

PEERLESS LAKE WILDFIRE PREPAREDNESS GUIDE



Prepared for:

Alberta Environment and Sustainable
Resource Development



July, 2012

The intent of this document is to provide an Incident Management Team with an overview of the planning area, fire behaviour potential, values-at-risk, and fire operations that can be utilized in the event that a wildfire threatens wildland/urban interface values at risk.

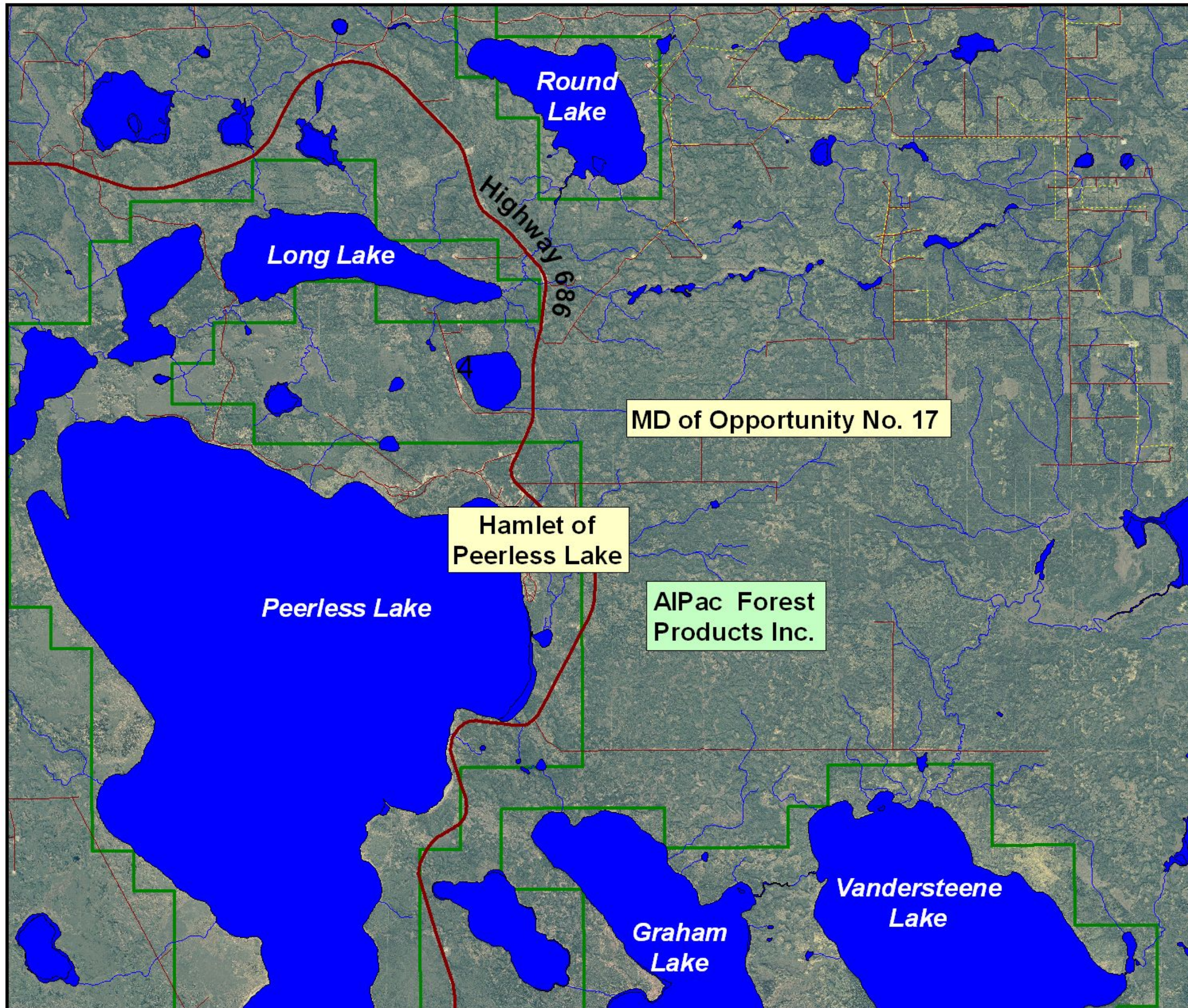
PEERLESS LAKE WILDFIRE PREPAREDNESS GUIDE

SECTION A: LOCAL AREA DESCRIPTION

A1. PLANNING AREA (MAP 1)

| FEATURE | JURISDICTIONAL AUTHORITY |
|------------------------|--|
| SRD Forest Area | Lesser Slave Area |
| Municipality | Municipal District of Opportunity Hamlet of Peerless Lake |
| Forest Management Area | ALPAC |

Map 1 - Planning Area Peerless Lake Wildfire Preparedness Guide

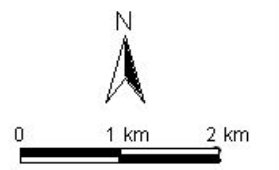


Legend

- Municipal District or County
- Main Road
- Road
- Pipeline
- Powerline
- Water Body
- Indian Reserve
- FMA or FMU Boundary

Map Produced by:

