

Physical and Chemical Analysis Data Form

Waterwatch Melbourne Physical and Chemical Analysis

Monitoring site details

Site code: *006*
 Site description: *Pobblebank Point*

Name of monitoring group

Persons monitoring: *Tina, Elaine, Anne, John, Arbaan*
 Date and time of monitoring: *2.2.20*

Please record your data below:

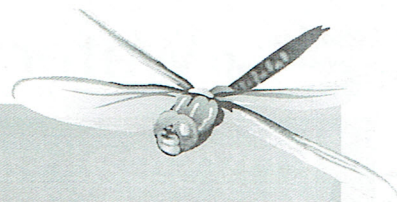
Parameter	Reading	Unit	Comments
Air Temperature	<i>18°</i>	° C	
Water Temperature	<i>19°</i>	° C	
Turbidity	<i>56</i>	NTU	
pH	<i>6.8</i>	Unit	
Conductivity	<i>148</i>	µ S / cm	
Dissolved Oxygen	<i>4.9</i>	mg / L	% Saturation
Phosphate <small>(If using Lamotte Smart2 Colorimeter multiply by 0.326 to calculate mg/L)</small>	<i>0.00</i>	mg / L	
Ammonium	<i>0.0</i>	mg / L	<i>Cloudy appearance</i>
Nitrate		mg / L	

Observations and Notes:

What has changed since last time you monitored? *Rain! Steady, 1st since 24th January (55 mm from 20th - 24th Jan)*

What stands out about the site today?
Water muddy, lots of plant debris, water level very high

Other observations: *Pac. Black duck, Dusky moorhen
 Cumbungi, flowering tips emerging Reeds in flower*



Physical and Chemical Analysis Data Form

Waterway Information

Rate of flow:

- Very fast Fast Normal base flow Slow Trickle
 None Permanent Temporary Other

If 'Other', please specify:

Type of flow:

- Rising Steady Falling Peak Dry Pools / Puddles Other

If 'Other', please specify:

Waterway Appearance:

- Clear Muddy Smelly Frothy Scummy
 Oily Discoloured Milky Stained brown Other

If 'Other', please specify:

Waterway depth: 1350 cm (0 to 3000cm)

Waterway width: _____ m (0 to 100m)

Weather:

- Sunny Cloudy Overcast Showers Rain
 Hail Windy Foggy Other

If 'Other', please specify:

Last rainfall:

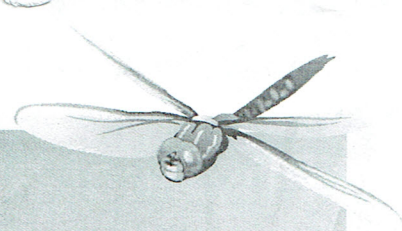
- Raining now Last 24hrs Last 3 days Last 7 days More than a week ago

25 mm steady rain. total 30 mm

Litter / Pollutants (record no.):

- | | | | |
|--------------------------|------------------|-------------------------------------|---------------------------|
| ___ Cans | ___ Paper | ___ Clothing | ___ Oil (m ²) |
| ___ Food Packets | <u>1</u> Plastic | <u>7</u> Polystyrene | ___ Car bodies |
| <u>1</u> Waxed Cardboard | <u>5</u> Bottles | ___ Petrol/Diesel (m ²) | ___ Other (specify) |

Cigarette butts



Physical and Chemical Analysis Data Form

Waterwatch Melbourne Physical and Chemical Analysis

Monitoring site details

Site code: 020
 Site description: The Landing

Name of monitoring group

Persons monitoring: Anne, Tina, John, Elaine, Ahaan.
 Date and time of monitoring: 2-2-20
 10:20 am

Please record your data below:

Parameter	Reading		Comments
Air Temperature	16	° C	
Water Temperature	21	° C	
Turbidity	36	NTU	
pH	7.2	Unit	
Conductivity	135	µ S / cm	
Dissolved Oxygen	* 1.3	mg / L	% Saturation
Phosphate <small>(If using Lamotte Smart2 Colorimeter multiply by 0.326 to calculate mg/L)</small>	0.00	mg / L	
Ammonium	0.0	mg / L	cloudy appearance
Nitrate		mg / L	

Observations and Notes:

What has changed since last time you monitored?

