

## Lake Redstone 2022 Aquatic Invasive Species Survey

On September 8-9, 2022, Cason & Associates, LLC conducted an Aquatic Invasive Species survey on Lake Redstone.

During the survey, Eurasian/ Hybrid Watermilfoil (EWM/HWM) was the only aquatic invasive species observed and surveyed. The EWM/HWM acreages by density are outlined in the table below:

EWM Densities	2020 Surveyed Area (Acres)	2021 Surveyed Area (Acres)	2022 Surveyed Area (Acres)	Acreage Difference
Highly Scattered	2.1	8.9	8.2	-0.7
Scattered	2.9	7.1	4.3	-2.8
Moderately Dense	6.1	3.9	6.6	+2.7
Dense	0.8	5.0	12.8	+7.8
<b>Total Acreage:</b>	<b>11.9</b>	<b>24.9</b>	<b>31.9</b>	<b>+7.0</b>

Since the survey in the fall of 2021, EWM/HWM has expanded and developed in new locations on Lake Redstone. The total acreage of EWM has increased by 7 acres since 2021. Densities have shifted from highly scattered and scattered too moderately dense and dense. Dense areas of EWM/HWM increased the most out of any density with an increase of 7.8 acres. Moderately dense areas increased by 2.7 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/HWM; the shoreline is steep and rocky in this area. EWM/HWM was also found growing on the dam.

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.

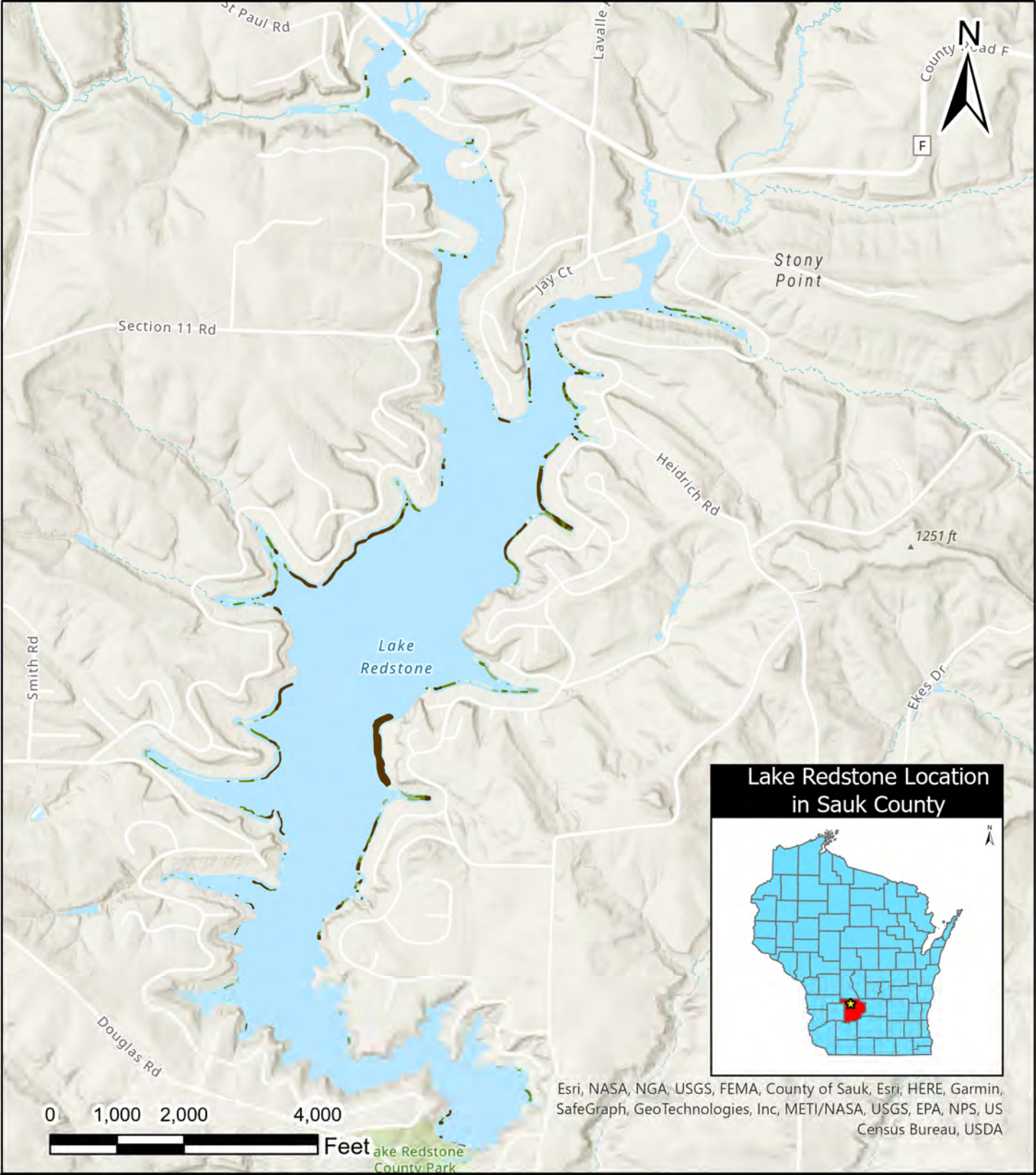
The following deliverables are attached to this survey summary:

