

## **Minutes of Rocglen Coal Mine Community Consultative Committee – Meeting #22**

**Meeting Held:** Wednesday 12<sup>th</sup> February 2014

**Venue:** The meeting was held at the Rocglen Coal Mine Training Room

**Commencement Time:** 3:00pm

### **1. Present and Apologies**

**Present:** Mr John Sturgess (JS) (Independent Chairperson)  
Mr Danny Young (DY) (Environmental Manager – Whitehaven)  
Mr Jason Conomos (JC) (Operations Manager)  
Mr Hans Allgayer (HA) (Gunnedah Shire Council Representative)  
Mrs Jill Johnson (JJ) (Environmental Superintendent – Whitehaven)  
Mrs Pam Burns (PB) (Community Representative)  
Mr Rod Barnes (RB) (Community Representative)  
Mr Nick Toms (NT) (Manager, Gunnedah – Bis Industries)

**Apologies:** Mr Tim Muldoon (TM) (Group Manager Community Relations & Property)

### **2. Previous Minutes**

Minutes accepted as a true record on the motion of HA and PB.

### **3. Business Arising from Previous Minutes**

- 3.1. DY advised that fencing for stock exclusion from the biobank area has almost been completed along the Yarrari/Belah and Roseberry boundary. RB said the fencing is good and has quietened the sheep down.

DY said Whitehaven will continue with the biobank management plan requirements and in the coming weeks will issue notices to landholders as we intend to undertake rabbit baiting with Pindone.

JJ asked the Committee if this item can be removed from the agenda as it is now just an ongoing management action. Committee agreed to remove it.

- 3.2. DY said the Wean Road upgrade had been completed.

- 3.3. In relation to advertising for new CCC members, JJ said that an advertisement had been placed in the Namoi Valley Independent with no applications received. She said one landholder expressed interest but didn't think he could meet the selection criteria. He was encouraged to apply irrespective of the selection criteria but as yet has not applied. Letters were subsequently issued to all surrounding landholders with no feedback received to date.

3.4. DY said he had forgotten about organising the first flush diverter for “Surrey” but had spoken to Pete Brian that morning and had organised for him to contact RB for installation.

#### **4. Mine Progress Report**

JC advised in the 3 months until the end of January that 1.5 million BCM of overburden was moved and 261,000 tonnes of coal was mined. This equates to a stripping ratio of about 6:1.

#### **5. Review of Environmental Performance**

DY presented the environmental monitoring results which are attached in the environmental monitoring report, and include any complaints lodged over the reporting period.

#### **6. General Business**

Nick Toms introduced himself as the Manager, Gunnedah for Bis Industries (Bis) who have the new coal haulage contract with Whitehaven. He provided a brief overview of his background and the new contract. It's the first on road haulage contract for Bis in NSW with 28 new B-doubles and most of the drivers who were previously employed by Toll are now working with Bis. Bis has 64 sites around Australia, particularly in QLD, NT and WA.

He said the new trucks have GPS tracking with set weigh points for aspects such as speed zones. All trucks are fitted with cameras (two rear, one forward and one in cab on the driver) that are not live and do not record sound. They are used for training and incidents. The drivers are also fitted with opti-alert glasses that monitor fatigue. Trucks and trailers are maintained by Scania.

RB apologised for not advising he wouldn't attend the last meeting.

RB asked if Council had signed off on Wean Road and whether they had done an inspection. DY said he will check. HA asked what the concern was. RB said there is timber spread along the road and when it floods it will wash over the road and into fences. DY and HA to check requirements.

RB asked about the drilling on Stratford. JC said it is not related to Rocglen and suspects it might be related to Vickery or Vickery South. RB said the previous manager at RC said there wouldn't be any additional expansions at Rocglen. JJ said the drilling isn't associated with Rocglen. DY said he will find out and let RB know.

RB asked why names are abbreviated to initials in the minutes and said he doesn't like it. JJ said it saves time when doing a significant amount of typing and the full names and corresponding initials are provided on the front page of the minutes.

JC said three sets of spotlights from pit vehicles had recently been stolen from site and suggested everyone be vigilant for theft in the area.

## **7. Next Meeting**

The next meeting of the Rocglen CCC is scheduled for Wednesday 14<sup>th</sup> May 2014 at 3:00pm.

Meeting closed 3:30pm.

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J Sturgess  
Chairman

# Rocglen Coal Mine Community Consultative Committee Meeting #22

## Environmental Monitoring Report November 2013 – January 2014

### Noise Monitoring

Attended noise monitoring was undertaken on the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> December 2013, in accordance with the Rocglen Noise Monitoring Program and Environmental Protection Licence Guidelines (90 minutes during the day, 30 minutes during the evening and 60 minutes during the night and occur for 3 consecutive operating days) with results outlined below:

### Surrey

RCM Operational Noise Monitoring Results – 4 <sup>th</sup> , 5 <sup>th</sup> and 6 <sup>th</sup> December 2013				
Date	Time	dB(A),Leq (15 min)	Wind speed/direction	Identified Noise Sources as dB(A) Leq (15 min)
4 <sup>th</sup> Dec 2013	7:25 am	44	0.8 / 269	Birds (44), <b>RCM (28)</b>
4 <sup>th</sup> Dec 2013	8:40 pm	36	2.2 / NNW	Insects (33), cattle (32), mine (24), <b>RCM inaudible</b>
4 <sup>th</sup> Dec 2013	10:10 pm	42	1.8 / N	Insects (39), wind (37), <b>RCM (31)</b>
5 <sup>th</sup> Dec 2013	7:32 am	43	3.2 / NW	Wind (39), birds (38), <b>RCM (33)</b>
5 <sup>th</sup> Dec 2013	8:33 pm	34	1.7 / S	Birds (31), wind (30), <b>RCM inaudible</b>
5 <sup>th</sup> Dec 2013	10:00 pm	31	0.5 / S	Domestic noise (31), <b>RCM inaudible</b>
6 <sup>th</sup> Dec 2013	7:09 am	47	2.2 / 262	Birds (47), <b>RCM (&lt;25)</b>
6 <sup>th</sup> Dec 2013	8:34 pm	45	2.2 / 155	Insects (45), <b>RCM inaudible</b>
6 <sup>th</sup> Dec 2013	10:02 pm	26	1.2 / 101	Insects (25), <b>RCM (&lt;20)</b>

### Retreat

RCM Operational Noise Monitoring Results – 4 <sup>th</sup> , 5 <sup>th</sup> and 6 <sup>th</sup> December 2013				
Date	Time	dB(A),Leq (15 min)	Wind speed/direction	Identified Noise Sources as dB(A) Leq (15 min)
4 <sup>th</sup> Dec 2013	9:15 am	38	1.4 / 292	Birds (37), mine (28) <b>RCM inaudible</b>
4 <sup>th</sup> Dec 2013	9:20 pm	38	2.2 / NW	Birds & insects (38), mine (20), <b>RCM inaudible</b>
4 <sup>th</sup> Dec 2013	11:17 pm	37	1.8 / N	Insects (35), wind (28), mine (26), <b>RCM inaudible</b>
5 <sup>th</sup> Dec 2013	10:20 am	45	1.8 / N	Insects (43), wind (38), <b>RCM (&lt;30)</b>
5 <sup>th</sup> Dec 2013	9:18 pm	34	0.7 / S	Wind (33), <b>RCM (24)</b>
5 <sup>th</sup> Dec 2013	11:13 pm	27	0.9 / NNE	<b>RCM (24)</b> , insects (23)
6 <sup>th</sup> Dec 2013	8:57 am	43	5.7 / 221	Wind (40), birds (40), <b>RCM (&lt;25)</b>
6 <sup>th</sup> Dec 2013	9:17 pm	28	2.7 / 150	Insects (26), <b>RCM (20)</b> , dog (19)
6 <sup>th</sup> Dec 2013	11:24 pm	27	0.9 / 40	Insects (26), <b>RCM (&lt;20)</b>

The results show that, under the operating and meteorological conditions at the time of monitoring, the mine noise did not exceed the operational noise criterion at any monitoring location or at any time.

In addition to the operational noise, the noise from the mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a

result of individual loud noises from the mine. During the night time monitoring the L1 (1 min) noise from the mine did not exceed 45 dB(A) at both monitoring locations, as shown below:

RCM Sleep Disturbance Monitoring Results				
Date	Location	Time	dB(A),L1 (1 min)	Wind speed/ direction
4 <sup>th</sup> Dec 2013	Surrey	10:10 pm	35	1.8 / N
5 <sup>th</sup> Dec 2013	Surrey	10:00 pm	n/a	0.5 / S
6 <sup>th</sup> Dec 2013	Surrey	10:02 pm	<25	1.2 / 101
4 <sup>th</sup> Dec 2013	Retreat	11:17 pm	n/a	1.8 / N
5 <sup>th</sup> Dec 2013	Retreat	11:13 pm	30	0.9 / NNE
6 <sup>th</sup> Dec 2013	Retreat	11:24 pm	<25	0.9 / 40

Rocglen's real time noise monitor is currently located at the "Penryn" property. The monitor's alarm system notifies operations when noise levels approach compliance limits and allows for the opportunity to adjust operations accordingly. Currently, in-pit dumping is prioritised during night operations to reduce the likelihood of operational noise impacts.

Road noise monitoring was undertaken on the 6<sup>th</sup> December 2013 at the "Brooklyn" and "Werona" residences on Blue Vale Road and indicated compliance with the 60 dB(A), $L_{eq(1hour)}$  day time criteria. The road noise associated with coal haulage at Residence 1 at "Brooklyn" was 50 dB(A), $L_{eq(1hour)}$ , while Residence 2 at "Brooklyn" was 43 dB(A), $L_{eq(1hour)}$ . Road noise at "Werona" was 45 dB(A), $L_{eq(1hour)}$ .

### **Blast Monitoring**

Since the first blast there have been 179 blasts (until the end of January). All blasts during the monitoring period were compliant within the limits of 120dB and 10mm/s.

### **Air Quality**

#### **Deposited Dust Results**

The deposited dust results (g/m<sup>2</sup>/month) obtained for the site over the last 12 months are as follows:

Air Quality (Dust Deposition) Results							
Month	BD3 - Belah	BD4 - Surrey	BD5 - Stratford	BD6 - Roseberry	BD7 - Roseglass	BD8 - Yarrowonga	BD2-a - Penryn
February 2013	0.7	0.7	1.1	0.5	0.7	1.7	0.7
March 2013	0.7	1.6	1.6	0.3	0.2	1.1	0.4
April 2013	0.3	0.5	3.6	0.8	0.7	1.3	-
May 2013	0.4	1.3	0.9	0.8	0.6	1.3	0.9
June 2013	0.4	0.4	0.4	0.4	0.5	0.7	0.3
July 2013	0.5	0.3	0.3	0.2	0.2	0.5	0.3
August 2013	0.1	0.4	0.2	0.1	0.2	0.3	0.2
September 2013	0.5	0.7	0.6	0.8	0.4	0.9	0.7
October 2013	1.1	0.2	1.3	1.1	2.4	1.7	0.8
November 2013	1.4	1.2	1.4	1.1	1.1	0.8	0.7
December 2013	3.0	0.6	3.0	3.0	2.8	1.0	1.3
January 2014	9.5	0.5	0.3	5.7	0.4	16.8	0.6

<b>Annual Average</b>	<b>1.7</b>	<b>0.6</b>	<b>0.9</b>	<b>1.7</b>	<b>0.8</b>	<b>2.0</b>	<b>1.0</b>
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Results show elevated results for BD3, BD6 and BD8 during January, most likely attributable to dry, dusty conditions throughout the district. The annual average at all sites remains well below the concentration threshold of 4g/m<sup>2</sup>/month.

### **PM<sub>10</sub> Results**

The annual averages for PM<sub>10</sub> levels up until the end of December 2013 remain below the annual average limit of 30µg/m<sup>3</sup>, as follows:

Costa Vale: 15.27µg/m<sup>3</sup>

Roseberry: 12.51µg/m<sup>3</sup>

The 24hr criterion was breached on the 29<sup>th</sup> December 2013 at “Costa Vale” with a result of 51.2 µg/m<sup>3</sup> (24 hour criteria = 50 µg/m<sup>3</sup>). Rocglen was not operating on the day of the exceedance, “Costa Vale” is north of Rocglen and the prevailing wind direction on that day was from the NNE which indicates the elevated dust result was not related to the mine.

Both monitors experienced power issues in November. The “Roseberry” unit has subsequently been replaced and the “Costa Vale” unit has been returned to normal function.

The real time PM<sub>10</sub> monitor at “Roseberry” is currently operating to send alarms to operations in the event that PM<sub>10</sub> levels approach compliance limits.

### **Water Monitoring**

#### **Ground Water**

Groundwater monitoring data for the last 12 months is presented in the following table. Standing Water Level (SWL) graphs of bores with sufficient data sets are also provided.

<b>Site</b>	<b>Date</b>	<b>SWL (m)</b>	<b>pH</b>	<b>Elect. Conduct µs/cm</b>
<b>MP2</b>	23 May 12	8.43	7.32	4170
	27 Aug 12	8.71	7.16	4670
	26 Nov 12	9.33	7.07	4530
	12 Mar 13	10.0	7.29	4620
	20 Jun 13	10.36	7.12	4710
	28 Aug 13	9.80	7.2	4740
	11 Dec 13	10.84	7.2	4870
<b>MP2a</b>	12 Mar 13	11.30	5.32	1340
	15 Apr 13	11.40		
	27 May 13	11.75		
	20 Jun 13	11.80	6.53	4490
	29 Jul 13	16.74		
	23 Aug 13	16.80		
	28 Aug 13	16.80	5.3	2360
	30 Sep 13	16.43		
	28 Nov 13	14.52		
	11 Dec 13	14.33	3.7	3140
<b>MP3</b>	23 May 12	Dry		

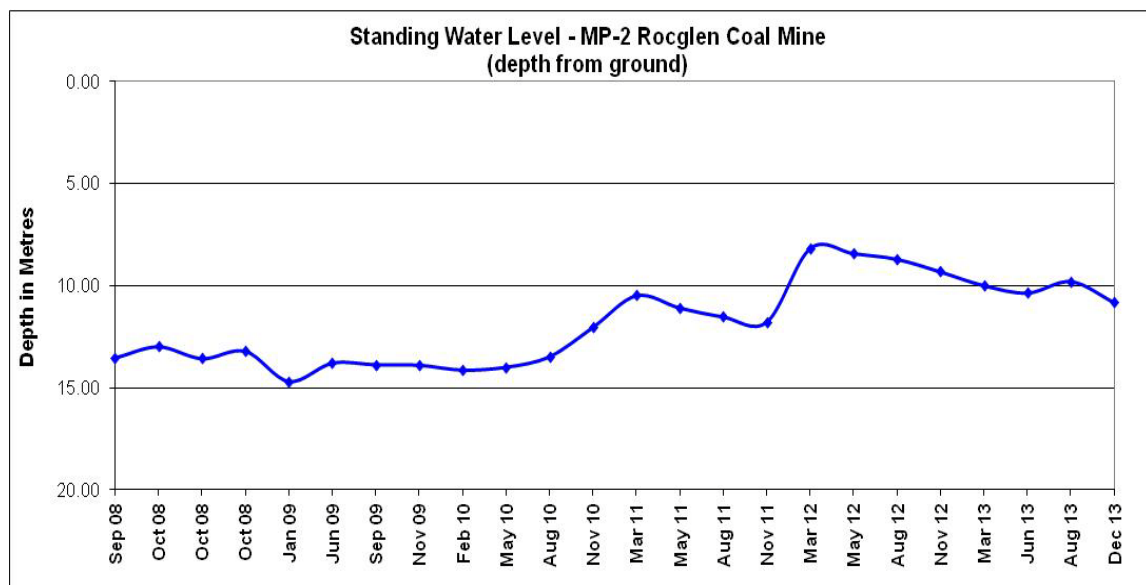
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	27 Aug 12	Dry		
	26 Nov 12	Dry		
	12 Mar 13	18.26	Insufficient water to sample	
	12 Jun 13	18.25	Insufficient water to sample	
	28 Aug 13	18.13	Insufficient water to sample	
	11 Dec 13	18.26	Insufficient water to sample	
<b>MP3a</b>	12 Mar 13	22.30	7.48	1280
	15 Apr 13	22.38		
	27 May 13	22.38		
	12 Jun 13	22.25	7.79	1225
	29 Jul 13	22.34		
	23 Aug 13	22.32		
	28 Aug 13	22.9	7.8	1250
	30 Sep 13	22.32		
	28 Nov 13	22.26		
	11 Dec 13	22.27	7.9	13.05
<b>MP4</b>	23 May 12	Dry		
	27 Aug 12	Dry		
	26 Nov 12	Dry		
	12 Mar 13	Dry		
	12 Jun 13	Dry		
	28 Aug 13	Dry		
	11 Dec 13	Dry		
<b>MP4a</b>	28 Nov 13	29.12		
	12 Dec 13	29.18	6.8	3210
<b>MP4b</b>	28 Nov 13	26.06		
	12 Dec 13	25.87	7.3	2960
<b>MP5</b>	23 May 12	54.41	Insufficient water to sample	
	28 Aug 12	55.43	Insufficient water to sample	
	26 Nov 12	54.95	Insufficient water to sample	
	12 Mar 13	Dry	Insufficient water to sample	
	12 Jun 13	Dry	Insufficient water to sample	
	28 Aug 13	Dry	Insufficient water to sample	
	12 Dec 13	Dry	Insufficient water to sample	
<b>MP5a</b>	12 Mar 13	63.80	7.33	2790
	15 Apr 13	65.78		
	27 May 13	67.11		
	12 Jun 13	67.03	7.12	2800
	29 Jul 13	66.10		
	23 Aug 13	66.20		
	29 Aug 13	66.90	7	2710
	30 Sep 13	71.25		
	28 Nov 13	76.55		
	12 Dec 13	76.56	7	2770
<b>MP6</b>	12 Mar 13	7.91	5.47	4120
	15 Apr 13	7.99		
	27 May 13	8.12		
	20 Jun 13	8.11	6.91	3170

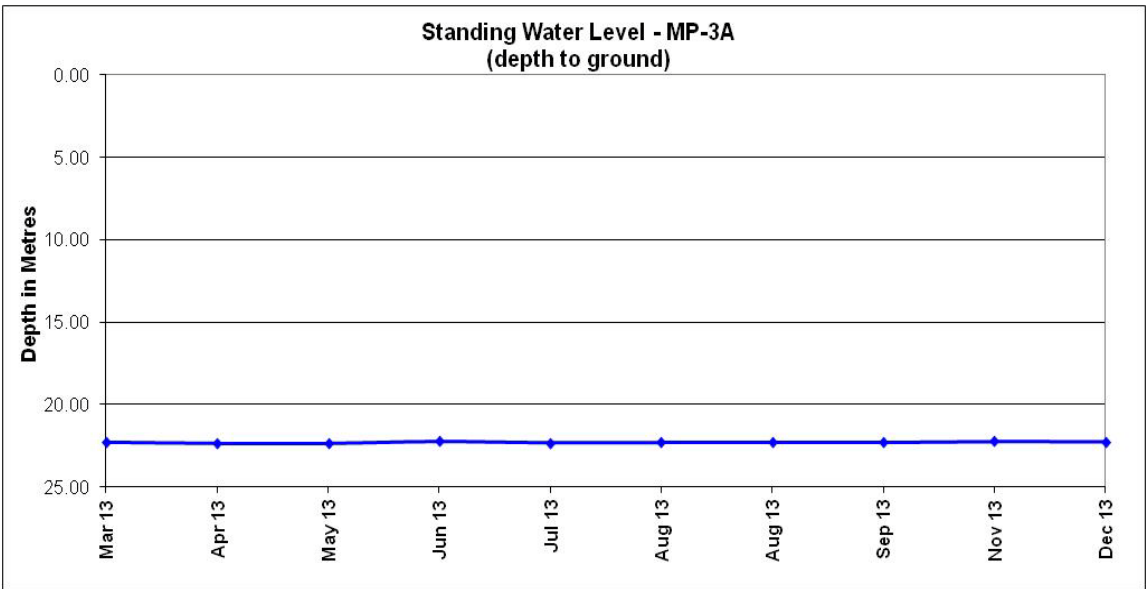
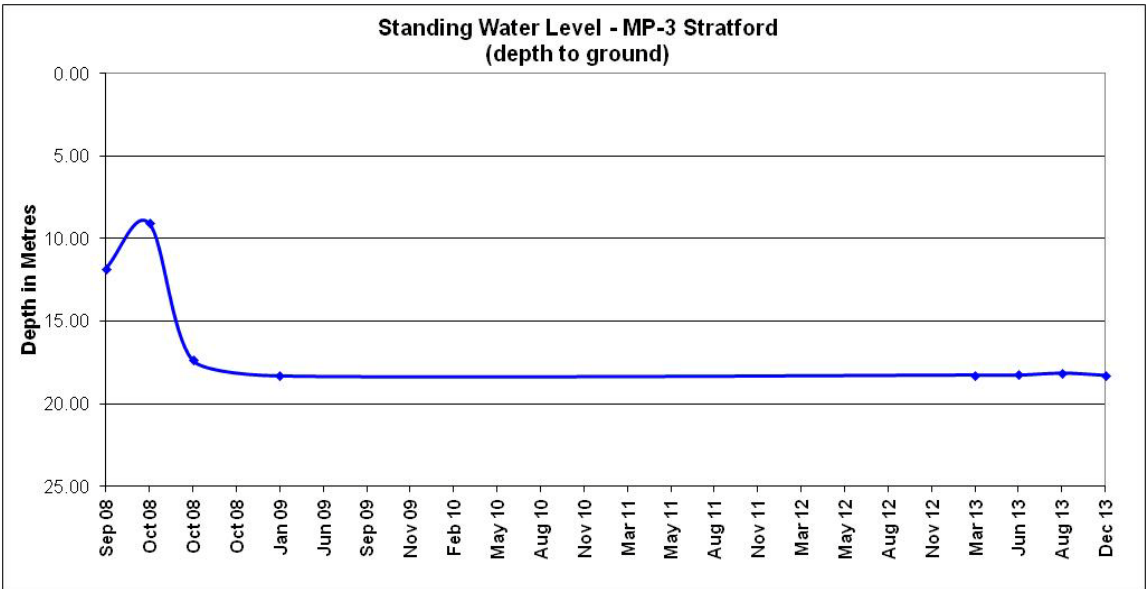
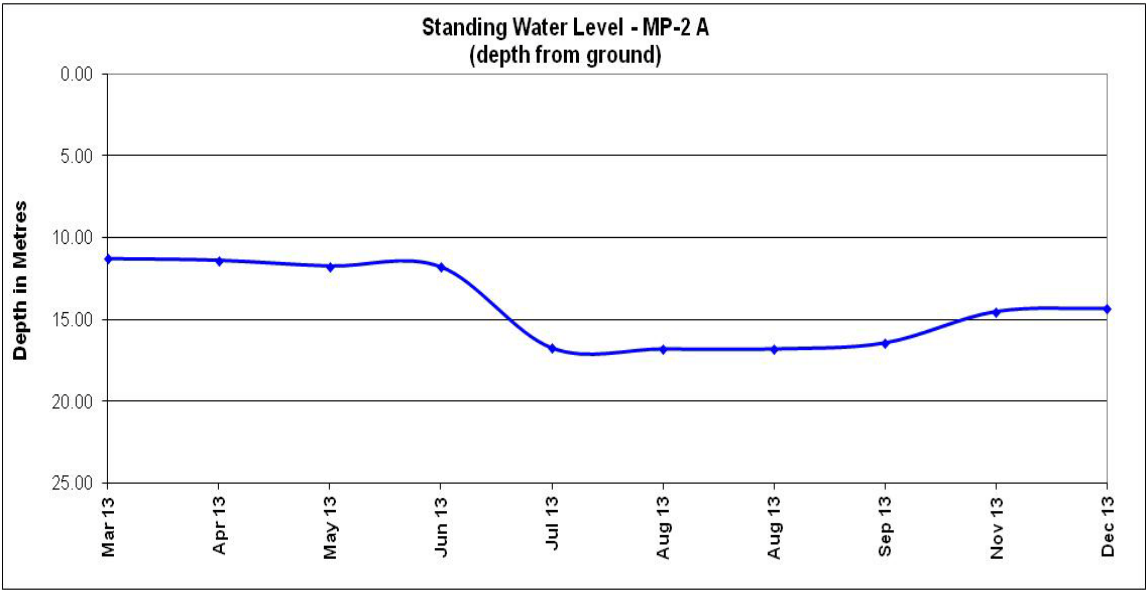
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	29 Jul 13	8.13		
	22 Aug 13	8.08		
	29 Aug 13	8.14	7.1	2890
	30 Sep 13	8.11		
	28 Nov 13	8.18		
	11 Dec 13	8.17	7.2	2780
<b>MP7</b>	13 Mar 13	15.50	6.8	3230
	15 Apr 13	15.64		
	27 May 13	15.76		
	2 Jul 13	15.72	6.81	3830
	29 Jul 13	15.72		
	23 Aug 13	15.68		
	29 Aug 13	15.70		
	30 Sep 13	15.63		
	28 Nov 13	15.60		
	18 Dec 13	15.76	6.9	2970
<b>MP8</b>	13 Mar 13	15.80	4.73	1430
	15 Apr 13	15.79		
	27 May 13	15.90		
	2 Jul 13	16.28	6.7	4200
	29 Jul 13	15.90		
	23 Aug 13	15.84		
	29 Aug 13	15.90	5.44	3180
	30 Sep 13	15.81		
	28 Nov 13	15.80		
	18 Dec 13	15.92	6.4	3620
<b>WB1</b>	24 May 12	8.52	8.03	1537
	27 Aug 12	7.82	No sample available	
	26 Nov 12	7.78	No sample available	
	12 Mar 13	7.85	No sample available	
	10 Jun 13	7.94	No sample available	
	29 Aug 13	7.99	No sample available	
	11 Dec 13	8.0	No sample available	
<b>WB2</b>	23 May 12	16.14	8.56	2610
	27 Aug 12	16.32	7.57	2240
	26 Nov 12	16.6	7.85	2560
	12 Mar 13	16.02	7.89	2570
	12 Jun 13	17.88	7.28	2620
	28 Aug 13	15.92	7.1	2840
	11 Dec 13	15.73	No access	
<b>WB3</b>	23 May 12	8.49	No pump	
	27 Aug 12	8.32	No pump	
	26 Nov 12	8.2	No pump	
	13 Mar 13	7.98	No pump	
	20 Jun 13	7.95	Pump over bore	
	30 Aug 13	7.86	Pump over bore	
	18 Dec 13	7.57	Pump over bore	
<b>WB4</b>	24 May 12	Unable to dip	7.91	3580
	28 Aug 12	Unable to dip	No sample	

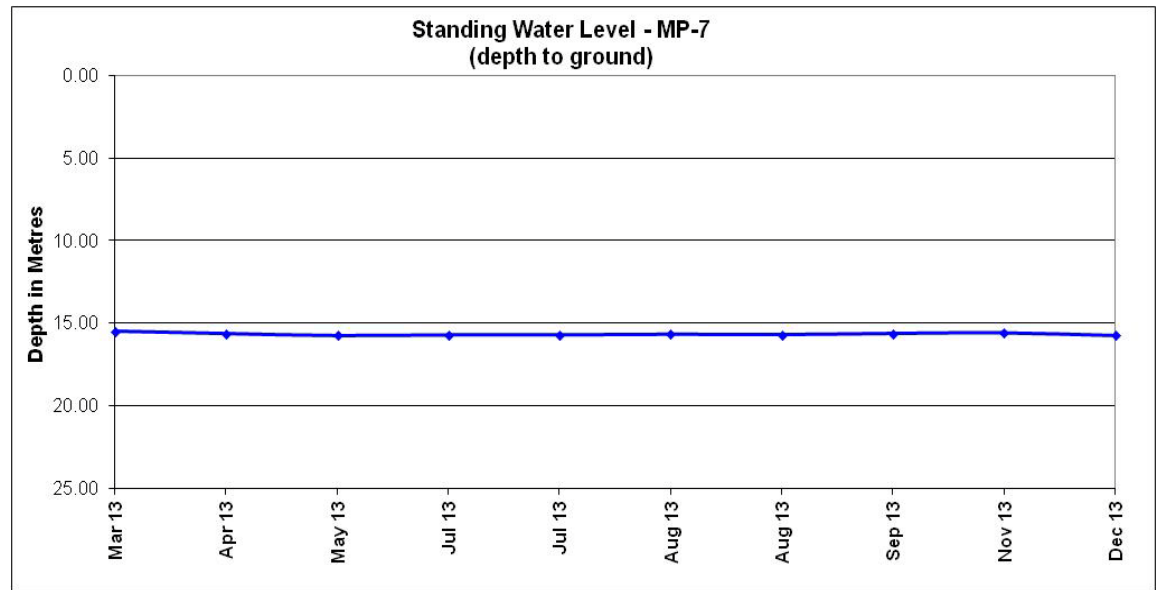
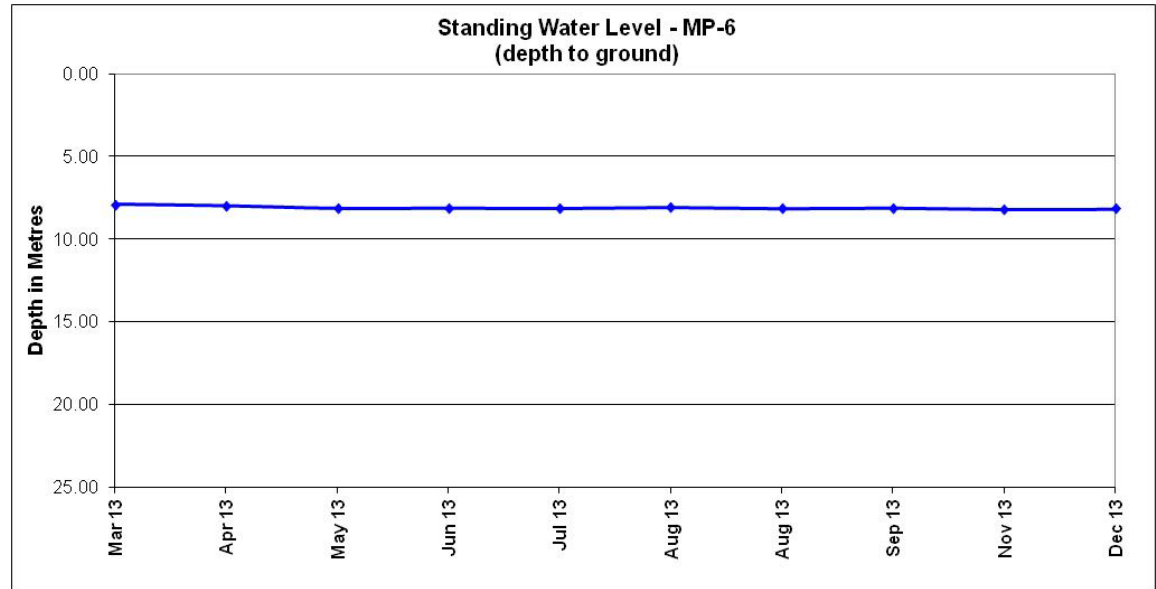
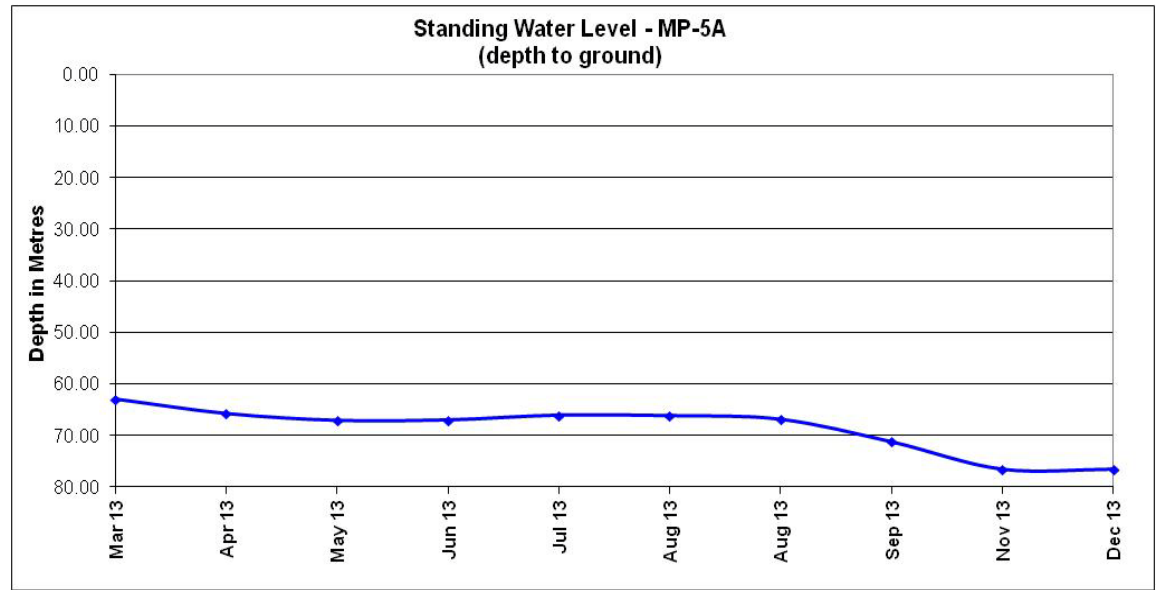


