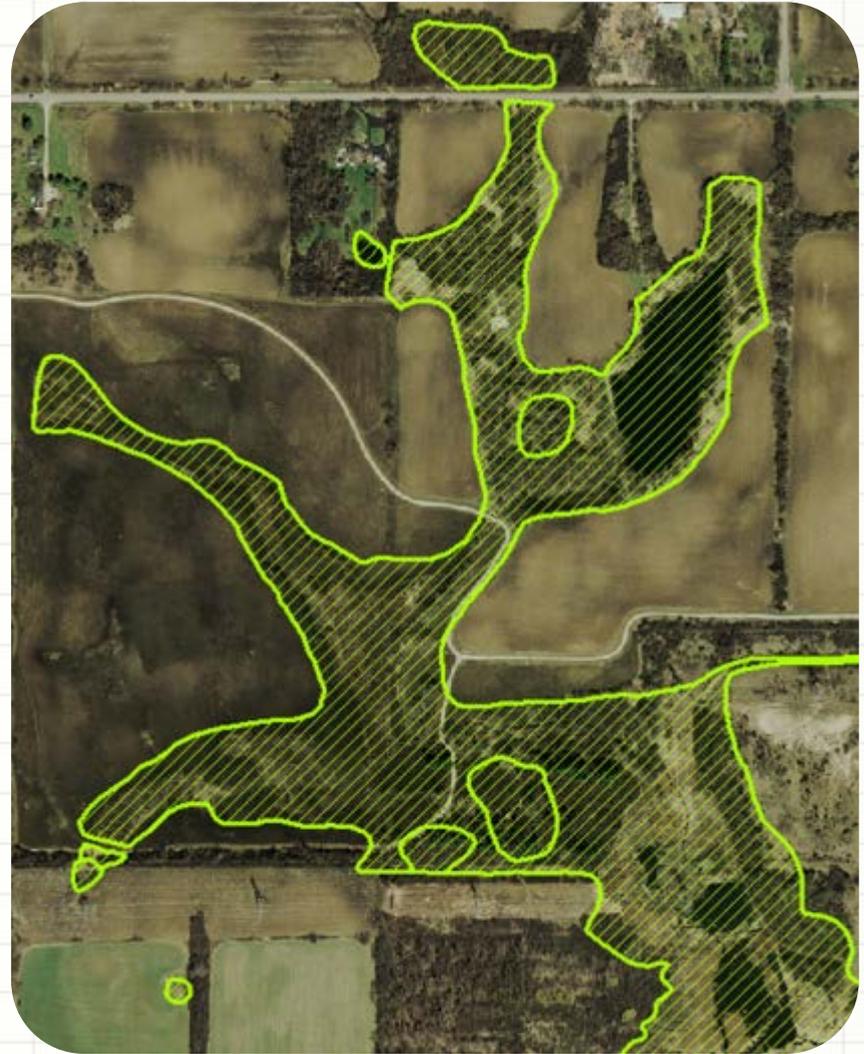


MAPPING FOR FUNCTIONAL ASSESSMENT

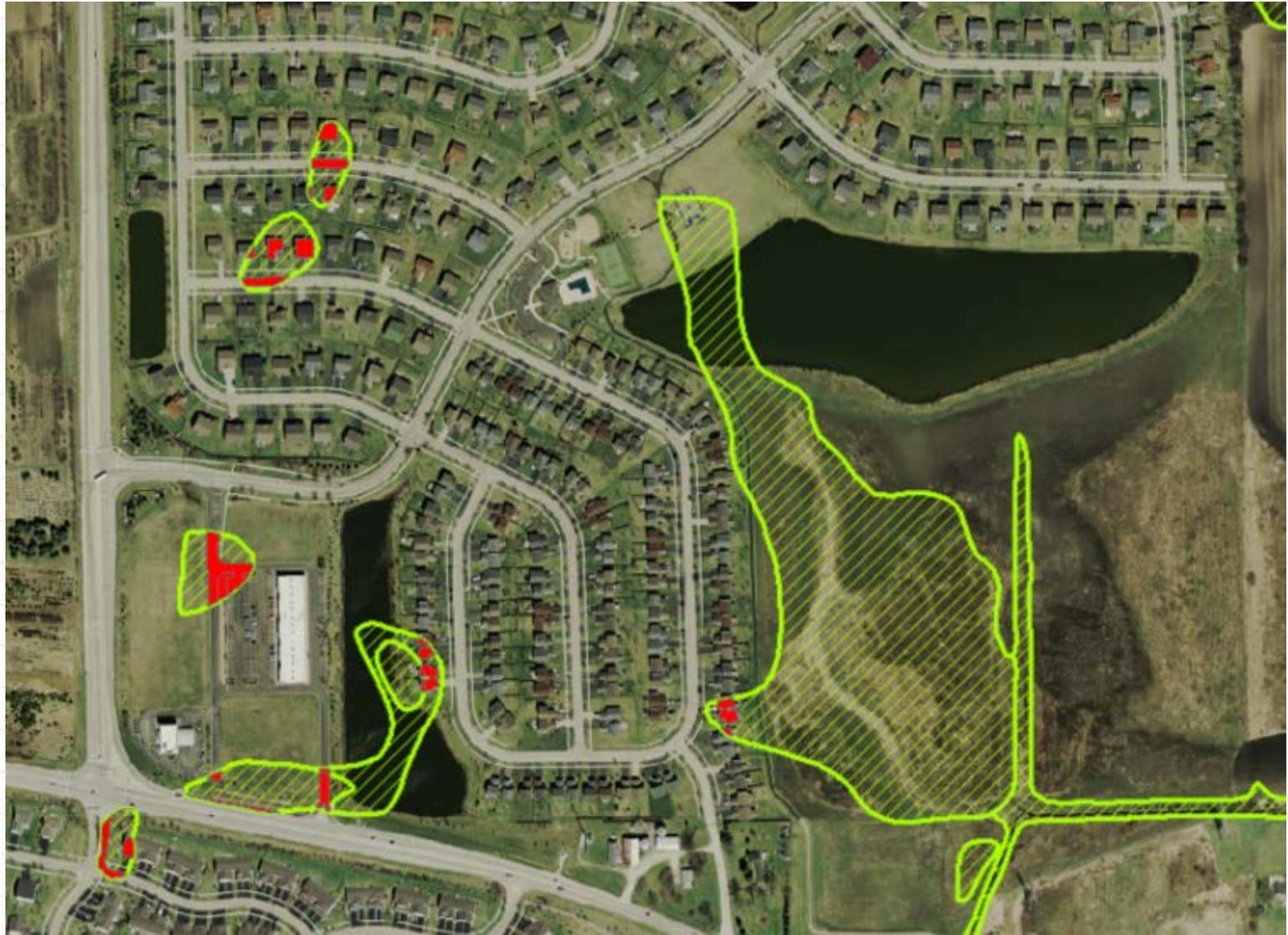
- ❖ Enhancing LCWI for WRAPP
- ❖ Wetland classification:
 - NWI (Cowardin)
 - Hydrogeomorphic (LLWW/NWIPlus)
- ❖ Functional Assessment (PAWF or W-PAWF)
- ❖ Don't drown in the alphabet soup!

