Wetlands Overview

Wetlands Working For Your Community-
Planning and Zoning For Clean Water
Wednesday, December 4, 2013

Regulatory Definition of Wetlands

"those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Source: http://water.epa.gov/lawsregs/guidance/wetlands/definitions.cfm

Regulatory Definition of Wetlands

"Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For the purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year."

Source:
http://www.fws.gov/northeast/ecologicalservices/pdf/wetlands/Clarification%20of%20FWS%20Wetland%20Definition.pdf

What Does A Wetland Look Like?

Influencing Factors

* Soils
* Topography
* Climate
* Hydrology
* Water Chemistry
* Vegetation
* Disturbance

Recipe

Dish: Wetland

Serves: 20 acres

Ingredients:

- Topography- 10 parts
- Climate- 3 parts
- Soils- 5 parts
- Hydrology- 5 parts
- Vegetation- 2 parts
- Water Chemistry- 1 part
- Disturbance- to taste

Forested Wetland

* characterized by woody vegetation that is 5 m tall or taller
* normally possess an overstory of trees, an understory of young trees or shrubs, and a herbaceous layer
* most common in the eastern United States

Scrub/Shrub Wetland

* characterized by woody vegetation less than 5 m tall
* includes true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions
* are one of the most widespread wetland classes in the United States

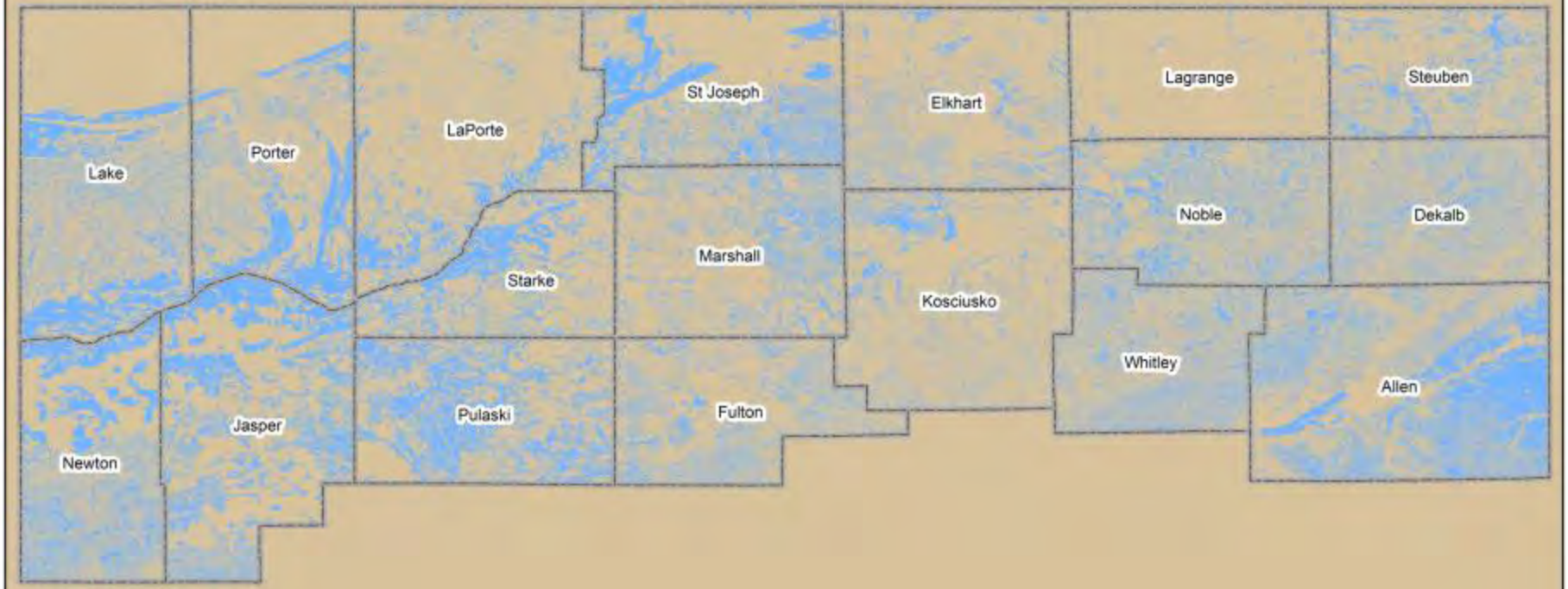
Emergent Wetland

* dominated by persistent emergent vascular plants, emergent mosses, or lichens
* found throughout the United States

