Barwon Downs Borefield Community Recommendations Report

October 2017

Introduction

This report outlines a set of core outcomes (end results) that the community wish to see around and within the Barwon Downs Borefield. This report was prepared by community and stakeholder representatives at a workshop on the 12th October 2017 held at the Colac Bowls Club. There were 29 participants at the workshop.

1. Trust and community consultation

What end result do you want to see on the site?
(5 word heading to describe a key outcome you want to see)
Example only: Platypus returning to Boundary Creek

Restoration of local community trust

What would tell you this was successful on the ground? would you see?
(3 key indicators of success (what you want to see) or things you don't want to see on site)
Example only: 1. Return of creatures that platypus eat, 2. regular platypus surveys

1. Barwon Water needs to LISTEN, as a baseline, to the community.
(e.g. To ask people 'to consider what level of environmental damage they are prepared to accept' suggests a real lack of understanding or attention to what the community have said already. The baseline of trust will be restoration of the system, not further, incremental damage).

2. Independent review of all reports to date, especially at data level (mistrust of SKM/Jacobs). Community trust will be blown out of the water if Barwon Water licence renewal relies significantly on SKM/Jacobs reports over the last 30 years.. **This cannot be emphasised enough.**

2. Community feeling listened to - evaluate (ie the community not feeling they have they have been used/co-opted to support Barwon Water's application for licence renewal). "It will take as long to restore community trust as it will to recharge the aquifer"

3. Not treating the community as fools - we have local knowledge and expertise.

4. Report to the community at least every second year on performance against licence conditions.

2. Flora and Fauna and Environment Protection

What end result do you want to see on the site?
(5 word heading to describe a key outcome you want to see)
Example only: Platypus returning to Boundary Creek
Big swamp flooded again, reduced acid flows
Waterways healthy enough to sustain platypus and other aquatic life
Clearly defined environmental flows for all related waterways

Set extraction at conservative levels (volumes, timing) based on best available science. Complement with monitoring and trigger levels (environmental indicators) to protect environmental assets across the zone of influence.

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1.Shared information with interested community on a regular basis. Identify key stakeholders and build trust over time.

2. Any environmental change being independent of pumping. No impact from future pumping - linked to monitoring program.

3. A management plan (developed and implemented) for Boundary Creek that is accepted by the community.

4. No measurable negative impacts on the Barwon River from Boundary Creek.

5. Protect other tributaries of the upper Barwon to maintain important habitat for flora and fauna.

6. Monitoring for potential impacts on the Gellibrand River.

3. Sulphate Protection, Rehabilitation of Boundary Creek, Big Swamp, Barwon River

What end result do you want to see on the site?
(5 word heading to describe a key outcome you want to see)
Example only: Platypus returning to Boundary Creek
Boundary creek/big swamp must be rehabilitated, keeping in mind the huge pool of acid water below the surface. Bringing that up would create further acid water pollution flowing to Barwon River. Potentially very expensive solution if done correctly. Aquifer needs to recover, then Boundry Creek/Big Swamp can recover.

Environmental flows for the whole river system, particularly summer and autumn to be formally defined by Govt authority and maintained and monitored, keeping in mind the aquatic populations.

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1. Trigger points - constant monitoring of water gauging, eg if trigger points are reached - water released from West Barwon reservoir.

Regular monitoring and reporting, including raw data of fauna, flora and aquatic life

2. Boundary creek - regular flows, a healthy aquatic population, higher pH levels. Monitoring of aquatic species with regular reporting.

3. Use results to guide future repairs to waterways

4. Aquifer recharged

What end result do you want to see on the site?
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Aquifer recharged to pre-pumping level

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1. Monitoring bores show levels are not declining over time, streams do not stop flowing, river flows meet the needs of the aquatic environment

2. Vegetation recovery over time, indicated by pioneer species recovery

3. Restoration of river and stream environmental conditions, including restoration of instream flora and fauna and riparian vegetation and stock and domestic supplies for local farmers not affected by acid sulphate water..

5. CCMA Partnership

What end result do you want to see on the site?
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Partner with CCMA for environmental flow delivery to the Barwon River.

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1. All aspects of water usage should be respected - including cultural flows, environmental flows, the protection of sites. There are underwater protected sites that need to be protected from drying out, erosion, and livestock.

2. Barwon River has been a mess for many years. Improvement would mean increased flows in the Barwon River tributaries and and river through to the estuary at Barwon Heads. CCMA need to take their responsibility seriously and partner with other organisations to ensure that freshwater flows reach the estuary and that freshwater is managed properly. Currently 98% of river flow is used to transport salt from agricultural areas.

3. CCMA need to understand that summer flows rely on groundwater flows from full overflowing aquifers, and they need to push hard for the preservation of summer flows, thereby eliminating the serious impacts caused by over-extraction by Barwon Water.

4. Should be much better mapping of potential acid sulphate soils - CCMA should push for regulatory triggers that prevent oxidation of AAS soils- EPA needs to be brought into this and become a partner supervising Big Swamp pollution

6. Adaptive licence

What end result do you want to see on the site?
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Example only: Platypus returning to Boundary Creek
Adaptive Licence - Environmental Sustainability

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1.Complete prevention of negative environmental effects by a licence that is flexible enough to pre-empt such effects.

2.Licence to be reviewed dynamically (at least annually) using very conservative trigger points. Review process must be rigorous and independent. Timing of review should pre summer, Climate change modelling must be included in the review.

3. Extractive Volume should be based on worst case science then incremented utilizing upward titration methodology. The early science recommended 1500 ML/yr and this should be the max starting point, and Level 4 restrictions (last resort) should be applied before any groundwater pumping takes place as part of the process. Last resort meaning nothing else is available

7. Monitoring/ Assessment

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(5 word heading to describe a key outcome you want to see)
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Annual monitoring of vegetation sites, bore levels (extensive network of bores) and computer model predictions by independent panel OR a joint committee comprising of Barwon Water and community members.

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1. Rising of aquifer water table to fully recharged condition.
2. Restoration of natural summer flows to Boundary Creek,Barongarook Riiver, Barwon River and Ten Mile Creek
3.
4. Collaborative and open working relationship between Barwon Water and the community

8. Platypus Study

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Example only: Platypus returning to Boundary Creek

Restore platypus to pre pumping number and condition.

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1.Conduct yearly platypus surveys in the lower mid and upper barwon catchment that reflect population and health condition to pre-pumping (not Jacobs). Success of the licence would be represented by a return of platypus to pre pumping numbers & health.

2.Engage independent expert (not Jacobs) ie platypus conservation to undertake scientifically rigorous studies that are peer reviewed by independent experts. Success of the licence would see an improvement platypus key environmental indicators.

3.What is a healthy platypus ecosystem - establishment of comprehensive baseline - benchmark studies (not Jacobs). Done in a manner to engage the trust of the community. Success of the licence would be reflected by re establishment of a healthy and diverse platypus ecosystem.

9. Sustainable yield

What end result do you want to see on the site?
(5 word heading to describe a key outcome you want to see)
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There is no sustainable yield figure we are comfortable with. We would first like to see the aquifer fully recharges then options for artificial recharging of the aquifer be investigated.

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1. A fully recharged aquifer

2. Artificial recharge regime investigated

3. Achieved a natural flow regime in Boundary Creek