Lake County Wetland Inventory

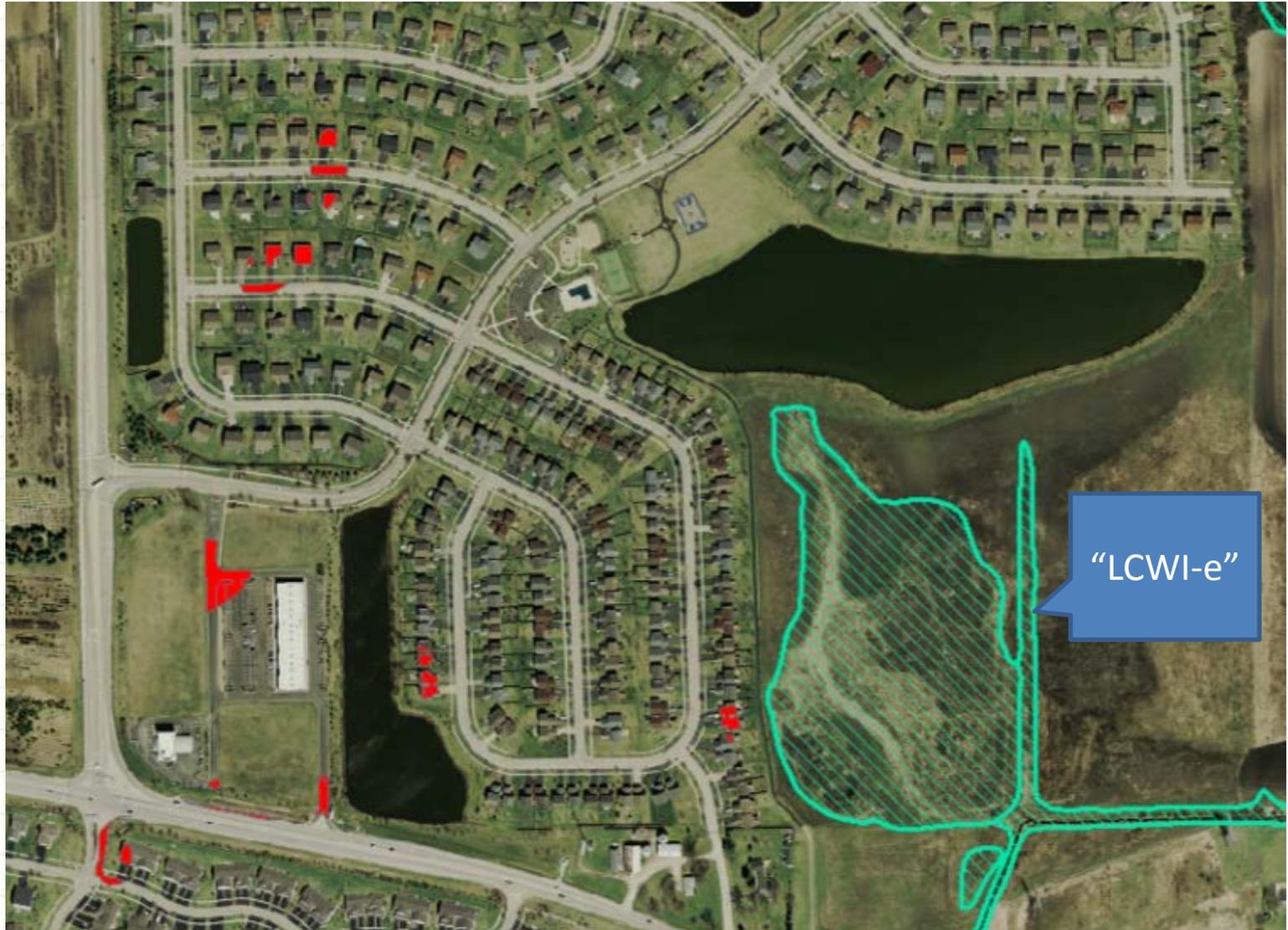
- First developed in early 1990s
- Periodic updates
- Widely used
- “Foundation” of WRAPP GIS