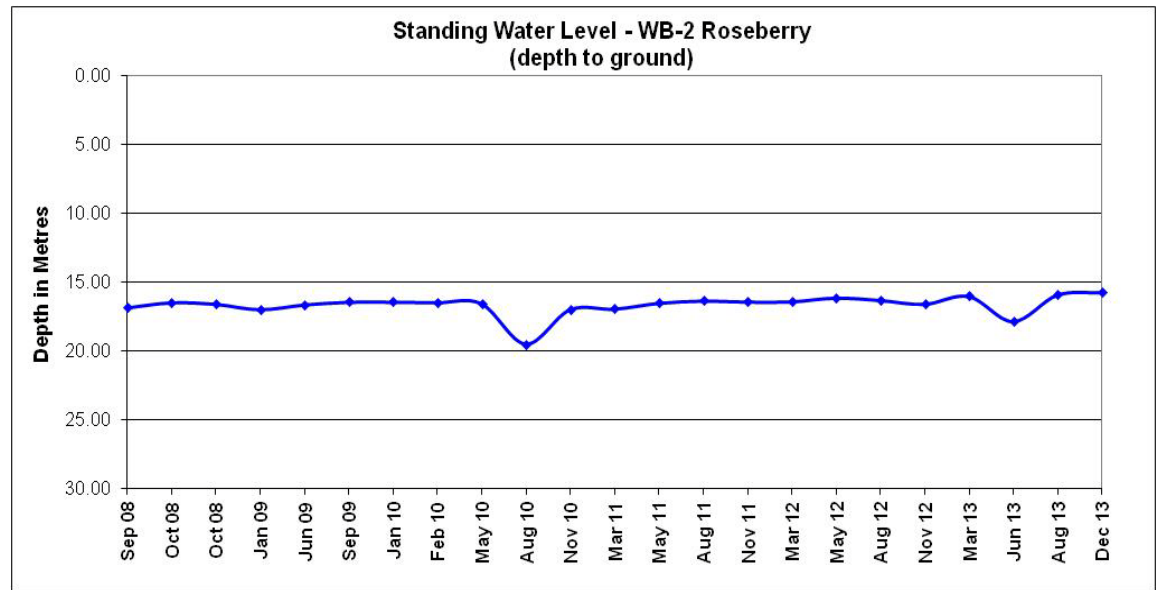
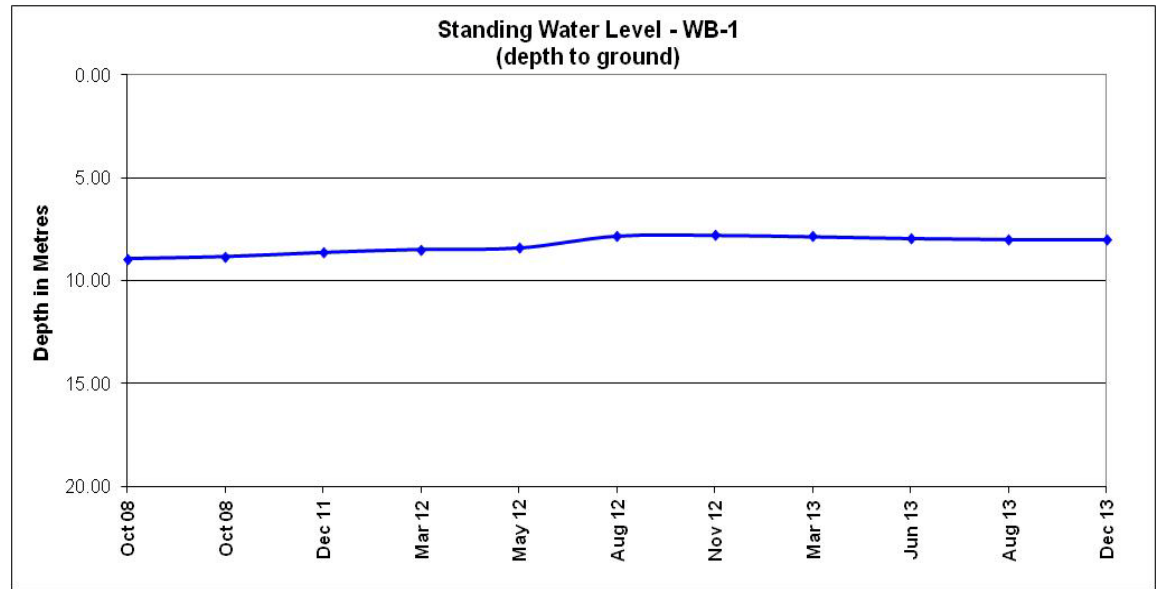
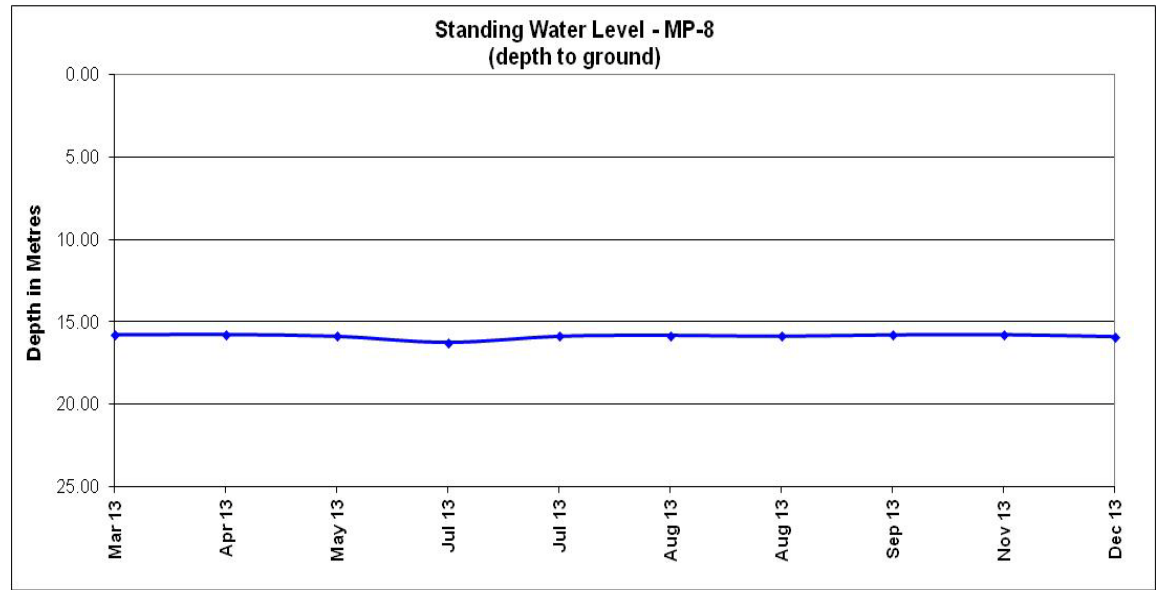
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	26 Nov 12	Unable to dip	No sample	
	13 Mar 13	Unable to dip	No sample	
	12 Jun 13	Unable to dip	No sample	
	29 Aug 13	Unable to dip	No sample	
	12 Dec 13	Unable to dip	No sample	
<b>WB5</b>	23 May 12	9.06	8.17	6360
	27 Aug 12	12.5	8.19	6930
	26 Nov 12	11.42	7.68	6740
	12 Mar 13	11.2	7.7	6890
	12 Jun 13	10.47	7.86	6930
	28 Aug 13	12.1	8.2	6910
	11 Dec 13	12.31	7.8	7130
<b>WB6</b>	23 May 12	21.06	Bore equipped	
	27 Aug 12	20.62	Bore equipped	
	26 Nov 12	20.42	Bore equipped	
	12 Mar 13	20.43	Bore equipped	
	12 Jun 13	20.46	Bore equipped	
	28 Aug 13	20.59	Bore equipped	
	11 Dec 13	26.66	Bore equipped	
<b>WB7</b>	23 May 12	4.60	8.11	3070
	27 Aug 12	27.43	7.4	2840
	26 Nov 12	18.87	7.18	2620
	12 Mar 13	9.77	No access	
	12 Jun 13	9.83	No access	
	28 Aug 13	10.15	No access	
	11 Dec 13	10.36	No access	
<b>WB8</b>	24 May 12	31.03	Unable to Sample – pump over bore	
	28 Aug 12	31.43	Unable to Sample – pump over bore	
	27 Nov 12	31.31	Unable to Sample – pump over bore	
	13 Mar 13	31.19	Unable to Sample – pump over bore	
	20 Jun 13	30.97	Unable to Sample – pump over bore	
	30 Sep 13	31.19	Unable to Sample – pump over bore	
	12 Dec 13	31.1	Unable to Sample – pump over bore	
<b>WB9</b>	23 May 12	24.21	8.15	902
	27 Aug 12	23.99	8.27	1010
	26 Nov 12	23.86	8.14	995
	12 Mar 13	24.85	No access	
	10 Jun 13	24.06	No access	
	28 Aug 13	23.94	No access	
	12 Dec 13	23.78	No access	
<b>WB10</b>	24 May 12	13.95	6.68	1902
	4 Sep 12	14.03	6.92	1870
	13 Dec 12	14.76	6.94	1696
	13 Mar 13	14.13	6.97	2020
	10 Jul 13	14.08	6.95	1883
	30 Aug 13	14.13	6.9	1880
	12 Dec 13	14.3	7	1925
<b>WB11</b>	24 May 12	16.5	Pump over bore	

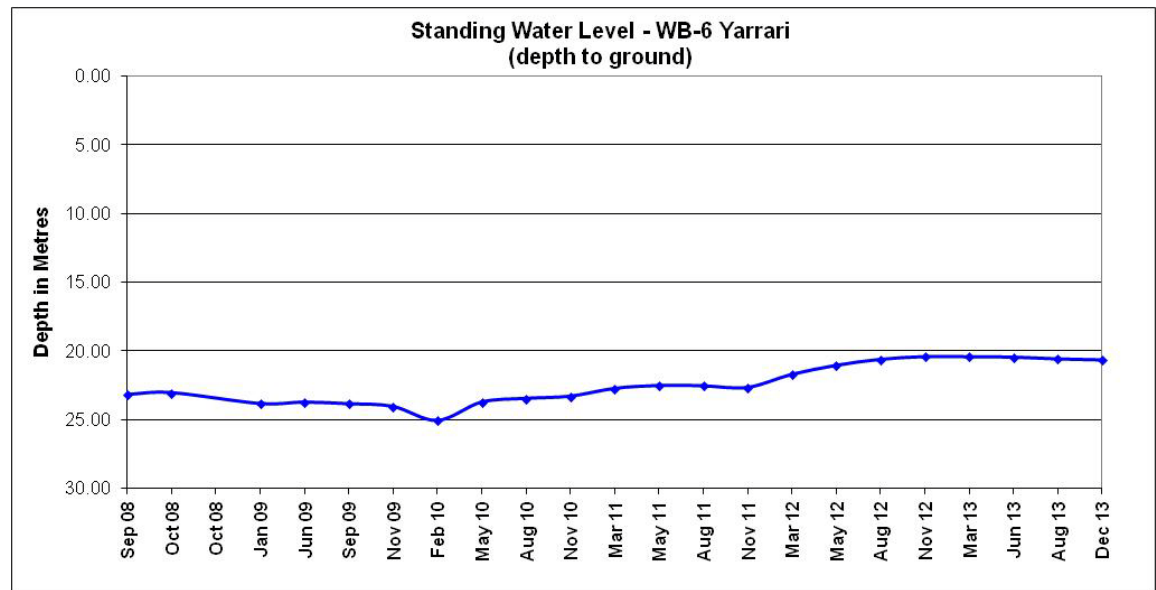
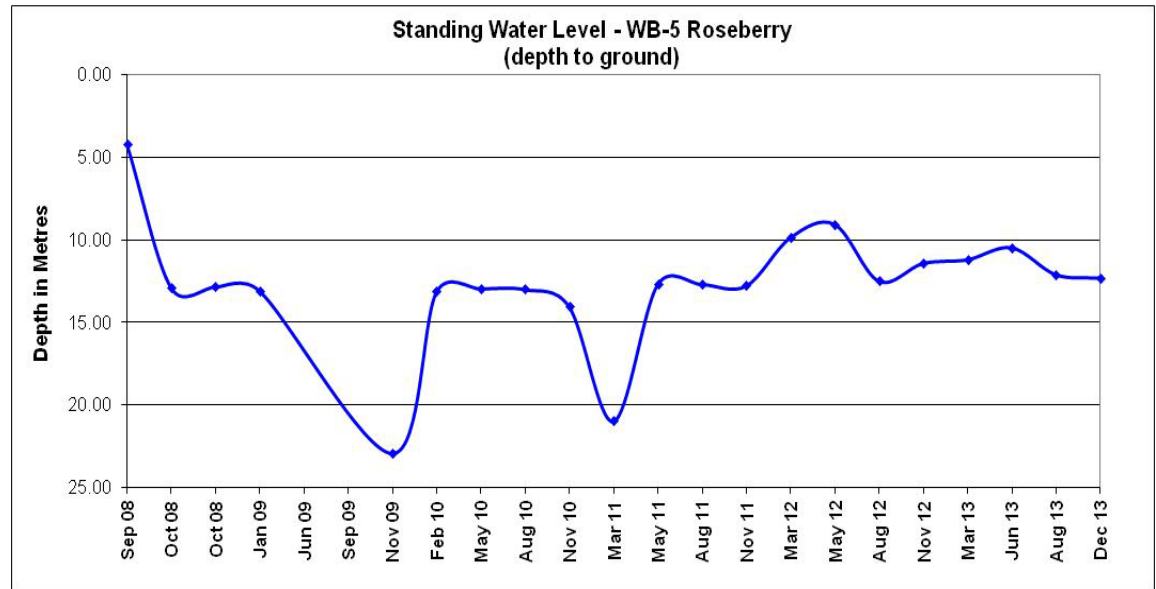
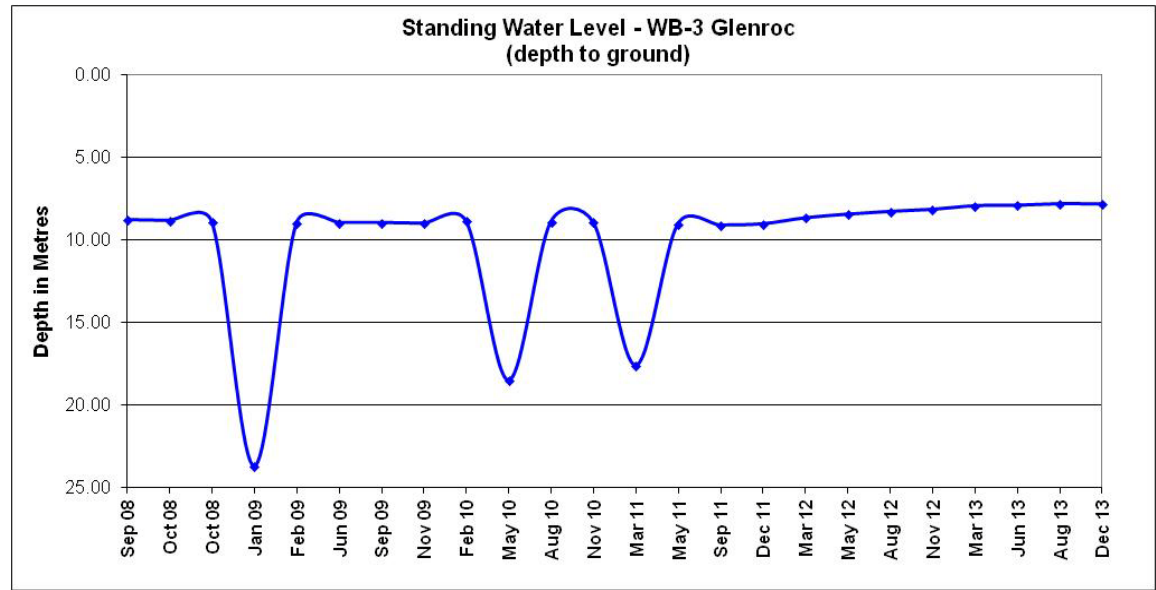
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	4 Sep 12	16.17	Pump over bore	
	13 Dec 12	Pump over bore		
	13 Mar 13	Pump over bore		
	10 Jul 13	15.32	7.75	1241
	30 Aug 13	16.67	7.6	1120
	12 Dec 13	16.7	7.8	1310
<b>WB12</b>	24 May 12	13.14	7.19	2150
	4 Sep 12	13.08	7.3	2150
	13 Dec 12	13.13	7.61	1907
	13 Mar 13	12.98	7.73	1800
	10 Jul 13	13.16	7.95	16.92
	30 Aug 13	13.08	8.1	1690
	12 Dec 13	12.98	7.9	1730
<b>WB13</b>	13 Mar 13	36.40	6.91	3410
	10 Jul 13	33.42	6.77	3550
	28 Aug 13	38.50	6.9	3730
	12 Dec 13	41.82	7	3460
<b>Production Bore</b>	23 May 12	Bore Equipped	7.51	3330
	27 Aug 2012	Bore Equipped	7.11	3390
	26 Nov 12	Bore Equipped	7.05	3360
	12 Mar 13	Bore Equipped	7.04	3420
	12 Jun 13	Bore Equipped	7.23	3510
	28 Aug 13	Bore Equipped	6.9	3430
	11 Dec 13	Bore Equipped	7	3630
<b>Surrey No.2</b>	24 May 2012	34.59	7.2	2790
	28 August 2012	34.29	7.15	3090
	27 November 2012	34.94	7.34	3100
	13 March 13	35.69	7.44	3250
	20 June 13	34.07	7.35	3310
	30 Aug 13	33.29	7.21	3110
	12 Dec 13	34.55	7.3	3420

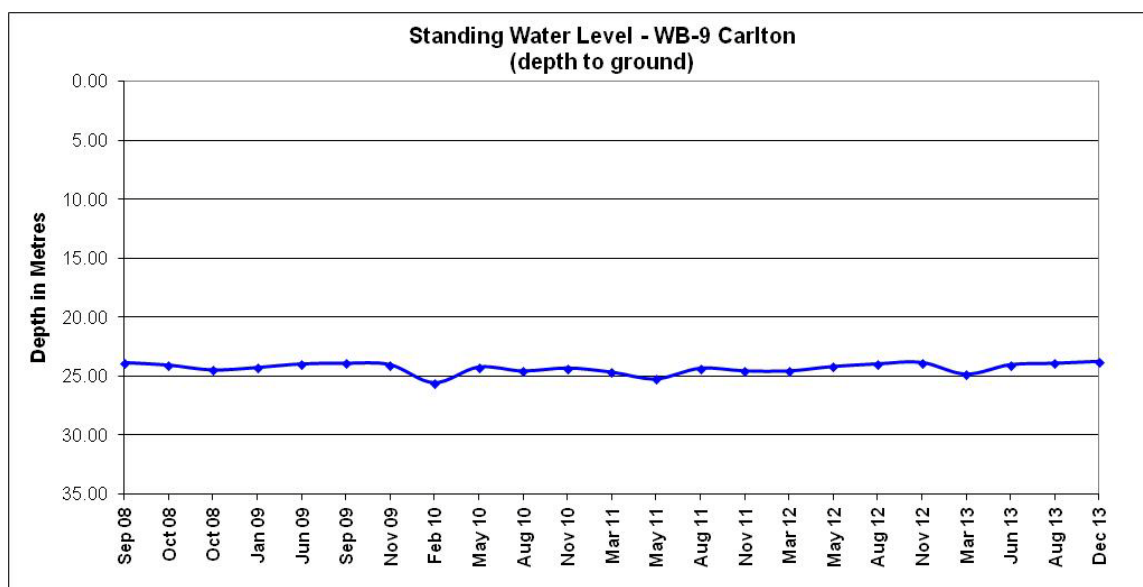
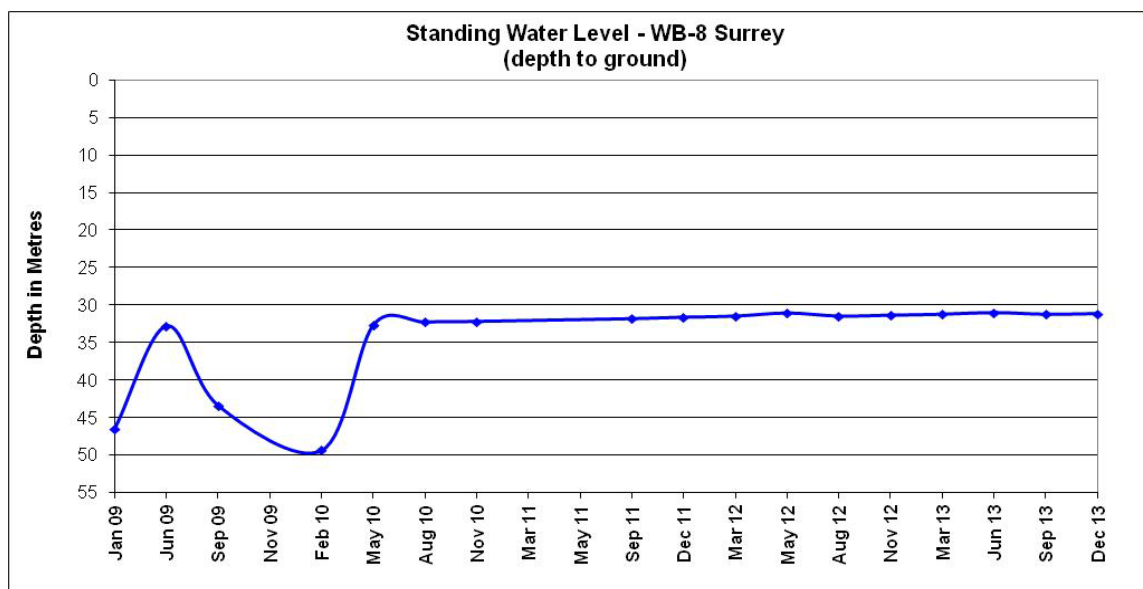
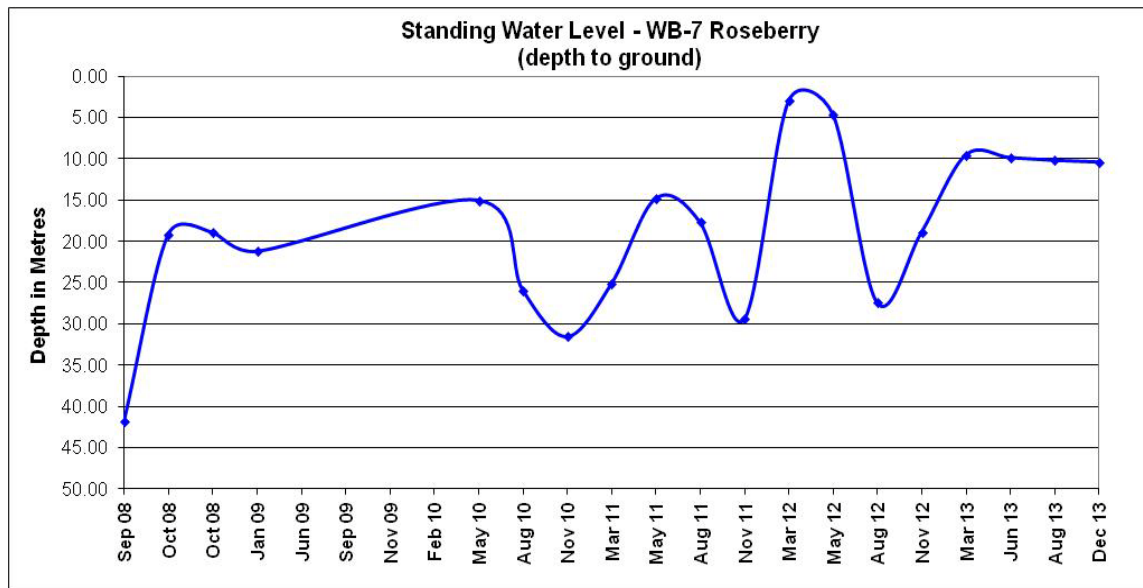


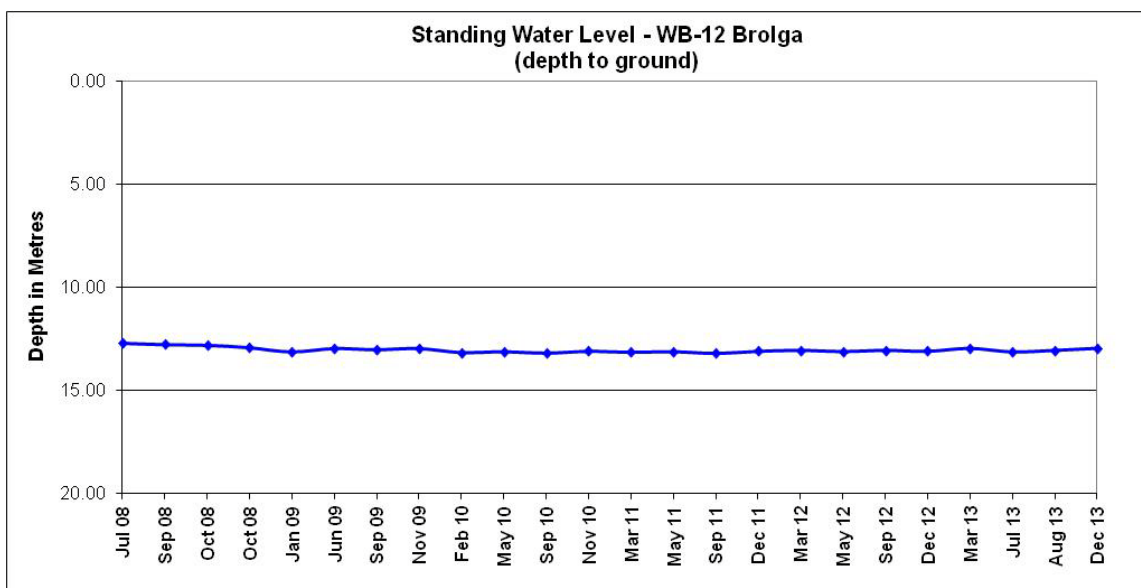
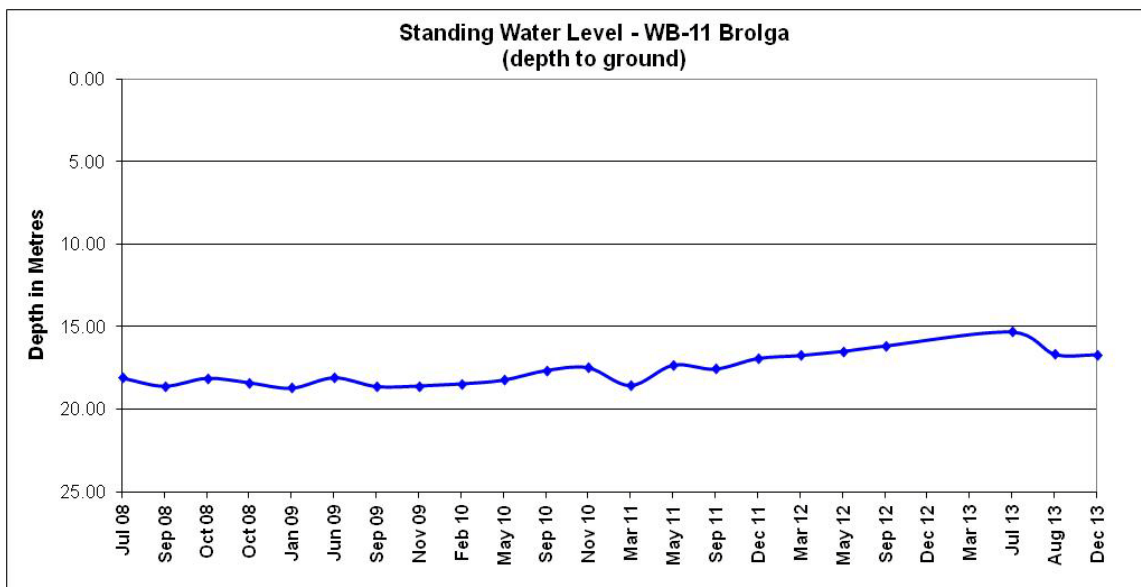
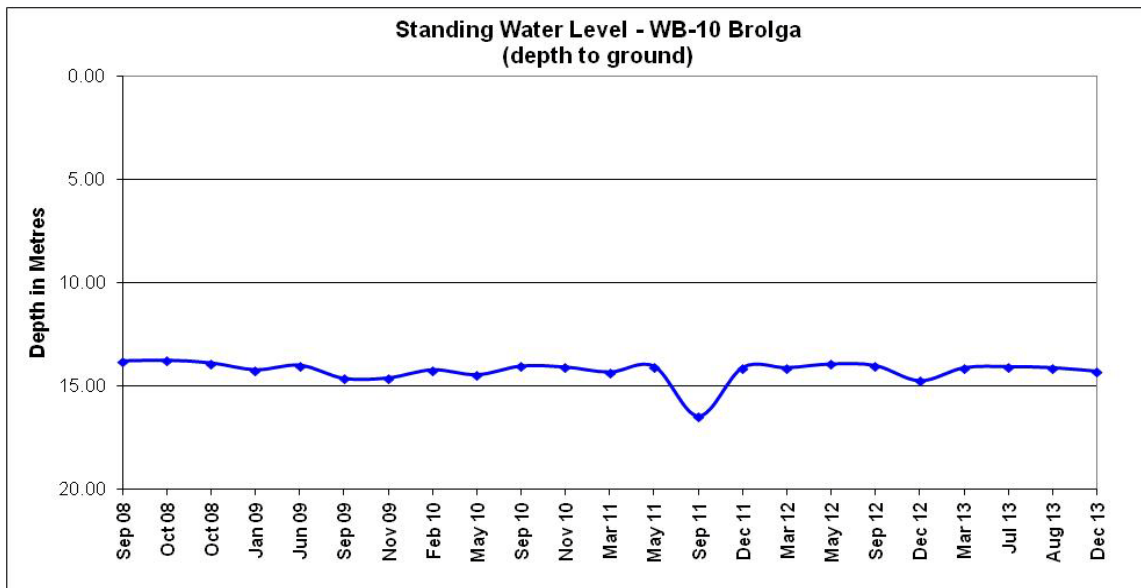




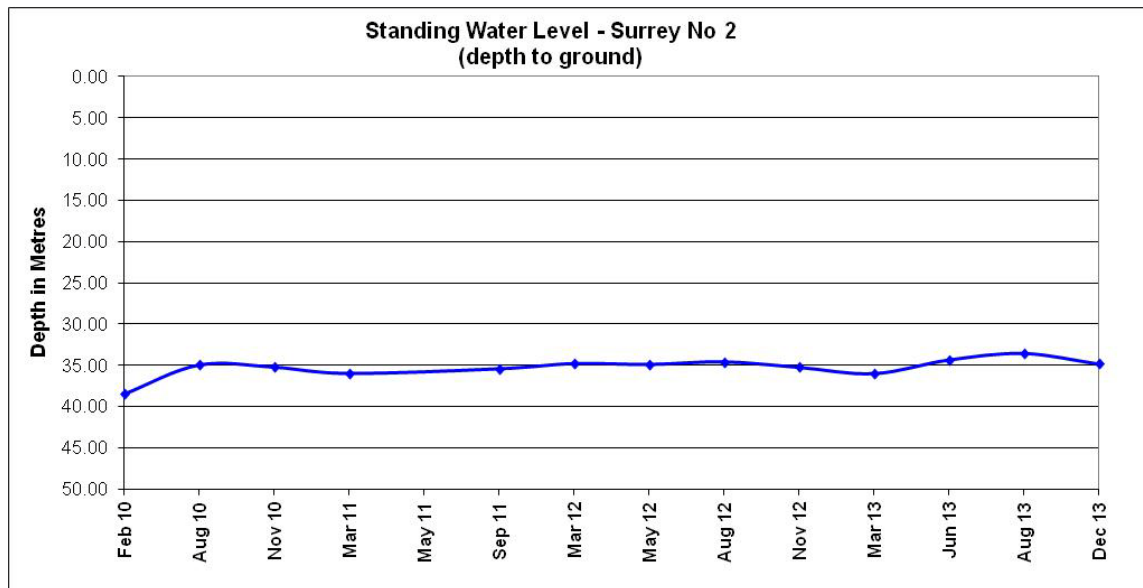












Standing water levels have remained relatively consistent since the last CCC meeting. MP5a, which is located to the west of the active pit at the Whitehaven owned “Yarrawonga” property, has shown a further drop in standing water level during the last three months. This monitoring bore was predicted in the Extension Approval Environmental Assessment to have a lowering water level as mining progresses in the western section of the active pit.

### **Surface Water**

No wet weather discharge has occurred at Rocglen during the period.

During the period, approximately 82.4 ML of water was used on site for dust suppression purposes, with 153.2mm of rainfall recorded for the period (133.2mm of this was recorded in November 2013).

### **Complaints**

No complaints have been received during the last three months.

### **Rehabilitation**

During the reporting period, rehabilitation work has continued to focus on the northern emplacement, where topsoiling, contouring and drainage works have taken place. Persistent dry weather has impeded cover crop establishment on rehabilitated areas and impacted on the survival of planted tubestock. Infill planting and re-seeding will be undertaken across rehabilitation areas when conditions allow.

During March it is intended to undertake Pindone baiting for rabbits within the Biodiversity offset area. Relevant notifications will be provided to adjoining landholders prior to the baiting taking place.

## **Minutes of Rocglen Coal Mine Community Consultative Committee – Meeting #24**

**Meeting Held:** Wednesday 13<sup>th</sup> August 2014

**Venue:** The meeting was held at the Rocglen Coal Mine Training Room

**Commencement Time:** 3:00pm

### **1. Present and Apologies**

**Present:** Mr John Sturgess (JS) (Independent Chairperson)  
Mr Hans Allgayer (HA) (Gunnedah Shire Council Representative)  
Mrs Jill Johnson (JJ) (Group Environment Manager)  
Mr Daryl Campbell (DC) (Community Relations Administration Officer)  
Mr Jason Conomos (JC) (Operations Manager)

**Apologies:** Mrs Pam Burns (PB) (Community Representative)  
Mr Tim Muldoon (TM) (Group Manager Community Relations & Property)

No advice: Mr Rod Barnes (RB) (Community Representative)

Moved: HA, JS

### **2. Previous Minutes**

Minutes accepted as a true record on the motion of HA and JS.

### **3. Business Arising from Previous Minutes**

- 3.1. DC was unsure if the first flush diverter had been installed at “Surrey”. TM to provide update at next meeting.
- 3.2. The requirement for sympathetic positioning of lighting plants reiterated to OCEs.

### **4. Mine Progress Report**

JC advised that in the last three months 2.2 Mbcm of overburden had been moved for a total of 445,000 tonnes of coal. The site had a big month in June.

### **5. Review of Environmental Performance**

JJ presented the environmental monitoring results which are attached in the environmental monitoring report.

## **6. General Business**

HA asked about the infestation of boxthorn on mine owned land north of the site.  
DC said the boxthorn had been sprayed and will be sprayed again as required.

JC noted logging trucks accessing Vickery State Forest had increased dust levels.

## **7. Next Meeting**

The next meeting of the Rocglen CCC is scheduled for Wednesday 12<sup>th</sup> November 2014 at 3:00pm.

Meeting closed 3:18pm.

