Wilmington Harbor
Cape Fear River, NC

Phase III Dredged Material Management Plan (Phase III DMMP)

PEER REVIEW PLAN

January 2008

Port of Wilmington, North Carolina
Cape Fear River

US Army Corps of Engineers

Wilmington District

1.0 Introduction

The U. S. Army Corps of Engineers, Wilmington District is responsible for the maintenance of the Wilmington Harbor navigation channel. Engineering Regulation (ER) 1105-2-100 mandates that a Dredged Material Management Plan (DMMP) be developed for all federal navigation projects where there is an indication of insufficient disposal capacity to accommodate maintenance dredging for the next 20 years.

The study area for the Wilmington Harbor DMMP includes the nearshore ocean area (including the bar channel and ODMDS) at the mouth of the Cape Fear River to the upstream limit of the Federal Project in the Northeast Cape Fear River, a distance of approximately 38 miles (30.8 miles of river channel plus 5.8 miles of ocean bar channel) (Figure 1).

This DMMP will address disposal requirements for the authorized Wilmington Harbor Federal navigation project. Future disposal actions by private entities adjacent to the Federal project are not considered in this analysis. Requests by private entities will be addressed on a case by case basis when received.

The Wilmington Harbor Federal navigation project begins as the ocean bar to the entrance of the Cape Fear River in southeastern North Carolina. Authorized navigation channel dimensions are described as follows:

1) Bald Head Shoal Channel through Battery Island Channel consists of a required depth of -44 feet with an allowable overdepth of 2 feet to -46 feet,
2) Lower Swash Channel through the Anchorage Basin channel to the Cape Fear River Memorial Bridge and including he 1200 foot wide turning basin consists of a required depth of -42 feet with an allowable overdepth of 2 feet to -44 feet,
3) From the Cape Fear Memorial Bridge up to 750 feet above the Hilton Railroad Bridge on the Northeast Cape Fear River consists of a required depth of -38 feet to include the 800 foot wide turning basin located at the northern end of fully developed areas of the City of Wilmington and
4) From 750 feet above the Hilton Railroad Bridge for approximately 1.3 miles to the project's northern terminus to include the most northern 800 foot wide turning basin consists of a required depth of -34 feet with an allowable overdepth of 2 feet to -36 feet.
5) Authorized channel widths in the lower harbor vary along the project as described above. On average the widths are 500-675 feet wide from Baldhead Shoal up to the Cape Fear Memorial Bridge located at approximate River mile 27.2 with nothing less than 400 feet in width. The authorized width from the Cape Fear Memorial Bridge to the project's northern terminus is 250 feet wide.

The existing Wilmington Harbor ship channel extends through the approximate center of the river and small islands border the channel for much of its length. These islands were created by disposal of dredged material in open water prior to the early 1970's. In addition to the Cape Fear River proper, and the existing

disposal islands, the study area also consists of lands on the east (New Hanover County) and west banks (Brunswick County) of the River, the beaches of southern New Hanover County and eastern Brunswick County and the designated Ocean Dredged Material Disposal Site (ODMDS).

The Wilmington Harbor navigation channel is divided into “reaches” or segments of river and dredging methods and disposal options vary depending on the reach location and quality of material to be dredged (Figure 1). Shown in Table 1 and summarized below are summaries of current dredging methods and disposal locations utilized through initial construction of the Wilmington Harbor-96 Act deepening project. Moving from the south end of the project at the Outer Ocean Bar to the northern limit of the project, above Wilmington, Reach 3 of Bald Head Shoal Channel is dredged annually by hopper dredge and deposited in the Ocean Dredged Material Disposal Site (ODMDS). Material from Bald Head Shoal Channel reaches 1 and 2 and Smith Island Channel is dredged with an ocean certified pipeline dredge every other year and pumped to the beach at either Bald Head Island or Oak Island in accordance with the Sand Management Plan (SMP) that was incorporated in the Environmental Assessment, Preconstruction Modifications of Authorized Improvements, Wilmington Harbor, NC, 2000. Material from Bald Head-Caswell Channel, Southport Channel and Battery Island Channel is dredged about once every 4 years by hopper dredge and deposited in the ODMDS. Material from Snows Marsh Channel to Lower Big Island Channel is dredged once every 2 years by bucket and barge or by hopper dredge and deposited in the ODMDS. If nearby bird nesting islands, South Pelican Island and Ferry Slip Island, are in need of sand due to erosion, material from Snows Marsh Channel and Horseshoe Shoal Channel may be pumped to these islands by pipeline dredge. Also, Islands 3 and 4 are alternative disposal areas available for disposal of dredged material by pipeline dredge from Bald Head-Caswell Channel through Horseshoe Shoal Channel. Upstream of Lower Big Island Channel to the upstream limits of the project, dredging is performed by pipeline dredge and material is pumped to the Eagle Island Disposal Area. Maintenance dredging in Upper Big Island Channel upstream through Fourth East Jetty Channel is performed every 2 years. Between Channel and the Anchorage Basin are dredged annually. The project area upstream of the Anchorage Basin to the upstream limits of the project is dredged about once every 5 years.

