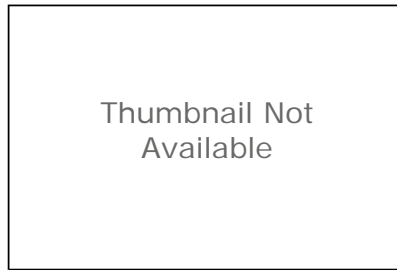


## EPA Surface Waters Monitoring Program-Regional Monitoring and Assessment Program and Mid-Atlantic Integrated Assessment Program



### Tags

WADEABLE STREAMS, Habitat, Watersheds, Streams, BENTHOS, WATER QUALITY, biota, environment

### Summary

The Environmental Monitoring and Assessment Program (EMAP) is a research program to develop the tools necessary to monitor and assess the status and trends of national ecological resources (see EMAP Research Strategy). EMAP's goal is to develop the scientific understanding for translating environmental monitoring data from multiple spatial and temporal scales into assessments of ecological condition and forecasts of the future risks to the sustainability of our natural resources. EMAP's research supports the National Environmental Monitoring Initiative of the Committee on Environment and Natural Resources (CENR).

### Description

The "Environmental Monitoring and Assessment Program (EMAP)" was developed in 1988 for the purpose of estimating the current status, changes, and trends in indicators of the condition of the nation's ecological resources on a regional basis; monitoring of indicators of pollutant exposure and habitat condition; identifying associations between human-induced stresses and ecological condition; and generation of periodic statistical summaries and interpretive reports on status and trends to resource managers and the public. The EMAP networks will provide statistically unbiased estimates with quantifiable confidence limits over regional and national scales for periods of years to decades. Six broad ecological resource categories have been defined within EMAP: near-coastal waters, inland surface waters, wetlands, forests, arid lands, and agroecosystems. Within each of these categories, EMAP is determining the ecological resource categories and resource sampling units that will be assessed in a series of annual surveys. Indicators of response, exposure, habitat, and stressors will be defined. These will determine the types of environmental assessments that will be conducted, such as biomarkers, pathogens, bioassays, tissue concentrations, ambient concentrations, exotics, habitat structure and landscape pattern. In 1990, EMAP initiated its first demonstration project, a study of estuaries in the mid Atlantic region. These data will be used for analyses to determine indices. Additional demonstration projects will be conducted over the next several years. Full implementation of monitoring in all resources is being targeted for 1995.

### Credits

There are no credits for this item.

### Use limitations

Use at your own risk

### ArcGIS Metadata ►

#### Citation ►

**TITLE** EPA Surface Waters Monitoring Program-Regional Monitoring and Assessment Program and Mid-Atlantic Integrated Assessment Program

[Hide Citation ▲](#)

## Resource Details ►

CREDITS

[Hide Resource Details ▲](#)

## Resource Constraints ►

CONSTRAINTS

LIMITATIONS OF USE

Use at your own risk

[Hide Resource Constraints ▲](#)

## Metadata Details ►

\* LAST UPDATE 2010-05-20

ARCGIS METADATA PROPERTIES

METADATA FORMAT ESRI-ISO

CREATED IN ARCGIS 2010-03-30T13:19:05

LAST MODIFIED IN ARCGIS 2010-05-20T08:50:03

AUTOMATIC UPDATES

HAVE BEEN PERFORMED No

[Hide Metadata Details ▲](#)

## FGDC Metadata (read-only) ►

### Identification ►

CITATION

CITATION INFORMATION

ORIGINATOR Office of Wetlands, Oceans and Watersheds

ORIGINATOR Susan Holdsworth

PUBLICATION DATE 2013-04-24

TITLE

EPA Surface Waters Monitoring Program-Regional Monitoring and Assessment Program and Mid-Atlantic Integrated Assessment Program

PUBLICATION INFORMATION

PUBLICATION PLACE Annapolis, MD

PUBLISHER Chesapeake Bay Program (CBP)

