

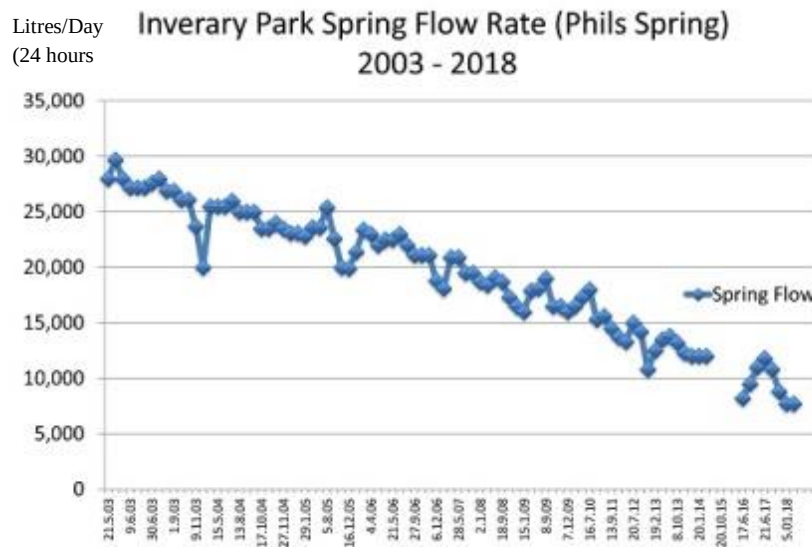
ATTACHMENT 1

SUBMISSION PM & DC BROADHEAD

INVERARY PARK, 40 BROADHEAD LANE, BUNGONIA

OBJECTION TO ARDMORE PARK QUARRY MODIFICATION (MP 07-0155 Mod 3)

UNDERGROUND WATER



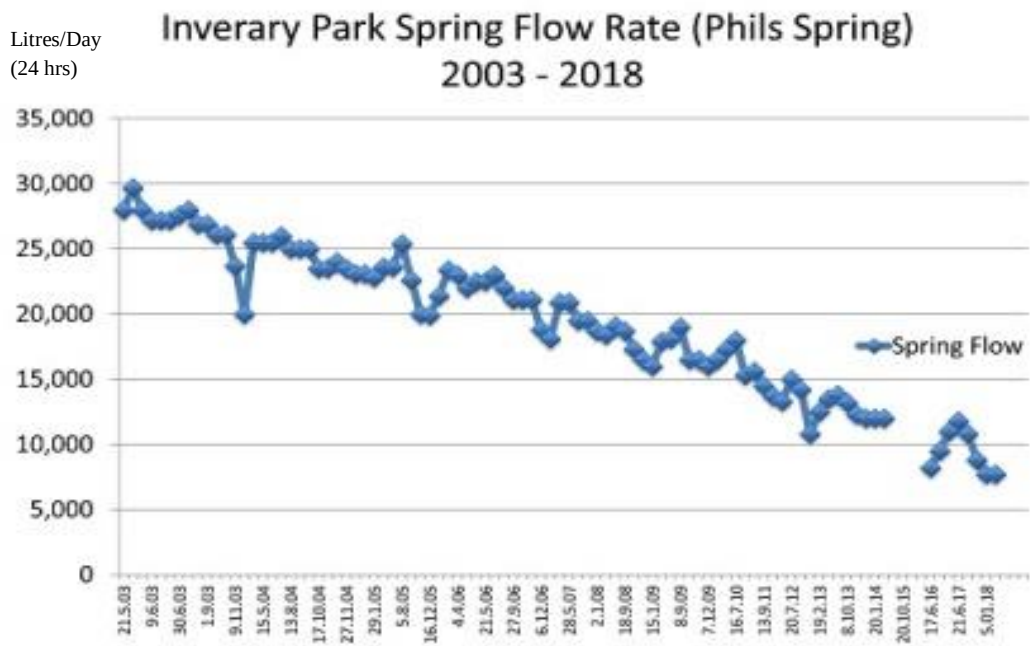
Depletion of Underground Water from our Spring. (Phils Spring)

Phils Spring is located on Inverary Park, Bungonia, adjoining property to the Ardmore Park Quarry on its Eastern side. The natural spring flows out of the ground in a fenced off area, then is piped underground to flow into a holding dam. (See picture below). It is pumped by a diesel motor (in shed) to a holding tank approximately 1200 metres up the hill and then is reticulated (gravity fed) out to various troughs in paddocks around the property. We are on basalt soil here and while it is fantastic to grow pasture, it needs a lot of rain before you have run off into your dams to fill them. This property has been in our family since 1853. Prior to that [Dr David Reid Navel Surgeon](#) was the founder who was granted land (Inverary Park) and was residing here by 1824. To our knowledge, the spring has been flowing since and before that time. It is the only permanent water source we have on this property and has never failed. The timbered in part of the spring is assumed to have been put in around Dr Reids time at Inverary Park. The previous 4 Broadhead generations to us, had passed down that it was constructed before the Broadheads were here.



