

## Physical and Chemical Analysis Data Form

Waterwatch Melbourne Physical and Chemical Analysis

### Monitoring site details

Site code: 006

Site description: Poblebank Pt

### Name of monitoring group

Persons monitoring: Su Dempsey, Anne Payne, John Shortridge, Thamshi Peiris

Date and time of monitoring: 7-1-18

### Please record your data below:

Parameter	Reading	Comments
Air Temperature	21 °C	
Water Temperature	25.5 °C	
Turbidity	44 NTU	
pH	6.5 Unit	Check out v.c. 6.9 at VC (pH)
Conductivity	240 μS / cm	
Dissolved Oxygen	1.5 mg / L	% Saturation
Phosphate <small>(If using Lamotte Smart2 Colorimeter multiply by 0.326 to calculate mg/L)</small>	0.08 × 0.326 0.02608 mg / L	
Ammonium	0.08 mg / L	
Nitrate	mg / L	

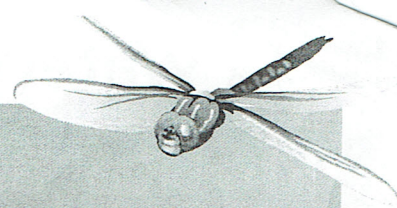
### Observations and Notes:

What has changed since last time you monitored?

What stands out about the site today?

Oily film on water

Other observations:



## Physical and Chemical Analysis Data Form

### Waterway Information

Pobblebonk Pt 006

#### 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 ~~tee~~  
 Oily       Discoloured       Milky       Stained brown       Other

If 'Other', please specify:

Traces of oil on surface

Waterway depth: ~~400~~ 900 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

Significant flooding 2 weeks ago (over 2m above normal level)

#### Litter / Pollutants (record no.):

- |                     |                                   |  |   |
|---------------------|-----------------------------------|--|---|
| ___ Cans            | ___ Paper                         | ___ Clothing                                   | <input checked="" type="checkbox"/> Oil (m <sup>2</sup> ) |
| ___ Food Packets    | <u>1</u> Plastic                  | <u>2</u> Polystyrene <sup>smaller</sup> pieces | ___ Car bodies  |
| ___ Waxed Cardboard | <u>2</u> <sup>black</sup> Bottles | ___ Petrol/Diesel (m <sup>2</sup> )            | ___ Other (specify)                                       |

~~6 Ducks~~ ~~6 Ducks~~

6 Pacific Ducks

1 Coot



## Habitat Data Form

### Observation Information

#### Monitoring site details

Site code: 006

Site description: Pobblebank Pt

#### Name of monitoring group

Persons monitoring:

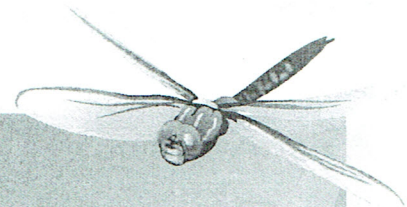
Date and time of monitoring: 7/1/18

### Habitat Assessment

Bank vegetation:	6	(0-10)
Verge vegetation:	4	(0-10)
In-stream cover:	5	(0-10)
Bank erosion and stability:	3	(0-5)
Riffles, pools and bends:	3	(0-5)
<b>Final Habitat Score:</b>	<b>21</b>	(Add your scores)

Score	Definition
Excellent (36-40)	Site in natural or virtually natural condition; excellent habitat condition.
Good (29-35)	Some alteration from natural state; good habitat conditions.
Fair (20-28)	Significant alteration from the natural state but still offering moderate habitat; stable.
Poor (12-19)	Significant alterations from the natural state, with reduced habitat value; may have erosion or sedimentation problems.
Degraded (8-11)	Very degraded, often with severe erosion or sedimentation problems.