ONLINE LINKAGE [http://data.chesapeakebay.net/?DB=CBP\\_NTBEADB](http://data.chesapeakebay.net/?DB=CBP_NTBEADB)

ONLINE LINKAGE

[http://www.chesapeakebay.net/data/downloads/watershed\\_wide\\_benthic\\_invertebrate\\_database](http://www.chesapeakebay.net/data/downloads/watershed_wide_benthic_invertebrate_database)ONLINE LINKAGE <http://www.epa.gov/emap/index.html>

DESCRIPTION

ABSTRACT

The "Environmental Monitoring and Assessment Program (EMAP)" was developed in 1988 for the purpose of estimating the current status, changes, and trends in indicators of the condition of the nation's ecological resources on a regional basis; monitoring of indicators of pollutant exposure and habitat condition; identifying associations between human-induced stresses and ecological condition; and generation of periodic statistical summaries and interpretive reports on status and trends to resource managers and the public. The EMAP networks will provide statistically unbiased estimates with quantifiable confidence limits over regional and national scales for periods of years to decades. Six broad ecological resource categories have been defined within EMAP: near-coastal waters, inland surface waters, wetlands, forests, arid lands, and agroecosystems. Within each of these categories, EMAP is determining the ecological resource categories and resource sampling units that will be assessed in a series of annual surveys. Indicators of response, exposure, habitat, and stressors will be defined. These will determine the types of environmental assessments that will be conducted, such as biomarkers, pathogens, bioassays, tissue concentrations, ambient concentrations, exotics, habitat structure and landscape pattern. In 1990, EMAP initiated its first demonstration project, a study of estuaries in the mid Atlantic region. These data will be used for analyses to determine indices. Additional demonstration projects will be conducted over the next several years. Full implementation of monitoring in all resources is being targeted for 1995.

#### PURPOSE

The Environmental Monitoring and Assessment Program (EMAP) is a research program to develop the tools necessary to monitor and assess the status and trends of national ecological resources (see EMAP Research Strategy). EMAP's goal is to develop the scientific understanding for translating environmental monitoring data from multiple spatial and temporal scales into assessments of ecological condition and forecasts of the future risks to the sustainability of our natural resources. EMAP's research supports the National Environmental Monitoring Initiative of the Committee on Environment and Natural Resources (CENR).

#### TIME PERIOD OF CONTENT

##### TIME PERIOD INFORMATION

##### RANGE OF DATES/TIMES

BEGINNING DATE 1993-01-01

ENDING DATE 1998-12-31

##### CURRENTNESS REFERENCE

Ground condition

#### STATUS

PROGRESS Complete

MAINTENANCE AND UPDATE FREQUENCY None Planned

#### SPATIAL DOMAIN

##### BOUNDING COORDINATES

WEST BOUNDING COORDINATE -80.34805

EAST BOUNDING COORDINATE -74.62521

NORTH BOUNDING COORDINATE 42.56826

SOUTH BOUNDING COORDINATE 37.2227

#### KEYWORDS

##### THEME

THEME KEYWORD THESAURUS None

THEME KEYWORD WADEABLE STREAMS

THEME KEYWORD Habitat

THEME KEYWORD Watersheds

THEME KEYWORD Streams

THEME KEYWORD BENTHOS

THEME KEYWORD WATER QUALITY

## THEME

THEME KEYWORD THESAURUS ISO 19115 Topic Category

THEME KEYWORD biota

THEME KEYWORD environment

## THEME

THEME KEYWORD THESAURUS EPA GIS Keyword Thesaurus

## THEME

THEME KEYWORD THESAURUS User

## PLACE

PLACE KEYWORD THESAURUS None

PLACE KEYWORD Nationwide

## STRATUM

STRATUM KEYWORD THESAURUS None

STRATUM KEYWORD Chesapeake Bay Region

## ACCESS CONSTRAINTS

None

## USE CONSTRAINTS

Use at your own risk

## POINT OF CONTACT

## CONTACT INFORMATION

## CONTACT PERSON PRIMARY

CONTACT PERSON John Stoddard

CONTACT ORGANIZATION United States Environmental Protection Agency-NHEERL Western Ecology Division

