to be a discharge of a pollutant:

Congress passed the Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the Nation's waters,. 33 U. S. C. §1251(a); see also PUD No. 1, 511 U. S., at 714, the national goal being to achieve water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water. 33 U. S. C. §1251(a)(2). To do this, the Act does not stop at controlling the addition of pollutants, but deals with pollution generally, see §1251(b), which Congress defined to mean the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water. §1362(19).

There is simply no question then that dredging up sediment from one place, moving it to and discharging it in another (*man-made or man-induced alteration of the chemical, physical and, biological integrity of water*) easily fits the definition making such an event subject to 401 water quality certification and a MEPDES permit.

Even if the disposal area waters were down-graded to Class SB, disposal of dredging spoils would not be permitted. It also appears unlikely that even dredging should be a permitted activity in SB waters:

2. Class SB waters. *Class SB waters shall be the 2nd highest classification.*

*A. Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. **The habitat must be characterized as unimpaired.*** [2003, c.227, §7 (AMD).]

B. The dissolved oxygen content of Class SB waters must be not less than 85% of saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration. [2005, c. 409, §3 (AMD).]

C. Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website. [2007, c.291, §7 (AMD).]
[2007, c.291, §7 (AMD).]

Ms. Kelly has provided ample evidence of the smothering effect that settled fines from past discharges creates. It is quite likely this as an adverse effect on the resident shellfish and vegetation communities. She has also pointed out gaps in testing. There has been no discussion by the Corps of their sediment data, nor findings made available to the public in time for analyses.

It appears USACOE has been in violation of 401 permits during past dredging and disposal episodes [at least as long as the reach has been classified SA]. Requirements for discharge of spoils cannot be met under SA or SB conditions. Permits must be denied for this site.

2. Proposed downgrade in classification-Maine and Clean Water Act issues.

Anti-degradation language under both Maine law [38 MRSA §464] and the Clean Water Act prohibits the downgrade of a waterbody classification without first conducting a Use Attainability Analysis [UAA], submitting the UAA to the EPA for review and receiving approval for the proposed reclassification from the federal agency. We have been told there will be a proposed downgrade to SB of the Phippsburg river section now SA contained in an upcoming Omnibus bill before the legislature. Without at least a 45 day public notice [the federal standard], the legislature simply cannot reclassify a waterbody. Reclassification is also governed by 38 MRSA §464:

2. Procedures for reclassification. Reclassification of state waters shall be governed by the following provisions.

A. Upon petition by any person or on its own motion, the board may initiate, following public notice, and the commissioner shall conduct classification studies and investigations. Information collected during these studies and investigations must be made available to the public in an expeditious manner. After consultation with other state agencies and, where appropriate, individuals, citizen groups, industries, municipalities and federal and interstate water pollution control agencies, the board may propose changes in water classification. [1989, c. 890, Pt. A, §40 (AFF) ; 1989, c. 890, Pt. B, §54 (AMD) .]

B. The board shall hold public hearings in the affected area, or reasonably adjacent to the affected area, for the purposes of presenting to all interested persons the proposed classification for each particular water body and obtaining public input. [1989, c. 890, Pt. A, §40 (AFF) ; 1989, c. 890, Pt. B, §54 (AMD) .]

C. The board may recommend changes in classification it deems necessary to the Legislature. [1985, c. 698, §15 (NEW) .]

*D. The Legislature shall have sole authority to make any changes in the classification of the waters of the State. [1985, c. 698, §15 (NEW) .]
[1989, c. 890, Pt. A, §40 (AFF) ; 1989, c. 890, Pt. B, §54 (AMD) .]*

2-A. Removal of designated uses; creation of subcategories of designated uses.
Removal of designated uses and creation of subcategories of designated uses are governed by the provisions of this subsection and 40 Code of Federal Regulations, Part 131, as amended.

A. The board must conduct a use attainability analysis:

(1) Prior to proposing to the Legislature a designated use of a specific water body that does not include the uses specified in the Federal Water Pollution Control Act, Public Law 92-500, Section 101(a)(2), as amended; or

(2) Prior to proposing to the Legislature the removal of a designated use or the adoption of a subcategory of such a designated use that requires less stringent criteria. [1993, c. 344, §1 (NEW) .]

Until such time as the EPA has approved a UAA proposing a lower classification, this reach of water shall remain SA and discharge of pollutants are prohibited.

3. 40 CFR Section 404 (b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.

§404 specifically governs disposal specifications for dredged material. Special aquatic sites include wetlands, mudflats and vegetated shallows. While discharges of spoils are planned for deep water, tidal oscillations move discharges up and downstream and distribute discharged sediments laterally across the river effecting special aquatic sites. No discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem.

40 CFR § 230.10 Section 404 (b)(1) Restrictions on discharge.

Note: Because other laws may apply to particular discharges and because the Corps of Engineers or State 404 agency may have additional procedural and substantive requirements, a discharge complying with the requirement of these Guidelines will not automatically receive a permit.

Although all requirements in §230.10 must be met, the compliance evaluation procedures will vary to reflect the seriousness of the potential for adverse impacts on the aquatic ecosystems posed by specific dredged or fill material discharge activities.

(a) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

(1) For the purpose of this requirement, practicable alternatives include, but are not limited to:

(i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters;

(ii) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters;

(2) An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

(3) Where the activity associated with a discharge which is proposed for a special aquatic site (as defined in subpart E) does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not “water

dependent”), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

(4) For actions subject to NEPA, where the Corps of Engineers is the permitting agency, the analysis of alternatives required for NEPA environmental documents, including supplemental Corps NEPA documents, will in most cases provide the information for the evaluation of alternatives under these Guidelines. On occasion, these NEPA documents may address a broader range of alternatives than required to be considered under this paragraph or may not have considered the alternatives in sufficient detail to respond to the requirements of these Guidelines. In the latter case, it may be necessary to supplement these NEPA documents with this additional information.

