

17th February 2020

Attention: Mr. Cameron Fitzgerald
Managing Director
Southern Rural Water

**Barwon Downs Community Leaders Group's Feedback on
Barwon Water's "Boundary Creek, Big Swamp and Surrounding Environment"
Remediation and Environmental Protection Plan**

I submit this letter on behalf of the "Barwon Downs Community Leaders Group" (CLG). While I've not received written confirmation from all members of the group confirming their support for this letter, I have received feedback from a majority of members. It is my belief that this feedback is not in disagreement with any points raised in this letter, but rather sought to further emphasise a number of the key aspects. I have amended the letter accordingly based on this feedback. Should I be made aware of any further matters from members of the CLG, I'll bring them to your attention.

The purpose of the letter is to provide you with the group's feedback on Barwon Water's Boundary Creek, Big Swamp and Surrounding Environment Remediation and Environmental Protection Plan (REPP), for your consideration in the approval or otherwise of this plan.

By way of background, the CLG was established by Southern Rural Water (SRW) in August 2019, to assist in its consideration of the REPP. The Plan relates to the remediation of impacts on Gerangamete GMU and related ecosystems, caused by past ground water extractions by Barwon Water from the region. Barwon Water is required to develop the plan under a "Section 78 Notice" which was issued by SRW under direction from the Minister for Water. SRW is in turn required to regulate the plan, including its approval and oversight of implementation. It is noted that the CLG was established in parallel with an Independent Technical Reference Panel (ITRP), which SRW set up to also help inform its decision making in respect of the REPP. As such, SRW is seeking feedback from the CLG that draws upon the local knowledge and insights of its members, which will complement the technical and scientific review of the plan by the ITRP.

Barwon Water submitted its REPP to SRW on the 20th of December 2019. Barwon Water are required to commence implementation of the plan by the 1st of March 2020. SRW are required to provide their approval or otherwise of the plan by that date. The CLG met on three occasions to discuss and agree their terms of reference, review the scope and nature of the REPP and finally to provide feedback on the submitted plan.

The attached tables provide the CLG's detailed feedback on the REPP. This feedback is grouped into a number of categories and are a mix of observations and recommendations. The CLG would hope that SRW could provide feedback on how it has considered the group's recommendations in the review and approval of the REPP.

Key aspects of the CLG's feedback are summarised below:

- The CLG generally supports the principles of the REPP and would support SRW's approval of the plan, subject to the range of matters raised in this letter, being appropriately considered and addressed. As Barwon Water is proposing to adopt adaptive management principles, the CLG believes that such approval should be staged over the life of the remediation process, allowing for the progressive consideration of these matters;
- The CLG wants to see SRW work with Barwon Water to ensure there are more concrete remediation actions being progressed sooner under this plan. It is noted that no "on the ground" action (outside the ceasing of ground water extractions, which has already occurred) is proposed until 2021 and in the CLG's view, the REPP reads more like a "plan to do more planning". Also, of particular concern is the lack of concrete remediation actions outside of Boundary Creek and the Big Swamp. It is the CLG's view that such actions need to be urgently identified and initiated;
- The CLG notes that there is both validated and anecdotal evidence of conflicts in data, assumptions and findings across multiple reports in relation the Gerangamete GMU and the related ecosystems. Such conflicts undermine the community's confidence in the proposed remediation plan and trust in the process more generally. It is strongly recommended that SRW ensure Barwon Water adopts a robust quality assurance process for managing the remediation activities and associated data. Furthermore, SRW should consider a continual process of independently peer reviewing future reports or plans in relation to the region's remediation;

