North Carolina Department of Environment and Natural Resources

Division of Coastal Management

Wetlands :: NC-Crews Metadata

- Identification_Information
- Data_Quality_Information
- Spatial_Data_Organization_Information
- Spatial_Reference_Information
- Entity_and_Attribute_Information
- Distribution_Information
- Metadata_Reference_Information

Identification_Information:
Citation:
Citation_Information:
Originator: North Carolina Division of Coastal Management
Publication_Date: 20030801
Title:
NC-CREWS: The North Carolina Coastal Region Evaluation of Wetland Significance
Geospatial_Data_Presentation_Form: vector digital data
Publication_Information:
Publication_Place: Raleigh, NC
Publisher: North Carolina Department of Environment and Natural Resources Division of Coastal Management
Description:
Abstract:

In order to accomplish its mission of management and protection of valuable natural resources, the North Carolina Division of Coastal Management (DCM) has developed wetland inventory and assessment tools that should greatly improve wetland resource management and planning in the coastal area. Specifically, DCM has developed a wetland Geographic Information System (GIS) that effectively inventories the type, amount, location and the functional significance of wetlands located in the 20 counties defined by the Coastal Area Management Act and an additional 17 counties within the NC Inner Coastal Plain.

DCM's wetland type maps combine the US Fish and Wildlife Service's National Wetland Inventory (NWI) maps, the Natural Resources Conservation Service's soils surveys, and 1989 and 1994 Landsat TM satellite imagery as well as field reconnaissance data. By using multiple data sources, DCM has attempted to maximize the strengths of each source, while minimizing its weaknesses. The resulting wetland type maps show the location, size and type of wetlands more accurately, clearly and comprehensively than ever before.

In addition to identifying the location and extent of wetlands, DCM's challenge has been to develop a wetland functional assessment procedure which would provide a meaningful evaluation of wetland functional significance. Consequently, DCM developed a GIS functional assessment model commonly known as The North Carolina Coastal Region Evaluation of Wetland Significance or NC-CREWS.
NC-CREWS functions in a hierarchical manner, analyzing three primary wetland functions (Hydrology, Water Quality and Wildlife Habitat), seven wetland subfunctions and 39 landscape and wetland parameters. Wetlands are assigned ratings of Beneficial Significance, Substantial Significance or Exceptional Significance, depending on how well they perform the various wetland functions. The relative risk to watershed integrity posed by the loss of specific wetlands is also measured and labeled "Potential Risk".

Although the NCCREWS model was developed for the NC Coastal area, it has the potential of being adapted to other areas. A number of states are already exploring how it could be used to

improve their wetland conservation efforts.

Purpose:

These data were created to assist local, state, and federal government agencies and others in making resource management decisions and in land use planning.

Supplemental_Information:

Because of overall data filesize, the statewide dataset was clipped by county. zipped ArcInfo shapefile sizes: (by county, in megabytes):
Beaufort (/beau_crews) - 8.06
Bertie (/bert_crews) - 7.22
Bladen (/blad_crews) - 17.8
Brunswick (/brun_crews) - 19.2
Camden (/camd_crews) - 2.01
Carteret (/cart_crews) - 10.4
Chowan (/chow_crews) - 1.81
Columbus (/colu_crews) - 15.5
Craven (/crav_crews) - 10.7
Cumberland (/cumb_crews) - 5.48
Currituck (/curr_crews) - 2.99
Dare (/dare_crews) - 4.23
Duplin (/dupl_crews) - 7.64
Edgecombe (/edge_crews) - 4.22
Gates (/gate_crews) - 3.16
Greene (/gree_crews) - 1.64
Halifax (/hali_crews) - 5.55
Hertford (/hert_crews) - 3.59
Hyde (/hyde_crews) - 4.88
Johnston (/john_crews) - 5.89
Jones (/jone_crews) - 5.40
Lenoir (/leno_crews) - 3.46
Martin (/mart_crews) - 4.22
Nash (/nash_crews) - 3.81
New Hanover (/newh_crews) - 3.88
Northampton (/nort_crews) - 4.21
Onslow (/onsl_crews) - 13.1
Pamlico (/paml_crews) - 5.81
Pasquotank (/pasq_crews) - 2.14
Pender (/pend_crews) - 16.1
Perquimans (/perq_crews) - 2.38
Pitt (/pitt_crews) - 5.87
Sampson (/samp_crews) - 9.85
Tyrrell (/tyrr_crews) - 3.34
Washington (/wash_crews) - 2.30
Wayne (/wayn_crews) - 4.86
Wilson (/wils_crews) - 3.84