## 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:

Date and time of monitoring: 7/1/18

### Please record your data below:

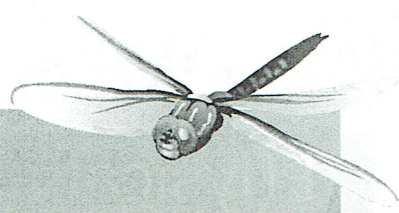
Parameter	Reading	Comments
Air Temperature	23.75 °C	
Water Temperature	<del>26.3</del> 26.3 °C	
Turbidity	46 NTU	
pH	7.0 Unit	
Conductivity	190 µS/cm	
Dissolved Oxygen	6.0 mg/L	% Saturation
Phosphate <small>(If using Lamotte Smart2 Colorimeter multiply by 0.326 to calculate mg/L)</small>	0.05 × 0.326 = 0.0163 mg/L	
Ammonium	0 mg/L	
Nitrate	mg/L	

### Observations and Notes:

What has changed since last time you monitored?

What stands out about the site today?

Other observations:



## 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:

*Wattle blossom on surface of water*

Waterway depth: 800 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 <sup>2</sup> ) |
| ___ Food Packets    | <u>10</u> Plastic                   | <u>5</u> Polystyrene                | ___ Car bodies            |
| ___ Waxed Cardboard | <u>5</u> Bottles <sup>plastic</sup> | ___ Petrol/Diesel (m <sup>2</sup> ) | ___ Other (specify)       |

*2 Pacific Black Ducks*



# Habitat Data Form

## Observation Information

### Monitoring site details

Site code: 020

Site description: The Landing

### Name of monitoring group

Persons monitoring:

Date and time of monitoring: 7/1/18

## Habitat Assessment

Bank vegetation:	<u>6</u>	(0-10)
Verge vegetation:	<u>6</u>	(0-10)
In-stream cover:	<u>4</u>	(0-10)
Bank erosion and stability:	<u>2</u>	(0-5)
Riffles, pools and bends:	<u>2</u>	(0-5)
<b>Final Habitat Score:</b>	<u>20</u>	(Add your scores)

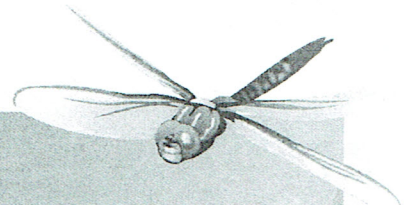
Score	Definition
Excellent (36-40)	Site in natural or virtually natural condition; excellent habitat condition.
Good (29-35)	Some alteration from natural state; good habitat conditions.
<u>Fair (20-28)</u>	Significant alteration from the natural state but still offering moderate habitat; stable.
Poor (12-19)	Significant alterations from the natural state, with reduced habitat value; may have erosion or sedimentation problems.
Degraded (8-11)	Very degraded, often with severe erosion or sedimentation problems.



## Habitat Data Form

Bank vegetation				
(10) Mainly undisturbed native vegetation. No signs of site alteration.	(8) Mainly native vegetation. Little disturbance or no signs of recent site disturbance.	(6) Medium cover, mixed native / introduced. Or one side cleared, the other undisturbed.	(4) Introduced ground cover, little native under storey or over storey, predominantly introduced vegetation.	(2) Introduced ground cover with lots of bare ground, occasional tree. Also includes sites with concrete lined channels.
Verge vegetation				
(10) Mainly undisturbed native vegetation on both sides of stream. Verge more than 30m wide.	(8) Well-vegetated wide verge corridor. Mainly undisturbed native vegetation on both sides of stream; some introduced or reduced cover of native vegetation.	(6) Wide corridor of mixed native and exotics, or one side cleared, and other wide corridor of native vegetation.	(4) Very narrow corridor of native or introduced vegetation.	(2) Bare cover or introduced grass cover such as pastureland.
In-stream cover				
(10) Abundant cover. Frequent snags, logs or boulders with extensive areas of in-stream, aquatic vegetation and overhanging bank.	(8) A good cover of snags, logs or boulders, with considerable areas of in-stream and overhanging vegetation.	(6) Some snags or boulders present and / or occasional areas of in-stream or overhanging vegetation.	(4) Only slight cover. The stream is largely cleared, with occasional snags and very little in-stream vegetation. Generally no overhanging vegetation.	(2) No cover. No snags, boulders submerged or overhanging vegetation. No undercut banks. Site may have rock or concrete lining.
Bank erosion and stability				
(5) Stable; no erosion / Sedimentation evident. No undercutting of banks, usually gentle bank slopes, lower banks covered with root mat grasses, reeds or shrubs.	(4) Only spot erosion occurring. Little undercutting of bank, good vegetation cover, usually gentle bank slopes, no significant damage to bank structure.	(3) Localised erosion evident. A relatively good vegetation cover. No continuous damage to bank structure or vegetation.	(2) Significant active erosion evident especially during high flows. Unstable, extensive areas of bare banks, little vegetation cover.	(1) Extensive or almost continuous erosion. Over 50% of banks have some form of erosion; very unstable with little vegetation cover.
Riffles, pools and bends (flowing water only)				
(5) Wide variety of habitats. Riffles and pools present of varying depths. Bends present. Good	(4) Good variety of habitats - e.g., riffles and pools or bends and pools. Variation in depth of riffle and pool.	(3) Some variety of habitats - e.g., occasional riffle or bend. Some variation in depth.	(2) Only slight variety of habitat. All riffle or pool with only slight variation in depth. Very poor	(1) Uniform habitat. Straight stream, all shallow riffle or pool of uniform depth - e.g.; channeled stream or irrigation channel.