“Enhanced” LCWI for WRAPP



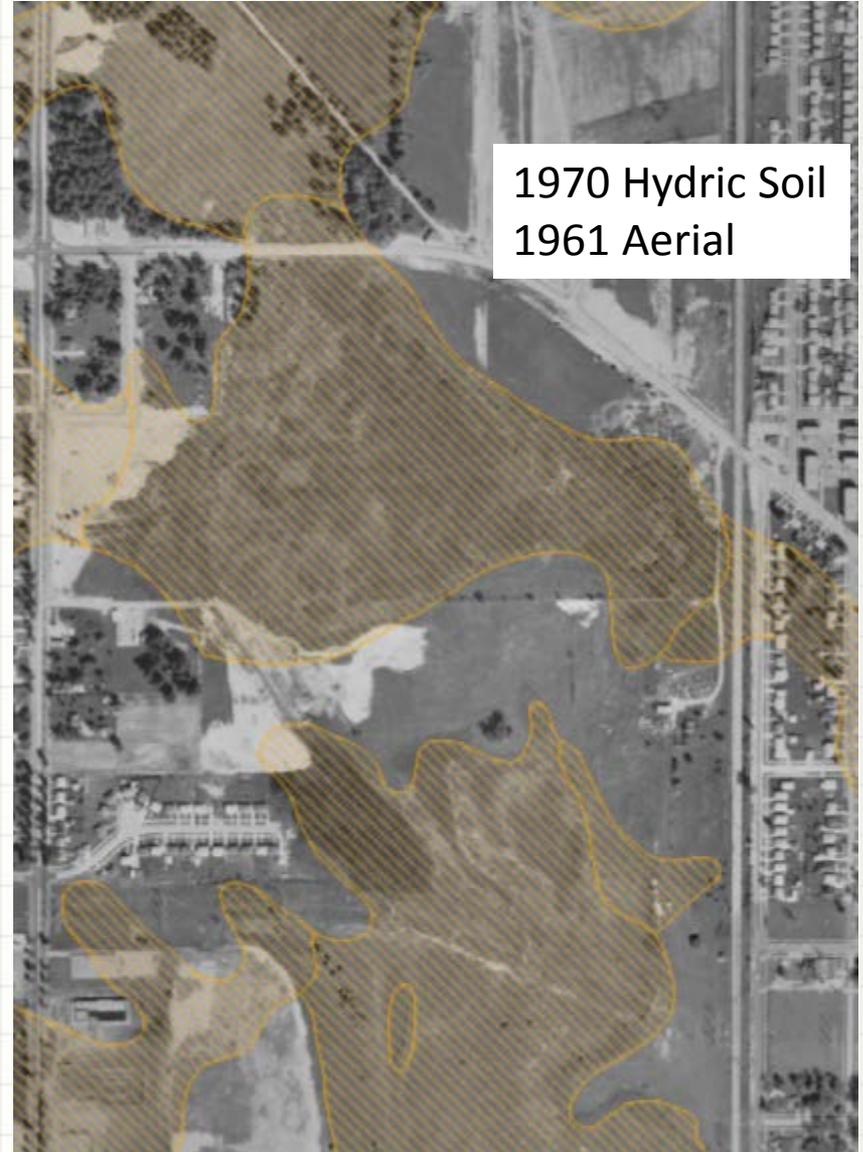
“Enhanced” LCWI for WRAPP



