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Topics

WETLANDS

- ▣ Importance and significance
- ▣ Historical degradation of functions and values
- ▣ Wetland restoration impacts

ACEP-WRE PROGRAM

- ▣ Objectives
- ▣ Conservation Practices
- ▣ Enrollment options



SWAMP

BOTTOMLAND

TIDAL FRESHWATER~MARSH

BILLABONG OXBOW

REEDMACE SWAMP WET MEADOW

WET PRARIE LAGOON POTHOLE

PLAYA SLOUGH CARR

SALT MARSH PAKIHI

WETLAND

MOOR

RAUPO SWAMP BOG DAMBO

DELTA FEN POCOSIN REEDSWAMP

VLEIS MARSH

SEDGE MEADOW MIRE

VERNAL POOL MUSKEG

MANGAL PEATLAND TURLOUGH

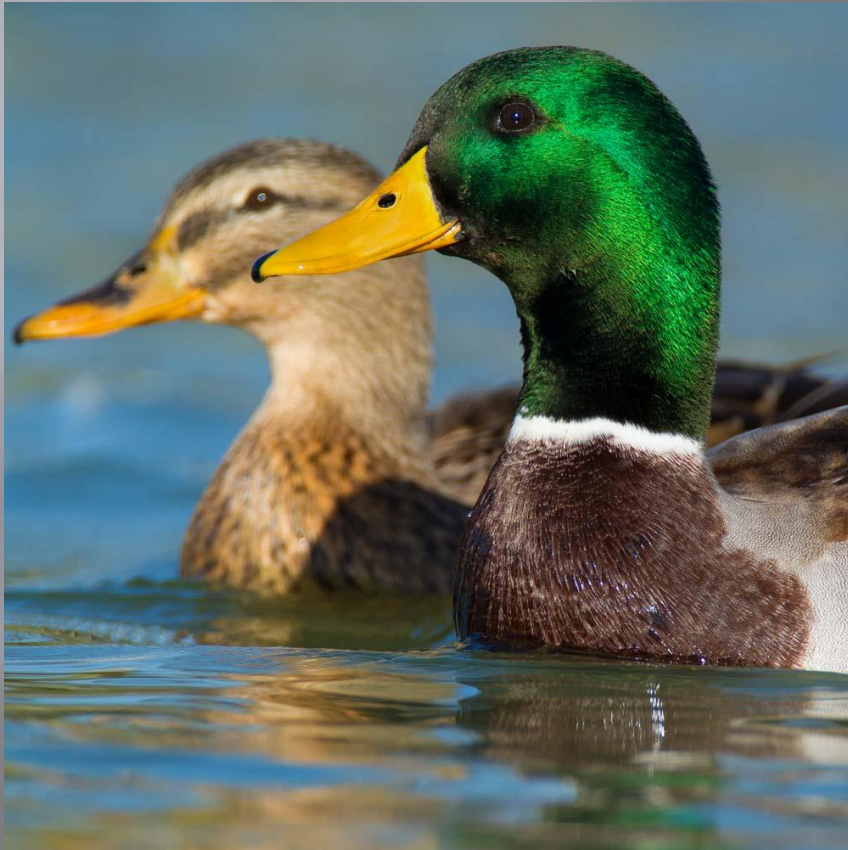
WAD
MANGROVE

Wetlands

- ▣ Must meet all 3 criteria:
 - Hydric Soils
 - Hydrophytic Vegetation
 - Wetland Hydrology



