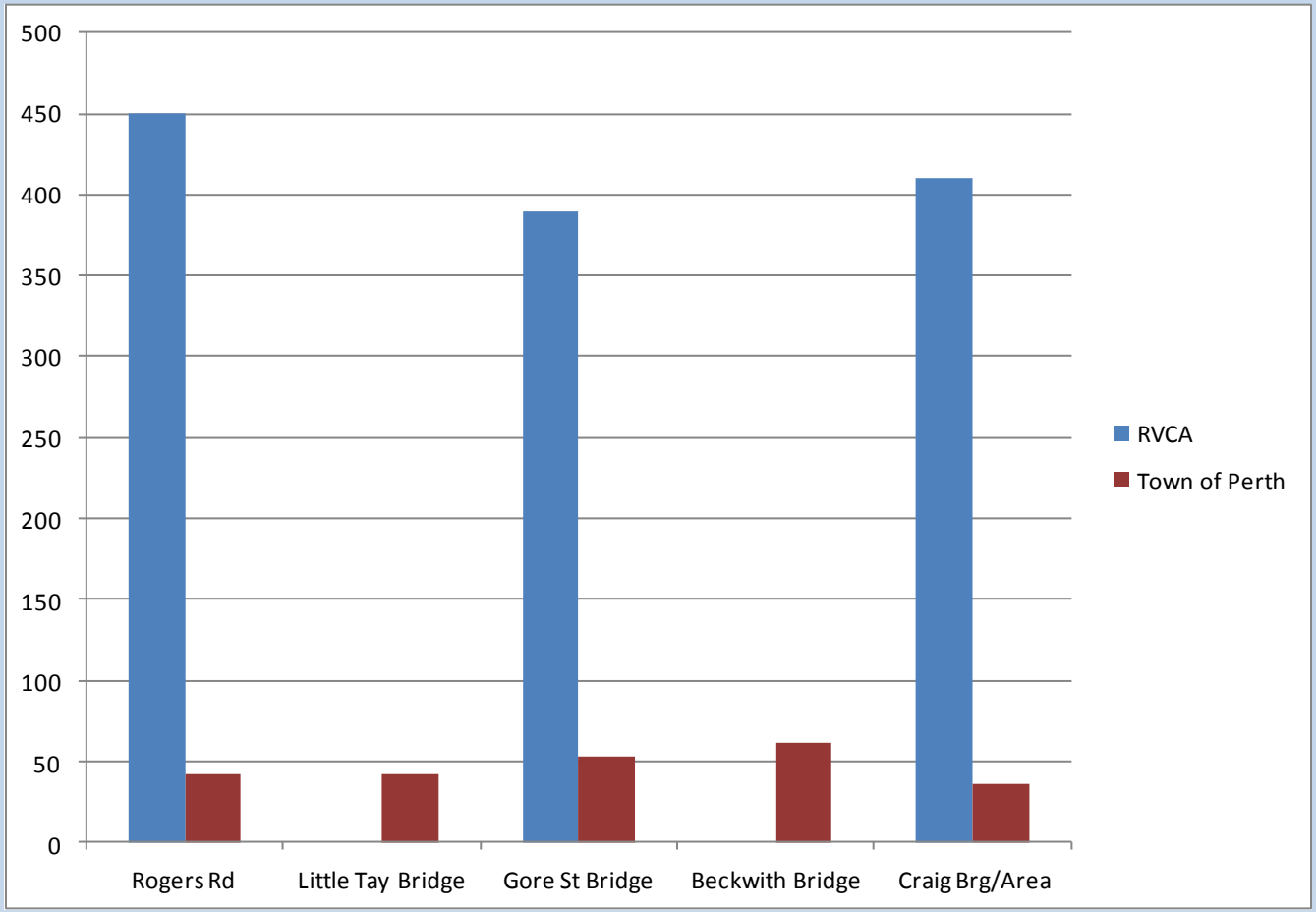
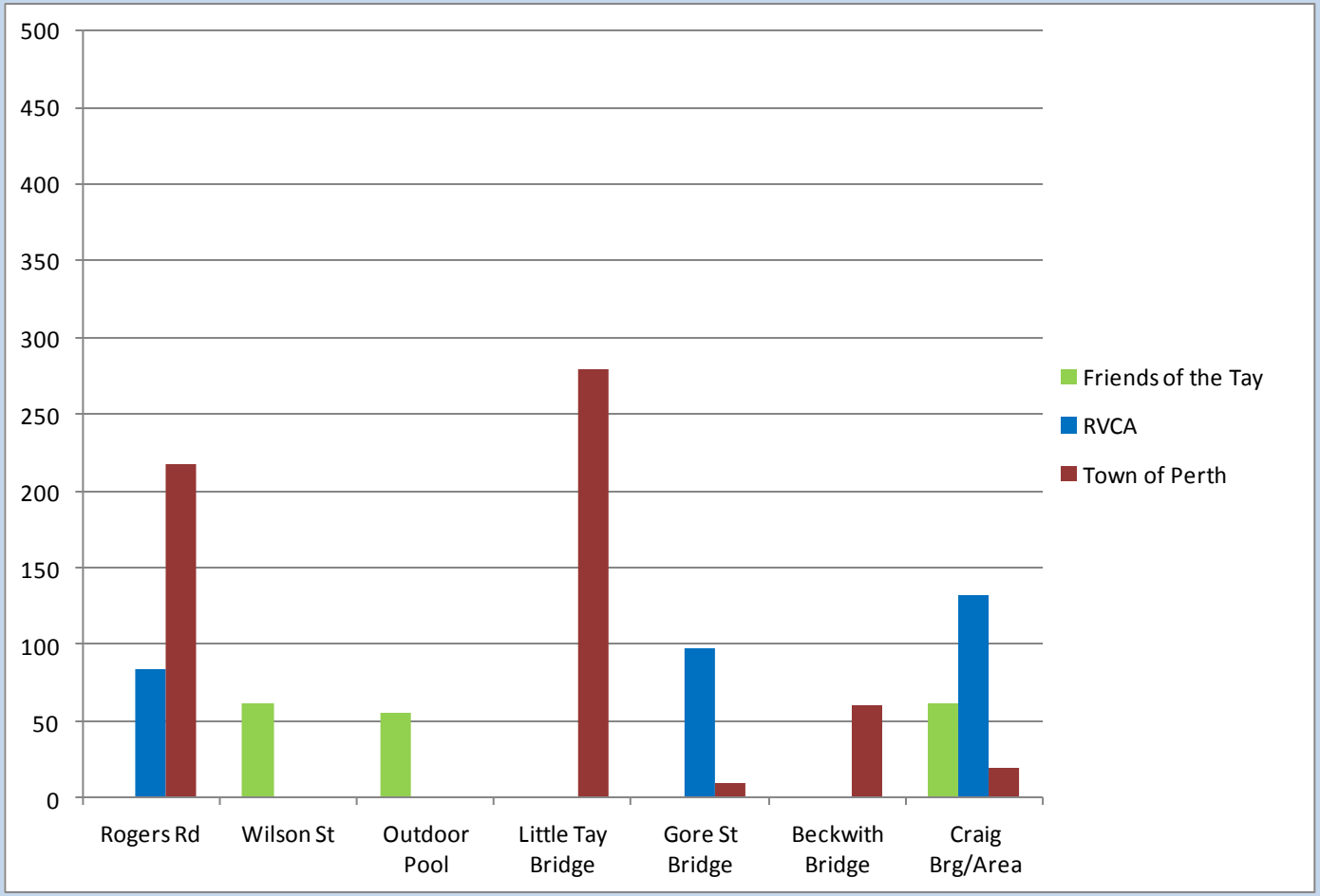
E-Coli test results in summer 2013 in Perth as sampled by:

