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VIA EMAIL AND OVERNIGHT MAIL

June 16, 2011

Susan Lessard, Chair
Maine Board of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

RE: U.S. Army Corps of Engineers Kennebec River Dredging Permit
DEP #L-16281-4E-E-N

Dear Chair Lessard:

On behalf of Party-in-Interest Bath Iron Works (BIW), I attach BIW's response to the appeals in this matter.

Sincerely,

Matthew D. Manahan

cc: BEP Service List

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STATE OF MAINE
BOARD OF ENVIRONMENTAL PROTECTION

APPEAL IN THE MATTER OF

U.S. ARMY CORPS OF ENGINEERS Bath and Phippsburg, Sagadahoc County MAINTENANCE DREDGING #L-16281-4E-E-N (approval)	NATURAL RESOURCES PROTECTION ACT COASTAL WETLAND ALTERATION WATER QUALITY CERTIFICATION FINDINGS OF FACT AND ORDER

RESPONSE OF PARTY-IN-INTEREST BATH IRON WORKS

On or about September 1, 2011, the Arleigh Burke-Class Destroyer *U.S.S. SPRUANCE* must leave Bath Iron Works ("BIW") for commissioning and inclusion in the U.S. Navy Fleet. The Navy has stated that adherence to this schedule is critical to Fleet operations and national defense at this time when the Fleet is in surge posture. The Navy also has stated, after review of sounding data, that to allow the safe transit of the *SPRUANCE* from BIW down the Kennebec River (the "River") emergency dredging of the federal navigational channel in the River must be completed in two locations.

The U.S. Army Corps of Engineers (the "Corps"), seeking to complete this dredging project on behalf of the Navy, filed an application with the Department of Environmental Protection (the "Department" or "DEP") for a Natural Resources Protection Act ("NRPA") permit and State Water Quality Certification. After review of the application and consideration of all the record materials, on April 15, 2011, the Department issued its Findings of Fact and Order L-16281-4E-E-N (the "Order"), issuing a NRPA permit and Water Quality Certification to the Corps for the dredging project.

Three coordinated appeals challenging the Order followed, one filed by attorney Stephen Hinchman on behalf of the Town of Phippsburg and ten other appellants, including Dot Kelly and Friends of Merrymeeting Bay ("FOMB") (the "Phippsburg Appeal"), a second filed by Dot

Kelly herself (the "Kelly Appeal"), and a third filed by FOMB chairman Ed Friedman and Douglas Watts (the "Friedman/Watts Appeal"). (Collectively, the appellants in all three appeals are referred to as the "Appellants.")[1]

As discussed below, the Department[2] properly applied all the applicable statutory and regulatory standards governing the Corps's application and appropriately issued the Order. There is no reason for the Board to disturb this sound decision. BIW requests that the Board affirm the Department's Order and deny the three coordinated appeals.

BACKGROUND

I. The Federal Navigation Channel and its Maintenance

The federal navigation channel has long been part of the Kennebec River as has been regularly dredged to maintain a depth that allows the safe passage of both Navy and commercial ships. The federal navigation project in the River was first adopted in 1902. (U.S. Army Corps of Engineers, *Environmental Assessment, Maintenance Dredging of the Kennebec River Federal Navigation Channel, Sagadahoc County, Maine*, at 2 (Feb. 2011 draft) (the "EA").) This dredging provides for a navigation channel that is 27 feet deep at mean low water ("MLW") and at least 500 feet wide. (*Id.*) Dredging in order to maintain the channel goes back at least to 1950 and has been conducted fourteen times since then. (*Id.* at 5.)

In particular, two areas within the channel require special attention because of sand shoals that develop there – the Doubling Point reach ("Doubling Point") and the North Sugarloaf

[1] The Corps also appealed the Order, but withdrew that appeal on June 8, 2011. (Letter from J. Almeida, Corps, to S. Lessard, BEP, regarding "Appeal of Water Quality Certification for Kennebec River Maintenance Dredging Project, DEP #L-16281-4E-E-N (June 8, 2011).)

[2] The Department of Environmental Protection consists of the Commissioner of Environmental Protection (and his or her staff) and the Board of Environmental Protection. 38 M.R.S.A. § 341-A. In this filing, we apply common usage of the terms Department and DEP to refer to the Commissioner or Acting Commissioner and his or her staff.

Island reach ("North Sugarloaf Island").[3] Since 1989, the Department has issued four orders, including NRPA approval and Water Quality Certification, for maintenance dredging in these two areas.[4] In two of these instances the order authorized emergency maintenance dredging specifically to facilitate the safe transit of a Navy ship from BIW. (DEP Order, #L-16281-4E-D-N at 2 ("DMR recognizes the emergency nature of the request to dredge . . . ."); DEP Order, #L-16281-4E-C-N at 1 ("This emergency maintenance dredging must be completed prior to the transit of a Navy destroyer from Bath Iron Works . . . .").) For all of these dredging projects, the Department authorized disposal of the dredged material at an in-river site known as Bluff Head and at a near shore site just south of Jackknife Ledge.

II. The Project: Emergency Maintenance Dredging to Allow the *U.S.S. SPRUANCE* to Sail

A. The Need for the *U.S.S. SPRUANCE* to Sail September 1, 2011

The Navy has unequivocally stated that the *SPRUANCE* must leave BIW on (or about) September 1, 2011. (Letter from Capt. Krestos, U.S. Navy, to Maj. Gen. Brisoli, U.S. Army Corps of Engineers, at 2 (Jan. 19, 2011) ("Capt. Krestos Letter 1"); Letter from Capt. Krestos, U.S. Navy, to Maj. Gen. Brisoli, U.S. Army Corps of Engineers (Jan. 31, 2011) ("Capt. Krestos Letter 2").) The Navy has explained:

> Failure of USS SPRUANCE (DDG 111) to sail on the required date has a **Critical Impact to U.S. Navy Fleet Operations and National Defense.** The impact will seriously and negatively affect USN operational schedules, and will restrict the USN Fleet Commander's ability to surge deployable strike capability as directed by the National Command Authority (NCA). . . . Delay to the ship's schedule creates an unacceptable limitation to the Navy's ability to execute NCA tasking while on a wartime footing.

(Capt. Krestos Letter 1 at 2 (emphasis in original); *see also* Capt Krestos Letter 2.)

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[3] In the EA, the North Sugarloaf Island reach is referred to the Popham Beach area.

[4] DEP Order, #L-16281-4E-A-N (Sept. 14, 1989) (corrected Nov. 30, 1989); DEP Order, #L-16281-4E-B-N (Oct. 22, 1997); DEP Order, #L-16281-4E-C-N (Nov. 30, 2000); DEP Order, #L-16281-4E-D-N (March 15, 2002).

B. The Need to Dredge the Federal Navigation Channel

The Navy also has explained why maintenance dredging of the federal navigation channel is required – safe passage of the *SPRUANCE*.

When leaving BIW and sailing down the River, the draft of the *SPRUANCE* at the bow, where the ship draws the most water, will be approximately 28 feet, 9 inches. While the normal forward draft for a ship of this class is 31 feet, the reduced draft of 28 feet, 9 inches forward is achieved by de-ballasting tanks normally filled with fuel. (EA at 1-2.) The *SPRUANCE* does not have separate ballast tanks and normally operates with tanks fully loaded. The draft cannot safely be further reduced:

> Further de-ballasting of tanks unacceptably reduces the vessel margin of stability and impacts ship maneuverability characteristics, producing an unsafe condition for transiting the vessel in a challenging channel, especially should weather conditions deteriorate on the day of transit.

(Capt. Krestos Letter 1 at 2.) As a result, the draft of the *SPRUANCE* cannot be reduced further.

Soundings performed in January 2011 showed that shoaling had reduced the controlling depth of the channel to 19.7 feet at MLW near Doubling Point and to less than 27 feet at MLW at North Sugarloaf Island.[5] (EA at 1-2; Capt. Krestos Letter 1 at 1.) The sounding data convinced the Navy that dredging is required not just to maintain the federal navigation channel, but also to allow safe passage of the *SPRUANCE*. (Capt. Krestos Letter 1 at 1-2; EA at 2.) Even at high tide the Navy considers the risk of the ship running aground to be too great. (*Id.*) The shoaling had created a "**Critical Safety Impact.**" (Capt. Krestos Letter 1 at 1 (emphasis in original).)

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[5] In its application, the Corps refers to mean low water ("MLW"), while in the Order the Department refers to mean low low water ("MLLW"). The two reflect slightly different approaches to averaging. The Corps is in the process of moving from use of MLW to use of MLLW. The difference between the two for the dredging project area is that the depth at MLLW is about 3 inches less than at MLW. (Email from M. Murray, Corps, to W. Kavanaugh, Corps, regarding "Kennebec River, Maintenance Dredging" (March 16, 2011). This difference is not material for the purpose of these appeals.

The determination by the Navy in January that safety concerns necessitated dredging came after consideration of BIW's plan to conduct sea trials with the *SPRUANCE* in February. BIW intended to conduct, and subsequently conducted, these trials by navigating outside the federal channel at Doubling Point in order to reach the ocean. The Navy determined this was not a viable option once the ship was under a Navy Commander's authority:

> Bath Iron Works (BIW) ship's master and pilot has stated that by going outside the designated channel limits at Doubling Point he feels he can safely circumvent the shoals in the channel and navigate that portion of the river which has the controlling depth of under 20.0'. As a trained lifelong pilot of the river, he is an expert in his field and although not a risk free maneuver, I feel comfortable allowing the ship to transit for these upcoming winter trials. The ship at this point in the construction process belongs to Bath Iron Works. BIW is liable for all aspects of safe ship operations and movement, however BIW's fiduciary liability is limited as the government is self insured. My office will officially take delivery of this ship in April of this year. Next [September], a Navy Commander (ship's commanding officer (CO)), will be in charge of sailing this ship out from Bath, Maine to her homeport in Norfolk, Va. I, as the senior Navy representative in the region, can not allow the CO of the ship to sail out of Bath knowing full well he will need to navigate outside the boundaries of the designated channel. The CO possesses neither the lifelong skill nor knowledge of the river as the BIW ship's Master. Therefore, I feel I have no other option than to declare an EMERGENCY for the upcoming departure transit of SPRUANCE (DDG 111) in [September] of 2011. This letter serves to document the U. S. Navy position that the hazardous shoaling condition in the navigable channel in the vicinity of buoys 28, 29 and 31 is unsafe and constitutes an emergency situation.

(*Id.*; *see also* Capt. Krestos Letter 2 (noting proper dates).) Throughout the permitting process, the Corps has made clear that if subsequent planned soundings reveal that the shoals have been reduced in height by natural forces, thus restoring the channel to a depth that will allow the *SPRUANCE* to sail safely in September, the Corps will not go ahead with the emergency maintenance dredging project. (At the time the Department issued the Order, additional soundings were scheduled to occur before the dredging. *See* email from B. Herman, BIW to R. Green, DEP, regarding *SPRUANCE* sea trial (April 7, 2011) ("BIW's licensed Master takes monthly depth soundings and will continue to monitor the area in the vicinity of Doubling

Point.") ("The annual water level in the river is the lowest at the end of summer, which increases the risk posed by the areas of shoaling. BIW will request USACE to provide depth soundings a week prior to departure to ensure accurate measurements and identify the constraints of safe water.").)

