

# RED EARTH WILDFIRE PREPAREDNESS GUIDE

Prepared for:



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.

# RED EARTH WILDFIRE PREPAREDNESS GUIDE

## SECTION A: LOCAL AREA DESCRIPTION

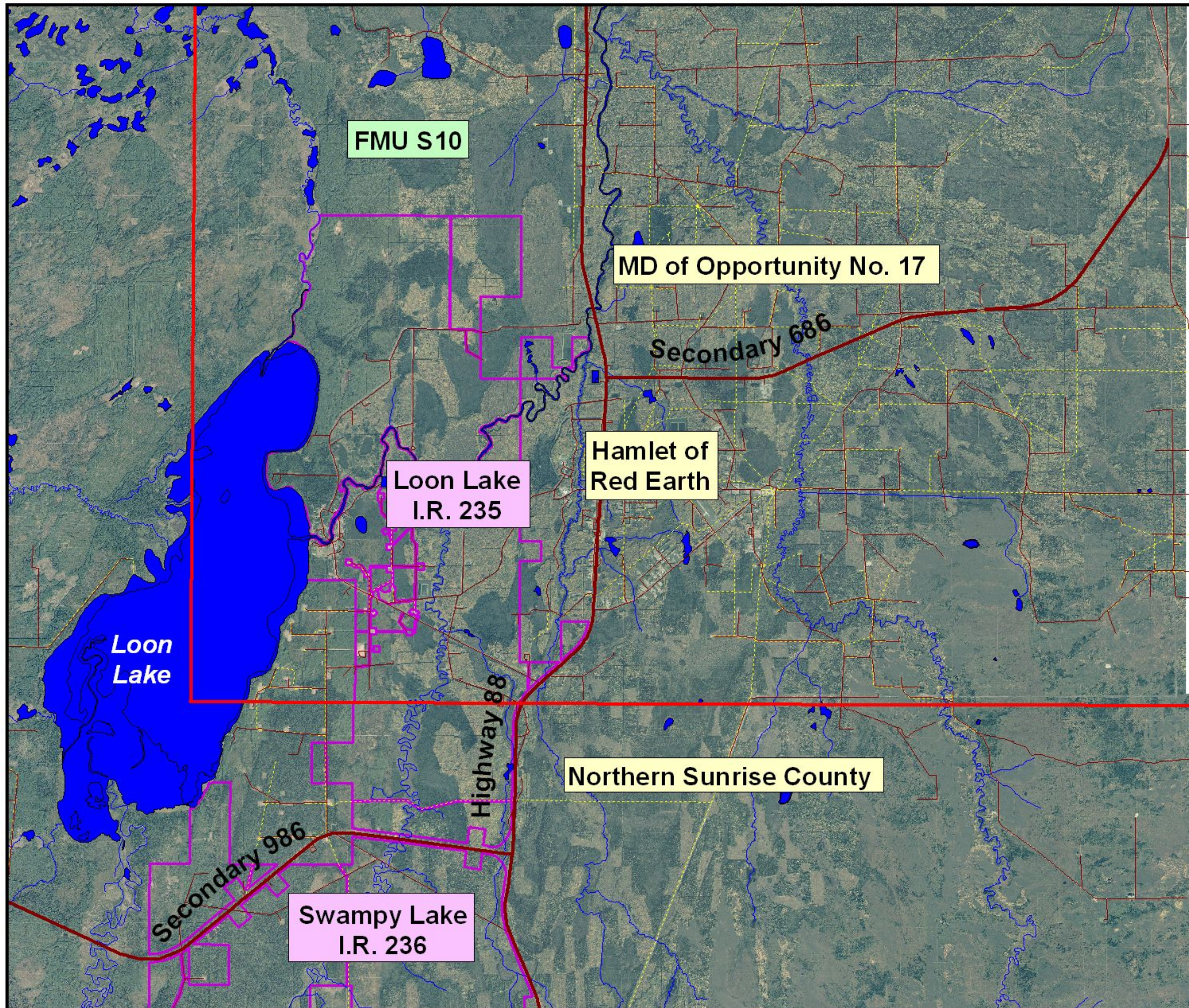
### A1. PLANNING AREA (MAP 1)

FEATURE	JURISDICTIONAL AUTHORITY
SRD Forest Area	Lesser Slave Area
Municipality(s)	Municipal District of Opportunity Northern Sunrise County
First Nation	Loon River Cree First Nation -Loon Lake 235 Swampy Lake 236
Forest Management Unit	Forest Management Unit S10