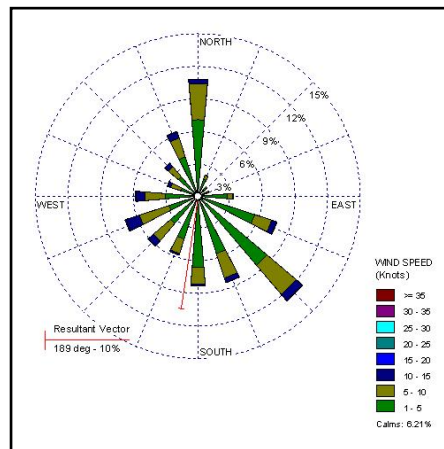
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A1. FIRE BEHAVIOUR POTENTIAL DESCRIPTION (MAP 2)

| FACTOR | DESCRIPTION |
|-------------------------|---|
| Fuels Influence | Approximately 70% of the forest fuels in the planning zone are C2 Boreal Spruce and 20% are D1/D2 Deciduous, with the remaining 10% of the area being C3 pine and grass. The northern quadrant is predominantly D1/D2. |
| Weather Influence | Wildfire spread will be dictated by the wind direction. The windrose data shows the predominant winds from the southeast quadrant, however, there will be considerable periods with winds from each of the other quadrants including the north. |
| Topographic Influence | The landscape is dominated by Peerless Lake. The area is generally flat with sloping towards Peerless Lake. Topography will not have a major affect on fire spread. The area has a western aspect. |
| Anticipated Fire Spread | <p>C2 fuels in the vicinity of the community may pose a threat. The C2 fuels have continuous runs into Peerless Lake. The community has completed areas of thinning and pruning.</p> <p>The community of Peerless Lake is at risk from spot fires originating from embers produced from wildfires in the community zone. Cured grass within the community will pose a risk in the spring and fall cured grass stage.</p> <p>There are a substantial number of fuel breaks in the zone including the Highway, powerlines, pipelines and seismic. These can be reinforced to meet the fire threat. The mulched fuel breaks to the north and east of the community are constructed to 50 meters.</p> |

Red Earth Windrose



The windrose indicates the distribution of wind direction and speed. The bars length indicates the portion of the time the wind is from a certain direction.

**Map 2 - Fire Behavior Potential
Peerless Lake
Wildfire Preparedness Guide**

Legend

- Staging Area
- ▭ Municipal District or County
- Main Road
- Road
- Pipeline
- Powerline
- Water Body
- ▭ Indian Reserve
- ▭ FMA or FMU Boundary

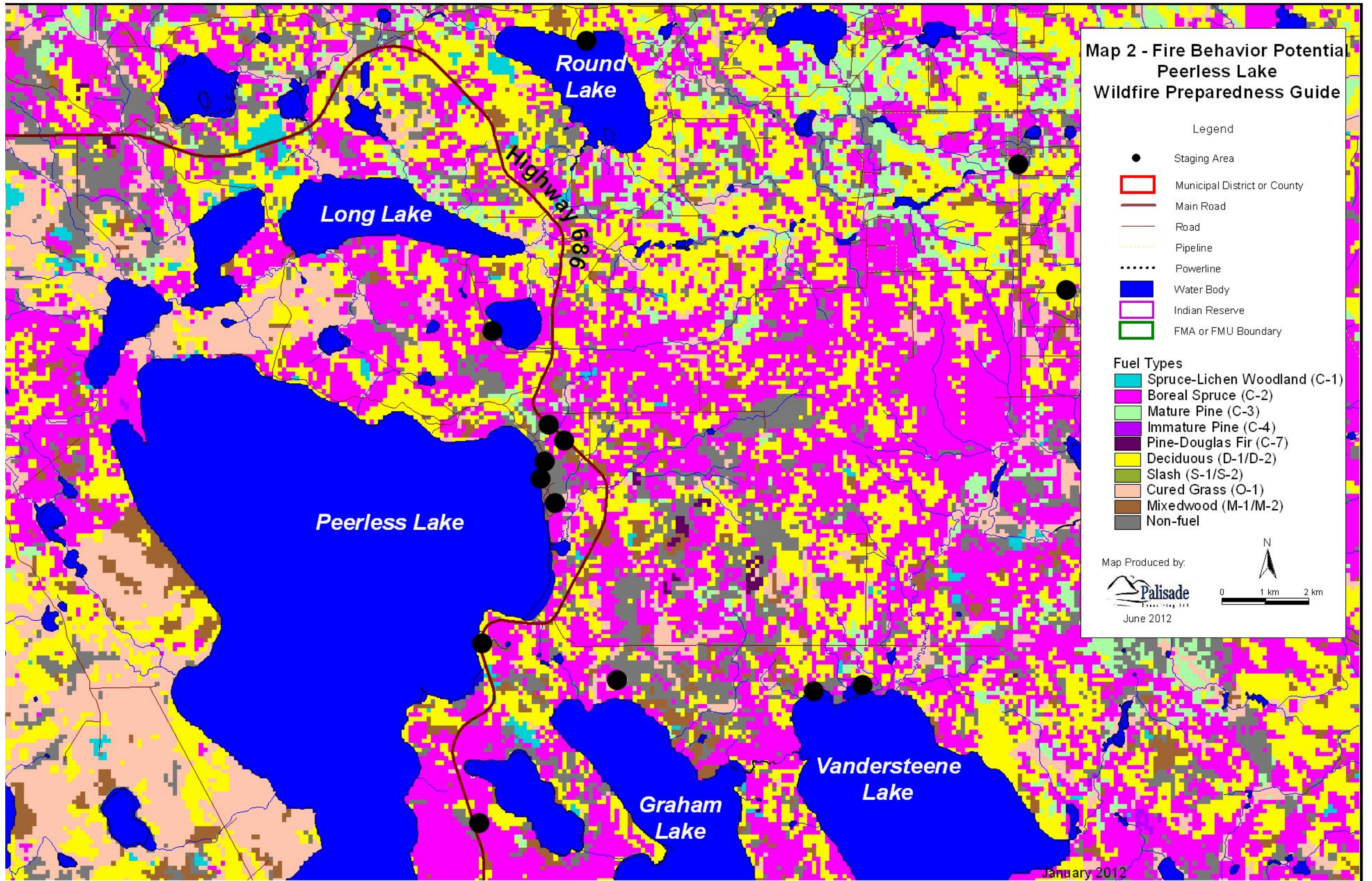
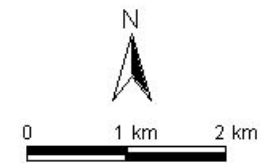
Fuel Types

