Southeastern Wisconsin

Regional Planning Commission

Natural Areas Plan Overview

Environmental Corridor Workshop

September 7, 2023

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History

- Planning effort initiated in 1987
  - Requested by Milwaukee County Parks
- In 1989, remaining counties requested the Plan
- PR 42 adopted in 1997
- Amendment to PR 42 adopted in 2010
- Update initiated in 2019, with target publication date between 2023-2024

Natural Areas Plan

- Objectives
  - Maintain the integrity of the remaining biodiversity of the region
  - Preserve and protect the remaining significant geological and archeological sites of the Region

Plan Recommendations

- Acquisition priorities for Natural Areas and CSH sites
  1. NA-1
  2. NA-2 and NA-3 within PEC, containing rare species, or already partially protected
  3. CSH sites within PEC or already partially protected
  4. Reestablish large grassland and forest interior sites

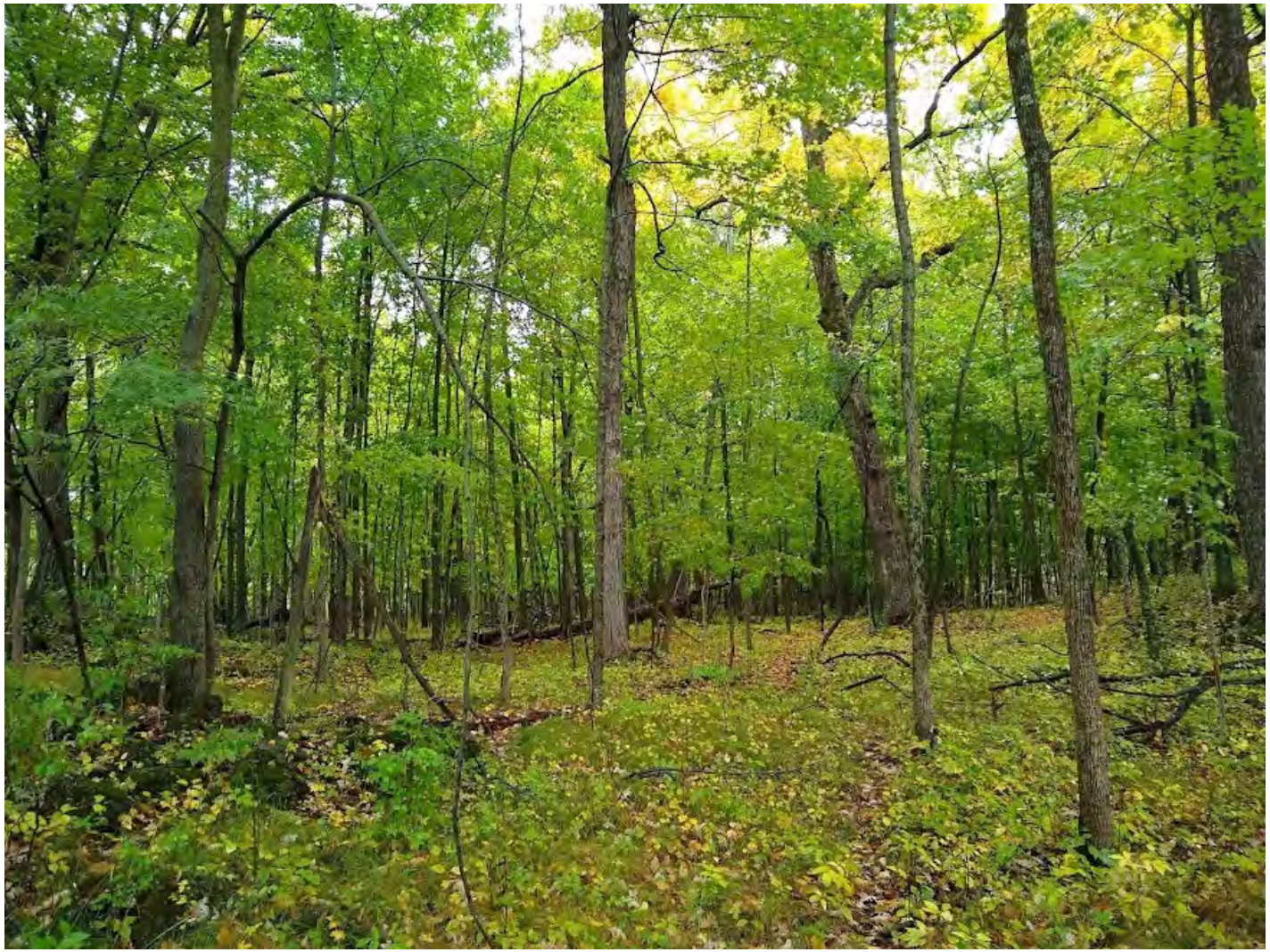
Natural Areas

What is a Natural Area (NA)?

