

# Natural Resources Inventories

A Fundamental Requirement for  
Managing Corps Lands

Stewardship Advisory Team

# Objectives

- Gain a better understanding of the development of a level one inventory
- Inventory Relationship to Performance Measures.
- Optional tools for completion
- New Web page information
- Provide a point of contact for more detailed issues and assistance.
- Implement any work – FY09.



# Purpose of the use of a National Level One Inventory.

- Is used consistently across the nation.
- Has its own unique scale and purpose.
- Provides a standard for use with OMBIL and performance measures (GPRA).
- Provides a national story.
- These core topic areas are from ER 1130-2-540 Chapter 2 Section 2-2 Policy.  
Activities.

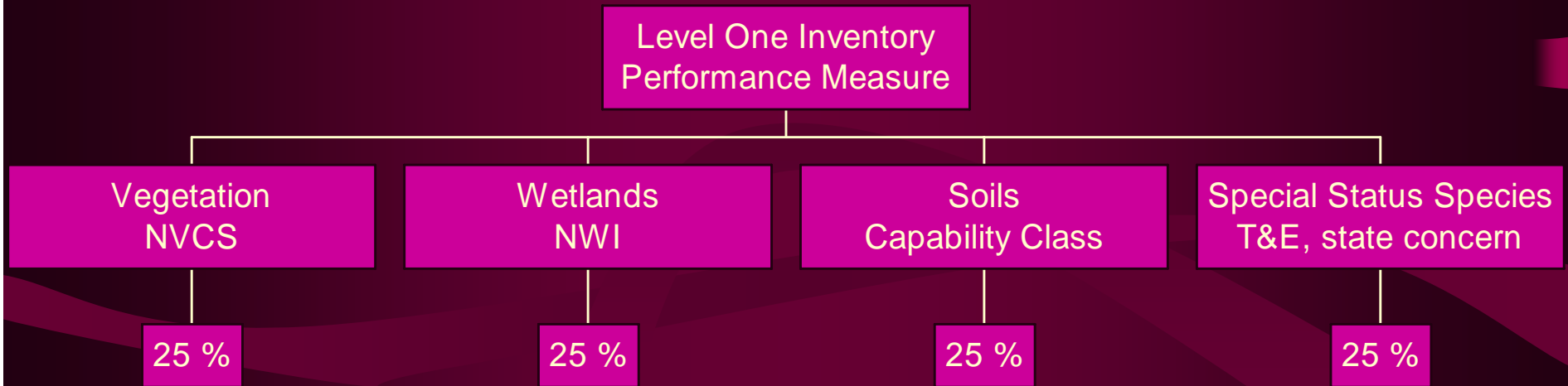
# Basic Information

- How many acres of forest land on projects?
- How many acres of wetlands?
- Largest type of wetlands on our projects?
- How many acres impacted by invasive sp ?
- How many acres are degraded?
- How many Federal and state species are we managing?
- How do we set national priorities??

# GPR A Performance Measures and OMBIL

- Percent of completed level one inventory
  - Inputs to Vegetation, Soils, Project Species and Wetland forms (Process)
- Acres of Healthy and Sustainable lands.
  - Vegetation - NVCS - determine whether lands are sustainable, transitioning or degraded.  
(Results based performance measure)
- Mild compared to other Agencies.

# Level One Inventory



Problem was the level of detail and the standards used and the lack of ability of upward reporting without OMBIL.

Bird list compared to a forest management cover typing.

Benefit - Educates the users on the project lands and uses of tools Such as GIS.



# Challenges

## Level 1 Inventory Implementation

- Projects with GIS capabilities?
- Knowing where to find the information.
- Projects with Fee lands and no staff.
- Lack of Resources - Time and \$
- Lack of Conservation specialist in the field.

# \$ Budgeted for Level I Inventories

- FY 08 – FY 11
  - Nationwide \$ 2.85 million.
- Stimulus
  - \$ 3 million



# Level One Inventory

Project Site Vegetation Classification



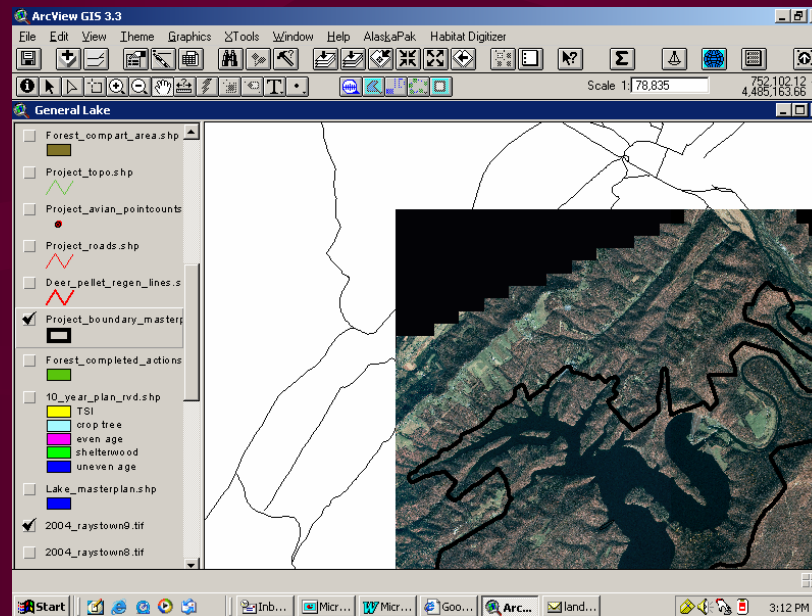
# Structure of the NVCS

Lake and Facilities

Division	Class	Sub-class
Vegetated	Closed Tree Canopy	Evergreen Forest
		Deciduous Forest
		Mixed evergreen-deciduous
	Open Tree Canopy	Evergreen Forest
		Deciduous Forest
		Mixed evergreen-deciduous
	Shrubland	Evergreen Forest
		Deciduous Forest
		Mixed evergreen-deciduous
	Dwarf Shrubland	Evergreen Forest
Deciduous Forest		
Mixed evergreen-deciduous		
Herbaceous Vegetation	Perennial gramimoid vegetal	
	Perennial forb vegetation Inc	
	Hydromorphic herbaceous -	
	Annual graminoid or forb veq	
Non-Vascular Vegetation	Bryhophyte Vegetation	
	Lichen Vegetation	
	Alga	
Sparse Vegetation		
Non-Vegetated		



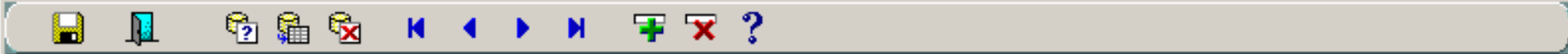
# GIS capabilities Aerial Imaging.



- Facilitate Vegetation Classification & GIS use.

# Basic Methods

- 200 acres Northern Hardwood.
- 200 acres Oak Hickory
- 200 acres Bottomland Hardwood
- 200 acres Scrub Oak
- 600 acres Closed Tree Canopy Deciduous
- 200 acres deciduous shrub land.