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J Sturgess  
Chairman

# Rocglen Coal Mine Community Consultative Committee Meeting #24

## Environmental Monitoring Report May 2014 – July 2014

### Noise Monitoring

Attended noise monitoring was undertaken on the 24<sup>th</sup>, 25<sup>th</sup>, 26<sup>th</sup> and 27<sup>th</sup> June 2014, in accordance with the Rocglen Noise Monitoring Program and Environment Protection Licence Guidelines (90 minutes during the day, 30 minutes during the evening and 60 minutes during the night and occur for 3 consecutive operating days) with results outlined below:

### Surrey

RCM Operational Noise Monitoring Results – 24 <sup>th</sup> , 25 <sup>th</sup> , 26 <sup>th</sup> and 27 <sup>th</sup> June 2014				
Date	Time	dB(A), Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
24 <sup>th</sup> Jun 2014	08:32 pm	35	Calm	Dogs (34), RCM (27)
24 <sup>th</sup> Jun 2014	10:04 pm	33	Calm	RCM (33)
25 <sup>th</sup> Jun 2014	07:02 am	40	0.2 / NW	Birds (40), RCM (23)
25 <sup>th</sup> Jun 2014	08:35 pm	29	Calm	RCM (28), traffic (22)
25 <sup>th</sup> Jun 2014	10:06 pm	22	Calm	RCM (22)
26 <sup>th</sup> Jun 2014	07:08 am	43	Calm	Birds (42), RCM (36)
26 <sup>th</sup> Jun 2014	08:21 pm	41	Calm	Dogs (41), RCM (31)
26 <sup>th</sup> Jun 2014	10:02 pm	28	Calm	RCM (28)
27 <sup>th</sup> Jun 2014	07:19 am	43	1.3 / E	Birds (42), RCM (36)

### Retreat

RCM Operational Noise Monitoring Results – 24 <sup>th</sup> , 25 <sup>th</sup> , 26 <sup>th</sup> and 27 <sup>th</sup> June 2014				
Date	Time	dB(A), Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
24 <sup>th</sup> Jun	09:19 pm	24	Calm	Other mine (24), RCM inaudible
24 <sup>th</sup> Jun	11:20 pm	25	Calm	Other mine (24), birds (17) RCM inaudible
25 <sup>th</sup> Jun	08:58 am	53	3.1 / WNW	Birds (53), RCM (31)
25 <sup>th</sup> Jun	09:20 pm	29	Calm	RCM (29)
25 <sup>th</sup> Jun	05:58 am	29	Calm	Birds (28), RCM (20)
26 <sup>th</sup> Jun	08:59 am	38	1.0 / W	Birds (38), RCM (26)
26 <sup>th</sup> Jun	09:14 pm	23	Calm	RCM (23)
26 <sup>th</sup> Jun	11:18 pm	20	0.3 / E	Cattle (20), RCM inaudible
27 <sup>th</sup> Jun	09:14 am	39	0.6 / SW	Birds (38), RCM (28), roadwork construction (28)

The results show that, under the operating and meteorological conditions at the times, the mine noise exceeded the operational noise criterion on two separate occasions at the Surrey monitoring location. The exceeding noise levels at Surrey both occurred during the day time monitoring periods, firstly on June 26 and then again on June 27. RCM was measured at 36 dB(A) Leq (15 min) on the two occasions at Surrey, exceeding the noise criterion by only 1 dB. It should be noted that an exceedance of less than 2 dB (A) above a statutory noise limit specified in a

licence condition is not considered to be a non-compliance as per the discussion in Section 11.1.3 of the NSW Industrial Noise Policy.

Where the noise from RCM was audible at the Surrey location it was engine revs from predominantly the operating scrapers along with general mine hum. Scraper operations at the mine site were modified at the beginning of July, where they ceased operating towards the southern end of the pit and began soil emplacement activities on the northern emplacement area. The number of scrapers operating on site was also reduced from seven to four, and there are currently only two scrapers operating on the site.

In addition to operational noise, the noise from the mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. During the night time monitoring the L1 (1 min) noise from the mine did not exceed 45 dB(A) at both monitoring locations, as shown below:

RCM Sleep Disturbance Monitoring Results				
Date	Location	Time	dB(A),L1 (1 min)	Wind speed/ direction
24 <sup>th</sup> Jun 2014	Surrey	10:04 pm	37	Calm
25 <sup>th</sup> Jun 2014	Surrey	10:06 pm	26	Calm
26 <sup>th</sup> Jun 2014	Surrey	10:02 pm	33	Calm
24 <sup>th</sup> Jun 2014	Retreat	11:20 pm	n/a	Calm
25 <sup>th</sup> Jun 2014	Retreat	05:58 am	24	Calm
26 <sup>th</sup> Jun 2014	Retreat	11:18 pm	n/a	0.3 / E

Rocglen's real time noise monitor is currently located at the "Penryn" property. The monitor's alarm system notifies operations when noise levels approach compliance limits and allows for the opportunity to adjust operations accordingly. Currently, in-pit dumping is prioritised during night operations to reduce the likelihood of operational noise impacts.

### **Blast Monitoring**

Since the first blast there have been 191 blasts (until the end of July). All blasts during the monitoring period were compliant within the limits of 120dB<sub>L</sub> and 10mm/s.

### **Air Quality**

#### **Deposited Dust Results**

The deposited dust results (g/m<sup>2</sup>/month) obtained for the site over the last 12 months are as follows:

### Air Quality (Dust Deposition) Results

Month	BD2-A – Penryn	BD3 – Belah	BD4 – Surrey	BD5 – Stratford	BD6 – Roseberry	BD7 – Roseglass	BD8 – Yarrowonga
August 2013	0.2	0.1	0.4	0.2	0.1	0.2	0.3
September 2013	0.7	0.5	0.7	0.6	0.8	0.4	0.9
October 2013	0.8	1.1	0.2	1.3	1.1	2.4	1.7
November 2013	1.4	1.2	1.4	1.1	1.1	0.8	0.7
December 2013	3.0	0.6	3.0	3.0	2.8	1.0	1.3
January 2014	9.5	0.5	0.3	5.7	0.4	16.8	0.6
February 2014		3.3	0.1	2.0	0.1	0.7	0.7
March 2014	<0.1	4.1	0.8	2.6	<1	0.8	1.4
April 2014	0.7	0.4	1.1	4.9	<1	0.6	0.7
May 2014	4.4	0.1	1.7	1.7	0.4	0.7	0.6
June 2014	0.5	0.8	0.9	1.9	0.7	0.3	0.6
July 2014	2.7	<0.1	0.7	1	0.2	<0.1	0.2
<b>Annual Average</b>	<b>2.17</b>	<b>1.06</b>	<b>0.94</b>	<b>2.17</b>	<b>0.64</b>	<b>2.06</b>	<b>0.86</b>

Results show slightly elevated results for BD2A in May 2014 however the annual average at all sites remains well below the concentration threshold of 4g/m<sup>2</sup>/month.

### PM<sub>10</sub> Results

The annual averages for PM<sub>10</sub> levels up until the end of June 2014 remain below the annual average limit of 30µg/m<sup>3</sup>, as follows:

Costa Vale: 16.75µg/m<sup>3</sup>

Roseberry: 13.02µg/m<sup>3</sup>

The real time PM<sub>10</sub> monitor at “Roseberry” is currently operating to send alarms to operations in the event that PM<sub>10</sub> levels approach compliance limits.

### Water Monitoring

#### Ground Water

Groundwater monitoring data for the last 12 months is presented in the following table. Standing Water Level (SWL) graphs of bores with sufficient data sets are also provided.

Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
MP2	20 Jun 13	10.36	7.12	4710
	28 Aug 13	9.80	7.2	4740
	11 Dec 13	10.84	7.2	4870
	26 Feb 14	11.1	8.06	5250
	12 Jun 14	11.4	7.2	4930
MP2a	27 May 13	11.75		
	20 Jun 13	11.80	6.53	4490
	29 Jul 13	16.74		
	23 Aug 13	16.80		

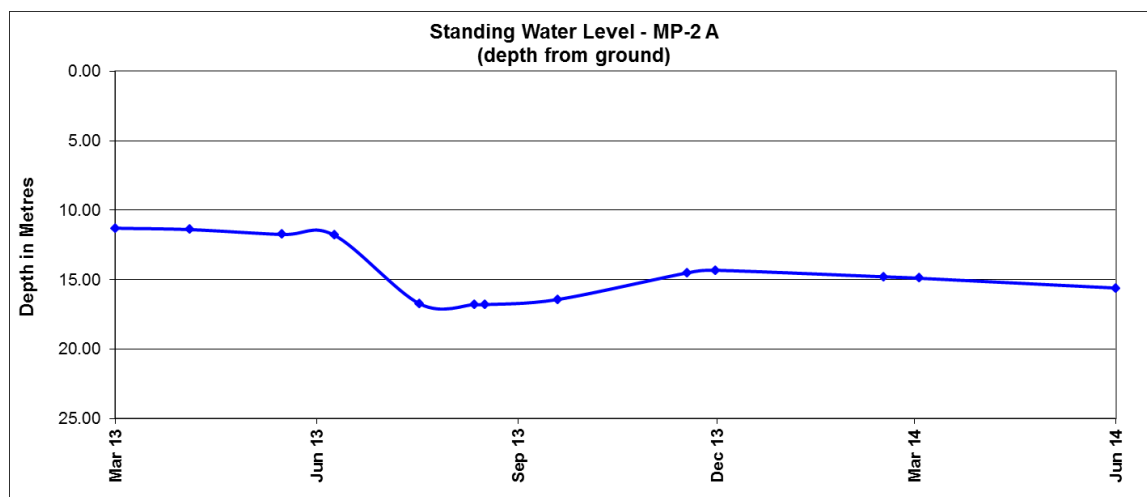
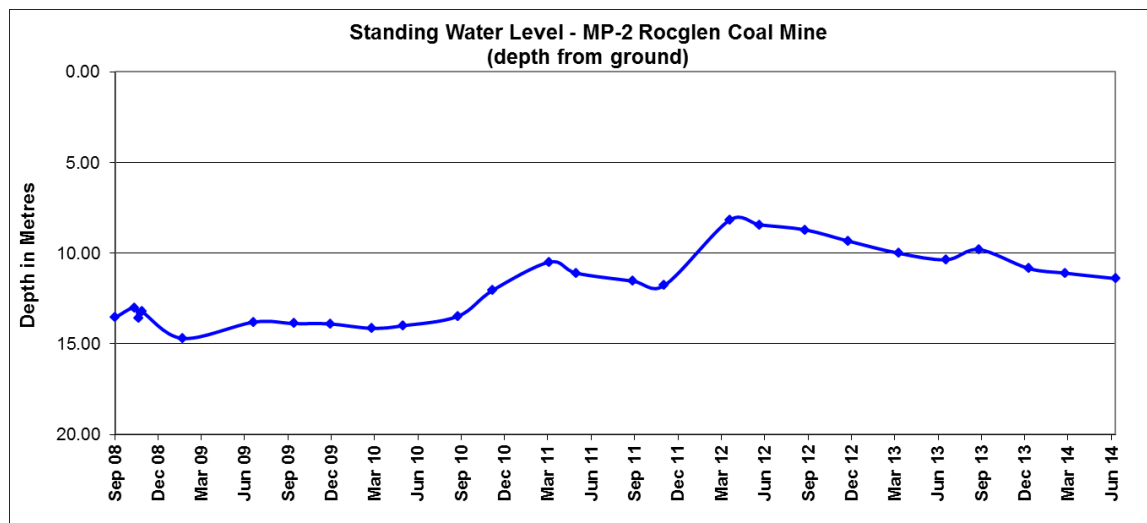
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	28 Aug 13	16.80	5.3	2360
	30 Sep 13	16.43		
	28 Nov 13	14.52		
	11 Dec 13	14.33	6.7	3140
	26 Feb 14	14.80	7.68	3250
	12 Jun 14	15.61	7	3180
<b>MP3</b>	12 Jun 13	18.25	Insufficient water to sample	
	28 Aug 13	18.13	Insufficient water to sample	
	11 Dec 13	18.26	Insufficient water to sample	
	24 Feb 14	Dry	Insufficient water to sample	
	12 Jun 14	18.27	Insufficient water to sample	
<b>MP3a</b>	27 May 13	22.38		
	12 Jun 13	22.25	7.79	1225
	29 Jul 13	22.34		
	23 Aug 13	22.32		
	28 Aug 13	22.9	7.8	1250
	30 Sep 13	22.32		
	28 Nov 13	22.26		
	11 Dec 13	22.27	7.9	1305
	26 Feb 14	22.30	8.37	1340
	17 Jun 14	22.28	7.8	1284
<b>MP4</b>	12 Jun 13	Dry		
	28 Aug 13	Dry		
	11 Dec 13	Dry		
	26 Feb 14	Dry		
	12 Jun 14	Dry		
<b>MP4a</b>	28 Nov 13	29.12		
	12 Dec 13	29.18	6.8	3210
	26 Feb 14	29.38	7.98	3820
	12 Jun 14	29.33	7.1	3690
<b>MP4b</b>	28 Nov 13	26.06		
	12 Dec 13	25.87	7.3	2960
	26 Feb 14	25.2	8.15	3050
	12 Jun 14	26.00	7.3	2960
<b>MP5</b>	12 Jun 13	Dry	Insufficient water to sample	
	28 Aug 13	Dry	Insufficient water to sample	
	12 Dec 13	Dry	Insufficient water to sample	
	27 Feb 14	Dry	Insufficient water to sample	
	12 Jun 14	Dry	Insufficient water to sample	
<b>MP5a</b>	27 May 13	67.11		
	12 Jun 13	67.03	7.12	2800
	29 Jul 13	66.10		
	23 Aug 13	66.20		
	29 Aug 13	66.90	7	2710
	30 Sep 13	71.25		
	28 Nov 13	76.55		
	12 Dec 13	76.56	7	2770
	27 Feb 14	76.60	7.32	3070

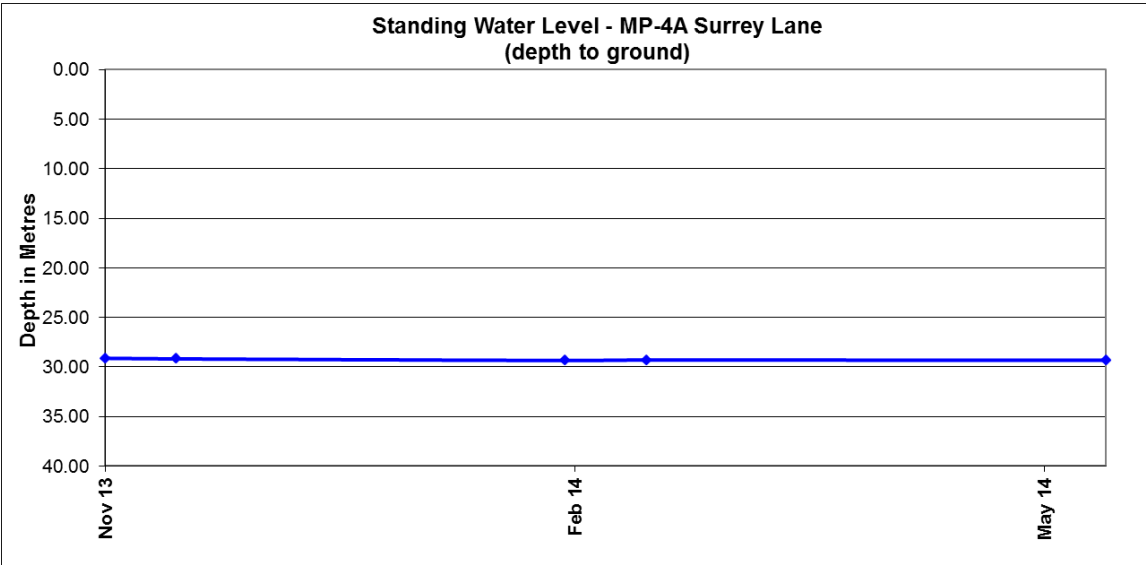
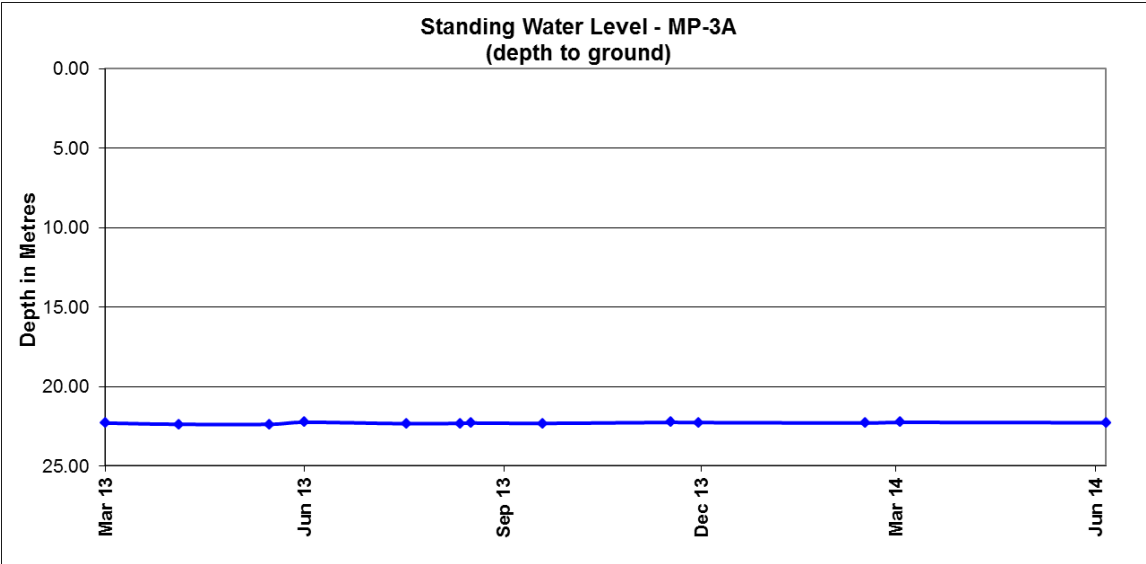
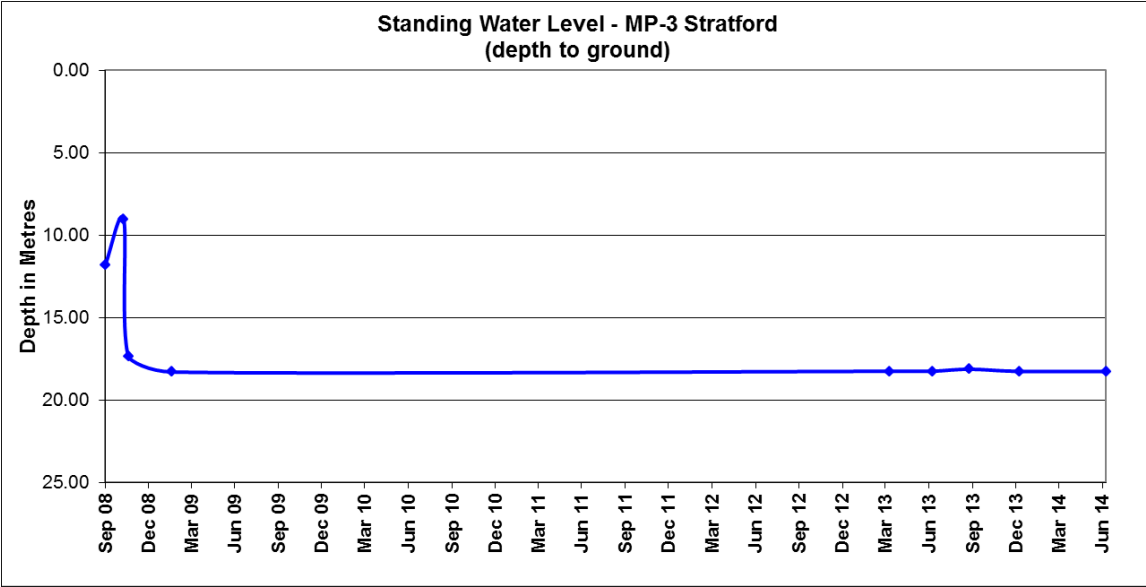
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	17 Jun 14	76.63	7	3010
MP6	27 May 13	8.12		
	20 Jun 13	8.11	6.91	3170
	29 Jul 13	8.13		
	22 Aug 13	8.08		
	29 Aug 13	8.14	7.1	2890
	30 Sep 13	8.11		
	28 Nov 13	8.18		
	11 Dec 13	8.17	7.2	2780
	24 Feb 14	8.29	7.4	2580
	12 Jun 14	8.34	7.3	2360
MP7	27 May 13	15.76		
	2 Jul 13	15.72	6.81	3830
	29 Jul 13	15.72		
	23 Aug 13	15.68		
	29 Aug 13	15.70		
	30 Sep 13	15.63		
	28 Nov 13	15.60		
	18 Dec 13	15.76	6.9	2970
	27 Feb 14	15.87	7.26	3200
	19 Jun 14	15.82	7	3050
MP8	27 May 13	15.90		
	2 Jul 13	16.28	6.7	4200
	29 Jul 13	15.90		
	23 Aug 13	15.84		
	29 Aug 13	15.90	5.44	3180
	30 Sep 13	15.81		
	28 Nov 13	15.80		
	18 Dec 13	15.92	6.4	3620
	27 Feb 14	16.05	6.72	3920
	19 Jun 14	16.01	6.9	4010
WB1	10 Jun 13	7.94	No sample available	
	29 Aug 13	7.99	No sample available	
	11 Dec 13	8.0	No sample available	
	24 Feb 14	8.11	No sample available	
	12 Jun 14	8.15	Windmill over bore	
WB2	12 Jun 13	17.88	7.28	2620
	28 Aug 13	15.92	7.1	2840
	11 Dec 13	15.73	No access	
	26 Feb 14	16.22	8.15	3070
	12 Jun 14	15.76	8.7	2700
WB3	20 Jun 13	7.95	Pump over bore	
	30 Aug 13	7.86	Pump over bore	
	18 Dec 13	7.57	Pump over bore	
	27 Feb 14	7.8	Pump over bore	
	12 Jun 14	8.05	Pump over bore	
WB4	12 Jun 13	Unable to dip	No sample	
	29 Aug 13	Unable to dip	No sample	

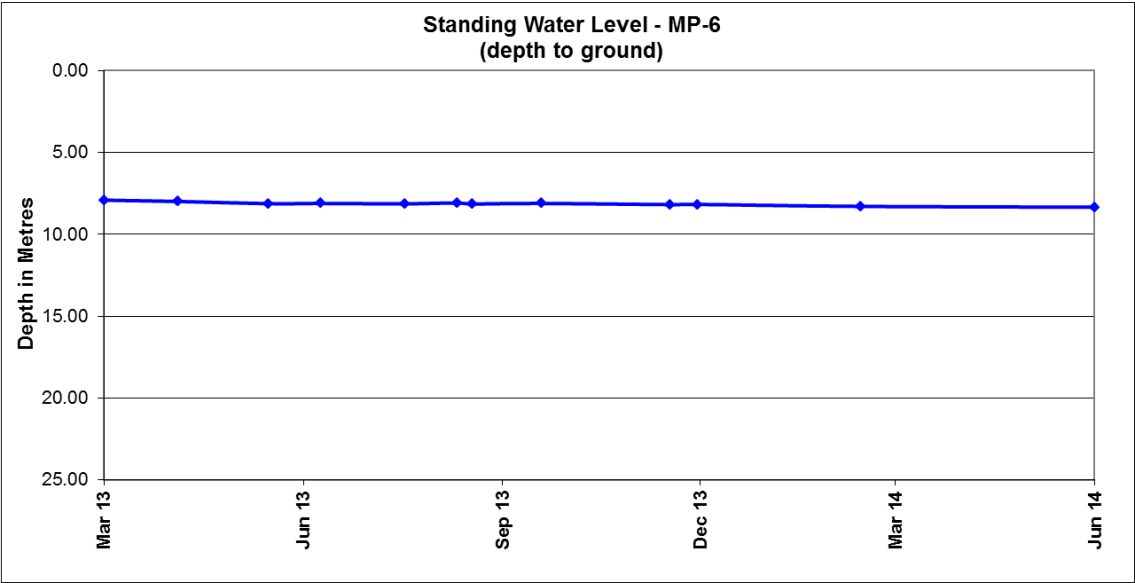
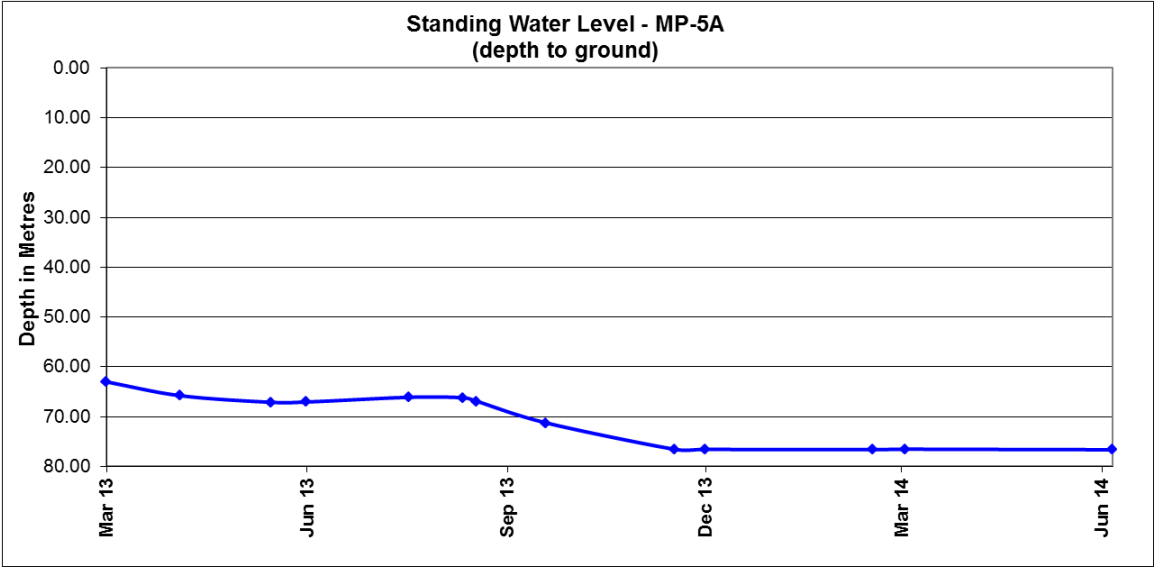
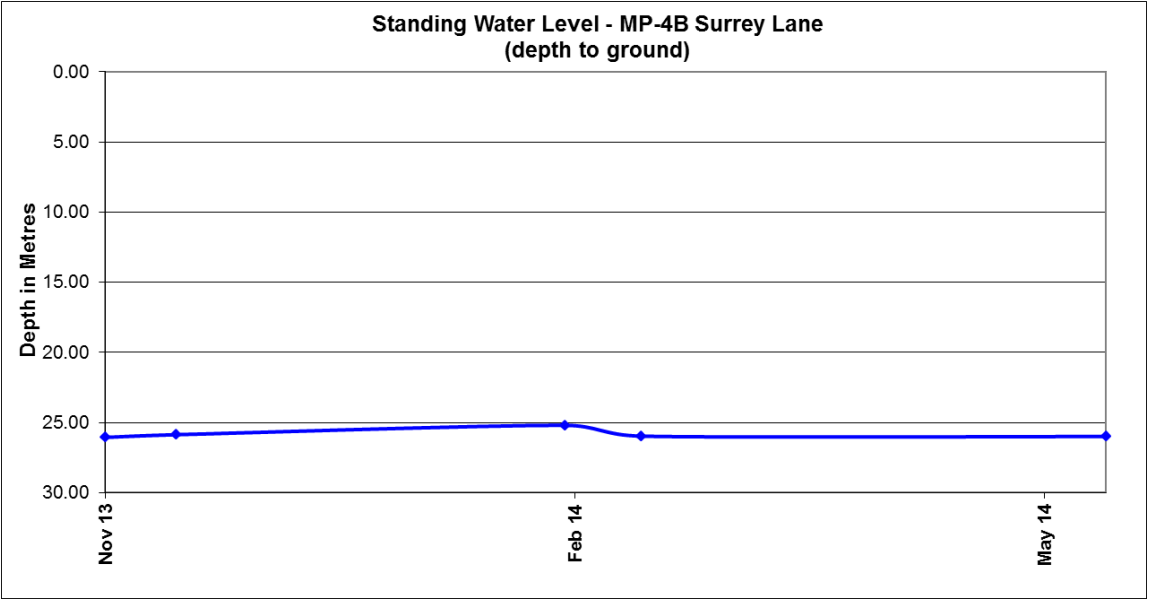


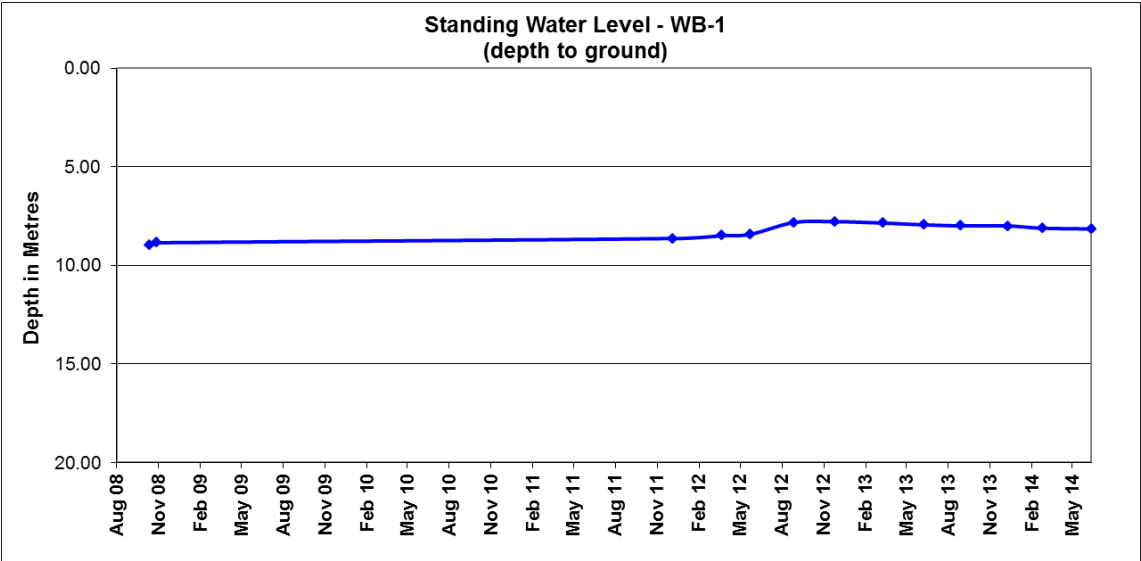
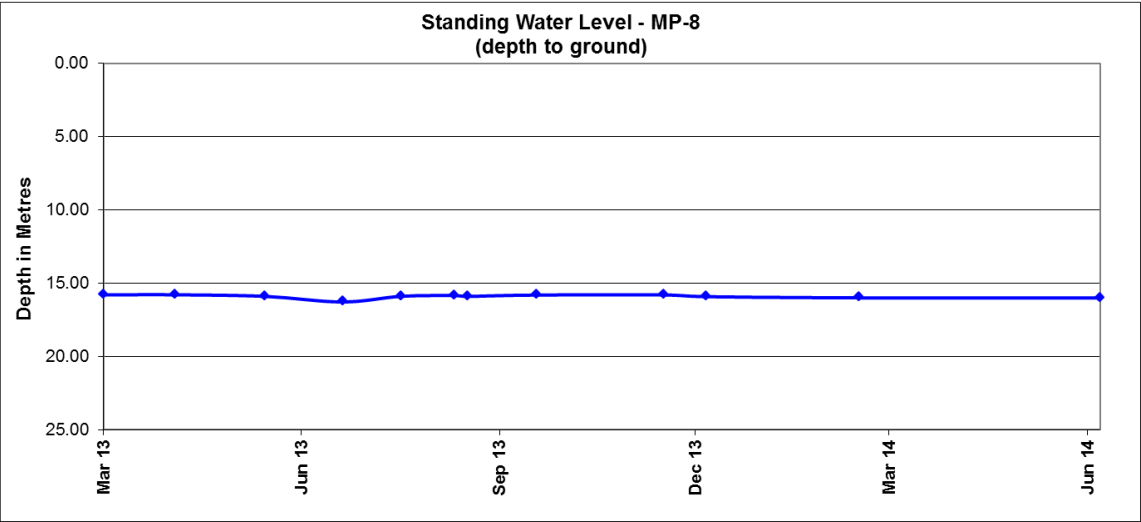
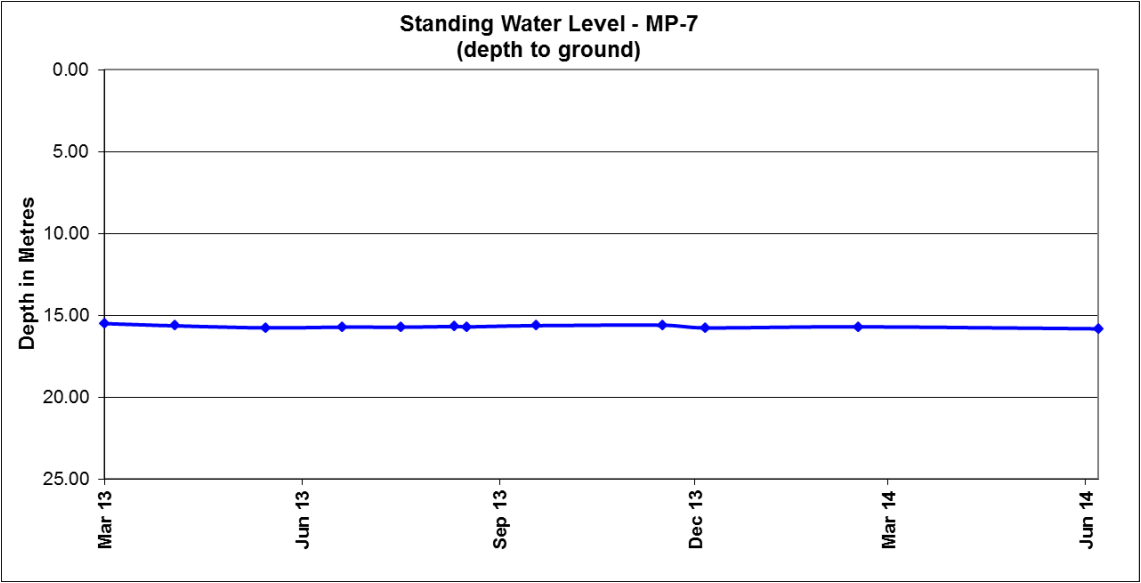
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	12 Dec 13	Unable to dip	No sample	
	27 Feb 14	Unable to dip	No sample	
	12 Jun 14	Unable to dip	No sample	
WB5	12 Jun 13	10.47	7.86	6930
	28 Aug 13	12.1	8.2	6910
	11 Dec 13	12.31	7.8	7130
	26 Feb 14	19.0	7.86	7840
	12 Jun 14	12.56	7.9	7740
WB6	12 Jun 13	20.46	Bore equipped	
	28 Aug 13	20.59	Bore equipped	
	11 Dec 13	26.66	Bore equipped	
	24 Feb 14	20.86	Bore equipped	
	12 Jun 14	21.08	Bore equipped	
WB7	12 Jun 13	9.83	No access	
	28 Aug 13	10.15	No access	
	11 Dec 13	10.36	No access	
	24 Feb 14	10.68	No access	
	12 Jun 14	10.87	Windmill over bore	
WB8	20 Jun 13	30.97	Unable to Sample – pump over bore	
	30 Sep 13	31.19	Unable to Sample – pump over bore	
	12 Dec 13	31.1	Unable to Sample – pump over bore	
	27 Feb 14	31.31	Unable to Sample – pump over bore	
	12 Jun 14	29.77	Pump over bore	
WB9	10 Jun 13	24.06	No access	
	28 Aug 13	23.94	No access	
	12 Dec 13	23.78	No access	
	26 Feb 14	24.69	8.12	1240
	12 Jun 14	24.27	7.7	1250
WB10	10 Jul 13	14.08	6.95	1883
	30 Aug 13	14.13	6.9	1880
	12 Dec 13	14.3	7	1925
	26 Feb 14	14.33	7.58	2110
	19 Jun 14	14.07	7.1	2010
WB11	10 Jul 13	15.32	7.75	1241
	30 Aug 13	16.67	7.6	1120
	12 Dec 13	16.7	7.8	1310
	26 Feb 14	18.15	8.37	1690
	19 Jun 14	16.93	7.7	1420
WB12	10 Jul 13	13.16	7.95	16.92
	30 Aug 13	13.08	8.1	1690
	12 Dec 13	12.98	7.9	1730
	26 Feb 14	13.08	8.38	1930
	19 Jun 14	13.14	8	1694
WB13	10 Jul 13	33.42	6.77	3550
	28 Aug 13	38.50	6.9	3730
	12 Dec 13	41.82	7	3460