- **The Town of Perth**
- **The Rideau Valley Conservation Authority**
- **The Friends of the Tay Watershed Association**



JUNE 11 RVCA, rain: 450, 390, 410

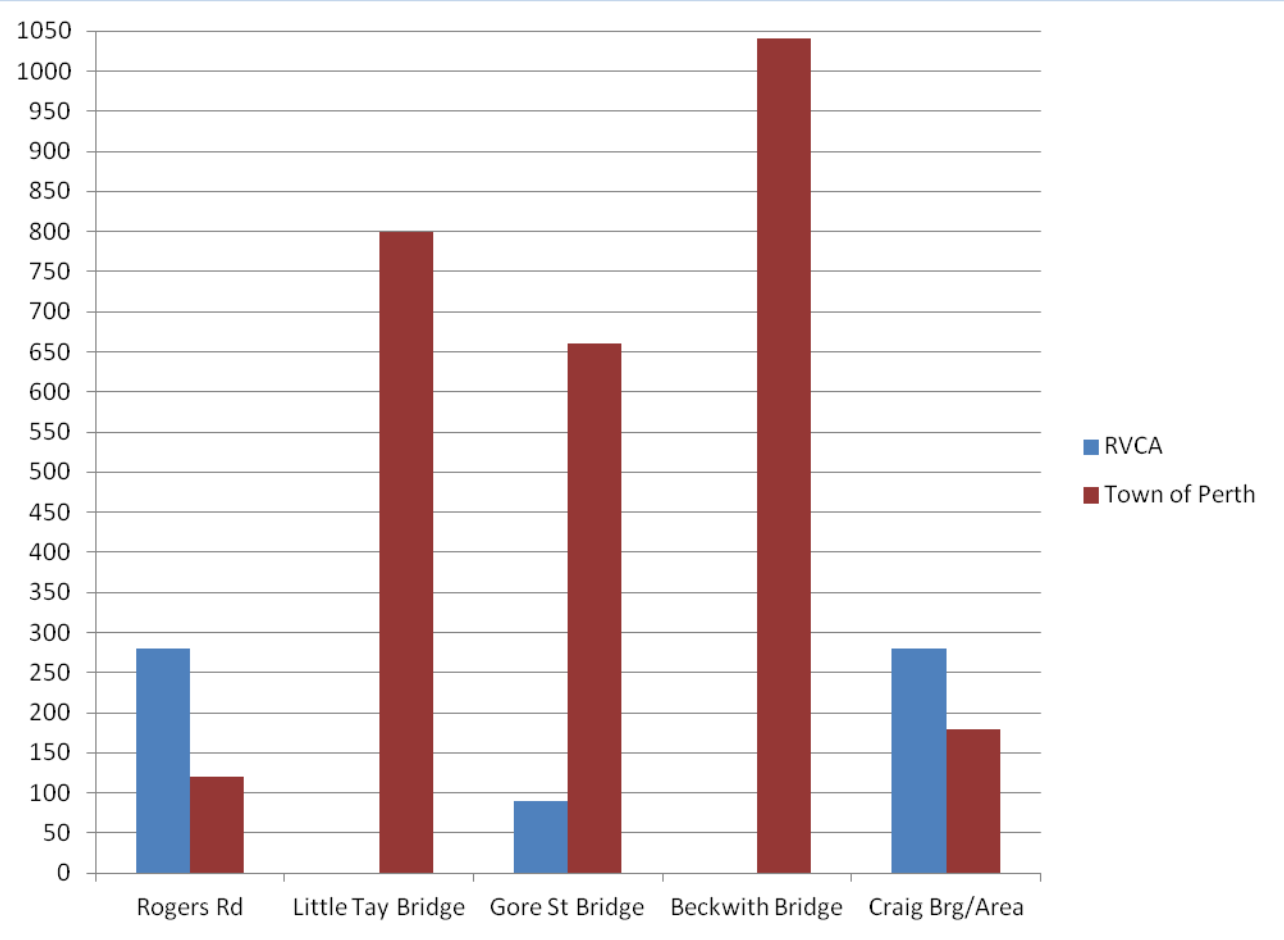
JUNE 24 Town of Perth, humid, no rain: 42, 42, 53, 61, 36



