1

PUBLIC HEARING ON

PROPOSED AMENDMENTS TO RESTRICTIONS ON USE OF THE CENTRAL and WESTERN LONG ISLAND SOUND DREDGED MATERIAL DISPOSAL SITES

MARCH 1, 2016 PORT JEFFERSON FREE LIBRARY PORT JEFFERSON, NEW YORK ----X

MINUTES OF PROCEEDINGS

BEFORE:

Jean Brochi, Project Manager, Ocean and Coastal Protection Unit, EPA Region 1

Mel Cote, Chief, Surface Water Branch EPA Region 1

Mark Habel, Chief Navigation and Environmental Resources Section U.S. Army Corps of Engineers, New England District

Steve Wolf, Environmental Resources Section, U.S. Army Corps of Engineers, New England District

Stephen Perkins, Director, Ocean and Coastal Policy, EPA Region 1

> Susan Crane Court Reporter

1	2	1	4
2	MS. BROCHI: Good evening.	2	rulemaking designated Central Western
3	Thank you for joining us. My name is	3	Long Island Sound Dredged Material
4	Jean Brochi. I'm with EPA in Boston.	4	Disposal Sites.
5	I just want to go over a few	5	I'm now going to describe what
6	logistics before we kick off the	6	EPA's role is with respect to this.
7	meeting.	7	I'm going to take a step back to
8	If you need to use a bathroom	8	provide background on the designation
9	they are over here behind this wall;	9	for Central and Western Long Island
10	take a right. If you would like to	10	Sound disposal sites, which was
11	speak tonight, this is a meeting to	11	completed in July of 2005.
12	accept public comment, so if you	12	Then I will turn it over to
13	would like to speak we ask that you	13	Habel of the U.S. Army Corps of
14	fill out a speaker card, and either	14	Engineers in connection with their
15	hold it and I will come by and	15	role, as well as their recently
16	collect it during the meeting.	16	completed Dredged Material Management
17	We are going to ask that you	17	Plan. Following Mark will be Steve
18	walk up to the front and use the	18	Wolf, also with the Corps' New
19	microphone when speaking. We are	19	England district. He is going to
20	also going to ask that you speak very	20	give you an overview and how we
21	clearly; state your name and spell	21	manage and monitor disposal sites.
22	your name. We have a	22	And following Steve, Stephen
23	transcriptionist off to my left and	23	Perkins, also of EP Region 1, will
24	she will be recording the meeting,	24	explain EPA proposed amendments for
25	and the report will be available on	25	the Central and Western sites.
	-		
1	3	1	5
2	the EPA Website a few weeks after the	2	As you probably know, EPA and
	the Li A website a few weeks after the	4	AS YOU DIODADIY KIOW, LI A allu
	meeting	3	
3 4	meeting. Thank you for coming. You are	3 4	U.S. Army Corps of Engineers jointly
4	Thank you for coming. You are	4	U.S. Army Corps of Engineers jointly regulate under federal authorities
4 5	Thank you for coming. You are here for the public hearing to make	4 5	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean
4 5 6	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA	4 5 6	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection,
4 5 6 7	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and	4 5 6 7	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also
4 5 6 7 8	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal	4 5 6 7 8	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act.
4 5 6 7 8 9	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel	4 5 6 7 8 9	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work
4 5 6 7 8 9	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA.	4 5 6 7 8 9	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies,
4 5 6 7 8 9 10	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean.	4 5 6 7 8 9 10 11	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S.
4 5 6 7 8 9 10 11	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for	4 5 6 7 8 9 10 11	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state
4 5 6 7 8 9 10 11 12 13	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good	4 5 6 7 8 9 10 11 12 13	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance
4 5 6 7 8 9 10 11 12 13 14	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name	4 5 6 7 8 9 10 11 12 13 14	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper
4 5 6 7 8 9 10 11 12 13 14 15	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the	4 5 6 7 8 9 10 11 12 13 14 15	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with
4 5 6 7 8 9 10 11 12 13 14 15 16	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1	4 5 6 7 8 9 10 11 12 13 14 15	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements
4 5 6 7 8 9 10 11 12 13 14 15 16 17	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston.	4 5 6 7 8 9 10 11 12 13 14 15 16	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards.
4 5 6 7 8 9 10 11 12 13 14 15 16 17	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is the ocean, the coastal protection and	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome Ambro from Long Island succeeded in
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is the ocean, the coastal protection and watershed programs for the 16 states.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome Ambro from Long Island succeeded in passing the Ocean Dumping Act, which
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is the ocean, the coastal protection and watershed programs for the 16 states. Thank you for coming to this public	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome Ambro from Long Island succeeded in passing the Ocean Dumping Act, which Long Island Sound is the only estuary
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is the ocean, the coastal protection and watershed programs for the 16 states. Thank you for coming to this public hearing. I really appreciate you	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome Ambro from Long Island succeeded in passing the Ocean Dumping Act, which Long Island Sound is the only estuary in the United States that is subject
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is the ocean, the coastal protection and watershed programs for the 16 states. Thank you for coming to this public hearing. I really appreciate you coming to learn more about this	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome Ambro from Long Island succeeded in passing the Ocean Dumping Act, which Long Island Sound is the only estuary in the United States that is subject to the more stringent testing
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is the ocean, the coastal protection and watershed programs for the 16 states. Thank you for coming to this public hearing. I really appreciate you coming to learn more about this process and to provide comments on	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome Ambro from Long Island succeeded in passing the Ocean Dumping Act, which Long Island Sound is the only estuary in the United States that is subject to the more stringent testing requirements of that law.
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is the ocean, the coastal protection and watershed programs for the 16 states. Thank you for coming to this public hearing. I really appreciate you coming to learn more about this	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome Ambro from Long Island succeeded in passing the Ocean Dumping Act, which Long Island Sound is the only estuary in the United States that is subject to the more stringent testing
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	Thank you for coming. You are here for the public hearing to make comments on the rulemaking, the EPA rulemaking amendments for Central and Western dredged material disposal sites. And our first speaker is Mel Cote from EPA. MR. COTE: Thank you, Jean. Good afternoon. Thank you, Jean, for welcoming everyone and good afternoon. As she mentioned, my name is Mel Cote, and I'm the Chief of the Surface Water Branch at EPA Region 1 in Boston. The Surface Water Branch is the ocean, the coastal protection and watershed programs for the 16 states. Thank you for coming to this public hearing. I really appreciate you coming to learn more about this process and to provide comments on	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	U.S. Army Corps of Engineers jointly regulate under federal authorities provided by Section 404 of the Clean Water Act, the Marine Protection, Research, and Sanctuaries Act, also known as the Ocean Dumping Act. In these programs we work closely with other federal agencies, The National Fishermen Service, U.S. Fish and Wildlife Service, and state environmental agencies to enhance this program to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. In 1980 Congressman Jerome Ambro from Long Island succeeded in passing the Ocean Dumping Act, which Long Island Sound is the only estuary in the United States that is subject to the more stringent testing requirements of that law.

		1	
1	6	1	8
2	have been applying the stringent	2	designation subject to ongoing
3	sediment tests on all federal	3	monitoring requirements to ensure
4	dredging projects and the private	4	that the sites remain environmentally
5	dredging projects.	5	sound.
6	Dredged material that meets	6	To summarize, EPA's
7	these criteria and is determined	7	responsibility related to dredging
8	suitable and clean enough for ocean	8	and dredged material disposal include
9	disposal may be disposed at one of	9	designating disposal sites for long
10	the four sites in the Long Island	10	term use, promulgating regulations
11	Sound known as the Western Central	11	and criteria for disposal site
12	Long Island site, Cornfield Shoals,	12	selection and permitting discharges,
13	and New London serving the Eastern	13	and reviewing Corps dredging projects
14	region.	14	and permits, developing site
15	The Western and Central Long	15	monitoring and management plans for
16	Island Sound sites were designated by	16	Corps sites, and monitoring disposal
17	EPA, as I mentioned earlier, in 2005.	17	sites jointly with the Corps.
18	Cornfield Shoals and the New London	18	Now I'm going to provide some
19	sites were evaluated and selected and	19	background and definitions into EPA
20	designated as disposal sites pursuant	20	dredged material disposal sites which
21	to programmatic environmental impact	21	was completed in July of 2005. The
22	statement, and prepared by the Corps	22	process began in 1998 when EPA and
23	most recently in 1991.	23	the Corps agreed to conduct a formal
24	In 1992, Congress added a new	24	site designation process following
25	provision to the Ocean Dumping Act	25	the criteria distributed by the EPA.
	F		
1	7	1	9
2	that for the first time established a	2	We also agreed that consistent
3	time limit on the availability of	3	with past practices of the designated
4	core selected sites for disposal	4	dredged material disposal sites, we
5	activity. The provision allowed the	5	would follow the EPA's safest policy
6	selective sites to be used for a	6	for Voluntary Recreation Act and
7	five-year period beginning with the	7	National Environmental Policy Act,
8	first disposal activity after the	8	the NEPA Act. They were prepared for
9	effective date of the provision,	9	EIS to evaluate the dredged material
10	which was October 31, 1992.	10	disposal options.
11	It also provides an additional	11	In June 1999 we published a
12	five-year period beginning first	12	notice of intent to prepare, in
13	disposal activity commencing after	13	cooperation with the Corps and other
14	completion of the first five-year	14	federal and state agencies, an EIS to
15	period. What that means is they	15	evaluate and potentially designate
16	don't have to be consecutive five	16	dredged material disposal sites for
17	plus five. The next disposal	17	the entire Long Island Sound region.
18	activity triggers the last five	18	We began the Soundwide field
19		19	data collection in 1999, but we have
20	years. And also, use of the site can	20	been slowed by both the technical
21	be extended if that site is	21	complexity and the associated large
22		22	scale multisite project.
23	designated by EPA for long term use.	23	In March of 2002, the
23 24	The selected disposal sites for short term limited use while authorized by	24	potential Long Island Sound disposal
25	EPA undertakes long term site	25	sites scheduled to close in February
ر ک	EL A UNUCLANCS TORE LETTI SILE		SHUS SCHRAIDRAFIU CIUSE III FEDILIALV
			sites sentedated to cross in a cerum,
			5.005 50.100 day.200 to 0.1550 m. 1 00.100m.y

1	10	1	12
2	of 2004, that is when the last five	2	subject to restrictions. These
3	year was going to end, we and the	3	restrictions were intended to reduce
4	Corps announced our intent to develop	4	or eliminate disposal of dredged
5	EIS in two stages; Western and	5	material in Long Island Sound and
6	Central Long Island Sound first,	6	include the Corps completed Dredged
7	followed by the Eastern Sound once	7	Material Management Plan for the
8	the sites had been designated to	8	entire region with the goal of
9	serve the Western and Central	9	reducing or eliminating open water
10	regions.	10	disposal by identifying alternatives.
11	We felt this was scheduled to	11	Two, establishing interagency
12	meet the important public meeting in	12	formation of a Long Island Sound
13	this region more expeditiously	13	Regional Dredging Team to review the
14	without compromise in the	14	analyses for federal and large
15	decision-making process.	15	private dredging projects.
16	In September of 2003, EPA	16	Three, EPA conducting its
17	issued the draft EIS recommended	17	annual review of progress to address
18	designation for Central and Western	18	the completion of the DMMP. To
19	disposal sites. We held public	19	address that last requirement since
20	hearings in Connecticut and New York	20	2006, EPA published an annual report
21	during late September and in	21	for the public, not only on the
22	December.	22	progress of completion of the DMMP,
23	EPA released the final EIS in	23	but on the disposition of dredged
24	response to comments on the draft in	24	material from all projects each year
25	April of 2004 with the recommended	25	including open water disposal for
1	11	1	12
1	11	1	13
2	action for alternative disposal site	2	beneficial use.
2 3	action for alternative disposal site designations of Central and Western	2 3	beneficial use. As an example of the kind of
2 3 4	action for alternative disposal site designations of Central and Western sites.	2 3 4	beneficial use. As an example of the kind of information contained in the report,
2 3 4 5	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a	2 3 4 5	beneficial use. As an example of the kind of information contained in the report, this is the data on the amount of
2 3 4 5 6	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began	2 3 4 5 6	beneficial use. As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each
2 3 4 5 6 7	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally	2 3 4 5 6 7	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island
2 3 4 5 6 7 8	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation.	2 3 4 5 6 7 8	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past
2 3 4 5 6 7 8	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York	2 3 4 5 6 7 8	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years.
2 3 4 5 6 7 8 9	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition	2 3 4 5 6 7 8 9	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most
2 3 4 5 6 7 8 9 10	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act	2 3 4 5 6 7 8 9 10	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower
2 3 4 5 6 7 8 9 10 11 12	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on	2 3 4 5 6 7 8 9 10 11 12	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared
2 3 4 5 6 7 8 9 10 11 12 13	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action	2 3 4 5 6 7 8 9 10 11 12 13	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials
2 3 4 5 6 7 8 9 10 11 12 13 14	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the	2 3 4 5 6 7 8 9 10 11 12 13	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004.
2 3 4 5 6 7 8 9 10 11 12 13 14 15	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their	2 3 4 5 6 7 8 9 10 11 12 13 14 15	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating Central and Western disposal sites to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good progress and we hope with the amended
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating Central and Western disposal sites to address concerns raised by the State	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good progress and we hope with the amended rule we are going to continue to see
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating Central and Western disposal sites to address concerns raised by the State of New York and some sectors of the	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good progress and we hope with the amended rule we are going to continue to see continued progress in reducing water
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating Central and Western disposal sites to address concerns raised by the State of New York and some sectors of the general public about the potential	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good progress and we hope with the amended rule we are going to continue to see continued progress in reducing water disposal.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating Central and Western disposal sites to address concerns raised by the State of New York and some sectors of the general public about the potential impact on the Long Island Sound water	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good progress and we hope with the amended rule we are going to continue to see continued progress in reducing water disposal. So right now I'm going to turn
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating Central and Western disposal sites to address concerns raised by the State of New York and some sectors of the general public about the potential impact on the Long Island Sound water quality.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good progress and we hope with the amended rule we are going to continue to see continued progress in reducing water disposal. So right now I'm going to turn it over to Mark Habel from the U.S.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating Central and Western disposal sites to address concerns raised by the State of New York and some sectors of the general public about the potential impact on the Long Island Sound water	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good progress and we hope with the amended rule we are going to continue to see continued progress in reducing water disposal. So right now I'm going to turn
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	action for alternative disposal site designations of Central and Western sites. Because the EIS is not a decision document, the EPA also began the rulemaking process formally designated two sites by regulation. At this point the State of New York exercised its federal opposition under the Coastal Zone Management Act to object to the site expedition on the basis that this federal action was not consistent with the enforcement of policies of their program. So in June of 2005 EPA published the Final Rule designating Central and Western disposal sites to address concerns raised by the State of New York and some sectors of the general public about the potential impact on the Long Island Sound water quality.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	As an example of the kind of information contained in the report, this is the data on the amount of dredged material disposed of at each of the individual four Long Island Sound disposal sites over the past nine years. The number I think is most important to point out is the lower right where what you see is compared to the average amount of materials disposed of between 1982 and 2004. It's an average; in the nine years there is a 35 percent reduction, the total amount being 402,458. So we have made some good progress and we hope with the amended rule we are going to continue to see continued progress in reducing water disposal. So right now I'm going to turn it over to Mark Habel from the U.S.

1	14	1	16
2	the Long Island Sound Dredged	2	also can look at other things which
3	Material Management Plan.	3	may or may not involve the Corps'
4	MR. HABEL: Thank you, Mel.	4	financials. The recommendations also
5	As Mel said, my name is Mark Habel	5	were given to the states and agencies
6	from the New England District of the	6	on further study to develop more
7	U.S. Army Corps of Engineers. I was	7	beneficial use alternatives, to get
8	also the principal author in the DMMP	8	more of the dredged material stream
9	that the Corps published as final on	9	out of the open "water disposal
10	the 11th of January of this year.	10	realm."
11	Tonight I'm going to give a	11	We also recommended a number
12	presentation that I gave back in	12	of items for continuing management
13	January to the interstate,	13	and monitoring of the Sound of
14	interagency steering committee for	14	dredged material disposal impacts,
15	the DMMP to talk about how to	15	and of the health of the Sound,
16	implement the DMMP's regulations, a	16	itself. The DMMP contained dredging
17	slide most of you have seen before.	17	volume projections.
18	This is where the dredged	18	Back to dredging volumes. We
19	material in Long Island Sound comes	19	looked at a 30-year period, what were
20	from. The circles that are on the	20	all of the needs for dredging in the
21	map are scaled to represent the share	21	Sound from federal sources and from
22	of the overall dredged material	22	non-Federal sources. Over 30 years
23	burden. The darker blue is federal	23	that was quite a large number, some
24	navigation projects and the lighter	24	53 million cubic yards.
25	blue is everything else.	25	However, it is unlikely that
	order is everydding elser		120 110 101, 10 10 0111111011, 111111
1	15	1	17
2	So as you can see, it is	2	all of that would ever be dredged.
3	obvious that the majority of the	3	You know, the situation with the
4	dredged material in the Sound comes	4	federal budget and the local budgets
5	from Connecticut, and the majority of	5	and state budgets, it's highly
6	that material comes from the	6	unlikely that more than a third of
7	maintenance of federal navigation	7	these projects would be dredged in
8	projects.	8	that period.
9	In the DMMP we examined all of	9	We had to look at each harbor
10	the various harbors in Long Island	10	and identify alternatives for each
11	Sound, the federal projects	11	harbor as it came up for work because
12	individually, and all of the	12	we can never predict which harbors
13	non-Federal work by regional dredging	13	are going to be funded at what times.
14	centers. We broke the Long Island	14	That is almost a political decision
15	Sound region down into about 27	15	more than an agency decision. So we
16	dredging sites.	16	had to look at them all, and that's
17	The DMMP contained a number of	17	where there is a 53 million cubic
18	recommendations by law and regulation	18	yard number out there.
19	that the Corps must identify what it	19	We had to identify places that
20	believes is the federal base plan for	20	that material might go. A lot of
21	every federal project that is the	21	this depends on sediment
22	least costly environmentally	22	classification. There's different
23	acceptable alternative for	23	types of dredged material and where
24	constructing that project.	24	they can be put depends on what it
25	Beyond the base plan the Corps	25	is. Is it sandy material; is it

1	18	1	20
2	material that is contaminated; or is	2	put it in the near shore or open
3	it fine grain material that is	3	water sites. You can cap other sites
4	uncontaminated.	4	with it. You can bring it upland for
5	So that 53 million cubic yards	5	landfill capping or brown field
6	breaks down by state and by those	6	remediation.
7	three material classes as you can see	7	There are things that can be
8	here. Out of that 53 million yards,	8	done with that. When we talk about
9	some 15-and-a-half million yards is	9	the federal base plan, the least cost
10	sand. We shouldn't be putting clean	10	environmentally-acceptable
11	sand out in the open water. We	11	alternative under the federal
12	should be finding ways to use that,	12	viewpoint all goes back to the Clean
13	whether it is beach nourishment or	13	Water Act and how it defines the
14	flood protection or storm protection	14	federal standard.
15	or whatever.	15	The Corps of Engineers is a
16	Over three million yards of	16	federal agency. It has a mission to
17	that material we know from past	17	establish to maintain and approve our
18	testing is likely to be too	18	nation's waterways. It has to do so
19	contaminated to ever be approved to	19	in an environmentally-acceptable
20	go into the open water sites in the	20	manner and in a
21	Sound, so we need to find ways to	21	financially-responsible manner, so we
22	contain that or treat that.	22	have to identify the least cost means
23	But in the middle is some 34	23	of constructing each of those
24	million cubic yards of fine grain	24	projects.
25	dredged material it doesn't all	25	Here is the definition of
1	19	1	21
1 2		1 2	
	come out of Connecticut that when		that. I talked a little bit about
2	come out of Connecticut that when it's tested, it is found suitable for	2	that. I talked a little bit about the base plan earlier. A plan other
2 3	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge	2 3	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be
2 3 4	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with	2 3 4	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers
2 3 4 5	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge	2 3 4 5	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor
2 3 4 5 6 7	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water.	2 3 4 5 6	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a
2 3 4 5 6	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open	2 3 4 5 6 7	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to
2 3 4 5 6 7 8	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three	2 3 4 5 6 7 8	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a
2 3 4 5 6 7 8 9	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement,	2 3 4 5 6 7 8 9	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative.
2 3 4 5 6 7 8 9	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three	2 3 4 5 6 7 8 9	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that
2 3 4 5 6 7 8 9 10	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand,	2 3 4 5 6 7 8 9 10	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the
2 3 4 5 6 7 8 9 10 11 12	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells	2 3 4 5 6 7 8 9 10 11 12	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on
2 3 4 5 6 7 8 9 10 11 12 13	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill	2 3 4 5 6 7 8 9 10 11 12 13	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps
2 3 4 5 6 7 8 9 10 11 12 13 14	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea	2 3 4 5 6 7 8 9 10 11 12 13	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be
2 3 4 5 6 7 8 9 10 11 12 13 14 15	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications.	2 3 4 5 6 7 8 9 10 11 12 13 14 15	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable material, you really can't do	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some of them it does not. It is Congress
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable material, you really can't do anything with it other than to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some of them it does not. It is Congress that determines this.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable material, you really can't do anything with it other than to confine it or treat it. There are,	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some of them it does not. It is Congress that determines this. There are laws passed
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable material, you really can't do anything with it other than to confine it or treat it. There are, however, alternatives for that 34	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some of them it does not. It is Congress that determines this. There are laws passed specifically that say that the Corps
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable material, you really can't do anything with it other than to confine it or treat it. There are, however, alternatives for that 34 million cubic yards of fine grain	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some of them it does not. It is Congress that determines this. There are laws passed specifically that say that the Corps can pay 65 percent of the cost of
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable material, you really can't do anything with it other than to confine it or treat it. There are, however, alternatives for that 34 million cubic yards of fine grain material that is in the middle.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some of them it does not. It is Congress that determines this. There are laws passed specifically that say that the Corps can pay 65 percent of the cost of building a marsh or building a beach
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable material, you really can't do anything with it other than to confine it or treat it. There are, however, alternatives for that 34 million cubic yards of fine grain material that is in the middle. You can build marshes with it;	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some of them it does not. It is Congress that determines this. There are laws passed specifically that say that the Corps can pay 65 percent of the cost of building a marsh or building a beach if that is not the base plan. Even
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	come out of Connecticut that when it's tested, it is found suitable for open water placement. The challenge is to find other things to do with that besides putting it in open water. A number of items that we looked at for each of those three classes are up here; beach placement, near shore placement for sand, capping older materials and CAD cells out in the Sound, construction fill and other coastal resiliency or sea level change applications. As I said for the unsuitable material, you really can't do anything with it other than to confine it or treat it. There are, however, alternatives for that 34 million cubic yards of fine grain material that is in the middle. You can build marshes with it; you can raise land elevations in	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	that. I talked a little bit about the base plan earlier. A plan other than the federal base plan can be implemented by the Corps of Engineers if there is a non-federal sponsor whether that is a state, county, or a local municipality that is willing to help share the financial cost of that alternative. So the base plan is what the federal government will pay for on its own. Other plans can be implemented. Some of them the Corps of Engineers has the authority to share in that additional cost, some of them it does not. It is Congress that determines this. There are laws passed specifically that say that the Corps can pay 65 percent of the cost of building a marsh or building a beach if that is not the base plan. Even under the base plan some things like