- The CLG notes that in Principle 1 of the REPP, Barwon Water proposes an exception being that if the Barwon region faces an emergency water shortage, it would go through a qualification of rights process. This is presumably so it can revisit the Barwon Downs Borefield as an emergency water supply source. The CLG objects strongly to this proposal and notes the extensive evidence that recommends the timely recovery of the aquifer as a key element of any remediation of the impacts of past extraction upon the Gerangamete GMU. Furthermore, emergency water supply shortages are likely to be triggered by drought and it is the CLG's view that in such circumstances the aquifer must be protected from any extractions over and above the Permissible Consumptive Volume;
- The CLG is supportive of the concept of success measures being included in the REPP. However, it felt that these measures could be more transparently structured, with clear targets and linkages to remediation actions. Furthermore, the group feel it is important that such measures cover not only the Boundary Creek and the Big Swamp, but also the broader region. Such measures for the broader region might initially focus on improving the understanding of impacts of past extractions and ultimately evolve to incorporate actual remediation goals;
- The CLG felt it was essential that the REPP list all remediation options considered as part of the plan's development and explain why certain options were not pursued via this plan; and
- Importantly, the CLG recommends that SRW ensure it has the adequate resourcing and capability to regulate this REPP over the life of the remediation process. This needs to include allowance for continued community engagement and independent technical review. There is a strong view amongst most of the group, that the past licence to extract water from the region was not well regulated and contributed to the problem the region now faces.

On behalf of the CLG, I wish to thank SRW for the opportunity to provide input into the assessment of the REPP. There has been generally positive feedback regarding this engagement process and thus the opportunity being afforded to the community to provide input to your consideration of the REPP.

I should also note that the CLG are comfortable with this report being made publicly available and we would encourage SRW to post it on their website and share it with other key stakeholders such as DEWLP, Barwon Water and the ITRP.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'S. Cox'.

Shaun Cox

Independent Chair of Southern Rural Water's Barwon Downs Community Leaders Group

Table 1 – Detailed CLG Feedback on the REPP

Category	Feedback / Recommendations
Process	
S78 Process	<ul style="list-style-type: none"> • The CLG noted that the Section 78 process provided limited time for key stakeholders to review BW's submitted REPP, particularly as key dates coincided with the Christmas / New Year period. These time constraints are exacerbated by the fact that CLG members are volunteering their time to participate in this process; • The CLG recommends that SRW requests the Minister for Water and DELWP to consider reviewing the S78 process, to allow for community input in the development of any future directions and for more time for stakeholder review of submitted plans; • The CLG recommends that SRW engage with the Minister for Water and DELWP to ensure community consultation is a mandatory requirement throughout the life of the remediation process.
Community Engagement	<ul style="list-style-type: none"> • A number of members of the CLG are also members of BW's community engagement process. Those members noted that BW had responded to the community's request to engage technical experts to provide input into BW's development of the REPP; • It is noted that Barwon Water's community engagement group provided in-principle support for the REPP, noting however that very limited time was given to review the plan;



Category	Feedback / Recommendations
Process - Cont.	
Quality Assurance	<ul style="list-style-type: none"> The CLG noted that there is both validated and anecdotal evidence of conflicts in data, assumptions and findings across multiple reports in relation the Gerangamete GMU and related ecosystems. Such conflicts undermine the community's confidence in the recommended remediation plan and trust in the process more generally; The CLG recommends that BW and SRW adopt rigorous quality assurance processes with respect of documentation, data and the management of models relating to the REPP; The CLG recommends that SRW adopts a process of independently peer reviewing key data, assumptions and findings in relation to the approval and on-going regulation of the REPP and notes that the ITRP will undertake this role in respect of the current plan;
Data Management	<ul style="list-style-type: none"> The CLG recommends that as part of the adopting a rigorous quality assurance process in relation to the REPP, SRW or DELWP consider establishing an independent and validated data repository across the GMU;
Monitoring Plan	<ul style="list-style-type: none"> The CLG recommends that to ensure the effective oversight of the remediation activity, BW be required to develop and submit for SRW's consideration, a monitoring plan, which outlines among other things, the parameters to be monitored, the monitoring scope, locations and frequency, the monitoring equipment required (including any related maintenance of such equipment) and the data management requirements associated with the outputs of such monitoring; The CLG recommends that as part of this monitoring plan, consideration be given to undertaking periodic "Spring Studies" to assist in determining the health and recovery of the aquifer. The scope of these studies needs to be sufficiently broad to ensure the areas potentially impacted by BW's past extractions are within the bounds of these studies;
Adaptive Management	<ul style="list-style-type: none"> The CLG recommends that SRW ensure that in its consideration of the REPP, it is satisfied that BW has the capacity to remediate the GMU in an adaptive manner as they propose in Principle 7 of the plan;

