



### April 2012:

Near-normal April temperatures put the brakes on the 2012 growing season after an extremely warm March resulted in a hasty and early launch. Although day-time highs were higher than usual, overnight lows averaged below normal and repeatedly threatened to dip into critical ranges, particularly for tender fruit. Wind machines went into action frequently to provide frost protection. The most critical frost event occurred on April 28 and 29, with most stations reporting lows between -2°C and -4°C (without the use of wind machines).

Accumulated growing degree days (base 10°C) for the month were typical. The month-end total for the growing season thus far, however, is above-normal as a result of the heat in March. The growing-degree-day accumulation at the end of April 2012 is lower as compared to 2010 but higher than the cooler-than-normal April 2011.

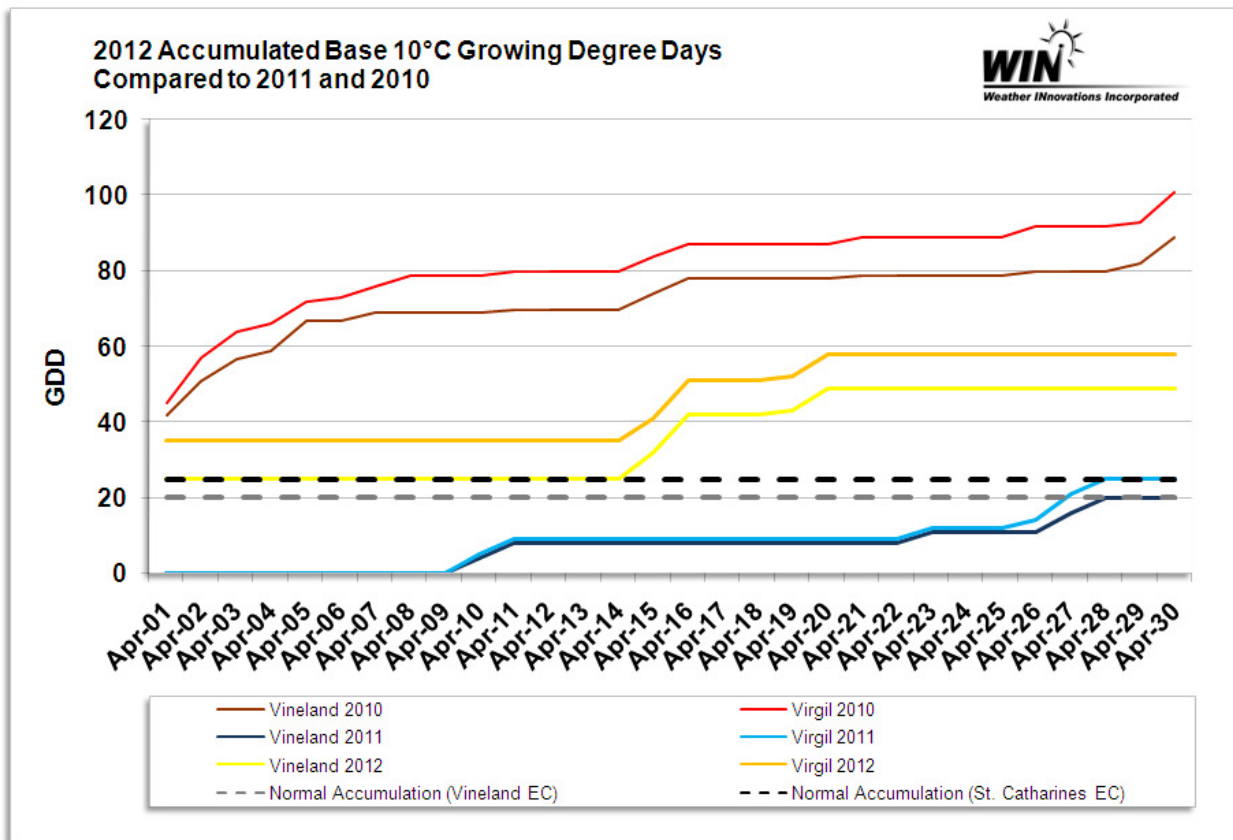


Figure 1: Growing Degree Days

April began with significantly dry conditions, following a winter short on snowfall, a drier-than-normal March and above-normal temperatures throughout. The first two-thirds of the month brought little rainfall to the region. The final third saw a number of rainfall events that bumped the monthly totals up close to normal. This was in direct contrast to last year's severely wet April which brought 1.5 to 2 times the normal rainfall accumulation.



