Wildland Fire Preparedness & Awareness


WILDC
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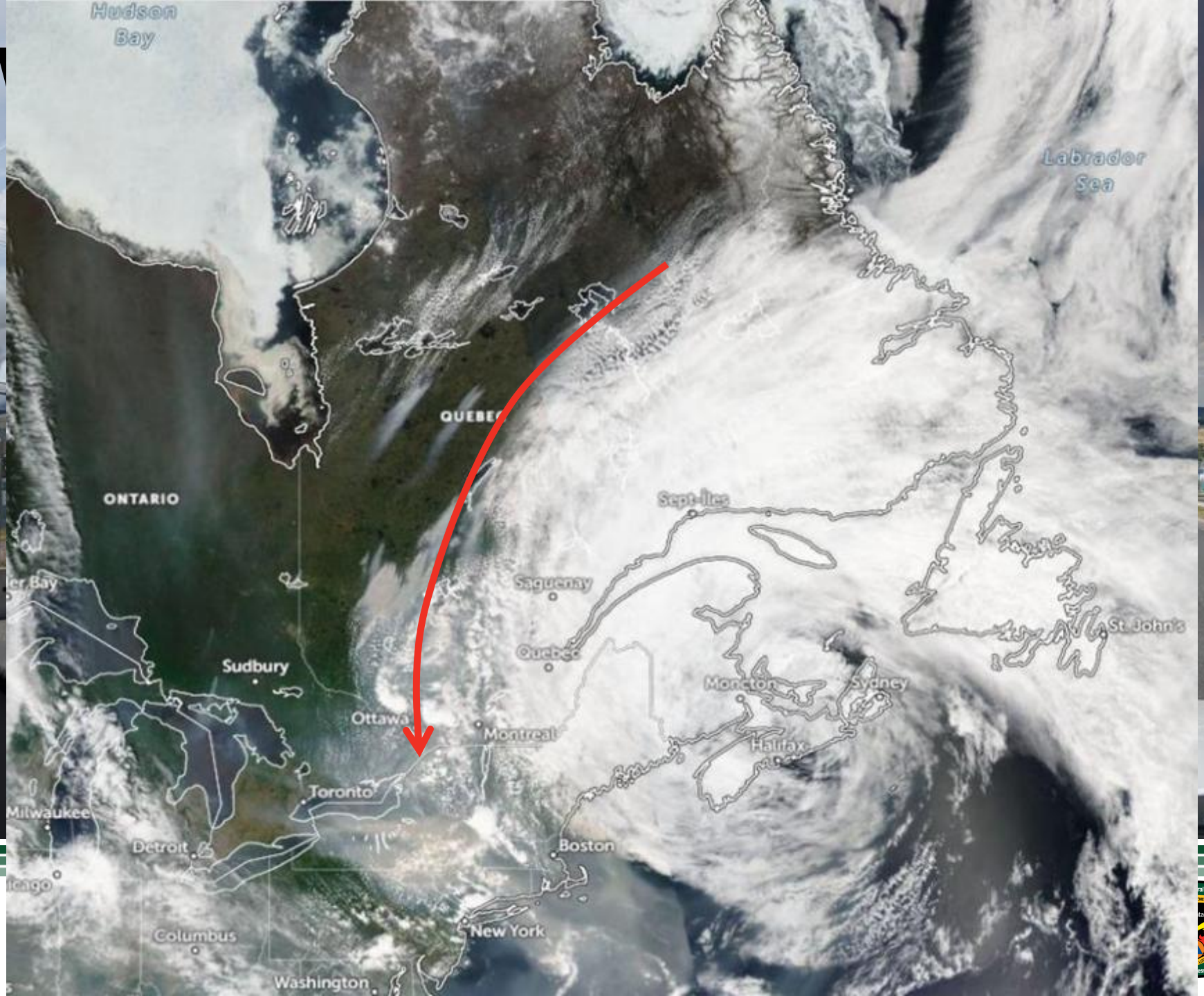
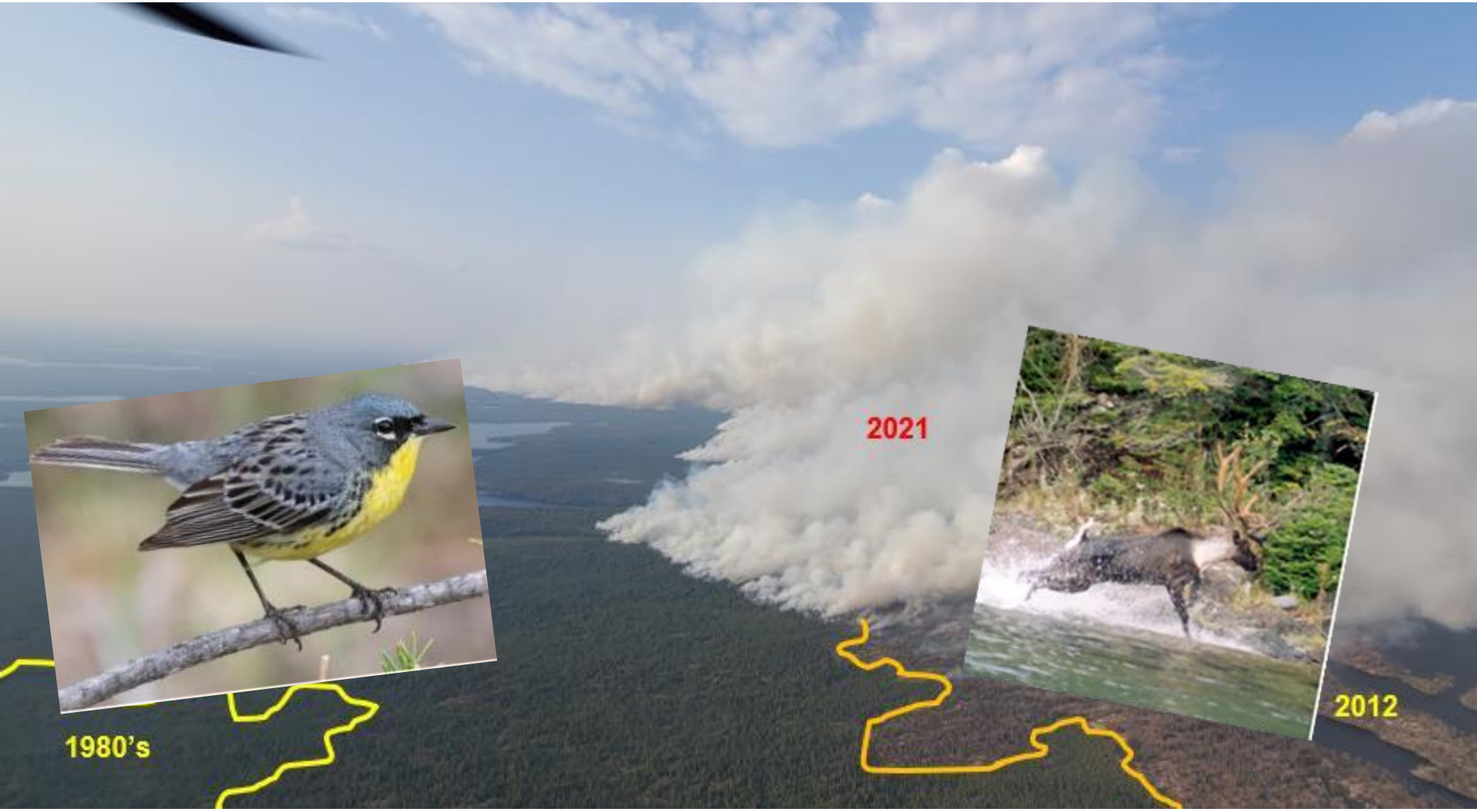
FIRE