1	22	1	24
2	we have contaminated material or fine	2	restoration projects. These are
3	grain material and we want to build a	3	marsh creations or marsh elevation
4	containment facility for that, that's	4	placement to keep ahead of sea level
5	considered an improvement and it	5	rise and land subsidence. A number
6	requires cost sharing in the same	6	of these have been built all over the
7	manner a core deepening project	7	country.
8	requires cost sharing.	8	Section 1135 is more where we
9	And that cost sharing goes by	9	go in and restore environmental
10	the depth of the harbor by law.	10	systems by removing material or
11	Congress in 1986 came up with this	11	adding material. There's more of
12	under the Water Resources Act of	12	these authorities than I have shown
13	1986, and it has stayed the same ever	13	up there, but individual sponsors and
14	since generally.	14	towns can come to us and ask with an
15	The projects of up to 20 feet	15	idea: Here is something we may want
16	require a 20 percent match. Projects	16	to do with the dredged material in
17	from 20 to 45 feet require a 35	17	the harbor or the project, and we
18	percent match. There aren't any	18	will identify the best way to help
19	projects over 45 feet in Long Island	19	them to get them options on how to
20	Sound, nor will I expect there will	20	proceed.
21	be.	21	I just spoke before about
22	I talked a little bit about	22	sandy material. The DMMP looked at
23	beneficial uses. Most of these	23	all of the state and county and many
24	require a sponsor to either pay a	24	of the municipal public beaches
25	hundred percent, or if there is a	25	around the Sound. We talked to those
	named percent, or if there is a		around the Sound. We talked to those
1 1	22	1	25
1	23	1	25
2	federal authority for assistance, to	2	who manage them about their needs to
2 3	federal authority for assistance, to pay 25 or 35 percent of the cost.	2 3	who manage them about their needs to have sand placement over the next 30
2 3 4	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress	2 3 4	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or
2 3 4 5	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all	2 3 4 5	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the
2 3 4 5 6	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have	2 3 4 5 6	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach.
2 3 4 5 6 7	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing	2 3 4 5 6 7	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we
2 3 4 5 6 7 8	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements	2 3 4 5 6 7 8	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement
2 3 4 5 6 7 8 9	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide	2 3 4 5 6 7 8	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors
2 3 4 5 6 7 8 9	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed.	2 3 4 5 6 7 8 9	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce
2 3 4 5 6 7 8 9 10	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to	2 3 4 5 6 7 8 9 10	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as
2 3 4 5 6 7 8 9 10 11	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are	2 3 4 5 6 7 8 9 10 11 12	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives.
2 3 4 5 6 7 8 9 10 11 12 13	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the	2 3 4 5 6 7 8 9 10 11 12 13	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said
2 3 4 5 6 7 8 9 10 11 12 13 14	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help	2 3 4 5 6 7 8 9 10 11 12 13 14	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in
2 3 4 5 6 7 8 9 10 11 12 13 14 15	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between	2 3 4 5 6 7 8 9 10 11 12 13 14	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank protection projects; sometimes they	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going into open water.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank protection projects; sometimes they require material. Certainly	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going into open water. Those tests and those
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank protection projects; sometimes they require material. Certainly hurricane and storm damage reduction	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going into open water. Those tests and those procedures and requirements get
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank protection projects; sometimes they require material. Certainly hurricane and storm damage reduction projects, a number of which are built	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going into open water. Those tests and those procedures and requirements get refined over the years, and now we
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank protection projects; sometimes they require material. Certainly hurricane and storm damage reduction projects, a number of which are built on Long Island, beach fill and near	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going into open water. Those tests and those procedures and requirements get refined over the years, and now we have a projection of some I think
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank protection projects; sometimes they require material. Certainly hurricane and storm damage reduction projects, a number of which are built on Long Island, beach fill and near shore placement projects.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going into open water. Those tests and those procedures and requirements get refined over the years, and now we have a projection of some I think around six and a half percent of all
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank protection projects; sometimes they require material. Certainly hurricane and storm damage reduction projects, a number of which are built on Long Island, beach fill and near	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going into open water. Those tests and those procedures and requirements get refined over the years, and now we have a projection of some I think
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	federal authority for assistance, to pay 25 or 35 percent of the cost. Each of these authorities Congress has addressed separately, so they all have different rules; they all have slightly different cost sharing requirements, different requirements with the local sponsor to provide real estate if anything is needed. These all go back to individual public laws. These are some of those authorities that the Corps has that can be used to help share the difference in cost between the base plan and something above the base plan. We have small stream bank protection projects; sometimes they require material. Certainly hurricane and storm damage reduction projects, a number of which are built on Long Island, beach fill and near shore placement projects.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	who manage them about their needs to have sand placement over the next 30 years either directly on the beach or near shore in the bar systems off the beach that feed the beach. We went through and we identified all of these as placement sites potentially, and those harbors closest to those areas that produce sand in the DMMP had these beaches as potential alternatives. Unsuitable material, as I said before, does not and will not go in the Sound. Since the advent of sediment sampling testing procedures in 1972, The Ocean Dumping Act, we tested all material that is going into open water. Those tests and those procedures and requirements get refined over the years, and now we have a projection of some I think around six and a half percent of all

1	26	1	28
2	be generated in Long Island Sound	2	Little Narragansett Bay where there
3	region over the next 30 years would	3	is dredging needs for the Pawcatuck
4	likely be classified as unsuitable	4	River, the Mystic River, Stonington
5	for open water placement.	5	Harbor, Watch Hill Cove, and places
6	These are some of the	6	like that which could be put together
7	locations that we looked at for	7	if the states could cooperate on
8	creating confined disposal	8	championing a marsh creation project
9	facilities, whether these are CAD	9	in Little Narragansett Bay.
10	cells which are confined aquatic	10	Potentially the Corps could
11	disposal sites, which we have built	11	assist with this if there were
12	all over New England since 1980 to	12	sufficient environmental benefits to
13	confine and isolate these materials,	13	do so. We could pay for up to 65
14	or whether they are actual confined	14	percent of the cost for something
15	disposal facilities above the water.	15	like this.
16	There have been studies for	16	Another example here in New
17	these facilities in Long Island Sound	17	Haven behind Sandy Point where there
18	that go back to the 1970s. So there	18	is a significant capacity for a marsh
19	is a large body of information out	19	fill project; New Haven had most of
20	there on sites that have been	20	its marshes filled for core
21	proposed for developing these over	21	development over the past two
22	the years, and the DMMP tried to	22	centuries. There is a chance to get
23	capture all of that information.	23	some of that environmental benefit
24	I talked before about the fine	24	back using dredged material to
25	grain dredged material, that large	25	construct the marsh.
23	gram dredged material, that large	23	construct the marsh.
1	27	1	29
2	chunk of 34 million cubic yards, what	2	Again, these are suggestions
2 3	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of	2 3	Again, these are suggestions that the Corps has made to the states
2 3 4	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what	2 3 4	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another
2 3 4 5	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we	2 3 4 5	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes
2 3 4 5 6	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple	2 3 4 5 6	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a
2 3 4 5 6 7	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through.	2 3 4 5 6 7	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for
2 3 4 5 6 7 8	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor,	2 3 4 5 6	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a
2 3 4 5 6 7 8	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New	2 3 4 5 6 7 8	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right
2 3 4 5 6 7 8 9	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF	2 3 4 5 6 7 8 9	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to
2 3 4 5 6 7 8 9 10	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take	2 3 4 5 6 7 8 9 10	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year
2 3 4 5 6 7 8 9 10 11 12	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these.	2 3 4 5 6 7 8 9 10 11 12	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to
2 3 4 5 6 7 8 9 10 11 12 13	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a	2 3 4 5 6 7 8 9 10 11 12 13	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12
2 3 4 5 6 7 8 9 10 11 12 13 14	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP	2 3 4 5 6 7 8 9 10 11 12 13 14	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston
2 3 4 5 6 7 8 9 10 11 12 13 14 15	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects	2 3 4 5 6 7 8 9 10 11 12 13 14 15	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or between Connecticut and Rhode Island and potentially New York for doing marsh creation projects using fine	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water. That opportunity, 12 million
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or between Connecticut and Rhode Island and potentially New York for doing	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water. That opportunity, 12 million cubic yards, is not going to come
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or between Connecticut and Rhode Island and potentially New York for doing marsh creation projects using fine	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water. That opportunity, 12 million cubic yards, is not going to come along for another generation, so it
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or between Connecticut and Rhode Island and potentially New York for doing marsh creation projects using fine grain material in the Sound.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water. That opportunity, 12 million cubic yards, is not going to come along for another generation, so it is an opportunity to use that dredged
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or between Connecticut and Rhode Island and potentially New York for doing marsh creation projects using fine grain material in the Sound. There's a couple of examples	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water. That opportunity, 12 million cubic yards, is not going to come along for another generation, so it is an opportunity to use that dredged material beneficially to remedy some
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or between Connecticut and Rhode Island and potentially New York for doing marsh creation projects using fine grain material in the Sound. There's a couple of examples in the DMMP near or on the state	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water. That opportunity, 12 million cubic yards, is not going to come along for another generation, so it is an opportunity to use that dredged material beneficially to remedy some past contamination.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	chunk of 34 million cubic yards, what to do with it. The DMMP has a lot of different suggestions on what individual projects going forward we need to look at. There is a couple of them here I will go through. Sites like in Stamford Harbor, New Haven Harbor, Norwalk Harbor, New London where you could develop a CDF facility or CAD cell that could take care of these. Beneficial uses; there were a couple of recommendations in the DMMP for potential pilot projects involving interstate cooperation between Connecticut and New York, or between Connecticut and Rhode Island and potentially New York for doing marsh creation projects using fine grain material in the Sound. There's a couple of examples in the DMMP near or on the state boundaries in order for the states to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	Again, these are suggestions that the Corps has made to the states to consider moving forward. Another thing we can do is it rarely comes along but occasionally you get a large scale dredging project for Corps deepening. We are looking at one right now in Boston Harbor that is going to be from construction later this year and will take four years or more to build, and we are looking at using 12 million cubic yards out of Boston Harbor to cap an old industry waste site out in Massachusetts Bay in about 300 feet of water. That opportunity, 12 million cubic yards, is not going to come along for another generation, so it is an opportunity to use that dredged material beneficially to remedy some past contamination. Similar opportunities may

1	30	1	32
2	when the New Haven deepening project	2	way and supported and budgeted. And
3	study gets underway later this year.	3	now I would like to introduce Steve
4	They are going to start looking at	4	Wolf, who will give a short
5	what you can do potentially for five	5	presentation on how we do sampling
6	million cubic yards of fill and	6	and testing and how we monitor the
7	natural parent material coming out of	7	disposal sites.
8	New Haven.	8	MR. WOLF: Thank you, Mark.
9	That material can be used to	9	Can you hear me all right if I don't
10	remedy some of the historic pre-Ocean	10	use a mic? It will give me a chance
11	Dumping Act activities in the Sound.	11	to move around a little bit.
12	There are some 11 or more disposal	12	I thought it might make sense
13	sites in the Sound beyond the four	13	since we are talking about placement
14	that are currently used. Some of	14	in open water sites to actually show
15	those have disposal bounds from back	15	you what one of those look like for
16	in the '60s, '50s, '40s and even	16	those of you who may not have been
17	earlier.	17	out there.
18	We can identify where those	18	This is about 3,000 plus cubic
19	are, where the most contaminated	19	yards of dredged material on the
20	materials are, and we can cap them.	20	scow. The scow is over its target
21	But again, a four million cubic yard	21	location. The hydraulics are engaged
22	parent material dredging project in	22	and the scow begins to open up along
23	Long Island Sound is not going to	23	the center line, and you see that
24	come around more than once a	24	material falling out. It is a
25	generation. So there are things to	25	relatively quick process; ten to 15
23	generation. So there are tilings to	23	relatively quick process, tell to 13
1	31	1	33
1 2	think about going forward on this.	1 2	seconds and 3,000 plus cubic yards of
	think about going forward on this. What is required to implement		seconds and 3,000 plus cubic yards of dredged material is gone.
2	think about going forward on this. What is required to implement these alternatives to implement the	2	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to
2 3	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal	2 3	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port.
2 3 4	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a	2 3 4	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we
2 3 4 5	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal	2 3 4 5	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port.
2 3 4 5 6	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a	2 3 4 5 6	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we
2 3 4 5 6 7	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the	2 3 4 5 6 7	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions
2 3 4 5 6 7 8	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal	2 3 4 5 6 7 8	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess
2 3 4 5 6 7 8 9	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing	2 3 4 5 6 7 8	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here
2 3 4 5 6 7 8 9	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies	2 3 4 5 6 7 8 9	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it
2 3 4 5 6 7 8 9 10	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the	2 3 4 5 6 7 8 9 10	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there,
2 3 4 5 6 7 8 9 10 11 12	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for	2 3 4 5 6 7 8 9 10 11 12	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there.
2 3 4 5 6 7 8 9 10 11 12 13	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses.	2 3 4 5 6 7 8 9 10 11 12 13	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue
2 3 4 5 6 7 8 9 10 11 12 13 14	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify.	2 3 4 5 6 7 8 9 10 11 12 13	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it
2 3 4 5 6 7 8 9 10 11 12 13 14 15	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every	2 3 4 5 6 7 8 9 10 11 12 13 14 15	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we have a large number of authorities	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the DMMP that Mark mentioned over a
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we have a large number of authorities that we can look at and try to tailor	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the DMMP that Mark mentioned over a common theme related to those.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we have a large number of authorities that we can look at and try to tailor to situations. It is unlikely that	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the DMMP that Mark mentioned over a common theme related to those. And the program that I worked
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we have a large number of authorities that we can look at and try to tailor to situations. It is unlikely that all of the ideas we come up with will	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the DMMP that Mark mentioned over a common theme related to those. And the program that I worked with does a lot of monitoring so I
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we have a large number of authorities that we can look at and try to tailor to situations. It is unlikely that all of the ideas we come up with will be things that we can assist.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the DMMP that Mark mentioned over a common theme related to those. And the program that I worked with does a lot of monitoring so I was involved in trying to answer those, and we thought it might make
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we have a large number of authorities that we can look at and try to tailor to situations. It is unlikely that all of the ideas we come up with will be things that we can assist. The Corps again strongly recommends that the three states	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the DMMP that Mark mentioned over a common theme related to those. And the program that I worked with does a lot of monitoring so I was involved in trying to answer those, and we thought it might make sense to give you a quick overview of
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we have a large number of authorities that we can look at and try to tailor to situations. It is unlikely that all of the ideas we come up with will be things that we can assist. The Corps again strongly recommends that the three states cooperate with each other and try to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the DMMP that Mark mentioned over a common theme related to those. And the program that I worked with does a lot of monitoring so I was involved in trying to answer those, and we thought it might make
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	think about going forward on this. What is required to implement these alternatives to implement the DMMP? Anything beyond the federal base plan, again, requires a non-federal public sponsor, the state, county, or municipal authority. They have to be willing to share in the cost of the studies for those beneficial uses and in the cost of designing construction for those beneficial uses. Not all of them will qualify. Congress hasn't covered every opportunity so what we have is we have a large number of authorities that we can look at and try to tailor to situations. It is unlikely that all of the ideas we come up with will be things that we can assist. The Corps again strongly recommends that the three states	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	seconds and 3,000 plus cubic yards of dredged material is gone. And then the scow begins to close and have the trip back to port. It is a quick process, but we understand that it raises questions and concerns. I'm going to guess that's why some of you are here tonight; things like can you place it accurately; when you do put it there, is that material going to stay there. Is it going to cause an issue to the water column, and what does it do to the sea floor. These were questions and comments we got on the DMMP that Mark mentioned over a common theme related to those. And the program that I worked with does a lot of monitoring so I was involved in trying to answer those, and we thought it might make sense to give you a quick overview of how we addressed those going forward.