C. The Proposed Dredging

As part of the project, the Corps proposes to restore the federal navigation channel to its 27 foot MLW depth at North Sugarloaf Island. (EA at 1, 3; Memo from R. Ladd, Corps, to W. Kavanaugh, Corps, regarding "DRAFT Suitability Determination for Kennebec River Federal Navigation Project, Bath and Phippsburg, Maine at 1 (Jan. 14, 2011) ("Ladd Memo").) Achieving this depth will include the standard 2 foot overdredge. (Ladd Memo at 1.) Because of the imprecise nature of dredging, to ensure a depth of 27 feet is achieved the dredging depth is set to 29 feet, with the two-foot difference being the overdredge. This is common dredging practice. (*See* EA at 6 (noting prior projects have involved overdredge).) At Doubling Point, where the sand shoals build up more rapidly, the Corps proposes to engage in advance maintenance dredging with the goal of achieving a channel depth of 30 feet MLW. (EA at 3; Ladd Memo at 1.) Similarly, to achieve this depth the Corps will include the standard 2 foot overdredge, so the dredging depth will be set to 32 feet MLW. (*Id.*) Advance maintenance dredging at Doubling Point will provide greater assurance that the necessary depth will be achieved and a greater margin of safety in this difficult-to-navigate section of the River, and is intended to delay the need for future dredging. (EA at 3.)

The project is scheduled to be completed over a three to five week period beginning around August 1, 2011 (*id.*), although the project more likely will be completed within two weeks and may take less than seven days. (Email from W. Kavanaugh, Corps, to R. Green, DEP,

regarding "Kennebec River, Maintenance Dredging" (March 16, 2011).) Approximately 50,000 cubic yards of material will be dredged from Doubling Point and approximately 20,000 cubic yards from North Sugarloaf Island. (EA at 3.) This dredged material will be almost exclusively sand. (EA at 9, Appendix 3; Ladd Memo at 2, 6.) The material from Doubling Point will be disposed of downstream at the in-river Bluff Head site. (EA at 3.) The material from North Sugarloaf Island will be deposited at the near-shore Jackknife Ledge site. (*Id.*)

III. The Department's Order Authorizing Emergency Maintenance Dredging

On April 14, 2011, the Department issued the Order containing a NRPA permit, with conditions of approval, and Water Quality Certification for the project.

PROCEDURAL ISSUES

IV. BIW is a Party-in-Interest

BIW, the builder of the *SPRUANCE*, participated in the Department's permitting process for the proposed dredging project. (Letter from R. Floccher, BIW, to R. Green, DEP, regarding "Comments to the Army Corps of Engineers August 2011 Maintenance Dredging of the Kennebec River Submittal" (March 25, 2011).) BIW appears here as a party-in-interest because its business interests are directly impacted by the ability of the Navy and BIW to safely navigate Navy ships to and from BIW, generally, and the *SPRUANCE*, particularly.

V. The Appellants Should be Limited to a Single Appeal.

Multiple appeals on behalf of the same individuals should not be permitted. Allowing the same individuals to file separate appeals of the same matter not only unfairly burdens parties who must respond to multiple appeals, but provides a strategic advantage to those taking multiple bites at the apple and adds unnecessary confusion and delay to the appeal process. For example, an individual may adopt one line of reasoning in one appeal and a slight variation in the

other, allowing arguments that would be exposed as inconsistent if paired in a single appeal. Whatever the strategic reasoning in the present instance behind the multiple appeals on behalf of common individuals,[6] the duplicative Kelly Appeal and Friedman/Watts Appeal should be dismissed.

Specifically, Dot Kelly is one of the named appellants represented by counsel in the Phippsburg Appeal. The Phippsburg Appeal was filed, in part, on her behalf. Ms. Kelly then filed a separate, second appeal, the Kelly Appeal. That second appeal should be dismissed.

Similarly, FOMB is one of the named appellants represented by counsel in the Phippsburg Appeal. Ed Friedman is the chairman of FOMB, and he is the spokesperson for FOMB. *See, e.g.*, Letter from E. Friedman, Chair FOMB, to R. Green, DEP, regarding "US Army Corps of Engineers NRPA/CWA Section 401 permit application for Maintenance Dredging of the Kennebec South of Bath, Maine with disposal in Kennebec Narrows in 95-100 feet of water north of Bluff Head" (March 19, 2011). The Phippsburg Appeal thus was filed, in part, on his behalf. Mr. Friedman then filed a separate, second appeal, the Friedman/Watts Appeal. That second appeal should be dismissed.[7]

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[6] The coordination among those filing all three appeals is apparent. *See, e.g.*, Phippsburg Appeal at 1 (identifying Dot Kelly as one of the appellants); *id.* n.18 (citing Dot Kelly comments to DEP and the Corps); *id.* n.30 (incorporating portion of Friedman/Watts Appeal by reference); Friedman/Watts Appeal at 6 (incorporating by reference comments made by the Town of Phippsburg); June 9, 2011 letter from S. Hinchman to S. Lessard regarding supplemental evidence (filed on behalf of all Appellants).

[7] Although the Friedman/Watts Appeal also includes Mr. Watts, Mr. Friedman/FOMB must not be permitted to file a second appeal by strategically including an additional person in their second appeal. At a minimum, Mr. Watts should be required to demonstrate that he is not a member of FOMB and Mr. Friedman should be removed from the Friedman/Watts appeal.

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LEGAL STANDARDS

VI. The Natural Resources Protection Act

A. Statutory Provisions

NRPA establishes that regulated activities may not have an *unreasonable* adverse impact on the environment; the Act does not prohibit all impacts. NRPA contains a list of standards that the Department must apply when evaluating the reasonableness of project impacts. These standards are contained in 38 M.R.S. § 480-D. If all the standards are satisfied, the impacts are reasonable. If any one of the factors is not met, the project has an unreasonable impact.

The Appellants question whether the Corps's dredging project satisfies three specific NRPA standards contained in Section 480-D. These three standards, quoted here, provide:

> **Lower water quality.** The activity will not violate any state water quality law, including those governing the classification of the State's waters. 38 M.R.S.A. § 480-D(5).
>
> **Harm to habitats; fisheries.** The activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater estuarine or marine fisheries or other aquatic life. *Id.* § 480-D(3).
>
> **Existing uses.** The activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses. *Id.* § 480-D(1).

B. Regulatory Provisions

The Department's rules implementing NRPA contain a requirement that applicants must conduct an alternatives analysis to evaluate whether "there is a practicable alternative to the activity that would be less damaging to the environment." DEP Rules, Ch. 310(5)(A). An alternative is an option that "meets the project purpose." *Id.* Ch. 310(9)(A). A "practicable" alternative is one that is "[a]vailable and feasible considering cost, existing technology and logistics based on the overall purpose of the project." *Id.*, Ch. 310(3)(R).

The Law Court, in *Uliano v. BEP*, 2005 ME 88, 876 A.2d 16, explained the purpose of the alternatives analysis. The Court stated that the alternatives analysis requirement, contained in the rules, is not a stand-alone standard, but rather is intended to aid in evaluating whether any of the impacts a project will have are unreasonable under 38 M.R.S.A. § 480-D. *Id.* ¶ 12, 876 A.2d at 19. Thus, if an alternatives analysis reveals no practicable alternative, this weighs in favor of finding that any resulting impacts are reasonable under Section 480-D. *Id.* ¶ 14, 876 A.2d at 20. If a practicable alternative is identified, this does not necessarily mean the resulting impacts are unreasonable, but just that the impacts must be looked at closely to evaluate whether they are reasonable. *Id.*

The rules provide guidance regarding the scope of an alternatives analysis:

> Determining whether a practicable alternative exists includes:
>
> (1) Utilizing, managing or expanding one or more other sites that would avoid the wetland impact;
>
> (2) Reducing the size, scope, configuration or density of the project as proposed, thereby avoiding or reducing the wetland impact;
>
> (3) Developing alternative project designs, such as cluster development, that avoid or lessen the wetland impact; and
>
> (4) Demonstrating the need, whether public or private, for the proposed alternative.

DEP Rules, Ch. 310(9)(A).

VII. State Water Quality Laws and Water Quality Certification

The dredge sites at Doubling Point and North Sugarloaf Island, as well as the dredge material disposal sites at Bluff Head and Jackknife Ledge, all are located in waters designated by the Maine Legislature as Class SB waters. The water quality standards for Class SB waters, in relevant part, provide:

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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.

B. . . . . 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.

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. . . .

Id. § 465-B(2).

Section 401 of the Clean Water Act ("CWA"), 33 U.S.C. § 1341, provides:

> Any applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate . . . that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title.

Id. § 1341(a)(1). CWA Section 303, 33 U.S.C. § 1313, requires states to develop water quality standards to establish the desired condition of waterways. Maine's water quality standards for the lower Kennebec River and near-shore area where Jackknife Ledge is located, contained in 38 M.R.S. § 465-B(2), are quoted above.

Section 401 also contains language allowing the certifying state to attach conditions to its certification, including conditions to ensure compliance with state water quality standards:

> Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply . . . with any other appropriate requirement of State law set forth in the such certification . . . .

Id. § 1341(d).

The discharge of "dredged or fill material" into a navigable water requires a federal permit under CWA Section 404, 33 U.S.C. § 1344. Section 404 permits are issued by the Corps, but the Corps, in the present case, will not apply to itself for approval of its dredging project. 33 C.F.R. § 336.1(a) (noting "the Corps does not process and issue permits for its own activities"). Although technically not an applicant for a federal permit to conduct an activity that may result in a discharge, the Corps is required to seek state water quality certification under Section 401. *Id.* § 336.1(b)(8). The certification is associated with the discharge (*i.e.*, disposal) of dredged material, but not with the dredging activity itself. *Id.* § 323.2(d)(3)(iii).

The scope of the State's certification for a dredge project is limited to review of State water quality standards as provided for under Section 401(a) though its reference to Section 303.

DISCUSSION OF THE APPLICABLE LEGAL STANDARDS

VIII. Framework for Discussion of Why the Emergency Maintenance Dredging Project Satisfies Maine's Environmental Protection Standards and Why the Department's Order Should be Affirmed

The Appellants question whether the Corps's emergency maintenance dredging project will have unreasonable impacts in violation of NRPA and whether the Department properly issued a water quality certification for the project. The three NRPA standards quoted above are the three standards the Appellants contest. They also question the sufficiency of the Corps's evaluation of alternatives. The remainder of this response is divided into four sections. The first, Section IX, contains a discussion of the Corps's alternatives analysis. The three sections after that each address one of the three contested NRPA standards: water quality (Section X), habitat and fisheries (Section XI), and existing uses (Section XII). In the course of discussing

the NRPA water quality standard in Section X, the project's compliance with the State's water quality laws and the appropriateness of the water quality certification are addressed.

IX. The Corps Demonstrated There Are No Practicable Alternatives to the Emergency Maintenance Dredging Project.

The purpose of the emergency maintenance dredging project is not just to dredge the federal navigation channel, which must be done periodically, but to allow the *SPRUANCE* to safely transit the River on September 1. (EA at 1-2 (noting that "[m]aintenance dredging is necessary to provide safe operating depths for deep draft vessels transiting to and from Bath Iron Works" and that dredging will be necessary "to allow the safe transit of this vessel [the *SPRUANCE*] in September 2011").) The need for the Navy to adhere to this date is discussed in more detail above and it is because the dredging must be completed in advance of this date that the Navy has declared an emergency. (Capt. Krestos Letter 1; EA at 1-2.)

Consistent with the requirements of the Department's rules, the Corps evaluated alternatives that would allow achievement of the project purpose – safe, on-time passage of the *SPRUANCE*. An analysis under the rules shows that the Department properly concluded that the dredging project proposed by the Corps is the "least environmentally damaging practicable alternative that meets the project purpose." (Order at 7.) Further, as discussed in the sections later in this response addressing the individual NRPA provisions, the alternatives evaluated by the Corps are consistent with and support the Department's overall finding that the dredging project satisfies all NRPA permitting criteria and will not have unreasonable impacts.

A. Utilizing, managing or expanding one or more other sites that would avoid the wetland impact – DEP Rules, Ch. 310(9)(A)(1)

No Action Alternative

There are no rivers (*i.e.*, sites) other than the Kennebec River running from BIW to the ocean, so for the *SPRUANCE* to join the Fleet in September it will have to travel down the Kennebec. Under the control of BIW's pilot for sea trials, the *SPRUANCE* did navigate the River in February. As explained in Section II.B above, the Navy deems following a similar route outside the channel to be too risky for a Navy Commander without the benefit of decades of experience on the River to attempt in September.

