

Southeastern Wisconsin **Regional Planning Commission**



Natural Areas Technical Advisory Committee Meeting

March 23, 2021

●●●●● Agenda



- Introductions and committee changes
- Approval of December 9, 2019 meeting minutes
- Summary of review work completed
- Summary of site profile template
- Proposed designation changes
- New Natural Areas
- Critical Species Habitat mapping update
- Aquatic Assessment scheme update
- Citizen Science efforts
- Plans for next meeting and Adjournment



●●●●● Introductions and Committee Changes



➤ Introductions

➤ Committee Changes

- Dr. David Rogers replaces Dr. Christopher Tyrrell as Committee Chair
- Fay Amerson replaced Shannon Haydin



●●●●● Summary of review work completed



498 sites reviewed as of 3/15/21

- Natural Areas database entry complete
- Started entry of CSH sites
- 54 sites visited since July 2020
- Most visits in Milwaukee, Waukesha, and Walworth Counties
 - 20-Milwaukee County
 - 11-Walworth County
 - 9-Waukesha County
 - 5-Kenosha County
 - 4-Racine County
 - 3-Ozaukee County
 - 2-Washington County



Site Profile Template

<#>

Natural Area Name: SEWRPC Designation (NA-1, NA-2, NA-3, CSH)

Level of Protection: (None, Low, Medium, High)

Level of Threat: (Low, Medium, High)

Size	Acres
Ownership	Private or Public
Site Management Plan	(Yes, No)
Number of Native Plant Species	Count vascular sp.
Endangered, Threatened, or Special Concern Species	(Yes, No)

Site Description: Narrative including site history and natural community description(s) detailing the justification for designation. Include rare or uncommon species and other noteworthy characteristic of the site. Include significant geologic areas occurring within the NA boundary.

Threats: Detail the primary and secondary threats impacting biodiversity. Consider and discuss land use within the surrounding buffer.

Opportunities: Include and discuss in detail opportunities for restoration and management within the NA and surrounding buffer lands. Summarize opportunities identified within site specific or regional management plans.

Insert site Photo	Insert Site Photo
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Left: Add Description Right: Add Description

- SEWRPC was tasked to create a Site Profile for each NA
- Profiles will be limited to a one-page summary with an image or map that best represents the site
- Profiles will contain
 - Site statistics
 - ❖ Accepted name w/ designation, acreage, ownership, management history, native richness, presence/absence of SC, T, or E species (generalized)
 - Narrative including site description, threats, and opportunities
 - Diagnostic site photos or maps,
 - ❖ Photos will capture the community as opposed to individual species



Site Profile

Barloga Woods: Natural Area of Local Significance (NA-3)

Level of Protection: **High** (Conservation Ownership with Site Management Plan)

Level of Threat: **Medium** (Invasive Species)

Size	64 Acres
Ownership	Milwaukee County
Site Management Plan	Yes
Number of Native Plant Species	134
Endangered, Threatened, or Special Concern Species	Yes, Plant and Animal

Formerly known as Esch-Honadel Woods, this remnant of the pre-European Beech-Maple hardwood forest and hardwood swamp was renamed in honor of the late local botanist and conservationist, Richard Barloga, whose efforts led to the recognition and preservation of many irreplaceable remnant communities in the Milwaukee area. Barloga Woods boasts a rich display of spring ephemeral wildflowers, with toothwort (*Cardamine concatenata*) and spring beauty (*Claytonia virginica*) in particularly high abundance. Several rare plants and animals are known to occur here, and many bird species have been observed, particularly during migration.

While most of the woods is protected, a small portion adjacent to Interstate High 94 was lost in the early 2010s with the redevelopment of a Drexel Avenue on-ramp. However, invasive species present an ongoing threat, and surrounding residential properties are potential sources of introduction. The 2016 SEWRPC survey discovered such a case; extremely invasive lesser celandine (*Ficaria verna*) was spreading from residential properties into a portion of the woods near a tributary to Oak Creek. Since that time, Milwaukee County has been working to address that particular threat.

A large opportunity to reconstruct forest habitat exists on County-owned agricultural land immediately to the north of the portion of the woods east of S. 20th Street. This would buffer the remnant community, increase interior habitat, and reduce the erosion of sediments into a tributary of Oak Creek that flows along the northern boundary of County property. Restoration of or the maintenance of a 250 meter buffer of open lands to the south of the woods would also help to ensure maintenance of critical wildlife habitat.



Left: Toothwort puts on an impressive display in early spring. Right: Dutchman's breeches (*Dicentra cucullaria*), one of several uncommon plant species afforded refuge at Barloga Woods. Credit: SEWRPC staff - Dan Carter

➤ Scope

- **Completed**
 - Site inventories updated
 - Final profile format created
- **This year**
 - Compile NA site profiles
 - Develop and update supplementary information
 - Determine which maps can be made public
- **Final Product**
 - Online data viewer with links to site profiles and supporting information



Summary of Proposed Designation Changes



- Loss of NA status for 3 sites
 - Recommend no change for most sites visited
 - Upgrades
 - ❖ Many new CSH sites
 - ❖ One new NA
 - ❖ Three CSH sites to NA-3 (Natural Areas of Local Significance)
 - ❖ One NA-3 to NA-2 (Natural Area of Regional Significance)
 - ❖ One NA-2 to NA-1 (Natural Area of Statewide Significance)



