2019 Griffy Lake Aquatic Vegetation Management Plan Review and Update

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LARE Review

- State funds received from boat registration fees
- Administered by IDNR/DFW/Lake & River Enhancement Program (LARE)
- Funding for control of <u>invasive aquatic plants</u>, sampling, and plan update
  - Traditional grant requires 20% sponsor match (Bloomington receives this level for Invasive species control at Griffy Lake)
  - Maintenance grants require 50% sponsor match
  - Received $11,600 for treatment of EWM and AVMP update this year

Aquatic Plant Ecology Review

- Most aquatic plants occur naturally in lakes
  - Sunlight
  - Proper Substrate
  - Nutrients
- Most aquatic plants are beneficial to your lake
  - Reduce erosion
  - Cover for fish and invertebrates
  - Improve water quality/clarity
  - Food for waterfowl
- Some species can lead to nuisance conditions or create ecological problems

Eurasian watermilfoil (EWM)
Myriophyllum spicatum

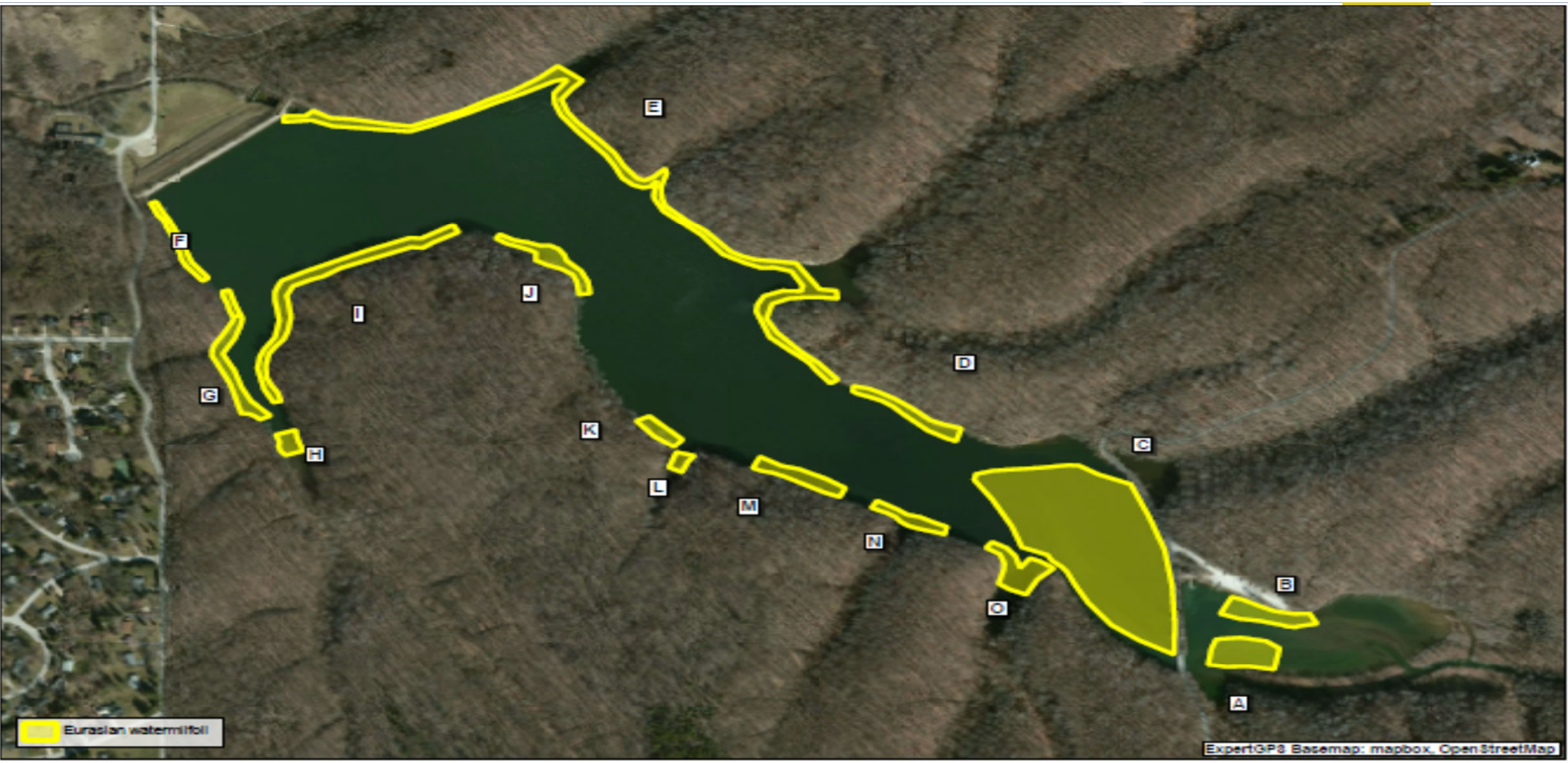
- Invasive non-native submersed plant
- Competes with native species for space and light
  - Grows up to 13.5 inches per day
- Spreads through fragmentation
- Can be detrimental to ecosystem
  - No value as food source
  - Out-compete native vegetation
  - Decreases forage space of predatory fish (musky, LMB)

Griffy Lake Plant Management History

- Milfoil weevils stocked in early 2000's
- Brazilian elodea eradication treatments 2006 & 2007
  - Signage posted at ramp
  - Education effort
- Curlyleaf pondweed treatments in 2008
- Eurasian watermilfoil treatments in 2009
- Dredging and lake lowering 2010
  - No EWM treatments 2010-2015
  - EWM treatments resumed 2016-present
    - Limited to use of Navigate granular 2,4-D