Historical LCWI for WRAPP

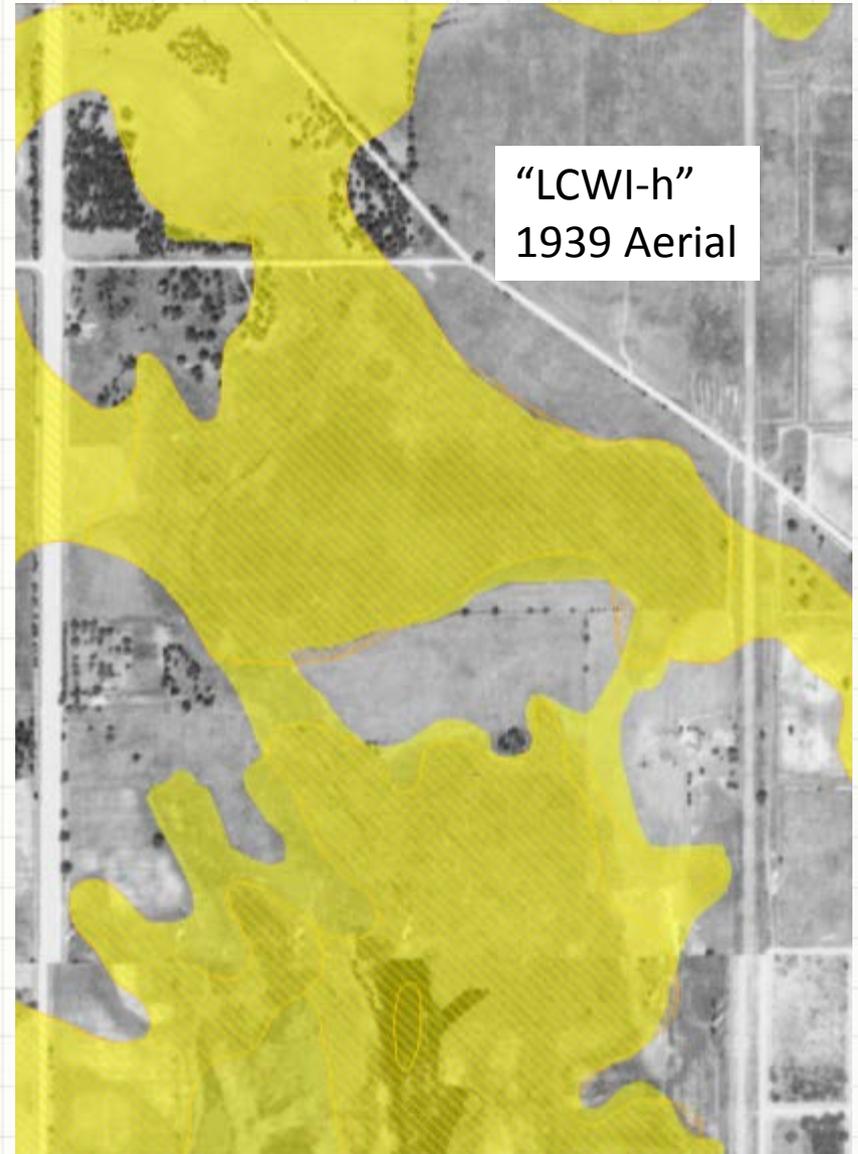
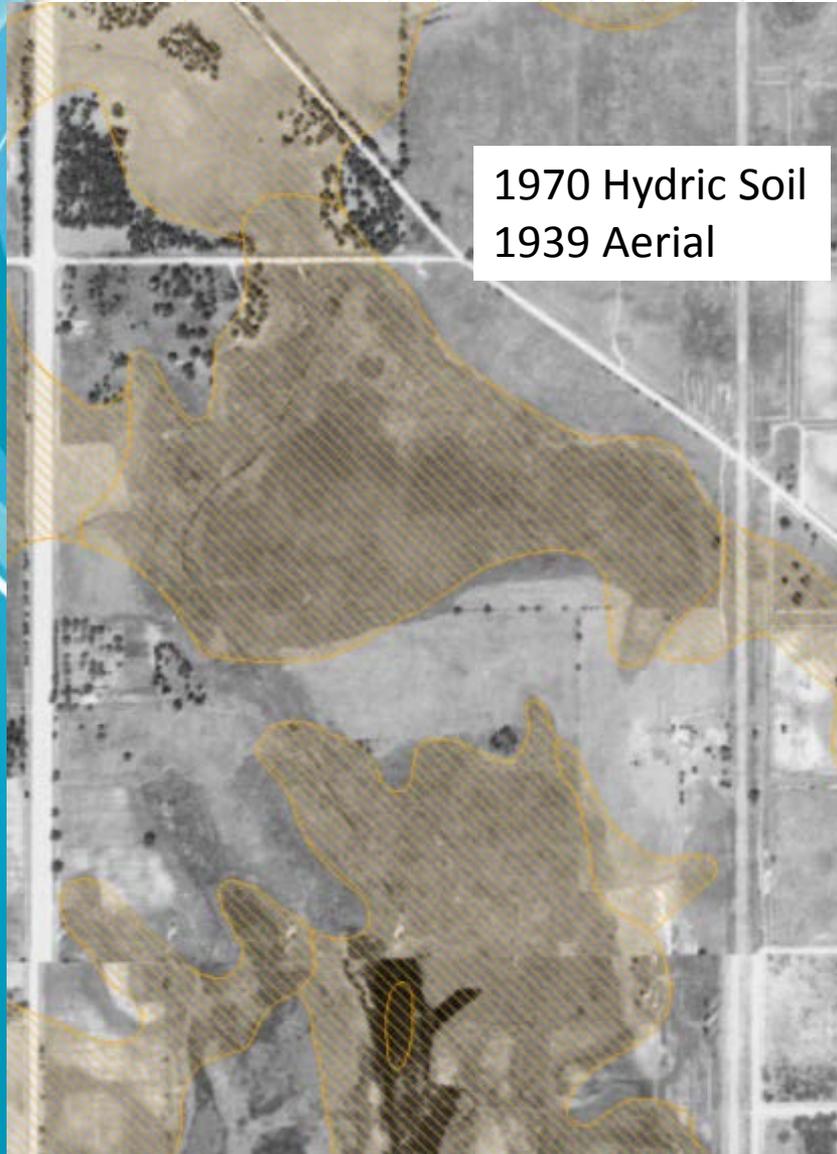