The Navy's understandable unwillingness to assume this risk is discussed in the Corps's application both in the discussion of project purpose and in the Corps's assessment of the "no action" alternative. (EA at 2, 6.) While the no action (or do nothing) alternative is a standard component of any alternatives analysis, in this instance this is not an alternative warranting consideration. This is because sailing outside the federal navigation channel is inconsistent with the project's purpose, ensuring *safe* and timely transit of the *SPRUANCE* in September. Only an option that meets the project purpose is an alternative warranting consideration under NRPA. (DEP Rules, Ch. 310(9)(A) (noting that the type of alternative to analyze is one that "meets the project purpose").)

Even if treated as an "alternative," however, analysis of this option shows that the practical result is no different. An alternative that could lead to the grounding of the *SPRUANCE*, potentially resulting in significant damage to the hull, harm to the crew, and environmental contamination is not practicable. (EA at 6; Capt. Krestos Letter 1 at 2 (noting that "the potential of an environmental catastrophe exists should fuel tanks rupture during a grounding incident").)

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B. Reducing the size, scope, configuration or density of the project as proposed, thereby avoiding or reducing the wetland impact – DEP Rules, Ch. 310(9)(A)(2)

Timing of Dredge

Routine maintenance of the federal navigation channel in the Kennebec River is conducted during the winter months. The Appellants are critical of the Corps for not considering a wintertime dredge in this instance as well. (Phippsburg Appeal at 13-14.) A call for a change in timing of the project, however, ignores the very purpose of the project in the first place – safe, *on-time* passage of the *SPRUANCE*. While the Appellants may assess the country's national defense needs differently than the United States Navy and dispute the veracity of the Navy's statement that it is critical for the *SPRUANCE* to sail in September, Appellants offer no basis for second guessing the Navy's statement of need. Because dredging at any time other than in advance of September 1 would fail to meet the project purpose, the Corps appropriately excluded discussion of such an option from its alternatives analysis.

Depth of Dredge

As part of the project, the Corps proposes to restore the federal navigation channel to its 27 foot MLW depth at North Sugarloaf Island. To achieve this depth, the Corps will use a two foot overdredge. At Doubling Point, the Corps proposes three feet of advance maintenance dredging to a depth of 30 feet MLW. Similarly, to achieve this depth the Corps would apply a standard two foot overdredge.

Appellants suggest dredging to some lesser depth would enable passage of the *SPRUANCE*. (Phippsburg Appeal at 11.) As stated by the Corps in its alternatives analysis, however, "the U.S. Navy relies upon authorized channel depths, high tides, and reduced ballast to safely transit their vessels through the channel." (EA at 6.) For a ship that draws nearly 29

feet, navigating a 27 foot MLW deep channel is no straightforward task and can be done only under specific high tide conditions. This is why the Corps explained in its analysis that "maintaining the authorized 27 foot channel depth is essential for these ships to safely transit from the BIW facility to sea." (*Id.*) Achieving a 27 foot deep channel at all points involves a two foot overdredge. Dredging to a lesser depth would not be sufficient to ensure the safety of the *SPRUANCE.*

The three feet of advance maintenance dredging proposed at Doubling Point provides a greater safety margin in this difficult to navigate section of the River. Advance maintenance dredging also delays the need for future dredging. So, while not conducting the advanced maintenance dredging is an alternative, is it a practicable alternative less damaging to the environment? The Corps and the Department both reasonably concluded the answer is no. Dredging to a greater depth now at Doubling Point improves "the chance that adequate depths will endure." (EA at 3.)

If additional near term future dredging can be avoided, impacts can be minimized. For example, whether a dredge hopper is collecting three feet or five feet of material, the potential impact to shortnose sturgeon passed over by the hopper is the same. While sturgeon might be feeding on the River bottom, they will not be four feet below the riverbed. As a result, fewer dredging events are better than more dredging events, and advance maintenance dredging this summer will pay dividends in the future in the form of avoided dredging. Advance maintenance dredging also has cost advantages, since the dredging equipment will already be in place this summer. Thus, in addition to providing the needed safety margin to accomplish the project purpose, the advance maintenance dredging proposed by the Corps is the better alternative from the big picture perspective as well.

C. Developing alternative project designs, such as cluster development, that avoid or lessen the wetland impact - DEP Rules, Ch. 310(9)(A)(3)

Alternative Dredging Methods

Two of the basic types of dredges are mechanical dredges and hydraulic dredges. In its alternatives analysis, the Corps considered both a mechanical dredge and two types of hydraulic dredges, a hopper dredge and pipeline dredge. A mechanical dredge scoops material off the bottom using, for example, a clamshell or bucket that is attached to a crane. (EA at 3.) A hydraulic dredge functions much like a vacuum and uses suction to remove the bottom material. (*Id.*) The primary difference between a hopper dredge and pipeline dredge is what happens after the material is removed from the bottom. In the case of a hopper dredge, the material is placed in a hopper and transferred to the disposal site. Bottom doors open to empty the hopper. (*Id.*) With a pipeline dredge, the material is offloaded through a pipeline (or directly piped from the dredged area) to the disposal site. Because of the difficulty of positioning the pipeline, especially in a river environment with river currents such as at the mouth of the Kennebec River in the vicinity of Popham Beach, and the added equipment and personnel costs even in a less dynamic environment, the Corps determined that use of a pipeline dredge was not practicable. (*Id.* at 6-7.)

The Corps selected a hopper dredge for the project. The advantage of a hopper dredge is that it is best suited for operating in an environment with river currents where the dredging is to occur over distance, as opposed to in an isolated location. This is because the hopper dredge can use the downstream current to help it maintain its desired position as it methodically moves upstream sucking a slurry of dredged material and water off the bottom. (*Id.* at 6.) Stationing a mechanical dredge as it scoops material off the bottom one bucket load at time is more difficult in a dynamic river environment. While a mechanical dredge can be positioned in a river, this

positioning, scooping, and repositioning is a tedious process taking considerably longer than a hydraulic dredge to remove the same amount of material along a navigation channel.

This explains why, as noted by the Appellants (Phippsburg Appeal at 14), BIW uses a mechanical dredge to dredge its sinking basin; the sinking basin is a confined area, perfectly suited for a mechanical dredge where the entire project can be completed efficiently and precisely by a mechanical dredge taking one scoop at a time. This also explains why, since at least 1950 in the 15 times the Corps has dredged the federal navigation channel in the Kennebec River, it has used a hopper dredge all 15 times. (EA at 5.) So, when the Appellants say, "[m]echanical dredge by clamshell bucket was once state of the art and was widely used in the Kennebec River" and that this form of dredge is "clearly practicable" because BIW still uses it today in its sinkhole (Phippsburg Appeal at 14), they reference an era that dates back to the first half of the last century, if not further, and improperly equate dredging a confined sinking basin with dredging a longitudinal channel.

In addition to the difference in technical suitability of a hopper dredge when compared to a mechanical dredge, there also are differences related to the potential impacts each could have. Although a potential advantage of a mechanical dredge is that it may be less likely to entrap fish, specifically shortnose sturgeon, the Corps has learned from experience on the Kennebec that fish (including sturgeon) caught in hydraulic dredge slurry may be released. (EA at 18, 22.) The faster moving hydraulic dredge, as the Corps notes, also requires less time in the River, therefore shortening the period of potential impact to sturgeon and other wildlife. (EA at 4.) By moving more quickly, the hydraulic dredge also shortens the time other users of the river will have to navigate around or otherwise see the dredging equipment.

Another method for addressing the shoaling in the channel considered by the Corps, but not deemed viable enough even to be included in the alternatives analysis, is dragging the shoals in an effort to smooth them out. As noted in an email from the Corps to DEP commenting on a suggestion from Dot Kelly that this approach should be used in the Kennebec River:

> We have actually used "dragging" (the process that she describes) to eliminate small shoals that have remained when a dredging project is near completion (typically in silty material) to clear the project to the required depth. However that process wouldn't work here and has been virtually eliminated from use as it is thought to actually increase levels of turbidity by most of the regulatory folks.

(Email from W. Kavanaugh, Corps, to R. Green, DEP, regarding "Dredging disposal in Phippsburg on the Kennebec River" (Feb. 15, 2011).) The reason the technique would not work in the present instance is fundamental. The shoals in the Kennebec are not sufficiently small and they are sandy, not silty.

Alternative Disposal Locations

In addition to Bluff Head and Jackknife Ledge, the two historically used disposal sites and the two sites selected by the Corps again for this project, the Corps also considered upland disposal and open water disposal. (EA at 7.) The advantages of continued use of Bluff Head and Jackknife Ledge is that doing so avoids disturbing any new sites and both are proximate to the dredge sites. (*Id.*) This proximity keeps transportation costs down and minimizes travel time, which, in turn, minimizes overall project time. (*Id.*) Additionally, history has shown that these disposal sites work well. Finally, and most significantly, use of Bluff Head and Jackknife Ledge keeps the sandy dredged material within the ecosystem. (*Id.*) This preserves the sand budget that is so critical to the continual replenishment of the sand at Popham Beach. (*Id.*) "Popham Beach State Park is one of the crown jewels of the Maine Park's system, and is among the most

heavily visited parks in the entire state." (Phippsburg Appeal at 33.) Ensuring that there remains sand for this beach is critical.

The importance of keeping the dredged sand in the immediate vicinity because of Popham Beach's dependence on this material is reflected in the Corps's discussion of alternatives and echoed by the State Marine Geologist. In his comments on the project, the State Marine Geologist cautioned: "Permanent removal of large volumes of sand from portions of the river near Bath could possibly affect Popham Beach in the future." (Email from S. Dickson, Ph.D., State Marine Geologist, to R. Green, DEP, regarding "Meeting in Phippsburg Today to Discuss Kennebec River Dredging - Revised" (Feb. 24, 2011).) With regard to the Corps's project, however, he stated he has "no geological concerns about dredging and disposal in August." (Email from S. Dickson, Ph.D., State Marine Geologist, to R. Green, DEP, regarding "MGS Advisory Opinion: Kennebec River Maintenance Dredging at Sugarloaf Islands and Doubling Point" (Feb. 14, 2011) ("MGS Advisory Opinion").) This is because he concluded that both disposal sites are ideally suited for the project. (S. Dickson Email (Feb. 24, 2011) ("Disposal of sand within the Kennebec River [at the Bluff Head site] is certain to avoid and minimize long-term beach impacts."); Email from S. Dickson, Ph.D., State Marine Geologist, to B. Swan, DMR, regarding "Tomorrow's meeting in Phippsburg" (Feb. 23, 2011) ("People should understand that the Jackknife Ledge site is a perfect match with the sand from Sugarloaf Islands. Sand placed there will remain part of the Popham Beach system.").)

With regard to upland disposal, the Appellants contend that this alternative is favorable because it would eliminate impacts to water quality and habitat. (*See, e.g.*, Phippsburg Appeal at 16.) As discussed in the sections that follow (specifically Sections X and XI), the Corps does not agree with the Appellants' assessment of impacts, as reflected in the Corps's assessment of

alternatives. (*See* EA at 6-7.) The Corps identified upland disposal to be a "viable" alternative if a suitable site could be found for disposal and "a non-Federal sponsor could be found to fund the increased cost for disposal." (*Id.* at 7.) Appellants seize on this language and argue that the Corps is obligated to demonstrate that no benefactor can be found, and suggest that the Corps is overstating the costs associated with upland disposal. (Phippsburg Appeal at 16.) Their argument is misplaced for three reasons.

First, NRPA expressly allows for consideration of the cost of alternatives to an applicant when an applicant evaluates those alternatives, and NRPA imposes no obligation to seek financial assistance from a third party. *See* DEP Rules, Ch. 310(3)(R) (defining "practicable" to allow consideration of cost); *id.* Ch. 310(9)(A) (providing a framework for evaluating whether a practicable alternative exists and not mentioning consideration of third party funding).)

