

# June 23, 27-28 Rainfall Events

Rainfall amounts

Rainfall patterns

Flooding results

Why homes flood

Response Plan

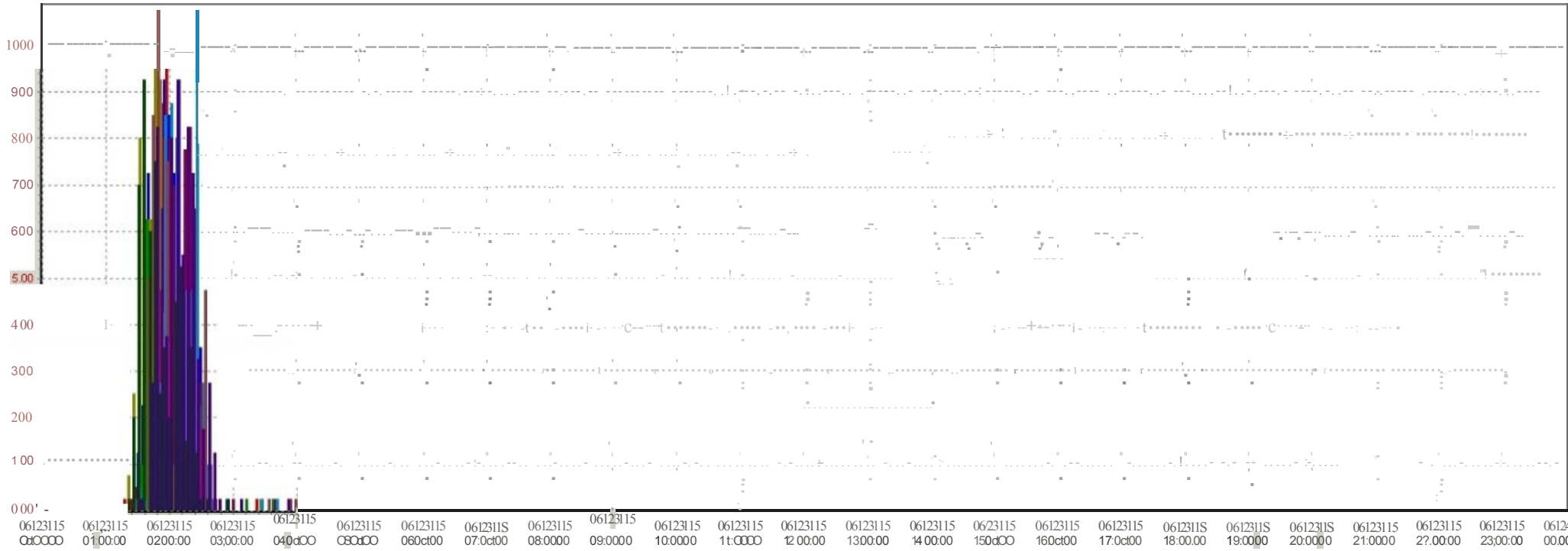
Operating response

Capital response

Improvement considerations

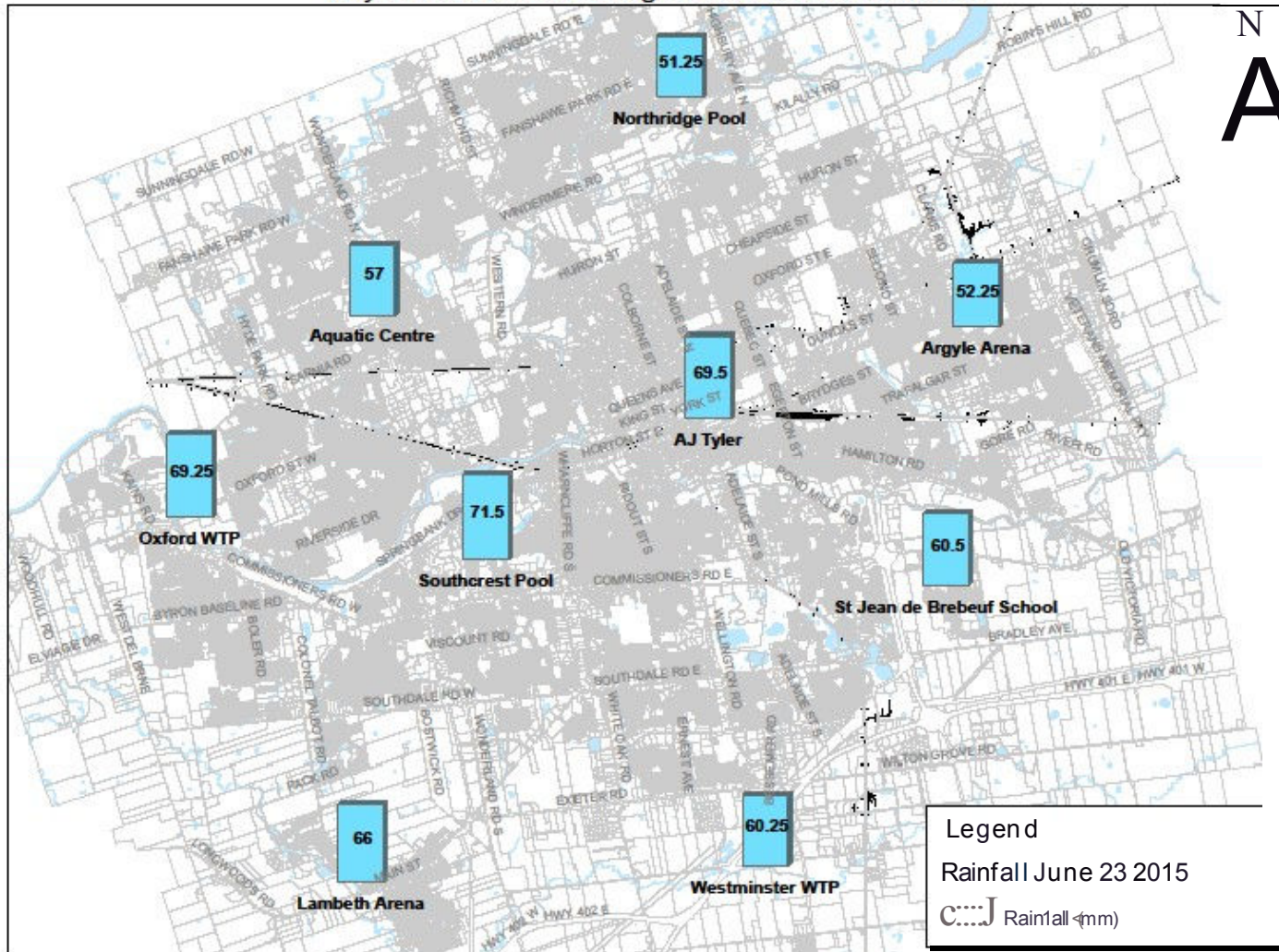
371147-St Jean de Brebeuf-Rain (06123115 to 06124115)

I,,	Rrn(mm)	I,,	371149-SouthClest Pool-RlnR... (hvr)	I,,	J713113 " F61PU R n 11 (nir)	I,,	371302 A gyle Atong -ROhRch(mm)	I,,	371155 Lombedi A ten
I,,	371154 Wf"tminster STP -RainRh(mm) P'	I,,	371153.Nbrtl'obfge Pool-RhRrl(mm) P'	I,,	371152-Acr.iotic Centre.RainRoin(hvr) P'	I,,	371150.AJTyler Centre.Rairl.Rain(mm)	I,,	371155 Lombedi A ten RoinRch(mm)

