



Otonabee Region Conservation Authority

Low Water Conditions Update

Prepared and Presented by:

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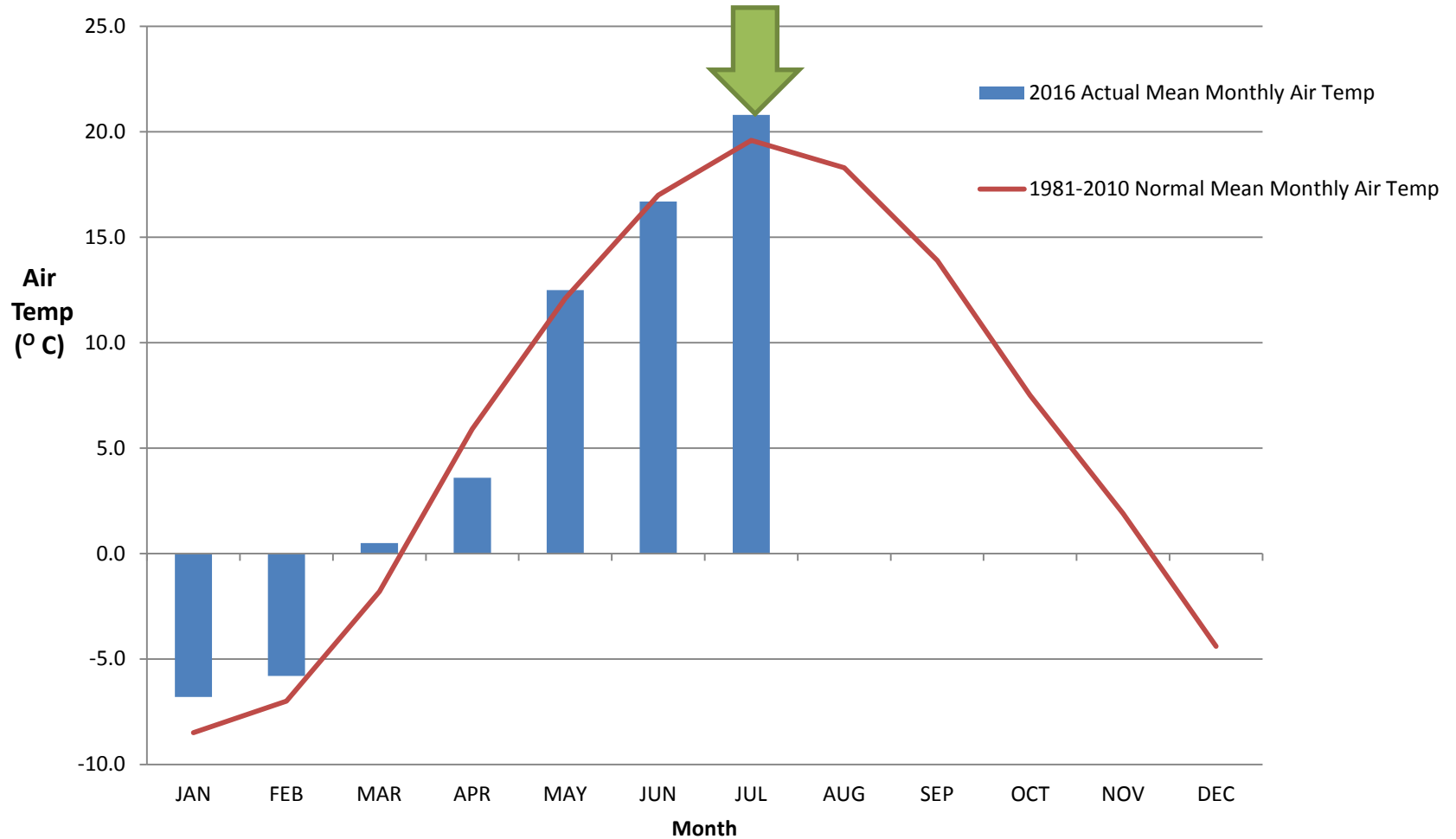
Water Resources Technologist

Date: August 17, 2016

Air Temperature

Actual = 20.8 °C

Normal = 19.6 °C



Days Above 30 °C (since 1950)

	MONTH	MAY	JUNE	JULY	AUG	SEPT	
YEAR							TOTAL
2016		1	5	10	9		25
2005		0	8	12	6	0	26
1988		1	6	11	11	0	29
1966		0	5	10	5	0	20
1955		0	3	14	10	1	28

Precipitation Indicators

Level I (Minor Drought)

