#### STATE OF MAINE

#### DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE HOUSE STATION 17

AUGUSTA, MAINE 04333

#### DEPARTMENT ORDER IN THE MATTER OF -

U.S. ARMY CORPS OF ENGINEERS PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY DREDGING AND SPOILS DISPOSAL L-16281-48-A-N

) FEDERAL CONSISTENCY REVIEW AND

) CERTIFICATION

) FINDINGS OF FACT AND ORDER

After reviewing the project file which includes an application for a consistency determination under 38 M.R.S.A., Section 480-C of the Natural Resource Protection Act and an application for a Water Quality Certification under Title IV, Section 401 of the Federal Water Pollution Control Act, the staff summary, and other related materials on file with regard to the above noted project, the Department finds the following facts:

#### PROJECT HISTORY

- 1. The Maine Coastal Zone Program was approved on September 30, 1978 by the Federal Office of Coastal Zone Management under Section 307 of the Coastal Zone Management Act, as amended. Federal activities which affect land or water resources in the Coastal Zone must be undertaken in a manner consistent, to the maximum extent practicable, with the requirements of Maine's approved Coastal Zone Management Program.
- 2. In a letter dated April 20, 1989, with an enclosed application, the New England Division Corps of Engineers has requested the Department's concurrence with their Consistency Determination pursuant to Maine's Coastal Zone Plan for maintenance dredging of the Lower Kennebec River Navigation Project.
- 3. This project also requires Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act.

#### PROJECT DESCRIPTION

- 4. The Corps of Engineers proposes to dredge 150,000 cubic yards of material from two sections of the Navigation Project to restore the channel to authorized dimensions. Authorized dimensions of the Navigation Project includes a channel 27 feet deep at Mean Low Water (MLW) and at least 500 feet wide, extending from the river mouth to a point adjacent to the Bath Bridge. The proposed work consists of:
  - (A) Dredging of a portion of the channel from the City of Bath to Doubling Point. This Doubling Point Reach is about 2,500 feet long and 500 feet wide. Dredging was last performed at this location in 1986.
  - (B) Disposal of the dredged material from the Doubling Point Reach at the previously used disposal site north of Bluff Head. This disposal area is 1.7 nautical miles downstream of the dredging site. It is 0.1 nautical mile long with depths of 80 to 100 feet below MLW.

U.S. ARMY CORPS OF ENGINEERS PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY L-16281-4E-A-N

2 FEDERAL GONSISTENCY REVIEW AND ) CERTIFICATION ) FINDINGS OF FACT AND ORDER

- (C) Dredging of the mouth of the River portion along Popham Beach (locally known as Coast Guard Beach), which is about 3,600 feet long and 500 feet wide except widening to 650 feet at the change in course of the navigation channel. Dredging was last performed at this location in 1971.
- (D) Disposal of the dredged material from the mouth of the River at a 500 yard diameter circular nearshore disposal site. The disposal site is about 0.4 nautical miles south of Jackknife Ledge in depths of 40 to 50 feet below MLW. A buoy will be placed in the center (69 degrees 46.8 minutes west; 43 degrees 42.9 minutes north) at least two weeks prior to start of
- 5. The work will be performed by the Government owned hopper dredge McFARLAND during a proposed two to three week period in September to October of the year that funds and the dredge become available.
- 6. A hopper dredge removes material from the bottom by suction, lifting sediments through dragarms connected to the side of the vessel. At the end of the dragarms are dragheads which draw a slurry of bottom material and water to the surface where it is discharged into the hopper. As pumping continues, the solid particles settle into the hopper while the excess water passes overboard through overflow troughs. After the hoppers are full the dragarms are raised and the dredge proceeds to the disposal site where the loaded hopper is emptied through bottom opening doors. The doors are then closed and the dredge returns to the dredging area to repeat the
- 7. The Corps of Engineers has not indicated at what speed the barge or dredge will be operated during dredge spoil disposal operations or at what location within the disposal areas the barge or dredge will commence disposal operations. The Department has found in the past on similar types of projects that in order to avoid a wide dispersal of spoils and widespread sedimentation that barges or dredges should be at complete stop at the center of the disposal area prior to disposal operations, and remain there until all material has been offloaded.

#### EXISTING SITE CONDITIONS

- 8. The proposed dredging and disposal areas are all below Mean Low Water. At the Doubling Point Reach the shoreline along the western side is the developed City of Bath; the eastern side is the undeveloped northern tip of Arrowsic Island. The shereline along the disposal site for this dredging area is heavily wooded and undeveloped.
- 9. At the dredging area in the vicinity of the mouth of the River the shoreline along the western side is Popham Beach; the eastern side is the undeveloped North and South Sugarloaf Islands.

#### SAND SUPPLY AND MOVEMENT

10. The Phippsburg Conservation Commission, Popham Beach Association and numerous residents have submitted letters outlining their concern that adverse erosional affects to Popham Beach may result from moving the dredge spails from the mouth of the River to the Jacknife Ledge disposal site.

U.S. ARMY CORPS OF ENGINEERS PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH DREDGING AND SPOILS DISPOSAL	MAINE	FEI GON	DERAL CONSISTENCY REVIEW AND NGURRENCE AND WATER QUALITY
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- 11. Dr. Ken Fink, Oceanographic Coordinator at the University of Maine-Darling Marine Center, has submitted comments expressing concern that removal of sand from the channel adjacent to the shoreline may exacerbate the present erosional cycle there. Transporting the dredged sand from that section of the Kennebec River to an area south of Jacknife Ledge may remove too much sand from the active nearshore sand redistribution pathways. Dr. Fink notes that the sand may be too far away for transport back onto the beaches of Popham within a reasonable amount of time, or, the sand may move offshore by storm events and be lost entirely from the system.
- 12. The Maine Geological Survey (MGS) has reviewed the project and Dr. Fink's comments and comments that the strongest river currents are north-south parallel to the river axis. Since the river bed will be levelled rather than excavated, what 'energy sink' that is created will most probably be filled with river bottom sands rather than beach sands. Processes moving sand on the river bed are not directly linked (in space and time) to those causing beach and dune erosion near the high water mark. Based on side scan and grain size data, MGS suspects that the disposed sand will stay in the 'sand system' following disposal. It is the opinion of MGS that the dredging will not significantly increase the erosion of Popham Beach.
- 13. MGS quotes Fitzgerald and Fink (1987) that "Man-made causes of shoreline change such as the building of coastal structures and dredging activity appear to be minimal." MGS notes that because the Popham Beach system is highly dynamic, shoreline changes are very difficult to predict. The natural variability of this system is so large that in the future it will be difficult to draw conclusions about the relationship between dredging and shoreline changes on the adjacent beach. No direct environmental degradation or shoreline erosion which may have resulted from previous episodes of dredging at this location, is known to MGS.

#### HABITAT/MARINE RESOURCES

- 14. The Department of Marine Resources (DMR) comments that:
  - (A) Dredging has a variety of short term and long term effects including: water quality degradation through an increase in total suspended solids and biological/chemical exygen demand; marine animals and plants are lost through physical removal, stress induced mortality and decreased productivity; most dredged areas require periodic maintenance adding to cumulative impact. Dredging also results in direct impacts on marine fisheries when it occurs at a time and place coinciding with: (1) anadramous fish runs; (2) lobster migration and shedding; (3) shellfish spawning; and (4) inshore feeding of schooling fishes.
  - (B) DMR's Anadromous Fish Division has reviewed the project and notes that there are three species of fish that will be affected by the dredging and spoils disposal in the Doubling Point Reach:

U.S. ARMY CORPS OF ENGINEERS PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY DREDGING AND SPOILS DISPOSAL L-16281-4E-A-N

4 FEDERAL CONSISTENCY REVIEW AND ) CERTIFICATION ) FINDINGS OF FACT AND ORDER

- (1) Shortnose Sturgeon overwinter in deep areas of this section of the River from mid-September to April, including the proposed riverine disposal site (north of Bluff Head). DMR notes that disposal of dredged material at the proposed riverine disposal area (north of Bluff Head) would negatively affect Shortnese sturgeon. The Division comments that it would have no objection to dredging the Doubling Point Reach (during a time of work window suggested by DMR) provided that the dredged material is disposed of at the nearshore disposal site (south of Jacknife Ledge) and not at the riverine disposal site.
- (2) Smelt colonies exist in this section of the river from December 31st to the end of February and may be negatively affected if dredging occurs during that time.
- (3) Bluefish are usually present during August through early September and that fish runs occur from January through February. DMR notes that in order to avoid impacts on anadromous fisheries, dredging should only occur in this Doubling Point Reach section of the River between September 10th and December 31st or March 1st and April 30th with disposal of dredged material only at the Jacknife Ledge disposal site, and not at the riverine disposal site.
- (C) DMR's Area Biologist has reviewed the project and believes the impact of the dredging at the mouth of the River will impact on lobster migration and fishing. The adverse impacts on the lobster fishery can be avoided by dredging there between November 1st and April 30th.