**Map 1 - Planning Area  
Red Earth  
Wildfire Preparedness Guide**

Legend

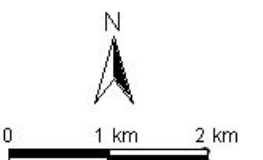
- Municipal District or County
- Main Road
- Road
- Pipeline
- Powerline
- Water Body
- Indian Reserve
- FMA or FMU Boundary



Map Produced by:



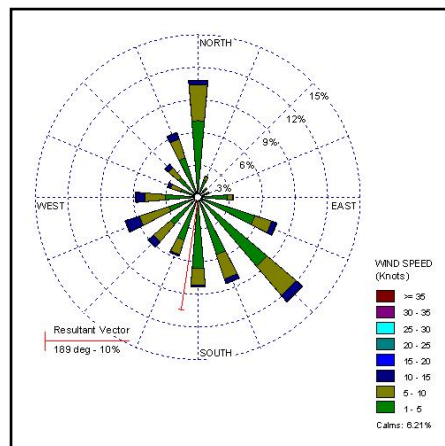
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## A1. FIRE BEHAVIOUR POTENTIAL DESCRIPTION (MAP 2)

FACTOR	DESCRIPTION
Fuels Influence	Approximately 50% of the fuels in the planning zone are D1/D2 and 30% are C2, with the remaining 20% of the area being grass areas and non fuel areas.
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 of the area is dominated by Loon Lake in the western region. The area is flat with generally a west facing aspect as the land elevation increases from the Loon Lake basin to the highest points of land in the east part of the area.
Anticipated Fire Spread	Topography is generally flat and will have no significant effect on fire behavior. Loon Lake provides an effective barrier against fire spread from the west. Other major barriers include two highways, major roadway, pipelines and powerlines.
	The Loon River Cree Nation on the east side of the lake could be exposed to fires spreading into their community from a fire in the south quadrant.
	C2 fuels in the immediate vicinity of the communities may pose a threat. Within the planning zone the C2 fuels regions are separated by D1 fuel types. The C2 fuels have continuous runs from the south into Red Earth and Loon River.
	Deciduous and cured grass fuels in the immediate vicinity of the communities may pose a threat during the spring and fall, particularly during extreme wind events.

### 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 Read Earth Wildfire Preparedness Guide

## Legend

- Value at Risk
- ▭ Municipal District or County
- Main Road
- Road
- Pipeline
- ..... Powerline
- Water Body
- ▭ Indian Reserve
- ▭ FMA or FMU Boundary

