Opening the Burn Window in Northeast Wisconsin

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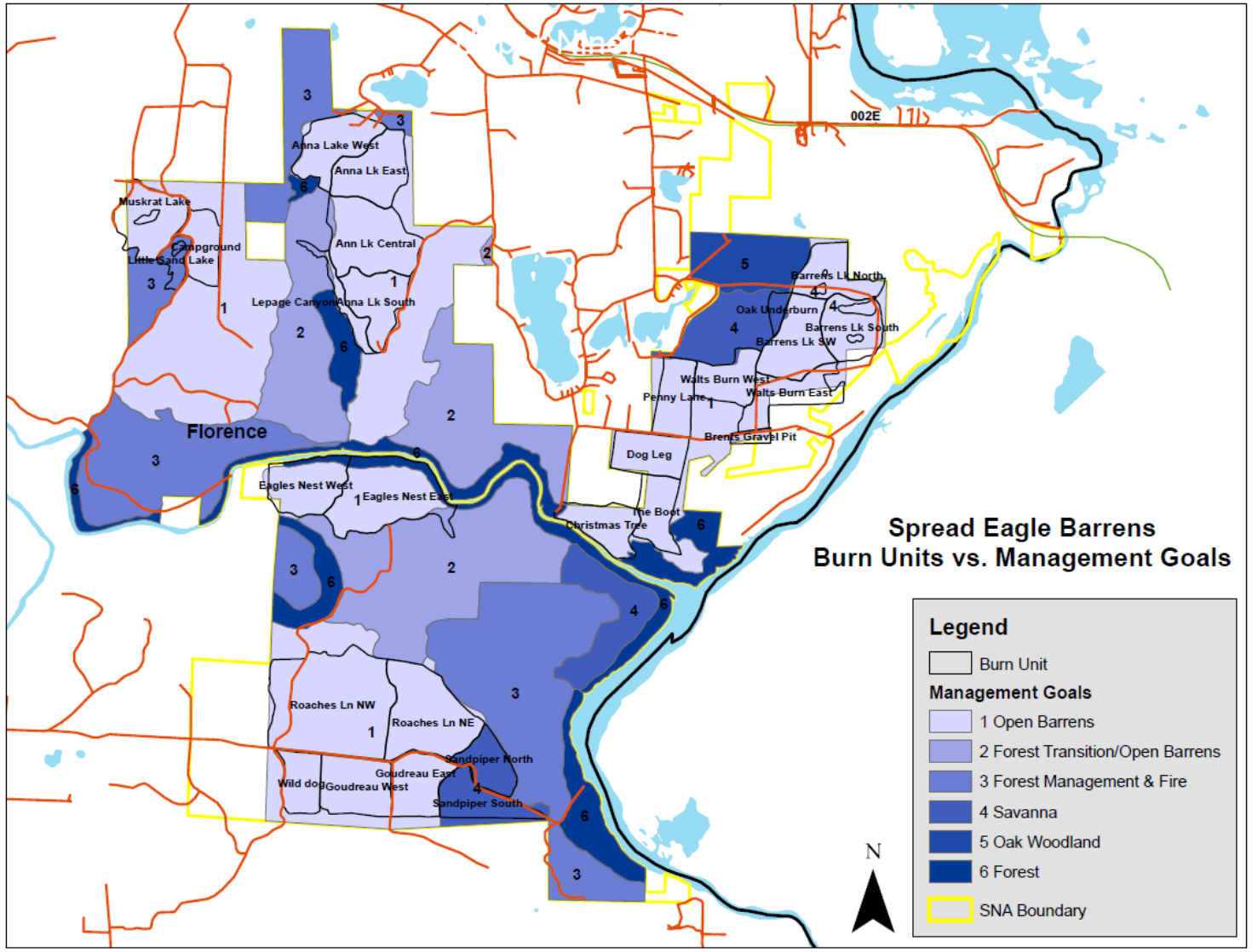
Spread Eagle Barrens State Natural Area