(5) To the extent that practicable alternatives have been identified and evaluated under a Coastal Zone Management program, a section 208 program, or other planning process, such evaluation shall be considered by the permitting authority as part of the consideration of alternatives under the Guidelines. Where such evaluation is less complete than that contemplated under this subsection, it must be supplemented accordingly.

(b) No discharge of dredged or fill material shall be permitted if it:

(1) Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard;

(2) Violates any applicable toxic effluent standard or prohibition under section 307 of the Act;

(3) Jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended. If an exemption has been granted by the Endangered Species Committee, the terms of such exemption shall apply in lieu of this subparagraph;

(4) Violates any requirement imposed by the Secretary of Commerce to protect any marine sanctuary designated under title III of the Marine Protection, Research, and Sanctuaries Act of 1972.

(c) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Findings of significant degradation related to the proposed discharge shall be based upon appropriate factual determinations, evaluations, and tests

required by subparts B and G, after consideration of subparts C through F, with special emphasis on the persistence and permanence of the effects outlined in those subparts. Under these Guidelines, effects contributing to significant degradation considered individually or collectively, include:

(1) Significantly adverse effects of the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites.

(2) Significantly adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical, and chemical processes;

(3) Significantly adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include, but are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy; or

(4) Significantly adverse effects of discharge of pollutants on recreational, aesthetic, and economic values.

(d) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. Subpart H identifies such possible steps.

*q-1) **Special aquatic sites means those sites identified in subpart E.** They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. (See Sec. 230.10(a)(3))40 CFR Part 230 Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material*

Subpart E--Potential Impacts on Special Aquatic Sites

Note: The impacts described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in subpart B.

Sec. 230.41 Wetlands.

(a)(1) Wetlands consist of areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

(2) Where wetlands are adjacent to open water, they generally constitute the transition

to upland. The margin between wetland and open water can best be established by specialists familiar with the local environment, particularly where emergent vegetation merges with submerged vegetation over a broad area in such places as the lateral margins of open water, headwaters, rainwater catch basins, and groundwater seeps. The landward margin of wetlands also can best be identified by specialists familiar with the local environment when vegetation from the two regions merges over a broad area.

(3) Wetland vegetation consists of plants that require saturated soils to survive (obligate wetland plants) as well as plants, including certain trees, that gain a competitive advantage over others because they can tolerate prolonged wet soil conditions and their competitors cannot. In addition to plant populations and communities, wetlands are delimited by hydrological and physical characteristics of the environment. These characteristics should be considered when information about them is needed to supplement information available about vegetation, or where wetland vegetation has been removed or is dormant.

(b) Possible loss of values: The discharge of dredged or fill material in wetlands is likely to damage or destroy habitat and adversely affect the biological productivity of wetlands ecosystems by smothering, by dewatering, by permanently flooding, or by altering substrate elevation or periodicity of water movement. The addition of dredged or fill material may destroy wetland vegetation or result in advancement of succession to dry land species. It may reduce or eliminate nutrient exchange by a reduction of the system's productivity, or by altering current patterns and velocities. Disruption or elimination of the wetland system can degrade water quality by obstructing circulation patterns that flush large expanses of wetland systems, by interfering with the filtration function of wetlands, or by changing the aquifer recharge capability of a wetland. Discharges can also change the wetland habitat value for fish and wildlife as discussed in subpart D. When disruptions in flow and circulation patterns occur, apparently minor loss of wetland acreage may result in major losses through secondary impacts. Discharging fill material in wetlands as part of municipal, industrial or recreational development may modify the capacity of wetlands to retain and store floodwaters and to serve as a buffer zone shielding upland areas from wave actions, storm damage and erosion.

Sec. 230.42 Mud flats.

(a) Mud flats are broad flat areas along the sea coast and in coastal rivers to the head of tidal influence and in inland lakes, ponds, and riverine systems. When mud flats are inundated, wind and wave action may resuspend bottom sediments. Coastal mud flats are exposed at extremely low tides and inundated at high tides with the water table at or near the surface of the substrate. The substrate of mud flats contains organic material and particles smaller in size than sand. They are either unvegetated or vegetated only by algal mats.

(b) Possible loss of values: The discharge of dredged or fill material can cause changes in water circulation patterns which may permanently flood or dewater the mud flat or disrupt periodic inundation, resulting in an increase in the rate of erosion or accretion. Such changes can deplete or eliminate mud flat biota, foraging areas, and nursery areas.

Changes in inundation patterns can affect the chemical and biological exchange and decomposition process occurring on the mud flat and change the deposition of suspended material affecting the productivity of the area. Changes may reduce the mud flat's capacity to dissipate storm surge runoff.

Sec. 230.43 Vegetated shallows.

(a) Vegetated shallows are permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as turtle grass and eelgrass in estuarine or marine systems as well as a number of freshwater species in rivers and lakes.

