



How to Survey a Property to Prepare an IPCPP

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The Two Phases

1. **In the Office** – Pre-survey Data/Information Review
2. **In the Field** – Survey Methods and Data Collection

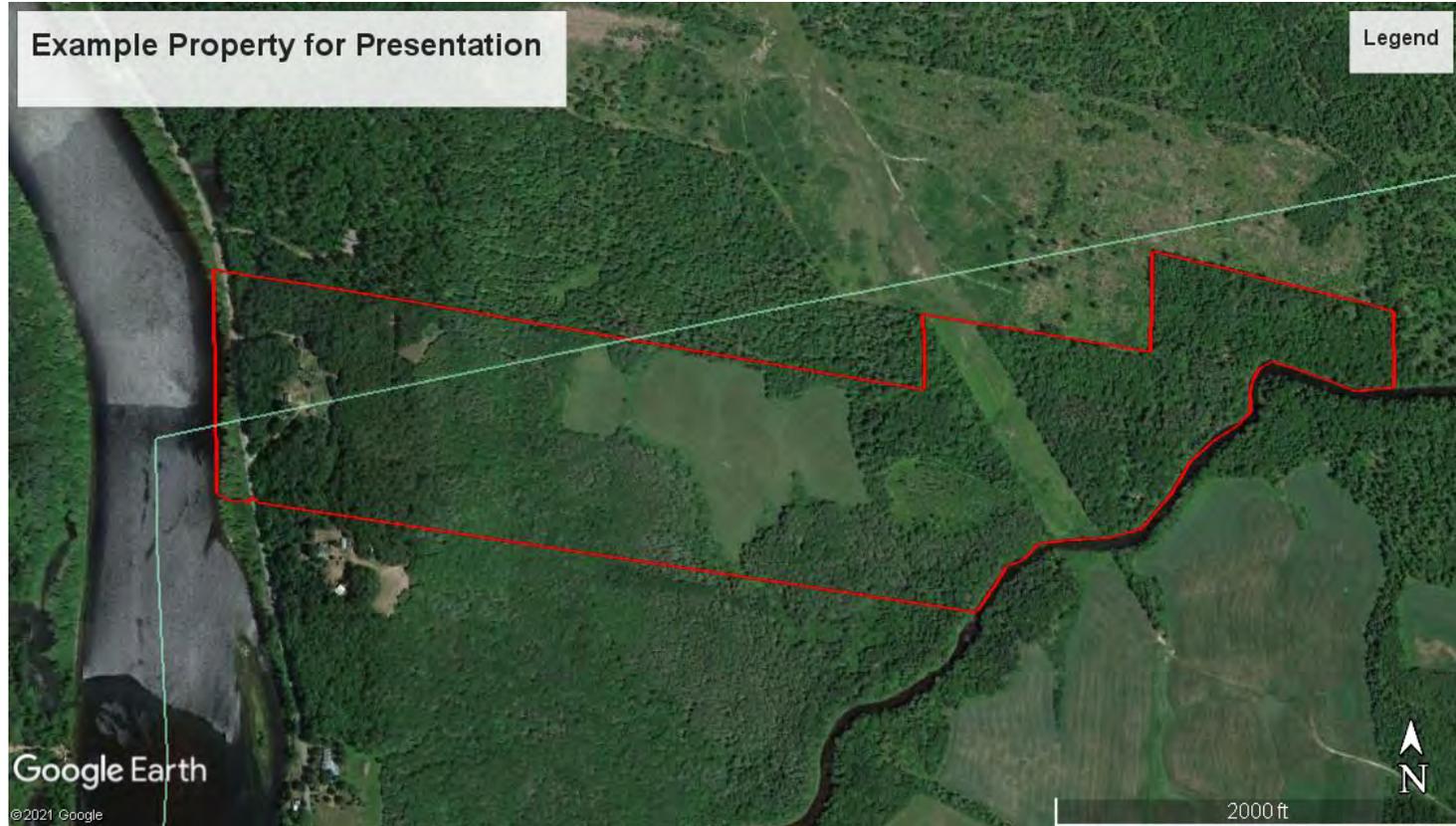
How to survey a property - prep

1. Review Landowner Questionnaire Form or similar
(example form provided on project website)

Questions for Landowners to Answer to Complete Their Assessment Worksheet

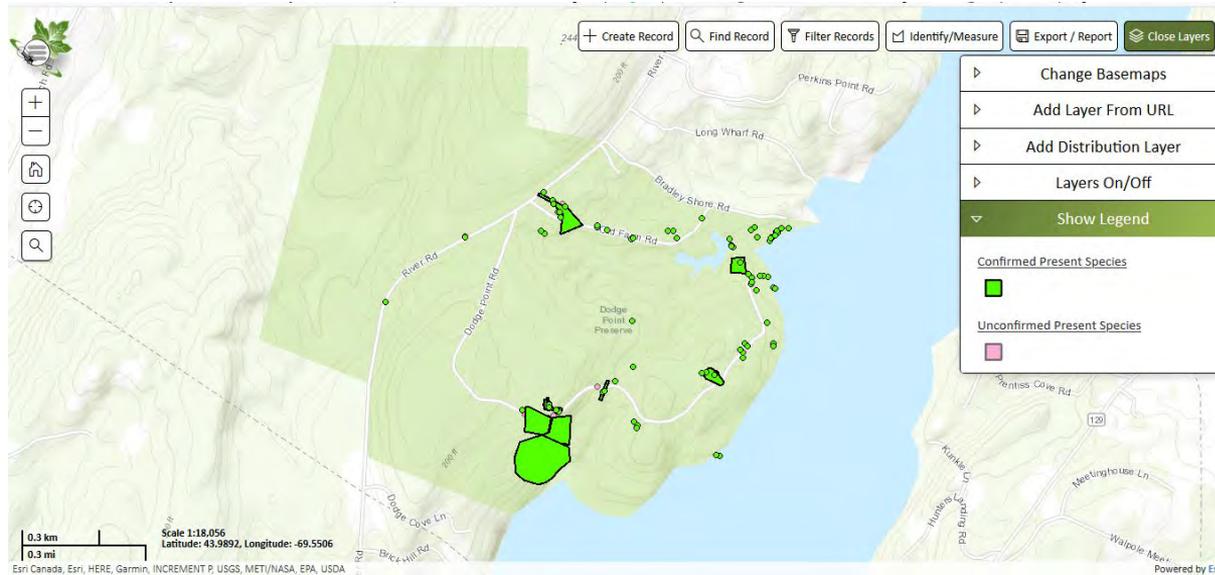
- 1) Do you have any invasive plants on the property? *(Check in Surveyor - Check if they have or state if any available information for nearby properties)*
- 2) If so, what species and where, and what are your top priorities for invasive species management?
- 3) Have there been any recent timber harvest on your property?
- 4) Do you have any planned timber harvest occurring in the near future?
- 5) Are there old mill or log skid trails in the woods?
- 6) Are there areas of unmanaged old fields that are overgrowing forest?
- 7) Are there any naturally forested sensitive areas (i.e. old glades, white pine, hemlock)?
- 8) Are there wetlands? *(Indicate forested wetland and non-forested wetland)*
- 9) Are there tracks (e.g., snowmobile or ATV) or roads, roads on or abutting the property?
- 10) Are there any unusual or special natural areas on the property? *(e.g., fire scar tree species, tree standing habitat, etc.)* *(Check in Surveyor - Check Agreement with their online map viewer)*
- 11) Any areas of soil disturbance? *(Any activity that requires soil such as clearing land for fields, recent building, removal of soils, gravel, sand, etc.)*
- 12) Have you (or previous owner) had any fire or soil brought in?
- 13) Is there anything else you would like us to know about the property? *(Check on a map that are important to you for any reason.)*
- 14) Is your signature required or do you have any limitations on public use of the vehicle use in management of natural areas?

