WOODS HOLE GROUP

US Army Corps of Engineers
New England District

LONG ISLAND SOUND DREDGED MATERIAL MANAGEMENT PLAN (DMMP)

ENVIRONMENTAL DATA UPDATE VOLUME II: ANNOTATED DATABASE

Contract No. W912WJ-09-D-0001-TO-0014

Prepared For:
United States Army Corps of Engineers
New England District
696 Virginia Road
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February 2010

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Environmental Data Update
Volume II: Annotated Database

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1.0 INTRODUCTION

The US Army Corps of Engineers (USACE) is conducting baseline efforts to formulate alternatives for the management of dredged material in Long Island Sound. As part of that effort, Woods Hole Group, Inc. was contracted to develop an environmental data update for Long Island Sound. Volume I of this report describes the environmental update project. An accompanying database of environmental data sources was developed to further summarize the data and provide references and contact information for all data described herein.

This volume (Volume II) includes the annotated database developed for the Environmental Data Update. The database is in a Microsoft Excel workbook and is provided electronically with this report, on an accompanying DVD+R. The Microsoft Excel workbook "LIS_DMMP_EnvDataUpdateTable.xls" includes a formatted copy of the database spreadsheet and lists of all selection menus for fields with limited data entry. Table 1 provides a Key Sheet that describes all fields in the Environmental Data Update database.

This report also includes an abridged version of the database, provided as an attachment to facilitate the review of the database. Fields highlighted in the Key Sheet (Table 1) constitute the abridged version of the database.

Entries in the Environmental Data Update spreadsheet and the abridged version of the database are sorted by relevance, then by study locations, and then by topic.

2.0 DESCRIPTION OF ENVIRONMENTAL DATA UPDATE DATABASE

The LIS DMMP Environmental Data Update database is modeled after the format of the 1999 Long Island Sound Dredged Material Disposal Database prepared for the US Army Corps of Engineers New England District (USACE, 1999). All of the fields in this database were replicated in the Environmental Data Update database. The fields are listed and defined in Table 1, the Key Sheet.

The following is a listing of the definitions of category terms that are highly relevant to analyses of the Environmental Data Update database. Topic definitions were imported verbatim (aside from notes on nomenclature) from the 1999 database (USACE, 1999). Study location categories were revised from the 1999 Database (USACE, 1999), in consultation with USACE-NAE, to address the specific needs of the Environmental Data Update.

Topics

Benthic (macro-invertebrate) resource - Information on the presence of benthic resources in Long Island Sound, at and outside of the existing and historic disposal sites. Information on recolonization and species assemblages as an indicator of toxicity. Information on biodiversity.

Coastal Management - Information on coastal management approaches, policies. Erosion control. Shoreline uses.

Ecology, Habitats and Species - Information on specific habitats/species.

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Economic data and Analysis - Information on economic data and reports or studies on navigation traffic, usage and economic benefits of waterborne commerce in the Sound and its value as a commercial waterway by canvassing and interviewing marine trades associations, port authorities, harbor associations, fishermen's group and regional recreational boating groups and interests.

Environmental evaluation and economics of disposal options - Information and studies on dredged material disposal costs for alternative disposal methods and sites, costs of dredged material testing and evaluation. Information on environmental evaluation of management options available for such alternative sites and methodologies.

Fisheries/shellfisheries - Information on the presence of fish and shellfish including spawning, nursery (larvae) and migration, particularly information based on trawl and similar sampling efforts. Presence and extent of fishing and shellfishing grounds and areas and aquaculture within the Long Island Sound Region, whether natural or managed, commercial or recreational. Information on the economic value of fisheries and shellfisheries, including catch/effort and locations for lobster. Location and evaluation of essential fisheries habitat areas and presence, extent and value of submerged aquatic vegetation.

Fishing Activities and Human Health Risks - Contamination of fish catch, biomagnification of contaminants and consumption, particularly from disposal site vicinity. Human health effects of LIS caught seafood consumption. Information on the incidence and location of past blooms of nuisance and toxic phytoplankton species. Information on State Health advisories in the Sound including locations, incidences, contaminants, and species.

General Interest – Articles published in large circulation newspapers (or in newsletters and websites) that do not align with any other topic category described herein.

Geology and Geomorphology - Information on geological structure of Long Island Sound and coastlines. History of the geological features. Geochemistry.

Historic disposal activities and dump sites - Information on past dredged material disposal activities. Information on effects of disposal and capping at disposal sites. (Note: appropriate nomenclature for this category is "Historic disposal activities and disposal sites," however historic nomenclature is preserved in the database to facilitate merging with prior databases and future querying.)

Historic, cultural and archaeological resources - Location of known and potentially significant cultural, historic and archaeological resources in the LIS region.

Marine Wildlife and Endangered Species - Information on presence and geographical extent of marine wildlife, Federal and State listed species and critical habitats.

Physical Impact of Fishing Activities - Locations of fishing grounds, particularly for draggers. Effect of dragging activity on disposal mound integrity and benthic recolonization.

Physical oceanographic - Hydrography (detailed bathymetry), waves and wind fetch, currents and water circulation information, and storm frequency and their effect on disposal sites.

Erosion/deposition data and sediment transport information for disposal sites and the Sound as a whole.

Public parklands, beaches and sanctuaries - Location of public parks and beaches and other public waterfront uses potentially affected adversely by dredging and the disposal of dredged material. Location/identification of sanctuaries potentially adversely affected by dredging and the disposal of dredged material. Also includes information on valuable habitats such as tidal marshes.

Sediment - Sediment information and mapping, including side scan data, particularly in formats useful in developing maps of the Sound. Also sediment chemistry data and analysis.

State Dredged Material Disposal Guidance - Information and guidance developed by the states of Connecticut and New York, and where appropriate, Rhode Island, to regulate dredged material disposal and disposal site identification, screening, use, monitoring and management.

Water quality - Water column chemistry data and investigations. Measurement and variability of water quality data throughout the Sound. Nutrients.

Meteorology - Information on meteorological and climatic conditions.

Locations

Entire LIS – Long Island Sound. Bounded on the west by the line between Throgs Neck (NY) and Willets Point (NY), and on the east by the line between Sandy Point (RI) and Orient Point (NY) through the chain of islands including Fishers, Plum and the Gulls.

Western LIS – Western Basin of Long Island Sound. Bounded on the west by the line between Throgs Neck (NY) and Willets Point (NY), and on the east by the line between Stratford Point (CT) and Port Jefferson (NY) along Stratford Shoal.

Central LIS - Central Basin of Long Island Sound. Bounded on the west by the line between Stratford Point (CT) and Port Jefferson (NY) along Stratford Shoal, and on the east by the line between Mulberry Point (CT) and Mattituck Point (NY) along the Mattituck Sill.

Eastern LIS - Eastern Basin of Long Island Sound. Bounded on the west by the line between Mulberry Point (CT) and Mattituck Point (NY) along the Mattituck Sill, and on the east by the line between Sandy Point (RI) and Orient Point (NY) through the chain of islands including Fishers, Plum and the Gulls.

Block Island Sound – Waters east of Long Island Sound and south of Washington County, Rhode Island. Bounded on the west by a line between Sandy Point (RI) and Orient Point (NY) (through the chain of islands including Fishers, Plum and the Gulls) and continuing to the midpoint of Montauk Point (NY) (through Gardiners Island). Bounded on the east by a line from Montauk Point (NY) through Block Island (RI) to Point Judith (RI). This area is referred to as Rhode Island Sound in the 1999 database (USACE, 1999).

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Gardiners & Peconic Bays – A complex of bays between the forks of Long Island that is bounded on the seaward side by a line from midway out Montauk Point (NY), through Gardiners Island, to Orient Point (NY).

Shoreline (CT) - Coastal lands adjacent to Long Island Sound located in Connecticut.

Shoreline (NY) - Coastal lands adjacent to Long Island Sound located in New York.

Shoreline (RI) - Coastal lands adjacent to Long Island Sound located in Rhode Island.

Upland (CT) – Lands in Connecticut that are in the Long Island Sound watershed above the first major change in terrain features after the shoreline area.

Upland (NY) - Lands in New York that are in the Long Island Sound watershed above the first major change in terrain features after the shoreline area.

Upland (RI) - Lands in Rhode Island that are in the Long Island Sound watershed above the first major change in terrain features after the shoreline area.

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Table 1. Key Sheet

Column	A	B	C	D	E	F	G	H
Title	**Document ID**	**Authors**	**Title**	**Year Of Publication**	**Document Type**	**Document Source**	**Journal Or Book**	**Publisher**
Description	Document unique identifier assigned automatically during data entry	Authority of publication	Title of document	Year published	Describes the format of the document	Institutional source of the document	Title of journal or book in which document is found (if applicable)	Name of Publisher and/or Editor (if applicable)
Menu					Abstract, Book, Brochure, Conference Proceedings, Data Report, Database (published), Database (unpublished), Journal Paper, M.S. Thesis, Magazine, Maps/Charts, Ph.D.Thesis, Planned/Future, Proposal, Report (draft), Report (final, published)	ASMFC, Central Pine Barrens Joint Planning and Policy Commission, Connecticut Department of Public Health, Cornell University, CT DOT, CT Harbor Management Association, CT Marine Trades Association, CT Port Authority, CT Sea Grant, CTDEP, CTDEP-BOR/State Parks, CTDEP-Fisheries, CTDEP-Natural Heritage, CTDEP-OLISP, CTDEP-Other, CTDEP-Shellfish, CT-Dept of Agric, CT-Municipality, CT-SHPO, CUNY Queens College, DOI-FWS, Eastern Connecticut State College, EPA-LIS Office, EPA-Other, EPA-Region 1, EPA-Region 2, Fairfield University, Greeley and Hansen, Hofstra University, Interstate Environmental Commission, LISRC, LISS, Millstone Environmental Laboratory, Mystic Aquarium, Narragansett Bay National Estuarine Research Reserve, National Audubon Society, Native American, NEGC, NERBC, New England Fisheries Management Council, NOAA, NOAA-NMFS, NOAA-NOS, NOAA-Other, Northeast Utilities Service, NUSC, NWRI, NYCDEP, NYDEC-Marine Resources and Habitat, NYDEC-Natural Heritage, NYDEC-Other, NYDOS-CRWR, NY-Empire State Marine Trades Association, NY-Municipality, NY-Port Authorities, NYS GIS Clearinghouse, NY-Sea Grant, NY-SHPO, Oceanic Society, Regional Plan Association, RICRMC, RIDEM, RI-Division of Fish and Wildlife Estuarine Research, RI-Municipality, RI-Sea Grant, Roger Williams University, SAIC, Save the Sound, SCDHS Division of Environmental Quality, Southampton University, Southern Connecticut State University, SUNY Stony Brook, The Riverhead Foundation for Marine Research and Preservation, UCONN-Avery Point, UCONN-Stamford, University of Bridgeport, University of Connecticut, University of New Haven, URI, USACE-NAE, USACE-NYD, USACE-Other, USACE-WES, USCG Academy, USCG-DOT, USGS, USGS-DOI, USNavy-Other, USWRC, Vassar College, Wesleyan College, WHOI, Williams College-Mystic Seaport, Yale University		
Notes					Some entries in the menu are residuals from the USACE 1999 database, and may not have been selected for any environmental data entries	Some entries in the menu are residuals from the USACE 1999 database, and may not have been selected for any environmental data entries		

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Table 1. Key Sheet (continued)

Column	I	J	K	L	M	N	O	P	Q	R
Title	**Document Number**	**Place Of Publication**	**No Pages**	**Relevant Pages**	**Work Type**	**Location**	**Summary**	**Main Topic**	**Main SubTopic**	**General Criteria 1**
Description	Original agency document number as it appears on the publication	City and State where publication originated	Total number of pages in the document	Subset of pages in the document that are relevant to environmental data (if applicable)	Describes the nature of the information and/or how it was gathered	Describes the geographical area on which the study is focused	Summary of the study and its findings	Numerical codes for General Criteria	Numerical codes for Specific Criteria	Primary general criteria defined by Section 102(c) of the Marine Protection Research and Sanctuaries Act (MPRSA) to help classify the publication
Menu					Data comparison, Directory, Environmental Analyses, Field Sampling, Forum for current research, Lab Analysis/Tests, Model, Monitoring, Regulations/Manuals, Review	Entire LIS, Western LIS, Central LIS, Eastern LIS, Block Island Sound, Gardiners & Peconic Bays, Shoreline (NY), Shoreline (CT), Shoreline (RI), Upland (NY), Upland (CT), Upland (RI)				Fisheries and Navigation Conflicts, Site Boundaries Based on Containment of Impacts, Provision for Site Termination Based on Unsuitability of Site, Site Boundaries Based on Monitoring and Surveillance Requirements, Use of Previously Disturbed Sites
Notes					Some entries in the menu are residuals from the USACE 1999 database, and may not have been selected for any environmental data entries	Some entries in the menu are residuals from the USACE 1999 database, and may not have been selected for any environmental data entries		Residual from USACE 1999 database. Not applied to environmental data	Residual from USACE 1999 database. Not applied to environmental data	Residual from USACE 1999 database. Not applied to environmental data

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Table 1. Key Sheet (continued)

Column	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD
Title	**General Criteria 2**	**Specific Criteria 1**	**Specific Criteria 2**	**Notes**	**Study Period Start**	**Study Period End**	**Longitude**	**Longitude EW**	**Latitude**	**Latitude NS**	**Disposal Type**	**Cap**
Description	Secondary general criteria defined by Section 102(c) of the Marine Protection Research and Sanctuaries Act (MPRSA) to help classify the publication	Primary specific criteria defined by Section 102(c) of the Marine Protection Research and Sanctuaries Act (MPRSA) to help classify the publication	Secondary specific criteria defined by Section 102(c) of the Marine Protection Research and Sanctuaries Act (MPRSA) to help classify the publication	Explanatory information on the data source	Start and end date of the period covered by the document with dates given in MM/DD/YY format	Start and end date of the period covered by the document with dates given in MM/DD/YY format	Study location coordinate	Study location coordinate	Study location coordinate	Study location coordinate	Indicates the method of disposal of dredged materials	Indicates whether or not the dredged material was capped
Menu	Same as General Criteria 1	Site Locus, Proximity to Living Resources, Proximity to Beaches and Amenities, Types and Quantities of Material to be Disposed, Feasibility of Surveillance and Monitoring, Dispersal, Horizontal Transport and Vertical Mixing, Existence and Effects of Current and Previous Disposal, Commercial, Recreational and Scientific Uses of LIS, Water Quality and Ecology, Potentialily for the Development or Recruitment of Nuisance Species in the Disposal Site, Significant Natural or Cultural Features of Historical Importances	Same as Specific Criteria 1								All, Any, Containment Area, In-harbor, In-river, Onshore, Onsite, Open Water, Upland	yes/no
Notes	Residual from USACE 1999 database. Not applied to environmental data	Residual from USACE 1999 database. Not applied to environmental data	Residual from USACE 1999 database. Not applied to environmental data				Angular distance between the prime meridian and points east or west	Indicates whether east or west of the prime meridian at Greenwich, England	Angular distance between the equator and points north or south	Indicates whether north or south of the equator	Residual from USACE 1999 database. Not applied to environmental data	Residual from USACE 1999 database. Not applied to environmental data

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Table 1. Key Sheet (continued)

Column	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
Title	**Baseline**	**Impacts**	**Historical**	**DMMP Relevance**	**Electronic**	**Electronic Format**	**GIS Compatible**	**GIS Format**	**Contact**	**Name**	**Agency and Department**	**Address**	**Telephone**
Description	Indicates whether or not the study included a baseline characterization for dredging	Indicates whether or not the study included an impacts analysis for dredging	Indicates whether or not the dredging activity described in the study was historical	Qualification of the data's relevance to the development of a dredged material management plan	Indicates whether or not source is available electronically	If source is available electronically, describes type of electronic file	Indicates whether or not source contains or is associated with geospatial data	If source contains geospatial data, describes the type of data available	Undefined field from USACE 1999 database	Name of primary author or contact person for data source	Affiliation of author or contact person	Author or contact's affiliated address	Author or contact's affiliated phone number
Menu	yes/no	yes/no	yes/no	High, Medium, Low	yes/no		yes/no						
Notes	Residual from USACE 1999 database. Not applied to environmental data	Residual from USACE 1999 database. Not applied to environmental data	Residual from USACE 1999 database. Not applied to environmental data						Residual from USACE 1999 database. Not applied to environmental data				