18 month < 80% of historical average
3 month < 80% of historical average

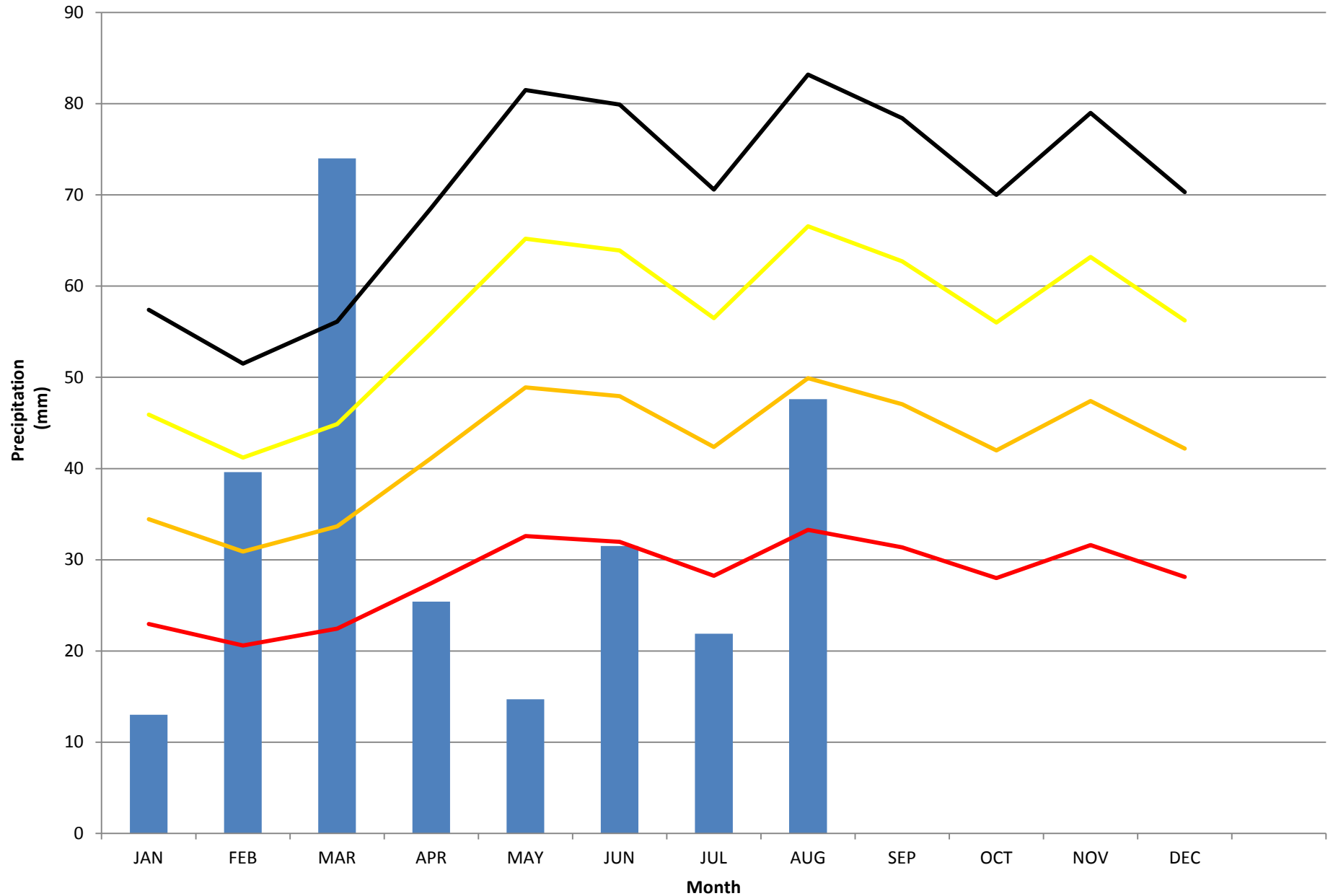
Level II (Moderate Drought)

18 month < 60% of historical average
3 month < 60% of historical average
1 month < 60% of historical average

