WINTER CONTROL UPDATE

Presented by:

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November 18th, 2013

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Winter Control Operations

- Winter Control started November 2nd
- Staff Assigned to Winter Control:
  - 104 City Staff
  - 30 Casual (Part Time)
  - Contract Crews
- Shifts:
  - Monday to Friday – Winter control staff are required to work shift work
  - Weekend coverage using City staff, casuals, and Contractors

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Winter Control Fleet

	CGS (Includes Spare Equipment)	Contractors
Plows	34 tandem axle combination plows 1 single axle combination plow 2 single axle underbody plow / sanders 5 single axle plow / wing (dump body) 7 graders 28 Municipal Tractors (for sidewalks)	23 tandem axle combination plows 4 graders
Loaders	11	6
Snow Blowers	3	0
4 x 4	5	4
DLA Trucks (anti icing)	2	0

Snow Plowing - *Roadways*

Service Levels for Class 1 to 3:

-   17 Routes (plus 4 echelon beats)

-   Commence plowing at 5 cm and continue until event concludes

-   Roadway plowing completed within 3 to 8 hours after event concludes

-   Freezing rain events (once detected): immediate sand/salt application

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Snow Plowing - *Roadways*

Service Levels for Class 4 to 6:

- 28 Routes

- Commence plowing at 8 cm and continue until event concludes

- Roadway plowing completed within 24 hours after event concludes

- Freezing rain events (once detected): immediate sand application

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Snow Plowing – *MPL's, Lanes and Cul-de-sacs*

10 Routes
- 191 Lanes
- 401 Cul-de-sacs and bulb-outs
- 32 MPL's (Municipal Parking Lots)

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Snow Plowing – *Sidewalks*

Service Levels:

- 20 Routes

- Commence at 8 cm or once icy conditions detected and continue until event concludes

- Snow clearing within 12 to 24 hours after event concludes

- City downtown business core plowed 5 days a week (Midnight to 8:00 a.m.)

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Snow Removal

- Downtown Business District - budgeted twice per year

- Intersection sight lines as required

- Lane width and traffic capacity as required

- Selected Bus Stops within 1 to 2 days after winter event clean up has been completed

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Technology – *Weather Forecasts*

The Weather Network Precipitation Forecast for Sudbury

Issued at Wed, Nov 13, 2013 00:00 EST

NO ENVIRONMENT CANADA WARNINGS IN EFFECT FOR GREATER SUDBURY AND VICINITY AT TIME OF ISSUE

WEDNESDAY Variably cloudy during the day. Winds south easterly 25km/h becoming 35km/h. Variably cloudy during the night. Winds southwesterly 35km/h becoming 30km/h.
THURSDAY Mainly cloudy in the morning with showers developing in the afternoon, probability of precipitation 40%. Winds southwesterly 25km/h becoming 20km/h. Cloudy with showers in the evening, light rain developing overnight, probability of precipitation 70%. Winds light.

Day	Wed, Nov 13 2013								Thurs, Nov 14 2013							
Period	Overnight		Morning		Afternoon		Evening		Overnight		Morning		Afternoon		Evening	
Local Time [24hr]	0 1 2 3 4 5		6 7 8 9 10 11		12 13 14 15 16 17		18 19 20 21 22 23		0 1 2 3 4 5		6 7 8 9 10 11		12 13 14 15 16 17		18 19 20 21 22 23	
Showers													x x x x x x			
Snow																
Flurries																
Sky Condition	CLOUDY PERIODS		VARIABLY CLOUDY		VARIABLY CLOUDY				CLOUDY						CLOUDY	
Sunshine (% period)	0		30		0				10						0	
Local Time [24hr]	0 - 3	3 - 6	6 - 9	9 - 12	12 - 15	15 - 18	18 - 21	21 - 0	0 - 3	3 - 6	6 - 9	9 - 12	12 - 15	15 - 18	18 - 21	21 - 0
Rainfall (mm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.0
Snowfall (cm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POP (%)	20	30	30	20	20	20	30	20	30	20	30	30	40	40	40	30
Air Temperature (°C)	-8	-7	-4	-1	3	3	3	3	3	3	3	6	6	6	5	4
Dew Point (°C)	-13	-11	-7	-5	-3	-3	-2	-1	0	1	1	2	2	2	2	1
Relative Humidity (%)	67	73	80	74	65	65	70	75	81	87	87	75	75	75	81	81
Wind Direction (8-pt)	SW	S	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
Wind Speed (km/h)	6	8	12	17	29	33	33	33	27	25	27	21	21	17	15	13
Wind Gusts (km/h)				32	48	50	50	50	44	38	41	35	32			
Wind Chill (°)	-11	-11	-9	-6	-3	-3	-3	-3	-2	-2	-2	2	2	3	1	1