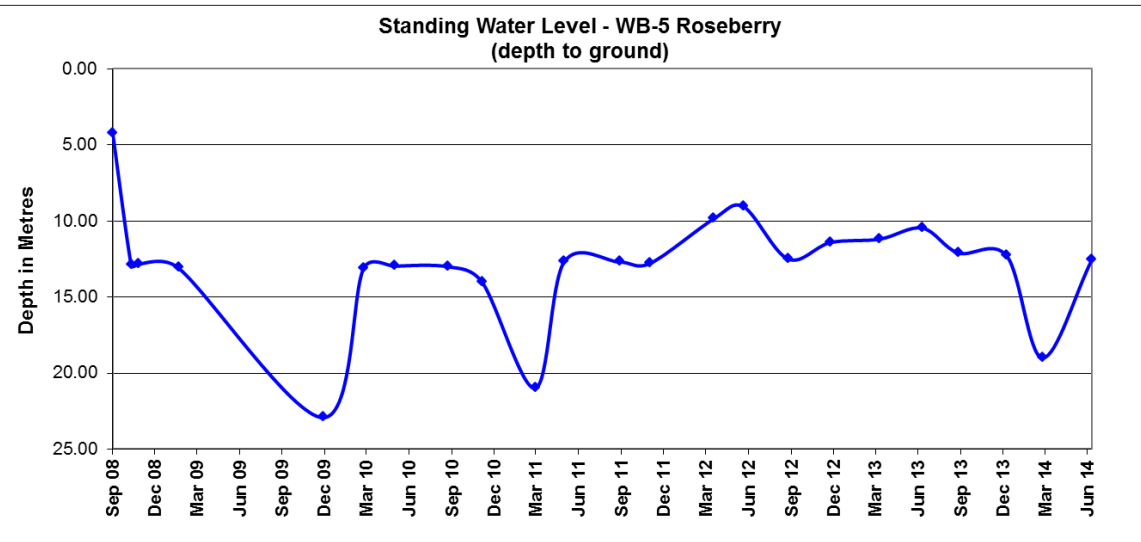
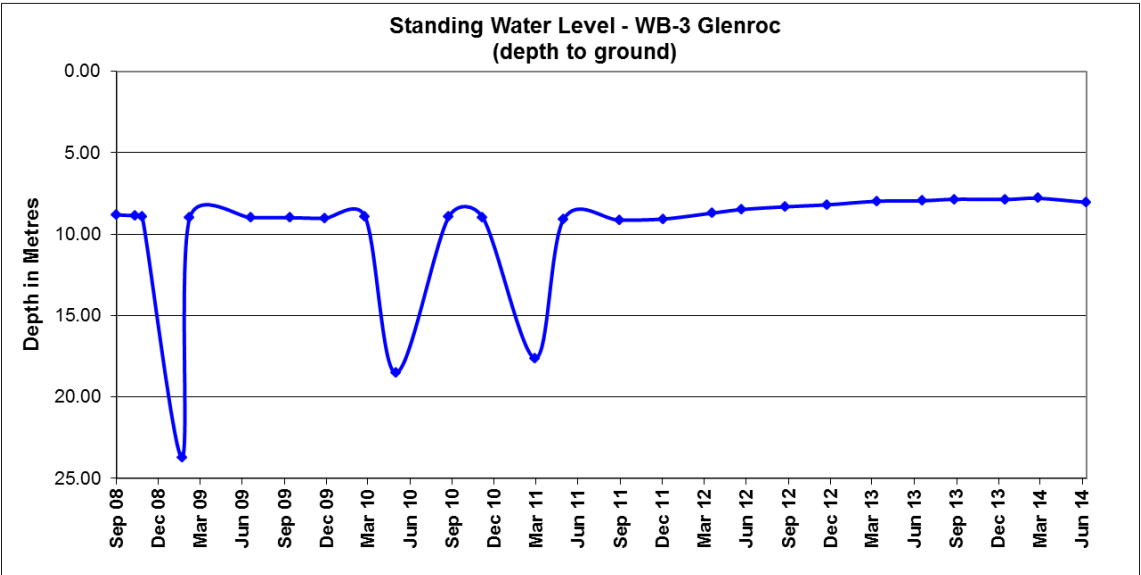
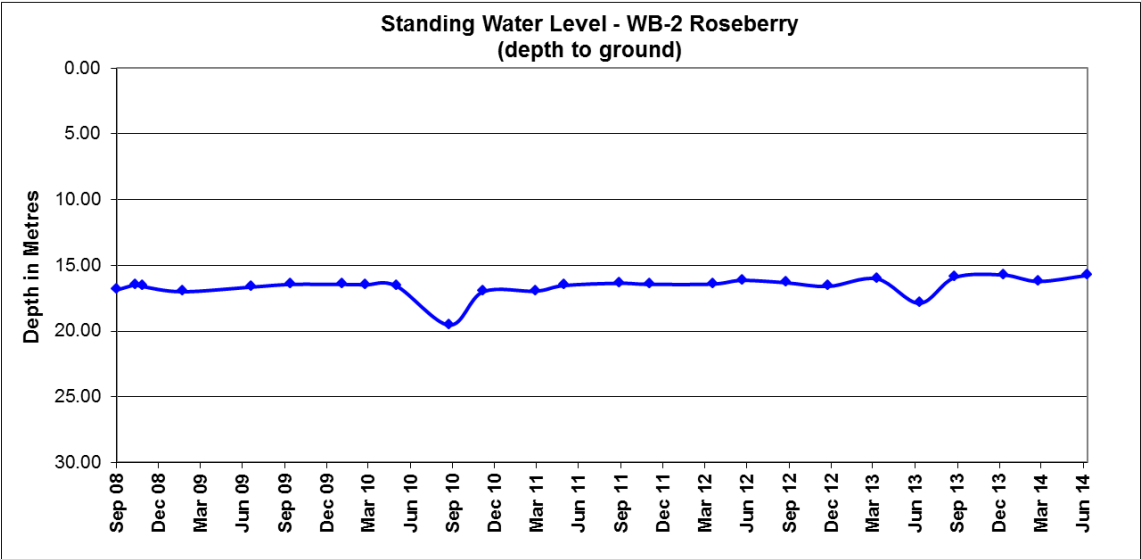
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	26 Feb 14	42.40	7.93	3690
	12 Jun 14	33.93	7.1	3540
<b>WB-14</b>	18 Dec 13	10.16	7.6	1315
	27 Feb 14	22.90	7.8	1150
	12 Jun 14	18.77	7.7	1260
<b>Production Bore</b>	12 Jun 13	Bore Equipped	7.23	3510
	28 Aug 13	Bore Equipped	6.9	3430
	11 Dec 13	Bore Equipped	7	3630
	24 Feb 14	Bore Equipped	6.9	3490
	12 Jun 14	Bore Equipped	7	3590
<b>Surrey No.2</b>	20 June 13	34.07	7.35	3310
	30 Aug 13	33.29	7.21	3110
	12 Dec 13	34.55	7.3	3420
	27 Feb 14	33.55	7.3	3060
	12 Jun 14	32.74	7.3	3310
<b>Kahana Windmill Bore</b>	11 Jul 14	27.62	No Sample	

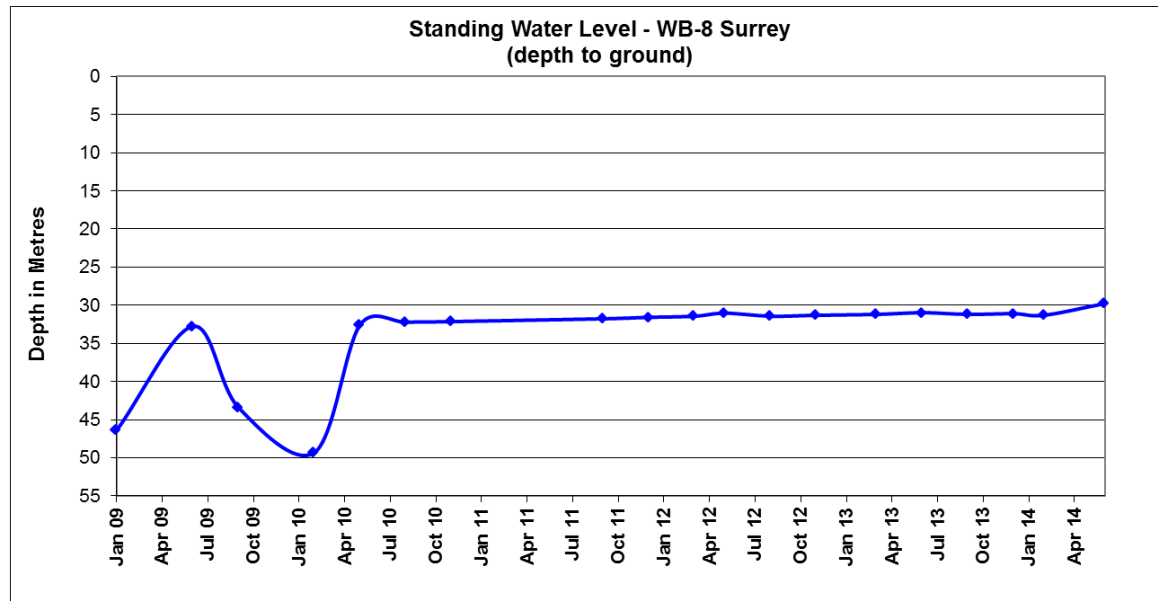
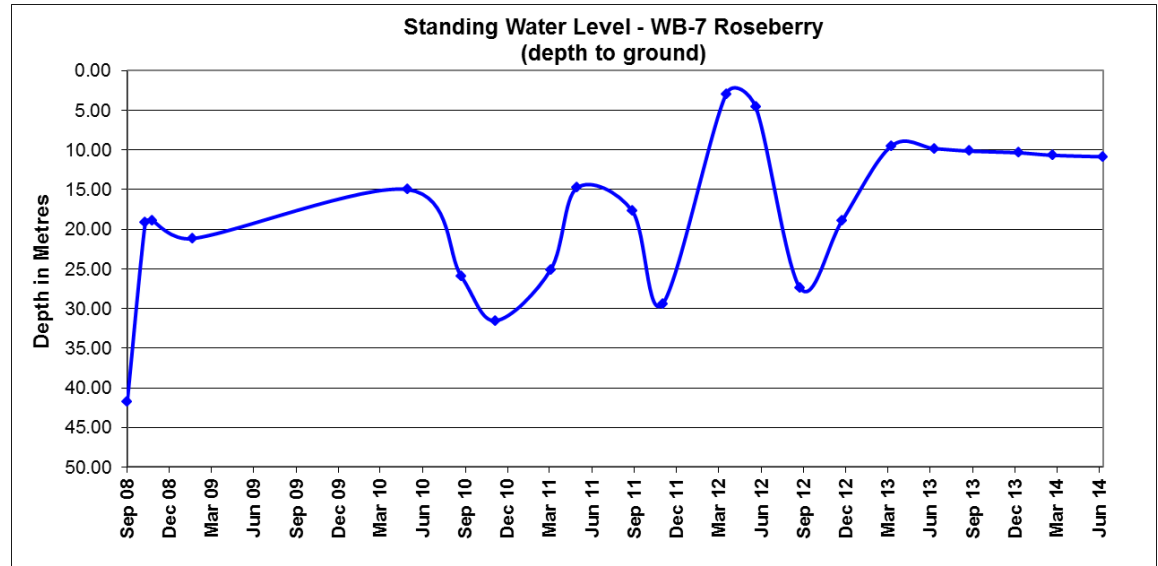
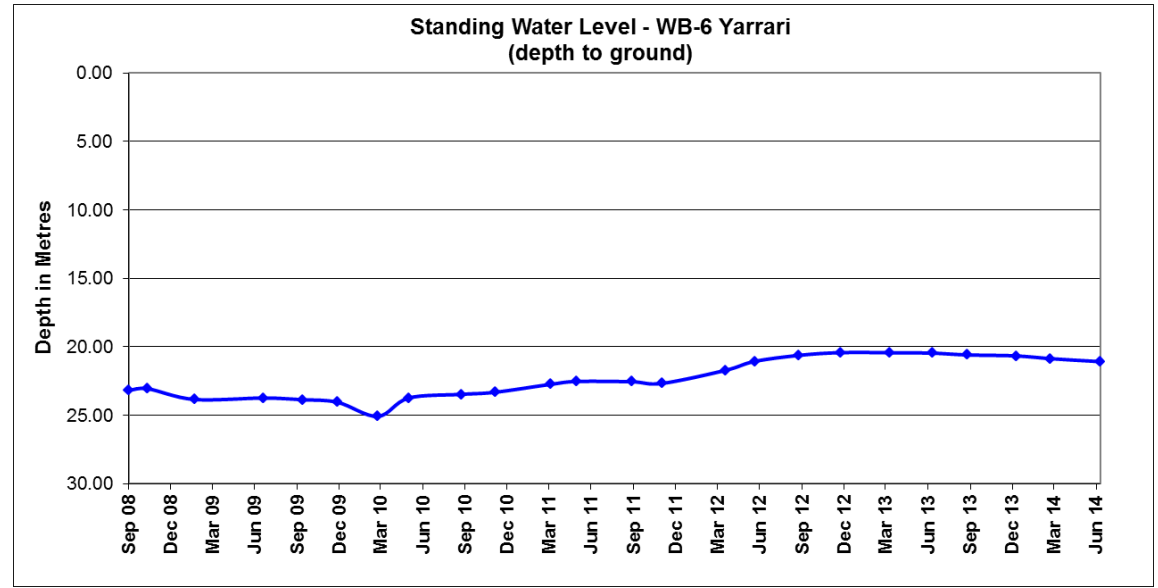


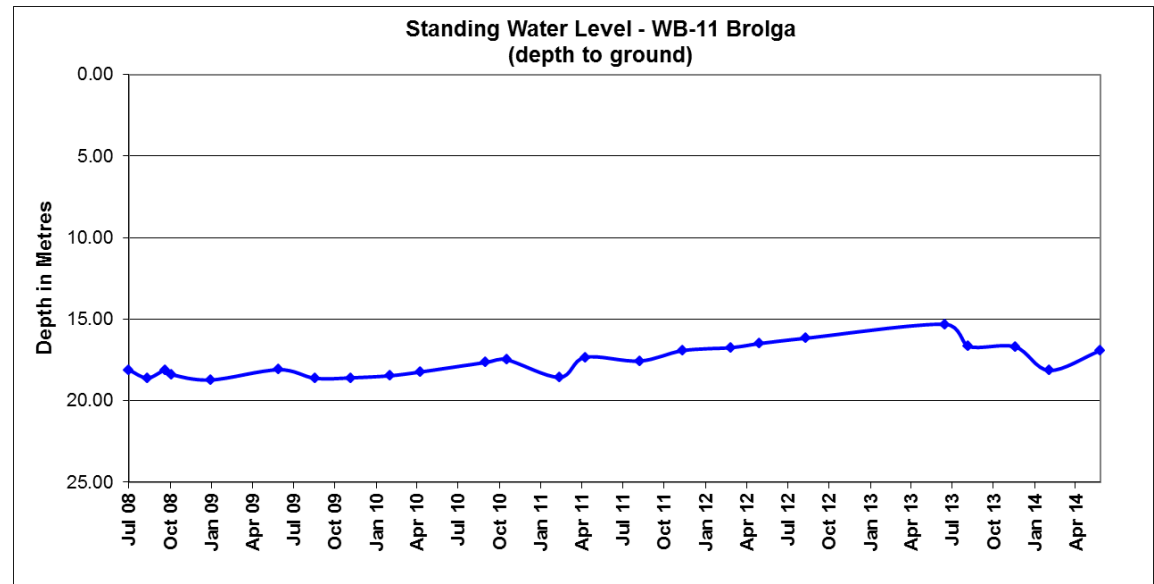
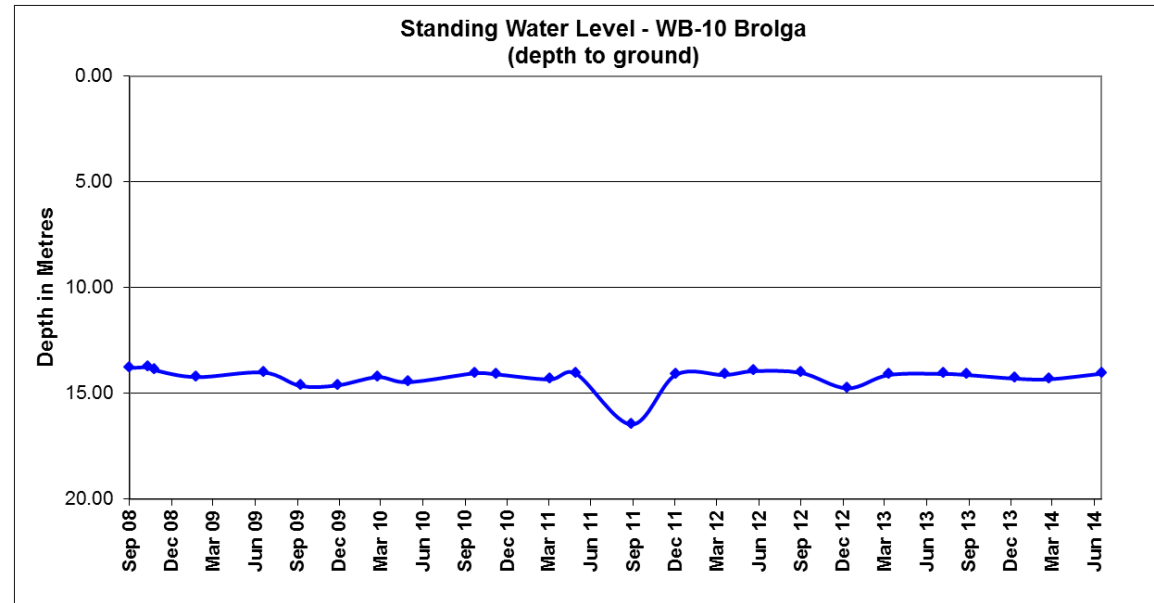
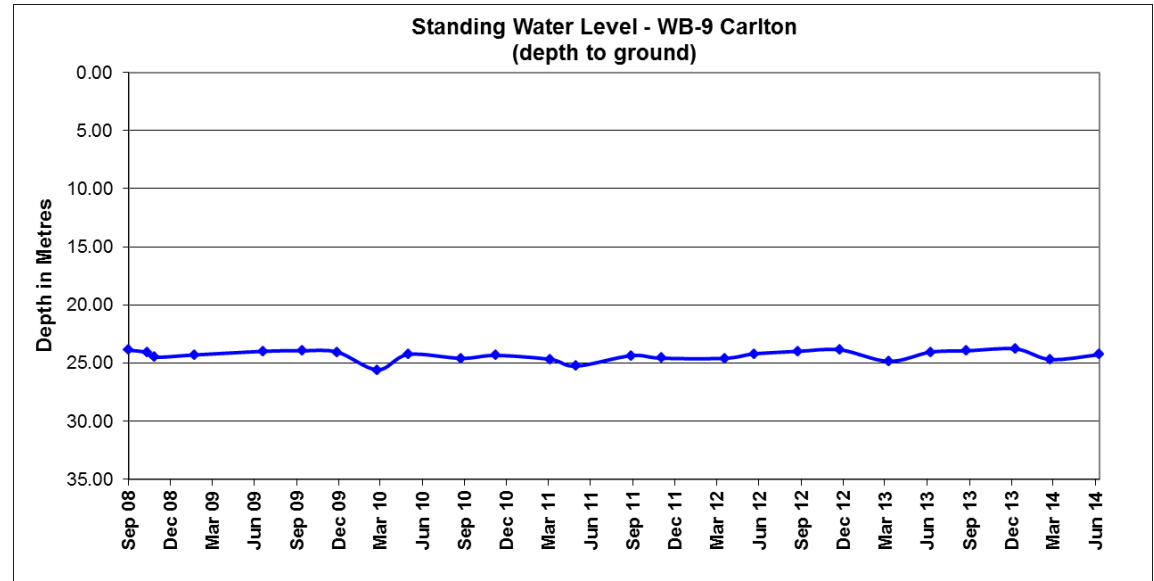




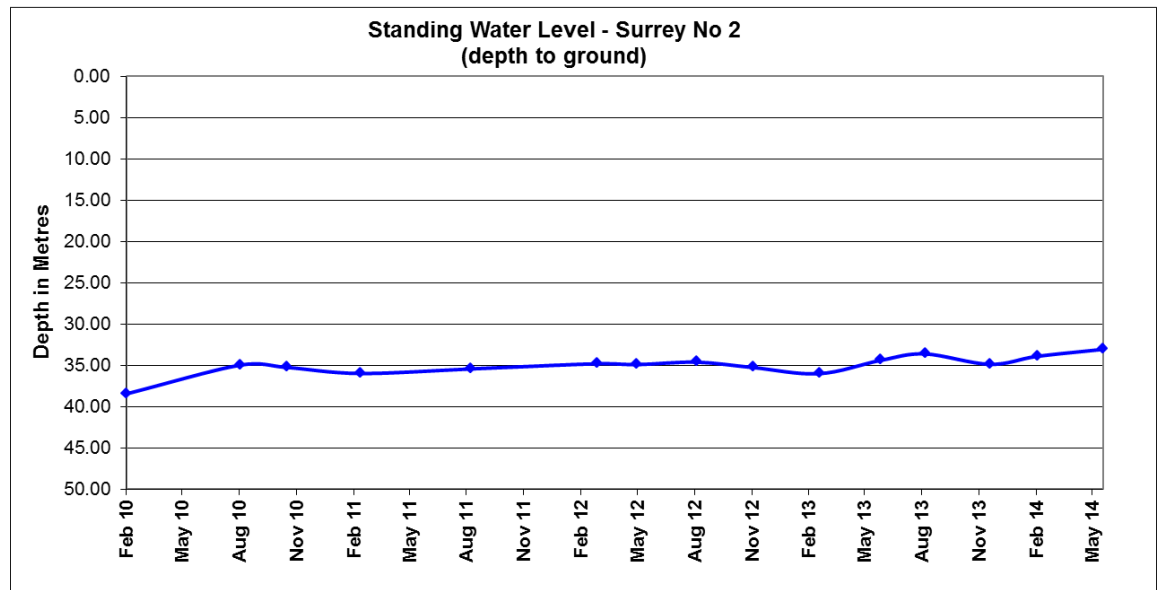
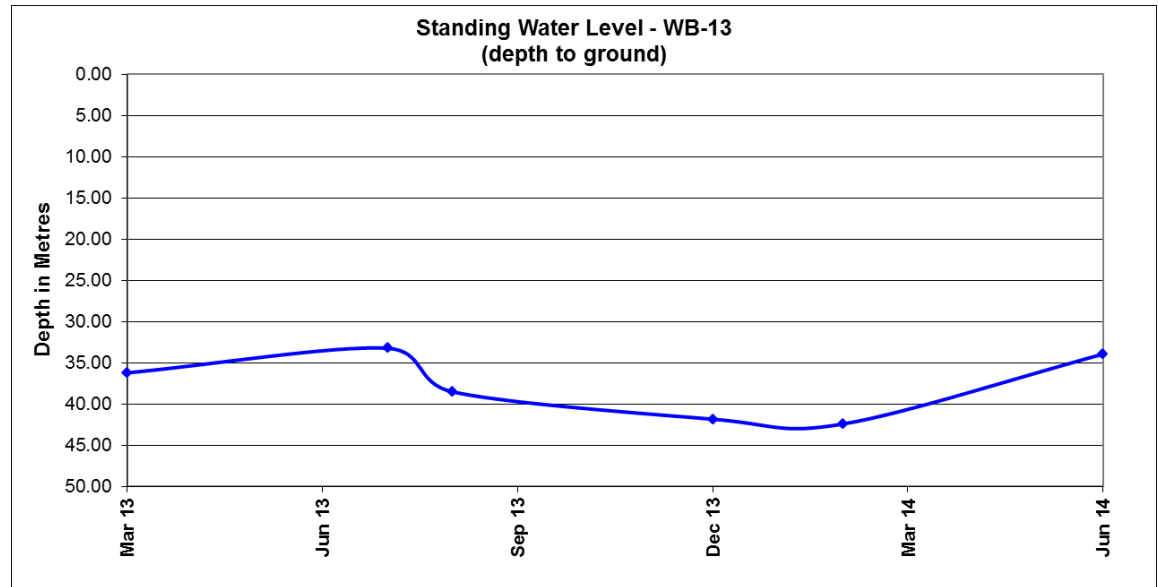
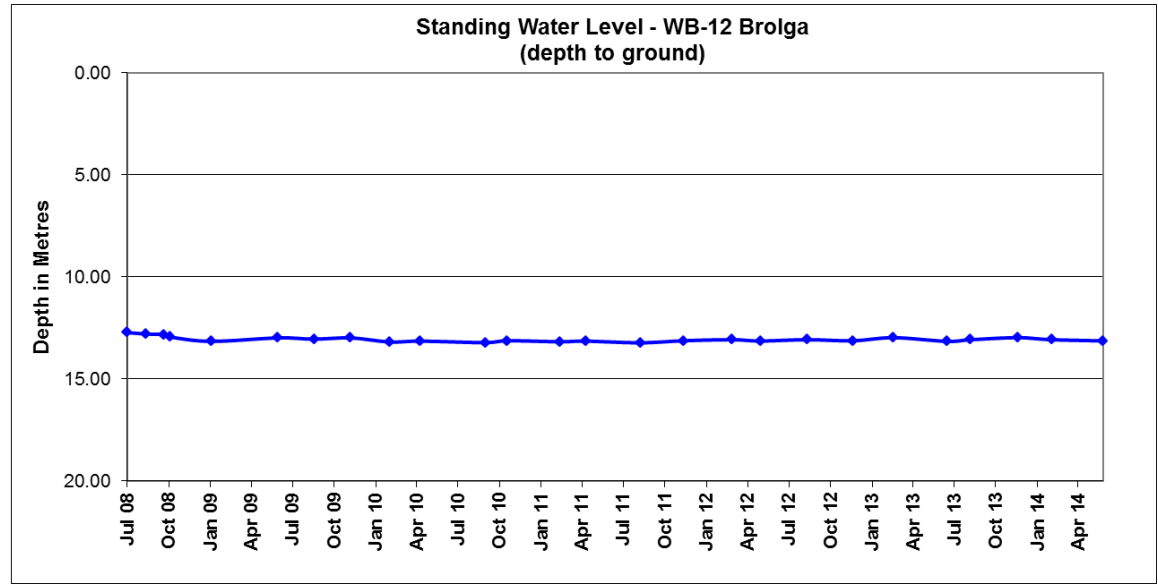












Standing water levels have remained relatively consistent since the last CCC meeting. WB5 (at Roseberry) continues to show a fluctuating trend associated with non mining activities. The SWL measured during June 2014 at WB11 (Brolga) has shown an increase back towards 2012-2013 levels.

Monitoring at Kahana commenced in July following concern from the landholder that blasting operations at Rocglen had collapsed the aquifer.

### Surface Water

No wet weather discharges occurred at Rocglen during the period.

### Complaints

There were two complaints received during the last three months. Both complaints related to impacts from blasting, summarised in the table below.

Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
Text message to OCE phone – received by OCE, forwarded to EO	19/06/2014 12:07pm	Complaint in relation to the impact of today's blast which rattled the windows.	The Environmental Officer monitored the blast from Wean Rd, and monitor results of the blast confirmed the blast was compliant. The EO discussed the complaint with the Whitehaven Drill and Blast Manager who advised that the blast was small at 50-60 tonnes of product, high in the south west of the pit, and the blast faced towards the north-north-east. The complainant's property is south-east of the mine. The blast monitoring located between the mine and the complainant's property indicated compliance. The EO phoned the complainant to advise them their message had been received and that the monitoring results showed the blast was compliant. The complainant was asked whether they would like to have the message recorded as a formal complaint. The complainant replied that yes, it should go on record. The OE advised the complainant that they should not hesitate to contact Whitehaven if any other issues arise in the future.	No further action or follow up was requested.
Phone Call to Gunnedah Office	09/07/2014 10:45am	Complainant was concerned that vibration associated with blasting at Rocglen had collapsed the aquifer and impacted on groundwater availability at their property. The complainant also raised the issue of blasts shaking the house and causing cracks in the walls.	The Rocglen Environmental Officer contacted the complainant on 09/07 at around 3 pm to notify the complainant that their message had been received and to discuss the complaint. The complainant said they had been pumping from the bore the previous day and noticed that it started pumping air, when he investigated he noticed that the water level in the bore had dropped 8m below its usual level, and was empty when measured this morning. The complainant thinks that blasting from the Rocglen coal mine has collapsed the aquifer and this is why the level of water in the bore has dropped. The EO made an offer to visit the complainant's property to view the bore and measure its standing water level, which was accepted. The Rocglen EO also advised the complainant that results recorded from the two most recent blasts to occur at Rocglen Coal Mine show the blasts were well within compliance limits.	The Rocglen EO measured the SWL of the complainant's bore on July 11 2014, and found it to be at a depth of 27.62 m. The complainant agreed that the SWL measured was in general accordance with the usual depth of water in the bore. The Rocglen EO offered to continue monitoring the bore on a quarterly basis as a part of the existing Rocglen groundwater monitoring program, which was accepted.

### **Rehabilitation**

During the reporting period, rehabilitation work has continued on both the western and northern emplacement areas. The bulk shaping works on the northern emplacement area were completed, with soil replacement commencing in July. Infill planting with tube stock on both the western and northern emplacement areas continued this quarter, with approximately 1500 trees planted. 1080 baiting for foxes was undertaken in the biodiversity offset area in conjunction with several neighbouring properties during May, with 21 baits taken.

## **Minutes of Rocglen Coal Mine Community Consultative Committee – Meeting #24**

**Meeting Held:** Wednesday 13<sup>th</sup> August 2014

**Venue:** The meeting was held at the Rocglen Coal Mine Training Room

**Commencement Time:** 3:00pm

### **1. Present and Apologies**

**Present:** Mr John Sturgess (JS) (Independent Chairperson)  
Mr Hans Allgayer (HA) (Gunnedah Shire Council Representative)  
Mrs Jill Johnson (JJ) (Group Environment Manager)  
Mr Daryl Campbell (DC) (Community Relations Administration Officer)  
Mr Jason Conomos (JC) (Operations Manager)

**Apologies:** Mrs Pam Burns (PB) (Community Representative)  
Mr Tim Muldoon (TM) (Group Manager Community Relations & Property)

No advice: Mr Rod Barnes (RB) (Community Representative)

Moved: HA, JS

### **2. Previous Minutes**

Minutes accepted as a true record on the motion of HA and JS.

### **3. Business Arising from Previous Minutes**

- 3.1. DC was unsure if the first flush diverter had been installed at “Surrey”. TM to provide update at next meeting.
- 3.2. The requirement for sympathetic positioning of lighting plants reiterated to OCEs.

### **4. Mine Progress Report**

JC advised that in the last three months 2.2 Mbcm of overburden had been moved for a total of 445,000 tonnes of coal. The site had a big month in June.

### **5. Review of Environmental Performance**

JJ presented the environmental monitoring results which are attached in the environmental monitoring report.

## **6. General Business**

HA asked about the infestation of boxthorn on mine owned land north of the site.  
DC said the boxthorn had been sprayed and will be sprayed again as required.

JC noted logging trucks accessing Vickery State Forest had increased dust levels.

## **7. Next Meeting**

The next meeting of the Rocglen CCC is scheduled for Wednesday 12<sup>th</sup> November 2014 at 3:00pm.

Meeting closed 3:18pm.