- Intact native plant and animal communities
- Three classes
  - NA-1, Statewide significance
  - NA-2, County or Regional Significance
  - NA-3, Local Significance
- Mapped independently of CSH or EC, but may overlap both
- The Plan provides site specific recommendations for protection
- Management recommendations are generalized by community type

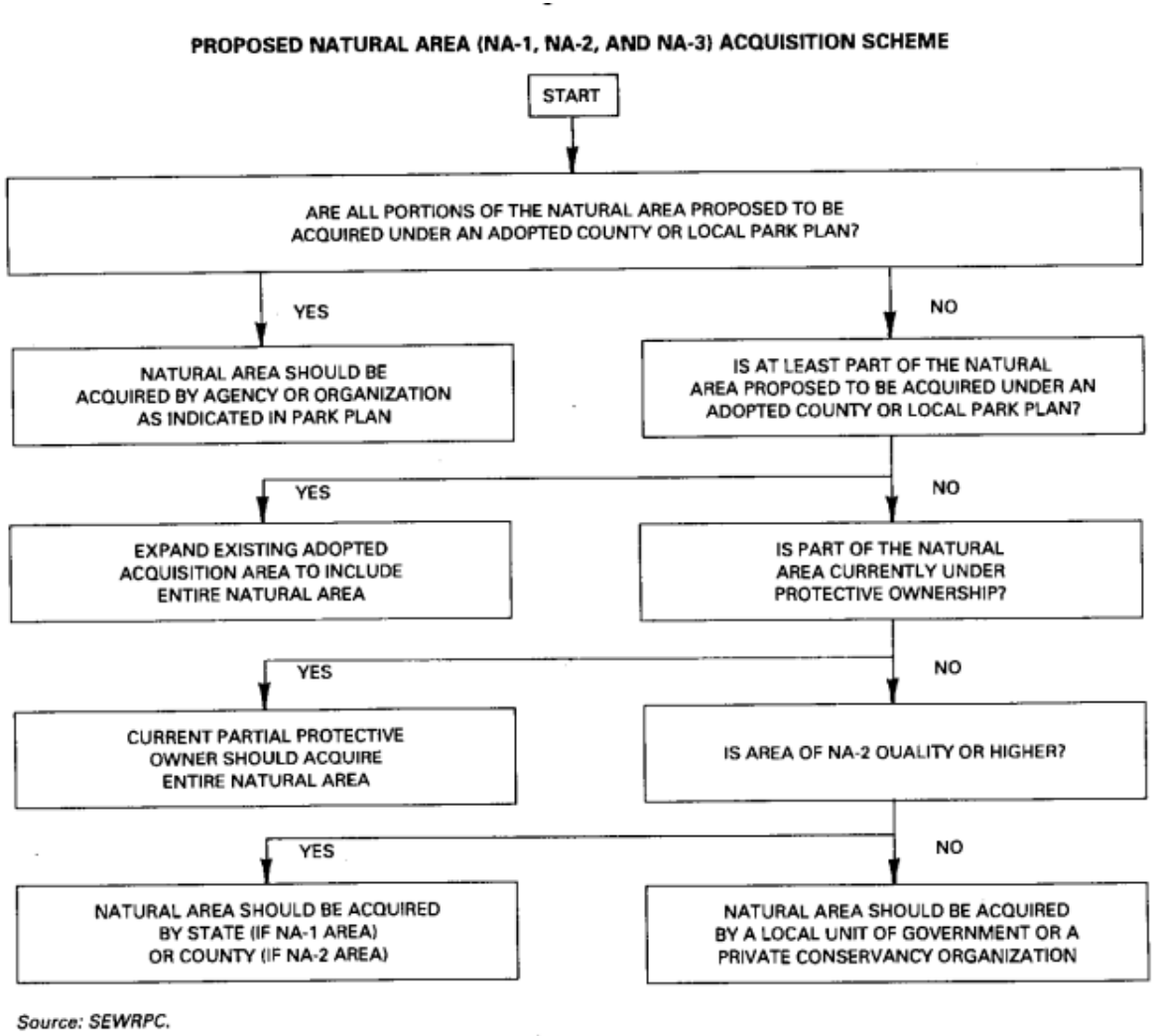
NA Ranking

- Criteria set by PR 42
  - Natural Area Quality
    - 35 pts
  - Size and Buffer Lands (forest only)
    - 25 pts
  - Species diversity
    - 25 pts
  - Community Significance
    - 25 pts
  - Species Significance
    - 15 pts
  - Mature Community (forest only)
    - 10 pts
- Total Points possible
  - 100 in non-forested sites
  - 135 in forested sites



Plan Recommendations

- Natural Areas Plan
  - Identify the remaining
    - Natural Areas
    - Critical Species Habitat sites
    - Geological Sites
    - Archaeological Sites
  - Rank Natural Areas
  - Provide recommendations for acquisition and management



Source: SEWRPC.