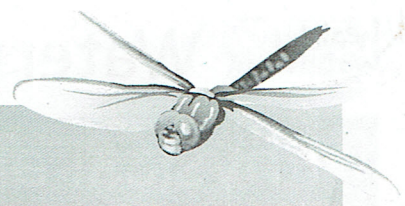
Water level higher

What stands out about the site today?

* When H₂SO₄ added to sample to be fixed, sample went almost colourless and fragments looked large and soft. When shaken, the fragments broke up a bit but still much larger than ever seen before

Other observations:

5 Pac. ducks 4 coots 2 White Ibis (at Boardwalk) #



Physical and Chemical Analysis Data Form

Waterway Information

Rate of flow:

- Very fast Fast Normal base flow Slow Trickle
 None Permanent Temporary Other

If 'Other', please specify:

Type of flow:

- Rising Steady Falling Peak Dry Pools / Puddles Other

If 'Other', please specify:

Waterway Appearance:

- Clear Muddy Smelly Frothy Scummy
 Oily Discoloured Milky Stained brown Other

If 'Other', please specify:

Waterway depth: 950 cm (0 to 3000cm)

Waterway width: _____ m (0 to 100m)

Weather:

- Sunny Cloudy Overcast Showers Rain
 Hail Windy Foggy Other

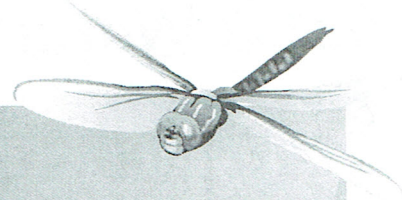
If 'Other', please specify:

Last rainfall:

- Raining now Last 24hrs Last 3 days Last 7 days More than a week ago

Litter / Pollutants (record no.):

- | | | | |
|--|-------------|-------------------------------------|---------------------------|
| ___ Cans | ___ Paper | ___ Clothing | ___ Oil (m ²) |
| <u>1</u> Food Packets <i>lolly wrapper</i> | ___ Plastic | ___ Polystyrene | ___ Car bodies |
| ___ Waxed Cardboard | ___ Bottles | ___ Petrol/Diesel (m ²) | ___ Other (specify) |



Physical and Chemical Analysis Data Form

Waterwatch Melbourne Physical and Chemical Analysis

Monitoring site details

Site code: 023
 Site description: Heron Point

Name of monitoring group

Persons monitoring: John, Tina, Arshan, Elaine Anne
 Date and time of monitoring: 2.2.20 10.40 am

Please record your data below:

Parameter	Reading	Unit	Comments
Air Temperature	16°	° C	
Water Temperature	22°	° C	
Turbidity	34	NTU	
pH	7.0	Unit	
Conductivity	114	µ S / cm	
Dissolved Oxygen	* 0.3	mg / L	% Saturation
Phosphate <small>(If using Lamotte Smart2 Colorimeter multiply by 0.326 to calculate mg/L)</small>	0.07 x 0.326	mg / L	
Ammonium	0.0	mg / L	seems reddish - sand dust?
Nitrate		mg / L	

Observations and Notes:

What has changed since last time you monitored?

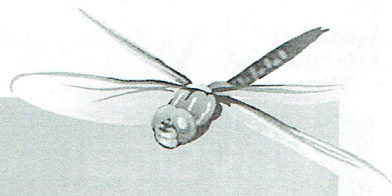
What stands out about the site today?

rocks more submerged, seat not fixed but roped still.

Other observations:

Sample once the sulphuric acid was added - became ^{very} large, particles 2-pale in colour.

* D.O. similar reaction to YGR 020 test, less marked, but reading even lower.



Physical and Chemical Analysis Data Form

Waterway Information

Rate of flow:

- Very fast Fast Normal base flow Slow Trickle
 None Permanent Temporary Other

If 'Other', please specify:

Type of flow:

- Rising Steady Falling Peak Dry Pools / Puddles Other

If 'Other', please specify:

Waterway Appearance:

- Clear Muddy Smelly Frothy Scummy
 Oily Discoloured Milky Stained brown Other

If 'Other', please specify:

Waterway depth: 1500 + cm (0 to 3000cm)

Waterway width: _____ m (0 to 100m)

Weather:

- Sunny Cloudy Overcast Showers Rain
 Hail Windy Foggy Other

If 'Other', please specify:

Last rainfall:

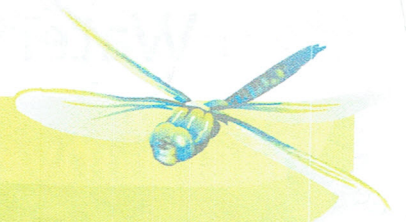
- Raining now Last 24hrs Last 3 days Last 7 days More than a week ago