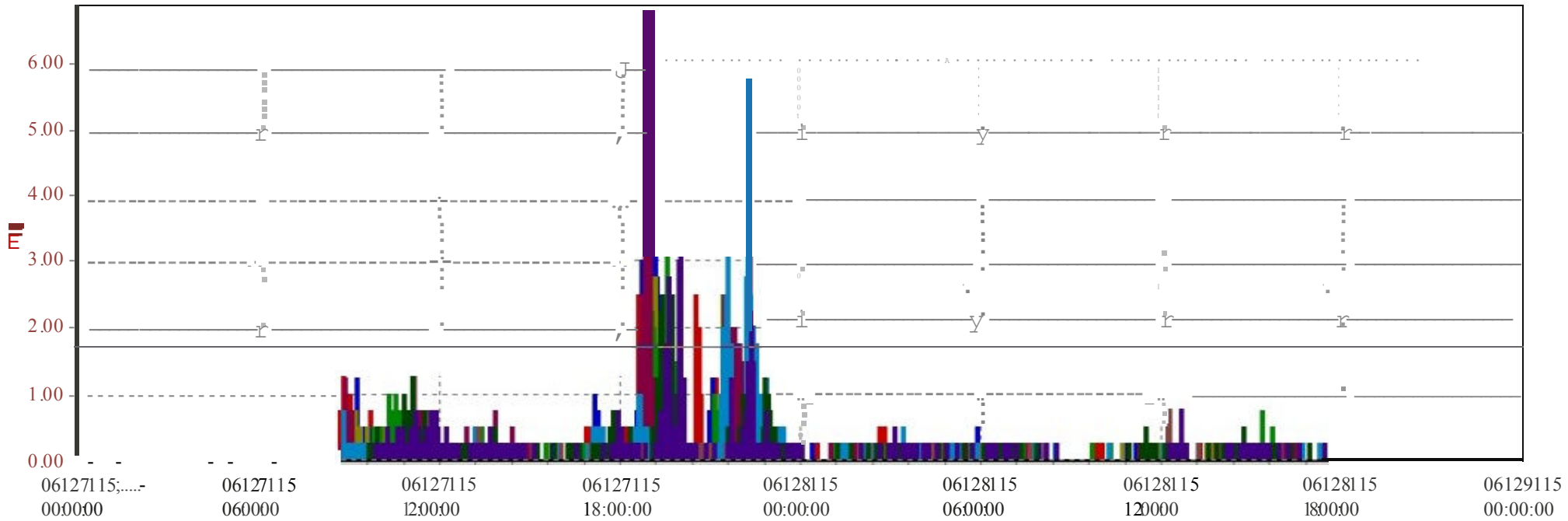
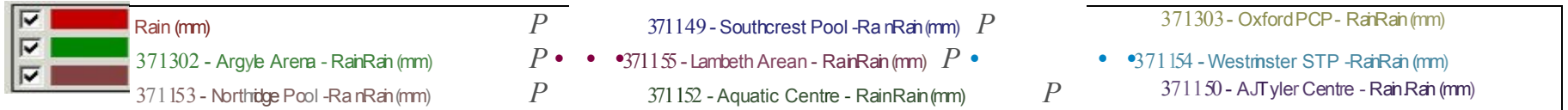


	A	B	C	D	E	F	G	H	I	J
	Title	Rain (**)	3 nu 9 South etl Pool -rain.Rain	371303 0 Ifold PCP- Rain Rain 1	371302 Arllto A ten Rain Rain (III)	371155 Lambelh A rean -Rain Rain	371154 Weatl hintlet STP -Rain Rain	3 n 153 Norlhrdge Pool Rain Rain	371152 Aquatic Centre Rain Rain	371150 AJTyler Centre Rain Rain
06123115 00:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 01:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 02:00:00		9.500	9.250	9.300	6.750	8.250	10.750	10.750	9.250	9.250
06123115 03:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 04:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 05:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 06:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 07:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 08:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 09:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 10:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 11:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 12:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 13:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 14:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 15:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 16:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 17:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 18:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 19:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 20:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 21:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 22:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06123115 23:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
06124115 00:00:00		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Q2	Mininum	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Q1	Average	9.500	9.250	9.300	6.750	8.250	10.750	10.750	9.250	9.250
Q3	Maximum	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Totall		60.500	71.500	69.250	52.250	66.000	60.250	51.250	57.000	69.500