Based on the above finding of fact, the Department makes the following conclusions:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment provided that during dredge spoil disposal operations the barge or dredge vessel will come to and stay at a complete dead stop at the center of the disposal area until all materials are off loaded.
- C. The proposed activity will not inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any estuarine or marine fisheries or other aquatic life provided that the dredging occurs only during the recommended time of work windows as suggested by the Department of Marine Resources, and provided that dredged material from the Doubling Point Reach is disposed of at the Jacknife Ledge Disposal Site.
- E. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, aquatic habitat, freshwater fishery or other aquatic life.
- F. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.

U.S. ARMY GORPS OF ENGINEERS 5 FEDERAL CONSISTENCY REVIEW AND PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY DREDGING AND SPOILS DISPOSAL ) GERTIFICATION L-16281-4E-A-N ) FINDINGS OF FACT AND ORDER

- G. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters in that the dredged material is primarily coarse sand, having low probability of containing toxic contaminants.
- H. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- I. The proposed activity will not unreasonably interfere with the natural supply or movement of sand within or to the sand dune system in that the river bed will be levelled rather than excavated, such that beach sand will not be carried offshore. The Jacknife Ledge disposal site is in the sand system, which extends seaward of the disposal site.
- J. The proposed activity will not unreasonably increase the erosion hazard to the sand dune system in that processes moving sand on the river bed are not directly linked (in space and time) to those causing beach and dune erosion near the high water mark.
- K. The activity is not on an outstanding river segment as noted in Title 38 M.R.S.A., Section 480-P.

THEREFORE, the Department CONCURS WITH THE CONSISTENCY DETERMINATION application by letter dated April 20, 1989. The Department also APPROVES the request for a Water Quality Certification by the U.S. Army Corps of Engineers to dredge two sections of the Kennebec River Federal Navigation Project WITH THE ATTACHED CONDITIONS.

- 1. Standard Conditions of Approval, a copy attached.
- 2. Dredging at the Doubling Point Reach will only occur during the period between September 10th and December 31st or March 1st and April 30th. Material from this Doubling Point Reach will be disposed of only at the Jacknife Ledge nearshore disposal site.
- 3. Dredging at the mouth of the River will only occur during the period between November 1st and April 30th. Dredged material from this mouth of the River section will be disposed of at the Jacknife Ledge nearshore disposal site.
- 3. During disposal of dredged materials, barges or dredges will remain at full stop at the center of the disposal area, until all material is released from the vessel.

HE DAY OF Superwher. 1989. DONE AND DATED AT AUGUSTA, MAINE, THIS DEPARTMENT OF ENVIRONMENTAL PROTECTION

PLEASE NOTE THE ATTACHED SHEET FOR APPEAL PROCEDURES....

Date of initial receipt of application 4/24/89

Date of application acceptance 4/24/89

Date of delegation to the Commissioner 8/22/89 CDSPOPHAM

#### STATE OF MAINE



#### DEPARTMENT OF ENVIRONMENTAL PROTECTION STATE HOUSE STATION 17

AUGUSTA, MAINE 04333

#### DEPARTMENT ORDER IN THE MATTER OF

U.S. ARMY CORPS OF ENGINEERS PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY DREDGING AND SPOILS DISPOSAL L-16281-4E-A-N (CORRECTED COPY)

) FEDERAL CONSISTENCY REVIEW AND

) CERTIFICATION

) FINDINGS OF FACT AND ORDER

After reviewing the project file which includes an application for a consistency determination under 38 M.R.S.A., Section 480-C of the Natural Resource Protection Act and an application for a Water Quality Certification under Title IV, Section 401 of the Federal Water Pollution Control Act, the staff summary, and other related materials on file with regard to the above noted project, the Department finds the following facts:

#### PROJECT HISTORY

- 1. The Maine Coastal Zone Program was approved on September 30, 1978 by the Federal Office of Goastal Zone Management under Section 307 of the Coastal Zone Management Act, as amended. Federal activities which affect land or water resources in the Goastal Zone must be undertaken in a manner consistent, to the maximum extent practicable, with the requirements of Maine's approved Coastal Zone Management Program.
- 2. In a letter dated April 20, 1989, with an enclosed application, the New England Division Corps of Engineers has requested the Department's concurrence with their Consistency Determination pursuant to Maine's Coastal Zone Plan for maintenance dredging of the Lower Kennebec River Navigation Project.
- 3. This project also requires Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act.

#### PROJECT DESCRIPTION

- 4. The Corps of Engineers proposes to dredge 150,000 cubic yards of material from two sections of the Navigation Project to restore the channel to authorized dimensions. Authorized dimensions of the Navigation Project includes a channel 27 feet deep at Mean Low Water (MLW) and at least 500 feet wide, extending from the river mouth to a point adjacent to the Bath Bridge. The proposed work consists of:
  - (A) Dredging of a portion of the channel from the City of Bath to Doubling Point. This Doubling Point Reach is about 2,500 feet long and 500 feet wide. Dredging was last performed at this location in 1986.
  - (B) Disposal of the dredged material from the Doubling Point Reach at the previously used disposal site north of Bluff Head. This disposal area is 1.7 nautical miles downstream of the dredging site. It is 0.1 nautical mile long with depths of 80 to 100 feet below MLW.

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			CERTIFICATION
L-16281-4E-A-N (CORRECTED COFY)		)	FINDINGS OF FACT AND ORDER

- (C) Dredging of the mouth of the River portion along Popham Beach (locally known as Coast Guard Beach), which is about 3,600 feet long and 500 feet wide except widening to 650 feet at the change in course of the navigation channel. Dredging was last performed at this location in 1971.
- (D) Disposal of the dredged material from the mouth of the River at a 500 yard diameter circular nearshore disposal site. The disposal site is about 0.4 nautical miles south of Jackknife Ledge in depths of 40 to 50 feet below MLW. A buoy will be placed in the center (69 degrees 46.8 minutes west; 43 degrees 42.9 minutes north) at least two weeks prior to start of work.
- 5. The work will be performed by the Government owned hopper dredge McFARLAND during a proposed two to three week period in September to October of the year that funds and the dredge become available.
- 6. A hopper dredge removes material from the bottom by suction, lifting sediments through dragarms connected to the side of the vessel. At the end of the dragarms are dragheads which draw a slurry of bottom material and water to the surface where it is discharged into the hopper. As pumping continues, the solid particles settle into the hopper while the excess water passes overboard through overflow troughs. After the hoppers are full the dragarms are raised and the dredge proceeds to the disposal site where the loaded hopper is emptied through bottom opening doors. The doors are then closed and the dredge returns to the dredging area to repeat the cycle.
- 7. The Corps of Engineers has not indicated at what speed the barge or dredge will be operated during dredge spoil disposal operations or at what location within the disposal areas the barge or dredge will commence disposal operations. The Department has found in the past on similar types of projects that in order to avoid a wide dispersal of spoils and widespread sedimentation that barges or dredges should be at complete stop at the center of the disposal area prior to disposal operations, and remain there until all material has been offloaded.

#### EXISTING SITE CONDITIONS

- 8. The proposed dredging and disposal areas are all below Mean Low Water. At the Doubling Point Reach the shoreline along the western side is the developed City of Bath: the eastern side is the undeveloped northern tip of Arrowsic Island. The shoreline along the disposal site for this dredging area is heavily wooded and undeveloped.
- 9. At the dredging area in the vicinity of the mouth of the River the shoreline along the western side is Popham Beach; the eastern side is the undeveloped North and South Sugarloaf Islands.

#### SAND SUPPLY AND MOVEMENT

10. The Phippsburg Conservation Commission, Popham Beach Association and numerous residents have submitted letters outlining their concern that adverse erosional affects to Popham Beach may result from moving the dredge spoils from the mouth of the River to the Jacknife Ledge disposal site.