1. Aquatic Invasive Species Survey Maps, with EWM (Maps 1-11)
2. Estimated EWM Depths Map

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



Esri, NASA, NGA, USGS, FEMA, County of Sauk, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Legend	
	Highly Scattered EWM
	Scattered EWM
	Moderately Dense EWM
	Dense EWM

### Lake Redstone Aquatic Invasive Species Survey for Eurasian Watermilfoil - Overview

FIELD DATE(S): 9/8-9/2022	CLIENT: Lake Redstone Protection District	CITY: LaValle
DRAWN DATE: 10/12/2022	COUNTY: Sauk County	STATE: Wisconsin

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MAP NUMBER:  
**1 of 11**



**Region within Lake Redstone**

County of Sauk, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA

Source: Esri, USDA, FSA, Esri Community Maps Contributors, County of Sauk, OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

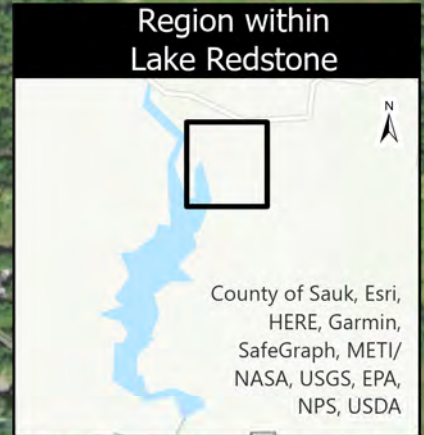
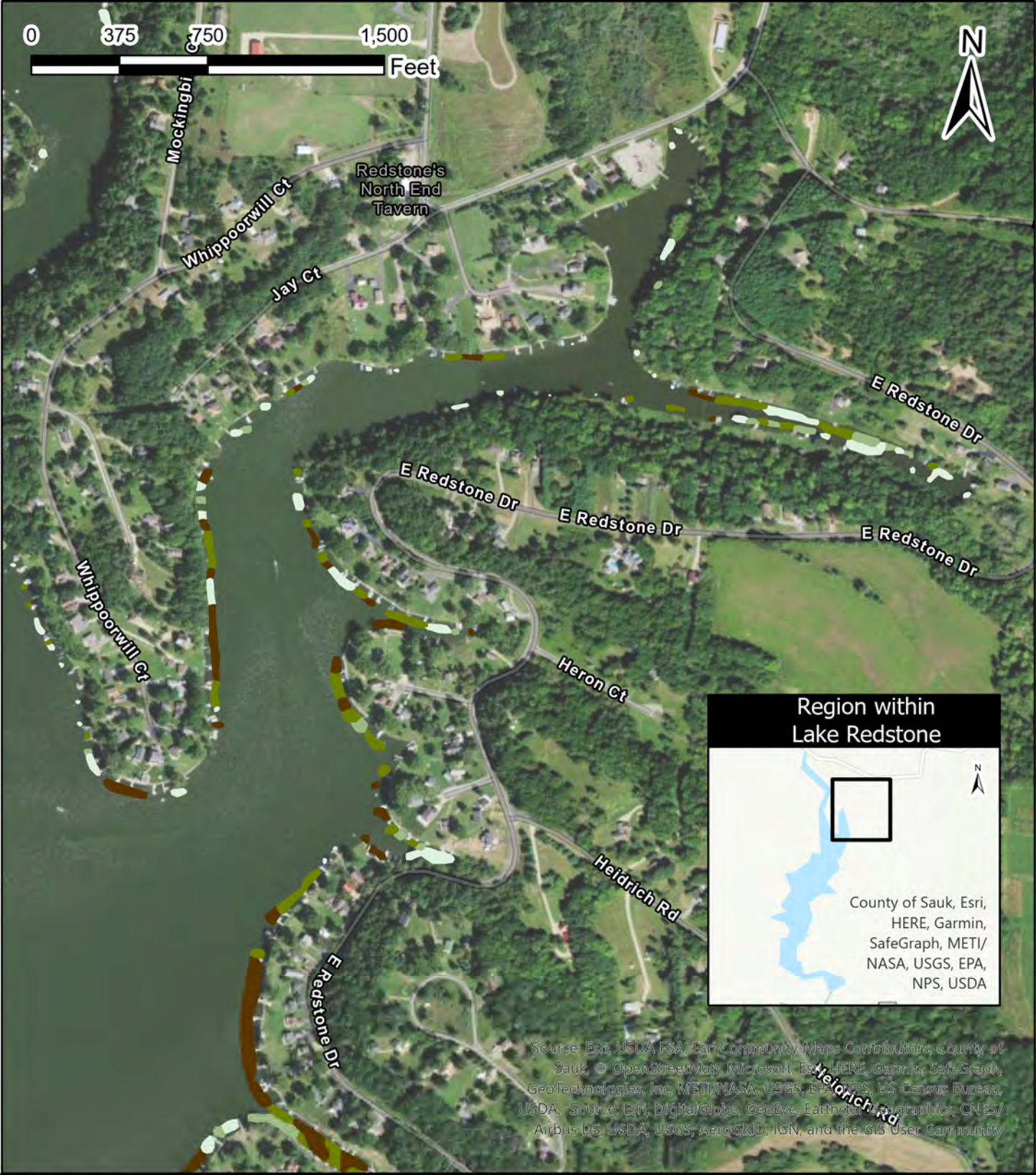
- Legend**
- Highly Scattered EWM
  - Scattered EWM
  - Moderately Dense EWM
  - Dense EWM