Category	Feedback / Recommendations
Scope	
Geographical Scope	<ul style="list-style-type: none"> • The CLG notes that the primary focus of the REPP is Boundary Creek and the Big Swamp and the surrounding environment is to be the subject of further studies; • The CLG notes that it supports the focus upon Boundary Creek and the Big Swamp as the first priority for the REPP; • The CLG notes that BW has identified 9 areas outside of the Big Swamp for further investigation. These sites were identified using a risk assessment process adapted from the Ministerial Guidelines for Groundwater Licensing and the Protection of High Value Groundwater Dependent Ecosystems (DELWP, 2015). This assessment was based on current knowledge relating these surrounding areas; • The CLG recommends that the number and extent of sites in the surrounding areas requiring remediation, be periodically reassessed as more contemporary knowledge becomes available via the additional studies being proposed by BW (it is the CLG's view that such knowledge could change the outcomes of the risk assessments in the current REPP);
Ecological scope	<ul style="list-style-type: none"> • The CLG recommends that there be a stronger focus on the flora and fauna impacts from past water extractions by BW in the REPP and that SRW ensures it engages the appropriate expertise to assist in its review of this aspect of the plan; • The CLG recommends that on behalf of SRW, the ITRP review the scope and nature of the on-going studies and investigations being proposed by BW into the areas potentially impacted by past ground water extractions;

Category		Feedback / Recommendations
Principles		
Emergency Shortages	Water	<ul style="list-style-type: none"> • The CLG noted that in Principle 1 of the REPP, BW proposes an exception being that if the Barwon region faces an emergency water shortage, BW would be required to go through a qualification of rights process. This is presumably to revisit the Barwon Downs Borefield as an emergency water supply source; • The CLG objects strongly to this proposal and notes the available evidence that recommends the timely recovery of the aquifer as a key element of any remediation of the impacts of past extraction upon the Gerangamete GMU; • Furthermore, emergency water supply shortages are likely to be triggered by drought and it is the CLG's view that in such circumstances the aquifer must be protected from extractions over and above the Permissible Consumptive Volume; • The CLG recommends that SRW requires BW to develop long term Water Security and Drought Contingency Strategies that are not dependent upon the Gerangamete GMU under any circumstances;
Local Stock and Domestic Uses		<ul style="list-style-type: none"> • The CLG recommends that recognition be given in the REPP's principles to local stock and domestic uses across the Gerangamete GMU, including the objective of restoring volumes impacted by BW's past extractions from the Borefield
General		<ul style="list-style-type: none"> • The CLG notes that other than the two points raised above, it is generally supportive of the principles set out in the REPP;

Category	Feedback / Recommendations
Vision, Objectives and Success Measures	
Structure of Success Measures	<ul style="list-style-type: none"> • The CLG recommends that BW be directed to restructure their success measures so that: <ul style="list-style-type: none"> ○ There is direct alignment and connection from the vision, to the objectives, to the measures and finally to any remediation actions (for example, there is currently no success measure relating to the aspect of the vision for the Big Swamp concerning mitigating fire risks); ○ The Success Measures table be restructured to clearly separate the measures from the targets; ○ Consistent with the principles of adaptive management, targets be nominated across multiple timeframes; ○ Targets be nominated for all success measures (e.g. Increase in diversity of understory species within the swamp plain currently has no target); and ○ Remediation actions be provided against each measure and target, so the reader of the REPP can understand which outcome is being achieved by which remediation action;
Surrounding Environment	<ul style="list-style-type: none"> • The CLG recommends that BW be directed to develop a separate vision, objective and set of success measures for the environment surrounding Boundary Creek and the Big Swamp, incorporating the above changes in structure to the measures. Such measures might initially focus on improving the understanding of impacts of past extractions and then ultimately incorporate actual remediation goals;
Recovery of the LTA	<ul style="list-style-type: none"> • It is noted that the success measures do not include targets for the recovery of ground water levels in the LTA, and the proposed monitoring is based on a limited number of bores; • The CLG recommends that BW be directed to develop and include in the REPP, targets for the recovery of the LTA. Such targets could be based on reaching equilibrium in the groundwater levels and thus overcome any dispute regarding the extent of the impact of climate change on the LTA over the time of BW's groundwater extraction. Furthermore, recovery of the LTA needs to be monitored across a broad range of bores that are representative of the entire aquifer that has been impacted by BW's past extractions;