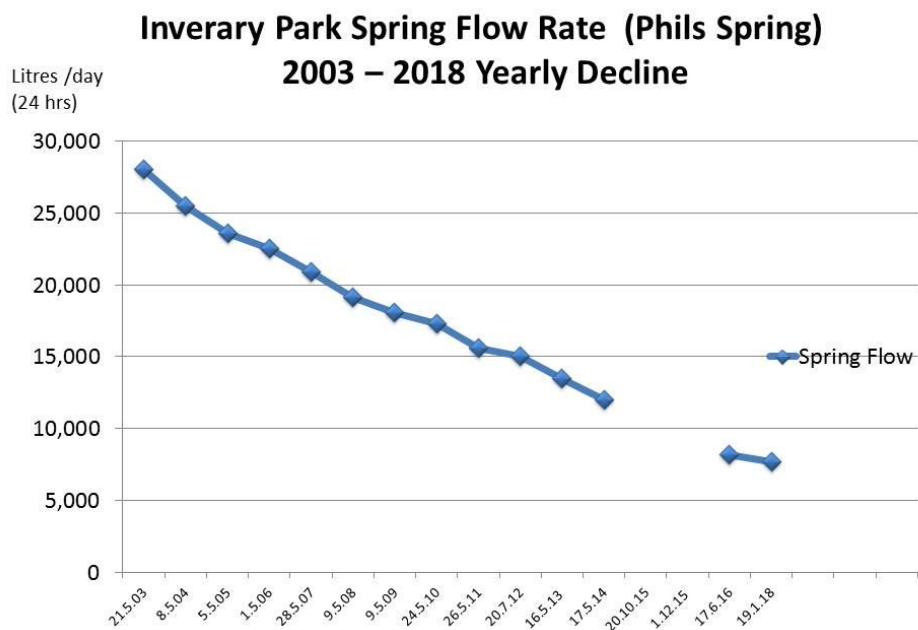
Inverary Park (Phil's Spring) has been flowing for at least 190 years approx.

Since 2003 when Multiquip (CEAL) were proposing a Chicken Farm, we have been recording Spring Flow Rates for (Phil's spring) Inverary Park. It can be seen very clearly by the following graph below, the steady decline from 28,000 litres a day (21/5/2003) to 7,700 litres a day 5.1.2018. Our minimum requirement for stock alone in summer is 10,000 litres a day. This spring has been flowing since white settlement and used for over 80 years on this property as the main water source. Unfortunately there is no flow data available pre 2003, however we could always pump 27,000 litres a day every day in dry weather without fail to a header tank.

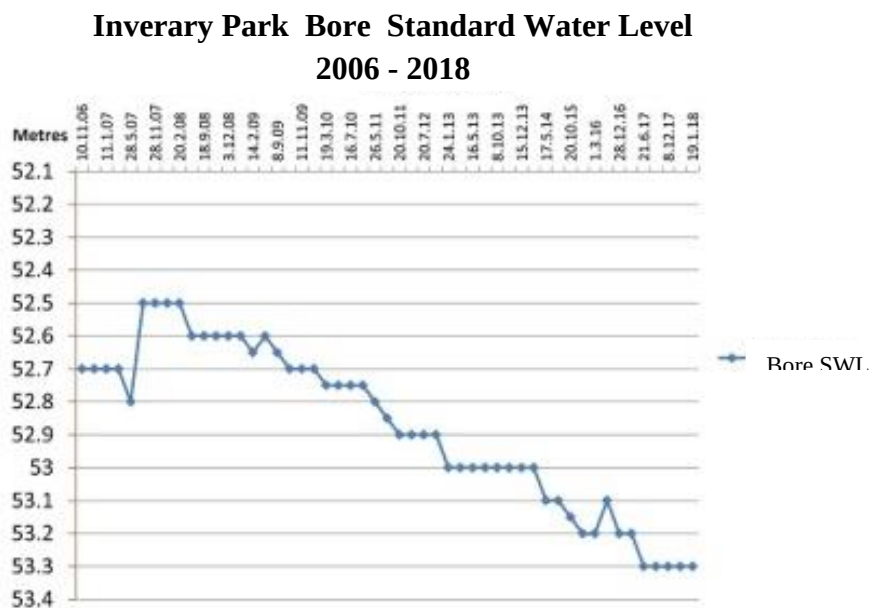


This is a graph of our Spring compiled with all our data.

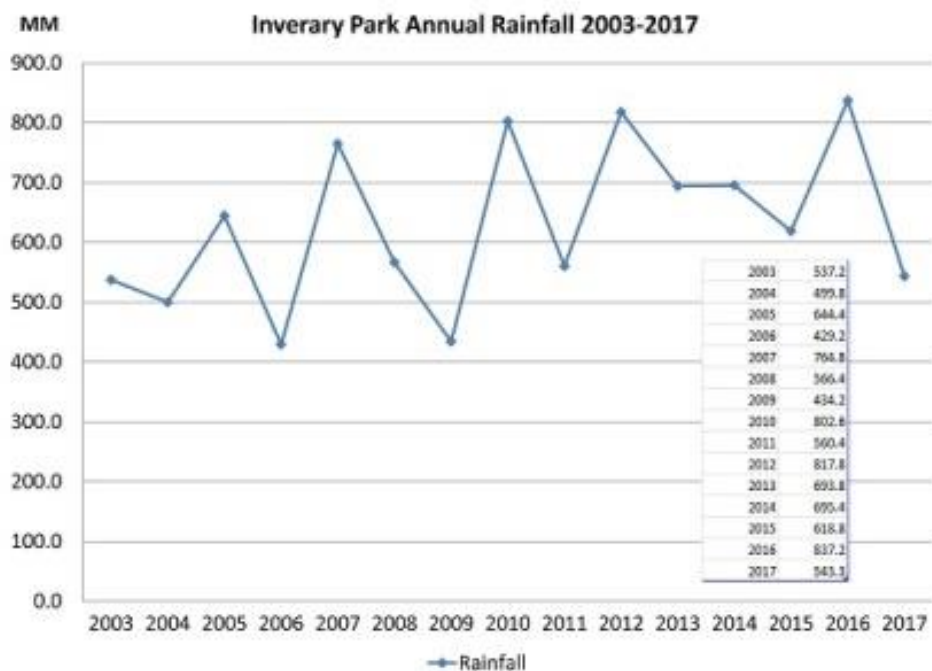
While Larry Cooke describes our spring as fluctuating, this may be on a monthly scale as seen above, it will fluctuate with rainfall & storms. However when you take it on an annual basis as seen below, it is a steady decline. Anyway you look at this it can only be described as Depletion. Depletion in which has never occurred here until the bores were put in on Ardmore Park and they started extracting water. We have all the figures for the years recorded if you need copy.