Lake Redstone Aquatic Invasive Species Survey for Eurasian Watermilfoil		
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**2**  
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**Legend**

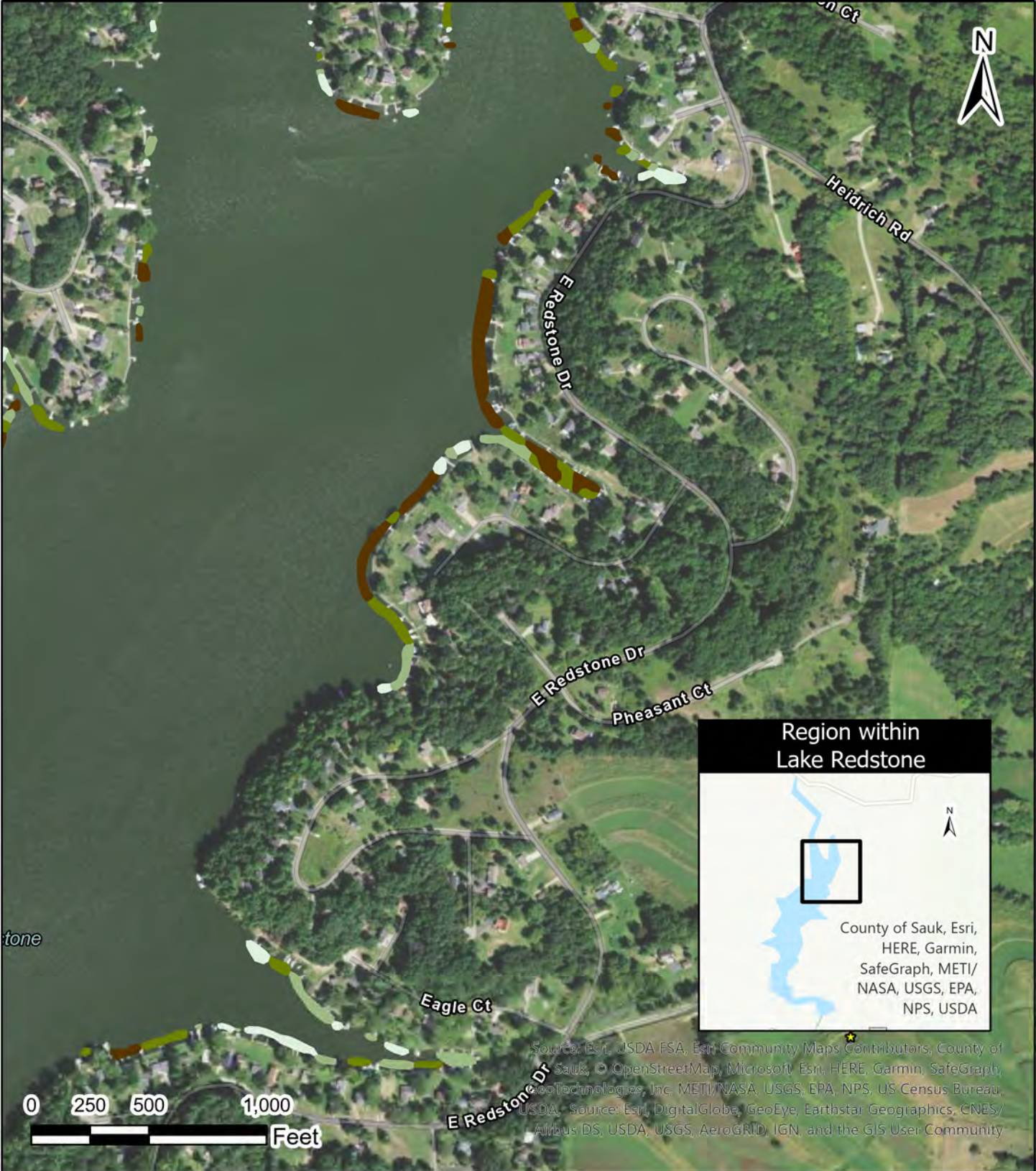
- Highly Scattered EWM
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<b>Lake Redstone Aquatic Invasive Species Survey for Eurasian Watermilfoil</b>		
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**3**  
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- Legend**
- Highly Scattered EWM
  - Scattered EWM
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  - Dense EWM

**Lake Redstone Aquatic Invasive Species Survey for Eurasian Watermilfoil**

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4  
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Lake Redstone

Eagle Ct

E Redstone Dr

E Redstone Dr

Cardinal Ct

E Redstone Dr



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Pine Tree Rd

**Legend**

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-  Scattered EWM
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-  Dense EWM