●●●●● Proposed Designation Changes



➤ Milwaukee County

- One proposed natural area designation
 - Cambridge Ave Woods
- Three Sites recommended for removal
 - Menomonee River Swamp-North (NA-3)
 - Bike Trail Marsh (NA-3)
 - Mission Hills Wetlands (NA-3)



Proposed Designation Changes



➤ Cambridge Ave Woods

- Proposed upgrade to NA-3 (currently CSH)
- 18-acre Red Oak-Sugar Maple Dry-Mesic Forest overlooking the Milwaukee River
- One of the few remnant plant communities in the area
- Habitat for many listed plants and animals



Proposed Designation Changes



➤ Cambridge Ave Woods

- 12 regionally uncommon species
- Four rare species
- Diverse flora
 - 176 native species
 - FQI = 61
- Owned by Milwaukee County and Village of Shorewood
- Visited in October, a follow-up survey is required





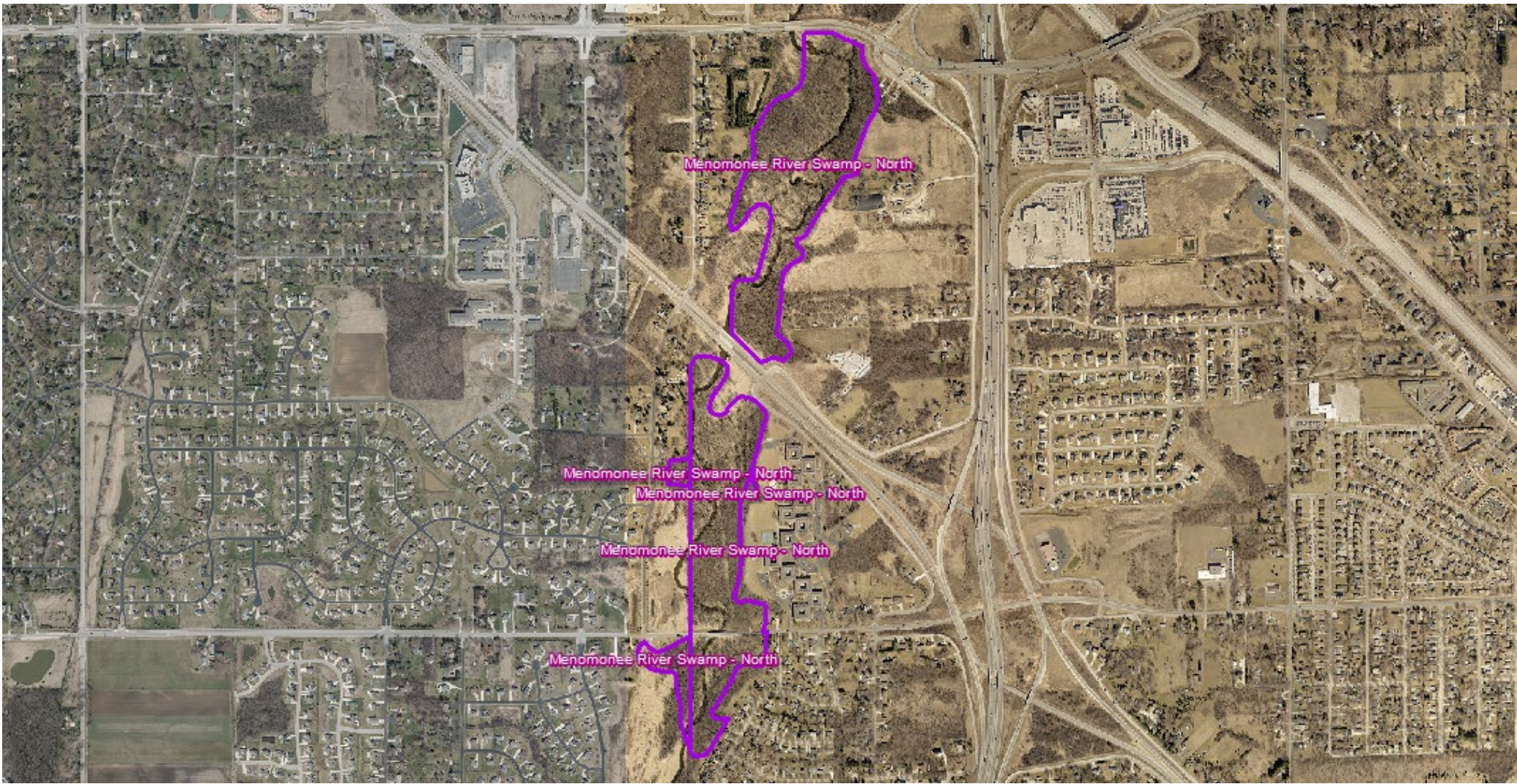
Proposed Designation Changes



➤ Menomonee River Swamp-North

- Downgrade to CSH
- 79 acres
- Milwaukee County and Private
- The area provides habitat for critical species
- NA-3 in the 2010 amendment
- Floodplain forest and Southern Hardwood Swamp along the Menomonee River
- InNN are dominant, canopy loss due to EAB





