

Limestone Coast Water Resource Management

Water Values Survey

Summary

Background

The Limestone Coast Landscape Board recognises that our community values the regional water resource and there is a need for this community value to be understood when shaping future water resource management activities.

To support a deeper understanding of the community views on water use and what they see as important for the ongoing sustainability and prosperity of the region, the **Water Values Survey** was released in March 2022.

<https://engage.lclandscapesa.com.au/water-values>

Purpose of the Water Values Survey

The survey was developed to help inform policy and engagement in water planning, including the upcoming reviews of the Lower Limestone Coast and Tintinara-Coonalpyn water allocation plans.

Whilst a section of the survey was aimed at water licence holders, the survey was primarily designed to explore what the general community thinks about the way water is perceived and valued in this region.

Key messaging and topics in the survey included:

- What does **water security** in the Limestone Coast look like to you?
- Water use creates economic prosperity but also impacts the environment, community and culture – what does a **balance** look like to you?
- From water allocation planning to drainage management, wetland preservation and industry water use. **Water resource management** concerns us all.

The survey questions are listed at **Appendix 1**.

Purpose of this summary

This summary has been developed as an overview of the responses received, and to identify key themes and opportunities to inform water planning and policy development. The responses are broadly presented in the following categories:

- Water Resource
- Water Management
- Water Security
- Engagement

Contents

Background	2
Summary	4
Respondents	5
Water Resource.....	7
Water Management.....	9
Water Security.....	11
Engagement.....	13
Appendix 1	15

Summary

Due to the low number of responses, this survey has been interpreted as reflective of the community respondents and/or small number of licence holders who participated and does not accurately reflect whole of community views.

Observations or key points are identified for further consideration or testing, with key themes summarised below:

- Respondents have a level of existing knowledge and understanding, but generally want to know more about the water resource and how it is managed.
- Maintaining a balance was the priority, with a healthy environment being viewed as much more important than a healthy economy by respondents.
- Respondents are concerned about water security and uncertain about the future.
- Impacts and opportunities of the drainage system on the water resource is heavily emphasised as a water resource solution. Opportunity for increased engagement on complexity and limitations of this as a management approach.
- Licence holders are doing their own research and trust their own observations above information that is being communicated with them.
- Respondents trust themselves or a local group they have chosen to be a part of over regulatory or government bodies. There is limited trust in industry or the bodies that manage groundwater.
- There appears to be limited social licence for development of the resource based on limited acceptance of perceived environmental impacts of increased water use and limited recognition of the benefits associated with development.

These key themes are anticipated to be of particular interest and relevance to the Lower Limestone Coast Water Allocation Plan review and Stakeholder Advisory Group, and may assist to inform engagement campaigns.

Respondents

The release of the survey was widely distributed and promoted to encourage respondents from a diverse demographic, this included:

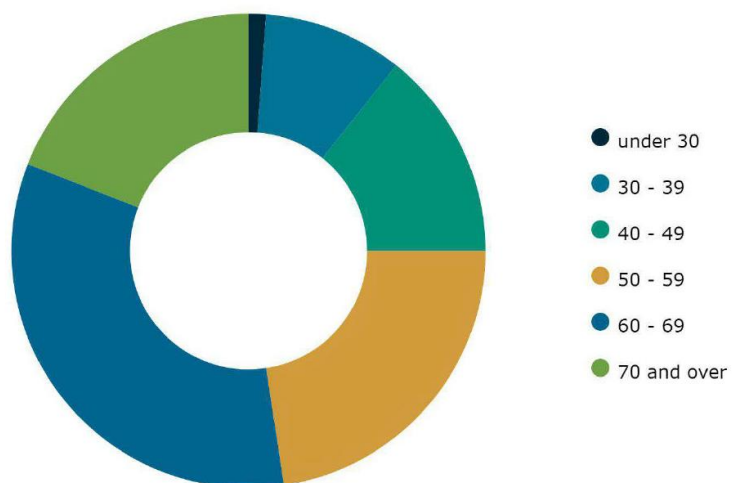
- South East Field Days
- Newspaper
- Flyers
- Social media posts
- Website news story
- Media release
- AgConnect e-newsletter.

Of the respondents, 36.90% heard of the survey through Facebook followed by 30.95% through email sources.

19.05% of the respondents were not aware of the Limestone Coast Landscape Board before this survey. This indicates that the distribution has been able to reach an audience which has not actively engaged with the Board and may reflect a previously unrepresented portion of the community.

Overview

Number of responses received:	84 total
Highest return area:	Mount Gambier 36.91% 5290 / 5291
In town / out of town:	44.05% / 55.95%
Water licence holders:	21 85.71% Lower Limestone Coast PWA
Aboriginal or Torres Strait Islander	2.38%
Age representation:	



Key points

- Response number of 84 is very low in context of regional population.
- 16 responses from community who were not aware of the LC Landscape Board prior to the survey, positive reflection of reach and representation.
- Responses were Lower Limestone Coast dominated, very few responses from Upper Limestone Coast area. Opportunity to engage further with northern area of LC Landscape Board region.
- Age representation was limited in Under 30 and 30-39 categories, majority of responses from over 60 age group/s. Opportunity to engage further with youth through Education programs for intergenerational representation.
- Respondents use of water in % order indicates predominantly 'community' based water uses, survey responses not dominated by water licence holders:
 1. Stock and/or domestic bore
 2. Visiting sinkholes, wetlands, creeks or rivers
 3. Town water use (supplied by SA Water)
 4. Water licence
 5. Other
 6. Dam for stock, domestic or recreational use.
- Water licence holder respondents:
 - Predominately Lower Limestone Coast PWA, 1 each in Tintinara-Coonalpyn, Padthaway and 2 in Tatiara
 - Respondents identified industry as grazing, dairy, forestry, grapes, seed production and horticulture.