(b) Possible loss of values: The discharge of dredged or fill material can smother vegetation and benthic organisms. It may also create unsuitable conditions for their continued vigor by:

- (1) Changing water circulation patterns;*
- (2) releasing nutrients that increase undesirable algal populations;*
- (3) releasing chemicals that adversely affect plants and animals;*
- (4) increasing turbidity levels, thereby reducing light penetration and hence photosynthesis; and*
- (5) changing the capacity of a vegetated shallow to stabilize bottom materials and decrease channel shoaling. The discharge of dredged or fill material may reduce the value of vegetated shallows as nesting, spawning, nursery, cover, and forage areas, as well as their value in protecting shorelines from erosion and wave actions. It may also encourage the growth of nuisance vegetation.*

Alternative disposal sites with less adverse environmental effect than a restricted tidal riverine reach almost certainly include both upland and ocean sites. USACOE has provided no analyses of these options. Unless the proposed site can be shown to be more environmentally benign than alternatives, no discharging can be permitted here.

4. Endangered Species and Marine Mammal Protection Acts.

The proposed area is necessary habitat for shortnose sturgeon, Atlantic salmon and harbor seals. The fish are both listed as endangered species and seals are protected under the Marine Mammal Protection Act. Summer is when all of these species are most active in the river and at highest risk of harassment or harm both considered "take."

Endangered shortnose sturgeon reside primarily within the river system and they frequently transit the proposed project area, They tend to spawn near the head of tide on the Androscoggin River, winter off the mouth of the Eastern River and during the summer often move up and down the Kennebec River from Merrymeeting Bay to the

Sagadahoc Bay area just east of the Kennebec mouth. (Squiers, T., 1999. Research Report on the Shortnose and Atlantic Sturgeon. Maine Department of Marine Resources).

Atlantic sturgeon currently a candidate for ESA listing are well-known to use the river in the summer and are frequently seen jumping.

The Kennebec/Androscoggin drainage once was home to the greatest Atlantic salmon population in the northeast. Salmon traveled up the Kennebec above the 16 foot Caratunk Falls more than 100 miles from the sea and on the Androscoggin 80 miles from the sea to Rumford Falls [Atkins, 1867]. These majestic fish survived the river's damming hanging on and spawning in tributaries below Augusta including Bond Brook and Togus Stream. With the dam removed, they are back in the main stem spawning and attempting to travel further upriver. In 2010 only 4 salmon were trapped at Lockwood dam, first at the Kennebec and 10 were passed on the Androscoggin at Brunswick. Each fish killed or weakened at this point is critical to survival of the population. Adult salmon are returning to the river in the later summer. Alewives are out-migrating in mid-late summer. Atlantic sturgeon are leaving the river in late summer.

1996 Amendments [PL 104-267] to the Magnuson-Stevens Fishery Conservation and Management Act [MSA] [16 U.S.C. §1801 et seq. [1998], define Essential Fish Habitat [EFH] as "waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." EFH has been designated for over a dozen federally managed species, including Atlantic salmon, which utilize the Kennebec-Sheepscoot-Androscoggin-Merrymeeting Bay estuary system. FERC [*and any other agency*] is required to consult with NMFS on any action or proposed action FERC [*or other agency*] takes that funds, permits or undertakes which may adversely affect the EFH [NMFS, 2006. FERC Project 12666-000 Comments. National Marine Fisheries Service. National Oceanic and Atmospheric Administration, US Department of Commerce].

Millions of diadromous fish use this stretch of river:

NOAA trust species in Maine include anadromous and catadromous species such as Atlantic salmon, alewife, American shad, blueback herring, Atlantic herring, sea-run brown trout, rainbow smelt, striped bass, American eel, sea lamprey, Atlantic sturgeon, and the federally endangered shortnose sturgeon. Some estuarine and marine fish found in Maine are: menhaden, banded killifish, mummichug, 3-spine stickleback, haddock, Atlantic tomcod, bluefish, and 9-spine stickleback. [NOAA, CRC ME. Fact Sheet- NOAA, Coastal Resource Consideration Program, Maine Fact Sheet [on the Web at: http://response.restoration.noaa.gov/book_shelf/475_crc_state_ME.pdf]"

*The NOAA CRC program works to protect and restore natural resources throughout Maine. **However, the Androscoggin and Kennebec Rivers, as well as Merrymeeting Bay where the two rivers meet, are of special concern to NOAA. This is one of the most productive estuaries in Maine, providing important habitat for NOAA trust resources.** The shortnose sturgeon, a federally endangered species, uses the Androscoggin River for spawning, nursery, and adult habitat. [NOAA, Ibid]"*

There is a little studied but very prominent harbor seal population in this part of the river. A favorite haul out is a few hundred yards below the Chops on ledges just above Lines Island. As many as fourteen seals have been observed here at once. Prior to the Edwards Dam removal seals traveled as far north as Augusta, 30 miles. Now with the dam gone, seals have been observed at Waterville about 48 miles above the Chops. Still, the vicinity of Fiddlers Reach with its mixing of salt and freshwater and its currents and whirlpools appears to also be well populated no doubt for its qualities as a food resource.



Both dredging and disposal with their increased turbidity are likely to create a take of endangered and or threatened or marine mammal species in the river.

National Marine Fisheries Service/NOAA, Commerce 50 CFR § 216.3

Take means to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal. This includes, without limitation, any of the following: The collection of dead animals, or parts thereof; the restraint or detention of a marine mammal, no matter how temporary; tagging a marine mammal; the negligent or intentional operation of an aircraft or vessel, or the any other negligent or intentional act which results in disturbing or molesting a marine mammal; and feeding or attempting to feed a marine mammal in the wild.

Level A Harassment means any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild.

Level B Harassment means any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering but which does not have the potential to injure a marine mammal or marine mammal stock in the wild.