## Physical and Chemical Analysis Data Form

Waterwatch Melbourne Physical and Chemical Analysis

**Monitoring site details**

Site code: 023

Site description: Heron Pt

**Name of monitoring group**

Persons monitoring:

Date and time of monitoring: 7/11/18

**Please record your data below:**

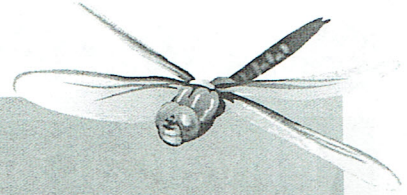
Parameter	Reading	Comments
Air Temperature	24.5 °C	
Water Temperature	26.8 °C	
Turbidity	37 NTU	
pH	7.2 Unit	
Conductivity	190 µS / cm	
Dissolved Oxygen	7.8 mg / L	% Saturation
Phosphate <small>(If using Lamotte Smart2 Colorimeter multiply by 0.326 to calculate mg/L)</small>	0.14 mg / L $\times 0.326 = 0.04564$	
Ammonium	0 mg / L	
Nitrate	mg / L	

**Observations and Notes:**

What has changed since last time you monitored?

What stands out about the site today?

Other observations:



## 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:** ~ 1200 cm (0 to 3000cm)

**Waterway width:** \_\_\_\_\_ m (0 to 100m)

**Weather:**

- Sunny     Cloudy     Overcast     Showers     Rain  
 Hail     Windy     Foggy     Other

If 'Other', please specify:

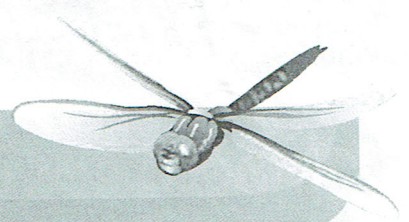
**Last rainfall:**

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

**Litter / Pollutants (record no.):**

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

*2 Pacific Black Ducks*



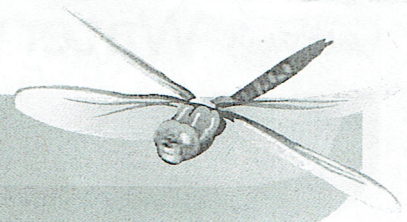
## Macro-invertebrates Data Form

Common Name	Order	Bug Score	Abundance
<b>Tolerant Macro-invertebrates</b>			
Hydra	Hydrozoa	4	
Beetle Larvae	Coleoptera	4	
True Bugs (Backswimmers, Water Boatman, Water Strider)	Hemiptera	4	<del>scribble</del>
Side Swimmer/Scud	Amphipoda	4	<del>scribble</del>
Aquatic Beetles (Diving Beetles, Whirligig Beetles)	Coleoptera	3	
Round Worms	Nematoda	3	
Leech	Hirudinea	3	
Freshwater Snails	Gastropoda	3	1
Flatworm	Turbellaria	3	
<b>Very Tolerant Macro-invertebrates</b>			
Mosquito Larvae	Diptera	2	
Biting Midge Larvae	Diptera	2	
Fly Larvae	Diptera	2	
Segmented Worm	Oligochaeta	1	
Non Biting Midge (Bloodworms)	Diptera	1	15+
	<b>TOTALS</b>		