1	34	1	36
2	the comments we got at the last	2	type of material could go out there.
3	hearing for the DMMP and a gentleman	3	So now we move into the era of
4	said, "When you make a placement like	4	the '70s where it is no longer out of
5	this, isn't it just out of sight out	5	sight out of mind, and that's really
6	of mind, for the Corps of Engineers,	6	the program that I work with, the
7	and you are not concerned about the	7	DAMOS, or the Disposal Area
8	dredged material any longer?"	8	Monitoring Program, got its work back
9	And the answer to that is I	9	from those two pieces of legislation
10	will go back in time. Go back to the	10	back in the '70s.
11	late 1800s, where dredging was	11	This program was really formed
12	pushing or dragging sediment out of	12	to help answer those same questions
13	the area; it was clearly out of sight	13	that people are still raising today.
14	and out of mind. Just get it outside	14	What we have done is drawn on almost
15	of the area that I'm worried about	15	40 years of investigation. If I go
16	and let someone else deal with it.	16	back and I empty some of the
17	As time rolled on and we got	17	archives, this is just a portion of
18	to the early 1900s, and the ports and	18	the various studies and reports that
19	harbors got a little more crowded, we	19	we have done on just these two sites
20	began to see the dredged material	20	that we are talking about today
21	taken outside of the harbors. If you	21	Central and Western.
22	look up and down the New England	22	I didn't get into the
23	coastline outside of a lot of the	23	archives; it would easily be double
24	harbors you can still see remnants	24	this. So it is clearly on the part
25	today. So we are still an era of out	25	of the states, on the part of EPA and
	today. So no are sair an ora or out		or and states, on the part of 2111 and
1	35	1	37
2	of sight and out of mind; just get it	2	the Corps which is no longer out of
3	out of the harbor.	3	sight out of mind. We have a good
4	As we moved into the 1900s, we	4	body of information to draw on to try
5	began to see sites more formalized	5	to answer the questions.
6	that showed up on charts, that began	6	Especially having been to some
7	to show up in the Corps of Engineers'	7	of these hearings where I think we
8	records and state records, and so for	8	fall down, we have not done a very
9	this image of Long Island Sound each	9	good job of communicating that to
10	one of the light-colored blocks is an	10	folks like yourselves, so we are
11	area where there is some record that	11	starting to turn the wheel. We
12	dredged material was placed there.	12	produced the report. We have a
13	Still there was not a lot of	13	Website.
14	control as to what type of material	14	You can download any of those
15	would go out there. I would qualify	15	reports. We have symposia; we go to
16	this as the beginning of not totally	16	conferences, but we don't do as much
		17	in terms of general outreach. So we
	OH OF SIADE OF BUILDING AND STATE	1 - '	in terms of general cancacti. DO We
17	out of sight out of mind but still	18	_
17 18	somewhat in that category.	18 19	are starting to think about how can
17 18 19	somewhat in that category. It wasn't until you get to the	19	are starting to think about how can we get the word out about the work
17 18 19 20	somewhat in that category. It wasn't until you get to the 1970s with the passage of the Clean	19 20	are starting to think about how can we get the word out about the work that has been done.
17 18 19 20 21	somewhat in that category. It wasn't until you get to the 1970s with the passage of the Clean Water Act and Marine Protection	19 20 21	are starting to think about how can we get the word out about the work that has been done. Before I get into the specific
17 18 19 20 21 22	somewhat in that category. It wasn't until you get to the 1970s with the passage of the Clean Water Act and Marine Protection Research and Sanctuary Act that was	19 20 21 22	are starting to think about how can we get the word out about the work that has been done. Before I get into the specific questions, I want to touch on what I
17 18 19 20 21 22 23	It wasn't until you get to the 1970s with the passage of the Clean Water Act and Marine Protection Research and Sanctuary Act that was passed that we began to see a more	19 20 21 22 23	are starting to think about how can we get the word out about the work that has been done. Before I get into the specific questions, I want to touch on what I think Mark said and Mel mentioned in
17 18 19 20 21 22	somewhat in that category. It wasn't until you get to the 1970s with the passage of the Clean Water Act and Marine Protection Research and Sanctuary Act that was	19 20 21 22	are starting to think about how can we get the word out about the work that has been done. Before I get into the specific questions, I want to touch on what I

1	38	1	40
2	well as this rulemaking.	2	there.
3	There has been some	3	So then moving on you have
4	misinformation out there and we would	4	sediment determined to be suitable.
5	certainly like to clear one thing up.	5	We are going to take it to one of
6	There have been direct statements	6	these offshore sites. How do we know
7	about toxic material being placed in	7	we get it in the right place? In the
8	the Sound. We just want to	8	early days of the DAMOS program we
9	emphatically say that based on states	9	put out marker buoys, and that gave
10	and EPA's rule, that is not the case.	10	the tugboat operators something to
11	As Mel mentioned, there's very	11	shoot as to where to place the
12	rigorous testing which is associated	12	material.
13	with that. So we are going to have a	13	In this day and age of
14	dredging project and we want to	14	electronics we are more accurate.
15	decide what to do with the material.	15	Every scow has a set of sensors.
16	There's three types of testing;	16	There is a GPS sensor back on the
17	physical testing for determining how	17	stern which gives a record as to
18	much is coarse grain, how much is	18	where the scow is. There are hull
19	fine grain as Mark was mentioning.	19	sensors which tell whether the hull
20	So it gives us some idea as to	20	is open or closed. We have got draft
21	physically what we can we do with it.	21	sensors fore and aft so we know if
22	Material goes off to the lab. We	22	the scow is loaded, whether it is
23	test it for chemistry so we see what	23	heavy or whether it released the load
24	levels of contaminants are in it.	24	and it is light.
25	And then we take that material	25	We have a data logger that
	This their we take that material		We have a data logger than
	••		
1	39	1	41
2	if we are proposing to put it	2	stores all of that information,
2	if we are proposing to put it offshore, and we do what is called	2 3	stores all of that information, transmits it back to shore so we can
2 3 4	if we are proposing to put it offshore, and we do what is called biological testing where it gets	2 3 4	stores all of that information, transmits it back to shore so we can look at it in real time so that we
2 3 4 5	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the	2 3 4 5	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks
2 3 4 5 6	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in	2 3 4 5 6	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating).
2 3 4 5 6 7	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does	2 3 4 5 6 7	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven
2 3 4 5 6 7 8	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them.	2 3 4 5 6 7 8	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And
2 3 4 5 6 7 8 9	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they	2 3 4 5 6 7 8	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread
2 3 4 5 6 7 8 9	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are	2 3 4 5 6 7 8 9	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the
2 3 4 5 6 7 8 9 10	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go	2 3 4 5 6 7 8 9 10	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the
2 3 4 5 6 7 8 9 10 11	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state	2 3 4 5 6 7 8 9 10 11 12	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where
2 3 4 5 6 7 8 9 10 11 12 13	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to	2 3 4 5 6 7 8 9 10 11 12 13	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back.
2 3 4 5 6 7 8 9 10 11 12 13 14	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic	2 3 4 5 6 7 8 9 10 11 12 13 14	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we
2 3 4 5 6 7 8 9 10 11 12 13 14 15	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to	2 3 4 5 6 7 8 9 10 11 12 13 14 15	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in a salt marsh or a mud flap you can	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the dredging contractors who have been
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in a salt marsh or a mud flap you can	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the dredging contractors who have been
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in a salt marsh or a mud flap you can see that sediment can be far removed	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the dredging contractors who have been hired to do that work.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in a salt marsh or a mud flap you can see that sediment can be far removed from impacts from humans, can	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the dredging contractors who have been hired to do that work. What gives the tugboat
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in a salt marsh or a mud flap you can see that sediment can be far removed from impacts from humans, can actually have a fairly nasty look like that (indicating) and it isn't until you get into the testing that	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the dredging contractors who have been hired to do that work. What gives the tugboat operators who may have a quarter of a
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in a salt marsh or a mud flap you can see that sediment can be far removed from impacts from humans, can actually have a fairly nasty look like that (indicating) and it isn't	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the dredging contractors who have been hired to do that work. What gives the tugboat operators who may have a quarter of a mile haul in terms of between where
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	if we are proposing to put it offshore, and we do what is called biological testing where it gets placed in sampling chambers with the types of critters that we see out in the Long Island Sound and we see does it have an effect on them. Is it toxic, do they bioaccumulate to materials that are out there? And that has to go through the testing before the state and EPA say yes, this is suitable to go offshore. I reiterate: Toxic material does not go off to these sites. Now, looks can be deceiving. For those of you who mucked around in a salt marsh or a mud flap you can see that sediment can be far removed from impacts from humans, can actually have a fairly nasty look like that (indicating) and it isn't until you get into the testing that	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	stores all of that information, transmits it back to shore so we can look at it in real time so that we get a record, something that looks like this (indicating). This came out of the New Haven project a couple of years ago. And what we see is a trail of bread crumbs and this tells location of the scow on its entire trip out to the dredged material disposal site where it is released and on its way back. If we were to zoom in here, we can see the precise point of where that material left the scow within 15 seconds. So we can see it should be where it is and we can track the dredging contractors who have been hired to do that work. What gives the tugboat operators who may have a quarter of a mile haul in terms of between where the tug is and where the scow is,

1	42	1	44
2	computer screen and they see exactly	2	of nor'easters, including the perfect
3	where the scow is in relation to the	3	storm. We've got Hurricane Sandy;
4	target. It's almost like a video	4	we've got Hurricane Irene, we've got
5	game.	5	Hurricane Bob.
6	So again, that has allowed us	6	Even some of these have been
7	to be very successful as to where the	7	out since Hurricane Gloria, and so we
8	material goes. So once we get it out	8	have been able to go back before and
9	there, one of the questions we got	9	after and say how big is the mound;
10	is: Is it stable on the sea floor?	10	how high off the bottom does it sit,
11	Is it going to stay there? This is	11	and that allows us to very
12	an image, a bathymetric map of the	12	confidently say where these sites
13	Central Long Island Sound site.	13	are, Central and Western, the
14	It is about a one-by-two-mile	14	material is very stable on the sea
15	rectangle. This is a map of the	15	floor.
16	bathymetry and the topography of the	16	So then we move on to what
17	sea floor. Then you see some areas	17	about release to the water column
18	over here where there has been little	18	when you actually place the material?
19	dredged material placement;	19	As I first started to get involved in
20	relatively flat, sort of gently	20	this work, this was sort of the image
21	sloping, and then we see a bunch of	21	that I had in my mind that came out
22	bumps over here.	22	of an older textbook.
23	We have accentuated the	23	You've got a scow up here on
24	topography to show it a little bit	24	the surface. You've got the material
25	better here. In reality, each one of	25	falling, falling, falling through the
	, , , , , , , , , , , , , , , , , , ,		2, 2, 2
1	43	1	45
2	these numbered sites is a project or	2	water column; some of it is coming
2 3	these numbered sites is a project or a particular placement year or two	2 3	water column; some of it is coming directly down, some of it is being
2 3 4	these numbered sites is a project or a particular placement year or two where we focus, where we targeted;	2 3 4	water column; some of it is coming directly down, some of it is being stripped off with the current.
2 3 4 5	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put	2 3 4 5	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you
2 3 4 5 6	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this	2 3 4 5 6	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be
2 3 4 5 6 7	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the	2 3 4 5 6 7	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are
2 3 4 5 6	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed.	2 3 4 5 6	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be
2 3 4 5 6 7	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really	2 3 4 5 6 7	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are
2 3 4 5 6 7 8 9	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of	2 3 4 5 6 7 8 9	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If
2 3 4 5 6 7 8 9 10	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now	2 3 4 5 6 7 8 9 10	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to
2 3 4 5 6 7 8 9 10 11 12	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that	2 3 4 5 6 7 8 9 10 11 12	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long
2 3 4 5 6 7 8 9 10 11 12 13	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the	2 3 4 5 6 7 8 9 10 11 12 13	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow,
2 3 4 5 6 7 8 9 10 11 12 13 14	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is	2 3 4 5 6 7 8 9 10 11 12 13 14	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long.
2 3 4 5 6 7 8 9 10 11 12 13 14 15	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back	2 3 4 5 6 7 8 9 10 11 12 13 14 15	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to see if this material is stable on the sea floor.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is between 40 and 60 feet below that
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to see if this material is stable on the sea floor. If you look, there are a lot	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to see if this material is stable on the sea floor.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is between 40 and 60 feet below that
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to see if this material is stable on the sea floor. If you look, there are a lot	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is between 40 and 60 feet below that scow. So it's got a short distance
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to see if this material is stable on the sea floor. If you look, there are a lot of numbers here and they relate to the dates, the years when some of the mounds were actually formed. They go	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is between 40 and 60 feet below that scow. So it's got a short distance for that material to fall through.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to see if this material is stable on the sea floor. If you look, there are a lot of numbers here and they relate to the dates, the years when some of the mounds were actually formed. They go back to early 2000s, to the '90s, to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is between 40 and 60 feet below that scow. So it's got a short distance for that material to fall through. You go to Western, you have a
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to see if this material is stable on the sea floor. If you look, there are a lot of numbers here and they relate to the dates, the years when some of the mounds were actually formed. They go	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is between 40 and 60 feet below that scow. So it's got a short distance for that material to fall through. You go to Western, you have a little bit more, maybe 60 to 80 feet.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	these numbered sites is a project or a particular placement year or two where we focus, where we targeted; where we put the buoy, where we put the coordinates, where we said this is where we would like to have the dredged material placed. You can see these are really sort of football field, a couple of football field size areas where now all of that dredged material for that particular year has been focused, the placement of it. What we can do is produce a map like this, go back several years later, and compare one to the other and that allows us to see if this material is stable on the sea floor. If you look, there are a lot of numbers here and they relate to the dates, the years when some of the mounds were actually formed. They go back to early 2000s, to the '90s, to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	water column; some of it is coming directly down, some of it is being stripped off with the current. But if you do the math and you say well, this thing has to be several hundred feet long, we are talking about a thousand foot water column. We have sites like that out on the West Coast but not here. If we look sort of more realistic to scale for Central and Western Long Island Sound, we have a typical scow, which is about 300 feet long. It sits fully loaded about 20 feet of draft, so about 20 feet of this under water here. This is for the Central site. Now the bottom is between 40 and 60 feet below that scow. So it's got a short distance for that material to fall through. You go to Western, you have a little bit more, maybe 60 to 80 feet. The math will tell you that this

1	46	1	48
2	quickly to the bottom. It's going to	2	is going to be impacted. I liken it
3	be in the water column for a very	3	to if you brought a load of clean
4	short period of time.	4	fill and you wanted to put it on your
5	That doesn't give it a chance	5	lawn somewhere and fill out empty
6	to be affected by the currents for it	6	spots.
7	to really significantly drift. That	7	Wherever that is placed, the
8	is what the math tells us. Again, we	8	grass, the insects, the worms
9	understand concerns and we go out and	9	underneath are clearly going to be
10	verify that.	10	impacted. They are going to be
11	For those of you who do some	11	smothered. But to a fairly limited
12	boating have fish finders. You know	12	area, it's a limited impact. And
13	that you can see fairly small fish in	13	what we see is over a very short
14	the water column with your fish	14	period of time just like in your
15	finders. We have instrumentation	15	yard if you were to bring in fill,
16	that allows us to see very, very fine	16	things begin to sprout, insects come
17	particles. And so we do the same	17	in, you get recovery.
18	thing as you might do looking for a	18	And that is exactly what we
19	fishing spot.	19	look for when we go out to these
20	After the scow has released	20	sites after the material has been
21	the material, we run a transect right	21	placed. We do a lot of camera work;
22	across that disposal site, and then	22	we also do sediment samples. This is
23	we paint a picture in real time as to	23	a camera that looks across the
24	where there might be a disturbance in	24	sediment water interface, and we see
25	the water column, there might be some	25	water up above and sediment down
1	47	1	49
2	suspended materials.	2	below.
3	This is an actual placement of	3	We can see what kind of
4	that; this is a recorded image. Then	4	critters are in there; who is
5	we turn the boat around and we go	5	inhabiting that; who comes back in;
6	right back to the spot and collect	6	is it well oxygenated; does it look
7	water right there, send it off to the	7	like the black mud, or is it fairly
8	lab and determine if there is	8	healthy looking. We do imagery where
9	something of concern in it.	9	we look down on the sea floor, and
10	Just particles that are going	10	that way you can do more quantitative
11	to settle out; that's fine, and they	11	counts.
12	settle out pretty quickly. Is there	12	You can tell how many burrows
13	something chemically that is in	13	are there; who is crawling around.
14	there? Toxicitywise is there a	14	That gives us an idea again, do these
15	concern? And so again, we have	15	sites recover as we expect they would
16	invested a lot of effort in this, and	16	after a short period of time,
17	we feel very confident for the sites	17	typically within one to two years.
18	that material really does not get	18	And then we struggle with the
19	lost in the water column.	19	part yes, there was an impact, but is
20	So then you say, well, what	20	that significant Soundwise. One of
21	about an impact to the benthic system	21	the things that we struggle with as
22	down underneath. That is where it is	22	environmental scientist is how do we
23	clear. If you place this material	23	convey that.
24	anything that is in that direct	24	I spend a lot of time out
25	footprint of where the material falls	25	there and I'm confident that the
	<u>.</u>	1	
	•		

1	50	1	52
2	impact associated with the annual	2	field analysis, we would probably
3	placement of the sites is minimal.	3	have a measurable amount that got
4	It recovers very quickly, and is very	4	very much covered up with material,
5	limited in duration.	5	but we understand the Sound is
6	How do I try to convey that to	6	resilient and recovers from a human
7	you folks? One way that we do that	7	event like that.
8	is scaling. If we thought of Long	8	So we feel that placing the
9	Island Sound, all 1,300 plus square	9	dredged material is really a part of
10	miles of it, as a big area we scaled	10	a natural cycle as long as we are
11	it down to the size of a football	11	monitoring it and managing the
12	field.	12	material up front.
13	We would say how big is the	13	Now we get to the last
14	relative impact when we do placement	14	question, which I know came up quite
15	at Western and Central Sound sites on	15	a bit, which is what about
16	an annual basis. Are we impacting up	16	alternatives to open water placement.
17	to the ten yard line, the 20 yard	17	Both Mel and Mark made mention of
18	line? How much of that relatively on	18	this, and I would like to note that
19	an annual basis does that material	19	Mel, who gave the opening remarks for
20	directly cover up and then needs to	20	EPA, and myself cochaired a group
21	recover.	21	which is called The New England
22	If we zoom into the end zone	22	Regional Dredge Team.
23	every year, this is relatively the	23	That is made up of federal
24	area that we would impact on an	24	agencies as well as representatives
25	annual basis. For Central it is	25	from each of the New England states.
23	annual basis. For Central it is	25	from each of the New England states.
1	51	1	53
1 2	about the size of paint can lid,	1 2	We meet roughly quarterly, and we
	about the size of paint can lid, again, relative to the size of the		We meet roughly quarterly, and we have a whole range of events we talk
2	about the size of paint can lid, again, relative to the size of the football field. For Western it's a	2	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is
2 3	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually	2 3	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials;
2 3 4	about the size of paint can lid, again, relative to the size of the football field. For Western it's a	2 3 4	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is
2 3 4 5 6 7	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually	2 3 4 5	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials;
2 3 4 5 6	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less	2 3 4 5 6	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative
2 3 4 5 6 7	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site.	2 3 4 5 6 7	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement.
2 3 4 5 6 7 8	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very	2 3 4 5 6 7 8	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on
2 3 4 5 6 7 8 9	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of	2 3 4 5 6 7 8	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we
2 3 4 5 6 7 8 9	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not	2 3 4 5 6 7 8 9	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we
2 3 4 5 6 7 8 9 10	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic	2 3 4 5 6 7 8 9 10	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter
2 3 4 5 6 7 8 9 10 11 12	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We	2 3 4 5 6 7 8 9 10 11 12	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a
2 3 4 5 6 7 8 9 10 11 12	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other	2 3 4 5 6 7 8 9 10 11 12 13	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place
2 3 4 5 6 7 8 9 10 11 12 13	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in	2 3 4 5 6 7 8 9 10 11 12 13 14	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help
2 3 4 5 6 7 8 9 10 11 12 13 14	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives	2 3 4 5 6 7 8 9 10 11 12 13 14 15	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier,
2 3 4 5 6 7 8 9 10 11 12 13 14 15	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating significant impact.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot of our marshes may be affected by
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating significant impact. This is an image of the	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot of our marshes may be affected by rising sea level.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating significant impact. This is an image of the Connecticut River discharging to the	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot of our marshes may be affected by rising sea level. Just a few weeks ago at our
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating significant impact. This is an image of the Connecticut River discharging to the Sound after Hurricane Tropical Storm	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot of our marshes may be affected by rising sea level. Just a few weeks ago at our winter meeting the EPA presented on a
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating significant impact. This is an image of the Connecticut River discharging to the Sound after Hurricane Tropical Storm Irene back in 2011. You can see this	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot of our marshes may be affected by rising sea level. Just a few weeks ago at our winter meeting the EPA presented on a tracking tool that they have that is going to allow everybody in the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating significant impact. This is an image of the Connecticut River discharging to the Sound after Hurricane Tropical Storm Irene back in 2011. You can see this tremendous sediment load a natural event which came out and blanketed	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot of our marshes may be affected by rising sea level. Just a few weeks ago at our winter meeting the EPA presented on a tracking tool that they have that is
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating significant impact. This is an image of the Connecticut River discharging to the Sound after Hurricane Tropical Storm Irene back in 2011. You can see this tremendous sediment load a natural	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot of our marshes may be affected by rising sea level. Just a few weeks ago at our winter meeting the EPA presented on a tracking tool that they have that is going to allow everybody in the states to see who is doing what with
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	about the size of paint can lid, again, relative to the size of the football field. For Western it's a little smaller because we actually send out a fair amount of less material for that site. That allows us to very comfortably say in the big picture of the Sound very limited, not significant impacts to the benthic system, and it recovers quickly. We know that within the scale of other events, what we are doing pales in comparison to those. And that gives us an idea we are not creating significant impact. This is an image of the Connecticut River discharging to the Sound after Hurricane Tropical Storm Irene back in 2011. You can see this tremendous sediment load a natural event which came out and blanketed large areas, significant areas.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	We meet roughly quarterly, and we have a whole range of events we talk about. A standard agenda item is beneficial use of dredged materials; what can we do with alternative placement. We are definitely focused on that, and this is a way that we exchange information. The meeting we had last fall, we had a presenter from Rhode Island who talked about a pilot program they had done to place dredged material on a marsh to help bring it up and make it healthier, and that's a long term plan as a lot of our marshes may be affected by rising sea level. Just a few weeks ago at our winter meeting the EPA presented on a tracking tool that they have that is going to allow everybody in the states to see who is doing what with beneficial use; what works and what