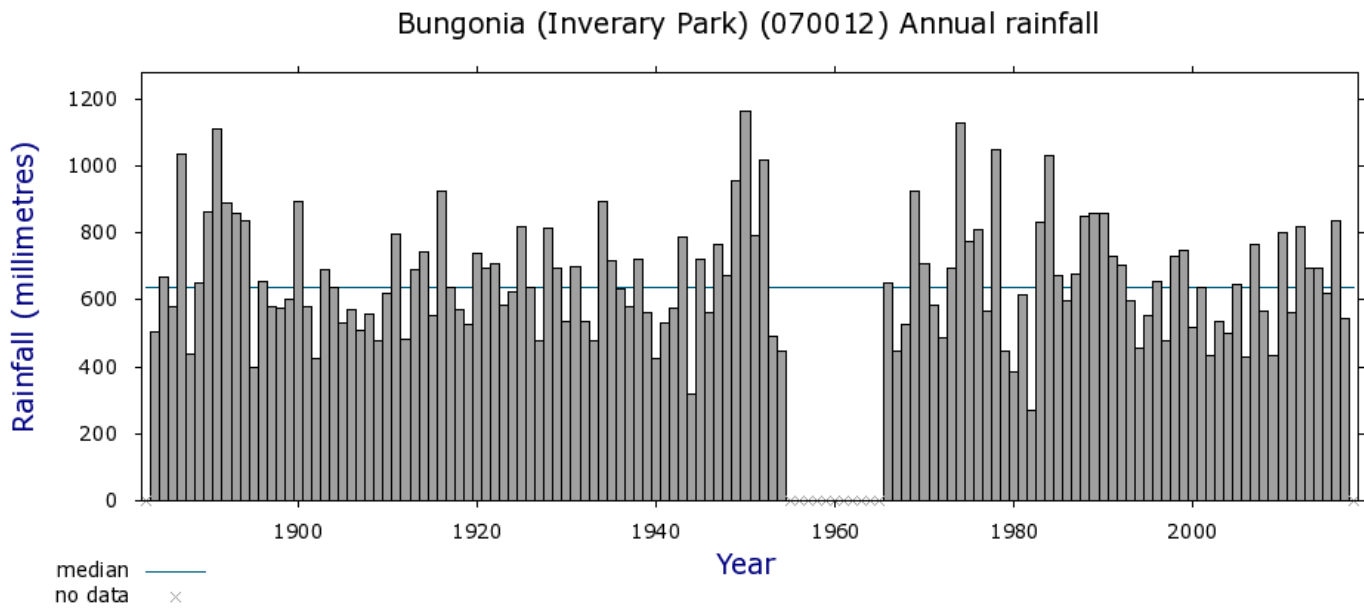
We also have a bore near our house which was put in around 1920, but the volume became insufficient, probably due to blockage, so they stopped using it around 1930. This is when Phils spring came into operation full time & replaced the bore. We have been keeping records of water levels for this bore since 10.1.2006. The accuracy was not good until 22.10.07 when a new Longer Tape was acquired. This graph below also shows a decline in water levels.



Inverary Park is the Official rainfall Station (70012) for the Bureau of Meteorology. Using the annual data for the years of 2003 up to January 2017 shows that the decline is not because of lower rainfall. Bungonia’s current annual rainfall is 660mm.



1880's to 2018



Climate Data Online, Bureau of Meteorology
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ONGOING ISSUES WITH THE QUARRY

Ardmore Park Quarry Production Bore (BHAP6) was established in 2003. Extraction of water would have been started shortly after testing was carried out. This testing was completed **‘in house’** and no consultation with neighbours who have surrounding bores & Springs. One western neighbour to the quarry was privy to when they did the pump test (via an external source) and at the time of the 46 hour pump test his bore dropped 1 metre and a further 2.6 metres afterward, settling at 3.6 metres total. He did tell Jason Mikosic, but did not pursue it as he did not rely on his bore for livelihood.

Taken from the EIS dated January 2005: Summary – page - xxiv - Ground Water

A 46-hour pump test and analysis of drawdown and recovery in this and surrounding bores indicated that the proposed rate of pumping to supply the water requirements to the proposed quarry would be unlikely to significantly impact on the groundwater of this aquifer or surrounding aquifers.

This statement was only for the water sources on Ardmore Park, not any of the surrounding bores or springs to the proposed quarry.

The quarry was approved in 2009 and operations well underway by 2013. Extraction of water from the production bore was happening long before that, how often and quantities we don't know, but we know from clear observation from a neighbours perspective that the quarry dams were full when everyone else in the district had low or empty dams. There is a total disrespect from Mulitquip for the underground water and how precious it is to locals. It is our only water other than what falls from the sky.

The underground water is not an infinite source and there is proof that the water is declining not just for us but also for the mine. They have been pumping water everyday with the sand washing and now they have found the sand to have more clay in it, they are using more water to wash it.

In 2008 we were so worried about the underground water which had declined by approx. 10,000 litres a day, that we actually went to the newspaper (22.8.2008) to see if Ardmore would take it more seriously, but they never did. (See article page 6)

Pit water worries surface

Bungonia quarry could drain springs

By LOUISE THROWER

TRUCKS may be gaining all the traction in the Ardmore Park quarry debate, but water is also bubbling up as a point of contention.