U.S. ARMY CORPS OF ENGINEERS PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY DREDGING AND SPOILS DISPOSAL L-16281-4E-A-N (CORRECTED COPY)

3 FEDERAL CONSISTENCY REVIEW AND

) GERTIFICATION

) FINDINGS OF FACT AND ORDER

- 11. Dr. Ken Fink, Oceanographic Coordinator at the University of Maine-Darling Marine Center, has submitted comments expressing concern that removal of sand from the channel adjacent to the shoreline may exacerbate the present erosional cycle there. Transporting the dredged sand from that section of the Kennebec River to an area south of Jacknife Ledge may remove too much sand from the active nearshore sand redistribution pathways. Dr. Fink notes that the sand may be too far away for transport back onto the beaches of Popham within a reasonable amount of time, or, the sand may move offshore by storm events and be lost entirely from the system.
- 12. The Maine Geological Survey (MGS) has reviewed the project and Dr. Fink's comments and comments that the strongest river currents are north-south parallel to the river axis. Since the river bed will be leveled rather than excavated, what 'energy sink' that is created will most probably be filled with river bottom sands rather than beach sands. Processes moving sand on the river bed are not directly linked (in space and time) to those causing beach and dune erosion near the high water mark. Based on side scan and grain size data, MGS suspects that the disposed sand will stay in the 'sand system' following disposal. It is the opinion of MGS that the dredging will not significantly increase the crosion of Popham Beach.
- 13. MGS quotes Fitzgerald and Fink (1987) that "Man-made causes of shoreline change such as the building of coastal structures and dredging activity appear to be minimal." MGS notes that because the Popham Beach system is highly dynamic, shoreline changes are very difficult to predict. The natural variability of this system is so large that in the future it will be difficult to draw conclusions about the relationship between dredging and shoreline changes on the adjacent beach. No direct environmental degradation or shoreline erosion which may have resulted from previous episodes of dredging at this location, is known to MGS.

#### HABITAT/MARINE RESOURCES

- 14. The Department of Marine Resources (DMR) comments that:
  - (A) Dredging has a variety of short term and long term effects including: water quality degradation through an increase in total suspended solids and biological/chemical oxygen demand; marine animals and plants are lost through physical removal, stress induced mortality and decreased productivity; most dredged areas require periodic maintenance adding to cumulative impact. Dredging also results in direct impacts on marine fisheries when it occurs at a time and place coinciding with: (1) anadramous fish runs; (2) lobster migration and shedding; (3) shellfish spawning; and (4) inshore feeding of schooling fishes.
  - (B) DMR's Anadromous Fish Division has reviewed the project and notes that there are three species of fish that will be affected by the dredging and spoils disposal in the Doubling Point Reach:

U.S. ARMY CORPS OF ENGINEERS

PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY

DREDGING AND SPOILS DISPOSAL

L-16281-4E-A-N (CORRECTED COPY)

PINDINGS OF FACT AND ORDER

- (1) Shortnose Sturgeon overwinter in deep areas of this section of the River from early October to April, including the proposed riverine disposal site (north of Bluff Head). DMR notes that disposal of dredged material during November 1st to March 1st at the proposed riverine disposal area (Doubling Point Reach, north of Bluff Head) would negatively affect Shortnose sturgeon. The Division comments that it would have no objection to dredging the Doubling Point Reach from November 1st to March 1st provided that, during this time, the dredged material is disposed of at the nearshore disposal site (south of Jacknife Ledge) and not at the riverine disposal site.
- (2) Smelt colonies exist in this section of the river from December 31st to the end of February and may be negatively affected if dredging occurs during that time.
- (3) Bluefish are usually present during August through early September and that fish runs occur from January through February.
- (4) DMR notes that in order to avoid impacts on anadromous fisheries, dredging and spoils disposal should only occur in this Doubling Point Reach section of the River between September 10th to October 10th or March 1st and April 30th. Dredging in the Doubling Point Reach may occur between November 1st to March 1st provided that dredge spoils are disposed of only at the Jacknife Ledge Disposal Site and not at the riverine disposal site during this time.
- (G) DMR's Area Biologist has reviewed the project and believes the impact of the dredging at the mouth of the River will impact on lobster migration and fishing. The adverse impacts on the lobster fishery can be avoided by dredging there between November 1st and April 30th.

Based on the above finding of fact, the Department makes the following conclusions:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment provided that during dredge spoil disposal operations the barge or dredge vessel will come to and stay at a complete dead stop at the center of the disposal area until all materials are off loaded.
- C. The proposed activity will not inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any estuarine or marine fisheries or other aquatic life provided that the dredging and spoils disposal occurs only at specific locations during the recommended time of work windows as suggested by the Department of Marine Resources, and provided that dredged material from the Doubling Point Reach is disposed of at the Jacknife Ledge Disposal Site from November 1st to March 1st.

- U.S. ARMY CORPS OF ENGINEERS

PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY

DREDGING AND SPOILS DISPOSAL

L-16281-4E-A-N (CORRECTED COPY)

5 FEDERAL CONSISTENCY REVIEW AND
CONCURRENCE AND WATER QUALITY

CERTIFICATION

FINDINGS OF FACT AND ORDER

- E. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, aquatic habitat, freshwater fishery or other aquatic life.
- F. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- G. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters in that the dredged material is primarily coarse sand, having low probability of containing toxic contaminants.
- H. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- I. The proposed activity will not unreasonably interfere with the natural supply or movement of sand within or to the sand dune system in that the river bed will be leveled rather than excavated, such that beach sand will not be carried offshore. The Jacknife Ledge disposal site is in the sand system, which extends seaward of the disposal site.
- J. The proposed activity will not unreasonably increase the erosion hazard to the sand dune system in that processes moving sand on the river bed are not directly linked (in space and time) to those causing beach and dune erosion near the high water mark.
- K. The activity is not on an outstanding river segment as noted in Title 38 M.R.S.A., Section 480-P.

THEREFORE, the Department CONCURS WITH THE CONSISTENCY DETERMINATION application by letter dated April 20, 1989. The Department also APPROVES the request for a Water Quality Certification by the U.S. Army Corps of Engineers to dredge two sections of the Kennebec River Federal Navigation Project WITH THE ATTACHED CONDITIONS.

- 1. Standard Conditions of Approval, a copy attached.
- 2. Dredging and dredged spoils disposal at the Doubling Point Reach may only occur during the period between September 10th and October 10th or March 1st and April 30th. From November 1st to March 1st, dredging may occur at the Doubling Point Reach, however, dredge spoils must be disposed of at the Jacknife Ledge nearshore disposal site.
- 3. Dredging at the mouth of the River will only occur during the period between November 1st and April 30th. Dredged material from this mouth of the River section will be disposed of at the Jacknife Ledge nearshore disposal site.
- 4. During disposal of dredged materials, barges or dredges will remain at full stop at the center of the disposal area, until all material is released from the vessel.

U.S. ARMY CORPS OF ENGINEERS  PHIPPSBURG, GEORGETOWN, ARROWSIC & BATH, MAINE ) CONCURRENCE AND WATER QUALITY  DREDGING AND SPOILS DISPOSAL ) CERTIFICATION  L-16281-4E-A-N (CORRECTED COPY) ) FINDINGS OF FACT AND ORDER	iD '
DONE AND DATED AT AUGUSTA, MAINE, THIS 30 DAY OF November, 1989	
DEPARTMENT OF ENVIRONMENTAL PROTECTION	
BY: Dean C. Marriott, Commissioner	
PLEASE NOTE THE ATTACHED SHEET FOR APPEAL PROCEDURES	
Date of initial receipt of application 4/24/89	
Date of application acceptance 4/24/89	
Date of delegation to the Commissioner 8/22/89	
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### STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION STATE HOUSE STATION 17 AUGUSTA, MAINE 04933

#### DEPARTMENT ORDER

IN THE MATTER OF

U.S. ARMY CORPS OF ENGINEERS	}	FED
ARROWSIC, BATH, GEORGETOWN, & PHIPPSBURG	}	AND
Sagadahoc County	4	8. MELS 875
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(Approval with Conditions)	*	an and grade

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Pursuant to the provisions of Section 307 of the Coastal Zone Management Act and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the Federal Consistency Determination request of the U.S ARMY CORPS OF ENGINEERS with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

#### 1. BACKGROUND

- a. The Maine Coastal Program was approved on September 30, 1978 by the Federal Office of Coastal Zone Management under Section 307 of the Coastal Zone Management Act, as amended. Federal activities which affect land or water resources in the Coastal Zone must be undertaken in a manner consistent, to the maximum extent practicable, with the requirements of Maine's approved Coastal Zone Management Program.
- b. This project must also receive Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act prior to beginning work.

#### 2. SUMMARY

- a. <u>Request</u>: The Army Corps of Engineers has submitted a request for a consistency determination for maintenance dredging of two portions of the Federal navigation project in the Kennebec River.
- b. History: The authorized federal navigation project consists of a channel 27 feet deep and 500 feet wide extending from the River mouth near Popham Beach to a point about 13 miles upstream to the City of Bath. The Army Corps has dredged the lower Kennebec River eleven times since 1950. Historically, shoaling occurs at two locations that require maintenance dredging every 3-5 years. These two areas are at the mouth of the River at Popham Beach and from Doubling Point to the Carlton Bridge in Bath. The Army Corps last dredged the Popham Beach area in 1989 and the Doubling Point area in 1991. The government owned hopper dredge MCFARLAND dredged both areas.

On 14 August 1997, a Navy destroyer grounded in a shoaled area in the Doubling Point. After this incident, Bath Iron Works wrote to the Army

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Corps of Engineers requesting that the River be dredged as soon as possible to allow the safe transit of Navy vessels to and from the Bath Iron Works. A survey of this area revealed shoaling to a depth of 21 feet below Mean Lower Low Water (MLLW) in the Doubling Point area.

#### c. <u>Summary of Proposal</u>

- 1) The Army Corps of Engineers proposes to dredge approximately 10,000 cubic yards of clean sand from the Doubling Point area and approximately 20,000 cubic yards of clean sand from the Popham Beach area. This material will be dredged using a hopper or mechanical dredge. Dredged material from Doubling Point will be dumped in the previously used in-River disposal site north of Bluff Head in 95-100 feet of water. Material from Popham will be dumped in the previously used inshore disposal area 0.4 nautical miles south of Jackknife Ledge in 40-50 feet of water. Contingent on the availability of funds and equipment, dredging will begin in November 1997 and be completed in 3-4 weeks.
- 2) Specific construction details with a map showing the dredging and disposal locations can be found in Department file # L-16281-4E-B-N.

#### 3. GEOLOGICAL ENVIRONMENT

The Maine Geological Survey (MGS) reviewed the proposed project. The MGS commented that staff investigated concerns raised after an earlier maintenance dredge. These concerns alleged that material dumped at Bluff Head migrated to and filled in clam flats in Phippsburg. The MGS could not document that allegation but did document the fact that the Bluff Head disposal site contained no spoils less than one year after the dredging. Subsequent observations by the MGS suggest that the material was moved upstream by tidal currents and was then flushed from the estuary by the spring freshet.

The MGS also commented that rapid erosion occurred at Coast Guard Beach at the mouth of the River following maintenance dredging in 1989. Again, observations by the MGS failed to find any connection between the dredging and beach erosion. The MGS has no concerns about using Jackknife Ledge as a disposal site.

#### 4. MARINE RESOURCES AND WATER QUALITY

The Department of Marine Resources (DMR) held a public hearing in Phippsburg on 9 October 1997 to gather information and hear concerns from the public about the proposed maintenance dredging project. Commercial harvesters of soft-shell clams expressed concerns that the dredging and disposal activity would increase the level of bacterial contamination in the water column resulting in the closing of areas to harvesting. The DMR states that there is the potential that increased levels of bacteria in the water column due to disposal activities north of the Bluff Head could necessitate the closing of shellfish harvesting areas down-river. The DMR recommends that bacterial levels should be monitored just south of this disposal site immediately before and soon after disposal episodes. This could help document any casual relation. The Department finds that the

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applicant or sponsor must monitor bacterial levels just south of the Bluff Head disposal site immediately before and soon after disposal episodes.

Clam harvesters also raised a 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. The Army Corps stated at the hearing that the sandy material would settle out very rapidly at the disposal site and remain in the 500 foot wide channel. However, to minimize any potential siltation of clamflats downriver, the DMR recommends that, if practicable, disposal north of Bluff Head should be timed to coincide with incoming or slack tides. To document the level of siltation from in-River disposal, the DMR also recommends monitoring turbidity before and after disposal events. The Department finds that the applicant or sponsor must document turbidity before and after disposal events to the Department.

The DMR also commented that dredging in November should minimize adverse impacts to migrating anadromous fish, shellfish spawning in the River, and lobstering at the mouth of the River. However, there is a reasonable expectation that some shortnose sturgeon, a federally listed endangered species, will be found in the vicinity of the Bluff Head disposal area during the first two weeks in November. These fish should be moving upstream after mid-November. Unless the applicant provides evidence that there are no shortnose sturgeon at the disposal site, the Department finds that dredge spoils must be dumped at the in-River site near Bluff Head after mid-November.

#### 5. DREDGE SPOILS TRANSPORTATION & DISPOSAL

As required by 38 MRSA 480-D (9), the Department finds that the applicant of sponsor must:

- a. Clearly mark or designate the dredging area, the spoils disposal route and the transportation route;
- b. Publish in a newspaper of general circulation in the area adjacent to the dredging, the approved transportation route of the dredge spoils; and
- c. Publish in a newspaper of general circulation in the area adjacent to the route, a procedure that the applicant will use to respond to inquiries regarding the loss of fishing gear during the dredging operation.

#### 6. OTHER CONSIDERATIONS

The Department has identified no other issues affecting: existing scenic, aesthetic, recreational, or navigational uses; natural transfer of soil; significant wildlife habitat; aquatic habitat; travel corridors; aquatic life; natural flow of surface or subsurface waters; or flooding.

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BASED on the above Findings of Fact, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

- The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses provided the applicant or sponsor complies with the requirements of 38 MRSA 480-D (9), as amended.
- 2. The proposed activity will not cause unreasonable erosion of sail or sediment.
- 3. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- 4. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, aquatic habitat, travel corridor, or freshwater fisheries.
- 5. The proposed activity will not unreasonably harm any estuarine or marine fisheries or other aquatic life provided that dredge spoils are dumped at Bluff Head after mid-November, and bacterial levels and turbidity is monitored before and after disposal events at Bluff Head.
- 6. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- 7. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- 8. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- 9. The proposed activity is not within a sand dune system.
- 10. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A., Section 489-P.

THEREFORE, the Department concurs with the ARMY CORPS OF ENGINEERS consistency determination dated 10 September 1997 and grants Water Quality Certification to SUBJECT TO THE ATTACHED CONDITIONS:

- 1. The Standard Conditions of Approval, a copy attached as Appendix A.
- 2. The applicant or sponsor shall comply with the provisions of 38 MRSA 480D(9), as amended and shall:
- a. Clearly mark or designate the dredging area, the spoils disposal route and the transportation route;
- b. Publish in a newspaper of general circulation in the area adjacent to the route, the approved transportation route; and

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c. Publish in a newspaper of general circulation in the area adjacent to the route, a procedure that the applicant will use to respond to inquiries regarding the loss of fishing gear during the dredging operation.

- 3. The applicant or spensor shall monitor turbidity at the Bluff Head disposal site before and after disposal events and submit the results to the Department within 14 days of receipt.
- 4. The applicant or sponsor shall monitor bacterial levels just south of the Bluff Head disposal site immediately before and soon after disposal episodes and submit the results to the Department within 14 days of receipt.
- 5. Disposal of spoils at the in-River site near Bluff Head shall be limited to the period after mid-November.

DONE AND DATED AT AUGUSTA, MAINE, THIS 22 DAY OF OCORY, 1997.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

C EDWARD O. SULLIVEN, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application 9/15/97 Date application accepted for processing 9/22/97

Date filed with Board of Environmental Protection L1628IBN/dbb





ANGUSS KING, JR.

# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 94333

#### DEPARTMENT ORDER

IN THE MATTER OF

U.S. ARMY CORPS OF ENGINEERS ) FEDERAL CONCLETENCY DE	
Arrowsic, Bath, Georgetown, & Phippsburg ) AND	/ LIVE
Sagadahoe, County	
MAINTENANCE DREDGING ) WATER QUALITY CERTIFICA	ý ses to sout
L-16281-4E-C-N (approval) ) FINDINGS OF FACT AND OR	

Pursuant to the provisions of Title 38 M.R.S.A. Section 480-A et seg, the Coastal Zone Management Act, and Section 401 of the Federal Water pollution Control Act, the Department of Environmental Protection has considered the application of the U.S. ARMY CORPS OF ENGINEERS with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

#### 1. FROJECT DESCRIPTION:

- A. Background: The Maine Coastal Program was approved on September 30, 1978 by the Federal Office of Coastal Zone Management under Section 307 of the Coastal Management Act, as amended. Federal activities which affect land or water resources in the Coastal Zone must be undertaken in a manner consistent, to the maximum extent practicable, with the requirements of Maine's approved Coastal Zone Management Program. This project must also receive Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act prior to beginning work.
- Summary of Proposal: On November 2, 2000, the Army Corps of Engineers submitted a request for a consistency determination to dredge two portions of the Federal navigation channel in the Kennebec River. This emergency maintenance dredging must be completed prior to the transit of a Navy destroyer from Bath Iron Works (BIW) in mid-December. The applicant is proposing to dredge approximately 25,000 cubic yards of clean sand from two areas which shoal and require maintenance dredging every 3-5 years. The project will begin in early December and should be completed in a week using a hopper dredge. These two areas are at the mouth of the river, adjacent to North Sugarloaf Island, and at Doubling Point, which is south of Bath. Material dredged from Doubling Point will be dumped in the previously used in-river disposal site north of Bluff Head in 95-100 feet of water. Material from the mouth of the river will be dumped at the previously used nearshore site located about 0.4 nautical miles south of Jackknife Ledge in depths of 40 to 50 feet. These two areas were last dredged in 1997. Maps of dredging and disposal areas were attached to the consistency request.



C. Site Description: The applicant recently completed hydrographic surveys of Doubling Foint and the channel next to North Sugarloaf Island. These surveys indicate that the Doubling Point reach has shoaled to 20.9 feet below Mean Lower Low Water (MLLW) in the left inside quarter, and the North Sugarloaf reach has shoaled to 18.3 feet below MLBW along the north limit of the channel and to 24.6 feet in the left inside quarter. In a letter to the Army Gorps, dated October 17, 2000, BTW stated that Navy ships with sonar domes cannot transit the channel safely even during extreme high tides. These ships draw approximately 30 feet.

#### 2. MARINE RESOURCES AND WATER QUALITY CONSIDERATIONS:

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. A lobster fisherman at this meeting stated that no fishing gear was now in the water at the mouth of the river or along the transportation route to the disposal site at Jackknife Ledge, nor would it be there during December. DMR further stated that dredging these two areas in December should minimize potential adverse impacts to migrating anadromous fish, shellfish spawning in the river, and lobstering activity near the mouth of the

#### 3. DREDGE SPOILS TRANSPORTATION CONSIDERATIONS:

As required by 38 M.R.S.A. Section 480-D (9), DMR has provided an assessment of the proposed project and the transportation of dredge material on the fishing industry as stated in Finding 2. To minimize any impacts on the fishing industry, the Department finds that the applicant or sponsor must:

- a. Clearly mark or designate the dredging area, the spoils disposal route and the transportation route;
- b. Publish in a newspaper of general circulation in the area adjacent to the dredging, the approved transportation route of the dredge spoils; and
- c. Publish in a newspaper of general circulation in the area adjacent to the route, a procedure that the applicant will use to respond to inquiries regarding the loss of fishing gear during the dredging operation.

#### 4. <u>OTHER CONSIDERATIONS</u>:

The Department has not identified any other issues involving existing scenic or aesthetic uses, soil erosion, the natural transfer of soil, natural flow of water, water quality, or flooding.

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BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not unreasonably interfere with existing navigational uses provided that the applicant or sponsor complies with the requirements of 38 M.R.S.A 480-D (9).
- C. The proposed activity will not cause unreasonable erosion of soil or sediment.
- D. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- E. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life.
- F. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- G. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- H. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A. Section 480-P.

THEREFORE, the Department APPROVES the above noted application of the U.S. ARMY CORPS OF ENGINEERS SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

- Standard Conditions of Approval, a copy attached.
- The applicant or sponsor shall comply with the provisions of 38 M.R.S.A. 480-D (9) and shall:
  - a. Clearly mark or designate the dredging area, the spoils disposal route and the transportation route;
  - b. Publish in a newspaper of general circulation in the area adjacent to the dredging, the approved transportation route of the dredge spoils; and

By:

c. Publish in a newspaper of general circulation in the area adjacent to the route, a procedure that the applicant will use to respond to inquiries regarding the loss of fishing gear during the dredging operation.

DONE AND DATED AT AUGUSTA, MAINE, THIS 30 DAY OF Moreles, 2000.

DEFARMENT OF ENVIRONMENTAL PROTECTION

MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

Date of initial receipt of application 11/02/2000 Date of application acceptance 11/03/2000

Date filed with Board of Environmental Protection DBB/L16281CN





## STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

#### DEPARTMENT ORDER

#### IN THE MAPTER OF

U.S. ARMY CORPS OF ENGINEERS	}	FEDERAL CONSISTENCY REVIEW
ARROWSIC, BATH, GEORGETOWN & PHIPPSBURG		WATER QUALITY CERTIFICATION
MAINTENANCE DREDGING	į.	MATTER ANGELLI CERTIFICATION
#L-16281-4E-D-N (APPROVAL)	)	FINDINGS OF FACT AND ORDER

Pursuant to the provisions of Section 307 of the Coastal Zone Management Act and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the Federal Consistency Determination request of the U.S. ARMY CORPS OF ENGINEERS (CORPS) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

#### 1. BACKGROUND:

- A. The Maine Coastal Program was approved on September 30, 1978 by the Federal Office of Coastal Zone Management under Section 307 of the Coastal Zone Management Act, as amended. Federal activities which affect land or water resources in the Coastal Zone must be undertaken in a manner consistent, to the maximum extent practicable, with the requirements of Maine's approved Coastal Zone Management Program.
- B. This project must also receive Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act prior to beginning work.

#### 2. <u>SUMMARY</u>:

- A. Request: The Corps submitted a request for a consistency determination dated February 4, 2002 for maintenance dredging of two areas in the Kennebec River. These two areas are Doubling Point, south of Bath, and North Sugarloaf Island reach at the mouth of the river in Phippsburg.
- B. History: The authorized federal navigation project is a channel 27 feet deep and 500 feet wide extending approximately 13 miles upstream from the Kennebec River's mouth near Popham Beach to the City of Bath. Historically, maintenance dredging is required at Doubling Point and North Sugarloaf Island reach every 2 to 5 years. The Corps last dredged them in 2000. The Corps recently completed a hydrographic survey of the two areas which shows that Doubling Point has shoaled to 21.6 feet below Mean Lower Low Water (MLLW) and North Sugarloaf Island reach has shoaled to 18.2 feet below MLLW. Maintaining the design depths at these two locations insures the safe passage of U.S. Navy vessels to and from Bath Iron Works (BIW).

C. Summary of Proposal: The Corps is now proposing to dredge both locations in April 2002 to allow the safe passage of a U.S. Navy ship in early May. The Corps is proposing to dredge a total of 25,000 cubic yards of clean sand from the two locations using a hopper dredge. Approximately 10,000 cubic yards of material will be dredged from Doubling Point and placed in a previously used in-river disposal area at Bluff Head. Material from the North Sugarloaf Island area will placed in a previously used nearshore disposal site located 0.4 nautical miles south of Jackknife Ledge. A copy of disposal area maps and haul routes is included in the application.

Based on the unpredictable nature of the shoaling in the Kennebec River, the Corps is also requesting long-term approval for this maintenance dredging. In its February request, the Corps stated that long-term approvals will allow it to more efficiently schedule and perform maintenance dredging to serve the operational needs of BIW and the U.S. Navy.

#### 3. GEOLOGICAL CONSIDERATIONS:

The Maine Geological Survey (MGS) has routinely reviewed maintenance diredging projects in the Kennebec River for both the Corps and Bath Iron Works. MGS favors the in-river disposal of sand at Bluff Head since it keeps this important resource within the riverine system. In commenting on a BTW application earlier this year that proposed placing clean sand at Bluff Head from its dry dock sinking hole. MGS stated that the sand will disperse in less than a year and remain part of the natural river bedload. MGS further stated that the mobile sand in the Kennebec River is a resource that has an important role in maintaining sandy estuarine habitats as well as the sand bars, beaches and dumes at the river mouth. MGS also has no concerns about using Jackknife Ledge as a disposal site.

#### 4. MARINE RESOURCES AND WATER OUALITY:

The Department of Marine Resources (DMR) reviewed the proposed project and the applicant's request for long-term approval, and provided comments dated March 12, 2002. DMR recognizes the emergency nature of the request to dredge in April 2002, but it is concerned about the potential to entrain shortnose or Atlantic sturgeon using a hopper dredge based on shortnose sturgeon data from April, 1998. Shortnose sturgeon was collected by environmental consultant Normandeau Associates in the vicinity of Doubling Point on April 1 and April 23, 1998. Therefore, DMR recommends that a qualified observer be onboard the hopper dredge to monitor and report the capture of shortnose or Atlantic sturgeon for the proposed dredge in April.

Regarding long-term approval over a ten-year period for the proposed maintenance dredging, DMR recommends that the Army Corps limit hopper dredging to a work window from December 1 to March 15 to minimize the impact to shortnose or Atlantic sturgeon. If the applicant chooses to use a mechanical dredge with a clamshell bucket, which is less likely to capture sturgeon, the DMR recommends a work window from November 1 to

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April 1. DMR also recommends that a qualified observer be employed by the applicant to monitor and record the capture of sturgeon when dredging occurs either in November or from March 15 to April 1.