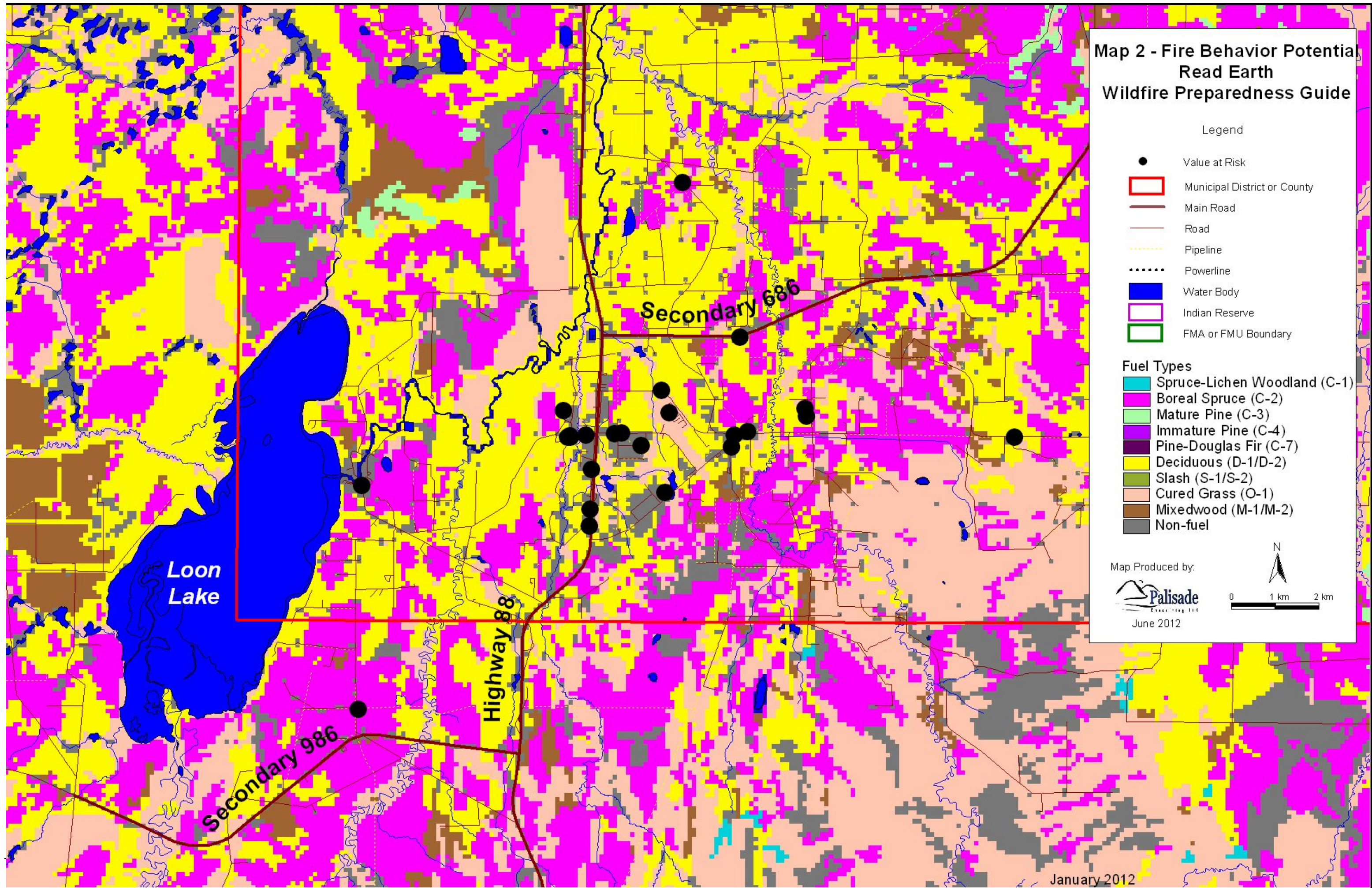
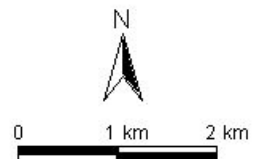
## Fuel Types

- 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

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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	Penn West 4-6-88-8-W5M	Oil and Gas Facility	N 56° 35.872' W 115° 16.873'	4-Non Combustible
8	Penn West Red Earth Treating Facility 1-13-87-9-W5M	Oil and Gas Facility Treating Facility	N 56° 32.806' W 115° 18.544'	6-Non Combustible
10	Plains Marketing Canada Ltd Red Earth Station Truck Terminal 9-18-87-8-W5M	Oil and Gas Facility	N 56° 32.789' W 115° 16.704'	3-Non Combustible
11	Penn West Battery 12-17-87-8-W5M	Oil and Gas Facility	N 56° 32.828' W 115° 14.960'	12-Non Combustible
13	Petro Canada Bulk Station NE 11-87-9-W5M	Oil and Gas Facility Bulk Fuel Sales	N 56° 31.873' W 115° 18.449'	3-Non Combustible
14	Harvest Operations Corp 8-11-87-9-W5M	Oil and Gas Facility Battery	N 56° 31.667' W 115° 18.451'	7-Non Combustible
16	Harvest Operations Corp 13-29-86-9-W5M	Oil and Gas Facility Battery	N 56° 29.405' W 115° 23.552'	11-Non Combustible
20	Red Earth Creek School NE 14-87-9-W5M	Other School	N 56° 33.074' W 115° 19.045'	1-Non Combustible

## B2- Critical Values-at-Risk

MAP#	Value Name/ATS	Value Type	Lat/Long	No. of Structures - Roof Material
3	M.D. of Opportunity Water Reservoir SE 24-87-9-W5M	Water Treatment	N 56° 33.330' W 115° 16.873'	1-Non Combustible
4	M.D. of Opportunity Red Earth Airport NW 18-87-8-W5M	Other Airport	N 56° 33.057' W 115° 16.704'	2-Non Combustible
5	M.D. of Opportunity Water Treatment Facility NE 14-87-9-W5M	Water Treatment Facility and Truck Fill Station	N 56° 32.752' W 115° 18.881'	1-Non Combustible
6	M.D. of Opportunity Red Earth Fire Station NE 14-87-9-W5M	Other Fire Station	N 56° 32.781' W 115° 18.544'	1-Non Combustible
9	Telus NE 18-87-8-W5M	Communications Tower	N 56° 32.642' W 115° 15.312'	1-Non Combustible
12	Telus AB0711 NE 17-87-8-W5M	Communication Tower	N 56° 33.021' W 115° 13.662'	1-Non Combustible
17	Unknown Communication Tower NE 14-87-8-W5M	Communication Tower	N 56° 32.770' W 115° 09.052'	1-Non Combustible

