

## Delaware Water Gap National Recreation Area, Spatial Vegetation Data Metadata

### Identification\_Information:

#### Citation:

##### Citation\_Information:

Originator: Pennsylvania Natural Heritage Program

Publication\_Date: 20060831

Title: DEWA\_Vegetation\_2006\_public

Geospatial\_Data\_Presentation\_Form: vector digital data

#### Larger\_Work\_Citation:

##### Citation\_Information:

Originator: Pennsylvania Natural Heritage Program

Publication\_Date: 20060831

Title: Vegetation Classification and Mapping of Vegetation and Fire Fuel Models at Delaware Water Gap National Recreation Area

Geospatial\_Data\_Presentation\_Form: Document: final technical report

Online\_Linkage: <http://nrdata.nps.gov/dewa/dewadata/>

Online\_Linkage: <http://biology.usgs.gov/npsveg/dewa/index.html>

### Description:

Abstract: Vegetation map of Delaware Water Gap National Recreation Area provides local park-specific names for vegetation types, as well as crosswalks to the National Vegetation Classification System (NVCS), including association, alliance and formation level attributes. Crosswalks to the NVCS were determined on 29 June 2006.

Purpose: To provide an up-to-date digital geospatial vegetation database containing base line information about the park's vegetation associations to the park's resource managers in order to ensure effective, long-term management of the natural resources held in trust.

### Time\_Period\_of\_Content:

#### Time\_Period\_Information:

##### Single\_Date/Time:

Calendar\_Date: 20060831

Currentness\_Reference: 20060831

### Status:

Progress: Complete

Maintenance\_and\_Update\_Frequency: None planned

### Spatial\_Domain:

Description\_of\_Geographic\_Extent: Delaware Water Gap National Recreation Area and environs

#### Bounding\_Coordinates:

West\_Bounding\_Coordinate: -77.281698

East\_Bounding\_Coordinate: -77.153808

North\_Bounding\_Coordinate: 39.858207

South\_Bounding\_Coordinate: 39.773127

### Keywords:

#### Theme:

Theme\_Keyword\_Thesaurus: none

Theme\_Keyword: vegetation association

Theme\_Keyword: vegetation classification

Theme\_Keyword: National Park Service

Theme\_Keyword: vegetation map

Theme\_Keyword: vegetation alliance

Theme\_Keyword: vegetation formation

#### Place:

Place\_Keyword\_Thesaurus: none

Place\_Keyword: Delaware Water Gap National Recreation Area

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Place\_Keyword: Pennsylvania

Place\_Keyword: New Jersey

Taxonomy:

Keywords/Taxon:

Taxonomic\_Keyword\_Thesaurus: none

Taxonomic\_Keywords: Standardized National Vegetation Classification System

Taxonomic\_Keywords: vegetation classification

Taxonomic\_Keywords: alliance

Taxonomic\_Keywords: community association

Taxonomic\_Classification:

Taxon\_Rank\_Name: Kingdom

Taxon\_Rank\_Value: Plantae

Access\_Constraints: none

Use\_Constraints: none

Point\_of\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: Pennsylvania Natural Heritage Program

Contact\_Position: Ecologist

Contact\_Address:

Address\_Type: mailing and physical address

Address: 208 Airport Drive

City: Middletown

State\_or\_Province: Pennsylvania

Postal\_Code: 10755

Country: USA

Contact\_Voice\_Telephone: (717) 948-3962

Contact\_Facsimile\_Telephone: (717) 948-3957

Native\_Data\_Set\_Environment: Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 2; ESRI

ArcCatalog 9.2.4.1420

Data\_Quality\_Information:

Attribute\_Accuracy:

Attribute\_Accuracy\_Report:

The Kappa index for the preliminary vegetation association map was 55.0% ± 2.5%, with the overall percent accuracy calculated as 56.1%. The Kappa index and errors of commission and omission reported for the vegetation association map and many vegetation associations fall below the USGS/NPS vegetation mapping protocol requirement of 80%. However, this low level of accuracy is typical for vegetation mapping efforts of large parks.

Based on the thematic accuracy assessment data, the preliminary vegetation association map was revised and corrected to create the final vegetation association map depicted in this shapefile. Therefore, the thematic accuracy of this final vegetation association map is greater than that reported above for the preliminary vegetation association map. However, re-assessing the thematic accuracy of the final vegetation association map would require another round of intensive field sampling. The costs of a second round of sampling do not seem justified simply to quantify the level of increased accuracy in the final map.

Logical\_Consistency\_Report: Check Topology script was run on shapefile in ArcView 3.2. No silvers or gaps were found.

Completeness\_Report: Shapefile covers entire park area.

Lineage:

Process\_Step:

Process\_Description: A vegetation cover type map was delineated from a 2002 digital aerial photo mosaic.