Second, the claim by Appellants that there is a "market" for dredged material, which they support by referencing BIW's experience, is factually wrong. (Phippsburg Appeal at 16.) BIW has never sold dredged material and understands that if there were a market for any of the material it dredged, the State of Maine, the owner of the material, would be entitled to the fair market value of the proceeds associated with such sale. Thus, BIW is not aware of any market mechanisms that allow for the offsetting of upland disposal costs for dredged material from the Kennebec River. What BIW has "learned" is the exact opposite of what the Appellants suggest. (*Id.*) BIW's experience (*see, e.g.*, DEP Solid Waste Orders, # S-021078-W7-C-M (Dec. 5, 2000) and #S-021078-W7-D-M (Feb. 18, 2003)) is that upland disposal is extremely costly. Here, given the material from the area of the channel requiring dredging and the volume of material in need of disposal, upland disposal would not be practicable.

Third, the Appellants fail to recognize that even if an upland disposal site existed and a benefactor could be found, the Corps still ruled out the upland disposal option in favor of the selected alternative. This is because the Corps determined that keeping the dredged material – what the Appellants refer to as the "clean sand" (Phippsburg Appeal at 16) – within the riverine/beach system is critical for Popham Beach and because of this significant factor upland disposal is not a practicable alternative. (EA at 7.)

Finally, with regard to open water disposal, the Corps noted that this had been done previously in 1971 and was an economically feasible option. (*Id.*) Just like upland disposal, however, open water disposal would remove the sandy dredge material from the local sand budget, negatively impacting Popham Beach. (*Id.*) As a result, this option, too, was determined not to be a practicable alternative that would be less damaging to the environment.

D. Demonstrating the need, whether public or private, for the proposed alteration - DEP Rules, Ch. 310(9)(A)

The public need for the emergency maintenance project already has been discussed thoroughly above. The Navy has clearly stated that it is critical to national security that the *SPRUANCE* sail on September 1 and that to do so safely the federal navigation channel must be dredged. (EA at 1-2; Capt. Krestos Letter 1; Capt. Krestos Letter 2.)

E. The Department Properly Concluded and Properly Stated in its Order that There Are No Practicable Alternatives to the Emergency Maintenance Dredging Project.

The Corps considered a wide range of alternatives. Some were ruled out because they were not consistent with the project purpose or practicable and others were found to be viable but not the least environmentally damaging. In this regard, the Corps's analysis and supporting record information speaks for itself.

Appellants are critical of the manner in which the Department explained its conclusion that the Corps's analysis demonstrates that the selected dredging and disposal is the least environmentally damaging practicable alternative that meets the project purpose. (Phippsburg Appeal at 10-11.) Citing *Uliano*, the Appellants want a more detailed analysis than is provided in the paragraph in the Order addressing the Corps's review of alternatives. (*Id.*)

The Appellants, however, misconstrue *Uliano*. In that case, in finding that the existing use standard in NRPA (38 M.R.S. § 480-D(1)) was not satisfied, the Board noted that "[t]he record contains photographs, maps and descriptions of the shoreline in the area of the proposed project" and that members visited the site. *Uliano*, 2005 ME 88, ¶ 23, 876 A.2d at 21. The Board then stated:

> Based on the evidence in the record and observations during its site visit, the Board finds that . . . the character of the area from Parker Point west to Hadley Point would not be maintained were the proposed pier constructed and that the project would unreasonably interfere with existing scenic and aesthetic uses in a manner inconsistent with existing structures and development.

Id. ¶ 23, 876 A.2d at 21-22. There was no discussion of the record evidence or analysis leading to this conclusion. Most significantly, the finding did not identify what existing scenic or aesthetic uses were considered. The Law Court explained: "These Findings do not permit meaningful appellate review because they merely summarize the evidence considered and state the Board's conclusion." *Id.*

In the present case, there is not just a record full of facts and then a conclusion without any analysis. An analysis, the alternatives analysis, was conducted by the Corps and found complete and persuasive by the Department. While the Department could have drafted the Order to parrot the alternatives analysis it accepted, instead it opted for a more succinct, but no less clear, summary of its contents. Appellants may not agree with the Corps's analysis and

conclusions, and the Department's incorporation of that analysis, but in no way does the Department's finding in the present case, adopting the reasoning and analysis of the Corps, prevent meaningful review. *Murphy v. BEP*, 615 A.2d 255, 260 (Me. 1992) ("Under the Administrative Procedure Act, all agency decisions made at the conclusion of an adjudicatory proceeding must 'include findings of fact sufficient to apprise the parties and any interested member of the public the basis for the decision.' 5 M.R.S.A. § 9061 (1989). However, this section does not require an agency to make a detailed incident-by-incident fact finding."); *see also Save Our Sebasticook, Inc. v. BEP*, 2007 ME 102, ¶ 23, 928 A.2d 736, 743) ("Although there is contrary evidence in the record, the Board made sufficient findings, and there is enough evidence in the record to support those findings regarding soil stability and wetlands.").) That the findings allow for meaningful review is evident from the Appellants' own critique. (*See, e.g.*, Phippsburg Appeal at 10-17.)

Further, the case upon which the Appellants rely, *Uliano*, establishes that "section 5(A) of the rules is not an independent criterion, but is only a factor to be considered by the Board." *Uliano*, 2005 ME 88, ¶ 12, 876 A.2d at 19. As a result, no formal finding is even required with regard to the sufficiency of the alternatives analysis. It is with the statutory standards in Section 480-D that an applicant must demonstrate compliance and it is with regard to those standards that the Department must make formal findings. This is what the Corps and the Department have done. The NRPA standards are discussed below.

X. The Project Complies with All State Water Quality Laws.

A. The Applicable Water Quality Classification is Class SB.

As required by NRPA Section 480-D(5), the project will not violate any state water quality law, including those governing the classification of the State's waters. The applicable

water quality classification is Class SB. Notwithstanding the Appellants' assertions (Phippsburg Appeal at 21-22), the waters in the lower Kennebec River where the permitted dredge and dredged disposal sites are located have been designated as Class SB since 1990. The Department is responsible for implementing the State's water classification program, including in estuarine and marine waters. 38 M.R.S. § 465-B. The Department has consistently determined that the areas that are part of the proposed emergency maintenance dredging project are in Class SB waters.

As the Appellants note, the direct discharge of dredged spoils is prohibited in Class SA waters. (*Id.* § 465-B(1)(C); Phippsburg Appeal at 21.) On that basis alone, the waters of the lower Kennebec River cannot be Class SA because the Department has permitted five Corps dredging and disposal operations in these same locations since the classification was adopted in 1990. (EA at 5.) In addition to Corps's approved dredging operations, BIW also has been approved for dredging and disposal operations at these same locations since 1990. It must be presumed that the Department knew the classification of waters impacted by dredging and disposal operations when it issued NRPA permits and water quality certifications to the Corps and BIW. The Department could not have issued those permits and certifications if this segment of the Kennebec River was Class SA.

In addition to authorizing numerous dredge and dredged material disposal projects in these same waters since 1990, the Department has consistently delineated this river segment as Class SB in its Section 305(b) reports to the U.S. Environmental Protection Agency ("EPA"). Under Section 305(b) of the Clean Water Act, the State is required every two years to provide a comprehensive and accurate report on the status of State waters. State waters are listed as identifiable segments, their attainment status is provided, and the cause of non-attainment, if

applicable, is noted. The current classification for each identified water segment also is included. In its 305(b) reports to EPA, the State never deviated from its determination that the lower Kennebec River in Phippsburg is Class SB, and EPA has never questioned the State's classification of this segment.

B. The Maine Legislature has Clarified the Statutory Language.

In the 21 years since the Maine Legislature established the classification for the lower Kennebec River, until now, there has been no claim that this segment of the River is a Class SA water. Appellants, however, question whether the Phippsburg side of the River is Class SA, leaving only the Georgetown side as Class SB. (Phippsburg Appeal at 21-22.)

Any doubt the Appellants may have had has been fully clarified this legislative session. Public Law 2011, chapter 206, section 11 modifies the wording of 38 M.R.S. § 469, to clarify that the lower Kennebec River, across its entire width, is Class SB.[8] The legislation makes clear that "offshore" waters in Phippsburg are Class SA and that the boundary between SA and SB waters with regard to the Kennebec River is the mouth of the River. Class SA waters do not extend upstream as the Appellants suggest. If the Class SA segment had extended upstream, one-half of the Kennebec River would have been SA (in Phippsburg), and one-half would have

[8] Chapter 206 provides, in relevant part:

> 5. Sagadahoc County. All estuarine and marine waters lying within the boundaries of Sagadahoc County and that are not otherwise classified are Class SB waters.
>
> . . . .
>
> B. Phippsburg.
>
> (1) ~~Tidal~~Offshore waters east of longitude 69`-50'-05" W. and west of longitude 69`-47'-00" W., including the tidal waters of the Morse River and the Sprague River, - Class SA.

P.L. 2011 , c. 206, § 11.

been SB (in Georgetown). But this never was intended and never could have been intended, because DEP could not have practically implemented the classification system if the River were divided down the middle.

The Class SA/SB boundary clarification made by the Legislature is consistent with the interpretation that the Department has consistently applied. Further, the clarification is consistent with the original legislative intent to protect areas such as Popham Beach and the waters immediately adjacent to publicly-owned lands with a Class SA designation, but not to extend this classification miles inland up the Kennebec River to include the commercially used and historically dredged portions of the River, including the federal navigation channel.

Finally, these classification clarifications are common and occur during most legislative sessions. (*See e.g.*, P.L. 2009, c. 163 (clarifying the classification for a segment of Trout Brook to correct ambiguity in the statute that could be interpreted as assigning two different classes to this segment of Trout Brook along a town boundary that runs through the mid-channel of the brook).) The clarification in chapter 206 this year, as with similar legislative actions in prior years, is just that – a clarification of the statute and not a reclassification of the waters. Today, the lower Kennebec River remains, just as it always has been, a Class SB water.

C. The Proposed Activity Meets Class SB Water Classification Standards Because There Will Be No Significant Loss of Estuarine or Marine Species.

In the Order, the Department made the finding that the proposed project would not "violate any state water quality law, including those governing the classification of the State's waters." (Order at 6, 7.) The Department reviewed the Class SB water quality standards, which provide, in part:

> Discharges to Class SB waters may not cause an 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.

38 M.R.S. § 465-B(2)(C). The term "without detrimental changes in the resident biological community" is further defined to mean "no significant loss of species or excessive dominance by any species or group of species." 38 M.R.S. § 466(12).

In addressing this standard, the Department found that the Corps's "dredged material is not expected to carry contaminants that would result in an adverse impact" to aquatic life. (Order at 6.) This finding is based on the composition of the dredged material, which is made up of medium to fine-grained sands. (EA at 9, Appendix 3; Ladd Memo at 2, 6.) A particle size analysis, which was included as part of the Corps's application, shows that the dredged material will settle quickly after release from the hopper barge. (EA at Appendix 3.) This means that the dredged material will stay largely within the designated disposal areas and not be carried immediately by tidal and river currents. (EA at 11; *see also* Order at 4.) These conclusions are supported by the State Marine Geologist with the Maine Geological Survey ("MGS"), who distinguished "medium and fine-grained *sands* and fine-grained *sediments* (silts and clays)." (Order at 4 (emphasis added); *see also* MGS Advisory Opinion (describing North Sugarloaf Island dredged material as "medium sand with 1% or less silt and clay" and describing Doubling Point dredged material as "over 98% sand and dominantly fine to medium sand 0.25 to 2.0 mm in diameter. Given the coarseness of the sediment, the bulk of the dredged material should settle quickly at the river disposal site . . . .").)