Critical Species Habitat Sites

- What are Critical Species Habitat (CSH) sites?
  - Areas that support Federally or State-listed Special Concern, Threatened, and/or Endangered plant or animal species
  - Some Natural Areas are also Critical Species Habitat Sites, but not all
  - Sites contain the factors necessary for the long-term support of the population
  - The Plan provides site specific recommendations for protection

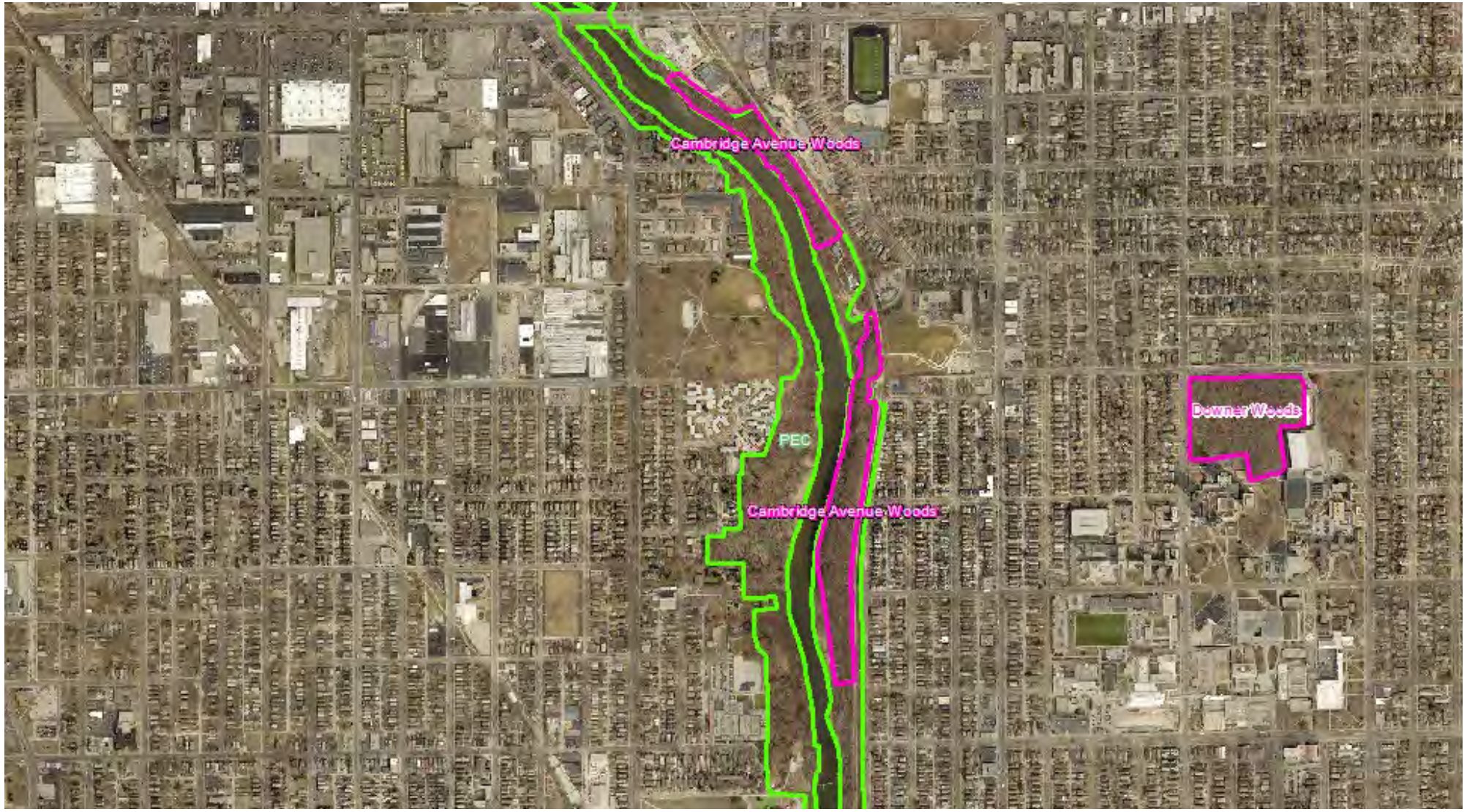
Environmental Corridors

- How does this relate to Environmental Corridors (EC)?
  - Defined by a point scale based on natural resource features
  - EC can be defined, in part, by NA or CSH.
  - Corridor is considered in Natural Area and CSH acquisition priority

The Environmental Corridor Connection

- Natural Areas often seated within Environmental Corridors
- Corridors connect Natural Areas to local parks, neighborhoods, and recreational pathways
- Corridors provide the matrix through which plants and animals can disperse to new habitat
- Improvement and expansion of the corridor can benefit both Natural Areas and CSH sites
- May also improve recreational value and access for local communities

The Environmental Corridor Connection



Summary of sites visited 2020-2023

- 167 Sites visited
  - 55-Milwaukee County
  - 51-Waukesha County
  - 38-Walworth County
  - 11 Kenosha County
  - 17-Racine County
  - 18- Ozaukee County
  - 16-Washington County

CSH Sites by County

	2010	Update
Kenosha	71	70
Milwaukee	55	124
Ozaukee	17	31
Racine	37	36
Walworth	39	37
Washington	21	23
Waukehsa	71	62
	311	**383**