In order to proceed with the proposed activities, USACE will need to consult with National Marine Fisheries Service (NMFS or NOAA Fisheries) and apply for Incidental Take Statements or Incidental Take Permits for the respective species. Risk will be substantially higher in the summer than during the winter months.

All in all, the USACE has much work to do before their project can begin. Under the current proposal there appears no legal way for the project to proceed as proposed. The Corps would do well to further investigate alternative means of dredging with less impact [as suggested by Ms. Kelly] as well as offshore or upland disposal options. The Navy might do well to investigate alternative pilotage solutions if that would truly make a difference as has been suggested. In our opinion MDEP cannot permit this project as it stands.

Thank you for your consideration.

Sincerely,



Ed Friedman, Chair

C.C.
Dot Kelly
Steve Hinchman, Esq.
Dave Nicholas, Esq.
Roger Fleming, Esq., Earthjustice
Mary Colligan, NMFS
Bill Kavanaugh, USACE
Doug Watts, FOKS
Steve Silva, EPA
Stew Fefer, USFWS

Friends of Merrymeeting Bay

P.O. Box 233

Richmond, ME 04357

207-666-3372

www.friendsofmerrymeetingbay.org

March 26, 2011

Comments via E-mail

Bill Kavanaugh, Project Manager
US Army Corps of Engineers
Programs/Project Management Division
696 Virginia Rd.
Concord, MA 01742
(978) 318-8328
William.M.Kavanaugh@usace.army.mil

RE: US Army Corps of Engineers NRPA/CWA Sections 401 and 404 permit application for Maintenance Dredging of the Kennebec South of Bath, Maine with disposal in the Kennebec Narrows in 95-100 feet of water north of Bluff Head and Dredging in the Lower River with Disposal at Jackknife Ledge.

Dear Bill,

Please accept these Friends of Merrymeeting Bay (FOMB) comments regarding the USACE dredge/disposal project referenced above. We also incorporate by reference those comments submitted or that will be submitted by FOMB member Dot Kelly or on her behalf and those comments submitted by the Town of Phippsburg Shellfish Commission. FOMB respectfully requests intervenor status in this proceeding.

Friends of Merrymeeting Bay is a membership based 501(c)(3) organization formed in 1975 whose mission is to preserve, protect and enhance the unique ecosystems of Merrymeeting Bay. FOMB accomplishes this mission through research, advocacy, education and land protection. FOMB members use the proposed project area for recreational and commercial fishing purposes, navigation, scientific study, education and work actively to protect valuable habitat in and near the project area.

The Bay is the only body of water in Maine providing spawning and nursery habitat to all twelve diadromous fish species found in the Gulf of Maine. Some of these, shortnose sturgeon and Atlantic salmon are endangered species while others, i.e. Atlantic sturgeon, rainbow smelt and alewives are threatened or species of concern. Merrymeeting Bay is the largest staging area north of Chesapeake Bay for migratory waterfowl and is home to about a dozen rare plant species living in the inter-tidal zone. The Bay has the second highest concentration of bald eagles in the state. Our organization and members are

clearly affected by the proposed project and have a direct and substantial stake in the outcome. The proposed project area is not far downstream of Merrymeeting Bay and is part of the Kennebec River transit corridor through which every fish and marine mammal heading to or from the Bay and tributary points upstream must pass.

Ms. Kelly provides great detail in a number of her comments particularly around quantitative and qualitative characteristics of spoils and how they effect the lower Kennebec. The Phippsburg Shellfish Commission primarily addresses economic impact on shellfish harvesters from closures and how spoils from both disposal areas affect nearby harvest areas and erosion zones. We will limit our current comments to:

1. USACE violations of state water quality statute-past and proposed.
2. Proposed downgrade in classification-Maine and Clean Water Act issues.
3. 40 CFR Section 404 (b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.
4. Endangered Species and Marine Mammal Protection Acts.

We reserve the right to present in future proceedings, discussion and evidence covered by of any or all of the following **PERTINENT LAWS, REGULATIONS, AND DIRECTIVES:**

Clean Water Act, as amended (33 U.S.C. 1251 et. seq.)
Code of Federal Regulation, Title 40 Part 230 Section 404 (b)(1)
Marine Protection Research and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.)
Code of Federal Regulation, Title 33, Parts 335 through 338
National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347)
Fish and Wildlife Coordination Act (16 U.S.C. 661-667e)
Fish and Wildlife Act of 1956 (16 U.S.C. 742a, et. seq.)
Migratory Marine Game-Fish Act (16 U.S.C. 760c-760g)
Coastal Zone Management Act of 1972 (16 U.S.C. 1456)
National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.)
Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)
Marine Mammal Protection act of 1972, as amended (16 U.S.C. 1361 et seq.)
Clean Air Act, as amended (42 U.S.C. 7401 et. seq.)
Estuary Protection Act (16 U.S.C. 1221 et. seq.)
Federal Water Project Recreation Act, as amended (16 U.S.C. 460L-12 et. seq.)
Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 460L et. seq.)
Magnuson-Stevens Fishery Conservation and Management Act as amended by the
Sustainable Fisheries Act of 1996 (16 U.S.C. 1801 et seq.)
Water Resources Development Acts
Executive Order 11988, Floodplain Management, 24 May 1977
Executive Order 11990, Protection of Wetlands, 24 May 1977
Executive Order 12898, Federal Actions to Address Environmental Justice in
Minority Populations and Low Income Populations, 11 February 1994

1. USACE violations of state water quality statute-past and proposed.

Title 38, §469 of Maine Statute classifies the Phippsburg waters of this proposed disposal site as SA. The site is part of an SA corridor encompassing the entire Kennebec within Phippsburg [(1) Tidal waters east of longitude 69°-50'-05" W. and west of longitude 69°-47'-00"W. – Class SA.] and Georgetown. The dredging site north of Doubling Point is classified as SB while the dredge site near Popham Beach also is in SA waters.