		1	
1	54	1	56
2	Again, this is an exchange of	2	the Dredged Material Management Plan
3	information, clearly a focus point.	3	and monitoring of it. My job is to
4	We are clearly focused on the table	4	get as focused on the actual rule
5	that Mel has presented that shows we	5	that we are here to have the public
6	are headed in the direction of less	6	hearing about tonight.
7	open water placement, more beneficial	7	So as you have seen from
8	use, so it is on our radar.	8	earlier presentations, the EPA and
9	With that, I close with a	9	the Corps share responsibility for
10	couple of reference pieces. One is	10	dredged disposal and dredged material
11	our Website. Again, all of our	11	management in the Sound. Our focus
12	reports are available there. I've	12	tonight is on EPA's responsibility,
13	got my contact information there. We	13	which is under Section 102.
14	welcome questions from folks. I	14	As you heard earlier, in June
15	believe we are taking Q and A after	15	of 2005 EPA published the Final Rule
16	the hearing. So we are going to	16	Designating the Central and Western
17	stick around if you have questions.	17	disposal sites. To address concerns
18	Again, if you read the reports	18	that were raised by the State of New
19	or you want to know more about the	19	York and others these destinations
20	program, that is what we are here	20	were subjected to restrictions on
21	for, so let us know. I even offer	21	their use.
22	the invitation to come out on some of	22	These restrictions were
23	our surveys. We offered that to a	23	intended to reduce or eliminate the
24	representative from Citizens Campaign	24	disposal of dredged material in the
25	For the Environment that came out	25	Sound. They included requirements
23	For the Environment that came out	23	Sound. They included requirements
1	55	1	57
2	last fall, and it was a very	2	for the Corps to complete a Dredged
2 3	last fall, and it was a very informational exchange for both of us	2 3	for the Corps to complete a Dredged Material Management Plan for the
2 3 4	last fall, and it was a very informational exchange for both of us to have.	2 3 4	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done
2 3 4 5	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go	2 3 4 5	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you.
2 3 4 5 6	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there	2 3 4 5 6	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency
2 3 4 5 6 7	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and	2 3 4 5 6 7	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged
2 3 4 5 6 7 8	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these	2 3 4 5 6 7 8	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects
2 3 4 5 6 7 8	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is	2 3 4 5 6 7 8	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during
2 3 4 5 6 7 8 9	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout	2 3 4 5 6 7 8 9	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for
2 3 4 5 6 7 8 9 10 11	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards.	2 3 4 5 6 7 8 9 10 11	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking.
2 3 4 5 6 7 8 9 10 11 12	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to	2 3 4 5 6 7 8 9 10 11 12	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the
2 3 4 5 6 7 8 9 10 11 12 13	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director	2 3 4 5 6 7 8 9 10 11 12 13	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is
2 3 4 5 6 7 8 9 10 11 12 13 14	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA	2 3 4 5 6 7 8 9 10 11 12 13	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize
2 3 4 5 6 7 8 9 10 11 12 13 14 15	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about	2 3 4 5 6 7 8 9 10 11 12 13 14 15	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen Perkins, a member of the dredging	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the future, again, with the goal of
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen Perkins, a member of the dredging team at EPA's regional office in Boston. I was the primary author of	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the future, again, with the goal of
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen Perkins, a member of the dredging team at EPA's regional office in Boston. I was the primary author of the proposed amendments to the site	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the future, again, with the goal of reducing or eliminating open water disposal. These standards and procedures
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen Perkins, a member of the dredging team at EPA's regional office in Boston. I was the primary author of	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the future, again, with the goal of reducing or eliminating open water disposal.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen Perkins, a member of the dredging team at EPA's regional office in Boston. I was the primary author of the proposed amendments to the site designation rule. By now you have heard a lot	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the future, again, with the goal of reducing or eliminating open water disposal. These standards and procedures
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen Perkins, a member of the dredging team at EPA's regional office in Boston. I was the primary author of the proposed amendments to the site designation rule.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the future, again, with the goal of reducing or eliminating open water disposal. These standards and procedures are meant to be consistent with the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen Perkins, a member of the dredging team at EPA's regional office in Boston. I was the primary author of the proposed amendments to the site designation rule. By now you have heard a lot	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the future, again, with the goal of reducing or eliminating open water disposal. These standards and procedures are meant to be consistent with the recommendations in the DMMP. So on
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	last fall, and it was a very informational exchange for both of us to have. Again, generally we don't go out in the winter. We are out there during the nicer time of the year and that's when the recovery of these sites happens. If anybody is interested in that, give me a shout or look us up afterwards. So with that I turn it over to Stephen Perkins, who is the director of Ocean and Coastal Policies for EPA Region 1, who is going to talk about the actual proposed amendments. MR. PERKINS: I'm Stephen Perkins, a member of the dredging team at EPA's regional office in Boston. I was the primary author of the proposed amendments to the site designation rule. By now you have heard a lot about the history of dredged material	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	for the Corps to complete a Dredged Material Management Plan for the entire Sound, which they have done and Mark has presented to you. Established as Interagency Long Island Sound Regional Dredged Management Team to review projects and the alternative analyses during the completion of the DMMP, and for EPA to do rulemaking. Within 120 days of the completion of the DMMP, EPA is required to propose and finalize amendments to the 2005 rules that describes standards and procedures that must be complied with in the future, again, with the goal of reducing or eliminating open water disposal. These standards and procedures are meant to be consistent with the recommendations in the DMMP. So on February 10, EPA took the first step

1	58	1	60
2	publishing the proposed amendments in	2	such as beach nourishment, near shore
3	the 2005 rule in the federal	3	bar or berm nourishment as long as
4	register. EPA is seeking comment on	4	there is a practicable alternative by
5	those proposed amendments both	5	the proposed and identified and
6	through this public hearing and in	6	secured funding for any of the needed
7	writing through March 25, also a	7	non-federal cost sharing.
8	public hearing tomorrow in	8	For fine grain material the
9	Connecticut.	9	proponents must thoroughly evaluate
10	Although the 2005 rule has	10	the practicable alternative and use
11	provided EPA with 60 days to publish	11	them if they are available. The DMMP
12	the proposed amendment, we have	12	for every one of these dredging sites
13	accelerated the process to provide	13	has a list of alternatives for the
14	more time for public comments on the	14	federal base plan.
15	proposal and for the states to	15	As you have heard before, this
16	conduct their review under the Costal	16	fine grain material is typically not
17	Zone Management Act. The 120-day	17	considered appropriate for beach or
18	deadline to finalize the rule gives	18	near shore nourishment, but in the
19	EPA until May 10.	19	future uses such as marsh creation or
20	The EPA split the time between	20	restoration may become practicable.
21	the proposal and the final action to	21	If no other alternative is determined
22	provide 45 days of public comment and	22	to be practicable, then suitable fine
23	for the same amount of time for EPA	23	grain materials may be placed at the
24	to consider a response to those	24	designated sites.
25	comments and make any appropriate	25	The proposed amendments also
1	59	1	61
2	changes to the proposal. Because of	2	expect that all levels of the
3	this tight time frame EPA will not be	3	government will continue to exercise
4	able to extend the comment period.	4	their existing authorities to reduce
5	The proposed amendments are	5	the flow of sediment and contaminants
6	intended to support the goal of	6	in the waterways. The proposal does
7	reducing or eliminating open water	7	not create new obligations, but
8	disposal by establishing standards	8	instead focuses attention on existing
9	and procedures that will encourage	9	programs such as those that address
10	the identification and development	10	storm water and pollution in coastal
	<u> </u>	1	
11	and use of practicable alternatives	1 11	•
11 12	and use of practicable alternatives	11	communities and along the tributaries
12	to open water disposal, and require	12	communities and along the tributaries for the Sound.
12 13	to open water disposal, and require large dredging project proposals that	12 13	communities and along the tributaries for the Sound. Finally, the proposed
12 13 14	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives.	12 13 14	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction
12 13 14 15	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal	12 13 14 15	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable
12 13 14 15	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of	12 13 14 15 16	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are
12 13 14 15 16 17	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of 25,000 cubic yards or greater. So	12 13 14 15 16 17	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are available. The EPA is acknowledging
12 13 14 15 16 17	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of 25,000 cubic yards or greater. So here are the standards that are	12 13 14 15 16 17 18	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are available. The EPA is acknowledging that there may be additional cost
12 13 14 15 16 17 18	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of 25,000 cubic yards or greater. So here are the standards that are included in the proposed amendments,	12 13 14 15 16 17 18 19	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are available. The EPA is acknowledging that there may be additional cost burden associated with those
12 13 14 15 16 17 18 19 20	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of 25,000 cubic yards or greater. So here are the standards that are included in the proposed amendments, and they echo what you have heard for	12 13 14 15 16 17 18 19 20	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are available. The EPA is acknowledging that there may be additional cost burden associated with those alternatives.
12 13 14 15 16 17 18 19 20 21	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of 25,000 cubic yards or greater. So here are the standards that are included in the proposed amendments, and they echo what you have heard for recommendations. Unsuitable material	12 13 14 15 16 17 18 19 20 21	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are available. The EPA is acknowledging that there may be additional cost burden associated with those alternatives. The procedures in the proposed
12 13 14 15 16 17 18 19 20 21 22	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of 25,000 cubic yards or greater. So here are the standards that are included in the proposed amendments, and they echo what you have heard for recommendations. Unsuitable material will not be disposed of at the sites.	12 13 14 15 16 17 18 19 20 21 22	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are available. The EPA is acknowledging that there may be additional cost burden associated with those alternatives. The procedures in the proposed amendments are built around making
12 13 14 15 16 17 18 19 20 21 22 23	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of 25,000 cubic yards or greater. So here are the standards that are included in the proposed amendments, and they echo what you have heard for recommendations. Unsuitable material will not be disposed of at the sites. Sandy material should be used	12 13 14 15 16 17 18 19 20 21 22 23	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are available. The EPA is acknowledging that there may be additional cost burden associated with those alternatives. The procedures in the proposed amendments are built around making the interagency Long Island Sound
12 13 14 15 16 17 18 19 20 21	to open water disposal, and require large dredging project proposals that thoroughly evaluate the alternatives. This applies to all federal projects and all private projects of 25,000 cubic yards or greater. So here are the standards that are included in the proposed amendments, and they echo what you have heard for recommendations. Unsuitable material will not be disposed of at the sites.	12 13 14 15 16 17 18 19 20 21 22	communities and along the tributaries for the Sound. Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives be used if they are available. The EPA is acknowledging that there may be additional cost burden associated with those alternatives. The procedures in the proposed amendments are built around making

1	62	1	64
2	team's goal is to reduce or eliminate	2	EPA will encourage
3	the use of open water disposal	3	participation of other federal
4	wherever practicable.	4	agencies, such as the Navy, the Coast
5	The purpose will be to ensure	5	Guard, and Fish and Wildlife Service.
6	that all large dredging projects	6	EPA expects that the states of
7	conduct a thorough analysis of	7	Connecticut, New York, and Rhode
8	alternatives to open water disposal,	8	Island will also participate through
9	and then make recommendations to the	9	their environmental agencies and
10	Corps on each of the projects. Of	10	coastal zone management programs and
11	equal importance, the team will	11	relevant port authorities.
12	provide a forum for continual	12	EPA proposes that the specific
13	exploration of beneficial use	13	details of the structure and process
14	*	14	that this feat will use will be left
15	alternatives for promoting use of	15	for them to determine and allowed to
16	alternatives and cost sharing	16	
	approaches.		evolve to best accomplish their
17	This group will exchange ideas	17	purposes.
18	with that New England Regional	18	Finally, EPA encourages the
19	Dredging Team that Steve showed you a	19	team to maintain cooperative working
20	picture of at the end of his	20	relationships with other Long Island
21	presentation. This proactive role	21	Sound-based organizations such as the
22	for the team is a new one. It adds	22	Long Island Sound Study Science and
23	onto his responsibilities from the	23	Technical Advisory Committee.
24	past six or eight years.	24	There are two other important
25	The team will be expected to	25	parts of the proposed amendments that
1	63	1	65
2	assist EPA and the Corps in the long	2	I want you to be aware of. The first
2 3	assist EPA and the Corps in the long term activities intended to track the		I want you to be aware of. The first is that EPA has retained the
2 3 4	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the	2 3 4	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that
2 3	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include	2 3 4 5	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA
2 3 4 5 6	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that	2 3 4 5 6	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the
2 3 4 5 6 7	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you.	2 3 4 5 6 7	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures
2 3 4 5 6	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that	2 3 4 5 6 7 8	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the
2 3 4 5 6 7 8	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will	2 3 4 5 6 7 8 9	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of
2 3 4 5 6 7 8	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so	2 3 4 5 6 7 8 9	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate
2 3 4 5 6 7 8 9 10	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the	2 3 4 5 6 7 8 9 10	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to
2 3 4 5 6 7 8 9	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so	2 3 4 5 6 7 8 9 10 11 12	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the
2 3 4 5 6 7 8 9 10	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the	2 3 4 5 6 7 8 9 10	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to
2 3 4 5 6 7 8 9 10 11 12 13 14	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives	2 3 4 5 6 7 8 9 10 11 12	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the
2 3 4 5 6 7 8 9 10 11 12	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of	2 3 4 5 6 7 8 9 10 11 12 13	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the
2 3 4 5 6 7 8 9 10 11 12 13 14	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and	2 3 4 5 6 7 8 9 10 11 12 13 14	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself.
2 3 4 5 6 7 8 9 10 11 12 13 14 15	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or	2 3 4 5 6 7 8 9 10 11 12 13 14 15	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in dredging or dredged material	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the opportunity to provide comments on
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in dredging or dredged material management.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the opportunity to provide comments on the proposed amendments. In just a
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in dredging or dredged material management. EPA is expecting the team will include federal representatives from	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the opportunity to provide comments on the proposed amendments. In just a few moments you will have the opportunity to provide oral comments
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in dredging or dredged material management. EPA is expecting the team will	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the opportunity to provide comments on the proposed amendments. In just a few moments you will have the opportunity to provide oral comments for the record, but you can provide
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in dredging or dredged material management. EPA is expecting the team will include federal representatives from Region 1 and 2 offices, the New	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the opportunity to provide comments on the proposed amendments. In just a few moments you will have the opportunity to provide oral comments for the record, but you can provide them in writing through March 25.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in dredging or dredged material management. EPA is expecting the team will include federal representatives from Region 1 and 2 offices, the New England and New York district and the North Atlantic division of Corps and	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the opportunity to provide comments on the proposed amendments. In just a few moments you will have the opportunity to provide oral comments for the record, but you can provide them in writing through March 25. The best way to send them is
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in dredging or dredged material management. EPA is expecting the team will include federal representatives from Region 1 and 2 offices, the New England and New York district and the	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the opportunity to provide comments on the proposed amendments. In just a few moments you will have the opportunity to provide oral comments for the record, but you can provide them in writing through March 25. The best way to send them is there on the screen. You can send
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	assist EPA and the Corps in the long term activities intended to track the disposal of materials and monitor the impact to the Sound. These include supporting the DAMOS program that Steve described to you. The geographic scope of the Long Island Sound Dredging Team will include all of Long Island Sound so that we look at all of the opportunities for alternatives broadly. The team will consist of representatives from Federal and State government agencies or authorities that have expertise in dredging or dredged material management. EPA is expecting the team will include federal representatives from Region 1 and 2 offices, the New England and New York district and the North Atlantic division of Corps and the National Oceanic and Atmospheric	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	I want you to be aware of. The first is that EPA has retained the restriction in the 2005 rule that provides for a party to petition EPA if they are not satisfied that the final amended rules adopt procedures that will reduce or eliminate whatever practice of disposal of dredged material in the Sound. EPA has also proposed to eliminate the restrictions from the 2005 rule that we are all about the completion of the DMMP, itself. I will conclude my presentation by reminding you of the opportunity to provide comments on the proposed amendments. In just a few moments you will have the opportunity to provide oral comments for the record, but you can provide them in writing through March 25. The best way to send them is

.!!			
1	66	1	68
2	e-mail addresses, and they will get	2	this issue for 15 years. I was young
3	to me for consideration as we	3	when we first started working on this
4	finalize the rule.	4	issue. After the hearing tonight I'm
5	Thank you for your attention	5	feeling very old.
6	and your patience. I'm now going to	6	Let me say this: We are going
7	turn it back to Jean Brochi.	7	to give some comments here on the EPA
8	MR. COTE: Real quick, what	8	rulemaking but, frankly, even
9	Steve forgot to mention is that when	9	providing comments on it is
10	we conclude the public testimony	10	objectionable to us. It is akin to
11	portion of our hearing tonight, we	11	giving a hot lunch to the getaway
12	are going to close the hearing. The	12	driver for the car for the bank
13	stenographer will shut the equipment	13	robbers.
14	down and we will open up a more	14	We don't agree with the DMMP.
15	informal Q and A session for those of	15	It is not a document that should be
16	you who would like to stay.	16	provided for rulemaking and
17	We are going to give an hour	17	implemented into policy. Many of you
18	for the public testimony. But when	18	know the DEC is here, the EPA, the
19	we close it, we will close it and go	19	Army Corps, the agreement signed in
20	to informal Q and A. We will	20	2005 was an agreement that mandated
21	probably stick around for another	21	that open water disposal be phased
22	half hour. I know people have places	22	out over time and replaced by
23	to go and things to do but we are	23	beneficial reuse.
24	happy to stay.	24	And it mandated that costs
25	MS. BROCHI: So as we had	25	could not be the overwhelming factor
	Ms. Broom. So us we had		could not be use over when many suctor
1	67	1	69
2	described in the beginning of the	2	in the decision-making process.
3	meeting, folks who would like to	3	Instead, we got a DMMP that said
4	speak and provide comments may do so.	4	everything is fine. We just heard it
5	If you have not had an opportunity to	5	again tonight. We now know that
6	fill out a speaker card, please do so	6	dredged materials go straight down
7	right now. I see three people who		
8		7	
O	would like to make comments. Is		60, 70, 80, 90 feet and they stay
	would like to make comments. Is there anybody else by a show of hands	8	60, 70, 80, 90 feet and they stay there.
9	there anybody else by a show of hands	8 9	60, 70, 80, 90 feet and they stay there. And stay there during storms,
9 10	there anybody else by a show of hands who is interested in speaking	8 9 10	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the
9 10 11	there anybody else by a show of hands who is interested in speaking tonight?	8 9 10 11	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound
9 10 11 12	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a	8 9 10 11 12	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying.
9 10 11 12 13	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written	8 9 10 11 12 13	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost
9 10 11 12 13 14	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front	8 9 10 11 12 13 14	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment
9 10 11 12 13 14 15	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can	8 9 10 11 12 13 14 15	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is
9 10 11 12 13 14 15	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the	8 9 10 11 12 13 14 15	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with
9 10 11 12 13 14 15 16 17	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the screen open with the e-mail address	8 9 10 11 12 13 14 15 16 17	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with beneficial reuse.
9 10 11 12 13 14 15 16 17	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the screen open with the e-mail address and it has the March 25 time frame.	8 9 10 11 12 13 14 15 16 17	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with beneficial reuse. Therefore, we are very
9 10 11 12 13 14 15 16 17 18	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the screen open with the e-mail address and it has the March 25 time frame. Adrienne Esposito, Executive	8 9 10 11 12 13 14 15 16 17 18	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with beneficial reuse. Therefore, we are very concerned about the least cost factor
9 10 11 12 13 14 15 16 17 18 19 20	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the screen open with the e-mail address and it has the March 25 time frame. Adrienne Esposito, Executive Director for Citizens Campaign For	8 9 10 11 12 13 14 15 16 17 18 19 20	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with beneficial reuse. Therefore, we are very concerned about the least cost factor because the only cost assigned is to
9 10 11 12 13 14 15 16 17 18 19 20 21	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the screen open with the e-mail address and it has the March 25 time frame. Adrienne Esposito, Executive Director for Citizens Campaign For the Environment.	8 9 10 11 12 13 14 15 16 17 18 19 20 21	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with beneficial reuse. Therefore, we are very concerned about the least cost factor because the only cost assigned is to beneficial reuse. Frankly, you know,
9 10 11 12 13 14 15 16 17 18 19 20 21 22	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the screen open with the e-mail address and it has the March 25 time frame. Adrienne Esposito, Executive Director for Citizens Campaign For the Environment. MS. ESPOSITO: Adrienne	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with beneficial reuse. Therefore, we are very concerned about the least cost factor because the only cost assigned is to beneficial reuse. Frankly, you know, I consider it pains me to say
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the screen open with the e-mail address and it has the March 25 time frame. Adrienne Esposito, Executive Director for Citizens Campaign For the Environment. MS. ESPOSITO: Adrienne Esposito, Executive Director of	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with beneficial reuse. Therefore, we are very concerned about the least cost factor because the only cost assigned is to beneficial reuse. Frankly, you know, I consider it pains me to say this, and I'm sorry to have to say
9 10 11 12 13 14 15 16 17 18 19 20 21 22	there anybody else by a show of hands who is interested in speaking tonight? Again, sir, please fill out a card. You can also provide written comments. There's a tray out front on the reception table and you can also submit them. I will leave the screen open with the e-mail address and it has the March 25 time frame. Adrienne Esposito, Executive Director for Citizens Campaign For the Environment. MS. ESPOSITO: Adrienne	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	60, 70, 80, 90 feet and they stay there. And stay there during storms, and there is a rapid recovery to the efforts because the Long Island Sound is resilient even though it is dying. So in the DMMP there is no cost associated for disposing of sediment in an open water fashion. There is only costs associated is with beneficial reuse. Therefore, we are very concerned about the least cost factor because the only cost assigned is to beneficial reuse. Frankly, you know, I consider it pains me to say