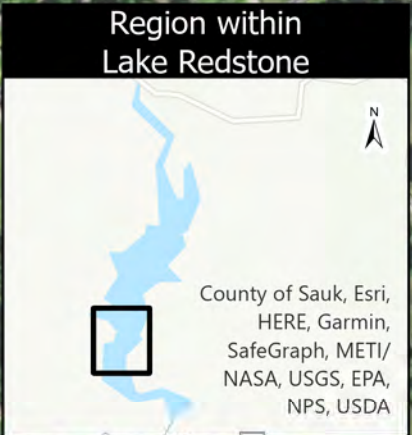
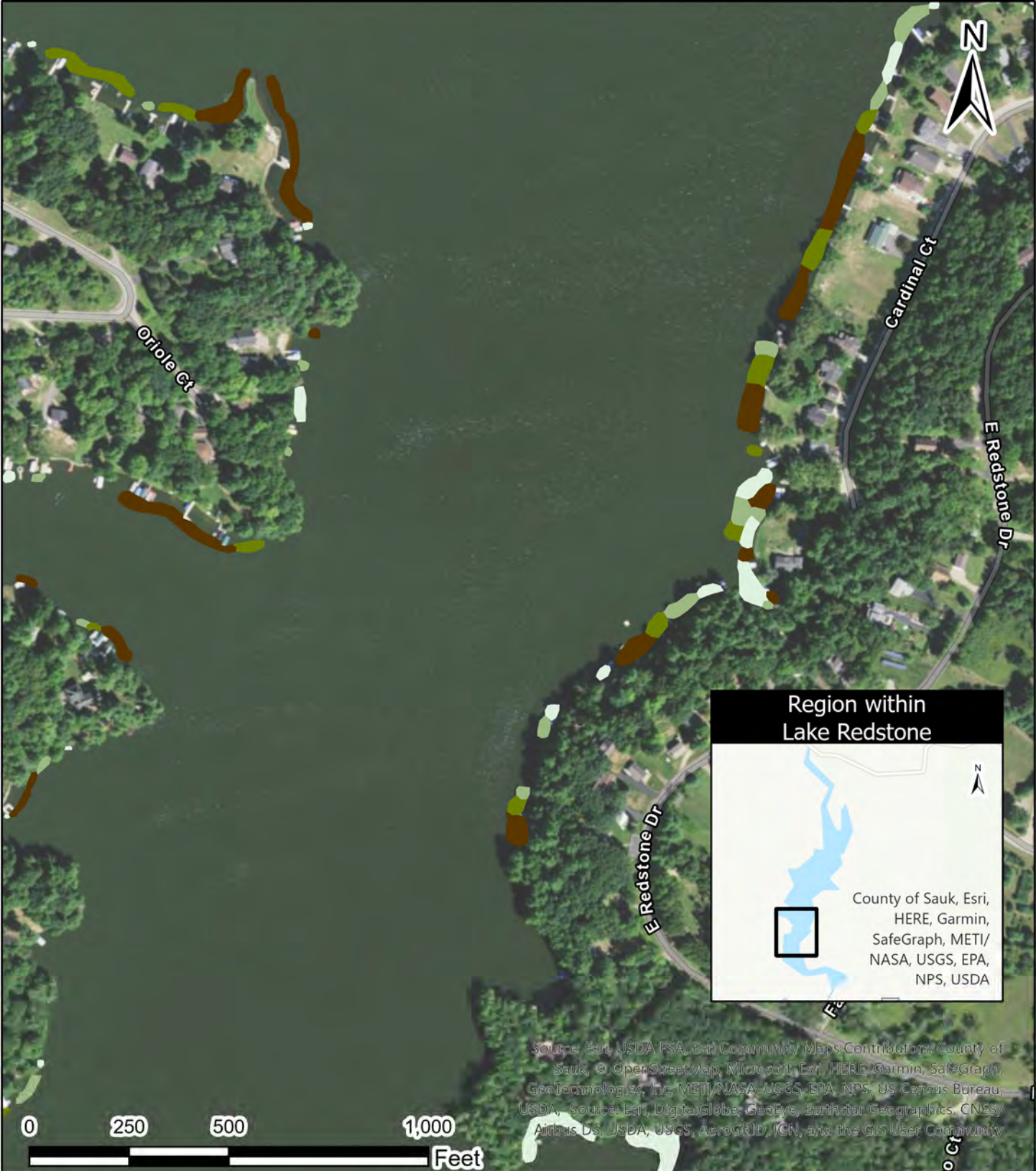
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**5**  
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**Legend**