Importance of Wetlands



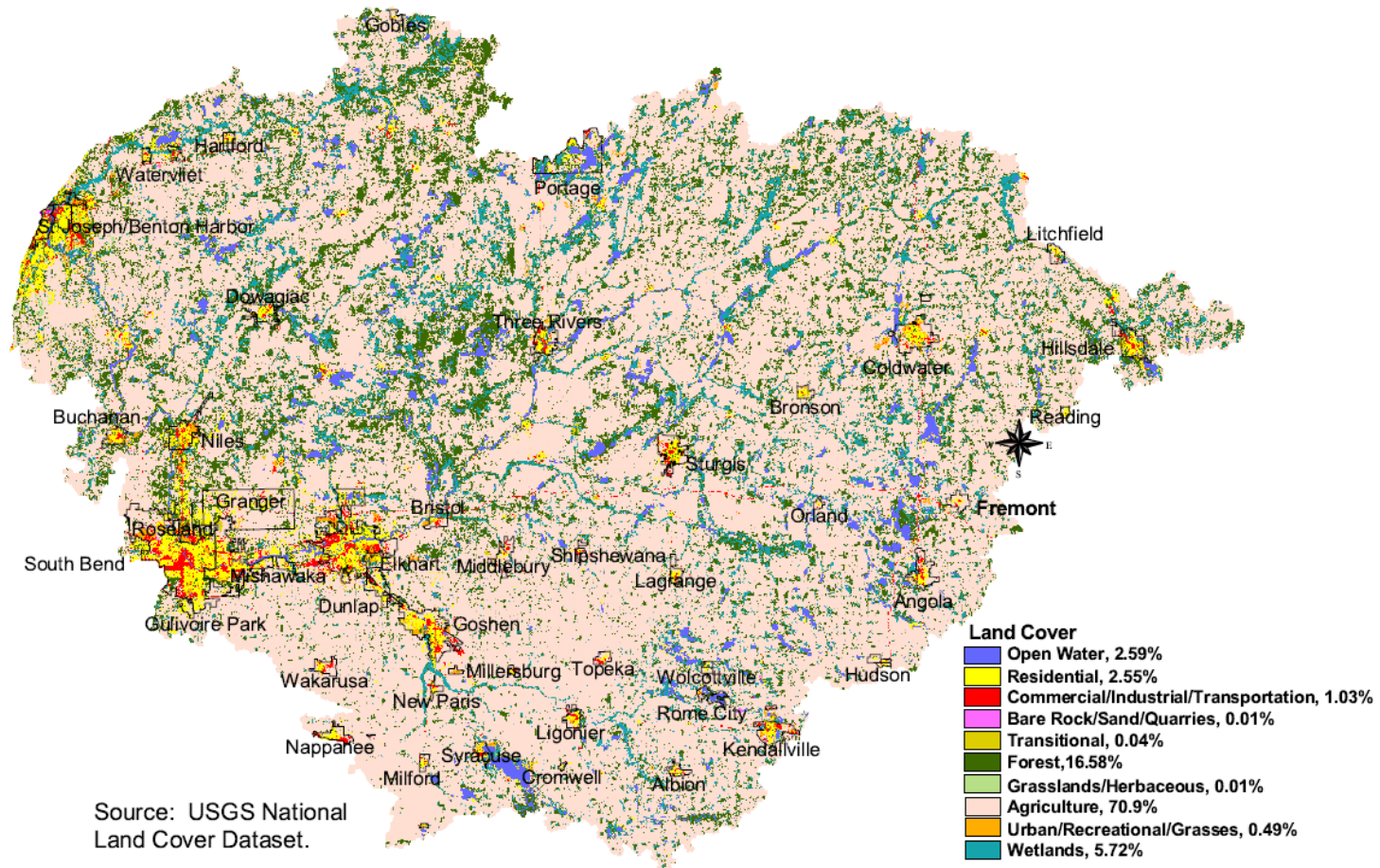
- ▣ Water storage
 - Groundwater recharge & Flood retention
- ▣ Nature's filter
 - Sediment & Nutrients
- ▣ Habitat for wildlife
 - Food & Cover
- ▣ Harbor for T/E Species
- ▣ Aesthetically pleasing

St. Joseph River Watershed

- ▣ Ox Creek watershed within Lower Paw Paw Watershed within St. Joseph River Watershed
- ▣ St. Joseph River Watershed:
 - 3rd largest watershed draining to Lake Michigan
 - 1.5 Million people live in the watershed
 - 70% of watershed is used for production Agriculture
 - 50% historic wetlands lost

