

## Dairy Creek (Lime Kiln Bay) Stream Watch Results

\* Note Faecal Coliform is not a Streamwatch Protocol . Test done on concentration of 2.5 ml

<b>Acceptable S Standard</b>	<b>Temp Degrees C</b>	<b>Ph 6.5-8.5</b>	<b>Cond 200 - 300</b>	<b>Turb 50</b>	<b>Do 85- 110</b>	<b>Phosphat e .0612</b>	<b>Ammonia</b>	<b>* Faecal Coliform 150col/100ml</b>
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<b>Date: 25 /11 /10</b>	<b>Temp Degrees C</b>	<b>Ph</b>	<b>Cond</b>	<b>Turb</b>	<b>Do</b>	<b>Phosphate</b>	<b>* Faecal Coliform</b>
Site A: just above GPT	25.5	8.5	930	10	5.2 (66%)	0.14	
Site B: Pond on Bay St	31.5	7.0	630	30	4.8 (66%)	0.11	
Site C : 2 <sup>nd</sup> culvert	30.00	7.0	580	15	6.8 (26%)	0.19	

**Present:** Melina, Sonia, Sharyn

**Comments:**

<b>Date: 30/ 08 /11</b>	<b>Temp Degrees C</b>	<b>Ph</b>	<b>Cond</b>	<b>Turb</b>	<b>Do</b>	<b>Phosphate</b>	<b>* Faecal Coliform</b>
Site A: Above GPT Glen Rd	13	7	1110	10	6.2 (59%)	0.07	
Site 2: GPT	14	7	1020	10	7.0 (68%)	0.09	

**Present:** Melina Amerasinghe, Graham Lalchere and Sonia Baxant

**Comments:** Glen Rd site fauna observed: water rat & 3 ducks. A lot of rubbish caught up on high water mark. No rain for about 10 days. Willows & Privets removed by Bushcare some years ago. New native plants put in and extensive work with large boulder construction stabilising bank have been carried out.

<b>Date:25 /10 /11</b>	<b>Temp Degrees C</b>	<b>Ph</b>	<b>Cond</b>	<b>Turb</b>	<b>Do</b>	<b>Phosphate</b>	<b>* Faecal Coliform</b>
Site A: Glen Rd	19.5	7	190	20	3.2 36%	0.25	
Site B: GPT	19.0	7	260	20	2.1 22%	0.02	
Site C : 1 <sup>st</sup> culvert past ponds	21.5	7	460	10	0.7 10%	0.40	

**Present:** Melina Amerasinghe, Graham Lalchere, Vicki Bolling and Sonia Baxant

**Comments:** Suspected detergent intrusion as stream was frothy. Large dragon lizard sleeping and duck at Glen Rd site. Light drizzle while testing. Rain over night. There was more water in GPT than last time.

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Date: 29 /11/ 2011	Temp Degrees C	Ph	Cond	Turb	Do	Phosphate	* Faecal Coliform
Site A: Glen Rd	20.5	7	680	10	3.8 49%	0.15	
Site B: GPT	20	7	690	10	5.0 59%	0.11	
Site C : 1 <sup>st</sup> culvert	21.5	7	570	10	1.1? 16%	0.20	

**Present:** Graham, Melina & Sonia

**Comments:** Site A Murky water , some foam on surface. Lots of litter. Continuous rain during previous week. Three water dragons seen at GPT site. Large GPT trap blocked with leaves. At First culvert site downstream from ponds water was very clear, lots of tiny fish seen swimming in the creek.

Date: 26 / 06 / 2012 Time: 10 - 12	Temp Degrees C	Ph	Cond	Turb	Do	Phosphate	* Faecal Coliform
Site A: Glen Rd (12 midday)	11.5	7	360	15	2.8 28%	0.18	
Site B: GPT (10.15 am)	10.5	7.5	200	20	2.3 24%	0.31	
Site C : 1 <sup>st</sup> culvert (11.15 am)	9	7.5	560	20	2.6 22%	0.1	

**Present:** Graham L, Sharyn C & Anne W

**Comments:** Last rainfall within 24 hours,

**Glen Rd** – Water without oily film, storm litter @edges and at rock riffle at end of pond.

**GPT** - downstream Waterfall Rd, Greyish turbid water. Much litter in GPT and also downstream scattered polystyrene and bottles.