Bungonia district couple Phillip and Diane Broadhead of historic Inverary Park fear the Multiquip Quarry, 4km east of the village on Oallen Ford Rd, will drain a permanent spring running through their land and threaten their very livelihoods.

An environmental assessment for the development has rejected this view.

The Broadheads' holding adjoins the proposed quarry site and produces super fine wool.

"There is a permanent spring that has been flowing on this property since before settlement that has never been known to dry up," Mrs Broadhead said.

"It flows out of the ground and runs into a small dam and is then pumped to a water tank, which is reticulated to troughs around the basalt property."

"We use one to two megalitres each year and in doing so, we have survived many droughts."

But she said the Ardmore Park quarry was proposing to extract 100



• **QUARRY QUALMS:** Bungonia district grazier Phillip Broadhead is worried about the proposed Ardmore Park quarry's impact on ground water and springs. His Inverary Park property adjoins Ardmore Park, which can be seen in the background.

megalitres each year to wash its product and water roads in the property.

The proponents could not guarantee during a Land and Environment Court hearing last year that this extraction would not affect neighbouring bores and springs.

"The best they could say was more than likely not?" Mrs Broadhead said.

"People have the perception that there is infinite water under the ground, but this is not the case. What they don't realise is that to replenish the underground water it needs to rain and it can also take many decades to bring levels up again."

She noted surrounding bores and springs had dropped during a court

tour of Ardmore Park, but that property's dams were full.

The couple say if their water supply runs dry, their long established farming enterprise will be finished. While Multiquip principal Steve Mikosic had said he'd truck in water to

properties if that occurred, the Broadheads believed the quality and

timing would be inadequate.

"Why should a proven business of 187 years in an agricultural area be jeopardised for a 30-year mine operation, that will not offer anything other than a couple of jobs and nothing but noise, dust, and traffic problems for 30 years," Mr Broadhead said.

Mr Mikosic declined comment on the claims.

However, an environmental assessment tendered to council last August stated that pumping for the quarry's needs would have minimal impact on groundwater and springs.

"Based on groundwater flows, and the distinct chemical characteristics of the various groundwater sources, it was determined that the groundwater within the sand resource to be extracted and that in several identified springs in the area, are separate," the document stated.

If an impact was proved, the company was prepared to negotiate on compensation to neighbouring properties.

Like other residents, the Broadheads are also concerned about the impact of trucks on local roads.

Mrs Broadhead said the Land and Environment Court hearing had clearly established that the road was unsafe in its current form to handle truck volumes.

"Most of the newly elected councillors are uninformed of the effects on their local community and for them to vote on a staged development when they do not know all the facts is condemning their voters," she said.

On 28 December 2016 we sent an email to Jason Mikosic, Multiquip Personal and Authorities informing them that our spring was down to 9,500 Litres/Day and it was becoming concerning for us as we rely on this for stock water. After not hearing back from Jason we emailed Larry Cook in January 2017 who said he would get back to us, which he did not. The outcome of this contact was an email sent to us **4 July 2017**, 7 months later with an attachment of the CEAL Spring Flow Report 16.1.17 from a Multiquip.

The Conclusion in the report they reached:

*4. CONCLUSIONS AND RECOMMENDATIONS This assessment of the apparent overall decline in flow rates from Phil's Spring located on 'Inverary Park' between 2003 and 2016 concludes that the decline is not due to an impact from quarrying activities on 'Ardmore Park' or from pumping from the licensed production bore on 'Ardmore Park'. The active basalt quarry is 'dry' with no groundwater intercepted. However, 'real time' monitoring of spring flow is strongly recommended in order to properly assess the relationship between spring flow, rainfall and ongoing resource development on 'Ardmore Park'. Practical monitoring of the flow rate in Phil's Spring has not been possible since supply line repair works were undertaken. The recommendation is to install an 'in line' V Notch Weir on the supply pipe between the ponded spring and storage dam. A water level sensor will be installed in the weir which will be constructed in a suitable metal module to secure the device and provide access as required. A standpipe could be used. The weir will not impede spring flow to the dam. The calibrated water level data will be converted to a flow unit. These data will be stored in the sensor and transmitted as an email weekly (or as required) by use of telemetry. The 'real time' data will be duly charted against daily rainfall data collected from the telemetry-run weather station on 'Ardmore Park'. A design for a V Notch Weir is provided in Appendix B. A high resolution water level sensor is held in-house. **The installation can be carried out in the next two to three weeks subject to approval.***

To show that they do not take our water issue seriously: this report was completed in **January 2017** and they state that they can install the monitor in the next 2-3 weeks. We did not receive the report until **July 2017**. Nothing happened, they did not mention it again and no monitor was offered.

On the **13 December 2017** we sent another email to Jason Mikosic, Larry Cooke & Authorities as our Spring had dropped to 8,800 litres/day and telling them it is now time for a strategy to be implemented. They had a meeting with us (Phillip) and told him they are not admitting to anything, but will supply us water if we run out this season only, as a gesture of good will and that they will install a vnotch monitor to see whats happening.

They know that the spring has been declining as we have told them and Larry Cooke has had access to it. They were told December 2016 it was becoming a problem for us and did nothing and now that they want their modifications passed the best they can offer us is a gesture of good will!