- Spruce-Lichen Woodland (C-1)
- Boreal Spruce (C-2)
- Mature Pine (C-3)
- Immature Pine (C-4)
- Pine-Douglas Fir (C-7)
- Deciduous (D-1/D-2)
- Slash (S-1/S-2)
- Cured Grass (O-1)
- Mixedwood (M-1/M-2)
- Non-fuel

Map Produced by:



June 2012



January 2012

SECTION B: VALUES AT RISK (MAP 3 and 3a)

| B1- Standard Values-at-Risk | | | | |
|-----------------------------|--|-----------------------|--------------------------------|---|
| MAP# | Value Name/ATS | Value Type | Lat/Long | No. of Structures - Roof Material |
| 1 | Random Camping SE 33-89-4-W5M | Recreational Facility | N 56° 45.565' W 114° 33.723 | None |
| 2 | Sword Energy Inc Trout Mountain Oil Battery 12-22-89-03-W5M | Oil and Gas Facility | N 56° 44.000' W 114° 24.067 | Flammable gases and liquids 6- Storage Tanks 5- Metal Buildings 1- Residence and Field Office |
| 3 | Fortune Energy Inc. Oil Treatment Facility 9-10-89-03-W5M | Oil and Gas Facility | N 56° 42.442' W 114° 23.004 | Flammable gases and liquids 12- Storage Tanks 5- Metal Buildings 1- Residence and Field Office |
| 4 | Sword Energy Inc - Peerless Oil Battery 2-8-89-4-W5M | Oil and Gas Facility | N 56° 41.992' W 114° 35.867 | Flammable gases and liquids 7- Storage Tanks 2- Metal Buildings |
| 7 | Peerless Lake School SW 33-88-4-W5M | Other | N 56° 40.372' W 114° 34.710 | 1-Non Combustible 8-Propane Tanks |
| 10 | East Peerless Provincial Recreation Area- Red Earth Gun Club NW 17-88-4-W5M | Recreational Facility | N 56° 38.135' W 114° 36.137 | NONE |
| 11 | Random Camping SW 15-88-4-W5M | Recreational Facility | N 56° 37.674' W 114° 33.128 | NONE |
| 12 | Cabin Site SW 18-88-3-W5M | Cabin | N 56° 37.519' W 114° 28.727 | 2-Combustible |

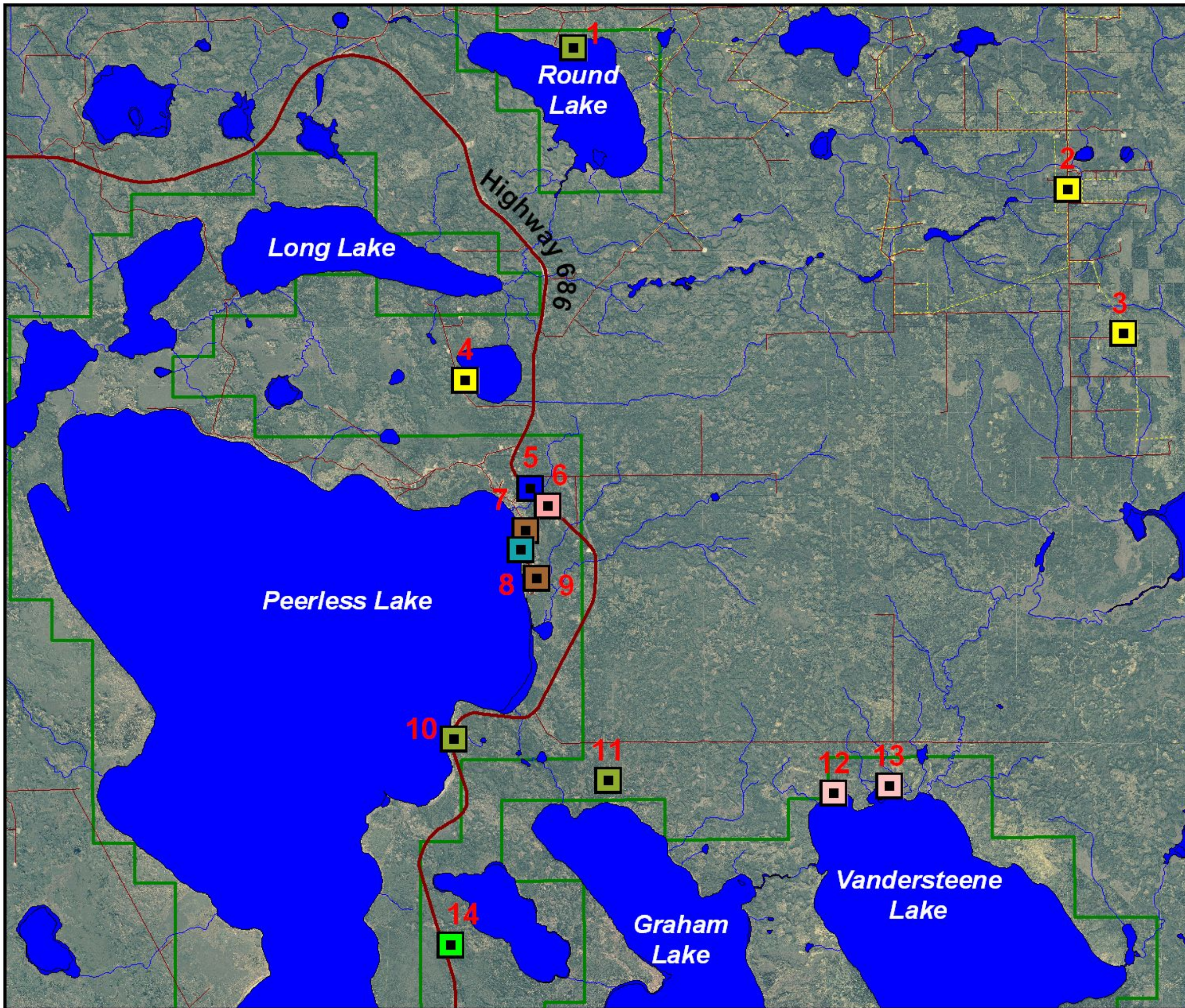
| | | | | |
|----|---|------------|--------------------------------|-------------------|
| 13 | Cabin Site SE 18-88-3-W5M | Cabin | N 56° 37.591' W 114° 27.645 | 2-Combustible |
| 14 | Lakeland General Store SW 5-88-4-W5M | Commercial | N 56° 35.916' W 114° 36.217 | 7-Non Combustible |

| B2- Critical Values-at-Risk | | | | |
|-----------------------------|--|----------------------|--------------------------------|-----------------------------------|
| MAP# | Value Name/ATS | Value Type | Lat/Long | No. of Structures - Roof Material |
| 5 | Supernet Tower NW 33-88-4-W5M | Communications Tower | N 56° 40.826' W 114° 34.610 | 1-Non Combustible |
| 8 | Peerless Lake Water Treatment Plant and Truck Fill SW 33-88-4-W5M | Water Treatment | N 56° 40.163' W 114° 34.808 | 1-Non Combustible |

| B3- Hazardous Values-at-Risk | | | | |
|------------------------------|---|--------------------|--------------------------------|-----------------------------------|
| MAP# | Value Name/ATS | Value Type | Lat/Long | No. of Structures - Roof Material |
| 6 | M.D of Opportunity Peerless Lake Waste Transfer Station NE 33-88-4-W5M | Hazardous Material | N 56° 40.634' W 114° 34.276 | Unknown waste products |

| B4- Special Values-at-Risk | | | | |
|----------------------------|--|------------|--------------------------------|---|
| MAP# | Value Name/ATS | Value Type | Lat/Long | No. of Structures - Roof Material |
| 9 | Peerless Lake Cemetery NW 28-88-4-W5M | Other | N 56° 39.859' W 114° 34.494 | |
| | Hamlet of Peerless Lake 33-88-4-W5M | Hamlet | N 56° 39.859' W 114° 34.494 | 73- Residential dwellings primarily asphalt shingles. Propane Tanks throughout. |

Map 3 - Values at Risk Peerless Lake Wildfire Preparedness Guide



Legend

Value at Risk

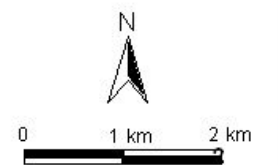
- Commercial Facility
- Communications Tower
- Hazardous Material
- Oil & Gas Facility
- Other
- Recreation Facility
- Water Treatment
- Cabin

- Municipal District or County
- Main Road
- Road
- Pipeline
- Powerline
- Water Body
- Indian Reserve
- FMA or FMU Boundary