### City of London Rain Gauges - June 23 2015 Rainfall



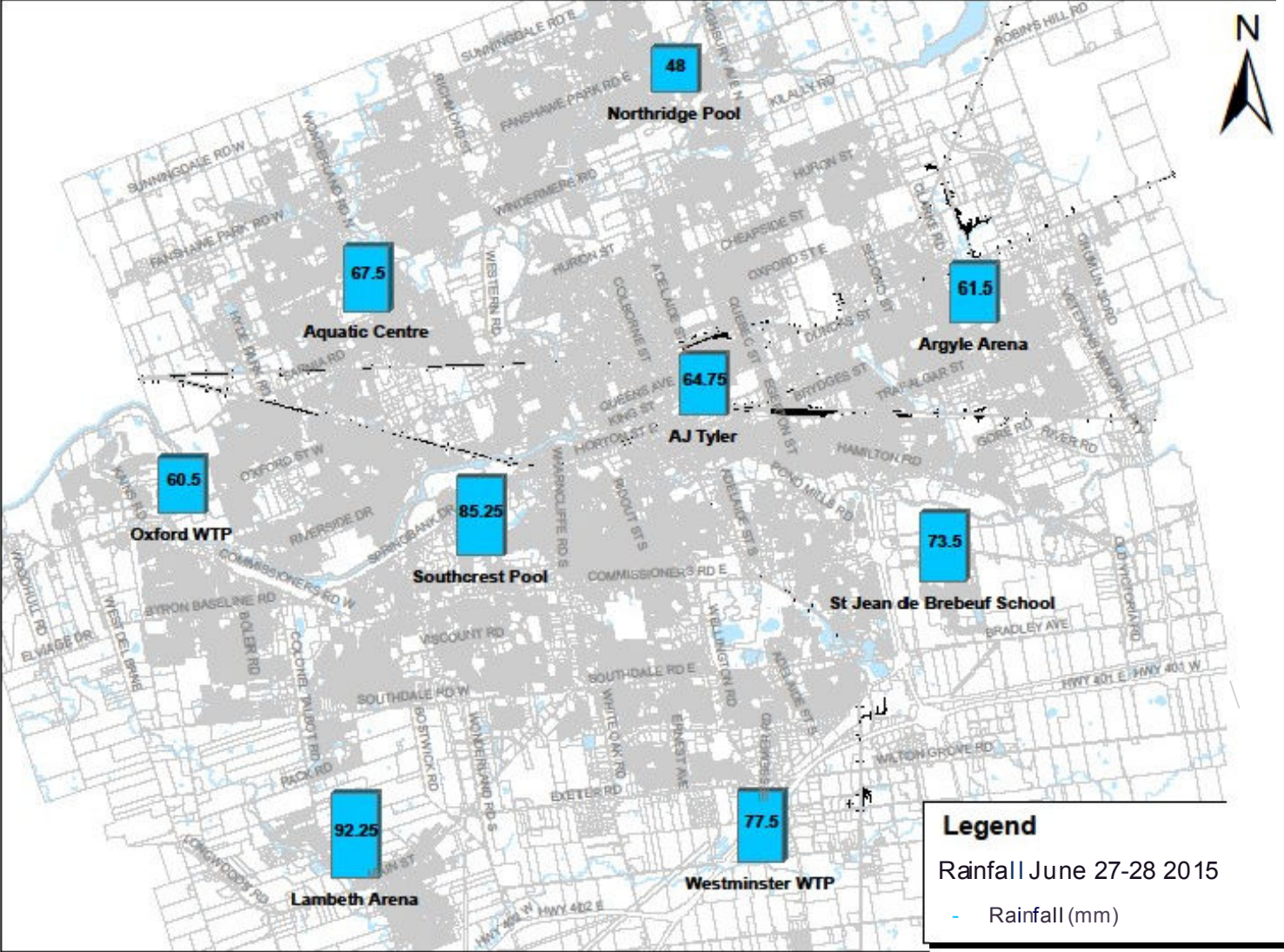
### 371147-St Jean de Brebeuf-Rain (06127115to 06129115)



	A	B	C	D	E	F	G	H	I	J
1	Time	Rain (mm)	371149 - Southcrest Pool	371303 - Oxford PCP - Rain	371302 - Argyle Arena - Rain	371155 - Lambeth Area - Rain	371154 - Westminster STP - Rain	371153 - Northridge Pool - Rain	371152 - Aquatic Centre - Rain	371150 - AJ Tyler Centre - Rain
577	06128/15 23:55:00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
578	<b>Minimum</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
579	<b>Average</b>									
580	<b>Maximum</b>	2.500	6.250	3.250	3.500	6.750	5.750	1.750	2.500	3.250
581	<b>Total</b>	73.500	85.250	60.500	61.500	92.250	77.500	40.000	67.500	64.750