The Department finds that, in addition to complying with the above recommendations as required by Section 480-D(9), the applicant or its contractor must, prior to each dredging event, publish in a local paper the proposed barge route to the disposal sites at Bluff Head and Jackknife Ledge. This notice must also identify a procedure for responding to inquiries regarding the loss of fishing gear during dredging operations. To document and record maintenance dredging in the river during the 10 year permit period, the Department finds that the applicant must submit an annual report to the Department documenting: a pre-dredge bathymetric survey, the period of dredging, volume of material dredged, and record of any capture or catch of Atlantic or shortnose sturgeon. Annual reports shall be submitted by January 15 for the previous year.

Based on past water quality monitoring by the applicant during the disposal of material at Bluff Head, the Department does not anticipate that the proposed dredging or disposal of material will degrade water quality in the Kennebec River.

The Department reserves the right to reopen the review of this project or reconsider the 10-year approval period if new information warrants a change in the findings of fact.

#### 5. OTHER CONSIDERATIONS:

The Department has not identified any issues involving existing scenic, aesthetic, or navigational uses, soil erosion, the natural transfer of soil, natural flow of water, or flooding.

Based on the above finding of fact, the Department makes the following conclusions:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, aquatic habitat, travel corridor, freshwater fisheries or other aquatic life.
- R. The proposed activity will not unreasonably harm any estuarine or marine fisheries fisheries provided that: the applicant employs a qualified observer to monitor and record the capture of Atlantic or shortnose sturgeon as discussed in Finding 4: long term dredging using a hopper dredge is limited to the period from December 1 to March 15, long term dredging using a mechanical dredge is limited to the period from

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Movember 1 to April 1; and an annual report as discussed in Finding 4 is submitted to the Department.

- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A., Section 480-P.

THEREFORE, the Department concurs with the ARMY CORPS OF ENGINEERS' consistency determination dated February 4, 2002 and grants Water Quality Certification for maintenance dredging in the Kennebec River, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

- 1. Standard Conditions of Approval, a copy attached.
- 2. The applicant shall employ a qualified observer to monitor and report the capture of Atlantic or shortnose sturgeon during the April, 2002 dredge and during dredges occurring in the month of November or between March 15 and April 1.
- 3. Dredging with a hopper dredge shall be limited to the period from December 1 to March 15.
- 4. Dredging with a clamshell bucket shall be limited to the period from November 1 to April 1.
- 5. Prior to each dredging event, the applicant shall publish, in a local newspaper, the disposal route to Bluff Head and identify the procedure for responding to inquiries regarding the loss of fishing gear.
- 6. By January 15 each year, the applicant shall submit a report to the pepartment documenting deedging activity undertaken during the previous year. This report shall include a pre-dredge bathymetric survey, the period of dredging, the volume of material dredged, and a record of any capture of Atlantic or shortnose sturgeon. Reports of no dredging activity shall also be submitted.

7. This permit shall expire ten years after the approved date unless the Department reopens the review of this project based on new information.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED AT AUGUSTA, MAINE, THIS TO DAY OF MAICH, 2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Martha G. Kirapatrick

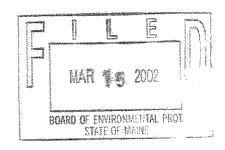
k, jommissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES....

Date of initial receipt of application Date of application acceptance

02/06/2002 02/11/2002

Date filed with Board of Environmental Protection DBB/L16281DN







## STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, ME 04333

#### DEPARTMENT ORDER

#### 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 A	CT
) COASTAL WETLAND ALTERATION	
) WATER QUALITY CERTIFICATION	
) FINDINGS OF FACT AND ORDER	

Pursuant to the provisions of 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of the U.S. ARMY CORPS OF ENGINEERS with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

#### 1. PROJECT DESCRIPTION:

A. History of Project: Under the Lower Kennebec River Navigation Project, the Army Corps of Engineers (Corps) is authorized to maintain the Federal channel in the lower Kennebec River. The dimensions of the channel are 27 feet deep at mean low water (MLW) and at least 500 feet wide, extending approximately 13 miles upstream from the Kennebec River's mouth near Popham Beach to the City of Bath. Shoaling within the Federal channel at two reaches, Doubling Point reach and North Sugarloaf Island reach, require periodic maintenance dredging to maintain the 27-foot deep channel. Maintaining the channel depth at these two locations ensures the safe passage of U.S. Navy vessels to and from Bath Iron Works (BIW).

In Department Order #L-16281-4E-A-N, dated November 30, 1989, the Department issued a federal consistency finding and water quality certification to the applicant for dredging approximately 150,000 cubic yards of material to restore the channel to its authorized depth. Subsequent water quality certifications in 1997 and 2000 were issued by the Department for maintenance dredging in the Kennebec River. In Department Order #L-16281-4E-D-N, dated March 15, 2002, the Department issued a federal consistency finding and water quality certification authorizing conditional approval over a ten-year period to perform maintenance dredging at both Doubling Point and North Sugarloaf Island reaches. To protect the endangered shortnosed sturgeon, Department Order #L-16281-4E-D-N limits maintenance dredging to the winter months with specific dredge windows dependent on the dredging method.

B. Summary: At the request of the U.S. Navy, the applicant proposes to dredge from both Doubling Point and North Sugarloaf Island reaches to the approved 27-foot channel to ensure safe passage for the U.S.S. SPRUANCE. The Navy will take delivery of the U.S.S. SPRUANCE from BIW on September 1, 2011 and has stated that the addition of the U.S.S. SPRUANCE to the fleet is critical to Fleet Operations and National Defense.

The U.S.S. SPRUANCE embarked for sea trials on February 16, 2011 and returned February 17, 2011. BIW's pilot, Captain Earl Walker, reported during the February 18, 2011 meeting between the Army Corps of Engineers, Maine Congressional representatives, multiple State agencies, and

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members of the public involved in dredging activities that he was able to navigate the ship past the shoals, but doing so was both difficult and hazardous. He reported that in order to make the transit past Doubling Point, he had to turn the ship outside of the Federal channel.

An estimated 70,000 cubic yards of sand is proposed to be dredged based on a hydrographic survey the Corps conducted in January 2011. Because of the dynamic nature of the river system, the actual volume of dredged material may be more or less than 70,000 cubic yards. The hydrographic survey indicates that Doubling Point has shoaled up to -21.6 feet Mean Lower Low Water (MLLW). At North Sugarloaf Island reach, sand has shoaled at a lesser rate, but some areas within this reach are still above the authorized river channel depth of -27 feet MLLW. The Corps is changing its tidal datum for setting the bottom of the river channel from MLW to MLLW. This change in datum represents an increase in depth of approximately three inches.

The Corps proposes to dredge the Federal channel in a portion of Doubling Point reach between Lincoln Ledge, which is approximately 2,350 feet downstream of BIW, to the turn at Doubling Point. Most of the dredging activity will occur between the Coast Guard's green buoy C"31" and red buoy R"28", which covers an area of approximately 35 acres. To reduce the frequency of dredging at Doubling Point, the Corps proposes advanced maintenance of the channel by removing the sand waves down to elevation -32 MLLW. The proposed project will generate approximately 50,000 cubic yards of fine-grained sand. Disposal of dredge material from this area will be disposed of at a delineated in-river site, known by the Corps as the Bluff Head Disposal Area and locally as Fiddlers Reach, located approximately 1.7 nautical miles downriver from the dredge site. The Corps has disposed of dredge material from Doubling Point at this site six times since 1986, with the last dredge done in 2003.

The applicant also proposes to dredge the Federal channel to a depth of -27 feet MLLW plus an additional 2-foot overdredge in a portion of North Sugarloaf Island reach. Most of the dredging activity will occur at two points between the Coast Guard's green buoy C"5" and red buoy R"6", which covers an area of approximately two acres. The proposed project will generate approximately 20,000 cubic yards of fine-grained sand. Disposal of dredge material from the area will be disposed of at a nearshore disposal site located approximately 0.4 nautical miles south of Jackknife Ledge. This site has been used as a disposal site for previous dredge projects, with the last dredge done in 2003.

C. Current Use of the Site: Along Doubling Point reach the west (Brunswick) side of the Kennebec River is developed along the riverbank, while the east (Arrowsic) side is largely undeveloped. At North Sugarloaf Island reach, the west (Phippsburg) side abuts Popham Beach.

#### 2. EXISTING SCENIC, AESTHETIC, RECREATIONAL OR NAVIGATIONAL USES:

In accordance with Chapter 315, Assessing and Mitigating Impacts to Scenic and Aesthetic Uses, the applicant submitted a copy of the Department's Visual Evaluation Field Survey Checklist as Appendix A to the application along with a description of the property and the proposed project. The Corps also submitted several photographs of the proposed project site including an aerial photograph of the project site.