**Site C** – Downstream of Duck pond pipe, between culverts, Water channel litter free. No oily film present at test site, though present in ponds upstream.

Date: 28 / 8 / 2012	Temp Degrees C	Ph	Cond	Turb	Do	Phosphate	* Faecal Coliform
Site A: Glen Rd Time 10 am	9.5	7	550	20	3.4 30%	0.05	
Site B: GPT Time 10.15 am	10	7	510	10	3.6 32%	0.03	
Site C : 1 <sup>st</sup> culvert Time 11am	12	6.5	220	30	1.7 16%	0.30	

**Present:**

**Comments :** Last rainfall 1-7 days

Site A Grey with scum, stormwater litter

Site B – water tested from area down from bridge Water dragon, water bit cloudy. Storm water rubbish

Site C – Water clear at test point, no litter

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<b>Acceptable S Standard</b>	<b>Temp Degrees C</b>	<b>Ph 6.5-8.5</b>	<b>Cond 200 - 300</b>	<b>Turb 50</b>	<b>Do 85- 110</b>	<b>Phosphat e .0612</b>	<b>Ammonia</b>	<b>* Faecal Coliform 150col/100ml</b>
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<b>Date: 27 /11 /2012</b>	<b>Temp Degrees C</b>	<b>Ph</b>	<b>Cond</b>	<b>Turb</b>	<b>Do</b>	<b>Phosphate</b>	<b>* Faecal Coliform</b>
Site A: Glen Rd Time 10.05	21.5	7	880	30	0.1 *	0.19	
Site B: GPT Time 10.15	21.5	7	510	10	2.0 20%	0.10	
Site 3 : after 1 <sup>st</sup> culvert After duck ponds Time 10.40	22.0	7	340	30	0.4 *	0.30	

**Present:** Graham , Anne , Sonia, Melina

**Comments** – Last rainfall – light rain overnight

\*Dissolved Oxygen levels too low in site A & C to calculate percentage. Possibly due to warm water temp and stagnant water.

Site A- Water looked dark and brooding, stagnant, stormwater rubbish (bottles, cans plastic bags) Water dragon. Water smelled.

Site B – Tested downstream from GPT. GPT cleaned about 4 days ago, a little rubbish. Four water dragons spotted

Site C – Chanel downstream after duck ponds, after 1st culvert. Lush vegetation along channel, no rubbish, water stagnant and below level of culvert pipe.

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<b>Standard</b>	<b>Degrees</b>	<b>6.5-8.5</b>	<b>200 - 300</b>	<b>50</b>	<b>85-</b>	<b>e</b>		<b>Coliform</b>
	<b>C</b>				<b>110</b>	<b>.0612</b>		<b>150col/100ml</b>

Date: 28 / 05 /13	Temp	Ph	Cond	Turb	Do	Phosphate	* Faecal
Date: 26 /03 /2013`	Degrees	Ph	Cond	Turb	Do	Phosphate	Coliform
	Degrees			NTU			Coliform
Site A: Glen Rd	14	6.5	210	8	7.5	0.09	
Site A: Glen Rd	21.0	7.5	770	10	5.4	0.29	Nil
Site B: GPT	13.5	6	240	11	7.0	0.04	
Site B: GPT	21.0	7	730	10	4.4	0.14	Nil
Site C: Hill 30 culvert	13	6	370		2.0	0.09	
Site C: Hill 30 culvert	22.5	7.5	390	20	0.40	0.98	Nil
Time 12.00							
Site D :Duck Ponds	24.5				4.6	0.66	
Time 3pm							

**Present:** Greg McDonald (Aust Museum), Anne, Sharyn, Melina, Graham, Geoff Sonia

**Comments**

Rain - 3 days previous, medium rainfall.

Hints from Greg

- 1) DO test - Added reagent 1&2 together at site to fix DO. If precipitate doesn't dissolve after initial 8 drops of acid, keep adding acid( 3 )two drops at a time till it has dissolved.
- 2) Read temp in the water
- 3) Turbidity can be read by meter but make note in observations ftus is unit of measurement. Manual tube measurement gave similar result. Remember to shake bottle before taking sample and before putting in machine.