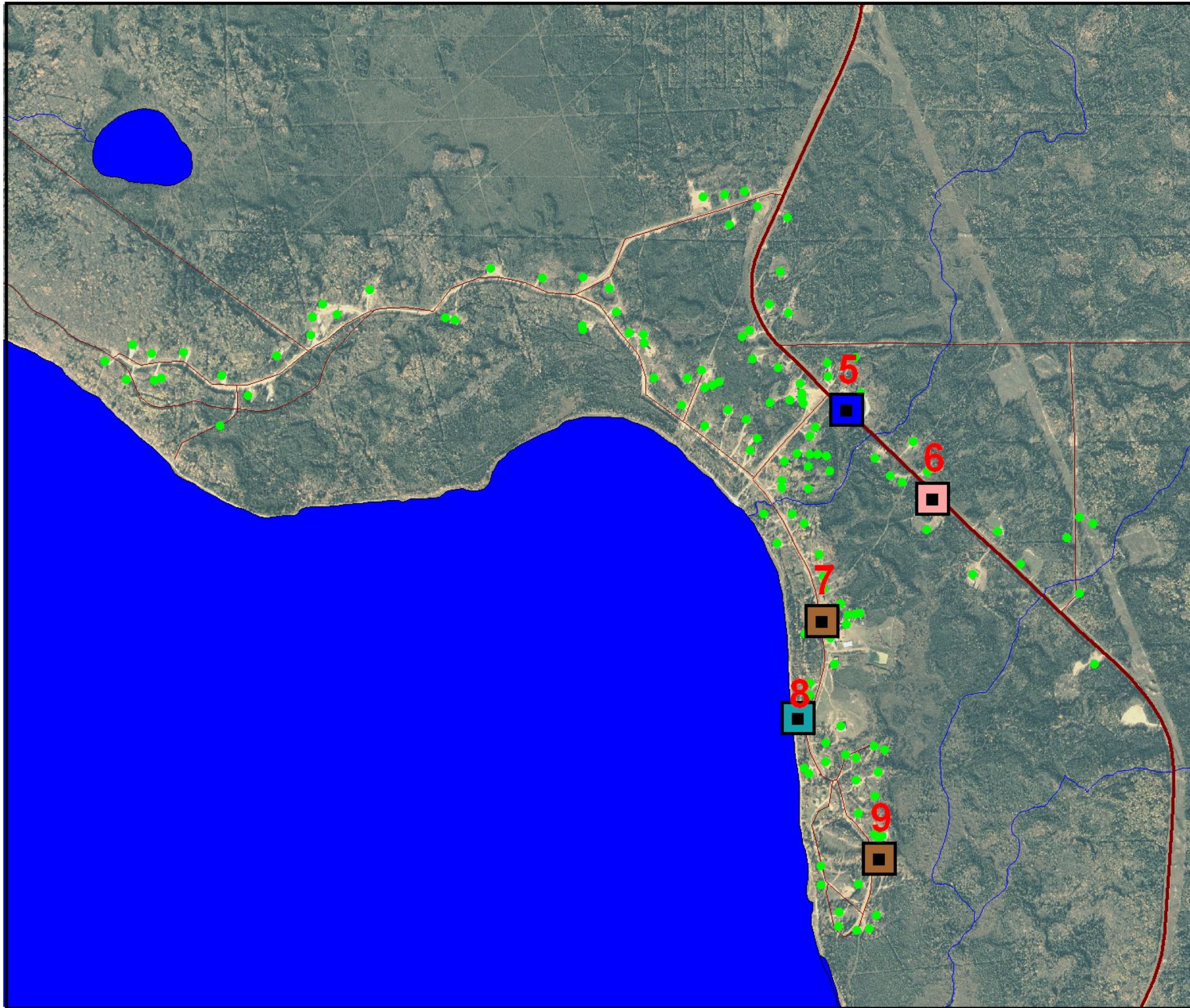
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Map 3a - Values at Risk Peerless Lake Wildfire Preparedness Guide



Legend

- Staging Area

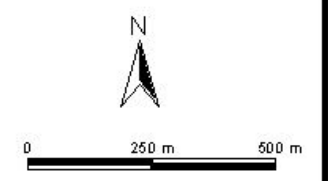
Value at Risk

- Commercial Facility
- Communications Tower
- Hazardous Material
- Oil & Gas Facility
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- Recreation Facility
- Water Treatment
- Cabin

Municipal District or County
 Main Road
 Road
 Pipeline
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SECTION C: FIRE OPERATIONS (MAP 4 AND 4A)

| C1- FUNCTIONAL ROLES | |
|----------------------|--|
| JURISDICTION | AGENCY RESPONSIBLE |
| Evacuation | Municipal District of Opportunity |
| Wildfire | Alberta Sustainable Resource Development |
| Values Protection | Red Earth Fire Department |

| C2- MUTUAL-AID COMMUNICATIONS | |
|-------------------------------|---------------------------------------|
| Type | Frequency |
| COMMAND | Mutual Aid Channel- 156.855 Wide Band |
| TACTICAL | To be assigned at time of incident. |

| C3- MINIMUM AUTO ORDER LIST | | | |
|-----------------------------|--|----------------------------------|--|
| ZONE/MAP # | APPARATUS | HEAVY EQUIPMENT | OTHER EQUIPMENT/MANPOWER |
| All | 3-Type I Engines 3- Type V Engines 3 Type T2 Tenders | 1- D5/6-Cat Group with Excavator | Structure Protection Unit 4- Structure Protection Crews (HAC) Class A Foam Aerial Ignition Equipment Trailer and Ignition Specialist Wildland Urban Interface Group Supervisor |

