

Lake Redstone 2021 Aquatic Invasive Species Survey

On September 28-29, 2021, Cason & Associates, LLC conducted an Aquatic Invasive Species survey on Lake Redstone.

During the survey, Eurasian Watermilfoil (EWM) was the only aquatic invasive species observed and surveyed. Shoreline invasive species were also documented, these were yellow iris, Chinese silver grass, and purple loosestrife. The EWM acreages by density are outlined in the table below:

EWM Densities	2020 Surveyed Area (Acres)	2021 Surveyed Area (Acres)	Acreage Difference
Highly Scattered	2.1	8.9	+6.8
Scattered	2.9	7.1	+4.2
Moderately Dense	6.1	3.9	-2.2
Dense	0.8	5.0	+4.2
Total Acreage:	11.9	24.9	+13

Since the survey in the fall of 2020, EWM has expanded and developed in new locations. The total acreage of EWM has more than doubled since the survey in 2020. Highly scattered areas of EWM increased the most out of any density with an increase of 6.8 acres. Both the scattered and dense, densities both increased by 4.2 acres. EWM was present in most locations that were shallow and had a soft bottom where roots could take hold. The Southwest bend of Lake Redstone had the lowest abundance of EWM; the shoreline is steep and rocky in this area.

Shoreline invasive species were prevalent around Lake Redstone. Yellow Iris was observed in fifty-one different locations around the lake. Chinese Silver Grass can be an aggressive invasive when seeds are allowed to spread, it is a tall grass often planted as an ornamental. Chinese silver grass was observed in twenty-five different locations on the lake. Purple loosestrife is an aggressive wetland plant that will quickly spread along the shoreline of the lake if not quickly removed; each plant can produce up to two million seeds. Purple loosestrife was observed in four locations. Even though these invasive species are attractive they are a detriment to a healthy ecosystem.

We recommend treating all areas for EWM areas with herbicides. All areas identified during this survey are noted in the Aquatic Invasive Species Survey Maps. A treatment plan can be developed and provided upon request. Just as a reminder, since a treatment plan takes some time to develop from these survey results, time spent working on them is invoiced (per our contract, at \$125/hr).

The following deliverables are attached to this survey summary:

1. Aquatic Invasive Species Survey Maps, with EWM (Maps 1-11)
2. Estimated EWM Depths Map
3. Reference images and links of Riparian Invasive Species

Thank you for your business and for allowing us to perform this service for your association. If you have any questions, please contact me at 920-290-6810 or lance@casonassociates.com.

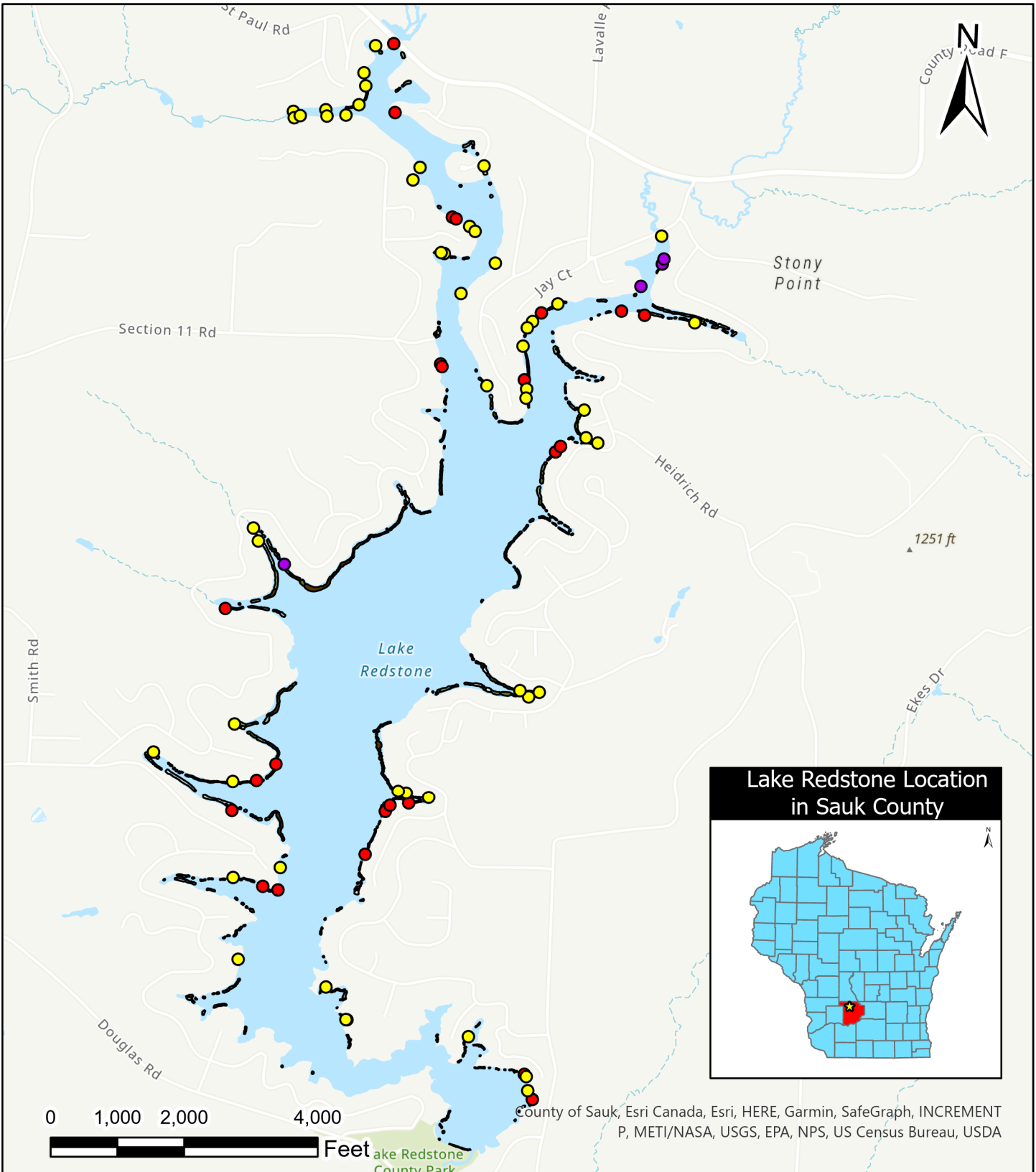
Sincerely,


Lance Paden

877-309-8408

www.casonassociates.com

info@casonassociates.com



Legend	
	Dense
	Moderately Dense
	Scattered
	Highly Scattered
	Yellow Iris
	Chinese Silver Grass
	Purple Loosestrife

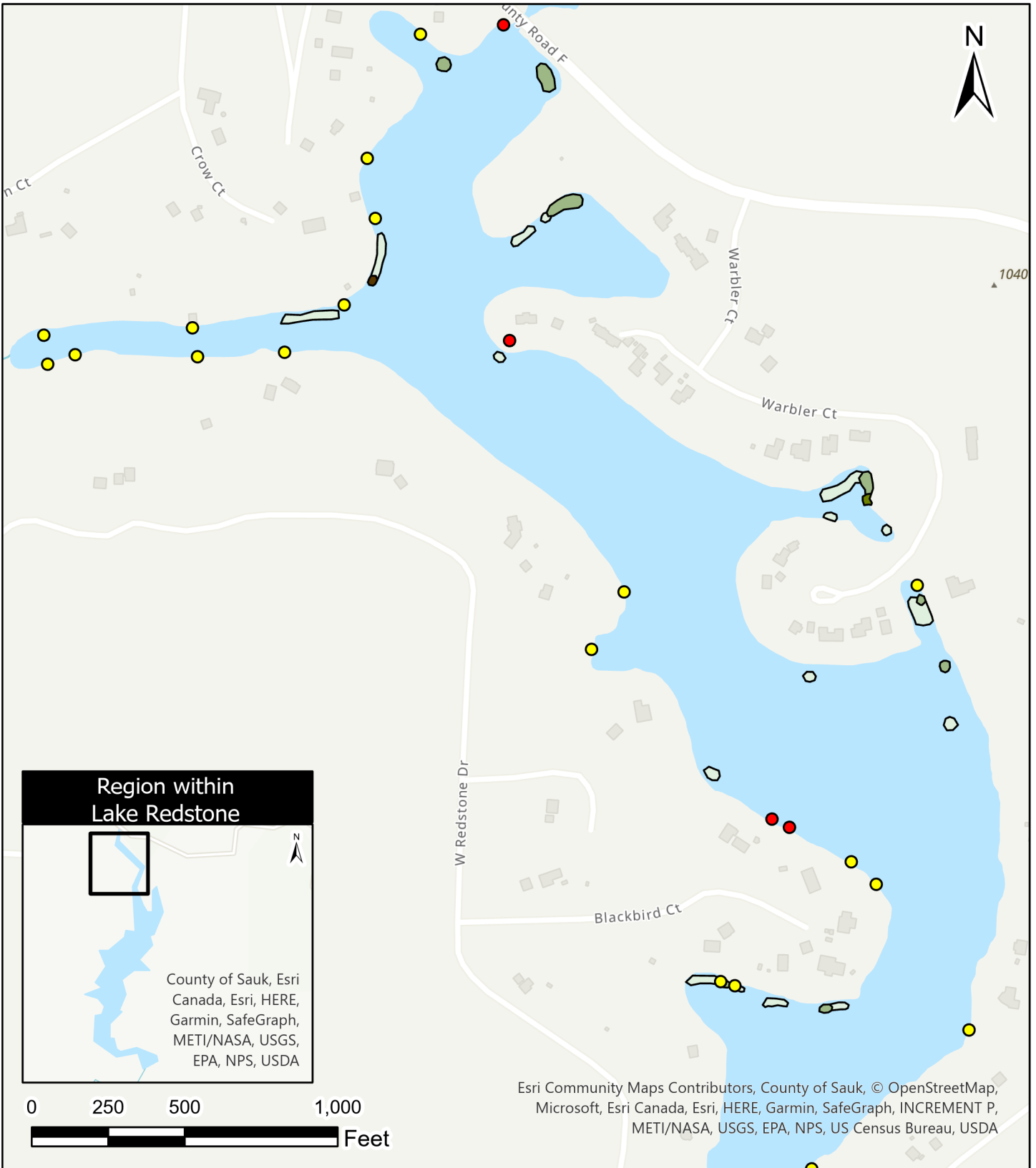
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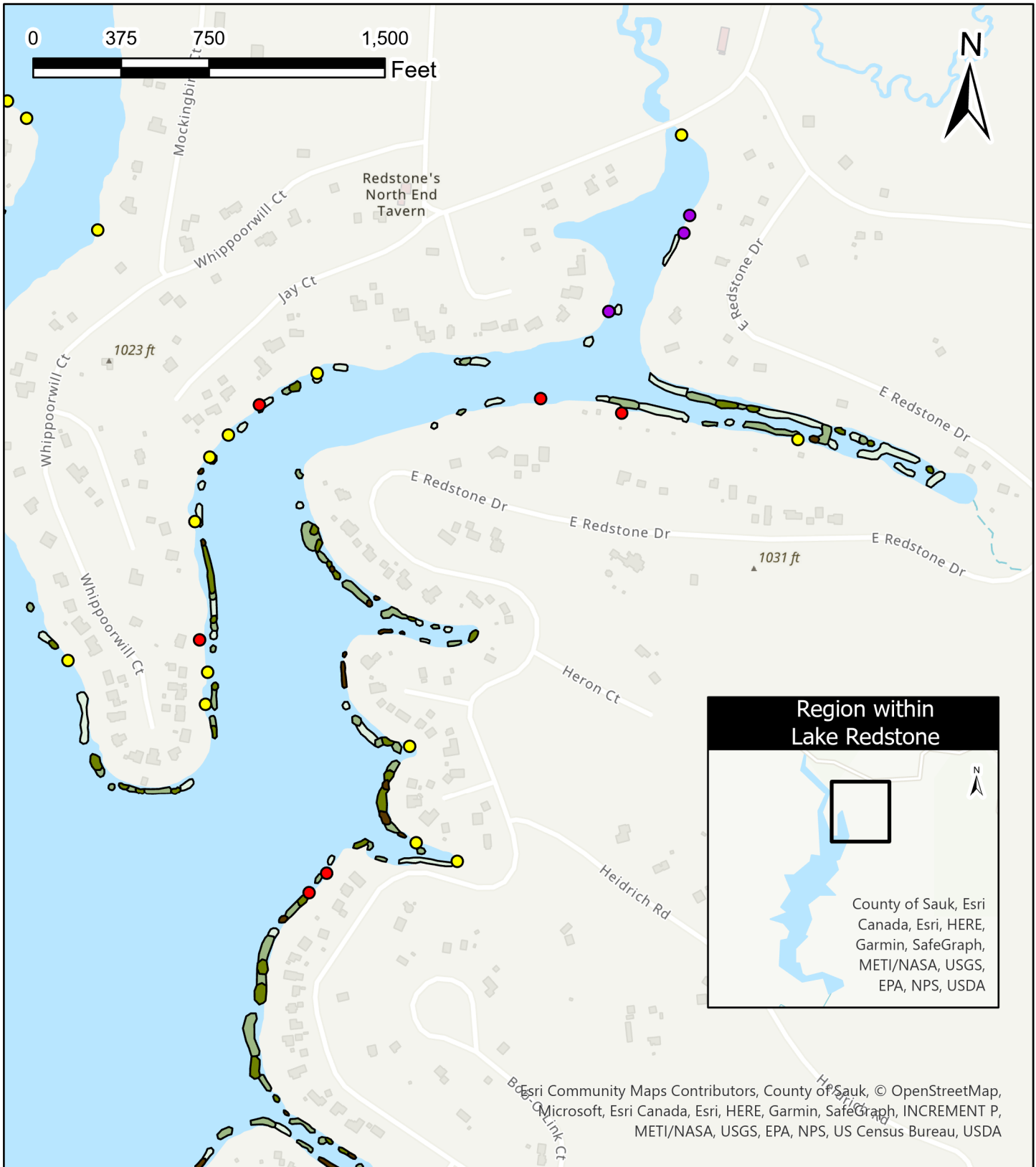
MAP NUMBER:

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Legend 	Lake Redstone Aquatic Invasive Species Survey for Eurasian Watermilfoil			 Cason & ASSOCIATES, LLC LAND & WATER MANAGERS PO Box 230, Berlin, WI 54923 www.casonassociates.com	MAP NUMBER:
	FIELD DATE(S):	CLIENT:	CITY:		2 of 11
	9/28-29/2021	Lake Redstone Protection District	LaValle		
	DRAWN DATE:	COUNTY:	STATE:		
12/9/2021	Sauk County	Wisconsin			



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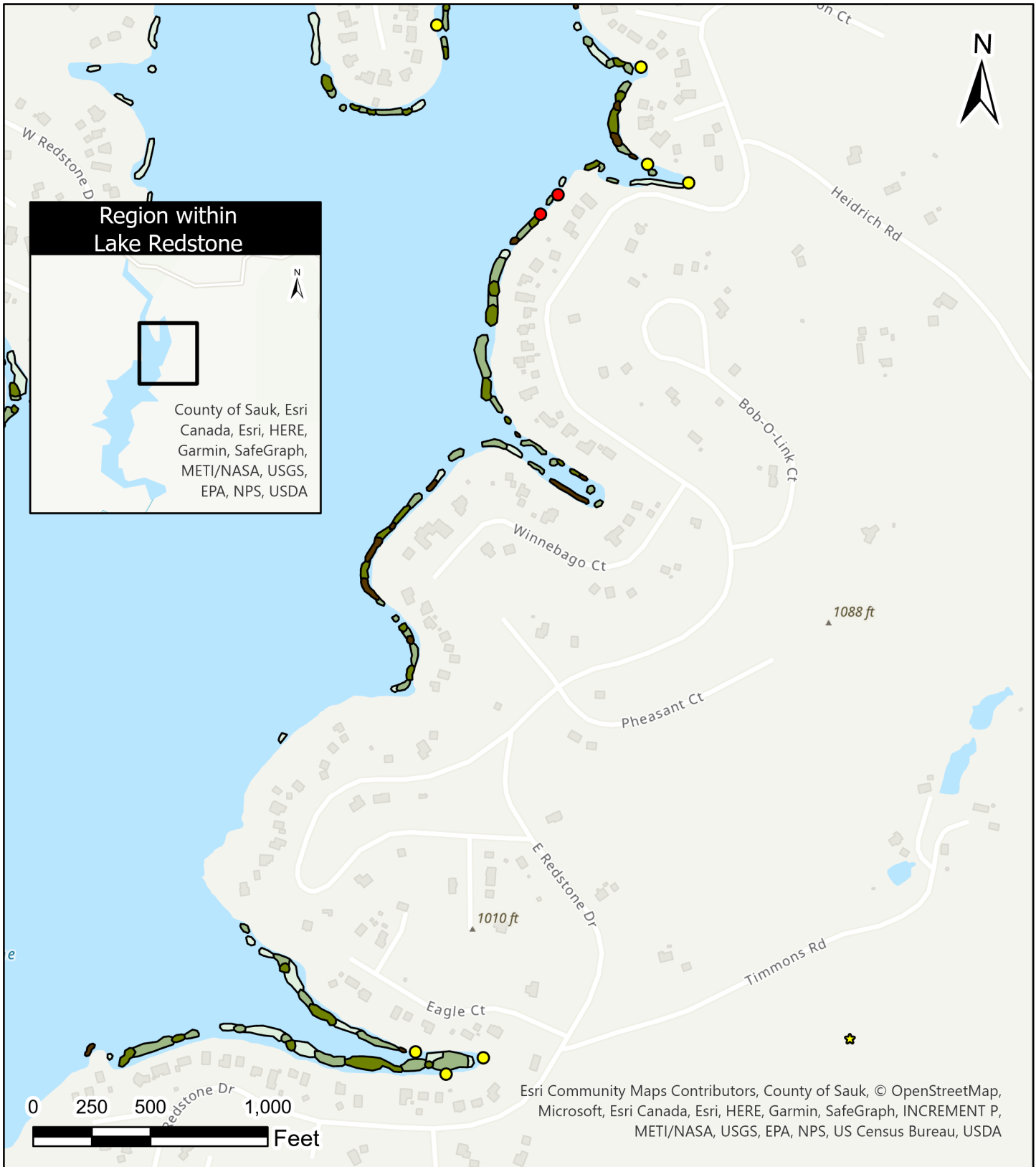
Legend	
	Dense
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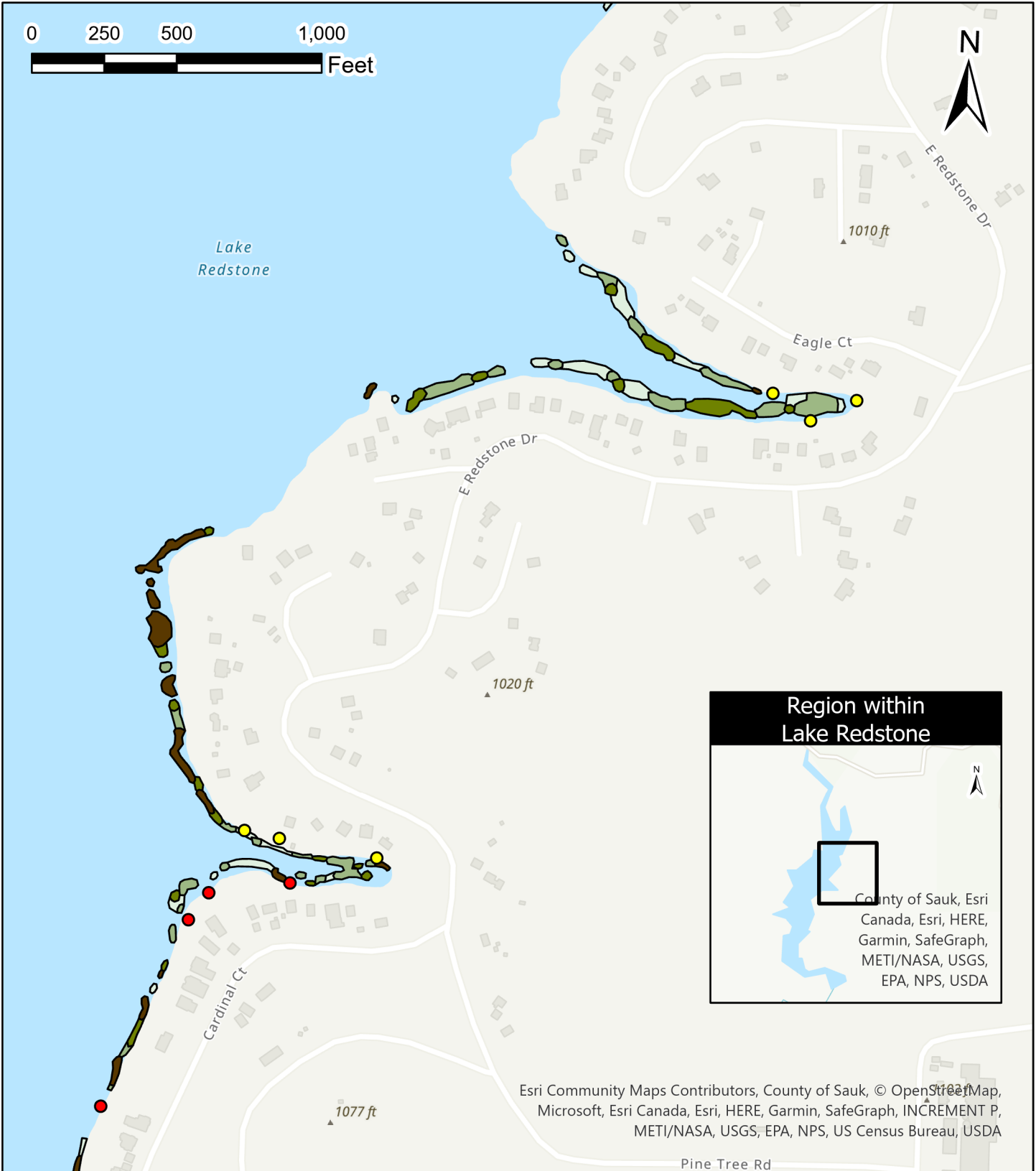


Region within Lake Redstone

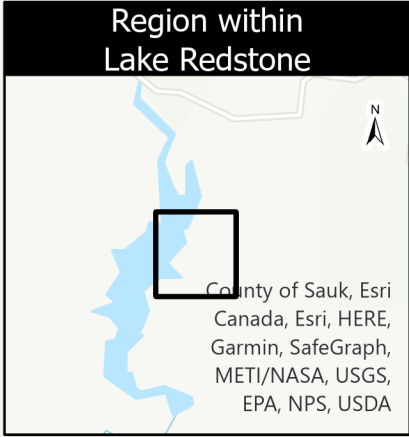
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DRAWN DATE: 12/9/2021	COUNTY: Sauk County	STATE: Wisconsin	PO Box 230, Berlin, WI 54923 www.casonassociates.com		



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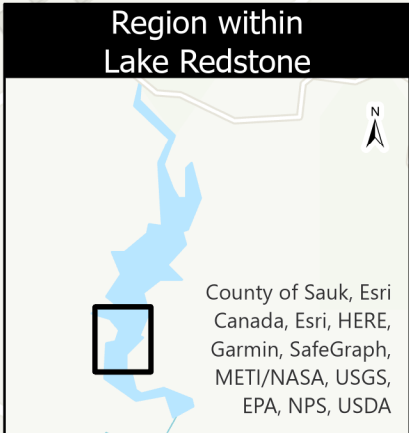
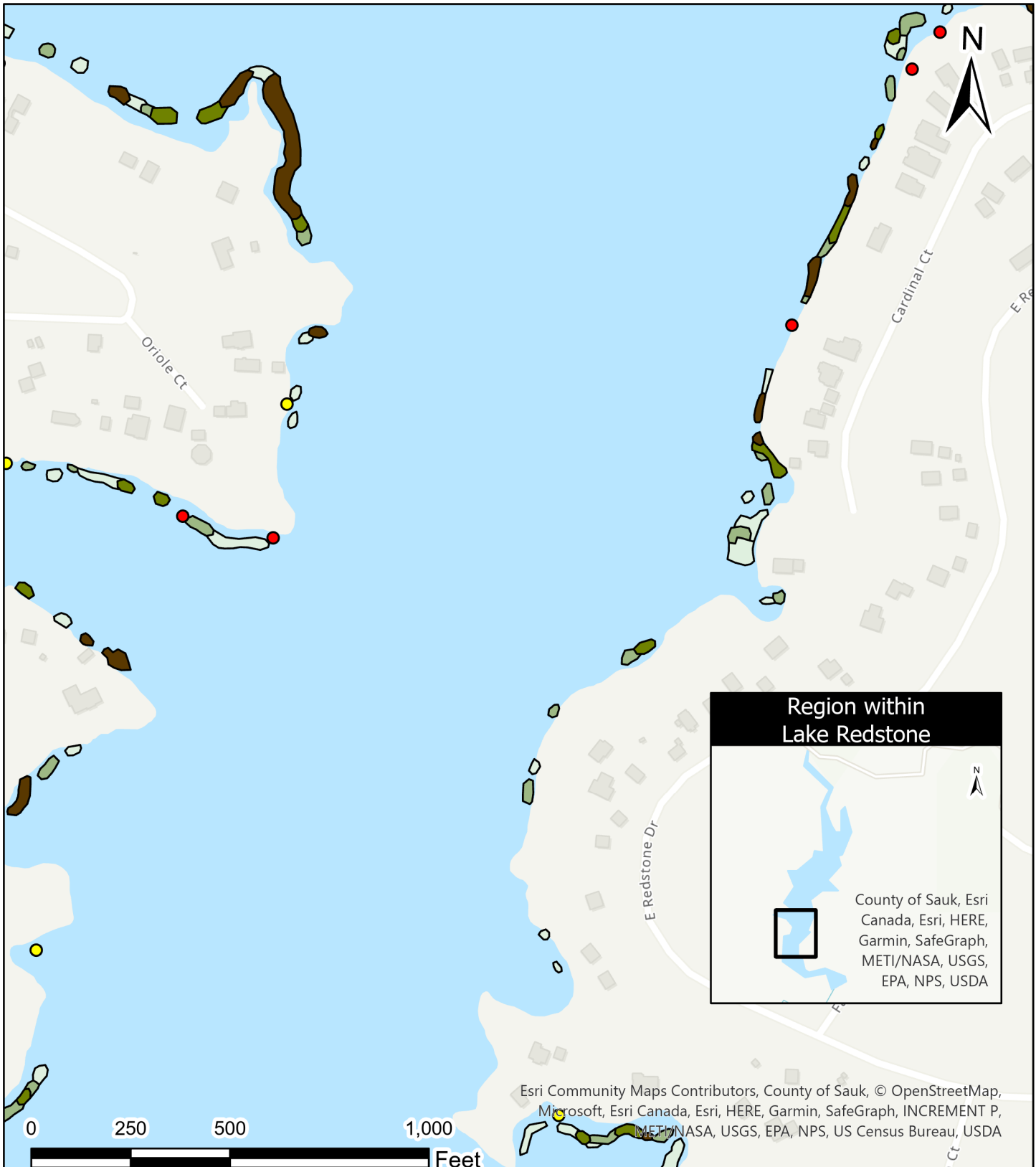