The proposed project is located in the Kennebec River, which is a scenic resource visited by the general public, in part, for the use, observation, enjoyment and appreciation of its natural and cultural visual qualities. There will be no permanent changes to the scenic and aesthetic values of the river, because dredging activities will take place in the subtidal area. The applicant intends to use a hopper dredge to perform the proposed project, working 24 hours a day seven days a week

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beginning August 1, 2011. Dredging equipment will be in the water for approximately four weeks or less depending on conditions.

The proposed project was evaluated using the Department's Visual Impact Assessment Matrix and was found to have an acceptable potential visual impact rating. Based on the information submitted in the application, and the visual impact rating, the Department determined that the location and scale of the proposed activity is compatible with the existing visual quality and landscape characteristics found within the viewshed of the scenic resource in the project area.

In comments submitted to the Department, interested parties expressed concern that the proposed project would impact summertime recreational activities both on and adjacent to the river because of noise generated during dredging and disposal operations and from the hopper dredge making repeated trips to dispose of dredged material. Given the amount of boat traffic currently experienced on this section of the river during this time of year, and the relatively short period during which the proposed project will take place, the Department finds that the movement of the hopper dredge from the two dredge sites to their respective disposal sites will not result in an unreasonable impact to existing navigational uses of the river provided the mitigation requirements outlined in Finding 7 are followed.

Dredging operations will run for 24 hours a day, and as a result, disposal of dredged material will occur during nighttime hours. The Corps reported that the hopper dredge would fill, dump, and return approximately once every two hours. This would result in approximately 4-5 trips between the hours of 9 pm to 7 am. The Corps also reported that under optimal conditions, the estimated time to complete dredging at the Doubling Point site would be two to three days and less at the North Sugarloaf Island site. Given the short duration of the project and limited number of trips expected during the nighttime hours, the Department finds that the proposed project will not have an unreasonable impact to the recreational uses of the area.

The Department finds that the proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses of the protected natural resource.

#### 3. GEOLOGICAL CONSIDERATIONS:

Doubling Point has been identified as a bedload convergence zone, where bi-directional flow from the natural flow (downstream) of the river and tidal action (upstream) transport sand up and down river depending on the dominant current. The result is that bedload sediment accumulates in the form of large, oscillating sand waves within the limits of the Federal channel. The recent surveys have documented crests of the sand waves reaching a height of almost 20 feet MLLW. The Corps last dredged these two river segments in 2003.

The Maine Geological Survey (MGS) has routinely reviewed maintenance dredging projects in the Kennebec River proposed by both the Corps and BIW. MGS favors the in-river disposal of sand at the Bluff Head Disposal Area since it keeps the sand, an important resource, within the riverine system. In commenting on earlier applications that proposed disposal of sand at Bluff Head, MGS stated that the sand will disperse in less than a year and remain part of the natural river bedload. MGS further stated that the mobile sand in the Kennebec River is a resource that has an important role in maintaining sandy estuarine habitats as well as the sand bars, beaches, and dunes at the river mouth. MGS has no concerns about using Jackknife Ledge as a disposal site.

The Department of Marine Resources (DMR) held a public meeting in Phippsburg on February 24, 2011 to gather information and hear concerns from the public about the proposed project.

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During the public meeting, Ms. Dot Kelly, whose property abuts the Bluff Head Disposal Site, raised concerns about the effects of a dredge that occurred in 2009 (the Department approved BIW's dredge of its dry-dock sinking basin in Department Order #L-14787-4E-Z-N) during which dredged materials were disposed of at the Bluff Head Disposal Site. Ms. Kelly stated that following the disposal of this material by BIW, her shoreline was heavily deposited with silt and expressed concern that the proposed project would have the same effect.

Included with the current application were grain-size analyses from several locations within both dredge sites. The Particle Size Analysis (ASTM D422-63) determined that samples taken at both locations were composed of 98-99% sand. The Unified Soil Classification System identified the samples as medium to fine-grained, poorly-sorted sands. Only one sample contained greater than one percent silt/clay. MGS reported that the bulk of the dredged material from Doubling Point reach would be expected to settle quickly at the Bluff Head Disposal Area, and that material from North Sugarloaf Island reach was consistent with the sandy sediment found in the Jackknife Ledge disposal site. MGS noted that fine-grained sediment (silts and clays) would not settle quickly but would be carried by tidal and river currents to intertidal and subtidal depositional sites upstream and downstream of the disposal sites. MGS also noted that it is not possible to quantify and predict transient water quality impacts, nor is it possible to identify specific areas that may become silted as a result of the proposed project.

In comments received from other interested parties, the concern was raised that chemical sampling of the proposed dredge material was not performed and that the Department should require chemical sampling prior to issuing a Water Quality Certification. Under the statute, 38 M.R.S.A. § 480-E(3)(A), an applicant is required to collect and test dredge spoils in accordance with a protocol approved by the commissioner. The Department has historically required that all dredge projects that propose open water disposal comply with the disposal requirements established by the Corps. As part of the application, the Corps submitted a draft Suitability Determination, dated January 14, 2011. The Suitability Determination summarized the grain-size analyses conducted on samples from the two dredge sites and noted that, in accordance with 40 CFR Part 230.60, no further testing would be required because the composition of the samples is primarily sand and not considered a likely carrier of contaminants. 40 CFR Part 230.60 states that dredged or fill material would most likely be free from chemical, biological, or other pollutants where it is composed primarily of sand, gravel, or other naturally occurring inert material.

Based on the materials submitted with the application and MGS' comments, the Department finds that the activity will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

#### 4. HABITAT CONSIDERATIONS:

During the public meeting referenced in Finding 3, Mr. Dean Doyle, a local harvester of soft-shell clams, raised concerns that the proposed project will create a turbid discharge that would result in impacts to downstream clam flats at the height of the commercial clamming season. This issue was raised prior to the applicant's 1997 maintenance dredge of Doubling Point. Department Order #L-16281-4E-B-N, dated, October 22, 1997, required the submission of a report that summarized monitoring of the Bluff Head Disposal Area for turbidity and fecal coliform before and after the approved project. In a letter prepared by Normandeau Associates and dated December 5, 1997, summarizing the findings of the report, Normandeau stated that turbidity levels were consistent with other sampling stations along the Kennebec River and that there was no trend related to station, depth, or dredging/disposal. An earlier study entitled, "A Final Report on the Effects of Dredging and Spoil Disposal on the Sediment Characteristics of the Clam Flats

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of the Lower Kennebec Estuary," dated March 1982, did not find a correlation between disposal of dredged material at the Bluff Head Disposal Site and sedimentation at downstream clam flats.

In previous dredging projects, the clam flats were not a major item of concern because they were not approved for commercial harvesting and because the dredge windows were restricted to the late fall and winter months when clams are not harvested. DMR recommends that sampling of the river for fecal coliform downstream from the Bluff Head Disposal Site be performed to ensure that dredging and disposal activities do not re-suspend fecal coliform, which may result in closure of the clam flats. DMR stated that it will use its staff to monitor the water quality downstream of the Bluff Head Disposal Site. DMR reiterated Mr. Doyle's comment that a significant portion of the local harvesters' income is generated during the month of August and that if a shellfish closure is mandated, then compensation should be required.

The Corps stated that, given the 24 hours a day work schedule for this project, dredging operations at Doubling Point could be completed in as few as two or three days and less for dredging at North Sugarloaf Island reach. Because DMR proposes to monitor water quality downstream of the Bluff Head Disposal Site, and given the low percentage of silt-sized particles that would create turbid discharge and the short time to perform the dredge, the Department finds that the proposed project is not expected to have an unreasonable impact to the clam flats near the mouth of the river.

DMR recognizes the emergency nature of the request to dredge, but it is concerned with the potential loss of shortnose or Atlantic sturgeon based on incidents from past dredging operations when fish were entrained. DMR recommended during the February 8, 2011 pre-application meeting, and again in its review comments, that the Corps tag up to 50 shortnosed sturgeon with acoustic tags and then track the fish with a mobile receiver aboard the hopper dredge. During the pre-application meeting, the Corps responded that dredging operations must continue 24 hours a day to ensure that the project is completed on time and that dredging would not be suspended because a tagged sturgeon may come into the area being dredged.

The Department finds that tagging and tracking sturgeon for this project would be impracticable, and recommends that in lieu of tagging and tracking, the Corps have a qualified observer be onboard the hopper dredge to monitor and report the capture of shortnose or Atlantic sturgeon during the proposed project to the Bureau of Land and Water Quality.

Department staff reviewed a Geographic Information System (GIS) database that contains information provided by both the Department of Marine Resources and the Department of Inland Fisheries and Wildlife. The GIS database indicates that 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.

Based on the prior studies referenced above, materials submitted with the application, and DMR's review comments, the Department finds that 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 provided that a qualified observer be onboard the hopper dredge to monitor and report the capture of shortnose or Atlantic sturgeon.

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#### 5. WATER QUALITY CONSIDERATIONS:

In April 2010, Ms. Kelly asked the Department to confirm the Water Quality Classification of the river segment where the Bluff Head Disposal Site is located. She alleges that the area is classified as a Class SA water, which would prohibit the disposal of dredge spoils.

Following a review of the statute, 38 M.R.S.A. § 469(5)(B), by staff from the Division of Environmental Assessment (DEA), it was determined that the statute, as written, is in error because it lacks a northerly boundary delineation. The literal interpretation of the statute, as written, lists the tidal waters of the Kennebec River in Phippsburg as Class SA extending from the mouth of the river to the Bath town line. While 38 M.R.S.A. § 469(5)(B) could be interpreted to lead to this conclusion, this would conflict with the history of this paragraph. Paragraph B was promulgated in 1990 based on the "Staff Proposal for Reclassification of Surface Waters to the Board of Environmental Protection," dated November 1, 1989, which includes the proposal for paragraph B under the heading "Popham Beach area (Phippsburg)." The proposal describes the Popham Beach, Seawall Beach and nearby offshore Heron Islands area, pointing out the protected status of the beaches and the seabird nesting habitat on Seawall and the Heron Islands. The longitudinal references in paragraph B are at either end of Seawall and Popham beaches. The clear intent was to protect these valuable beaches and the associated seabird nesting areas on the beaches and islands, and the Department has always interpreted it in this manner.

Because the statute uses the town-by-town classification system, the same stretch of river on the Georgetown side is not listed as Class SA in 38 M.R.S.A. § 469(5)(B), and so defaults to Class SB.

Since the issue was first raised by Ms. Kelly, the DEA has been working to resolve the drafting error in the water quality classification designation for this section of the Kennebec River as it was originally intended. In proposed legislation scheduled for review at the 125<sup>th</sup> Maine Legislature later this year, DEA proposes to correct the drafting error to limit the Class SA water designation to the intertidal portion of the Kennebec River on the northerly side of Popham Beach State Park and Fort Popham as was originally intended. All waters upstream of this point would be classified as Class SB waters. The legislative proposal would eliminate the Class SA designation to all waters of the Kennebec River north of the mouth of the river.

Given the drafting error noted in 38 M.R.S.A. § 469(5)(B) and the current efforts being taken to correct it, the Department does not anticipate that the proposed project will violate state water quality laws governing the classification of the State's waters. Provided that the Legislature corrects the classification of the intertidal portion of the Kennebec River from the mouth of the river to the Bath town line to be Class SB waters as described in proposed legislation before the 125<sup>th</sup> Session of the Maine Legislature, the Department does not anticipate that the proposed project will violate any state water quality law governing the classification of the State's waters.

In comments received from interested parties, the concern was raised that if it is determined that the disposal site is in a Class SB water, then in accordance with 38 M.R.S.A. § 469(5)(B)(2)(C), discharges to Class SB waters may not cause an adverse impact to estuarine and marine life or that a new discharge will not cause closure of open shellfish areas. As discussed in Finding 4, the dredged material is not expected to carry contaminants that would result in an adverse impact to downstream aquatic life, and as discussed in Finding 5, provisions will be taken to monitor downstream water quality to determine if dredging operations will have an adverse impact on the clam flats.

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Given the composition of the dredged material and the provisions that will be taken to protect open shellfish areas, the Department does not anticipate that the proposed project will violate any state water quality law, including those governing the classification of the State's waters.

#### 6. WETLANDS AND WATERBODIES PROTECTION RULES:

The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, require that the applicant meet the following standards:

- A. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. Each application for a coastal wetland alteration permit must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist. The applicant submitted an alternatives analysis for the proposed project in the February 2011 Draft Environmental Assessment. The purpose of the proposed project is to restore the depth of the federal channel and reduce the potential of groundings by ships. The alternatives analysis considered a no dredge alternative and several alternate dredging methods (mechanical, hydraulic, or hopper dredge) and disposal methods (ocean or upland disposal). The Department finds that the analysis demonstrates that ocean disposal is the least environmentally damaging practicable alternative that meets the project purpose.
- B. Minimal Alteration. The amount of wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. The applicant prepared a detailed hydrographic survey of the project area to ensure that the minimum amount of material will be removed from the project area to meet the federally approved depth. Removing bottom material will not permanently alter the existing bottom sediment and habitat characteristics and therefore minimizes the impact to marine fisheries.
- C. Compensation. In accordance with Chapter 310, compensation is required to achieve the goal of no net loss of wetland functions and values. The applicant demonstrated that the proposed dredge will not permanently alter the characteristics of the project area. Based on surveys by the applicant and comments from DMR, the Department finds that the impact to wetland functions from the proposed project will be temporary and insignificant. Therefore, no compensation is required.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project.

#### 7. DREDGE SPOILS TRANSPORTATION CONSIDERATIONS:

As required by 38 M.R.S.A. Section 480-D (9), DMR provided an assessment of the proposed project and its impact on the fishing industry as stated in Finding 4. To minimize this impact, the Department finds that the applicant must:

- a. Clearly mark or designate the dredging area, the disposal area, and the transportation route from Doubling Point reach to the Bluff Head Disposal Area and from North Sugarloaf Island reach to the Jackknife Ledge nearshore disposal site.
- b. Publish the transportation routes in a newspaper of general circulation in the area adjacent to the routes.

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c. Publish in a local newspaper the procedure that the applicant will use to respond to inquiries regarding the loss of fishing gear during the dredging operation.

#### 8. OTHER CONSIDERATIONS:

The Department did not identify any other issues involving existing scenic, aesthetic, or navigational uses, soil erosion, habitat or fisheries, the natural transfer of soil, natural flow of water, water quality, or flooding.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A <u>et seq.</u> and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed 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 provided that the applicant publishes the notices described in Finding 7 one week prior to commencing the dredging operation, and a qualified observer is onboard the hopper dredge to monitor and report the capture of shortnose or Atlantic sturgeon, as described in Finding 4.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law, including those governing the classifications of the State's waters, provided the Legislature corrects the classification of the intertidal portion of the Kennebec River from the mouth of the river to the Bath town line to be Class SB waters as is currently proposed in the 125<sup>th</sup> Session of the Maine Legislature.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A. Section 480-P.

THEREFORE, the Department APPROVES the above noted application of the U.S. ARMY CORPS OF ENGINEERS to complete dredging in the Kennebec River, as described above, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

- 1. Standard Conditions of Approval, a copy attached.
- 2. The applicant shall take all necessary measures to ensure that its activities or those of its agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.
- 3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
- 4. The applicant shall not dispose of dredge material in any disposal site in the intertidal portion of the Kennebec River between the mouth of the river to the Bath town line unless and until the Maine Legislature corrects the classification of the intertidal portion of the Kennebec River from the mouth of the river to the Bath town line to be Class SB waters as is currently proposed in the 125<sup>th</sup> Session of the Maine Legislature.
- 5. The applicant shall employ a qualified observer to monitor and report the capture of shortnose or Atlantic sturgeon during the project to the Bureau of Land and Water Quality.
- 6. The applicant shall comply with the provisions of 38 M.R.S.A. 480-D (9) and shall:
  - a. Clearly mark or designate the dredging area, the disposal area, and the transportation route from Doubling Point reach to the Bluff Head Disposal Area and from North Sugarloaf Island reach to the Jackknife Ledge nearshore disposal site.
  - b. Publish the transportation routes in a newspaper of general circulation in the area adjacent to the routes.
  - c. Publish in local newspapers the procedure that the applicant will use to respond to inquiries regarding the loss of fishing gear during the dredging operation.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.,

DONE AND DATED IN AUGUSTA, MAINE, THIS

\_DAY OF

2011

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: MUCH WALL Commissioner

APH 14 2011

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

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#### Natural Resource Protection Act (NRPA) Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. <u>Approval of Variations From Plans.</u> The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. <u>Compliance With All Applicable Laws.</u> The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. <u>Erosion Control.</u> The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. <u>Compliance With Conditions</u>. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. <u>Initiation of Activity Within Two Years.</u> If construction or operation of the activity is not begun within two years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits shall state the reasons why the applicant will be able to begin the activity within two years form the granting of a new permit, if so granted. Reapplications for permits may include information submitted in the initial application by reference.
- F. Reexamination After Five Years. If the approved activity is not completed within five years from the date of the granting of a permit, the Board may reexamine its permit approval and impose additional terms or conditions to respond to significant changes in circumstances which may have occurred during the five-year period.
- G. <u>No Construction Equipment Below High Water.</u> No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- H. <u>Permit Included In Contract Bids.</u> A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- I. <u>Permit Shown To Contractor.</u> Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

  Revised (4/92/DEP LW0428