Day	Fri, Nov 15 2013								Sat, Nov 16 2013							
Period	Overnight		Morning		Afternoon		Evening		Overnight		Morning		Afternoon		Evening	
Local Time [24hr]	0 1 2 3 4 5		6 7 8 9 10 11		12 13 14 15 16 17		18 19 20 21 22 23		0 1 2 3 4 5		6 7 8 9 10 11		12 13 14 15 16 17		18 19 20 21 22 23	
Rain	x														x x x x	
Showers	x x x	x x x x x x x x x x x x					x x x								x x x	
Snow																
Flurries																
Sky Condition	CLOUDY		CLOUDY		CLOUDY				MAINLY CLOUDY						CLOUDY	
Sunshine (% period)	0		0		0				50						0	
Local Time [24hr]	0 - 3	3 - 6	6 - 9	9 - 12	12 - 15	15 - 18	18 - 21	21 - 0	0 - 3	3 - 6	6 - 9	9 - 12	12 - 15	15 - 18	18 - 21	21 - 0
Rainfall (mm)	0.8	1.2	0.7	0.5	0.6	0.3	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	1.2	1.4
Snowfall (cm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POP (%)	70	70	70	60	60	60	40	40	40	40	20	10	20	40	70	70
Air Temperature (°C)	3	2	2	5	5	5	5	5	5	4	4	5	8	7	6	6
Dew Point (°C)	1	1	1	4	4	4	4	3	3	2	1	1	1	3	4	5
Relative Humidity (%)	87	93	93	93	93	93	93	87	87	87	81	75	61	76	87	93
Wind Direction (8-pt)	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	W	SW	SW	S	S	S
Wind Speed (km/h)	11	12	17	17	18	18	17	16	16	17	13	14	15	15	17	15
Wind Gusts (km/h)																
Wind Chill (°)	0	-2	-2	1	1	1	1	2	2	0	1	2			3	3