This distinction is critically important, not only because of the rapid settling of the sandy material within the disposal areas, but also because materials that are primarily sand are likely "free from chemical, biological or other pollutants." (Order at 4 (citing 40 CFR Part 230.60).) It is well recognized that sands, unlike finer clays and silts, are not contaminated because pollutants

do not adhere or bind to coarser materials like sand and gravel. (EA at 9.) All available evidence indicates that the dredged materials, which consist almost exclusively of clean sand, initially stay within the proposed dredging and disposal areas and do not release any significant silt.[9] (EA at 9, 11, Appendix 3; Ladd Memo at 2, 6; MGS Advisory Opinion (noting that no more than 1 percent of dredged material from Doubling Point is silt and clay).)

The Appellants state that the "Phippsburg Shellfish Committee is unequivocal that, based on the personal experience of harvesters during dredge events in 1997, 2000, 2002, and 2003, dredging and disposal into this very sensitive system does in fact effect the clam flats." (Phippsburg Appeal at 28.) The concern expressed today is similar to that expressed in the 1997 licensing proceeding. In 1997:

> Clam harvesters also raised concern that newly opened flats could be covered with sand, and clams smothered at a time of the year when they were vulnerable. When asked if they had any evidence that flats were covered with sand dredged during past dredging events, the clam harvesters stated that they did not.

(DEP Order, #L16281-4E-B-N at 3 (Oct. 22, 1997).)

Now the Appellants claim to have the evidence that was absent in 1997, offered in the form of an unequivocal, declarative statement. (Phippsburg Appeal at 28.) The permitting history for Corps dredge project, however, tells a different story – that, in fact, there has been no impact to shellfish, and this according to shellfish harvesters. The Department permit issued November 30, 2000 notes:

> The Department of Marine Resources (DMR) held a public meeting in Phippsburg on November 28, 2000 to gather information and hear concerns about the proposed project. In comments dated November 29, 2000, DMR stated that no significant concerns were raised at this meeting. *Phippsburg shellfish harvesters mentioned that no adverse impacts to shellfish areas south of the Bluff Head disposal area were observed during or after the dredging in 1997.*

[9] As discussed earlier these clean sands are eventually distributed throughout the riverine/beach systems, providing an important benefit, especially to Popham Beach.

(DEP Order, #L-16281-4E-C-N at 2 (Nov. 30, 2000).) These statements, made much closer to the prior dredging events, directly contradict the statement now presented by Appellants years after the fact. As the record shows, in both the 1997 and 2000 permitting proceedings the evidence demonstrated that dredge projects similar to the one now planned by the Corps would not degrade water quality in the lower Kennebec River. Similarly, in its 2002 permit, the Department noted that past water quality monitoring by the Corps during the disposal of dredged material at Bluff Head supported a finding of no degradation in water quality. (DEP Order, #L-16281-4E-D-N at 3 (March 15, 2002).)

In summary, contrary to claims made by the Appellants today, the data collected, the experience gained, and the statements made by shellfish harvesters during the long history of dredging and disposal operations at these same sites has shown no impact to shellfish or fishery resources, and certainly no adverse impact such that there was a "significant loss of species" as required to be shown under the applicable Class SB water quality standards. BIW recognizes that, much like in 1997, additional flats have been opened in recent years, but because of the coarse nature of the sandy, dredged material and the considerable distance between the disposal sites and the nearest clam flats (nearly one and one-half miles separate Bluff Head and the nearest flat in Drummore Bay, and more than one mile separates Jackknife Ledge and the nearest flat in Atkins Bay) there will continue to be no adverse impact or significant loss of species.

D. The Proposed Activity Meets the Numeric Criteria for Class SB Waters and Will Not Cause the Closure of Open Shellfish Areas.

Along with the criterion relating to estuarine and marine species discussed above, the Class SB standard also provides that Class SB waters must attain specific bacteria numbers. 38 M.R.S. § 465-B(2)(B). In addition, discharges to Class SB waters may not cause the closure of open shellfish areas. *Id.* § 465-B(2)(C). Both requirements are discussed below, along with

additional water qualify claims advanced by the Appellants, some of which are not tied to any particular statutory or regulatory standard.

1. The Project Will Not Cause Violation of the Numeric Criterion for Bacteria Levels.

The dredging project will not be adding any new bacteria to the Kennebec River. To the extent dredging influences bacteria concentrations it is through the resuspension of bacteria already introduced to the River and trapped in the sediment. Sediment type influences its ability to trap or carry bacteria. As the Corps noted in its application, "[c]ontaminants, including bacteria, do not generally adhere to sand particles due to the structure of sand." (EA at 21.)

In deciding not to require sampling of the dredged material, the Department agreed with the Corps, referring to federal rules governing dredging that acknowledge that where the dredged material is primarily sand, the material is most likely "free from chemical, biological, or other pollutants." (Order at 4 (citing 40 C.F.R., Part 230.60).) The referenced rules are part of the Corps's dredged material regulations. The Corps is the agency which conducts most of the dredging and disposal operations in the United States and the regulations are based on years of experience.

A 1997 study conducted by Normandeau Associates further corroborates that the dredging project will not have a material effect on bacteria levels and will not violates the State's numeric criterion for bacteria levels. (Letter from M. Bowen, Normandeau, to B. Herman, BIW, regarding "NAI Project #17566" (Dec. 5, 1997) ("Normandeau Report").) In that study, Normandeau evaluated, among other things, fecal coliform levels before, during, and after a dredging project conduct by BIW. Coliform levels were measured in four locations, both above and below the dredge site and above and below the disposal site (Bluff Head). The results show that "fecal coliform levels were generally low before, during, and after dredging." (Normandeau

Report at 2.) The highest fecal coliform sample was taken at Station 2 located just downstream of the proposed dredging area *prior to* any dredging activity. (*Id.*, Table 4.) Of particular note, before, during, and after dredging fecal coliform levels were well below Class SB standards in the samples taken from Station 4, which was located just downriver from the Bluff Head disposal area. These samples, at their highest (which was pre- and post-dredge) were approximately one-half of the numeric Class SB criteria. In addition, all dredged and post-dredged fecal coliform numbers were less than the highest pre-dredged numbers.

In sum, what these numbers show is that coliform concentrations in the River fluctuate and any correlation between these concentrations and dredging is small. As a result, the dredging of the clean, sandy material in the federal navigation channel will comply the State's numeric water quality standards.

Notably, the Appellants have not alleged that any numeric criteria for Class SB waters would be violated. (*See* Phippsburg Appeal at 26-30.)

2. The Project Will Not Cause Closure of Open Shellfish Areas.

The Appellants argue that the project might affect open shellfish areas and criticize the Department for not obligating the Corps to provide compensation to harvesters if the clam flats are closed. (Phippsburg Appeal at 20, 27-28.) As discussed above, the dredging project will not result in a violation of the numeric bacteria standard for Class SB waters. If, however, dredging or disposal of dredged material were to increase bacteria concentrations, clam flats would not be affected.[10]

The nearest flats, located downstream from Bluff Head, are Drummore Bay, Upper Flats, Parker Head, Wyman Bay, and Atkins Bay. (EA at 20; Phippsburg Appeal at 28.) Bluff Head is

[10] Because clam flats will not be adversely affected there is no need for compensation. Additionally, NRPA does not provide for the payment of compensation to commercial users of a resource who may suffer an economic impact from a permitted activity.

nearly one and one-half miles north of the nearest clam flat, Drummore Bay. (EA at 21.) A recent study prepared as part of a dredging project proposed for the Providence River evaluated both the coliform levels associated with dredging in that river and how rapidly those levels dissipate, as a result of dilution, with distance. (*Id.*) The research and modeling results showed that a three orders of magnitude reduction in coliform levels is achieved within a few hundred yards. (*Id.*) Further dilution, of another magnitude or two, occurs beyond that distance. (*Id.*) Based on these findings, there is no reason to believe the downstream clam flats will be in any jeopardy of closure.

Nevertheless, the Appellants express concern. Pointing to the Normandeau Report, they claim that disposal of dredged material will cause increases in bacteria levels that are similar to or higher than increases in bacteria levels from storm events that trigger closure of clam flats. (Phippsburg Appeal at 20.) There are two primary flaws with this claim. First, they misread the Normandeau Report. The coliform levels measured by Normandeau before, during, and after the 1997 dredging generally were low. Of the 24 measurements, only three exceeded 43 MPN/100ml (most probable number of coliform bacteria per 100/ml). (Normandeau Report, Table 4.) One of these samples was collected before dredging began and two after the project was completed. (*Id.*)

The Appellants try to explain the absence of a significant jump from the pre-dredging concentrations to the dredging or post-dredging concentrations by suggesting that the pre-dredging concentrations are inflated and themselves high. They seize on language in the report noting the pre-dredging concentrations were taken on the day of a "large storm." (Phippsburg Appeal at 19 (quoting Normandeau Report at 2).) Without citation or any basis for doing so, the Appellants then state: "Due to high levels of pollution from storm events (CSO discharges,

POTW overflows, stormwater runoff, and non-point pollution) data collected on that date does not provide a valid baseline." (*Id.* at 19.) This statement is completely fabricated. The storm event referred to in the report involved wind and approximately a half inch of snow. This type of event and the 27 degree conditions on that November day would not have triggered any of the discharges, overflows, or runoffs the Appellants wishfully claim had occurred.[11] When comparing the pre-dredge coliform concentrations collected by Normandeau to the concentration during and after dredging, there are no big jumps and no basis for asserting that any of the concentration increases are equal to or greater than what would result from a rain storm event. In fact, the single largest change of all those measured by Normandeau was a *decrease* in concentration from pre-dredge levels, not an increase. (Normandeau Report, Table 4.)

The second primary flaw in the Appellants' claim that the Normandeau Report shows the disposal of dredged material will cause increase in bacteria levels that are similar to or higher than increases in bacteria levels from storm events is that they completely ignore the significance of distance and dilution. Assuming that the coliform concentrations associated with the proposed project will be comparable to the concentrations in the Normandeau Report, based on how rapidly these concentrations become diluted over a very short distance (see the discussion of the Providence River analysis above) and the distances between the disposal sites and the clam flats, coliform from the dredging project will not be a problem at these sites.

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[11] Also in their critique of the pre-dredge monitoring conducted by Normandeau, the Appellants suggest the coliform concentrations may have been unrepresentatively high because the data were collected during a month "when most upstream wastewater treatment plants do not chlorinate. In August, however, treatment plants are under seasonal disinfection requirements." (Phippsburg Appeal at 20.) While perhaps technically accurate, this statement is misleading. The closest upstream POTW and the one most likely to impact water quality in the vicinity of the dredging project, the Bath Wastewater Treatment Plant, chlorinates year round.

Finally, although the record demonstrates that bacteria levels associated with the project will not pose a problem for shellfish harvesters, the Department acknowledged the concern of harvesters. The Order provides that the Maine Department of Marine Resources ("DMR") will "monitor water quality downstream of the Bluff Head Disposal Site" to ensure that dredging and disposal activities "do not re-suspend fecal coliform which may result in closure of the clam flats." (Order at 5.)

Based on all the factors discussed above, the Department reasonably concluded that the project does not threaten water quality or require closure of any shellfish areas. (Order at 5, 7.)

3. Appellants' Focus on Turbidity and Total Suspended Solids in their Critique of the Normandeau Report is Divorced From Any Applicable Standard and Misplaced.

Although not always relevant to an applicable water quality standard or criterion, the Appellants go to great lengths attempting to discredit the Normandeau Report referenced in the Department's Order. (Phippsburg Appeal at 19-21.) The Appellants' misrepresentation of the portion of the report addressing coliform concentrations associated with a 1997 dredging project is discussed above. The report also contains monitoring data for turbidity and total suspended solids ("TSS") and the Appellants attempt to mischaracterize these data or present them in a misleading manner, as well.