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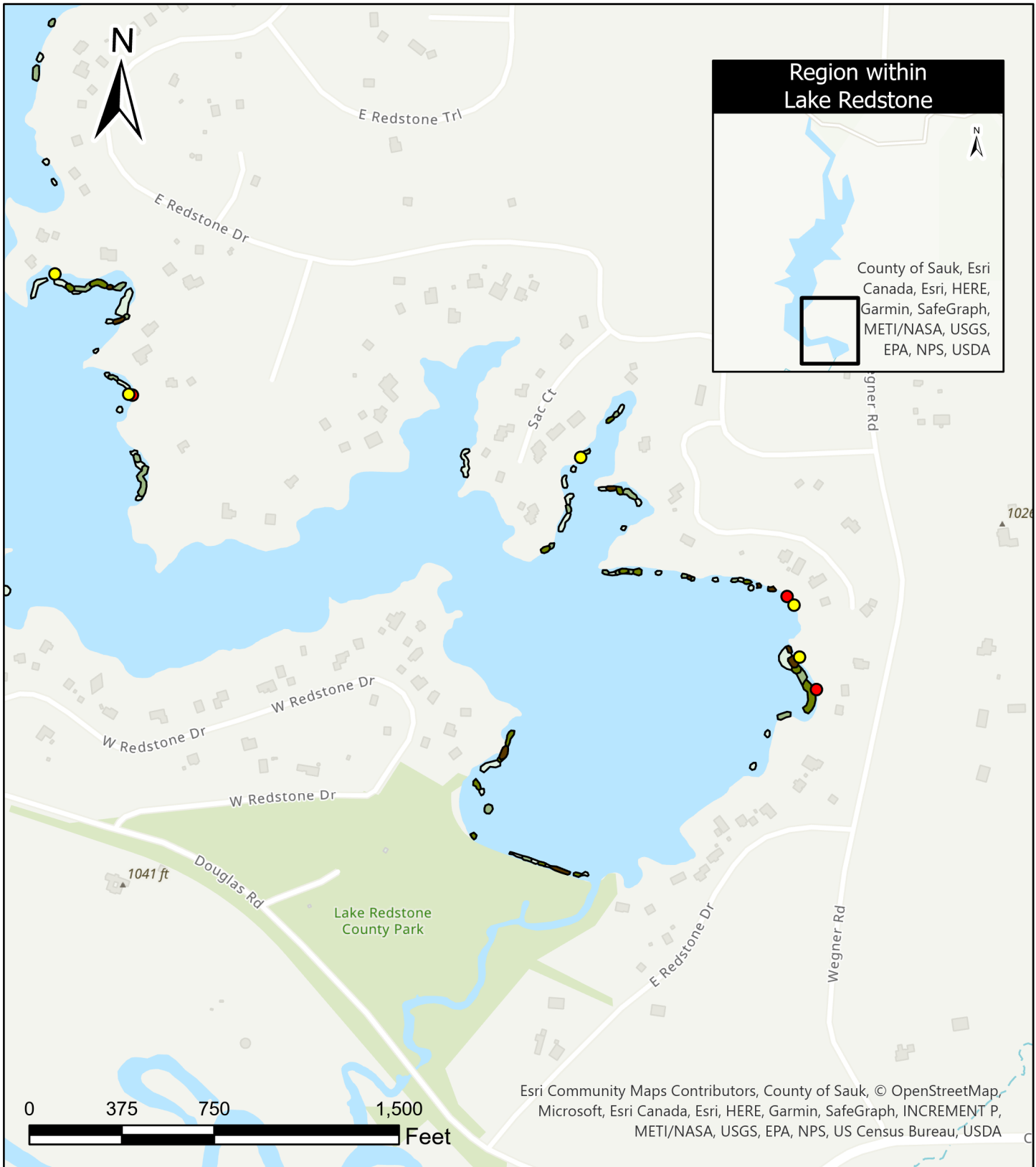
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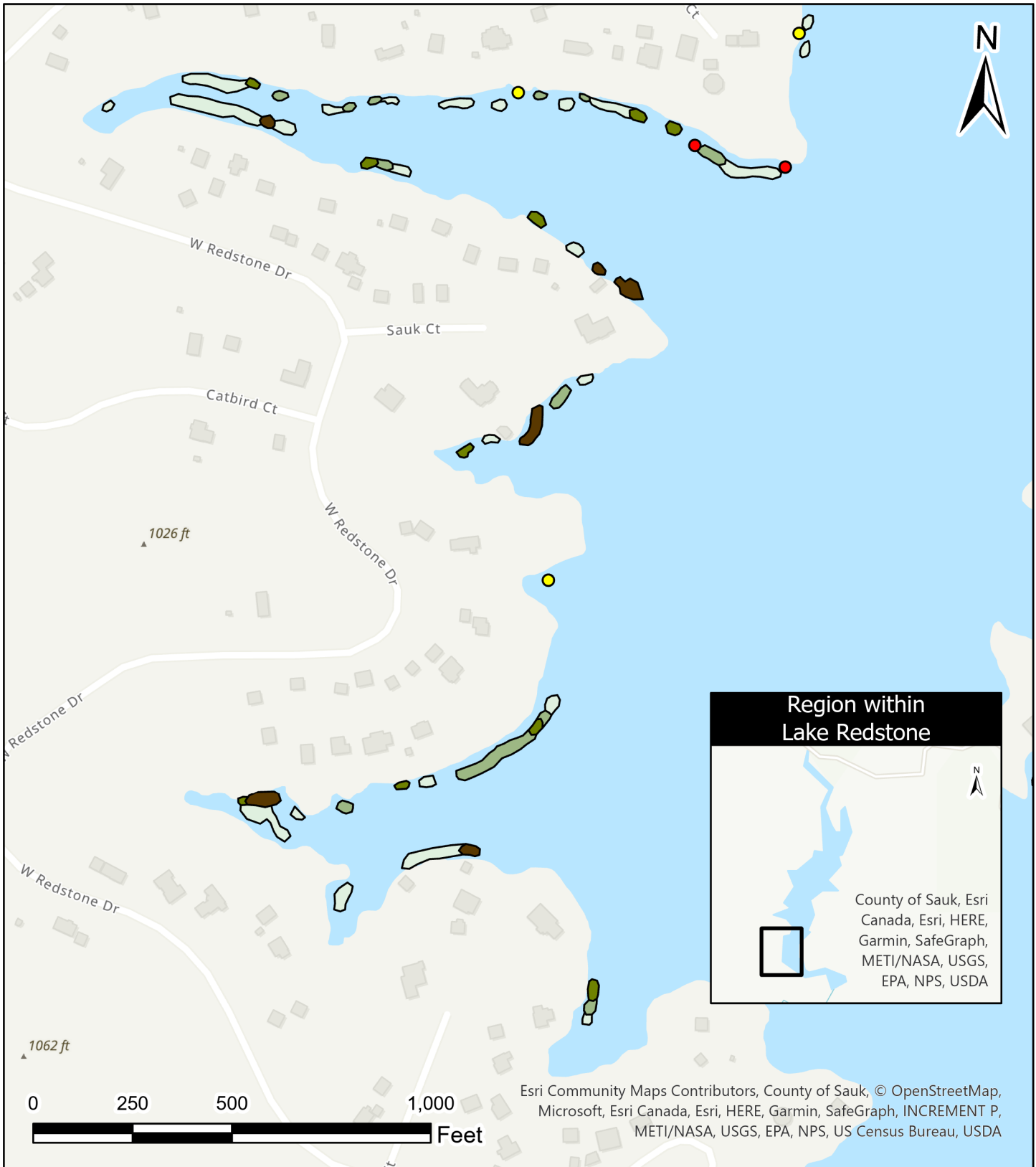
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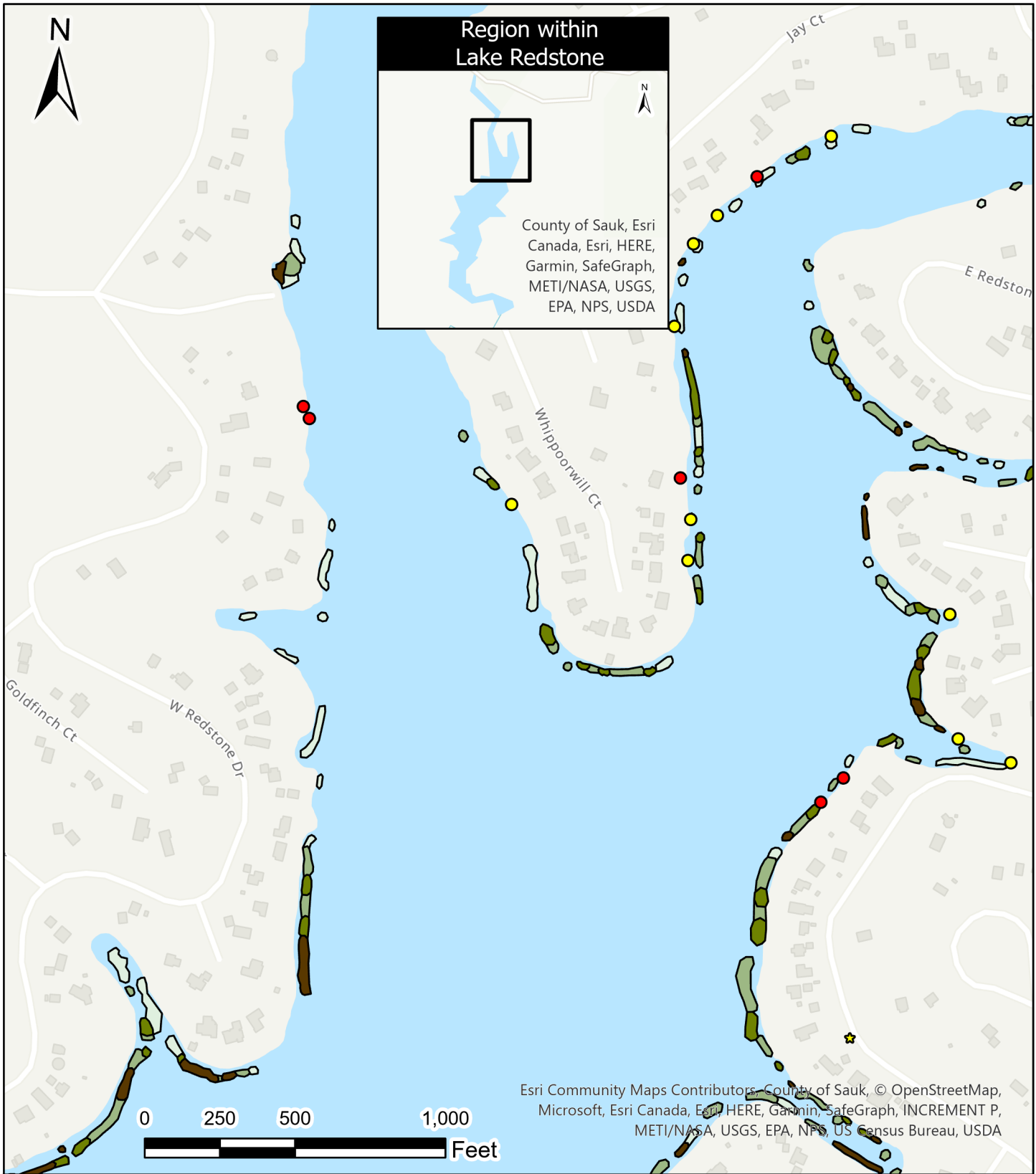
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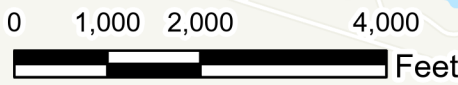