A Preliminary Assessment is the first phase of the DMMP process and identifies the need or lack thereof for a DMMP. Phase I of the Wilmington Harbor DMMP process was the preparation of a Preliminary Assessment (PA), which was completed in 1996. The PA identified significant problems with the continued maintenance of Wilmington Harbor and concluded that a long term management strategy that considered both maintenance and new work dredging was needed. Immediately following the PA, a Phase I DMMP study, dated 1997 was completed. The main purpose of the Phase I study was to define and document investigations needed to develop a long-term management plan. A Phase II DMMP study for the upper portion of Wilmington Harbor was completed in June 2001. This study concluded that dike heights at the only disposal site for the upper portion of the Harbor, Eagle Island, would have to be gradually raised to accommodate future maintenance dredged material and material from initial

construction under the Wilmington Harbor-96 Act deepening project. Following the Phase II DMMP and with the prolonged initial construction phase of the Wilmington Harbor -96 Act due to funding constraints, it was determined in 2004 that an all-inclusive DMMP would be required to be developed as part of the Wilmington Harbor- 96 Act Construction General project. This comprehensive DMMP will ensure sufficient disposal capacity for a 20-year period beyond completion of the initial construction phase of the authorized Wilmington Harbor-96 Act deepening project. Subject to funding, the Wilmington Harbor-96 Act deepening is scheduled for completion in 2011. Therefore, this DMMP considers dredge disposal requirements from 2012 through 2031. The DMMP is a planning document that ensures maintenance-dredging activities are performed in an environmentally acceptable manner, use sound engineering techniques, and are economically justified. Phase III of the Wilmington Harbor DMMP, which is the subject of this report, covers the entire Wilmington Harbor Project and addresses dredging needs, disposal capabilities, capacities of disposal areas, environmental compliance requirements, potential for beneficial use of dredged material and indicators of continued economic justification.

This comprehensive DMMP for the Wilmington Harbor project has been developed using a consistent and logical procedure by which dredged material management alternatives have been identified, evaluated, screened, and recommended so that dredged material placement operations are conducted in a timely, environmentally sensitive, and cost-effective manner. The Phase III DMMP study began in the summer of 2004. Initially, the PDT identified 29 potential alternatives. As shown below, between 2004 and the fall of 2005, analysis and screening had reduced the potential number of alternatives to 14.

#		Status
1	Management Plan for Eagle Island, cell rotation / dike raises	addressed in DMMP
2	Capacity restoration of existing CDFs by ocean disposal/beneficial use	addressed in DMMP
3	Sand recycling at Islands 3 and 4	addressed in DMMP
4	Disposal of all Beach Compatible Material on Beach	addressed in DMMP
5	New ODMDS	addressed in DMMP
6	Create a nearshore disposal site for recycling sand to the beach	addressed in DMMP
7	Use of scow or barge overflow to increase dredging efficiency	addressed in DMMP
8	New CDF at U. S. Coast Guard LORAN site	addressed in DMMP
9	Open water site mid-harbor near Snows Cut (100-200 acres)	addressed in DMMP
10	Sand recycling from borrow hole in the channel near Horseshoe Shoal	addressed in DMMP
11	CDF at Progress Energy's Brunswick Nuclear Plant (Southport)	addressed in DMMP
12	New Eagle Island type CDF in MOTSU buffer area at Carolina Beach	addressed in DMMP
13	New confined disposal facility on Eagle Island by expansion	addressed in DMMP
14	Restoration of Islands 8 and 10	addressed in DMMP
15	Reduction of dredging area in Anchorage Basin	eliminated in 2005
16	Dike restoration/rehab at all existing CDFs in River (all islands)	eliminated in 2005
17	CDF at Progress Energy's power line right-of- way on River	eliminated in 2005
18	Restore capacity at DA2 at MOTSU	eliminated in 2005
19	Create CDF on west side fo River for MOTSU security	eliminated in 2005
20	Install training walls to create scour and reduce dredging volume	eliminated in 2005
21	Agitation dredging to remove bottlenecks/emergency shoals	eliminated in 2005
22	Use drag bar to remove high spost between dredging events	eliminated in 2005
23	Pump fine-grained dredged material directly offshore of Carolina/Kure Beach	eliminated in 2005
24	Pump sandy dredged material directly to Carolina/Kure Beach	eliminated in 2005
25	Build berm from dredged material around MOTSU for blast protection	eliminated in 2005
26	Use dredging equipment that reduces water content of dredged material	eliminated in 2005
27	Use dredged material to create a beneficial site similar to Island 13	eliminated in 2005
28	Use dredged material for embankment material on the new DOT bridge	eliminated in 2005
29	Use dredged material to raise the USS NC Battleship parking lot	eliminated in 2005

These 14 alternatives include modification to existing active sites, such as the Eagle Island confined disposal facility (CDF), rehabilitation and restoration of previously used sites, such as Islands 8 and 10, and the acquisition and construction of new sites, especially in the mid-River area where upland disposal sites are lacking. Alternatives also considered were beneficial uses, including beach disposal, disposal on bird islands, recycling from upland sites and disposal of small quantities of sand in designated areas within the nearshore zone.