Wetland Functions/Benefits

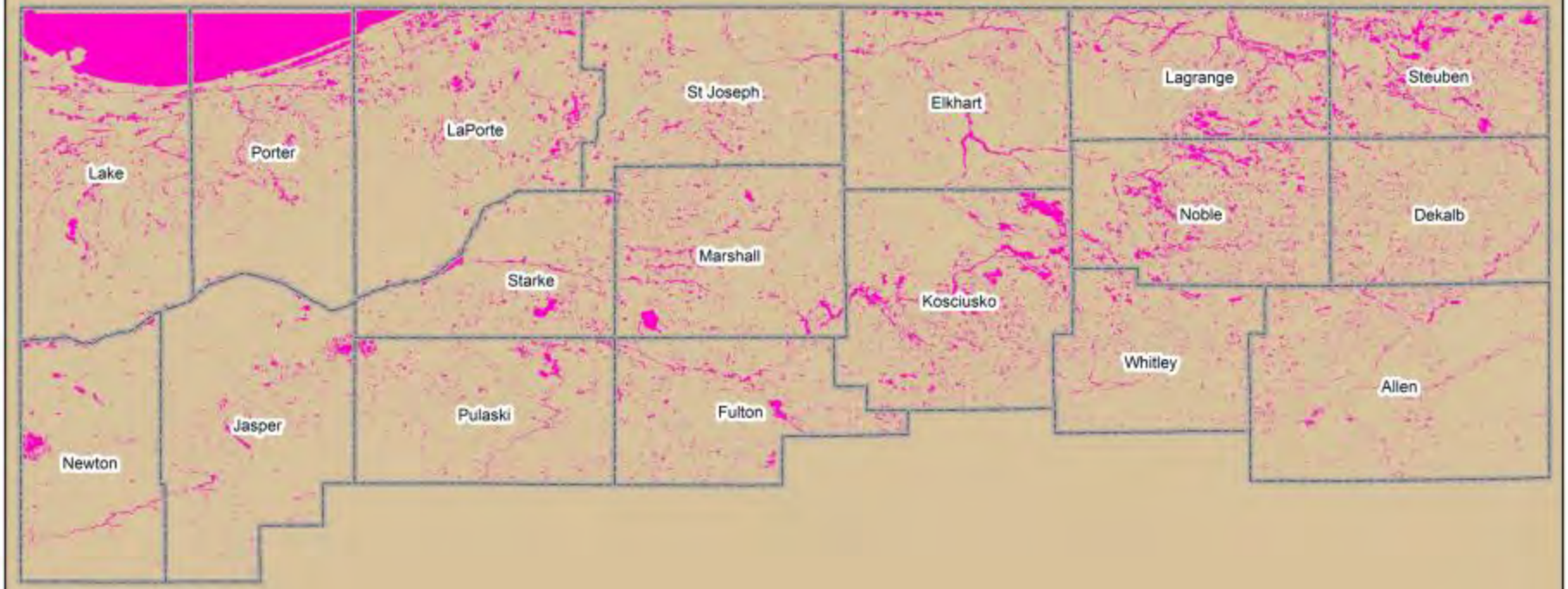
* Fish & Wildlife Habitat
* Flood Attenuation
* Water Quality Protection
* Shoreline Protection
* Groundwater Recharge & Streamflow Maintenance
* Aesthetics, Recreation, Education, & Science