18	RCMP SE 14-87-9-W5M	Other Police	N 56° 32.361' W 115° 18.414'	1-Non Combustible
19	MD of Opportunity Administration Office NE 14-87-9-W5M	Other MD Office	N 56° 32.771' W 115° 18.896'	1-Non Combustible
21	Western Telecom NE 17-87-8-W5M	Communications Tower	N 56° 33.117' W 115° 13.691'	1-Metal

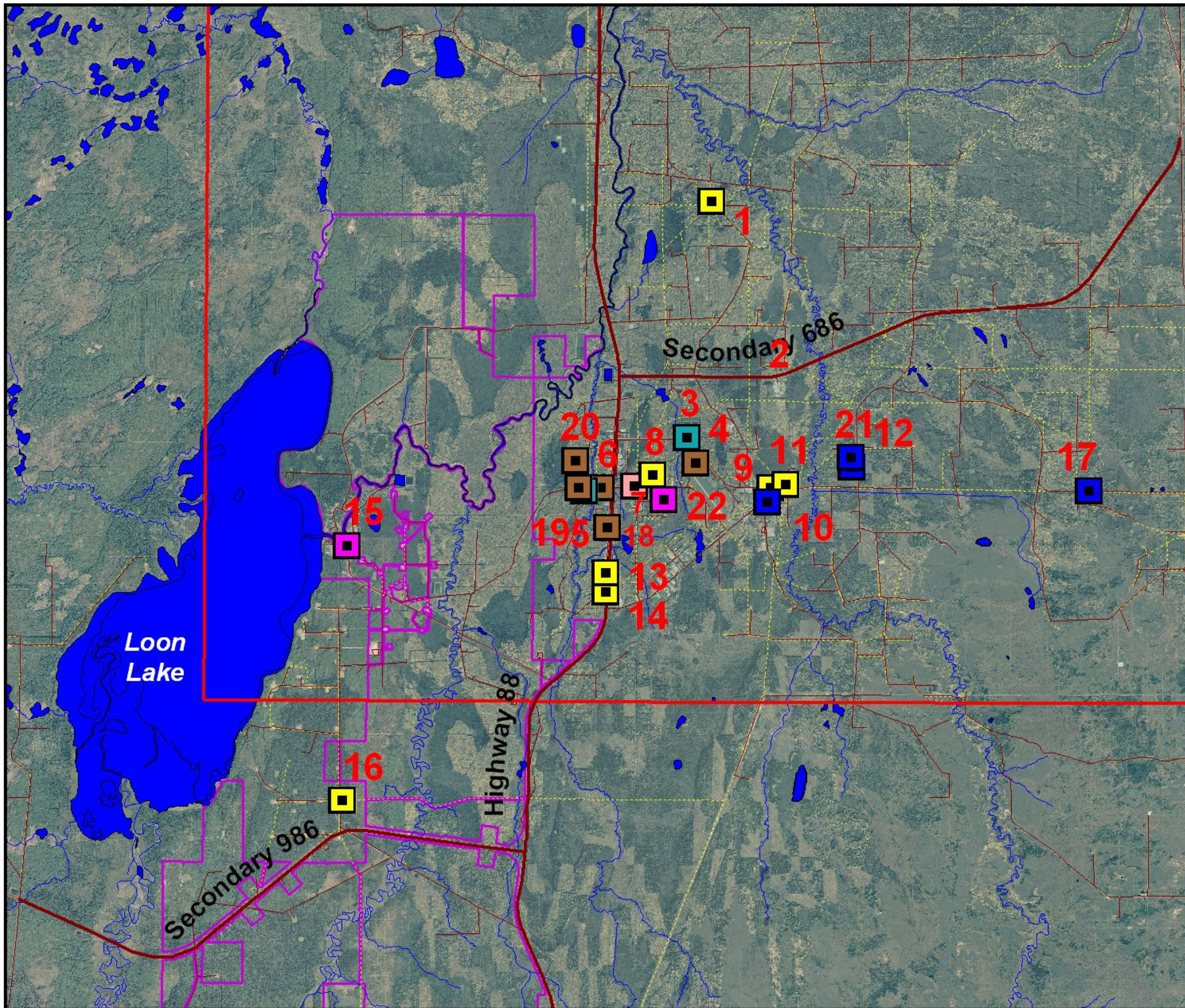
B3- Hazardous Values-at-Risk				
MAP#	Value Name/ATS	Value Type	Lat/Long	No. of Structures - Roof Material
2	M.D. of Opportunity Landfill NE 19-87-8-W5M	Hazardous Materials	N 56° 33.987' W 115° 15.142'	1-Non Combustible
7	Newalta Red Earth Creek Oilfield Waste Mgt NW 13-87-9-W5M	Hazardous Materials	N 56° 32.800' W 115° 17.901'	2-Non Combustible