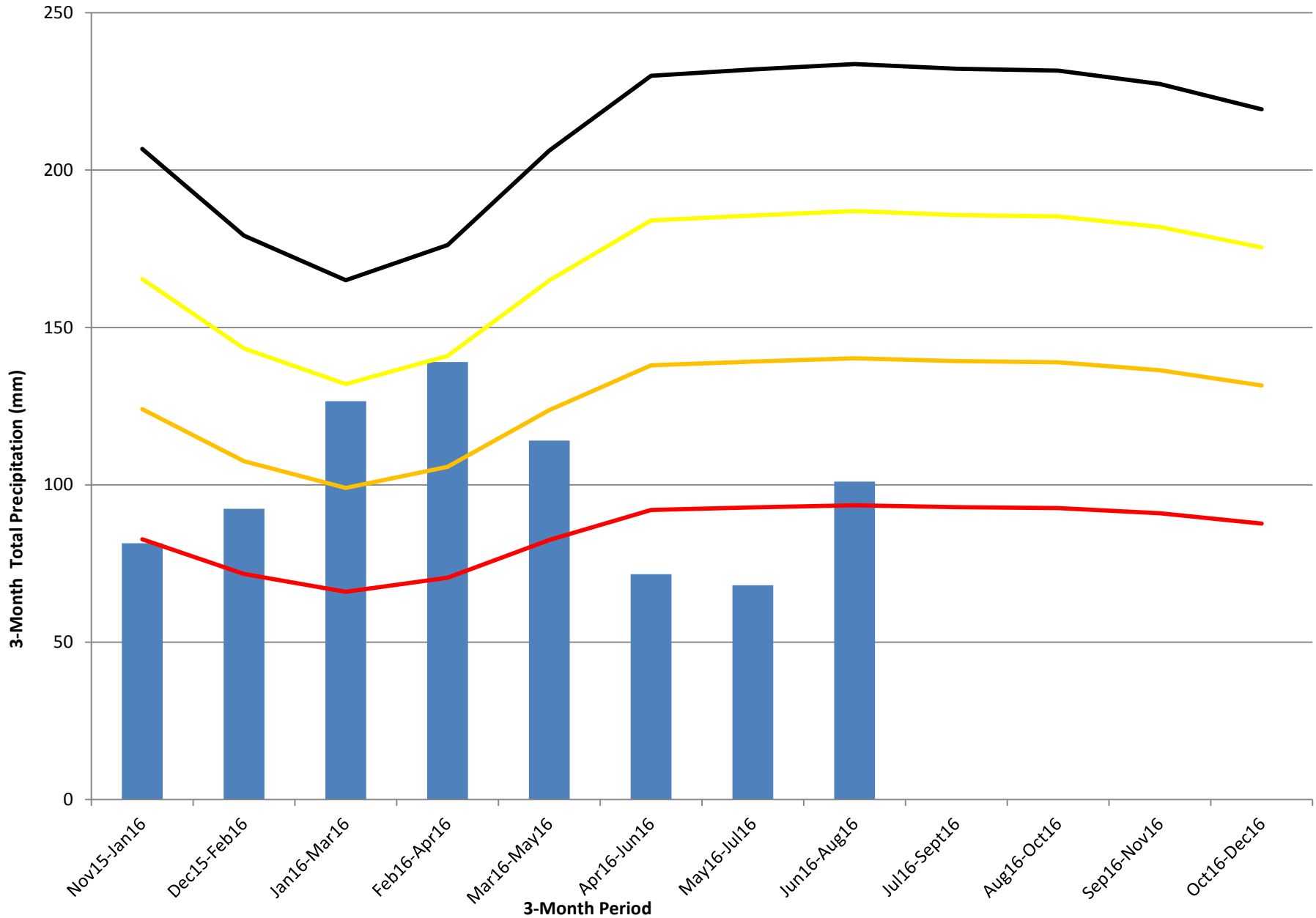
Level III (Severe Drought)

18 month < 40% of historical average
3 month < 40% of historical average
1 month < 40% of historical average

1 Month Precipitation Receipts (January 01 – Aug 16)

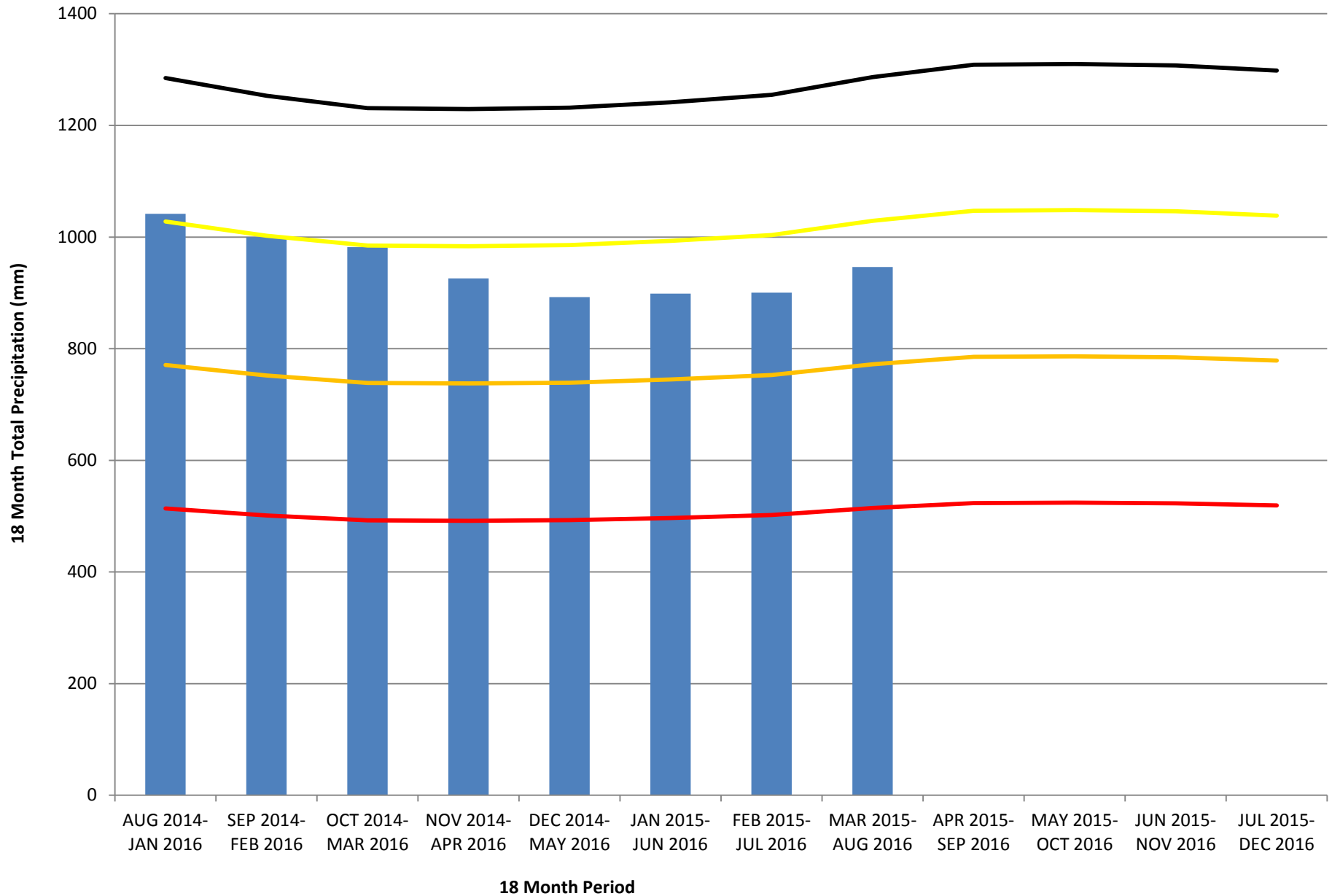


3-Month Precipitation (January 01 – August 16)



18-month Precipitation (January 01 – August 16)

***Note: Missing 80% of January 2015 precipitation values**



Peterborough Precipitation Statistics (Jan 01 – Aug 16)

MONTH	1 Month % of Normal	Drought Level	3 Month % of Normal	Drought Level	18 Month % of Normal	Drought Level
January	23	3	39	3	81	0
February	77	1	52	2	80	0
March	132	0	77	1	80	0
April	37	3	79	1	75	1
May	18	3	55	2	72	1
June	39	3	31	3	72	1
July	31	3	29	3	72	1
August	57	2	43	2	73	1

Streamflow Thresholds

Based on Lowest Average Summer Month (LASM) Flow

Level I

Spring (Mar Apr May) : – monthly flow < 100% of LASM flow

Other times: – monthly flow < 70% of LASM flow

Level II

Spring (Apr May Jun): – monthly flow < 70% of LASM flow

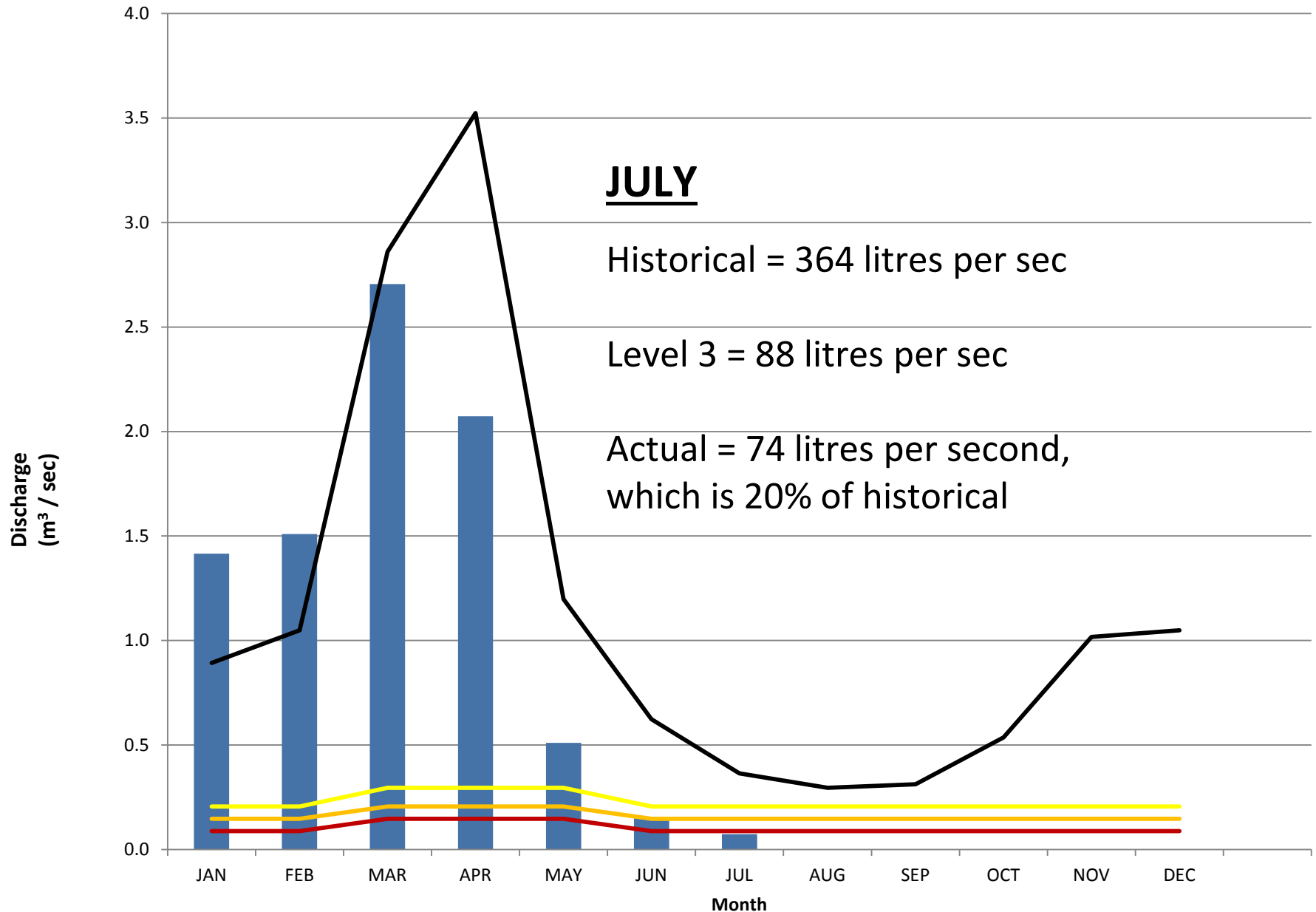
Other times: – monthly flow < 50% of LASM flow