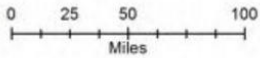
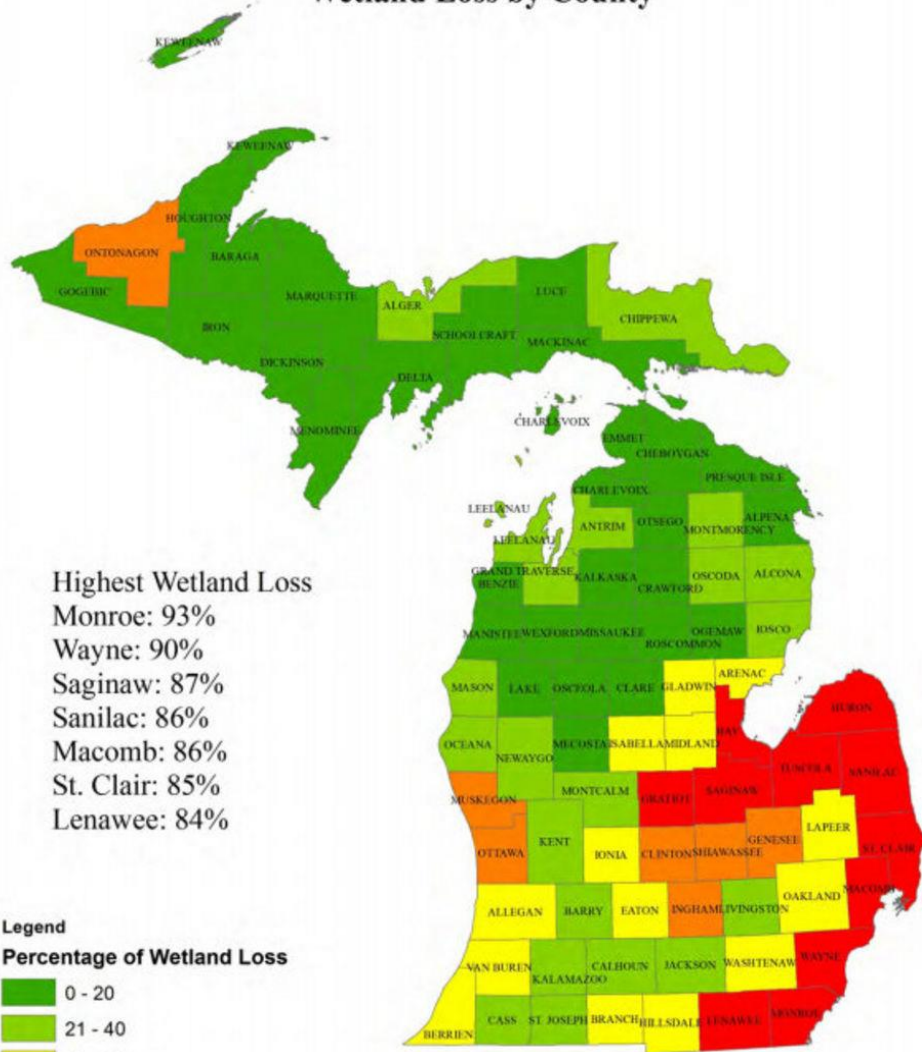
St. Joseph River Watershed

Land Cover in the St. Joe River Watershed



Wetland Trends In Michigan from 1800 to 2005

Wetland Loss by County





ACEP - WRE

- ▣ Agricultural Conservation Easement Program (ACEP)
 - Wetland Reserve Easement component
 - Formally know as the Wetland Reserve Program (WRP)



ACEP - WRE

- ▣ Objectives: to protect, restore, and enhance the functions and values of wetland ecosystems to attain:
 - Recharge of groundwater
 - Protection and improvement of water quality
 - Protection and enhancement of open space and aesthetic quality
 - Habitat for migratory birds, wildlife, including T&E species

WRE Eligible Land

- ▣ Targeted sites include
 - Forest, cropland, grassland, pastureland
 - WHICH contain hydric soils currently farmed, converted, or significantly degraded/manipulated
 - WHERE wetland hydrology can be significantly restored
 - TO a condition similar to pre-settlement conditions (to the extent practicable)

ACEP-WRE

- ▣ Non-eligible sites:
 - Existing wetlands without hydrology degradations.
 - Sites unable to be restored to wetlands due to onsite/offsite conditions.

Wetland Restoration



Surface ditch plugged during restoration



Surface ditch before restoration

Wetland Enhancement



Wetland Enhancement



ACEP-WRE

- ▣ Vegetation restorations:
 - Tree plantings
 - Wetland grasses and forbs.

- ▣ Based on pre-settlement vegetation



ACEP - WRE

▣ Enrollment options:

1. Permanent Easement

- ▣ 100% restoration costs paid
- ▣ Up to 95% of FMV paid for easement

2. 30 year Easement

- ▣ 75% restoration costs paid
- ▣ Up to 75% of FMV paid for easement

3. 30 year contract for Indian Tribes only

▣ **Application deadline for St. Joseph River Watershed: March 15, 2016**

ACEP – WRE Enrollment

Continuous Sign - Up Program!!

- ▣ NRCS Field Offices in Southwest Michigan:
 - Allegan
 - Berrien Springs
 - Big Rapids
 - Cassopolis
 - Centreville
 - Charlotte
 - Coldwater
 - Fremont
 - Grand Haven
 - Grand Rapids
 - Hastings
 - Ionia
 - Marshall
 - Paw Paw
 - Portage
 - Shelby
 - St. Johns

<http://www.nrcs.usda.gov/wps/portal/nrcs/site/mi/home/>