Nick Anich, WDNR

A History of Burning

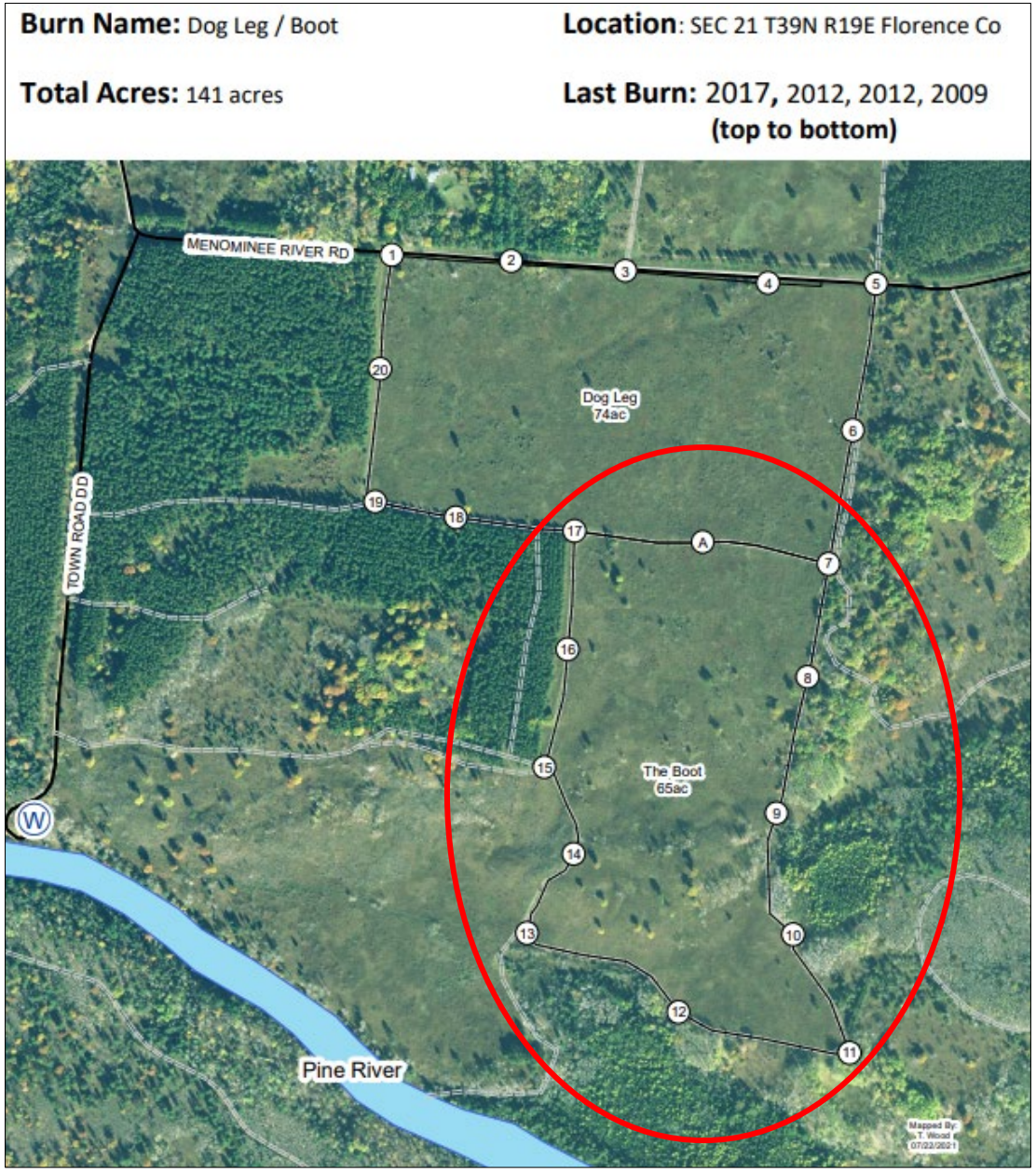
- Barrens management dates back to the 1950's
- First prescribed fire: 1957
- 1979 marks start of regular prescribed burning
- Since then, 104 burns, ave. 250 ac/yr
- Late May – Early June

Expanding the Burn Window

- Logistic objectives
  - Burn more acres annually
  - Account for reduced opportunities in spring/early summer
- Ecological objectives
  - Reduce impacts on sensitive species
  - Improve woody vegetation control
  - Increase species diversity

Planning

- Keep it ‘easy’
- Ecological Objectives
  - Top-kill 25-50% woody vegetation
  - Reduce surface fuels >50%



Prescriptions

- Temp Range- 40 to 80 degrees F
- Winds- 4 to 15 mph
- RH- 15 to 70%
- 1 hr. fuel moisture- 5 to - 15%
- 10 hr fuel moisture- 7 to 20%
- Mixing Heights- 4300 ft
- Surface Rate of Spread- 0 to 80 ch/hr
- Flame Length- 2 to 10 ft

Implementation

Burn Boss	Henry Sullivan (8X)

Right Flank	
Ignition Specialist	Sam Blake (6x)
trainee	Garrett Lubbers (FRB)
Torch	Landin Brockman
Torch	Carly Lapin
Tractor Plow with water	John Lemanski

Left Flank	
Ignition Specialist	Tyler Wood (6x)
trainee	Melissa Scheuerman
Torch	Mason Marvin
Torch	Matt Rovers
Tractor Plow with water	Paul Veirauch

Interior Ignitions	
Ignition Specialist	Bruce Djupstrom
torch	Jim Ivacko
torch	Craig Lietzke

Holding	
Holding Boss	Jordon Westrick (6x)
trainee	Kendra Preusser
UTV	Landin Brochman
UTV	Derrick Sams

Results – Day of Burn

- Mixing heights are not as high in summer. We need to look at this this value closer to see if it is appropriate.
- Spring burns – perimeter firing is the way to go on this property.
- Summer burns will require interior ignitions on this property.
- Rates of spreads can be significantly slower. Not able to burn as many acres in a day.
- The burn was conducted in a successful manner. We were not sure if we succeeded in meeting burn objectives.