Level III

Spring (Apr May Jun): – monthly flow < 50% of LASM flow

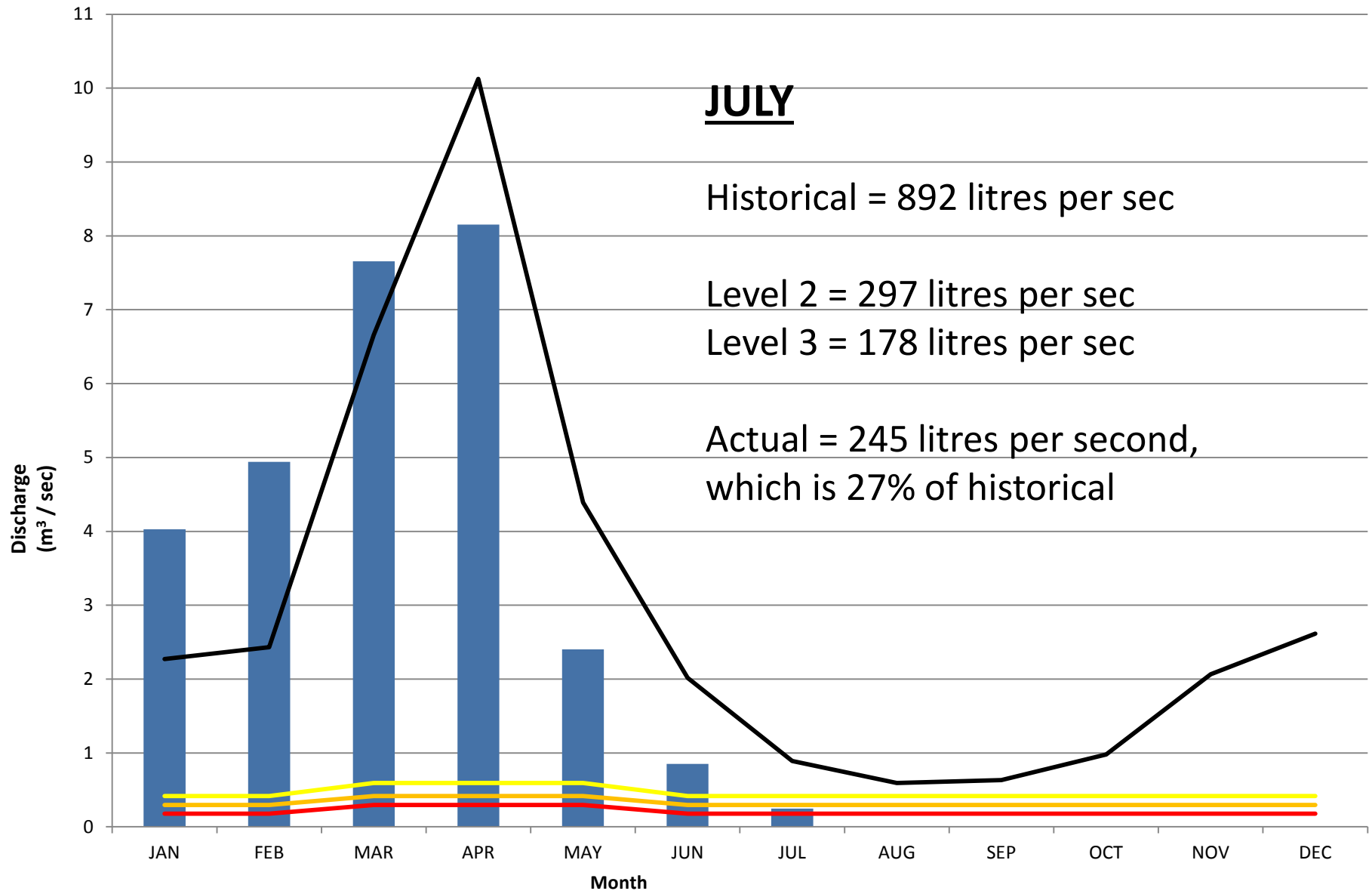
Other times: – monthly flow < 30% of LASM flow

Jackson Creek Flow (January – July)





Ouse River Flows (January – July)