2004 Hydric Soil
2014 Aerial



1970 Hydric Soil
1961 Aerial

Historical LCWI for WRAPP



Advanced Identification (ADID) study



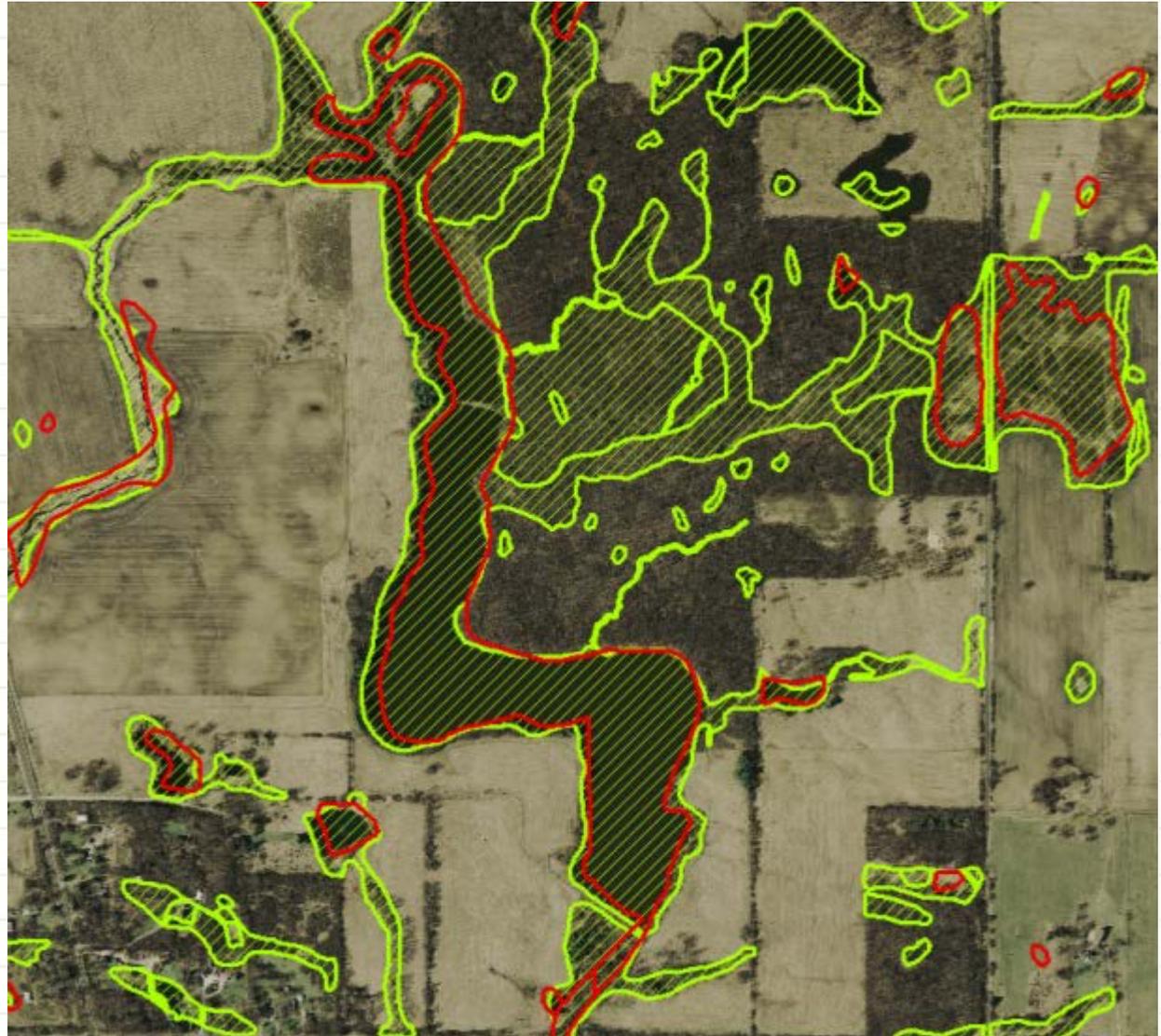
- Published in 1992
- High Functional Quality Wetlands (203 sites identified)
- Mapping varies slightly from LCWI

LCWI (hatching)
ADID (fill)

National Wetland Inventory (NWI)

- Countywide layer
- Maps fewer wetlands than LCWI
- Corresponds with LCWI to a degree

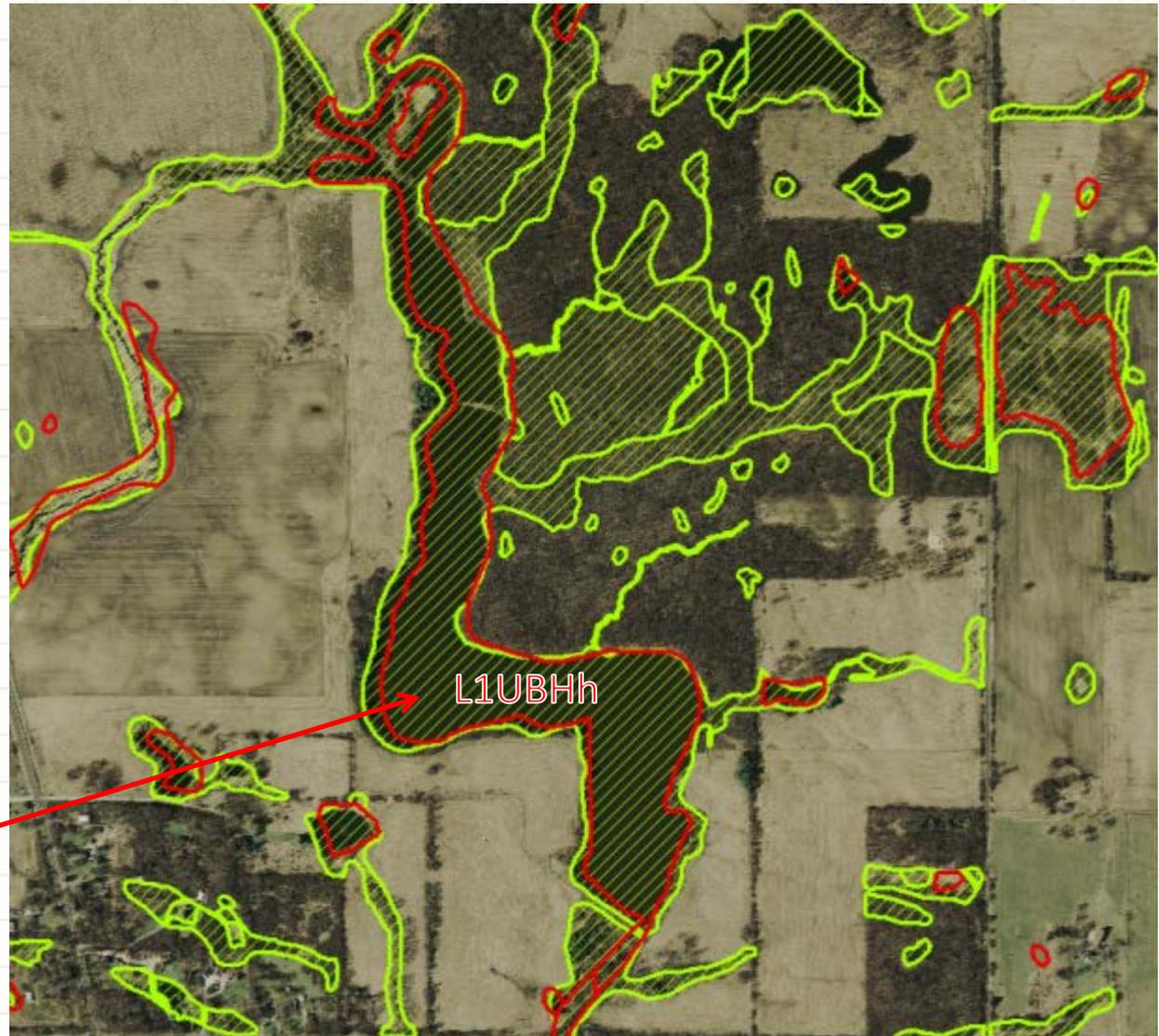
LCWI (Green hatching)
NWI (Red outline)