**B4- Special Values-at-Risk**

MAP#	Value Name	Value Type	Lat/Long	No. of Structures - Roof Material
15	Loon River Cree First Nation  NE 8-87-9-W5M	Country Residential Subdivision	N 56° 32.150'  W 115° 23.493'	Numerous Residential Dwellings primarily asphalt and metal
22	Hamlet of Red Earth  13-87-9-W5M	Country Residential Subdivision  Hamlet	N 56° 32.656'  W 115° 17.321'	214- Residential Dwellings primarily asphalt and metal.

# Map 3 - Values at Risk Red Earth Wildfire Preparedness Guide



**Legend**

Value at Risk

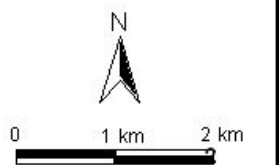
- Country Residential Sub
- Communications Tower
- Hazardous Material
- Oil & Gas Facility
- Other
- Water Treatment

- Municipal District or County
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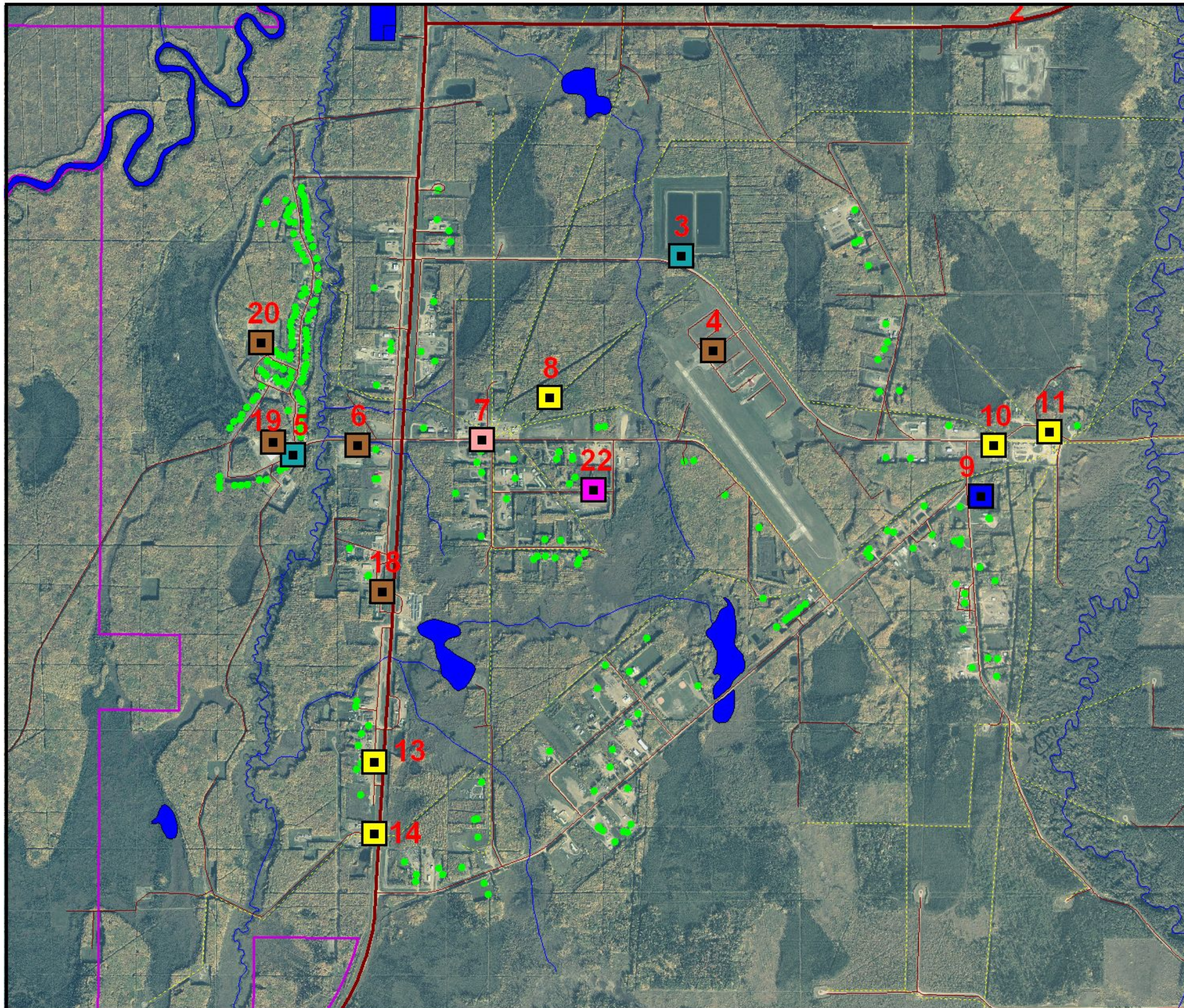
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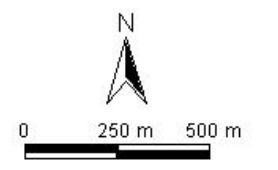
# Map 3a - Values at Risk Red Earth Wildfire Preparedness Guide