Several alternatives have been eliminated for various reasons, including significant environmental impacts, mitigation costs, lack of availability of land, potential groundwater impacts, and lack of economic justification. These alternatives include 1) A new upland confined disposal facility (CDF) at the Coast Guard LORAN Station, Carolina Beach, 2) A CDF at the Brunswick Nuclear Power Plant in Southport, NC, 3) A borrow hole/sediment trap in the Horseshoe Shoal Reach, 4) CDFs in the buffer zone for Military Ocean Terminal Sunny Point (MOTSU) at Carolina Beach, 5) Eagle Island Expansion northward, 6) A 100-200 acre open water disposal site in the mid-River area (near Snows Cut) and 7) Restoration of Islands 8 and 10

Alternatives that remain viable and warrant further investigations and analyses during this DMMP development are: 1) Continued use of Eagle Island with plans for dike raises to elevation 42', cell rotation, ditching, and beneficial use, 2) Sand recycling from Islands 3 & 4 in the mid-River, 3) Disposal of material in the designated ODMDS, 4) Placement of small quantities (<100,000 cubic yards) of sand in nearshore disposal zones, 5) beach disposal, and 6) Disposal of sand on the bird islands.

In summary, the Wilmington Harbor DMMP will recommend the continued use of Eagle Island, Islands 3 and 4, designated nearshore zones, the beaches of Bald Head Island and Oak Island-Caswell, and the ODMDS. The DMMP will not recommend the construction of new sites or the restoration of previously used inactive sites. Modifications to Eagle Island and restoration of the dikes at Islands 3 and 4 will be required to provide adequate dredged material storage capacity. Additionally, 3 nearshore disposal zones are proposed to accommodate small quantities of sand that may result from removal of shoals following a storm. Lastly, beneficial uses, such as disposal on bird islands, should continue as well as further investigation of additional beneficial uses, especially beneficial uses of dredged material from Eagle Island.

Although, the Phase III of the Wilmington Harbor Comprehensive DMMP ensures that dredged material disposal capacity exists for at least the next 20 years, the DMMP shall be updated periodically as required by ER 1105-2-100 and Policy Guidance Letter 47 (PGL 47), to identify any potentially changed conditions.

ISSUES TO BE ADDRESSED BY THE DMMP
1. Develop a plan that provides adequate capacity for maintenance dredged material from Wilmington Harbor for the next 20 years
2. Incorporate beneficial uses of dredged material

The Wilmington Harbor DMMP addresses dredging needs, disposal capabilities, capacities of disposal areas, environmental compliance requirements, potential for beneficial use of dredged material and indicators of continued economic justification.

It is the policy of the Corps that all dredged material management studies include an assessment of potential beneficial uses for environmental purposes including fish and wildlife habitat creation, ecosystem restoration and enhancement and/or hurricane and storm damage reduction. Districts and MSCs will make every effort to ensure that sponsors and other interests understand the valuable contributions that beneficial uses can make to management plans and will maximize use of regional forums to share experiences of opportunities for beneficial uses.

A NEPA document, an EIS or EA (depending on final alternatives selected), will be included as a part of the DMMP process.

2.0 The Peer Review Plan

This Peer Review Plan (PRP) is a collaborative product of the project delivery team (PDT) and the National Deep Draft Navigation Planning Center of Expertise (DDNPCX). The DDNPCX shall manage the PRP, which for this study includes an Independent Technical Review (ITR). Each of the following paragraphs (a.) through (j.) correspond to the guidance provided in paragraphs 6.a. through j. of Engineering Circular 1105-2-408, "Peer Review of Decision Documents":

a. Decision Document and Team Members. The *Wilmington Harbor – 96 Act Project Dredged Material Management Plan* shall be the decision document. The primary purpose of the DMMP is to ensure that sufficient dredged material placement capacity is available for at least the next 20 years for the entire Wilmington Harbor project. The DMMP further ensures that maintenance-dredging activities are performed in an environmentally acceptable manner, use sound engineering techniques, and are economically justified. The Phase III Wilmington Harbor DMMP addresses dredging needs, disposal capabilities, capacities of disposal areas, environmental compliance requirements, beneficial uses of dredged material and indicators of continued economic justification.

Key PDT members are shown in the table below.