NWI Wetland Classification

- LCWI provides basis for WRAPP GIS
- NWI has classification data (Cowardin)

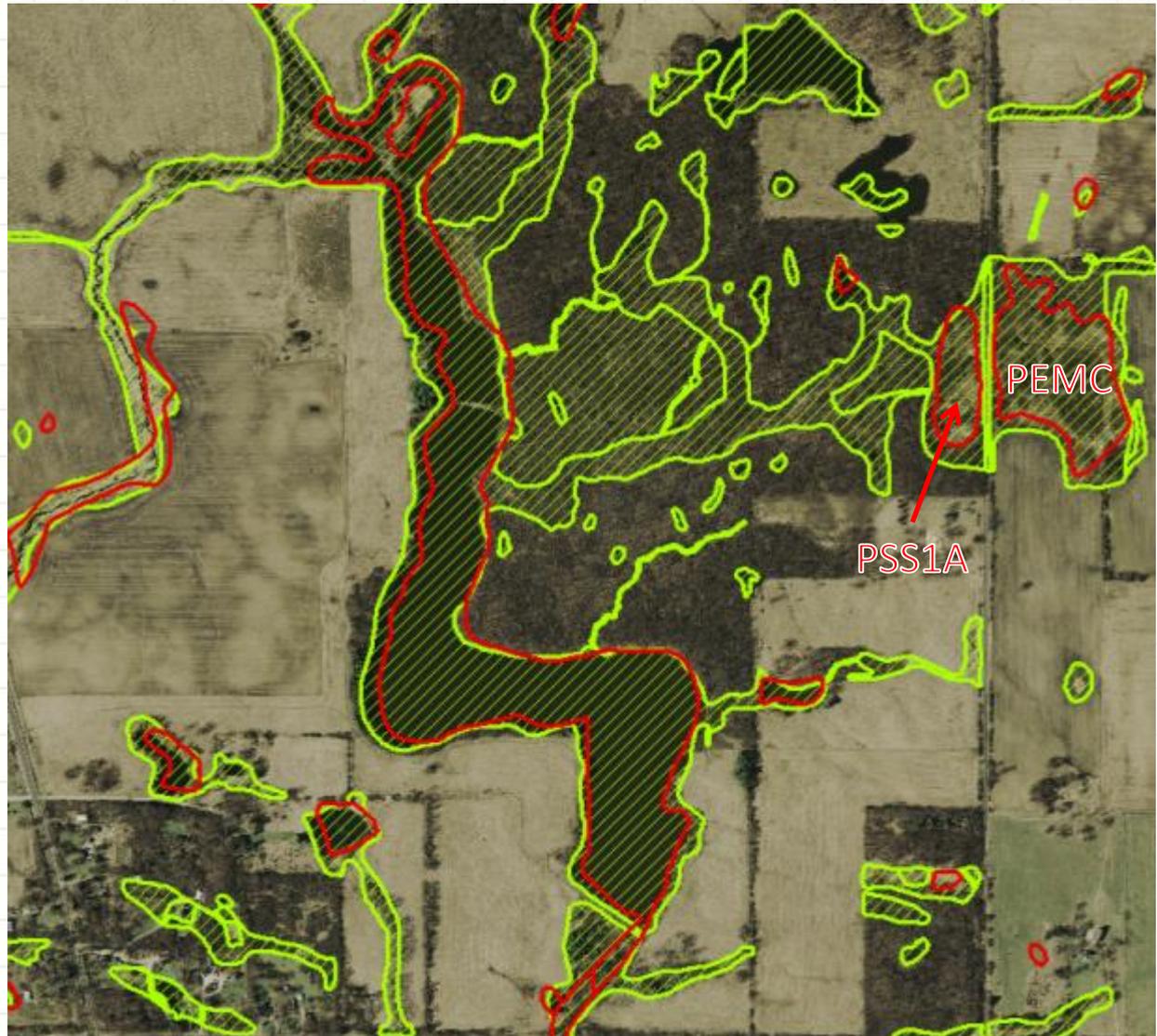
Lacustrine (L), Limnetic (1), Unconsolidated Bottom (UB), Permanently Flooded (H), Diked/Impounded (h)