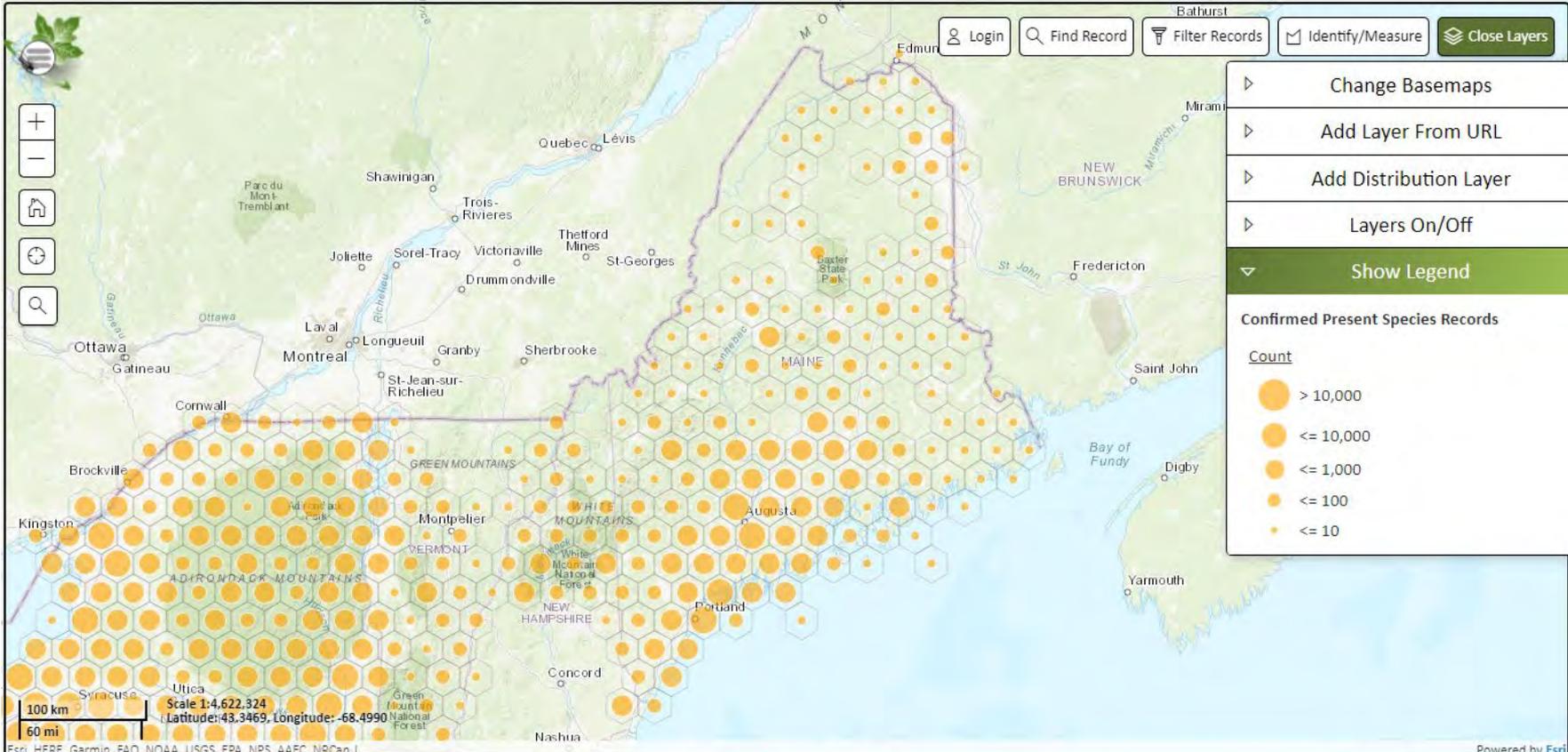
Example property

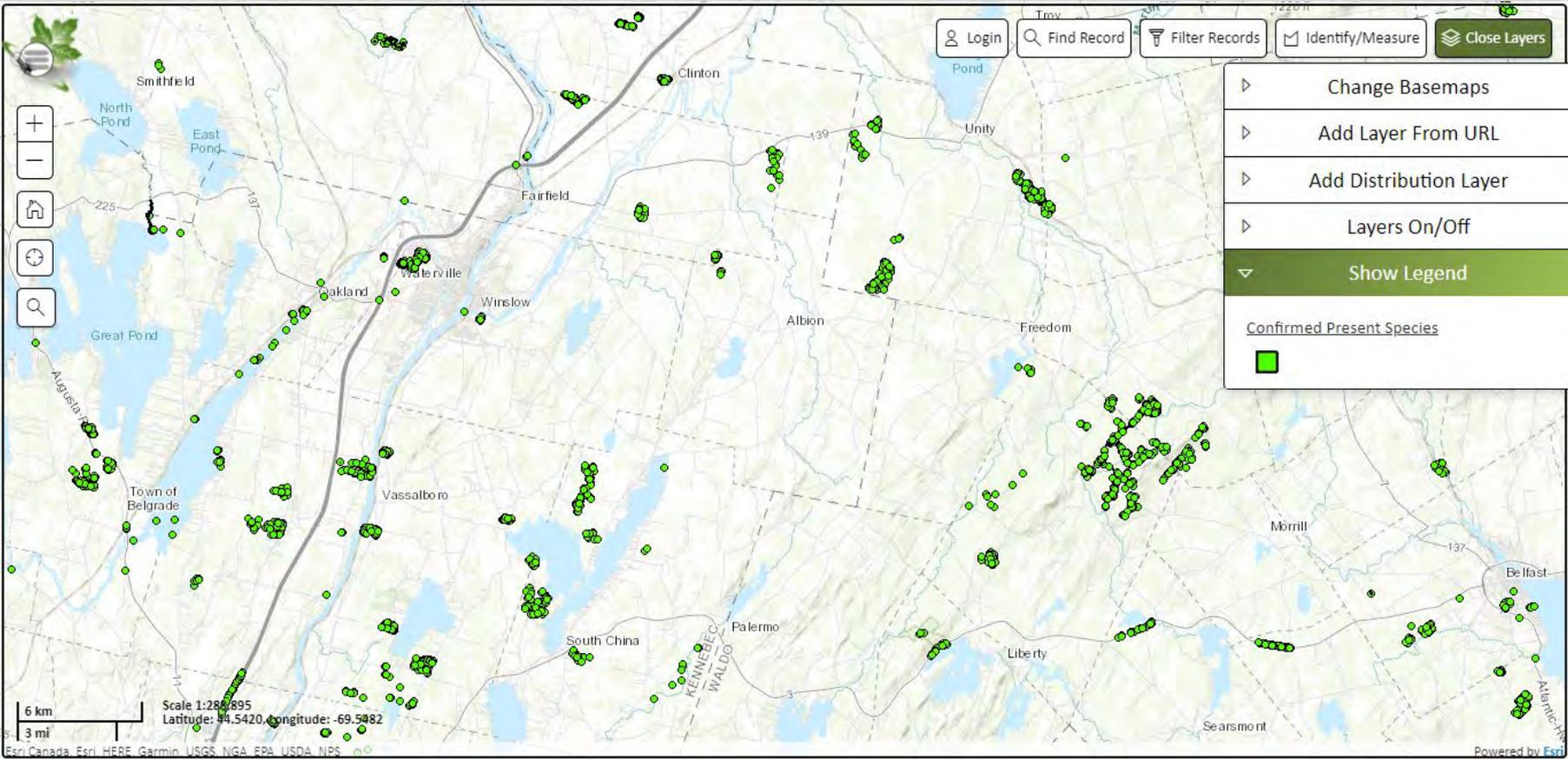


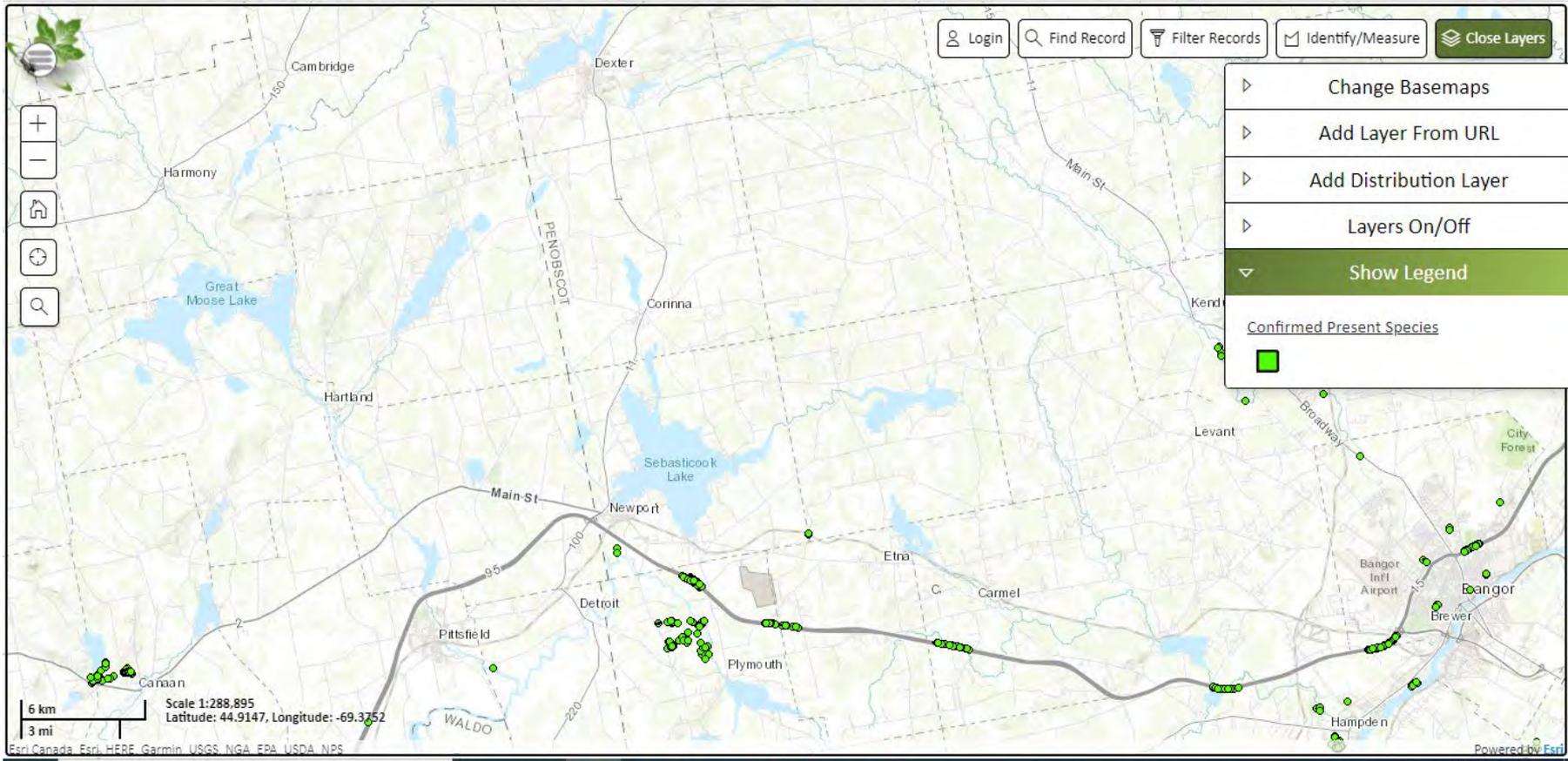
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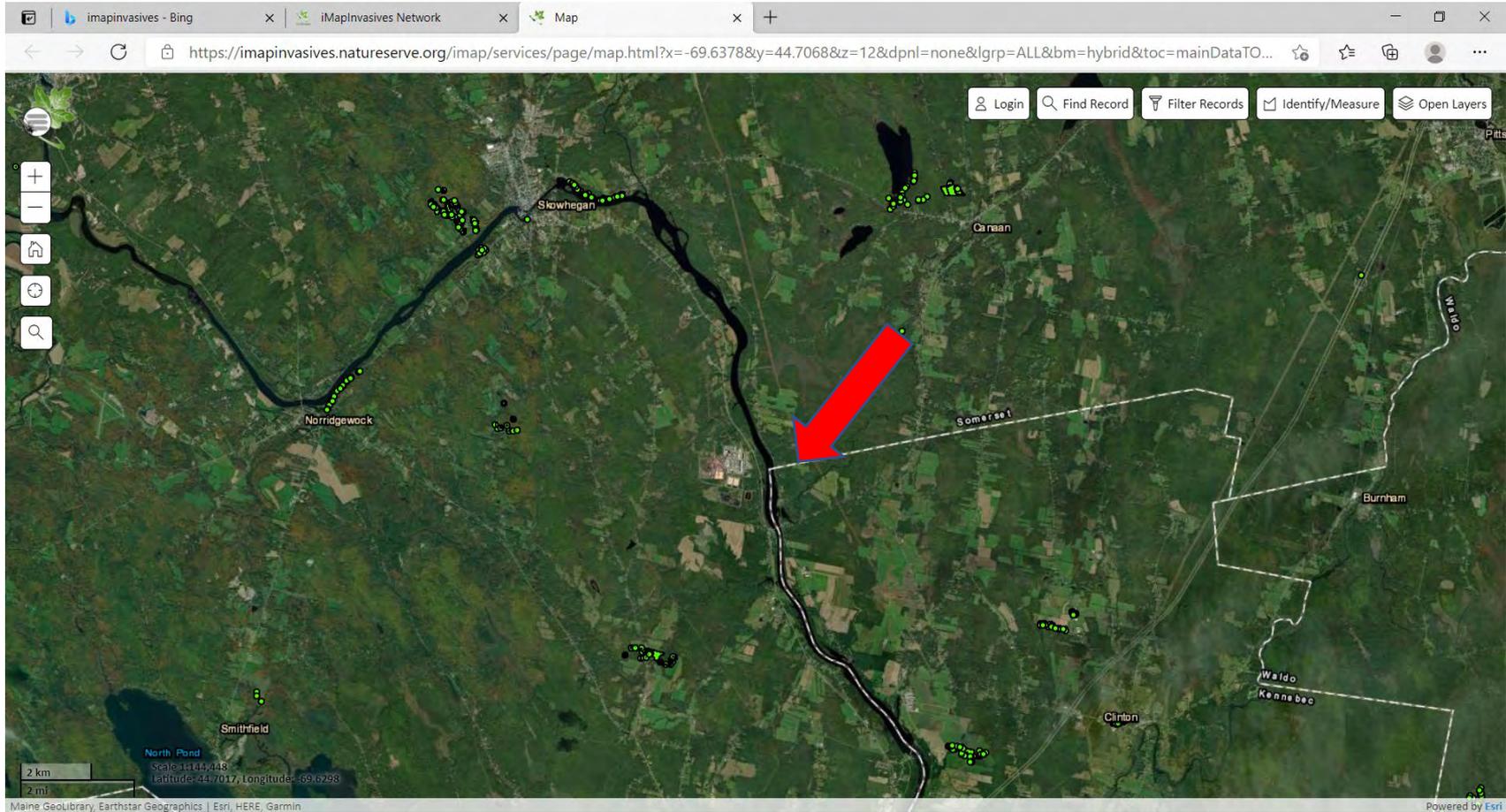
2. Check iMapInvasives for data in area











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3. Check Beginning With Habitat online map viewer
<https://webapps2.cgis-solutions.com/beginningwithhabitat/>

Map Viewers

Riparian habitats



Map 1- Riparian Habitats

Beginning with Habitat Map 1 depicts major surface water features and drainage areas, associated shoreline habitats and riparian zones, and aquifers and wells that supply public drinking water.

[Open Viewer](#)

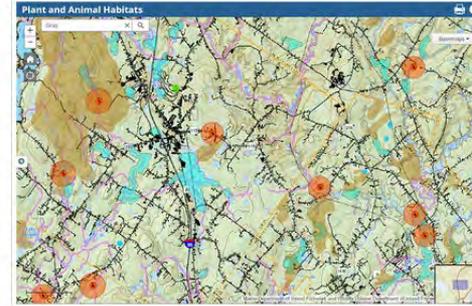


Map 3- Conserved Land and Undeveloped Habitat

Beginning with Habitat Map 3 depicts the State of Maine's conserved lands database including lands in federal, state, and nonprofit ownership.