PROJECT SITE VEGETATION CLASSIFICATION

Project Site

Fiscal Year

**\*\* THE FOLLOWING CLASSIFICATION INFORMATION (EXCLUDING CONDITIONS) IS DERIVED FROM THE NATIONAL VEGETATION CLASSIFICATION SYSTEM \*\***

Project Fee-Owned Area

Division	Order	Class	Sub-Class	Sub-Class Acreage	Condition
VEGETATED	Shrub Dominated	Shrubland (Scrub)	Evergreen shrubland (scrub)	200	Condition
VEGETATED	Herb Dominated	Herbaceous Vegetation	Annual graminoid or forb vegetation	100	Condition
VEGETATED	Tree Dominated	Closed Tree Canopy	Deciduous closed tree canopy	1200	Condition
VEGETATED	Tree Dominated	Closed Tree Canopy	Evergreen forest	650	Condition
VEGETATED	Shrub Dominated	Shrubland (Scrub)	Deciduous shrubland (scrub)	480	Condition
VEGETATED	Herb Dominated	Herbaceous Vegetation	Perennial forb vegetation	500	Condition
Total Classified Acreage				3130	
Total Unclassified Acreage				17870	

Fiscal Year for the Vegetation Classification information

# Vegetation Accounting for the Lake

- The conservation pool should be classified as non-vegetated.
- Allows for assigning condition assessments.

# Other Sources of Data

- National Land Cover Data  
[http://www.mrlc.gov/nlcd\\_multizone\\_map.php](http://www.mrlc.gov/nlcd_multizone_map.php)

The screenshot shows a web browser window titled "Multi-Resolution Land Characteristics Consortium (MRLC) - Windows Internet Explorer". The address bar displays the URL [http://www.mrlc.gov/nlcd\\_multizone\\_map.php](http://www.mrlc.gov/nlcd_multizone_map.php). The page content includes a navigation menu with links: Home, About MRLC, Access Data, Scene Library, Land Cover Publications, Partners, News, Tools, FAQ, Contact Us, and Other Websites. The main heading is "National Land Cover Database (NLCD 2001) Multi-zone Download Site". Below the heading is a paragraph of text explaining the MRLC's completion of the NLCD 2001 products for the conterminous United States, Hawaii, Alaska, and Puerto Rico. The text mentions that the products were generated from a standardized set of data layers and that NLCD 2001 used an improved classification algorithm. A link for "download here" is provided. Below the text is a map of the United States divided into numbered superzones (1-15). A text box on the right side of the map asks the user to "Find the superzone(s) required for complete state coverage" and includes a "Choose a state" dropdown menu. The Windows taskbar at the bottom shows the "start" button, several application icons, and the system clock displaying "12:52 PM".

# Level One Inventory

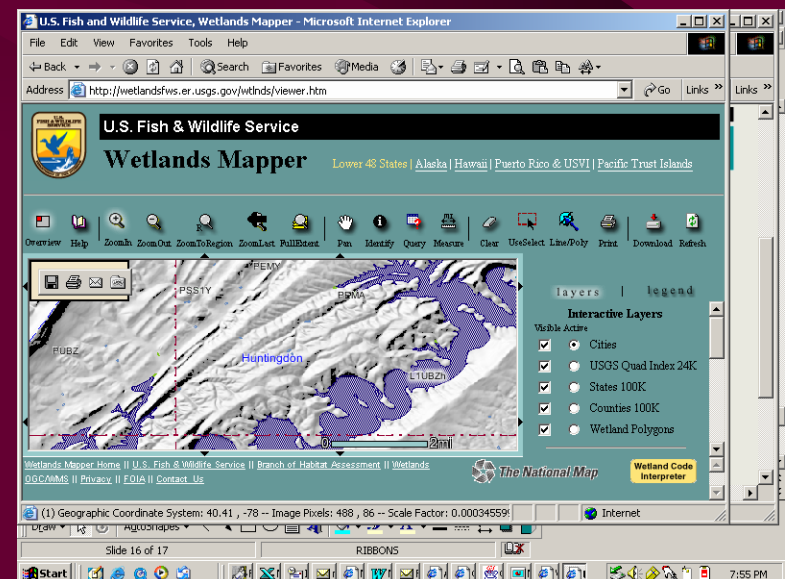
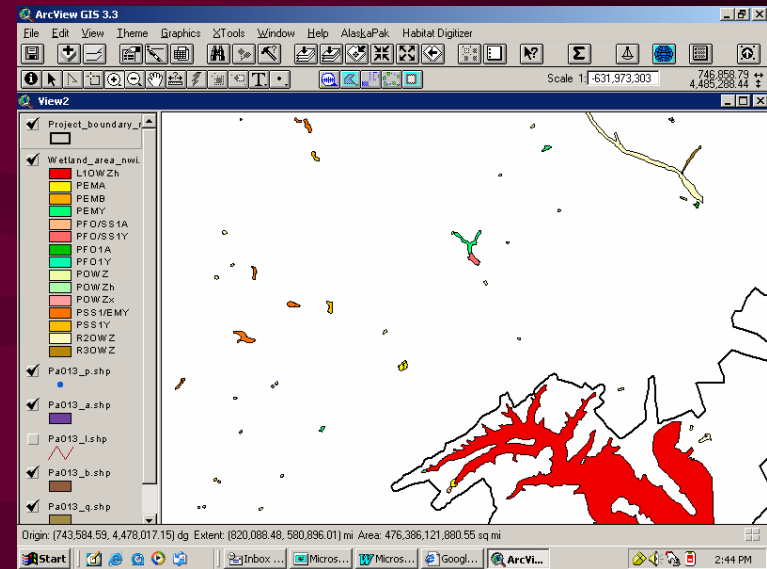
## Project Wetland Classification





# FWS NWI - Wetland Inventory.

- GIS data and hard copy maps of the National Wetland Inventory.
- On-line Wetland Mapper.
- Select areas -give you wetland classification and type.
- Not looking for jurisdictional wetlands.



History X

View >>

- Last...
- Tue...
- We...
- Today



## U.S. Fish & Wildlife Service

# National Wetlands Inventory

*Providing Wetland Information to the American People*

**MAPS - online**  
[Wetlands Mapper: view and print maps or download custom wetland digital data](#)  
[Wetlands Quad Data](#) in other formats

**MAPS INFORMATION**  
[Status Maps](#)  
[Era of Photography](#)  
[Recent Updates](#)  
[Metadata and Map Search](#)  
[Hard-Copy Maps](#)  
[Code Definitions](#)  
[Wetlands Definition](#)

**WETLAND INFORMATION**  
[Wetland Plants](#)  
[Status and Trends](#)

### FEATURES

**5-Year National Wetlands Status and Trends**  
 report part of Earth Day Presidential Initiative,  
**Service Press Release**