1	70	1	72
2	failure.	2	We find it hypocritical that
3	We expected it from the Army	3	on one hand the EPA is claiming to
4	Corps. We don't expect it from the	4	protect the Long Island Sound from
5	EPA. We expect the EPA to be	5	nitrogen, and on the other hand
6	protecting the Long Island Sound, not	6	turning a blind eye to what may be a
7	fostering a plan that degrades the	7	significant cause of nitrogen
8	Long Island Sound. If you think	8	loading.
9	about it, and I'm sorry to go on, the	9	The other thing I wanted to
10	inherent conflict, if it is so benign	10	find out is that we would ask the EPA
11	to be disposing of sediment in an	11	in its rulemaking to take into
12	open water disposal fashion, then	12	account the comments provided in the
13	what's the incentive to do beneficial	13	June 3, 2004, objection to
14	reuse?	14	consistency determination produced by
15	If it is so benign as we have	15	New York State Department of State.
16	heard over and over again at this	16	Two particular ones and I'm
17	hearing, the last hearing, the last	17	going to read them, and this is not
18	hearing at every hearing in	18	our words, this is the New York State
19	Connecticut and New York I have been	19	DOS charged with coastal water
20	at why are we promoting beneficial	20	protection for New York State coastal
21	reuse? We are promoting it because	21	waters:
22	we know it is safer and better for	22	"One, they want the EPA to
23	the environment.	23	assess chemical parameters such as
24	In that vein let me just offer	24	dissolved oxygen which will be
25	a couple of comments to the EPA in	25	reduced in the water column during
23	a couple of confinents to the EFA in	23	reduced in the water column during
1	71	1	73
1 2	this rulemaking process. One is that	1 2	73 dumping activities; carbon acidity
	this rulemaking process. One is that we had asked for the Army Corps to	1	dumping activities; carbon acidity and pollutants such as heavy metals,
2	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a	2	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which
2 3	this rulemaking process. One is that we had asked for the Army Corps to	2 3	dumping activities; carbon acidity and pollutants such as heavy metals,
2 3 4	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with	2 3 4	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which
2 3 4 5 6 7	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the	2 3 4 5	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed."
2 3 4 5 6	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with	2 3 4 5 6	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is
2 3 4 5 6 7	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound.	2 3 4 5 6 7	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed."
2 3 4 5 6 7 8	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the	2 3 4 5 6 7 8	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from
2 3 4 5 6 7 8	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound.	2 3 4 5 6 7 8	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying
2 3 4 5 6 7 8 9	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of	2 3 4 5 6 7 8 9	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean
2 3 4 5 6 7 8 9 10	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote,	2 3 4 5 6 7 8 9 10	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We
2 3 4 5 6 7 8 9 10 11 12	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an	2 3 4 5 6 7 8 9 10 11 12	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas
2 3 4 5 6 7 8 9 10 11 12 13	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water	2 3 4 5 6 7 8 9 10 11 12 13	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping
2 3 4 5 6 7 8 9 10 11 12 13	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In	2 3 4 5 6 7 8 9 10 11 12 13	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper
2 3 4 5 6 7 8 9 10 11 12 13 14	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen	2 3 4 5 6 7 8 9 10 11 12 13 14 15	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels
2 3 4 5 6 7 8 9 10 11 12 13 14 15	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will rectify that.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish. Second point raised in the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will rectify that. On one hand we are thankful to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish. Second point raised in the objection of consistency
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will rectify that. On one hand we are thankful to have the EPA producing a new nitrogen	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish. Second point raised in the objection of consistency determination is the EPA must consider and evaluate the impacts
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will rectify that. On one hand we are thankful to have the EPA producing a new nitrogen plan by state for the Long Island	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish. Second point raised in the objection of consistency determination is the EPA must
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will rectify that. On one hand we are thankful to have the EPA producing a new nitrogen plan by state for the Long Island Sound and be protective of it. On	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish. Second point raised in the objection of consistency determination is the EPA must consider and evaluate the impacts from different dredging projects.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will rectify that. On one hand we are thankful to have the EPA producing a new nitrogen plan by state for the Long Island Sound and be protective of it. On the other hand, you can't condone nitrogen loading because it costs	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish. Second point raised in the objection of consistency determination is the EPA must consider and evaluate the impacts from different dredging projects. Documentation on sediments from the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will rectify that. On one hand we are thankful to have the EPA producing a new nitrogen plan by state for the Long Island Sound and be protective of it. On the other hand, you can't condone	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish. Second point raised in the objection of consistency determination is the EPA must consider and evaluate the impacts from different dredging projects. Documentation on sediments from the Thames River in Connecticut is
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	this rulemaking process. One is that we had asked for the Army Corps to incorporate into their analysis a comprehensive analysis of the nitrogen loading associated with disposing of 30 to 50 million cubic yards of dredged materials into the Long Island Sound. We provided for them some of the latest science that shows, quote, "significant nitrogen loading into an estuary water body from open water disposal of dredged materials." In the final DMMP no mention of nitrogen loading. We hope the EPA will rectify that. On one hand we are thankful to have the EPA producing a new nitrogen plan by state for the Long Island Sound and be protective of it. On the other hand, you can't condone nitrogen loading because it costs more money to protect the Sound. You	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	dumping activities; carbon acidity and pollutants such as heavy metals, toxic and hazardous materials which will be released in the water column and will be present after dumping is completed." That is contradictory from testimony that we heard today saying it is clean. Well, it can't be clean and be toxic at the same time. We know that in the summer the areas that have been used as a dumping ground have higher levels of copper in lobsters, and also elevated levels of PCBs in fish. Second point raised in the objection of consistency determination is the EPA must consider and evaluate the impacts from different dredging projects. Documentation on sediments from the Thames River in Connecticut is relevant and compelling.

		1	
1	74	1	76
2	bioaccumulate and have far reaching	2	to protect the body of water that we
3	consequences. Sediments contain	3	have worked 30 years to protect, that
4	various concentrations of PHAs,	4	we love and we call home. Thank you.
5	pesticides, PCBs, and other chemicals	5	(Applause)
6	above naturally occurring background	6	MS. BROCHI: Thank you,
7	levels. So for us the bottom line is	7	Adrienne. Again, we hope folks will
8	that the DMMP is simply a document	8	stay afterwards for a half an hour of
9	which perpetuates open water disposal	9	question and answer general session.
10	over the next 30 years.	10	I apologize if I mispronounce your
11	There is no benchmarks.	11	last name, Virginia Capon, citizen
12	There's no achievement goals that	12	and resident.
13	they have crafted in 10 or 20 or 30	13	MS. CAPON: I just typed this
14	years.	14	while I was on the train. I'm
15	Let me be honest with you. We	15	Virginia Capon. I'm a lifelong
16	worked so hard to get a DMMP that	16	resident of Port Jefferson, and I'm
17	would reduce open water disposal; we	17	also an environmental attorney. I
18	didn't expect miracles; we didn't	18	would like to just make a very brief
19	even think it would be phased out in	19	comment about this and, you know, I
20	the next 20 years. What we did	20	gather my remarks are going to be
21	expect is a document that would have	21	added to the record which I
22	a game plan to achieve a significant	22	appreciate.
23	reduction of open water disposal.	23	I actually was involved in
24	That was the spirit and also	24	this back in 2003, 2004, 2005 because
25	the letter of agreement that was	25	I was very concerned about it then,
	Ç		,
1	75	1	77
1 2	75 signed in 2005 by the EPA, by the	1 2	77 and many of our elected officials
2	signed in 2005 by the EPA, by the	2	and many of our elected officials,
	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New	2 3	and many of our elected officials, thousands of people were very
2 3 4	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this	2 3 4	and many of our elected officials, thousands of people were very concerned and it yielded what seemed
2 3	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves.	2 3 4 5	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome.
2 3 4 5 6	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own	2 3 4 5 6	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I
2 3 4 5 6 7	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document	2 3 4 5 6 7	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to
2 3 4 5 6 7 8	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent	2 3 4 5 6 7 8	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had
2 3 4 5 6 7 8 9	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame.	2 3 4 5 6 7 8	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon
2 3 4 5 6 7 8	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable	2 3 4 5 6 7 8 9	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was
2 3 4 5 6 7 8 9	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process.	2 3 4 5 6 7 8	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I
2 3 4 5 6 7 8 9 10	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more	2 3 4 5 6 7 8 9 10	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of
2 3 4 5 6 7 8 9 10 11	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing.	2 3 4 5 6 7 8 9 10 11 12	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last
2 3 4 5 6 7 8 9 10 11 12 13 14	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments,	2 3 4 5 6 7 8 9 10 11 12 13 14	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are
2 3 4 5 6 7 8 9 10 11 12 13 14	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been	2 3 4 5 6 7 8 9 10 11 12 13 14 15	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to
2 3 4 5 6 7 8 9 10 11 12 13 14	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the	2 3 4 5 6 7 8 9 10 11 12 13 14	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the public out and make comments when	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities. I really don't believe that is
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the public out and make comments when none of it is incorporated.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities. I really don't believe that is going to work. It may seem a little
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the public out and make comments when none of it is incorporated. We hope the EPA will break	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities. I really don't believe that is going to work. It may seem a little ambitious, but I think that we have
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the public out and make comments when none of it is incorporated. We hope the EPA will break that streak, and finally not make	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities. I really don't believe that is going to work. It may seem a little ambitious, but I think that we have to lead the federal government has
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the public out and make comments when none of it is incorporated. We hope the EPA will break that streak, and finally not make this into a dog and pony show, not	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities. I really don't believe that is going to work. It may seem a little ambitious, but I think that we have to lead the federal government has to lead on this issue. We really
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the public out and make comments when none of it is incorporated. We hope the EPA will break that streak, and finally not make this into a dog and pony show, not turn it in a facade, but rather turn	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities. I really don't believe that is going to work. It may seem a little ambitious, but I think that we have to lead the federal government has to lead on this issue. We really need to stop this unconfined open
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the public out and make comments when none of it is incorporated. We hope the EPA will break that streak, and finally not make this into a dog and pony show, not turn it in a facade, but rather turn it into a real genuine partnership	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities. I really don't believe that is going to work. It may seem a little ambitious, but I think that we have to lead the federal government has to lead on this issue. We really need to stop this unconfined open water dumping. Reducing it is just
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	signed in 2005 by the EPA, by the Army Corps, by Connecticut and New York States. That is not what this achieves. In New York State's own analysis they said that this document at best will achieve a two percent reduction over a 30-year time frame. This is a completely unacceptable process. I want to go over one more thing. I have been at every hearing. We have offered comments, comments, and comments and none of it has been incorporated. I don't know why the Army Corps is bothering to drag the public out and make comments when none of it is incorporated. We hope the EPA will break that streak, and finally not make this into a dog and pony show, not turn it in a facade, but rather turn	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	and many of our elected officials, thousands of people were very concerned and it yielded what seemed like a good outcome. Then it became very quiet. I really didn't pay more attention to it, and I thought that it had resulted in a decision to abandon these sites, so I thought. But I was mistaken, obviously and, you know, I have since learned in light of reading about this in the paper last week that the EPA and the Corps are really focused on just trying to limit the use or reduce the use of these facilities. I really don't believe that is going to work. It may seem a little ambitious, but I think that we have to lead the federal government has to lead on this issue. We really need to stop this unconfined open

1	78	1	80
2	Really, when you look at	2	I guess I'm really confused.
3	technology today, we have advanced I	3	When I first came and I listened to
4	think sufficiently socially and	4	tonight's partial presentation, I
5	technologically to know that this	5	came a little late, and it seemed
6	practice is really detrimental, just	6	very encouraging and very optimistic
7	like we know fossil fuels are very	7	that I think what you are trying to
8	detrimental to the environment, and	8	do is the right thing, but it doesn't
9	open sewers are very detrimental to	9	square with the recommendations of
10	the environment. This is an	10	the Army Corps.
11	uncontrolled situation.	11	I want to mirror what Adrienne
12	So I really would just ask	12	said and what Virginia said. I have
13	that EPA and the Corps go back to the	13	been to all of the meetings as well,
14	drawing board in a very timely	14	and it is really frustrating that we
15	fashion because you don't have a lot	15	have public participation at every
16	of time to actually just try and	16	meeting and nothing changes. No
17	figure out how you are going to stop	17	matter what recommendations are made,
18	this, you know, ramp down to zero.	18	the train just continues and it's
19	And that decision will	19	almost like it's lip service to the
20	actually force the groups that are	20	public participation.
21	meeting to focus on the beneficial	21	I have to tell you that it is
22	reuse and really do it because	22	really frustrating. We are a
23	there's an absolute bar. You have no	23	relatively new environmental group,
24	choice but to start doing more	24	citizen based, ad we are trying to do
25	beneficial reuse.	25	our job as citizens to protect the
23	beneficial rease.		our job as crazens to protect the
1	79	1	81
2	One of them which I'm not	2	assets we have in our community, and
2	One of them which I'm not terribly familiar with is	2 3	assets we have in our community, and it is frustrating to see the train
2 3 4	One of them which I'm not terribly familiar with is solidification and using it in	2 3 4	assets we have in our community, and it is frustrating to see the train just continues.
2 3 4 5	One of them which I'm not terribly familiar with is solidification and using it in construction materials and	2 3 4 5	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the
2 3 4 5 6	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes	2 3 4 5 6	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the
2 3 4 5 6 7	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted	2 3 4 5 6 7	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the
2 3 4 5 6 7 8	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you	2 3 4 5 6 7 8	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right
2 3 4 5 6 7 8 9	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment.	2 3 4 5 6 7 8	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final
2 3 4 5 6 7 8 9	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you.	2 3 4 5 6 7 8 9	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left
2 3 4 5 6 7 8 9 10	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your	2 3 4 5 6 7 8 9 10	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own
2 3 4 5 6 7 8 9 10 11	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization.	2 3 4 5 6 7 8 9 10 11 12	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording.
2 3 4 5 6 7 8 9 10 11 12 13	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening,	2 3 4 5 6 7 8 9 10 11 12 13	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I
2 3 4 5 6 7 8 9 10 11 12 13 14	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman.	2 3 4 5 6 7 8 9 10 11 12 13 14	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we
2 3 4 5 6 7 8 9 10 11 12 13 14 15	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task	2 3 4 5 6 7 8 9 10 11 12 13 14 15	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room know, the EPA and Army Corps doesn't	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel. MR. ROEL: I'm not with any
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room know, the EPA and Army Corps doesn't know, is actually part of the Port	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel. MR. ROEL: I'm not with any organization, myself. I'm a
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room know, the EPA and Army Corps doesn't know, is actually part of the Port Jeff Harbor complex.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel. MR. ROEL: I'm not with any organization, myself. I'm a Northport resident and I'm not as
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room know, the EPA and Army Corps doesn't know, is actually part of the Port Jeff Harbor complex. We are actually we were in	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel. MR. ROEL: I'm not with any organization, myself. I'm a Northport resident and I'm not as qualified as the three previous
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room know, the EPA and Army Corps doesn't know, is actually part of the Port Jeff Harbor complex. We are actually we were in the building where you could look at	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel. MR. ROEL: I'm not with any organization, myself. I'm a Northport resident and I'm not as qualified as the three previous speakers but I would agree with all
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room know, the EPA and Army Corps doesn't know, is actually part of the Port Jeff Harbor complex. We are actually we were in the building where you could look at the harbor and you would be looking	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel. MR. ROEL: I'm not with any organization, myself. I'm a Northport resident and I'm not as qualified as the three previous speakers but I would agree with all of their comments. The only
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room know, the EPA and Army Corps doesn't know, is actually part of the Port Jeff Harbor complex. We are actually we were in the building where you could look at	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel. MR. ROEL: I'm not with any organization, myself. I'm a Northport resident and I'm not as qualified as the three previous speakers but I would agree with all
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	One of them which I'm not terribly familiar with is solidification and using it in construction materials and solidifying it because it immobilizes any contaminants or metals. I wanted to make that comment, and thank you for the opportunity to comment. MS. BROCHI: Thank you. George Hoffman. Please state your organization. MR. HOFFMAN: Good evening, everyone. My name is George Hoffman. I'm with the Setauket Harbor Task Force. I'm here this evening to make a couple of comments. Setauket Harbor as most people in this room know, the EPA and Army Corps doesn't know, is actually part of the Port Jeff Harbor complex. We are actually we were in the building where you could look at the harbor and you would be looking	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	assets we have in our community, and it is frustrating to see the train just continues. I don't know how to square the words tonight with what I read in the draft management plan. Even the draft plan actually has the right words, but then the final recommendations just take a left turn; it's like they ignore their own wording. I would like to say that I think we have to throw it out and we need to start over again. Thank you very much. MS. BROCHI: Thank you. Ray Roel. MR. ROEL: I'm not with any organization, myself. I'm a Northport resident and I'm not as qualified as the three previous speakers but I would agree with all of their comments. The only

1	82	1	84
2	make is that I don't see any type of	2	actions are going to happen on this
3	budget being put forth for this	3	process. Unless there is anyone else
4	specific project, not the whole Army	4	who would like to speak, we will
5	Corps of Engineers or the EPA, but	5	close the public hearing and open it
6	this Long Island Sound DMMP or	6	up for question and answer session.
7	whatever you call it.	7	Is anybody interested who has
8	When looking at the slides I	8	not had an opportunity to speak?
9	saw what was done in the 1800s in	9	Would you like to speak? Thank you
10	terms of the dumping, what was done	10	very much for coming out tonight.
11	in the early 1900s, before 1970, and	11	I'm going to introduce Mel Cote to
12	then what was done post 1970. What I	12	officially close out the hearing.
13	didn't see is a slide aggregating all	13	MR. COTE: Thank you, Jean.
14	of those events.	14	Thank you very much. We really do
15	You said that there are	15	appreciate you taking the time to
16	contamination areas that are decades	16	come out and listen to the
17		17	information and provide your thoughts
18	old that you want to consider capping, you want to cap them with	18	
19	some of this stuff. But I think it's	19	on the project, on the process, and
20		20	your concerns. We will take them
21	unfair to just take a snapshot of	l	into consideration.
22	what you are doing today and say	21 22	We are doing another public
	look, it's the size of a paint can	l	hearing tomorrow in Stamford, and
23	when over the course of a century	23	it's another three weeks until the
24	there has been a tremendous	24	comment period expires. I encourage
25	degradation of the Long Island Sound.	25	you to stay involved. To that I'm
1	83	1	85
1 2	83 That is indisputable. In the	1 2	
2	That is indisputable. In the		going to close the session, the
2	That is indisputable. In the '70s we went away from the Long	2	going to close the session, the public hearing session and we are
2 3 4	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to	2 3	going to close the session, the
2 3 4 5	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even	2 3 4	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session.
2 3 4	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the	2 3 4 5	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until
2 3 4 5 6 7	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's	2 3 4 5 6 7	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask
2 3 4 5 6 7 8	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that,	2 3 4 5 6	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives
2 3 4 5 6 7 8	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi	2 3 4 5 6 7 8	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and
2 3 4 5 6 7 8	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils	2 3 4 5 6 7 8	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies
2 3 4 5 6 7 8 9 10	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the	2 3 4 5 6 7 8 9	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to
2 3 4 5 6 7 8 9 10 11 12	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water.	2 3 4 5 6 7 8 9 10 11	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process.
2 3 4 5 6 7 8 9 10 11 12 13	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land	2 3 4 5 6 7 8 9 10 11 12	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so
2 3 4 5 6 7 8 9 10 11 12 13	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is	2 3 4 5 6 7 8 9 10 11 12 13 14	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the
2 3 4 5 6 7 8 9 10 11 12 13 14 15	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it	2 3 4 5 6 7 8 9 10 11 12 13 14 15	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect,	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of becoming the Connecticut toilet.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of becoming the Connecticut toilet. MS. BROCHI: Thank you.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of becoming the Connecticut toilet. MS. BROCHI: Thank you. Again, please provide written	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of becoming the Connecticut toilet. MS. BROCHI: Thank you. Again, please provide written comments out front. If you did sign	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of becoming the Connecticut toilet. MS. BROCHI: Thank you. Again, please provide written comments out front. If you did sign in and you selected a notification to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of becoming the Connecticut toilet. MS. BROCHI: Thank you. Again, please provide written comments out front. If you did sign in and you selected a notification to be on the e-mail list, we will send	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of becoming the Connecticut toilet. MS. BROCHI: Thank you. Again, please provide written comments out front. If you did sign in and you selected a notification to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	That is indisputable. In the '70s we went away from the Long Island Sound being called an ocean to open water. It isn't really even open water. It's akin to the Mississippi River; it is huge; it's long. It's not exactly like that, but you don't dredge the Mississippi River and then put the spoils upstream or downstream back in the water. What comes out of the land should be put back on land. That is where it came from, that's where it should go. That's all my comments. I think that in terms of the effect, the Long Island Sound is in danger of becoming the Connecticut toilet. MS. BROCHI: Thank you. Again, please provide written comments out front. If you did sign in and you selected a notification to be on the e-mail list, we will send	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	going to close the session, the public hearing session and we are going to open it now to an informal Q and A session. We will stay at least until seven if not longer, and I would ask any of the agency representatives here with the Army Corps and Connecticut EPA the New York agencies if they will chime in. We want to focus on questions about the process. It is an EPA rulemaking process, so we expect the majority of the questions should be on topic. I will be the one trying to facilitate that. (Time noted: 6:35 p.m.)

```
INDEX TO TESTIMONY
 2
 3
                             Page
       Call to order by Jean Brochi
 5
       Hearing Officer Opening Remarks
 6
           Mel Cote
       Long Island Sound Dredged Material
 7
          Management Plan
 8
           Mark Habel
 9
       Dredged Material Testing and Disposal
          Site Management
10
                                  32
           Steve Wolf
11
       Proposed Amendments to the Central
12
          and Western Rule
           Stephen Perkins
                                   55
13
       Hearing Procedures
          Jean Brochi
14
                                 66
15
16
       PUBLIC COMMENT SPEAKERS:
       Adrienne Esposito
17
                                    67
18
       Virginia Capon
                                   76
       George Hoffman
19
       Ry Roel
                                 81
20
21
       Closing Remarks
22
          Mel Cote
                                 84
23
24
25
 1
                                   87
  2
  3
                  CERTIFICATION
  4
               I, SUSAN CRANE, a Notary Public in
 5
        and for the State of New York, do hereby
 6
        certify:
 7
               THAT the foregoing is a true and
 8
        accurate transcript of my stenographic notes.
 9
               IN WITNESS WHEREOF, I have
10
        hereunto set my hand this 11th day of March,
11
        2016.
12
13
14
15
                       SUSAN CRANE
16
17
18
19
20
21
22
23
24
25
```