Then, 251 vegetation plots were sampled in the park. These data were analyzed to determine the number and distribution of vegetation associations present in the park. The vegetation cover type map was then revised and attributed with the association names. Then 1,130 thematic accuracy assessment points were randomly placed

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within the association map, following a stratified random sampling plan. Based on the accuracy assessment data, the association map was revised further.

Process\_Date: 20060831

Process\_Step:

Process\_Description: Five polygons were identified to contain sensitive information and were merged into surrounding polygons to protect the location information

Process\_Date: 20070201

Spatial\_Data\_Organization\_Information:

Direct\_Spatial\_Reference\_Method: Vector

Point\_and\_Vector\_Object\_Information:

SDTS\_Terms\_Description:

SDTS\_Point\_and\_Vector\_Object\_Type: G-polygon

Point\_and\_Vector\_Object\_Count: 4682

Spatial\_Reference\_Information:

Horizontal\_Coordinate\_System\_Definition:

Planar:

Grid\_Coordinate\_System:

Grid\_Coordinate\_System\_Name: Universal Transverse Mercator

Universal\_Transverse\_Mercator:

UTM\_Zone\_Number: 18

Transverse\_Mercator:

Scale\_Factor\_at\_Central\_Meridian: 0.999600

Longitude\_of\_Central\_Meridian: -75.000000

Latitude\_of\_Projection\_Origin: 0.000000

False\_Easting: 500000.000000

False\_Northing: 0.000000

Planar\_Coordinate\_Information:

Planar\_Coordinate\_Encoding\_Method: coordinate pair

Coordinate\_Representation:

Abscissa\_Resolution: 0.000016

Ordinate\_Resolution: 0.000016

Planar\_Distance\_Units: meters

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

Entity\_and\_Attribute\_Information:

Detailed\_Description:

Entity\_Type:

Entity\_Type\_Label: DEWA\_Vegetation\_2006\_public

Entity\_Type\_Definition: attribute from shapefile table

Entity\_Type\_Definition\_Source: Pennsylvania Natural Heritage Program

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: ALLIANCEID

Attribute\_Definition: record number of polygon

Attribute\_Definition\_Source: Add Record Number script in ArcView 3.2

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Attribute\_Domain\_Values:

Unrepresentable\_Domain: unique number for each polygon

Attribute:

Attribute\_Label: VEG\_STRC

Attribute\_Definition: vegetation structure, leaf phenology and hydrologic regime of vegetation in polygon

Attribute\_Definition\_Source: Pennsylvania Natural Heritage Program

Attribute\_Domain\_Values:

Unrepresentable\_Domain: vegetation structure, leaf phenology and hydrologic regime of vegetation in polygon

Attribute:

Attribute\_Label: FUEL\_MODEL

Attribute\_Definition: fire behavior fuel model

Attribute\_Definition\_Source: Anderson (1982)

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Anderson (1982) fire behavior fuel models

Attribute:

Attribute\_Label: Shape

Attribute\_Definition: Feature geometry.

Attribute\_Definition\_Source: ESRI

Attribute\_Domain\_Values:

Unrepresentable\_Domain: Coordinates defining the features.

Attribute:

Attribute\_Label: FORM\_NAME

Attribute\_Definition: formation level vegetation type

Attribute\_Definition\_Source: National Vegetation Classification System

Attribute\_Domain\_Values:

Unrepresentable\_Domain: National Vegetation Classification System formation-level vegetation type names

Attribute:

Attribute\_Label: FORM\_CODE

Attribute\_Definition: code for formation level vegetation type

Attribute\_Definition\_Source: National Vegetation Classification System

Attribute\_Domain\_Values:

Unrepresentable\_Domain: National Vegetation Classification System code for formation-level vegetation types

Attribute:

Attribute\_Label: CVR\_CLSS

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 1

Enumerated\_Domain\_Value\_Definition: 0 - 20% canopy cover

Enumerated\_Domain\_Value\_Definition\_Source: Finney (1998)

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 2

Enumerated\_Domain\_Value\_Definition: 21 - 50% canopy cover

Enumerated\_Domain\_Value\_Definition\_Source: Finney (1998)

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 3

Enumerated\_Domain\_Value\_Definition: 51 - 80 % canopy cover

Enumerated\_Domain\_Value\_Definition\_Source: Finney (1998)

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: 4

Enumerated\_Domain\_Value\_Definition: 81 - 100%

Enumerated\_Domain\_Value\_Definition\_Source: Finney (1998)

Attribute\_Definition: canopy cover class

Attribute\_Definition\_Source: FARSITE model, Finney (1998)

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Attribute:

Attribute\_Label: SIG\_DEAD

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: Y

Enumerated\_Domain\_Value\_Definition: denotes concentrations of dead and dying trees, typically eastern hemlocks

Enumerated\_Domain\_Value\_Definition\_Source: Pennsylvania Natural Heritage Program

Attribute\_Domain\_Values:

Enumerated\_Domain:

Enumerated\_Domain\_Value: <blank>

Enumerated\_Domain\_Value\_Definition: no dense concentrations of dead and dying trees, normal natural level of mortality

