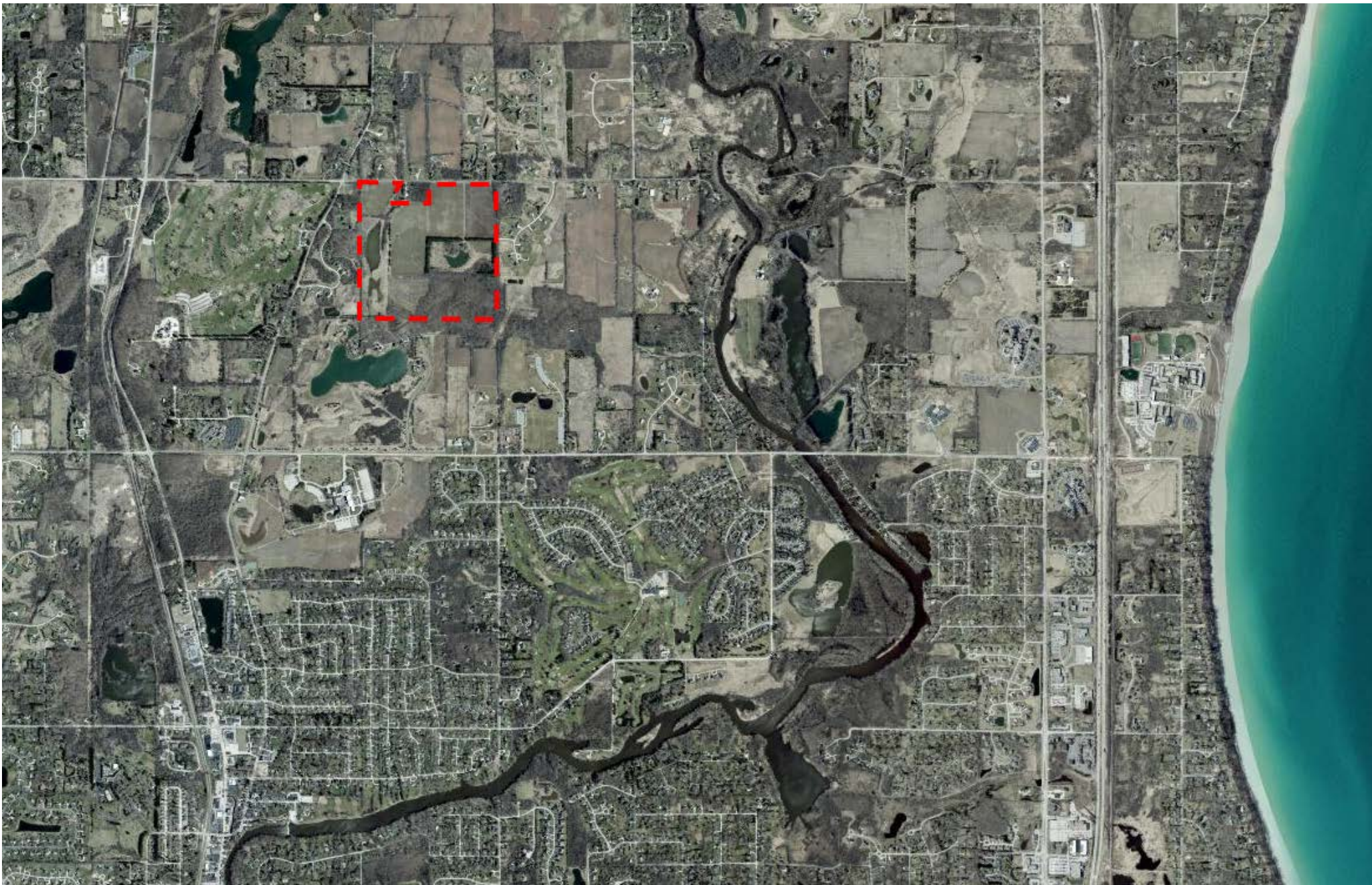