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20030801
Ending_Date: 20030801

Currentness_Reference:

publication date

Status:

Progress: Complete
Maintenance_and_Update_Frequency: As needed

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -79.101699
East_Bounding_Coordinate: -75.420957
North_Bounding_Coordinate: 36.590066
South_Bounding_Coordinate: 33.803897

Keywords:

Theme:

Theme_Keyword_Thesaurus: None
Theme_Keyword: Wetlands
Theme_Keyword: Wetland Mapping
Theme_Keyword: Wetland Functions
Theme_Keyword: Wetland Functional Assessment
Theme_Keyword: Wetland Functional Significance

Theme_Keyword: Coastal Management
Theme_Keyword: ADID
Place:
Place_Keyword_Thesaurus: None
Place_Keyword: North Carolina Coast
Place_Keyword: Eastern North Carolina
Place_Keyword: CAMA
Place_Keyword: Beaufort County
Place_Keyword: Bertie County
Place_Keyword: Bladen County
Place_Keyword: Brunswick County
Place_Keyword: Camden County
Place_Keyword: Carteret County
Place_Keyword: Chowan County
Place_Keyword: Columbus County
Place_Keyword: Craven County
Place_Keyword: Cumberland County
Place_Keyword: Currituck County
Place_Keyword: Dare County
Place_Keyword: Duplin County
Place_Keyword: Edgecombe County
Place_Keyword: Gates County
Place_Keyword: Greene County
Place_Keyword: Halifax County
Place_Keyword: Hertford County
Place_Keyword: Hyde County
Place_Keyword: Johnston County
Place_Keyword: Jones County
Place_Keyword: Lenoir County
Place_Keyword: Martin County
Place_Keyword: Nash County
Place_Keyword: New Hanover County
Place_Keyword: Northampton County
Place_Keyword: Onslow County
Place_Keyword: Pamlico County
Place_Keyword: Pasquotank County
Place_Keyword: Pender County
Place_Keyword: Perquimans County
Place_Keyword: Pitt County
Place_Keyword: Sampson County
Place_Keyword: Tyrrell County
Place_Keyword: Wayne County
Place_Keyword: Wilson County
Place_Keyword: Washington County
Stratum:
Temporal:

Access_Constraints: None

Use_Constraints:

These data are advisory in nature. They are not a substitute for an on-site determination of jurisdictional wetlands. Although every effort was taken to ensure the accuracy and validity of wetland location and extent, these data contain inherent errors and limits. Surfaces mapped from remotely sensed data have certain degrees of error and accuracy limits. The actual boundaries may differ from those shown in these data. Wetlands smaller than one acre often are overlooked at this scale and may not be included in these data. There also may be cases in which regulatory agencies' determinations of the existence or lack of wetlands differ from these data.

While every effort has been made to ensure that these data are accurate and reliable within limits of the current state of the art, DCM cannot assume liability for any damages caused by inaccuracies in the map of supporting data. DCM makes no warranty, express or implied, nor does the fact of distribution constitute such a warranty.

Native_Data_Set_Environment:

Present version is in ArcGIS format (version 8.3). DCM uses Windows XP workstations

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Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A comprehensive accuracy assessment of these data was performed by DCM using funds provided by the Environmental Protection Agency. For more information contact DCM.

Logical_Consistency_Report:

These data were originally processed by 14-digit hydrologic units (HU). Upon completion, all hydrologic units were joined together using the Arc/Info "mapjoin" command and then clipped by county. Digital data and hard copy maps were checked extensively for consistency and completeness by GIS analysts and wetland specialists on DCM's staff. There may be inconsistencies in these data along county boundaries. This is due mainly to the fact that the soils data used for development of this data set were mapped by county and was not edge-matched or otherwise made consistent at county boundaries.