[Open Viewer](#)

Conserved Land and Undeveloped habitat



Map 2- Plant and Animal Habitats

Beginning with Habitat Map 2 depicts known rare, threatened, or endangered plant and animal occurrences, as well as "Significant Wildlife Habitat," "Essential Wildlife Habitat," and other important wildlife habitats.

[Open Viewer](#)

Special Plant and Animal habitats

Plant and Animal Habitats

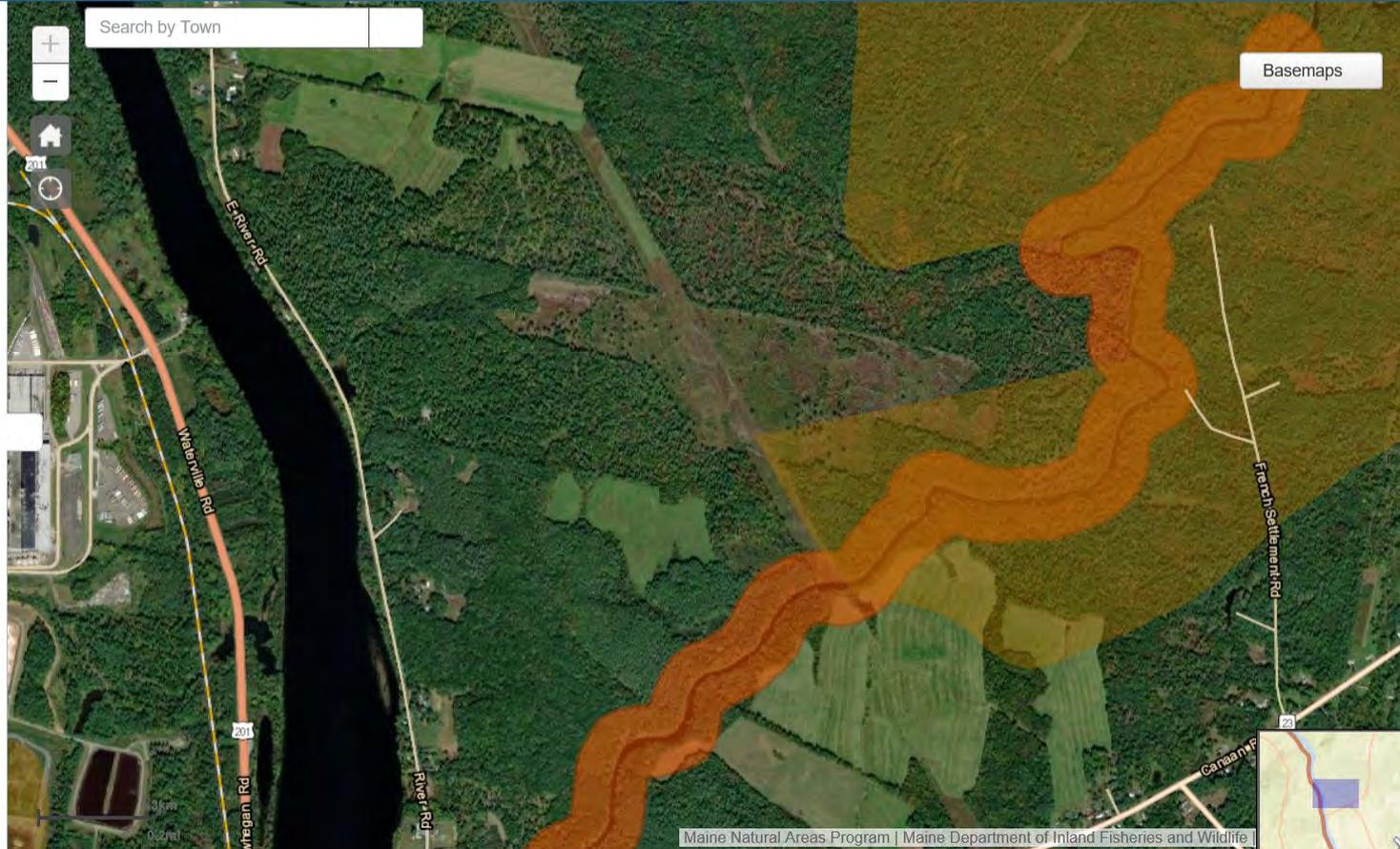


Welcome **Layers** Legend

Layer Details:
Toggle layers on and off. Layers with gray checkbox will appear once zoomed to visible scale.

- Endangered Fish Species
- Maine State Listed Plants
- Significant Vernal Pools
- Deer Wintering Areas
- Essential Plover and Tern Habitat
- Exemplary Natural Communities
- State Listed Animal Habitats
- Inland Wading Bird and Waterfowl Habitat
- Shorebird Habitat
- Seabird Nesting Islands
- Shellfish Beds
- Tidal Wading Bird and Waterfowl Habitat
- Atlantic Salmon Spawning Habitat
- Atlantic Salmon Rearing Habitat
- Wild Brook Trout Habitat

Hover:
 Check this box to enable your mouse to hover over features on the map. Click on the feature to identify more information.



Conserved Land and Undeveloped Habitat



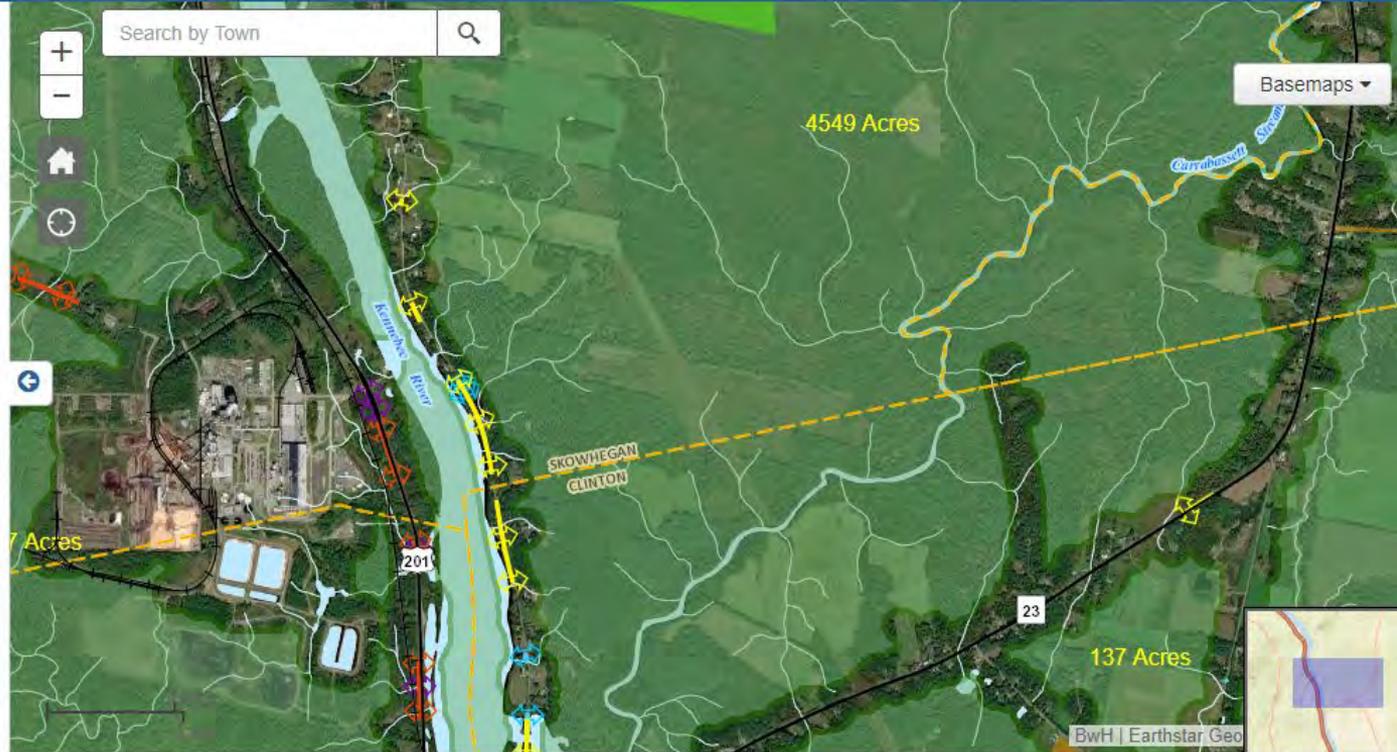
Welcome **Layers** Legend

Layer Details:

Toggle layers on and off. Layers with gray checkbox will appear once zoomed to visible scale.