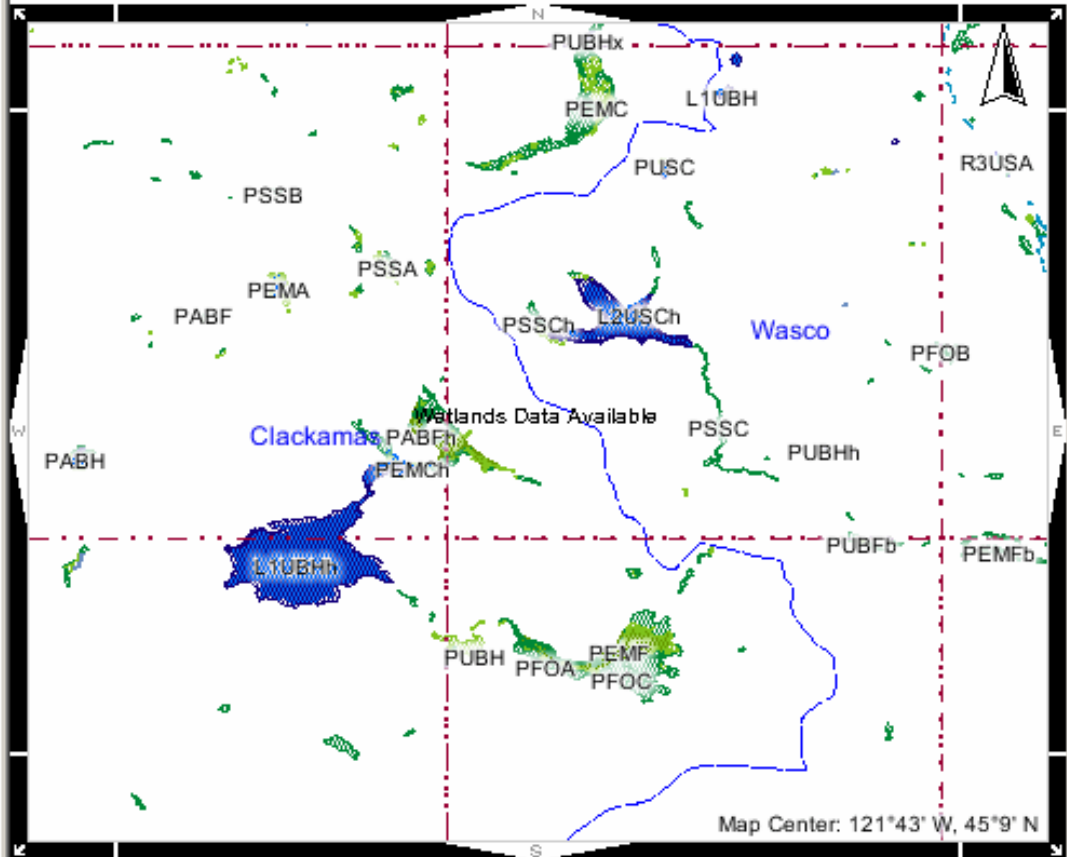
**Wetlands Mapper**  
 Geodatabase technology drives our new **Wetland Mapper**, and provides improved views and access to seamless wetlands habitat data with direct links to [The National Map](#).  
[Geodatabase Factsheet \(pdf\)](#)

**Geographically Isolated Wetlands Report (html)**  
 also available in **pdf**



Photos are available from USFWS i library

Welcome to the National Wetlands In (NWI). We produce and provide inform

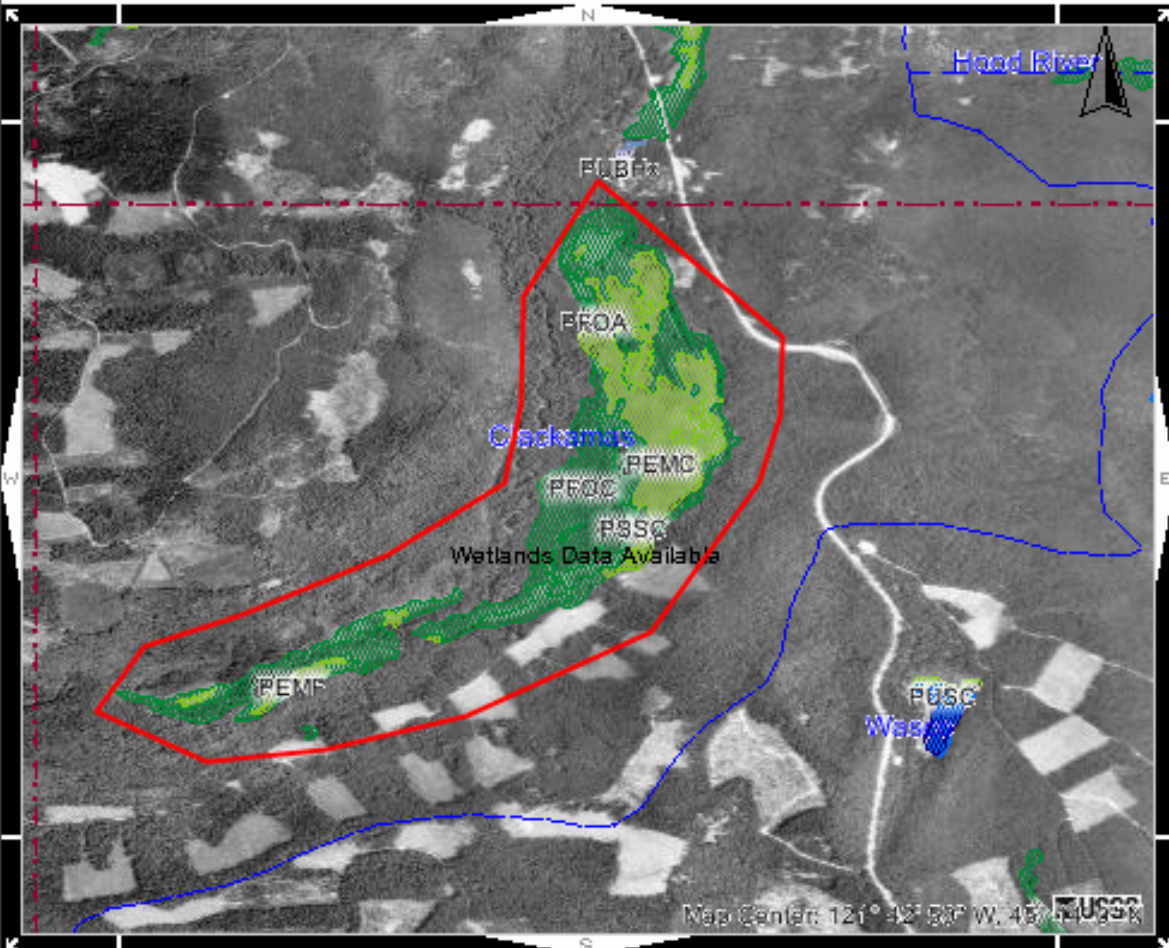


Jump To: Select a theme to view

### Map Layers

- Interactive Layers
  - Wetlands Data
    - Wetlands Data Availability
    - Wetland Polygons
  - Base Data
    - Cities
    - Major Cities \*
    - Zip Codes
    - USGS Quad Index 24K
    - USGS Quad Index 100K \*
    - States 100K
    - States 2M \*
    - States 25M \*
    - Counties
  - Display Layers
    - Road Labels (BTS) \*
    - Roads (BTS)
    - Major Roads (USGS) \*

1:229,659 Go Map Tool: **Zoom In** Active Layer: **Wetland Polygons** Powered by geocortex



### Markup Tool

15 points recorded. Click the map to add more points to the polygon, or click the OK button if you are finished drawing your polygon.

To restart the polygon, click the Clear button.