NA Summary by County, 2010 Plan

	NA-1	NA-2	NA-3	Total
Kenosha	6	16	19	41
Milwaukee	0	10	45	55
Ozaukee	6	12	32	50
Racine	7	17	31	55
Walworth	7	15	60	82
Washington	8	29	56	93
Waukehsa	8	32	78	118
				494

NA Summary by County, Updated

	NA-1	NA-2	NA-3	Total
Kenosha	5	6	15	26
Milwaukee	0	11	42	53
Ozaukee	6	12	36	54
Racine	4	8	34	46
Walworth	8	14	61	83
Washington	8	29	58	95
Waukehsa	9	27	89	125
				482

Common problems

- Lack of management and invasive species
  - Many sites are not receiving adequate or appropriate management to maintain or improve community structure
  - Lack of RX fire in fire dependent communities
  - InNN species (buckthorn, hybrid cattail, phragmites (common reed grass))
  - number one reason for loss
- Clear cutting
- Development

Common problems

- Hybrid and narrow-leaf Cat-tail

Common problems

- Phragmites

Proposed designation changes

- Kenosha Co
  - One new NA-1
  - One new NA-3
  - Three NA-2 and eight NA-3 recommended for removal
  - Three NA recommended for downgrade
  - Eight lost, seven new CSH
- Milwaukee Co
  - Three new NA-3
  - One NA-3 recommended for removal
  - Three NA-3 downgraded to CSH
  - seven CSH lost, 76 new CSH

Proposed Designation Changes

- Ozaukee County
  - Four new NA-3, two of these formerly CSH
  - One lost NA-3
  - Four lost CSH, 18 new CSH
- Racine County
  - One new NA-3
  - Two lost NA-2
  - Six lost NA-3
  - 11 NA downgraded to a lower ranking
  - Six lost, five New CSH

Proposed Designation Changes

- Walworth County
  - Two new NA-3
  - Two NA upgraded to higher rankings
  - Six lost , four new CSH
  - One lost NA-3
- Washington County
  - Three new NA-3, one of which was previously a CSH
  - One lost NA-3
  - Two NAs downgraded to a lower ranking
  - Seven lost, nine new CSH

Proposed Designation Changes

- Waukesha County
  - Currently updating NA/CSH boundaries
  - Seven NAs downgraded in ranking
  - Seven NAs upgraded
  - Four NA-3 Lost
  - ten new NA-3 (four of which were CSH previously)
  - Twelve CSH sites lost, seven new

Finalize the Plan amendment

- Finalize the update to the Plan by end of December 2023
- Solicit public feedback via public meetings from January – March 2024
- Incorporate public comment and final Technical Advisory Committee comments into the final amendment (April 2024)
- Submit the final plan amendment for certification by the Board of Commissioners (April or May 2024)

Thank You

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Supplemental Funding

- Grant from the Wisconsin Coastal Management Program (June 2023-June 2024)
  - Tasks include
    - Outreach - Public meetings and Advisory Committee Meetings
    - Site Profiles – Site specific summary of each natural area including a map
    - Aquatic Ranking – Refine and integrate the updated scheme into the Plan
    - Website Updates – Refine the Plan update protocol and update the Natural Areas webpage
    - Final Report-Finalize the amendment to the Plan incorporating feedback from the public and technical advisory committee

Outreach

- One Technical Advisory Committee meeting
- One Aquatic Habitat Subcommittee meeting
- Six public meetings throughout the Region
- Engage with the PIO division to reach out to a broader audience

Site Profile

Map X
Barloga Woods Natural Area Site No. 29 (NA-3)

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

NATURAL AREA

SURFACE WATER

STREAM

PARCEL BOUNDARY

Lands Considered to be Protected Through Public or Private Ownership Interest

(Defined as lands owned in fee simple by Federal, State, County, and local governments; public school districts; utility, sewerage, and lake districts; and lands owned fee simple by private organizations, including land trusts, schools, conservation clubs, campgrounds and other compitable groups (some of these lands may be vulnerable to development); and, lands protected by conservation easements.)