- Maine Conserved Lands ☰
- Conserved Lands Ownerships ☰
 - Federal
 - Municipal
 - Water Dist., etc.
 - Private
 - State
- Conserved Lands Easements ☰
- Focus Areas ☰
- Undeveloped Blocks ☰
- Block Connectors ☰
- Riparian Connectors ☰
- Highway Bridge Connectors ☰
- Developed Land ☰

Hover:



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4. Review maps: aerial photos, topos, digital imagery (ex. Google Earth)

Map Interface Elements:

- Top Bar:** Login, Find Record, Filter Records, Identify/Measure, Close Layers
- Right Menu:**
 - Change Basemaps
 - Add Layer From URL
 - Add Distribution Layer
 - Layers On/Off
 - Show Legend
- Map Labels:** SOMERSET CO, KENNEBEC CO, LINTON, MAINE, Kennebec RIVER, ROAD, Gravel Pit, ROAD, DISTAFORSON ROAD, 176, 206, 195, 180, WI 175, 202T, 207T, 3-243, 222T, BM 124 rd cr 124 WI 112, B-17
- Scale:** 1:18,056, Latitude: 44.7000, Longitude: -69.6228
- Scale Bar:** 0.3 km, 0.3 mi
- Copyright:** © 2013 National Geographic Society. i-cubed
- Power:** Powered by Esri