NWI Wetland Classification

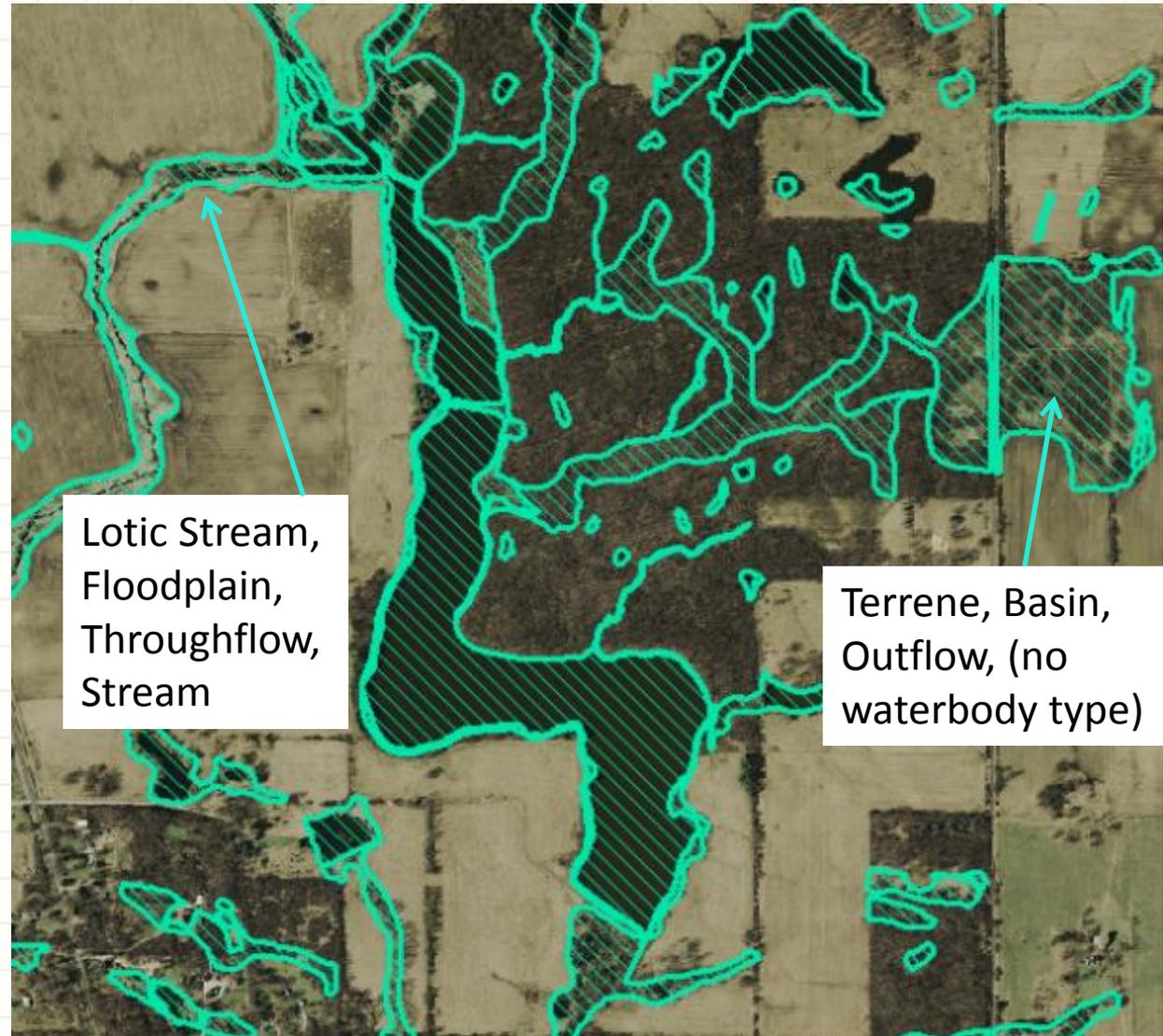
PEMC: Palustrine (P)
Emergent (EM)
Seasonally Flooded
(C)

PSS1A: Palustrine (P)
Scrub-Shrub (SS),
Broad-Leaved
Deciduous (1),
Temporarily Flooded
(A)



LLWW Wetland Classification

- Hydrogeomorphic classification system
- Developed by USFWS (Tiner) in early 2000s as “NWIPlus”
- Landscape position, Landform, Water flow path, & Waterbody type



Functional Assessment

- Watershed-based Preliminary Assessment of Wetland Function (W-PAWF)
- Analysis of NWI and LLWW attributes and other GIS data

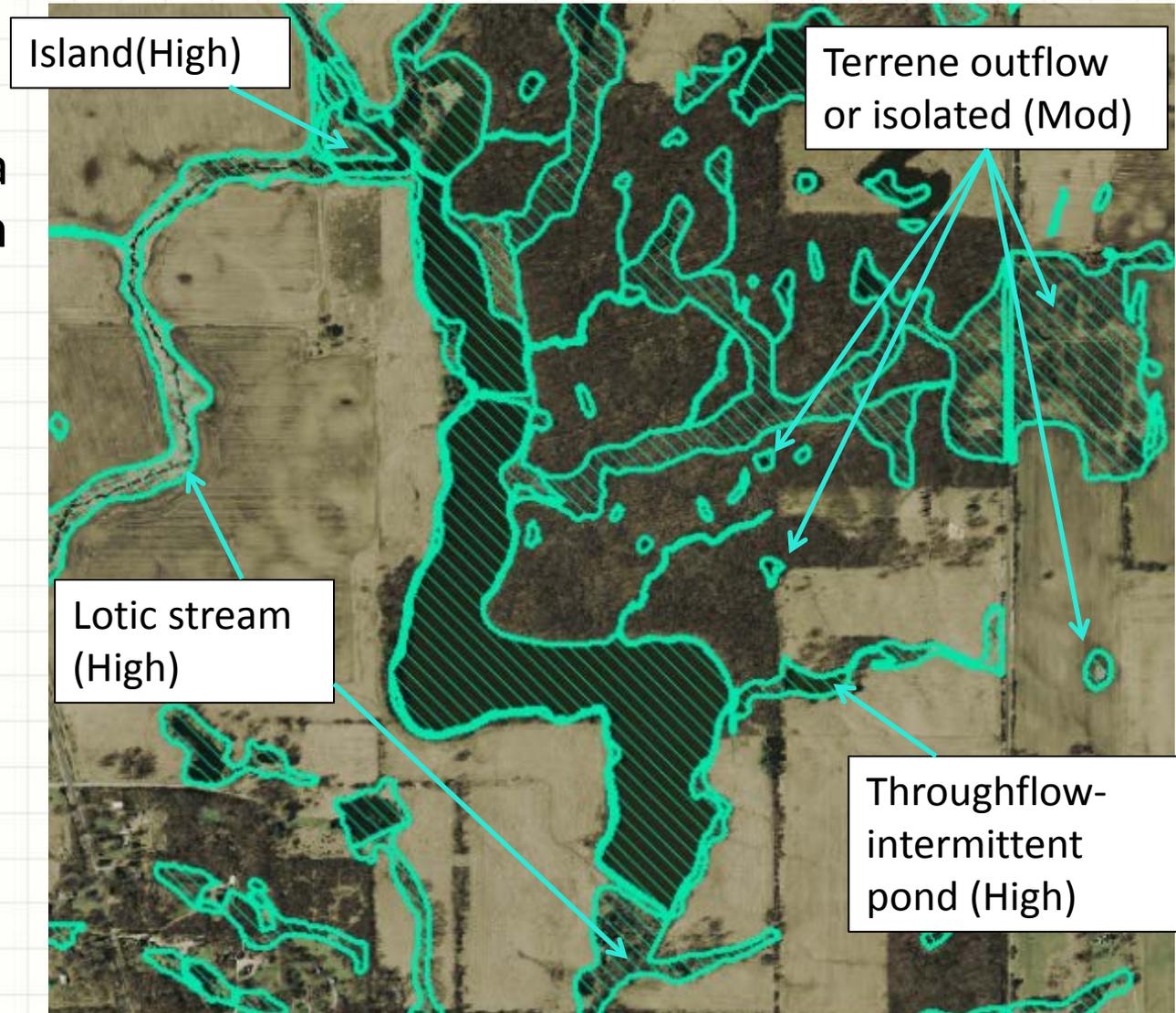
Table 20. Criteria for flood water storage functional significance

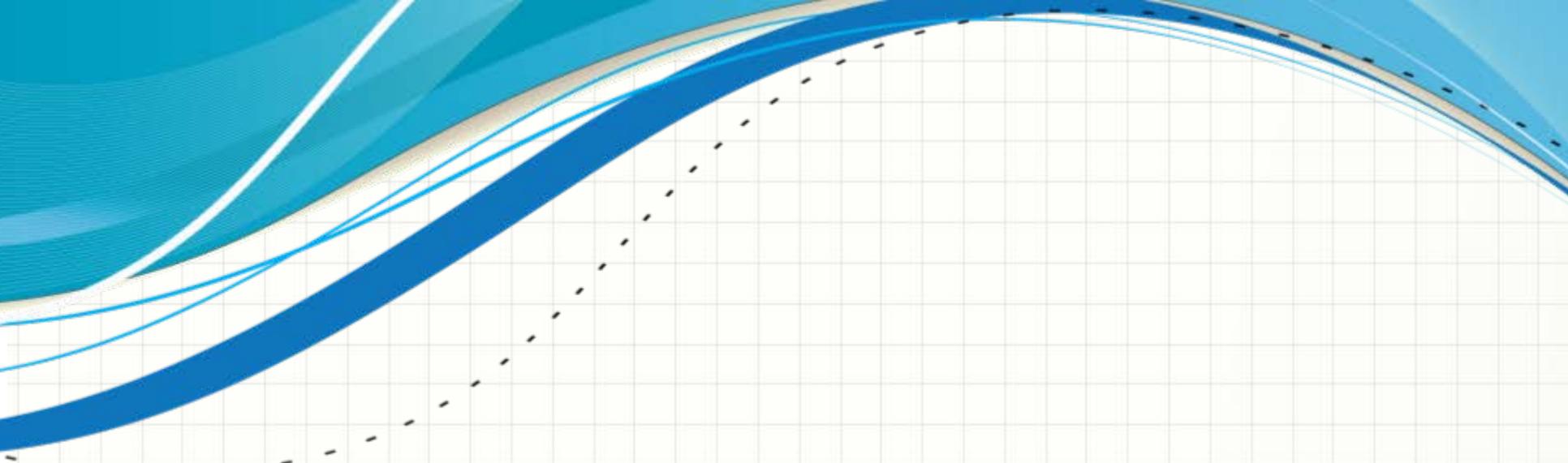
| Functional Significance | Selection Criteria |
|-------------------------|--|
| High | <ul style="list-style-type: none"> • Wetlands along streams and rivers (i.e., LR or LS) • Island wetlands • Ponds that are throughflow, throughflow intermittent, bidirectional, or isolated <p>--for all of the above, wetland area equal or greater than median size of historic and existing wetlands determined separately for each HUC-12 watershed.</p> |
| Moderate | <ul style="list-style-type: none"> • All of the above in the High category less than watershed-specific threshold • Terrene basin isolated • Outflow or outflow intermittent wetlands classified as Terrene (i.e., TE(hw)) • Terrene wetlands that are associated with ponds • All lake-side (LK) wetlands not already ranked high |
| Low | <ul style="list-style-type: none"> • All remaining wetlands |

From: Tetra Tech, 2014

Functional Assessment

- Example using Flood Water Storage Criteria from Tetra Tech (2014)
- Analyzes attributes developed in LLWW classification





QUESTIONS?