ROLE	ORGANIZATION
Project Manager	SAW-PM-C
Program Manager	SAW-PM-P
Technical & Planning Leader	SAW-TS-PE
Design, Islands	SAW-TS-ED SAW-TS-ED
Construction	SAW-CW
Cultural Resources	SAW-TS-PE
Coastal/H&H	SAW-TS-EC SAW-TS-EC

Geotechnical	SAW-TS-EG SAW-TS-EG
Navigation	SAW-OP-N
Cost	SAW-TS-EE
Economics	SAW-TS-PF
Real Estate	SAS-RE-RP
Legal	SAW-OC
Operations	SAW-OP-N
Non-Federal Sponsor	State of North Carolina Division of Water Resources
Resource Agencies	US Fish and Wildlife Service
	NC Wildlife Resources Commission
	National Marine Fisheries Service
	NC Division of Marine Fisheries
	NC Division of Water Quality
Stakeholders	NC Ports Military Ocean Terminal, Sunny Point (MOTSU)

For more information regarding the PRP, the project manager for the feasibility study may be contacted as follows:

Sharon Haggett
US Army Corps of Engineers – Wilmington District
CESAW-PM-C
69 Darlington Avenue
Wilmington, North Carolina 28403
Phone: (910) 251-4441 Fax: (910) 251-4965
Email: Sharon.F.Haggett@usace.army.mil

The PCX lead is:

Kenneth G. Claseman
Deep Draft Navigation Planning Center of Expertise
US Army Corps of Engineers – Mobile District
CESAM-PD-FE
http://www.sam.usace.army.mil/ddncx/
Phone: (251) 694-3840
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b. External Peer Review. EC 1105-2-408 provides the process for deciding whether or not to employ external peer review. The following is an excerpt of EC section 9.a: *Decision documents covered by this Circular will undergo EPR if there is a vertical team consensus (involving district, major subordinate command and Headquarters members) that the covered subject matter (including data, use of models, assumptions, and other scientific and engineering information) is novel, is controversial, is precedent setting, has significant interagency interest, or has significant economic, environmental and social effects to the nation. Decision documents covered by this Circular that do not meet the standard shall undergo ITR as described in paragraph 8, above.*

c. Evaluation. Following is an External Peer Review Decision Checklist based upon the five considerations listed in EC 1105-2-408:

1. Novel subject matter? No. The DMMP addresses O & M of an existing Harbor with typical disposal practices. In summary, the Wilmington Harbor DMMP will recommend the continued use of Eagle Island, DA-3 and DA-4, designated nearshore placement areas, the beaches of Bald Head Island and Oak Island-Caswell, the bird islands, and the ODMDS. The DMMP will not recommend the construction of new upland sites or the restoration of previously used inactive sites. Modifications to Eagle Island and restoration of the dikes at Islands 3 and 4 will be required to provide adequate dredged material storage capacity. Also, still under consideration is the expansion of Eagle Island northward to include Cells 4 and 5 and adjacent property currently in private ownership. Additionally, 3 nearshore placement areas are proposed to accommodate small quantities of sand that may result from removal of shoals following a storm. A large nearshore placement area is also being considered for placement of large quantities of sand that could later be placed on nearby beaches. However, nearshore placement areas are not considered novel, as we already have some in North Carolina. Lastly, beneficial uses, such as disposal on bird islands and beaches will continue. ,

2. Controversial subject matter? No. We propose to continue using existing disposal practices and sites with the possible addition of a nearshore zone in Brunswick County for disposal of small quantities of sand. Nearshore disposal has been done in other areas within North Carolina and is typically non-controversial. All potentially controversial alternatives have been eliminated from further consideration. No controversial alternatives remain in the recommended plan.

3. Precedent setting? No. The proposed long-term management of dredged material involves standard, ongoing disposal methods and practices. There is the potential for precedent setting in regard to beneficial uses, however, to date, none have been identified. Methods and models used for decision-making and technical analysis are accepted engineering models in common use. The engineering models were used to plan and formulate the DMMP. For the use of any planning or decision models, the requirements of EC 1105-2-407, *Planning, Planning Models Improvement Program: Model Certification* will be satisfied as to model certification, that is, that the model(s) utilized are reviewed and certified by the appropriate PCX.

4. Unusually significant interagency interest? No. The level of interest has been normal and as would be expected for a project of this nature. The U. S. Fish and Wildlife Service, the National Marine Fisheries Service, the North Carolina Division of Marine Fisheries, the North Carolina Wildlife Resources Commission and representatives from the State Ports and MOTSU are all active PDT members that support the DMMP recommendations. Subjects of significant interagency interest are non-existent base on current recommendations. Close coordination with all interested agencies will continue, but so far, has resulted in consensus in selection and evaluation of the alternatives.