2019 activities

- 2 surveys
  - Spring Invasive survey
  - Late summer Tier 2/invasive
- Spring Survey (May 13)
  - 23 acres EWM
  - Approval for use of new herbicide (ProcellaCOR)
    - EPA reduced risk classification
    - Greatly reduced application rates and amount of product
    - 2016-2018 applied 2,100 lbs. Navigate (400 lbs active ingredient)
      - Results were less than ideal (8-22% frequency of occurence EWM in Late summer survey)
    - 2019 applied 185 PDU (4.6 gallons) ProcellaCOR (0.96 lbs active ingredient)
      - Excellent results (4% occurrence of EWM by late summer)



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Est. 1966

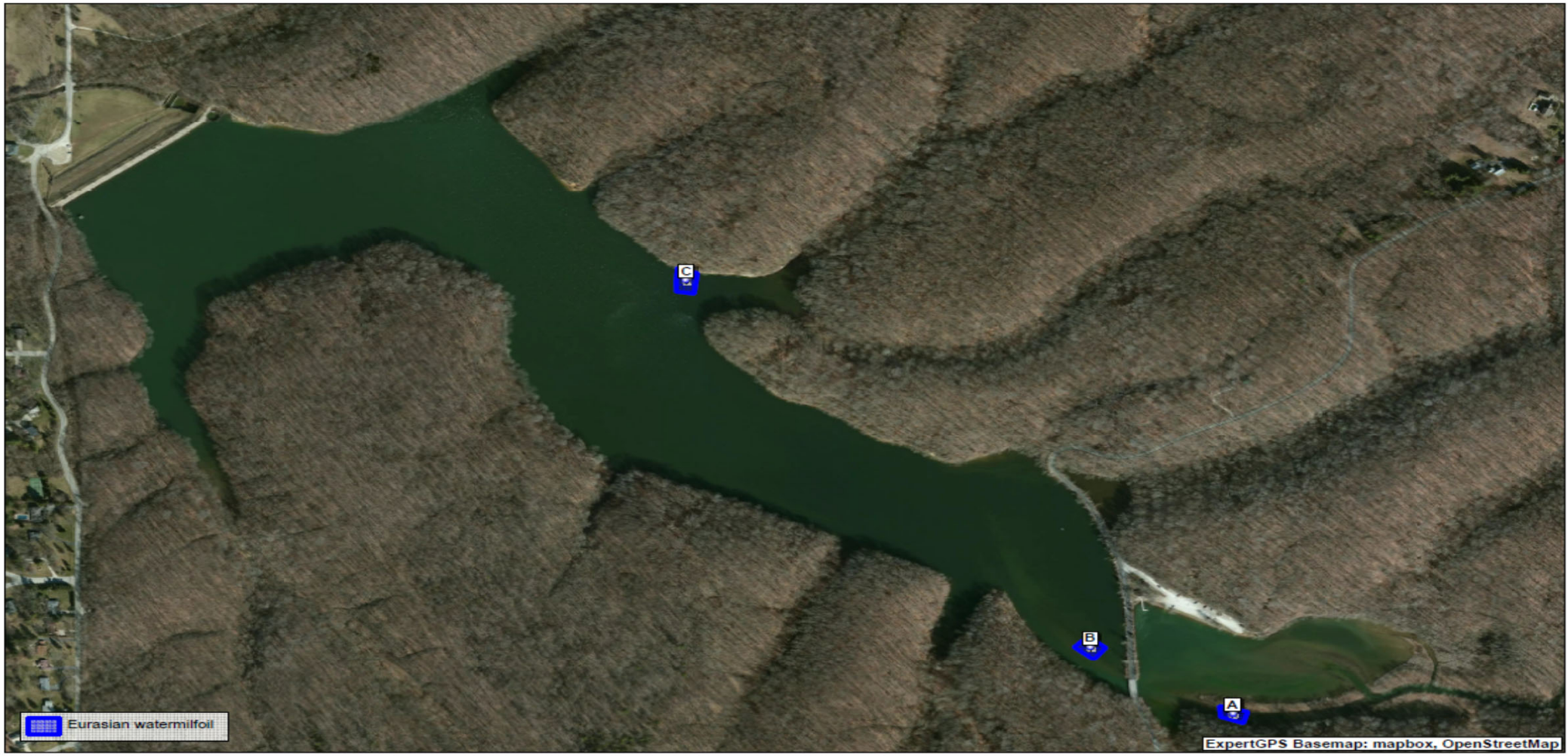
2019 Griffy Lake Treatment Map

500 ft

MN
4°29'

Summer 2019 Tier 2 survey

- Completed July 29
- EWM coverage estimated 0.3 acres, 4% frequency of occurrence (<10% is goal)
- Coontail was most common native (38%)
- Secchi of 4.5'
  - Much lower than normal
  - Algae bloom



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Est. 1966

Griffy Lake Tier 2 Survey Points

250 ft

MN
4°29'

Recommended Future Actions

- Continue with surveys
  - Invasive survey spring & summer (potentially LARE funded)
    - Summer survey 1 month after treatment
  - Tier 2 late summer (potentially LARE funded)
- Spring invasive EWM treatment with selective/systemic EPA approved aquatic herbicide
  - Earlier treatment helps selectivity
  - Cost/acre will be similar, but acreage should be reduced
- Continue with public meetings and plan updates (potentially LARE funded)
- Continue to work to improve shoreline stabilization and watershed improvements (potentially LARE funded)
- Monitor boats entering and leaving lake

Remaining LARE Program Steps

- Permit meeting with LARE/permit biologist?
  - Done over email in the past
- Draft Aquatic Vegetation Management Plan due Nov. 15
- Submit grant application by Jan 15
- Submit permit application by Feb. 1
- LARE awards grants in late Feb/early March
- Send out bid requests in March
- Decide on contractor by late March/early April

Questions?

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