### Niagara West: April 2012 Daily Minimums

Date	Winona	Grimsby	West Lincoln	Lincoln Fly Road	Beamsville	Lincoln Hwy 8	Vineland Lakeshore	Vineland Cherry Ave.	Jordan Escarpment	Jordan Escarpment	Jordan Hwy 8	Jordan Harbour	Rockway
01-Apr	1.4	0.2	0.1	0.4	1.9	1.6	2.1	2.1	1.4	0.4	1.9	2.1	1.8
02-Apr	0.2	-1.4	0.1	1.6	2.2	1.7	3.2	-0.8	0.7	0.6	0.1	2	-0.2
03-Apr	-1.8	-4.2	-3	0.3	-0.4	-1.1	-1.9	-3.9	-1.3	-2.8	-1.9	-3.1	-3.5
04-Apr	1.1	-0.7	0.1	2.1	2.6	2.1	2.9	0.9	2.6	0.8	2.4	1.7	1
05-Apr	0.9	0.6	0.6	0.7	1.7	1.5	2.6	1.7	0.9	1.3	2	2.1	1.4
06-Apr	0.4	0.3	-0.1	0.7	0.5	1.7	2.4	0.5	0.4	0.5	-0.3	1.5	-1.1
07-Apr	-1.6	-3.4	-3	1.6	0.1	1.3	-0.8	-2.8	-1.3	-2.8	-1.5	-1.6	-3
08-Apr	-0.8	-2.8	-1.7	1.4	1.5	0.4	-0.4	-2.5	0.9	-2.1	-0.5	-1.8	-1.3
09-Apr	3.5	1.6	1.1	1.6	2.6	3	3.9	2.9	2.3	1.9	3.2	3.1	2.1
10-Apr	2.6	1.4	1.1	1.1	2.3	2.4	3.3	1.9	2.2	1.4	2.9	2.1	2
11-Apr	2.2	1.1	0.8	0.9	1.6	1.5	2.4	1.9	1.5	1.3	2.1	1.7	1.4
12-Apr	0.2	1.5	1.2	1.2	2.8	1.8	2.6	0.1	2	1.3	0.3	0.6	-1.2
13-Apr	-1.3	-3.3	-2.5	1.1	0.2	0	-0.2	-1.7	1.3	-3.1	-0.7	-0.6	-2.6
14-Apr	1.8	1.9	1.9	3.2	5.4	3.5	1.7	3.4	4.5	3	3.5	1.6	1.8
15-Apr	11.9	11	10.4	10.5	11.2	11.3	11.7	11.4	10.8	10.8	11.3	11.1	11
16-Apr	12.2	11.2	11.2	11.5	12.2	11.7	12.8	12.6	12.2	12.3	13.1	12.4	12.7
17-Apr	3.6	2.6	2.7	2.6	3	3.2	3.6	3.2	3.1	3.1	3.3	3.1	2.9
18-Apr	-2.2	-3.8	-2.6	-0.2	-1.4	-2.4	-1.5	-4	-2.6	-1.5	-1.9	-2.6	-2.8
19-Apr	0.9	-0.3	0	1.4	2	0.9	1.5	0.5	2	0.6	1.3	1.4	0.8
20-Apr	7.9	8.2	8	7.5	8.6	7.2	7.9	7.1	7.6	7.7	8.1	7.7	7
21-Apr	3.7	2.8	3	3.1	3.8	3.4	4.2	3.9	3.5	3.4	4.1	3.8	3.5
22-Apr	4.2	3	3.1	2.9	3.7	3.7	4.1	3.9	3.5	3.2	3.9	3.7	3.2
23-Apr	2.1	1.1	1.1	1.2	2.1	2	2.8	2.3	1.8	1.6	2.4	2.5	1.8
24-Apr	1.4	0.3	0.4	0.6	1.2	1.1	2.3	1.8	1.2	1.2	1.8	1.7	1.3
25-Apr	2.6	0	0.5	1.6	2.1	2.1	1.9	1.4	2	0.7	1.6	1.5	1.5
26-Apr	3.7	2.3	3.2	3.4	4.3	4.2	4.8	4.3	4	3.2	3.6	4.3	3.5
27-Apr	1.4	0.2	0.3	0.3	1.3	1.1	1.7	1.2	0.8	0.7	1.3	1.4	0.9
28-Apr	-2.5	-4.1	-4	-3.2	-2	-1.7	-0.9	-3.3	-2.5	-2.6	-2.1	-1.5	-2.3
29-Apr	-3.1	-5.5	-4.2	-2.5	-1.4	-2.9	-2.6	-5.1	-2.6	-3.2	-2.2	-3.5	-3.6
30-Apr	-1.1	-1.6	-0.2	2.4	1.4	-0.4	-1.3	-2.6	1	1.1	-0.4	-2	-1.1