2024 Ontario Wildland Fires


Hudson Bay
Labrador Sea
ONTARIO
Sept-Îles
Saguenay
Québec
St. John's
Moncton
Sydney
Halifax
Sudbury
Ottawa
Montreal
Toronto
Milwaukee
Detroit
Boston
New York
Columbus
Washington

Wildland Fire Positive Impacts

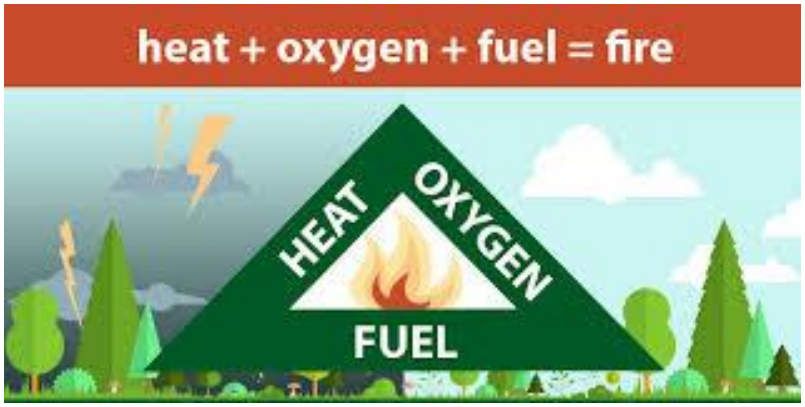


Wildland Fire Controlled Burns

Prescribed Burning in Ontario;

- **Ecological**
- **Silvicultural**
- **Hazard Reduction – (Mitigation)**

- **Fire Triangle:** elements required for a Wildland Fire flame to develop/sustain:



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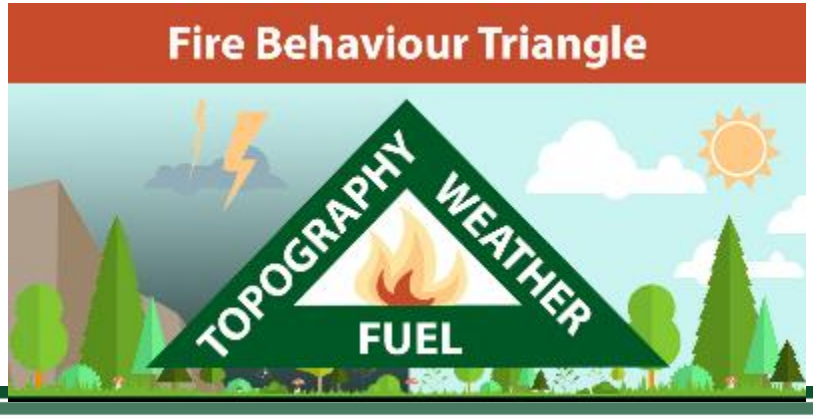
- **Fire Environment:** elements that affect the Wildland Fire behaviour once it starts:



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Forest Fuels and Wildland Fire

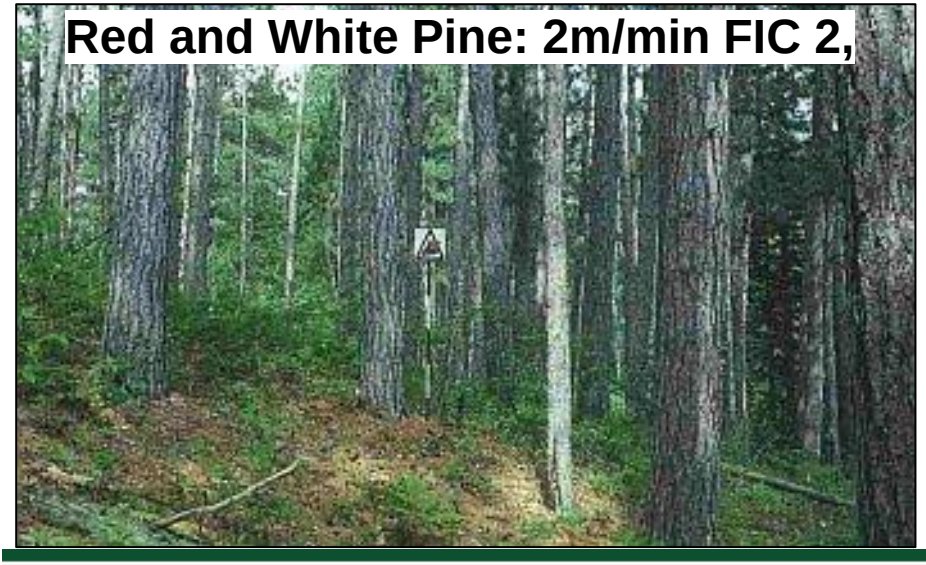
May 11th, 2023: Actual Weather Observations:

Temp: 23.6 - R/H 34% - Wind: 10km/hr. ⟶ FFMC 92 – DMC 26 – DC 45 - ISI 10.2 – BUI 26 – FWI 16 High.