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Table 1. Key Sheet (continued)

Column	AR	AS	AT	AU	AV	AW	AX	AY
Title	**Fax**	**Email**	**USACE Copy**	**EPA Copy**	**ENSR Copy**	**Available On Web**	**Web Address**	**Topic 1**
Description	Author or contact's affiliated fax number	Author or contact's affiliated email address	Indicates whether USACE has a copy (either electronic or hard copy)	Indicates whether USEPA has a copy (either electronic or hard copy)	Indicates whether ENSR has a copy (either electronic or hard copy)	Indicates whether or not source can be found on the internet	If source is available on the internet, indicates the URL address where it is located	Primary general topic to classify the publication
Menu			yes/no	yes/no	yes/no	yes/no		Benthic (Macro-Invertebrate) Resource, Coastal Management, Ecology/Habitats/Species, Economic Data and Analysis, Environmental Evaluation and Economics of Disposal Options, Fisheries/Shell Fisheries, Fishing Activities and Human Health Risks, General Interest, Geology and Geomorphology, Historic Disposal Activities and Dump Sites, Historic/Cultural/Archaeological Resources, Marine Wildlife and Endangered Species, Physical Impact of Fishing Activities, Physical Oceanographic, Public Parklands/Beaches/Sanctuaries, Sediment, State Dredged Material Disposal Guidance, Water Quality, Meteorology
Notes				Residual from USACE 1999 database. Not applied to environmental data	Residual from USACE 1999 database. Not applied to environmental data			Some entries in the menu are residuals from the USACE 1999 database, and may not have been selected for any environmental data entries

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Table 1. Key Sheet (continued)

Column	AZ	BA	BB
Title	**Topic 2**	**SubTopic 1**	**SubTopic 2**
Description	Secondary general topic to classify the publication	Primary specific topic to classify the publication	Secondary specific topic to classify the publication
Menu	Same as Topic 1	Land Use, Shoreline, Erosion and Sedimentation, Birds, Foraminiferal, Other Habitats, Vegetation, Species Inventory, Marshes, Algae, Submerged Aquatic Vegetation, Commercial Fishing, Ferries, Commercial Recreation, Recreational Boating, All (Economic Data and Analysis), Commercial Cargo, Alternative Sites-Cost, All (Environmental and Economics), Testing and Evaluation-Cost, Alternative Methods-Environmental, Alternative Sites-Environmental, Alternative Methods-Cost, Testing and Evaluation-Environmental, Aquaculture/Commercial Area, All (Fisheries/Shell Fisheries), Mussels, Plankton (Fisheries), Oysters, Spawning, Migration, Essential Fisheries Habitats, Economic Value (Catch per Effort), Recreational Uses, Lobster, Nursery, Contaminants, Health Advisories, Nuisance and Toxic Phytoplancton Blooms, Toxicity Testing, All (Fishing Activities and Human Health), Management and Policies, Pollution, Hydrogeology, Geochemistry, Seismic Profiles, All (Geology), History, Volumes and Types of Material, Physical Effects, Chemical Effects, Biological Effects, All (Historic Disposal Activities), Native American Tribal Interest/Resources, All (Historic, Cultural and Archeological), State Significant, Federally Significant, Eligible for Listing, All (Marine Wildlife), Habitat, State Status, Federal Status, Dragging Effect on Mound, Impact on Recolonization, All (Physical Impact of Fishing), All (Physical Oceanographic), Waves and Wind Fetch, Salinity, Tides, Temperature, Hydrography, Circulation, Currents, Sediment Transport, All (Public Parklands), Sanctuaries, Other, Public Beaches, State Parks, All (Sediment), Sediment Chemistry, Bottom Morphology, Physical Characteristics, All (State Guidance), Rhode Island, Connecticut, New York, Plankton (Water Quality), Other Toxics, Nutrients, All (Water Quality), Thermal Pollution, Metals, Organics, Pesticides, PCBs, Dissolved Oxygen, Bacteria/Pathogens, Suspended Solids	Same as Sub Topic 1
Notes	Same as Topic 1	Some entries in the menu are residuals from the USACE 1999 database, and may not have been selected for any environmental data entries	Same as Sub Topic 1

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3.0 REFERENCES

USACE. 1999. Dredged Material Disposal Database Report and User's Manual – Long Island Sound: Connecticut and New York. Prepared by ENSR. July.

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ATTACHMENT A LIS ENVIRONMENTAL DATA UPDATE ABRIDGED DATABASE

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
55	Regional Plan Association	Long Island Sound Stewardship Initiative - 2006 Stewardship Atlas	2006	Report (final, published)	Directory	Entire LIS	Atlas of areas around the Sound with significant recreational and ecological values.	High	Regional Plan Association
46	Institute for Sustainable Energy - Task Force on Long Island Sound	Comprehensive Assessment and Report Part II - Environmental Resources and Energy Infrastructure of Long Island Sound	2003	Report (final, published)	Environmental Analyses	Entire LIS	Appendix C has environmental resource maps: shoreline types, coastal wetlands, flooding, reefs, bathymetry, invertebrates, reptiles, marine mammals, shellfish beds, finfish biomass/distribution/CPUE, lobster fishing, rare plants, sensitive bird and nesting habitat, sediment texture and TOC, landuse, surface water quality classification.	High	Institute for Sustainable Energy At Eastern Connecticut State University
104	Halavik	Long Island Sound Eelgrass Survey	2004	Abstract	Monitoring	Entire LIS	The US Fish & Wildlife Service conducted a survey of Long Island Sound to document the actual areal distribution of eelgrass in the Sound.	High	Long Island Sound Study

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
187	Gobler, C.J.	The Distribution, Causes, and Impacts of Alexandrium Fundyense Blooms in Coves, Near Shore, and Open Water Regions of Long Island Sound	2009	Planned/ Future	Monitoring	Entire LIS	The research, a combination of both field-based pelagic sampling and experimental protocols, seeks to establish spatial and temporal patterns for the distribution of this organism and its cysts in relation to temperature, nutrients, and other components of the planktonic community.	High	Long Island Sound Study
235	USEPA with USACE	Final Environmental Impact Statement for the Designation of Dredged Material Disposal Sites in Central and Western Long Island Sound, Connecticut and New York	2004	Report (final, published)	Environmental Analyses	Entire LIS	[In Chapter 4 Affected Environment] for entire Sound and alternative disposal sites: bathymetry, geological setting and geomorphology, meteorology, sediment transport, waves and currents, salinity gradients, wind stress, sediment chemistry and grainsize, benthic community analysis, sediment toxicity, water quality (temperature/ turbidity/nutrients/DO/ contaminants), plankton, finfish habitat areas and characteristics, CPUE 1984-2000, finfish distribution, shellfish closure and classification areas, shellfish distribution, bird lists, marine mammal and reptile lists, seal haul-out and special use areas, endangered and threatened species, flounder/lobster/mussel/ clam/worm body burdens, commercial fish landings, parks and wildlife refuges. [in Appendix F] Sediment studies. [in Appendix G] physical oceanography, water quality, meteorology. [Appendix H] Biological resources of open water sites.	High	USEPA Region 1

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
237	Broadwater and consultants	Broadwater LNG Project Final Environmental Impact Statement		Report (final, published)	Environmental Analyses	Entire LIS	[Figure 3.0-2]: Marine habitats, wetlands (tidal wetland, barrier beach), and sanctuaries (USFWS Coastal Areas, management areas, NYSDOS Significant Coastal F&W Habitat). [Figure 3.0-3]: shellfish distribution, RI shellfish beds, CT oyster grounds, restricted harvesting areas. [Figure 3.0-4]: fish distribution (CT, RI), flounder and tautog migratory routes, RI fisheries concentration zone, RI winter flounder spawning area. [Figure 3.0-5] Marine mammal distribution, eelgrass beds, seal haulout and special use areas. [Figure 3.0-6] bird distribution. [Figure 3.0-7] Terrestrial habitat and management areas: parks. Small mammal, CT natural area preserves, CT Natural diversity database areas, RI conservation areas, wildlife refuges, estuarine research reserves, RI rare species, tribal land. [Figure 3.1-1] distribution of surficial sediments. [Figure 3.1-3/4/5] sediment copper/mercury/leadalong pipeline route. [Figure 3.3-1] benthic communities along pipeline route. [Table 3.3.2-1] fish species. [Figure 3.3-2] essential fish habitat. [Table 3.3.3-2] commercial and recreational fishery species. [Table 3.3.5-1] avian species in offshore waters. [Table 3.4-1] endangered species in offshore waters. [Table 3.4.2-1] state listed species within 4 miles of proposed onshore facility. Text of Section 3 addresses Geology and Soils [3.1], Water Resources [3.2], Biological Resources [3.3], and Threatened and Endangered Species [3.4].	High	
3	Wilson, R.E., Swanson, R.L., and Waliser, D.E.	Relationship Between American Lobster Mortality in LIS and Prevailing Water Column Conditions		Abstract	Field Sampling	Entire LIS	Examination of water quality factors such as temperature, salinity, dissolved oxygen, and pollutants with respect to the lobster mortalities in Long Island Sound.	High	Stony Brook University, Marine Sciences Research Center

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
4	Draxler, A.F.J., and Deshpande, A.	Exposure of Lobsters to the Varied Chemical and Biological Environment of Long Island Sound		Abstract	Field Sampling	Entire LIS	Examination of the response of lobsters to ambient conditions (biogeochemicalsand contamination) at 6 cage stations in Western and Central Long Island Sound.	High	NOAA Fisheries, Howard Laboratory
8	Howell, P. and McKown, K.	Monitoring Long Island Sound Lobster Populations	2003	Brochure	Monitoring	Entire LIS	Regional at-sea monitoring of the commercial lobster catch, including Long Island Sound Trawl Survey, lobster tagging study, GIS model of lobster habitat selection, Lobster Trap Survey.	High	Connecticut Department of Environmental Protection
118	Simpson, D.	Semi-Annual Performance Report: Assessment and Monitoring of the American Lobster Resource and Fishery in Long Island Sound	2005	Data Report	Monitoring	Entire LIS	Sea-sampling for catch composition study, expanded DEP Long Island Sound Trawl Survey, lobster tagging study, stock identification, spatial analysis of habitat structure and distribution, age determination.	High	NOAA National Marine Fisheries Service, Northeast Region - State, Federal & Constituent Programs Division
136	Connecticut Department of Environmental Protection Bureau of Natural Resources	A Study of Marine Recreational Fisheries in Connecticut	2007	Report (final, published)	Field Sampling	Entire LIS	Marine angler survey, trawl survey, seine survey, water quality monitoring for temperature/salinity/oxygen.	High	CT DEP Bureau of Natural Resources Marine Fisheries Division
150	New England Fishery Management Council	Essential Fish Habitat Description Atlantic cod (Gadus morhua)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Atlantic Cod.	High	
151	New England Fishery Management Council	Essential Fish Habitat Description Haddock (Melanogrammu s aeglefinus)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Haddock.	High	

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
152	New England Fishery Management Council	Essential Fish Habitat Description Atlantic halibut (Hippoglossus hippoglossus)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Atlantic Halibut.	High	
153	New England Fishery Management Council	Essential Fish Habitat Description Atlantic herring (Clupea harengus)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Atlantic Herring.	High	
154	New England Fishery Management Council	Essential Fish Habitat Description Monkfish (Lophius americanus)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Monkfish.	High	
155	New England Fishery Management Council	Essential Fish Habitat Description Ocean pout (Macrozoarces americanus)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Ocean Pout.	High	
156	New England Fishery Management Council	Essential Fish Habitat Description Pollock (Pollachius virens)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Pollock.	High	
157	New England Fishery Management Council	Essential Fish Habitat Description Red hake (Urophycis chuss)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Red Hake.	High	

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
158	New England Fishery Management Council	Essential Fish Habitat Description Windowpane flounder (Scophthalmus aquosus)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Windowpane Flounder.	High	
159	New England Fishery Management Council	Essential Fish Habitat Description Winter flounder (Pleuronectes americanus)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Winter Flounder.	High	
160	New England Fishery Management Council	Essential Fish Habitat Description Witch flounder (Glyptocephalus cynoglossus)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Witch Flounder.	High	
161	New England Fishery Management Council	Essential Fish Habitat Description Yellowtail flounder (Pleuronectes ferruginea)	1998	Report (final, published)	Environmental Analyses	Entire LIS	Description and delineation of the essential habitat for eggs, larvae, juveniles and adult of Yellowtail Flounder.	High	
165	NMFS Office of Science & Technology	Fisheries Economics of the United States 2006: Economics and Sociocultural Status and Trends Series	2006	Report (final, published)	Monitoring	Entire LIS	Fish landings statistics for commercial fisheries in CT, NY, RI. Does not indicate how much from Long Island Sound. Data 1997-2006.	High	NOAA National Marine Fisheries Service - Economic and Sociocultural Analysis Division (F/ST5)
168	Connecticut Department of Environmental Protection Bureau of Natural Resources	A Study of Marine Recreational Fisheries in Connecticut	2006	Report (final, published)	Field Sampling	Entire LIS	Marine angler survey, trawl survey, seine survey, water quality monitoring for temperature/salinity/oxygen.	High	CT DEP Bureau of Natural Resources Marine Fisheries Division

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
170	CTDEP	Marine Finfish Survey: Long Island Sound Trawl Survey	2007	Data Report	Monitoring	Entire LIS	Yearly monitoring since 1984 of 200 stations in LIS by otter trawl. Data reported includes annual mean count and weight per tow, indices at age and age-group.	High	
182	Long Island Sound Study	Sound Health 2003: A Report on the Status and Trends in the Health of the Long Island Sound	2003	Report (final, published)	Monitoring	Entire LIS	Indicators of LIS health: nitrogen release from CT and NY (1998-2002), hypoxia area and duration (1984-2002), Cu/Zn/Hg in sediments (1200-2000), oyster/lobster/clam harvest (1982-2002), fish biomass (1992-2002), bluefish/tautog/stripedbass/winter flounder/ summer flounder counts per trawl (1984-2002), CT and NY nesting populations of osprey/piping plover/ least tern (1984-2002).	High	Long Island Sound Study
183	Long Island Sound Study	Sound Health 2006: A Report on the Status and Trends in the Health of the Long Island Sound	2006	Report (final, published)	Monitoring	Entire LIS	Indicators of LIS health: nitrogen release from CT and NY (1994-2004), hypoxia area and duration (1987-2005), Cu/Zn/Hg in sediments (1200-2000), oyster/ lobster harvest (1983-2004), fish biomass (1992-2004), bluefish /tautog/stripedbass counts per trawl (1984-2005), CT and NY nesting populations of osprey/piping plover/least tern (1984-2005).	High	Long Island Sound Study
184	Long Island Sound Study	Sound Health 2008: A Report on the Status and Trends in the Health of the Long Island Sound	2008	Report (final, published)	Monitoring	Entire LIS	Indicators of LIS health: hypoxia area and duration (1987-2007), hypoxia frequency (1991-2007), Cu/Zn/Hg in sediments (1200-2000), PCB concentration in striped bass (1985-2006), seasonal yearly surface water temperature at New London (1976-2007), warmwater vs coldwater fish species per tow (1984-2007), water(1991-2007)/ sediment (2000-2004) /benthic (2000-2004) quality indices by basin, oyster/ lobster/clam harvest (1984-2007), fish biomass (1992-2007), winter flounder/ scup/striped bass counts per trawl (1984-2007), CT and NY nesting populations of piping plover/least tern (1984-2006), CT and NY breeding pairs of colonial waterbirds (1998-2004).	High	Long Island Sound Study

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
185	Long Island Sound Study	Sound Health 2008: A Report on the Status and Trends in the Health of the Long Island Sound	2008	Conference Proceedings	Monitoring	Entire LIS	Indicators of LIS health: historical and present eelgrass distribution, % forest cover in CT (1620-1998), stream health in LIS subregional watersheds (1985-2002), CT inland wetland gain/loss (1990-2003), tidal wetland loss at four Long Island sites (1974-2005), tidal wetland loss in six southeast CT sites (1974-2004), riparian buffer loss in CT (1985-2002), CT and NY nesting osprey (1984-2002), CT and NY nesting piping plover (1984-2006), CT and NY nesting least tern (1985-2006), estimated breeding pairs of colonial foraging birds in CT and NY (1998-2004), seal observations at Sheffield Island (1997-2007), bluefish/winter flounder/summer flounder/tautog/striped bass/ weakfish/ scup/ shad/blueback herring abundance (1984-2007), cunner abundance and forage fish survey (1988-2006), fish biomass (1992-2007), alewife and shad fish counts at Norwich (1997-2007), alewife fish counts at Greenwich (1997-2007), atlantic salmon/ shad/blueback herring fish counts in CT River (1967-2008), seasonal surface water temperature at New London (1976-2006), warmwater and coldwater species richness in LIS (1984-2007), bottom water temperature averaged from three western LIS stations, oyster/ clam/lobster landings (1983-2007), lead in surface sediments (2000), contaminant trends in mussels NS&T Mussel Watch (1986-2003), sediment/benthic quality indices (2000-2004), chlorophyl a in WLIS (1991-2007), hypoxia frequency (1996-2007), DO profile (2006-2007), extent and duration of hypoxia (1987-2007), STP nitrogen discharge (1994-2006).	High	Long Island Sound Study

Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
100	Skinner	Chemical Residues in Long Island Sound Indicator Fish and Lobster: A Bi-state Update	2007	Planned/ Future	Field Sampling	Entire LIS	This project includes the assessment of the current status of PCB and mercury concentrations in striped bass and bluefish taken from Long Island Sound and an analysis of temporal and spatial changes in PCB levels in striped bass from the Sound. Tier 2 of the project includes assessing the current status of PCB, mercury, cadmium, and chlorinated dioxin and furan concentrations in hepatopancreas of American lobster. The current status of PCB and mercury concentrations in weakfish taken from the Sound and in American eels taken from major tributaries or bays of the Sound would also be assessed.	High	Long Island Sound Study
178	Connecticut Department of Public Health	Health Consultation - Evaluation of Fish Contaminant Data: Long Island Sound	2009	Report (final, published)	Field Sampling	Entire LIS	PCB and mercury concentrations in bluefish and striped bass fillets sampled from Long Island Sound.	High	CT Department of Public Health, Environmental Epidemiology and Occupational Health
47	CT DEP Office of Long Island Sound Programs	Cooperative Geologic Investigations Of Long Island Sound		Maps/Charts	Environmental Analyses	Entire LIS	Data and online mapper of bathymetry, surficial sediment distribution, sedimentary environment, and other geologic studies of the LIS.	High	Long Island Sound Resource Center
48	USGS Coastal and Marine Geology Program	USGS Studies in Long Island Sound: Geology, Contaminants, and Environmental Issues		Data Report	Environmental Analyses	Entire LIS	Long Island Sound data on geophysics, sediment texture and chemistry, bathymetry, and bottom photography.	High	USGS Coastal & Marine Geology Program
78	Poppe, L.J., Paskevich, V.F., Lewis, R.S., and DiGiacomo-Cohen, M.L.	Geological Framework Data from Long Island Sound, 1981-1990: A Digital Data Release	2002	Data Report	Field Sampling	Entire LIS	High-resolution seismic reflection data were collected and used to establish the basic stratigraphy within the Sound and to map the major geologic units; field verification of the geologic interpretations of the seismic profiles was primarily accomplished with vibratory cores. These interpretations were in turn used to produce basin-wide syntheses of the late Quaternary depositional history.	High	USGS Coastal and Marine Geology Team

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
82	CT DEP Office of Long Island Sound Programs	Long Island Sound Resource Center Data Catalogue		Maps/Charts	Directory	Entire LIS	Catalogue of spatial data, containing shapefiles on bathymetry, benthic communities, chemical data, geologic profiles, and multibeam sidescan sonar.	High	University of Connecticut-Avery Point
192	Institute for Sustainable Energy	Existing & Proposed Infrastructure Crossings of Long Island Sound Marine Environment-Marine Mammals	2003	Maps/Charts	Environmental Analyses	Entire LIS	General distribution areas in LIS for Atlantic whitesided dolphin, gray seal, harbor seal, hooded seal, and humpback whale.	High	
5	Varekamp, J., Thomas, E., Altabet, M., Cooper, S., and ten Brink, M.B.	Environmental Change in LIS in the Recent Past		Abstract	Monitoring	Entire LIS	Documentation of environmental change (water temperature, organisms, dissolved oxygen, pollution, salinity) over the past decade using sediment cores.	High	Wesleyan University
77	Poppe, L.J., Williams, S.J., and Paskevich, V.F.	U.S. Geological Survey East-Coast Sediment Analysis: Procedures, Database, and GIS Data	2005	Report (final, published)	Field Sampling	Entire LIS	Surficial sediment texture database and GIS maps.	High	USGS Coastal and Marine Geology Team

Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
79	Paskevich, V.F. and Poppe, L.J.	Georeferenced Sea-Floor Mapping and Bottom Photography in Long Island Sound	2000	Report (final, published)	Field Sampling	Entire LIS	Maps showing the shape of the marine transgressive surface and the thickness of postglacial sediments in Long Island Sound, regional distribution of sea-floor sedimentary environments in Long Island Sound, map showing the distribution of surficial sediments in Long Island Sound, map showing the distribution of total organic carbon in Long Island Sound, metals in the surface sediments of Long Island Sound, the distribution of mercury in sediment from Long Island Sound and surrounding marshes, clostridium perfringens distribution in Long Island Sound sediments: data report, maps of benthic foraminifera distribution and environmental changes in Long Island Sound between the 1940s and the 1990s, a benthic community geographical information system (GIS) for Long Island Sound.	High	USGS Coastal and Marine Geology Team
92	Poppe, L.J., and Polloni, C.	Long Island Sound Environmental Studies	1998	Report (final, published)	Field Sampling	Entire LIS	An archive of sidescan sonar, high-resolution seismic-reflection, bathymetric, sediment (texture and geochemistry), biologic, surficial geologic and bibliographic data from Long Island Sound.	High	USGS Coastal and Marine Geology Team
62	CT DEP	Long Island Sound Water Quality Monitoring Program Maps		Maps/Charts	Monitoring	Entire LIS	Maps depict the extent of low dissolved oxygen in Long Island Sound for bi-weekly surveys conducted by the Connecticut Department of Environmental Protection, Bureau of Water Protection and Land Reuse's Long Island Sound Water Quality Monitoring Program from June to September.	High	Long Island Sound Study
63	CT DEP	Long Island Sound Water Quality Monitoring		Database (unpublished)	Monitoring	Entire LIS	The Connecticut DEP performs an intensive year-round water quality monitoring program on Long Island Sound. Water samples are analyzed for water temperature, salinity, dissolved silica, particulate silica, dissolved nitrogen, particulate nitrogen, dissolved oxygen, chlorophyll a, and total suspended solids.	High	Long Island Sound Study

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
64	UCONN Department of Marine Sciences	LISICOS -- The Long Island Sound Integrated Coastal Observing System		Database (published)	Monitoring	Entire LIS	Real time and archived water quality data. Thames River (temp, cond, sal, DO on surface and bottom), Eastern Sound (surface temp), CT River at Old Lyme (temp, sal), Central Sound (surface temp, wave height, wave period, wave direction), Norwalk Harbor (temp, cond, sal, DO), Western Sound (surface temp, wave height, wave period, wave direction), Execution Rocks (surface temp).	High	Long Island Sound Study
135	Connecticut Department of Environmental Protection	Protecting and Restoring our Environment: Annual Report 2007	2007	Report (final, published)	Monitoring	Entire LIS	Water quality in LIS: area of hypoxia 1987=2007, beach closings 1993-2007, fish biomass 1992-2007, eelgrass acreage 2002 and 2006.	High	Connecticut Department of Environmental Protection
186	Altabet, M.A.	Geochemical Budgeting of Dissolved Gases for Understanding Long Island Sound Hypoxia	2009	Planned/ Future	Monitoring	Entire LIS	Monitoring of oxygen levels at appropriate temporal/spatial scales.	High	Long Island Sound Study
223	Lee, Y.J. and Lwiza, K.	Interannual Variability of Temperature and Salinity in Shallow Water: Long Island Sound, New York	2005	Journal Paper	Monitoring	Entire LIS	Variabilities of temperature and salinity over Long Island Sound (LIS), New York, are examined using observations from CTDEP, Bureau of Water Management LIS Ambient Water Quality Monitoring program (1991 to 2002).	High	Stony Brook University, Marine Sciences Research Center
224	Olsen, C. and Lyman, M.	Monitoring Long Island Sound Hypoxia 2002	2003	Data Report	Monitoring	Entire LIS	CT DEP water quality monitoring program. Monthly water samples are collected from more than forty sites in LIS and analyzed for nitrogen, phosphorus, silica content, chlorophyll a, and total suspended solids. On the boat, instruments measure temperature, salinity, dissolved oxygen, and light penetration throughout the water column. During the summer, CTDEP conducts additional summer hypoxia surveys at bi-weekly intervals to better define the areal extent (Figure 2) and duration (Figure 3) of hypoxia. During the summer of 2002, surveys began in early June and ended by the	High	CT DEP, Water Management Bureau

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							middle of September representing 284 stations sampled during seven cruises.		
225	Olsen, C. and Lyman, M.	Monitoring Long Island Sound Hypoxia 2004	2005	Data Report	Monitoring	Entire LIS	CT DEP water quality monitoring program. Monthly water samples are collected from more than forty sites in LIS and analyzed for nitrogen, phosphorus, silica content, chlorophyll a, and total suspended solids. On the boat, instruments measure temperature, salinity, dissolved oxygen, and light penetration throughout the water column. During the summer, CTDEP conducts additional summer hypoxia surveys at bi-weekly intervals to better define the areal extent (Figure 2) and duration (Figure 3) of hypoxia. In 2004, 160 stations were sampled during 7 cruises.	High	CT DEP, Water Management Bureau
226	O'Donnell, J., Dam, H.G., W. Bohlen, W.F. and Babb, I.	LISICOS: The Long Island Sound Integrated Coastal Observing System Interim Report, March, 2007 - August 2007	2007	Data Report	Monitoring	Entire LIS	5 buoys in sound measure salinity, temperature, pressure, dissolved oxygen concentration, chlorophyll fluorescence, and light level every 15 minutes. Deployed five acoustic Doppler current profilers (ADCPs) in the western Sound describe the meteorologically forced exchange through the East River in winter. Deployed two CODAR HF RADAR SeaSondes in Western Long Island Sound and three in Block Island Sound. Monthly CTDEP ship survey data 1985-2007. Other data include measurements of the concentration and distribution of nutrients, oxygen, POM, DOM, and the magnitude and distribution of salt, temperature, and currents, primary production, respiration, grazing and downward flux of organic matter in order to construct carbon, nitrogen and oxygen budgets for the Sound.	High	University of Connecticut Department of Marine Sciences

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
229	University of Connecticut Dept. of Marine Sciences	Monitoring Your Sound: Real-Time Weather, Water Quality and Wave Data from Long Island Sound		Database (published)	Monitoring	Entire LIS	MYSound provides comprehensive, real-time water quality, weather and wave data from Long Island Sound, its harbors and estuaries. Telemetering data buoys at several locations throughout The Sound provide data on water temperature, salinity (from conductivity), and dissolved oxygen as indicators of water quality. Weather sensors at three buoys (western, central, eastern), and a wave monitor in the central Sound.	High	University of Connecticut Department of Marine Sciences
230	Gobler, C.J., Buck, N.J., Sieracki, M.E. and Sanudo-Wilhelmy, S.A.	Nitrogen and Silicon Limitation of Phytoplankton Communities Across an Urban Estuary: The East River-Long Island Sound System	2006	Journal Paper	Monitoring	Entire LIS	Experimental results are compare to mean monthly concentrations and ratios of dissolved inorganic nitrogen (DIN; nitrate, nitrite, and ammonium), dissolved inorganic phosphorus (DIP; orthophos-phate), and dissolved silicon (DSi) found in the East River (ER), western, central, and eastern Long Island Sound (WLIS, CLIS, ELIS) as measured by the Connecticut Department of Environmental Protection (Table 4).	High	Stony Brook University, Marine Sciences Research Center
38	Paton, P., McWilliams, S., Mizrahi, D., and Peters, K.	Spatial Distribution and Abundance and Flight Ecology of Marine and Coastal Birds off Coastal Rhode Island		Planned/ Future	Field Sampling	Block Island Sound	Researchers are compiling existing data and conducting and-based, sea-based, and radar surveys to determine current avian distribution and abundance, to assess diel (daily cycle) patterns of avian use, and to quantify flight ecology for birds and bats.	High	Rhode Island Coastal Resources Management Council - Policy and Planning
2	Office of Water Resources	Notice of Polluted Shellfishing Grounds May 2008	2008	Maps/Charts	Regulations/ Manuals	Block Island Sound	Notification of areas where shellfishing is prohibited, seasonally closed, or conditionally closed along Rhode Island coast. Narrative describing areas as well as shellfishing classification maps.	High	RIDEM Office of Water Resources Shellfish Program
37	Beutel, D.	Fisheries Usage Maps	2009	Maps/Charts	Regulations/ Manuals	Block Island Sound	Recreational and Commercial Fishing areas in Rhode Island waters.	High	Rhode Island Coastal Resources Management Council - Policy and Planning

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
39	Nixon, S., Granger, S., and Oviatt, C.	Spatial and Seasonal Distribution of Phytoplankton, Primary Production, and Flux of Organic Matter to Benthic Habitats in Rhode Island and Block Island Sounds		Planned/ Future	Field Sampling	Block Island Sound	Researchers are obtaining the first measurements of the biological energy supporting the food chains of the Rhode Island and Block Island Sounds ecosystem.	High	Rhode Island Coastal Resources Management Council - Policy and Planning
94	USPEA New England Region and USACE New England District	Final Environmental Impact Statement: Rhode Island Region Long-Term Dredged Material Disposal Site Evaluation Project	2004	Report (final, published)	Environmental Analyses	Block Island Sound	Environment in Rhode Island and regional waters affected by dredged material disposal. Inventory of bathymetry, sedimentary environment, sidescan sonar, meteorology, physical oceanography (currents/density structure/wave climate), sediment characteristics (grainsize /TOC /metals /organics), sediment transport, water quality (temperature/salinity/ density/turbidity/DO nutrients/contaminants), plankton community, benthic invertebrates (abundance /richness /diversity/evenness), fish (commercial landings/trawl survey CPUE/essential fish habitat/life history characteristics), shellfish (life history/habitat/ distribution/density/ biomass), lobster (commercial landings/trawl survey CPUE), marine and coastal birds (life history), marine mammals and reptiles (life history, population estimate, haulout counts), rare/threatened/ endangered (list and life history), chemical analysis of finfish /lobster/bivalve tissue, map of commercial trawling grounds/recreational fishery/fish concentration zones/anectodal lobster and scallop areas, list of coastal special management areas.	High	USACE New England District

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43	King, J.W., Pockalny, R., Pratt, S., Boothroyd, J., Mather, R., and Jensen, J.	Sediment, Benthic Habitat Distribution, and Cultural Resources		Planned/ Future	Field Sampling	Block Island Sound	Researchers are conducting coarse resolution geophysical, geological, biological surveys and ground-truthing studies of prospective sites.	High	Rhode Island Coastal Resources Management Council - Policy and Planning
29	Pickerell, C. and Schott, S.	Peconic Estuary Program 2007 Eelgrass (Zostera marina) Long-Term Monitoring Program	2008	Report (final, published)	Monitoring	Gardiners & Peconic Bays	Eelgrass monitoring in Peconic Estuary.	High	Peconic Estuary Program, Suffolk County Department of Health Services - Office of Ecology
30	Pickerell, C. and Schott, S.	Peconic Estuary Program 2006 Eelgrass (Zostera marina) Long-Term Monitoring Program	2008	Report (final, published)	Monitoring	Gardiners & Peconic Bays	Eelgrass monitoring in Peconic Estuary.	High	Peconic Estuary Program, Suffolk County Department of Health Services - Office of Ecology
31	Pickerell, C. and Schott, S.	Peconic Estuary Program 2004 Eelgrass (Zostera marina) Long-Term Monitoring Program	2005	Report (final, published)	Monitoring	Gardiners & Peconic Bays	Eelgrass monitoring in Peconic Estuary.	High	Peconic Estuary Program, Suffolk County Department of Health Services - Office of Ecology
33	Pickerell, C. and Schott, S.	Peconic Estuary Program Long Term Eelgrass Monitoring Program - Eelgrass Trends Analysis Report: 1997-2002	2004	Report (final, published)	Monitoring	Gardiners & Peconic Bays	Eelgrass monitoring in Peconic Estuary.	High	Peconic Estuary Program, Suffolk County Department of Health Services - Office of Ecology
26	Suffolk County Planning Department	Suffolk County Aquaculture Lease Program in Peconic Bay and Gardiners Bay: Shellfish Aquaculture Lease Program Management Plan	2009	Report (final, published)	Regulations/ Manuals	Gardiners & Peconic Bays	Map of aquaculture sites and description of leasing program.	High	Suffolk County Department of Planning