Legend:

	Most Critical Frost Event
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Figure 2: Niagara West - Daily Minimums



### Niagara East: April 2012 Daily Minimums

Date	St. Catharines Glass Ave	St. Catharines Third Ave	West St. Catharines Fifth St	Niagara College	St. David's Bench	Niagara Airport	Virgil	NOTL Irvine Road	Lakeshore	Pathway	Queenston		
01-Apr	2.3	1.5	1.9	1.4	0.9	1.1	0.8	-0.8	-0.1	0.9	0	-0.5	1.3
02-Apr	1.9	2.1	-0.2	-0.6	-0.3	-0.7	0.8	-0.3	0.3	2.5	3.1	1.3	-0.7
03-Apr	-3.3	-3.5	-3.4	-2.7	-2	-1.8	-1.9	-2.5	-2.6	-1.4	-2	-2.7	-1.3
04-Apr	1.1	1.9	1.7	0.9	1.2	1.9	2.4	1.2	0.5	3.2	3.7	1.4	1.6
05-Apr	2.3	2	1.1	0.9	0.2	0.1	1.3	1.5	1.3	1.9	2.4	2	0.1
06-Apr	1.7	1.5	-0.7	-2.6	-1.6	-0.9	0.6	-1.4	-0.4	2	2.8	2.1	-0.8
07-Apr	-3.2	-3.5	-3.6	-2.9	-2.4	-2.5	-2.1	-2.9	-1.3	-0.5	-0.8	-2.2	-0.2
08-Apr	-2.5	-2.3	-1.8	-1	0.4	-0.2	-0.6	-0.9	-0.3	0.2	-0.4	-1.5	0.6
09-Apr	3.7	3.7	2.1	2.4	3.1	3.5	3.6	3.6	3.6	3.7	4.3	3.7	3.6
10-Apr	2.8	2.6	1.8	1.5	2.2	2.6	2.8	2.2	2.7	2.8	3.3	2.9	2.8
11-Apr	2.1	1.9	1.4	1.8	2	1.8	2.3	2.5	2.3	2.5	3.1	2.7	2.1
12-Apr	-1.6	-1.5	-1.3	-1.4	-0.7	-0.9	0.7	-1.1	-0.3	2.2	1.6	0.5	0.4
13-Apr	-2.6	-3.4	-3.1	-2.1	-1.4	-0.9	-1.8	-2	-0.9	0.4	0.3	-2	0.7
14-Apr	1.4	0.7	1.1	2.8	4.9	5.2	2.7	2.3	1.5	3.2	3	1.2	4
15-Apr	11.5	11.3	11.2	11.5	11.6	11.5	11.7	11.9	11.8	11.7	12.2	12.1	11.7
16-Apr	13	13	12.6	13.2	13.7	13.8	13.2	13	12.8	11.8	10.7	12.2	14.1
17-Apr	3.6	3.2	2.8	3.2	2.7	2.2	2.7	2.5	2.6	2.7	3.2	2.7	2.8
18-Apr	-2.8	-2.9	-2.9	-2.4	-2	-1.6	-2.1	-3.3	-0.7	-0.7	-1	-2.6	-1.6
19-Apr	0.6	0.8	0.9	1.3	3.2	2.6	2.1	0.8	1.8	2.5	2.3	1.3	2.2
20-Apr	7.8	7.6	7.4	7.4	8.3	8	8.1	7	7.7	7.9	8.4	8	8.4
21-Apr	4	3.7	3.7	4	4.2	3.9	4.1	4.3	4.2	3.9	4.2	4.3	4.4
22-Apr	3.9	3.5	3.2	3.6	3.3	3	3.3	3.6	3.4	3.2	3.7	3.7	3.5
23-Apr	2.5	2.2	1.9	2.1	2.3	2.1	2.3	2.5	2.3	2.4	3	2.5	2.4
24-Apr	1.7	1.7	1.4	1.6	2.1	1.7	2	1.1	1.2	1.6	1.9	0.7	1.9
25-Apr	0.7	0.9	1.7	0.3	1.2	1.7	2	1.6	2.3	3.7	4.8	3.4	1.9
26-Apr	4.5	3.8	3.5	3.9	4.6	4.2	3.9	3.3	4.3	4	4	2.8	4.7
27-Apr	1.6	1.4	1	1.1	1.3	0.9	1.2	1.3	1.2	1.3	1.6	1.6	0.8
28-Apr	-2.5	-2.8	-2.8	-3.3	-2.7	-2.4	-2.1	-3.1	-0.8	0	0.8	-0.5	-1.7
29-Apr	-3.7	-3.7	-3.8	-3.5	-2.9	-2.1	-2.9	-3.7	-0.9	-0.2	0.1	-2.1	-1.5
30-Apr	-2	-2.1	-2	-2	-0.1	0.9	-0.8	-1.9	2	2	0.3	-0.8	-0.2