25 mm total 80 mm steady rain

Litter / Pollutants (record no.):

- | | | | |
|---------------------|-------------|-------------------------------------|---------------------------|
| ___ Cans | ___ Paper | ___ Clothing | ___ Oil (m ²) |
| ___ Food Packets | ___ Plastic | ___ Polystyrene | ___ Car bodies |
| ___ Waxed Cardboard | ___ Bottles | ___ Petrol/Diesel (m ²) | ___ Other (specify) |

1 plastic milk bottle



Macro-invertebrates Data Form

Monitoring Group Information

Monitoring site details

Site code: YGR 006.
 Site description: Pebblebank Pt.

Name of monitoring group

Persons monitoring: Tina Alvi, John Shertridge.
 Date and time of monitoring: 2-2-2020 10-11 am.

Macro-invertebrates

Sample Type

Edge Riffle

Please record your data below:

Common Name	Order	Bug Score	Abundance
Very Sensitive Macro-invertebrates			
Stonefly Nymph	Plecoptera	8	
Mayfly Nymph	Ephemeroptera	7	
Caddisfly Nymph	Trichoptera	7	
Sensitive Macro-invertebrates			
Toebiters/Dobsonflies	Megaloptera	6	
Damselfly Nymph	Odonata - <i>Coenagrionidae</i> " " <i>< 10mm</i>	6	(2)
Dragonfly Nymph	Odonata	6	
Freshwater Mussel	Class: Bivalvia	5	
Aquatic Caterpillars	Lepidoptera	5	
* Freshwater Shrimp/Prawn	Decapoda - <i>Atyidae</i>	5	+ ? (15)
Freshwater Yabby/Crayfish	Decapoda	5	
Water Mite	Acarina	5	1, 1, 1, 1, 1 (4)
Freshwater Slater	Isopoda	5	
		16	21

whirlygi's bug ?? see over



Macro-invertebrates Data Form

Common Name	Order	Bug Score	Abundance
Tolerant Macro-invertebrates			
Hydra	Hydrozoa	4	
Beetle Larvae	Coleoptera	4	
* True Bugs (Backswimmers, Water Boatman, Water Strider)	Hemiptera <i>Corixidae - micronecta</i> <i>* Naucoridae / Belostomatidae - imm?</i>	1	+ 20+
Side Swimmer/Scud	Amphipoda	4	
Aquatic Beetles (Diving Beetles, Whirligig Beetles)	Coleoptera	3	
Round Worms	Nematoda	3	
Leech	Hirudinea	3	
Freshwater Snails	Gastropoda	3	
Flatworm	Turbellaria	3	
Very Tolerant Macro-invertebrates			
Mosquito Larvae	Diptera	2	
Biting Midge Larvae	Diptera	2	
Fly Larvae	Diptera	2	
Segmented Worm	Oligochaeta	1	
* Non Biting Midge (Bloodworms)	Diptera	1	(3)
	TOTALS	21	45

Overall Bug Rating

Total abundance	Total bug score	
	0-35	35+
0-200	Poor	Good
200+	Fair	Very good

* 10-11 mm - eyes not protruding, greenish colour - photo attached.



Macro-invertebrates Data Form

Monitoring Group Information

Monitoring site details

Site code:

YGR - The Boardwalk *

This location not normally used for collection.

Site description:

Name of monitoring group

Persons monitoring:

Date and time of monitoring:

2.2.2020

10 - 11 am

Macro-invertebrates

Sample Type

Edge Riffle

Please record your data below:

Common Name	Order	Bug Score	Abundance
Very Sensitive Macro-invertebrates			
Stonefly Nymph	Plecoptera	8	
Mayfly Nymph	Ephemeroptera	7	
Caddisfly Nymph	Trichoptera - Leptoceridae >5mm	7	1
Sensitive Macro-invertebrates			
Toebiters/Dobsonflies	Megaloptera	6	
Damselfly Nymph	Odonata	6	1
Dragonfly Nymph	Odonata	6	
Freshwater Mussel	Class: Bivalvia	5	
Aquatic Caterpillars	Lepidoptera	5	
Freshwater Shrimp/Prawn	Decapoda	5	20 + 20
Freshwater Yabby/Crayfish	Decapoda - Parastacidae (imm) >10mm	5	2 + 1 (4)
Water Mite	Acarina	5	1, 1, 3 (2 red)
Freshwater Slater	Isopoda	5	
		23	41