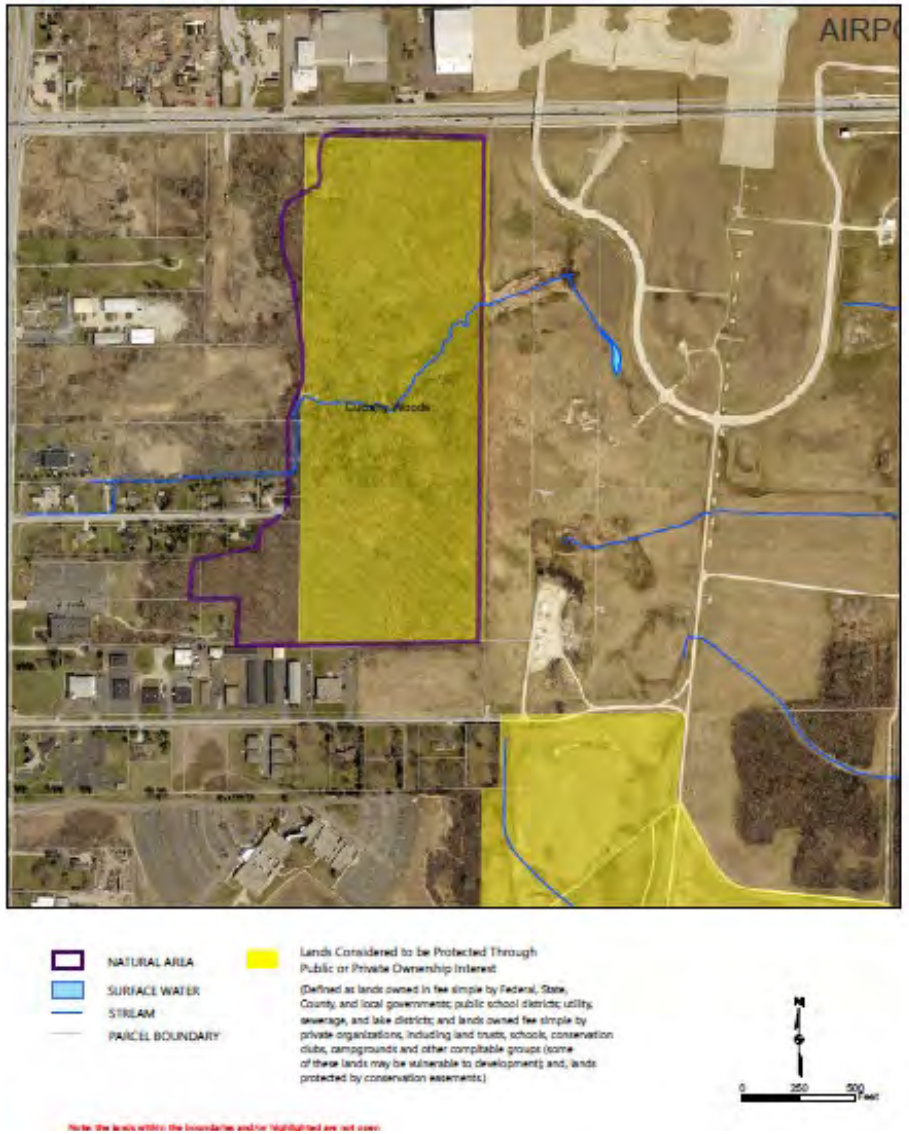
N

0 250 500 Feet

Note: the lands within the boundaries and/or highlighted are not open to public access (for any purpose) unless otherwise noted onsite.

Site Profile

Map X
Cudahy Woods Natural Area Site No. 5 (NA-2)



Cudahy Nature Preserve: Natural Area of County-Wide or Regional Significance (NA-2)
Level of Protection: High (Conservation Ownership with Site Management Plan)
Level of Threat: Medium (Invasive Species)

Size	47 Acres
Ownership	Milwaukee County
Site Management Plan	Yes
Number of Native Plant Species	178
Endangered, Threatened, or Special Concern Species	Yes, Plant and Animal

Cudahy Nature Preserve, also a State Natural Area known as Cudahy Woods, consists of a relatively large remnant tract of white oak-red oak dry-mesic forest, beech-maple northern hardwood forest, and hardwood swamp with skunk cabbage seeps. It harbors a rich ground flora that includes trout lilies (*Erythronium albidum* and *E. americanum*), Spring cress (*Cardamine bulbosa* and C. *douglassii*), toothwort (*Cardamine concatenata*), and many other species that have been extirpated from most of the surrounding area. American cancer root (*Conopholis americana*) and Beech drops (*Epifagus virginiana)*, both fully parasitic plants that lack chlorophyll, are two of the more unique members of the Cudahy Woods plant community. They respectively depend on the presence of oaks (*Quercus* sp.) and American beech (*Fagus americana*) as hosts. The woods also supports many bird species during migration and the breeding season.

Invasive species are the primary threats to the long-term preservation of biodiversity at Cudahy Nature Preserve. There are ongoing efforts to control garlic mustard (*Alliaria petiolata*), but perhaps the greatest threats the woods' diverse and irreplaceable spring ephemeral community are exotic "bulb" species, which are actively displacing spring ephemerals in parts of the woods. Siberian squill (*Scilla siberica*) and Bossier's glory-of-the-snow (S. *luciliae*) are the most problematic, but snowdrops (*Galanthus nivale*) also poses a threat. Other invasive species present in or at the margins of the woods and warranting consideration for eradication include bush honeysuckle (*Lonicera x bella*) and common buckthorn (*Rhamnus cathartica*).

Acquisition and afforestation of adjacent properties to the west and south of the woods, which already contain some mature oaks and wetland areas, would buffer the core remnant community from surrounding development and further enhance wildlife values.