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Legend:

Most Critical Frost Event
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Figure 3: Niagara East - Daily Minimums

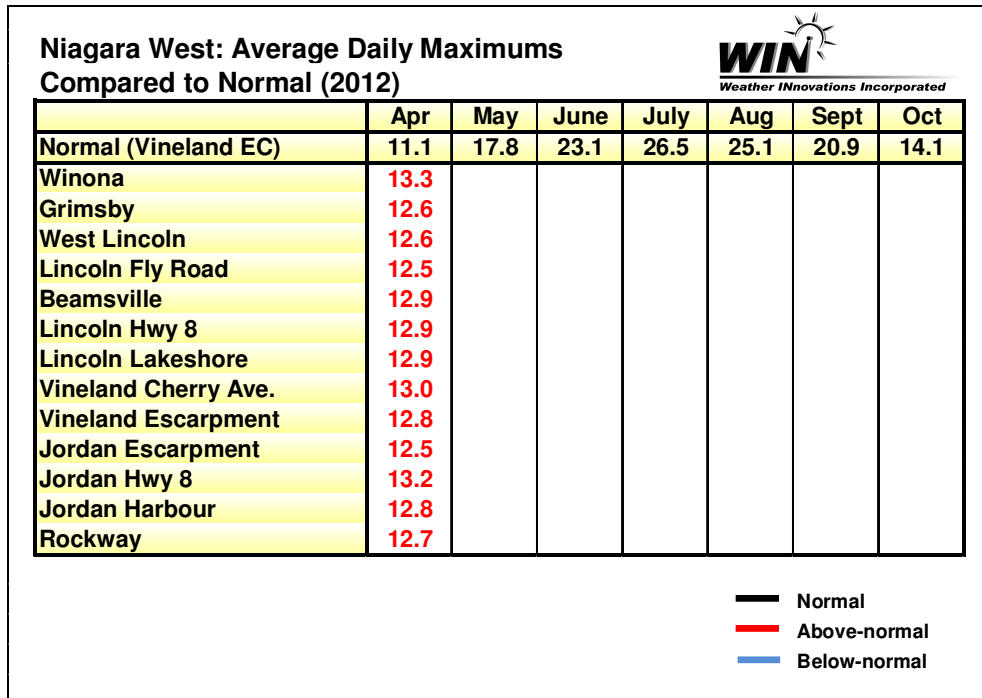


Figure 4: Niagara West - Maximum Temperatures

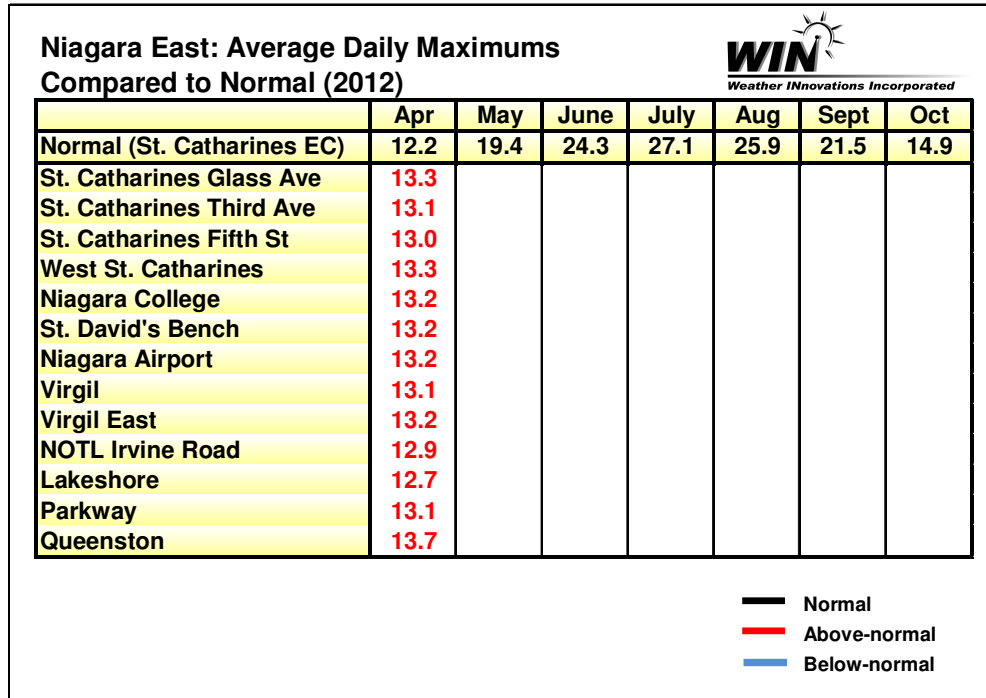


Figure 5: Niagara East - Maximum Temperatures