## CONTACT ADDRESS

ADDRESS TYPE mailing and physical address

ADDRESS USEPA National Health and Environmental Effects

ADDRESS Research Lab/ORD Western Ecology Division

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STATE OR PROVINCE Oregon

POSTAL CODE 97333-4902

CONTACT VOICE TELEPHONE 541-754-4441

CONTACT ELECTRONIC MAIL ADDRESS stoddard.john@epa.gov

## CONTACT INSTRUCTIONS

Not Available

## SECURITY INFORMATION

SECURITY CLASSIFICATION SYSTEM FIPS Pub 199

SECURITY CLASSIFICATION No Confidentiality

SECURITY HANDLING DESCRIPTION Standard Technical Controls

*Hide Identification* ▲**Data Quality** ►

LOGICAL CONSISTENCY REPORT  
Not Applicable

COMPLETENESS REPORT  
Unknown

POSITIONAL ACCURACY

HORIZONTAL POSITIONAL ACCURACY

HORIZONTAL POSITIONAL ACCURACY REPORT

Data were collected using methods that are accurate to within 6-25 meters (EPA National Geospatial Data Policy [NGDP] Accuracy Tier 3). For more information, please see EPA's NGDP at <http://epa.gov/geospatial/policies.html>

LINEAGE

PROCESS STEP

PROCESS DESCRIPTION

Metadata imported.

PROCESS DATE 2010-03-30

PROCESS STEP

PROCESS DESCRIPTION

Data for Chesapeake Bay Region was extracted from National Dataset and loaded into the CBPO Non-Tidal Benthic Data base.

PROCESS DATE 2010-03-30

*Hide Data Quality ▲*

## Spatial Reference ►

HORIZONTAL COORDINATE SYSTEM DEFINITION

GEOGRAPHIC

LATITUDE RESOLUTION 0.000001

LONGITUDE RESOLUTION 0.000001

GEOGRAPHIC COORDINATE UNITS Decimal degrees

GEODETTIC MODEL

HORIZONTAL DATUM NAME North American Datum of 1983

ELLIPSOID NAME Geodetic Reference System 1980

SEMI-MAJOR AXIS 6378137.000000

DENOMINATOR OF FLATTENING RATIO 298.257222

*Hide Spatial Reference ▲*

## Distribution Information ►

DISTRIBUTOR

CONTACT INFORMATION

CONTACT PERSON PRIMARY

CONTACT PERSON John Stoddard

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CONTACT ADDRESS

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ADDRESS USEPA National Health and Environmental Effects

ADDRESS Research Lab/ORD Western Ecology Division

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 unavailavle

RESOURCE DESCRIPTION Downloadable Data

DISTRIBUTION LIABILITY

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)

*Hide Distribution Information ▲*

## Metadata Reference ►

METADATA DATE 2013-04-24

METADATA FUTURE REVIEW DATE 2017-04-24

METADATA CONTACT

CONTACT INFORMATION

CONTACT ORGANIZATION PRIMARY

CONTACT ORGANIZATION U.S. Environmental Protection Agency, Chesapeake Bay Program

CONTACT PERSON Peter Tango

CONTACT POSITION Monitoring Coordinator

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METADATA STANDARD NAME NBII Content Standard for National Biological Information Infrastructure Metadata

METADATA STANDARD VERSION FGDC-STD-001-1998

METADATA SECURITY INFORMATION

METADATA SECURITY CLASSIFICATION SYSTEM None

METADATA SECURITY CLASSIFICATION Unclassified

METADATA SECURITY HANDLING DESCRIPTION

None

*Hide Metadata Reference ▲*