| C4- STRUCTURE PROTECTION STRATEGIES AND TACTICS | | | |
|---|---------------------------------|---|---|
| ZONE/MAP # | STRATEGIES | TACTICS | COMMENTS |
| AII | Direct Attack Options | High priority on fire suppression activities to prevent fire from impacting VAR. | Consider utilizing municipal fire Department to action fires in immediate vicinity of VAR. Exercise caution around propane tanks. |
| AII | Indirect Attack Options | Reinforce existing roads and right of ways with dozer guard to mineral soil. Further reinforce with sprinkler lines or retardant lines. | Consider use of reinforced right of ways as a base for backfire operations. Utilize the Fire guard located north and east of the community. Burnout grass fuels in vicinity of VAR. |
| AII | Conduct structure triage of VAR | Utilize triage to determine structure and site preparation tactics. | Consider the VAR's at the greatest risk first. |
| AII | Structure Protection | Utilize Class A foam and sprinklers to protect VAR's. | Consider the VAR's at threat from flame impingement and those threatened by air borne embers. Keep suppression forces mobile. Establish sprinklers on remote cabins. |

VAR- Value at Risk- including residential dwellings

| C5- FIRE SUPPRESSION WATER SUPPLY | | | | |
|-----------------------------------|---|--------------------|--------------------------------|--|
| MAP # | FACILITY NAME/ATS | TYPE | LOCATION | PRESSURE/FLOW |
| W1 | MD of Opportunity Water Treatment Plant SW 33-88-4-W5M | Truck Fill Station | N 56° 40.163' W 114° 34.808 | Unknown |
| W2 | Peerless Lake SW 33-88-4-W5M | Lake | N 56° 40.171' W 114° 34.872 | Unlimited at draught with portable pumps for tender operations |

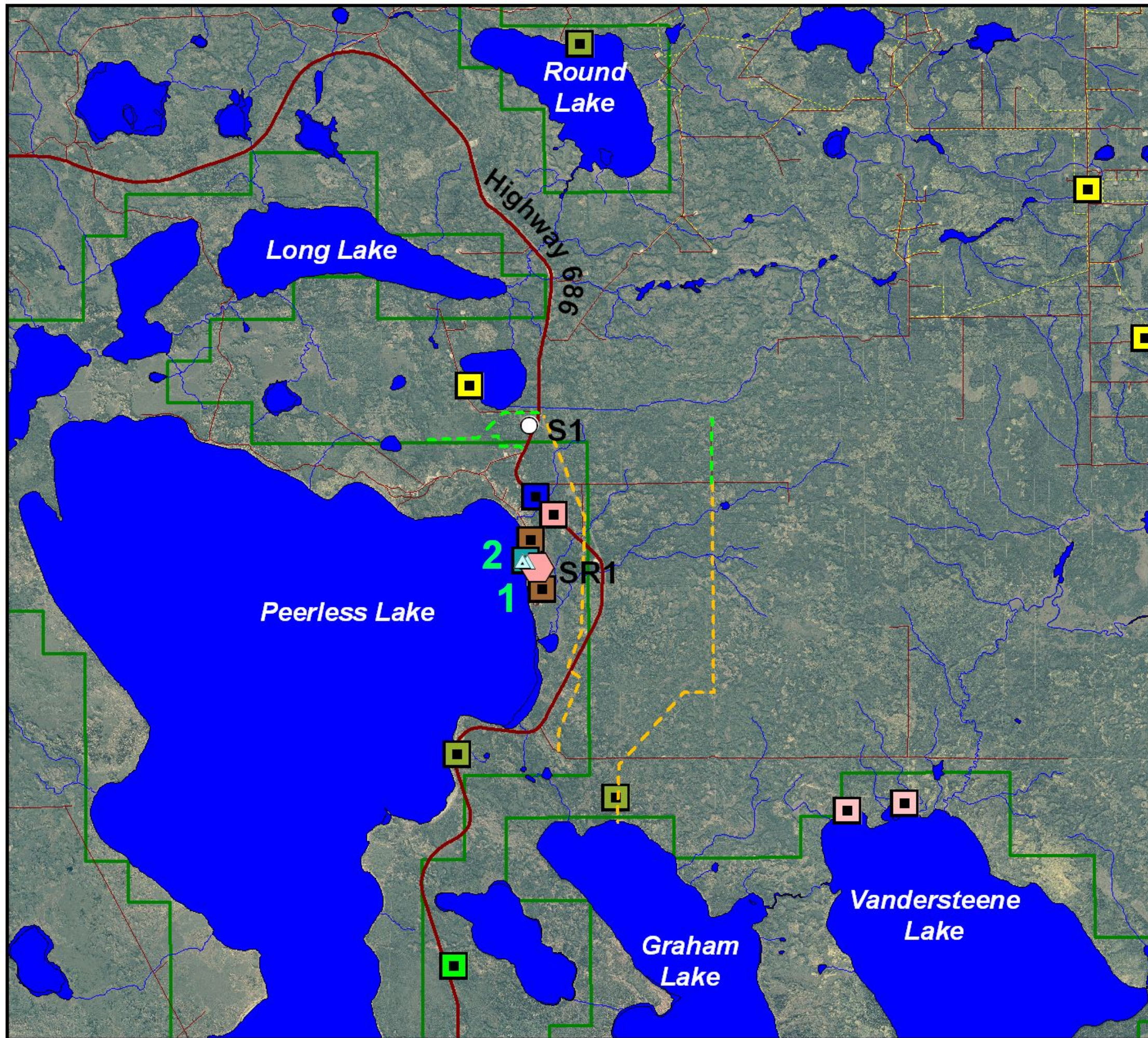
| C6- STAGING AREAS | | | |
|-------------------|------------------|-----------------------|--|
| MAP # | NAME | LOCATION LAT-LONG/ATS | DESCRIPTION |
| S1 | Peerless Staging | N 56° 41.589' | On Highway adjacent to large clearing. |
| | | W 114° 34.797' | |
| | | NW 4-89-4-W5M | |