Multiquip organised a Vnotch monitoring system to be placed at our spring on 19 January 2018 so that they can record the water flow. We requested to be able to view the data online as they do, but they then did not want to let us have access to this data. It was only after a meeting with locals in Bungonia, which was part of the modification application, that it was taken up by the local press when we complained publicly at this meeting that they would not give us viewing access. (See article page 8). Also at this meeting when we complained about the water decline, Jason Mikosic responded with, we have fixed that. To which I said, You have not fixed this, you are monitoring which only tells us what is already known that its declining and you have only said you would supply water for this season. That is not fixing it.

Since having access to the Vnotch data, we have discovered that the Flow Rates appear to be incorrect, running nearly double what it should be. On the day the monitor was installed (19.1.17) (Multiquip personnel, installers and Phillip were present) a manual measure was taken of 7,700 litres per day which was supposed to be the measure to calibrate the monitor for an accurate reading. When we look at the data from the Vnotch (19.1.17) it appears to be running at 14,580 litres per day.

We will be able to confirm the degree of error next week, but we can say that the monitor was supposed to be calibrated to the manual measure flow on the 19 January 2018 at 7,700 litres per day and it appears to not have been calibrated correctly.

NEWS

Water claims beset quarry

BY LOUISE THROWER

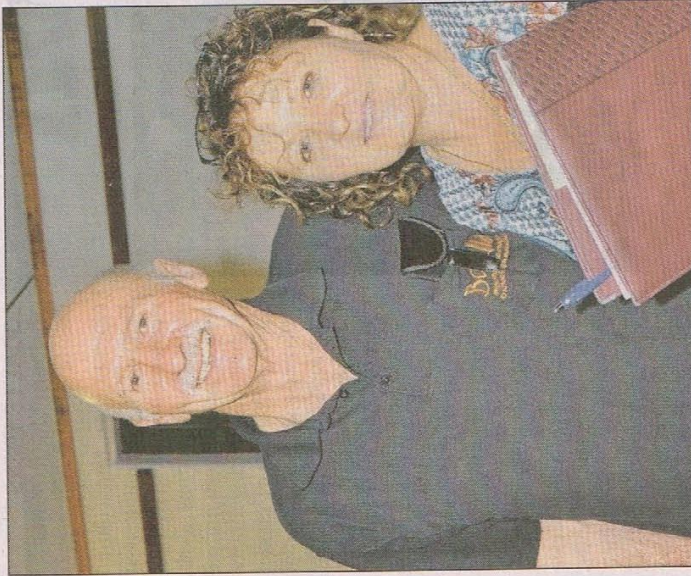
A BUNGONIA district quarry operation has granted neighbouring graziers access to data following accusations the facility was "sucking up" groundwater.

Phil and Diane Broadhead own 1600-acre cattle grazing property 'Inverary Park', adjoining the Ardmore Park quarry, four kilometres south of Bungonia.

Mrs Broadhead told a Progress Association meeting in the village on Monday night that flow in a spring running through their property had dropped from 28,000 to 30,000 litres a day in 2003, when quarry owners Multiquip started a chicken farm, to 7700 currently.

"It just happened to coincide with when the mine started extracting water from their production bore," Mrs Broadhead said.

"We think their production is sucking water from our property because other bores are dropping too. It's hard to prove, but what else could it be? ... We believe it's only a matter of time until the mine runs out of water."



WATER WOES: Phillip and Diane Broadhead are concerned about the quarry's impact on groundwater on their property, adjoining the operation.

Mrs Broadhead told the allocation, with access to an meeting the water was there other 100mL, when graziers for everyone and others such as them had their allocation cut and were struggling to manage.

She questioned why Multiquip general manager Jason Mikosic replied 110-megalitre water licence

that she too could apply for a licence like his company.

It earned a swift rebuke from Mr Broadhead, who said if Multiquip used all of its permitted volumes, the company should be asking questions of the Department of Primary Industries. "Don't you think there might be a problem with water allocation on the Inverary plateau?" he said.

Later he told the *Post* that DPI should be consulting with them when a nearby allocation, like Multiquip's, was doubled. The basalt country meant the couple relied on the spring for stock and domestic use. Mr Broadhead said they couldn't depend greatly on dams, because they needed substantial run-off to fill, given the geology.

Last year Multiquip installed a device on the Broadheads' property to monitor spring flow. Mrs Broadhead said the couple had not been given access to this data, despite requests.

However, the company has granted this in the past few days. A consent conditions dictates that the quarry

will supply the property with water if it runs out.

ROAD IMPACTS WORRY RESIDENTS

The forum was called to discuss Multiquip Quarries' bid to increase production from 400,000 to 580,000 tonnes annually, extend the extraction area by 3.5 hectares, and increase truck numbers from 88 to a maximum 124 daily.

In addition, it wants to increase transportation hours to 5am to 10pm Monday to Friday and 5am to 5pm on Saturdays. Under the existing approval, Multiquip can only run trucks from 7am to 6pm Monday to Friday and 7am to 1pm Saturday.

The company's managing director Steve Mikosic said it was about "squaring off" the quarry, enabling the basalt to be more easily extracted. Multiquip says the application asks for an increase in the maximum daily truck movements to take account of days on which they do less, and it won't translate to more than the allowable 25,064 vehicles annually.

The increased volume

could be achieved with no additional truck movements due to the use of Performance Based Standard (PBS) vehicles. They can carry up to 53 tonnes, as opposed to the current 30 to 33 tonnes.

But road impacts and the quality of work Multiquip's haul route upgrade emerged as a major concern. "How can you put your hand on your heart and say that running trucks from 5am to 10pm daily is safe?" one woman asked.

Jason Mikosic replied that other quarries had similar operating times and Multiquip had to fit in with rules and regulations.