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J Sturgess  
Chairman

# Rocglen Coal Mine Community Consultative Committee Meeting #24

## Environmental Monitoring Report May 2014 – July 2014

### Noise Monitoring

Attended noise monitoring was undertaken on the 24<sup>th</sup>, 25<sup>th</sup>, 26<sup>th</sup> and 27<sup>th</sup> June 2014, in accordance with the Rocglen Noise Monitoring Program and Environment Protection Licence Guidelines (90 minutes during the day, 30 minutes during the evening and 60 minutes during the night and occur for 3 consecutive operating days) with results outlined below:

### Surrey

RCM Operational Noise Monitoring Results – 24 <sup>th</sup> , 25 <sup>th</sup> , 26 <sup>th</sup> and 27 <sup>th</sup> June 2014				
Date	Time	dB(A), Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
24 <sup>th</sup> Jun 2014	08:32 pm	35	Calm	Dogs (34), RCM (27)
24 <sup>th</sup> Jun 2014	10:04 pm	33	Calm	RCM (33)
25 <sup>th</sup> Jun 2014	07:02 am	40	0.2 / NW	Birds (40), RCM (23)
25 <sup>th</sup> Jun 2014	08:35 pm	29	Calm	RCM (28), traffic (22)
25 <sup>th</sup> Jun 2014	10:06 pm	22	Calm	RCM (22)
26 <sup>th</sup> Jun 2014	07:08 am	43	Calm	Birds (42), RCM (36)
26 <sup>th</sup> Jun 2014	08:21 pm	41	Calm	Dogs (41), RCM (31)
26 <sup>th</sup> Jun 2014	10:02 pm	28	Calm	RCM (28)
27 <sup>th</sup> Jun 2014	07:19 am	43	1.3 / E	Birds (42), RCM (36)

### Retreat

RCM Operational Noise Monitoring Results – 24 <sup>th</sup> , 25 <sup>th</sup> , 26 <sup>th</sup> and 27 <sup>th</sup> June 2014				
Date	Time	dB(A), Leq (15 min)	Wind speed/ direction	Identified Noise Sources as dB(A) Leq (15 min)
24 <sup>th</sup> Jun	09:19 pm	24	Calm	Other mine (24), RCM inaudible
24 <sup>th</sup> Jun	11:20 pm	25	Calm	Other mine (24), birds (17) RCM inaudible
25 <sup>th</sup> Jun	08:58 am	53	3.1 / WNW	Birds (53), RCM (31)
25 <sup>th</sup> Jun	09:20 pm	29	Calm	RCM (29)
25 <sup>th</sup> Jun	05:58 am	29	Calm	Birds (28), RCM (20)
26 <sup>th</sup> Jun	08:59 am	38	1.0 / W	Birds (38), RCM (26)
26 <sup>th</sup> Jun	09:14 pm	23	Calm	RCM (23)
26 <sup>th</sup> Jun	11:18 pm	20	0.3 / E	Cattle (20), RCM inaudible
27 <sup>th</sup> Jun	09:14 am	39	0.6 / SW	Birds (38), RCM (28), roadwork construction (28)

The results show that, under the operating and meteorological conditions at the times, the mine noise exceeded the operational noise criterion on two separate occasions at the Surrey monitoring location. The exceeding noise levels at Surrey both occurred during the day time monitoring periods, firstly on June 26 and then again on June 27. RCM was measured at 36 dB(A) Leq (15 min) on the two occasions at Surrey, exceeding the noise criterion by only 1 dB. It should be noted that an exceedance of less than 2 dB (A) above a statutory noise limit specified in a

licence condition is not considered to be a non-compliance as per the discussion in Section 11.1.3 of the NSW Industrial Noise Policy.

Where the noise from RCM was audible at the Surrey location it was engine revs from predominantly the operating scrapers along with general mine hum. Scraper operations at the mine site were modified at the beginning of July, where they ceased operating towards the southern end of the pit and began soil emplacement activities on the northern emplacement area. The number of scrapers operating on site was also reduced from seven to four, and there are currently only two scrapers operating on the site.

In addition to operational noise, the noise from the mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. During the night time monitoring the L1 (1 min) noise from the mine did not exceed 45 dB(A) at both monitoring locations, as shown below:

RCM Sleep Disturbance Monitoring Results				
Date	Location	Time	dB(A),L1 (1 min)	Wind speed/ direction
24 <sup>th</sup> Jun 2014	Surrey	10:04 pm	37	Calm
25 <sup>th</sup> Jun 2014	Surrey	10:06 pm	26	Calm
26 <sup>th</sup> Jun 2014	Surrey	10:02 pm	33	Calm
24 <sup>th</sup> Jun 2014	Retreat	11:20 pm	n/a	Calm
25 <sup>th</sup> Jun 2014	Retreat	05:58 am	24	Calm
26 <sup>th</sup> Jun 2014	Retreat	11:18 pm	n/a	0.3 / E

Rocglen's real time noise monitor is currently located at the "Penryn" property. The monitor's alarm system notifies operations when noise levels approach compliance limits and allows for the opportunity to adjust operations accordingly. Currently, in-pit dumping is prioritised during night operations to reduce the likelihood of operational noise impacts.

### **Blast Monitoring**

Since the first blast there have been 191 blasts (until the end of July). All blasts during the monitoring period were compliant within the limits of 120dB<sub>L</sub> and 10mm/s.

### **Air Quality**

#### **Deposited Dust Results**

The deposited dust results (g/m<sup>2</sup>/month) obtained for the site over the last 12 months are as follows:

### Air Quality (Dust Deposition) Results

Month	BD2-A – Penryn	BD3 – Belah	BD4 – Surrey	BD5 – Stratford	BD6 – Roseberry	BD7 – Roseglass	BD8 – Yarrowonga
August 2013	0.2	0.1	0.4	0.2	0.1	0.2	0.3
September 2013	0.7	0.5	0.7	0.6	0.8	0.4	0.9
October 2013	0.8	1.1	0.2	1.3	1.1	2.4	1.7
November 2013	1.4	1.2	1.4	1.1	1.1	0.8	0.7
December 2013	3.0	0.6	3.0	3.0	2.8	1.0	1.3
January 2014	9.5	0.5	0.3	5.7	0.4	16.8	0.6
February 2014		3.3	0.1	2.0	0.1	0.7	0.7
March 2014	<0.1	4.1	0.8	2.6	<1	0.8	1.4
April 2014	0.7	0.4	1.1	4.9	<1	0.6	0.7
May 2014	4.4	0.1	1.7	1.7	0.4	0.7	0.6
June 2014	0.5	0.8	0.9	1.9	0.7	0.3	0.6
July 2014	2.7	<0.1	0.7	1	0.2	<0.1	0.2
<b>Annual Average</b>	<b>2.17</b>	<b>1.06</b>	<b>0.94</b>	<b>2.17</b>	<b>0.64</b>	<b>2.06</b>	<b>0.86</b>

Results show slightly elevated results for BD2A in May 2014 however the annual average at all sites remains well below the concentration threshold of 4g/m<sup>2</sup>/month.

### PM<sub>10</sub> Results

The annual averages for PM<sub>10</sub> levels up until the end of June 2014 remain below the annual average limit of 30µg/m<sup>3</sup>, as follows:

Costa Vale: 16.75µg/m<sup>3</sup>

Roseberry: 13.02µg/m<sup>3</sup>

The real time PM<sub>10</sub> monitor at “Roseberry” is currently operating to send alarms to operations in the event that PM<sub>10</sub> levels approach compliance limits.

### Water Monitoring

#### Ground Water

Groundwater monitoring data for the last 12 months is presented in the following table. Standing Water Level (SWL) graphs of bores with sufficient data sets are also provided.

Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
MP2	20 Jun 13	10.36	7.12	4710
	28 Aug 13	9.80	7.2	4740
	11 Dec 13	10.84	7.2	4870
	26 Feb 14	11.1	8.06	5250
	12 Jun 14	11.4	7.2	4930
MP2a	27 May 13	11.75		
	20 Jun 13	11.80	6.53	4490
	29 Jul 13	16.74		
	23 Aug 13	16.80		

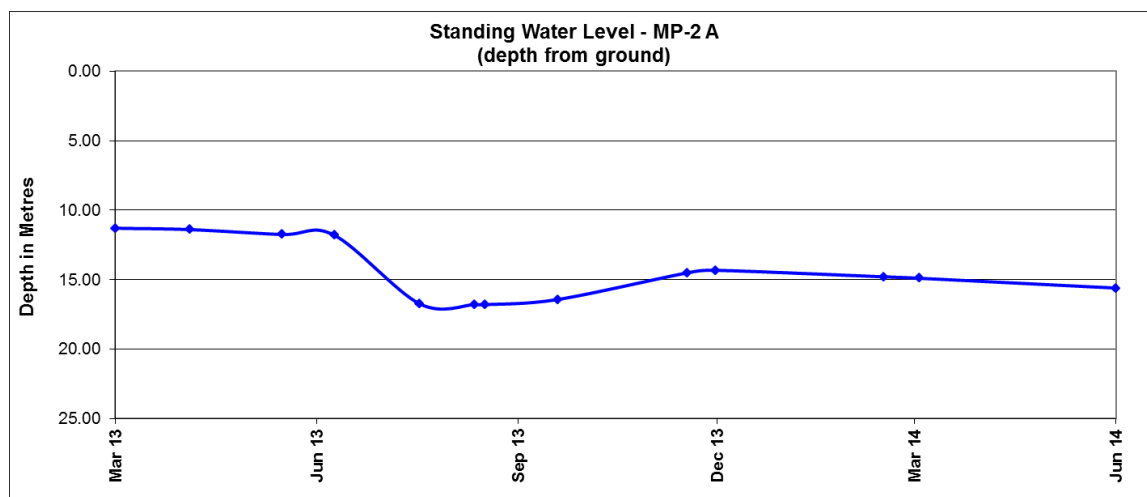
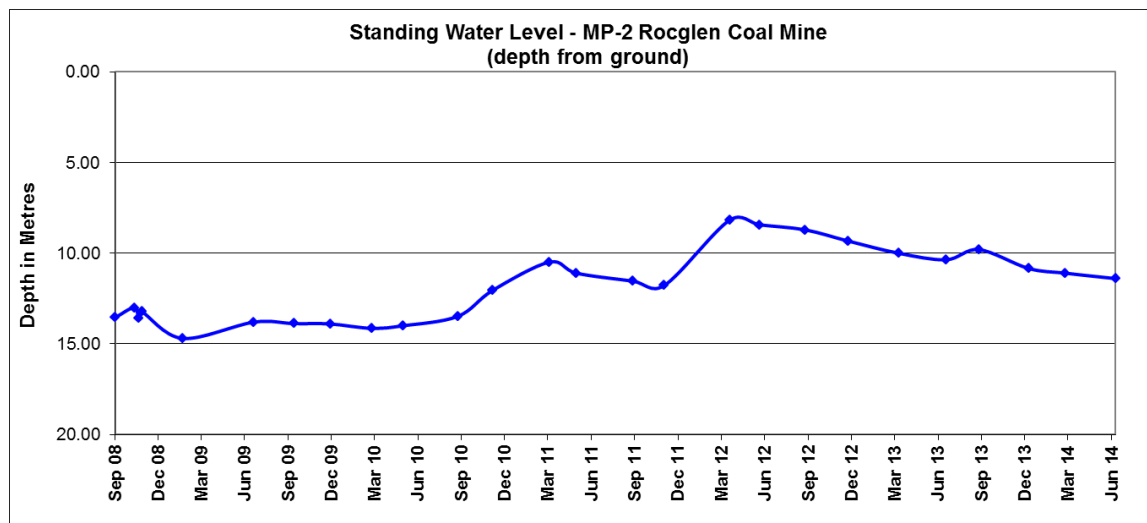


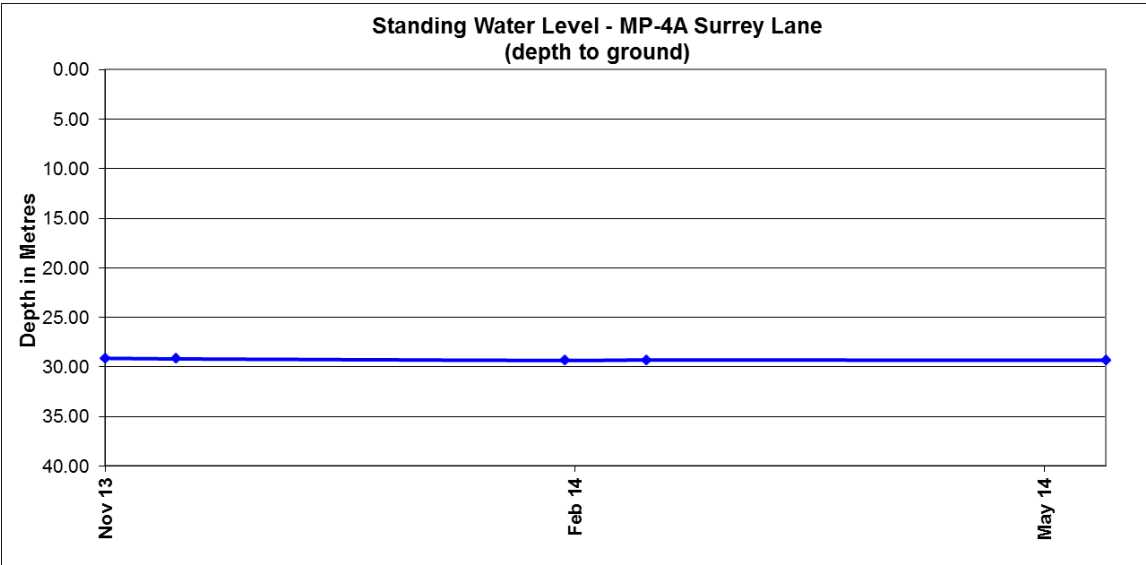
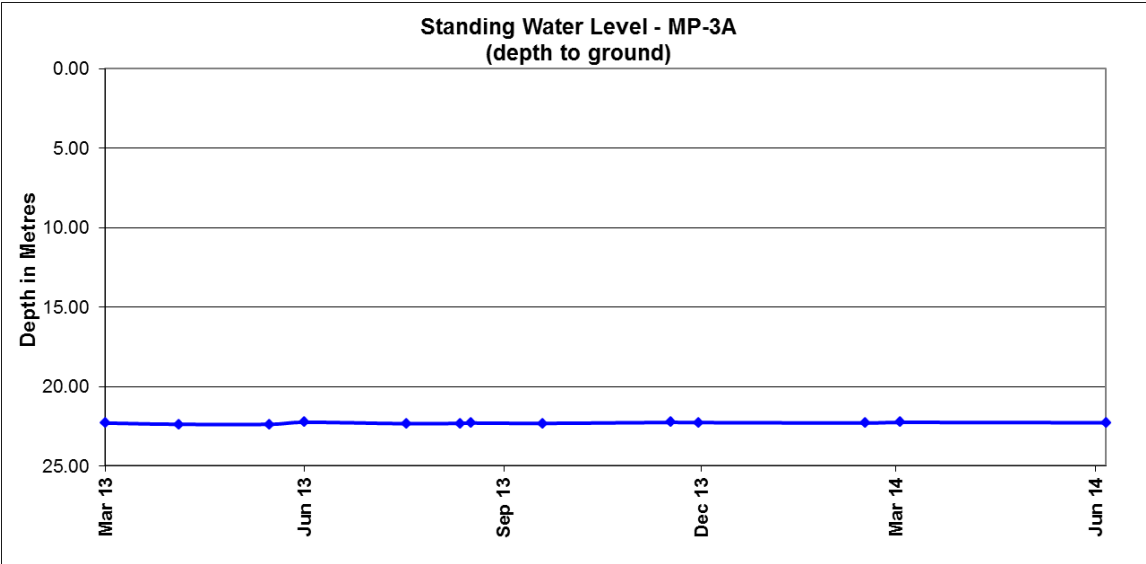
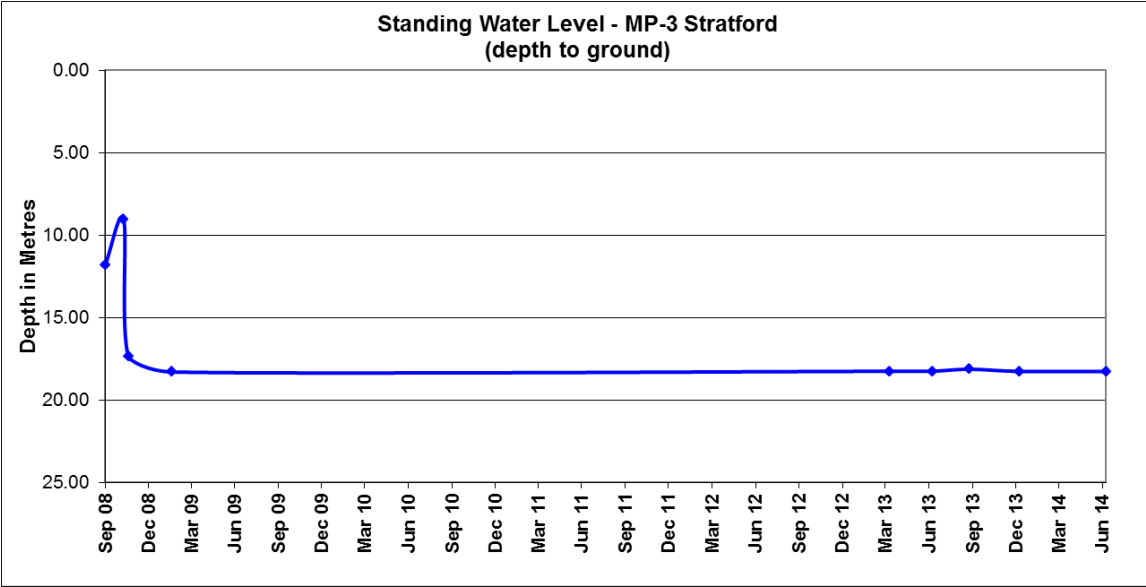
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	28 Aug 13	16.80	5.3	2360
	30 Sep 13	16.43		
	28 Nov 13	14.52		
	11 Dec 13	14.33	6.7	3140
	26 Feb 14	14.80	7.68	3250
	12 Jun 14	15.61	7	3180
<b>MP3</b>	12 Jun 13	18.25	Insufficient water to sample	
	28 Aug 13	18.13	Insufficient water to sample	
	11 Dec 13	18.26	Insufficient water to sample	
	24 Feb 14	Dry	Insufficient water to sample	
	12 Jun 14	18.27	Insufficient water to sample	
<b>MP3a</b>	27 May 13	22.38		
	12 Jun 13	22.25	7.79	1225
	29 Jul 13	22.34		
	23 Aug 13	22.32		
	28 Aug 13	22.9	7.8	1250
	30 Sep 13	22.32		
	28 Nov 13	22.26		
	11 Dec 13	22.27	7.9	1305
	26 Feb 14	22.30	8.37	1340
	17 Jun 14	22.28	7.8	1284
<b>MP4</b>	12 Jun 13	Dry		
	28 Aug 13	Dry		
	11 Dec 13	Dry		
	26 Feb 14	Dry		
	12 Jun 14	Dry		
<b>MP4a</b>	28 Nov 13	29.12		
	12 Dec 13	29.18	6.8	3210
	26 Feb 14	29.38	7.98	3820
	12 Jun 14	29.33	7.1	3690
<b>MP4b</b>	28 Nov 13	26.06		
	12 Dec 13	25.87	7.3	2960
	26 Feb 14	25.2	8.15	3050
	12 Jun 14	26.00	7.3	2960
<b>MP5</b>	12 Jun 13	Dry	Insufficient water to sample	
	28 Aug 13	Dry	Insufficient water to sample	
	12 Dec 13	Dry	Insufficient water to sample	
	27 Feb 14	Dry	Insufficient water to sample	
	12 Jun 14	Dry	Insufficient water to sample	
<b>MP5a</b>	27 May 13	67.11		
	12 Jun 13	67.03	7.12	2800
	29 Jul 13	66.10		
	23 Aug 13	66.20		
	29 Aug 13	66.90	7	2710
	30 Sep 13	71.25		
	28 Nov 13	76.55		
	12 Dec 13	76.56	7	2770
	27 Feb 14	76.60	7.32	3070

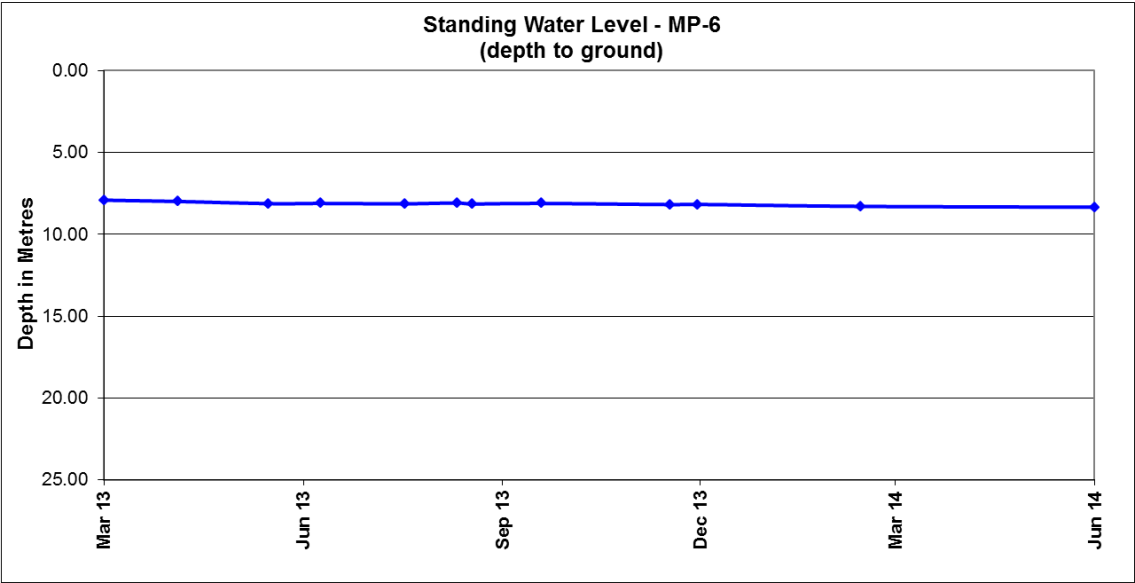
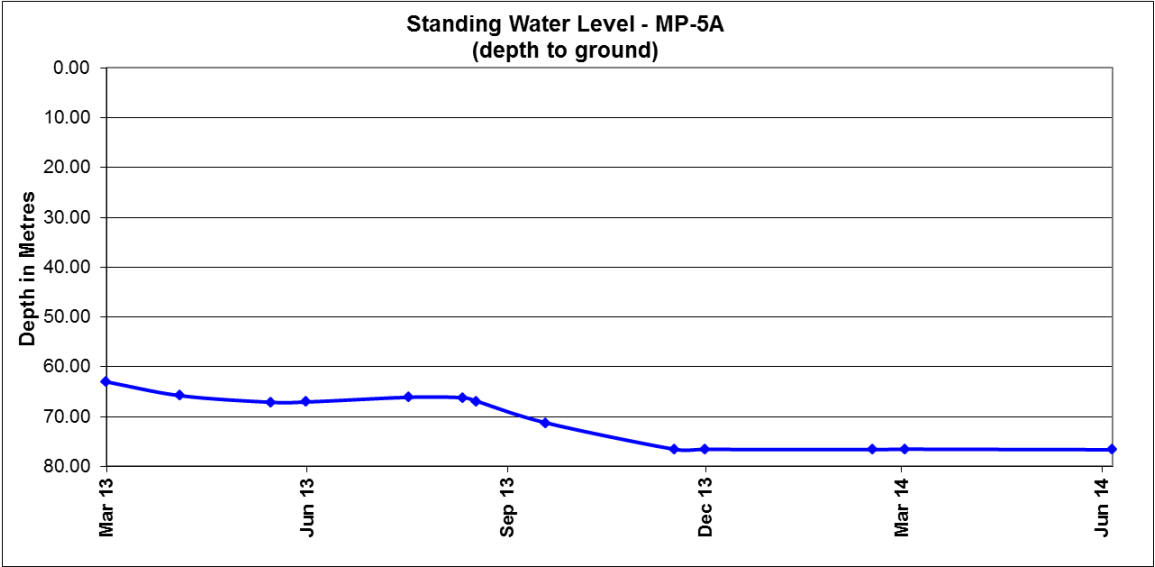
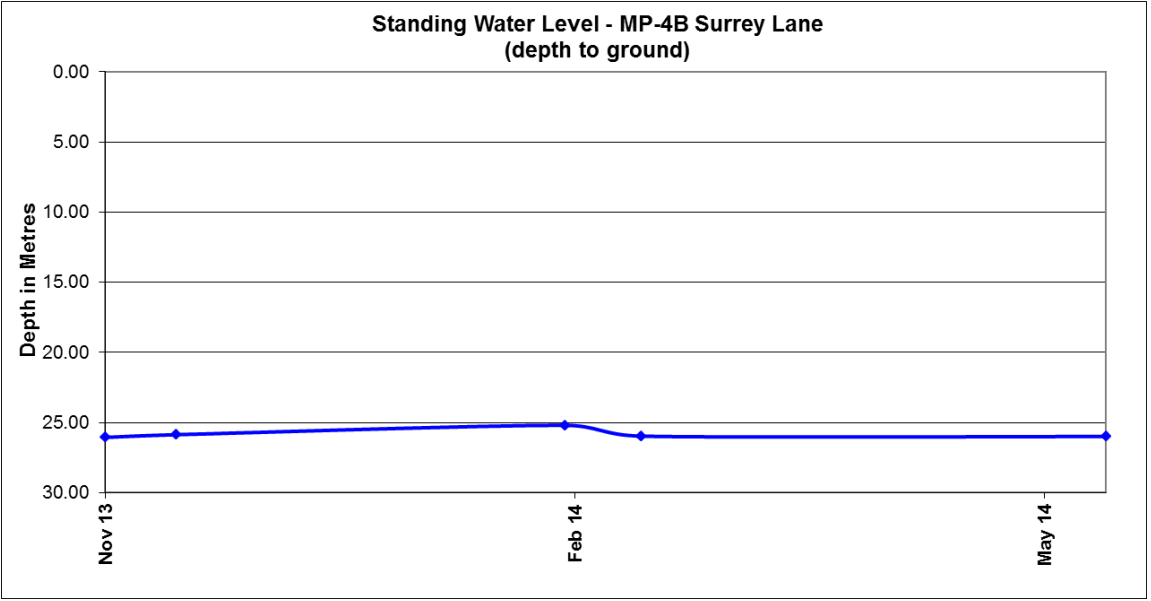
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	17 Jun 14	76.63	7	3010
MP6	27 May 13	8.12		
	20 Jun 13	8.11	6.91	3170
	29 Jul 13	8.13		
	22 Aug 13	8.08		
	29 Aug 13	8.14	7.1	2890
	30 Sep 13	8.11		
	28 Nov 13	8.18		
	11 Dec 13	8.17	7.2	2780
	24 Feb 14	8.29	7.4	2580
	12 Jun 14	8.34	7.3	2360
MP7	27 May 13	15.76		
	2 Jul 13	15.72	6.81	3830
	29 Jul 13	15.72		
	23 Aug 13	15.68		
	29 Aug 13	15.70		
	30 Sep 13	15.63		
	28 Nov 13	15.60		
	18 Dec 13	15.76	6.9	2970
	27 Feb 14	15.87	7.26	3200
	19 Jun 14	15.82	7	3050
MP8	27 May 13	15.90		
	2 Jul 13	16.28	6.7	4200
	29 Jul 13	15.90		
	23 Aug 13	15.84		
	29 Aug 13	15.90	5.44	3180
	30 Sep 13	15.81		
	28 Nov 13	15.80		
	18 Dec 13	15.92	6.4	3620
	27 Feb 14	16.05	6.72	3920
	19 Jun 14	16.01	6.9	4010
WB1	10 Jun 13	7.94	No sample available	
	29 Aug 13	7.99	No sample available	
	11 Dec 13	8.0	No sample available	
	24 Feb 14	8.11	No sample available	
	12 Jun 14	8.15	Windmill over bore	
WB2	12 Jun 13	17.88	7.28	2620
	28 Aug 13	15.92	7.1	2840
	11 Dec 13	15.73	No access	
	26 Feb 14	16.22	8.15	3070
	12 Jun 14	15.76	8.7	2700
WB3	20 Jun 13	7.95	Pump over bore	
	30 Aug 13	7.86	Pump over bore	
	18 Dec 13	7.57	Pump over bore	
	27 Feb 14	7.8	Pump over bore	
	12 Jun 14	8.05	Pump over bore	
WB4	12 Jun 13	Unable to dip	No sample	
	29 Aug 13	Unable to dip	No sample	

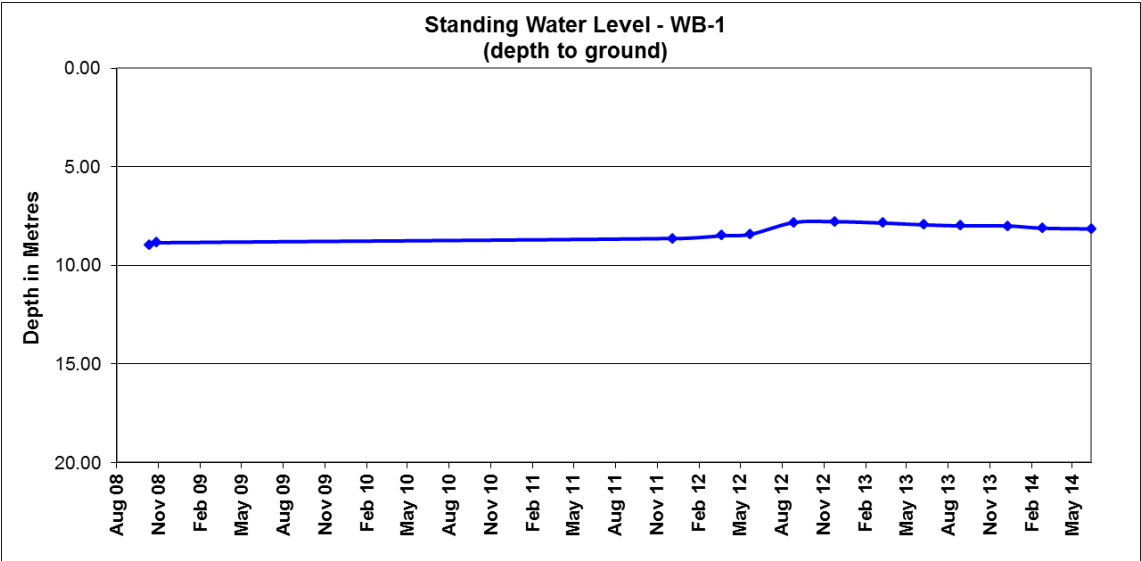
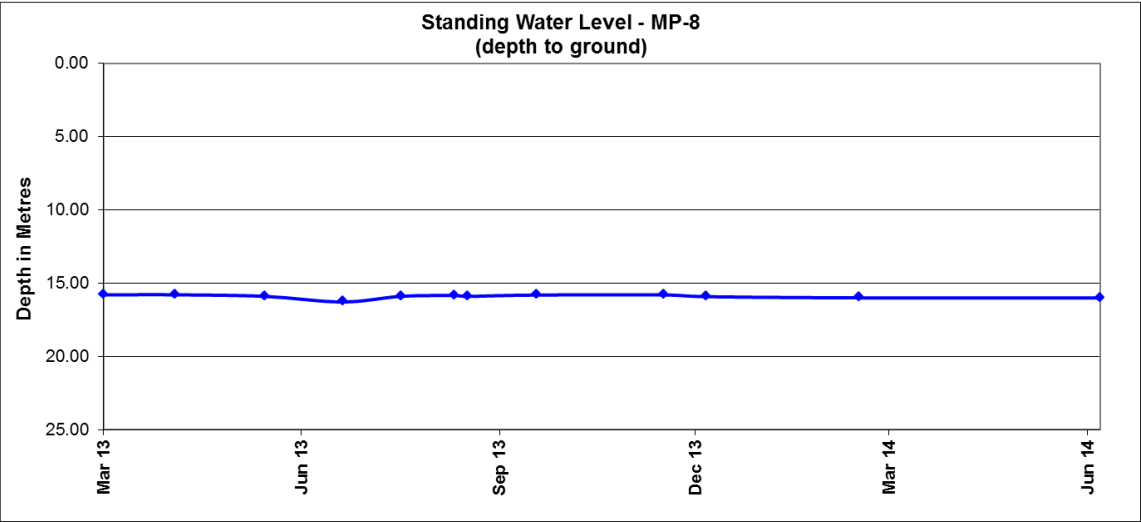
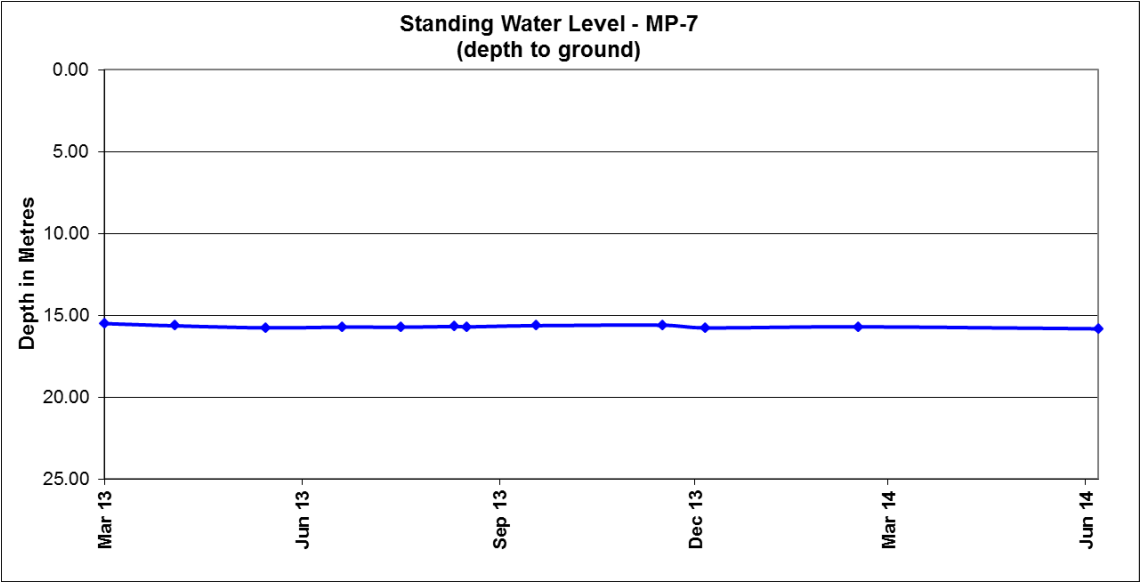
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	12 Dec 13	Unable to dip	No sample	
	27 Feb 14	Unable to dip	No sample	
	12 Jun 14	Unable to dip	No sample	
WB5	12 Jun 13	10.47	7.86	6930
	28 Aug 13	12.1	8.2	6910
	11 Dec 13	12.31	7.8	7130
	26 Feb 14	19.0	7.86	7840
	12 Jun 14	12.56	7.9	7740
WB6	12 Jun 13	20.46	Bore equipped	
	28 Aug 13	20.59	Bore equipped	
	11 Dec 13	26.66	Bore equipped	
	24 Feb 14	20.86	Bore equipped	
	12 Jun 14	21.08	Bore equipped	
WB7	12 Jun 13	9.83	No access	
	28 Aug 13	10.15	No access	
	11 Dec 13	10.36	No access	
	24 Feb 14	10.68	No access	
	12 Jun 14	10.87	Windmill over bore	
WB8	20 Jun 13	30.97	Unable to Sample – pump over bore	
	30 Sep 13	31.19	Unable to Sample – pump over bore	
	12 Dec 13	31.1	Unable to Sample – pump over bore	
	27 Feb 14	31.31	Unable to Sample – pump over bore	
	12 Jun 14	29.77	Pump over bore	
WB9	10 Jun 13	24.06	No access	
	28 Aug 13	23.94	No access	
	12 Dec 13	23.78	No access	
	26 Feb 14	24.69	8.12	1240
	12 Jun 14	24.27	7.7	1250
WB10	10 Jul 13	14.08	6.95	1883
	30 Aug 13	14.13	6.9	1880
	12 Dec 13	14.3	7	1925
	26 Feb 14	14.33	7.58	2110
	19 Jun 14	14.07	7.1	2010
WB11	10 Jul 13	15.32	7.75	1241
	30 Aug 13	16.67	7.6	1120
	12 Dec 13	16.7	7.8	1310
	26 Feb 14	18.15	8.37	1690
	19 Jun 14	16.93	7.7	1420
WB12	10 Jul 13	13.16	7.95	16.92
	30 Aug 13	13.08	8.1	1690
	12 Dec 13	12.98	7.9	1730
	26 Feb 14	13.08	8.38	1930
	19 Jun 14	13.14	8	1694
WB13	10 Jul 13	33.42	6.77	3550
	28 Aug 13	38.50	6.9	3730
	12 Dec 13	41.82	7	3460