A	80:24	8:23 9:2
abandon	added	agreement
77:9	6:24 76:21	68:19,20 74:25
able	adding	ahead
44:8 59:4	24:11	24:4
absolute	additional	akin
78:23	7:11 21:16 61:18 81:25	68:10 83:6
accelerated	address	allow
58:13	11:20 12:17,19 56:17 61:9	53:22
accentuated	67:17	allowed
42:23	addressed	7:5 42:6 64:15
accept	23:5 33:24	allows
2:12	addresses	43:17 44:11 46:16 51:8
acceptable	66:2	alternative
15:23	adds	11:2 15:23 20:11 21:10 53:6
accomplish	62:22	57:9 60:4,10,21
64:16	Administration	alternatives
account	63:25	12:10 16:7 17:10 19:20 25:12
72:12	adopt	31:4,25 52:16 59:11,14
accurate	65:7	60:13 61:16,20 62:8,14,15
40:14 87:8	Adrienne	63:12
accurately	67:19,22 76:7 80:11 86:17	ambitious
33:11	advanced	77:20
achieve	78:3	Ambro
74:22 75:8	advent	5:19
achievement	25:15	amended
74:12	Advisory	13:19 65:7
achieves	64:23	amendment
75:5	aft	58:12
acidity	40:21	amendments
73:2	afternoon	1:4 3:7,25 4:24 55:16,21
acknowledging	3:12,14	57:15 58:2,5 59:5,19 60:25
61:17	age	61:22 64:25 65:18 86:11
Act	40:13	amount
5:6,7,8,20 6:25 9:6,7,8 11:11	agencies	13:5,13,17 51:6 52:3 58:23
20:13 22:12 25:17 30:11	5:10,13 9:14 16:5 52:24	analyses
	63:15 64:4,9 85:10	12:14 57:9
35:21,22 58:17	agency	analysis
action	17:15 20:16 85:8	52:2 62:7 71:4,5 75:7
11:2,13 58:21	agenda	announced
actions	53:4	10:4
84:2	aggregating	annual
activities	82:13	12:17,20 50:2,16,19,25
30:11 63:3 73:2	ago	answer
activity	41:8 53:19	33:21 34:9 36:12 37:5 76:9
7:5,8,13,18		84:6
o otra o l	agree	04.0
actual	68.14 81.22	anyhady
26:14 47:3 55:16 56:4 ad	68:14 81:23 agreed	anybody 55:9 67:9 84:7

basis apologize associated 9:21 38:12 50:2 61:19 69:14 11:13 50:16.19.25 76:10 Applause 69:16 71:6 bathroom 76:5 Atlantic 2:8 applications 63:23 bathymetric 19:15 Atmospheric 42:12 applies 63:24 **bathymetry** 42:16 59:15 attention applying 61:8 66:5 77:7 Bay 28:2,9 29:16 6:2 attorney 76:17 appreciate beach 3:22 76:22 84:15 author 18:13 19:10 21:22 23:23 25:4 14:8 55:20 approaches 25:6,6 60:2,17 62:16 authorities beaches 5:4 23:4.13 24:12 31:17 61:4 24:24 25:11 appropriate 58:25 60:17 63:16 64:11 becoming authority 83:19 approve 21:15 23:2 31:9 20:17 began 8:22 9:18 11:6 34:20 35:5,6 approved authorized 18:19 7:24 April availability beginning 7:3 7:7,12 35:16 67:2 10:25 aquatic available begins 23:25 26:10 2:25 54:12 60:11 61:17 32:22 33:4 archives believe average 54:15 77:18 36:17,23 13:13,15 believes aware area 65:2 15:20 34:13,15 35:11 36:7 48:12 benchmarks 50:10,24 В 74:11 areas back 25:10 42:17 43:11 51:24.24 beneficial 4:7 14:12 16:18 20:12 23:11 13:2 16:7 22:23 27:13 31:11 73:12 82:16 26:18 28:24 30:15 33:5 31:13 53:5,24 54:7 62:13 Army 34:10,10 36:8,10,16 40:16 1:18,20 4:13 5:3 13:25 14:7 68:23 69:17,21 70:13,20 41:3,13 43:15,24 44:8 47:6 68:19 70:3 71:3 75:3.17 78:21.25 49:5 51:21.25 66:7 76:24 79:19 80:10 82:4 85:9 beneficially 78:13 83:11,14 asked 29:22 59:24 background 71:3 benefit 4:8 8:19 74:6 28:23 assess bank 72:23 benefits 23:18 68:12 28:12 assets bar benign 81:2 25:5 60:3 78:23 assigned 70:10.15 base 69:20 benthic 15:20,25 20:9 21:3,4,11,23 47:21 51:11 assist 21:24 23:16.17 31:6 60:14 28:11 31:21 63:2 berm based assistance 60:3 38:9 80:24 best 23:2

24:18 64:16 65:23 75:8	break	76:4 82:7 86:4
better	75:20	called
42:25 63:25 70:22	breaks	39:3 52:21 83:4
beyond	18:6	camera
15:25 30:13 31:5	brief	48:21,23
big	76:18	Campaign
44:9 50:10,13 51:9	bring	54:24 67:20.24
bioaccumulate	20:4 48:15 53:15	cap
39:10 74:2	broadly	20:3 29:15 30:20 82:18
biological	63:13	capacity
39:4	Brochi	28:18
bit	1:14 2:2,4 66:7,25 76:6 79:10	Capon
21:2 22:22 32:11 42:24 45:23	81:17 83:20 86:4,14	76:11,13,15 86:18
52:15	broke	capping
black	15:14	19:12 20:5 82:18
49:7	brought	capture
blanketed	48:3	26:23
51:23	brown	car
blind	20:5	68:12
72:6	budget	carbon
blocks	17:4 82:3	73:2
35:10	budgeted	card
blue	32:2	2:14 67:6,13
14:23,25	budgets	care
board	17:4,5	27:12
78:14	build	case
boat	19:23 22:3 29:13	38:10
47:5	building	category
boating	21:22,22 79:23	35:18
46:12	built	cause
Bob	23:22 24:6 26:11 61:22	33:13 72:7
44:5	bumps	CC 67:25
body 26:19 37:4 61:25 71:13 76:2	42:22 bunch	67:25
Boston	42:21 43:25	CDF 27:10
2:4 3:17 29:10,14 55:20	buoy	cell
bothering	43:5	27:11
75:17	buoys	cells
bottom	40:9	19:12 26:10
44:10 45:18 46:2 74:7	burden	center
boundaries	14:23 61:19	32:23
27:24	burrows	centers
bounds	49:12	15:14
30:15		Central
Branch	C	1:4 3:7 4:2,9,25 6:11,15 10:6
1:16 3:16,18	CAD	10:9,18 11:3,19 36:21 42:13
bread	19:12 26:9 27:11	44:13 45:12,18 50:15,25
41:9	call	56:16 86:11

centuries claiming 14:19 15:4.6 29:5 49:5 83:13 28:22 72:3 comfortably century classes 51:9 82:23 coming 18:7 19:10 classification 3:4,21,23 30:7 45:2 84:10 certainly 23:20 38:5 17:22 commencing **CERTIFICATION** classified 7:13 26:4 87:3 comment certify clean 2:12 58:4.22 59:4 76:19 79:8 87:6 5:5 6:8 18:10 20:12 35:20 79:9 81:25 84:24 86:16 challenge 48:3 73:10,10 comments 19:4 clear 3:6,24 10:24 33:16 34:2 chambers 38:5 47:23 58:14,25 65:17,20 67:4,8,14 39:5 68:7,9 70:25 72:12 75:14,14 clearly championing 75:15.18 79:17 81:24 83:16 2:21 34:13 36:24 48:9 54:3,4 28:8 83:22 close chance 9:25 33:5 54:9 66:12,19,19 committee 28:22 32:10 46:5 14:14 64:23 84:5,12 85:2 closed change common 19:15 40:20 33:18 changes closely communicating 59:2 80:16 5:10 37:9 charged closest communities 72:19 25:10 61:11 charts Closing community 35:6 86:21 81:2 chemical coarse compare 72:23 38:18 43:16 chemically Coast compared 47:13 45:10 64:4 13:12 chemicals comparison coastal 74:5 1:15,21 3:19 11:11 19:14 51:15 compelling chemistry 55:14 61:10 64:10 72:19,20 38:23 coastline 73:24 34:23 Chief complete 1:16,17 3:15 cochaired 57:2 chime 52:20 completed 85:11 collect 4:11,16 8:21 12:6 73:7 choice 2:16 47:6 completely 78:24 collection 75:10 9:19 chunk completion 27:2 7:14 12:18,22 57:10,13 65:14 column circles 33:14 44:17 45:2.9 46:3.14 complex 14:20 46:25 47:19 72:25 73:5 79:21 citizen complexity come 76:11 80:24 2:15 19:2 24:14 29:19 30:24 9:21 complied 31:20 48:16 54:22 84:16 citizens 57:17 54:24 67:20,24 80:25 comes

comprehensive consequences control 71:5 74:3 35:14 compromise consider convev 49:23 50:6 10:14 29:4 58:24 69:22 73:20 82:17 consideration computer cooperate 66:3 84:20 42:2 27:25 28:7 31:24 considered concentrations cooperation 74:4 22:5 60:17 9:13 27:16 concern consist cooperative 47:9,15 63:13 64:19 coordinates concerned consistency 34:7 69:19 76:25 77:4 5:15 72:14 73:18 43:6 coordination concerns consistent 11:20 33:8 46:9 56:17 84:19 9:2 11:14 57:22 5:15 conclude construct copper 65:15 66:10 73:14 28:25 condone constructing core 71:22 15:24 20:23 21:25 7:4 22:7 28:20 conduct construction Cornfield 8:23 58:16 62:7 19:13 29:11 31:12 79:5 6:12,18 conducting contact Corps 1:18,20 4:13 5:3,25 6:22 8:13 12:16 54:13 conferences contain 8:16,17,23 9:13 10:4 12:6 37:16 18:22 74:3 13:25 14:7,9 15:19,25 20:15 confident contained 21:5,14,20 23:14 28:10 29:3 47:17 49:25 13:4 15:17 16:16 29:8 31:22 34:6 35:7 37:2 confidently containment 56:9 57:2 62:10 63:2,23 44:12 22:4 68:19 70:4 71:3 75:3,17 confine 77:14 78:13 79:19 80:10 contaminants 19:19 26:13 38:24 61:5 73:25 79:7 82:5 85:9 Corps' confined contaminated 26:8,10,14 18:2.19 22:2 30:19 4:18 16:3 conflict contamination cost 70:10 29:23 82:16 20:9,22 21:9,16,21 22:6,8,9 continual confused 23:3.7.15 28:14 31:10.12 80:2 62:12 60:7 61:18 62:15 69:13,19 Congress continue 69:20 6:24 21:17 22:11 23:4 31:15 13:20 61:3 Costal Congressman continued 58:16 5:18 13:21 costly Connecticut 15:22 continues 10:20 15:5 19:2 27:17,18 80:18 81:4 costs 51:19 58:9 64:7 70:19 continuing 68:24 69:16 71:23 73:23 75:3 83:19 85:10 16:12 Cote connection 1:16 3:10,11,15 66:8 84:11 contractors 4:14 41:19 84:13 86:6,22 consecutive contradictory country 73:8 24:7 7:16

46:6 20:25 counts 49:11 cvcle definitions county 52:10 8:19 21:7 24:23 31:8 degradation D 82:25 couple damage degrades 27:6.14.22 41:8 43:10 54:10 23:21 70:25 79:17 70:7 **DAMOS Department** course 36:7 40:8 63:6 82:23 72:15 danger Court depends 83:18 1:25 17:21,24 darker Cove depth 14:23 22:10 28:5 data describe cover 9:19 13:5 40:25 4:5 50:20 date described covered 7:9 31:15 52:4 63:7 67:2 dates describes crafted 43:22 74:13 57:16 day Crane designate 40:13 87:10 1:24 87:4,15 9:15 days crawling designated 40:8 57:12 58:11,22 49:13 4:2 6:16,20 7:22 9:3 10:8 deadline 11:8 60:24 create 58:18 61:7 designating deal 8:9 11:18 56:16 creating 34:16 26:8 51:16 designation **DEC** creation 4:8 8:2,24 10:18 55:22 68:18 27:20 28:8 60:19 designations decades creations 11:3.25 82:16 24:3 designing deceiving criteria 31:12 39:17 destinations 6:7 8:11,25 December critters 56:19 10:22 39:6 49:4 details decide crowded 64:13 38:15 34:19 determination decision crumbs 72:14 73:19 11:6 17:14,15 77:9 78:19 41:10 determine decision-making cubic 47:8 64:15 10:15 69:2 16:24 17:17 18:5,24 19:21 determined deepening 27:2 29:14,19 30:6,21 32:18 6:7 40:4 60:21 22:7 29:8 30:2 33:2 59:17 71:7 determines defines current 21:18 20:13 45:4 determining definitely currently 38:17 53:8 30:14 detrimental definition currents 78:6,8,9

develop 1:18.20 4:19 14:6 63:22 14:18,22 15:4 16:8,14 17:2 10:4 16:6 27:10 disturbance 17:7.23 18:25 24:16 25:25 developing 46:24 26:25 28:24 29:21 32:19 8:14 26:21 division 33:3 34:8,20 35:12 41:12 development 63:23 42:19 43:8,12 52:9 53:5,14 28:21 59:10 **DMMP** 55:24 56:2,10,10,24 57:2,7 difference 12:18,22 14:8,15 15:9,17 63:17 65:10 69:6 71:8,14 23:15 16:16 24:22 25:11 26:22 86:7,9 different 27:3,14,23 31:5 33:17 34:3 dredging 17:22 23:6,7,8 27:4 73:21 37:25 57:10,13,23 60:11 6:4,5 8:7,13 12:13,15 15:13 direct 65:14 68:14 69:3,13,24 15:16 16:16,18,20 28:3 29:7 38:6 47:24 71:15 74:8,16 82:6 30:22 34:11 38:14 41:19 DMMP's direction 55:18 59:13 60:12 61:24 54:6 14:16 62:6,19 63:9,17 73:21 directly document drift 25:4 45:3 50:20 11:6 68:15 74:8,21 75:7 46:7 director **Documentation** driver 73:22 1:21 55:13 67:20,23 68:12 discharges dog dumping 8:12 75:22 5:8,20 6:25 25:17 30:11 73:2 discharging doing 73:6,13 77:24 82:10 51:19 27:19 51:14 53:23 78:24 duration dismal 82:21 84:21 50:5 69:25 DOS dying 72:19 69:12 disposal double 1:5 3:8 4:4,10,21 6:9,20 7:4,8 \mathbf{E} 7:13,17,23 8:8,9,11,16,20 36:23 e-mail 9:4,10,16,24 10:19 11:2,19 download 65:25 66:2 67:17 83:24,25 12:4,10,25 13:8,22 16:9,14 37:14 earlier 21:25 26:8,11,15 30:12,15 downstream 6:17 21:3 30:17 56:8,14 83:11 32:7 36:7 41:12 46:22 early draft 55:25 56:10,17,24 57:20 34:18 40:8 43:24 82:11 10:17,24 40:20 45:16 81:7,8 59:8,12 62:3,8 63:4 65:9 easily 68:21 70:12 71:14 74:9,17 drag 36:23 75:17 74:23 86:9 Eastern disposed dragging 6:13 10:7 6:9 13:6,14 59:22 34:12 echo disposing draw 59:20 69:14 70:11 71:7 37:4 ecosystem disposition drawing 23:25 12:23 78:14 effect dissolved drawn 39:8 83:17 72:24 36:14 effective distance dredge 7:9 45:20 52:22 83:9 effort distributed dredged 47:16 8:25 1:5 3:8 4:3.16 6:6 8:8.20 9:4 efforts district 9:9,16 12:4,6,23 13:6 14:2

69:11 5:14 8:3 62:5 5:21 71:13 eight entire evaluate 62:24 9:17 12:8 41:11 57:4 9:9,15 59:14 60:9 73:20 EIS environment evaluated 54:25 67:21,25 70:23 78:8,10 9:9,14 10:5,17,23 11:5 6:19 either environmental evening 1:17,19 5:13,17 6:21 9:7 24:9 2:14 22:24 25:4 65:25 2:2 79:13,16 28:12,23 49:22 64:9 76:17 elected event 77:2 80:23 51:23 52:7 **electronics** environmentally events 40:14 8:4 15:22 51:14 53:3 82:14 83:25 environmentally-acceptable elevated everybody 73:15 20:10.19 53:22 elevation EP evolve 24:3 4:23 64:16 elevations **EPA** exactly 19:24 1:15,16,22 2:4 3:2,6,10,16 42:2 48:18 83:8 eliminate 4:24 5:2,25 6:17 7:22,25 examined 8:19,22,25 10:16,23 11:6,17 12:4 56:23 62:2 65:8,12 15:9 eliminating 12:16,20 36:25 39:13 52:20 example 12:9 57:19 59:7 53:20 55:14 56:8,15 57:11 13:3 28:16 emphatically 57:13,24 58:4,11,19,20,23 examples 38:9 59:3 61:17 63:2,19 64:2,6 27:22 64:12,18 65:3,5,11 68:7,18 exchange empty 53:10 54:2 55:3 62:17 36:16 48:5 70:5,5,25 71:16,19 72:3,10 encourage 72:22 73:19 75:2,20 77:14 Executive 59:9 64:2 84:24 78:13 79:19 82:5 85:10,13 67:19.23 EPA's exercise encourages 4:6 8:6 9:5 38:10 55:19 56:12 61:3 64:18 encouraging equal exercised 62:11 80:6 11:10 enforcement equipment exist 66:13 11:15 29:25 engaged existing era 32:21 34:25 36:3 61:4.8 Engineers **Especially** expect 1:18,20 4:14 5:3 13:25 14:7 37:6 22:20 49:15 61:2 70:4,5 20:15 21:5,15 34:6 82:5 **Esposito** 74:18,21 85:14 **Engineers'** 67:19.22.23 86:17 expected 35:7 establish 62:25 70:3 England 20:17 expecting 1:18,20 4:19 14:6 26:12 63:19 established 34:22 52:21.25 62:18 63:22 7:2 57:6 expects enhance establishing 64:6 12:11 59:8 expedition 5:13 enhancing estate 11:12 23:10 expeditiously 61:25 10:13 ensure estuary

expertise federal 18:3.24 19:21 22:2 26:24 63:16 5:4.10 6:3 9:14 11:10.13 27:20 38:19 46:16 47:11 expires 12:14 14:23 15:7,11,20,21 60:8,16,22 69:4 84:24 16:21 17:4 20:9,11,14,16 first 21:4,12 23:2 31:5 52:23 3:9 7:2,8,12,14 10:6 44:19 explain 4:24 58:3 59:15 60:14 63:14.20 57:24 65:2 68:3 80:3 exploration 64:3 77:21 fish 62:13 feed 5:12 46:12,13,14 64:5 73:16 extend 25:6 Fishermen 59:4 feel 5:11 extended 47:17 52:8 fishing 7:21 46:19 feeling 68:5 five eve 72:6 feet 7:16,17,18 10:2 30:5 22:15,17,19 29:17 45:7,14,16 five-year F 45:16,19,23 69:7 7:7,12,14 facade felt flap 75:23 39:19 10:11 facilitate field flat 85:16 9:18 20:5 43:10,11 50:12 42:20 facilities 51:4 52:2 flood 21:25 26:9,15,17 77:17 figure 18:14 facility 78:17 floor 22:4 27:11 fill 33:15 42:10,17 43:19 44:15 factor 49:9 2:14 19:13 23:23 28:19 30:6 68:25 69:19 48:4,5,15 67:6,12 flow failure filled 61:5 70:2 28:20 focus fair 43:4 54:3 56:11 78:21 85:12 final 51:6 10:23 11:18 14:9 56:15 58:21 focused fairly 65:7 71:15 81:9 43:13 53:8 54:4 56:4 77:15 39:22 46:13 48:11 49:7 finalize focuses fall 57:14 58:18 66:4 61:8 37:8 45:21,25 53:11 55:2 finally folks falling 61:13 64:18 75:21 37:10 50:7 54:14 67:3 76:7 32:24 44:25,25,25 financial follow falls 21:9 9:5 47:25 financially-responsible followed familiar 20:21 10:7 79:3 financials following far 16:4 4:17,22 8:24 39:20 74:2 find foot fashion 18:21 19:5 72:2,10 45:8 69:15 70:12 78:15 finders football feat 46:12,15 43:10,11 50:11 51:4,25 64:14 finding footprint February 47:25 18:12 9:25 57:24 fine force