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
28	Peconic Estuary Program	Peconic Estuary Program GIS Clearinghouse	2009	Maps/Charts	Directory	Gardiners & Peconic Bays	GIS data in Peconic Estuary for: critical natural resource areas, hardened shorelines, land use and land cover, submerged aquatic vegetation, shellfish bed closures, water monitoring stations, tidal wetlands, nitrogen-stressed subwatersheds, water bodies.	High	Peconic Estuary Program, Suffolk County Department of Environmental Quality
238	Cerrato, R.M. and Holt, L.	North Shore Bays Benthic Mapping: Groundtruth Studies	2008	Report (final, published)	Field Sampling	Shoreline (NY)	High-resolution backscatter and bathymetric maps created by side scan and multibeam sonar surveys were used to classify the sea bed into provinces. Samples for macrofauna and sediment properties were collected within each province to provide ground truth" for the acoustic maps. Oyster Bay, Huntington Harbor, and Port Jefferson Harbor were sampled at 40, 38, and 50 locations, respectively, with two replicate samples at each location. Samples were processed for organic content, grain-size, and fauna. Multivariate analysis was used to identify biotopes, i.e., areas of uniform sedimentary and faunal characteristics.	High	Stony Brook University, School of Marine and Atmospheric Sciences - Marine Sciences Research Center
56	Regional Plan Association	Nissequogue River Stewardship Action Plan	2008	Report (final, published)	Directory	Shoreline (NY)	Analysis of significant recreational and ecological areas in the Nissequogue River watershed.	High	Regional Plan Association
25	NYDOS - Division of Coastal Resources	Significant Coastal Fish and Wildlife Habitats		Data Report	Regulations/ Manuals	Shoreline (NY)	Description and map of the habitat, its fish and wildlife values, and an impact assessment.	High	New York State Department of State - Division of Coastal Resources
110	Holst and Young	Surface Elevation Tables	2003	Planned/Future	Monitoring	Shoreline (NY)	Deployment of SETs in Long Island marshed to monitor marsh elevation. Project expanded to include monitoring sulfides/ nitrate/ nitrite/ammonia/total dissolved phosphorous / pH/redox potential in porewater and tidal elevation/water temperature/salinity.	High	Long Island Sound Study
169	Sommers, L.A., Rosenblatt, D.L., and DelPuerto, M.J.	1998-1999 Long Island Colonial Waterbird and Piping Plover Survey	2002	Report (final, published)	Monitoring	Shoreline (NY)	Pairs observed and population estimates, with maps of survey areas on Long Island.	High	NYSDEC - Region 1

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
194	Hamilton, F.	2008 Long Island Colonial Waterbird and Piping Plover Survey Results	2009	Data Report	Monitoring	Shoreline (NY)	2008 bird counts on Long Island for piping plover, common tern, least tern, roseate tern, forsters tern, gull-billed tern and black skimmer.	High	NYSDEC - Region 1
233	NYSDEC Bureau of Marine Resources	New York State Official Tidal Wetlands Inventory		Maps/Charts	Environmental Analyses	Shoreline (NY)	New York State Official Tidal Wetlands Inventory, a set of maps delineating and classifying all the tidal wetlands in New York from aerial infrared photographs (1974 and 1989). Vector coverages in ARC/INFO export files and raster coverages in ERDAS .lan or .img are available for Shinnecock Bay, Moriches Bay, Quantuck and Moneybougue Bay. Coverages are being developed for Napeague Bay to Montauk Point, Great South Bay east of Fire Island Inlet.	High	NYSDEC Bureau of Marine Resources
244	NOAA Office of Response and Restoration, Emergency Response Division	New York: Long Island - 2009 Environmental Sensitivity Index Maps	2009	Maps/Charts	Environmental Analyses	Shoreline (NY)	For Long Island shoreline: maps of shoreline habitat types, locations of critical habitat, management areas and wildlife refuges, distribution of birds, fish, marine mammals, terrestrial mammals, reptiles, invertebrates, plants, and threatened/ endangered species by area, season and life stage.	High	NOAA's Office of Response and Restoration Emergency Response Division (ERD)
7	LoBue, C.	Monitoring Long Island Sound Lobster Population and Commercial Fishery: NY		Abstract	Monitoring	Shoreline (NY)	Expanded sea-sampling and trawl survey monitoring, sample collections for researchers, stock movements and identification, and habitat use.	High	New York State Department of Environmental Conservation
19	Maguire Group, Inc.	Environmental Assessment For Pier 6 Replacement Project	2004		Environmental Analyses	Shoreline (CT)	Contains sediment testing, analysis of impacts and EFH determination, significant coastal habitat delineation, shellfish beds, megainvertebrates, finfish, endangered species, sea turtle occurrence, birds, mammals, Thames River hydrography / water quality/salinity/ flood zone, NLDS hydrography / bathymetry/water quality, sediment geological characteristic, land use.	High	US Navy - New London Sub Base, Installation Restoration Program

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
189	CT DEP Office of Long Island Sound Programs	Long Island Sound Study Habitat Restoration Initiative - Annual Summary for the Year 2005	2005	Planned/ Future	Monitoring	Shoreline (CT)	Surface Elevation Tables Installation and Monitoring in Long Island Sound: measure gains/losses in marsh surface elevation relative not only to current sea level, but to the bedrock below. SET stations at 6 stations along CT coast.	High	Long Island Sound Study
232	Hurd, J.D., Civco, D.L., Gilmore, M.S., Prisloe, S. and Wilson, E.H.	Coastal Marsh Characterization Using Satellite Remote Sensing and In Situ Radiometry Data: Preliminary Results	2005	Report (draft)	Environmental Analyses	Shoreline (CT)	Use of multispectral image sources (Landsat, ASTER, and QuickBird) and various analytical methods to delineate and monitor the extent of coastal marshes throughout Long Island Sound. In addition, in situ spectral radiometer data are being collected at select coastal marsh locations throughout the growing season to generate a spectral library of prominent coastal marsh plant species. This information will be used to ascertain at what point during the growing season the coastal marsh plant species are most distinguishable.	High	UCONN College of Agriculture & Natural Resources, Department of Natural Resources Management and Engineering - Center for Land use Education and Research
234	Fuss & O'Neill and Woods Hole Group	Environmental Impact Evaluation: Hammonasset Beach Erosion Study	2008	Report (final, published)	Environmental Analyses	Shoreline (CT)	Data for Hammonasset Beach area: natural diversity database area, tidal marsh soils, wetlands, transitional areas, dunes, FEMA flood zones, nearshore bathymetry, groundwater quality classifications, surface water quality classifications, Housatonic River and Clinton Harbor sediment chemistry, nearshore habitat survey, bird habitat, essential fish habitat.	High	
242	NOAA Office of Response and Restoration, Emergency Response Division	Rhode Island/CT/NY-NJ - 2001 Environmental Sensitivity Index Maps	2009	Maps/Charts	Environmental Analyses	Shoreline (CT)	For CT shoreline: maps of shoreline habitat types, locations of critical habitat, management areas and wildlife refuges, distribution of birds, fish, marine mammals, terrestrial mammals, reptiles, invertebrates, plants, and threatened/ endangered species by area, season and life stage.	High	NOAA's Office of Response and Restoration Emergency Response Division (ERD)
321	Vaudrey, J.M.P.	Establishing Restoration Objectives for Eelgrass in Long Island Sound; Part II: Case Studies	2008	Report (final, published)	Monitoring	Shoreline (CT)	Three sites were chosen to serve as case studies for examining the recommended habitat criteria (Part I/Doc320) for the preservation and restoration of eelgrass (Zostera marina) to Long Island Sound: Niantic River, Mumford Cove, and Pawcatuck River / Little Narragansett Bay.	High	University of Connecticut, Department of Marine Sciences

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							Values for recommended habitat guidelines from the Chesapeake Bay region and from Long Island Sound were compared to water quality parameters determined in the three sites, eelgrass distribution, and historical data from the sites. From these analyses, guidelines for setting restoration goals for water quality were developed.		
6	Simpson, D.	Monitoring Long Island Sound Lobster Population and Commercial Fishery: CT		Abstract	Monitoring	Shoreline (CT)	Combines a variety of lobster sea-sampling data to describe the existing population in the western Sound, document the commercial lobstering activities throughout the entire Sound, and develop methods to properly index the recruitment strength of young-of-year lobsters each year.	High	Connecticut Department of Environmental Protection
171	National Marine Fisheries Service	Annual Landings by Species for Connecticut as of 24-APR-09	2009	Data Report	Monitoring	Shoreline (CT)	Annual landings in pounds and dollars for CT commercial fish catch 2002-2007.	High	
323	University of Rhode Island Environmental Data Center	Rhode Island Geographic Information System: Environment and Conservation	2009	Maps/Charts	Directory	Shoreline (RI)	Includes GIS data on barrier beaches/ islands/ spits, land use, natural resource corridors, conservation and park lands, CRMC coastal water use type, Shellfish Harvest prohibition areas, south coast eelgrass and estuarine/marine wetlands.	High	University of Rhode Island, Environmental Data Center
243	NOAA Office of Response and Restoration, Emergency Response Division	Rhode Island/CT/NY-NJ - 2001 Environmental Sensitivity Index Maps	2009	Maps/Charts	Environmental Analyses	Shoreline (RI)	For RI shoreline: maps of shoreline habitat types, locations of critical habitat, management areas and wildlife refuges, distribution of birds, fish, marine mammals, terrestrial mammals, reptiles, invertebrates, plants, and threatened/ endangered species by area, season and life stage.	High	NOAA's Office of Response and Restoration Emergency Response Division (ERD)
198	Ford, K.H.	Assessment of the Rhode Island Coastal Lagoon Ecosystem	2003	Ph.D.Thesis	Field Sampling	Shoreline (RI)	Investigation of three Rhode Island coastal ponds (Winnapaug, Quonochontaug, Ninigret). Measurement of organic and inorganic contaminants in sediment, sidescan sonar analysis of eelgrass habitats and depositional environments.	High	University of Rhode Island - Graduate School of Oceanography
91	North Shore Embayments Consulting Team	Suffolk County North Shore Embayments Watershed Management Plan	2007	Report (final, published)	Environmental Analyses	Upland (NY)	Subwatershed (Huntington Bay-Northport Complex, Nissequogue River, Stony Brook Harbor, Port Jefferson Harbor Complex, Mt. Sinai Harbor) data includes: bathymetry, surface water quality (nitrogen, DO,	High	Suffolk County Department Of Health Services, Division Of Environmental

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							coliform), groundwater outflow areas, nitrogen loading modeling, stream nitrogen discharge, streamflow, land use, habitat, species, tidal wetlands, submerged aquatic vegetation, phytoplankton and zooplankton distribution, invertebrates distribution, benthos distribution, shellfish and crustaceans distribution, finfish distribution, marine mammals and turtles distribution, bird distribution, herpetile distribution, important ecological areas, significant coastal fish and wildlife habitat.		Quality
200	Deal, R.E.	Map of Central Pine Barrens	1999	Maps/Charts	Environmental Analyses	Upland (NY)	Map of Central Pine Barrens core area and compatible growth areas.	High	Central Pine Barrens Joint Planning and Policy Commission
84	CT DEP	CT DEP GIS Data		Maps/Charts	Directory	Upland (CT)	Bathymetry for lakes and LIS, eelgrass beds, migratory waterfowl, tidal wetlands, coastal area boundary, Connecticut Coastal 2002 Environmental Sensitivity Index, Shellfish Area Classification, Connecticut Managed Shellfish Beds, bedrock/ surficial/ quaternary/glacial geology, hydrography, waterbodies, Aquifer Protection Areas, Fisheries Stream Survey Points, Ground Water Quality Classifications, Surface Water Quality Classifications, DEP Property, Federal Open Space, Municipal and Private Open Space, Soil Survey Geographic (SSURGO) database, watersheds.	High	CT Department of Environmental Protection Office of Information Management
133	Connecticut Department of Environmental Protection Bureau of Natural Resources	Connecticut's Comprehensive Wildlife Conservation Strategy	2005	Report (final, published)	Environmental Analyses	Upland (CT)	Mammal/bird/amphibian/reptile/fish abundance and distribution, waterfowl focus area maps, coastal bird breeding habitat map, important waterbird areas map, Audubon key bird habitats, benthic invertebrate richness, threatened/ endangered species distribution, physiography, geology, soils, aquatic life use support assessment, LIS Stewardship Initiative Ecological Areas, North American Bird Conservation Initiative Bird Conservation Regions, Connecticut Ecoregions , SNE-GAP Landuse/NLCD, Agricultural Resources Map, Forestry Resources Map, Habitat Resources Map,	High	Connecticut Department of Environmental Protection Bureau of Natural Resources - Wildlife Division

Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
							Connecticut's Water Quality EPT Indicator.		
134	Connecticut Council on Environmental Quality	Environmental Quality in Connecticut: Council on Environmental Quality 2008 Annual Report	2008	Report (final, published)	Monitoring	Upland (CT)	Indicators of environmental quality in CT, including: preserved land, forests, preserved farmland, wetlands, beach closure, plover habitat, LIS oxygen, LIS nitrogen, lobster population, shellfish bed closures, tidal wetlands, rivers, bald eagle population.	High	Connecticut Council on Environmental Quality
90	UCONN Map and Geographic Information Center	Connecticut GIS Data		Maps/Charts	Directory	Upland (CT)	Bedrock Geology, Surficial Materials, Soils, Open Space, Municipal Solid Waste Sites, Hydrography, Rivers, Drainage Basins, Aquifer Protection Areas, Coastal Boundary, Boat Launches.	High	Map and Geographic Information Center (MAGIC)
322	University of Rhode Island Environmental Data Center	Rhode Island Geographic Information System: Biology and Ecology	2009	Maps/Charts	Directory	Upland (RI)	Includes GIS data on bird nesting and breeding areas, habitat and range of state listed rare species, and wetlands.	High	University of Rhode Island, Environmental Data Center
325	University of Rhode Island Environmental Data Center	Rhode Island Geographic Information System: Inland Water Resources	2009	Maps/Charts	Directory	Upland (RI)	Includes GIS data on wellhead protection areas, groundwater classification/recharge areas/reservoirs, water supply reservoirs, sole source aquifers, surface water protection areas.	High	University of Rhode Island, Environmental Data Center
57	New York State Department of Environmental Conservation	Environmental Resource Mapper		Maps/Charts	Directory		Online map viewer for New York classified waterbodies, state freshwater wetlands, rare plant and animal areas, and significant natural communities.	High	
24	Various	NYS GIS Clearinghouse	2009	Maps/Charts	Directory		GIS data for: Agricultural District Boundaries, Coastal Area Boundary, NYS Public Land Boundaries, Significant Coastal Fish and Wildlife Boundaries, Bird Conservation Areas, Ecological Zones, South Shore Estuary of Long Island - Benthic Habitats Mapping 2002, State Pollutant Discharge Elimination System, Digital Q3 Flood Zone Data, National Hydrography Dataset Plus (NHDPlus), National Water Inventory System (NWIS), NYS Hydrography - 1:24,000, Water Inventory/Priority Waterbodies List, Water Quality Classifications - NYS, Long Island Hydrologic Framework, Long Island Sound	High	

Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
							Water Quality Monitoring Data, National Land Cover Database 2001(NLCD 2001), DEC Lands, MRLC National Land Cover Data Set, C-Cap Land Cover, 12 Digit Watershed Boundary, New York State Aquifers, Tidal Wetlands - NYC and Long Island.		
320	Vaudrey, J.M.P.	Establishing Restoration Objectives for Eelgrass in Long Island Sound; Part I: Review of the Seagrass Literature Relevant to Long Island Sound	2008	Report (final, published)	Review	Entire LIS	The aim of this report was to summarize the literature regarding the factors affecting the growth and distribution of Zostera marina relevant to Long Island Sound and identify levels for water quality standards and habitat guidelines that would be protective of Zostera marina. The most important factor governing both the distribution and growth of Zostera marina is the availability of light. If the light attenuated by epiphytes is taken into account, the minimum light required by Zostera marina should be around 15% of the surface light. Other factors affecting eelgrass include temperature, nutrients, physical aspects of the sites, sediment characteristics, and water column characteristics.	Medium	University of Connecticut, Department of Marine Sciences
120	Balcom, N. and Howell, P.	Responding to a Resource Disaster: American Lobsters in Long Island Sound 1999-2004	2006	Report (final, published)	Review	Entire LIS	Overview of lobster mortality events, fishery landings and effort, habitat and water quality, list and contact info for associated research projects.	Medium	Connecticut Sea Grant Extension
166	Atlantic States Marine Fisheries Commission	News Release: Striped Bass Stock Assessment Indicates Healthy Stock, Female Spawning Stock Biomass Remains High	2008	Magazine	Monitoring	Entire LIS	1982-2006 Atlantic Striped Bass Female Spawning Stock Biomass (SSB) and Fully-Recruited Fishing Mortality Rate (F ages 8-11).	Medium	Atlantic States Marine Fisheries Commission, Fisheries Management Plan Coordinator
101	Enion	Toxic Contamination in Long Island Sound: 2006 Update	2006	Abstract	Data comparison	Entire LIS	Compiled data on contaminant concentrations in the water column, sediments, and biota for the period from 1994 through 2005 and compared these data to measurements collected over the previous	Medium	Long Island Sound Study

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							decade.		
211	Fitzgerald, W.F. and Visscher, P.T.	Final Report: Microbiological and Physicochemical Aspects of Mercury Cycling in the Coastal/Estuarine Waters of Long Island Sound and Its River-Seawater Mixing Zones	2002	Report (final, published)	Field Sampling	Entire LIS	Hg-Organic Interactions, Methylmercury Production in Sediments, River-Seawater Mixing Zones, Hg0 and Hg Speciation in Long Island Sound.	Medium	
212	Lamborg, C.H., Fitzgerald, W.F., Skoog, A. and Visscher, P.T.	The Abundance and Source of Mercury-Binding Organic Ligands in Long Island Sound	2004	Journal Paper	Field Sampling	Entire LIS	The abundance and strength of mercury (Hg)-complexing organic matter was measured in samples collected from Long Island Sound (LIS) and related locations. A range in ligand-equivalent concentrations was found in LIS (0.3–6 nN). Rivers, lakes, sewage effluent, and marine porewaters were also sampled.	Medium	Woods Hole Oceanographic Institution, Department of Marine Chemistry and Geochemistry
214	Varekamp, J., Kreulen, B., ten Brink, B.M., and Mecray, E.	Mercury Contamination Chronologies from Connecticut Wetlands and Long Island Sound Sediments	2003	Journal Paper	Field Sampling	Entire LIS	Sediment cores were used to investigate the mercury deposition histories of Connecticut and Long Island Sound.	Medium	Wesleyan University, Department of Earth and Environmental Sciences
60	US Environmental Protection Agency	National Coastal Assessment NCA Northeast Region Data Pages		Database (published)	Field Sampling	Entire LIS	NCA Northeast Map Application maps data for dissolved oxygen, sediment toxicity, TOC, nitrogen, Chla, phosphorous, sediment contamination, water clarity, NCCR2 benthic index, sediment quality index, water quality index.	Medium	
61	USEPA Office of Research and Development / Office of Water	National Coastal Condition Report III	2008	Report (final, published)	Environmental Analyses	Entire LIS	Contains water quality index, sediment quality index, benthic index, coastal habitat index, fish tissue contaminants index, and fisheries data.	Medium	

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
196	Hammerschmidt, C.R., Fitzgerald, W.F., Lamborg, C.H., Balcom, P.H., and Visscher, P.T.	Biogeochemistry of Methylmercury in Sediments of Long Island Sound	2004	Journal Paper	Field Sampling	Entire LIS	Measurements of mercury, bioturbation, pH, and iron in sediments and porewater from three stations in Long Island Sound (Western, Central, Eastern) on three dates.	Medium	University of Connecticut Department of Marine Sciences
99	Ward and Wikfors	Phytoplankton Dynamics in Long Island Sound: Influence of Environmental Factors on Naturally-Occurring Assemblages	2002	Abstract	Field Sampling	Entire LIS	The objective of this project was to determine how phytoplankton dynamics differed in Long Island Sound along an eutrophication gradient (from east to west) and with the seasons. The researchers also examined which environmental factors (i.e., nutrients, hypoxia or temperature) are the best predictors of phytoplankton assemblages.	Medium	Long Island Sound Study
102	Sanudo-Wilhelmy	Trace Metals, Organic Carbon and Inorganic Nutrients in Surface Water of Long Island Sound: Sources, Cycling and Effects on Phytoplankton Growth	2000	Abstract	Field Sampling	Entire LIS	The objective of this project was to establish the concentration and distribution of dissolved metals and inorganic nutrients in the surface waters of Long Island Sound and to examine the relative importance of various sources (i.e., riverine inputs, sewage) of these nutrients and metals.	Medium	Long Island Sound Study
116	Pearce, J. and Balcom, N.	The 1999 Long Island Sound Lobster Mortality Event: Findings of the Comprehensive Research Initiative	2005	Journal Paper	Environmental Analyses	Entire LIS	Review of environmental conditions related to lobster mortality event of 1999.	Medium	Connecticut Sea Grant College Program, University of Connecticut

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
117	Howell, P., Benway, J., Giannini, C., McKown, K., Burgess, R., and Hayden, J.	Long-Term Population Trends in American Lobster (Homarus Americanus) and Their Relation to Temperature in Long Island Sound	2005	Journal Paper	Environmental Analyses	Entire LIS	Existing long-term monitoring data and studies initiated in response to the 1999 lobster die-off in Long Island Sound were examined to determine long-term trends that might clarify causes of the die-off. Data examined included a 28-y time series of commercial lobster-trap catch (harvest and discard) sea-sampling, a 20-y time series of research trawl survey indices, a 13-y time series of bottom water temperature, 3 y of mark-recapture data and 1 y of a research trap survey.	Medium	Connecticut Department of Environmental Protection, Marine Fisheries Division
215	Tseng, C.M., Balcom, P.H., Lamborg, C.H., and Fitzgerald, W.F.	Dissolved Elemental Mercury Investigations in Long Island Sound Using On-Line Au Amalgamation-Flow Injection Analysis	2003	Journal Paper	Field Sampling	Entire LIS	Measurements of dissolved elemental mercury at CTDEP surface water quality monitoring stations throughout Long Island Sound.	Medium	National Taiwan University, National Center for Ocean Research
241	Long Island Sound Study	The Comprehensive Conservation and Management Plan: V. Pathogen Contamination	1994	Report (final, published)	Environmental Analyses	Entire LIS	Long Island Sound drainage area designations, 1990 shellfish area status, NY clam harvest 1972-1991.	Medium	Long Island Sound Study
98	Yale University, SAIC	Monitoring of Bottom Water and Sediment Conditions at Critical Stations in Western Long Island Sound	2005	Journal Paper	Monitoring	Western LIS	Field surveys were conducted in order to obtain sediment profile images and bottom water data (dissolved oxygen, hydrogen sulphide and ammonia) from sampling stations in WLIS. The objective of these field surveys was to examine overall benthic habitat quality, as revealed by SPI photographs, bottom water chemical conditions, and benthic organisms.	Medium	Long Island Sound Study
130	Pedersen, A., Kraemer, G. and Yarish, C.	Seaweed of the Littoral Zone at Cove Island in Long Island Sound: Annual Variation and	2008	Journal Paper	Monitoring	Western LIS	Seaweed species composition monitored, along with salinity, temperature, and nutrients.	Medium	Norwegian Institute of Water Research

Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
		Impact of Environmental Factors							
121	Valente, R.M. and Cuomo, C.	Did Multiple Sediment-Associated Stressors Contribute to The 1999 Lobster Mass Mortality Event in Western Long Island Sound, USA?	2005	Journal Paper	Field Sampling	Western LIS	In response to a dramatic mass die-off of lobsters that began in WLIS in the late summer of 1999, a benthic habitat survey using a sediment-profile imaging (SPI) camera was conducted in October 1999. Follow-up surveys involving SPI and simultaneous measurements of dissolved oxygen (DO), hydrogen sulfide and ammonia within 10 cm of the bottom were conducted in August, September and November 2000.	Medium	SeaRay Environmental
141	ENSR	Monitoring Survey at the Western Long Island Sound Disposal Site, June 2004.	2005	Report (final, published)	Monitoring	Western LIS	The Western Long Island Sound Disposal Site (WLDS) was monitored as part of the Disposal Area Monitoring System (DAMOS) on 19- 20 June 2004 and 30 June - 1 July 2004. The 2004 field effort consisted of bathymetric and sediment-profile imaging (SPI) surveys designed to characterize seafloor topography, evaluate the physical distribution of dredged material around recent and historic disposal events and to assess the benthic conditions over recently formed and historic disposal mounds.	Medium	US Army Corps of Engineers-New England District, Regulatory Division
9	Beaulieu, E., Poppe, L.J., Paskevich, V.F., Doran, E.F., Chauveau, B.E., Crocker, J.M., Beaver, A.L., and Schattgen, P.T.	Sidescan Sonar Imagery and Surficial Geologic Interpretation of the Sea Floor Off Bridgeport, Connecticut	2005	Report (final, published)	Environmental Analyses	Western LIS	290.3 sq. km sidescan sonar survey completed in 2003 for west-central Long Island Sound off the coast of Bridgeport, CT. Includes images and interpretations of surficial features, sediments, and sedimentary environments.	Medium	USGS Coastal and Marine Geology Team
65	Wilson, R.E., Flagg, C.N., Codiga, D.L., and Waliser, D.E.	Sound Science: Research in Real Time		Database (published)	Monitoring	Western LIS	Surface water sampling on Bridgeport-Port Jefferson PT Barnum ferry. Measurements of the near-surface water properties are based on sampling water from a sea-water intake system. Measured quantities include sea surface temperature (SST), salinity, chlorophyll-a, and dissolved oxygen.	Medium	Long Island Sound Study

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
67	Interstate Environmental Commission	2008 Annual Report of the Interstate Environmental Commission	2009	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study
68	Interstate Environmental Commission	2007 Annual Report of the Interstate Environmental Commission	2008	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study
69	Interstate Environmental Commission	2006 Annual Report of the Interstate Environmental Commission	2007	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study
70	Interstate Environmental Commission	2005 Annual Report of the Interstate Environmental Commission	2006	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study
71	Interstate Environmental Commission	2004 Annual Report of the Interstate Environmental Commission	2005	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study
72	Interstate Environmental Commission	2003 Annual Report of the Interstate Environmental Commission	2004	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study
73	Interstate Environmental Commission	2002 Annual Report of the Interstate Environmental Commission	2003	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study
74	Interstate Environmental Commission	2001 Annual Report of the Interstate Environmental Commission	2002	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study

Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
75	Interstate Environmental Commission	2000 Annual Report of the Interstate Environmental Commission	2001	Report (final, published)	Monitoring	Western LIS	Surface water and bottom water Dissolved Oxygen monitoring in tri-state waters.	Medium	Long Island Sound Study
76	New York City Department of Environmental Protection	2008 New York Harbor Water Quality Report	2008	Report (final, published)	Monitoring	Western LIS	Surface water monitoring of fecal coliform (1984-2008), enterococci (2001-2008), chlorophyll a and secchi depth (1986-2008). Surface and bottom water monitoring of total suspended solids (1986-2008), and dissolved oxygen (1970-2008).	Medium	Long Island Sound Study
144	Myre, P.L. and Germano, J.D.	Field Verification Program (FVP) Disposal Mound Monitoring Survey 2005	2007	Report (final, published)	Monitoring	Central LIS	The Field Verification Program (FVP) Disposal Mound was monitored as part of the Disposal Area Monitoring System (DAMOS) in June 2005. The FVP mound was created at the Central Long Island Sound Disposal Site (CLDS) during the 1982-83 disposal season as part of the joint USEPA/USACE Field Verification Program. The primary objective of the 2005 survey was to determine current benthic community conditions and the distribution of contaminants across the FVP disposal mound.	Medium	US Army Corps of Engineers-New England District, Regulatory Division
139	ENSR	Monitoring Survey at the Central Long Island Sound Disposal Site, June 2004	2005	Report (final, published)	Monitoring	Central LIS	Central Long Island Sound Disposal Site (CLDS) was monitored as part of the Disposal Area Monitoring System (DAMOS) on 17-18 and 28-29 June 2004. The 2004 field effort consisted of bathymetric and sediment-profile imaging (SPI) surveys designed to characterize seafloor topography, evaluate the physical distribution of dredged material around recent and historic disposal events and to assess whether the algal/detrital layer observed in the September 2003 survey had persisted or reoccurred in 2004.	Medium	US Army Corps of Engineers-New England District, Regulatory Division
140	ENSR	Stamford-New Haven North/Cap Site 2 Investigation May 2004	2005	Report (final, published)	Monitoring	Central LIS	An investigation was conducted in May 2004 as part of the Disposal Area Monitoring System (DAMOS) to assess the physical distribution of sediments and chemical profiles in two engineered mounds in Long Island Sound, Stamford New Haven-North (STNH-N) and Cap Site 2 (CS-2).	Medium	US Army Corps of Engineers-New England District, Regulatory Division

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142	ENSR	Monitoring Survey at the Central Long Island Sound Disposal Site, September 2003	2004	Report (final, published)	Monitoring	Central LIS	The Central Long Island Sound Disposal Site (CLDS) was monitored as part of the US Army Corps of Engineers New England District Disposal Area Monitoring System (DAMOS) on 8-10, 16-17, and 22 September 2003. The 2003 field effort included bathymetric and sediment-profile imaging (SPI) surveys designed to document changes in seafloor topography, evaluate the physical distribution of dredged material and assess the benthic recolonization status associated with recent dredged material disposal activity.	Medium	US Army Corps of Engineers-New England District, Regulatory Division
143	ENSR	Baseline Bathymetric Surveys at the Central and Western Long Island Sound Disposal Sites, July 2005	2007	Report (final, published)	Monitoring	Central LIS	Bathymetric surveys were conducted in July 2005 at the Central Long Island Sound Disposal Site (CLDS) and the Western Long Island Sound Disposal Site (WLDS) as part of the Disposal Area Monitoring System (DAMOS).	Medium	US Army Corps of Engineers-New England District, Regulatory Division
146	SAIC	Monitoring Cruise at the Morris Cove Borrow Pit, May 2002	2003	Report (final, published)	Monitoring	Central LIS	The initial environmental monitoring survey to examine the impacts associated with the dredged material placement and subsequent recovery of the seafloor was completed in late September 2000. A follow-up monitoring survey was conducted over the Morris Cove borrow pit in late May 2002, to document the continued recovery of the benthic habitat within the borrow pit, to examine the distribution of sediments at the disposal area, and to calculate the remaining dredged material capacity within the pit for future dredged material placement.	Medium	US Army Corps of Engineers-New England District, Regulatory Division

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148	SAIC	Monitoring Cruise at the Central Long Island Sound Disposal Site, June 2001	2003	Report (final, published)	Monitoring	Central LIS	As part of the Disposal Area Monitoring System (DAMOS) Program, Science Applications International Corporation (SAIC) conducted an environmental monitoring survey over the Central Long Island Sound Disposal Site (CLDS) in June 2001. Field operations consisted of a single-beam bathymetric survey and sediment-profile imaging surveys over the most recently formed dredged material disposal mounds, as well as several historic bottom features. The bathymetric data were used to document changes in seafloor topography resulting from the placement of dredged sediments during the 2000–01 disposal season. The sediment-profile images were used to examine the benthic recolonization status and habitat conditions over individual disposal mounds relative to three CLDS reference areas and to the results of previous monitoring efforts.	Medium	US Army Corps of Engineers-New England District, Regulatory Division
149	SAIC	Monitoring Cruise at the Central Long Island Sound Disposal Site – September 1997 and March 1998	2002	Report (final, published)	Monitoring	Central LIS	13 Monitoring surveys were conducted at the Central Long Island Sound Disposal Site (CLIS) in September 1997 and March 1998. Field operations were concentrated over the CLIS 95/96 Mound Complex and the historic New Haven 1993 Mound (NHAV 93), and nearby reference areas. The September 1997 field effort consisted of precision bathymetric and REMOTS sediment-profile imaging surveys to examine the disposal mound morphology, stability, composition and rates of benthic recolonization. The March 1998 field effort consisted of a follow-up survey to examine benthos during winter conditions, and a side-scan sonar survey over one of the reference areas (CLIS REF).	Medium	US Army Corps of Engineers-New England District, Regulatory Division
10	McMullen, K.Y., Poppe, L.J., Paskevich, V.F., Doran, E.F., Moser, M.S., Christman, E.B.,	Surficial Geologic Interpretation and Sidescan Sonar Imagery of the Sea Floor in	2005	Report (final, published)	Environmental Analyses	Central LIS	293 sq. km sidescan sonar survey completed in 2001 for west-central Long Island Sound off the coast of Milford, CT. Includes images and interpretations of surficial features, sediments, and sedimentary environments.	Medium	USGS Coastal and Marine Geology Team