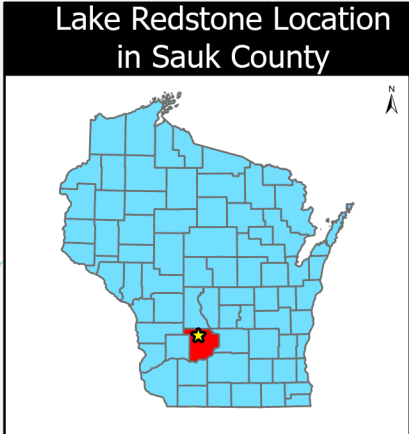
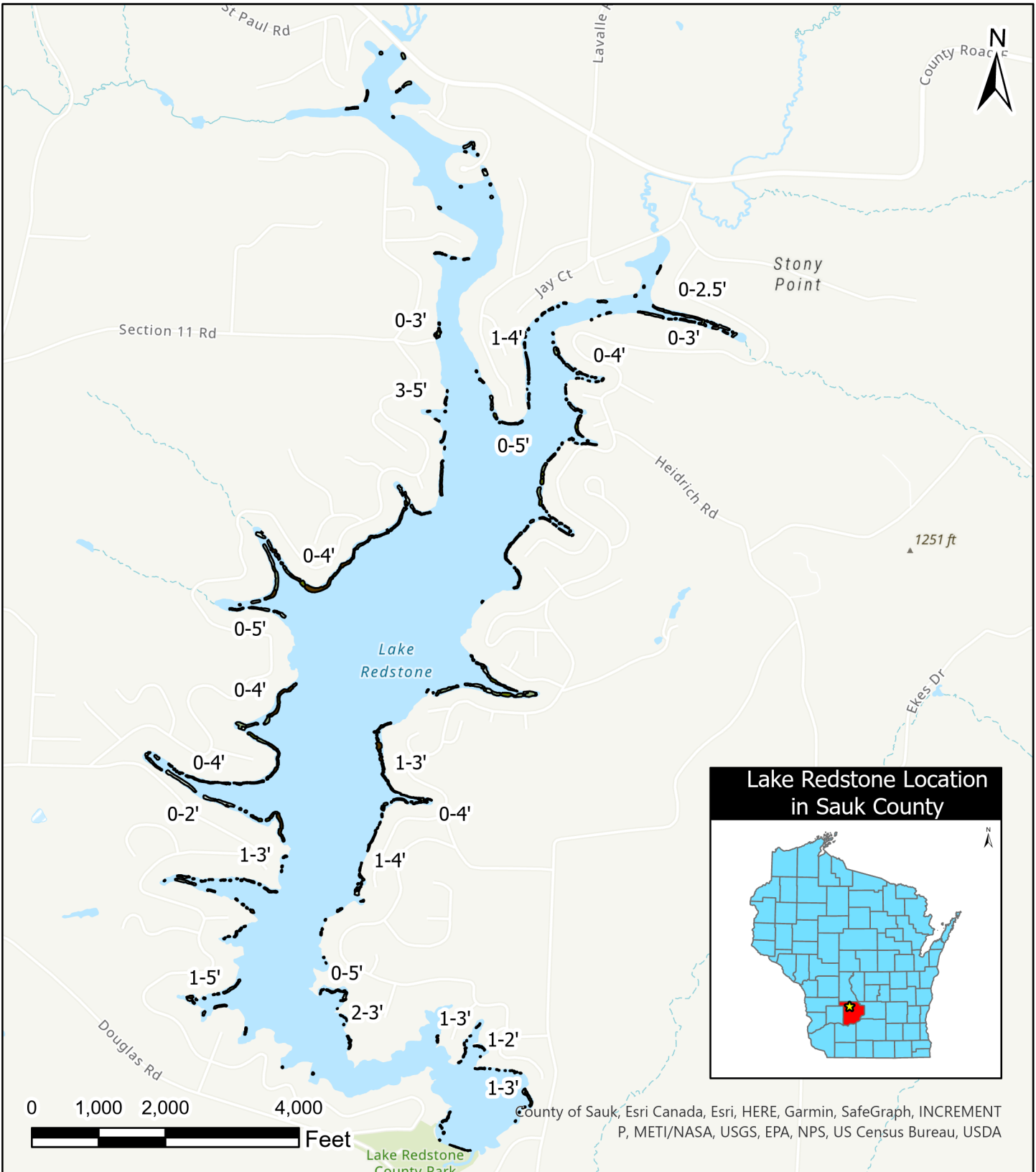
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Lake Redstone Estimated Eurasian Watermilfoil Depths		
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<https://www.invasiveplantatlas.org/subject.html?sub=3052>

Chinese Silvergrass (*Miscanthus sinensis*) Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org



<https://www.invasiveplantatlas.org/subject.html?sub=5853>

Yellow Iris (*Iris pseudacorus*) Photo: James H. Miller, USDA Forest Service, Bugwood.org



[purple loosestrife: *Lythrum salicaria* \(Myrtales: Lythraceae\): Invasive Plant Atlas of the United States](#)
Purple Loosestrife (*Lythrum salicaria*) Photo: John D. Byrd, Mississippi State University, Bugwood.org