

## Lower Limestone Coast WAP Stakeholder Advisory Group Minutes

Meeting No. 2, 18 November 2022, 9:00 am – 1:00 pm

CHARDONNAY LODGE

Minutes were confirmed at Meeting 3, 19 January 2023. Moved by: Terry Buckley, Seconded by: Kylie Boston

### Objectives

- Gain a basic, joint, understanding of groundwater resources in the Lower Limestone Coast Prescribed Wells Area
- Broadly understand actions and work since the 2018 Science Review
- Understand the sections of the current water allocation plan in relation to the *Landscape South Australia Act 2019*
- Discuss and agree upon a process for evaluation of the principles
- Discuss volumetric conversion and bridging volume principles
- Begin discussing Licence components – taking, holding, delivery supplement and specialised productions requirements.

### Attendees:

**Group Attendees** – Penny Schulz (Chair of Group, LC Landscape Board), Belinda Williamson, Claire Davies, Claire Harding, James Prescott, Kerry DeGaris, Kylie Boston, Melissa Herpich, Michelle Irvine, Nick Hillier, Peter Balnaves, Terry Buckley, Darren Shelden

**Staff Attendees** – Sue Botting (Team Leader, Water Policy and Planning, LC Landscape Board), Liz Perkins (Manager, Planning & Engagement, LC Landscape Board)

**Apologies** – Pete Bissell, Wayne Hancock, Alan Rossouw, Graeme Hamilton, John Hunt

### Welcome and agenda

The Chair welcomed everyone and thanked advisory group members and staff for their attendance.

### Minutes

Minutes from Meeting 1 confirmed as true and correct.

Moved by: Terry Buckley, Seconded by: Kerry DeGaris. All were in favour.

Revised Terms of Reference were approved.

Moved by: Nick Hillier, Seconded by: Michelle Irvine. All were in favour.

Ground rules were also supported.

### Action outcomes to note

- Action 1.1 Ongoing. Commence in Meeting 2.
- Action 1.2 Ongoing.
- Action 1.3 Complete.
- Action 1.4 Complete.
- Action 1.5 Ongoing. To revisit when discussing mining related principles.

## Lower Limestone Coast Prescribed Wells Area Groundwater Resources

Cameron Wood provided an overview of the groundwater resources and research around the Lower Limestone Coast Prescribed Wells. Presentation provided as a pdf.

### Key Points and Discussion:

- Hydrology of region
- Geology of region
- Aquifers
  - Interaction between aquifers
  - Thickness
  - Inflows
    - Recharge - Unconfined
      - Science review feedback on 90% allocation of recharge
      - Confidence intervals not considered
      - Changes from year to year, no “magic number”
      - May to October rainfall – indicator of recharge
      - Tree water use is very variable, not uniform, trees naturally adjust to the water available
    - Recharge – Confined
      - Evidence of some recharge from unconfined aquifer
      - CFC studies – Tarpeena and Nangwarry
  - Outflows
    - Groundwater discharge to coast – seawater intrusion
    - Evapotranspiration
    - Pumping
      - Metering since late 2000s
      - Discussion around licencing
      - Salinity
    - Plantation forest use
    - Drains and wetlands
      - Science review feedback – monitoring
  - Modelling
    - Not the real world, there are assumptions, many variables, tool to model scenarios
    - Reliability exists in groundwater level data
    - Tool to guide decision making, takes into consideration what we know and allows us to look forward
    - Examples provided around Padthaway scenarios
    - Fit to actual past data
    - Timescales don’t match well to the timescales of industry – security of investment
    - Good for exploring ideas, careful around interpretation
    - Ability to identify when models provide unusual results
- Precautionary principle – LC Landscape Board needs to be clear where this has been allowed for/applied in the development of the water allocation plan and extraction industries need to be able to understand/informed of the risk that they need to manage, particularly in relation to the modelling of climate change scenarios.

- Forestry doing research on how much water trees are using, satellite data
- Department for Environment and Water – trialling telemetered meters.