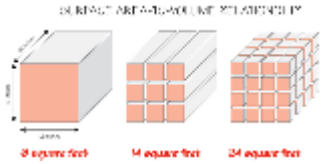
Boreal Mix Wood: 3 - 4m/min FIC 3,

Boreal Spruce: 9m/min* FIC 5,

Red and White Pine: 2m/min FIC 2,



Standing Dead Grass: 29m/min FIC 4,



Weather and Wildland Fire

WSTN	WSTNNAM	WX_YEAR	Month/Da	Month	WX_DATE	TEMP	REL_H	WIND_DIR	WIND	Cod	RAI	FFMC	DMC	DC	ISI	BUI	FWI	DS	OE	C2	C3	C4	C62	C67	M275
BRA	Bracebrid	2012	07/07	July	07/07/2012	26.4	67	266	11.6	1	2	77.4	47	323	1.3	69	5		A	Low	Low	Low	Low	Low	Low
BRA	Bracebrid	2012	07/08	July	07/08/2012	24.7	48	20	16.1	1	0	86.3	50	331	4.1	73	14		A	Extreme	Low	High	Low	Low	High
BRA	Bracebrid	2012	07/09	July	07/09/2012	25.1	38	301	7.3	1	0	89.6	54	339	5	77	17		A	Extreme	Low	Extreme	Low	Low	High
BRA	Bracebrid	2012	07/10	July	07/10/2012	28	33	252	8.3	1	0	91.5	59	348	6.8	83	22		A	Extreme	High	Extreme	High	Moderate	Extreme
BRA	Bracebrid	2012	07/11	July	07/11/2012	27.7	32	300	5.2	1	0	91.9	63	357	6.6	88	22		A	Extreme	High	Extreme	High	Moderate	Extreme
BRA	Bracebrid	2012	07/12	July	07/12/2012	28.8	30	274	1.9	1	0	92.5	68	366	6.4	93	22		A	Extreme	High	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/13	July	07/13/2012	31.6	25	194	4.6	1	0	93.9	74	375	8.6	99	28		A	Extreme	High	Extreme	Extreme	High	Extreme
BRA	Bracebrid	2012	07/14	July	07/14/2012	31.6	41	272	5.6	1	0	92.8	79	385	7.5	104	26		A	Extreme	High	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/15	July	07/15/2012	30.6	50	304	9.9	1	0	91	82	394	6.7	108	25		A	Extreme	High	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/16	July	07/16/2012	30.1	46	297	14.3	1	0	91	86	403	7.6	112	28		A	Extreme	High	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/17	July	07/17/2012	31.1	52	261	18.2	1	0	90.5	90	412	8	116	29		A	Extreme	High	Extreme	Extreme	High	Extreme
BRA	Bracebrid	2012	07/18	July	07/18/2012	25.6	38	323	7.2	1	0	90.5	94	420	5.7	120	23		A	Extreme	Moderate	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/19	July	07/19/2012	23.7	42	24	10.9	1	0	90.5	97	428	6.4	124	25		A	Extreme	High	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/20	July	07/20/2012	25.7	34	96	3.1	1	0	91.1	101	437	5.5	128	23		A	Extreme	Moderate	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/21	July	07/21/2012	29.2	32	203	8.7	1	0	92.1	106	446	7.5	133	29		A	Extreme	High	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/22	July	07/22/2012														A	Extreme	Extreme	Extreme	Extreme	Extreme	Extreme
BRA	Bracebrid	2012	07/23	July	07/23/2012	31.3	44	243	18.4	1	0	91.9	115	464	9.8	142	36		A	Extreme	Extreme	Extreme	Extreme	Extreme	Extreme
BRA	Bracebrid	2012	07/24	July	07/24/2012	24.5	37	348	19	1	0	91.9	119	472	10	146	36		A	Extreme	Extreme	Extreme	Extreme	Extreme	Extreme
BRA	Bracebrid	2012	07/25	July	07/25/2012	27.9	39	228	12.4	1	0	91.9	123	481	8.2	150	32		A	Extreme	Extreme	Extreme	Extreme	Extreme	Extreme
BRA	Bracebrid	2012	07/26	July	07/26/2012	20.1	100	54	1.8		5	3.1	73	471	0	105	0		A	Low	Low	Low	Low	Low	Low
BRA	Bracebrid	2012	07/27	July	07/27/2012	25.8	44	353	7.8	1	0	3.6	77	479	0.9	109	5		A	Low	Low	Low	Low	Low	Low
BRA	Bracebrid	2012	07/28	July	07/28/2012	28.8	27	14	7.8	1	0	90.3	82	488	5.7	115	23		A	Extreme	Moderate	Extreme	High	Moderate	Extreme
BRA	Bracebrid	2012	07/29	July	07/29/2012	29.3	25	295	2	1	0	93.1	87	497	7.1	121	27		A	Extreme	High	Extreme	High	High	Extreme
BRA	Bracebrid	2012	07/30	July	07/30/2012	30.9	27	200	7.5	1	0	93.5	93	506	8.9	127	32		A	Extreme	Extreme	Extreme	Extreme	Extreme	Extreme
BRA	Bracebrid		07/31	July	07/31/2012	20.9	100	158	8.8	1	13	18.3	46	452	0	73	0		A	Low	Low	Low	Low	Low	Low
BRA	Bracebrid	2012	08/01	August	08/01/2012	25.1	62	293	12.5	1	1	58.8	48	460	0.6	76	2		A	Low			Low	Low	Low
BRA	Bracebrid	2012	08/02	August	08/02/2012	26.8	48	206	8.7	1	0	81.9	51	468	1.8	80	8		A	Moderate	Low	Moderate	Low	Low	Moderate
BRA	Bracebrid	2012	08/03	August	08/03/2012	28.1	52	326	2	1	0	86.6	54	476	2.8	84	11		A	High	Low	High	Low	Low	Moderate
BRA	Bracebrid	2012	08/04	August	08/04/2012	34.8	46	165	19.8	1	1	88.7	58	485	6.5	89	22		A	Extreme	High	Extreme	High	Moderate	Extreme
BRA	Bracebrid	2012	08/05	August	08/05/2012	22	100	217	16.4	1	5	30.9	37	472	0	62	0		A	Low	Low	Low	Low	Low	Low
BRA	Bracebrid	2012	08/06	August	08/06/2012	24.2	40	272	12.8	1	1	74	40	479	1.1	66	4		A	Low	Low	Low	Low	Low	Low
BRA	Bracebrid	2012	08/07	August	08/07/2012	25	55	220	1.6	1	0	82.8	43	487	1.6	70	6		A	Moderate	Low	Low	Low	Low	Low