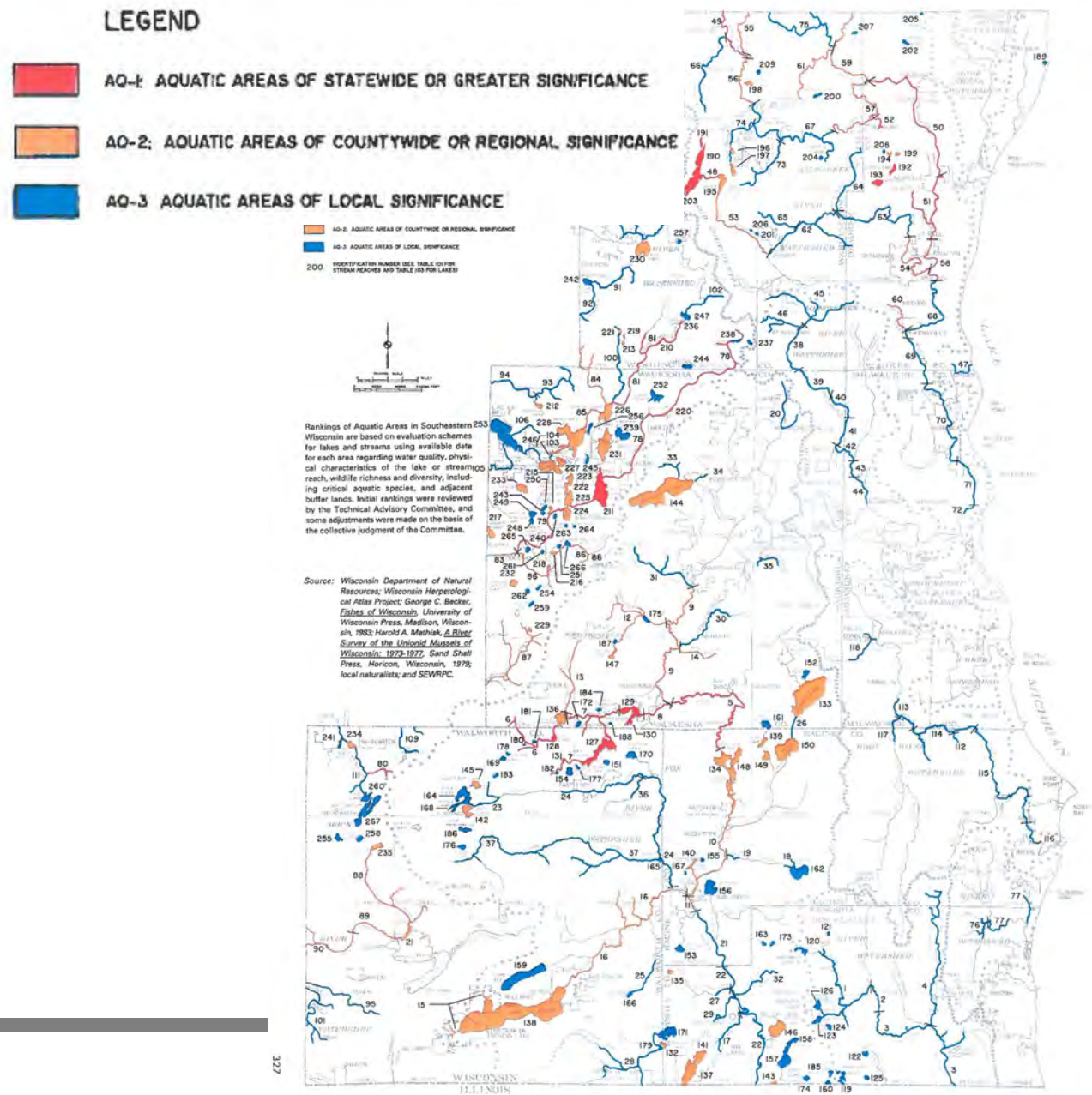
Left: White trout lily, a spring ephemeral wildflower, carpets portions of Cudahy Nature Preserve in early spring. **Right**: Invasive Bossier's glory-of-the-snow expanding in a portion of the woods. Credit: SEWRPC staff – Dan Carter

DLC
Rawson Park Woods Natural Area Profile (246040)