FRIDAY Cloudy with showers during the day, probability of precipitation 70%. Winds southwesterly 20km/h. Cloudy with showers during the night, probability of precipitation 40%. Winds southwesterly 20km/h becoming 15km/h. High 5, Low 4.
SATURDAY Mainly sunny with cloudy periods in the morning with isolated showers developing in the afternoon, probability of precipitation 40%. Winds light. Cloudy with light rain in the evening, tapering to showers overnight, probability of precipitation 70%. Winds light. High 8, evening Low of 6 warming to 7 overnight.
SUNDAY Cloudy with light rain during the day, probability of precipitation 80%. Winds light. Rain during the night, probability of precipitation 100%. Winds southerly 20km/h becoming 25km/h. High 9, Low 6.
MONDAY Cloudy with light rain in the morning, becoming rain in the afternoon, probability of precipitation 90%. Winds southerly 25km/h. Cloudy with light rain in the evening changing to a few flurries overnight, probability of precipitation 70%. Winds southwesterly 20km/h. High 4, Low 1.
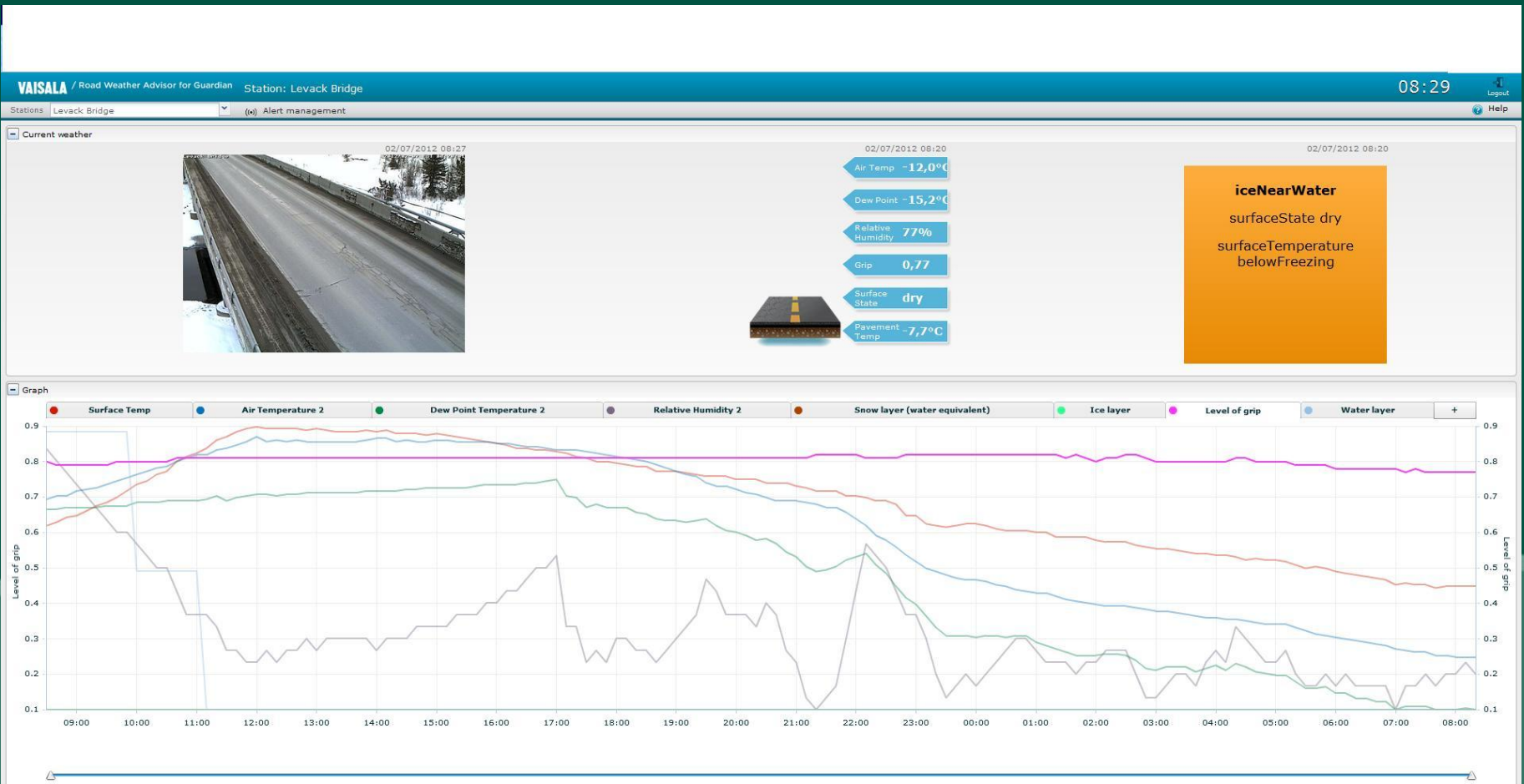**TUESDAY** Mainly cloudy with isolated showers in the morning, snow or rain showers in the afternoon, probability of precipitation 40%. Winds southwesterly 20km/h shifting to northerly 20km/h. Mainly cloudy with a few flurries ending in the evening, mainly clear overnight. Winds light. Morning High 4, cooling to 3 in the afternoon, Low -6 overnight.