78:20 79:16 60:6 45:22 46:9 47:5 48:19 further fore 51:25 55:5 66:19.23 69:6 40:21 16:6 70:9 75:12 78:13 83:16 foregoing future goal 12:8 57:18 59:6 62:2 87:7 57:18 60:19 forgot goals G 66:9 74:12 game formal goes 42:5 74:22 8:23 20:12 22:9 38:22 42:8 gather **formalized** going 76:20 35:5 2:17,20 4:5,7,19 8:18 10:3 general 13:20,23 14:11 17:13 25:18 formally 11:22 37:17 76:9 11:7 27:5 29:10.19 30:4.23 31:2 generally formation 33:8,12,13,24 38:13 40:5 22:14 55:5 12:12 42:11 45:25 46:2 47:10 generated formed 48:2,9,10 53:22 54:16 55:15 26:2 36:11 43:23 66:6,12,17 68:6 72:17 76:20 generation forth 77:19,25 78:17 84:2,11 85:2 29:20 30:25 82:3 85:4 gentleman forum good 34:3 62:12 2:2 3:12,13 13:18 37:3,9 77:5 gently forward 79:13 42:20 27:5 29:4 31:2 33:24 government genuine fossil 21:12 61:3 63:15 77:21 75:24 78:7 GPS geographic fostering 40:16 63:8 70:7 grain George found 18:3,24 19:21 22:3 26:25 79:11,14 86:19 19:3 27:21 38:18,19 60:8,16,23 getaway four grass 68:11 48:8 6:10 13:7 29:12 30:13,21 give frame greater 4:20 14:11 32:4,10 33:23 59:3 67:18 75:9 59:17 46:5 55:10 66:17 68:7 frankly ground given 68:8 69:21 73:14 16:5 FREE group gives 1:7 52:20 62:17 80:23 38:20 40:17 41:21 49:14 front groups 51:15 58:18 78:20 2:18 52:12 67:14 83:22 giving frustrating Guard 68:11 80:14,22 81:3 64:5 Gloria fuels guess 44:7 78:7 33:8 80:2 fully Н 2:5 17:20 18:20 23:11 24:9 45:15 25:14 26:18 27:7 34:10.10 Habel funded 1:17 4:13 13:24 14:4,5 86:8 35:15 36:2,15 37:15 39:11 17:13 39:14,15 43:15,23 44:8 half funding

25:24 66:22 76:8	40:23 73:3	32:21
hand	held	hypocritical
71:18,22 72:3,5 87:10	10:19	72:2
hands	help	
67:9	21:9 23:14 24:18 36:12 53:14	I
happen	hereunto	idea
84:2	87:10	24:15 38:20 49:14 51:16
happens	high	ideas
55:9	44:10 59:25	31:20 62:17
happy	higher	identification
66:24	73:14	59:10
harbor	highly	identified
17:9,11 22:10 24:17 27:8,9,9	17:5	25:8 60:5
28:5 29:10,15 35:3 79:15,18	Hill	identify
79:21,24,25	28:5	15:19 17:10,19 20:22 24:18
harbors	hired	30:18
15:10 17:12 25:9 34:19,21,24	41:20	identifying
hard	historic	12:10
74:16	30:10	ignore
haul	history	81:11
41:23	55:24	image
Haven	Hoffman	35:9 42:12 44:20 47:4 51:18
27:9 28:17,19 30:2,8 41:7	79:11,13,14 86:19	imagery
hazardous	hold	49:8
73:4	2:15	immobilizes
headaches	home	79:6
53:25	76:4	impact
headed	honest	6:21 11:23 47:21 48:12 49:19
54:6	74:15	50:2,14,24 51:17 63:5
health	hope	impacted
16:15	13:19 71:16 75:20 76:7	48:2,10
healthier	hot	impacting
53:15	68:11	50:16
healthy	hour	impacts
49:8	66:17,22 76:8	16:14 39:21 51:11 73:20
hear	huge	implement
32:9	83:7	14:16 31:3,4
heard	hull	implemented
55:23 56:14 59:20 60:15 69:4	40:18,19	21:5,14 68:17
70:16 73:9	human	importance
hearing	52:6	62:11
1:3 3:5,22 34:3 54:16 56:6	humans	important
58:6,8 66:11,12 68:4 70:17	39:21	10:12 13:11 64:24
70:17,18,18 75:13 84:5,12	hundred	improvement
84:22 85:3 86:5,13	22:25 45:7	22:5
hearings	hurricane	incentive
10:20 37:7	23:21 44:3,4,5,7 51:20	70:13
heavy	hydraulics	include
	<u> </u>	<u> </u>

introduce 5:18 8:8 12:6 63:5,10,20 32:3 84:11 included iob 56:25 59:19 invested 37:9 56:3 80:25 47:16 including joining 12:25 44:2 investigation 2:3 incorporate 36:15 jointly invitation 5:3 8:17 71:4 54:22 incorporated July 75:16.19 involve 4:11 8:21 **INDEX** 16:3 June 86:2 involved 9:11 11:17 56:14 72:13 33:21 44:19 76:23 84:25 indicating K 39:23 41:6 involving keep indisputable 27:16 24:4 83:2 Irene kick individual 44:4 51:21 2:6 13:7 23:12 24:13 27:5 Island kind 1:4 4:3,9 5:19,21 6:10,12,16 individually 13:3 49:3 9:17,24 10:6 11:23 12:5,12 15:12 know industry 13:7 14:2,19 15:10,14 22:19 5:2 17:3 18:17 40:6,21 46:12 29:15 23:23 26:2,17 27:18 30:23 51:13 52:14 54:19,21 66:22 informal 35:9 39:7 42:13 45:13 50:9 68:18 69:5,21 70:22 73:12 53:12 57:7 61:23 63:9,10 66:15.20 85:4 75:16 76:19 77:11 78:5,7,18 information 64:8,20,22 69:11 70:6,8 79:19,20 81:5 13:4 26:19,23 37:4 41:2 71:9,20 72:4 82:6,25 83:4 known 83:18 86:7 53:10 54:3,13 84:17 5:8 6:11 63:25 informational isolate 55:3 26:13 L inhabiting issue lab 49:5 33:13 68:2,4 77:22 38:22 47:8 inherent issued land 70:10 10:17 19:24 24:5 83:13,14 insects item landfill 48:8.16 53:4 20:5 instrumentation items large 46:15 16:12 19:8 9:21 12:14 16:23 26:19,25 intended 29:7 31:17 51:24 59:13 J 12:3 56:23 59:6 63:3 62:6 January intent late 14:10,13 9:12 10:4 10:21 34:11 80:5 Jean interagency latest 1:14 2:4 3:11.12 66:7 84:13 12:11 14:14 57:6 61:23 71:11 86:4,14 interested law **Jeff** 55:10 67:10 84:7 5:24 15:18 22:10 79:21 interface lawn **Jefferson** 48:24 48:5 1:7,7 76:16 interstate laws Jerome 14:13 27:16

21:2 22:22 28:2,9 32:11 21:19 23:12 39:17 41:5 48:23 34:19 42:18.24 45:23 51:5 lead lost 77:21,22 77:19 80:5 47:19 lot learn load 3:23 40:23 48:3 51:22 17:20 27:3 33:20 34:23 35:13 learned loaded 37:25 43:20 47:16 48:21 77:12 49:24 53:16 55:23 78:15 40:22 45:15 leave loading love 67:16 71:6,12,16,23 72:8 76:4 lobsters lower left 2:23 41:16 64:14 81:10 73:15 13:11 legislation local lunch 36:9 17:4 21:8 23:9 68:11 letter location \mathbf{M} 74:25 32:21 41:10 maintain locations level 20:17 64:19 19:15,25 24:4 53:18 26:7 maintenance logger levels 15:7 40:25 38:24 61:2 73:14,15 74:7 majority **LIBRARY** logistics 15:3,5 85:14 1:7 2:6 making lid London 61:22 51:2 6:13,18 27:10 manage lifelong long 4:21 25:2 76:15 1:4 4:3,9 5:19,21 6:10,12,15 management light 7:22,25 8:9 9:17,24 10:6 4:16 8:15 11:11 12:7 14:3 40:24 77:12 11:23 12:5,12 13:7 14:2,19 16:12 56:2,11 57:3,8 58:17 light-colored 15:10,14 22:19 23:23 26:2 63:18 64:10 81:7 86:7,10 35:10 26:17 30:23 35:9 39:7 Manager lighter 42:13 45:7,12,14 50:8 52:10 1:14 14:24 53:16 57:7 60:3 61:23 63:2 managing liken 63:9,10 64:20,22 69:11 70:6 52:11 48:2 70:8 71:9,20 72:4 82:6,25 mandated limit 83:3,8,18 86:7 68:20,24 7:3 77:16 longer manner limited 34:8 36:4 37:2 85:7 20:20,21 22:7 7:24 48:11,12 50:5 51:10 look map line 16:2 17:9,16 27:6 31:18 14:21 42:12,15 43:15 32:23 50:17,18 74:7 32:15 34:22 39:22 41:4 March lip 43:20 45:11 48:19 49:6,9 1:6 9:23 58:7 65:22 67:18 80:19 55:11 63:11 78:2 79:23 87:10 82:22 list Marine 60:13 83:24 looked 5:6 35:21 16:19 19:9 24:22 26:7 listen Mark 84:16 looking 1:17 4:17 13:24 14:5 32:8 listened 29:9,13 30:4 41:25 46:18 33:17 37:23 38:19 52:17 49:8 79:24 82:8 80:3 57:5 86:8 little looks

	1	1
marker	80:16	mission
40:9	meetings	20:16
marsh	80:13	Mississippi
21:22 24:3,3 27:20 28:8,18	meets	83:7,9
28:25 39:19 53:14 60:19	6:6	mistaken
marshes	Mel	77:11
19:23 28:20 53:17	1:16 3:9,15 14:4,5 37:23	moments
Massachusetts	38:11 52:17,19 54:5 84:11	65:19
29:16	86:6,22	money
match	member	71:24
22:16,18	55:18	monitor
material	mention	4:21 32:6 63:4
1:5 3:8 4:3,16 6:6 8:8,20 9:4	52:17 66:9 71:15	monitoring
9:9,16 12:5,7,24 13:6 14:3	mentioned	8:3,15,16 16:13 33:20 36:8
14:19,22 15:4,6 16:8,14	3:14 6:17 33:17 37:23 38:11	52:11 56:3
17:20,23,25 18:2,3,7,17,25	mentioning	mound
19:17,22 22:2,3 23:20 24:10	38:19	44:9
24:11,16,22 25:13,18,25	metals	mounds
26:25 27:21 28:24 29:22	73:3 79:7	43:23
30:7,9,22 32:19,24 33:3,12	mic	move
34:8,20 35:12,14,25 36:2	32:10	32:11 36:3 44:16
38:7,15,22,25 39:15 40:12	microphone	moved
41:12,16 42:8,19 43:8,12,18	2:19	35:4
44:14,18,24 45:21,25 46:21	middle	moving
47:18,23,25 48:20 50:19	18:23 19:22	29:4 40:3
51:7 52:4,9,12 53:14 55:24	mile	mucked
56:2,10,24 57:3 59:21,23	41:23	39:18
60:8,16 63:17 65:10 86:7,9	miles	mud
materials	50:10	39:19 49:7
13:13 19:12 26:13 30:20	million	multisite
39:10 47:2 53:5 59:25	16:24 17:17 18:5,8,9,16,24	9:22
60:23 63:4 69:6 71:8,14	19:21 27:2 29:14,18 30:6,21	municipal
73:4 79:5	71:7	24:24 31:8
math	mind	municipality
45:5,24 46:8	34:6,14 35:2,17 36:5 37:3	21:8
matter	44:21	Mystic
80:17	minimal	28:4
means	50:3	N
7:15 20:22	MINUTES	
meant	1:10	name
57:22	miracles	2:3,21,22 3:14 14:5 76:11
measurable	74:18	79:14
52:3	mirror	Narragansett 28:2,9
meet	80:11	1
10:12 53:2	misinformation	nasty 39:22
meeting	38:4	nation's
2:7,11,16,24 3:3 10:12 53:10	mispronounce	20:18
53:20 57:25 67:3 78:21	76:10	20.10
	l	l

National	Norwalk	offer
5:11 9:7 63:24	27:9	54:21 70:24
natural	Notary	offered
30:7 51:22 52:10	87:4	54:23 75:14
naturally	note	office
74:6	52:18	55:19
navigation	noted	Officer
1:17 14:24 15:7	85:17	86:5
Navy	notes	offices
64:4	87:8	63:21
near	notice	officially
19:11 20:2 23:23 25:5 27:23	9:12	84:12
60:2,18	notification	officials
need	83:23	77:2
2:8 18:21 27:6 77:23 81:15	nourishment	offshore
needed	18:13 60:2,3,18	39:3,14 40:6
23:10 60:6	number	old
needs	13:10 15:17 16:11,23 17:18	29:15 68:5 82:17
16:20 25:2 28:3 50:20	19:8 23:22 24:5 31:17	older
NEPA	numbered	19:12 44:22
9:8	43:2	once
never	numbers	10:7 30:24 42:8
17:12	43:21	one-by-two-mile
new		42:14
1:7,18,20 4:18 6:13,18,24	O	ones
10:20 11:9,21 14:6 26:12	object	72:16
27:9,9,17,19 28:16,19 30:2	11:12	ongoing
30:8 34:22 41:7 52:21,25	objection	8:2
56:18 61:7 62:18,22 63:21	72:13 73:18	open
63:22 64:7 70:19 71:19	objectionable	12:9,25 16:9 18:11,20 19:4,6
72:15,18,20 75:3,6 80:23	68:10	20:2 25:19 26:5 32:14,22
85:10 87:5	obligations	40:20 52:16 54:7 57:19
nicer	57:25 61:7	59:7,12 62:3,8 66:14 67:17
55:7	obvious	68:21 69:15 70:12 71:13
nine	15:3	74:9,17,23 77:23 78:9 83:5
13:9,15	obviously	83:6 84:5 85:4
nitrogen	77:11	opening
71:6,12,15,19,23 72:5,7	occasionally	37:24 52:19 86:5
NOAA	29:6	operators
63:25	occurring	40:10 41:22
non-federal	74:6	opportunities
15:13 16:22 21:6 31:7 60:7	ocean	29:24 63:12
nor'easters	1:14,21 3:19 5:8,20 6:8,25	opportunity
44:2	25:17 55:14 83:4	29:18,21 31:16 65:17,20 67:5
North	Oceanic	79:9 84:8
63:23	63:24	opposition
Northport	October	11:10
81:21	7:10	optimistic
		_

80:6 80:4 permitting options participate 8:12 9:10 24:19 64:8 perpetuates 74:9 oral participation 65:20 64:3 80:15,20 pesticides order particles 74:5 27:24 86:4 46:17 47:10 petition 65:5 organization particular 79:12 81:20 43:3,13 72:16 **PHAs** organizations particularly 74:4 64:21 29:25 phased outcome partnership 68:21 74:19 77:5 75:24 physical outreach parts 38:17 64:25 79:25 37:17 physically outside party 38:21 34:14,21,23 65:5 picture 46:23 51:9 62:20 overall passage 14:22 pieces 35:20 overview passed 36:9 54:10 pilot 4:20 33:23 21:19 35:23 27:15 53:13 overwhelming passing 68:25 5:20 place patience 33:10 35:25 40:7,11 44:18 oxygen 72:24 66:6 47:23 53:13 Pawcatuck placed oxygenated 49:6 28:3 35:12 38:7 39:5 43:8 48:7.21 60:23 P 21:12,21 22:24 23:3 28:13 placement p.m 77:7 19:4,10,11 23:24 24:4 25:3,8 85:17 **PCBs** 26:5 32:13 34:4 42:19 43:3 Page 73:16 74:5 43:14 47:3 50:3,14 52:16 86:3 people 53:7 54:7 pains 36:13 66:22 67:7 77:3 79:18 places 69:22 17:19 28:5 66:22 percent paint 13:16 21:21 22:16,18,25 23:3 placing 46:23 51:2 82:22 25:24 28:14 75:8 52:8 pales perfect plan 51:14 44:2 4:17 12:7 14:3 15:20,25 20:9 paper period 21:3,3,4,11,23,24 23:16,17 77:13 7:7.12.15 16:19 17:8 46:4 31:6 53:16 56:2 57:3 60:14 parameters 48:14 49:16 59:4 84:24 70:7 71:20 74:22 81:7,8 72:23 **Perkins** 86:7 parent 1:21 4:23 55:13,17,18 86:12 plans 30:7,22 8:15 21:13 permanent part 61:24 please 36:24,25 49:19 52:9 79:20 permits 67:6.12 79:11 83:21 partial 8:14 plus

7:17 32:18 33:2 50:9	14:12 32:5 62:21 65:16 80:4	progress
point	presentations	12:17,22 13:19,21
11:9 13:11 28:17 41:15 54:3	56:8	project
73:17	presented	1:14 9:22 15:21,24 22:7
policies	53:20 54:5 57:5	24:17 28:8,19 29:7 30:2,22
11:15 55:14	presenter	38:14 41:8 43:2 59:13 82:4
policy	53:11	84:18
1:22 9:5,7 68:17	press	projected
political	37:25	25:25
17:14	pretty	projection
pollutants	47:12	25:23
73:3	previous	projections
pollution	81:22	16:17
61:10	primary	projects
	55:20	6:4,5 8:13 12:15,24 14:24
pony 75:22	principal	15:8,11 17:7 20:24 22:15,16
	principal 14:8	22:19 23:19,22,24 24:2 27:5
port 1:7,7 33:5 64:11 76:16 79:20	private	27:15,20 57:8 59:16,16 62:6
portion 1.7,7 33.3 04.11 70.10 79.20	6:4 12:15 59:16	62:10 73:21
36:17 66:11		
	proactive 62:21	promoting 62:14 70:20,21
ports 34:18		*
	probably 5:2 52:2 66:21	promulgating 8:10
post 82:12		
	procedures	proper 5:14
potential	25:16,21 57:16,21 59:9 61:21	
9:24 11:22 25:12 27:15	65:7 86:13	proponents
potentially	proceed 24:20	60:9
9:15 25:9 27:19 28:10 30:5	PROCEEDINGS	proposal
practicable	1:10	58:15,21 59:2 61:6
59:11,24 60:4,10,20,22 61:15 62:4		proposals 59:13
	process	
practice	3:24 8:22,24 10:15 11:7	propose
65:9 78:6	32:25 33:6 35:24 58:13	57:14
practices	64:13 69:2,25 71:2 75:11	proposed
9:3	84:3,18 85:12,13	1:4 3:25 4:24 26:21 55:16,21
pre-Ocean	produce	58:2,5,12 59:5,19 60:5,25
30:10	25:10 43:15	61:13,21 64:25 65:11,18
precise	produced	86:11
41:15	37:12 72:14	proposes
predict	producing	64:12
17:12	71:19	proposing
prepare	program 5.14.11.16.22.10.26.6.9.11	39:2
9:12	5:14 11:16 33:19 36:6,8,11	protect
prepared	40:8 53:13 54:20 63:6	71:24 72:4 76:2,3 80:25
6:22 9:8	programmatic	protecting
present	6:21	70:6
73:6	programs	protection
presentation	3:20 5:9 61:9 64:10	1:15 3:19 5:6 18:14,14 23:19
	I	