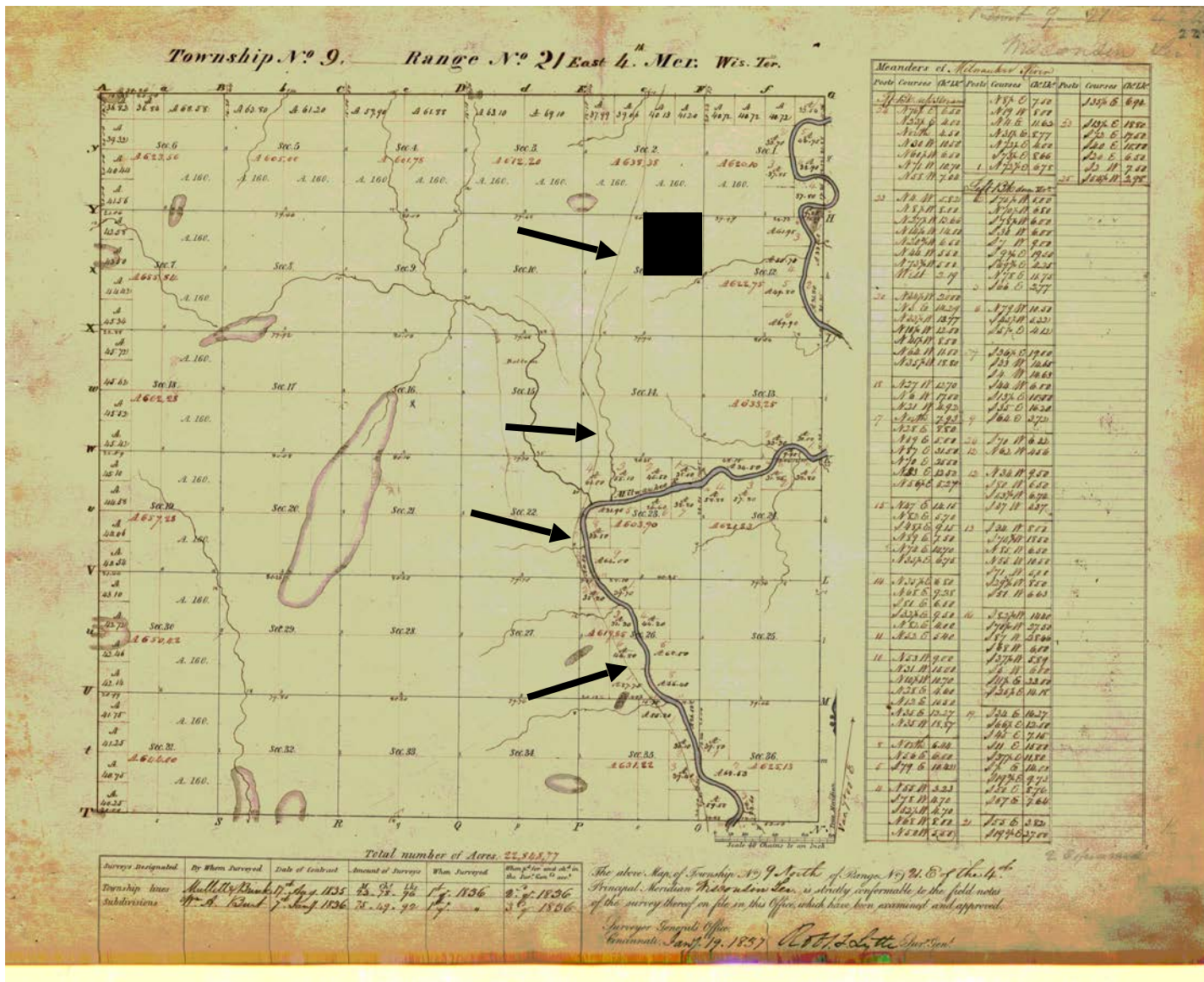