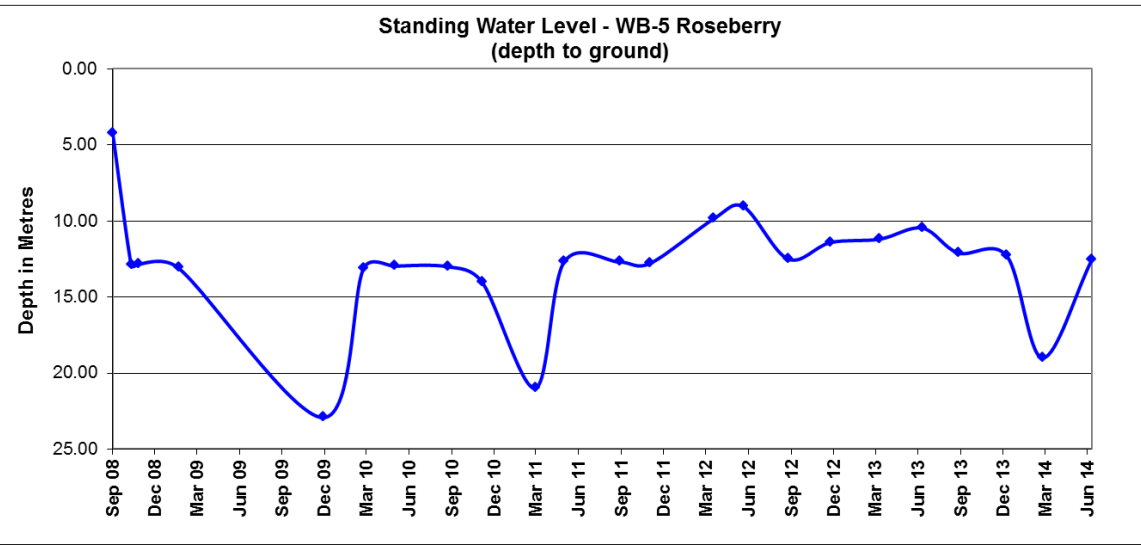
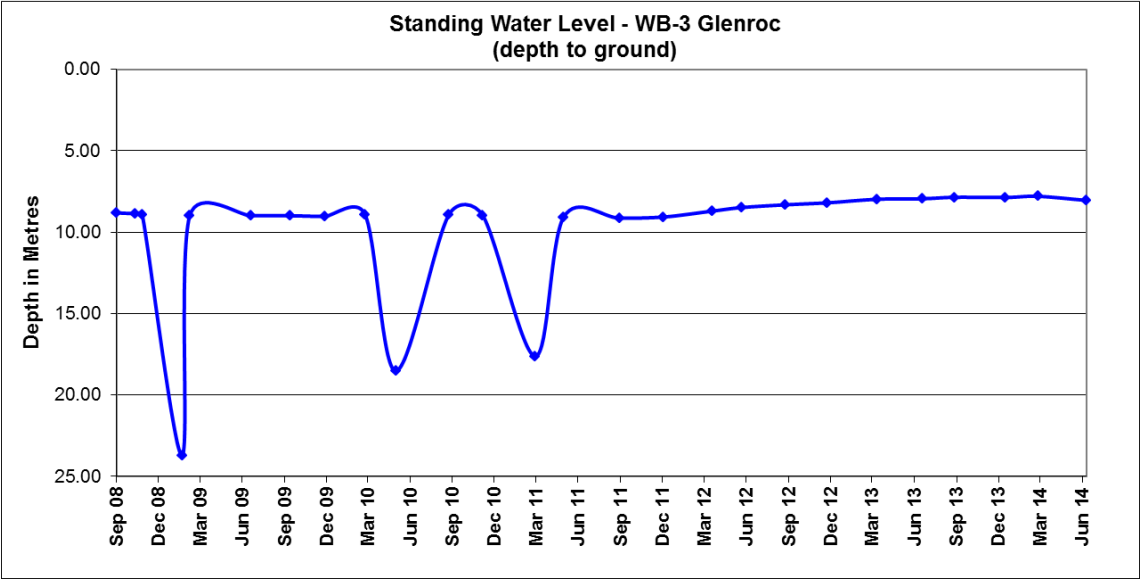
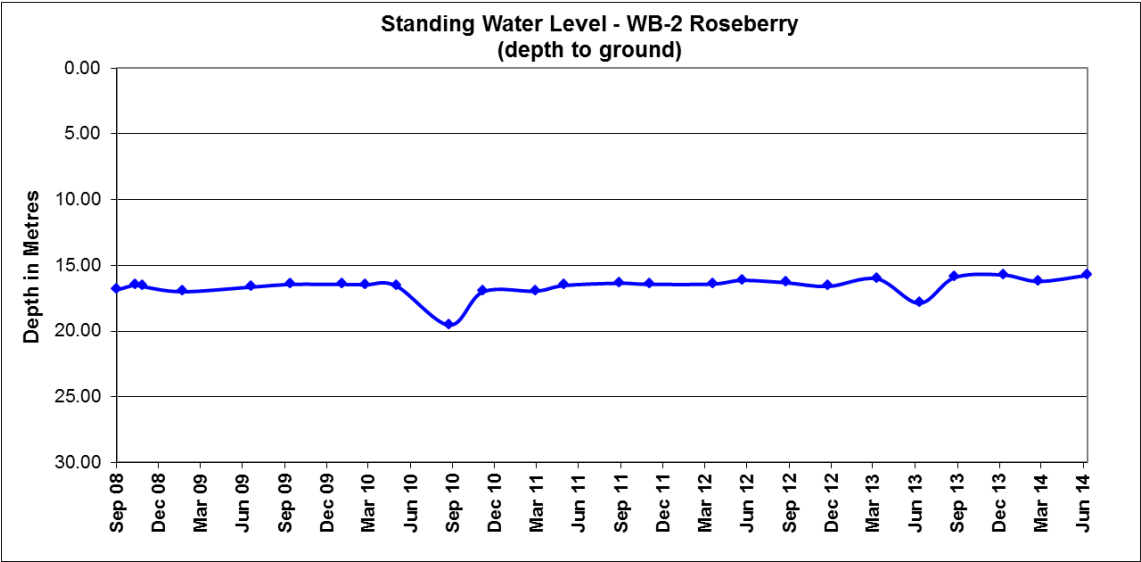
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	26 Feb 14	42.40	7.93	3690
	12 Jun 14	33.93	7.1	3540
<b>WB-14</b>	18 Dec 13	10.16	7.6	1315
	27 Feb 14	22.90	7.8	1150
	12 Jun 14	18.77	7.7	1260
<b>Production Bore</b>	12 Jun 13	Bore Equipped	7.23	3510
	28 Aug 13	Bore Equipped	6.9	3430
	11 Dec 13	Bore Equipped	7	3630
	24 Feb 14	Bore Equipped	6.9	3490
	12 Jun 14	Bore Equipped	7	3590
<b>Surrey No.2</b>	20 June 13	34.07	7.35	3310
	30 Aug 13	33.29	7.21	3110
	12 Dec 13	34.55	7.3	3420
	27 Feb 14	33.55	7.3	3060
	12 Jun 14	32.74	7.3	3310
<b>Kahana Windmill Bore</b>	11 Jul 14	27.62	No Sample	



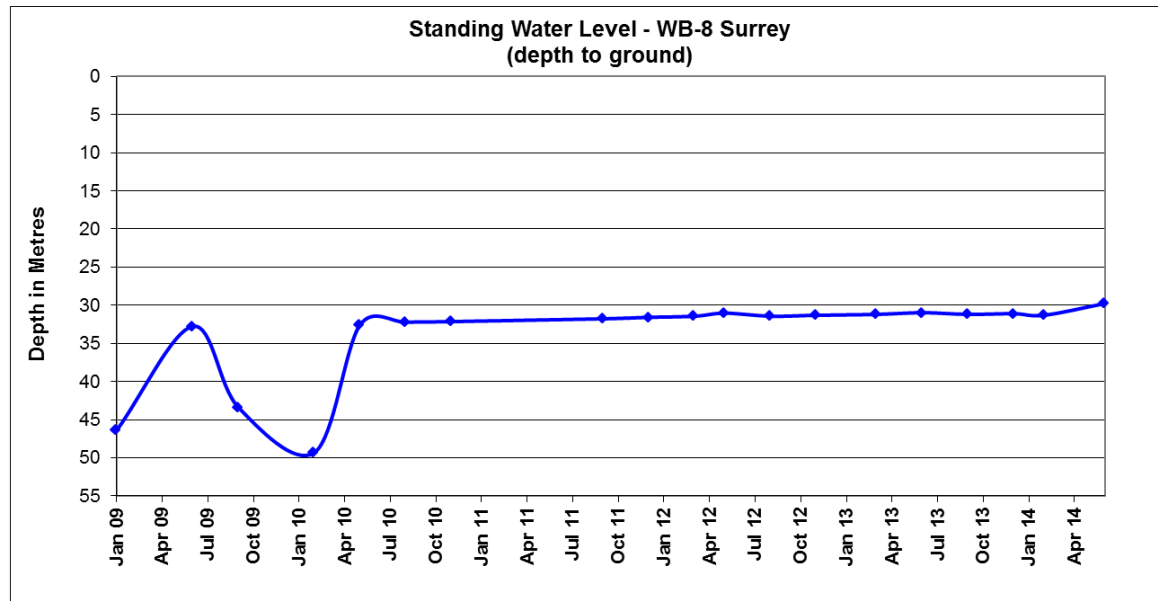
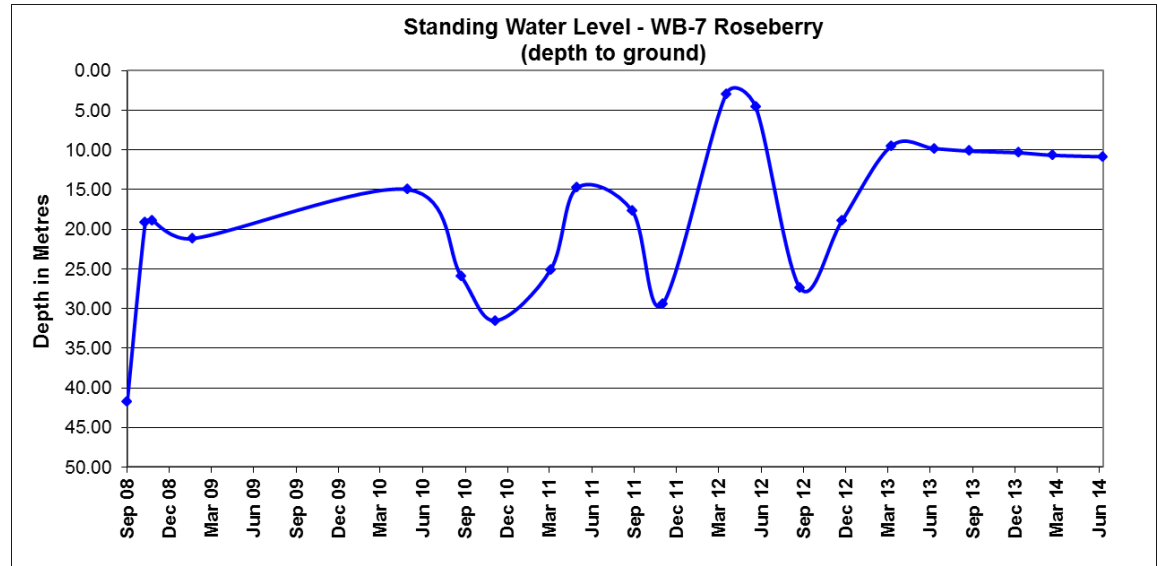
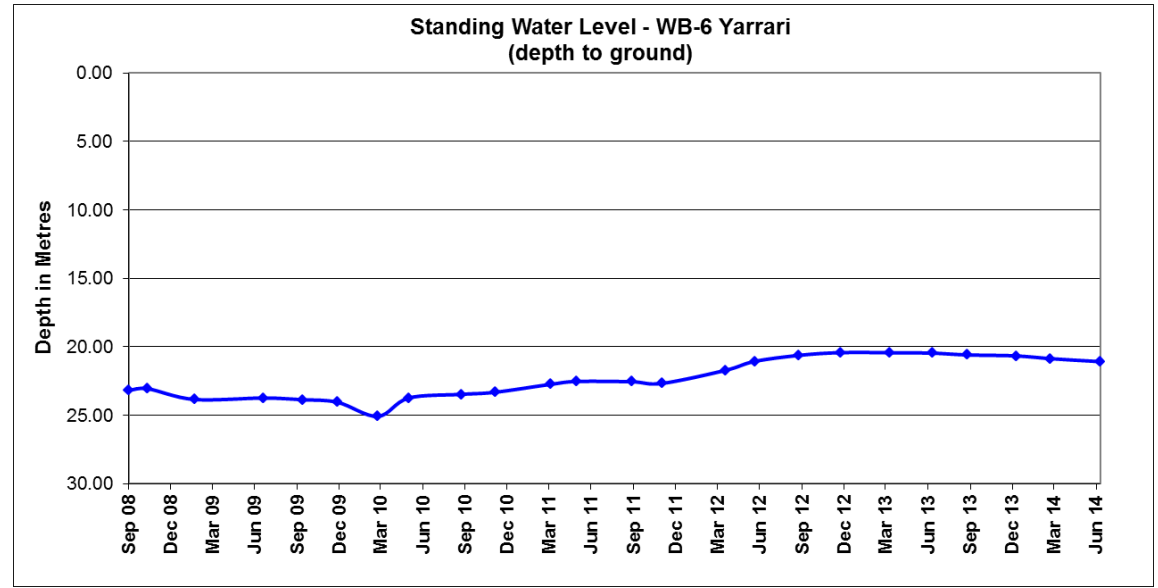


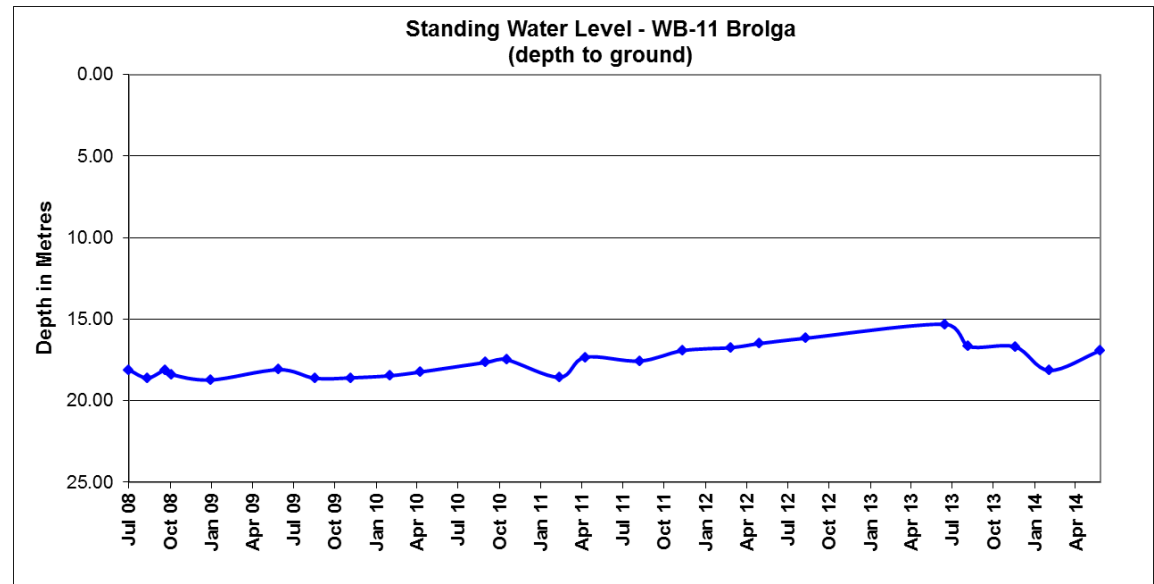
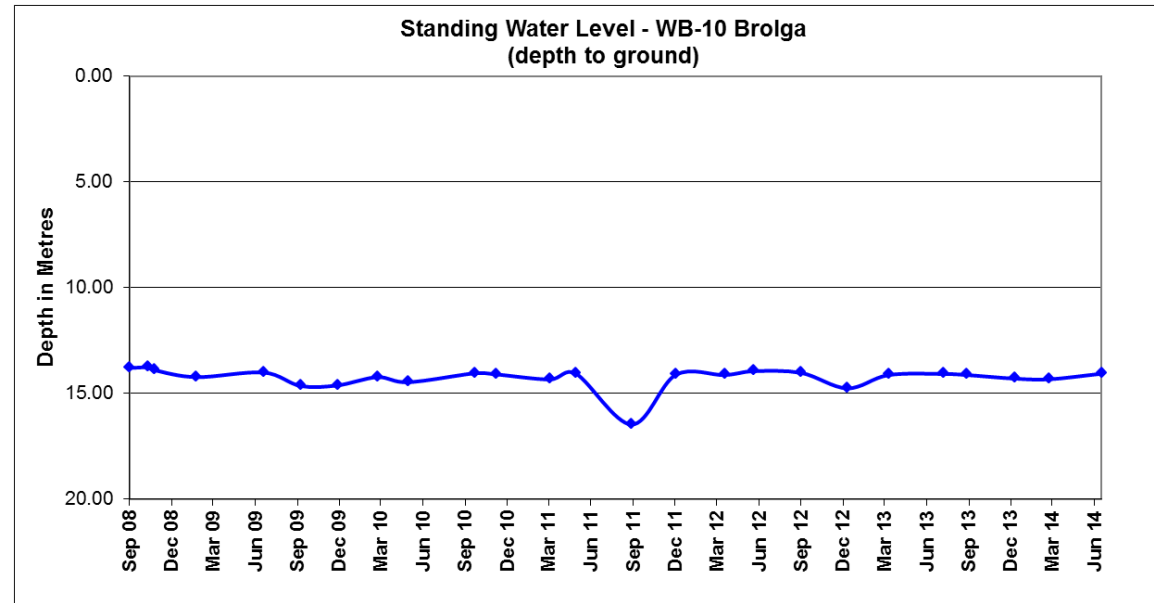
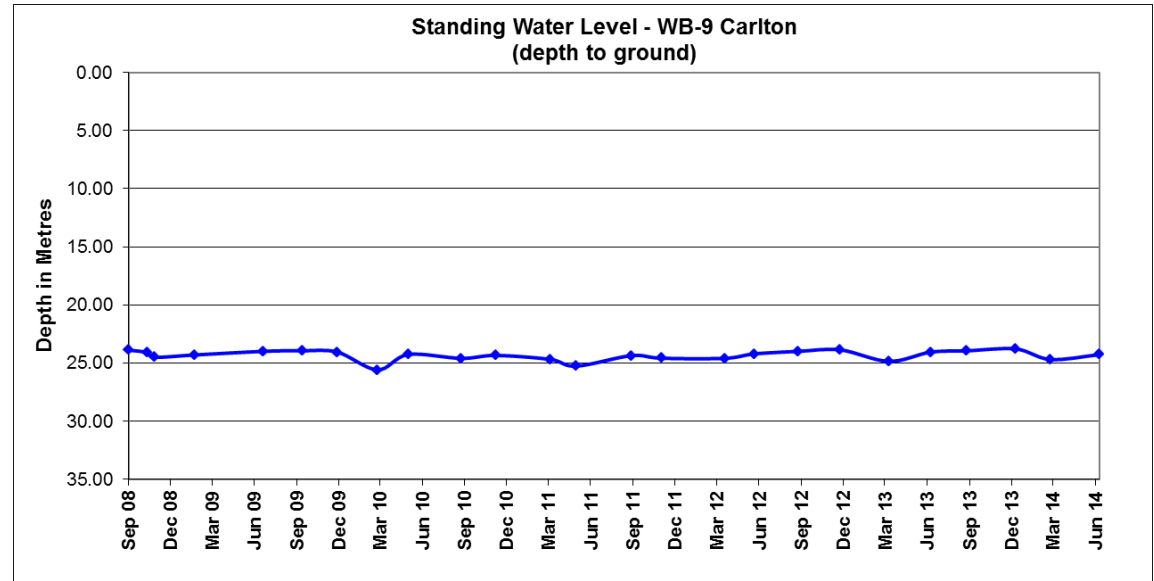


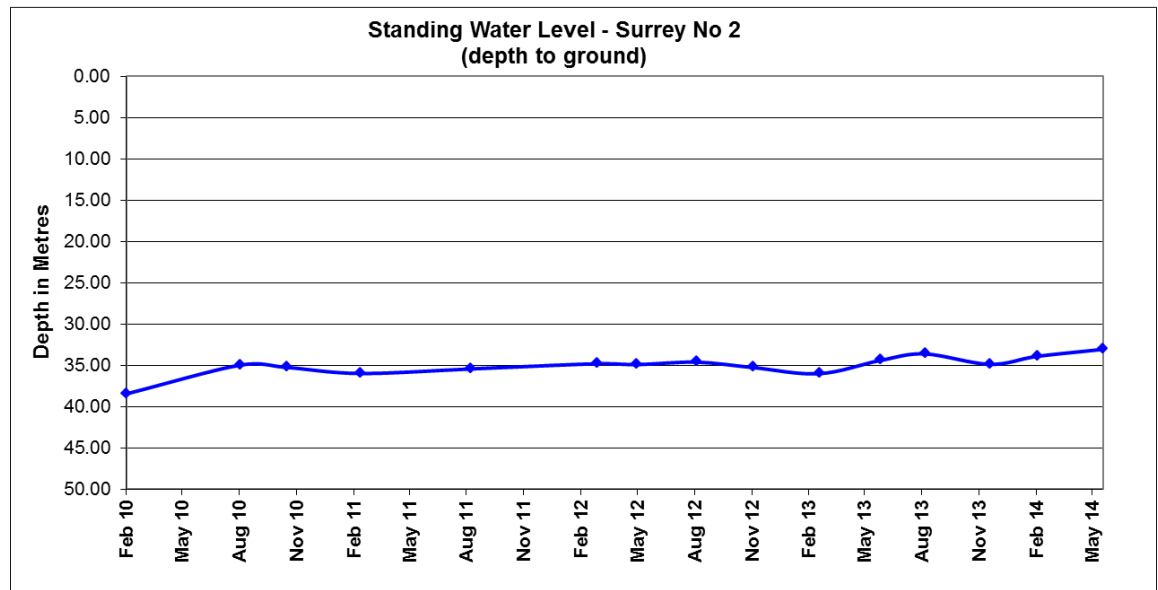
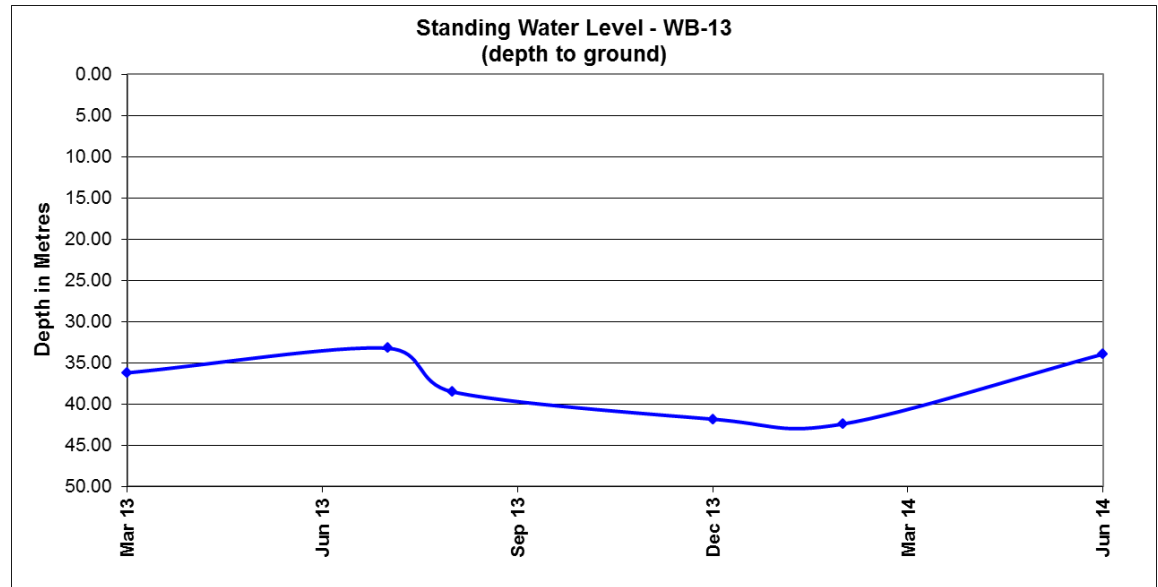
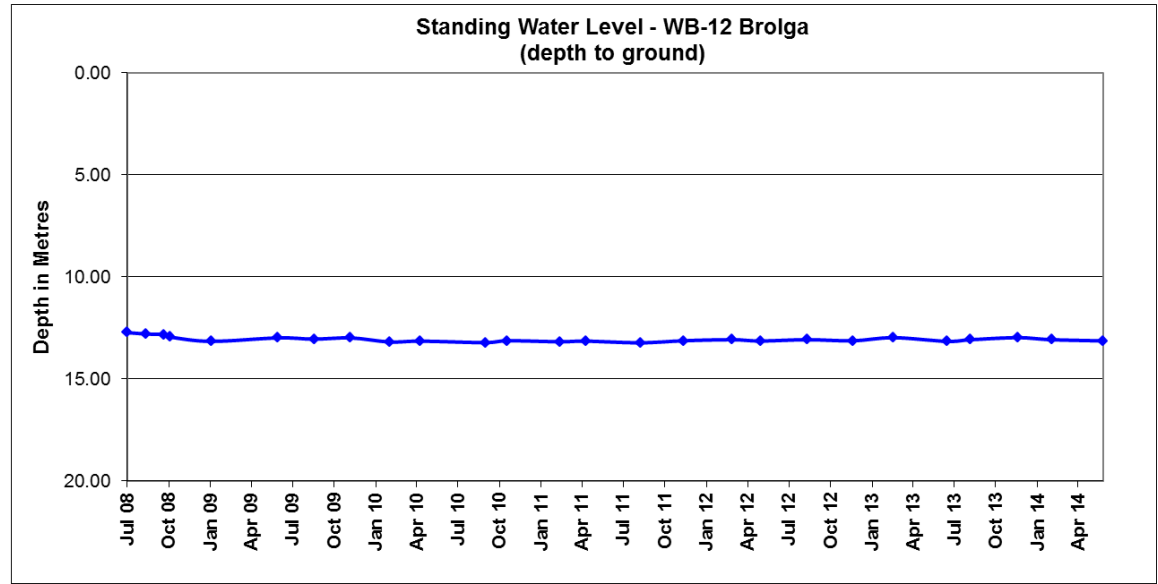












Standing water levels have remained relatively consistent since the last CCC meeting. WB5 (at Roseberry) continues to show a fluctuating trend associated with non mining activities. The SWL measured during June 2014 at WB11 (Brolga) has shown an increase back towards 2012-2013 levels.

Monitoring at Kahana commenced in July following concern from the landholder that blasting operations at Rocglen had collapsed the aquifer.

### Surface Water

No wet weather discharges occurred at Rocglen during the period.

### Complaints

There were two complaints received during the last three months. Both complaints related to impacts from blasting, summarised in the table below.

Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
Text message to OCE phone – received by OCE, forwarded to EO	19/06/2014 12:07pm	Complaint in relation to the impact of today's blast which rattled the windows.	The Environmental Officer monitored the blast from Wean Rd, and monitor results of the blast confirmed the blast was compliant. The EO discussed the complaint with the Whitehaven Drill and Blast Manager who advised that the blast was small at 50-60 tonnes of product, high in the south west of the pit, and the blast faced towards the north-north-east. The complainant's property is south-east of the mine. The blast monitoring located between the mine and the complainant's property indicated compliance. The EO phoned the complainant to advise them their message had been received and that the monitoring results showed the blast was compliant. The complainant was asked whether they would like to have the message recorded as a formal complaint. The complainant replied that yes, it should go on record. The OE advised the complainant that they should not hesitate to contact Whitehaven if any other issues arise in the future.	No further action or follow up was requested.
Phone Call to Gunnedah Office	09/07/2014 10:45am	Complainant was concerned that vibration associated with blasting at Rocglen had collapsed the aquifer and impacted on groundwater availability at their property. The complainant also raised the issue of blasts shaking the house and causing cracks in the walls.	The Rocglen Environmental Officer contacted the complainant on 09/07 at around 3 pm to notify the complainant that their message had been received and to discuss the complaint. The complainant said they had been pumping from the bore the previous day and noticed that it started pumping air, when he investigated he noticed that the water level in the bore had dropped 8m below its usual level, and was empty when measured this morning. The complainant thinks that blasting from the Rocglen coal mine has collapsed the aquifer and this is why the level of water in the bore has dropped. The EO made an offer to visit the complainant's property to view the bore and measure its standing water level, which was accepted. The Rocglen EO also advised the complainant that results recorded from the two most recent blasts to occur at Rocglen Coal Mine show the blasts were well within compliance limits.	The Rocglen EO measured the SWL of the complainant's bore on July 11 2014, and found it to be at a depth of 27.62 m. The complainant agreed that the SWL measured was in general accordance with the usual depth of water in the bore. The Rocglen EO offered to continue monitoring the bore on a quarterly basis as a part of the existing Rocglen groundwater monitoring program, which was accepted.

### **Rehabilitation**

During the reporting period, rehabilitation work has continued on both the western and northern emplacement areas. The bulk shaping works on the northern emplacement area were completed, with soil replacement commencing in July. Infill planting with tube stock on both the western and northern emplacement areas continued this quarter, with approximately 1500 trees planted. 1080 baiting for foxes was undertaken in the biodiversity offset area in conjunction with several neighbouring properties during May, with 21 baits taken.

## **Minutes of Rocglen Coal Mine Community Consultative Committee – Meeting #25**

**Meeting Held:** Wednesday 12<sup>th</sup> November 2014

**Venue:** The meeting was held at the Rocglen Coal Mine Training Room

**Commencement Time:** 3:00pm

### **1. Present and Apologies**

**Present:** Mr John Sturgess (JS) (Independent Chairperson)  
Mr Hans Allgayer (HA) (Gunnedah Shire Council Representative)  
Mrs Jill Johnson (JJ) (Group Environment Manager)  
Mr Jason Conomos (JC) (Operations Manager)  
Mrs Pam Burns (PB) (Community Representative)  
Mr Tim Muldoon (TM) (Group Manager Community Relations & Property)  
Mr Tony Dwyer (TD) (Environmental Superintendent)

**Apologies:** Mr Rod Barnes (RB) (Community Representative)

### **2. Previous Minutes**

Minutes accepted as a true record on the motion of HA and JS.

### **3. Business Arising from Previous Minutes**

3.1. TM advised that the first flush diverter had been installed at Surrey.

### **4. Mine Progress Report**

JC advised that in the last three months 1.8 Mbcm of overburden had been moved for a total of 294,000 tonnes of coal, which was above budget.

### **5. Review of Environmental Performance**

JJ presented the environmental monitoring results which are attached in the environmental monitoring report.

### **6. General Business**

TM mentioned the EPA proposed regional air quality monitoring network, which is proposed to be similar to the Hunter model. TM said Whitehaven is keen to be involved but is debating the funding proposal as all industries contribute to dust levels and it is therefore not fair that mining companies should fully pay for installation and maintenance of the network. HA said GSC will be pushing for it. TM

noted that a range of monitoring data is already available on the Whitehaven website.

JJ, on behalf of RB, noted RB's appreciation for the fence Whitehaven recently installed between his property and the Biobank site. JJ said RB commented that he would have preferred the dams not be decommissioned on the Biobank site as animals will now go to his property for water. JJ said she advised RB that decommissioning the dams was a requirement of the Biobank management plan.

## **7. Next Meeting**

The next meeting of the Rocglen CCC is scheduled for Wednesday 11<sup>th</sup> February 2015 at 3:00pm.

Meeting closed 3:20pm.