1:61,438

Go

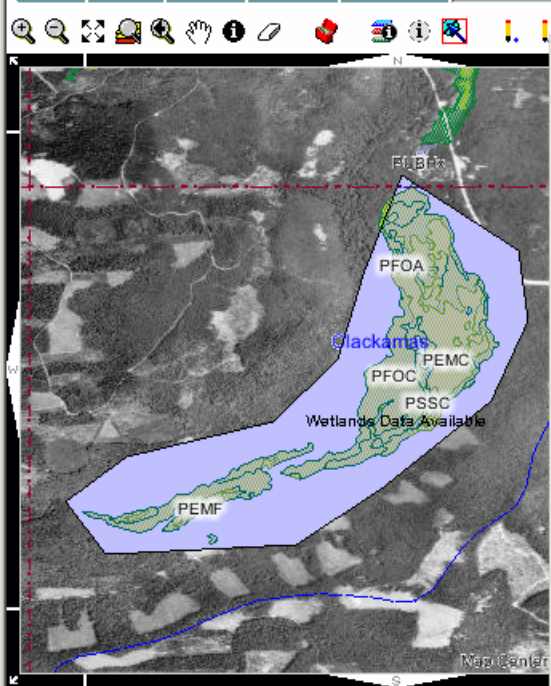
Map Tool: Polygon Markup Active Layer: Wetland Polygons

Powered by geocortex

Cursor Location: -121.70530910910014 , 45.24343182222091

Internet





http://wetlandsfws.er.usgs.gov/imf/imfSelectDefault.jsp?rec=1&pts=-12...

File Edit View Favorites Tools Help

- ### Query Results
- Wetland Polygons**
- Wetland Code:** PEMF  
**DECODE:** [Wetlands Code Interpreter](#)  
**WETLAND\_TYPE:** Freshwater Emergent Wetland  
**ACRES:** 0.50605373 [Zoom to this feature](#)
  - Wetland Code:** PEMF  
**DECODE:** [Wetlands Code Interpreter](#)  
**WETLAND\_TYPE:** Freshwater Emergent Wetland  
**ACRES:** 4.8182287 [Zoom to this feature](#)
  - Wetland Code:** PFOC  
**DECODE:** [Wetlands Code Interpreter](#)  
**WETLAND\_TYPE:** Freshwater Forested/Shrub Wetland  
**ACRES:** 43.30002363 [Zoom to this feature](#)
  - Wetland Code:** PSSC  
**DECODE:** [Wetlands Code Interpreter](#)  
**WETLAND\_TYPE:** Freshwater Forested/Shrub Wetland  
**ACRES:** 2.94445863 [Zoom to this feature](#)
  - Wetland Code:** PFOC  
**DECODE:** [Wetlands Code Interpreter](#)  
**WETLAND\_TYPE:** Freshwater Forested/Shrub Wetland  
**ACRES:** 4.16422061 [Zoom to this feature](#)

1:61,438 Go Map Tool: Select Active Layer

Cursor Location: -121.69069033151756, 45.2410928178077

Microsoft Excel - xls61177[1].xls

File Edit View Insert Format Tools Data Window Help

Arial 10 B I U

	A	B	C	D	E	F
2						
3	<b>Wetland</b>	<b>WETLANDS_DBA.C</b>	<b>WETLANDS_DBA.CONUS</b>	<b>WET_PC</b>	<b>WETLANDS_DBA.CONUS</b>	
4	PEMC	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	3.908016	total	
5	PEMC	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	0.746286		
6	PEMC	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	119.4166		
7	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	0.506054		
8	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	4.818229		
9	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	6.309633		
10	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	4.140072		
11	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	1.417811		
12	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	3.828048		
13	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	0.798491		
14	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	0.570871		
15	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	1.26587		
16	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	0.691205		
17	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	1.494543		
18	PEMF	http://www.nwi.fws.gov/at	Freshwater Emergent 'Wetland	7.993217	157.9049	
19	PFOA	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	1.967338		
20	PFOC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	43.30002		
21	PFOC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	4.164221		
22	PFOC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	4.27965		
23	PFOC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	19.71855		
24	PFOC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	27.4464		
25	PFOC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	101.31		
26	PFOC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	6.595289		
27	PFOC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	1.188789	209.9702	
28	PSSC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	2.944459		
29	PSSC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	0.962522		
30	PSSC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	4.954704		
31	PSSC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	3.189423		
32	PSSC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	5.526806		
33	PSSC	http://www.nwi.fws.gov/at	Freshwater Forested/Shrub 'Wetland	6.406678		

Sheet0

Ready

# Downloading GIS data

Download NWI Data - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media

Address <http://wetlands.fws.gov/downloads.htm> Go Links

## Wetlands Data

**Don't have GIS software?**  
[View and print custom NWI maps online](#)

**How do I download data?**  
 Users will be able to download one map file or one zipped 1:250,000 map folder (includes all available data, up to 128 map files) at a time. Select a data file or folder, then click the right mouse button to use the copy option.

**What data have been recently added?** [Search the list of updated data \(NAD 83\) plus scanned digital data from hard-copy \(NAD 27\) wetland maps.](#)

**How do I find the folder containing the map I need?**  
[NWI digital map data are](#)

### DOWNLOAD DIGITAL WETLANDS DATA (GIS software needed to view maps)

<b>Shapedata</b>	UTM NAD83	<a href="#">single quads</a> or <a href="#">1:250,000 zipped file folders</a>	These files are in UTM projection, NAD83 (including projected NAD27 data and "updated" NAD83 data).
<b>Personal Geodatabases</b>	UTM NAD83	<a href="#">geodatabases</a>	Updated NWI geodatabases or new digital data for which there are no NWI hardcopy maps. Examples available.
<b>Updated ARC Data</b>	UTM NAD83	<a href="#">single quads</a> or <a href="#">1:250,000 zipped file folders</a>	Newer and updated ARC data without corresponding copy maps.
<b>ARC Data</b>	UTM NAD27	<a href="#">single quads</a> or <a href="#">1:250,000 zipped file folders</a>	NWI ARC Export data (including files for older quads when copy maps were produced).
<b>Riparian/Wetland</b>	UTM NAD83	<a href="#">single quads</a> or	

Start | Internet | 4:04 PM

Index of /shapedata/huntington - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://wetlands.fws.gov/shapedata/huntington/> Go Links >>

<a href="#">chesni.zip</a>	27-NOV-2002	12:09	305K
<a href="#">concor.zip</a>	27-Nov-2002	12:09	129K
<a href="#">decatu.zip</a>			
<a href="#">fallsb.zip</a>			
<a href="#">friend.zip</a>			
<a href="#">gallip.zip</a>			
<a href="#">garris.zip</a>			
<a href="#">german.zip</a>			
<a href="#">glenwo.zip</a>			
<a href="#">greenu.zip</a>			
<a href="#">hager.zip</a>			
<a href="#">hamers.zip</a>			
<a href="#">hamlin.zip</a>			
<a href="#">higgin.zip</a>	27-Nov-2002	12:09	340K
<a href="#">hun.txt</a>	12-Dec-2002	13:54	5.3K
<a href="#">huntin.zip</a>	27-Nov-2002	12:09	415K
<a href="#">hurric.zip</a>	27-Nov-2002	12:09	185K
<a href="#">ironto.zip</a>	27-Nov-2002	12:09	343K

**File Download**

Some files can harm your computer. If the file information below looks suspicious, or you do not fully trust the source, do not open or save this file.