**ACTION:**

2.1 Provision of presentation, provision of reports from presentation

## Science Review Recommendations

Sue Botting provided a brief overview of the 2018 Science Review recommendations.

**Key Points:**

- Scope of the 2018 Science review
  - Forestry research was excluded from scope
  - Risk assessment was a separate process
  - Some discussion around the recommendation of: 1-D spatial unsaturated zone modelling to examine salinity increases
    - Accumulation and flushing of salt under different land uses
    - Has already been a lot of work done on this area – this work wasn't provided as part of the Science Review package – at this stage no identified need to do anything further
  - Risk assessment methodology could be improved and this occurred in 2019
  - Monitoring network – addition and replacement of some wells
  - GDE hydrological monitoring – increase in monitoring, paired with observational wells and some will be telemetered. Supported by accelerated funding from South Australian Government

**Discussion:**

- How representative are the high value GDEs list in the water allocation plan – how confident are we the list is right?
  - High value, good condition and groundwater dependent
  - List potentially misses some of the GDEs that are more susceptible to smaller changes and have declined in condition as a result of changes in climate and extraction
  - There is a need for wetland assessments that include all wetlands not only the high value list
  - How many GDEs are non-recoverable? Requirement to look at this further, modelling could support
  - What is the definition of a GDE, some indication stakeholders are not clear on which ones they were and why. There is confusion for stakeholders on what a groundwater dependent ecosystem is.
    - Page 9, Table 2.1 of water allocation plan has a definition of the level of dependence
  - Terrestrial GDEs – potentially not well covered in the current plan
    - Red Gums as an example
    - Some discussion around the importance of the presence of a clay base to Red Gums vs the presence of groundwater

## **ACTION:**

2.2 Session in future meeting on Groundwater Dependent Ecosystems to assist with stakeholder clarity.

## **Overview of the Current Plan**

Sue Botting provided an overview of the current plan and how the sections relate to the *Landscape South Australia Act 2019*.

### **Key Points:**

- Sections of the plan
  - Section 1 - Introduction
  - Section 2 – Water dependent ecosystems – setbacks are the only real principle that has translated through around groundwater dependent ecosystems
    - Karst
    - Watercourses – includes drainage system
    - Wetlands
    - Vegetation
    - Marine
  - Section 3 – Assessment of effects on other water resources
  - Section 4 – Assessment of capacity of the resource to meet the demand
    - TML & TAR
    - Low, High risk management areas
    - Reductions
    - Current Allocation and Use data is confidential – will be made publicly available at a later date by the Department
  - Section 5 – Definitions and Abbreviations
  - Section 6 – Allocation Criteria – Unconfined aquifer
  - Section 7 – Transfer Criteria – Unconfined aquifer
  - Section 8 – Allocation Criteria – Confined aquifer
  - Section 9 – Transfer Criteria – Confined aquifer
  - Section 10 – Permits
  - Section 11 – Monitoring, evaluation and reporting
  - Section 12 – Consistency with other plans and legislation

### **Discussion:**

- Status of National Water Initiative – to be reinvigorated under the current Federal Government
  - South Australian Water allocation plans align to National Water Initiative
  - Federal policy around Closing the Gap may have impact for policy development
- Border Groundwater Agreement – differences between states, discussion around the difficulty and appropriateness of the agreement. Discussion around whether the agreement is achieving anything. Noted that LC Landscape Board has representation on the Review Committee now.

## **ACTION:**

2.3 Paddock Tree report to be provided on the project portal.

2.4 Provide summary report that takes recommendations from the plan and places them against actions that have been undertaken.

## Principles Evaluation Process

Liz Perkins and Sue Botting provided an overview of the process for principles evaluation. Volumetric conversion, bridging volumes and licencing component principles were discussed.