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	and Beaver, A.L.	West-Central Long Island Sound							
11	McMullen, K.Y., Poppe, L.J., Schattgen, P.T., and Doran, E.F.	Enhanced Sidescan-Sonar Imagery, North-Central Long Island Sound	2008	Report (final, published)	Environmental Analyses	Central LIS	Enhanced imagery removes tonal artifacts. Includes enhanced imagery for the surveys off Bridgeport, CT, Milford, CT, and Branford, CT.	Medium	USGS Coastal and Marine Geology Team
12	Poppe, L.J., Paskevich, V.F., Moser, M.S., DiGiacomo-Cohen, M.L., and Christman, E.B.	Sidescan Sonar Imagery and Surficial Geologic Interpretation of the Sea Floor Off Branford, Connecticut	2004	Report (final, published)	Environmental Analyses	Central LIS	41.1 sq. km sidescan sonar survey completed in 2001 for west-central Long Island Sound off the coast of Branford, CT. Includes images and interpretations of surficial features, sediments, and sedimentary environments.	Medium	USGS Coastal and Marine Geology Team
13	Poppe, L.J., Ackerman, S.D., Doran, E.F., Beaver, A.J., Crocker, J.M., and Schattgen, P.T.	Interpolation of Reconnaissance Multibeam Bathymetry From North-Central Long Island Sound	2006	Report (final, published)	Environmental Analyses	Central LIS	Bathymetric grids and imagery from acoustic surveys in North-central Long Island Sound.	Medium	USGS Coastal and Marine Geology Team
14	Poppe, L.J., Ackerman, S.D., Doran, E.F., Moser, M.S., Stewart, H.F., Forfinski, N.A., Gardner, U.L., and Keene, J.A.	Geologic Interpretation And Multibeam Bathymetry of the Sea Floor in Southeastern Long Island Sound	2006	Report (final, published)	Environmental Analyses	Central LIS	95 sq. km multibeam bathymetry survey in southeastern Long Island Sound. Includes bathymetry data and interpretation of surficial geology.	Medium	USGS Coastal and Marine Geology Team
17	Poppe, L.J., Ackerman, S.D., McMullen, K.Y., Schattgen, P.T., Schaer, J.D., and Doran, E.F.	Interpolation of Reconnaissance Multibeam and Single-Beam Bathymetry, Offshore Milford, Connecticut	2008	Report (final, published)	Environmental Analyses	Central LIS	153 sq. km singlebeam and multibeam bathymetry survey in north-central Long Island Sound. Includes bathymetry data and imagery.	Medium	USGS Coastal and Marine Geology Team

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
188	Lwiza, K.M.	Interaction of Biological and Physical Factors Controlling Bottom Dissolved Oxygen	2009	Planned/ Future	Monitoring	Central LIS	Chemical and biological data will be collected from pre-existing sampling stations, including samplers placed on the Bridgeport to Port Jefferson ferry boats and buoys outfitted with sampling devices. Additional data will be collected during sampling cruises. These diverse sampling regimes will produce a set of spatially and temporally scaled data, including both fine-grained hourly data and longer time-series encompassing years.	Medium	Long Island Sound Study
221	Goebel, N.L., Kremer, J.N. and Edwards, C.A.	Primary Production in Long Island Sound	2006	Journal Paper	Monitoring	Central LIS	Daily and annual integrated rates of primary productivity and community respiration were calculated using physiological parameters measured in oxygen-based photosynthesis-irradiance (P-I) incubations at 8 stations throughout central and western Long Island Sound (cwLIS) during the summer and autumn of 2002 and 2003 and the late spring of 2003.	Medium	University of Connecticut Department of Marine Sciences
222	Goebel, N.L. and Kremer, J.N.	Temporal and Spatial Variability of Photosynthetic Parameters and Community Respiration in Long Island Sound	2007	Journal Paper	Monitoring	Central LIS	Daily and annual integrated rates of primary productivity and community respiration were calculated using physiological parameters measured in oxygen-based photosynthesis-irradiance (P-I) incubations at 8 stations throughout central and western Long Island Sound (cwLIS) during the summer and autumn of 2002 and 2003 and the late spring of 2003.	Medium	University of California - Santa Cruz, Ocean Sciences Department
51	Tiner, R., Bergquist, H., Halavik, T., and MacLachlan, A.	Eelgrass Survey for Eastern Long Island Sound, Connecticut and New York	2003	Report (final, published)	Field Sampling	Eastern LIS	Current and historical distribution of eelgrass.	Medium	U.S. Fish and Wildlife Service, Southern New England Coastal Program
52	Tiner, R., Bergquist, H., Halavik, T., and MacLachlan, A.	2006 Eelgrass Survey for Eastern Long Island Sound, Connecticut and New York	2007	Report (final, published)	Field Sampling	Eastern LIS	Current and historical distribution of eelgrass.	Medium	U.S. Fish and Wildlife Service, Southern New England Coastal Program

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
228	Keser, M., Swenarton, J.T. and Foertch, J.F.	Effects of Thermal Input and Climate Change on Growth of Ascophyllum nodosum (Fucales, Phaeophyceae) in Eastern Long Island Sound (USA)	2005	Journal Paper	Monitoring	Eastern LIS	Growth of Ascophyllum nodosum was monitored monthly from 1979 to 2002 at four locations in eastern Long Island Sound near Millstone Power Station (MPS), Waterford, Connecticut, USA.	Medium	Dominion Nuclear Connecticut, Millstone Environmental Laboratory
145	ENSR	Monitoring Survey at the Cornfield Shoals Disposal Site, June 2004	2005	Report (final, published)	Monitoring	Eastern LIS	The Cornfield Shoals Disposal Site (CSDS) was monitored as part of the Disposal Area Monitoring System (DAMOS) on 14-16 June 2004. The June 2004 field effort consisted of a bathymetric survey designed to document any significant accumulation of dredged material around the center of the disposal site since the previous set of investigations in the early 1990s.	Medium	US Army Corps of Engineers-New England District, Regulatory Division
147	SAIC	Post-Storm Monitoring Survey at the New London Disposal Site Seawolf Mound October 2002	2003	Report (final, published)	Monitoring	Eastern LIS	The survey was designed to detect any large-scale changes in the morphology of the mound, as well as any small-scale evidence of surface erosion or winnowing that may have occurred due to wave energy during the storm. Bathymetric, side-scan sonar, and REMOTS® sediment profile imaging surveys were conducted to characterize post-storm conditions on the mound.	Medium	US Army Corps of Engineers-New England District, Regulatory Division
203	Codiga, D.L. and Aurin, D.A.	Residual Circulation in Eastern Long Island Sound: Observed Transverse-Vertical Structure and Exchange Transport	2007	Journal Paper	Monitoring	Eastern LIS	Residual currents in eastern Long Island Sound (LIS) are investigated using direct velocity measurements from an acoustic Doppler current profiler mounted on a ferry. Circulation at the site has major influence on exchange of water and water-borne materials between LIS and the coastal ocean.	Medium	University of Rhode Island Graduate School of Oceanography

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
15	Poppe, L.J., Denny, J.F., Williams, S.J., Moser, M.S., Stewart, H.F., Forfinski, N.A., and Doran, E.F.	The Geology of Six Mile Reef, Eastern Long Island Sound	2007	Report (final, published)	Environmental Analyses	Eastern LIS	156 sq. km multibeam bathymetry survey in eastern Long Island Sound. Includes bathymetry data and interpretation of surficial geology.	Medium	USGS Coastal and Marine Geology Team
16	Poppe, L.J., DiGiacomo-Cohen, M.L., Smith, S.M., Stewart, H.F., and Forfinski, N.A.	Geological Interpretation and Multibeam Bathymetry of the Sea Floor in the Vicinity of the Race, Eastern Long Island Sound	2007	Report (final, published)	Environmental Analyses	Eastern LIS	94 sq. km multibeam bathymetry survey in eastern Long Island Sound. Includes bathymetry data and interpretation of surficial geology.	Medium	USGS Coastal and Marine Geology Team
93	Science Applications International Corporation	Monitoring Survey at the New London Disposal Site, June 2001	2004	Report (final, published)	Monitoring	Eastern LIS	The New London Disposal Site (NLDS) was monitored in June 2001 as part of the Disposal Area Monitoring System (DAMOS) Program. The survey objectives were to evaluate the physical and chemical composition of the deposited sediment comprising the capped Seawolf Mound and the benthic recolonization status of this mound relative to ambient conditions at the reference areas.	Medium	USACE New England District
66	Codiga, D.L.	Foster-LIS		Database (published)	Monitoring	Eastern LIS	Monitoring aboard New London-Orient Point ferry. Horizontally-directed currents are measured in a vertical profile, from near the sea surface to near the seafloor, by an acoustic Doppler current profiler (ADCP). Near-surface water is pumped past sensors in the engine room and its temperature, salinity, and chlorophyll concentration are measured.	Medium	Long Island Sound Study
36	Kenney, R.D., and Vigness-Raposa, K.J.	Marine Mammals and Sea Turtles of Narragansett Bay, Block Island Sound, Rhode Island Sound, and Nearby Waters: An Analysis of Existing Data for	2009	Report (draft)	Environmental Analyses	Block Island Sound	Occurrence, distribution and relative abundance from surveys, sightings, strandings, bycatch and historical data.	Medium	Rhode Island Coastal Resources Management Council - Policy and Planning

Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
		the Rhode Island Ocean Special Area Management Plan							
42	Codiga, D. and Ullman, D.	Characterizing Physical Oceanography of the Rhode Island Coastal Ocean		Planned/ Future	Environmental Analyses	Block Island Sound	Annual-mean and seasonal-mean currents, non-tidal current variations due wind forcing and estuarine outflow, tidal currents, and the structure of annual-and seasonal mean temperature, salinity, density, and density stratification are being described.	Medium	Rhode Island Coastal Resources Management Council - Policy and Planning
41	McCann, J., Smythe, T., and Damon, C.	Marine Recreation Use and Impact Study		Planned/ Future	Review	Block Island Sound	This study is analyzing and mapping all marine recreational uses within the SAMP area. Recreational uses included in the analysis are recreational boating, yacht racing, diving, and wildlife tours.	Medium	Rhode Island Coastal Resources Management Council - Policy and Planning
18	Poppe, L.J., Paskevich, V.F., Williams, S.J., Hastings, M.E., Kelly, J.T., Belknap, D.F., Ward, L.G., Fitzgerald, D.M., and Larsen, P.F.	Surficial Sediment Data from the Gulf of Maine, Georges Bank, and Vicinity: A GIS Compilation	2003	Report (final, published)	Environmental Analyses	Block Island Sound	Textural data and lithologic descriptions generated on surficial sediment samples from Block Island Sound and Montauk Point.	Medium	USGS Coastal and Marine Geology Team
107	Elphick	Salt Marsh-Breeding Sparrows in Long Island Sound: Status and Productivity of a Globally Important Species	2002	Abstract	Field Sampling	Shoreline (NY)	Assess population size of salt marsh sharp-tailed sparrow and seaside sparrow, estimate breeding productivity, identify suitable indicators of salt marsh health.	Medium	Long Island Sound Study
236	NOAA, USFWS and NYSDEC	Final Restoration Plan And Environmental Assessment Applied Environmental Services (Shore Realty) Superfund Site	2002	Report (final, published)	Environmental Analyses	Shoreline (NY)	[EXHIBIT II]: fish and shellfish species in Hempstead Harbor. [EXHIBIT III]: Summary of essential fish habitat designation for waters affecting Hempstead Harbor.	Medium	

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
53	CT DEP Office of Long Island Sound Programs	Nomination Report to the Convention on Wetlands of International Importance: Connecticut River Estuary and Tidal River Wetlands Complex	1994	Report (final, published)	Environmental Analyses	Shoreline (CT)	Nomination of southern Connecticut River Estuary to RAMSAR list, includes maps and data of significant wetlands and habitat.	Medium	U.S. Fish and Wildlife Service, Southern New England Coastal Program
87	Center for Land Use Education and Research	Coastal Riparian Buffer Analysis		Maps/Charts	Environmental Analyses	Shoreline (CT)	Overview of the status of riparian corridors draining to the Sound, and a feel for land use trends within these areas.	Medium	Middlesex Cooperative Extension Center
81	CT DEP Office of Long Island Sound Programs	Connecticut Coastal Access Guide		Maps/Charts	Directory	Shoreline (CT)	Mapping database of sites open to the public for boating, swimming, fishing, hiking and other outdoor activities along CT shore.	Medium	Connecticut Department of Environmental Protection, Office of Long Island Sound Programs
20	TEC, Inc.	Pre And Post Dredging Sediment Sampling Results Report, Shellfish Monitoring Program:Naval Submarine Base New London - Groton, Connecticut	2007		Field Sampling	Shoreline (CT)	Contains sediment analysis pre and post CAD cell disposal, shellfish tissue analysis, outline of Thames River Shellfish Resource Area.	Medium	US Navy - New London Sub Base, Installation Restoration Program
80	Mullaney, J.R., Schwarz, G.E., and Todd Trench, E.C.	Estimation of Nitrogen Yields and Loads from Basins Draining to Long Island Sound, 1988–98	2002	Report (final, published)	Monitoring	Shoreline (CT)	Monitoring data on total nitrogen concentrations and streamflow were used to estimate annual nonpoint nitrogen loads for 1988–98 at 28 monitoring sites and 26 unmonitored basins that drain to Long Island Sound. The estimated total nitrogen yields at monitoring sites were used with basin characteristics and ancillary data to develop a multiple-linear regression equation to estimate nonpoint nitrogen yields from monitored and unmonitored basins.	Medium	USGS CT District Office

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
195	Balcom, P.H., Fitzgerald, W.F., Vandal, G.M., Lamborg, C.H., Rolfhus, K.R., Langer, C.S., and Hammerschmidt, C.R.	Mercury Sources and Cycling in the Connecticut River and Long Island Sound	2004	Journal Paper	Monitoring	Shoreline (CT)	Mercury monitoring at four atmospheric deposition stations (Marshlands-RyeNY, Milford Point, Hammonassett-Madison, Avery Point-Groton), six water pollution control facilities (Greenwich, Stamford, Norwalk, Bridgeport, New Haven, Mattabassett-Cromwell, Hartford), and four rivers discharging to Long Island Sound (Connecticut, Housatonic, Thames, Quinnipiac).	Medium	University of Connecticut Department of Marine Sciences
88	Center for Land Use Education and Research	Coastal Area Land Cover Analysis Project		Maps/Charts	Environmental Analyses	Shoreline (CT)	The Purpose of the Coastal Area Land Cover Change Analysis Project (CALCAP) Project is to provide an improved understanding of how and where development within Connecticut's coastal area and lower Connecticut River towns may be affecting coastal Connecticut's most significant ecological and coastal recreation areas.	Medium	Middlesex Cooperative Extension Center
1	Burke, R.L. and Feinberg, J.A.	Amphibians and Reptiles of Long Island, Staten Island and Manhattan	2000	M.S. Thesis	Directory	Upland (NY)	A key for identifying the reptiles and amphibians found on Long Island, Staten Island and Manhattan. This key contains ALL reptiles and amphibians, that currently, or until recently, occurred in sustained populations in this region. Species that have become extinct locally are included in this key as well as exotic (introduced) species.	Medium	Hofstra University Dept. of Biology
125	Audubon New York	Birds of Conservation Concern in NY – April 2008	2008	Database (published)	Directory	Upland (NY)	List of threatened, endangered and species of special concern in New York state.	Medium	Audubon New York
126	Audubon New York	Birds of Conservation Concern in NY - Map	2005	Maps/Charts	Directory	Upland (NY)	Location and size of Important Bird Areas on Long Island.	Medium	Audubon New York
162	US Fish & Wildlife	Threatened & Endangered Species System: Environmental Conservation Online System - New York	2009	Database (published)	Directory	Upland (NY)	Listing of all federally threatened and endangered animals and plant (including marine species) that are known to inhabit New York and its waters. Links to species profiles online.	Medium	