File name: huntin.zip  
 File type: WinZip File  
 From: wetlands.fws.gov

Would you like to open the file or save it to your computer?

Open Save Cancel More Info

Always ask before opening this type of file

Shortcut to huntin.zip

Start

4:07 PM

Geocortex Internet Mapping - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://wetlandsfws.er.usgs.gov/wtinds/launch.html>

History

View Search

- Last Week
- Tuesday
- Wednesday
- Today

**U.S. Fish & Wildlife Service**  
**Wetlands Online Mapper**

**Step 1: Learn to Use the Maps**


We recommend looking at the following prior to launching a map:


- [Quick tutorial](#) or [help system](#)


**Step 2: Launch the Map**

This site uses the Geocortex IMF Map Viewer.

Please select the region where you wish to begin. Once in the mapper you can change regions/themes by using the "Jump To: Theme" pull down menu located at the top of the layers list.

 [Launch Map of Lower 48 States](#)

 [Launch Map of Alaska](#)

 [Launch Map of Hawaii](#)

Geocortex Internet Mapping Framework - Microsoft Internet Explorer

**U.S. Fish & Wildlife Service**  
**Wetlands Online Mapper**


About Layers Legend Key Map Bookmarks Locate Contact Us Print PDF Help Exit


Jump To: Select a theme to view

**Map Layers**

- Interactive Layers
  - Wetlands Data
    - Wetlands Data Availability
    - Wetland Polygons \*
  - Base Data
    - Cities \*
    - Major Cities \*
    - Zip Codes \*
    - USGS Quad Index 24K \*
    - USGS Quad Index 100K \*
    - States 100K \*
    - States 2M \*
    - States 25M \*
    - Counties \*
  - Display Layers
    - Road Labels (BTS) \*
    - Roads (BTS) \*
    - Major Roads (USGS) \*

Map Center: 95°54' W, 36°54' N

1:52,059,480 Go Map Tool:  Zoom In Active Layer: Wetland Polygons

Powered by  Geocortex

Done Internet

Start 4:23 PM





PROJECT SITE WETLAND CLASSIFICATIONS

Project Site

POTOMAC RIVER AT ALEXANDRIA

Fiscal Year

2005

Project Fee-Owned Area

21000

\*\* THE FOLLOWING CLASSIFICATION INFORMATION IS DERIVED FROM THE U.S. FISH AND WILDLIFE SERVICE CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES

System	Sub-System	Class	
Riverine	Intermittent	Streambed	
Lacustrine	Littoral	Unconsolidated Bottom	8000
Palustrine	NO SUB-SYSTEM	Emergent Wetland	150
Palustrine	NO SUB-SYSTEM	Forested Wetland	80

Upland Acres 0

More Info

Total Uninventoried Project Fee-Owned Area 11770

Wetland Systems

Find %

System Name	System Definition
Estuarine	Deepwater tidal h
Lacustrine	Includes wetlands
Marine	Consists of the or

Find OK Cancel

Choices in list: 5

# Wetlands

## Accounting for the Lake

- The conservation pool should be identified as appropriate Lacustrine or Palustrine classification.

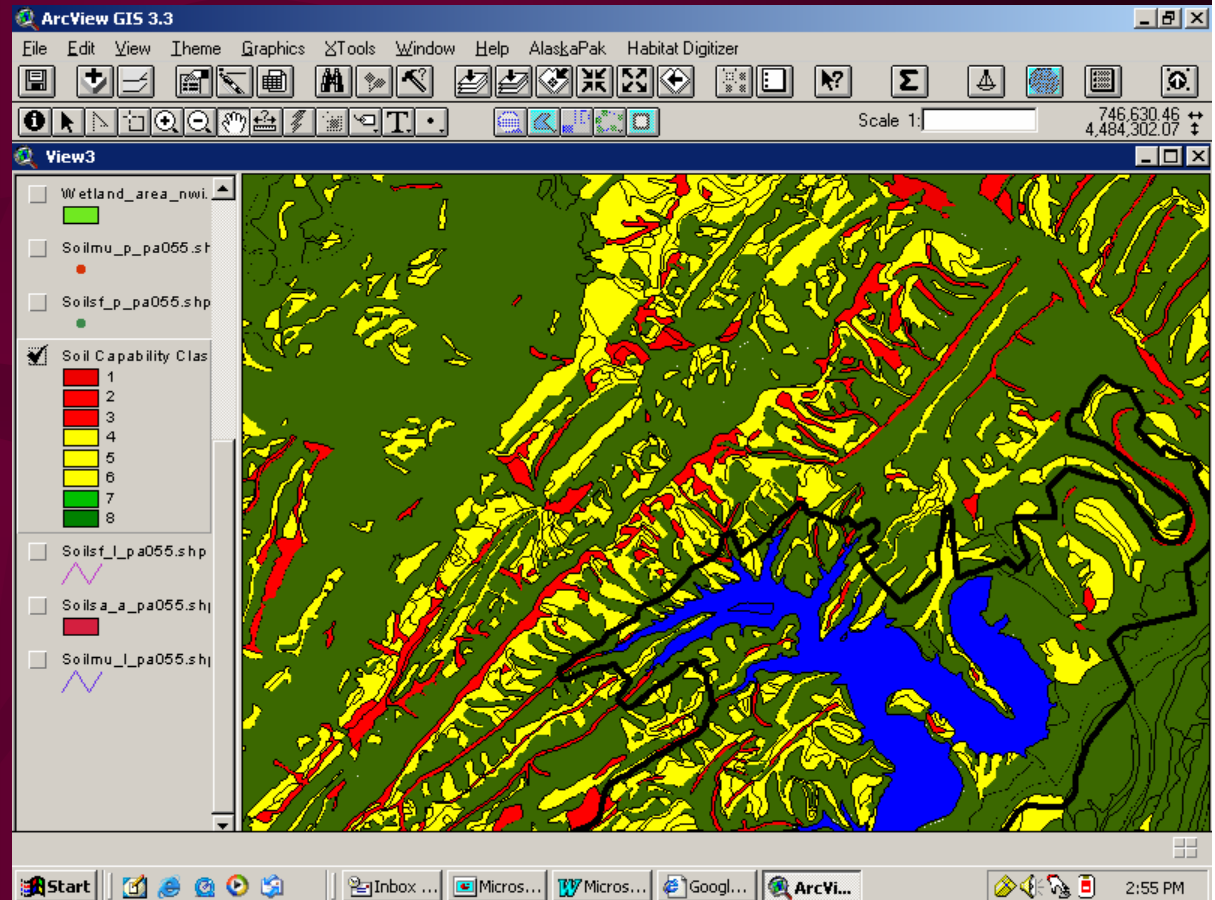
# Level One Inventory

Project Site Land (Soils)  
Capability Classes



# NRCIS soils - land capability classes.

- Existing maps for most projects using SURGO data (Now Soil Data Mart) can be evaluated to give acreage within a project boundary for soil classes.



# Soil Data Mart

<http://soildatamart.nrcs.usda.gov/> includes over 2000 soil surveys with spatial and tabular information, and another 800 plus soil surveys with tabular (soil attribute) data only.