**Legend**

- Residence
- Value at Risk**
- Country Residential Sub
- Communications Tower
- Hazardous Material
- Oil & Gas Facility
- Other
- Water Treatment
- ▭ Municipal District or County
- Main Road
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Map Produced by:  
  
 June 2012



## 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.
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. 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..

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 NE 14-87-9-W5M	Truck Fill Station	N 56° 32.756' W 115° 18.904'	Unknown Hamlet of Red Earth has full hydrant system.

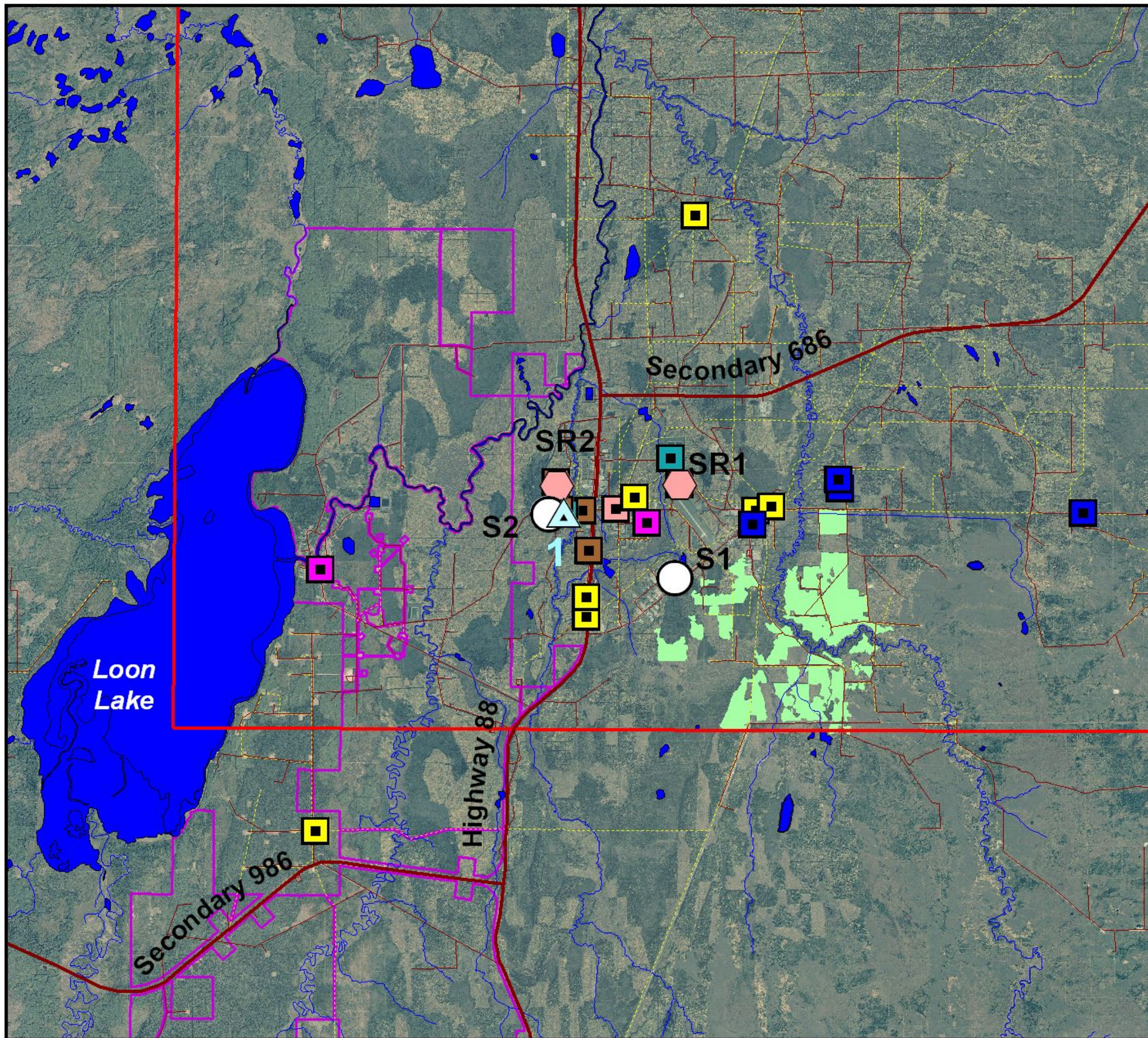
C6- STAGING AREAS			
MAP #	NAME	LOCATION LAT-LONG/ATS	DESCRIPTION
S1	Fairgrounds Staging	N 56° 32.079'	300 meters x 300 meters including Community Hall with washrooms and kitchen
		W 115° 16.784'	
		NE 12-87-9-W5M	
S2	Back Lake Recreation Center Staging	N 56° 32.753'	200 meters x 200 meters including Recreation Center with washrooms and kitchen.
		W 115° 18.952'	
		NE 14-87-9-W5M	