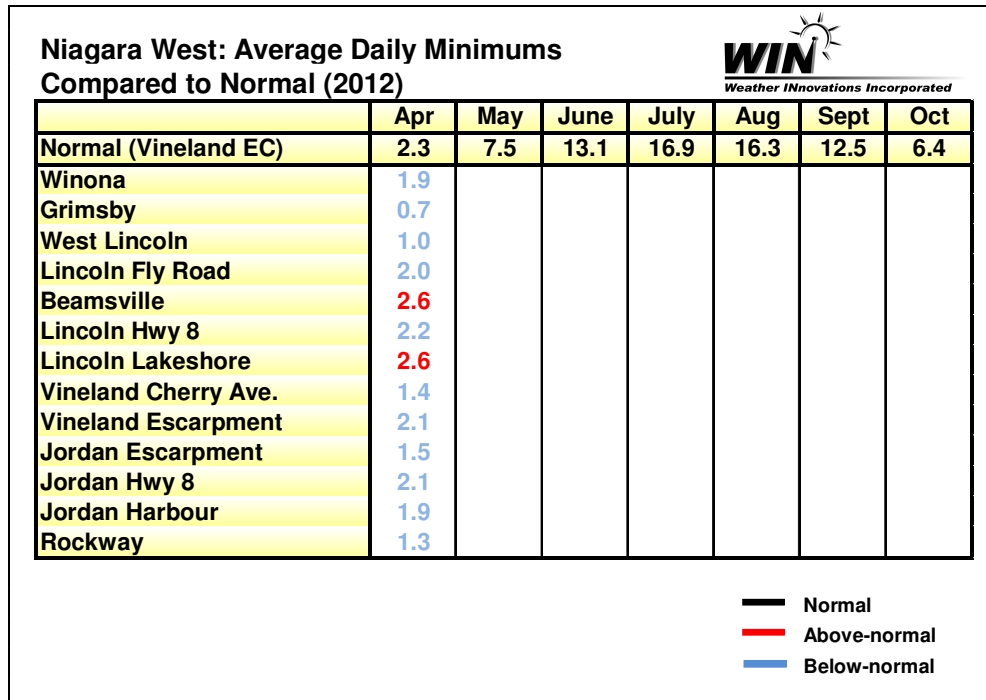


Figure 6: Niagara West - Minimum Temperatures

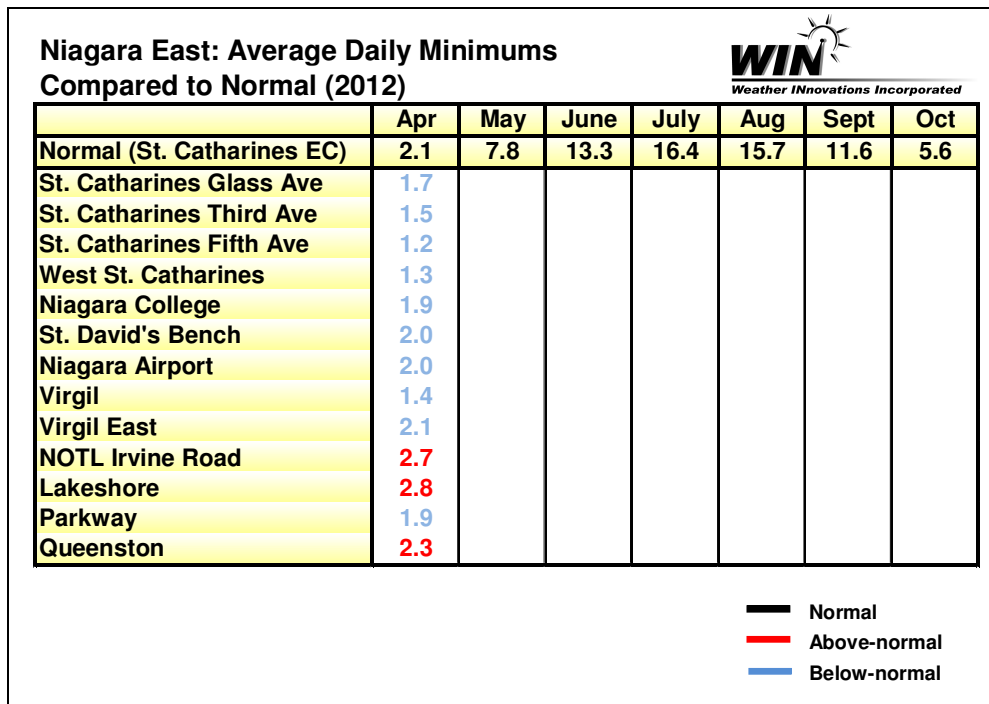


Figure 7: Niagara East - Minimum Temperatures