Needle bug 1  
**Overall Bug Rating**  
 Mosquito fish (5 dead)

Feathered Red (segmented worm?) 1

Total bug score		
<b>Total abundance</b>	0-35	35+
0-200	Poor	Good
200+	Fair	Very good



## Macro-invertebrates Data Form

### Monitoring Group Information

#### Monitoring site details

Site code: .06

Site description: *Pobblebank Point*

#### Name of monitoring group

Persons monitoring:

Date and time of monitoring: *7.1.18*

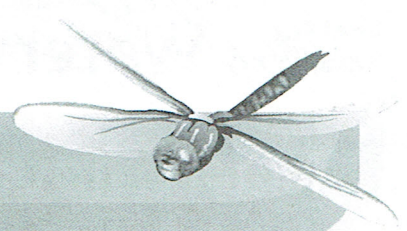
### Macro-invertebrates

#### Sample Type

Edge  Riffle

Please record your data below:

Common Name	Order	Bug Score	Abundance
<b>Very Sensitive Macro-invertebrates</b>			
Stonefly Nymph	Plecoptera	8	
Mayfly Nymph	Ephemeroptera	7	
Caddisfly Nymph	Trichoptera	7	<i>4</i>
<b>Sensitive Macro-invertebrates</b>			
Toebiters/Dobsonflies	Megaloptera	6	
Damselfly Nymph	Odonata	6	<i>1</i>
Dragonfly Nymph	Odonata	6	
Freshwater Mussel	Class: Bivalvia	5	
Aquatic Caterpillars	Lepidoptera	5	
Freshwater Shrimp/Prawn	Decapoda	5	
Freshwater Yabby/Crayfish	Decapoda	5	
Water Mite	Acarina	5	<i>Several</i>
Freshwater Slater	Isopoda	5	



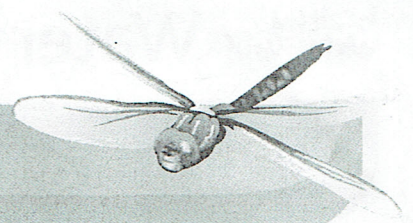
## Macro-invertebrates Data Form

Common Name	Order	Bug Score	Abundance
<b>Tolerant Macro-invertebrates</b>			
Hydra	Hydrozoa	4	
Beetle Larvae	Coleoptera	4	
True Bugs (Backswimmers, Water Boatman, Water Strider)	Hemiptera	4	80 Boatman 10 Back Swimmer
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	
<b>Very Tolerant Macro-invertebrates</b>			
Mosquito Larvae	Diptera	2	
Biting Midge Larvae	Diptera	2	8
Fly Larvae	Diptera	2	
Segmented Worm	Oligochaeta	1	
Non Biting Midge (Bloodworms)	Diptera	1	1
	<b>TOTALS</b>		

Mosquito fish - lots.

### 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: 023  
 Site description: Hean Point

#### Name of monitoring group

Persons monitoring:  
 Date and time of monitoring: 7-1-18

### Macro-invertebrates

#### Sample Type

Edge  Riffle

#### Please record your data below:

Common Name	Order	Bug Score	Abundance
<b>Very Sensitive Macro-invertebrates</b>			
Stonefly Nymph	Plecoptera	8	
Mayfly Nymph	Ephemeroptera	7	
Caddisfly Nymph	Trichoptera	7	4
<b>Sensitive Macro-invertebrates</b>			
Toebiters/Dobsonflies	Megaloptera	6	
Damselfly Nymph	Odonata	6	2
Dragonfly Nymph	Odonata	6	
Freshwater Mussel	Class: Bivalvia	5	
Aquatic Caterpillars	Lepidoptera	5	
Freshwater Shrimp/Prawn	Decapoda	5	45+
Freshwater Yabby/Crayfish	Decapoda	5	5
Water Mite	Acarina	5	several 10+
Freshwater Slater	Isopoda	5	