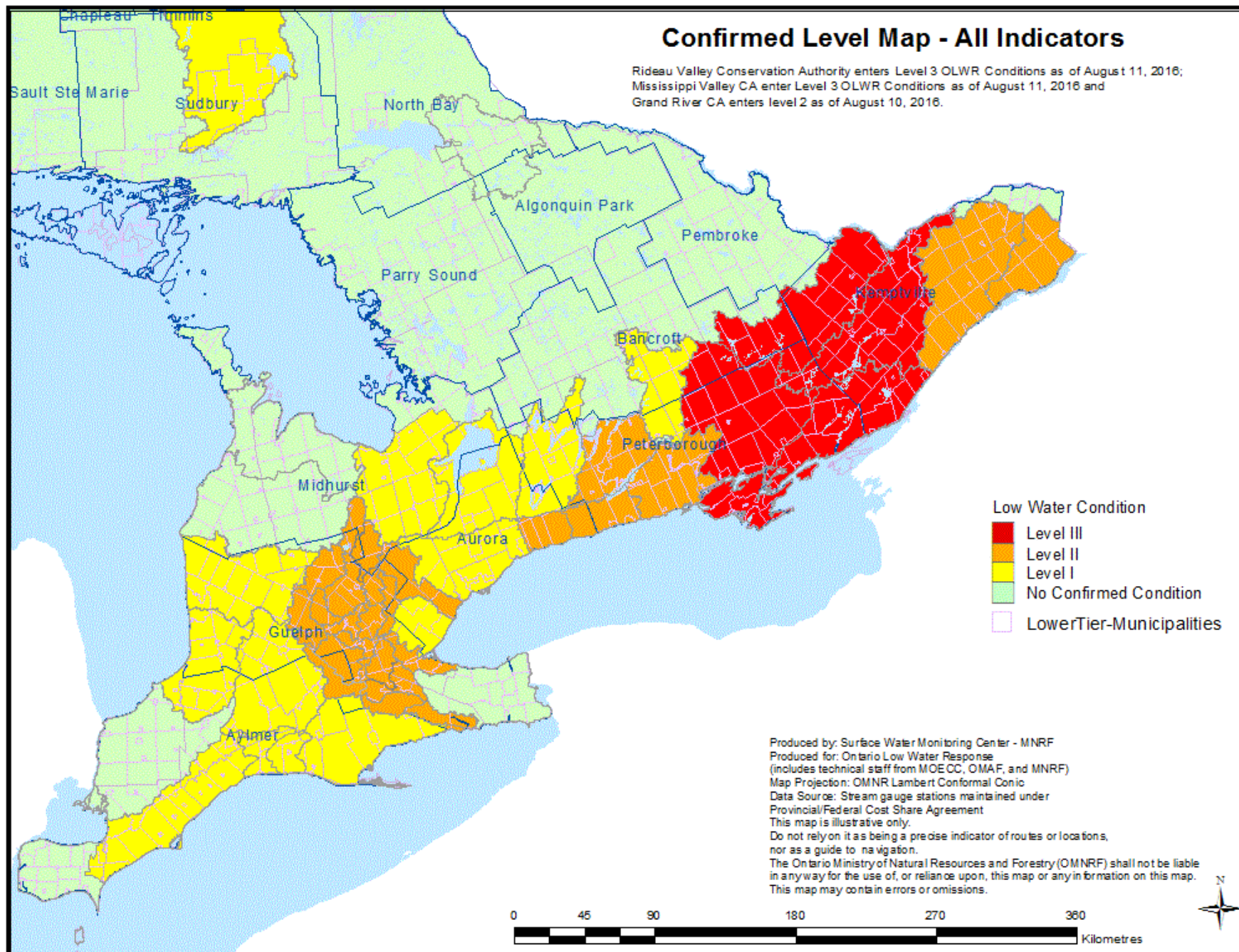


Jackson Creek and Ouse River 2016 Flow Statistics

MONTH	JACKSON CREEK			OUSE RIVER		
	% HISTORICAL FLOW	% LASM FLOW	DROUGHT LEVEL	% HISTORICAL FLOW	% LASM FLOW	DROUGHT LEVEL
January	159	480	0	177	679	0
February	144	512	0	203	833	0
March	95	917	0	114	1291	0
April	59	703	0	80	1375	0
May	43	173	0	55	405	0
June	24	51	1	42	144	0
July	21	25	3	27	41	2

Confirmed Level Map - All Indicators

Rideau Valley Conservation Authority enters Level 3 OLWR Conditions as of August 11, 2016;
Mississippi Valley CA enters Level 3 OLWR Conditions as of August 11, 2016 and
Grand River CA enters level 2 as of August 10, 2016.