| C7- EVACUATION | | | | | |
|----------------|--|----------|-----------------------|--------------------------------|---|
| ZONE MAP# | VALUE NAME/LOCATION | # PEOPLE | EST. EVAC TIME-(MINS) | SAFE REFUGE AREA | SPECIAL EVACUATION CONCERNS |
| | Cabins, Recreational areas and oil and gas facilities. VAR's 1-4, 10-14 | 0-30 | 480 | Peerless Lake Community Center | Remote cabins and oil and gas facilities will require helicopter reconnaissance to determine occupancy. Possible transportation of cabin occupants. |
| | Hamlet of Peerless Lake 33-88-4-W5M | 50-500 | 480 | Peerless Lake Community Center | Unaccompanied Minors. Persons without transportation |

| C8- SAFE REFUGE AREAS | | | |
|-----------------------|---------------------------------|-----------------------|--------------------------------|
| MAP # | NAME | LOCATION LAT-LONG/ATS | DESCRIPTION |
| SR1 | Peerless Lake Recreation Center | 56° 40.095' | 200 m x 300 m of cleared area. |
| | | 114° 34.584' | |
| | | NW 28-88-4-W5M | |

| C9- RESOURCES | | | |
|---------------------------|-----------------------|---------|--|
| AGENCY # | ENGINES | TENDERS | COMMENTS |
| Red Earth Fire Department | 1-Type I 1-Type IV | | 1- Rescue |
| ASRD | | | 1-Structure Protection Unit (Slave Lake) |

Map 4 - Fire Operations Map Peerless Lake Wildfire Preparedness Guide



Legend

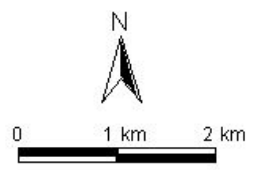
- Containment Line
- Fire Guard
- Safe Refuge Area
- Staging Area
- Water Source

Value at Risk

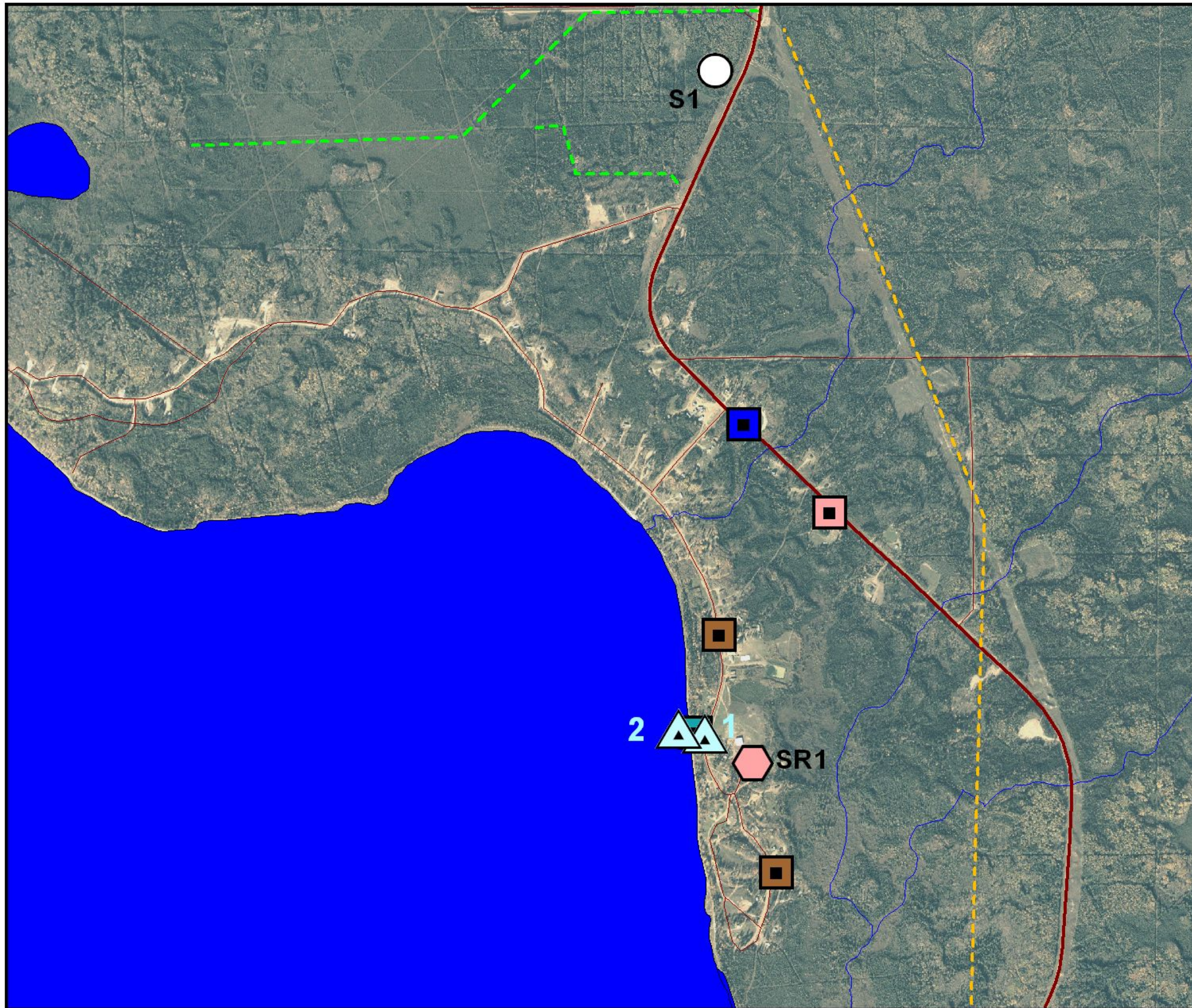
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Map 4a - Fire Operations Peerless Lake Wildfire Preparedness Guide