Another resident, Bill Dobbie, who lives near the quarry, said a section of Oallen Ford Road had to be redone because the road's profile couldn't accommodate the drainage. "(But) most of the residents are pleased with the roadworks because the widening (along Oallen Ford and Jerrara roads) has made it better," he said. "A lot are concerned that the work won't hold up because the road was never designed for this type of traffic."

This water resource had never failed our property in approx. 190 years and it was only when Ardmore Park started pumping from their bores did our water start to decline.

They have denied that their bores have dropped yet their own measurements show differently.

We were told by Multiquip and Larry Cooke that their water levels have not changed in their bores and so we asked to see records on the quarry bores and historic levels etc, but have not been given access to anything, even though we have supplied them with all of our records on our spring. So we decided to look a little closer during this Submission into the Proposed Modifications and found some data.

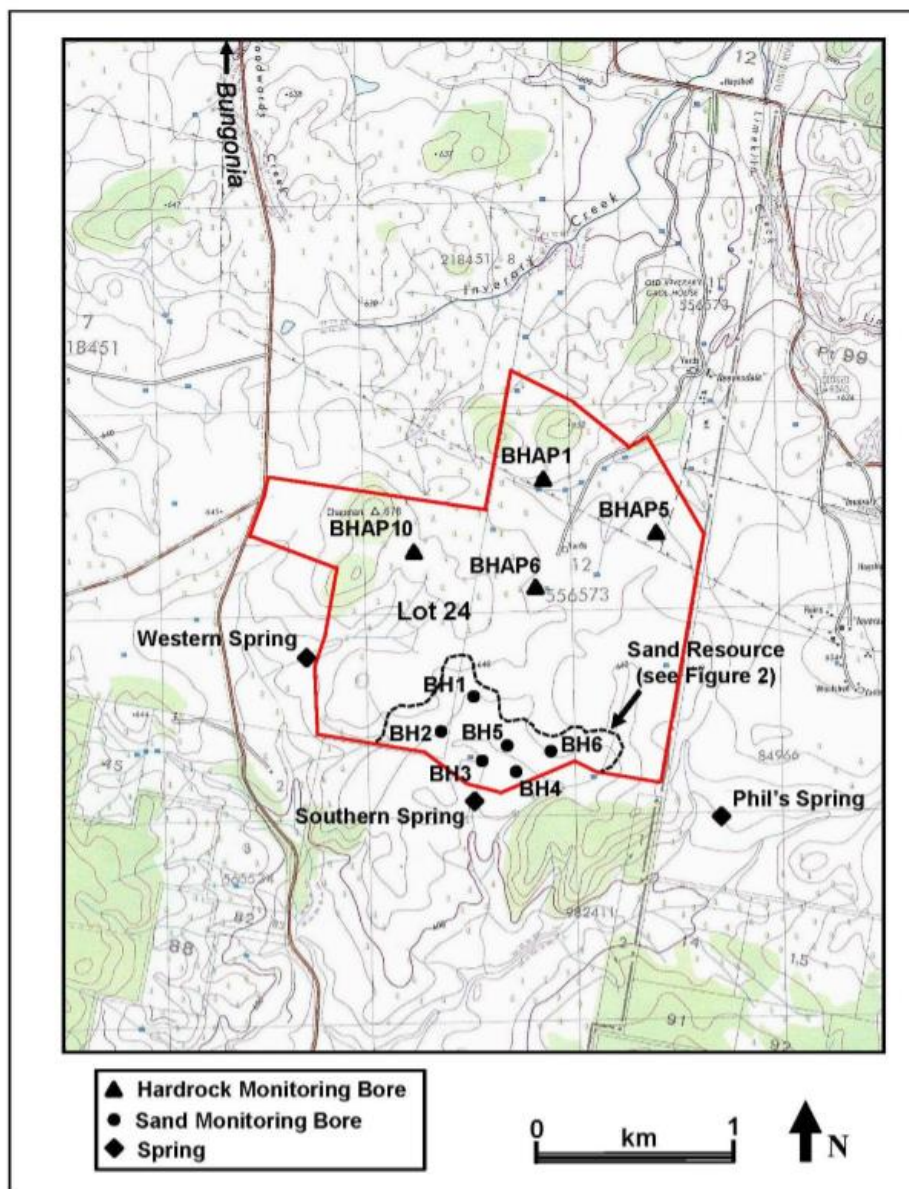
The below picture is taken from the **Proposed Modification 3 - Appendix 10 - Hydrology Assessment - Figure 6 - 9.3 – Aquifer Discharge - A10-21.**

(This picture shows locations of the bores on Ardmore Park and also our Spring (Phils Spring) on Inverary Park.

ENVIRONMENTAL ASSESSMENT
Appendix 10

MULTIQUIP QUARRIES
Ardmore Park Quarry – Modification 3 of PA 07_0155
Report No. 625/24

Figure 6: Locations of Monitoring Bores and Springs



This is the only current data (11 April 2017) we could find that shows what the most current Standing Water Levels are available to the public for the Ardmore Park Bores.

If you compare this data of the Standing Water Levels with the data on the next page you will start to see that when they tell us that their water levels have not changed, they are not telling the truth.

The table below is also taken from the **Proposed Modification 3 - Appendix 10 - Hydrology Assessment – Table 7 - 9.4 – Monitoring Bores - A10-25**

The locations of the hard rock monitoring bores, sand monitoring bores and the three target springs are shown in **Figure 6**. The locations were strategically selected to intercept any potential contaminants that may be migrating in the groundwater system down gradient of the Quarry. The monitoring of these bores is undertaken on an approximately quarterly basis (four time per year) in accordance with a Water Management Plan (RWC, 2017). A register of the monitoring bores and springs with specifications, representative water levels and water flows is provided in **Table 7**.