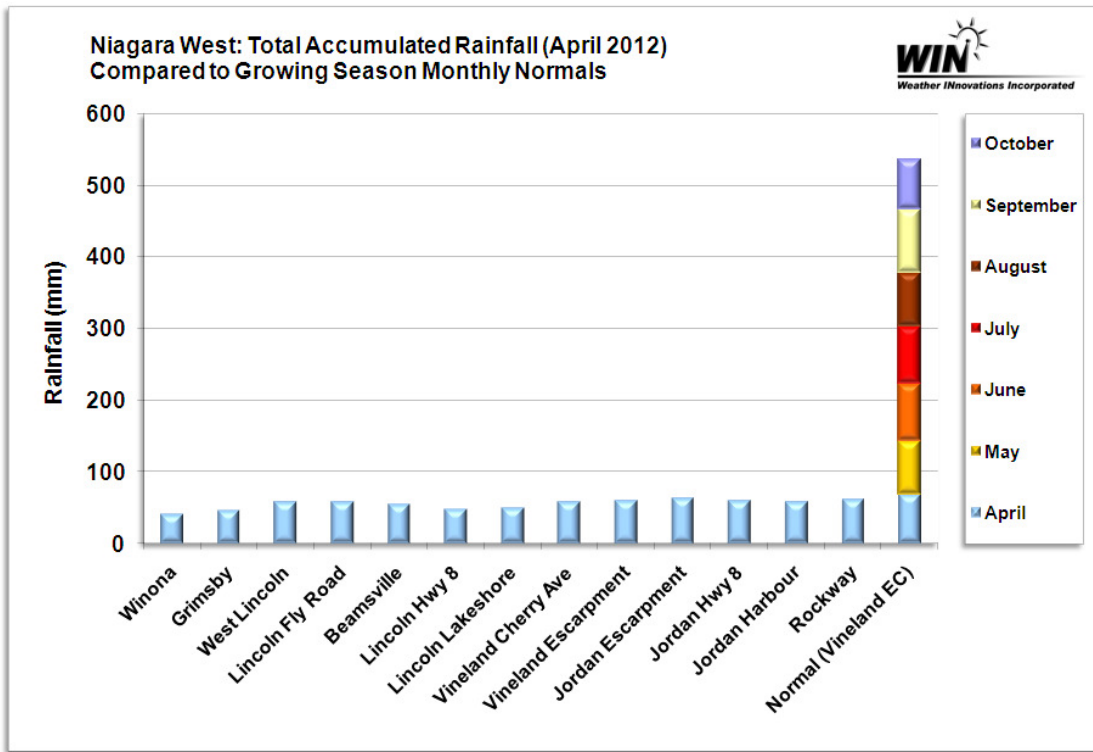


Figure 8: Niagara West - Rainfall

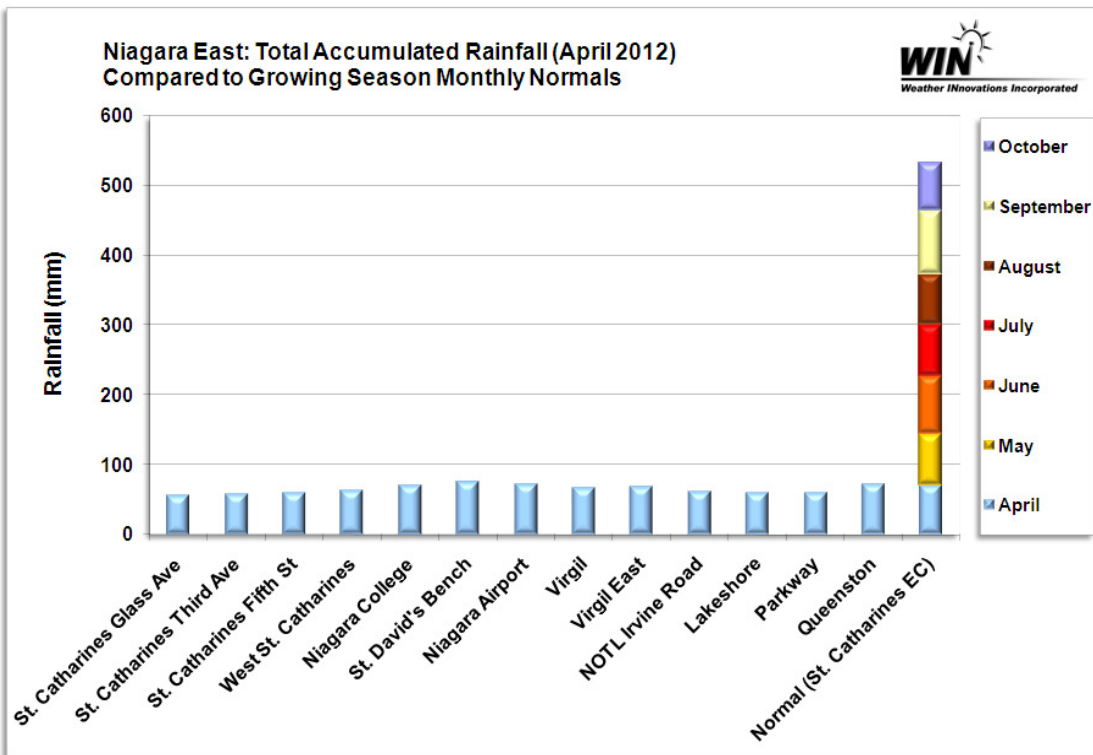


Figure 9: Niagara East - Rainfall