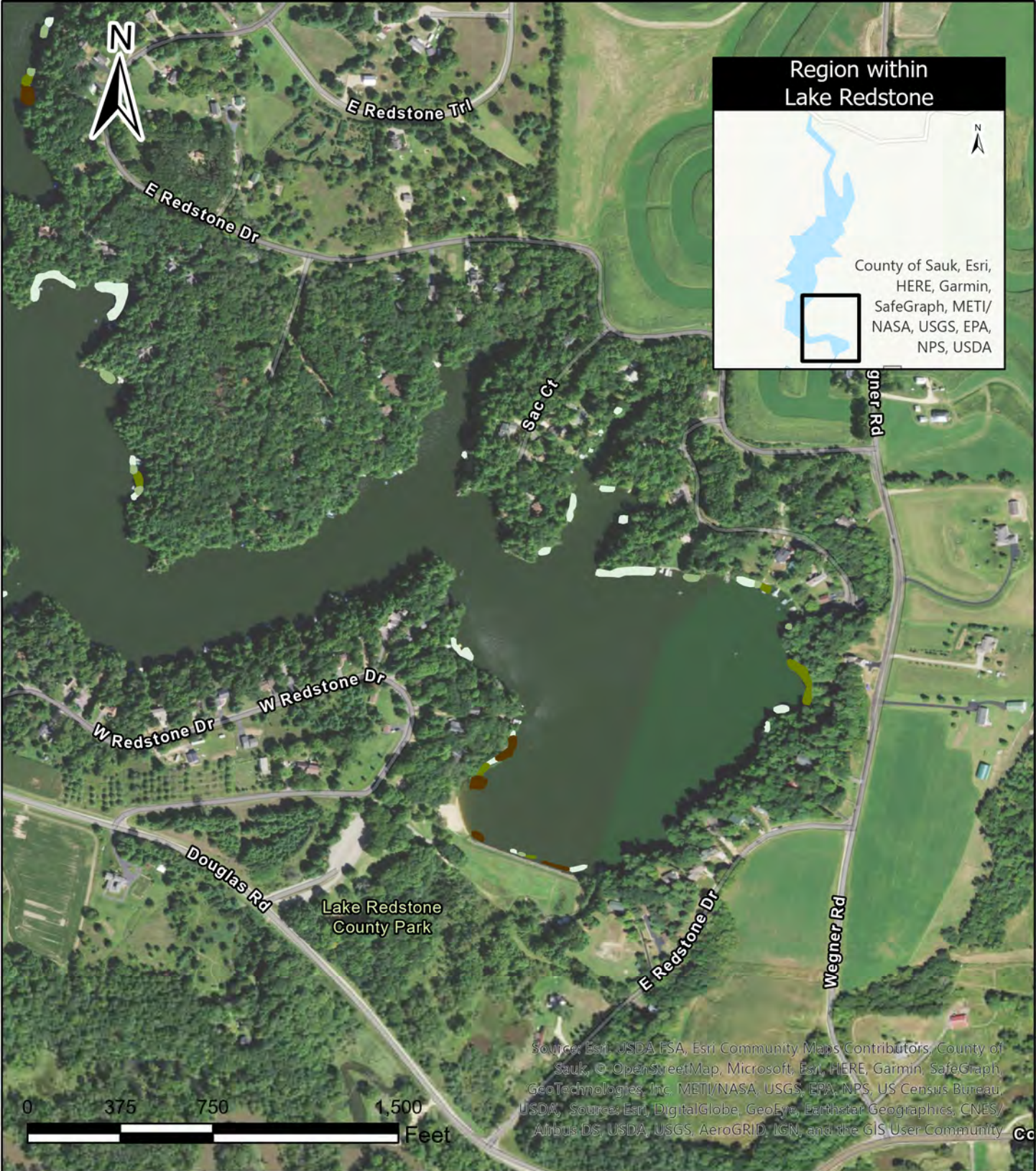
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**6**  
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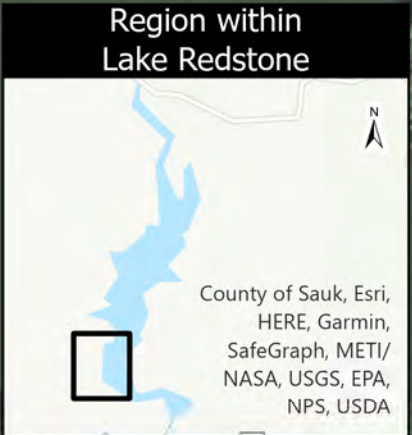
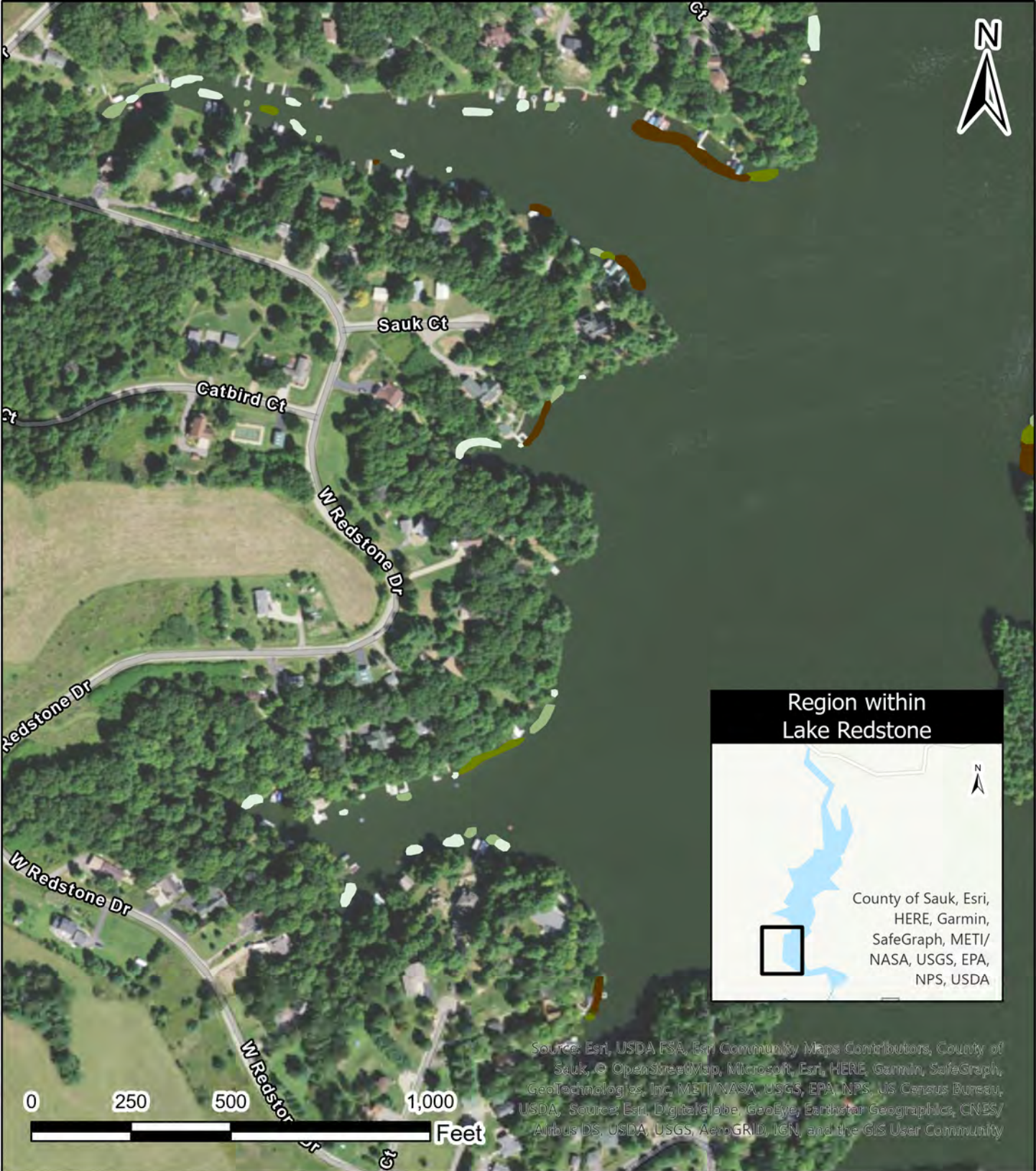
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10/12/2022	Sauk County	Wisconsin