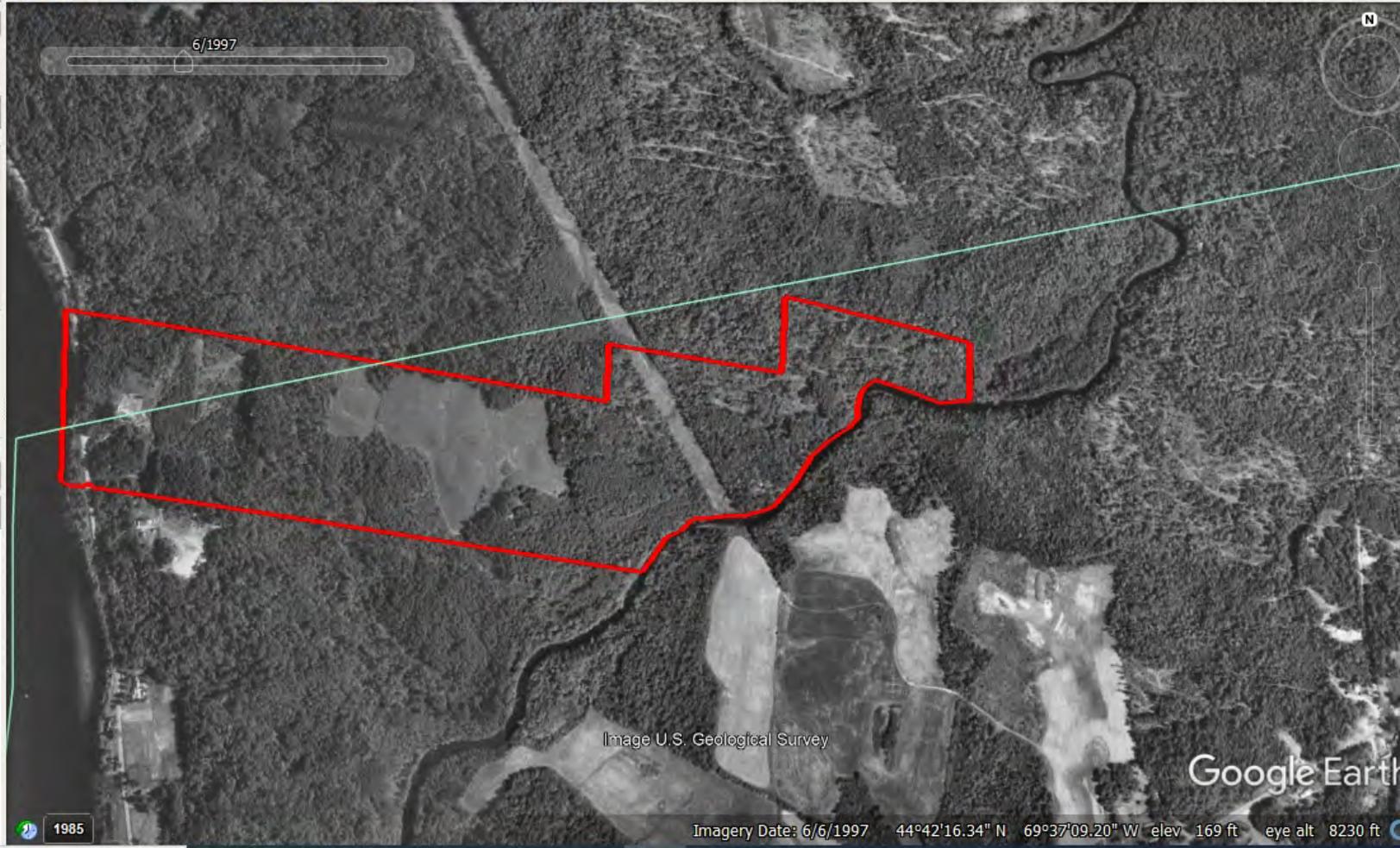


Image U.S. Geological Survey

Google Earth

1985

Imagery Date: 6/6/1997 44°42'16.34" N 69°37'09.20" W elev 169 ft eye alt 8230 ft



12/2003



Image © 2021 Maine GeoLibrary

Google Earth

1985

44°42'09.83" N 69°37'35.88" W elev 184 ft eye alt 8230 ft

9/2007
1985 2018

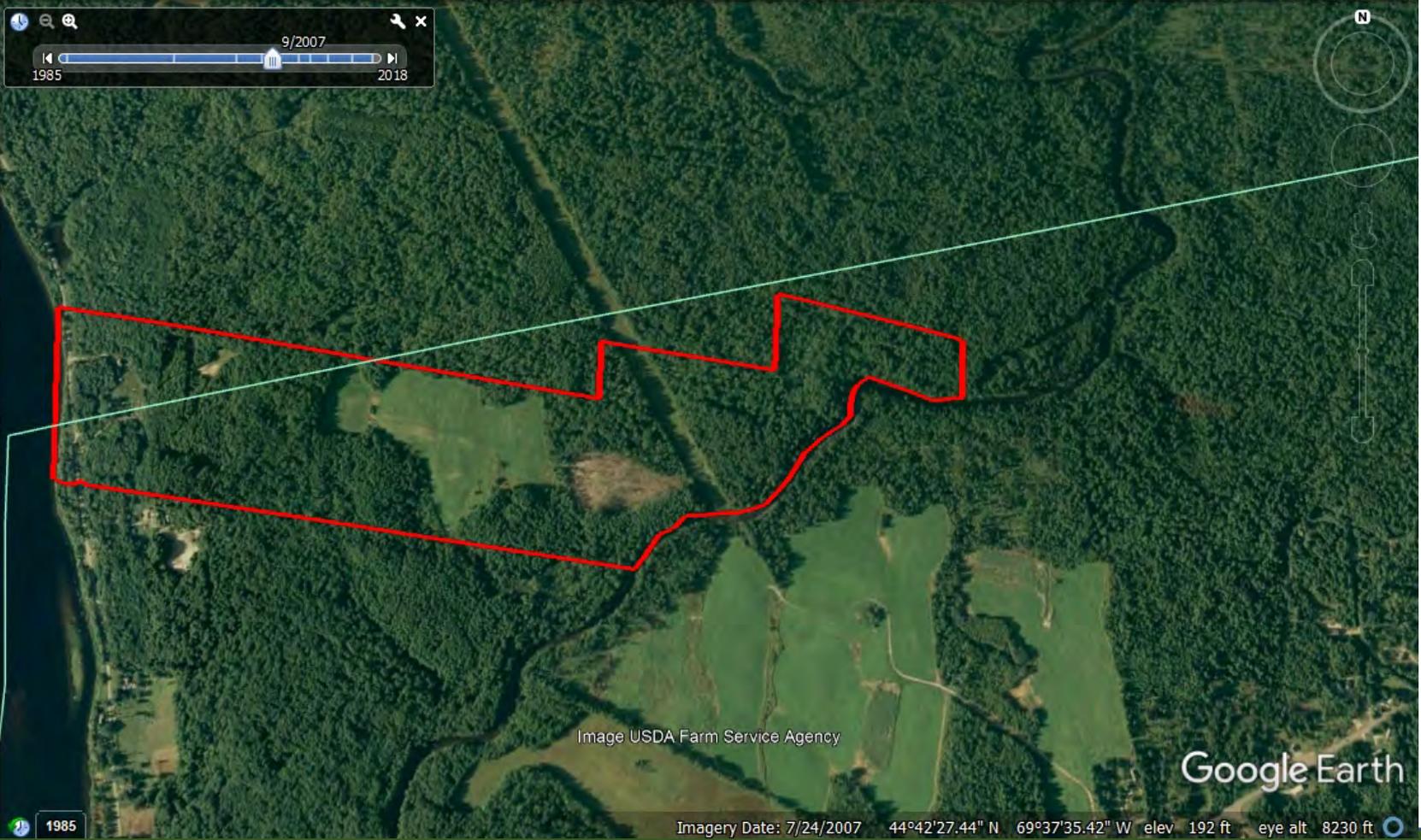


Image USDA Farm Service Agency

Google Earth

1985

Imagery Date: 7/24/2007 44°42'27.44" N 69°37'35.42" W elev 192 ft eye alt 8230 ft

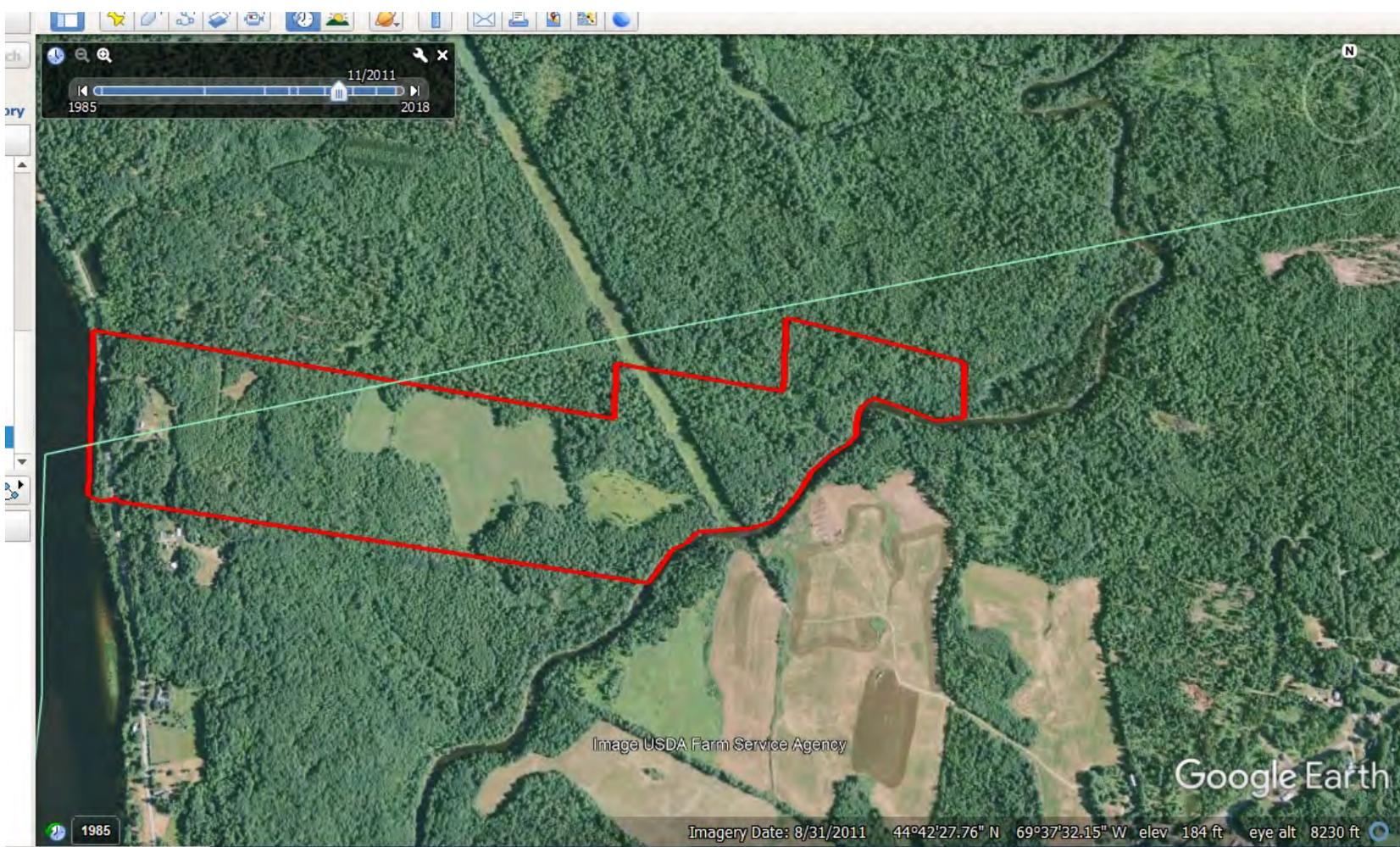
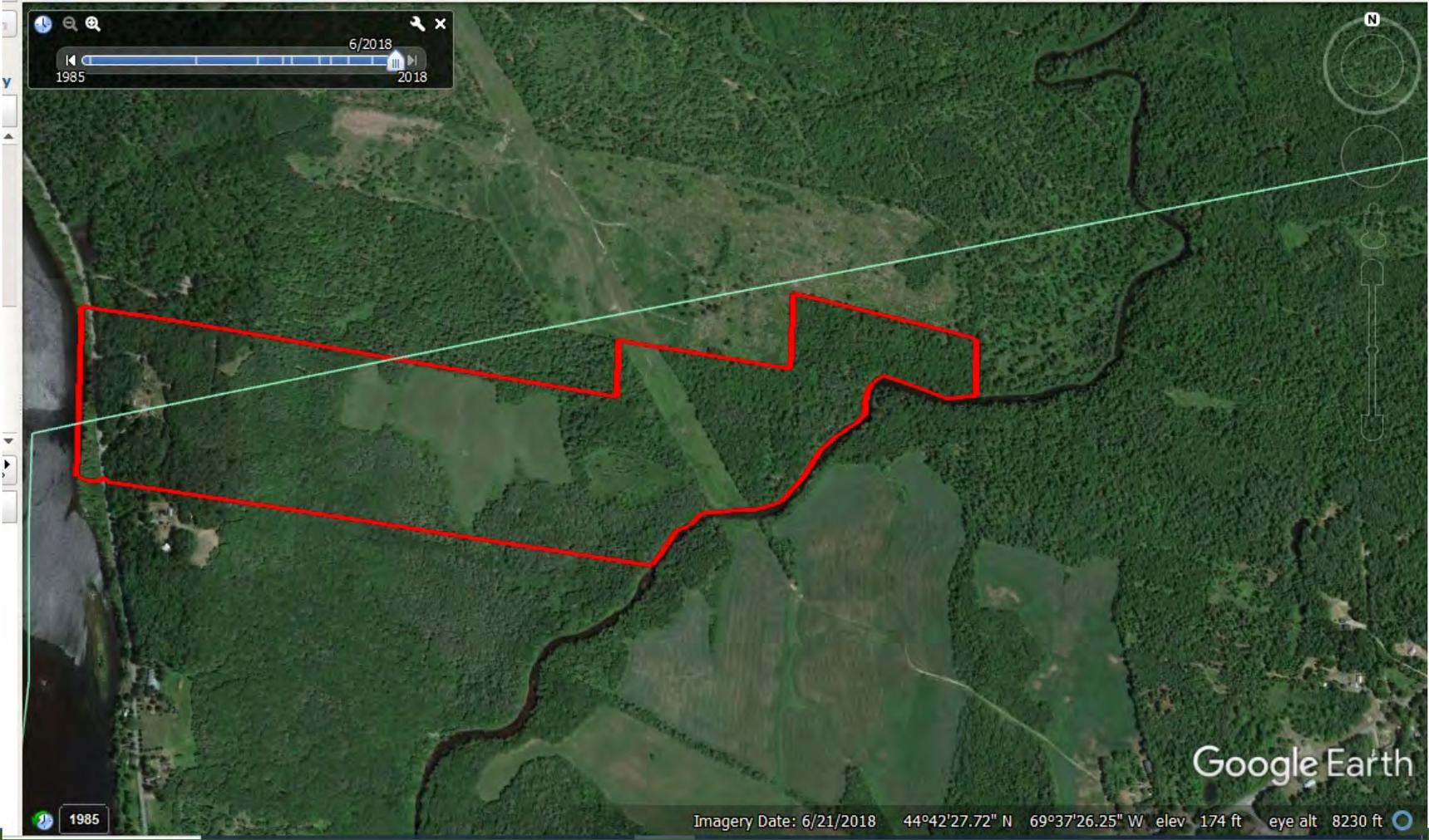