Table 7: Register of Groundwater Monitoring Sites

	Coordinates (MGA Grid)		Elevation Ground Level (m AHD)	Depth of Hole (m BGL)	SWL 11.4.17 (m BGL)
Monitoring Site	Easting (m)	Northing (m)			
Hardrock Bores					
BHAP 1	770000	6134780	633.3	114.0	6.54
BHAP 5	770520	6134505	634.5	72.0	19.78
BHAP 6	769910	6134252	640.0	124.0	60.25
BHAP 7	769960	6133780	633.0	112.0	Bore Missing
BHAP 10	769340	6134480	637.5	52.0	27.38
Sand Bores					
BH 1	769654	6133672	631.5	12.5	10.64
BH 2	769505	6133505	623.0	12.0	6.14
BH 3	769692	6133358	619.2	11.6	3.45
BH 4	769835	6133316	616.8	11.8	3.64
BH 5	769802	6133441	622.5	12.5	5.98
BH 6	770037	6133399	630.7	13.2	9.97
Groundwater Springs					
Southern Spring	-	-	615.0	N/A	Approx. 0.3 L/s
Phil's Spring	-	-	620.0	N/A	Approx. 0.2 L/s
Western Spring	-	-	609.8	N/A	Dry
AHD: Australian Height Datum BGL: Below Ground Level SWL: Standing Water Level					

The table below is from the Original EIS January 2005. See: Contents – Ground Water- 4-59- Table 4.25

Table 4.24 Third row down BHAP6 being the main production bore, Standing Water Level (SWL) m) is 57 in July 2003. Fluctuating slightly over the next 2 readings and 56.44 by May 2004.

This was the measurements they used in the Environmental Impact Statement January 2005.

MULTIQUIP QUARRIES
Proposed "Ardmore Park" Quarry
Report No. 625/02

4 - 59

ENVIRONMENTAL IMPACT STATEMENT
Section 4 – Environmental Safeguards & Impacts

Table 4.24
Groundwater Level Measurements

Bore	Aquifer	Baseline Measurement	25.7.03		29.10.03		16.4.04		14.5.04		10.11.04	
			SWL (m)	Elev. mAHD	SWL (m)	Elev. mAHD	SWL (m)	Elev. mAHD	SWL (m)	Elev. mAHD	SWL (m)	Elev. mAHD
BHAP1	Fracture aquifer	9.00m (9.7.03)	8.05	625.3	8.80	624.55	8.57	624.73	8.90	624.4	-	-
BHAP5 (deep)	Lower alluvial aquifer	23.80m (21.7.03)	21.50	613.0	21.50	613.0	21.19	613.31	21.43	613.17	-	-
BHAP6	Fracture aquifer	57.00m (24.7.03)	57.00	583.0	57.20	582.8	56.92	583.18	56.44	583.66	-	-
BHAP7	Fracture aquifer	52.10m (24.11.03)					52.78	580.2	52.83	587.27	-	-
BHAP8	Lower alluvial aquifer	Dry (15.7.03)	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	-	-
BHAP9	Lower alluvial aquifer	Dry (15.7.03)	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	-	-
BHAP10	Fracture aquifer	25.20m (27.11.03)	-	-	-	-	25.30	612.2	25.43	612.17	-	-
APS38A (deep)	Lower alluvial aquifer	33.61m (6.4.04)	-	-	-	-	33.72	590.3	33.66	590.34	-	-
APS38B (shallow)	Upper alluvial aquifer	8.55m (6.4.04)	-	-	-	-	8.65	615.4	8.50	615.55	5.80	619.70
BH1	Upper alluvial aquifer		-	-	-	-	-	-	-	-	Dry	Dry
BH2	Upper alluvial aquifer		-	-	-	-	-	-	-	-	3.62	620.88
BH3	Upper alluvial aquifer		-	-	-	-	-	-	-	-	0.84	619.99
BH4	Upper alluvial aquifer		-	-	-	-	-	-	-	-	1.06	619.27
BH5	Upper alluvial aquifer		-	-	-	-	-	-	-	-	3.35	619.83
BH6	Upper alluvial aquifer		-	-	-	-	-	-	-	-	6.99	621.40

Source: Modified after Larry Cook & Associates (2004b) – Tables 5 and 6



BHAP6
Production Bore



BH2, BH3, BH4, BH5, BH6
Sand Monitoring Bores

To put all of this in a bit of perspective, I have put the figures from the two tables above, of the Standard Water Levels of 2003 & 2004 and the most current 2017, of the Main Production Bore (BHAP6) and the Sand Monitoring Bores (BH2, BH3, BH4, BH5 & BH6) that are closest to our Spring as these are more relative to our Spring.

	BHAP 6	BH2	BH3	BH4	BH5	BH6
25.7.03	57.00					
28.10.03	57.20					
16.4.04	56.92					
14.5.04	56.44					
10.11.04		3.62	0.84	1.06	3.35	6.99
11.4.17	60.25	6.14	3.45	3.64	5.98	9.97
Decline in Metres	3.25	2.52	2.8	2.58	2.63	2.98

The quarry tells us that their bores have not dropped. This information is from their own data and it proves that their underground water has dropped. These are significant drops.

Ardmore Park Quarrys Production bore was licenced for 110 ML/Year and now they have secured a further 100 ML/Y taking them to 210 ML/Year. Information below taken for **Proposed Modification 3 - 5.6.4.1 Quarry Water Balance - Water Supply**.

How can the DPI give more water to this Quarry when they are already depleting what's there. Why haven't neighbours who rely on this water been given the opportunity to object to this.

Have the DPI been given any figures to show the quarry is draining the underground water. There was never a problem for us until they started extracting underground water.