July 10 RVCA, showers: 84, 98, 132

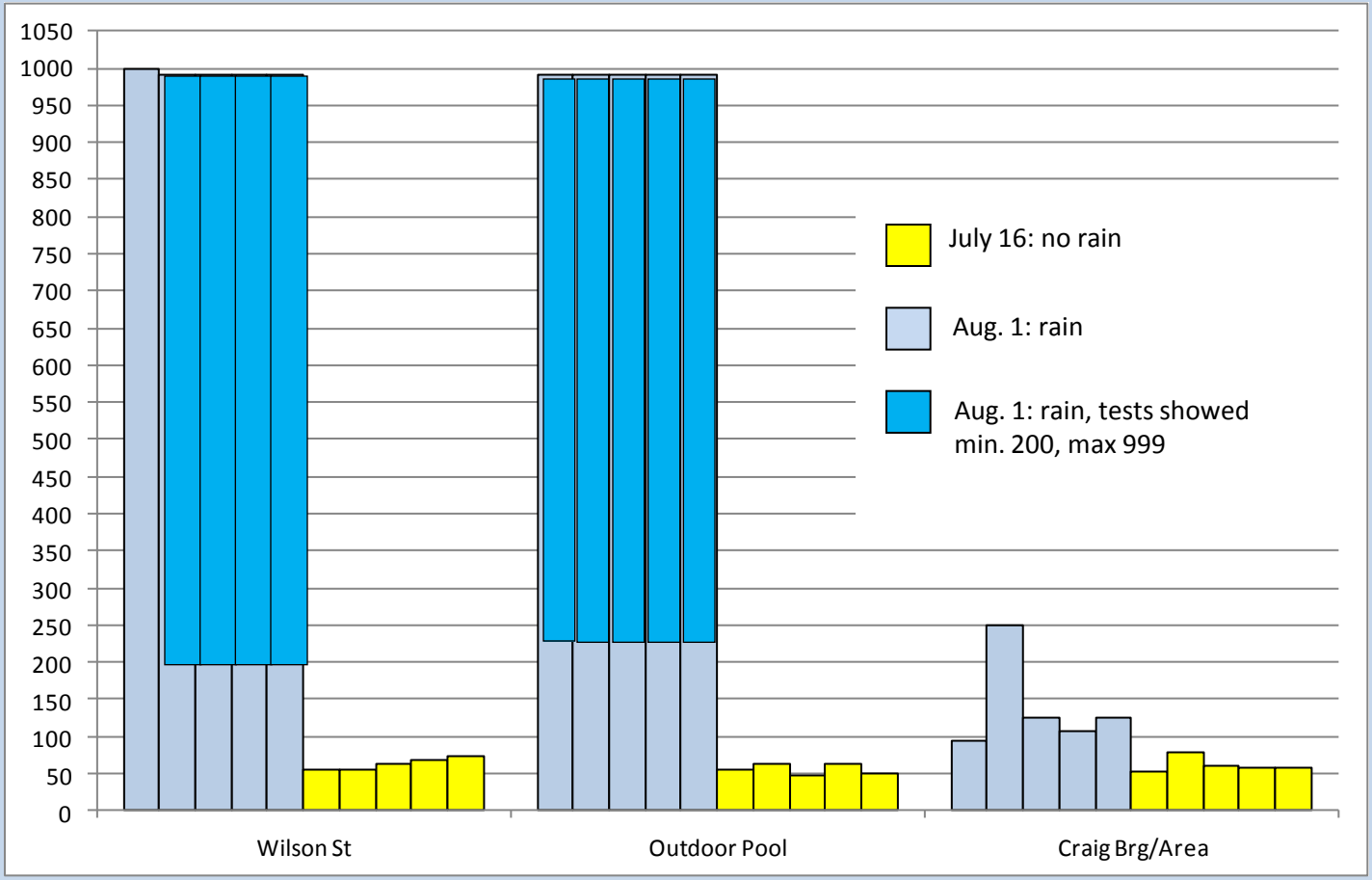
July 18 Town of Perth, rain: 260, 280, 10, 60, 20