Hydric Soils



0 12.5 25 50 Miles

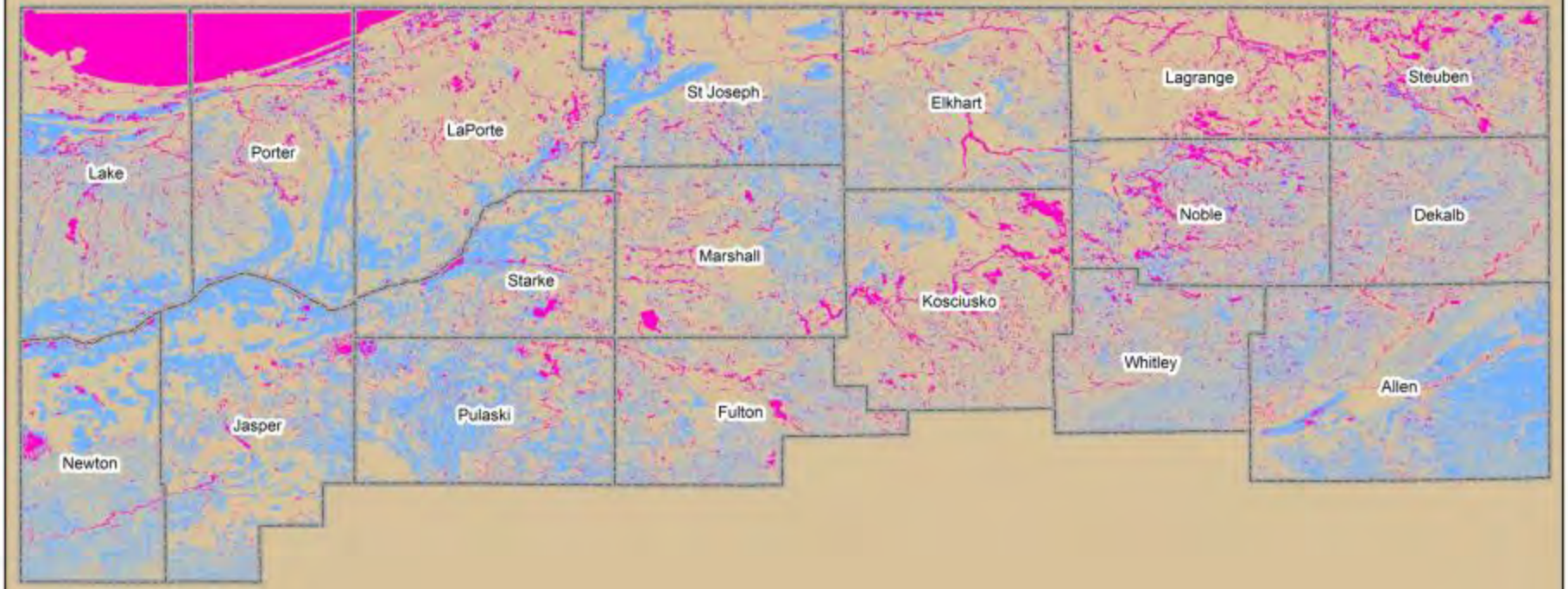
Wetlands

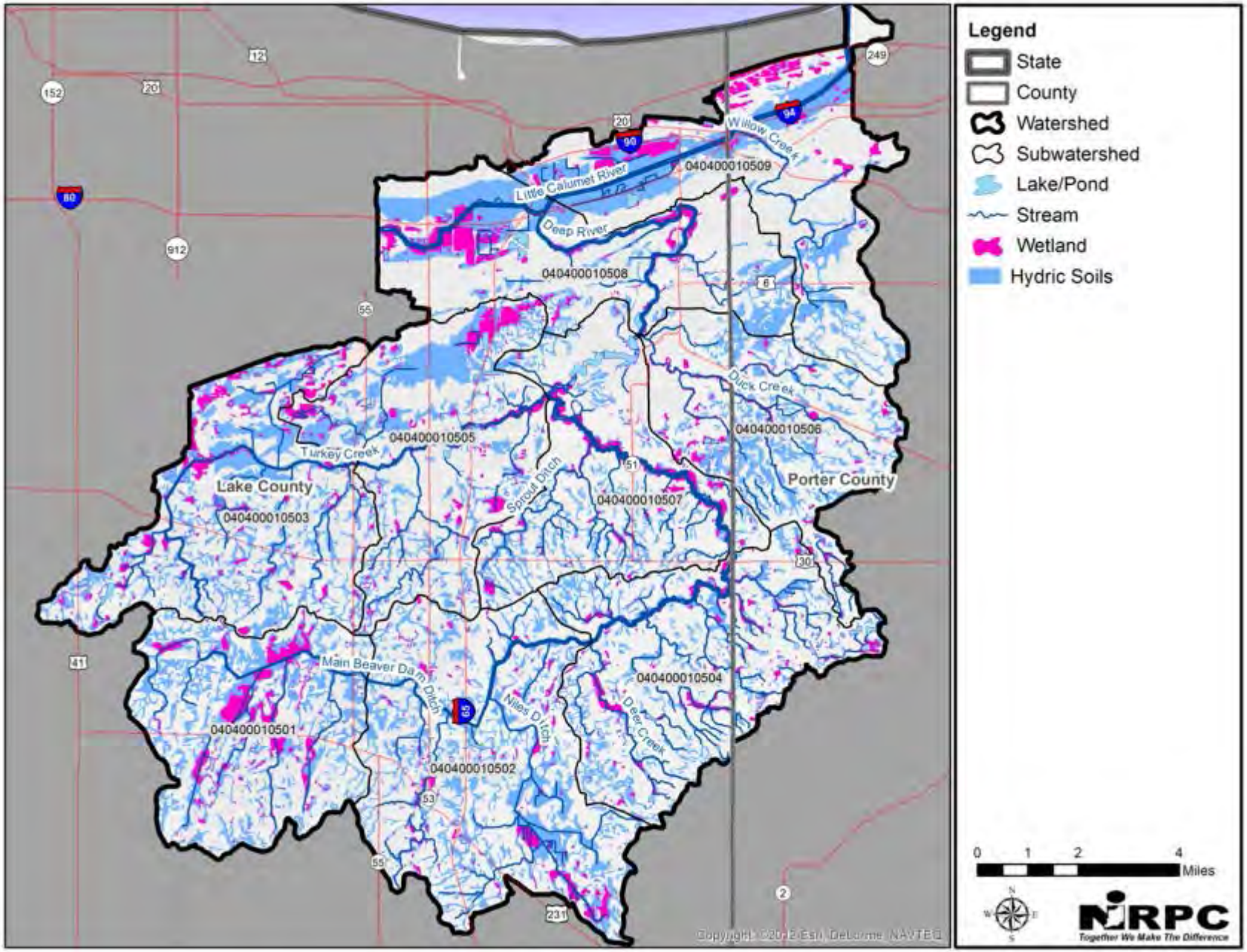


0 12.5 25 50

Miles

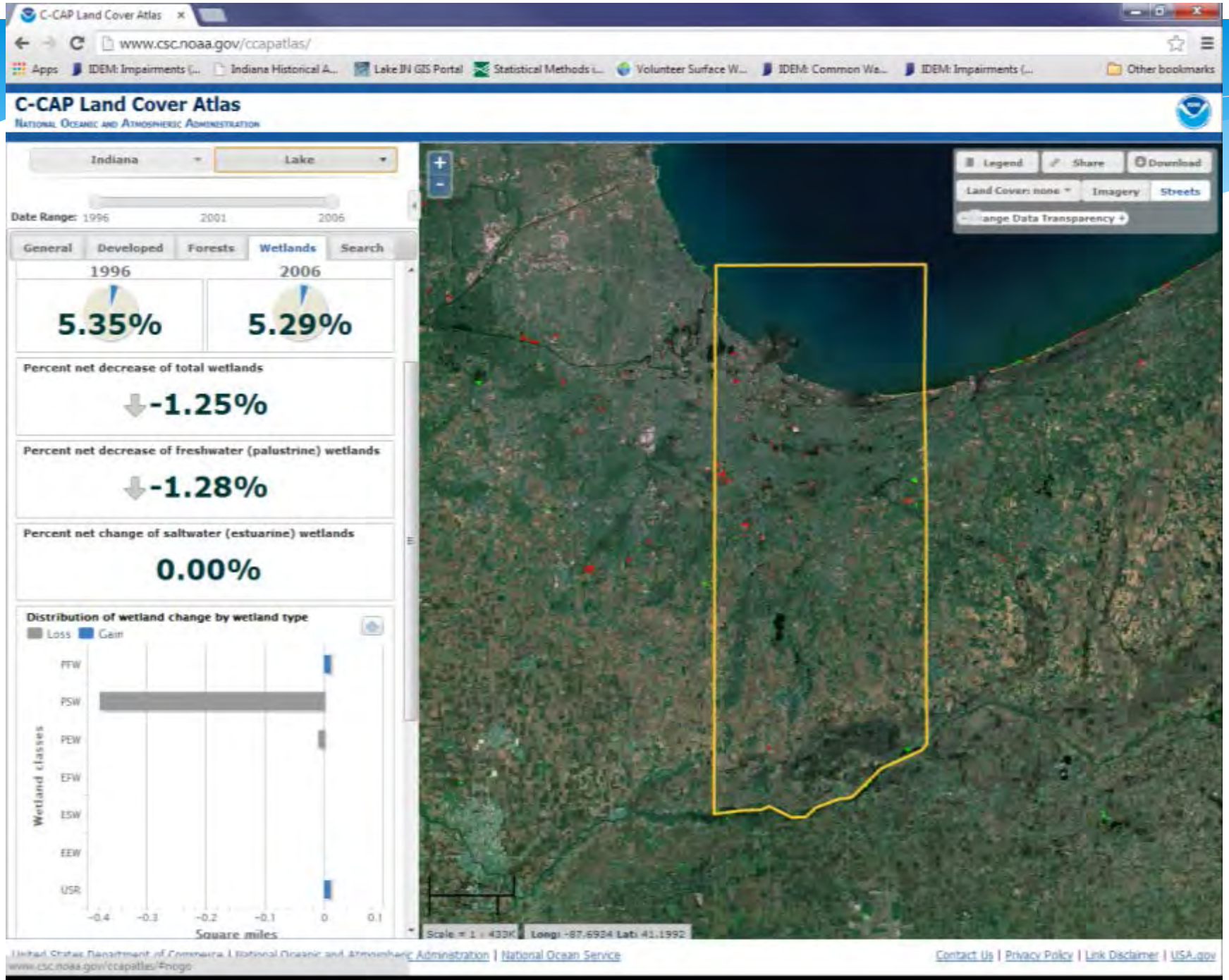
Hydric Soils & Wetlands




Legend
State
County
Watershed
Subwatershed
Lake/Pond
Stream
Wetland
Hydric Soils
Lake County
Porter County
040400010501
040400010502
040400010503
040400010504
040400010505
040400010506
040400010507
040400010508
040400010509
Little Calumet River
