

**DRAFT CATALOG DOCUMENTATION**  
**NATIONAL COASTAL ASSESSMENT- NORTHEAST DATABASE**  
**YEAR 2000 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 2000 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

June, 2002

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)

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### 2.2 Sample Collection Investigators

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### 2.3 Sample Processing Investigators

Not applicable

## 3. DATASET ABSTRACT

### 3.1 Abstract of the Dataset

The STATIONS data file reports information regarding the planned sampling locations designated by National Coastal Assessment planners for the Northeast Region. One record is presented per station. Each record reports the planned values of latitude and longitude. The actual values for these parameters, recorded at the time of sampling, are reported in the EVENTS data file. Each record also includes the names of the estuary, the State cooperative agreement nominally responsible for sampling the station, the state's original station identifier, and various statistical weighting factors (inclusion probabilities) used when performing analyses with the data.

### 3.2 Keywords for the Dataset

Station location, latitude, longitude, date, estuary name, region, state, inclusion probability

## 4. OBJECTIVES AND INTRODUCTION

### 4.1 Program Objective

The Coastal 2000 Initiative is a national EMAP effort. In Coastal 2000 we are demonstrating a consistent, integrated, probabilistic monitoring effort that will produce a national assessment of the condition of the U.S. marine estuaries. We partnered with EPA Regions, EPA's Office of Water, state resource/protection agencies in the 24 marine coastal states and Puerto Rico, USGS, and NOAA to conduct the sampling of estuaries during the late summer months of 2000 and 2001. A minimum of 50 sampling locations in each state have been established within EMAP's probabilistic sampling framework. From this we will develop a national report on the condition of the Nations's estuaries, as well as reports on the condition of the estuaries in each of the individual states and Puerto Rico. In 2002 we are beginning our assessment of the condition of the near-shore coastal environments to complement EPA's ongoing efforts to improve beach monitoring.

### 4.2 Dataset Objective

To report information about the planned location of sampling stations, including: latitude, longitude, and area; the names of the estuaries, sub-regions, and states containing the stations.

### 4.3 Dataset Background Discussion

NCA sampling stations in the Northeast were in a stratified random design. One to four strata were defined for each of ten regions. Stations in each strata were laid out in a hexagon grid pattern or a modified hexagon grid pattern. In most strata, three possible sampling locations (with "Alternate Site" codes of A, B, or C) were defined for each hexagon. Sampling crews were instructed to attempt to sample the A site first, and to proceed to the B or C site if the A site could not be sampled. Generally one site was visited, but in rare cases, another of the alternate sites was also sampled.

Sampling strata were assigned to different NCA partners, identified here by a Cooperative Agreement code ST\_COOP. Because different partners used different vessels and instrumentation, the ST\_COOP is an important identifier that is used in NCA metadata when referring to differences in sampling methods.

The STATIONS data file reports information regarding the planned sampling locations designated by program planners. (Actual locations are reported in the EVENTS data file.) The geographical information provided for a station (the names of the estuary, and state containing the station) are useful when interpreting the results of other data files. The weighting factors for a station (AREA and ST\_AREA) are used when performing statistical analyses. One record is presented per station, and only stations that were actually sampled are included.

#### 4.4 Summary of Dataset Parameters

```
*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 covering Sampling
LOCAL_ID      Station Identifier used by State
STATE         State where Station is Located
REGION        Region Station is located in
STRATA        Strata Station is located in
AREA          Statistical Area represented by Station (sq. km)
ST_AREA       Statistical Area Represented by Strata (sq. km)
```

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

The Cooperative Agreement code ST\_COOP identifies the organization that was responsible for sampling the station and the main purpose of sampling. Possible Codes are:

| ST_COOP | Description              | Organization responsible for sampling                         |
|---------|--------------------------|---|
| ME      | Maine                    | Casco Bay Project/U of Southern Maine                         |
| NH      | New Hampshire            | Jackson Estuarine Lab/UNH                                     |
| MA      | Massachusetts            | MA Coastal Zone Mgt.<br>U. of Massachusetts/Boston, Dartmouth |
| MA-FSH  | Massachusetts Fish       | Massachusetts Marine Fisheries                                |
| RI      | Rhode Island             | Roger Williams University                                     |
| RI-FSH  | Rhode Island Fish Survey | Roger Williams University                                     |
| CT      | Connecticut              | Connecticut DEP   |
| CT-FSH  | Connecticut Fish Survey  | 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                          |

The variables REGION and STRATA define bio-geographical regions and sampling strata that make up the NCA sampling design. Each strata has a represents a defined surface area (ST\_AREA). All stations except for Fish Survey sites (MA\_FSH, RI\_FSH, and CT-FSH) represent a defined surface area (AREA) which is used as a weighting factor in certain analyses.