There are no numeric water quality criteria for turbidity or TSS in Class SB waters. *See* 38 M.R.S. § 465-B(2). Thus, measurements for both are relevant to the extent they bear on one of the other water quality standards, such as whether dredging will contribute to detrimental changes in the resident biological community (*i.e.*, contribute to significant loss of species or excessive dominance by any species or group of species), *id.* §§ 465-B(2) (C), 466(12), or cause closure of open shellfish areas, *id.* § 465-B(2)(C).

As discussed above, because of the coarse nature of the dredged material and its distance, dredging will not result in deposition of material on clam flats that will smother the clams or carry with it contaminants that could force closure of the flats. Additionally, any impacts to lobster at Jackknife Ledge will not cause significant loss of species.

The suspension of material in the water column, which is what turbidity and TSS measurements quantify, will not violate State water quality standards either. With regard to turbidity, the Normandeau Report shows a slight increase from pre-dredge to dredge readings and then the beginning of a return to pre-dredge levels in the vicinity of the dredge shortly after the project is complete. In the vicinity of the disposal site, comparison of the readings taken during the dredge and after the dredge show a plateau just upstream of Bluff Head and slightly elevated turbidity just downstream of Bluff Head. Notable, however, is that even the post-dredge readings just downstream of Bluff Head (6.0 NTU (nephelometric turbidity units) at mid-depth and 9.0 NTU at bottom depth) are within the pre-dredge turbidity range (2.5 NTU to 9.5 NTU). (Normandeau Report, Table 1.)

What does all this mean? As expected, dredging in the Kennebec has some impact on turbidity, but not as great an impact as one might think. The Normandeau Report put these numbers in context by allowing comparison to turbidity readings taken by BIW, once per month over a seven month period (April through October). All of the readings taken by Normandeau – pre-dredge, dredge, and post-dredge – were within the range recorded by BIW as occurring within the River, 1.1 NTU to 14.5 NTU. (*Id.*, Table 2.)

Normandeau's analysis of TSS tells a similar story. Dredging in the Kennebec does not have the type of impact one might expect. In fact, the TSS concentrations measured by Normandeau show post-dredge concentrations generally lower than pre-dredge concentrations.

(*Id.*, Table 3.) While Normandeau states that, in part, this could be the result of the wind and snow event during pre-dredge monitoring elevating the pre-dredge concentrations, *id.* at 2, this does not change the fact that the post-dredge concentrations, ranging from 8.8 mg/L to 16.8 mg/L, were low, *id.*, Table 4.

The Corps's application helps put these TSS concentrations in context, citing studies that show TSS can have lethal effects on fish, but at concentrations of 580 mg/L to 700,000 mg/L, depending on the species. (EA at 20.) The Corps also discussed studies of striped bass that found, for example, that striped bass larvae tested at concentrations of 200 and 500 mg/L consume significantly less prey than larvae exposed to 0 and 75 mg/L, and that adult prespawn striped bass did not avoid concentrations of 954 to 1,920 mg/L. (*Id.*) What all these study results show is that the TSS concentrations associated with dredging are not the type that are environmentally detrimental or close to the concentrations that contribute to significant loss of species.

The Appellants strategically ignore discussion of what turbidity levels and TSS concentrations might cause a violation of the State's water quality standards. Instead, they misleadingly suggest that any increase in turbidity or TSS associated with dredging is a violation to attempt to discredit the Normandeau Report. (*See* Phippsburg Appeal at 20.) By attacking the Report they hope to undercut one of the record items referenced by the Department in the Order and from there argue that the entire Order was issued in error. Review of Appellants' critique of the Normandeau Report, however, only underscores their willingness to distort and manipulate the record in pursuit of their goal to stop the dredging project.

First, the Appellants criticize the fact that water quality was evaluated at only four locations, which they say is insufficient to support a study of the "river system." (*Id.* at 19.)

However, the intent of the report was not to study the entire river system, but rather to evaluate dredging and disposal activities in specific locations. Thus, monitoring sites were selected just upstream and downstream of both the dredge site and Bluff Head disposal site, sites where any impacts were expected to be greatest. The report was conducted strictly in conformance with Department requirements for dredge monitoring and in compliance with a Department permit requirement. (*See* Department Order, #L16281-4E-B-N at 5 (Oct. 22, 1997).)

Second, the Appellants claim study sites and data were not correlated to tides and currents. (Phippsburg Appeal at 19.) In fact, Normandeau intentionally collected samples on incoming and outgoing tides consistent with DEP requirements. Stations 1 (upstream of the dredge site) and Station 3 (upstream of the disposal site) were collected on incoming tides and Station 2 (downstream of the dredge site) and Station 4 (downstream of the disposal site) were collected on outgoing tides. (Normandeau Report at 1, 2.) This reflects a recognition of the significance of tidal influences and a desire by Normandeau to collect worst case scenario results.

Third, the Appellants cherry-pick data when discussing the turbidity results. In comparing Normandeau's turbidity data to turbidity data collected by BIW, the Appellants exclude the July data, data showing naturally occurring turbidity levels in the River exceeding any of the levels that occurred during or after the 1997 dredging monitored by Normandeau. (Phippsburg Appeal at 20.) The apparent explanation for this misleadingly selective use of BIW's data is that the Appellants only want to compare Normandeau's monitoring results to BIW's data for "dry weather." (*Id.*) This explanation, however, rings hollow. The Appellant acknowledge elsewhere in their appeal that July is one of the driest months in Maine. (*Id.* at 29 ("For the Phippsburg commercial harvesters, the months of July and August are the best months

of the year – the weather tends to be dry . . . .").) July 24, 1997, the day BIW collected the July data the Appellants conveniently ignore, was no exception. That was a day with no precipitation, preceded by five more days with no rainfall. This is another example of the Appellants' willingness to ignore the facts for the sake of their argument.

Fourth and perhaps most notably (and already discussed above), the Appellants criticize the Normandeau report because pre-dredge monitoring data were collected during "a large storm event," erroneously saying that storm contributed to POTW overflows, stormwater runoff, and non-point source pollution so as to impact baseline data. (Phippsburg Appeal at 19.) Normandeau acknowledged that this event – which included wind and approximately one-half inch of snow – may have increased the pre-dredge TSS concentrations. (Normandeau Report at 2.) With this understanding of the data, the report makes clear how minimal an impact dredging has on TSS. The Appellants' fabrication of factual scenarios in an effort to discredit the report is unfortunate.

E. The Proposed Activity Meets the Designated Use Standard for Class SB Waters.

Class SB waters must be of a quality suitable for the following designated uses: "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." 38 M.R.S. § 465-B(2)(A). In addition, "[t]he habitat must be characterized as unimpaired," *id.*, meaning capable of supporting aquatic life "without diminished capacity." *Id.* § 466(11).

There is a presumption that if all numeric and narrative water quality criteria are met then applicable designated uses also will be achieved. *See* 40 C.F.R. § 131.1. As discussed in Section XI below, there will be no unreasonable impacts to habitat and, while dredging and

disposal will impact the sites where those activities occur, and the habitat at those sites, the waters of both the Kennebec River and the coastal environment will continue to have the same, undiminished capacity to support aquatic life. Indigenous aquatic life is and will continue to be fully supported in these areas and, in fact, shellfish populations and fish populations are thriving with periodic dredging and disposal operations. Also, as discussed above, the numeric standards will be met and water quality will not be impaired. This means shellfish will continue to propagate and be harvested. This also means that recreational users of the River and beach goers visiting Popham Beach State Park, Morse Mountain, or coastal areas will be able to engage in all those activities that attract them to those locations, including swimming, without concern. Finally, as DMR has stated, the water will remain suitable for recreational fishing. (Memorandum from DMR to R. Green, DEP, regarding "Request for Project Review" (March 10, 2011) ("DMR Comments 1") (stating its opinion that "impacts to recreational fishing and other recreational activities from this proposal would not be significant").)

In sum, the Kennebec River and the ocean surrounding Jackknife Ledge will remain suitable for all designated uses in Class SB waters.

F. Disposal of Dredged Material in Class SB Waters at Jackknife Ledge will Not Violate Class SA Water Quality Standards at Popham Beach.

The Appellants suggest that the deposition of clean sand at Jackknife Ledge in Class SB waters will violate Class SA water quality standards because of potential migration of some dredged material across the SA/SB line. (Phippsburg Appeal at 22-23.) This argument suffers two fundamental flaws. First, Appellants' suggestion that material quantities of the dredged spoils disposed of at Jackknife Ledge will migrate into and settle in Class SA waters is overstated and based on a misleading characterization of the record. They point to discussion of a study conducted by William Hubbard contained in the EA, declaring that the study shows that

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"initial dispersal of dump spoils will extend between 1,000 feet . . . to 3,000 feet" from Jackknife Ledge. (*Id.* at 22.) What Appellants conveniently fail to specify is that the referenced Hubbard study addressed disposal at the in-river disposal site. (EA at 19.) The distance calculations were based on a "fast river flow of 12,000 cfs," which would not be present at the Jackknife Ledge site.[12] (*Id.*) Appellants inappropriately compare apples to oranges.

Second, any migration of dredged material into Class SA waters, along with being minimal, would not violate any Class SA standard. The material will be discharged directly to Class SB water at Jackknife Ledge and any subsequent migration to neighboring Class SA waters would not be a direct discharge. 38 M.R.S. § 465-B(1)(C). Any such migration would not affect the dissolved oxygen level or bacteria level in the Class SA waters. *Id.* § 465-B(1)(B). The Appellants do not contend otherwise. (Phippsburg Appeal at 22-23.)

Finally, the disposal at Jackknife Ledge will not affect the designated uses of Class SA waters or alter the characterization of the habitat as free-flowing and natural, 38 M.R.S. § 465-B(1)(A), nor will it prohibit the estuarine and marine life from continuing as it naturally occurs, *id.* § 465-B(1)(B). The benthic community at the Jackknife Ledge disposal site is "dominated by organisms adaptive to shifting sands." (EA at 12.) This will continue. Further, as the State Marine Geologist noted: "People should understand that the Jackknife Ledge site is a perfect match with the sand from Sugarloaf Islands." (Email from S. Dickson, Ph.D., State Marine Geologist, to B. Swan, DMR, regarding "Tomorrow's meeting in Phippsburg" (Feb. 23, 2011).) It is precisely because of this match and a desire to keep the dredged material from North Sugarloaf Island in the near-shore system that Jackknife Ledge was selected as a disposal site

[12] Surveys of previous in-river disposals show the deposited material "remains predominately within the disposal area." (EA at 19.)

years ago. (*Id.*; EA at 11, 19.) The intent is to ensure that over time the natural currents move the sand from the disposal site to renourish Popham Beach. This is fully consistent with the Class SB water quality standards at the Jackknife Ledge disposal site and neighboring Class SA water quality standards at Popham Beach.

G. The Department Appropriately Issued the Water Quality Certification.

As required by NRPA Section 480-D(5), the Department evaluated the compliance of the dredging project with State water quality laws. As discussed above, the Department appropriately concluded that the project will comply with these laws. (Order at 6-8.) It therefore follows that the Department appropriately issued the CWA Section 401 Water Quality Certification, certifying that the project will comply with all appropriate State water quality standards. (Order at 8.)

Appellant Dot Kelly argues that the Department's Water Quality Certification is insufficient. In addition to certifying compliance with State water quality laws adopted in accordance with Section 303, 33 U.S.C. § 1313, Ms. Kelly argues that the Department also must certify that the Corps's dredging will satisfy CWA Section 301, 33 U.S.C. § 1311. Section 301, she claims, mandates that the Department must certify compliance with all the federal requirements for a CWA Section 404, 33 U.S.C. § 1344, permit, including those requirements spelled out in the federal regulations administered by the Corps. (Kelly Appeal at 4-6.) In advancing this argument she makes an inferential leap not supported by the statutory text or case law that completely redefines the accepted application of the CWA across the country.