- **Daytime burning restrictions in relation to daily diurnal effects**
- **Restricted Fire Zones**

FireSmart™ Canada

Embers & Sparks

Embers and sparks can blow up to two kilometres ahead of a wildland fire. They can ignite materials on or near your home causing severe damage.

Direct Flame

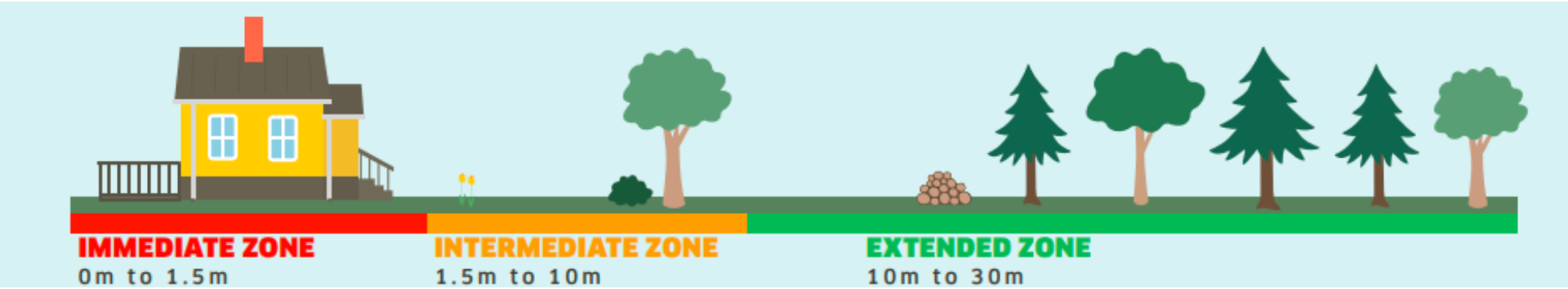
As wildland fires spread toward homes, they ignite other flammable objects in their path. To stop wildland fire from directly affecting your home, create breaks in this path, especially close to your home.

Extreme Heat

Radiant heat from a wildland fire can melt vinyl siding, ignite your home, and even break windows. Extreme heat can come from flames within 30 metres of your home.

The Home Ignition Zone (HIZ) is the area within 30 metres of your home and structures. It is made up of three priority areas: The Immediate Zone, Intermediate Zone, and Extended Zone.