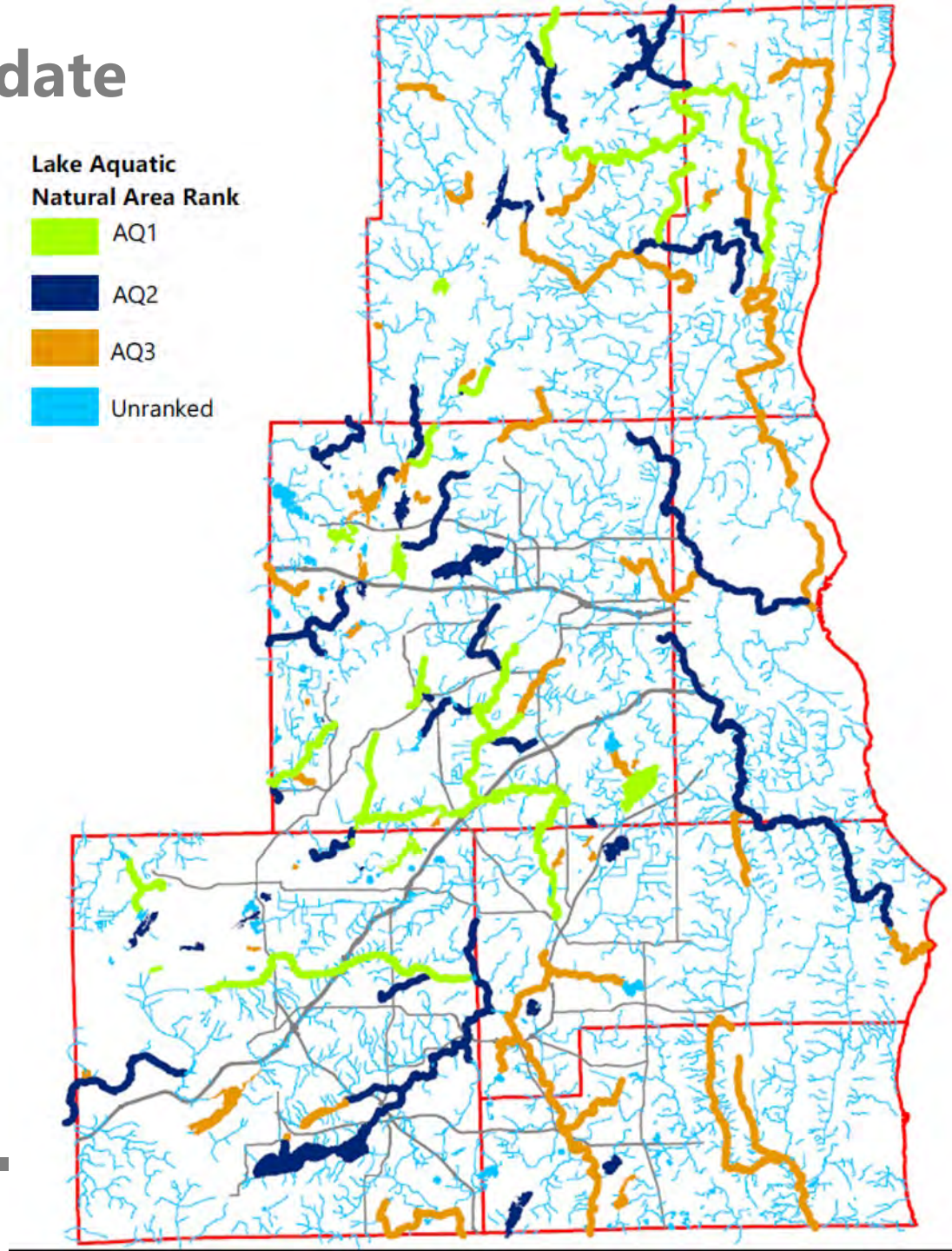
Aquatic Assessment scheme update

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



Aquatic Assessment scheme update



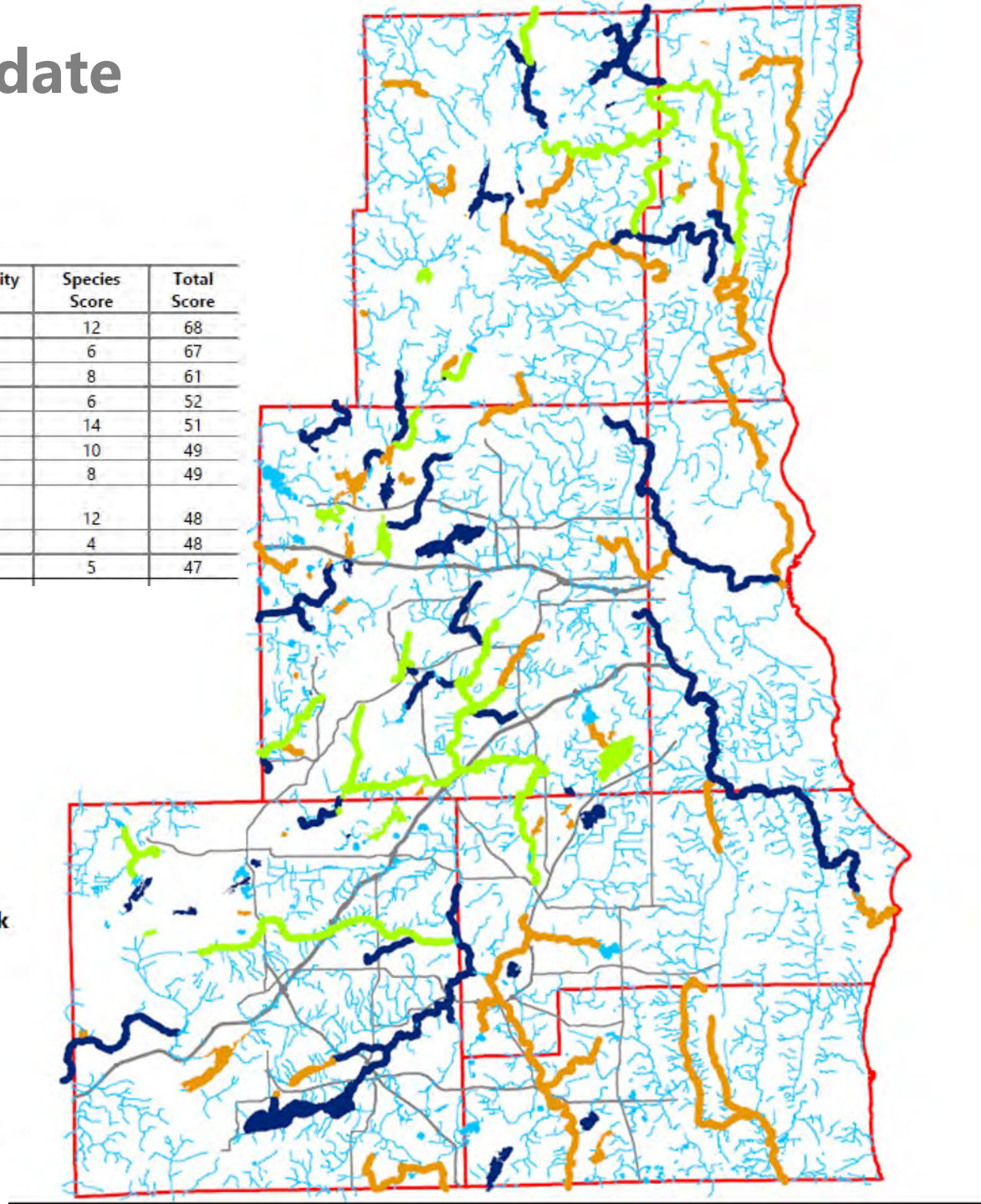
Lake Score (≤100) = Morphology and Classification (≤7) + Water Quality (≤8) + Macrophytes (≤20) + Shoreline Buffer (≤5) + Connectivity (≤15) + Fisheries (≤25) + Natural Heritage Inventory Listings (≤20)