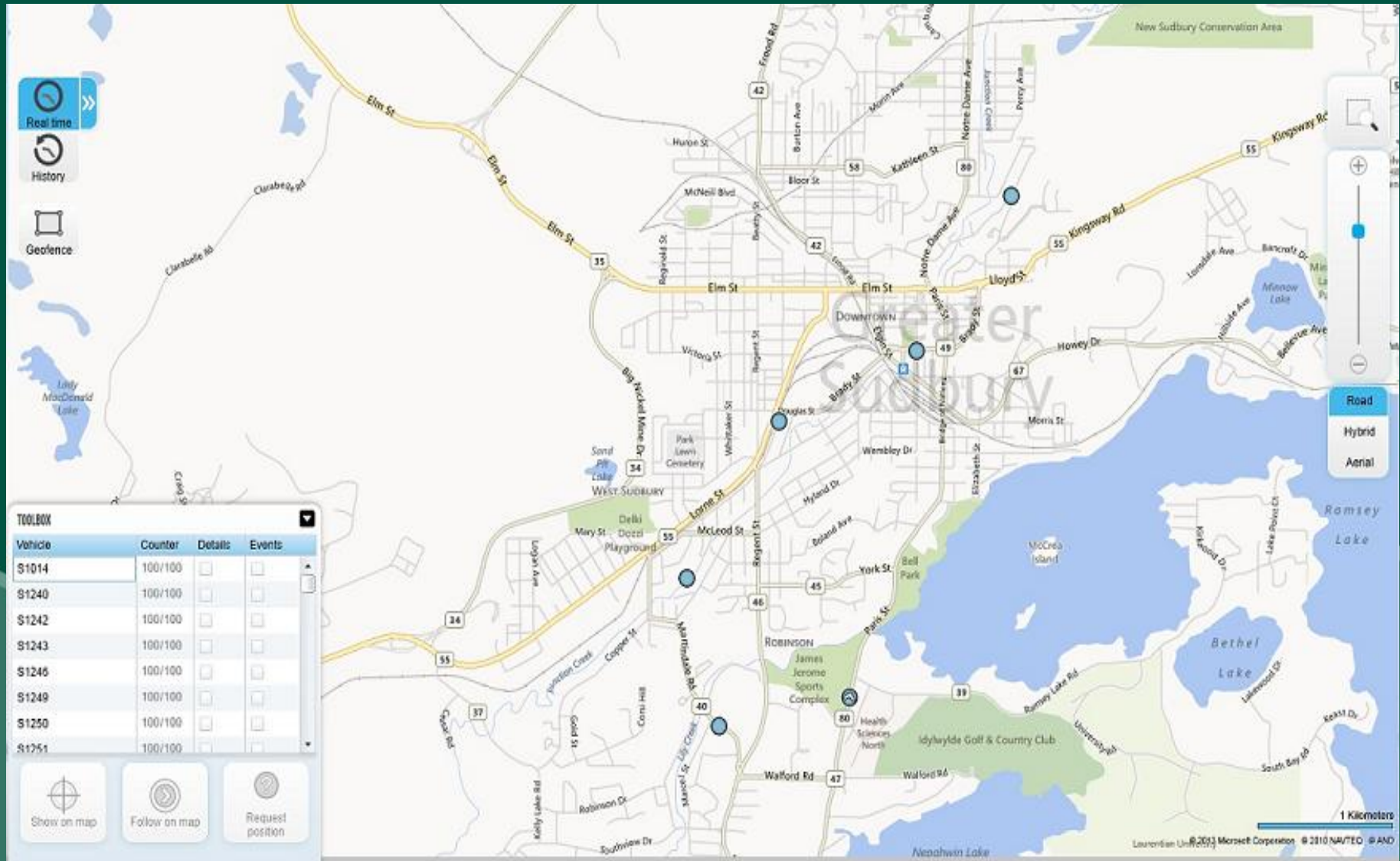Forecast provided by The Weather Network Commercial Services © 2013

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Technology – *RWIS*
(Road Weather Information System)

Onaping River Bridge, Levack

Technology – *AVL Project*

THANK YOU

Questions?