The Bluff Head area of possible spoils discharge is SA. As defined in 38MRSA §465-B, there can be no direct discharge of pollutants to Class SA waters in this situation. If the act of dredging in the Popham area also creates a man-induced alteration of the chemical, physical, biological, and radiological integrity of water, than this activity may also be prohibited in these waters.

1. Class SA waters. Class SA shall be the highest classification and shall be applied to waters which are outstanding natural resources and which should be preserved because of their ecological, social, scenic, economic or recreational importance.

A. Class SA waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as free-flowing and natural. [2003, c.227, §6 (AMD) .]

B. The estuarine and marine life, dissolved oxygen and bacteria content of Class SA waters shall be as naturally occurs. [1985, c.698, §15 (NEW) .]

C. There may be no direct discharge of pollutants to Class SA waters, except for the following:

(1) Storm water discharges that are in compliance with state and local requirements;

(2) Discharges of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety using materials and methods that provide for protection of nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this subparagraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website; and

*(3) An overboard discharge licensed prior to January 1, 1986 if no practicable alternative exists. [2009, c.654, §7 (AMD) .]
[2009, c.654, §7 (AMD) .]*

In 2006, the US Supreme Court in *SD Warren v. Maine Board of Environmental Protection* discussed and ruled on the issues and definitions of discharge and pollutants. [*S. D. Warren Co. v. Me. Bd. of Env'tl. Prot.*, 126 S. Ct. 1843 (2006)]. Here they were dealing only with the movement of water through a dam and still found this to be a discharge of a pollutant:

Congress passed the Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the Nation's waters,. 33 U. S. C. §1251(a); see also PUD No. 1, 511 U. S., at 714, the national goal being to achieve water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water. 33 U. S. C. §1251(a)(2). To do this, the Act does not stop at controlling the addition of pollutants, but deals with pollution generally, see

§1251(b), which Congress defined to mean the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water. §1362(19).

There is simply no question then that dredging up sediment from one place, moving it to and discharging it in another (*man-made or man-induced alteration of the chemical, physical and, biological integrity of water*) easily fits the definition of a pollutant, making such an event subject to 401 water quality certification and a MEPDES permit. The Corps cannot proceed with its planned activity in SA water without a §401 water quality certification from MDEP. DEP cannot issue a the 401 for a discharge into SA waters.

Even if the disposal area waters were down-graded to Class SB, disposal of dredging spoils would not be permitted. It also appears unlikely that even dredging should be a permitted activity in SB waters:

2. Class SB waters. *Class SB waters shall be the 2nd highest classification.*

*A. Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. **The habitat must be characterized as unimpaired.** [2003, c.227, §7 (AMD).]*

B. The dissolved oxygen content of Class SB waters must be not less than 85% of saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration. [2005, c. 409, §3 (AMD) .]

C. Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to estuarine and marine life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this paragraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website. [2007, c.291, §7 (AMD) .]
[2007, c.291, §7 (AMD) .]

Ms. Kelly has provided ample evidence of the smothering effect that settled fines from past discharges creates. It is quite likely this has an adverse effect on the resident shellfish

and vegetation communities. She has also pointed out gaps in testing. While sediment cores taken by the Corps in the proposed Doubling Pt. dredge site indicate a high percentage of coarse-grained sand, discharges from past dredge events originating at the same site indicate a different result with significant discharges of fines. There has been limited discussion by the Corps of their sediment data.

It appears USACOE has been in violation of state water quality classification restrictions. That past 401 certifications may have been issued in error during past dredging and disposal episodes [at least as long as the reach has been classified SA] does not erase the violations. Requirements for discharge of spoils cannot be met under SA or SB conditions. Permits must be denied for this site.

2. Proposed downgrade in classification-Maine and Clean Water Act issues.

Anti-degradation language under both Maine law [38 MRSA §464] and the Clean Water Act prohibits the downgrade of a waterbody classification without first conducting a Use Attainability Analysis [UAA], submitting the UAA to the EPA for review and receiving approval for the proposed reclassification from the federal agency. We have been told there will be a proposed downgrade to SB of the Class SA Phippsburg river section contained in an upcoming Omnibus bill before the legislature. Without at least a 45 day public notice [the federal standard], completion and approval by EPA of a UAA, the legislature simply cannot reclassify a waterbody. Assuming the Maine legislature proceeds with disregard for federal law, and if the Corps proceeds with their proposed activities prior to EPA approval of the proposed downgrade, the Corps too exposes itself to litigation in federal court for violation of the Clean Water Act. Reclassification is governed by 38 MRSA §464:

2. Procedures for reclassification. Reclassification of state waters shall be governed by the following provisions.

A. Upon petition by any person or on its own motion, the board may initiate, following public notice, and the commissioner shall conduct classification studies and investigations. Information collected during these studies and investigations must be made available to the public in an expeditious manner. After consultation with other state agencies and, where appropriate, individuals, citizen groups, industries, municipalities and federal and interstate water pollution control agencies, the board may propose changes in water classification. [1989, c. 890, Pt. A, §40 (AFF) ; 1989, c. 890, Pt. B, §54 (AMD) .]

B. The board shall hold public hearings in the affected area, or reasonably adjacent to the affected area, for the purposes of presenting to all interested persons the proposed classification for each particular water body and obtaining public input. [1989, c. 890, Pt. A, §40 (AFF) ; 1989, c. 890, Pt. B, §54 (AMD) .]

C. The board may recommend changes in classification it deems necessary to the Legislature. [1985, c. 698, §15 (NEW) .]

D. The Legislature shall have sole authority to make any changes in the classification of the waters of the State. [1985, c. 698, §15 (NEW) .] [1989, c. 890, Pt. A, §40 (AFF) ; 1989, c. 890, Pt. B, §54 (AMD) .]

2-A. Removal of designated uses; creation of subcategories of designated uses.
Removal of designated uses and creation of subcategories of designated uses are governed by the provisions of this subsection and 40 Code of Federal Regulations, Part 131, as amended.

A. The board must conduct a use attainability analysis:

(1) Prior to proposing to the Legislature a designated use of a specific water body that does not include the uses specified in the Federal Water Pollution Control Act, Public Law 92-500, Section 101(a)(2), as amended; or

(2) Prior to proposing to the Legislature the removal of a designated use or the adoption of a subcategory of such a designated use that requires less stringent criteria. [1993, c. 344, §1 (NEW) .]

Until such time as the EPA has approved a UAA proposing a lower classification, this reach of water shall remain SA and discharge of pollutants are prohibited. Any discharge will be in violation of the Clean Water Act. So too may dredging at the Popham site be in violation of the Act.

3. 40 CFR Section 404 (b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.

§404 specifically governs disposal specifications for dredged material. Special aquatic sites include wetlands, mudflats and vegetated shallows. While discharges of spoils are planned for deep water, tidal oscillations move discharges up and downstream [making those “sand waves”] and also distribute discharged sediments laterally across the river effecting special aquatic sites. No discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem.

40 CFR § 230.10 Section 404 (b)(1) Restrictions on discharge.

Note: Because other laws may apply to particular discharges and because the Corps of Engineers or State 404 agency may have additional procedural and substantive requirements, a discharge complying with the requirement of these Guidelines will not automatically receive a permit.

Although all requirements in §230.10 must be met, the compliance evaluation procedures will vary to reflect the seriousness of the potential for adverse impacts on the aquatic ecosystems posed by specific dredged or fill material discharge activities.

(a) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

*(1) For the purpose of this requirement, **practicable alternatives include**, but are not limited to:*

(i) Activities which do not involve a discharge of dredged or fill material into the waters of the United States or ocean waters;

(ii) Discharges of dredged or fill material at other locations in waters of the United States or ocean waters;

(2) An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

(3) Where the activity associated with a discharge which is proposed for a special aquatic site (as defined in subpart E) does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (i.e., is not “water dependent”), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

(4) For actions subject to NEPA, where the Corps of Engineers is the permitting agency, the analysis of alternatives required for NEPA environmental documents, including supplemental Corps NEPA documents, will in most cases provide the information for the evaluation of alternatives under these Guidelines. On occasion, these NEPA documents may address a broader range of alternatives than required to be considered under this paragraph or may not have considered the alternatives in sufficient detail to respond to the requirements of these Guidelines. In the latter case, it may be necessary to supplement these NEPA documents with this additional information.

(5) To the extent that practicable alternatives have been identified and evaluated under a Coastal Zone Management program, a section 208 program, or other planning process, such evaluation shall be considered by the permitting authority as part of the consideration of alternatives under the Guidelines. Where such evaluation is less complete than that contemplated under this subsection, it must be supplemented accordingly.

(b) No discharge of dredged or fill material shall be permitted if it:

(1) Causes or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard;

(2) Violates any applicable toxic effluent standard or prohibition under section 307 of the Act;

(3) Jeopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act of 1973, as amended, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, as appropriate, to be a critical habitat under the Endangered Species Act of 1973, as amended. If an exemption has been granted by the Endangered Species Committee, the terms of such exemption shall apply in lieu of this subparagraph;

(4) Violates any requirement imposed by the Secretary of Commerce to protect any marine sanctuary designated under title III of the Marine Protection, Research, and Sanctuaries Act of 1972.

(c) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Findings of significant degradation related to the proposed discharge shall be based upon appropriate factual determinations, evaluations, and tests required by subparts B and G, after consideration of subparts C through F, with special emphasis on the persistence and permanence of the effects outlined in those subparts. Under these Guidelines, effects contributing to significant degradation considered individually or collectively, include:

(1) Significantly adverse effects of the discharge of pollutants on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites.

(2) Significantly adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical, and chemical processes;

(3) Significantly adverse effects of the discharge of pollutants on aquatic ecosystem diversity, productivity, and stability. Such effects may include, but are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy; or

(4) Significantly adverse effects of discharge of pollutants on recreational, aesthetic, and economic values.

(d) Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. Subpart H identifies such possible steps.

q-1) Special aquatic sites means those sites identified in subpart E. They are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. (See Sec. 230.10(a)(3))40 CFR Part 230 Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material

Subpart E--Potential Impacts on Special Aquatic Sites [listed below]

Note: The impacts described in this subpart should be considered in making the factual determinations and the findings of compliance or non-compliance in subpart B.

Sec. 230.41 Wetlands.

(a)(1) Wetlands consist of areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

(2) Where wetlands are adjacent to open water, they generally constitute the transition to upland. The margin between wetland and open water can best be established by specialists familiar with the local environment, particularly where emergent vegetation merges with submerged vegetation over a broad area in such places as the lateral margins of open water, headwaters, rainwater catch basins, and groundwater seeps. The landward margin of wetlands also can best be identified by specialists familiar with the local environment when vegetation from the two regions merges over a broad area.

(3) Wetland vegetation consists of plants that require saturated soils to survive (obligate wetland plants) as well as plants, including certain trees, that gain a competitive advantage over others because they can tolerate prolonged wet soil conditions and their competitors cannot. In addition to plant populations and communities, wetlands are delimited by hydrological and physical characteristics of the environment. These characteristics should be considered when information about them is needed to supplement information available about vegetation, or where wetland vegetation has been removed or is dormant.

(b) Possible loss of values: The discharge of dredged or fill material in wetlands is likely to damage or destroy habitat and adversely affect the biological productivity of wetlands ecosystems by smothering, by dewatering, by permanently flooding, or by altering substrate elevation or periodicity of water movement. The addition of dredged or fill material may destroy wetland vegetation or result in advancement of succession to dry land species. It may reduce or eliminate nutrient exchange by a reduction of the system's productivity, or by altering current patterns and velocities. Disruption or elimination of

the wetland system can degrade water quality by obstructing circulation patterns that flush large expanses of wetland systems, by interfering with the filtration function of wetlands, or by changing the aquifer recharge capability of a wetland. Discharges can also change the wetland habitat value for fish and wildlife as discussed in subpart D. When disruptions in flow and circulation patterns occur, apparently minor loss of wetland acreage may result in major losses through secondary impacts. Discharging fill material in wetlands as part of municipal, industrial or recreational development may modify the capacity of wetlands to retain and store floodwaters and to serve as a buffer zone shielding upland areas from wave actions, storm damage and erosion.

Sec. 230.42 Mud flats.

(a) Mud flats are broad flat areas along the sea coast and in coastal rivers to the head of tidal influence and in inland lakes, ponds, and riverine systems. When mud flats are inundated, wind and wave action may resuspend bottom sediments. Coastal mud flats are exposed at extremely low tides and inundated at high tides with the water table at or near the surface of the substrate. The substrate of mud flats contains organic material and particles smaller in size than sand. They are either unvegetated or vegetated only by algal mats.

(b) Possible loss of values: The discharge of dredged or fill material can cause changes in water circulation patterns which may permanently flood or dewater the mud flat or disrupt periodic inundation, resulting in an increase in the rate of erosion or accretion. Such changes can deplete or eliminate mud flat biota, foraging areas, and nursery areas. Changes in inundation patterns can affect the chemical and biological exchange and decomposition process occurring on the mud flat and change the deposition of suspended material affecting the productivity of the area. Changes may reduce the mud flat's capacity to dissipate storm surge runoff.

Sec. 230.43 Vegetated shallows.

(a) Vegetated shallows are permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as turtle grass and eelgrass in estuarine or marine systems as well as a number of freshwater species in rivers and lakes.

(b) Possible loss of values: The discharge of dredged or fill material can smother vegetation and benthic organisms. It may also create unsuitable conditions for their continued vigor by:

- (1) Changing water circulation patterns;*
- (2) releasing nutrients that increase undesirable algal populations;*
- (3) releasing chemicals that adversely affect plants and animals;*
- (4) increasing turbidity levels, thereby reducing light penetration and hence photosynthesis; and*
- (5) changing the capacity of a vegetated shallow to stabilize bottom materials and decrease channel shoaling. The discharge of dredged or fill material may reduce the*

value of vegetated shallows as nesting, spawning, nursery, cover, and forage areas, as well as their value in protecting shorelines from erosion and wave actions. It may also encourage the growth of nuisance vegetation.

Alternative disposal sites with less adverse environmental effect than a restricted tidal riverine reach almost certainly include both upland and ocean sites. USACOE has provided no analyses of these options. Unless the proposed site can be shown to be more environmentally benign than alternatives, no discharging can be permitted here.

4. Endangered Species and Marine Mammal Protection Acts.

The proposed area is Essential Fish Habitat [EFH] for a plethora of migratory and resident fish species including the Endangered Species Act listed shortnose sturgeon and Atlantic salmon. The lower Kennebec also contains an active seal population most common of which are harbor seals. Seals are protected under the Marine Mammal Protection Act. Summer is when all of these species are most active in the river and at highest risk of harassment or harm, both considered “take.” Previous dredging episodes late in the year have resulted in some incidental take of shortnose sturgeon. Incidental take, if once again permitted by NMFS can be expected to be greater at this time of year.

Endangered shortnose sturgeon reside primarily within the river system and they frequently transit the proposed project area, They tend to spawn near the head of tide on the Androscoggin River, winter off the mouth of the Eastern River and during the summer often move up and down the Kennebec River from Merrymeeting Bay to the Sagadahoc Bay area just east of the Kennebec mouth. (*Squiers, T., 1999. Research Report on the Shortnose and Atlantic Sturgeon. Maine Department of Marine Resources*).

Atlantic sturgeon, currently a candidate for ESA listing are well-known to use the river in the summer and are frequently seen jumping.

The Kennebec/Androscoggin drainage once was home to the greatest Atlantic salmon population in the northeast. Salmon traveled up the Kennebec above the 16 foot Caratunk Falls more than 100 miles from the sea and on the Androscoggin 80 miles from the sea to Rumford Falls [*Atkins, 1867*]. These majestic fish survived the river’s damming hanging on and spawning in tributaries below Augusta including Bond Brook and Togus Stream. With the dam removed, they are back in the main stem spawning and attempting to travel further upriver. In 2010 only 4 salmon were trapped at Lockwood dam, first dam on the Kennebec and 10 were passed at the Brunswick fishway on the Androscoggin. Each fish killed or weakened at this point is critical to survival of the population. Adult salmon are returning to the river in the later summer. Alewives are out-migrating in mid-late summer. Atlantic sturgeon are leaving the river in late summer.

1996 Amendments [PL 104-267] to the Magnuson-Stevens Fishery Conservation and

Management Act [MSA] [16 U.S.C. §1801 et seq. [1998], define Essential Fish Habitat as “waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.” EFH has been designated for over a dozen federally managed species, including Atlantic salmon, which utilize the Kennebec-Sheepscoot-Androscoggin-Merrymeeting Bay estuary system. The Federal Energy Regulatory Commission [FERC] [*and any other agency*] is required to consult with NMFS on any action or proposed action FERC [*or other agency*] takes that funds, permits or undertakes and which may adversely affect the EFH [NMFS, 2006. FERC Project 12666-000 Comments. National Marine Fisheries Service. National Oceanic and Atmospheric Administration, US Department of Commerce].

Millions of diadromous fish use this stretch of river particularly from late spring through mid fall which is one reason why past dredging efforts have been limited to winter months.

NOAA trust species in Maine include anadromous and catadromous species such as Atlantic salmon, alewife, American shad, blueback herring, Atlantic herring, sea-run brown trout, rainbow smelt, striped bass, American eel, sea lamprey, Atlantic sturgeon, and the federally endangered shortnose sturgeon. Some estuarine and marine fish found in Maine are: menhaden, banded killifish, mummichug, 3-spine stickleback, haddock, Atlantic tomcod, bluefish, and 9-spine stickleback. [NOAA, CRC ME. Fact Sheet- NOAA, Coastal Resource Consideration Program, Maine Fact Sheet [on the Web at: http://response.restoration.noaa.gov/book_shelf/475_crc_state_ME.pdf]”

*The NOAA CRC program works to protect and restore natural resources throughout Maine. **However, the Androscoggin and Kennebec Rivers, as well as Merrymeeting Bay where the two rivers meet, are of special concern to NOAA. This is one of the most productive estuaries in Maine, providing important habitat for NOAA trust resources.** The shortnose sturgeon, a federally endangered species, uses the Androscoggin River for spawning, nursery, and adult habitat. [NOAA, Ibid]”*

There is a little studied but very prominent harbor seal population in this part of the river. A favorite haul out is a few hundred yards below the Chops on ledges just above Lines Island. As many as fourteen seals have been observed here at once. Prior to the Edwards Dam removal seals traveled as far north as Augusta, 30 miles from Merrymeeting Bay. Now with the dam gone, seals have been observed at Waterville about 48 miles above the Chops. Still, the vicinity of Fiddlers Reach with its mixing of salt and freshwater and its currents and whirlpools appears to also be well populated no doubt for its qualities as a food resource.



Both dredging and disposal with their increased turbidity are likely to create a take of endangered and or threatened fish or marine mammal species in the river.

National Marine Fisheries Service/NOAA, Commerce 50 CFR § 216.3

Take means to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal. This includes, without limitation, any of the following: The collection of dead animals, or parts thereof; the restraint or detention of a marine mammal, no matter how temporary; tagging a marine mammal; the negligent or intentional operation of an aircraft or vessel, or the any other negligent or intentional act which results in disturbing or molesting a marine mammal; and feeding or attempting to feed a marine mammal in the wild.

Level A Harassment means any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild.

Level B Harassment means any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering but which does not have the potential to injure a marine mammal or marine mammal stock in the wild.

In order to proceed with the proposed activities, USACE will need to consult with National Marine Fisheries Service (NMFS or NOAA Fisheries) and apply for Incidental Take Statements or Incidental Take Permits for the respective species. Risk will be substantially higher in the summer than during the winter months.

All in all, the USACE has much work to do before and if their project can begin. There are also some chronic issues that need to be addressed. The Merrymeeting Bay watershed drains nearly 40% of Maine. From 10,000 square miles it's logical to assume a steady

supply of sediment has made, and will continue to make its way downstream to replenish the dredge areas. Runoff of sediment speaks to the importance of vegetated buffers within shoreland zoning minimizing erosion and subsequent dredging. The Corps should be aware of an effort in the Maine Legislature to reduce shoreland zoning from 250' to 75'. The bill, LD 219, An Act to Amend the Laws Governing Shoreland Zoning will be heard at 9am on April 8th. It is our hope the USACE will provide testimony against this bill which if passed will likely aggravate Corps wetland protection efforts and further complicate and increase dredging operations.

Under the current dredging proposal there appears no legal way for the Kennebec project to legally proceed as proposed, certainly not within the scheduled timetable. The Corps would do well to further investigate alternative means of dredging with less impact [as suggested by Ms. Kelly] as well as offshore or upland disposal options. The Navy might do well to investigate alternative pilotage solutions if that would truly make a difference as has been suggested. In our opinion, and that of experienced counsel, neither MDEP nor the USACE can permit this project as it stands.

Thank you for your consideration.

Sincerely,



Ed Friedman, Chair

C.C.
Dot Kelly
Steve Hinchman, Esq.
Dave Nicholas, Esq.
Roger Fleming, Esq., Earthjustice
Mary Colligan, NMFS
Bob Green, MDEP
Doug Watts, FOKS
Steve Silva, EPA
Stew Fefer, USFWS
Jay Clement, USACE
Town of Phippsburg