Stream Score (≤100) = Morphology, Modification, and Classification (≤7) + Water Quality (≤8) + Macroinvertebrates (≤20) + Riparian Buffer (≤5) + Connectivity (≤15) + Fisheries (≤25) + Natural Heritage Inventory Listings (≤20)

Aquatic Assessment scheme update

Table 1
2022 Aquatic Natural Areas: Lakes

Rank	Lake Name	WBIC	County	Morphology Score	Water Quality Score	Plant Score	Fish Score	Buffer Score	Connectivity Score	Species Score	Total Score
AQ1	Lulu	768800	Walworth	3	8	14	16	3	12	12	68
AQ1	Nagawicka	828000	Waukesha	7	4	16	21	0	13	6	67
AQ1	Beulah	766600	Walworth	7	4	12	25	0	5	8	61
AQ1	Big Muskego	762400	Waukesha	5	4	9	21	2	5	6	52
AQ1	Lower Phantom	765800	Waukesha	2	4	7	13	0	11	14	51
AQ1	Mud	22100	Ozaukee	3	4	16	3	5	8	10	49
AQ1	Turtle	795100	Walworth	4	4	12	17	2	2	8	49
AQ1	Eagle Spring	768600	Waukesha, Walworth	2	4	11	9	2	8	12	48
AQ1	Oconomowoc	849600	Waukesha	7	4	16	17	0	0	4	48
AQ1	Pike	858300	Washington	4	4	10	17	2	5	5	47



Aquatic Assessment scheme update

Table 2
2022 Aquatic Natural Areas: Streams

Rank	Stream Name	Reach ID	WBIC	Morphology Score	Water Quality Score	Plant Score	Fish Score	Buffer Score	Connectivity Score	Species Score	Total Score
AQ1	Mukwonago River	765500:398	765500	5	8	12	18	3	12	13	71
AQ1	Bluff Creek	816100:290	816100	5	6	13	15	2	9	12	62
AQ1	East Branch Milwaukee River	36900:715	36900	5	6	15	18	3	7	7	61
AQ1	Scuppernong River	817600:409	817600	4	4	10	9	3	11	18	59
AQ1	Sugar Creek	752100:228	752100	5	0	12	19	2	10	8	56
AQ1	Oconomowoc River	848200:576	848200	4	4	14	14	3	9	8	56
AQ1	Mukwonago River	765500:463	765500	4	4	9	20	2	8	8	55
AQ1	Jericho Creek	768300:398	768300	5	4	13	16	2	6	8	54
AQ1	Pebble Brook	769500:404	769500	5	4	11	15	3	7	8	53
AQ1	Oconomowoc River	848200:551	848200	5	4	12	6	2	8	16	53
AQ1	North Branch Cedar Creek	22500:658	22500	4	4	9	15	2	9	8	51
AQ1	Whitewater Creek	813900:290	813900	5	4	12	12	2	6	10	51
AQ1	Milwaukee River	15000:724	15000	5	0	12	14	0	6	12	49
AQ1	South Branch Genesee River	3000069:436	3000069	4	4	17	10	3	5	6	49