Proposed Designation Changes



➤ Bike Trail Marsh

- Lost due to invasive species
- Reed canary grass and hybrid cattail are dominant
- 3-acre shallow marsh
- 0.5 acres of shallow marsh remain
- Owner: Milwaukee County

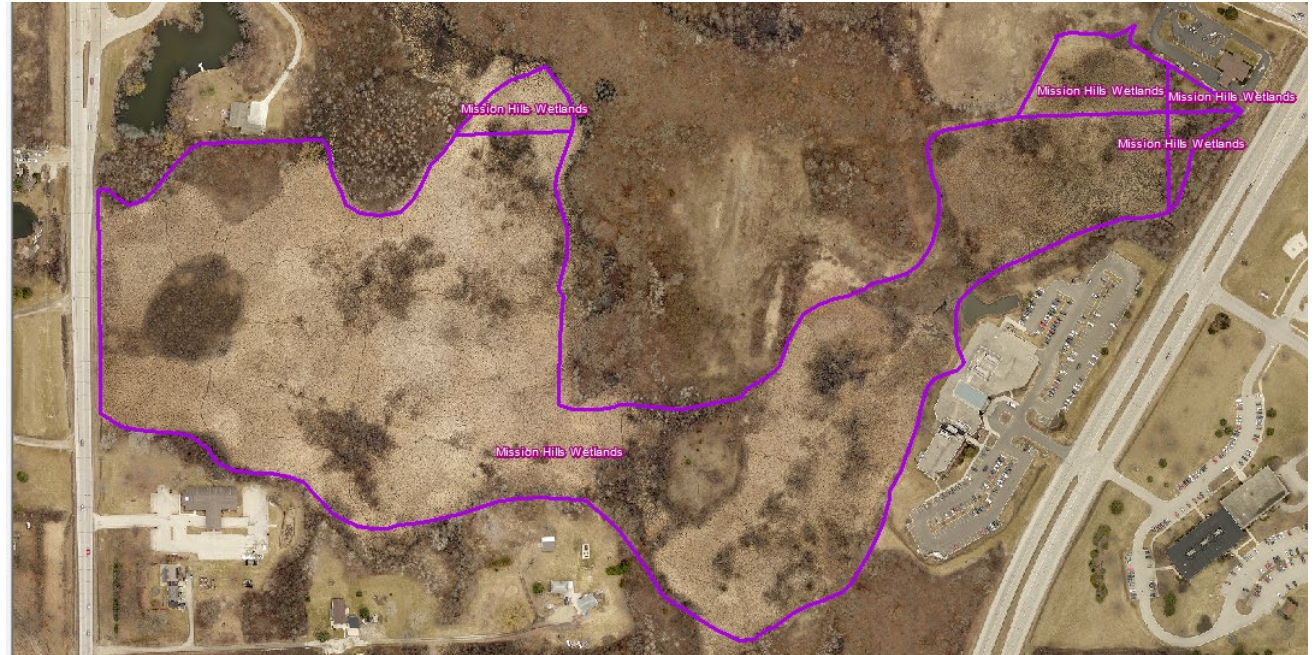


Proposed Designation Changes



➤ Mission Hills Wetlands

- Lost due to invasive species
- Reed canary grass and hybrid cattail are dominant
- 38 Acres, formerly a wetland complex composed of sedge meadow, shallow marsh, and wet prairie
- Owners: State of Wisconsin and Private



●●●●● Proposed Designation Changes



➤ Other Plan changes in Milwaukee County

- Combine Grant Park Woods-Old Growth (#26) and Grant Park Woods - South (#27) into Grant Park Woods
 - Both sites are designated NA-3
 - New combined site will be named Grant Park Woods (NA-3)
 - ❖ Clay seepage bluffs require additional surveys, many rare and uncommon species present
- Change Root River Parkway Woods (#14) to Mangan Woods
- Change Currie Park Low Woods (#41) to Menomonee River Parkway Woods
- Over 40 new CSH sites



Proposed Designation Changes



➤ South Shore Dunes CSH

- Proposed CSH
- Found just north of the South Shore Water Reclamation Facility (MMSD)
- Dune and Swale, Great Lakes beach
 - Disturbed, InNN species common
 - 5 SC, 9 U
 - 120 Native plants, 45 InNN species
 - Additional investigation required, could meet NA-3 criteria with restoration
 - Very few examples of dune and swale in the region



Proposed Designation Changes



●●●●● Proposed Designation Changes



➤ Waukesha County

- Recommended for NA rank increase
 - Eagle Centre Oak Opening
 - Big Bend Wet-Mesic Woods
- Recommended for new NA designation
 - Campground Woods
 - Nashotah Park Woods



Proposed Designation Changes

➤ Eagle Centre Oak Opening (Eagle Centre Prairie SNA)

- Upgrade to NA-2
- Oak Opening and Dry-Mesic Prairie
- Significant increases in floristic quality
 - 213 Native species
 - Several rare plant species
 - 49 regionally uncommon plants, including an addition to the regional flora
 - FQI = 73 (43 previously)
- InNN species management improved diversity and community structure



Proposed Designation Changes





Proposed Designation Changes



➤ Big Bend Wet-Mesic Woods

- Change to 'Big Bend Woods'
- Upgrade to NA-1
- Includes Martin's Woods SNA
- Multiple private and public owners
 - Public ownership includes Waukesha County and the Village of Big Bend
- 295 native species
- 425 acres



Proposed Designation Changes



- Several diverse natural communities including Southern Mesic Forest, Floodplain Forest, Southern Hardwood Swamp, Ephemeral pond, Emergent Marsh, and Southern Sedge Meadow.
- Many rare and uncommon species
- Herbaceous wetland communities are under sampled



Proposed Designation Changes





Proposed Designation Changes

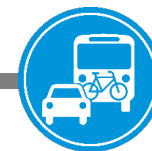


➤ Campground Woods

- Upgrade to NA-3 (formerly CSH)
- Southern Mesic Forest
- Moist Cliff occurs on several shaded limestone exposures. Limestone domes scattered throughout the woods support uncommon species
- Smaller areas of good quality Southern Dry-Mesic Forest, Southern Hardwood Swamp, and Southern Sedge Meadow.
- Past disturbance is evident, but communities are recovering with management



Proposed Designation Changes



Proposed Designation Changes



➤ Campground Woods

- 261 native plant species
- 22 uncommon
- 4 rare
- Good subpopulations of a rare species throughout the woods
- Owners: Waukesha County and Private
- 116 Acres (91 acres in protective ownership)

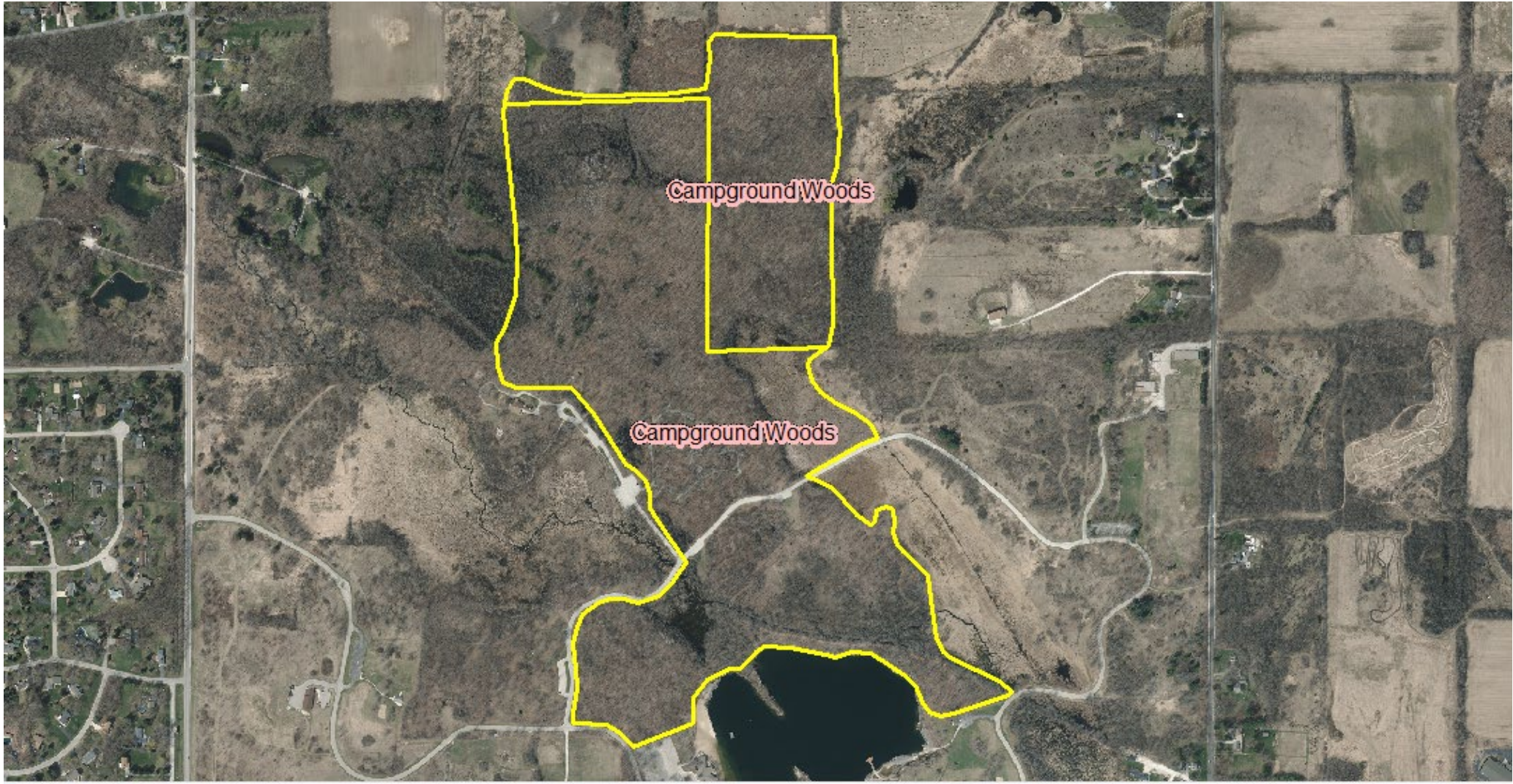


Proposed Designation Changes



Proposed Designation Changes





Proposed Designation Changes



➤ Nashotah Park Woods

- Upgrade to NA-3 (formerly CSH)
- Primarily Southern Dry-Mesic Forest with Oak Opening and Southern Sedge Meadow remnants along Grass and Forest Lake
- Several years of management including RX fire and brush removal drastically improved the quality of the Oak Openings
- Many new uncommon species



Proposed Designation Changes



➤ Nashotah Park Woods

- 222 native species
- Rare species present
- 17 regionally uncommon species
- Owner: Waukesha County
- 106 acres



Proposed Designation Changes





Proposed Designation Changes



Other Proposed Changes



➤ Walworth County

- Young Prairie SNA (NA-1)
 - 2-acre WM Prairie remnant not previously sampled by SEWRPC
 - Not included within the SEWRPC NA boundary
 - Included within the SNA boundary by WDNR
 - Visited in late October, need to revisit
 - Diverse flora
 - Actively managed



Other Proposed Changes



Proposed Designation Changes



➤ Washington County

- One new NA-3, Jackson Marsh Springs



Proposed Designation Changes



➤ Jackson Marsh Springs

- Proposed NA-3
- Owner: State of Wisconsin, 36 acres
 - Northern Wet-Mesic Forest (Cedar Swamp) and Southern Mesic Hardwoods (Beech-Maple)
 - ❖ Not included within the State Natural Area Boundary or previous SEWRPC designations
 - ❖ Nine uncommon species including one addition to the regional flora
 - ❖ Separated from Jackson Marsh SNA by planted prairie buffer



Proposed Designation Changes



Proposed Designation Changes



Critical Species Habitat mapping update



➤ Summary from December 2019 meeting

- Maintain 2010 CSH site recommendations and attributes if the site still meets criteria
- 2010 CSH sites and updates to CSH sites will be maintained as a generalized layer in GIS
- Generalized layer will include both 2010 CSH and NA site boundaries
- Additional data sources to include NHI, SEWRPC, and other records
- CSH Layer will be drawn based on suitable habitat for a given species
- Ultimately the layer will be published through an online data viewer platform
- Layer attributes will include taxonomic group but carry no species-specific information



Critical Species Habitat mapping update



➤ Status

- CSH layer compiled for Racine and Kenosha Counties
- Exploring data viewer platforms, not ready for publication
- Milwaukee County mapping is in progress
- Next in line; Waukesha, Ozaukee, Washington, then Walworth



●●●●● Critical Species Habitat mapping update

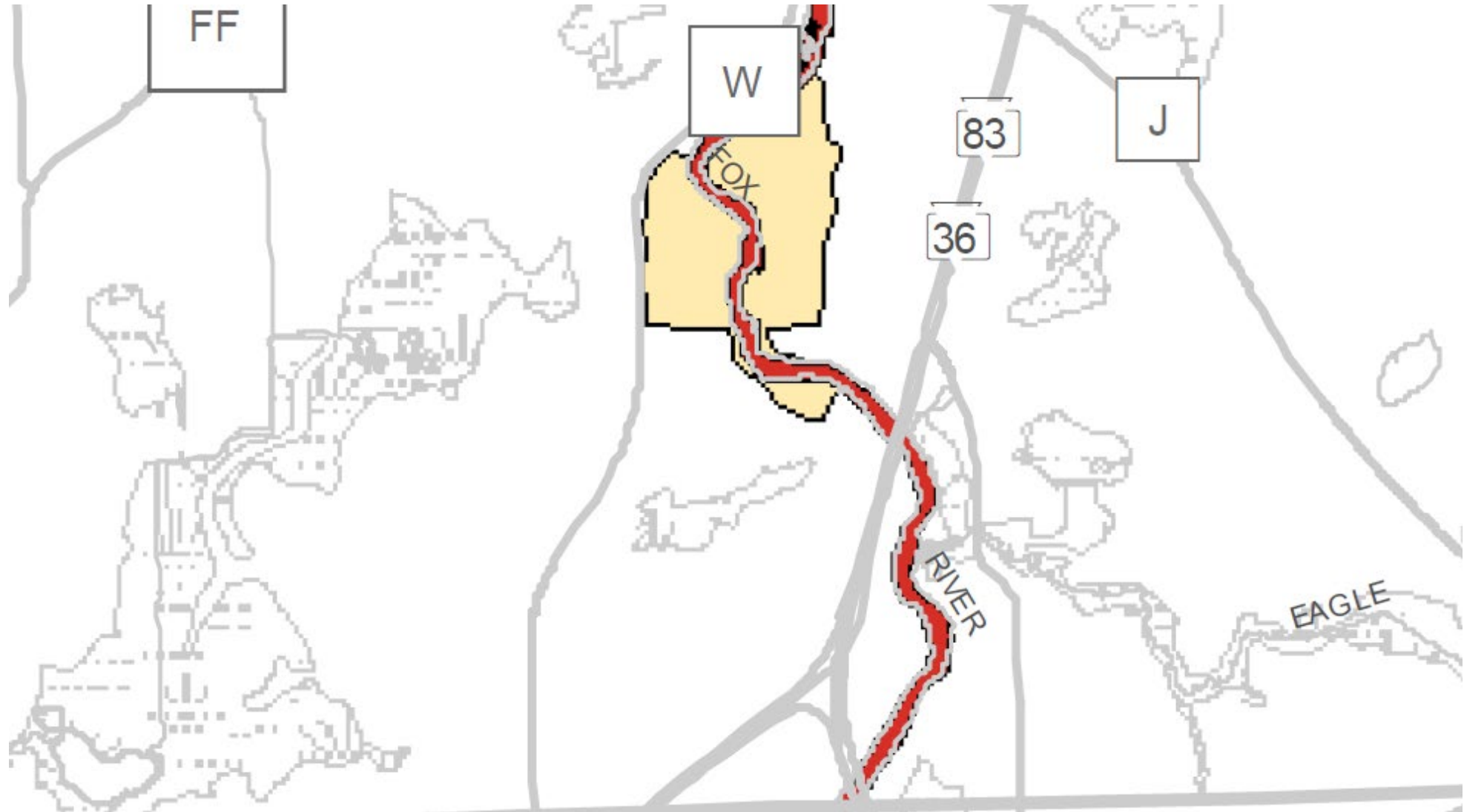


➤ Prioritization among CSH sites

- CSH sites are listed as the third highest acquisition priority within the 2010 amendment to PR-42
- Among CSH sites, highest priority for acquisition is recommended for sites located outside or partially within a Natural Area and ...
 - Which lie within a SEWRPC designated primary environmental corridor
 - Or which are already partially protected.
- CSH sites are not currently ranked
- If needed, SEWRPC will develop a more detailed ranking and prioritization scheme for CSH sites



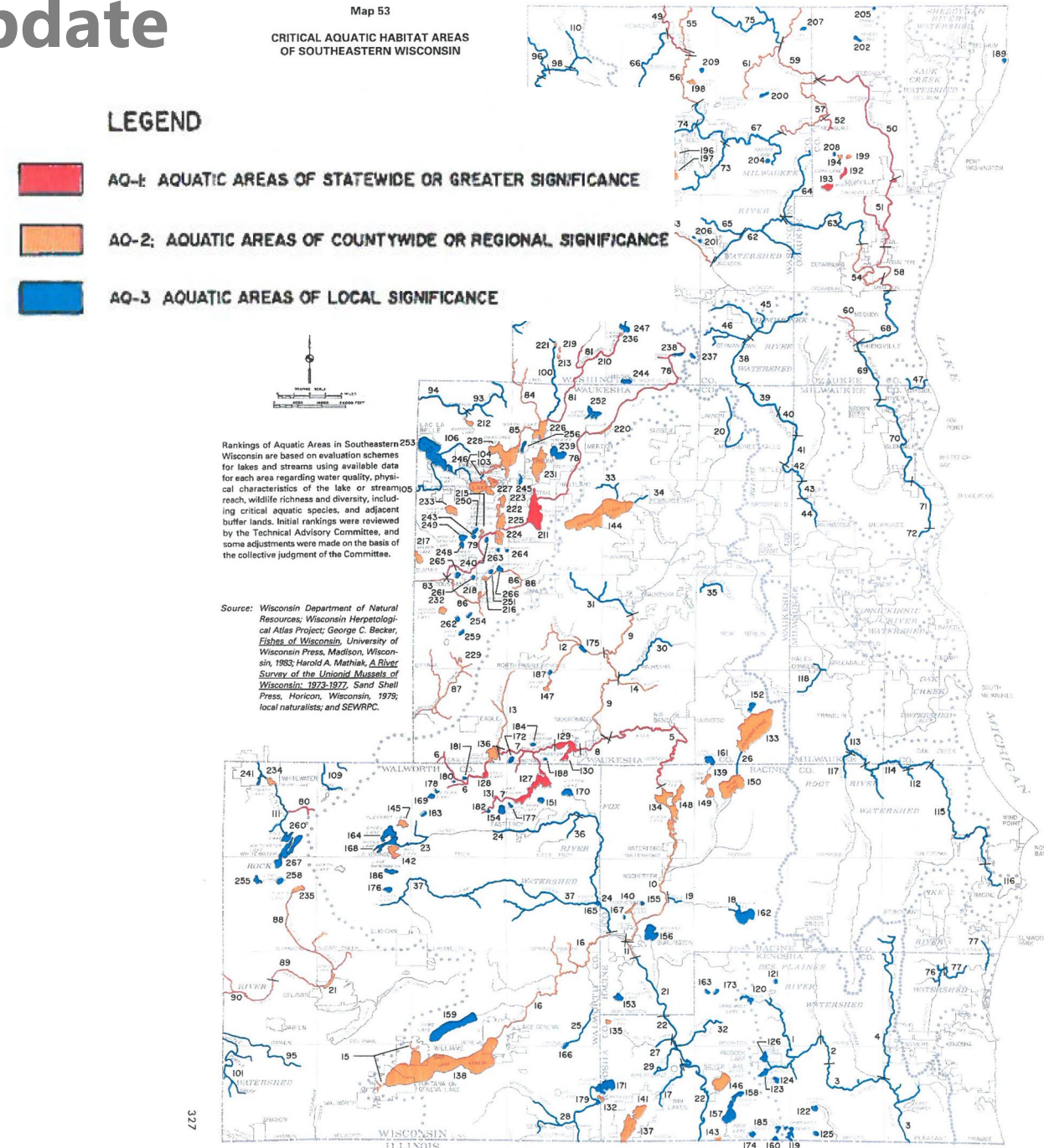
Critical Species Habitat mapping update



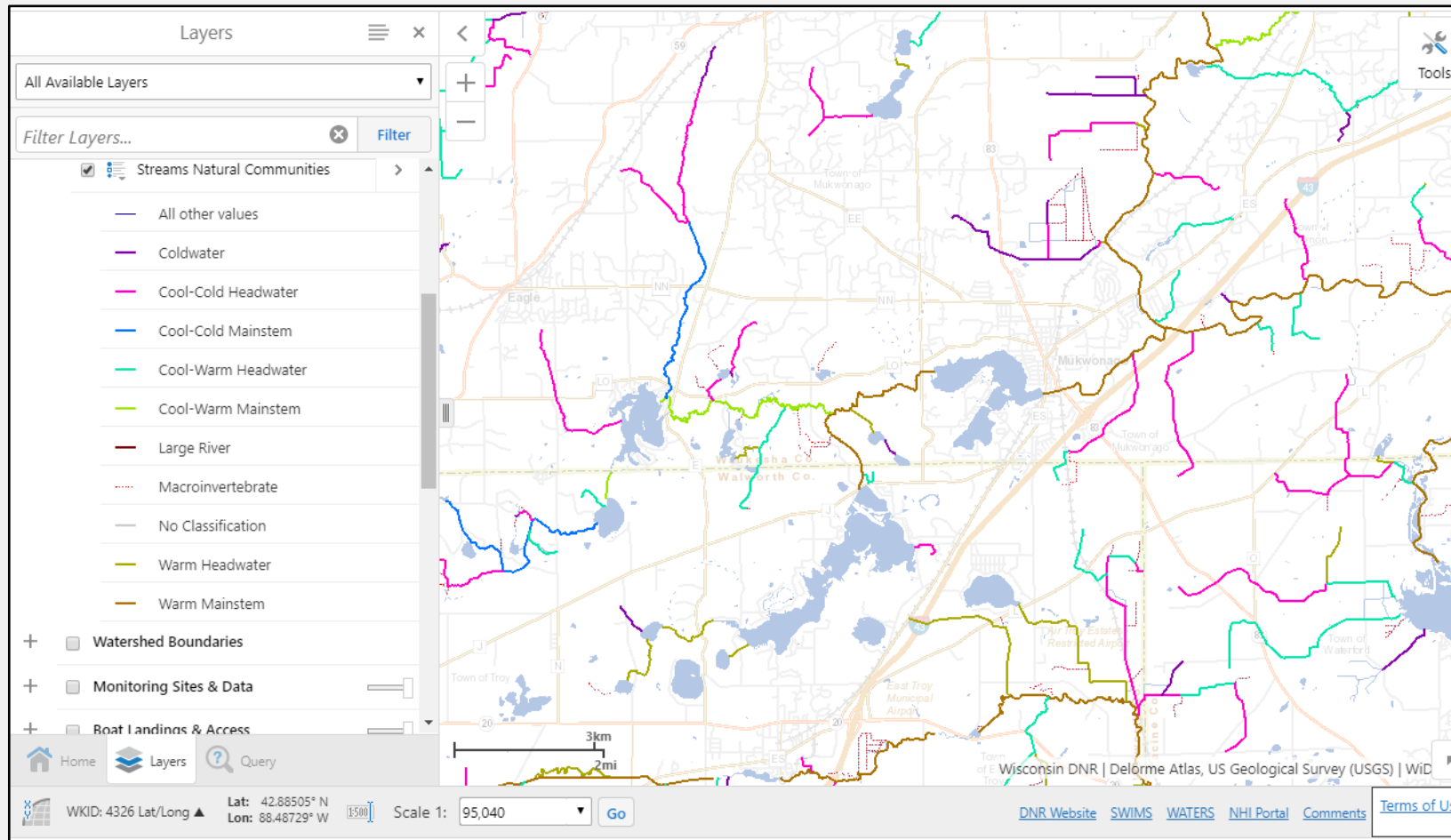
Aquatic Assessment scheme update

Elements for Consideration in Natural Areas Assessment Scheme

- Lake Natural Communities
- Stream Natural Communities
- Water Quality Impairments
- Aquatic Plants
- Fish
- Macroinvertebrates
- Mussels
- Special Concern, Threatened, and Endangered Species
- Other Wildlife Observations (mammals, herptiles, birds, etc.)
- Connectivity

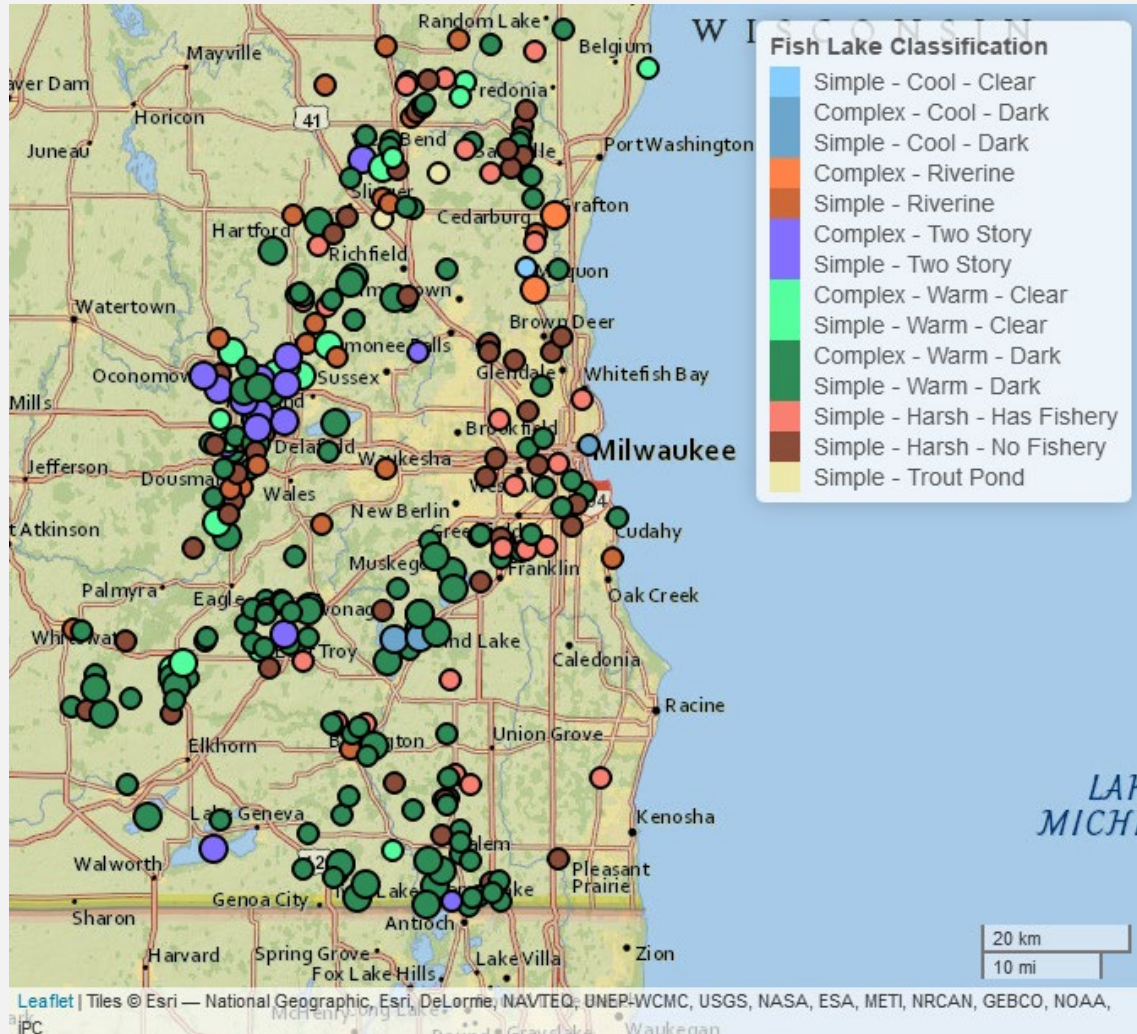


SWDV: Streams Natural Communities



- Based on predicted streamflow and temperature
- Used for assigning appropriate fish IBIs and determining water quality impairments

Flexible Classification of WI Lakes for Improved Fisheries



Lake Class	# of Lakes	Percent
Simple - Cool - Clear	1	0.4
Complex - Cool - Dark	2	0.7
Simple - Cool - Dark	1	0.4
Complex - Riverine	2	0.7
Simple - Riverine	22	7.9
Complex - Two Story	13	4.7
Simple - Two Story	3	1.1
Complex - Warm - Clear	9	3.2
Simple - Warm - Clear	11	4
Complex - Warm - Dark	32	11.6
Simple - Warm - Dark	106	38.3
Simple - Harsh - Has Fishery	24	8.7
Simple - Harsh - No Fishery	49	17.7
Simple - Trout Pond	2	0.7

- Lake fishery classification model developed by Rypel et al., 2019
 - Uses sportfish data, lake temperature, water clarity, and hydrology to classify lake types
 - Provides descriptions, CPUE, and mean size for sportfishes in each lake type

➤ Monitoring data can be incorporated into Site Profiles and Inventories

- This includes monitoring reports from restoration or mitigation sites, which may include NA or CSH sites

➤ Citizen Science efforts

- A good example (used previously) is the Eagle Centre Prairie SNA on iNaturalist
 - 147 observations, and 97 species identified
 - Two uncommon species had not been reported in the Region for some time (and were missed by me)
 - An efficient way to fill in the gaps for publicly accessible sites
 - Future site visits will include a pre-visit screening of iNaturalist
- Let us know if there are any similar efforts in the region



●●●●● Plans for next meeting



- Likely virtual, perhaps with a field visit component
- Tentative meeting date in early June
- Prioritize field visits for the next several months in Milwaukee, Waukesha, Ozaukee, Washington, and Walworth Counties.
- Reach out if you would like me to review any existing or proposed sites



Thank You

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