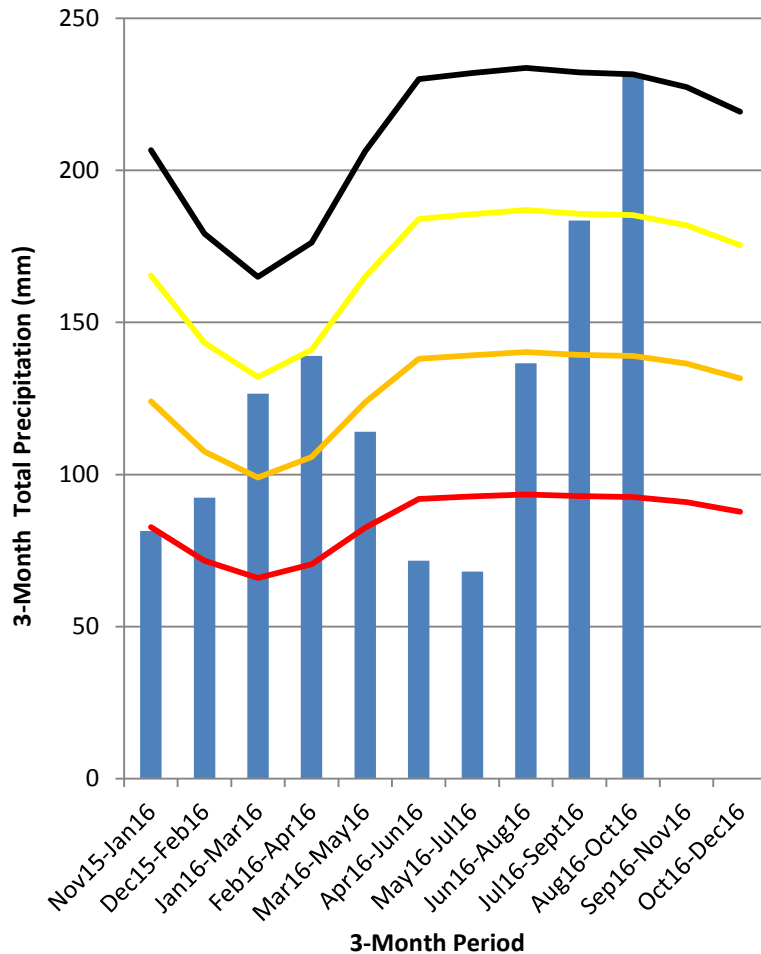


August Forecast

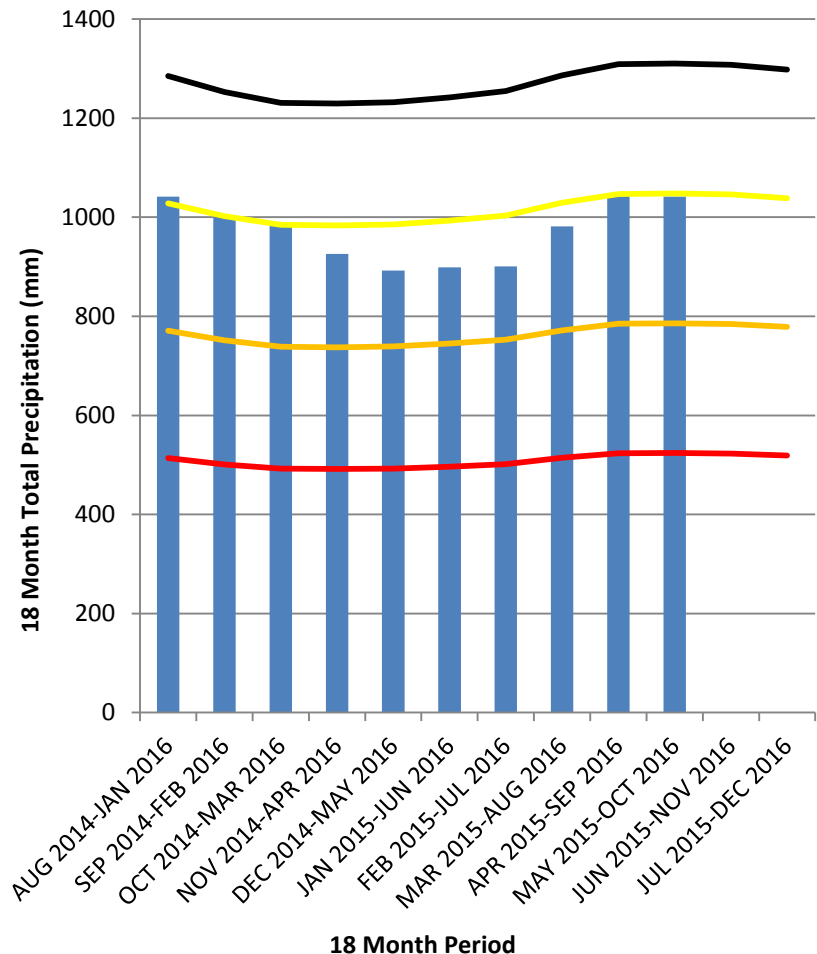
DAY	DATE	HIGH	LOW	RAIN
Wed	17	28	16	0
Thurs	18	28	15	0
Fri	19	30	18	0
Sat	20	30	19	2
Sun	21	25	13	21
Mon	22	23	12	0
Tues	23	25	14	0
Wed	24	27	14	0
Thurs	25	28	15	8
Fri	26	25	11	5
Sat	27	24	7	0
Sun	28	25	8	0
Mon	29	23	9	1
Tues	30	24	11	1
Wed	31	23	9	0

What Happens if Rainfall Receipts are Normal in August, September & October?

3-Month Indicator Chart



18-Month Indicator Chart





FALL HIGHLIGHTS

2016