Section 401(a) provides for a state to certify compliance "with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317" of the CWA. This includes certification of state

water quality standards adopted pursuant to Section 303.[13] Notably, Section 404 is not included in the list. Ms. Kelly leaps over this fact, noting that Section 301 is included and that this section references Section 404. Specifically, Section 301, titled "effluent limitations," begins: "Except as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title, any discharge of any pollutant by any person shall be unlawful." After this statement, Section 301 focuses on the development and implementation of effluent limitations. *Id.* § 1311(b)-(p).

An "effluent limitation" is defined as "any restriction . . . on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters." *Id.* § 1362(11). Effluent limitations are not part of the regulation of the discharge of dredged and fill material under the Section 404 permit program. Rather, effluent limitations are used to control point source discharges of pollutants under the Section 402 National Pollutant Discharge Elimination System ("NPDES") program. As the courts have explained:

> [T]he NPDES program administered by EPA under § 402 is the only appropriate permitting mechanism for discharges subject to an effluent limitation under § 301 or a standard of performance under § 306. . . . Congress never intended for § 404 to govern discharges subject to effluent limitations or performance standards.

Southeast Alaska Conservation Council v. U.S. Army Corps of Engineers, 486 F.3d 638, 647 (9th Cir. 2007). Thus, in arguing that the Department must certify compliance with Section 301 and, therefore, with Section 404 as well, Ms. Kelly attempts to do what the CWA does not provide for and what Congress never intended -- apply Section 301 effluent limitations to Section 404 dredge projects. Her argument should be rejected and the Water Quality Certification

[13] Under Section 303, state water quality standards must "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." 33 U.S.C. § 1313(c)(2)(A).

confirming that the dredging will comply with State water quality standards[14] should be affirmed.

XI. The Project Will Not Unreasonably Impact Habitats or Fisheries.

NRPA Section 480-D(3) establishes that the dredging project may not "unreasonably harm" significant wildlife habitat ("SWH"), marine fisheries, or other aquatic life. The Corps application and other record material make clear that these resources will not be unreasonably impacted by the emergency maintenance dredging project.

A. Significant Wildlife Habitat

1. The Dredge and Disposal Sites are Not Within Significant Wildlife Habitat.

"Significant wildlife habitat" is a defined term specific to NRPA. 38 M.R.S. § 480-B(10).[15] Neither the Kennebec River nor the near-shore ocean area at the River's outlet has been defined or mapped as SWH. Thus, neither the dredge sites nor the disposal sites are within SWH. This is the unmistakable, unambiguous result of a plain reading of NRPA and the

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[14] Ms. Kelly appears to believe that the Water Quality Certification issued by the Department was issued pursuant to Section 401(d). (Kelly Appeal at 4-6.) Section 401(d), however, does not provide for the issuance of certifications, but rather provides for the attachment of conditions to certifications. This is evident from the plain language of Section 401(d). The Water Quality Certification issued by the Department, in accordance with Section 401(a), certifies compliance with State water quality standards adopted by Maine consistent with CWA Section 303. These State water quality standards are contained in 38 M.R.S. § 465-B(2).

[15] NRPA provides:

> Significant wildlife habitat means:
>
> A. The following areas to the extent that they have been mapped by the Department of Inland Fisheries and Wildlife or are within any other protected natural resource: habitat, *as defined by the Department of Inland Fisheries and Wildlife*, for species appearing on the official state or federal list of endangered or threatened animal species . . . .

38 M.R.S. § 480-D(10) (emphasis added).

Department of Inland Fisheries and Wildlife's ("DIFW's") rules governing this habitat. *Id.*; DIFW Rules, Ch. 10.[16]

The Appellants wish this were not the case. They argue that because the River is used by Atlantic salmon and shortnose sturgeon, both listed as endangered species under the federal Endangered Species Act ("ESA"), and because the River has been designated by the federal government as "critical habitat" under the ESA, the River also should be designated as "significant wildlife habitat" under NRPA. (Phippsburg Appeal at 31-32; Friedman/Watts Appeal at 9-11.) Although similar in sound, these two specific terms in two specific acts, one federal and one State, do not have similar meaning. The Board should not, and legally may not, use the present administrative licensing proceeding to take up the policy changes the Appellants desire. Formal rulemaking or statutory amendment would be needed to achieve the type of change Appellants seek.

For example, Friedman/Watts acknowledge that "Maine DIFW has never designated any habitat in Maine as 'significant wildlife habitat' for these two endangered species [*i.e.*, Atlantic salmon and shortnose sturgeon]; and has never done so in the Kennebec River." This should be the end of the issue. (Friedman/Watts Appeal at 9.) Nevertheless, Friedman/Watts contend that the Department's "reliance on Maine DIFW for determining what is and what is not 'significant wildlife habitat' under NRPA is arbitrary and capricious." (*Id.* at 10.) Actually, the opposite is true. All the Department has done is follow State law and all applicable rules. If the Department took it upon itself to designate the Kennebec River as SWH, the Department would be acting without legal authority and in an arbitrary and capricious manner.

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[16] The definition section of DIFW's rules state: **"Habitat for species appearing on the official state or federal lists of endangered and threatened species.** The Department reserves this subsection for future definition." DIFW Rules, Ch. 10.02(1).

Phippsburg *et al.* advance slightly different arguments also completely without merit. For example, they claim it is "immaterial" that DIFW has not designated the Kennebec River as SWH, asserting that "the Order must be revised" to treat and evaluate the River as though it were such habitat. (Phippsburg Appeal at 32.) Their position, they claim, reflects the true intent of NRPA. (*Id.*). The legislative intent of NRPA, however, is reflected in its plain language, specifically the definition of "significant wildlife habitat." This language must not be disregarded, as Phippsburg *et al.* request.

Phippsburg *et al.* also claim that the Supremacy Clause of the U.S. Constitution requires that any definition of SWH under NRPA must include all federally designated "critical habitat." (*Id.*) There is no conflict between the federal ESA and Maine's NRPA, and contrary to the suggestion of these appellants, in no way does NRPA weaken federal authority or "alter the designation of critical habitat" under the ESA. (*Id.* at 32, n. 35.) In fact, it is precisely because of the federal government's authority under the ESA that the Corps is engaged in a separate, formal consultation process with the National Marine Fisheries Service ("NMFS")[17] under Section 7 of the ESA to ensure full compliance with this federal act. (Email from J. Crocker, NMFS, to B. Swan, DMR, regarding "Kennebec River Dredge CMR Comments" (April 13, 2011) ("NMFS Status Report") (summarizing status of formal consultation process between NMFS and Corps).)

2. The Dredging Project Will Not Unreasonably Harm Significant Wildlife Habitat.

As discussed above, the dredging and disposal will not occur in SWH. While the area in the vicinity of Popham Beach has been designated SWH, as have a few areas along the bank of the lower Kennebec River (Phippsburg Appeal, Ex. 12), the predominantly coarse, sandy

[17] NMFS is an office within the National Oceanic and Atmospheric Administration ("NOAA"). NOAA, in turn, is a division of the U.S. Department of Commerce.

dredged material will not adversely impact these areas. The only possible impact to any such habitat would be the result of the silt/clay component of the dredged material settling on the shore, but due to the small fraction of material that consists of silt and clay and the dynamic nature of the river and the coastal environment, any such deposition would be minimal and only temporarily noticeable. Further, any such deposition would not cause unreasonable harm. Not only do natural events, such as periods of rain, increase silt levels in the River, which can translate to siltation on the shore (EA at 18), but the history of dredging on the River and repeated use of the same disposal sites teaches us that this habitat, which continues to function today, will not be unreasonably harmed.

These facts are reflected in the Department's statement in the Order that after review of the State's Geographic Information System ("GIS") database showing SWH the Department determined "there are no Significant Wildlife Habitats as defined in the Natural Resources Protection Act associated with the two dredge sites or with the two disposal sites." (Order at 5.) This supports the finding that the project will not unreasonably harm SWH (*id.*), a finding that should be affirmed.

B. Shortnose Sturgeon

1. The Project Will Not Result in Unreasonable Harm to Sturgeon.

Shortnose sturgeon, listed as an endangered species under the federal ESA but not under Maine's Endangered Species Act, inhabit the Kennebec River. In fact, they do so in significant numbers. A 2003 study indicated that an adult population of approximately 9,500 shortnose sturgeon live in the Kennebec River. (EA at 14.) As a result of the number of sturgeon and the potential for them to be in the dredge area in August, the Corps acknowledged that "[i]t is possible that the endangered shortnose sturgeon which feed of the bottom may be entrained"

during the project. (EA at 22.) In October 2003, during the last Corps dredge project, the dredging at Doubling Point resulted in the take[18] of five shortnose sturgeon. (*Id.*) Three of the takes were presumed to be lethal and occurred prior to the protective screens on the hydraulic intake being removed. (*Id.*) After removal of the screens, the two additional fish that were entrained were released with minor injuries. (*Id.*)

This summer there is a possibility for comparable or slightly increased take compared to 2003 because the project will be completed in August, as opposed to in October.[19] This summer, however, through removal of the intake screens, entrained sturgeon will have a reasonable chance of survival, as demonstrated by the 2003 project. In light of the abundance of shortnose sturgeon, the likely impact on the fish based on prior dredging experience, and the need to complete the dredging in August, the project will not result in unreasonable harm to this species.

Consideration of alternatives only affirms the reasonableness of the project. For example, wintertime dredging will not achieve the project purpose and is not a practicable alternative. Additionally, while the use of a mechanical dredge, as opposed to the proposed hydraulic dredge, might result in a marginal reduction of the number of shortnose sturgeon impacted by the project, the increased time (translating to a longer period of disturbance for sturgeon and users of the River and Popham Beach) and added cost associated with that alternative do not justify its use or render the impact of the project, as proposed, unreasonable. NRPA provides for this type of balancing when evaluating a project, its impacts, and whether approval is appropriate. *Uliano*, 2005 ME 88, ¶¶ 13-15, 876 A.2d at 19-20. The Department's

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[18] The federal ESA provides: "The term 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 U.S.C. § 1532(19).

[19] October is outside, but closer to, the wintertime dredging window in which the Corps normally seeks to dredge, except in the case of emergencies, because sturgeon are likely to be less abundant in the channel in the winter.

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finding that the emergency maintenance dredging project will not unreasonably harm shortnose sturgeon is supported by the record and should be affirmed.

Notably, the Department's finding is not unconditional. The Order requires the Corps to have a qualified observer onboard the hopper dredge to monitor and report the capture of shortnose or Atlantic sturgeon.[20] (Order at 5, 8.) While the Appellants dismiss this condition as "meaningless," they are wrong. (Friedman/Watts Appeal at 6; *see also* Phippsburg Appeal at n.30 (incorporating by reference the Friedman/Watts Appeal regarding impacts to wildlife, fisheries, and habitat).) These observers can help with the safe release of entrained fish and are experts, with the potential to provide beneficial, real-time feedback. For example, observation of entrained sturgeon in 2003 revealed that removal of the protective screens would benefit the fish. With a person onboard dedicated to observing and looking out for sturgeon, these types of improvements are more likely. The participation of observers has long-term benefits, as well. Data collected by the observers this summer will help inform all the parties involved in future dredging projects on the Kennebec, including regulators, applicants, and interested parties, and help ensure continued health of both species of sturgeon as a whole.

2. The Federal Government Provides an Added Layer of Protection that the Department and Board May Consider.

All of the factors discussed above, by themselves, justify the Department's finding that the Corps's project will not unreasonably harm shortnose sturgeon (or Atlantic sturgeon). As the Appellants state, "[t]he federal, not state government has jurisdiction over migratory and federally endangered species." (Phippsburg Appeal at 31.) This includes jurisdiction over shortnose sturgeon. Through the formal consultation process in which the Corps is engaged with

[20] Atlantic sturgeon are proposed for addition to the federal list of threatened or endangered species. This species is not listed under Maine's ESA. The impacts to Atlantic sturgeon will be no greater than the impacts to shortnose sturgeon.