Key Points:

- It was raised whether there is a need to evaluate whether bridging volume and volumetric conversion principles were successful in what they set out to achieve.
- There was discussion by those who were part of those processes as to whether there was any stakeholder concerns as to the process that those principles enacted.
- Is a consensus required? Discussion around whether consensus is needed for decisions. Where possible the group will seek to reach consensus but there is recognition that at times consensus might not be possible. In cases of divergent views or failure to reach a recommendation these views will be provided to the LC Landscape Board for consideration.
- Recognition that the environment had no opportunity to access bridging volumes – starting at a different point from irrigators.
- Discussion around carry over and how it works and how different users work within their allocations and whether you can exceed allocation. Discussion around the margin of safety irrigators use to ensure they don't exceed allocation.
- Noted that dry years can result in reduced water use as irrigators can make business decisions to not plant crops or can change practices to accommodate a dryer year.
- SPR, 3 year rolling average – differing views around how this works
- It will be useful to hear from industries on how they have found and used the SPR and to hear from DEW Water Licencing on how they administer SPR and what they're hearing around Annual Water Use Returns.
- SPR to be used last but actually ended up being used first – opposed to the original intent.
  - Relationship with changes to plan and ensuring people could continue to do run their business without being adversely impacted by the plan changes.
  - Impact and barrier to trades and transfer
  - Business decisions around infrastructure to keep water
- Can SPR changes occur in terms of when it is used (last rather than first)? Will require input from DEW Water Licencing.

**SAG DECISION:** Recommend that the LC Landscape Board remove the volumetric and bridging volume principles from the water allocation plan under amendment.

Moved by: Terry Buckley, Seconded by: Nick Hillier

### ACTION:

2.5 Arrange a presentation from DEW Water Licencing on licencing components and their experiences and perspectives as the body that administers them.

2.6 Arrange a presentation from industry representatives around how useful they have found the different licencing components and how they have used them in their businesses.

2.7 Breakdown of data around allocation and use to be provided at next meeting.

## Next meeting date

- December or January – poll to be provided.

### **Close of meeting**

Meeting closed at 1:15 pm

The Chair thanked the stakeholders and staff for attending.

CONFIRMED

## Lower Limestone Coast WAP Stakeholder Advisory Group Action Table

Action	LLC WAP Stakeholder Advisory Group Actions	Status	Meeting 2 Update
1.1	Provide an overview of the Science Review process, outcomes and the work that has occurred since then at Meeting 2.	Ongoing	Summary of current status of work addressing recommendations presented. Further updates will be provided as needed.
1.2	LC Landscape Board Staff to provide relevant papers on the project portal for Stakeholder Advisory Group members to access	Ongoing	Papers provided. Ongoing operating procedure for the Group.
1.5	Convey stakeholder concerns around the Australian Rare Earths Limited development to the LC Landscape Board Governing Body.	Ongoing	To remain ongoing on the Action List and revisit when discussing mining related principles.
2.1	Provision of presentation, provision of reports from presentation		
2.2	Session in future meeting on Groundwater Dependent Ecosystems to assist with stakeholder clarity.		
2.3	Paddock Tree report to be provided on the project portal.		
2.4	Provide summary report that takes recommendations from the plan and places them against actions that have been undertaken.		
2.5	Arrange a presentation from DEW Water Licencing on licencing components and their experiences and perspectives as the body that administers them.		
2.6	Arrange a presentation from industry representatives around how useful they have found the different licencing components and how they have used them in their businesses.		
2.7	Breakdown of data around allocation and use to be provided at next meeting.		

### Action Table – Closed Items

Action	LLC WAP Stakeholder Advisory Group Actions	Status
1.3	Ground rules to be drafted and provided back to group	Complete
1.4	LC Landscape Board Staff prepare recommendation for the LC Landscape Board Governing Body on behalf of the Stakeholder Advisory Group. Recommendation to be considered by the LC Landscape Board Governing Body at its 28 October 2022 Meeting.	Complete

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## Lower Limestone Coast WAP Stakeholder Advisory Group Decision Register

Issue	Meeting	Decision
Volumetric conversion and bridging volume principles	Meeting 2	Recommend that the LC Landscape Board remove the volumetric conversion and bridging volume principles from the water allocation plan under amendment.
Representativeness of Group	Meeting 1	Group agreement that a nomination should be sought from hardwood plantation forestry for representation on the Stakeholder Advisory Group.

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