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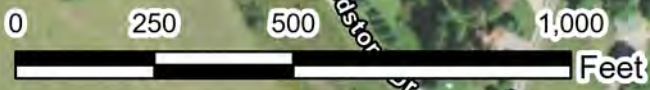
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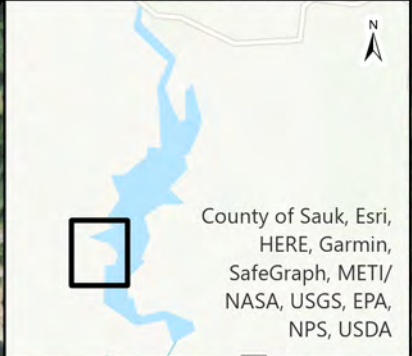


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8  
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### Region within Lake Redstone



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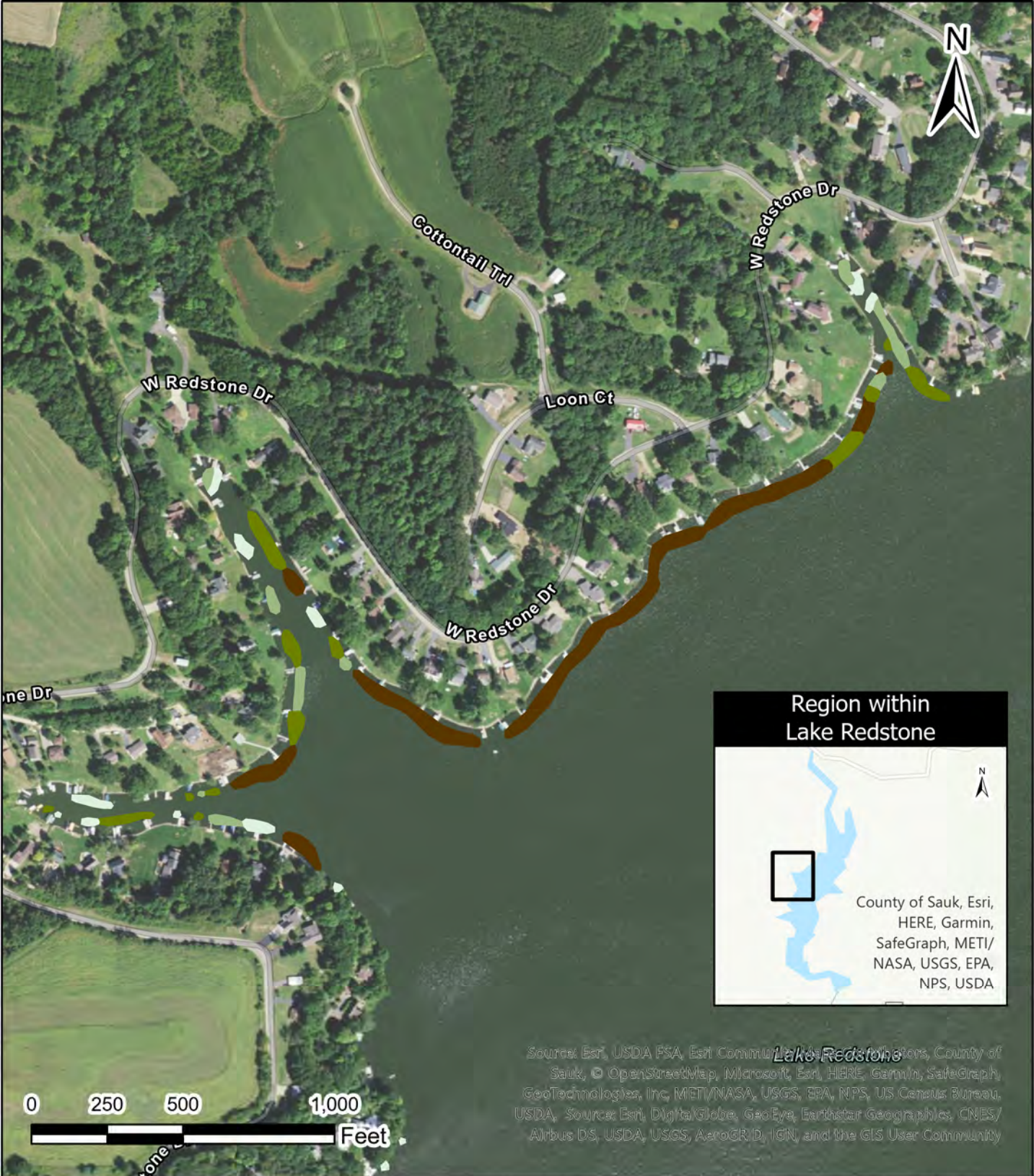
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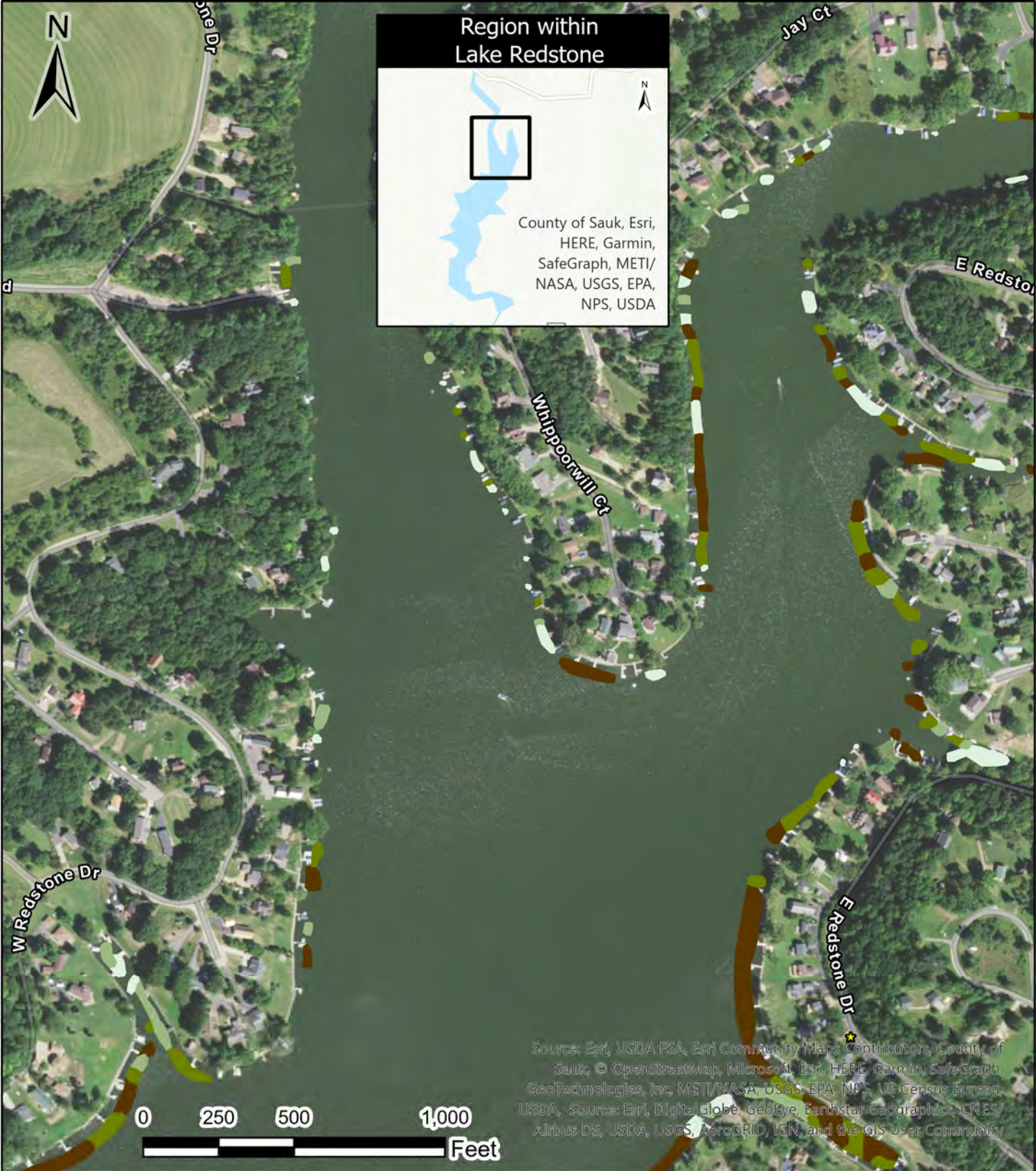
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**10 of 11**