Why is this written so small and not in the underground water section where it should be.

Water Supply

There are several sources of water for the site:

- a 50kL tank collecting roof runoff and used for domestic supply;
- surface stormwater stored in two re-use ponds (possibly three as the quarry extends) and in three clarifying ponds (**Table 2**);
- water drained from the sand after processing (re-gained in a closed-circuit); and
- a licensed bore with an approved allocation of 100ML/year⁸.

Of the water storages from which water would be drawn, only runoff yield to RE2 and CP3 could be affected by the Proposal with the catchment flowing to these increased by approximately 6%. SEEC (2017) note that such a change is:

- Less than the accuracy of a water balance model; and
- masked by annual variations in rainfall amounts and patterns.

⁷ 400,000tpa represents the maximum sand production expected, even with the increased production limit of the proposed modification.

⁸ Multiquip has recently received confirmation for purchase of additional 100ML allocation from the local groundwater source.



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Increasing the annual production limit from 400,000 tpa to 580,000 tpa.

To increase the annual production from 400,000 to 580,000 would have even more devastating impact on underground water. This increased production includes the gravel needed for the proposed bitumen plant as well as the Sand Processing and Clay separation. These products use masses amounts of water to process and there is substantial proof now that the water is declining. The sand operations have been well underway for sometime now. Photo below of the quarry at Ardmore Park taken from our property 18/2/18



Acceptance and management of ENM, in addition to Virgin Excavated Natural Material (VENM), as a backfill material

Again, noise from machinery to off-load material and excavate the ground for dumping and covering.

Importing of ENM and VENM to backfill the extraction area to return the land for agricultural production, or other land use sounds great. However, the problem with self-monitoring allows for it to become a dumping ground for foul waste like asbestos. It should be signed off on by an independent authority and documentation placed on the Multiquip website for public viewing. This way there is accountability. Unlike in the city we rely on ground water here for stock & domestic use and the risk to contamination of underground water is significant when self-monitoring is in place. By the time it is realised the water is polluted, numerous amounts of stock could be harmed not to mention humans that use that water for domestic purposes.

Operation of Bitumen Pre Coating Plant

The proposed Bitumen Pre Coating Plant would be another source of impact on underground water. The gravel required for pre-coating must be dust free prior to the pre-coat bitumen as the bitumen will stick to the dust and not the gravel giving an inferior product. The process requires them to have the dust reduced to less than 2% by washing it and then the gravel dried prior to pre-coating as the water content in the gravel will also affect the pre-coat. None of this information has been put in the Proposal and underground water has not been mentioned.

Increase in size of Extraction Area & Increase of Annual Production

Once again the over increase in Annual Production takes into account all operations, Bitumen, Sand, Hardrock, which all have an impact on underground water.

Increasing the Maximum allowable daily truck movements form 88 to 124 per day & amending the wording of several administrative conditions.

Increasing the maximum allowable truck movements a day would create a huge amount of dust on the internal roads within the quarry and watering the roads is part of the Conditions of Consent. What is in place now is:

Taken from the EIS Jan 2005, Under the safeguards - **4.3.6 Safeguards and Management Procedures** they stated the following highlighted area.

- (i) A 10 000 litre water truck would be used to regularly wet the active internal unsealed roads. Watering of the unsealed roads would occur at least 3 times per day with an application of approximately 2L/m² per application.**

In the new Proposed Modifications, they have changed the wording of this Condition of Consent. Listed under **5.5 AIR EMISSIONS - 5.5.3 Design Features, Operational Safeguards, Controls and Management Measures - Particulate Emissions to:**

- A **water truck** would be used to regularly wet the active internal unsealed roads. Watering of the unsealed roads would occur at least **once per day** with an application of water (and soil binder as required) at a rate of approximately 2L/m² per application.

To change the Conditions of Consent from 3 times a day to once a day is not going to suppress the dust, however, to reduce the water is a acknowledgment that they are aware that the water is declining. We see the only alternative is to seal all internal roads.

CONCLUSION

The underground water is declining and affecting neighbouring properties and contrary to what we have been told by the Ardmore Park Personnel, that their water levels have not dropped, this is not the truth. They should be very concerned as well, considering without water you can't have a mine. If they are in this for the long haul then they should be doing something about it which makes us question, are they are planning to sell it and leave the mess with someone else.

You can clearly see that this has been an ongoing issue for us from the beginning and we have repeatedly been dismissed by the quarry. The proof is there of the decline of our spring. The proof is there that the bores on Ardmore Park have declined. All the misrepresented wording in the world is not going to prove otherwise, the fact remains that the water is running out. A proven water resource that has held fast for 190 years on our property has only declined since the extraction of water from Ardmore Park.

The quarry has proven that they do not take neighbours complaints and evidence seriously. They tell untruths about the levels of their bores. They do in house testing that only relates to their property. Nothing is Transparent and they are not forthcoming with information to people that are affected.

Buying a licence does not turn the tap on for more water to appear and it does not increase the underground water, all it does is allows them to extract legally more water from the water table that is in decline and that neighbours rely on, some for their livelihood.

The DPI should never have allowed Multiquip an additional 100 Mega litres of more water (page 12). They should have investigated what is actually happening and requested proof of the status of water.

The mine should be denied the Modifications of any Proposal until they fix the existing problems first.

They should be made to:

- **Seal all internal roads.**
- **Supply affected neighbours with permanent bores away from the effects of the mine operations.**
- **Allow affected neighbours access to all their data in relation to the underground water as this is a shared resource.**

If they cannot, they should buy out the affected neighbours.

Phillip & Diane Broadhead

25 February 2018