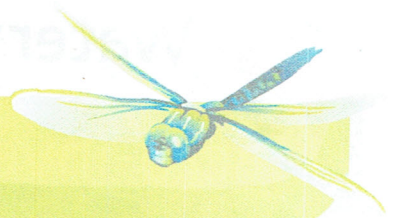


Macro-invertebrates Data Form

Common Name	Order	Bug Score	Abundance
Tolerant Macro-invertebrates			
Hydra	Hydrozoa	4	
Beetle Larvae	Coleoptera	4	
True Bugs (Backswimmers, Water Boatman, Water Strider)	Hemiptera - <i>Corixidae</i> - <i>Micronecta</i> - <i>Sigara</i>	4	500 ca 2 Sigara
Side Swimmer/Scud	Amphipoda	4	
Aquatic Beetles (Diving Beetles, Whirligig Beetles)	Coleoptera	3	
Round Worms	Nematoda	3	
Leech	Hirudinea	3	
Freshwater Snails	Gastropoda	3	
Flatworm	Turbellaria	3	
Very Tolerant Macro-invertebrates			
Mosquito Larvae	Diptera	2	
Biting Midge Larvae	Diptera	2	
Fly Larvae	Diptera	2	
Segmented Worm	Oligochaeta	1	
Non Biting Midge (Bloodworms)	Diptera	1	
	TOTALS	27	540++

Overall Bug Rating

Total abundance	Total bug score	
	0-35	35+
0-200	Poor	Good
200+	Fair	Very good



Macro-invertebrates Data Form

Monitoring Group Information

Monitoring site details

Site code: YGR ~~012~~ 023 Duck + Heron Pt.
 Site description:

Name of monitoring group

Persons monitoring: John Shartridge, Tina Alvi,
 Date and time of monitoring: 2-2-2020 10am - 11am.

Macro-invertebrates

Sample Type

Edge Riffle

Please record your data below:

Common Name	Order	Bug Score	Abundance
Very Sensitive Macro-invertebrates			
Stonefly Nymph	Plecoptera	8	
Mayfly Nymph	Ephemeroptera - <i>Caenidae</i> <5mm	7	1
Caddisfly Nymph	Trichoptera - <i>Leptoceridae</i>	7	1
Sensitive Macro-invertebrates			
Toebiters/Dobsonflies	Megaloptera	6	
Damselfly Nymph	Odonata * 1x <i>Isostictid</i> - mature ~20mm 1x <i>Coenagrionid</i> - Imm <5mm	6	2
Dragonfly Nymph	Odonata	6	
Freshwater Mussel	Class: Bivalvia	5	
Aquatic Caterpillars	Lepidoptera	5	
Freshwater Shrimp/Prawn	Decapoda - <i>Atyidae</i>	5	20+
Freshwater Yabby/Crayfish <i>big</i>	Decapoda 2x <10mm 1x 60mm	5	(3) 1 + 1 small
Water Mite	Acarina	5	
Freshwater Slater	Isopoda	5	

* *Isostictid* - only 2 gills, very long wing buds (almost full length of body) → specimen kept crawling out of water + up a leaf.



Macro-invertebrates Data Form

Common Name	Order	Bug Score	Abundance
Tolerant Macro-invertebrates			
		c/f. 30.	27+
Hydra	Hydrozoa	4	
Beetle Larvae	Coleoptera	4	
True Bugs (Backswimmers, Water Boatman, Water Strider)	Hemiptera <i>Corixidae</i> <i>- Micronecta</i>	4 adult/imm mix	30
Side Swimmer/Scud	Amphipoda	4	
Aquatic Beetles (Diving Beetles, Whirligig Beetles)	Coleoptera	3	
Round Worms	Nematoda	3	
Leech	Hirudinea	3	
Freshwater Snails	Gastropoda	3	
Flatworm	Turbellaria	3	
Very Tolerant Macro-invertebrates			
Mosquito Larvae	Diptera	2	
Biting Midge Larvae	Diptera	2	
Fly Larvae	Diptera	2	
Segmented Worm	Oligochaeta	1	
Non Biting Midge (Bloodworms)	Diptera	1	
	TOTALS	34	57+

Overall Bug Rating

Total abundance	Total bug score	
	0-35	35+
0-200	Poor	Good
200+	Fair	Very good