

US EPA ARCHIVE DOCUMENT

CATALOG DOCUMENTATION
NATIONAL COASTAL ASSESSMENT- NORTHEAST DATABASE
YEAR 2002 STATIONS
STATION LOCATION DATA:"STATIONS"

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1. DATASET IDENTIFICATION

1.1 Title of Catalog document

National Coastal Assessment-Northeast Region Database
Year 2002 Stations
Station Location Data

1.2 Authors of the Catalog entry

John Kiddon, U.S. EPA NHEERL-AED
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1.3 Catalog revision date

August 2007

1.4 Dataset name

STATIONS

1.5 Task Group

National Coastal Assessment-Northeast

1.6 Dataset identification code

001

1.7 Version

001

1.8 Request for Acknowledgment

EMAP requests that all individuals who download EMAP data acknowledge the source of these data in any reports, papers, or presentations. If you publish these data, please include a statement similar to: "Some or all of the data described in this article were produced by the U. S. Environmental Protection Agency through its Environmental Monitoring and Assessment Program (EMAP)".

2. INVESTIGATOR INFORMATION (for full addresses see Section 13)

2.1 Principal Investigators (NCA Northeast Region)

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2.2 Sample Collection Investigators

Donald Cobb, U.S. EPA NHEERL-AED

2.3 Sample Processing Investigators

John Kiddon, U.S. EPA NHEERL-AED

3. DATASET ABSTRACT

3.1 Abstract of the Dataset

The STATIONS data file reports information regarding stations sampled during 2002 in the National Coastal Assessment in the Northeast Region. Each record reports the planned location of the station (latitude and longitude); various descriptions of the jurisdiction of the station's location (name of state, stratum, and estuary containing the station); identification of the cooperative responsible for sampling; the local identification code assigned to the station; and the area represented by the station and stratum (used as weighting factors during analysis).

3.2 Keywords for the Dataset

Latitude, longitude, estuary name, state, cooperative, stratum, weighting factor, area.

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

The National Coastal Assessment (NCA) is a national monitoring and assessment program with the primary goal of providing a consistent evaluation of the estuarine condition in U.S. estuaries. It is an initiative of the Environmental Monitoring and Assessment Program (EMAP), and is a partnership of several federal and state environmental agencies, including: EPA's Regions, Office of Research and Development, and Office of Water; state environmental protection agencies in the 24 marine coastal states and Puerto Rico; and the United States Geological Survey (USGS) and the National Oceanic and Atmospheric Agency (NOAA). The NCA program was initiated in 2000, and known as the Coastal 2000 Program.

Stations were randomly selected using EMAP's probabilistic sampling framework and were sampled once during a summer index period (June to October). A consistent suite of indicators was used to measure conditions in the water, sediment, and in benthic and fish communities. The measured data may be used by the states to meet their reporting requirements under the Clean Water Act, Section 305(b). The data will also be used to generate a series of national reports characterizing the condition of the Nation's estuaries.

4.2 Dataset Objective

To report information about planned station locations and weighting factors used during data analysis.

4.3 Dataset Background Discussion

Refer to Section 4.4 for a list of dataset parameters. Additional information about selected parameters are discussed in this section.

The station locations (STA_LAT and STA_LNG) presented in this datafile are the *planned* latitude and longitude values designated by program designers. The *actual* latitudes and longitudes, which may differ slightly from the planned values, are reported as EVNT_LAT and EVNT_LNG in the EVENTS datafile. Generally, the user may find the actual location more useful during data analysis.

The parameter ST_COOP identifies the state-cooperative responsible for the administration of the NCA program in the Northeast. The entities responsible for sampling in 2002 are listed in the Table below. Note that in some cases a ST_COOP's jurisdiction crosses state lines. For example, NJ-DB administers the program in Delaware Bay and includes sampling in New Jersey, Delaware, and Pennsylvania. The parameter STATE may be used to identify all stations located within a state's boundaries.

ST_COOP	Description	Organizations responsible for sampling
ME	Maine	Casco Bay Project/U of Southern Maine
NH	New Hampshire	Jackson Estuarine Lab/UNH
RI	Rhode Island	University of Rhode Island
CT	Connecticut	Connecticut DEP
NY	New York	MSRC, Stonybrook University Suffolk County Dep. Health Services NYC DEP Town of Hempstead
NJ-DB	New Jersey-Delaware Bay	New Jersey Marine Sciences Consortium
NJ-C	New Jersey Coast	New Jersey Marine Sciences Consortium
DE	Delaware Inland Bays	Delaware DNR

Stations are grouped into strata based on watershed boundaries, state jurisdiction, or physical property such as depth. ST_AREA is the area (km²) of the stratum. The STRATA are generally organized to reflect water body boundaries and may therefore contain stations falling in more than one state. Stations are selected at random within a stratum according to a multi-year sampling design and are assigned a station weight (AREA) equal to the area (km²) represented by the station. For a particular sampling design, the sum of the AREA values for a stratum is equal to the stratum area ST_AREA.

The parameter STA_ALT indicates whether the station location was the original site, first alternate, or second alternate by "A", "B", or "C", respectively. The user may wish to adjust the magnitude of the weighting factor (AREA) based on the value of STA_ALT, for example, by multiplying the weighting factor by 0.5 or 0.33 if sampling crews had to sample at the first or second alternate location, respectively. Such an adjustment reflects the fact that the station did not represent the entire area originally assigned to the station.

Massachusetts did not participate in the NCA program in 2002. Rhode Island

conducted fish trawls only in 2002, and collected physical water parameters in conjunction with the trawls. Connecticut collected all parameters, but at an abbreviated group of in-shore stations (stations in the Long Island Sound intended for sampling in 2002 were sampled in 2003).