Enumerated\_Domain\_Value\_Definition\_Source: Pennsylvania Natural Heritage Program

Attribute\_Definition: concentrations of dead and dying trees, typically eastern hemlocks

Attribute\_Definition\_Source: Pennsylvania Natural Heritage Program

Attribute:

Attribute\_Label: LOCAL\_NAME

Attribute\_Definition: local park-specific name for vegetation type

Attribute\_Definition\_Source: Fike 1999, Pennsylvania Natural Heritage Program, Walz et al 2006, New Jersey Natural Heritage Program, National Vegetation Classification System

Attribute\_Domain\_Values:

Unrepresentable\_Domain: park-specific local names for vegetation association

Attribute:

Attribute\_Label: ALLIA\_CODE

Attribute\_Definition: code for alliance-level vegetation type

Attribute\_Definition\_Source: National Vegetation Classification System

Attribute\_Domain\_Values:

Unrepresentable\_Domain: National Vegetation Classification System code for alliance-level vegetation types

Attribute:

Attribute\_Label: ASSOC\_SCI

Attribute\_Definition: scientific name for vegetation association

Attribute\_Definition\_Source: National Vegetation Classification System

Attribute\_Domain\_Values:

Unrepresentable\_Domain: National Vegetation Classification System scientific name for vegetation associations

Attribute:

Attribute\_Label: ASSOC\_ENG

Attribute\_Definition: English name for vegetation association

Attribute\_Definition\_Source: National Vegetation Classification System

Attribute\_Domain\_Values:

Unrepresentable\_Domain: National Vegetation Classification System English name for vegetation associations

Attribute:

Attribute\_Label: ASSOC\_CODE

Attribute\_Definition: code for vegetation association

Attribute\_Definition\_Source: National Vegetation Classification System

Attribute\_Domain\_Values:

Unrepresentable\_Domain: National Vegetation Classification System CEGL code for vegetation associations

Attribute:

Attribute\_Label: ALLIAN\_SCI

Attribute\_Definition: scientific name for vegetation alliance

Attribute\_Definition\_Source: National Vegetation Classification System

Attribute\_Domain\_Values:

Unrepresentable\_Domain: National Vegetation Classification System scientific name for vegetation alliances

Attribute:

Attribute\_Label: ALLIAN\_ENG

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Attribute\_Definition: English name for vegetation alliance  
Attribute\_Definition\_Source: National Vegetation Classification System  
Attribute\_Domain\_Values:  
Unrepresentable\_Domain: National Vegetation Classification System English name for vegetation alliances

Distribution\_Information:

Distributor:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: USGS Center for Biological Informatics

Contact\_Position: USGS-NPS Vegetation Mapping Program Coordinator

Contact\_Address:

Address\_Type: mailing and physical address

Address: United States Geological Survey, Center for Biological Informatics

Address: MS 302, Bldg 810, Room 8000

Address: Denver Federal Center

City: Denver

State\_or\_Province: Colorado

Postal\_Code: 80225

Country: USA

Contact\_Voice\_Telephone: 303 202-4220

Contact\_Facsimile\_Telephone: 303 202-4219

Contact\_Facsimile\_Telephone: 303 202-4229

Contact\_Electronic\_Mail\_Address: gs-b-npsveg@usgs.gov

Resource\_Description: Downloadable Data

Distribution\_Liability:

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Standard\_Order\_Process:

Digital\_Form:

Digital\_Transfer\_Information:

Format\_Name: HTML

Digital\_Transfer\_Option:

Online\_Option:

Computer\_Contact\_Information:

Network\_Address:

Network\_Resource\_Name: <http://biology.usgs.gov/npsveg/dewa/index.html>

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Access\_Instructions: Internet Access  
Fees: None

Metadata\_Reference\_Information:

Metadata\_Date: 20080423

Metadata\_Review\_Date: 20080728

Metadata\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: USGS-NPS Vegetation Mapping Program Coordinator

Contact\_Address:

Address\_Type: mailing and physical address

Address:

U.S. Geological Survey, Center for Biological Informatics, MS 302,  
Room 8000, Building 810, Denver Federal Center

City: Denver

State\_or\_Province: Colorado

Postal\_Code: 80225

Country: USA

Contact\_Voice\_Telephone: (303) 202-4220

Contact\_Facsimile\_Telephone: (303) 202-4219

Contact\_Electronic\_Mail\_Address: gs-b-npsveg@usgs.gov

Metadata\_Standard\_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part  
1: Biological Data Profile, 1999

Metadata\_Standard\_Version: FGDC-STD-001-1998

Metadata\_Extensions:

Online\_Linkage: [http://metadata.nbii.gov/portal/community/Communities/Toolkit/Metadata/FGDC\\_Metadata/](http://metadata.nbii.gov/portal/community/Communities/Toolkit/Metadata/FGDC_Metadata/)  
Profile\_Name: Biological Data Profile FGDC-STD-001.1-1999