July 16 FoTW, no rain: 54, 55, 62, 69, 74



Aug. 13 RVCA, light rain: 280, 90, 280

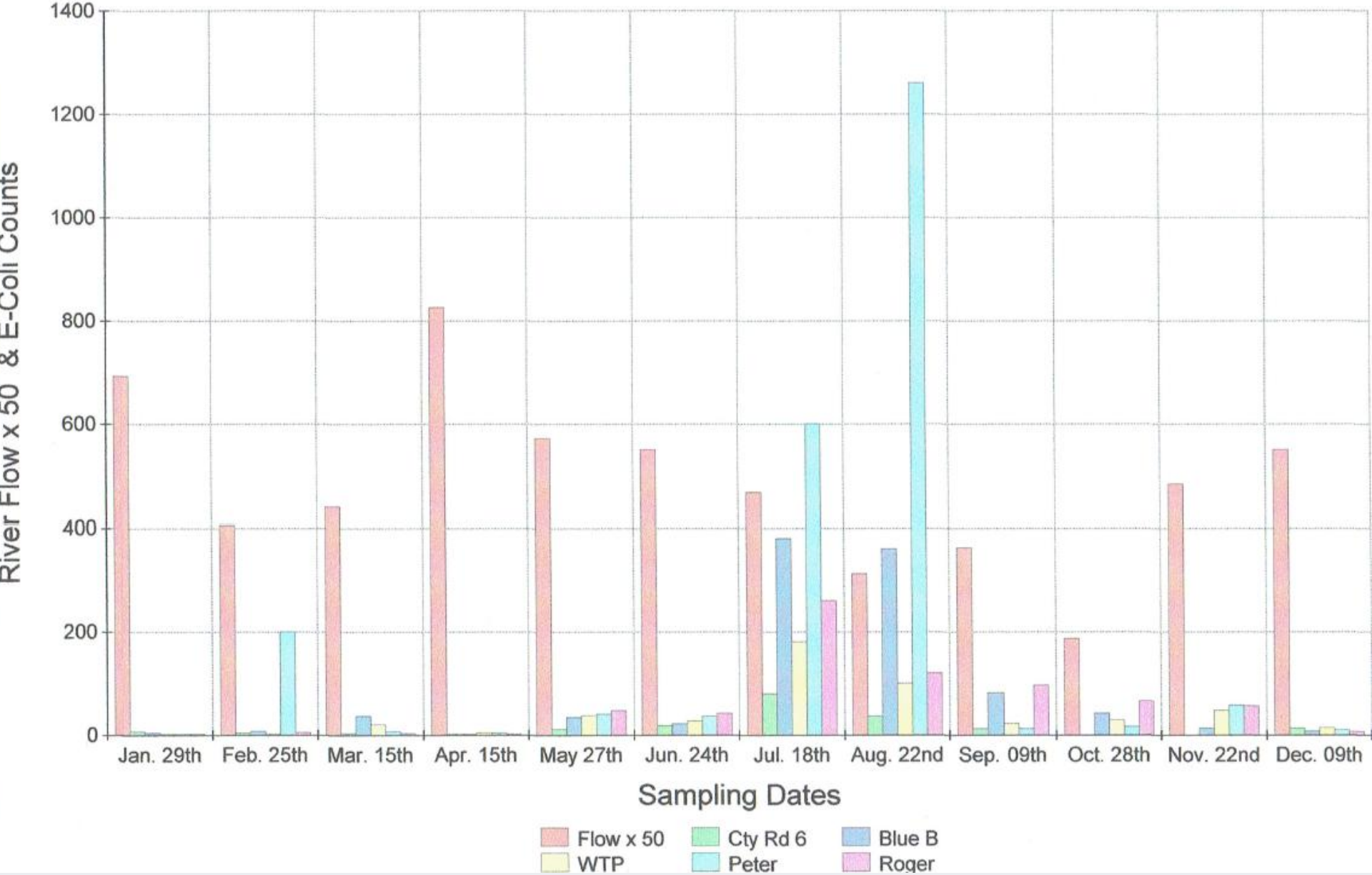
Aug. 22 Town of Perth, heavy rain: 120, 800, 660, 1040, 180