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J Sturgess  
Chairman

# Rocglen Coal Mine Community Consultative Committee Meeting #25

## Environmental Monitoring Report August 2014 – October 2014

### Noise Monitoring

Attended noise monitoring was undertaken on the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> September 2014, in accordance with the Rocglen Noise Monitoring Program and Environment Protection Licence Guidelines (90 minutes during the day, 30 minutes during the evening and 60 minutes during the night and occur for 3 consecutive operating days) with results outlined below:

### Surrey

RCM Operational Noise Monitoring Results – 24 <sup>th</sup> , 25 <sup>th</sup> , 26 <sup>th</sup> and 27 <sup>th</sup> June 2014				
Date	Time	dB(A),Leq (15 min)	Wind speed/direction	Identified Noise Sources as dB(A) Leq (15 min)
1 <sup>st</sup> Sep 2014	1:47 pm	40	3.1/301	Birds (40), <b>RCM (27)</b> , traffic (25)
1 <sup>st</sup> Sep 2014	8:22 pm	33	2.6/20	<b>RCM (32)</b> , frogs (25)
1 <sup>st</sup> Sep 2014	10:00 pm	34	1.7/30	<b>RCM (34)</b> , frogs (22)
2 <sup>nd</sup> Sep 2014	7:00 am	51	2.1/45	Birds (51), <b>RCM (26)</b> , traffic (21)
2 <sup>nd</sup> Sep 2014	8:17 pm	31	0.8/203	Birds (30), traffic (21), frogs (20), <b>RCM inaudible</b>
2 <sup>nd</sup> Sep 2014	10:00 pm	28	2.0/278	<b>RCM (23)</b> , frogs (23), cattle (23)
3 <sup>rd</sup> Sep 2014	7:09 pm	45	1.2/2.8	Birds (45), traffic (27), <b>RCM (26)</b>
3 <sup>rd</sup> Sep 2014	8:30 pm	27	5.2/179	<b>RCM (24)</b> , traffic (24)
3 <sup>rd</sup> Sep 2014	10:00 pm	36	4.7/211	Dogs (36), birds (23), <b>RCM inaudible</b>

### Retreat

RCM Operational Noise Monitoring Results –24 <sup>th</sup> , 25 <sup>th</sup> , 26 <sup>th</sup> and 27 <sup>th</sup> June 2014				
Date	Time	dB(A),Leq (15 min)	Wind speed/direction	Identified Noise Sources as dB(A) Leq (15 min)
1 <sup>st</sup> Sep 2014	3:34 pm	51	3.3/310	Birds (51), traffic (25), <b>RCM inaudible</b>
1 <sup>st</sup> Sep 2014	9:10 pm	30	2.5/8	Frogs (26), birds (26), other mine (22), <b>RCM inaudible</b>
1 <sup>st</sup> Sep 2014	11:16 pm	29	1.4/26	Cattle (29), frogs (22), other mine (20), <b>RCM inaudible</b>
2 <sup>nd</sup> Sep 2014	8:47 am	45	2.2/273	Birds (45), other mine (28), <b>RCM (24)</b>
2 <sup>nd</sup> Sep 2014	9:09 pm	31	1.1/8	<b>RCM (30)</b> , frogs (23)
2 <sup>nd</sup> Sep 2014	11:15 pm	34	2.7/250	<b>RCM (32)</b> , wind in trees (28), frogs (25)
3 <sup>rd</sup> Sep 2014	8:58 pm	41	5.2/179	Birds (41), <b>RCM (26)</b>
3 <sup>rd</sup> Sep 2014	9:15 pm	33	2.9/202	<b>RCM (33)</b>
3 <sup>rd</sup> Sep 2014	11:17 pm	33	1.5/30	<b>RCM (33)</b> , cattle (20)

The results show that, under the operating and meteorological conditions at the time of monitoring, the mine noise did not exceed the operational noise criterion at any monitoring location or at any time.



In addition to operational noise, the noise from the mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. During the night time monitoring the L1 (1 min) noise from the mine did not exceed 45 dB(A) at both monitoring locations, as shown below:

RCM Sleep Disturbance Monitoring Results				
Date	Location	Time	dB(A),L1 (1 min)	Wind speed/ direction
1 <sup>st</sup> Sep 2014	Surrey	10:00	40	1.7/30
2 <sup>nd</sup> Sep 2014	Surrey	10:00	27	2.0/278
3 <sup>rd</sup> Sep 2014	Surrey	10:01	n/a	1.4/146
1 <sup>st</sup> Sep 2014	Retreat	11:16	n/a	1.4/26
2 <sup>nd</sup> Sep 2014	Retreat	11:15	38	2.7/250
3 <sup>rd</sup> Sep 2014	Retreat	11:17	38	1.5/30

Rocglen's real time noise monitor is currently located at the "Penryn" property. The monitor's alarm system notifies operations when noise levels approach compliance limits and allows for the opportunity to adjust operations accordingly. Currently, in-pit dumping is prioritised during night operations to reduce the likelihood of operational noise impacts.

### **Blast Monitoring**

Since the first blast there have been 204 blasts (until the end of October). All blasts during the monitoring period were compliant within the limits of 120dB and 10mm/s.

### **Air Quality**

#### **Deposited Dust Results**

The deposited dust results (g/m<sup>2</sup>/month) obtained for the site over the last 12 months are as follows:

Air Quality (Dust Deposition) Results							
Month	BD2-A – Penryn	BD3 – Belah	BD4 – Surrey	BD5 – Stratford	BD6 – Roseberry	BD7 – Roseglass	BD8 – Yarrowonga
November 2013	1.4	1.2	1.4	1.1	1.1	0.8	0.7
December 2013	3.0	0.6	3.0	3.0	2.8	1.0	1.3
January 2014	9.5	0.5	0.3	5.7	0.4	16.8	0.6
February 2014		3.3	0.1	2.0	0.1	0.7	0.7
March 2014	<0.1	4.1	0.8	2.6	<1	0.8	1.4
April 2014	0.7	0.4	1.1	4.9	<1	0.6	0.7
May 2014	4.4	0.1	1.7	1.7	0.4	0.7	0.6
June 2014	0.5	0.8	0.9	1.9	0.7	0.3	0.6
July 2014	2.7	<0.1	0.7	1	0.2	<0.1	0.2
August 2014	4.3	0.3	4	1	0.1	0.3	1.1
September 2014	0.3	0.2	0.5	1.1	0.4	0.4	0.9
October 2014	2.2	0.9	0.9	1.2	3.5	1.5	1.3
<b>Annual Average</b>	<b>2.7</b>	<b>1.0</b>	<b>1.3</b>	<b>2.3</b>	<b>1.0</b>	<b>2.0</b>	<b>1.0</b>

Results show slightly elevated results for BD2A in August 2014 however the annual average at all sites remains well below the concentration threshold of 4g/m<sup>2</sup>/month.

## PM<sub>10</sub> Results

The annual averages for PM<sub>10</sub> levels up until the end of September 2014 remain below the annual average limit of 30µg/m<sup>3</sup>, as follows:

Costa Vale: 16.44µg/m<sup>3</sup>

Roseberry: 12.03µg/m<sup>3</sup>

The real time PM<sub>10</sub> monitor at “Roseberry” is currently operating to send alarms to operations in the event that PM<sub>10</sub> levels approach compliance limits.

## Water Monitoring

### Ground Water

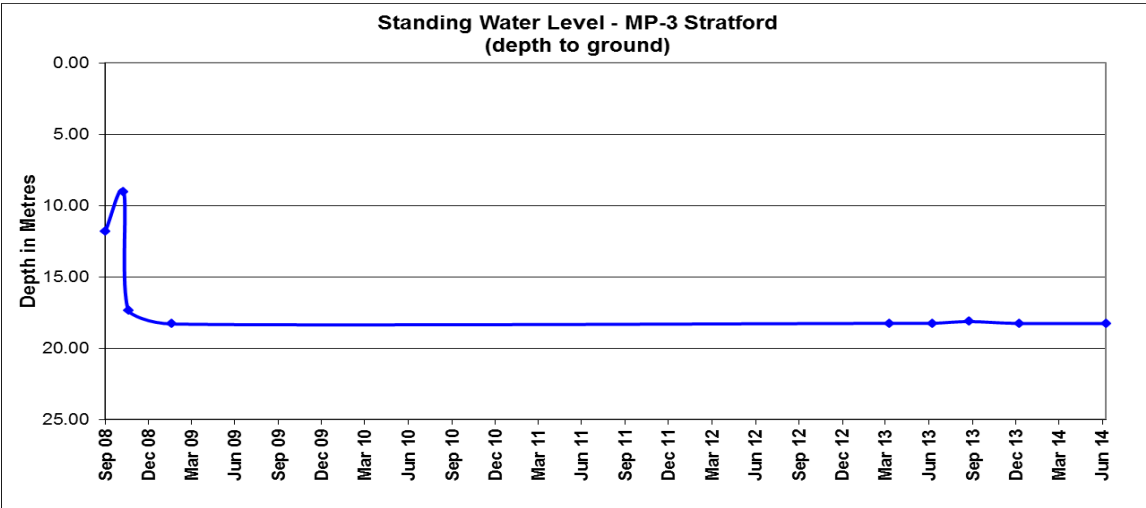
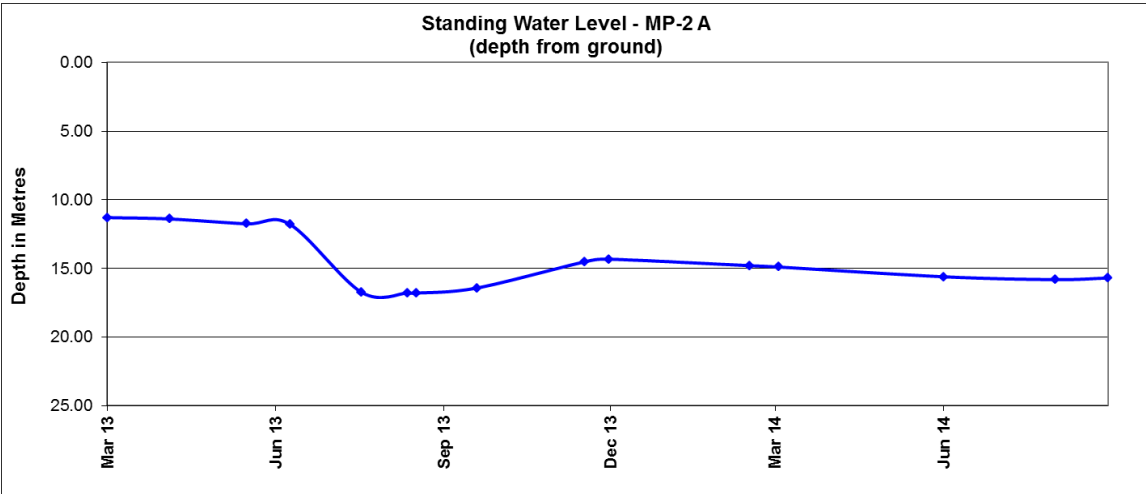
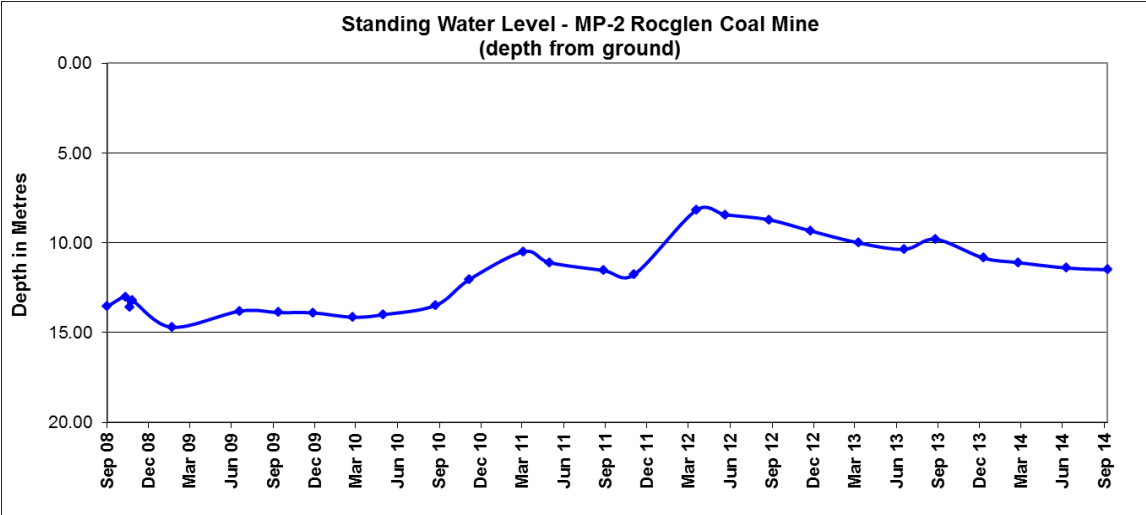
Groundwater monitoring data for the last 12 months is presented in the following table. Standing Water Level (SWL) graphs of bores with sufficient data sets are also provided.

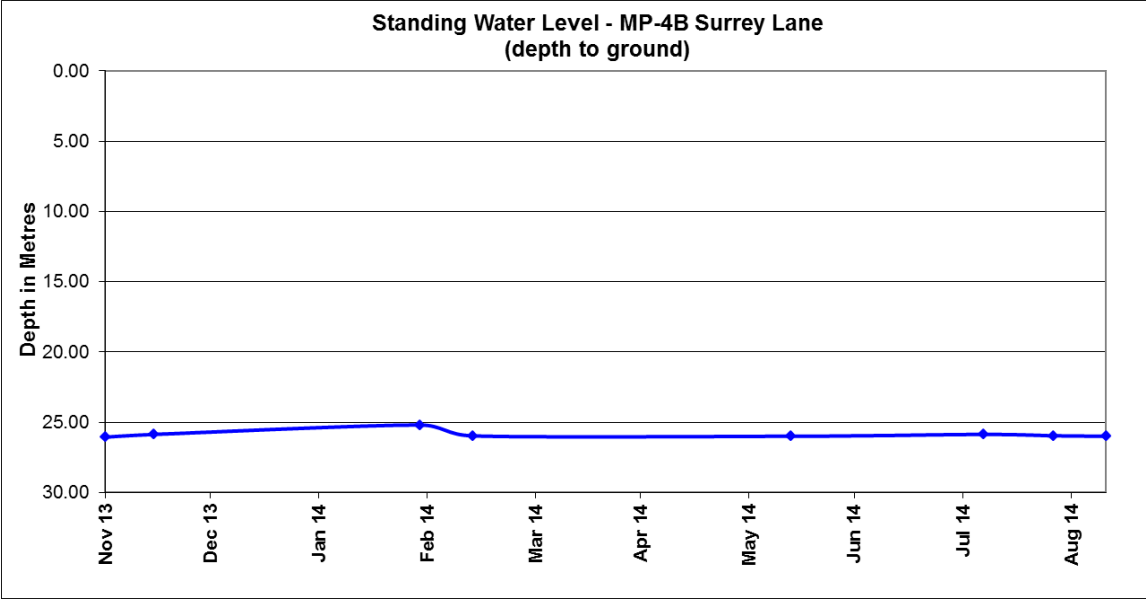
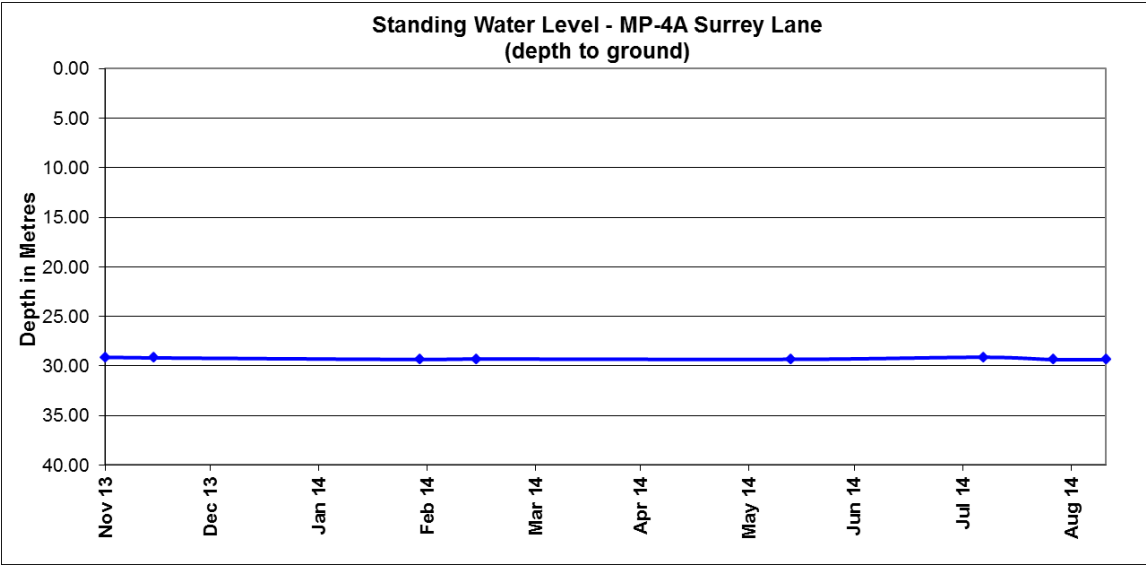
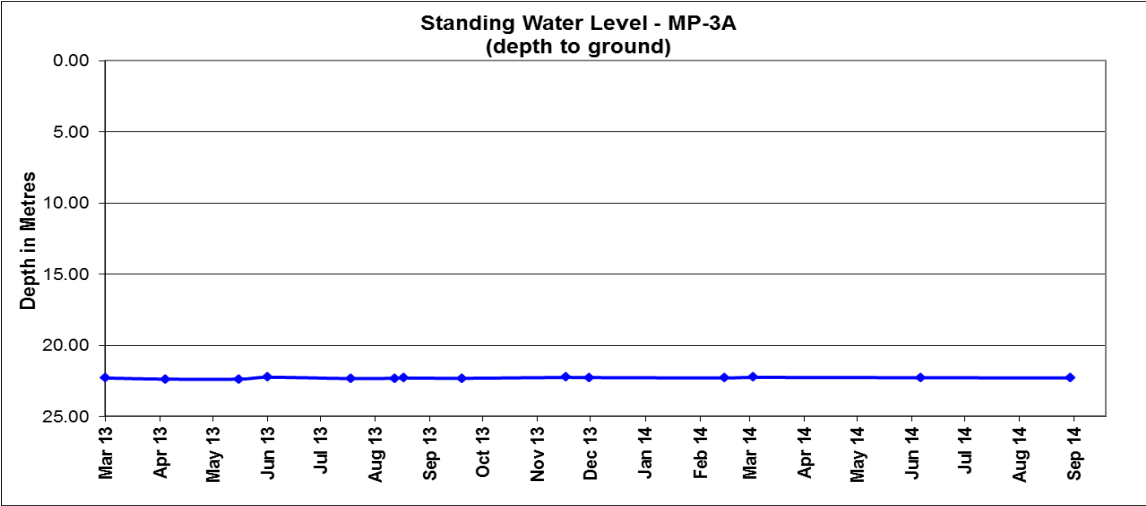
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
MP2	11 Dec 13	10.84	7.2	4870
	26 Feb 14	11.1	8.06	5250
	12 Jun 14	11.4	7.2	4930
	10 Sep 14	11.5	7.2	4930
MP2a	23 Aug 13	16.80		
	28 Aug 13	16.80	5.3	2360
	30 Sep 13	16.43		
	28 Nov 13	14.52		
	11 Dec 13	14.33	6.7	3140
	26 Feb 14	14.80	7.68	3250
	12 Jun 14	15.61	7.00	3180
	10 Sep 14	15.7	7.00	3210
MP3	28 Aug 13	18.13	Insufficient water to sample	
	11 Dec 13	18.26	Insufficient water to sample	
	24 Feb 14	Dry	Insufficient water to sample	
	12 Jun 14	18.27	Insufficient water to sample	
	10 Sep 14	18.27	Insufficient water to sample	
MP3a	23 Aug 13	22.32		
	28 Aug 13	22.9	7.8	1250
	30 Sep 13	22.32		
	28 Nov 13	22.26		
	11 Dec 13	22.27	7.9	1305
	26 Feb 14	22.30	8.37	1340
	17 Jun 14	22.28	7.8	1284
	10 Sep 14	22.30	7.8	1290
MP4	28 Aug 13	Dry		
	11 Dec 13	Dry		
	26 Feb 14	Dry		
	12 Jun 14	Dry		
	10 Sep 14	Dry		

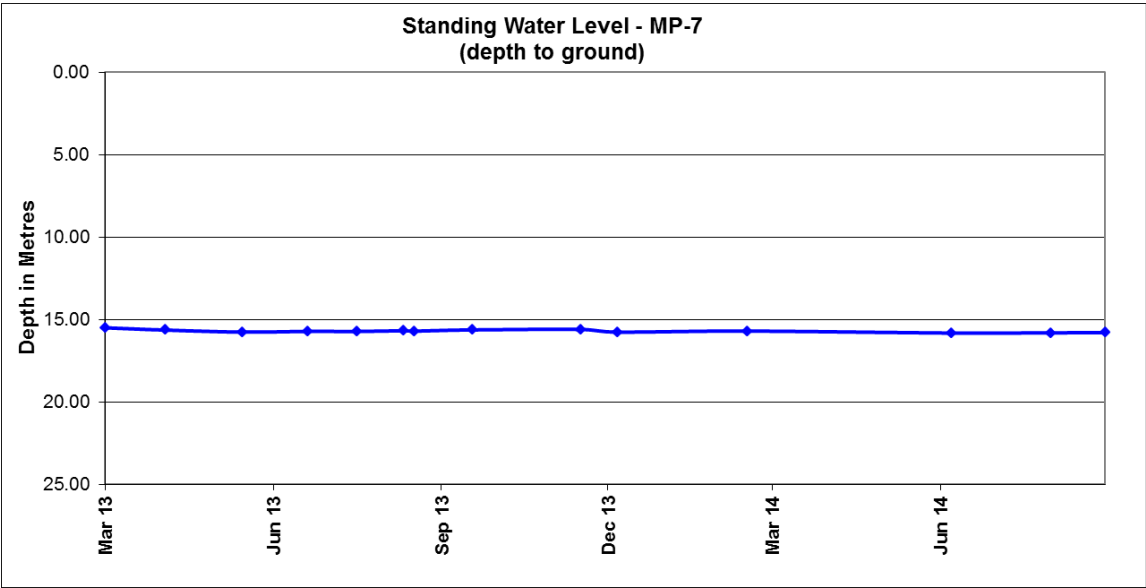
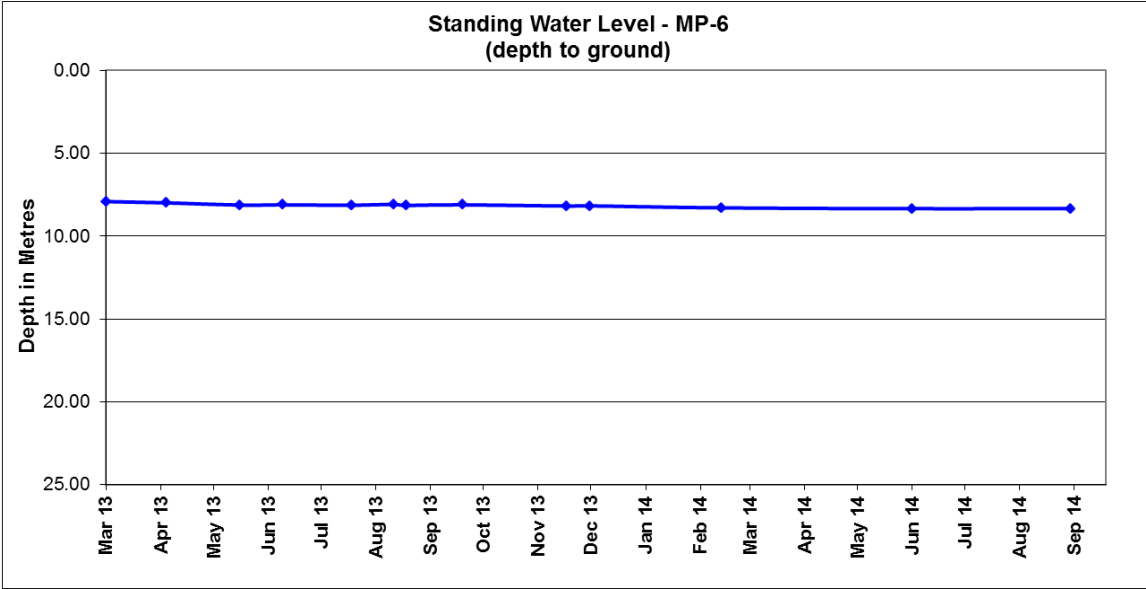
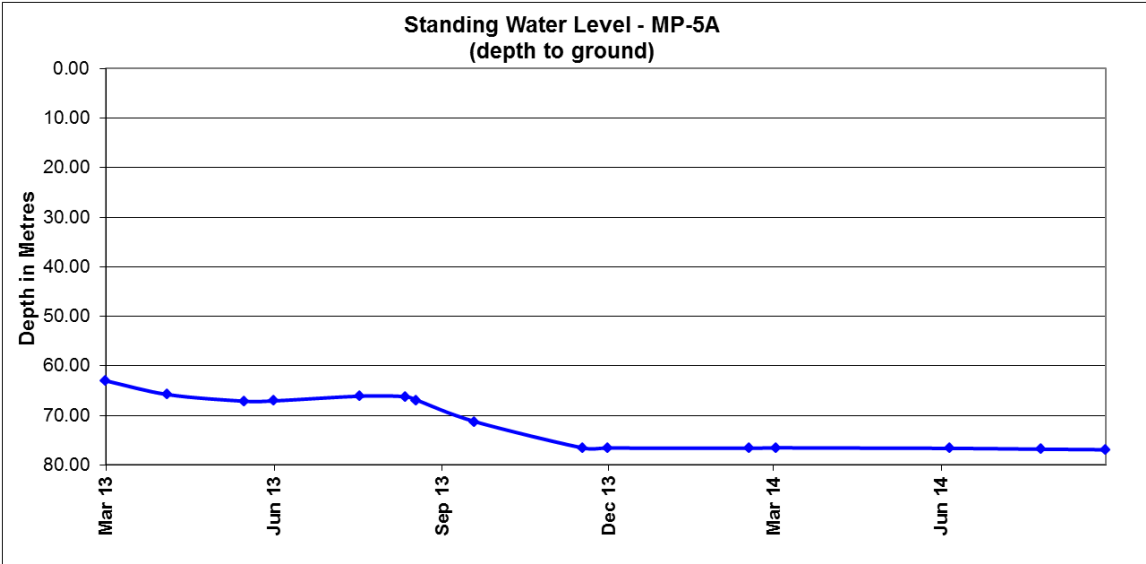
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
MP4a	28 Nov 13	29.12		
	12 Dec 13	29.18	6.8	3210
	26 Feb 14	29.38	7.98	3820
	12 Jun 14	29.33	7.1	3690
	06 Aug 14	29.12		
	26 Aug 14	29.36		
	10 Sep 14	29.35	7.2	3720
MP4b	28 Nov 13	26.06		
	12 Dec 13	25.87	7.3	2960
	26 Feb 14	25.2	8.15	3050
	12 Jun 14	26.00	7.3	2960
	06 Aug 14	25.87		
	26 Aug 14	25.97		
	10 Sep 14	26.00	7.4	2950
MP5	28 Aug 13	Dry	Insufficient water to sample	
	12 Dec 13	Dry	Insufficient water to sample	
	27 Feb 14	Dry	Insufficient water to sample	
	12 Jun 14	Dry	Insufficient water to sample	
MP5a	23 Aug 13	66.20		
	29 Aug 13	66.90	7	2710
	30 Sep 13	71.25		
	28 Nov 13	76.55		
	12 Dec 13	76.56	7	2770
	27 Feb 14	76.60	7.32	3070
	17 Jun 14	76.63	7	3010
	06 Aug 14	76.79		
	10 Sep 14	76.90	6.9	2990
MP6	22 Aug 13	8.08		
	29 Aug 13	8.14	7.1	2890
	30 Sep 13	8.11		
	28 Nov 13	8.18		
	11 Dec 13	8.17	7.2	2780
	24 Feb 14	8.29	7.4	2580
	12 Jun 14	8.34	7.3	2360
	10 Sep 14	8.33	7.4	2260
MP7	23 Aug 13	15.68		
	29 Aug 13	15.70		
	30 Sep 13	15.63		
	28 Nov 13	15.60		
	18 Dec 13	15.76	6.9	2970
	27 Feb 14	15.87	7.26	3200
	19 Jun 14	15.82	7	3050
	12 Aug 14	15.81		
	10 Sep 14	15.80	7	3040
MP8	23 Aug 13	15.84		
	29 Aug 13	15.90	5.44	3180
	30 Sep 13	15.81		

Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
	28 Nov 13	15.80		
	18 Dec 13	15.92	6.4	3620
	27 Feb 14	16.05	6.72	3920
	19 Jun 14	16.01	6.9	4010
	12 Aug 14	16.07		
	10 Sep 14	7.75	6.7	4170
WB1	29 Aug 13	7.99	No sample available	
	11 Dec 13	8.0	No sample available	
	24 Feb 14	8.11	No sample available	
	12 Jun 14	8.15	Windmill over bore	
WB2	28 Aug 13	15.92	7.1	2840
	11 Dec 13	15.73	No access	
	26 Feb 14	16.22	8.15	3070
	12 Jun 14	15.76	8.7	2700
	10 Sep 14	18.82	7.8	2090
WB3	30 Aug 13	7.86	Pump over bore	
	18 Dec 13	7.57	Pump over bore	
	27 Feb 14	7.8	Pump over bore	
	12 Jun 14	8.05	Pump over bore	
WB4	29 Aug 13	Unable to dip	No sample	
	12 Dec 13	Unable to dip	No sample	
	27 Feb 14	Unable to dip	No sample	
	12 Jun 14	Unable to dip	No sample	
WB5	28 Aug 13	12.1	8.2	6910
	11 Dec 13	12.31	7.8	7130
	26 Feb 14	19.0	7.86	7840
	12 Jun 14	12.56	7.9	7740
	10 Sep 14	14.5	7.6	5340
WB6	28 Aug 13	20.59	Bore equipped	
	11 Dec 13	26.66	Bore equipped	
	24 Feb 14	20.86	Bore equipped	
	12 Jun 14	21.08	Bore equipped	
WB7	28 Aug 13	10.15	No access	
	11 Dec 13	10.36	No access	
	24 Feb 14	10.68	No access	
	12 Jun 14	10.87	Windmill over bore	
WB8	30 Sep 13	31.19	Unable to Sample – pump over bore	
	12 Dec 13	31.1	Unable to Sample – pump over bore	
	27 Feb 14	31.31	Unable to Sample – pump over bore	
	12 Jun 14	29.77	Pump over bore	
WB9	28 Aug 13	23.94	No access	
	12 Dec 13	23.78	No access	
	26 Feb 14	24.69	8.12	1240
	12 Jun 14	24.27	7.7	1250
	11 Sep 14	24.19	7.5	1180

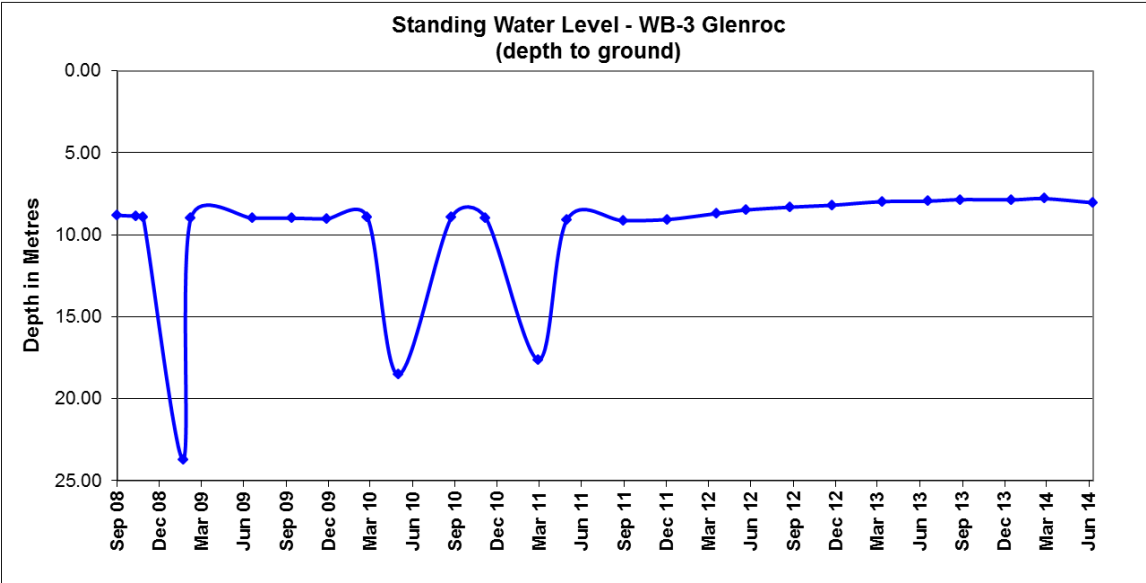
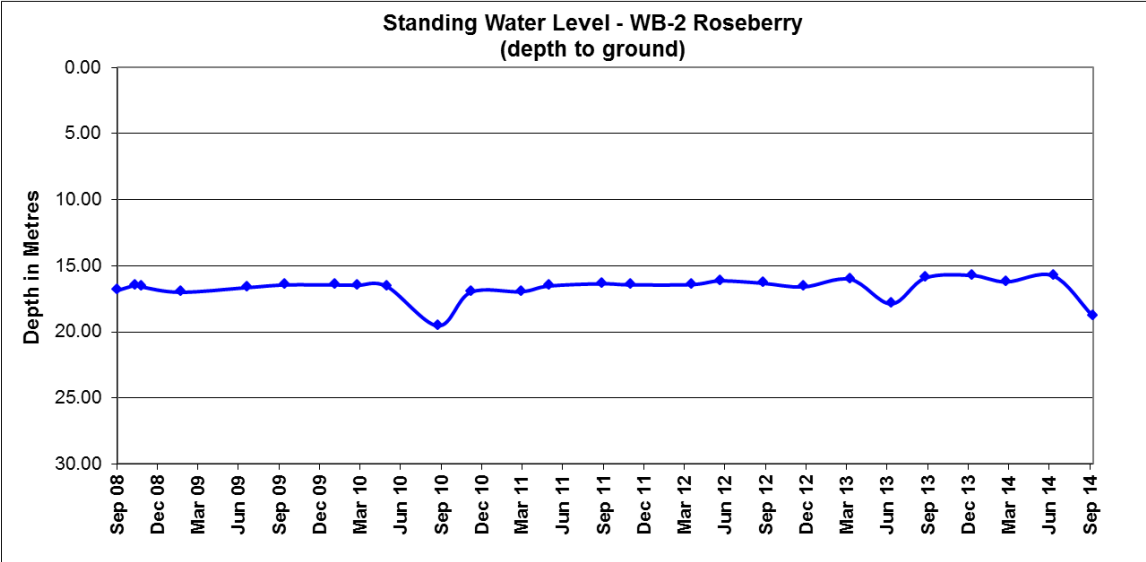
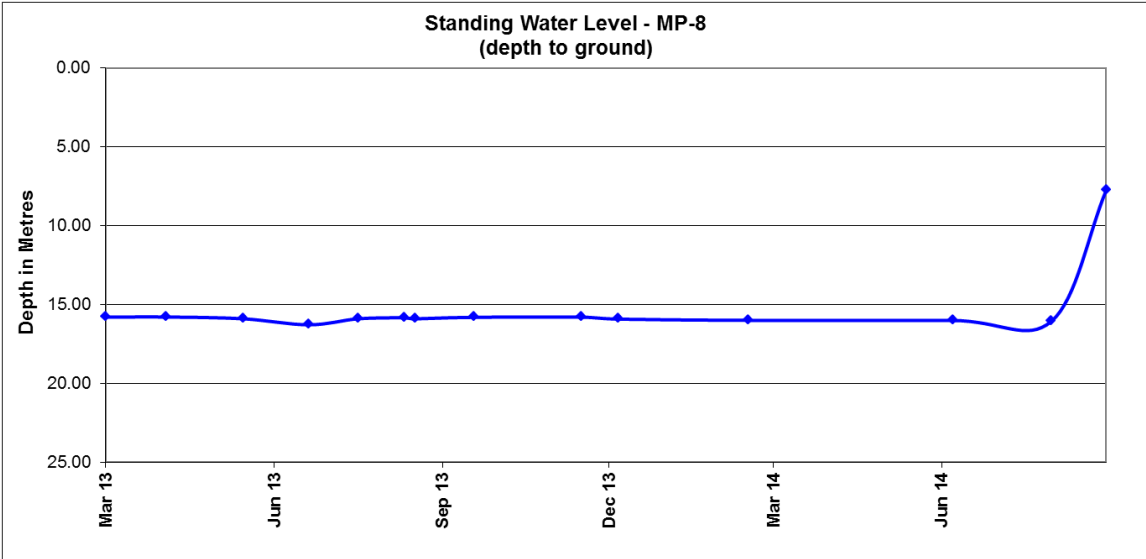
Site	Date	SWL (m)	pH	Elect. Conduct µs/cm
<b>WB10</b>	30 Aug 13	14.13	6.9	1880
	12 Dec 13	14.3	7	1925
	26 Feb 14	14.33	7.58	2110
	19 Jun 14	14.07	7.1	2010
	11 Sep 14	13.93	7	1960
<b>WB11</b>	30 Aug 13	16.67	7.6	1120
	12 Dec 13	16.7	7.8	1310
	26 Feb 14	18.15	8.37	1690
	19 Jun 14	16.93	7.7	1420
	11 Sep 14	16.65	7.8	1210
<b>WB12</b>	30 Aug 13	13.08	8.1	1690
	12 Dec 13	12.98	7.9	1730
	26 Feb 14	13.08	8.38	1930
	19 Jun 14	13.14	8	1694
	11 Sep 14	13.08	7.9	1800
<b>WB13</b>	28 Aug 13	38.50	6.9	3730
	12 Dec 13	41.82	7	3460
	26 Feb 14	42.40	7.93	3690
	12 Jun 14	33.93	7.1	3540
	11 Sep 14	40.90	7	3380
<b>WB-14</b>	18 Dec 13	10.16	7.6	1315
	27 Feb 14	22.90	7.8	1150
	12 Jun 14	18.77	7.7	1260
	11 Sep 14	18.60	7.7	1280
<b>WB-15</b>	11 Jul 14	27.62		
	26 Aug 14	30.11		
	11 Sep 14	30.28	6.9	1390
<b>Production Bore</b>	28 Aug 13	Bore Equipped	6.9	3430
	11 Dec 13	Bore Equipped	7	3630
	24 Feb 14	Bore Equipped	6.9	3490
	12 Jun 14	Bore Equipped	7	3590
	10 Sep 14	Bore Equipped	6.9	3620
<b>Surrey No.2</b>	30 Aug 13	33.29	7.21	3110
	12 Dec 13	34.55	7.3	3420
	27 Feb 14	33.55	7.3	3060
	12 Jun 14	32.74	7.3	3310
	11 Sep 14	34.29	7.2	3620