The HIZ shows how you can minimize your home and property's vulnerability to wildland fire by addressing threats in each of the three priority zones, starting with the most vulnerable area, the Immediate Zone, and working your way outward.



Immediate Zone **Intermediate Zone** **Extended Zone**

Immediate Zone 0 m to 1.5 m

Intermediate Zone 1.5m to 10m

The goal in the Intermediate Zone is to reduce a lot of fire supporting fuel, Elements in this zone are managed so they do not support fire growth and include naturally occurring fire resistant plants and trees.

Plants:

Because some plants are particularly more flammable than other, it is important in this area to consider deciduous plants rather than conifer plants.

Trees:

Because coniferous trees are particularly more flammable than deciduous trees, it is important in this area to consider deciduous trees rather than conifer. If conifers are still preferred for other factors; then prune and space to lessen fire intensity.

Plants less flammable:

Fire resistant plants are those that do not readily ignite from flame or embers. They do not contribute to wildland fire intensity and include characteristics such as:

- Moist, supple leaves
- Limited dead woody stems
- Water-like sap with little or no odor
- Low amount of sap

Plants more flammable:

Some plants are more flammable and should be considered avoiding when re-planting within 10 meters of a structure. Characteristics include:

- Fine, dry papery material within the plant. (Bark)
- Volatile waxes, terpenes or oils, sticky sap with odor.
- Leaves are aromatic.

Trees less flammable:

Deciduous trees (Leafy) are more resistant to wildland fire and include:

- Poplar
- Birch
- Aspen
- Maple
- Ash
- Cherry
- Oak
- Basswood

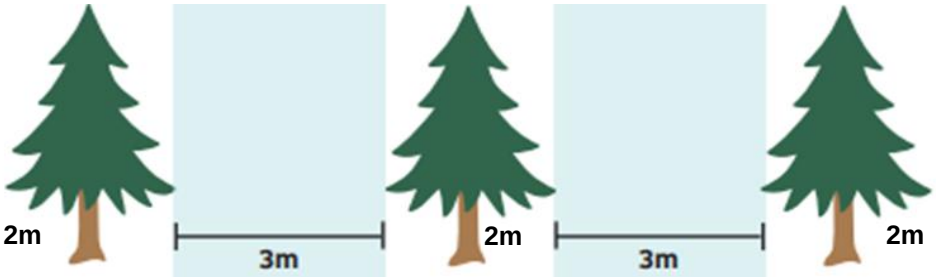
Trees more flammable:

Coniferous trees (needles) are more flammable and should be considered avoiding when re-planting within 10 meters of a structure

- Spruce species
- Fir Species
- Pine Species
- Cedar Species

Extended Zone 10m to 30m

The goal in the Extended Zone is not to eliminate fire by removing all fuel, However, rather to reduce Fire Intensity by removing some flammable fuels.