5. Unusually significant economic, environmental, and social effects to the nation? No. The primarily regional economic, environmental, and social effects of the long-term maintenance of Wilmington Harbor will not pose an unusual effect to the nation. The DMMP will result in nominal economic impact and social effects as maintenance of the Harbor is ongoing and would continue with or without the DMMP. Environmental impacts are expected to be minimal. Proposed nearshore placement areas have the potential to have the greatest impact, however they are temporary holding areas that will be located such that they avoid significant resources, like hardbottoms or other Essential Fish Habitat (EFH).

d. Decision. For this study, the PDT suggests that EPR is not required at this time. The option of instituting EPR continues, and may be applied if found to be appropriate for selected disciplines at a later time.

Independent Technical Review (ITR) will be completed according to Corps regulations, employing the Deep Draft Navigation Planning Center of Expertise in South Atlantic Division. In addition to ITR, other review milestones have, and will, ensure that the analysis is technically correct, properly focused, and consistent with Corps policy, as follows:

- Feasibility Scoping Meeting
- In-Progress Review
- Alternative Formulation Briefing
- Draft Feasibility Report Policy Review

These reviews have, and will, provide adequate oversight to the DMMP and, together with the NEPA review process, help ensure a technically-sound and policy-consistent report.

e. Anticipated Peer Review Schedule. Based on the current project schedule, following is a list of review milestones.

REVIEW MILESTONE	COMPLETION DATE	
Initiation of DMMP		2004
AFB Independent Technical Review (ITR)	**September**	**2007**
Alternative Formulation Briefing (AFB)	November	2007
Complete draft DMMP/EIS (for in-house review)	March	2008
ITR of draft DMMP/EIS	**April**	**2008**
Public Review of Draft DMMP/EIS	June	2008
ITR of final DMMP/EIS	**September**	**2008**
Circulate Final EIS	November	2008
Public Review of Final DMMP/EIS	October	2008
Record of Decision	April	2009

As indicated by the bolded items, above, ITR of the AFB materials will occur in September 2007 and ITR of the Draft and Final DMMP/EISs will occur in April and September 2008, respectively.

f. Conducting External Peer Review. External Peer Review, as discussed in EC 1105-2-408, is not required for DMMP's.

g. Public Comment on Decision Document. Coordination with resource agencies and the general public began in December 2005 with the circulation of a NEPA Scoping letter, followed by a Scoping meeting on December 8, 2005. No Scoping comments were received and no issues of concern were raised during the Scoping process. At the Scoping meeting all attendees were invited to participate on the Project Delivery Team (PDT). Representatives from the U.S. Fish and Wildlife Service, the North Carolina Wildlife Resources Commission, the North Carolina Division of Water Quality, the NC State Ports and MOTSU all indicated their interest in becoming active PDT members. These representatives regularly attend PDT meetings and have made important contributions to the planning and evaluation of alternatives. Also, all Scoping meeting attendees, whether active PDT members or not, are provided with monthly PDT meeting minutes via email. Coordination with the USFWS regarding the Fish and Wildlife Coordination Act requirements is ongoing. As the NEPA process moves forward, coordination with all appropriate resource agencies and stakeholders will intensify.

In addition to participating in PDT meetings, interested stakeholders and resource agencies will have the opportunity to review the AFB read-ahead package and to attend the AFB, which is scheduled for November 2007.

The public will have an opportunity to comment on the DMMP as part of the National Environmental Policy Act (NEPA) compliance activities, including circulation of the draft and final NEPA documents in June and November 2008. Once completed, the Integrated DMMP and EA or EIS will be disseminated to resource agencies, interest groups, and the public as part of the NEPA environmental compliance review. Reference "DMMP/ NEPA Public Review" as highlighted in the "Peer Review Plan" flow chart included as Attachment 1. Public entities and private individuals that are members of the PDT may also review and comment on draft documents.

h. Provision of Public Comments to Reviewers. All significant and relevant public comments will be provided as part of the review package to Peer Reviewers as they are available and may include but not be limited to: scoping letters, meeting minutes, other received letters, and emails.

i. Anticipated Number of Reviewers. Based on the summary of disciplines and expertise necessary for thorough review of the AFB for the Wilmington Harbor DMMP, 8 reviewers will be required. Disciplines include: Plan Formulation, Economic Analysis, Environmental Compliance, Civil Design, Geotechnical Design, Coastal Engineering, Operations and Cost Engineering.

j. Primary Review Disciplines and Expertise. The number of reviewers (Level of Review) shall vary as depicted under "Review Phase" in the "Peer Review Plan" flow chart included as Attachment 1. However, EPR's are not required for DMMP's. ITR of all decision documents will be conducted using DrChecks. Following is a preliminary list of review disciplines for Independent Technical Review.

PRELIMINARY REVIEW DISCIPLINES FOR ITR	
Discipline	**Focus Area Description**
Navigation/Operations	Operations & Maintenance
Environmental	Nearshore disposal, compliance w/ State/Federal Laws
Design	Confined Disposal Facilities (CDF)
Geotechnical	CDF stability and sediment analysis
Coastal/hydraulics & hydrology	Nearshore disposal, groundwater & shoaling analyses
Economist	
Cost Engineering	
Planning	

k. Selection of External Peer Reviewers. EPR's are not required for DMMP's.

k. Nomination of Peer Reviewers by the Public. Not applicable.

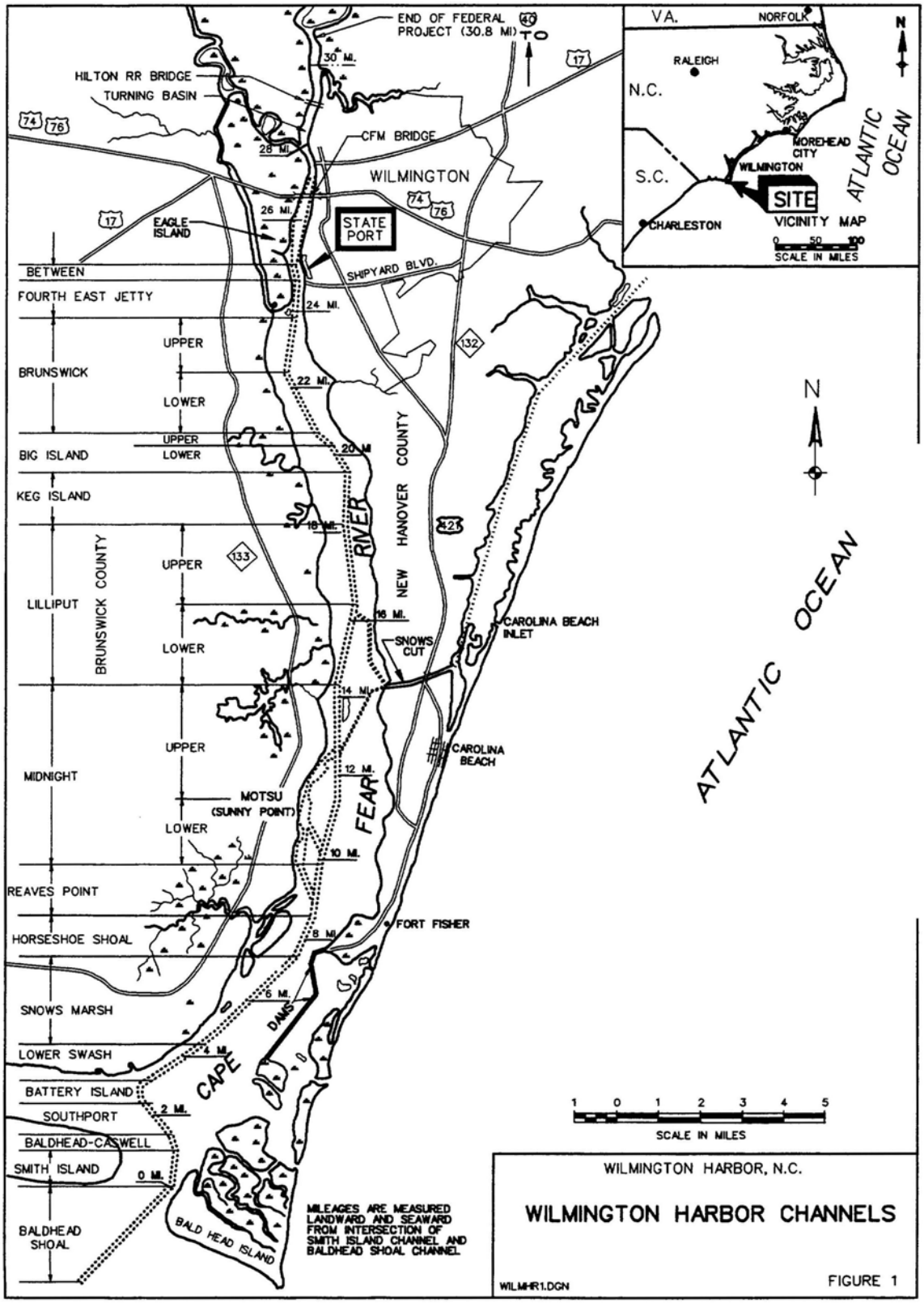


Figure 1. Wilmington Harbor DMMP Study Area

Channel Reaches	per Year		Disposal Location	Dredge Type	gravel/sand/silt	Contract	Contract
Upstream Limits of Project to 750 ft above Chemserve	12,600	5	Eagle Island Cells 2/3	18" pipeline	0/58/42	Anchorage Basin	Annual
750 ft above Chemserve to NC 133 Bridge	70,600	5	EI Cell 2/Cell 3	18" pipeline	10/55/35	Anchorage Basin	Annual
NC 133 Bridge to Cape Fear Mem Bridge	14,100	5	EI Cell 2/Cell 3	18" pipeline	10/55/35	Anchorage Basin	Annual
Anchorage Basin	1,168,135	1	EI Cell 1/Cell 2/Cell 3	18" pipeline	0/6/94	Anchorage Basin	Annual
Between Channel	84,166	1	EI Cell 1/Cell 2/Cell 3	18" pipeline	0/80/20	Anchorage Basin	Annual
Fourth East Jetty	19,600	2	EI Cell 1/Cell 2/Cell 3	18" pipeline	0/80/20	Anchorage Basin	Annual
Upper Brunswick	17,100	2	EI Cell 1/Cell 2	18" pipeline	0/57/43	Anchorage Basin	Annual
Lower Brunswick	29,800	2	EI Cell 1/Cell 2	18" pipeline	0/93/7	Anchorage Basin	Annual
Upper Big Island	22,452	2	ODMDS/Island 10	B&B or Hopper, 18" Pipe.	2/95/3	Mid-River	Even FY
Lower Big Island	35,874	2	ODMDS/Island 10	B&B or Hopper, 18" Pipe.	2/95/3	Mid-River	Even FY
Keg Island	34,100	2	ODMDS/Island 10	B&B or Hopper, 18" Pipe.	0/63/37	Mid-River	Even FY
Upper Lilliput	48,900	2	ODMDS/Island 10	B&B or Hopper, 18" Pipe.	0/98/2	Mid-River	Even FY
Lower Lilliput	43,000	2	ODMDS/Island 10	B&B or Hopper, 18" Pipe.	0/53/47	Mid-River	Even FY
Upper Midnight	107,000	2	ODMDS/Island 8	B&B or Hopper, 18" Pipe.	0/82/18	Mid-River	Even FY
Lower Midnight	25,500	2	ODMDS/Island 8	B&B or Hopper, 18" Pipe.	0/76/24	Mid-River	Even FY
Reaves Point	21,200	2	ODMDS/Island 8	B&B or Hopper, 18" Pipe.	0/99/1	Mid-River	Even FY
Horseshoe Shoal	45,835	2	Bird Island/Island 3/4	18" pipeline	0/98/2	Anchorage Basin	Annual
Snows Marsh	21,754	2	Bird Island/Island 3/4	18" pipeline	15/83/2	Anchorage Basin	Annual
Lower Swash	12,000	2	ODMDS/Island 3/4	B&B or Hopper, 18" Pipe.	27/70/3	Mid-River	Even FY
Battery Island	25,305	4	ODMDS/Island 3/4	B&B or Hopper, 18" Pipe.	38/61/1	Mid-River	Even FY
Southport	0	4	ODMDS/Island 3/4	B&B or Hopper, 18" Pipe.	12/86/2	Mid-River	Even FY
Baldhead-Caswell	11,039	4	ODMDS/Island 3/4	B&B or Hopper, 18" Pipe.	18/80/2	Mid-River	Even FY
Smith Island	257,786	2	Beach BHI or CB/WOI	30" Pipeline	7/92/1	Inner Bar	Odd FY
Ocean Bar Entrance Channels	545,000	2	Beach BHI or CB/WOI	30" Pipeline	0/99/1	Inner Bar	Odd FY
Ocean Bar Outer Channels	538,000	1	ODMDS	Hopper	0/73/27	Outer Bar	Annual
TOTAL	3,210,845						

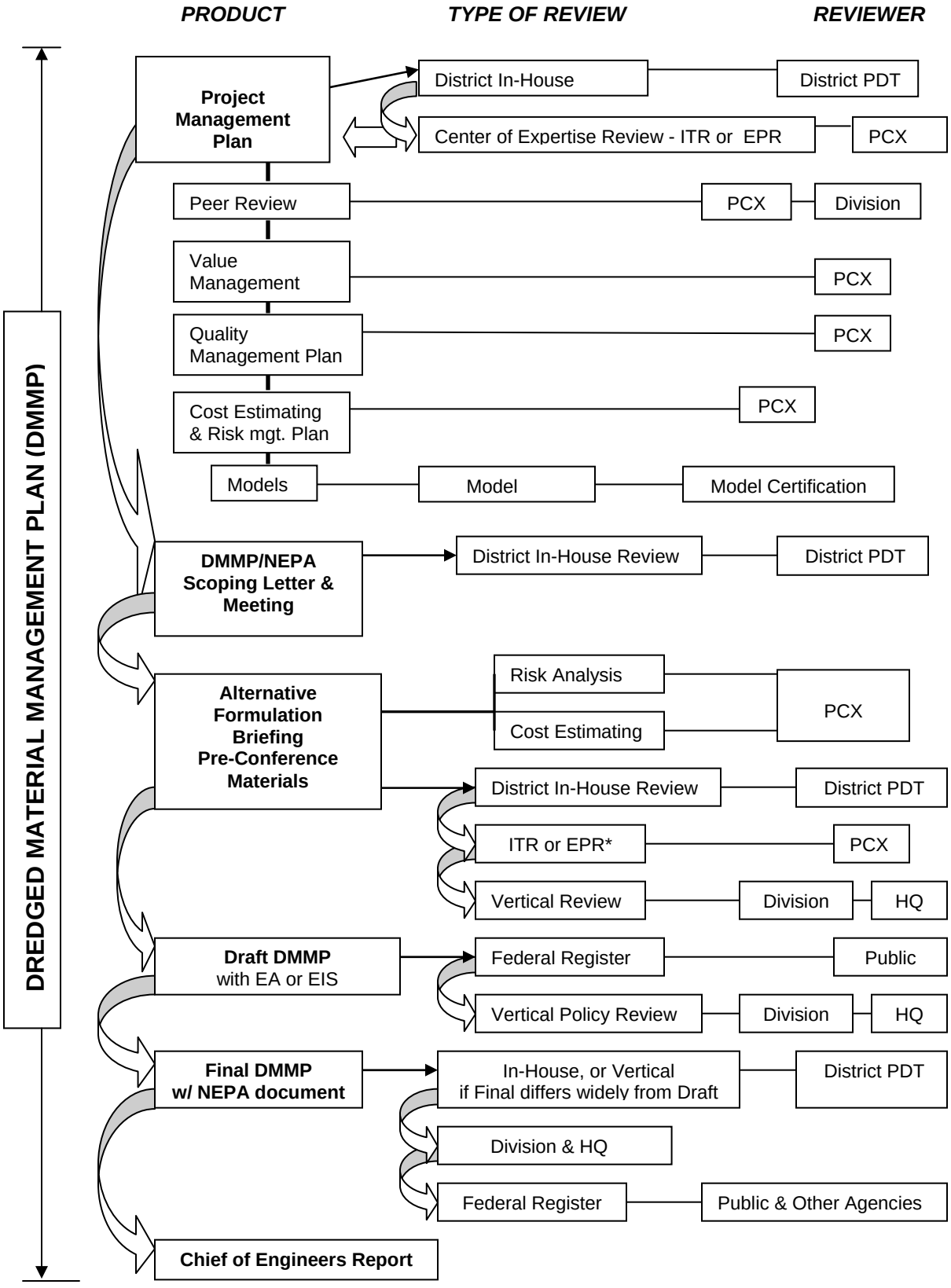
EI = Eagle Island, ODMDS = Ocean Dredged Material Disposal, BHI=Bald Head Island,CB=Caswell Beach,WOI=West Oak Island, B & B = Bucket and Barge

Table 1. Summary of Current Dredging and Disposal Practices for Wilmington Harbor

Peer Review Plan

ATTACHMENT 1

DMMP REVIEW PLAN



***** Reference External Peer Review Decision Checklist in Section b., questions 1 - 5: if any changes occur in checklisted items, the vertical team will determine if External Peer Review (EPR) will be required.
**A Scoping Letter/Meeting solicits Public involvement
***Project Delivery Team (PDT) includes the non-Federal Sponsor, stakeholders, and resource agencies.

ITR Approval Request

ATTACHMENT 2

Skilled and experienced personnel who have not been associated with the development of the Wilmington Harbor Dredged Material Management Plan are here being recommended for ITR responsibilities. It is requested that the following listing of ITR Team Members be evaluated and approved to perform the upcoming ITR. Biographical information for the recommended ITR Team Members is included.

[ADD BIOGRAPHICAL INFORMATION FOR RECOMMENDED ITR TEAM MEMBERS]

DEPARTMENT OF THE ARMY
SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS
ROOM 9M15, 60 FORSYTH ST., S.W.
ATLANTA GA 30303-8801

REPLY TO
ATTENTION OF

CESAD-PDS-P

11 January 2008

MEMORANDUM FOR Commander, Wilmington District, CESAW-TS-P (W. Coleman long)

SUBJECT: Approval of Peer Review Plan (PRP) for Wilmington Harbor Phase III Dredged Material Management Plan, Wilmington District

1. Reference, CESAW-TS-P memo dated 20 November 2007 subject as above.

2. The subject Peer Review Plan (PRP) is approved. SAD staff has reviewed the PRP and concludes an external peer review of this project is not necessary for the following reasons (1) no novel subject matter will be produced by the report, (2) controversial subject matter is minor with team consensus, 3) subject matter is not precedent-setting, 4) interagency interest has not been unusually significant, and 5) there are no unusually significant economic, environmental, or social effects to the nation.

3. The District should immediately post the Final PRP to its website and provide a link to the DDN-PCX for their use. Before posting to the website, the names of the Corps/Army employees should be removed in accordance with CECW-CP guidance memo on "Peer Review Process" dated March 2007.

4. The point of contact for this action is Mr. Terry Stratton at (404) 562-5228.

Dennis W Barnett

DENNIS W. BARNETT
Acting Chief, Planning and Policy Community
of Practice