Image USDA Farm Service Agency

Google Earth

Imagery Date: 8/31/2011 44°42'27.76" N 69°37'32.15" W elev 184 ft eye alt 8230 ft



6/2018
1985 2018

Google Earth

Imagery Date: 6/21/2018 44°42'27.72" N 69°37'26.25" W elev 174 ft eye alt 8230 ft

How to survey a property - prep

5. Create priority lists of Highly Probable Areas and High-Quality areas to survey

Highly Probable areas:

- Utility ROWs
- Field edges
- Hedgerows
- Old logging landings
- Road/Trail system
- Old homestead locations
- Current homestead location
- Evergreen stands/plantations

High Quality areas:

- Riparian Zones
- BWH features
- Forest interior

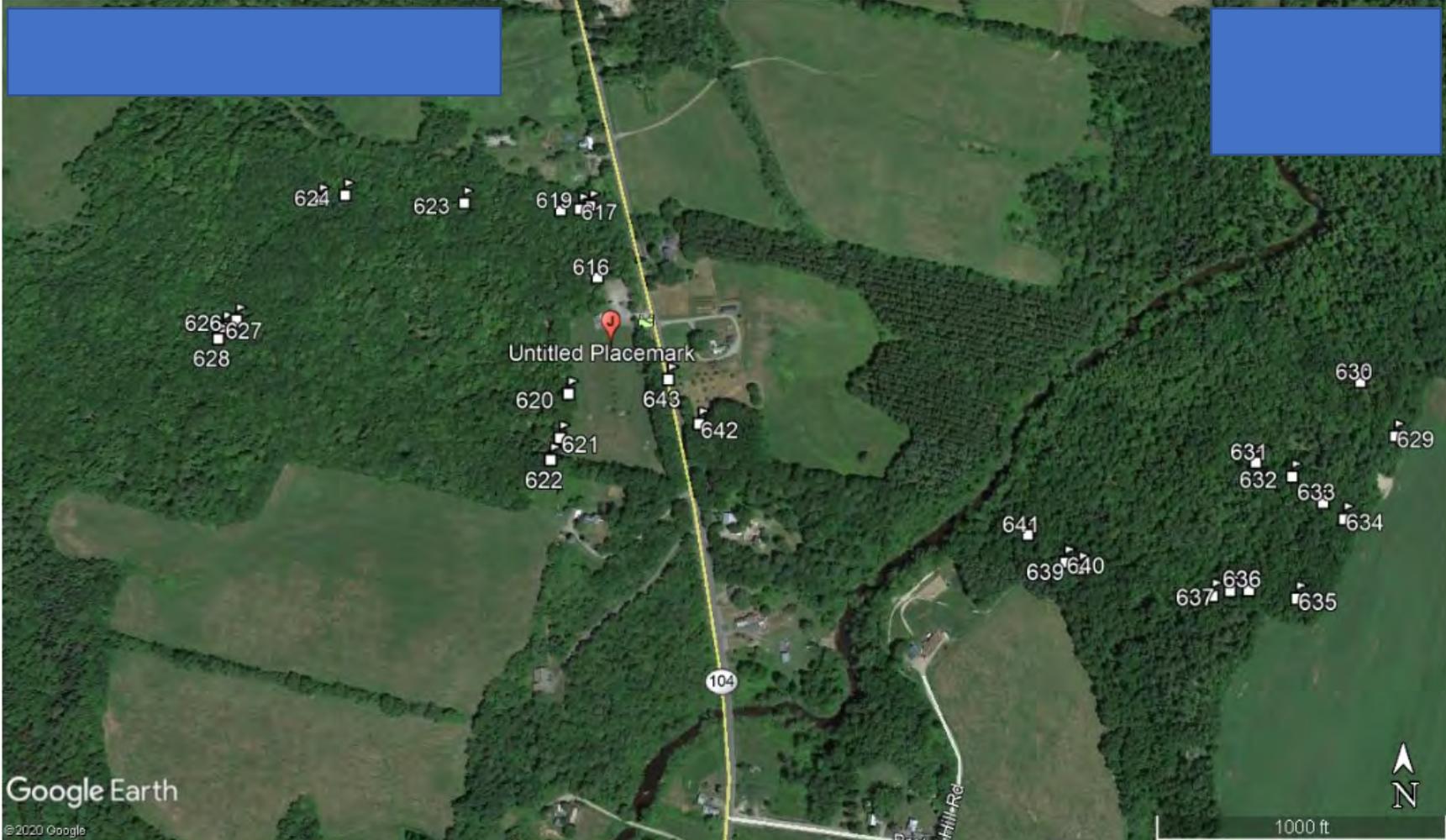
How to survey a property - prep

6. Determine property boundary and create field maps

- a. *Tax Map Imagery – Town websites, MEGIS Layers (Organized and Unorganized Townships)*
- b. *Property Owner Information – existing survey, forest management plan, marked boundary lines*

How to survey a property - onsite

1. Drive or walk any road frontage on the property
2. Different methods may be used, i.e., high priority areas vs grid search, etc.
3. Realistic minimum mapping unit
4. Points vs polygons vs lines (use buffers)
- *percentage cover/plant age/species mix*
5. Keep a track of the survey route as it is required for mapping and verification of survey