C7- EVACUATION					
ZONE MAP#	VALUE NAME/LOCATION	# PEOPLE	EST. EVAC TIME-(MINS)	SAFE REFUGE AREA	SPECIAL EVACUATION CONCERNS
15	Loon River Cree First Nation	25-400	480	Red Earth Creek School	Unaccompanied Minors. Persons without transportation
	NE 8-87-9-W5M				
22	Hamlet of Red Earth	50-750	480	Red Earth Creek School	Unaccompanied Minors. Persons without transportation
	13-87-9-W5M				

C8- SAFE REFUGE AREAS			
MAP #	NAME	LOCATION LAT-LONG/ATS	DESCRIPTION
SR1	Red Earth Airport	N 56° 33.057'	Airport, runway and road. Cleared area.
		W 115° 16.704'	
		NE 13-87-9-W5M	
SR2	Red Earth School	N 56° 33.044'	School grounds.
		W 115° 19.017'	
		NE 14-87-9-W5M	

C9- RESOURCES			
AGENCY #	ENGINES	TENDERS	COMMENTS
Red Earth Fire Department	1-Type I 1-Type IV		1- Rescue
Wabasca Fire Department	2-Type 1	1-S3	1-Rescue
ASRD			1-Structure Protection Unit (Slave Lake)

# Map 4 - Fire Operations Map Red Earth Wildfire Preparedness Guide



**Legend**

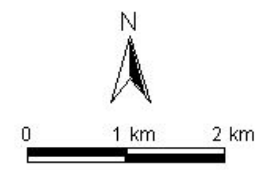
- ⊙ S1 Staging Area
- ⊙ SR Safe Refuge Area
- △ Water Source
- Harvest Area