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
197	NYSDEC Division of Fish, Wildlife and Marine Resources	Checklist Of Amphibians, Reptiles, Birds And Mammals Of New York State	2007	Database (published)	Directory	Upland (NY)	List of mammals, birds, amphibians and reptiles of New York state, plus state and federal designations.	Medium	New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources - Wildlife Diversity Group
111	Preston	Connecticut River Riparian Area Mapping	2004	Maps/Charts	Environmental Analyses	Upland (CT)	Maps occurrences of riparian buffers, invasive species, riparian buffer restoration and protection opportunities along lower Connecticut River and main tributaries.	Medium	Long Island Sound Study
163	US Fish & Wildlife	Threatened & Endangered Species System: Environmental Conservation Online System - Connecticut	2009	Database (published)	Directory	Upland (CT)	Listing of all federally threatened and endangered animals and plant (including marine species) that are known to inhabit Connecticut and its waters. Links to species profiles online.	Medium	
164	Connecticut Department of Environmental Protection	Endangered, Threatened & Special Concern Birds	2007	Database (published)	Directory	Upland (CT)	Listing of endangered, threatened, and special concern birds in Connecticut	Medium	
83	CT DEP	Surficial Aquifer Potential Map of Connecticut	2008	Maps/Charts	Environmental Analyses	Upland (CT)	The map identifies areas with greater potential for ground water supply based upon the texture and thickness of surficial aquifer deposits. The resulting hydrostratigraphic units define areas of coarse grained deposits, coarse overlying fine grained deposits, fine grained deposits, and areas where fine grained deposits overlie coarse grained deposits.	Medium	Connecticut Geological and Natural History Survey
85	Center for Land Use Education and Research	Connecticut's Changing Landscape		Maps/Charts	Environmental Analyses	Upland (CT)	The land cover change portion of Connecticut's Changing Landscape provides basic information about changes to developed, forest and agricultural lands during the period 1985 to 2006. Five directly comparable land cover datasets, from 1985, 1990, 1995, 2002 and 2006.	Medium	Middlesex Cooperative Extension Center

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
86	Center for Land Use Education and Research	Forest Fragmentation		Maps/Charts	Environmental Analyses	Upland (CT)	The forest fragmentation model uses the land cover data from Connecticut's Changing Landscape to characterize the degree to which our forests have become carved up by developed landscapes, especially roads.	Medium	Middlesex Cooperative Extension Center
324	University of Rhode Island Environmental Data Center	Rhode Island Geographic Information System: Geological and Geophysical	2009	Maps/Charts	Directory	Upland (RI)	Includes GIS data on bedrock geology, glacial deposits, soil survey.	Medium	University of Rhode Island, Environmental Data Center
58	New York State Department of Environmental Conservation	Part 182: Endangered and Threatened Species Of Fish and Wildlife; Species Of Special Concern		Database (published)	Directory		List of fish and wildlife species in New York listed as threatened or endangered.	Medium	
59	New York State Department of Environmental Conservation	Part 193: Trees and Plants - Page 2		Database (published)	Directory		List of plant species in New York listed as rare, threatened or endangered.	Medium	
105	Zajak	Food Webs in Long Island Sound: Review, Synthesis and Potential Applications	2004	Abstract	Model	Entire LIS	Conceptual and quantitative food web models for different habitats in Long Island Sound, used to assess critical food web components and identify data gaps.	Low	Long Island Sound Study
112	DeGuise	LIS Environmental Data Synthesis	2007	Planned/ Future	Data comparison	Entire LIS	Systematic synthesis of information on the patterns and processes that characterize the Long Island Sound ecosystem.	Low	Long Island Sound Study
180	Balcom, N.	Long Island Sound Interstate Aquatic Invasive Species Management Plan	2007	Report (draft)	Regulations/Manuals	Entire LIS	Table 3 has list of marine aquatic invasive species of Long Island Sound.	Low	Connecticut Sea Grant College Program
181	Maclellan, J.	Draft Long Island Sound Invasive Species List	2005	Report (draft)	Directory	Entire LIS	List of introduced, cryptogenic, and potentially invasive species in Long Island Sound.	Low	USFWS

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
114	Crivello, J., Howell, P., LoBue, C., and Zajac, R.	Lobster Resource Status in Long Island Sound	2003	Brochure	Forum for current research	Entire LIS	Expanded monitoring of lobster stock with sampling trips made in cooperation with commercial lobstermen, a semiannual trawl survey, a tagging study, and a young-of-the-year study.	Low	
115	Benway, J., Burgess, R., Giannini, C., Howell, P., Hayden, J., and McKown, K.	Long-Term Population Trends in American Lobster in Long Island Sound	2005	Brochure	Forum for current research	Entire LIS	Existing long-term monitoring data and studies initiated in response to the 1998-1999 lobster die-off in Long Island Sound were examined to determine long-term trends that may help to clarify the causes. Data examined included:- time series of commercial lobster catch (i.e., landings and discards) compiled over 28 years; sea-sampling; time series of research trawl indices compiled over two decades; three years of mark-recapture data, time series of bottom water temperature compiled over 13 years; and one year of research trap survey. Movement information was gathered by recapture of 2,309 lobsters at-large in the Sound for more than 30 days.	Low	
119	The Long Island Sound Lobster Research Initiative and CT DEP Long Island Sound Research Fund	Third Long Island Sound Lobster Health Symposium	2003	Conference Proceedings	Forum for current research	Entire LIS	Abstracts of research on lobster health. Topics include status of the LIS lobster resource, environmental stressors, physiological responses to stress, pesticides, parasites and disease.	Low	Connecticut Sea Grant Extension
179	Stacey, P. and Beristain, M.	Toxic Contamination in Long Island Sound	1990	Brochure	Field Sampling	Entire LIS	Copper in LIS oysters.	Low	New York Sea Grant Extension
193	DiGiovanni Jr., R., Durham, K., Wocial, J. and Zawacki, K.	Post Release Monitoring of Juvenile Harp seals (Phoca groenlandica) Released in New York Waters	2003	Conference Proceedings	Field Sampling	Entire LIS	Tagging study of juvenile male harp seals.	Low	The Riverhead Foundation for Marine Research and Preservation

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
217	Varekamp, J.C., Mecray, E.L. and Maccalous, T.Z.	Once Spilled, Still Found: Metal Contamination in Connecticut Coastal Wetlands and Long Island Sound Sediment from Historic Industries	2005	Book	Review	Entire LIS	Metals contaminant levels in sediment cores from various Long Island Sound and coastal CT stations.	Low	
95	Dam and O'Donnell	A Synthesis of Water Quality and Planktonic Resource Monitoring Data for Long Island Sound	2005	Planned/ Future	Data comparison	Entire LIS	The objective of this project is to synthesize existing water quality and biological resource monitoring data into information and recommendations useful to Long Island Sound restoration management and decision-making.	Low	Long Island Sound Study
113	Cuomo, C. and Wilson, R.	Bottom Water Conditions Can Create Problems for Lobsters in Long Island Sound	2003	Brochure	Forum for current research	Entire LIS	Bottom water temperature anomalies and lobster mortality events in Long Island Sound.	Low	
190	NYSDEC and CTDEP	A Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound	2000	Report (final, published)	Regulations/Manuals	Entire LIS	Quantification of yearly nitrogen and TOC loading to Long Island Sound from point sources and nonpoint sources.	Low	Long Island Sound Study
227	Li, J.Y.	Monitoring Phytoplankton Community Composition in Long Island Sound With HPLC Photopigment Profiles	2005	Brochure	Monitoring	Entire LIS	Community composition and biomass of phytoplankton in Long Island Sound, patterns of spatial and temporal variability.	Low	CT DEP, Water Management Bureau

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
239	Long Island Sound Study	The Comprehensive Conservation and Management Plan: III. Hypoxia	1994	Report (final, published)	Environmental Analyses	Entire LIS	Discussion of hypoxia issue in LIS. [Figure 3]: minimum DO in bottom waters 1989. [Figure 6]: nitrogen loads from various sources. [Figure 9]: high priority sub basins for watershed nonpoint source nitrogen management.	Low	Long Island Sound Study
240	Long Island Sound Study	The Comprehensive Conservation and Management Plan: IV. Toxic Substances	1994	Report (final, published)	Environmental Analyses	Entire LIS	Organic and inorganic contaminant data in water, sediment and tissue of LIS. Metal loadings sources to the Sound.	Low	Long Island Sound Study
49	Brochi, J.	DAMOS in Long Island Sound WLIS Mound K and Mound L		Planned/ Future	Field Sampling	Western LIS	Benthic habitat mapping with sidescan sonar sediment profile imaging at WLIS disposal sites. Also collected sediment chemistry data. Fieldwork completed summer 2009, awaiting data analysis and report.	Low	USEPA - New England
109	Rozsa, Yamalis, Holst, and Young	Rates of Tidal Wetland Loss	2002	Planned/ Future	Environmental Analyses	Western LIS	Developed a database of tidal marsh polygons and acreage information from air photo interpretation for tidal rivers in Western Long Island Sound, similar plans for New York.	Low	Long Island Sound Study
50	Brochi, J.	EPA/CTDEP Assessment of Hypoxic Conditions in Western Long Island Sound		Planned/ Future	Field Sampling	Western LIS	72 hour continuous water quality monitoring for hypoxic conditions in WLIS.	Low	USEPA - New England
129	Sweeney, A. and Sanudo-Wilhelmy, S.A.	Dissolved Metal Contamination in the East River–Long Island Sound System: Potential Biological E fects	2004	Journal Paper	Field Sampling	Western LIS	23 stations on 55 mile transect in western Long Island Sound sampled for surface water quality in summer 1999. Measured salinity, secchi depth, silver, cadmium, copper, lead, nitrate, phosphate, chlorophyll-a.	Low	Marine Sciences Research Center, Stony Brook University
216	Turekian, K.K., Sharma, M. and Gordon, G.W.	The Behavior of Natural and Anthropogenic Osmium in the Hudson River–Long Island Sound Estuarine System	2007	Journal Paper	Field Sampling	Western LIS	The extent to which riverine Osmium (Os) is trapped in a temperate estuary was the aim of this study. The behavior of Os through the Hudson River, East River and the Long Island Sound (LIS) system is addressed using both natural Os and anthropogenically mobilized Os.	Low	Yale University, Department of Geology and Geophysics

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
176	Lawrence J. Poppe, L.J., Williams, S.J., Moser, M.S., Forfinski, N.A., Stewart, H.F., and Doran, E.F.	Quaternary Geology and Sedimentary Processes in the Vicinity of Six Mile Reef, Eastern Long Island Sound	2008	Journal Paper	Field Sampling	Central LIS	Descriptions and maps of bedrock and glacial moraines, bathymetry, glaciolacustrine deposits, sediment texture, seismic lines, megaripples, postglacial marine deposits, modern reworked sediments, barchanoid sand wave, transverse sand waves in the vicinity of Six Mile Reef.	Low	U.S. Geological Survey
177	Wang, Y.H.	The Intertidal Erosion Rate of Cohesive Sediment: A Case Study from Long Island Sound	2003	Journal Paper	Field Sampling	Central LIS	Current, wave, and turbidity data were collected from a bottom mounted instrument array in LIS to investigate the relationship between erosion rate and bottom shear stress.	Low	Center for Ocean Research, National Taiwan University
207	Poppe, L.J., Knebel, H.J., Lewis, R.S., and DiGiacomo-Cohen, M.L.	Processes Controlling the Remobilization of Surficial Sediment and Formation of Sedimentary Furrows in North-Central Long Island Sound	2002	Journal Paper	Field Sampling	Central LIS	Sidescan sonar, bathymetric, subbottom, and bottom-photographic surveys and sediment sampling in the vicinity of the New Haven Dump Site to understand processes forming sedimentary furrows.	Low	USGS Coastal and Marine Geology Team
209	Poppe, L.J., McMullen, K.Y., Williams, S.J., Crocker, J.M. and Doran, E.F.	Estuarine Sediment Transport By Gravity-Driven Movement of the Nepheloid Layer, Long Island Sound	2008	Journal Paper	Field Sampling	Central LIS	Sidescan sonar imagery shows down-slope gravity-driven movement of the nepheloid layer is an important sediment transport mode into the basins of north-central Long Island Sound.	Low	USGS Coastal and Marine Geology Team
123	Valente, R.M. and Fredette, T.J.	Benthic Recolonization of a Capped Dredged Material Mound at an Open Water Disposal Site in Long Island Sound	2002	Report (draft)	Field Sampling	Eastern LIS	Surveys were conducted to assess recolonization of the Seawolf Mound by benthic macroinvertebrates. Sediment grab samples for benthic taxonomic analysis were collected at six stations across the capped mound in September 1997 (1.5 years following completion of the capping operation) and again in June 2001 (5 years postcap). Sediment-profile images (SPI) were collected simultaneously at the six stations in both years, as well as in July 1998	Low	DAMOS Program Manager, US Army Corps of Engineers, New England District

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
							and August 2000.		
122	Connecticut Department of Environmental Protection	An Assessment of the Impacts of Commercial and Recreational Fishing and Other Activities to Eelgrass in Connecticut's Waters and Recommendation for Management	2007	Report (final, published)	Environmental Analyses	Eastern LIS	Distribution of eelgrass and trends in abundance, effection of recreational and commercial fishing (finfish, lobster, shellfish) on eelgrass, effects of boats/piers/docks/dredging/filling/waterfowl/ disease/climate/water quality on eelgrass.	Low	
204	Kirincich, A.R. and Hebert, D.	The Structure of the Coastal Density Front at the Outflow of Long Island Sound During Spring 2002	2005	Journal Paper	Field Sampling	Eastern LIS	South of the eastern end of Long Island (Montauk Point) along the Eastern U.S. coast, a coastal density front forms between the buoyant outflow plume of the Long Island Sound (LIS) and the denser shelf waters offshore. During a 2- day cruise in April 2002, measurements of the density and velocity structure of this front were obtained from high-resolution CTD and ADCP data.	Low	College of Atmospheric and Oceanic Sciences, Oregon State University
205	Levine, E.R., Goodman, L., and O'Donnell, J.	Turbulence in Coastal Fronts Near the Mouths of Block Island and Long Island Sounds	2009	Journal Paper	Field Sampling	Eastern LIS	Measurements of turbulence were performed in four frontal locations near the mouths of Block Island Sound (BIS) and Long Island Sound (LIS). These measurements extend from the offshore front associated with BIS and Mid-Atlantic Bight Shelf water, to the onshore fronts near the Montauk Point (MK) headland, and the Connecticut River plume front. The latter feature is closely associated with the major fresh water input to LIS. Turbulent kinetic energy (TKE) dissipation rate, , was obtained using shear probes mounted on an auto-nomous underwater vehicle.	Low	Naval Undersea Warfare Center, Autonomous Systems Department
206	Mau, J.C., Wang, D.P., Ullman, D.S., and Codiga, D.L.	Characterizing Long Island Sound Outflows From HF Radar Using Self-Organizing Maps	2007	Journal Paper	Environmental Analyses	Eastern LIS	The surface outflows from the Long Island Sound are examined from one-year records of HF radar (CODAR) observations. Synoptic flow patterns are identified using manual classification, empirical orthogonal function (EOF) decomposition, and self-organizing maps (SOM).	Low	Stony Brook University Marine Sciences Research Center