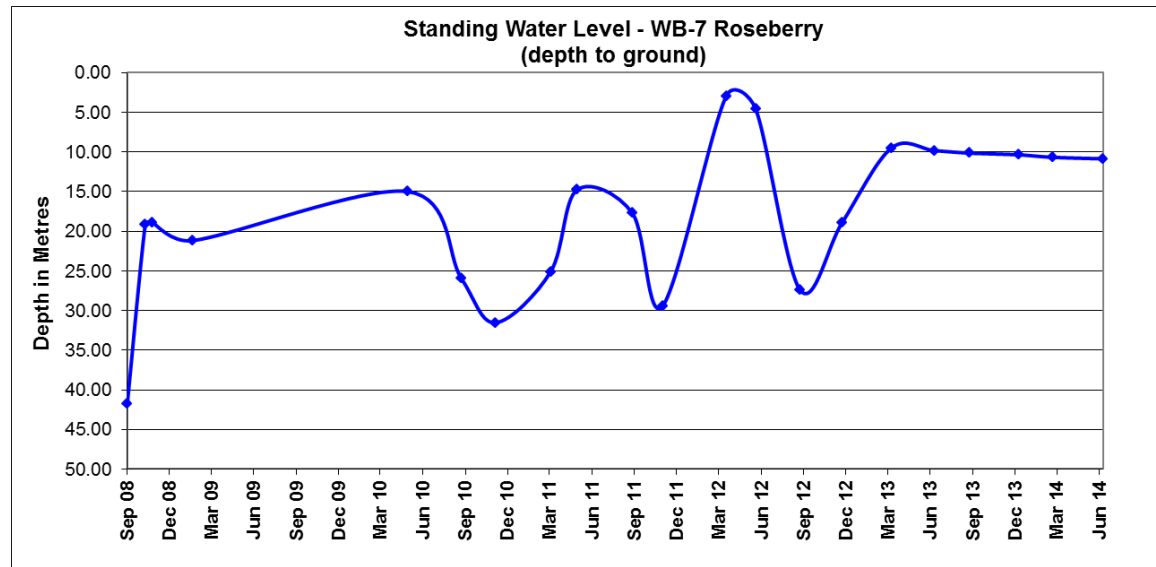
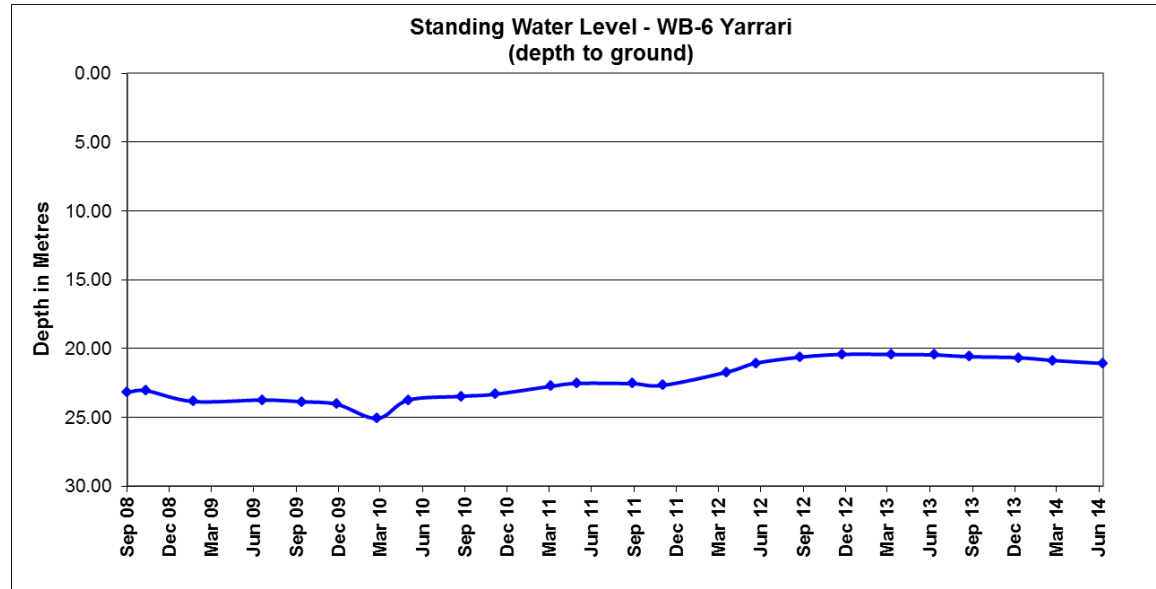
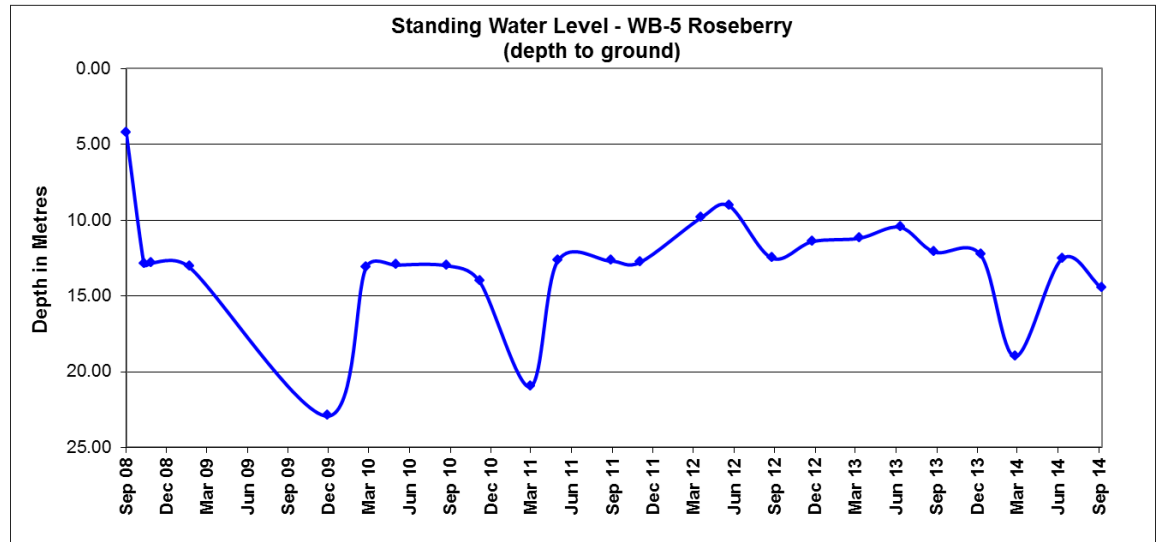


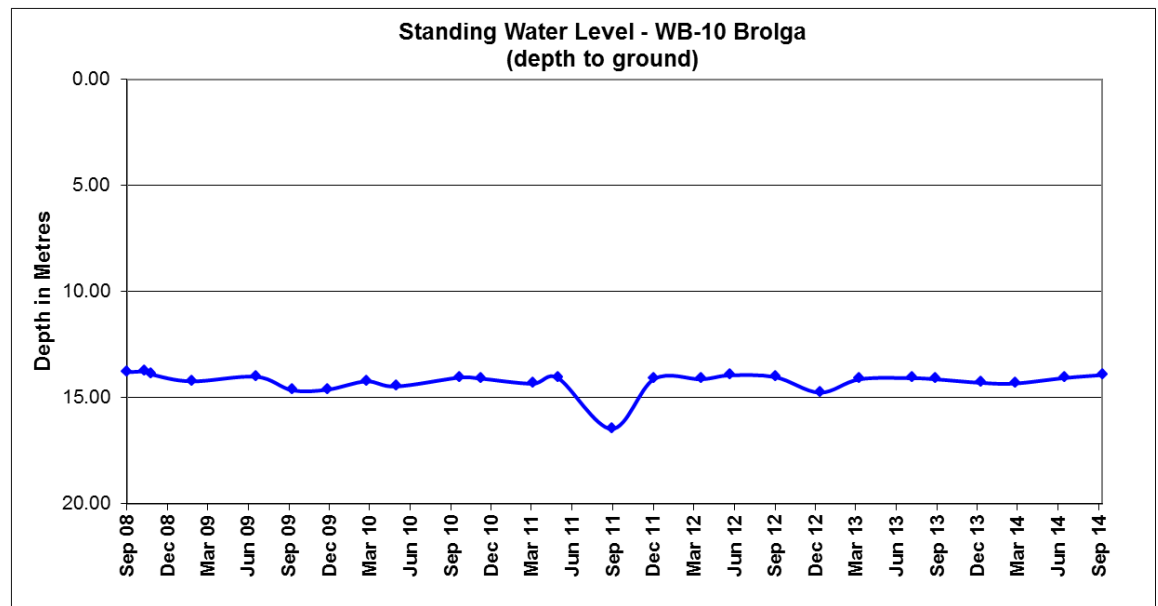
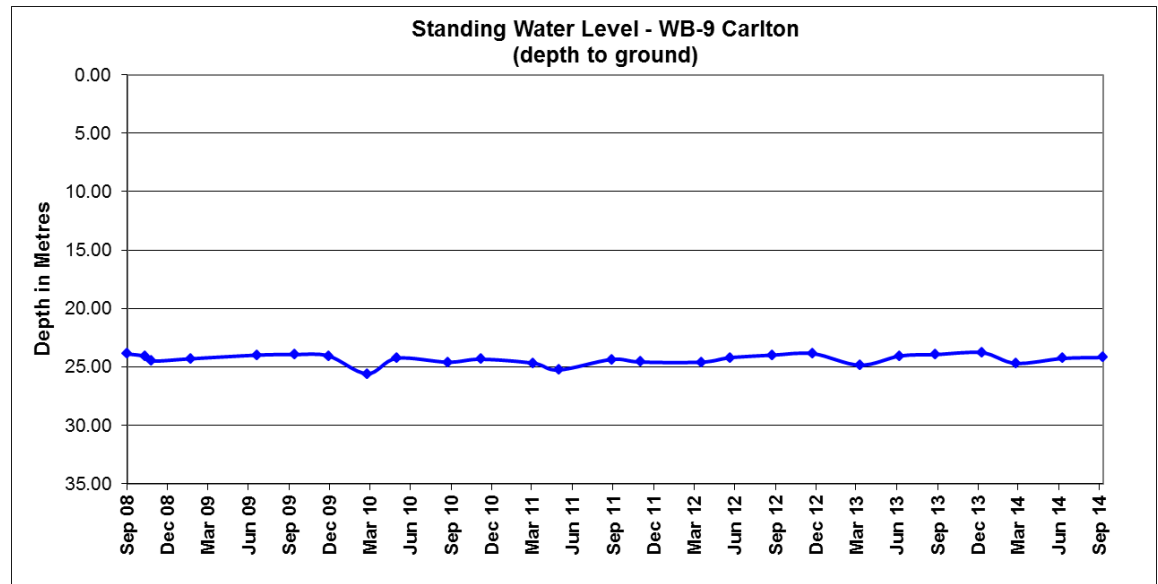
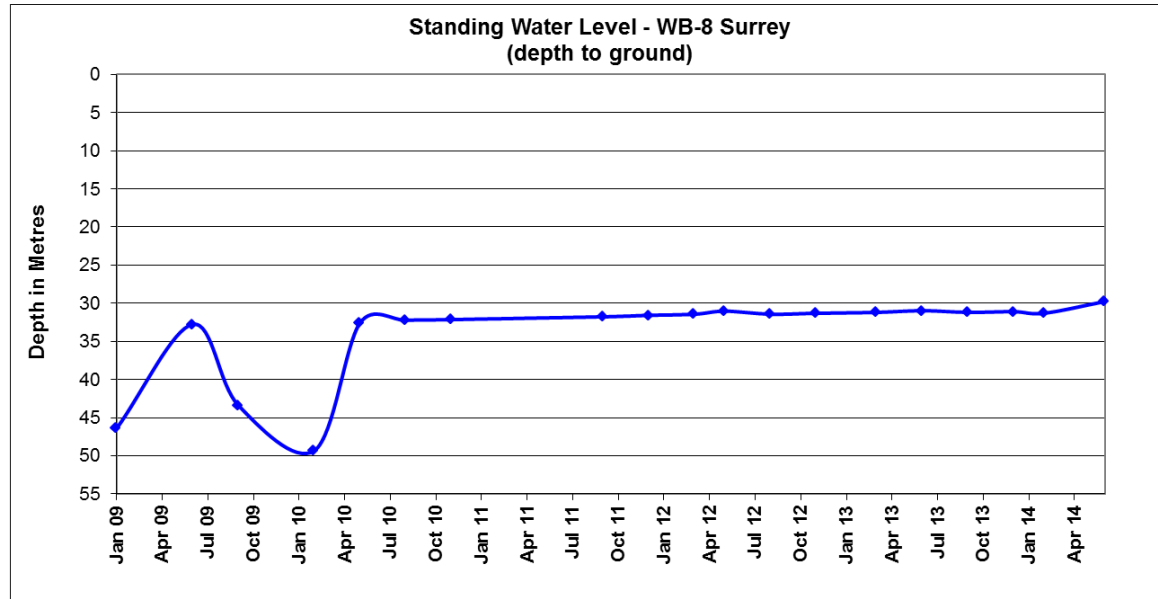


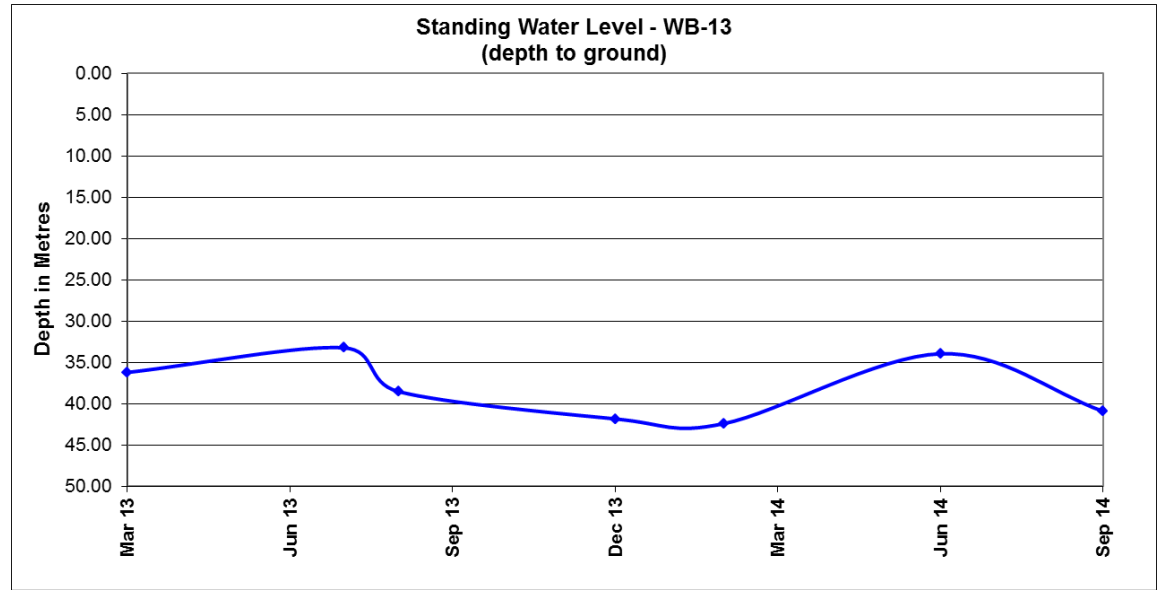
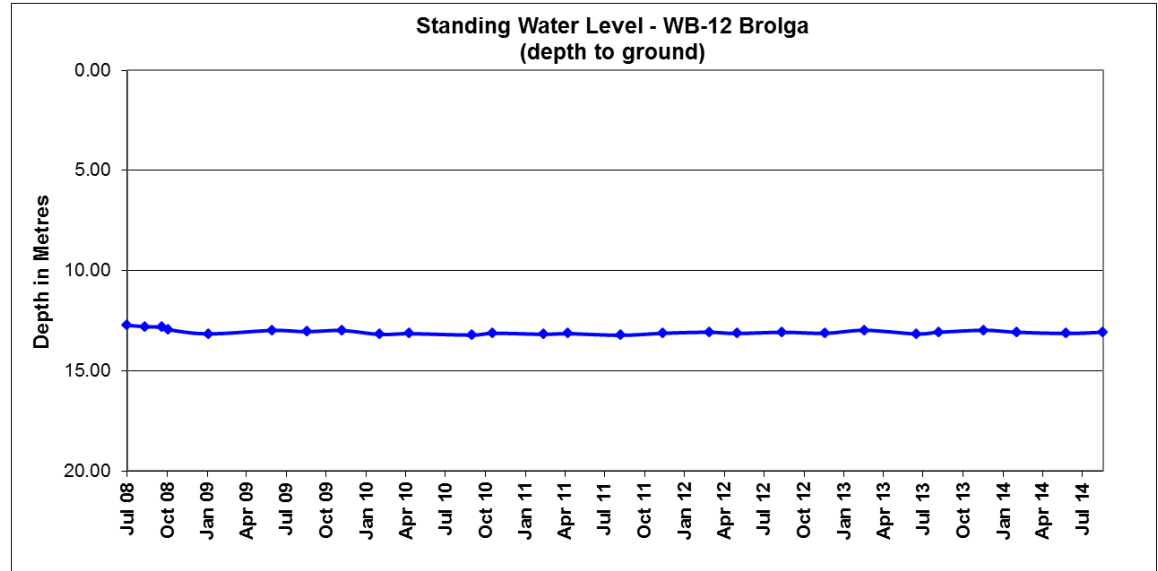
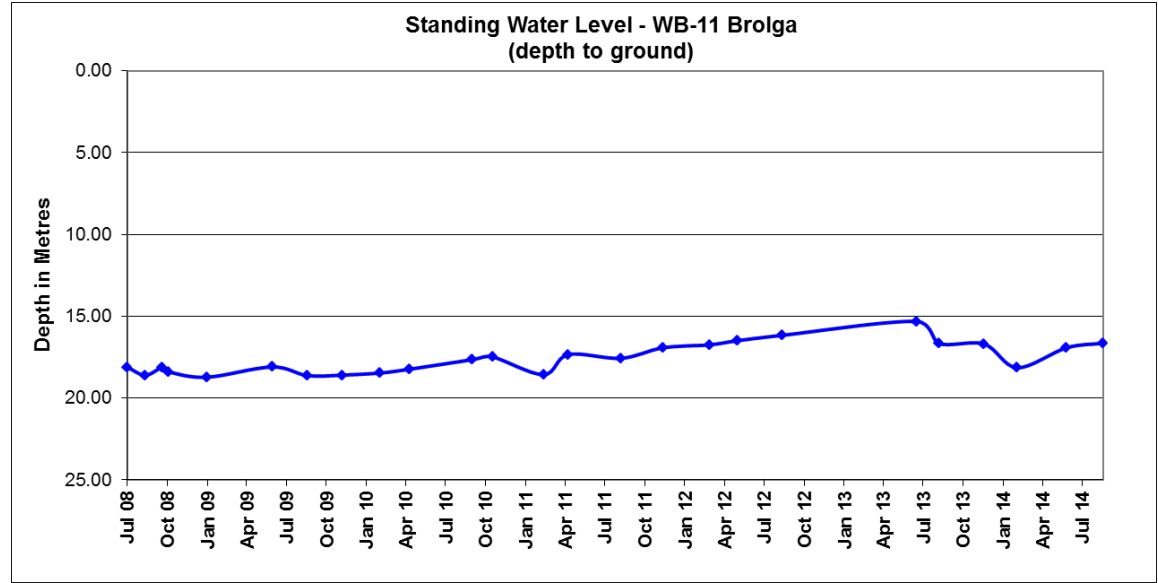


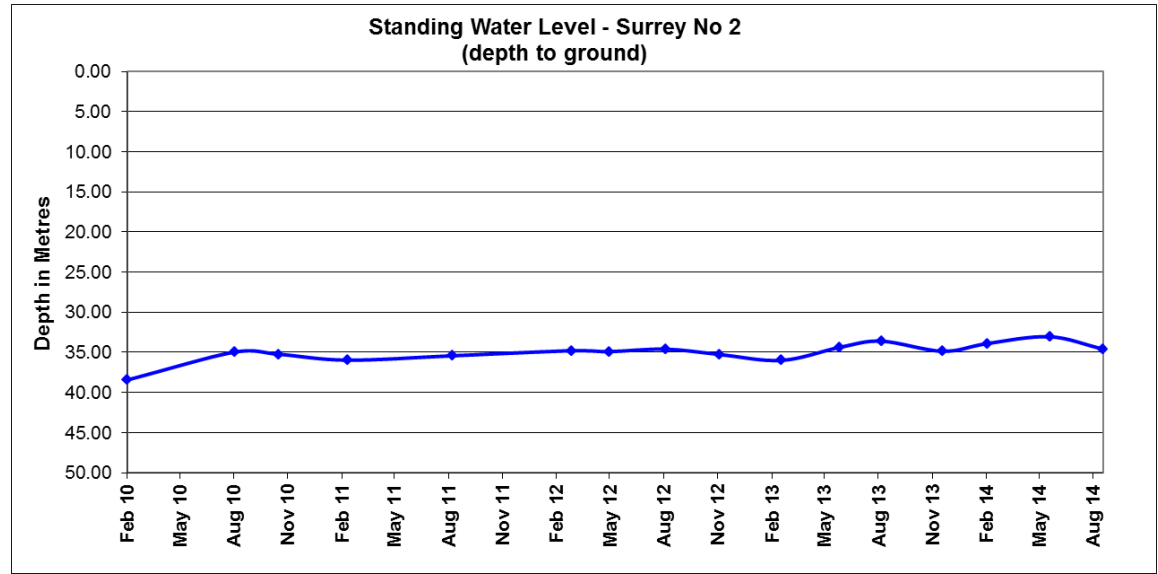
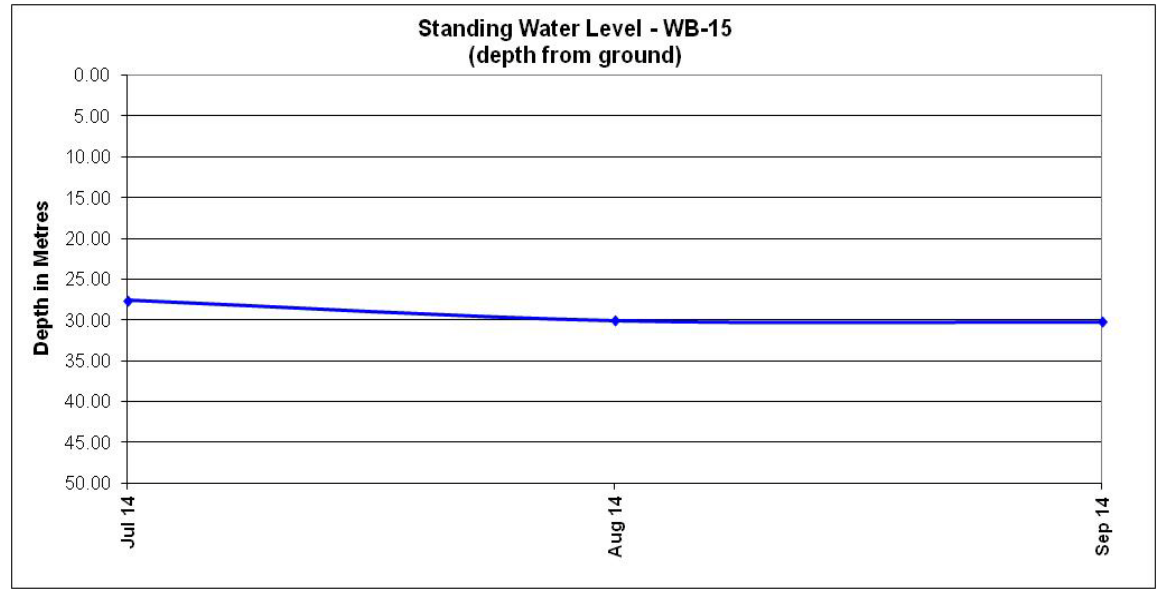
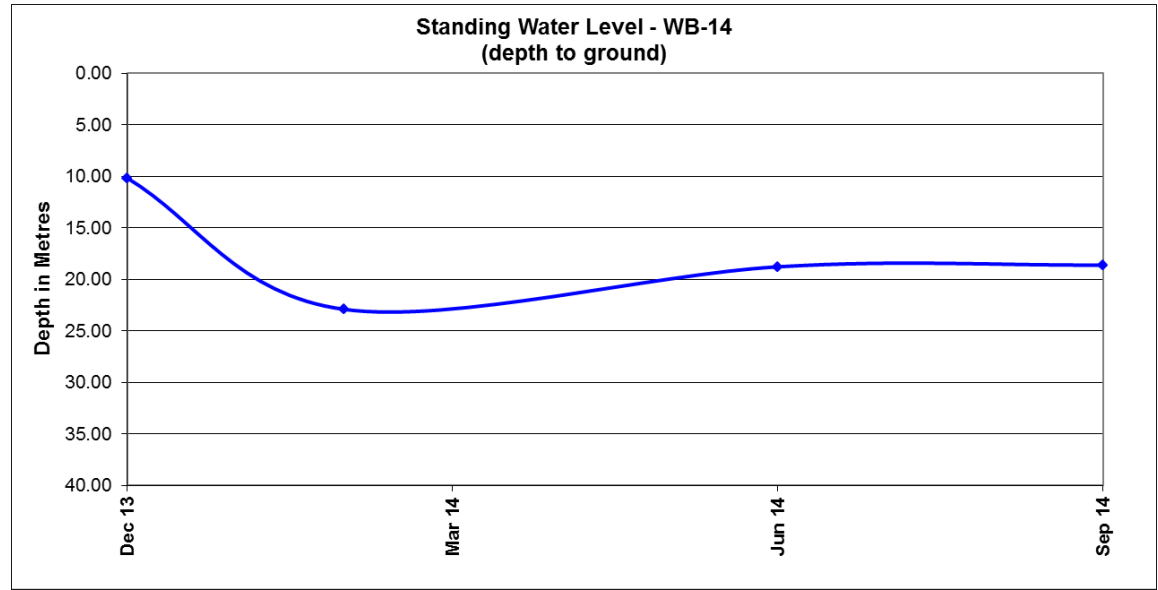


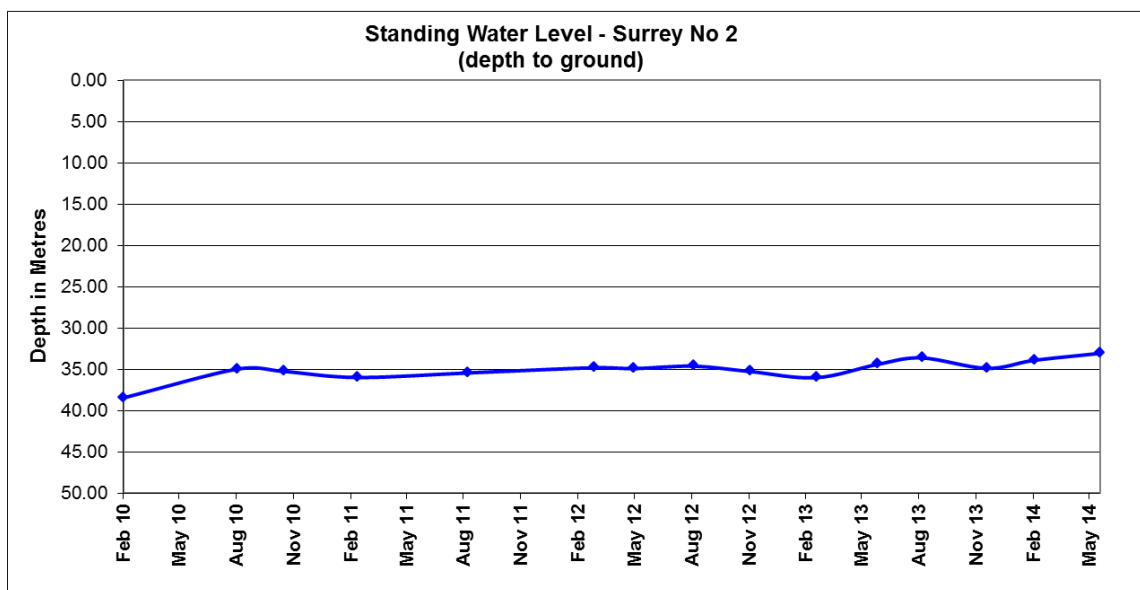












Standing water levels have remained relatively consistent since the last CCC meeting. MP-8 has shown an increase in SWL of approximately 9m. It is suspected that this was an error during monitoring, which will be confirmed during the next round of monitoring. WB-5 (at Roseberry) continues to show a fluctuating trend associated with non mining activities. The SWL measured during September 2014 at WB-11 (Brolga) has shown an increase back towards 2012-2013 levels.

Monitoring at WB-15 (Kahana) commenced in July following landholder concerns. The SWL has ranged between 28 and 30 metres over 3 monitoring events.

### Surface Water

No wet weather discharges occurred at Rocglen during the period.

### Complaints

One complaint has been received during the last three months. The complaint related to impacts from blasting, summarised in the table below.

Method	Date/Time of Complaint	Nature of Complaint	Investigation	Action Taken / Follow-up
Phone call to Site Office	29/08/2014 12:00pm	Complainant rang the site office concerned about the noise of the blast and fume from the blast. Complainant stated that this was the first blast they had heard from Rocglen in some time and it was very loud, caused birds to lift.	The Rocglen Environmental Officer contacted the complainant at approximately 12:20pm on 29/08/14 to notify the complainant that their message had been received and to discuss the complaint. The complainant notified the EO that they had called as the blast was very loud and that was unusual as they usually do not hear Rocglen blasts. They were also concerned that fume from the blast may impact them, however the complainant confirmed that no fume was visible and that there was little dust visible from the blast, although there was a faint gunpowder smell. The EO informed the complainant that the blast monitors showed the blast was well within the overpressure limit of 115dB, and that the blast may have sounded louder than usual as the wind was blowing in the general direction of the complainant's property and the blast was relatively high in the pit.	No follow up required.

### **Rehabilitation**

During the reporting period, rehabilitation work has continued on both the western and northern emplacement areas. Shaping works on the northern emplacement area have continued, with soil replacement expected to recommence in the November. Contour bank erosion on the western face of the western rehabilitation was repaired and an area on the southern face of the western dump was reseeded. An updated final landform design that reflects the lower height of much of the northern emplacement area was also developed and is being utilised in the development of a landform drainage design.