35:21 72:20	11:24	reading
protective	quantitative	77:13
71:21	49:10	real
		23:10 41:4 46:23 66:8 75:24
provide	quarter 41:22	
3:24 4:8 8:18 23:9 58:13,22		realistic
62:12 65:17,20,21 67:4,13	quarterly	45:11
83:21 84:17	53:2	reality
provided	question	42:25
5:5 58:11 68:16 71:10 72:12	52:14 76:9 84:6	really
provides	questions	3:22 19:17 36:5,11 43:9
7:11 65:5	33:7,16 36:12 37:5,22 42:9	45:25 46:7 47:18 52:9 77:7
providing	54:14,17 85:12,15	77:15,18,22 78:2,6,12,22
68:9	quick	80:2,14,22 83:5 84:14
provision	32:25 33:6,23 66:8	realm
6:25 7:5,9	quickly	16:10
public	46:2 47:12 50:4 51:12	reception
1:3 2:12 3:5,21 10:12,19	quiet	67:15
11:22 12:21 23:12 24:24	77:6	recommendations
31:7 56:5 58:6,8,14,22	quite	15:18 16:4 27:14 57:23 59:21
66:10,18 75:18,25 80:15,20	16:23 52:14	62:9 80:9,17 81:10
84:5,21 85:3 86:16 87:4	quote	recommended
publish	71:11	10:17,25 16:11
58:11		recommends
published	R	31:23
9:11 11:18 12:20 14:9 56:15	radar	record
publishing	54:8	35:11 40:17 41:5 65:21 76:21
58:2	raise	recorded
purpose	19:24	47:4
62:5	raised	recording
purposes	11:20 56:18 73:17	2:24
64:17	raises	records
pursuant	33:7	35:8,8
6:20	raising	recover
pushing	36:13	49:15 50:21
34:12	ramp	recovers
put	78:18	50:4 51:12 52:6
17:24 20:2 28:6 33:11 39:2	range	recovery
40:9 43:5,5 48:4 82:3 83:10	53:3	48:17 55:8 69:10
83:14	rapid	Recreation
putting	69:10	9:6
18:10 19:6	rarely	rectangle
18.10 19.0	29:5	42:15
	Ray	
0		rectify
Q	I 81·17	
qualified	81:17	71:17
qualified 81:22	reaching	reduce
qualified 81:22 qualify	reaching 74:2	reduce 12:3 56:23 61:4 62:2 65:8
qualified 81:22	reaching	reduce

72:25 remain 52:6 69:12 8:4 Resources reducing 12:9 13:21 57:19 59:7 77:24 remarks 1:18,19 22:12 37:24 52:19 76:20 86:5,21 reduction respect 13:16 23:21 74:23 75:9 remediation 4:6 reference 20:6 response 54:10 remedy 10:24 19:25 58:24 29:22 30:10 refined responsibilities 25:22 reminding 62:23 65:16 responsibility region 1:15,16,22 3:16 4:23 6:14 8:7 56:9,12 remnants 9:17 10:13 12:8 15:15 26:3 34:24 restoration 55:15 63:21 removed 24:2 60:20 39:20 regional restore 12:13 15:13 52:22 55:19 57:7 24:9 removing 61:24 62:18 24:10 restriction regions replaced 61:14 65:4 10:10 68:22 restrictions 1:4 12:2,3 56:20,22 65:12 register report 58:4 2:25 12:20 13:4 37:12 resulted 77:9 regulate Reporter 1:25 5:4 retain 61:14 regulation reports 11:8 15:18 36:18 37:15 54:12,18 retained regulations 65:3 represent 14:21 8:10 14:16 reuse representative 68:23 69:17,21 70:14,21 regulatory 5:16 54:24 78:22,25 reiterate representatives review 39:14 52:24 63:14,20 85:8 12:13,17 57:8 58:16 relate reauire reviewing 43:21 22:16,17,24 23:20 59:12 8:13 related required Rhode 8:7 33:18 37:25 31:3 57:14 27:18 53:12 64:7 requirement relation right 42:3 12:19 2:10 13:12,23 29:9 32:9 40:7 relationships requirements 46:21 47:6,7 67:7 80:8 81:8 64:20 5:16,24 8:3 23:8,8 25:21 rigorous 35:24 38:12 relative 56:25 50:14 51:3 requires rise 22:6,8 31:6 61:15 19:25 24:5 relatively 32:25 42:20 50:18,23 80:23 Research rising 53:18 release 5:7 35:22 44:17 resident river 76:12,16 81:21 released 28:4,4 51:19 73:23,25 83:7 10:23 40:23 41:13 46:20 73:5 resiliency 83:10 19:14 robbers relevant resilient 64:11 73:24 68:13

68:13	82:9	67:7 81:3 82:2,13
Roel	saying	seeking
81:18,19 86:20	73:9	58:4
role	scale	seen
4:6,15 61:25 62:21	9:22 29:7 45:12 51:13	14:17 56:7
rolled	scaled	selected
34:17	14:21 50:10	6:19 7:4,23 83:23
room	scaling	selection
79:18	50:8	8:12
roughly	scheduled	selective
53:2	9:25 10:11	7:6
rule	science	send
11:18 13:20 38:10 55:22 56:4	64:22 71:11	47:7 51:6 65:23,24 83:24
	scientist	· ·
56:15 58:3,10,18 65:4,13 66:4 86:12	49:22	sense
		32:12 33:23
rulemaking	scope	sensor
3:6,7 4:2 11:7 38:2 57:11	63:8	40:16
68:8,16 69:25 71:2 72:11	scow	sensors
85:13	32:20,20,22 33:4 40:15,18,22	40:15,19,21
rules	41:11,16,24 42:3 44:23	separately
23:6 57:15 65:7	45:13,20 46:20	23:5
run	screen	September
46:21	42:2 65:24 67:17	10:16,21
Ry	sea	serve
86:20	19:14,25 24:4 33:15 42:10,17	10:9
	43:19 44:14 49:9 53:18	service
safer	Second	5:11,12 64:5 80:19
70:22	73:17	serving
safest	seconds	6:13
9:5	33:2 41:17	session
salt	Section	66:15 76:9 84:6 85:2,3,5
39:19	1:18,19 5:5 24:8 56:13	set
	sectors	40:15 87:10
samples 48:22	11:21	Setauket
	secured	79:15,17,25
sampling 25:16 32:5 39:5	60:6	settle
25:10 52:5 59:5 Sanctuaries	sediment	47:11,12
	6:3 17:21 25:16 34:12 39:20	seven
5:7	40:4 48:22,24,25 51:22 61:5	85:7
Sanctuary	69:14 70:11	sewers
35:22	sediments	78:9
sand	73:22 74:3	share
18:10,11 19:11 25:3,11	see	14:21 21:9,16 23:15 31:10
sandy	13:12,20 15:2 18:7 32:23	56:9
17:25 24:22 28:17 44:3 59:23	34:20,24 35:5,23 38:23 39:6	sharing
satisfied	39:7,20,25 41:9,15,17 42:2	22:6,8,9 23:7 60:7 62:15
65:6	42:17,21 43:9,18 46:13,16	Shoals
saw	48:13,24 49:3 51:21 53:23	6:12,18

shoot 11:8,19 13:8 15:16 18:20 1:5 4:3,10 5:21 6:11,16 40:11 20:3,3 25:9 26:11,20 27:8 9:17,24 10:6,7 11:23	
	12:5
shore 30:13 32:7,14 35:5 36:19 12:12 13:8 14:2,19 15	5:4.11
19:11 20:2 23:24 25:5 41:3 39:16 40:6 43:2 44:12 45:9 15:15 16:13,15,21 18	
60:2,18 47:17 48:20 49:15 50:3,15 19:13 22:20 24:25 25	
short 55:9,25 56:17 59:22 60:12 26:2,17 27:21 29:25 3	
7:23 32:4 45:20 46:4 48:13 60:24 77:10 30:13,23 35:9 38:8 39	
49:16 42:13 45:13 50:9,15 5	
shout 45:15 42:13 43:13 30:3,13 50:3,1	
55:10 situation 51:20 52:3 53:25 50: 57:4,7 61:12,23 63:5,	
show 17:3 78:11 57:4,7 61:12,23 63:3,9 64:22 65:10 69:11 70	
	23
, , , , , , , , , , , , , , , , , ,	
35:6 62:19 six Sound-based	
shown 25:24 62:24 64:21	
24:12 size Soundwide	
shows 43:11 50:11 51:2,3 82:22 9:18	
54:5 71:11 slide Soundwise	
shut 14:17 82:13 49:20	
slides sources	
sight 82:8 16:21,22	
34:5,13 35:2,17 36:5 37:3 slightly speak	
sign 23:7 2:11,13,20 67:4 84:4,8	,9
83:22 sloping speaker	
signed 42:21 2:14 3:9 67:6	
68:19 75:2 slowed speakers	
significant 9:20 81:23 86:16	
28:18 49:20 51:11,17,24 small speaking	
71:12 72:7 74:22 23:18 46:13 2:19 67:10	
significantly smaller specific	
46:7 37:21 64:12 82:4	
Similar smothered specifically	
29:24 48:11 21:20 39:25	
simply snapshot spell	
74:8 82:20 2:21	
sir socially spend	
67:12 78:4 49:24	
sit solidification spirit	
44:10 79:4 74:24	
site solidifying split	
6:12 7:20,21,25 8:11,14,24 79:6 58:20	
11:2,12,25 29:16 41:12 somewhat spoils	
42:13 45:18 46:22 51:7 35:18 83:10	
55:21 86:10 sorry spoke	
sites 69:23 70:9 24:21	
1:5 3:9 4:4,10,21,25 6:10,16 sort sponsor	
6:19,20 7:4,6,23 8:4,9,16,17 42:20 43:10 44:20 45:11 21:6 22:24 23:9 31:7	
8:20 9:4,16,25 10:8,19 11:4 sound sponsors	

24:13	76:8 84:25 85:6	study
spot	stayed	16:6 30:3 64:22
46:19 47:6	22:13	stuff
	steering	82:19
spots 48:6	14:14	subject
	stenographer	5:22 8:2 12:2
sprout 48:16	66:13	
	stenographic	subjected 56:20
square 50:9 80:9 81:5	87:8	submit
stable		67:16
42:10 43:18 44:14	step 4:7 57:24	subsidence
stages	Stephen	24:5
10:5	1:21 4:22 55:13,17 86:12	succeeded
stakeholders	stern	5:19
75:25	40:17	successful
Stamford	Steve	42:7
27:8 84:22	1:19 4:17,22 32:3 62:19 63:7	sufficient
standard	66:9 86:10	28:12
20:14 53:4	stick	sufficiently
standards	54:17 66:21	78:4
5:17 57:16,21 59:8,18 61:14	Stonington	suggestions
start	28:4	27:4 29:2
30:4 33:25 78:24 81:15	stop	suitable
started	77:23 78:17	6:8 19:3 39:13 40:4 60:22
44:19 68:3	stores	summarize
starting	41:2	8:6
37:11,18	storm	summer
state	18:14 23:21 44:3 51:20 61:10	73:12
2:21 5:12 9:14 11:9,20 17:5	storms	support
18:6 21:7 24:23 27:23 31:8	69:9	59:6
35:8 39:12 56:18 63:15	straight	supported
71:20 72:15,15,18,20 79:11	69:6	32:2
87:5	streak	supporting
State's	75:21	63:6
75:6	stream	surface
statement	16:8 23:18	1:16 3:16,18 44:24
6:22	stringent	surveys
statements	5:23 6:2	54:23
38:6	stripped	Susan
states	45:4	1:24 87:4,15
3:20 5:22 16:5 27:24 28:7	strongly	suspended
29:3 31:23 36:25 38:9	31:22	47:2
52:25 53:23 58:15 64:6	structure	symposia
75:4	64:13	37:15
statutory	struggle	system
5:16	49:18,21	47:21 51:12
stay	studies	systems
33:12 42:11 66:16,24 69:7,9	26:16 31:10 36:18	24:10 25:5

	38:23	12:16 18:7,16 19:9 31:23
	tested	38:16 67:7 81:22 84:23
table	19:3 25:18	throw
54:4 67:15	testimony	81:14
tailor	66:10,18 73:9 86:2	tight
31:18	testing	59:3
take	5:23 18:18 25:16 32:6 38:12	time
2:10 4:7 27:11 29:12 38:25	38:16,17 39:4,12,24 86:9	7:2,3 34:10,17 41:4 46:4,23
40:5 72:11 81:10 82:20		48:14 49:16,24 55:7 58:14
84:19	tests 6:3 25:20	58:20,23 59:3 67:18 68:22
taken		73:11 75:9 78:16 84:15
34:21	textbook 44:22	85:17
talk		
13:25 14:15 20:8 53:3 55:15	Thames	timely 78:14
talked	73:23	,
21:2 22:22 24:25 26:24 53:12	thank	times
talking	2:3 3:4,11,12,21 14:4 32:8	17:13
32:13 36:20 45:8	66:5 76:4,6 79:8,10 81:15	today
target	81:17 83:20 84:9,13,14	34:25 36:13,20 73:9 78:3
32:20 42:4	thankful	82:21
targeted	71:18	toilet
43:4	theme	83:19
Task	33:18	tomorrow
79:15	thing	58:8 84:22
team	29:5 38:5 45:6 46:18 72:9	tonight
12:13 52:22 55:19 57:8 61:24	75:13 80:8	2:11 14:11 33:10 56:6,12
62:11,19,22,25 63:9,13,19	things 16:2 19:5 20:7 21:24 30:25	66:11 67:11 68:4 69:5 81:6
64:19		84:10
team's	31:21 33:10 48:16 49:21 53:25 66:23	tonight's 80:4
62:2	think	tool
technical	13:10 25:23 31:2 37:7,18,23	53:21
9:20 64:23	70:8 74:19 77:20 78:4 80:7	
technologically	81:14 82:19 83:17	topic 85:15
78:5	third	topography
technology	17:6	42:16,24
78:3	thorough	total
tell	62:7	13:17
40:19 45:24 49:12 80:21	thoroughly	totally
tells 41:10 46:8	59:14 60:9	35:16
	thought	touch
ten 32:25 50:17	32:12 33:22 50:8 77:8,10	37:22
52:23 30:17 term	thoughts	towns
7:22,24,25 8:10 53:16 63:3	84:17	24:14
terms	thousand	toxic
37:17 41:23 82:10 83:17	45:8	38:7 39:9,14 73:4,11
terribly	thousands	Toxicitywise
79:3	77:3	47:14
test	three	track

41:18 63:3 36:19 43:3 49:17 64:24 32:10 53:5.24 54:8 56:21 tracking 72:16 75:8 59:11 60:10 62:3.13.14 53:21 type 64:14 77:16,16 35:14 36:2 82:2 trail uses 41:9 typed 22:23 27:13 31:11,13 59:25 train 76:13 60:19 76:14 80:18 81:3 types \mathbf{V} 17:23 38:16 39:6 transcript value typical 87:8 59:25 transcriptionist 45:13 various 2:23 typically 15:10 36:18 74:4 transect 49:17 60:16 vein 46:21 U 70:24 transmits U.S verify 41:3 1:18,20 4:13 5:3,11 13:24 46:10 tray 14:7 video 67:14 unacceptable 42:4 treat 75:10 viewpoint 18:22 19:19 unconfined 20:12 tremendous 77:23 Virginia 51:22 82:24 uncontaminated 76:11,15 80:12 86:18 tributaries 18:4 volume 61:11 uncontrolled 16:17 tried 78:11 volumes 26:22 underneath 16:18 triggers 47:22 48:9 Voluntary 7:18 understand 9:6 trip 33:7 46:9 52:5 33:5 41:11 \mathbf{W} undertakes **Tropical** walk 7:25 51:20 2:18 underway true wall 30:3 87:7 2:9 unfair try want 82:20 31:18.24 37:4 50:6 78:16 2:5 22:3 24:15 37:22 38:8,14 Unit trying 54:19 65:2 72:22 75:12 1:15 33:21 77:15 80:7,24 85:16 80:11 82:17,18 85:11 United tug wanted 5:22 41:24 48:4 72:9 79:7 unsuitable tugboat wasn't 19:16 25:13 26:4 59:21 40:10 41:21 35:19 upland waste 20:4 4:12 13:23 37:11 47:5 55:12 29:15 upstream 66:7 75:23,23 81:11 Watch 83:11 turning 28:5 use 72:6 1:4 2:8,18 7:20,22,24 8:10 two 1:16 3:16,18 5:6 11:23 12:9 13:2 16:7 18:12 29:21 10:5 11:8 12:11 28:21 36:9

willing 26:3.22 29:12 36:15 41:8 12:25 13:21 16:9 18:11,20 21:8 31:9 19:4,7 20:3,13 22:12 25:19 43:16.22 49:17 62:24 68:2 26:5,15 29:17 32:14 33:14 winter 74:10,14,20 76:3 35:21 44:17 45:2,8,17 46:3 53:20 55:6 yielded 77:4 46:14,25 47:7,19 48:24,25 WITNESS 52:16 54:7 57:19 59:7.12 87:9 York 61:10 62:3,8 68:21 69:15 Wolf 1:7 10:20 11:9,21 27:17,19 70:12 71:13,13 72:19,25 1:19 4:18 32:4,8 86:10 56:19 63:22 64:7 70:19 73:5 74:9,17,23 76:2 77:24 word 72:15,18,20 75:4,6 85:10 83:5,6,12 37:19 87:5 wording waters young 72:21 81:12 68:2 watershed words \mathbf{Z} 72:18 81:6,9 3:20 zero waterways work 78:18 20:18 61:6 5:9 15:13 17:11 36:6,8 37:19 zone 41:20 44:20 48:21 77:19,25 wav 11:11 50:22 58:17 64:10 24:18 32:2 41:13 49:10 50:7 worked zoom 33:19 74:16 76:3 53:9 65:23 41:14 50:22 working wavs 64:19 67:25 68:3 18:12,21 71:25 0 we've works 44:3,4,4 53:24 1 Website worms 3:2 37:13 54:11 48:8 1:1,6,15,16,22 3:16 4:23 week worried 55:15 63:21 77:14 34:15 1.300 weeks writing 50:9 3:2 53:19 84:23 58:7 65:22 10 welcome written 10:1 57:24 58:19 74:13 67:13 83:21 54:14 102 welcoming 56:13 X 3:13 11 X went 11:1 30:12 1:2,8 25:7 83:3 1135 West \mathbf{Y} 24:8 45:10 11th yard Western 14:10 87:10 17:18 30:21 48:15 50:17,17 1:4 3:8 4:2,9,25 6:11,15 10:5 12 yards 10:9,18 11:3,19 36:21 44:13 12:1 29:13,18 16:24 18:5,8,9,16,24 19:21 45:12.22 50:15 51:4 56:16 120 27:2 29:14,19 30:6 32:19 86:12 57:12 33:2 59:17 71:8 wheel **120-day** year 37:11 58:17 10:3 12:24 14:10 29:11 30:3 WHEREOF 13 43:3,13 50:23 55:7 87:9 13:1 years Wildlife 14 7:19 13:9,15 16:22 25:4,22 5:12 64:5 14:1 86:8

15	10:16 76:24	32
15:1 32:25 41:16 68:2	2004	32:1 86:10
15-and-a-half	10:2,25 13:14 72:13 76:24	33
18:9	2005	33:1
16.9 16		34 34
	3:25 4:11 6:17 8:21 11:17	
3:20 16:1	56:15 57:15 58:3,10 61:14	18:23 19:20 27:2 34:1
17.1	65:4,13 68:20 75:2 76:24	35
17:1	2006	13:16 22:17 23:3 35:1
18	12:20	36
18:1	2011	36:1
1800s	51:21	37
34:11 82:9	2016	37:1
19	1:6 87:11	38
19:1	21	38:1
1900s	21:1	39
34:18 35:4 82:11	22	39:1
1970	22:1	4
82:11,12	23	4
1970s	23:1	4:1
26:18 35:20	24	4.1
1972	24:1	
25:17	25	36:15 40:1 45:19
1980	23:3 25:1 58:7 65:22 67:18	402,458
5:18 26:12	25,000	13:17
1982	59:17	404
13:14	26	5:5
1986	26:1	40s
22:11,13	27	30:16
1991	15:15 27:1	41
6:23	28	41:1
1992	28:1	42
6:24 7:10	29	42:1
1998	29:1	43
8:22	3	43:1
1999	•	44
9:11,19	3	44:1
2	3:1 72:13 86:6	45
	3,000	22:17,19 45:1 58:22
2.1.62.21.96.4	32:18 33:2	46
2:1 63:21 86:4	30	46:1
20.1.22.15.16.17.45.15.16	16:22 25:3 26:3 30:1 71:7	47
20:1 22:15,16,17 45:15,16	74:10,13 76:3	47:1
50:17 74:13,20	30-year	48
2000s	16:19 75:9	48:1
43:24	300	49
2002	29:17 45:14	49:1
9:23 2003	31 7:10 31:1	5
	1 / 111 4 1 1 1	

		上上'
	1	1
5	68	86
5:1	68:1	86:1
50	69	87
50:1 71:7	69:1	87:1
50s		
30:16	7	9
51	7	9
51:1	7:1	9:1
52	70	90
52:1	69:7 70:1	69:7
53	70s	90s
16:24 17:17 18:5,8 53:1	36:4,10 83:3	43:24
54	71	
54:1	71:1	
55	72	
	72:1	
55:1 86:12	73	
56	73:1	
56:1	73 :1 74	
57		
57:1	74:1	
58	75	
58:1	75:1	
59	76	
59:1	76:1 86:18	
	77	
6	77:1	
6	78	
6:1	78:1	
6:35	79	
85:17	79:1 86:19	
60		
45:19,23 58:11 60:1 69:7	8	
60s	8	
30:16	8:1	
61	80	
61:1	45:23 69:7 80:1	
62	80s	
62:1	43:25	
	81	
63	81:1 86:20	
63:1	82	
64	82:1	
64:1		
65	83	
21:21 28:13 65:1	83:1	
66	84	
66:1 86:14	84:1 86:22	
67	85	
67:1 86:17	85:1	
	Ī	<u>I</u>