Coniferous Tree Pruning

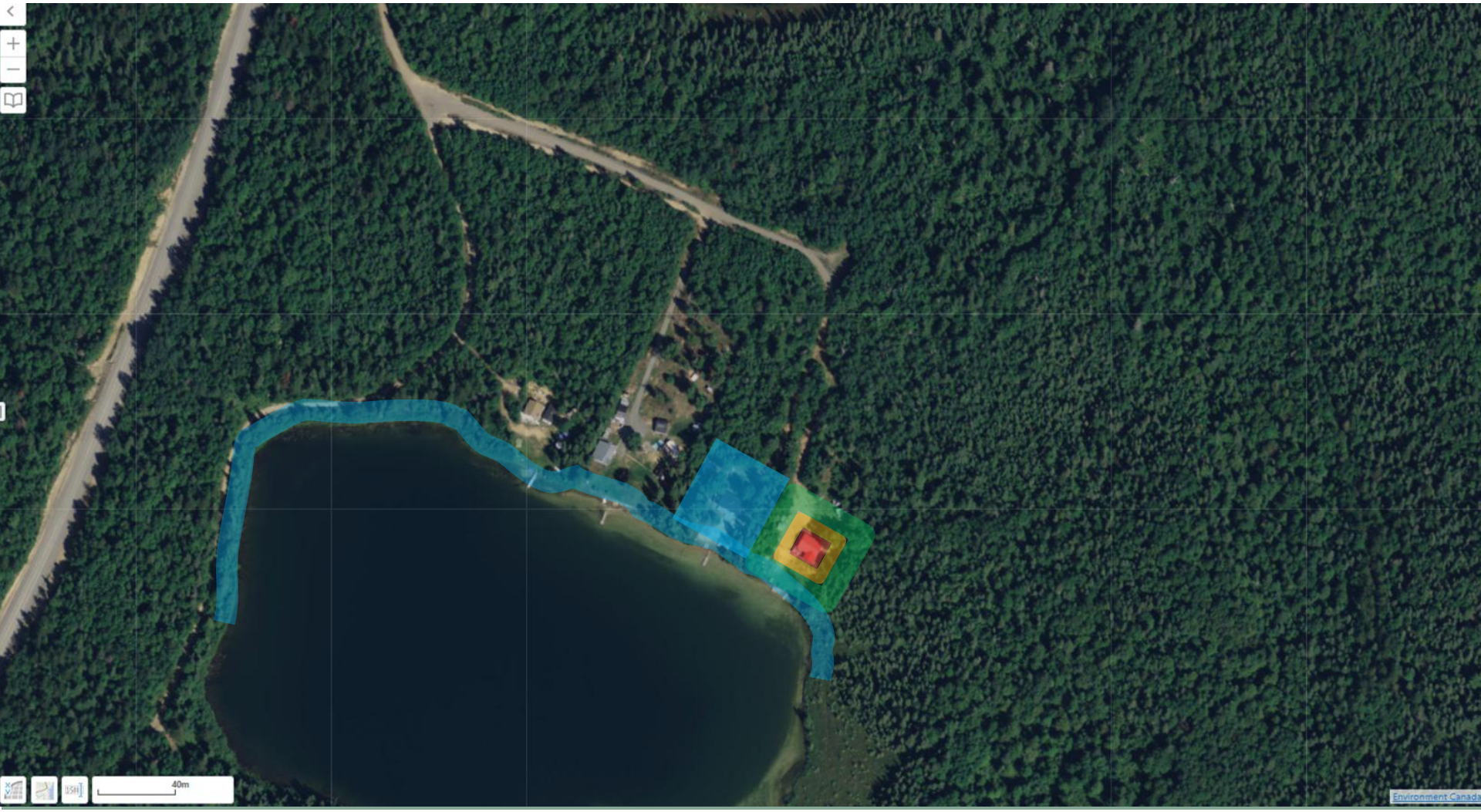
Because coniferous trees are particularly more flammable than deciduous trees, it is important to prune conifers lower limbs. As a general direction of guidance 2 meters between crown base height and the ground is enough to reduce Surface to crown fire growth.

Coniferous Tree Spacing

Because coniferous trees are particularly more flammable than deciduous trees, it is important to thin conifers 3m apart between the outermost branches, as a rule of thumb. 3 meters between crowns is enough to reduce crown to crown fire growth.

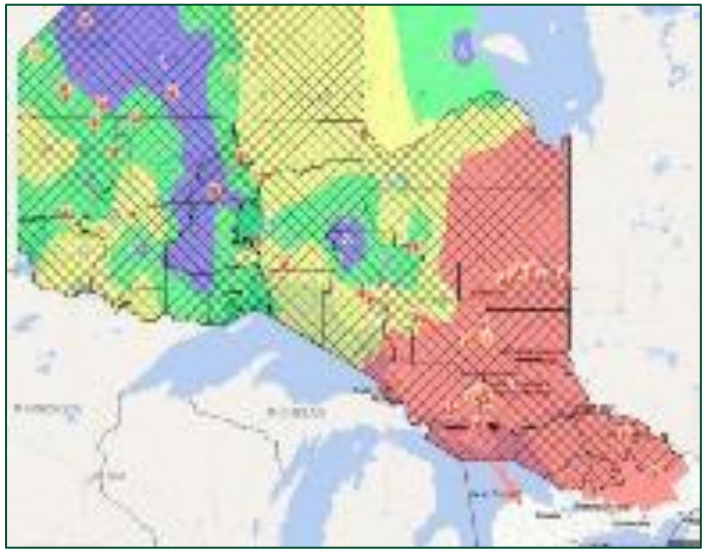
Balancing Other Priorities

Living with Wildland Fire, Species at Risk, Shoreline Bylaws



Firesmartcanada.ca

Ontario Interactive Fire Map:



Federal Fire Hazard Map: