# Padthaway WAP Stakeholder Advisory Group Minutes

Meeting No. 10, Thursday 15 October 2020, 1:00 – 4:15 pm

Treasury Wines Meeting Room, 6558 Riddoch Highway, Padthaway

## Objectives

- Risk assessment
- Adaptive management scenario model update

**Attendees:**

**Group Attendees –** Penny Schulz (Group Chair, Limestone Coast Landscape Board), Bruce Wood (Proxy Group Chair, Limestone Coast Landscape Board), Tim Hoare, Carolyn Brown (arrived 1:35pm), John Summers, Phil Brown, Krysteen McElroy.

**Staff Attendees** – Sue Botting (Team Leader, Water Policy and Planning, LCLB, absent 1:55-2:20pm), Ryan Judd (Senior Project Officer, Water Policy and Planning, LCLB), David Williamson (Team Leader, Water Licencing, DEW), Cameron Wood (Senior Hydrogeologist, DEW).

**Apologies** – Scott Longbottom.

## 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.

The Chair introduced Bruce Wood, LCL Board member and proxy chair, attending via MS teams.

## Minutes

Previous minutes from meeting 9 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 – On-going.
- Action 4.5 – On-going.
- Action 5.6 – On-going.
- Action 9.1 – Completed.
- Action 9.2 – Completed.
- Action 9.3 – Completed.
- Action 9.4 – Completed. Provided in meeting.

## Risk assessment

A number of group members clarified their scoring from the first risk assessment session.

Ryan Judd presented the compiled results from the first session.

Key Points:

- Scoring was quite consistent.
- All risks assessed as "Low" level.

Discussion:

- The Group noted that the compiled results were consistent with their understanding of the Padthaway PWA, with no unexpected results.
- A question was raised out of session about the potential impact of drainage and whether it should be considered in the risk assessment process.

  CW: Drains have a very localised impact, mainly on surface water. Model had been run initially without drains included and when included there was very little difference in the modelling outputs.

  RJ: Drainage map shows that drains are mainly in the south west corner of the PWA, running north-west. They are beyond the main irrigation area and at the edge of the PWA, so unlikely to have impact on management of Padthaway groundwater resource.

  **ACTION:** Forward map of drainage channels to the Group.

- BW: If there is connectivity between surface water and groundwater should they be considered (managed) separately?

  The current policy defines this as a groundwater-specific plan. Surface-groundwater interactions are picked up to some extent through consideration of groundwater dependent ecosystems (GDEs).

The Group continued the risk assessment process, as outlined in meetings 7 and 8.

- Cameron Wood provided hydrogeological information, interpretation and advice to the Group.
- Ryan Judd presented information on public water supply (SA Water) and stock and domestic wells.
- The Group each completed risk assessment scoring for the categories:
  - Water for domestic use.
  - Economic consumptive use.

  **ACTION:** Compile results of second risk assessment session and provide to the Group at the next meeting.

  **ACTION:** Forward supporting hydrogeological, public water supply and stock and domestic wells presentation to the Group.

## Adaptive management scenario model update

Cameron Wood presented the results from modelling the adaptive management responses proposed to be implemented when an RCL has been breached for three consecutive years.

Key Points:

- Two scenarios were presented:
    1. Scenario 3A: pumping at full allocation reduced to the Acceptable Limit of Extraction (48,000ML) under average recharge conditions
    2. Scenario 3B: pumping at full allocation reduced to the Acceptable Limit of Extraction (48,000ML) under reduced rainfall conditions.
- Scenario 3A shows a recovery to above 2009 levels in example wells within the timeframe of the model. Mapping of the drawdown contours shows a significant contraction in the affected area.
- Scenario 3B shows an upward trajectory in groundwater levels in the example wells but not a complete recovery within the timeframe of the model. Mapping of drawdown contours shows a significant reduction in the area of highest drawdown, although some drawdown across the main area of irrigation remains.

Discussion:

- JS: Noted that Wine Australia (WA) has produced future climate scenarios for Australian wine regions and the Padthaway is predicted to have an increase in rainfall during the growing season. How does this align with the modelling?
- RJ: WA uses the same climate change source data as modelling (from CSIRO report).

  CW: Has reviewed the WA report. Source data is the same however WA uses seasonal data whereas the model works on annualised data. The model does not account for rainfall as a specific variable – it uses recharge, which occurs in the winter period.

  SB Scenario modelling is about managing in the worst case scenario. An increase in rainfall in the growing season does not change the worst case scenario, or the need to define a management response for it.

  **ACTION:** Review Wine Australia climate data with respect to that used for Padthaway groundwater model to confirm comparability.

- The Group discussed if there was a need to "buffer" the recovery following the implementation of restrictions, to ensure that the water resource had properly recovered and irrigators were not likely to be subject to "yo-yoing" triggering of the RCL.

  **ACTION**. Forward adaptive management scenario modelling presentation to the Group.

  **ACTION**. Include time on next meeting's agenda to further discuss recovery rules following RCL induced restrictions.

## Other business

- BW: Noted that while drainage is outside the scope of the Padthaway WAP review it is an issue for consideration by the Board.

  SB: A Drainage and Wetland Strategy was recently (2019) developed cooperatively by the South East Water and Conservation Drainage Board and SENRM. It is available on the LCLB website.

- BW: Noted some concerns about the confidence levels of the modelling outputs (graphs) and subsequent interpretation, and expressed an interest in furthering understanding of modelling and other work done to inform the Padthaway WAP review.

  **ACTION**. Ryan to re-forward Padthaway WAP background information to Bruce Wood (alternative email address).

  **ACTION**. Sue to forward Water-Connect link to technical reports to Bruce Wood.

- SB: With the progress that has been made on the WAP review, LCLB are aiming to prepare a First Draft of the WAP for SAG review in early 2021, followed by community consultation. A draft community engagement plan has been prepared for discussion and input from the SAG.

  **ACTION**. Draft community engagement plan to be forwarded to the Group.

## Next steps

- Review risk assessment results.
- Further discussion on recovery rules following RCL induced restrictions.
- Community engagement.

## Next meeting date

- Next meeting date:  Thursday 3 December 2020 2:00 pm – 4:00 pm.

## Close of meeting

Meeting closed at 4:10 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 9 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".<br>Suggested wordings:<br>"Warnings" and "Actions"<br>"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. | On-going | Held open |
| 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<br>As per Action 3.7 |
| 5.6 | Further investigate options for managing commercial-in-confidence data. | On-going | Held open |
| 10.1 | Forward map of drainage channels to the Group. | | |
| 10.2 | Compile results of second risk assessment session and provide to the Group at the next meeting. | | |
| 10.3 | Forward supporting hydrogeological, public water supply and stock and domestic wells presentation to the Group. | | |
| 10.4 | Review Wine Australia climate data with respect to that used for Padthaway groundwater model to confirm comparability. | | |
| 10.5 | Forward adaptive management scenario modelling presentation to the Group. | | |
| 10.6 | Include time on next meeting's agenda to further discuss recovery rules following RCL induced restrictions. | | |
| 10.7 | Ryan to re-forward Padthaway WAP background information to Bruce Wood (alternative email address). | | |
| 10.8 | Sue to forward Water-Connect link to technical reports to Bruce Wood. | | |
| 10.9 | Draft community engagement plan to be forwarded 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 | Licencing 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 |

| Action | Padthaway WAP Stakeholder Advisory Group Actions | Status |
|---|---|---|
| 5.4 | Forward presentation of RCL and RCT graphs to the Group amended with only winter observation wells' readings included. | Complete |
| 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 |

**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 *provisionally* 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. |