Deep River
Willow Creek
Turkey Creek
Sprout Ditch
Duck Creek
Main Beaver Dam Ditch
Niles Ditch
Deer Creek
0 1 2 4
Miles
NRPC
Together We Make The Difference

Deep River-Portage Burns Waterway Wetland Loss

Name	HUC-12	Hydric Soils (Historic Wetland) (ac.)	% of Drainage Area	Existing Wetland (ac.)	% of Drainage Area	% Change (Wetland Loss)
Headwaters Main Beaver Dam Ditch	040400010501	4,540	39	1,146	9.8	-75
Main Beaver Dam Ditch-Deep River	040400010502	5,665	34	797	4.7	-86
Headwaters Turkey Creek	040400010503	4,922	36	1,189	8.7	-76
Deer Creek-Deep River	040400010504	3,588	26	1,024	7.4	-71
City of Merrillville-Turkey Creek	040400010505	4,278	34	1,016	8.1	-76
Duck Creek	040400010506	2,781	27	520	5.1	-81
Lake George-Deep River	040400010507	2,808	25	1,086	9.8	-61
Little Calumet River-Deep River	040400010508	4,025	33	1,246	10.3	-69
Willow Creek-Burns Ditch	040400010509	4,626	34	1,223	9.1	-74
	Watershed Total	37,233	32	9,247	8.0	-75