Category	Feedback / Recommendations
Remediation Actions	
General	<ul style="list-style-type: none"> The CLG notes that the REPP seems more like a “plan to do more planning”. The CLG expressed a general concern that without intervention, in the time that it takes the aquifer to recover, there will be damage due to the drying out of terrestrial ecosystems that were once wet, and there will be further mobilization of acid sulphate soils; The CLG recommends that BW be requested to consider bringing forward more concrete initiatives to assist with the remediation of impacts caused by their past extraction of ground water;
Assessment of Remediation Options	<ul style="list-style-type: none"> The CLG notes that the plan does not appear to include an analysis of a wide range of remediation options (even though certain options are understood to have been discussed as part of BW’s community engagement processes). Examples provided included artificial recharge of the aquifer, settlement ponds being used downstream of Big Swamp and artificial remediation of the Big Swamp; The CLG recommends that BW provide a full list of remediation options considered in the development of this plan and the reasoning for their non-inclusion in the REPP;
Supplementary Flows	<ul style="list-style-type: none"> The CLG recommends that SRW and BW review the volume of flow necessary to remediate the Big Swamp and this be used as the basis for the REPP. It is the CLG’s view that there are conflicting references within the REPP to the volumes necessary to remediate the Big Swamp; The CLG recommends that SRW and BW consider the use of supplementary flows in the East Barwon River to mitigate the impact of past groundwater extractions, while the LTA recovers and reaches equilibrium; The CLG recommends that SRW ensure that where supplementary flows are used as part of this remediation plan, there is no detrimental impact the social and economic outcomes for the Colac area;

Category	Feedback / Recommendations
Remediation Actions - Cont.	
Acid Sulphate Areas Outside the Big Swamp	<ul style="list-style-type: none"> The CLG notes that in their view, there are 3 to 4 acid sulphate areas outside of the Big Swamp that have arisen due to past extractions by BW. It is noted that LAWROC have undertaken studies into these sites; The CLG recommends that BW be directed to assess and if necessary, develop immediate remediation plans to mitigate the acid sulphate run off from sites outside of the Big Swamp;
Prioritisation of Remediation Actions	<ul style="list-style-type: none"> The CLG recommends that once remediation actions have been identified across the broader Gerangamete GMU and its associated ecosystems, the regional catchment strategy principles be used for prioritizing the implementation of these actions; The CLG recommends that SRW work with BW to identify and expedite the implementation of concrete remediation actions (based on the further studies recommended in the REPP) for the surrounding environment to Boundary Creek and Big Swamp, that has been impacted by BW's past groundwater extractions;

Category	Feedback / Recommendations
Approval and Regulation	
Approval	<ul style="list-style-type: none"> • The CLG notes that it would prefer to see more immediate concrete action taken to assist with the actual remediation of impacts created by BW's past extractions from the Gerangamete GMU. However, the CLG felt that providing the matters raised in this letter are considered and adequately responded to, it was important that the REPP progress from the nominated date of 1 March 2020; • The CLG recommends that it would support SRW approving the REPP, providing the matters raised in this letter along with any additional issues identified by SRW and the ITRP are adequately addressed; • The CLG recommends that as BW have recommended adopting the principle of adaptive management, that SRW stage its approval over the life of the remediation process, with approval steps aligning with key decision milestones underpinning the plan; • The CLG recommends that SRW puts in place processes that ensure it can consider and approve future stages of the REPP in a timely manner;
Regulation	<ul style="list-style-type: none"> • The CLG recommends that SRW has the adequate resourcing and capability to regulate this REPP over the life of the remediation process. This needs to include allowance for continued community engagement and independent technical review; • The CLG recommends that SRW work with BW to ensure the adequate volume of flows are reaching the Big Swamp to bring about its timely remediation. Such flows need to accommodate the consumptive needs of stock and domestic users upstream of the Big Swamp;
Community Engagement	<ul style="list-style-type: none"> • The CLG recommends that SRW in its capacity as the regulator, engages proactively and transparently with the community on the remediation of the Gerangamete GMU and related ecosystems and the implementation of the REPP.