Legend

- Containment Line
- Fire Guard
- Safe Refuge Area
- Staging Area
- Water Source

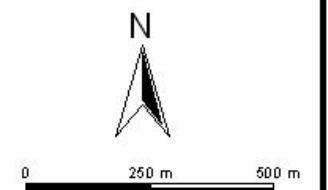
Value at Risk

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Map Produced by:



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C10. EMERGENCY CONTACT LIST

| EMERGENCY MANAGEMENT - | | | | |
|---|---------------------|--------------|--------------|--------------|
| POSITION | NAME | WORK | CELL | HOME |
| Chief Administrative Officer (Director of Emergency Management) Municipal District of Opportunity- | Dennis Egyedy | 780.891.3778 | 780.891.8482 | 780.891.0356 |
| Deputy Director of Emergency Management- Municipal District of Opportunity | Martin Holst | 780.891.3778 | 780.891.8157 | 780.891.2335 |
| Emergency Operations Center | MD Office- Wabasca | 780.891.3778 | | |
| Emergency Operations Center | MD Office Red Earth | 780.649.3427 | | |

| FIRE/RESCUE 9-1-1 | | | | |
|------------------------|------------------|--------------|--------------|--------------|
| POSITION | NAME | WORK | CELL | FAX |
| Red Earth Fire Chief- | Trenton Caldwell | 780.649.3861 | 780.649.4384 | |
| Red Earth Fire Station | | 780.649.3176 | | 780.649.3179 |
| Dispatch Center | Keytech | 780.349.3933 | | |

| R.C.M.P. 9-1-1 | | |
|----------------------------------|----------------|--------------|
| POSITION | ADMINISTRATION | COMPLAINT |
| Officer I/C Detachment Red Earth | 780.649.3992 | 780.649.3990 |

| SRD - WILDFIRE OPERATIONS | | | | |
|----------------------------------|-----------------|--------------|-------------------|--------------|
| POSITION | NAME | WORK | CELL/PAGER | FAX |
| FORESTRY MANAGER | Iain Johnston | 780.849.7058 | 780.805.0390 | 780.849.6826 |
| WILDFIRE OPERATIONS OFFICER | Kevin Parkinson | 780.849.7426 | 780.805.0312 | 780.849.6826 |
| WILDFIRE PREVENTION OFFICER | Terry Jessiman | 780.849.7142 | 780.849.7177 | 780.849.6826 |
| PFFC DUTY OFFICER | TBA | 780.415.6460 | 780.913.2344 | 780.422.7230 |
| AREA DUTY OFFICER | TBA | 780.849.7429 | 780.849.1247 | 780.849.6826 |
| AREA DISPATCH | | 780.849.7428 | | 780.849.6826 |

| OTHERS | | |
|------------------------------------|-------------------------------|-----------------------------|
| ORGANIZATION | 24 HOUR CONTACT NUMBER | LOCAL CONTACT NUMBER |
| ALPAC | 780.525.8200 | |
| ATCO | 1.800.597.9111 | |
| Cougar Energy Inc | 1.403.262.8044 | |
| Fortune Energy | 1.403.297.0230 | |
| MD of Opportunity Water Plant | 780.649.3859 | 780.649.3427 |
| MD of Opportunity Land Fill | | 780.649.6466 |
| MD of Opportunity Red Earth Office | | 780.649.3427 |
| Penn West Energy | 1.877.792.2990 | |
| Supernet | 1.866.514.0030 | |
| Sword Energy Inc | 1.866.514.0030 | |