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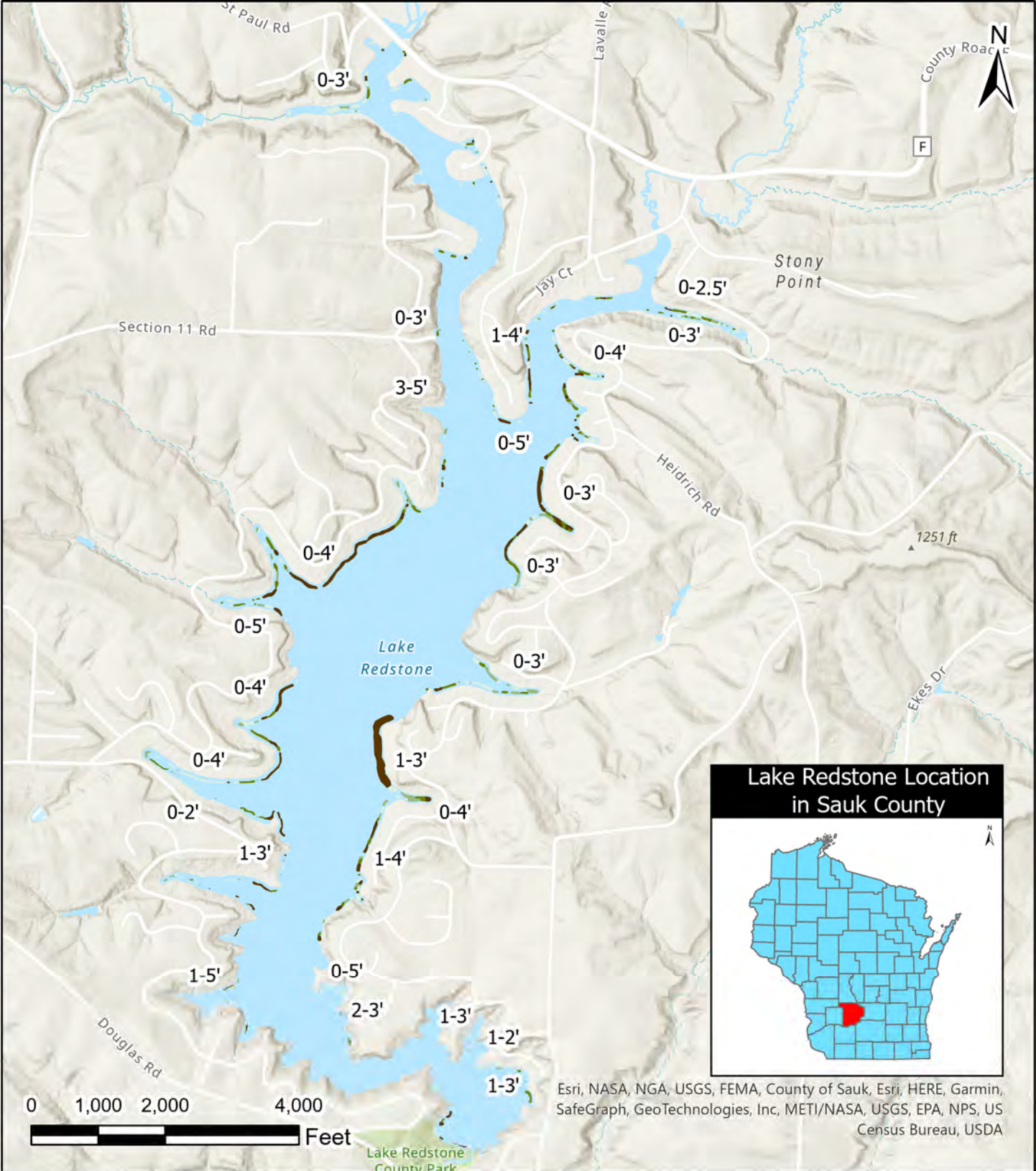
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**Lake Redstone Estimated Eurasian Watermilfoil Depths**

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1 of 1