Soil Data Mart - Select County or Parish. - Microsoft Internet Explorer

Address: <http://soildatamart.nrcs.usda.gov/County.aspx?State=PA>

Template Databases

Please select a county or parish with at least one survey area:

County Code	County Name	Available Survey Areas
PA001	Adams	1
PA003	Allegheny	1
PA005	Armstrong	1
PA007	Beaver	1
PA009	Bedford	1
PA011	Berks	1
PA013	Blair	1
PA015	Bradford	1
PA017	Bucks	1
PA019	Butler	1
PA021	Cambria	1
PA023	Cameron	1
PA025	Carbon	1
PA027	Centre	1
PA029	Chester	1
PA031	Clarion	1
PA033	Clearfield	1
PA035	Clinton	1

Select Survey Area

Select State

Done Internet 3:37 PM

History X

View >>

- Last...
- Tue...
- We...
- Today

Please select the class of data you wish to download: ( Survey Area Version 1 , Tabular Version 1 , Spatial Version 1 )

Tabular Data Only
  Tabular and Spatial Data
  Spatial Data Only
  Template Database Only

Please select a spatial format: 
 Please select a coordinate system:

Please select a template database (optional):

	State	MS Access Versio	Template DB Ver:	Template DB Name	Size
	OR	Access 2002	30 - 5	soildb_OR_2002	1.9M
▶	OR	Access 2000	30 - 5	soildb_OR_2000_v30_5	2.3M
	OR	Access 2002	30 - 5	soildb_OR_2002_v30_5	1.9M
	OR	Access 97	30 - 5	soildb_OR_97_v30_5	1.4M

**Description:** This template includes the following locally developed reports:

- Map unit descriptions
- Land Capability Classification
- Forest Ecological Site or Plant Association with understory plant species
- Forest Productivity with site index base age
- Prime and Important Farmland

Please enter your e-mail address:

# On- line Assistance

- Gateway – Link to document.
- Web Soil Survey

[http://websoilsurvey.nrcs.usda.gov/app/  
WebSoilSurvey.aspx](http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)

**Search**

**Quick Navigation**

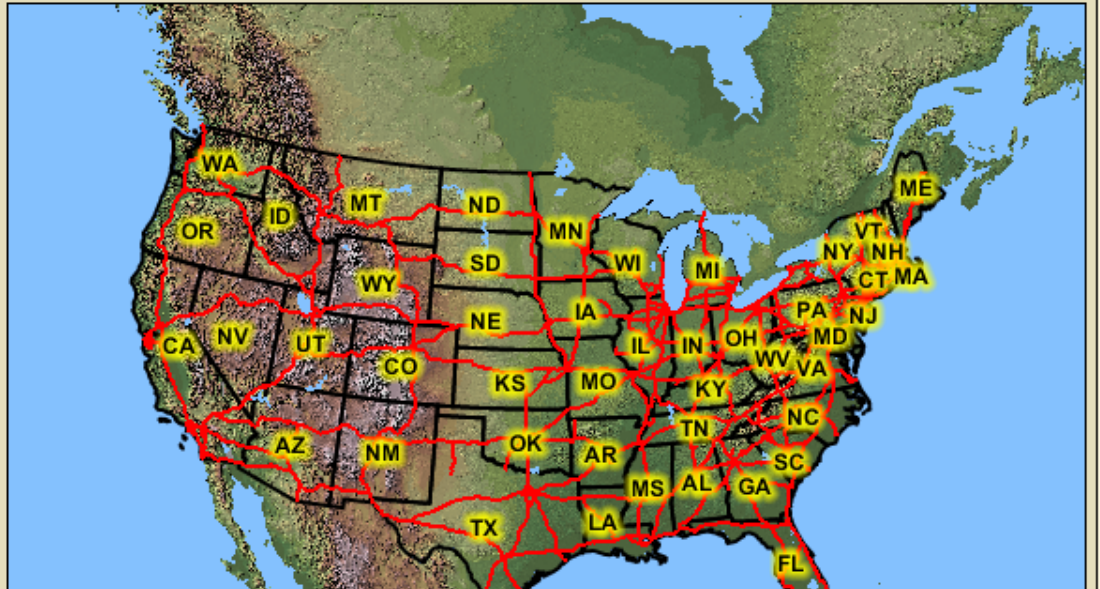
**Navigate By...**

- Address
- State and County
- Soil Survey Area
- Latitude and Longitude
- PLSS (Section, Township, Range)
- Bureau of Land Management
- Department of Defense
- Forest Service
- National Park Service
- Hydrologic Unit

**Area of Interest Interactive Map**

Legend

View Extent: Contiguous U.S. Scale: (not to scale)





Search

Area of Interest Properties

Clear AOI

AOI Information

Name

- Use Soil Survey Area Map Unit Symbols
- Use National Map Unit Symbols

Area (acres) 9,239.5

Soil Data Available from Web Soil Survey

Huntingdon County, Pennsylvania (PA061)

Soil Maps Version 1, Mar 2, 2004

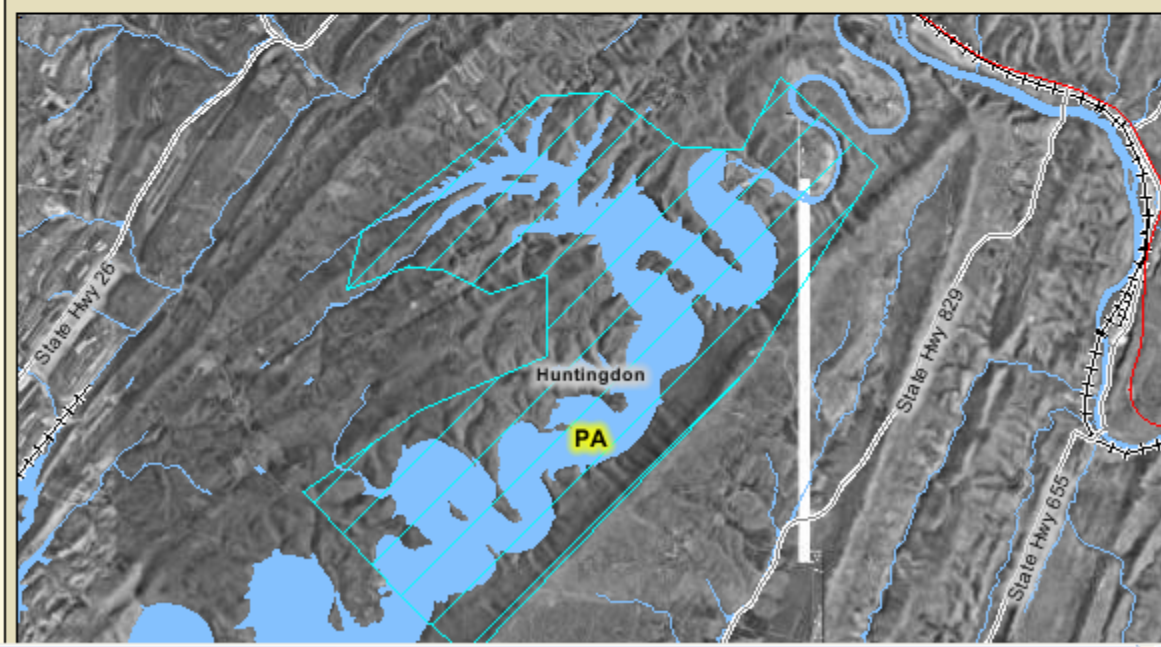
Soil Data Version 3, Jan 30, 2008

Clear AOI

Area of Interest Interactive Map

Legend

View Extent Contiguous U.S. Scale (not to scale)