Site A – Water still, bubbles in surface (detergent?) Only a small amount of water. Dragon lizard spotted.

Site B – GPT clear and not much rubbish. Water reasonably clear, mating damsel flies & juvenile Water Dragon spotted.

Site C – Shallow water, slow flow floating algae, Blue Dragon fly & Skink

Site D – DO at duck ponds was done as an additional test. An Eel was seen. Algae on surface. Is there a thermocline on top?

Date: 9/05 /2013 **	Temp	Ph	Cond	Turb	Do	Phosphate	* Faecal
	Degrees			Ftu			Coliform
	C						
Testing at 2.15 pm	20	6	720	27	4.5	0.14	

**Present: Melina, Geoff & Graham**

**Comments: \*\***Special testing site – Small drainage pipe next to large Sewer overflow – Between GPT and Main Pipe via duct/walkway. Bright Orange coloured sludge coming from the pipe, believed to be Iron Oxide Bacteria. Water coming out was relatively clear. Water in pond after GPT had orange bacteria as scum and an oily film and, which is believed to be a ferrious oxide film consistent with the Bacteria growth in the upper section. Also some Orange sludge oozing from the rocks. Light rainfall about 36 hours One large Water Dragon Lizard sighted.

**Present:** Sonia, Melina, Graham and Sharyn

**Comments:**

Rainfall - within last 24 hours light

Site A - Large Water Dragon, Blackish water with bubbles. Plastic and Polystyrene litter

Site B - Behind rock froth, very little litter, no slicks of oil.

Site C - No oily slick, no litter, looks turbid.

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Date: 01 /10 /13	Temp Degrees C	Ph	Cond	Turb FTU	Do	Phosphate	* Faecal Coliform
Site A: Glen Rd Time 9.20	15	7.0	870	5	6.3 62%	0.13	
Site B: after GPT Time 9.45	15	7.0	810	10	2.0 19%	0.07	
Site 3 : 1 <sup>st</sup> culvert Time 10.15	17	7.0	460	65	1.8 18%	0.24	

**Present:** Melina, Geoff & Sonia

### Comments

Last Rainfall more than 7 days ago on 17/9/13 heavy falls.

Site A - 6 water dragons were spotted sunning on the rocks. Low water levels. Methane & CO<sub>2</sub> bubbles seen on surface with some scum (iron bacteria?) on the surface.

Site B - Two lizards. Scum iron bacteria film. Low Do indicating possible black water event?

Site C - Water looked stagnant and green (possibly due to duck poo) 2 ducks in the water, dragonfly. Iron bacteria and Algal bloom. High turbidity - we needed two filters to get the sample for AP testing.

Date: 26 /11 /13`	Temp Degrees C	Ph	Cond	Turb FTU	Do	Phosphate	Ammonia ppm	* Faecal Coliform
Site A: Glen Rd Time 10.00	17	7	700	18	6.2	0.07		
Site B: GPT Time 10.15	17	7	690	13	4.6	0.07		
Site 3 : 1 <sup>st</sup> culvert Time 10.30	17.5	6.5	470	32	0.5	0.19		

**Present:** Geoff, Sonia, Vicki, Graham, Melina and Sharyn

### Comments

- Several sewer over flows from outlet at near GPT following heavy rain – 22/11/13
- **Last rainfall** 25/11/13 afternoon
- New test – for Ammonia was done on all sites plus Swimming baths. ( result zero) used Aquacheck – provided by Museum.

Site A: Some rubbish, a little detergent scum, 1 black rat and 2 water dragons spotted.

Site B : Some rubbish , water not clear\_ 3 water dragons spotted.

Site C:Water not clear, Ponds preceding channel were very smelly and dirty looking scum.

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Site A: Glen Rd Time 10.00	17	7	700	18	6.2	0.07		
Site B: GPT Time 10.15	17	7	690	13	4.6	0.07		
Site 3 : 1 <sup>st</sup> culvert Time 10.30	17.5	6.5	470	32	0.5	0.19		

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<b>Standard</b>	<b>Degrees</b> <b>C</b>	<b>6.5-8.5</b>	<b>200 - 300</b>	<b>50</b>	<b>85-</b> <b>110</b>	<b>e</b> <b>.0612</b>		<b>Coliform</b> <b>150col/100ml</b>