Google Earth

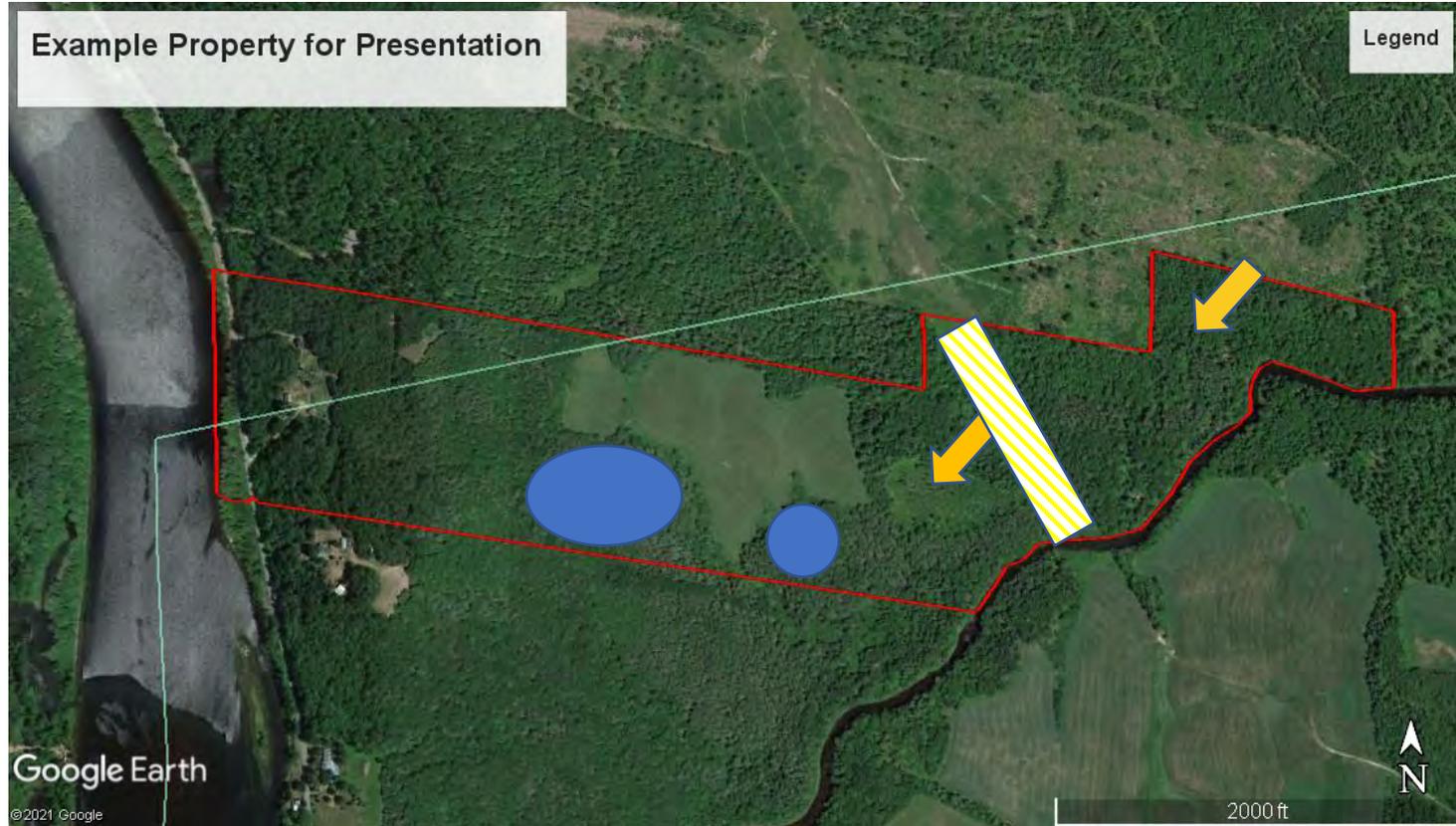
© 2020 Google

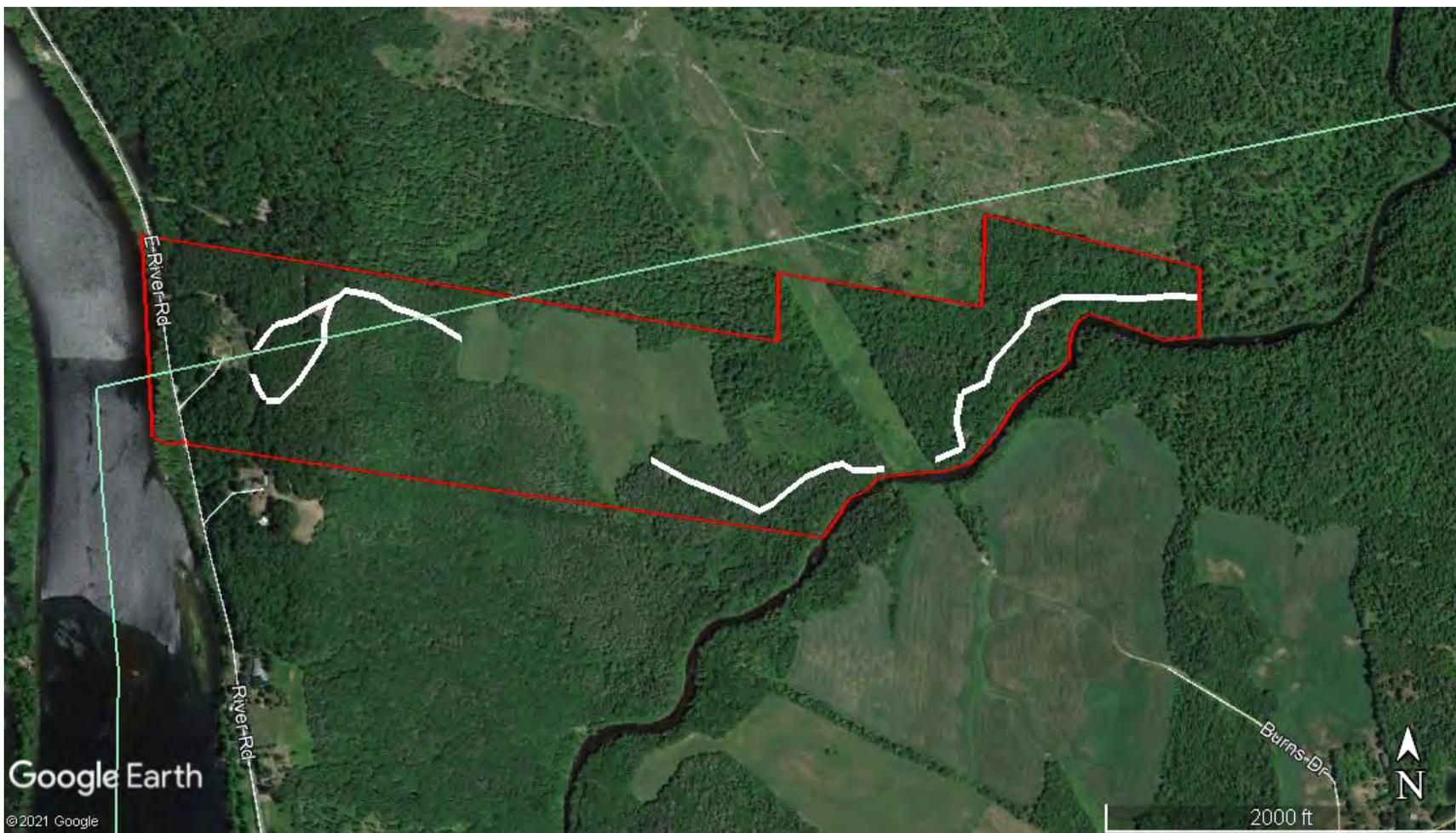


How to survey a property - onsite

6. Check identified highly probable and high-quality areas
7. Ensure that minimum survey time (based upon acreage and infestation level) is met
8. Flag example species of invasive plants found and/or isolated occurrences, edges of occurrences, etc. to assist in re-locating for treatment. Ask landowner prior to survey if they would like this.

Example property





Google Earth

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Minimum Survey Time Guidelines

Table 1. Minimum survey effort based on 100-250 acres/qualified FORP/day (refer to program manual for more detail)

Level of Infestation	Acres	50	100	150	200	500
Low		2-4 hours	4 hours	6 hours	8 hours	20 hours
Medium		3-4 hours	5-8 hours	7-12 hours	9-16 hours	22-32 hours
High		4+ hours	8+ hours	12+ hours	16+ hours	32+ hours

Marking Invasive Plants



1. Marking isolated occurrences
2. Marking edges of infestations (polygons, hedgerows, etc)
3. Marking example plants for landowner (if requested)



Thank You!

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