The regions and strata are:

| REGION                            | STRATA   |
|-----------------------------------|--|
| Delaware                          | DE Inland Bays   |
| Delaware Estuary                  | DE Estuary East Side<br>DE Estuary Small Systems<br>DE Estuary West Side<br>Delaware River |
| Long Island Sound                 | CT Coastal<br>LIS Fish<br>Long Island Sound<br>NY Small Systems                            |
| Maine                             | Casco Bay<br>Cobscook Bay<br>ME Northern Coast<br>Penobscot Bay                            |
| Massachusetts                     | Buzzards Bay<br>Cape Cod<br>MA Fish<br>Remaining MA<br>Salem Sound                         |
| NY/NJ Harbor                      | NJ Harbor<br>NY Harbor   |
| New Hampshire<br>New Jersey Coast | New Hampshire<br>NJ Coastal  |
| New York                          | Hudson River<br>Southern Long Island   |
| Rhode Island                      | Narragansett Bay<br>RI Fish<br>RI South Coast  |

## 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     | Coastal 2000 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                       |
| 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 for    |
| LOCAL_ID  | Char | 8      | Station Identifier Used by State   |
| AREA      | Num  | 8.3    | Statistical Area represented by    |
| ST_AREA   | Num  | 8.3    | Area Represented by Strata (sq. m) |
| REGION    | Char | 40     | Region Station is located in       |
| STRATA    | Char | 20     | Strata Station is located in       |

#### 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 0.001 square km.

#### 7.1.3 Minimum Value in Dataset

| Name    | Min      |
|---------|----------|
| STA_LAT | 38.4521  |
| STA_LNG | -75.7737 |
| AREA    | 0.002    |
| ST_AREA | 49.8     |

#### 7.1.4 Maximum Value in Dataset

| Name    | Max      |
|---------|----------|
| STA_LAT | 44.9456  |
| STA_LNG | -67.0939 |

AREA 165  
ST\_AREA 31309

## 7.2 Data Record Example

| STATION   | STAT_ALT | STATE | ESTUARY           | STA_LAT | STA_LNG  | ST_COOP |
|-----------|----------|-------|-------------------|---------|----------|---------|
| CT00-0001 | A        | CT    | Connecticut Ponds | 41.1512 | -73.2199 | CT      |
| CT00-0003 | A        | CT    | Housatonic River  | 41.2877 | -73.071  | CT      |
| CT00-0005 | A        | CT    | Connecticut River | 41.2738 | -72.327  | CT      |

| LOCAL_ID | AREA | ST_AREA | REGION            | STRATA     |
|----------|------|---------|-------------------|------------|
| 21A      | 1.13 | 84.4    | Long Island Sound | CT Coastal |
| 23A      | 3.26 | 84.4    | Long Island Sound | CT Coastal |
| 25A      | 0.06 | 84.4    | Long Island Sound | CT Coastal |

## 8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude (Westernmost)  
-75.7737 decimal degrees

8.2 Maximum Longitude (Easternmost)  
-67.0939 decimal degrees

8.3 Minimum Latitude (Southernmost)  
38.4521 decimal degrees

8.4 Maximum Latitude (Northernmost)  
44.9456 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

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

Holland, A.F., ed. 1990. Near Coastal Program Plan for 1990: Estuaries. EPA 600/4-90/033. U.S. EPA, Office of Research and Development, NHEERL-AED, Narragansett, RI. November 1990.

Valente, R. and Strobel, C.J. 1993. Environmental Monitoring and Assessment Program- Estuaries: 1993 Virginian Province Quality Assurance Project Plan. U.S. EPA, NHEERL-AED, Narragansett, RI. May 1993.

### 12. TABLE OF ACRONYMS

|        |   |
|--------|---|
| AED    | Atlantic Ecology Division                                     |
| C      | Degrees Celsius   |
| CTD    | Conductivity, Temperature, and Depth                          |
| DB     | Delaware Bay  |
| DEC    | Department Environmental Conservation                         |
| DEM    | Department Environmental Management                           |
| DEP    | Department Environmental Protection                           |
| DES    | Department Environmental Services                             |
| DNREC  | Dept. Natural Resources & Environmental Control               |
| DRBC   | Delaware River Basin Comm.                                    |
| DO     | Dissolved Oxygen  |
| EMAP   | Environmental Monitoring and Assessment Program               |
| EPA    | U.S. Environmental Protection Agency                          |
| GED    | Gulf Ecology Division   |
| m      | Meter   |
| MCZM   | MA Coastal Zone Management                                    |
| mg/L   | Milligrams per liter  |
| MSRC   | Marine Science Research Ctr. -SUNY SB                         |
| NHEERL | National Health and Environmental Effects Research Laboratory |
| NJMSC  | NJ Marine Sciences Consortium                                 |
| QA/QC  | Quality Assurance/Quality Control                             |
| ppt    | Parts per thousand  |

RWU Roger Williams University  
SAV Submerged Aquatic Vegetation  
SUNY SB State University of NY @ Stony Brook  
USEPA United States Environmental Protection Agency  
UMASS University of Massachusetts, Boston and Dartmouth campuses  
UNH University of New Hampshire, Jackson Estuarine lab  
VER Versar, Inc.  
WWW World Wide Web

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