Friends of the Tay Watershed
Rain compared to no rain: July 16 and August 1

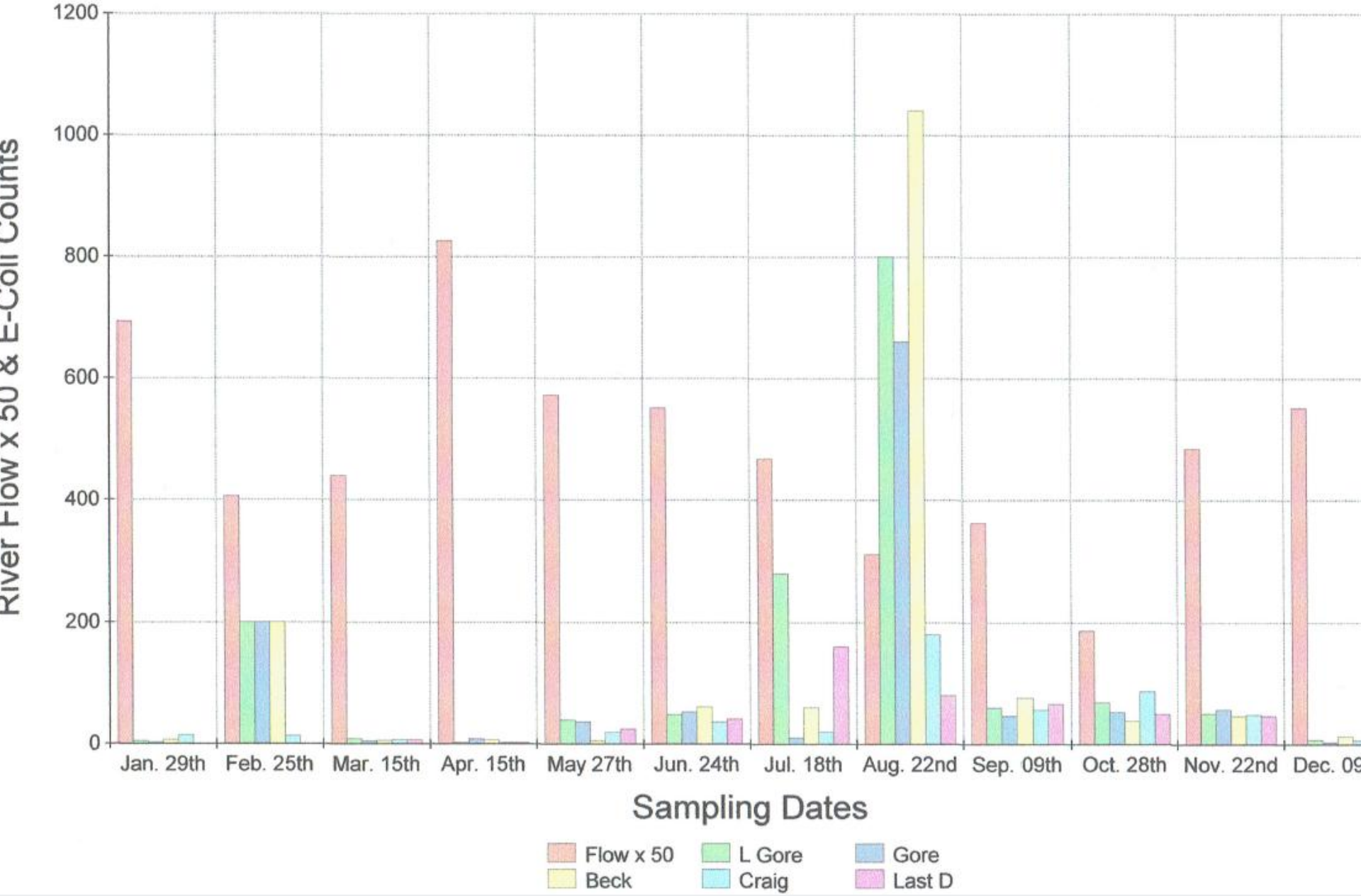
Tay River Flow & E-Coli Counts 2013

Data from Town of Perth, Grant Mahon,



Tay River Flow & E-Coli Counts, 2013

Data from Town of Perth, Grant Mahon



Summary

Samples taken between June and August along the Tay between Rogers Road and Craig Street bridge area:

RVCA, June 11, July 12, Aug. 13	9
Town of Perth, June 23, Jul. 18, Aug. 22	15
Friends of the Tay, July 16, Aug.1	30
Total	54

Samples below 100 e-coli/100ml	26/54
Samples above 100 e-coli/100ml	28/54 or 51.9%
Of these, above 200 e-coli/100ml	14/28

- **Highest counts found were after documented rain at Peter Street (1260, Perth), past the Wilson Street outlet in the Little Tay (1000, FoTW), and by the Beckwith Street bridge (1040, Perth)where both branches of the Tay had merged.**

- **In general, the heavier the rain, the higher the counts.**

- **Counts below 100 occurring when no rain events: 100%**

- **These results are consistent with previous testing by FoTW re: elevated counts after rain, and also with all testing by the RVCA between 1998 and 2011.**

- **1998-2011 testing by RVCA showed that slightly greater than 50% of samples taken in Perth showed counts above the safe swimming limit of 100.**

How long does it take for E-Coli plumes to leave the area?

- **On April 14, ‘13,rain was recorded , and the Town of Perth found that the next day all counts were below 100.**

- **On June 23’13, rain and thunderstorms were recorded in Perth, but the next day when it was humid only, all counts were below 100 at all sites tested. *But it is not known what the counts were on the previous days when there was rain. Such testing has not been done before to our knowledge.***

- **Friends of the Tay will test three sites again at Health Unit Standards (5 samples per site) in the summer of 2014 on a day of rain followed by repeat testing the next day to help fill in this knowledge gap.**