**Value at Risk**

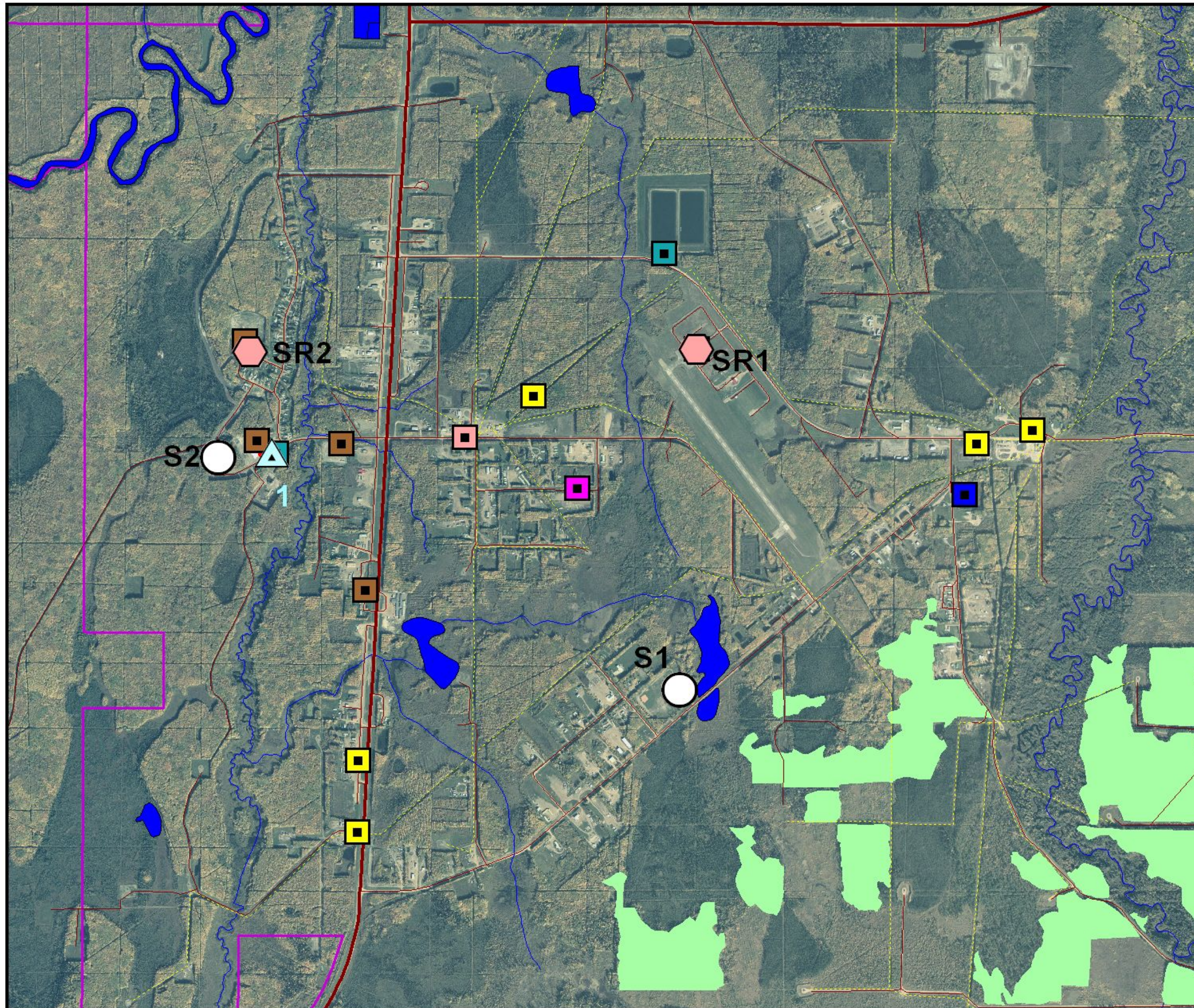
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- ▭ Municipal District or County
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- ⋯ Powerline
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# Map 4a - Fire Operations Red Earth Wildfire Preparedness Guide



**Legend**

- Staging Area
- Safe Refuge Area
- Water Source
- Harvest Area

**Value at Risk**

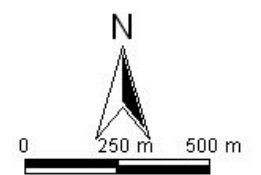
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Map Produced by:



June 2012





## 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		
Chief Administrative Officer (Director of Emergency Management) Northern Sunrise County	Peter Thomas- Interim C.A.O./Director of Legislative Services	780.624.0013  Emergency: 780.618.2854		
Director of Protective Services- Northern Sunrise County	David LeBlanc	780.624.0013	780.617.0911	
Loon River Cree Band Administration Office		780.649.3883		

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	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
Alta Gas	1.866.222.2067	
ATCO Electric Transmission	1.800.668.5506	
Harvest Operations Corp	1.800.760.2826	
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
Newalta	403.266.6556	780.649.3793
Penn West	1.877.792.2990	
Petro Canada Bulk Station		780.649.3666
Plains Marketing	1.866.875.2554	
Telus	1.800.391.1391	