Spirit Lake Preserve as a Place of Restoration Ethos

Nathaniel Wurzer
Land Restoration
School





1836
 Commission of
 Public Lands
 Survey

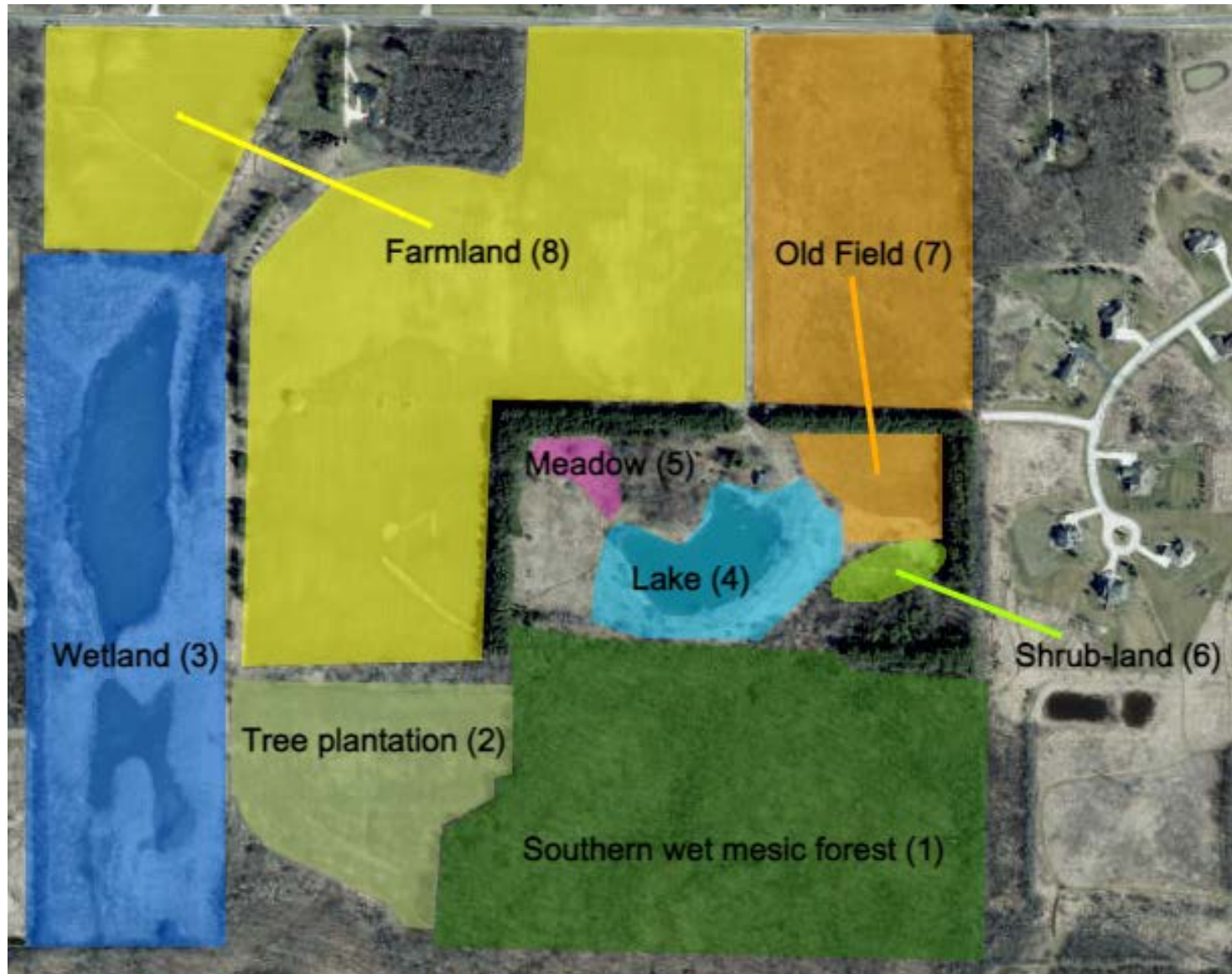
Vegetation in 1836: Woodland with sugar maple, hickory, beech, oak, basswood, ironwood, elm