Completeness_Report:

These wetland functional significance data represent watersheds completely within the 20 coastal counties under the jurisdiction of the Division of Coastal Management and an additional 17 counties within the NC Inner Coastal Plain. The data is not a substitute for an on-site determination of jurisdictional wetlands. Wetlands smaller than one acre are often overlooked at this scale and may not be included in these data. Linear wetlands less than 40 feet wide are also often overlooked at this scale and may not be included in these data.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Accuracy varies depending on source scale and/or resolution of the data layer from which each wetland polygon is derived.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report:

n/a

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: NC DENR, North Carolina Division of Coastal Management
Publication_Date: 19990930
Title:

DCM Wetland Data

Geospatial_Data_Presentation_Form: map
Publication_Information:

Publication_Place: Raleigh, NC
Publisher: NC DENR, NC Division of Coastal Management

Other_Citation_Details:

N/A

Type_of_Source_Media: 8mm digital tape or CD
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: Varies
Ending_Date: Varies

Source_Currentness_Reference:

publication date

Source_Citation_Abbreviation:

NC DENR, DCM

Source_Information:

Source_Citation:

Citation_Information:

Originator: US Dept of Agriculture-Natural Resources Conservation Service
Publication_Date: Varies (37 different county soils data were used)
Publication_Time: Unknown
Title:

Detailed County Soils, North Carolina (various counties)

Geospatial_Data_Presentation_Form: map
Publication_Information:

Publication_Place: Raleigh, NC
Publisher: US Dept of Agriculture-Natural Resources Conservation Service

Type_of_Source_Media: 8mm digital tape, FTP
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: Varies

Ending_Date: Varies
Source_Currentness_Reference:
Publication date of soil survey for each county
Source_Citation_Abbreviation:
USDA, NRCS
Source_Information:
Source_Citation:
Citation_Information:
Originator: EOSAT/LandSat Thematic Mapper (TM)
Publication_Date: 199405
Publication_Time: Unknown
Title:
Land Use/Land Cover TM (APES 1987)
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Raleigh, NC
Publisher: EOSAT/LandSat Thematic Mapper (TM)
Type_of_Source_Media: 8mm digital tape
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 19930516
Ending_Date: 19960630
Source_Currentness_Reference:
Data creation and revision dates
Source_Citation_Abbreviation:
EOSAT
Source_Information:
Source_Citation:
Citation_Information:
Originator: Earth Satellite Corporation (EarthSat)
Publication_Date: 19980305
Publication_Time: Unknown
Title:
Statewide Land Cover - 1996
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Raleigh, NC
Publisher: EarthSat
Type_of_Source_Media: digital tape media
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1991
Ending_Date: 199405
Source_Currentness_Reference:
Data creation and revision dates
Source_Citation_Abbreviation:
EOSAT
Source_Information:
Source_Citation:
Citation_Information:
Originator: U.S. Geological Survey
Publication_Date: Unknown
Publication_Time: Unknown
Title:
Hydrography, Digital Line Graphs (1:24,000)
Geospatial_Data_Presentation_Form: map
Publication_Information:
Publication_Place: Reston, Virginia
Publisher: U.S. Geological Survey
Type_of_Source_Media: digital tape media
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19990326
Time of Day: unknown
Source_Currentness_Reference:

Last data update
Source_Citation_Abbreviation:
USGS, DLG
Source_Information:
Source_Citation:
Citation_Information:
Originator: NC DENR Div. of Water Quality, Water Quality Planning Section
Publication_Date: Unknown
Title:
Watershed Boundaries
Publication_Information:
Publication_Place: Raleigh, North Carolina
Publisher: NC DENR Div. of Water Quality, Water Quality Planning Section
Type_of_Source_Media: digital tape media
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: Varies
Ending_Date: Varies
Source_Currentness_Reference:
Data creation and revision dates
Source_Citation_Abbreviation:
NC DENR, DWQ
Source_Information:
Source_Citation:
Citation_Information:
Originator: NC DENR Div. of Parks and Recreation, Natural Heritage Program
Publication_Date: Unknown
Title:
Endangered Species Occurences - Natural Heritage Element Occurrences
Publication_Information:
Publication_Place: Raleigh, North Carolina
Publisher: NC DENR Div. of Parks and Recreation, Natural Heritage Program
Type_of_Source_Media: digital tape media
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: unknown
Time of Day: unknown
Source_Currentness_Reference:
publication date
Source_Citation_Abbreviation:
NCDENR, NHP, P&R
Source_Information:
Source_Citation:
Citation_Information:
Originator: North Carolina Division of Marine Fisheries
Publication_Date: 19981201
Publication_Time: Unknown
Title:
Estuarine Primary Nursery Areas
Publication_Information:
Publication_Place: Morehead City, North Carolina
Publisher: NC Division of Marine Fisheries
Type_of_Source_Media: digital tape media
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19981201
Time of Day: unknown
Source_Currentness_Reference:
publication date
Source_Citation_Abbreviation:
NCDMF
Source_Information:
Source_Citation:
Citation_Information:

Title:
Water Quality Classifications
Source_Information:
Source_Citation:
Citation_Information:
Title:
NC Unique Natural Ecosystem and Special Wildlife Habitat Areas
Source_Information:
Source_Citation:
Citation_Information:
Originator: North Carolina Division of Marine Fisheries
Publication_Date: 19981201
Publication_Time: Unknown
Title:
Anadromous Fish Spawning Areas
Publication_Information:
Publication_Place: Morehead City, North Carolina
Publisher: NC Division of Marine Fisheries
Type_of_Source_Media: digital tape media
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19981201
Time of Day: unknown
Source_Currentness_Reference:
publication date
Source_Citation_Abbreviation:
NCDMF
Process_Step:
Process_Description:
Wetland data that are stored quad by quad are joined and clipped by watershed boundary. The watershed's wetland information is analyzed using the NC-CREWS procedure, a wetland significance assessment model consisting of a series of Arc Macro Language (AML) programs. NC-CREWS analyzes how well each individual wetland polygon performs water quality, hydrology, and habitat functions. Water quality functions include a non-point source function and a flood water cleansing function. Hydrology functions such as surface runoff storage, flood water storage and shoreline stabilization are analyzed. The Habitat function considers terrestrial and aquatic wildlife. The GIS data layers considered in the NC-CREWS model include:

(1) Wetland boundaries and types (DCM wetland type data)
(2) Soils data
(3) Land Use/Land Cover
(4) Hydrography
(5) Watershed Boundaries
(6) Endangered species occurrences
(7) Estuarine Primary nursery areas
(8) Water quality classifications
(9) NC Unique natural ecosystem and special wildlife habitat areas
(10) Anadromous fish spawning areas

For more information on NC-CREWS, please see DCM report "NC-CREWS: North Carolina Coastal Region Evaluation of Wetland Significance".
Process_Date: 1994-2002
Process_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Jennifer Rouse
Contact_Organization: North Carolina Division of Coastal Mangement
Contact_Position: GIS Analyst
Contact_Address:
Address_Type: mailing address
Address:
1638 Mail Service Center
City: Raleigh
State_or_Province: NC
Postal_Code: 27699-1638
Country: US
Contact_Voice_Telephone: 919-733-2293
Contact_Facsimile_Telephone: 919-733-1495

Contact_Electronic_Mail_Address: jennifer.rouse@ncmail.net
Hours_of_Service: 8:00AM - 5:00PM Eastern
Process_Step:
Process_Step:

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Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains
Point_and_Vector_Object_Count: 188955

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Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: State Plane Coordinate System
State_Plane_Coordinate_System:
SPCS_Zone_Identifier: 3200
Lambert_Conformal_Conic:
Standard_Parallel: 34.333333
Standard_Parallel: 36.166667
Longitude_of_Central_Meridian: -79.000000
Latitude_of_Projection_Origin: 33.750000
False_Easting: 2000000.002617
False_Northing: 0.000000
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 0.002048
Ordinate_Resolution: 0.002048
Planar_Distance_Units: survey feet
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

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Entity_and_Attribute_Information:
Detailed_Description:
Entity_Type:
Entity_Type_Label: Wetland Functions
Attribute:
Attribute_Label: FID
Attribute_Definition:
Internal feature number.

Attribute_Definition_Source:
ESRI
Attribute_Domain_Values:
Unrepresentable_Domain:
Sequential unique whole numbers that are automatically generated.
Attribute:
Attribute_Label: Shape
Attribute_Definition:
Feature geometry.
Attribute_Definition_Source:
ESRI
Attribute_Domain_Values:
Unrepresentable_Domain:
Coordinates defining the features.
Attribute:
Attribute_Label: AREA
Attribute_Definition:
Area of Polygon
Attribute_Definition_Source:
Software Computed
Attribute:
Attribute_Label: PERIMETER
Attribute_Definition:
Perimeter of Polygon
Attribute_Definition_Source:
Software computed
Attribute:
Attribute_Label: Final Covername#
Attribute_Definition:
Internal Feature Number
Attribute_Definition_Source:
Software Computed
Attribute:
Attribute_Label: Final Covername-id
Attribute_Definition:
Feature Identification Number
Attribute_Definition_Source:
User Defined
Attribute:
Attribute_Label: WH_ID
Attribute:
Attribute_Label: W_TYPE
Attribute_Definition:
Wetland Type
Attribute_Definition_Source:
NC Division of Coastal Management
Attribute:
Attribute_Label: OWR1
Attribute_Definition:
Overall Wetland Rating
Attribute_Definition_Source:
NC Division of Coastal Management
Attribute:
Attribute_Label: ORC01
Attribute_Definition:
Estuarine or Coastal Wetland
Attribute_Definition_Source:
NC Division of Coastal Management
Attribute:
Attribute_Label: ORC02
Attribute_Definition:
Wetland adjacent to an officially designated Primary Nursery Area (PNA)
Attribute_Definition_Source:
NC Division of Coastal Management
Attribute:
Attribute_Label: ORC03
Attribute_Definition:
Wetland contains threatened or endangered species or includes all or part of an

exemplary or unique natural ecosystem or special wildlife habitat as designated by the NC Natural Heritage Program

Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: WQF01
Attribute_Definition:
Water Quality Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: WQF011
Attribute_Definition:
Non-Point Source Sub-Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: WQF012
Attribute_Definition:
Flood Water Cleansing Sub-Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: HYF01
Attribute_Definition:
Hydrology Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: HYF011
Attribute_Definition:
Surface Runoff Storage Sub-Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: HYF012
Attribute_Definition:
Flood Water Storage Sub-Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: HYF013
Attribute_Definition:
Shoreline Stabilization Sub-Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: HAF01
Attribute_Definition:
Habitat Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: HAF011
Attribute_Definition:
Terrestrial Wildlife Sub-Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: HAF012
Attribute_Definition:
Aquatic Life Sub-Function
Attribute_Definition_Source:
NC Division of Coastal Management

Attribute:
Attribute_Label: PRF01
Attribute_Definition:
Potential Risk Factor

Attribute_Definition_Source:
NC Division of Coastal Management
Attribute:
Attribute_Label: PRF011
Attribute_Definition:
Landscape Character
Attribute_Definition_Source:
NC Division of Coastal Management
Attribute:
Attribute_Label: PRF012
Attribute_Definition:
Watershed Water Quality
Attribute_Definition_Source:
NC Division of Coastal Managment
Attribute:
Attribute_Label: PRF013
Attribute_Definition:
Replacement Difficulty for Wetland Function
Attribute_Definition_Source:
NC Division of Coastal Management
Attribute:
Attribute_Label: PRF014
Attribute_Definition:
Enhancement Potential of Site
Attribute_Definition_Source:
NC Division of Coastal Management
Attribute:
Attribute_Label: HGM
Attribute_Definition:
Hydrogeomorphic Class
Attribute_Domain_Values:
Unrepresentable_Domain:
Coordinates defining the features.
Overview_Description:
Entity_and_Attribute_Overview:
The overall rating, functions and subfunctions are each coded according to the following scheme:
-1 -Unable to rate
0 -Non Wetland
1 -Beneficial Significance
2 -Substantial Significance
3 -Exceptional Significance
The exceptions to this rule are those wetlands that are rated as having exceptional significance due to over-riding considerations. These polygons will have a value of 3 for their overall rating and a value of 0 for all functions and sub-functions.

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Distribution_Information:
Distributor:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: NC Division of Coastal Management
Contact_Position: GIS
Contact_Address:
Address_Type: mailing and physical address
Address:
1638 Mail Service Center
City: Raleigh
State_or_Province: NC
Postal_Code: 27699-1638
Country: USA
Contact_Voice_Telephone: (919) 733-2293
Contact_Facsimile_Telephone: (919) 733-1495

Contact_Electronic_Mail_Address: jennifer.rouse@ncmail.net
Hours_of_Service: 8:00 AM - 5:00 PM
Resource_Description: DCM Wetland Functional Assessment
Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Format_Name: Data available in Shapefile format
Transfer_Size: 327
Digital_Transfer_Option:
Offline_Option:
Offline_Media: n/a
Recording_Format: Compatibility_Information n/a

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Metadata_Reference_Information:
Metadata_Date: 20041007
Metadata_Review_Date: 20030801
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: North Carolina Division of Coastal Management
Contact_Person: Jennifer Rouse
Contact_Position: GIS Analyst
Contact_Address:
Address_Type: Mailing address
Address:
1638 Mail Service Center
City: Raleigh
State_or_Province: NC
Postal_Code: 27699-1638
Country: USA
Contact_Voice_Telephone: (919) 733-2293
Contact_Facsimile_Telephone: (919) 733-1495
Contact_Electronic_Mail_Address: jennifer.rouse@ncmail.net
Hours_of_Service: 8:00am - 5:00pm
Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Time_Convention: local time
Metadata_Extensions:

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Last Modified: October 11, 2004

N.C. Division of Coastal Management . 400 Commerce Ave . Morehead City, NC 28557
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