4.4 Summary of Dataset Parameters

* denotes parameters that should be used as key fields when merging data

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*STATION      Station name
*STAT_ALT     Alternate site code (A, B, or C)
ESTUARY       Estuary name
STA_LAT       Latitude (decimal degrees, datum NAD83)
STA_LNG       Longitude (decimal degrees, datum NAD83)
ST_COOP       State cooperative agreement responsible for sampling
LOCAL_ID      Station identifier (if any) assigned by ST_COOP
STATE         State jurisdiction of station
PROVINCE      Bio-geographical province containing station (AP or VP)
SYSTEM        Estuarine system or region name
STRATA        Stratum name
AREA          Station area (km2)
ST_AREA       Stratum area (km2)

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5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition / Field Sampling

Data in this data file were not acquired in the field or in laboratories; rather values were assigned by NCA program planners.

5.2 Data Preparation and Sample Processing

No analytical processing was involved with the STATIONS parameters

6. DATA ANALYSIS AND MANIPULATIONS

6.1 Name of New or Modified Values

Not applicable

6.2 Description of Data Manipulation

Not applicable

7. DATA DESCRIPTION

7.1 Description of Parameters

7.1.1 Components of the Dataset

PARAMETER	TYPE	LENGTH	LABEL
STATION	Char	10	NCA station name
STAT_ALT	Char	1	Alternate site code (A, B, C)
STATE	Char	2	State where station is located
ESTUARY	Char	40	Estuary name
PROVINCE	Char	2	Province name
STA_LAT	Num	8.4	Latitude (decimal degrees, datum
STA_LNG	Num	8.4	Longitude (decimal degrees, datum
ST_COOP	Char	6	State Cooperative Agreement
LOCAL_ID	Char	8	Station identifier used by ST_COOP

STRATA	Char	20	Stratum name
SYSTEM	Char	20	Estuarine system or region name
AREA	Num	8.3	Station area
ST_AREA	Num	8.3	Stratum area

7.1.2 Precision of Reported Values

STA_LAT and STA_LNG are reported to 0.0001 decimal degree units. AREA and ST_AREA are reported to three significant digits.

7.1.3 Minimum Value in Dataset

Name	Min
STA_LAT	38.4538
STA_LNG	-75.7271
AREA	0.001
ST_AREA	57.3
SUBAREA	0.001
SUBST_AR	2.39

7.1.4 Maximum Value in Dataset

Name	Max
STA_LAT	45.1339
STA_LNG	-66.9564
AREA	457
ST_AREA	3280
SUBAREA	457
SUBST_AR	3280

7.2 Data Record Example

STATION	STAT_ALT	STATE	ESTUARY	PROVINCE	STA_LAT	STA_LNG	ST_COOP
CT02-0200	A	CT	Connecticut Ponds	VP	41.1455	- 73.2166	CT
CT02-0202	A	CT	Housatonic River	VP	41.2254	- 73.1118	CT
CT02-0203	A	CT	New Haven Harbor	VP	41.2736	- 72.9269	CT

LOCAL_ID	STRATA	SYSTEM	AREA	ST_AREA	SUBSTRAT	SUBAREA	SUBST_AR
	CT	Long Island	1.13	84.4	CT	1.13	84.4
	Coastal	Sound			Coastal		
	CT	Long Island	3.26	84.4	CT	3.26	84.4
	Coastal	Sound			Coastal		
	CT	Long Island	23.8	84.4	CT	23.8	84.4
	Coastal	Sound			Coastal		

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude (Westernmost)
-75.6977 decimal degrees

8.2 Maximum Longitude (Easternmost)
-67.0482 decimal degrees

8.3 Minimum Latitude (Southernmost)
38.4739 decimal degrees

8.4 Maximum Latitude (Northernmost)
45.1848 decimal degrees

8.5 Name of area or region

The National Coastal Assessment Northeast Region covers the northeastern US coastline from Maine to Delaware.

9. QUALITY CONTROL AND QUALITY ASSURANCE

9.1 Measure Quality Objective
Not applicable

9.2 Data Quality Assurance Procedures
Not applicable

9.3 Actual Measurement Quality
Not applicable

10. DATA ACCESS

10.1 Data Access Procedures
Data can be downloaded from the web
<http://www.epa.gov/emap/nca/html/regions/index.html>

10.2 Data Access Restrictions
None

10.3 Data Access Contact Persons
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10.4 Dataset Format
ASCII (CSV) and SAS Export files

10.5 Information Concerning Anonymous FTP
Not available

10.6 Information Concerning WWW
No gopher access, see Section 10.1 for WWW access

10.7 EMAP CD-ROM Containing the Dataset

Data not available on CD-ROM

11. REFERENCES

Strobel, C.J. 2000. Environmental Monitoring and Assessment Program: Coastal 2000 - Northeast component: field operations manual. Narragansett (RI): U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division. EPA/620/R-00/002. 68 p.

U.S. EPA. 2001. National Coastal Assessment: Field Operations Manual. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL. EPA/620/R-01/003. 72 p.

U.S. EPA. 2001. Environmental Monitoring and Assessment Program (EMAP): National Coastal Assessment Quality Assurance Project Plan 2001-2004. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL. EPA/620/R-01/002. 189 p.

12. TABLE OF ACRONYMS

AED	Atlantic Ecology Division
CSC	Computer Sciences Corporation
EMAP	Environmental Monitoring and Assessment Program
EPA	Environmental Protection Agency
NCA	National Coastal Assessment
NHEERL	National Health and Environmental Effects Research Laboratory
QA/QC	Quality Assurance/Quality Control

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