Results – Post-Burn

- Ecological Objectives
  - Top-kill 25-50% woody vegetation
  - Reduce surface fuels >50%
  - 30% Aspen; 50% Other
  - About 60% black

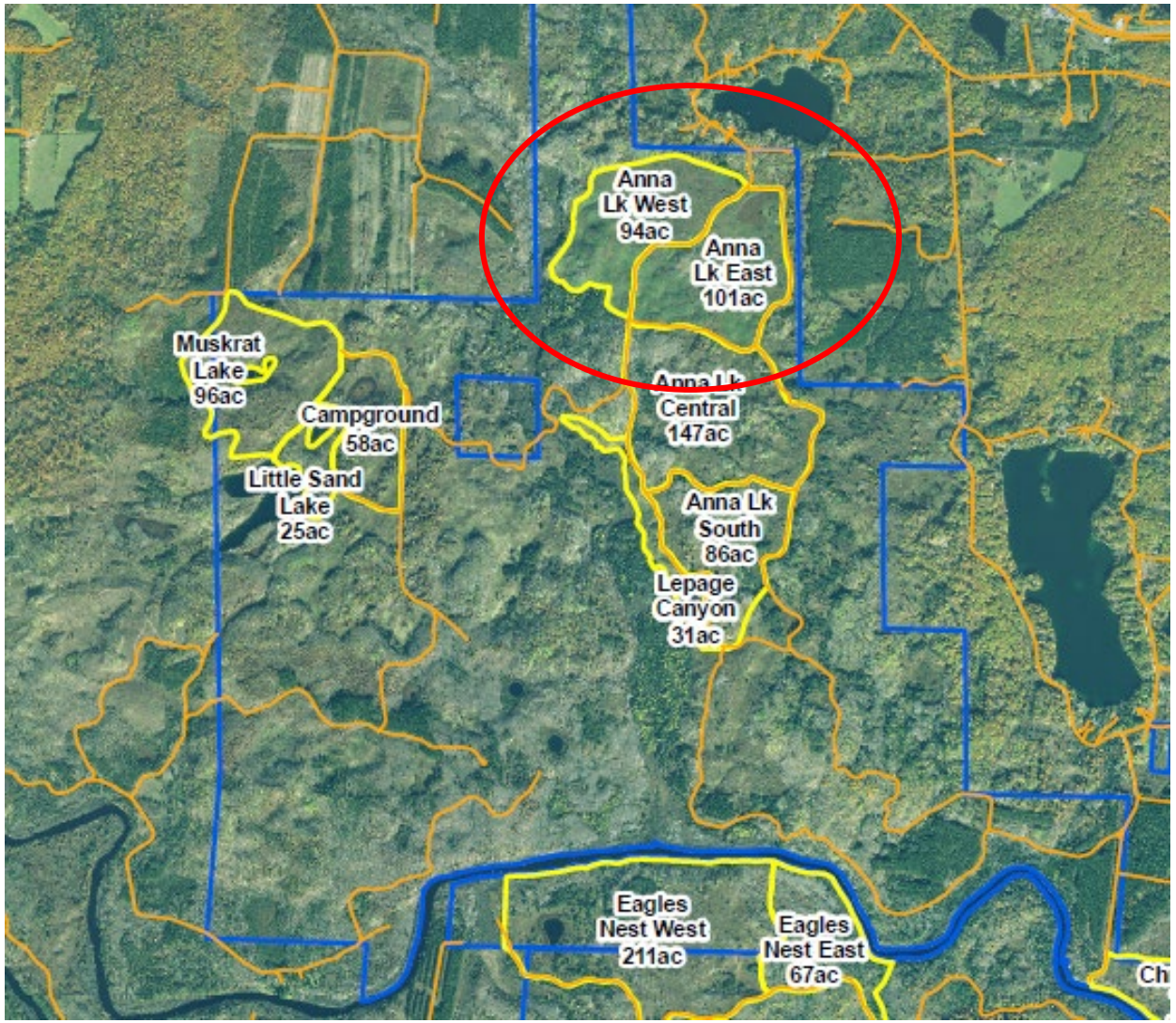
Opportunities and Challenges

- Opportunities
  - Increased opportunities to burn
  - A ‘paradigm shift’
  - Growing our understanding of how to implement and what to expect
  - Improved/diversified ecological response

- Challenges
  - Didn’t know what to expect; this is still new
  - Still don’t know what to expect for ecological response

The Future

- Growing season burn planned for 2022
- Long-term monitoring



CONNECT WITH US

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