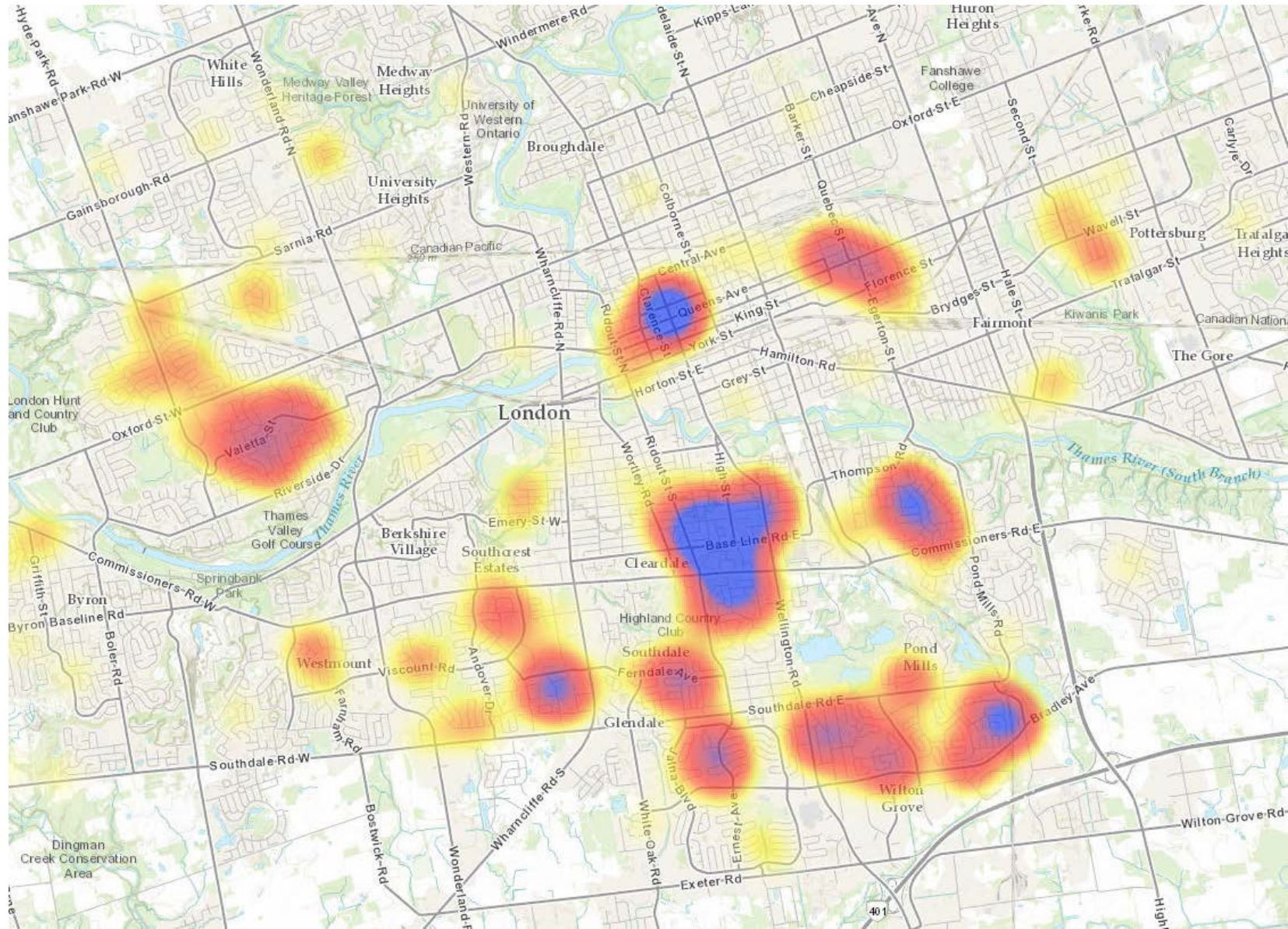


### City of London Rain Gauges - June 27-28 2015 Rainfall



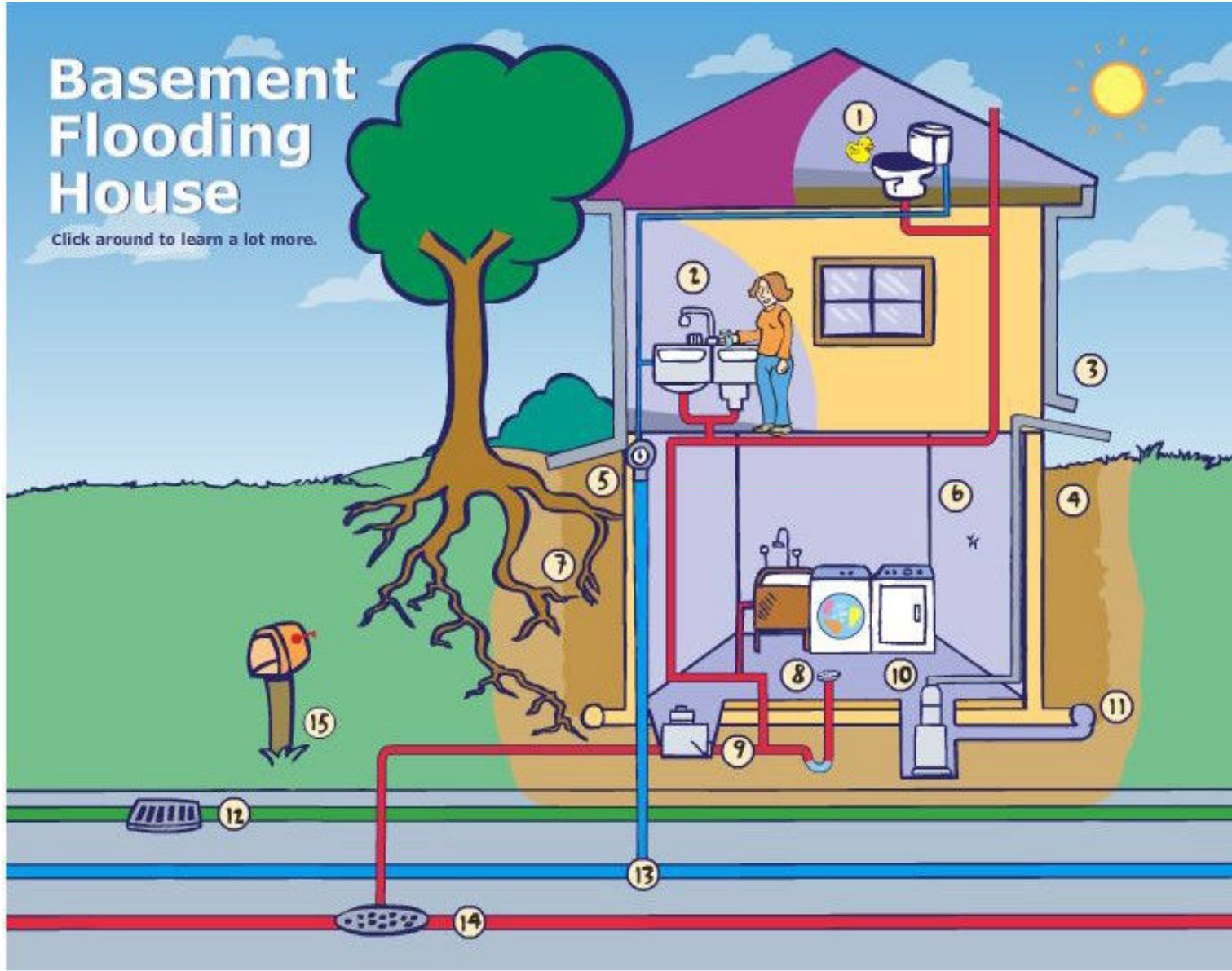


June 23  
June 27-28  
458  
basements  
flooded





[house](#)



# Response Plan

- Calls received – supervisor dispatched
- Escalation to an Incident Commander at AJT – more staff
- Communications notified – updates to Council and media
- Logging of calls at a call centre – inspections by multiple staff
- Engineering “CSI” inspections at homes – recommendations and program education
- Engineering records made and analysis
- Report to CWC
- Capital and Operating improvements





Electrical

Home Depot  
building

EAST LONDON  
ACCEPT  
2014 RE  
TO PO  
LONDO  
W W.w.eastlon

Home

# 10 Year Capital Program

\$377.6 M

## Life Cycle

Sewer replacements	154.0
Sewer ext / repairs	1.6
SWM remediation	8.9
Sewer repairs	10.6
Truck upgrades	43.5
Pump Station Impov.	4.3
Water courses	4.6
Ditch mtncce	<u>4.3</u>
	<b>\$281.9 M</b>

## Service Improvement

Sump Pump subsidy	1.7
Sewer Separation / CSO	66.9
Carling Storm Trunk	1.5
Burbrook Trunk	12.0
Burbrook Area Sewers	9.0
Dayus Creek Trunk	1.4
Murray Marr SWM	1.1
Surface Flooding	<u>2.1</u>
	<b>\$95.7 M</b>

# Improvement Considerations

- Communications
- Forecasting potentially damaging storms
- Consider benefits of triggers monitored by SCADA
- Proactive backflow / sump pump program
- PDC inspection program
- Risk assessment -- overland flow route and hydraulic grade line vs. basement elevation
- Insurance company coordination
- More education and promotion