1836		1836		1836		1836	
T. J. N. R. 21 E, 4th Mer. Mic. Ter.		T. J. N. R. 21 E, 4th Mer. Mic. Ter.		T. J. N. R. 21 E, 4th Mer. Mic. Ter.		T. J. N. R. 21 E, 4th Mer. Mic. Ter.	
North	Between sections 10 and 11	East	Random	East	Random	North	Between sections 11 and 12
10 16	Sugar 20 in dia	34 70	Trail C.	61 50	Run 8 links wide C. S. E.	12 95	B. Ash 18 in dia
30 83	Do 15 in dia	80 56	Intersected	80 04	Int Range Line 2.5 links South	21 95	Do 14 " "
40 00	Set gr section Post		Land Roll		of Post Land same Rolling	28 93	B. Oak 20 " "
	Beech 12 S 76 W 6 1/2		timber so		2 Post E of same wet	40 00	set gr
	Sugar 15 S 53 E 51 } Bearings		thick and		W Oak Elm Lym Sugar		Pr. Oak 40 N 42 W 22 9
48 27	Beech 16 in dia	West	corrected		B Oak Ash Hickory H		B. Oak 28 S 64 E 31 } Bearings
58 00	Do 20 " "	10 22	Beech 9 in	West	Corrected	40 25	Run 6 links wide N. E.
68 75	Do 11 " "	21 08	Sugar 16 " "	9 46	Elm 8 in dia	49 63	B. Oak 24 in dia
80 01	Set Post Cor. of Sect 2, 3, 10, 11	31 37	Beech 9 " "	20 09	Lym 10 " "	62 08	Beech 10 " "
	Beech 8 S 35 1/2 W 30 } Bearings	40 28	Set gr Section	29 85	B. Ash 15 " "	72 07	Sugar 12 " "
	Do 20 N 51 1/2 E 24 } Bearings		Beech 12 S	40 02	Elm 9 in dia gr Post Cor.	80 00	Set Post Cor. of Sect 1, 2, 11, 12
	Land Rolling some Lilly		Do 9 N		Pr Oak 16 N 26 E 29 9		Beech 11 S 71 E 22 9
	good 2 Post Sugar Beech	58 06	Beech 8 "		Elm 8 S 9 W 9 } Bearings		Do 11 N 87 W 25 } Bearings
	Lym Elm B. Oak Ironwood	59 66	Do 7 " "	50 32	Ironwood 4 in dia		Land Rolling 2 Post
	Sail Loom	61 92	Do 10 " "	60 34	Beech 9 " "		H. Oak Beech Sugar B. Oak
		60 56	Set Cor	71 58	Do " " "		Hickory Lym Elm Ash
				80 04	Set Cor		Ironwood Soil Loom

February 22 1835
Clear & pleasant

1937 Aerial Photograph





The Big Picture

- Not cohesive
- In danger reference ecosystem on site
- Near the Milwaukee River
- Existing Partnerships:
 - Milwaukee Metropolitan Sewage District (conservation easement)
 - Milwaukee Audubon Society (funding partner to potentially assume ownership)
 - Ozaukee Washington Land Trust (current owner and steward)
 - WIDNR (stewardship grant awarder)
- Potential Partnerships:
 - Flowering Tree Indigenous organization (others?)
 - Mequon Thiensville Rotary Club
 - Milwaukee Area Technical College
 - University of Wisconsin-Milwaukee
 - Land Restoration School
- Pre-settlement vegetation
- Historical use



Long-term Goals

- Restoration and expansion of the woodland
- Land use as an educational center, event space, and for general community engagement
- Restoration agriculture experiments, studies





Areas of Restoration Focus

- Slow pine removal, over the course of three years.
 - Could be structurally assessed
 - Sold
 - Left as boarding houses and nurse logs
- Shrub-land provides softwood cuttings of dogwood and ninebark to plant into the disturbed areas: underneath the dead ash and where conifers have been removed
 - Migration facilitation
 - Competition against non-local beings
 - Even and random distribution throughout







Protected areas

- Non-local being removal focus
 - Use debris to construct exclosures (herbivore protection)
- By creating "priority" areas, native vegetation is encouraged to become established. Maintenance is targeted.
- On a three-year cycle, the protected areas will be expanded.
 - Rest, protect, expand
 - Propagate native plants using cuttings, division, and seed collection of existing native beings
- Elderberry, *Ribes* and *Rubus* sp. are proposed to be introduced into the



Next Steps

- Tree species composition and distribution of diameter random plot survey
- Herbaceous plant random plot survey
- Consideration of fauna monitoring
- Time studies to inform cost of non-local being removal and density
- Contact nearby landowners and stakeholders
- Contact indigenous organizations
- Discuss trail system
 - Connection with nearby Rotary Park