

Padthaway WAP Stakeholder Advisory Group

Minutes

Meeting No. 11, Thursday 3 December 2020, 2:00 – 4:00 pm
Treasury Wines Meeting Room, 6558 Riddoch Highway, Padthaway

Objectives

- Risk assessment.
- Recovery rules following RCL induced restrictions.
- Community engagement.

Attendees:

Group Attendees – Penny Schulz (Group Chair, Limestone Coast Landscape Board), Tim Hoare, Carolyn Brown, John Summers, Phil Brown, Scott Longbottom.

Staff Attendees – Sue Botting (Team Leader, Water Policy and Planning, LCLB), Ryan Judd (Senior Project Officer, Water Policy and Planning, LCLB),

Apologies – Krysteen McElroy, Bruce Wood (Proxy Group Chair, Limestone Coast Landscape Board), David Williamson (Team Leader, Water Licencing, DEW).

Welcome and agenda

The Chair welcomed everyone, advised on COVIDSafe requirements and discussed the proposed agenda. Thanked advisory group members and staff for their attendance.

Minutes

Previous minutes from meeting 10 confirmed as true and correct.

Action outcomes to note

- Action 2.6 – On-going.
- Action 3.6 – On-going
- Action 3.7 – On-going.
- Action 4.4 – To be discussed in meeting.
- Action 4.5 – On-going.
- Action 5.6 – On-going.
- Action 10.1 – Completed.
- Action 10.2 – Completed.
- Action 10.3 – Completed.
- Action 10.4 – To be discussed in meeting.
- Action 10.5 – Completed.
- Action 10.6 – Completed.
- Action 10.7 – Completed.
- Action 10.8 – Completed.
- Action 10.9 – Completed.

Science process

Sue Botting provided an overview of the science process.

Key Points:

- Under a Science Partnership agreement supported by the Minister, the Department provides the science advice and assessment needed to support the legislated water planning responsibilities. This ensures consistency, transparency, rigour and independence.
- LCLB and DEW aim to provide the best and most appropriate science support to inform the review and preparation of a water allocation plan (evidence based).
- The Department follows a standard groundwater modelling process that is considered the accepted practice by hydrogeologists.
- Science work undertaken by the department is independently externally peer reviewed, reviewed internally and published following an approvals process.
- The modelling work for the Padthaway review (Padmod 4) has been based on the existing model (Padmod 3), updated with current data, an improved digital elevation model (DEM) and increased domain (to reduce edge effects).
- The effectiveness of Padmod 4 in representing the hydrology is illustrated by comparing modelled data to historical data. Cameron has shown that the model is a good fit for GW level but fit was variable for salinity. Consequently the SAG made the decision to not include a RCL for salinity.
- While modelling has informed discussions and decisions to date it requires significant resources and time so additional modelling work will only be supported if it adds value to the WAP process, informing principles and/or implementation.

Discussion:

- The results of science work undertaken for the Padthaway (PadMod4) has been regularly presented to the Group. Consequently, the Group has a good understanding of the modelling, its application, interpretation and interpretation and are interested in seeing a full compilation of the modelling work.

SB: A full report has been drafted and peer reviewed. It is currently going through a publications approvals process, but it is not known how long this takes or when the report will be publically available.

ACTION: Check on availability of Padthaway modelling report for distribution to Group.

Risk assessment

Ryan Judd presented the compiled results from the second risk assessment session.

Key Points:

- Scoring again was quite consistent.
- Most risks assessed as "Low" level, only two "Medium" risks.

Discussion:

- Results as expected. Of the two "Medium" risks irrigation recycling is best managed directly by the irrigator. The potential for a lowered groundwater table will be addressed by the introduction of the adaptive management framework (RCTs/RCL).

The Group completed the risk assessment process, applying confidence ratings to the final collated risk levels.

Key Points:

- Provides a check that the results of the risk assessment are representative of the entire Group, and identifies areas where there may not be consensus or confidence in a result.

Discussion:

- SB: Although a somewhat laborious process, the completion of the risk assessment by the Group reinforces the review process and adds strength to the proposed Plan as it goes through approvals.

ACTION: Forward completed risk assessment summary to the Group.

Resource condition limit

Ryan Judd presented options for recovery rules following RCL induced restrictions.

Key Points:

- A comparison of using moving average versus fixed point data:
 - Moving average creates delayed response to groundwater levels for both a declining trend and recovery.
 - Requirement for three continuous years of fixed point measures below RCL before implementing responses provides confidence that there is a trend to be managed, not annual variation.
 - Fixed point is simpler to implement and easier for community to understand.
- Suggested options for recovery following restrictions:
 1. If above RCL return to full allocation
 2. If above RCT (b) return to full allocation (0.3m above RCL)
 3. If above RCL return to full allocation but if water level drops below RCL again in the next 3 years then adaptive management implemented in 1 year rather than the 3 year rule previously used.
 4. Level must be above RCL for 2 continuous years before full allocation returned.

Discussion:

- JS noted that the question regarding the use of moving averages was actually about representation of model outputs not RCT adaptive management.

SB: Good to have clarification. The comparison of moving averages versus fixed point data was still useful as it addresses Action 4.4.

- Although the “worst worst” case scenario is unlikely to occur it is important to define the recovery response should it occur in order to protect the resource.
- Group discussed proposed options, including continuing restrictions for a period following recovery of groundwater levels, setting the recovery state at a higher groundwater level than the RCL, implications for managing allocations with annual and permanent plantings, implications for the long term condition of the water resource.
- Group noted concern that there is a need to be sure the resource has recovered and that the RCL is not easily triggered again creating a yo-yo effect of restrictions on-off-on again.
- Concern that even if the resource appeared to have recovered and restrictions were removed, if the groundwater levels dropped below the RCL again this may indicate a longer-term issue. A more precautionary approach proposed of implementing restrictions sooner if RCL is

breached again after restrictions had previously been implemented. Option three best addresses this but is challenging for enterprise management.

- Alternative suggestion, agreed by the Group, that restrictions be applied again where groundwater levels drop below RCL for two continuous years, when restrictions have previously been applied during the life of the Plan.

SAG DECISION: Groundwater levels to be above RCL for two continuous years before restrictions are removed. At any time during the life of the Plan, RCL adaptive management responses will be implemented if groundwater levels drops below the RCL for two continuous years when restrictions have previously been applied.

- Need to confirm timing of restrictions – when would licensees receive notification that the resource had recovered and restrictions will be removed?

RJ: Wells are monitored in September / October and licensees notified in December. Any required management response is then applied from 1 July the following year.

ACTION: Write up complete adaptive management table including RCTs and RCL and management responses following triggering of RCTs and RCL for the different recovery scenarios.

- Question raised re the use of an average groundwater level change rather than a proportion of wells exceeding the RCL level.

SB: This has previously been discussed and responded to. The additional data management and calculations require significantly more work without improving the representation of the water resource levels.

- Group discussion re the number and distribution of monitoring wells – is there adequate and appropriate cover of the PWA?

RJ: There is a high number of wells in Padthaway with good coverage across the PWA – well locations have been shown previously in Cameron's presentations.

ACTION: Map groundwater observation wells, identifying those to be monitored to inform the adaptive management framework.

Community engagement plan

Ryan Judd introduced the draft community engagement plan for discussion.

Key Points:

- Need to plan community engagement to ensure community understands the Plan and has the opportunity to give feedback.
- Community engagement plan is a living document – amended as needed. Looking for advice and direction from SAG as how best to engage with community, what sort of information should be presented, how, where and when.

Group advice:

- Face-to-face meeting should be held up front.
- Don't send information out unexplained (prior to meetings).
- Drop-in sessions as well as meeting.
- Video the public meeting and make available to licensees.

- No need for individual industry meetings / presentations as Padthaway community is very engaged with water and will attend public meeting.
- Use of online platforms (eg the Hive) would need to be carefully considered to balance moderating inappropriate comments and allowing freedom of expression.
- Fact sheets should present what's changed, why and provide examples of different scenarios.

ACTION: Update community engagement plan and circulate to the Group.

Other business

- SL questioned if water transfers between the ranges and flats in the north of PWA, where it would cause less of an issue, should be considered?

CB: Need to protect the flow-through (maintain hydraulic gradient) to flush salt through the aquifer.

- The Chair proposed that the Group extend their thanks to Kerry DeGaris, Limestone Coast Landscape Board Presiding Member, for chairing the SAG meetings in 2020, prior to handing over to Penny. The Group asked Penny to convey their thanks and appreciation to Kerry.

ACTION: Penny to write a letter to Kerry DeGaris conveying Group's appreciation and thanks for chairing the SAG meetings in 2020.

- SB: Reminder to include Penny on any Group email communications.

ACTION. Distribute Penny's email address to the Group.

Next steps

- Summary of progress to date.
- Monitoring wells.

Next meeting date

- Next meeting date: Thursday 4 February 2021 2:00 pm – 4:00 pm.

Close of meeting

Meeting closed at 4:25 pm.

The Chair thanked the stakeholders and staff for attending.

**Padthaway WAP Stakeholder Advisory Group
Action Table**

Action	Padthaway WAP Stakeholder Advisory Group Actions	Status	Meeting 11 Update
2.6	Prepare and distribute to the Group an explanation / example of the application of the three year rolling average SPR carry-over.	On-going	Held open
3.6	Consider alternative wording to "Resource Condition Triggers". Suggested wordings: "Warnings" and "Actions" "Resource condition indicators"	On-going	Held open
3.7	Consult with DEW re feasibility of providing more tailored water quality and level data and trends directly to licensees.	On-going	Held open
4.4	Investigate suggested alternatives for groundwater level resource condition triggers and limits.	Complete	Discussed in meeting
4.5	Consult with relevant DEW teams to review annual reporting to better inform licensees of Padthaway salinity and groundwater levels and trends.	On-going	Held open As per Action 3.7
5.6	Further investigate options for managing commercial-in-confidence data.	On-going	Held open
10.4	Review Wine Australia climate data with respect to that used for Padthaway groundwater model to confirm comparability.	Complete	Discussed in meeting
11.1	Check on availability of Padthaway modelling report for distribution to Group.		
11.2	Forward completed risk assessment summary to the Group.		
11.3	Write up complete adaptive management table including RCTs and RCL and management responses following triggering of RCTs and RCL for the different recovery scenarios.		
11.4	Map groundwater observation wells, identifying those to be monitored to inform the adaptive management framework.		
11.5	Update community engagement plan and circulate to the Group.		
11.6	Penny to write a letter to Kerry DeGaris conveying Group's appreciation and thanks for chairing the SAG meetings in 2020.		
11.7	Distribute Penny's email address to the Group.		

Action Table – Closed Items

Action	Padthaway WAP Stakeholder Advisory Group Actions	Status
1.1	Amend Terms of Reference	Complete
1.2	Unbundling presentation for meeting 2	Complete
1.3	Forward both Daniela and Cameron's meeting 1 presentations to SAG members	Complete
2.1	Forward unbundling presentation to the Group	Complete
2.2	Confirm requested information regarding delivery supplements and the current sustainable limit and allocations	Complete
2.3	Available water extraction, rainfall and salinity data for the last ten years to be compiled and forwarded to the group	Complete
2.4	Forward presentation on the current Padthaway Water Allocation Plan to the Group.	Complete
2.5	Confirm requested information regarding transfers, carry-overs and divided allotments.	Complete
2.7	Terms of Reference to be amended, as discussed, and distributed to the Group.	Complete
3.1	Forward Groundwater Modelling and Resource Condition Limits (RCLs) presentation to the Group.	Complete
3.2	Further information on flow from the ranges to the flats to be provided.	Complete
3.3	Further information required on modelled salinity output confidence levels, with respect to landuse and spatial patterns, and potential areas to improve the model.	Complete
3.4	Contact PIRSA (Mel Fraser) to investigate current or potential soil salinity monitoring projects of relevance.	Complete
3.5	Scenarios to be run for average extraction, full allocation and reduced rainfall.	Complete
3.8	Confirm requested information for RCT and RCL discussion.	Complete
3.9	Ryan to present further information on the Citizen Science salinity monitoring project.	Complete
4.1	Forward updated salinity modelling and groundwater modelling scenarios presentation to the Group.	Complete
4.2	Forward heat mapping and other information to the Group.	Complete
4.3	Licensing to check that if DS has been returned that Total Allocation has also been reduced, and to confirm the current Total Allocation volume.	Complete
4.6	Forward salinity monitoring project presentation to the group.	Complete
5.1	Decision Register to be updated with reference to salinity modelling limitations as a key consideration in the decision to not have an RCT or RCL for salinity.	Complete
5.2	Examples of how unbundling applies to Padthaway licences to be prepared for the next meeting.	Complete
5.3	Request advice from Cameron Wood on the use of saturated thickness as an RCL measure and how it varies across the Padthaway area.	Complete
5.4	Forward presentation of RCL and RCT graphs to the Group amended with only winter observation wells' readings included.	Complete

Action	Padthaway WAP Stakeholder Advisory Group Actions	Status
5.5	Prepare examples of the application of the proposed RCL/RCTs to past data and future modelled scenarios, the percentage of well exceedances for each management area, and projections for the recovery of the resource.	Complete
6.1	Forward Simone's unbundling presentation to the Group.	Complete
6.2	Forward Action 5.3 response to the Group.	Complete
6.3	Investigate possible changes to vineyard extent in the Padthaway since 2009.	Complete
6.4	Forward RCL Scenarios presentation to the Group.	Complete
7.1	Forward Meeting 7 unbundling presentation to the Group.	Complete
7.2	Forward legislative references for bundling and unbundling to the Group.	Complete
7.3	Forward risk assessment presentation to the Group.	Complete
7.4	Prepare a list of risk statements for consideration by the Group.	Complete
8.1	Prepare an accurate map of the Padthaway Prescribed Wells Area and current management areas for the Group.	Complete
8.2	Data on SPR licences and use to be prepared and presented at the next meeting for Group discussion.	Complete
8.3	Check that risk statements include risks to users.	Complete
8.4	Group to review consequence criteria and risk statements and provide feedback and / or additional risks for consideration.	Complete
9.1	Compile results of first risk assessment session and provide to the Group at the next meeting.	Complete
9.2	Forward supporting hydrogeological and ecological presentations to the Group.	Complete
9.3	Forward SPR presentation to the Group.	Complete
9.4	Present a draft timeline for the remainder of the Padthaway WAP review at the next meeting.	Complete
10.1	Forward map of drainage channels to the Group.	Complete
10.2	Compile results of second risk assessment session and provide to the Group at the next meeting.	Complete
10.3	Forward supporting hydrogeological, public water supply and stock and domestic wells presentation to the Group.	Complete
10.5	Forward adaptive management scenario modelling presentation to the Group.	Complete
10.6	Include time on next meeting's agenda to further discuss recovery rules following RCL induced restrictions.	Complete
10.7	Ryan to re-forward Padthaway WAP background information to Bruce Wood (alternative email address).	Complete
10.8	Sue to forward Water-Connect link to technical reports to Bruce Wood.	Complete
10.9	Draft community engagement plan to be forwarded to the Group.	Complete

Padthaway WAP Review 2019/20
Decision Register

Issue	Meeting	Decision
Terms of Reference	3	Group agreed to adopt the Terms of Reference
Guiding principles for WAP review		
Resource Condition Triggers and the concept of Resource Condition Limits	4	Group agreed to have no RCT or RCL for salinity
	4	Group agreed to having an RCL for maintaining throughflow of groundwater from the Ranges to the Flats
	4	Group agreed to having an RCT and an RCL for groundwater levels
Timeline for Resource Condition Triggers and Resource Condition Limits	5	Group agreed to the proposed timeline for responses to resource condition triggers and limits
Carry-over	6	Group <i>provisionally</i> agreed that carry-over should be suspended if RCT B is reached as an adaptive management step to prevent the RCL being reached.
Adaptive management	6	Group agreed that management responses activated through the triggering of RCTs and RCLs are to be applied to the entire Padthaway PWA.
Resource Condition Limit recovery management.	11	Group agreed that groundwater levels to be above RCL for two continuous years before restrictions are removed. At any time during the life of the Plan, RCL adaptive management responses will be implemented if groundwater levels drops below the RCL for two continuous years when restrictions have previously been applied.