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Doc ID	Author(s)	Title	Year Published	Document Type	Work Type	Location	Summary	DMMP Relevance	Contact Agency/Department
208	Poppe, L.J., DiGiacomo-Cohen, M.L., Smith, S.M., Stewart, H.F. and Forfinski, N.A.	Seafloor Character and Sedimentary Processes in Eastern Long Island Sound and Western Block Sound	2006	Journal Paper	Field Sampling	Eastern LIS	Multibeam bathymetric data and seismic reflection profiles reveal previously unrecognized glacial features and modern bedforms.	Low	USGS Coastal and Marine Geology Team
40	Collie, J., King, J., and Pratt, S.	Mapping and Characterizing Fish Habitat in Rhode Island's Transitional Seas		Planned/ Future	Review	Block Island Sound	This effort will classify and map fisheries habitats, based on benthic characteristics and site Specific fisheries data, and assess the functional importance of fish habitat in providing shelter and food for demersal fish species.	Low	Rhode Island Coastal Resources Management Council - Policy and Planning
175	Boothroyd, J.C.	A Short Geological History of Block Island and Rhode Island Sounds Block Island and Rhode Island Sounds	2009	Maps/Charts	Environmental Analyses	Block Island Sound	Bedrock map of upland Rhode Island, RI Sound bathymetry, map of terminal moraines in RI Sound (with material type) and LIS, map of benthic geologic habitats and sidescan sonar at Matunuck-GreenHill shoreface, map of Block Island Sound inner shelf deposition, map of bottom characteristics of RI and BI Sounds, seismic profiles.	Low	URI College of the Environment and Life Sciences, Rhode Island Geological Survey and Department of Geosciences
44	Grilli, S., Harris, J., and Steube, D.	High Resolution Modeling of Meteorological, Hydrodynamic, Wave, and Sediment Processes in the SAMP Study Area		Planned/ Future	Model	Block Island Sound	Researchers are using high-resolution meteorological, hydrodynamic, wave and sediment suspension, and numerical models to the SAMP study area to accurately characterize and map wind fields, hydrodynamic fields, and potential for sediment suspension from bottom velocity of combined waves and current.	Low	Rhode Island Coastal Resources Management Council - Policy and Planning
45	Spaulding, M., Codiga, D., Ullman, D., and Pettigrew, N.	Buoy-Based Oceanographic and Meteorological Observations: Block Island and Deep Water Sites		Planned/ Future	Field Sampling	Block Island Sound	Researchers are deploying two fully instrumented buoys, one off the southern coast of Block Island and the second near Cox's Ledge. The buoys are collecting data for one year, and the data is being analyzed for additional insight into the circulation, waves, and meteorology of both sites.	Low	Rhode Island Coastal Resources Management Council - Policy and Planning

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210	King, J.W.	Rhode Island Ocean SAMP:Fall 2008 Endeavor Cruise Results and Proposed Future Work	2008	Conference Proceedings	Field Sampling	Block Island Sound	Bathymetry, benthic imaging, grab sampling south and west of Block Island; sedimentary environment of Ninigret Pond; benthic habitats of Greenwich Bay; Rhode Island Sound seafloor topography and high resolution subbottom seismic profiles, glacial geology.	Low	University of Rhode Island - Graduate School of Oceanography
34	Tiner, R.W., Bergquist, H.C., Siraco, D., and McClain, B.J.	An Inventory of Submerged Aquatic Vegetation and Hardened Shorelines for the Peconic Estuary, New York	2003	Report (final, published)	Environmental Analyses	Gardiners & Peconic Bays	Delineation of submerged aquatic vegetation in Peconic Estuary.	Low	U.S. Fish and Wildlife Service, Northeast Region - National Wetlands Inventory Program
27	Cashin Associates, P.C.	Draft Generic Environmental Impact Statement for the Shellfish Aquaculture Lease Program in Peconic Bay and Gardiners Bay Suffolk County, NY	2008	Report (draft)	Environmental Analyses	Gardiners & Peconic Bays	EIS contains estuary circulation patterns and water quality data.	Low	Suffolk County Department of Planning
32	Balla, R., Bavaro, L., deQuillfeldt, C., and Miller, S.	Peconic Estuary Program Environmental Indicators Report	2005	Report (final, published)	Review	Gardiners & Peconic Bays	Environmental indicators include habitat and water quality.	Low	Suffolk Department of Health Services
35	Suffolk County Office of Ecology	YSI Automated Water Quality Monitors		Brochure	Monitoring	Gardiners & Peconic Bays	Water quality monitoring in Long Island Sound and Peconic Estuary.	Low	Suffolk County Department of Health Services - Office of Ecology
103	D'Amico	LI Embayment Benthic Mapping	2003	Planned/ Future	Field Sampling	Shoreline (NY)	NYSDEC has contracted Stony Brook University to develop benthic maps for Port Jefferson Harbor, Huntington – Northport Bays, and Oyster Bay – Cold Spring Harbor. The side scan photography has been completed for all three embayments and benthic sampling will be conducted in Port Jefferson and Huntington – Northport Bays.	Low	Long Island Sound Study

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106	Gorokhovich	GIS-based Assessment of Undeveloped Parcels in New York Coastal Counties	2006	Planned/ Future	Directory	Shoreline (NY)	Assemble existing parcel data from coastal counties of New York State that will be used by LISS and NYSDEC officials in conservation of the most significant remaining unprotected and undeveloped parcels.	Low	Long Island Sound Study
108	Gilmore and Civco	Application of Remote Sensing Technologies for the Delineation and Assessment of Coastal Marshes and their Constituent Species	2004	Abstract	Environmental Analyses	Shoreline (NY)	Remote sensing inventory identifying and delineating coastal marshes of Long Island Sound.	Low	Long Island Sound Study
231	Greller, A.M., Lotowycz, G.E., Moore, G., Lamont, E., Binger, H., Conolly, B., Dankel, V., Hoar, J., Johnston, C., Mangiacapre, A., Schmidt, J., Zimmerman, L., Luisi, V., Quigley, B., Lamont, M.L. and Clemants, S.E.	Vascular Flora of Caumsett State Historic Park, Lloyd Neck, Long Island, New York, with Notes on the Vegetation	2005	Journal Paper	Directory	Shoreline (NY)	Five classes of habitats are found within the park, each with many types of plant communities. These are I. upland forests, mature forest and also extensive areas undergoing succession; II. freshwater swamps, marshes and ponds, dominated by flood tolerant trees, shrubs, forbs or graminoids; III. gravel and sand deposits, dominated by drought tolerant shrubs, forbs and grasses; IV. tidal wetlands, dominated by salt tolerant grasses, shrubs and, locally, forbs; and V. disturbed habitats, mainly lawns and dry meadows, dominated by grasses and composites. Species lists are included.	Low	Brooklyn Botanic Garden, Department of Science
124	Comins, P. and Field, C.	Stratford Great Meadows Marsh including Long Beach West/Pleasure Beach To Be Recognized as an Important Bird Area By Audubon	2008	Brochure	Directory	Shoreline (CT)	Data in support of the nomination to Important Bird Area, plus list of all Connecticut Important Bird Areas.	Low	CT IBA Coordinator, Audubon Connecticut

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128	Niantic River Foundation	Niantic River Ecological Study	2006	Report (draft)	Environmental Analyses	Shoreline (CT)	Summary of ecological resources in Niantic River estuary, includes data on bathymetry, sediment type, tidal exchange, freshwater contribution, water temperature, salinity, macroalgal community richness and biomass, eelgrass biomass, light attenuation, chlorophyl-a, bay scallop abundance, demersal fish diversity and evenness.	Low	
21	TEC, Inc.	CAD Cell Cap Assessment: Thames River Navigation Channel, Naval Submarine base New London	2008		Field Sampling	Shoreline (CT)	Contains sediment chemistry and grainsize analysis and bathymetry at CAD site in Thames River.	Low	US Navy - New London Sub Base, Installation Restoration Program
22	TEC, Inc.	Dredge Material Disposal Alternatives Analysis: Waterfront Maintenance Dredging - Subase Nlon	2009		Field Sampling	Shoreline (CT)	Contains sediment grainsize analysis in Thames River.	Low	US Navy - New London Sub Base, Installation Restoration Program
23	Tetra Tech NUS, Inc.	Final Non-Time Critical Removal Action Work Plan for Sediment Removal at Pier 1 Inner and Outer Areas Naval Submarine Base – New London	2009		Field Sampling	Shoreline (CT)	Superfund program - analysis of chemical contamination adjacent to Subase waterfront in Thames River, and bathymetry.	Low	US Navy - New London Sub Base, Installation Restoration Program
127	Rhode Island Coastal Adventure Trails	Coastal Birding Trail		Brochure	Directory	Shoreline (RI)	Guide to bird refuges and management areas along the coast of Rhode Island, including commonly encountered birds.	Low	
218	Rhode Island Department of Environmental Management Division of Fish and Wildlife Marine Fisheries	2009 Management Plan for the Shellfish Fishery Sector	2009	Report (final, published)	Regulations/ Manuals	Shoreline (RI)	2007 commercial quahog landing count, 2006-2007 commercial softshell clam landings weight, quahog landings 1946-2007, Narragansett Bay quahog density 1999-2007, softshell clam landings 1999-2007, oyster landings 1990-2007.	Low	Rhode Island Department of Environmental Management Division of Fish and Wildlife Marine Fisheries

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219	Rhode Island Department of Environmental Management Division of Fish and Wildlife Marine Fisheries	2009 Management Plan for the Crustacean Sector	2009	Report (final, published)	Regulations/ Manuals	Shoreline (RI)	Lobster Abundance in the RIDFW Fall Trawl Survey in Narragansett Bay and RI Coastal Waters, 1979-2007; Lobster Abundance in the URIGSO Trawl Survey in Narragansett Bay and RI Coastal Waters, 1979-2007; Abundance of Newly Settled Lobster in Rhode Island from Wahle Dive Survey; Rhode Island Commercial Inshore Lobster Landings (1977-2007)and Fishery Catch per Unit Effort (1991-2007);RI Inshore Lobster Absolute Abundance and Landings; RI Cancer Crab Abundance and Landings; RI Horsehoe Crab Abundance and Landings.	Low	Rhode Island Department of Environmental Management Division of Fish and Wildlife Marine Fisheries
199	US Fish & Wildlife	Block Island National Wildlife Refuge	2008	Brochure	Directory	Shoreline (RI)	Information about wildlife and habitat on Block Island.	Low	US Fish & Wildlife Service Northeast Region
201	Rhode Island Department of Environmental Management Parks and Recreations Division	Rhode Island Parks: Region V	2009	Brochure	Directory	Shoreline (RI)	Information about Rhode Island parks in Westerly and Charlestown.	Low	Rhode Island Department of Environmental Management Parks and Recreations Division - Region V Headquarters
202	US Fish & Wildlife	Trustom Pond National Wildlife Refuge	2009	Brochure	Directory	Shoreline (RI)	Information about wildlife and habitat at Trustom Pond in South Kingstown.	Low	
220	NYSDEC Division of Solid & Hazardous Materials	Active Long Island Landfills	2008	Database (published)	Directory	Upland (NY)	Locations, contact info and types of material received at landfills on Long Island.	Low	New York State Department of Environmental Conservation, Division of Solid & Hazardous Materials, Solid Waste Management Facilities

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213	Luoa, Y., Yanga, X., Carleyb, R.J., and Perkins, C.	E fedts of Geographical Location and Land Use on Atmospheric Deposition of Nitrogen in the State of Connecticut	2003	Journal Paper	Field Sampling	Upland (CT)	A network of eight monitoring stations (Old Greenwich, Bridgeport, Hammonassett, Avery Point, Voluntown, East Hartford, Waterbury, Mohawk Mountain) was established to study the atmospheric nitrogen concentration and deposition in the State of Connecticut. The stations were classified into urban, rural, coastal and inland categories to represent the geographical location and land use characteristics surrounding the monitoring sites.	Low	University of Connecticut, Department of Natural Resources Management and Engineering
131	CT DEP - Wildlife Division	Connecticut's Endangered, Threatened and Special Concern Species	2004	Brochure	Directory	Upland (CT)	List of endangered/threatened/special concern mammals, birds, reptiles, amphibians, fish, insects, and plants.	Low	CT DEP, Environmental and Geographic Information Center - Natural Diversity Data Base
191	US Fish & Wildlife	Silvio O. Conte National Fish and Wildlife Refuge Final Action Plan and Environmental Impact Statement	1995	Report (final, published)	Directory	Upland (CT)	List of Mammals of the Connecticut River Watershed.	Low	
167	CT DEP - Bureau of Natural Resources, Inland Fisheries Division	Connecticut Fish Distribution Report: 2008	2008	Report (final, published)	Data comparison	Upland (CT)	Locations and numbers of 2008 stocking program for trout, Kokanee salmon, Northern Pike, walleye, channel catfish, Atlantic Salmon, brown trout, shad, alewife.	Low	CT DEP - Bureau of Natural Resources, Inland Fisheries Division
96	NEIWPCC and USGS	Nitrogen Attenuation in The Connecticut River, Northeastern USA; A Comparison of Mass Balance and N2 Production Modeling Approaches.	2008	Journal Paper	Field Sampling	Upland (CT)	The objective of the proposed work was to quantify in-stream nitrogen attenuation at the watershed scale based on sufficient measurements of nitrogen concentrations and loads at chosen locations within the Connecticut River watershed.	Low	Long Island Sound Study

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97	NEIWPCC and USGS	Connecticut River Nitrogen Monitoring	2006	Report (final, published)	Field Sampling	Upland (CT)	NEIWPCC conducted a 3-year effort to study and model nonpoint and point source nitrogen contributions to the Connecticut River basin from Massachusetts, Vermont and New Hampshire. NEIWPCC compiled and assessed new data from the 3-year monitoring study, as well as continued to evaluate the nitrogen loading results of the New England SPARROW water quality model.	Low	Long Island Sound Study
132	CT DEP Nonpoint Source Coordinator	Connecticut Department Of Environmental Protection Nonpoint Source Management Program 2006 & 2007 Annual Report	2007	Report (final, published)	Forum for current research	Upland (CT)	Inventory of watershed management and monitoring programs throughout the state. Does not include data, but lists contacts through which data may be obtained.	Low	CT DEP - Nonpoint Source Program
137	CT DEP - Bureau of Water Management	2004 Water Quality Report To Congress	2004	Report (final, published)	Environmental Analyses	Upland (CT)	Assessment of primary contact use support, aquatic life use support, benthic community structure, fish consumption and shellfishing in CT waterbodies, inland and tidal coastal wetland acreage, groundwater aquifer location and quality, drinking water watersheds, beach monitoring closure records.	Low	CT DEP Bureau of Water Management - Planning & Standards Division
138	CT DEP - Bureau of Water Management	2006 Water Quality Report To Congress	2006	Report (final, published)	Environmental Analyses	Upland (CT)	Assessment of primary contact use support, aquatic life use support, benthic community structure, fish consumption and shellfishing in CT waterbodies, inland and tidal coastal wetland acreage, groundwater aquifer location and quality, drinking water watersheds, beach monitoring closure records.	Low	CT DEP Bureau of Water Management - Planning & Standards Division
89	Center for Land Use Education and Research	Connecticut Watershed Maps		Maps/Charts	Environmental Analyses	Upland (CT)	A map for each of Connecticut's 169 towns was created showing the watersheds that make up each town.	Low	Middlesex Cooperative Extension Center

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54	US Fish & Wildlife Long Island Sound Coastal and Estuary Office	Northeast Coastal Areas Study: Significant Coastal Habitats of Southern New England and Portions of Long Island, New York	1991	Report (final, published)	Environmental Analyses		Identification of 40 major coastal habitat complexes in need of protection in southern New England and Long Island, New York. It assessed the status of the region's living resources and developed strategies to protect, conserve, and enhance the resources and their habitat complexes, which extend from Cape Cod to Staten Island, including Long Island Sound and the tidal reaches of the Connecticut River.	Low	U.S. Fish and Wildlife Service, Southern New England Coastal Program
172	Atlantic States Marine Fisheries Commission	Amendment 6 to the Interstate Fishery Management Plan for Atlantic Striped Bass	2003	Report (final, published)	Regulations/ Manuals		Contains geographic range / migration patterns / life history info / habitat requirements for all life stages, data on entire population abundance and fishing mortality 1982-2000, Commercial landings 1990-2000, recreational landings 1982-2000, monitoring programs for recruitment and spawning stock biomass exist but do not occur in LIS, plans for other monitoring programs.	Low	Atlantic States Marine Fisheries Commission, Atlantic Striped Bass Management Board
173	Atlantic States Marine Fisheries Commission	Addendum I to Amendment 6 to the Atlantic Striped Bass Fishery Management Plan: Bycatch Data Collection Program and Angler Education Program	2007	Report (final, published)	Regulations/ Manuals		Estimates of commercial and recreational dead discards in the entire fishery 1982-2006.	Low	Atlantic States Marine Fisheries Commission, Fisheries Management Plan Coordinator
174	Atlantic States Marine Fisheries Commission	2008 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Atlantic Striped Bass (Morone Saxatilis): 2007 Fishing Year	2008	Report (final, published)	Regulations/ Manuals		2007 update of striped bass fishery commercial and recreational landings and discards.	Low	Atlantic States Marine Fisheries Commission, Fisheries Management Plan Coordinator