### Map Legend

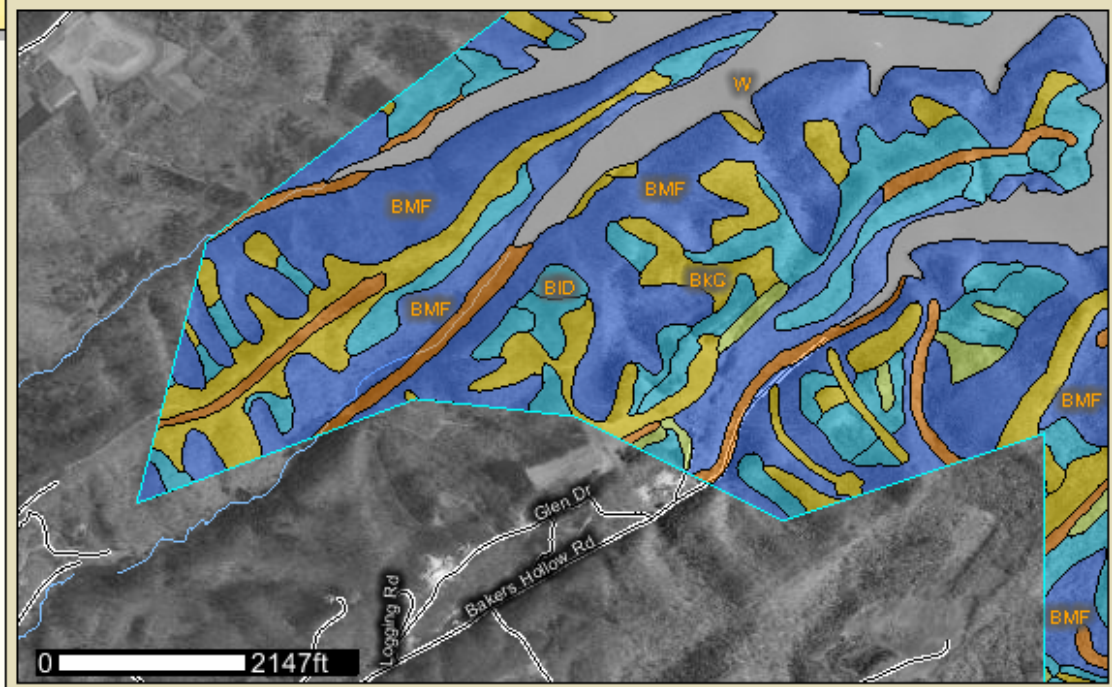
- Area of Interest (AOI)
- Area of Interest (AOI)
- Soils
  - Soil Survey Areas
  - Soil Map Units
  - Soil Ratings
    - Capability Class - I
    - Capability Class - II
    - Capability Class - III
    - Capability Class - IV
    - Capability Class - V
    - Capability Class - VI
    - Capability Class - VII
    - Capability Class - VIII
    - Not rated or not available
  - Special Point Features
  - Special Line Features
  - Political Features

Rating

Table

Description of Rating

Rating Options  Detailed Description



### Tables — Nonirrigated Capability Class — Summary By Map Unit

#### Summary by Map Unit — Huntingdon County, Pennsylvania

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AbB	Albrights silt loam, 3 to 8 percent slopes	2	108.9	1.2%
AbC	Albrights silt loam, 8 to 15 percent slopes	3	50.6	0.5%



PROJECT SITE LAND (SOILS) CAPABILITY CLASSES

Project Site  
POTOMAC RIVER AT ALEXANDRIA

Fiscal Year  
2006

\*\* THE FOLLOWING CLASSIFICATION INFORMATION IS DERIVED FROM THE NATURAL RESOURCES CONSERVATION SERVICE \*\*

Project Fee-Owned Area  
21000

Class	Land Capability Class Definition	Class Acreage
1	Soils in this class have few limitations that restrict their use. The soils are deep, well drained and the land is ne ...	50
2	Soils in this class have some limitations that reduce the choice of plants or require moderate conservation practi ...	20
3	Soils in this class have severe limitations that reduce the choice of plants or require special conservation practi ...	35
4	Soils in this class can be used for cultivation but there are very severe limitations on the choice of crops. Thes ...	60
5	Soils in class V to VIII are generally not suited to cultivation. Soils in class are generally subject to frequent stre ...	50
6	Soils in this class have severe limitations that restrict their use to pasture or range, woodland or wildlife. Limita ...	40
7	Soils in this class are very severe which restrict use to grazing, woodland or wildlife. Physical limitations same ...	10
8	Soils in this class should not be used for any kind of commercial plant production. Use is restricted recreation, ...	50
Level One Conservation Pool Area		11000
Total Unassessed Project Fee-Owned Acreage		9685

More Info

# Level One Inventory

## Project Site Special Status Species Page

# Special Status Species

- Sources
  - FWS, state fish/wildlife agencies, natural resource heritage, nature conservancy.
- Recovery plans and requirements are mostly online.
- Local surveys, credible interviews and observations.

# Special Status Species

- Potential species vs. Confirmed
  - Goal is to have a list of species that include:
    - Those that are confirmed on the project through surveys or observation and estimates of occurrence such as abundant, rare.
    - Identify potential species that due to know populations and habitat composition are reasonable believed to be on the project but have not been confirmed through surveys or observation.
- Changes forthcoming to provide credit for having the list.
- Future changes to species list expected.



PROJECT SITE SPECIAL STATUS SPECIES

Project Site

POTOMAC RIVER AT ALEXANDRIA

Fiscal Year

2005

Federal List  State List

Species	Fed/ State List	Inventoried Occurrence	Biological Opinion Issued	Final Recovery Requirements	Recovery Action Designated
Indian Knob mountain balm	FED	Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alani	FED	Potential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black-spored quillwort	FED	Potential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rocksnail, painted	FED	Potential	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Species Final Recovery Plan

More Info



# Level One Inventory

## Assessing Vegetation Conditions



# Other agencies

- FWS Refuge System

## Goal #1

**Conserve, Manage, and Where Appropriate, Restore Fish, Wildlife, and Plant Resources and Their Habitats to Fulfill Refuge Purposes, Trust Resource Responsibilities, and Biological Diversity/Integrity**

### **I. Habitat Condition Assessments**

One common performance measure running throughout DOI, FWS, and the Refuge System, is the overall condition of habitat acres and riparian miles. The data your refuge entered for these questions in 2005 became a baseline by which performance will be measured in coming years. Last year you set targets in RAPP for how you expected the acres/miles in these habitat condition classes to change in the current year. You can review those targets either in last year's workbook, looking online in Enterprise Planner, or requesting a report from your RAPP Coordinator. Now you must reassess whether you met those tar-

The following tables are provided to help you do the assessment, and make sure all your numbers add up correctly. The numbers in the top-left corner of each box corresponds to questions in the online RAPP. You must classify all land owned or managed by the Service into 2 ways — first by habitat type, then by habitat condition. The habitat types are:

**Wetland** – Includes all freshwater, estuarine and saltwater wetlands, but not large (i.e. greater than 100 acres) bodies of open water. If you use the National Wetland Inventory classifications, include all classes except open water, marine and reef. The online RAPP Guidance Document has a link to NWI classification.