C-CAP Land Cover Atlas
www.csc.noaa.gov/ccapatlas/
C-CAP Land Cover Atlas
National Oceanic and Atmospheric Administration
Indiana
Lake
Date Range: 1996 2001 2006
General
Developed
Forests
Wetlands
Search
1996
2006
5.35%
5.29%
Percent net decrease of total wetlands
-1.25%
Percent net decrease of freshwater (palustrine) wetlands
-1.28%
Percent net change of saltwater (estuarine) wetlands
0.00%
Distribution of wetland change by wetland type
Loss
Gain
PFW
PSW
PEW
EFW
ESW
EEW
USR
Wetland classes
-0.4
-0.3
-0.2
-0.1
0
0.1
Square miles
Legend
Share
Download
Land Cover: none
Imagery
Streets
Change Data Transparency
Scale = 1 : 433K
Longi -87.6924 Lati 41.1992
United States Department of Commerce | National Oceanic and Atmospheric Administration | National Ocean Service
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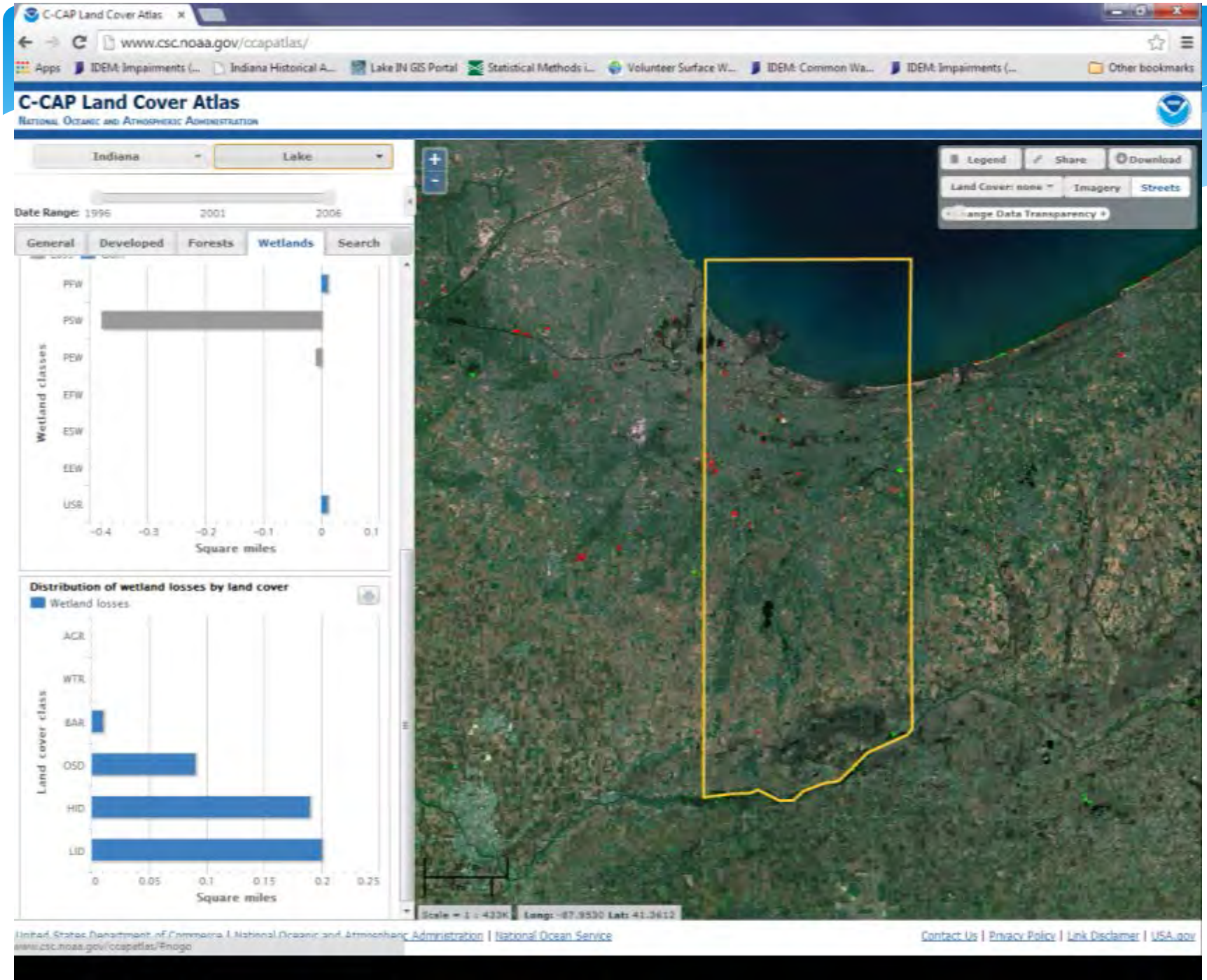
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General
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Search
PFW
PSW
PEW
EFW
ESW
EEW
USR
Wetland classes
-0.4
-0.3
-0.2
-0.1
0
0.1
Square miles
Distribution of wetland losses by land cover
Wetland losses
ACR
WTR
BAR
OSD
HID
LID
Land cover class
0
0.05
0.1
0.15
0.2
0.25
Square miles
Legend
Share
Download
Land Cover: none
Imagery
Streets
Change Data Transparency
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