NMFS, the Corps expects to receive an Incidental Take Statement ("ITS") authorizing the take of a specific, limited number of shortnose sturgeon; this is a number that may not be exceeded.[21] (Email from W. Kavanaugh, Corps, to B. Swan, DMR, regarding "Kennebec River, Maintenance Dredging Request – follow up meeting" (Feb. 17, 2011) ("If the number of takes of SNS [shortnose sturgeon] exceeds the number in the take statement then operations will need to be halted . . . ."); *see* EA at 23 (noting a prior take limit of four shortnose sturgeon set by NMFS).) NMFS has explained that "[t]he ITS will include reasonable and prudent measures and terms and conditions that NMFS determines are necessary and appropriate to minimize and monitor take."[22] (NMFS Status Report.) In addition, the Corps has stated: "All conservation recommendations provided by the National Marine Fisheries Service will be adhered to during these dredging activities." (EA at 23.) While the Department did not deem discussion of this layer of federal protection necessary to support its finding of no unreasonable harm, a decision with which BIW concurs, the Department could have considered, and the Board still may consider, this additional factor when evaluating the impact of the project on sturgeon.

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[21] DMR provided two rounds of comments to the Department on the dredging project, including comments on shortnose sturgeon. In its initial comments, DMR recommended capturing up to 50 shortnose sturgeon prior to commencement of dredging and fitting them with acoustic transmitters so their movement could be monitored during dredging. By monitoring movement, DMR noted it might be possible to coordinate dredging activities to avoid the sturgeon. (Memorandum from DMR to R. Green, DEP, regarding "Request for Project Review" at 2 (March 10, 2011).) In subsequent comments, DMR clarified that it was not suggesting a permit condition requiring the fitting of sturgeon with transmitters, but rather offering a suggestion for the benefit of the Corps to help it comply with the take limit NMFS will set. DMR explained: "To avoid project delays that might result from NMFS's enforcement of the ESA, DMR suggests that up to 50 shortnose sturgeon in the Kennebec River (in the immediate dredging area) be captured and tagged with acoustic transmitters." (Memorandum from DMR to R. Green, DEP, regarding "Request for Project Review – Additional Comments" (April 11, 2011).) Statements by the Appellants that the Department ignored DMR's suggestion by not including a permit condition requiring the capture and fitting of sturgeon with transmitters misrepresents the intent of DMR's suggestion. (*See* Friedman/Watts Appeal at 6 (criticizing the Department for not requiring adoption of the transmitter strategy).)

[22] These measures will benefit Atlantic sturgeon, as well.

3. The Relevance of Prior Dredging Approvals on the Current Project

Prior Department approvals for maintenance dredging in the Kennebec River limited dredging to the winter months. The reason for this limitation is that during the winter sturgeon are less likely to be present and, therefore, less likely to be impacted by dredging. Contrary to the position adopted by the Appellants (Phippsburg Appeal at 9-10, 33; Friedman/Watts Appeal at 6), it does not necessarily follow that because a finding of no unreasonable harm to sturgeon in a prior licensing proceeding was conditioned on wintertime dredging that dredging during some other time of year is presumed to be unreasonable. Each project and each permit application must be evaluated on its own merits and the specific facts.

In the present instance, the Corps is seeking approval for *emergency* maintenance dredging for August so that the *SPRUANCE* may sail on time and safely. It is in light of this project purpose that the potential impacts to sturgeon (as well as the other impacts NRPA requires be evaluated) and potential alternatives consistent with the project purpose must be evaluated. *Uliano*, 2005 ME 88, ¶ 14, 876 A.2d at 20 (noting the balancing required by NRPA). As set out above, when this balancing is done the appropriate conclusion is the one the Department reached – the emergency maintenance dredging project will not unreasonably harm sturgeon (shortnose or Atlantic).

C. Atlantic Salmon

Atlantic salmon, listed as an endangered species under the federal ESA but not under Maine's ESA, may pass by the dredge and disposal sites, most likely during spring migration. (EA at 13.) The Corps expects any interference with these fish to be minimal (if there is any interference at all) since both upstream and downstream migrations will have been completed.

(*Id.* at 18.) Further, any salmon present is expected to move to avoid the dredge equipment. (*Id.*) (Unlike sturgeon, Atlantic salmon are not bottom feeders.)

DMR, the agency with salmon expertise, has reviewed the project and in two sets of comments has not expressed any concerns about potential impacts to Atlantic salmon. (DMR Comments 1; Memorandum from DMR to R. Green, DEP, regarding "Request for Project Review – Additional Comments" (April 11, 2011) ("DMR Comments 2").) At the federal level, NMFS has not expressed any concerns either. In its April status report, NMFS reported, "[a]t this time we are engaged in the [ESA] Section 7 consultation process. As you know, this involves considering the effects of the proposed action on listed species (GOM DPS[23] of Atlantic salmon and shortnose sturgeon) . . . ." (NMFS Status Report.) Notably, NMFS went on to explain that an Incidental Take Statement would be needed for shortnose sturgeon as a result of likely project impacts. (*Id.*) NMFS made no similar statement regarding the need for the Corps to obtain authorization for impacts to Atlantic salmon. (*Id.*) If the project created potential for a "take" – which includes harming, capturing, or killing – an ITS would be needed for salmon, as well. But because NMFS believes there will be no harm to Atlantic salmon, such an authorization will not be needed.

Consistent with the level of concern expressed by the State and federal fisheries agencies about potential impacts to Atlantic salmon – they expressed no concern – and record evidence in the Corps's application, the Department found that the dredging project will not unreasonably harm any estuarine or marine fisheries, without any specific mention of Atlantic salmon. While the Appellants complain that there was no specific discussion of Atlantic salmon in the Order (Phippsburg Appeal at 32, Friedman/Watts Appeal at 8), the Department is under no obligation

[23] GOM DPS stands for Gulf of Maine Distinct Population Segment.

to identify every non-impact. The Department's finding of no unreasonable harm should be affirmed.

D. Other Fisheries or Aquatic Life

The dredging and disposal will occur in areas routinely dredged and routinely used to dispose of the dredged material. There will be impacts to these areas, but as with previous dredge projects, these impacts will be reasonable. Further, by not expanding the footprint of the areas routinely impacted by dredging activities, the overall environmental impact will be minimized.

1. Lobster

Lobstermen fish in the Jackknife Ledge area. Some of the lobster in this area are likely to be covered when the dredged material is deposited in this area. While Appellants express concern about the potential impacts to lobstermen of the project, no one doubts that overall lobster population in the area will remain strong or that lobster will continue to populate the Jackknife Ledge area after the project is complete, just as lobster have after prior projects. (*See* Phippsburg Appeal at 23.) The impacts to the lobster fishery will be reasonable.

The concern among lobstermen, as expressed in the Phippsburg Appeal, is that "the dredge itself will cut lines and wipe out lobster traps that are in its path, both while dredging and while transporting the dredged material to the [Jackknife Ledge] disposal site." (*Id.*) This concern is specifically addressed by NRPA Section 480-D(9), which provides: "If the proposed activity involves dredging, dredge spoils disposal or transporting dredge spoils by water, the applicant must demonstrate that the transportation route minimizes adverse impacts on the fishing industry and that the disposal is geologically suitable."

While recognizing that lobstermen may be concerned, the Appellants do not contest that this standard has been met. (*See, e.g.*, Phippsburg Appeal at 8 (summarizing grounds for appeal).) Whether challenged or not, BIW notes that the material dredged at North Sugarloaf Island "will be transported to the Jackknife ledge disposal area via the commercially traveled route." (EA at 3.) This means that gear currently set outside of the course typically travelled by commercial vessels will not be subject to new risk. Additionally, as a condition of approval, the Order requires the Corps to clearly mark or designate the dredging areas, disposal areas, and transportation route to and from each, publish notice of the transportation routes a week in advance of dredging, and publish notice of the procedure the Corps will use to respond to inquiries regarding the loss of fishing gear. (Order at 7-8.) This notice also will provide lobstermen with the potential to "fish that area [*i.e.*, Jackknife Ledge and the transport route] prior to dredge material disposal to reduce potential direct adverse impacts to lobster." (DMR Comments 1 at 2.) All of this will ensure that the project will not have an unreasonable impact on lobster or lobstermen.

2. Other Fish Species and Recreational Fisheries

In preparing its application, the Corps identified and considered the potential impacts to all the species of fish in the vicinity of the project and their habitat. (EA at 25.) The Corps concluded that no unreasonable impacts to these species or to their habitat is expected because:

> Dredging and disposal activities are not expected to impede the passage of fish migrating up and down the Kennebec River due to the width of the river. The material to be dredged is coarse grained (i.e. sand). This will limit the amount of turbidity in the river during dredging and disposal activities.

(*Id.*) With a focus on recreational fisheries, DMR concurred, commenting: "It is DMR's opinion that potential adverse impacts to recreational fishing and other recreational activities from this proposal would not be significant." (DMR Comments 1 at 2.)

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This record evidence supports the Department's finding that the project will not unreasonably harm any estuarine or marine fisheries or other aquatic life. (Order at 5.)

XII. The Project Will Not Unreasonably Interfere with Existing Scenic, Aesthetic, Recreational, or Navigational Uses.

Currently, the Kennebec River is used by large commercial vessels and recreational boaters and kayakers. The presence of dredging equipment will not change this and, in fact, through completion of the project, will ensure the full range of uses will continue to be able to use and enjoy the River. Any impact to other navigational uses will be minimal. The dredging equipment will only be present for a short period and when present can easily be avoided.

The dredge equipment also will be visible to both those on the water and on shore. During the period when dredging occurs at North Sugarloaf Island and the material is disposed of at Jackknife Ledge, the equipment will be visible, and perhaps at times audible, from portions of Popham Beach State Park. Individuals at other nearby beaches may be able to observe the dredge equipment during this portion of the project, as well. The overall project (dredging at both sites) is scheduled to be completed within three to five weeks, but, as noted above, the project more likely will be completed within two weeks and may take less than seven days. (Email from W. Kavanaugh, Corps, to R. Green, DEP, regarding "Kennebec River, Maintenance Dredging" (March 16, 2011).) The dredging at North Sugarloaf Island and associated disposal, which constitutes approximately 30 percent of the project based on the volume of material to be dredged, will be completed more quickly. As a result, any impact of the project on Popham Beach and the Morse Mountain area will occur for only a fraction of the project duration and from no one area will the entire project be observable.

The overall brevity of the project (especially when compared to the mechanical dredging alternative that would take considerably longer), combined with the fact that the activity will not

be that obtrusive in an area already used by commercial vessels, will ensure that the project will not unreasonably interfere with any existing scenic, aesthetic or recreational uses.

This is what the Department concluded in its findings (Order at 2-3), and appropriately so.

XIII. Conclusion

The Corps has successfully dredged the federal navigation channel in the Kennebec River, in compliance with all State water quality laws and without unreasonable environmental impact, on numerous prior occasions. The only difference between these prior projects and the emergency maintenance dredging the Corps seeks to conduct this summer is timing. The Navy has determined that it is critical for the *SPRUANCE* to sail on September 1. While prior projects have been completed in April, October, and during the winter months, they have not been completed in August as now proposed.

The Appellants contend the timing makes all the difference, but the record shows otherwise. The coarse, sandy material that will be dredged at Doubling Point and North Sugarloaf Island will quickly settle at the Bluff Head and Jackknife Ledge disposal locations and is neither contaminated nor the type of material that traps and holds bacteria or other contaminants. Water quality will remain compliant with Maine's laws, shellfish harvesting areas will remain open, and fisheries and surrounding habitat will not suffer unreasonable harm. This is reflected in the record material and consistent with prior experience.

The Department reviewed this record material, considered the alternatives, and evaluated the Corps's dredging project. This produced the Department's reasoned determination, reflected in the Order, that the dredging satisfies all NRPA permitting standards and requirements for water quality certification. BIW respectfully requests that the Board affirm this determination

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and Order, and allow the Corps to proceed with the dredging so the *SPRUANCE* may join the Navy Fleet in September.

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