**Open Water** – Includes all freshwater, estuarine, and salt water bodies, such as ponds, lakes, rivers, estuaries, oceans, bays, and inlets. Include the National Wetland Inventory classes for open water, marine and reef.

**Upland** – All land not counted as wetland or open water may be counted as uplands. Built-up areas, including parking lots, facilities, and roads may be counted within upland habitat if there is significant acreage and to reach a total that roughly equates to the total refuge acres as reported by Realty.

The condition classes are:

**Class 1A – No Management Needed** – Acres of pristine/undisturbed habitat, or simply acres that don't need active management. Examples include wilderness areas and much of the land in Alaska. In Alaska, refuges should count acres in Class 1A where wildland fire is used as a management tool.

**Class 1B – Receiving Needed Management** - Acres which receive needed level of active management. Examples include acres farmed, grazed, burned, thinned, flooded, etc., sufficient to maintain intended habitat function.

**Class 2 – Management Needed, But Deferred** – Acres which need active management, but are not receiving it due of lack of funds. Examples include moist soil impoundments not receiving needed disking, grasslands not receiving prescribed grazing, forested areas not receiving needed thinning, etc.

**Class 3 – Restoration Needed, But Deferred** – Acres which need restoration, but are not receiving it due to lack of funds. Compared to Class 2 acres, these acres need more drastic work such as restoring contour, restoring hydrology, re-planting vegetation, or wholesale removal of invasive species.

**Riparian Mile Assessment** – DOI requires a separate measure for riparian habitat condition, which is measured in miles along the centerline of the stream channel. Previously, it was optional to enter figures for this assessment; however, refuges that regularly work with riparian habitat were encouraged to do so. If your refuge entered figures in the past, you should update them this year. Riparian is usually considered vegetation adjacent to, or contiguous with perennially/intermittent

# Definitions

- **Sustainable** – Meeting desired state. *The acreage is not significantly impacted by any factors that can be managed and does not require intensive management. The acreage also meets operational goals and objectives set out in project OMP or other applicable management document. These acres are considered healthy and sustainable for future generations. Only minor management practices may be required to maintain the health.*
- **Transitioning** – Managed to meet desired goals. The acreage is impacted by human or other environmental factors that require management of the acreage to meet goals and objectives outlined in the project OMP or other applicable management document.
- **Degraded** – Does not meet desired goals. The acreage is significantly impacted by human or other environmental factors that prevent the acreage from meeting desired goals outlined in the project OMP or other management documents. The acreage is not considered healthy. Intense management may be required to meet desired goals.
- **Not Assessed** – The acreage has not been assessed against operational goals and objectives and thus a condition rating cannot be determined.



PROJECT SITE VEGETATION CLASSIFICATION

Project Site

Fiscal Year

**\*\* THE FOLLOWING CLASSIFICATION INFORMATION (EXCLUDING CONDITIONS) IS DERIVED FROM THE NATIONAL VEGETATION CLASSIFICATION SYSTEM \*\***

Project Fee-Owned Area

Division	Order	Class	Sub-Class	Sub-Class Acreage	
VEGETATED	Shrub Dominated	Shrubland (Scrub)	Evergreen shrubland (scrub)	200	Condition
VEGETATED	Herb Dominated	Herbaceous Vegetation	Annual graminoid or forb vegetation	100	Condition
VEGETATED	Tree Dominated	Closed Tree Canopy	Deciduous closed tree canopy	1200	Condition
VEGETATED	Tree Dominated	Closed Tree Canopy	Evergreen forest	650	Condition
VEGETATED	Shrub Dominated	Shrubland (Scrub)	Deciduous shrubland (scrub)	480	Condition
VEGETATED	Herb Dominated	Herbaceous Vegetation	Perennial forb vegetation	500	Condition
Total Classified Acreage				3130	
Total Unclassified Acreage				17870	

Fiscal Year for the Vegetation Classification information

**PROJECT SITE VEGETATION CLASSIFICATION CONI**

Project Site  
CENTER HILL LAKE

Fiscal Year  
2006

Sub-Class  
Algae vegetation

Condition	Condition Acreage
<b>SUSTAINABLE</b>	2750
<b>TRANSITIONING</b>	3500
<b>DEGRADED</b>	500

Total Sub-Class Acres Not Assessed: 3250

Close

12 →

13 →

14 →

← 15

← 16

← 17

← 18

19 →

# Methods of Assessment

- No mandatory approach.
- Projects assessment based on the definitions.
- Best professional judgment using information available.
- Additional Tools – Nature Serve
  - Test Run

Inventories - Windows Internet Explorer

http://corpslakes.usace.army.mil/employees/inventory/LevelOne/inventories.cfm

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Inventories

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## Level One Inventories

Level one inventories are of a general nature and will be conducted to provide baseline information. This data will be used to support the resource objectives and land use classifications. Level one inventories shall be conducted in sufficient detail to determine acreage of dominant vegetation types, soil and land use capabilities, wetland acreage and the presence of [special status species](#) occurring on project lands and waters. The level one inventory shall in most cases be accomplished using available existing information that is readily available from a variety of sources.

In 2003, the level one inventory became a budget based performance measure and standards were developed. Input screens for data results have been provided in OMBIL and reporting on inventory results are required each year to meet performance tracked by the Office of Management and Budget (OMB).

- [Policy & Procedures](#)
- [Statement of Need](#)
- [News / Current Issues](#)
- [References](#)
- [Level One Inventory Elements](#)
- [Tools](#)
- OMBIL Website
- [Assessing Conditions](#)
- Performance Measures
- [Level One Inventory Working Group](#)
- [Lessons Learned](#)
- [Soil Capability](#)

Local intranet 100%

start | Inbox - Micro... | 3 Windows ... | Microsoft Po... | Inventories -... | 10:24 AM



# Example Inventory

Level One Inventories: Lessons Learned - Windows Internet Explorer

http://corpslakes.usace.army.mil/employees/lessons.cfm?Id=inventory-level1

File Edit View Favorites Tools Help

Links

Level One Inventories: Lessons Learned

**Natural Resources Management Gateway**  
to the future . . .

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## Lessons Learned

**Click for Disclaimer**

- [Submit a Lessons Learned](#)

**Example of completed level one inventory document from Raystown Lake completed by an SCA intern.**  
[Raystown Lake USACE Project Natural Resource Management Level One Natural Resource Inventories](#)  
Written by Devin DeCoeur SCA Intern

**Protocols of how to collect soils, vegetation and wetland information**

- [Procedures for obtaining and processing information for OMBIL Project Site Land \(Soils\) Capability Classes](#)
- [OMBIL Wetlands Inventory Procedure for GIS](#)
- [Vegetation Inventory for OMBIL](#)

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- [Assessing Conditions](#)
- [News / Current Issues](#)
- [Performance Measures](#)
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Inventories  
Lessons Learned



# Summary

- Various tools available.
- Numerous sources of information.
- Account for conservation pool acreage.
- Use GATEWAY links and examples.
- Condition is Important!!



# Inventory and Classification

Questions and Answers?