Water Resource

Overview

- 16.67% of respondents felt they were 'knowledgeable' about the Limestone Coast's water resources, majority (80.95%) felt they had a little or some existing knowledge.
- When considering water resource trends, consistent majority identified declining trends across:
 - Groundwater levels
 - Groundwater quality
 - Surface water in creeks and wetlands
 - Surface water flows and drains
 - Rainfall
- Respondents view on industries using water sustainably was highly varied. Stock water considered most sustainable, followed by viticulture and seed production. Blue gum forestry plantation considered least sustainable.
- Maintaining a balance was considered most important, with a healthy environment being viewed as much more important than a healthy economy.
- Respondents viewed that regional economy, industry and community benefit most from water use generally.
- When considering water in the landscape, and what changes seem likely, the highest responses were:
 1. Decline of underground water tables
 2. Drying of naturally wet places eg Bool Lagoon, Tatiara Creek
 3. Water level drop in places like Little Blue Lake or Cockatoo Lake
 4. Less water in the drains in summer
 5. Decrease in groundwater quality

Responses indicate that community may not fully realise the opportunities, value or benefit of water use, but are primarily focussed on the negative environmental impacts of water use.
- Specific to water licence holders:
 - Majority consider the current condition (quality and quantity) of groundwater in their respective PWA as average, with availability slightly less than average
 - 85.71% of respondents have concerns about the future condition and availability of groundwater in their PWA

Key points

- Respondents feel like they know a fair bit but also feel like they need to know more.
- Inconsistent responses on industry water use likely reflects respondent perception of the industry as a whole as opposed to how sustainably they use water, and noted variation of water use within each industry. Respondents seem undecided as to whether water is being used sustainably by industry.
- Maintaining a balance between a healthy environment and healthy economy is reflective of the key objectives of the respondents in a community based survey, likely this response may reflect differently if respondents were primarily industry.
- Survey indicates there is primarily negative connotations associated with increased water use, as opposed to the potential benefits. This may indicate there is low social licence for developing the resource further until there is a supported shift in this sentiment. Again, noting that this response would likely reflect differently depending on representation of predominate respondents.
- Water licence respondents are clearly concerned about the future of the water resource and indicates a high level of uncertainty. Opportunity to improve communication on water resource condition in an open and ongoing way, so as to minimise apprehension at time of water allocation plan reviews.

Water Management

Overview

- 11.90% of respondents felt they were 'knowledgeable' about how water is managed in the Limestone Coast, majority (86.90%) felt they had a little or some existing knowledge.
- Respondents were predominately less than neutral (negative) when asked who they trust to manage our water resources responsibility. Of the categories provided, all responses were neutral to not trusting in the following order (most to least trust):
 1. LC Landscape Board
 2. Landholders
 3. Primary Producers
 4. State Government
 5. Local Government
 6. Private Industry.
- 78.32% of respondents were not satisfied with the management of our water resources when thinking about the natural environment.
- 72.29% of respondents were not satisfied with the management of our water resources when thinking about the region's economy.
- 81.93% of respondents were neutral or dissatisfied with how decisions are made in relation to water resource management and 67.47% were neutral or dissatisfied with opportunities to be heard on issues that are important to them.
- Specific to water licence holders:
 - Believe the purpose of water allocation plans is as follow (in order):
 1. Use a scientific basis to categorise and calculate water use types and quantities to maintain a sustainable balance
 2. Apply the best available science to a unique set of varying conditions to manage multiple uses and requirements
 3. Manage a balance between economic development and environmental water needs
 4. Assist water regulators (state government, LC Landscape Board) to track water use in the region
 5. Regulate water use to ensure equitable user-pays distribution
 6. Constrain development to protect the environment
 7. Other.

- 54.55% are comfortable with the information and knowledge they have about how water use is regulated in their prescribed well area.
- 75% of respondents were neutral to positive on how the water allocation plan manages the current condition (quality and quantity) of the groundwater resources in their prescribed well area.
- When considering adaptations that might help manage water resources in the future, the responses were spread across all options but top responses included:
 1. Change of irrigation practice
 2. Change of tilling/sowing/grazing practice
 3. Change of crop/stock type
 4. Change to specialised production requirement rules, reducing water availability
 5. Create an environmental water allowance
 6. Metering of stock and domestic bores.

Key points

- Respondents feel like they know a bit about how water is managed but also feel like they need to know more, positive that there is interest in understanding how water is managed.
- Opportunity for LC Landscape Board to be proactive in education, awareness and understanding of water resource management.
- Positive that LC Landscape Board was seen with most trust to manage water resources. Response was still neutral to negative indicating that further trust needs to be built through increased visibility, understanding and communication of water management balance.
- Majority dissatisfied with how water resource is managed for the environment and also the economy. Aligns with earlier response priority of maintaining a balance, and may further reflect the lack of trust and lack of acknowledgement of benefit of the resource, currently viewed negatively by respondents.
- Licence holders value and focus on science within the water allocation plans, which aligns with anecdotal observations and engagement through review processes.
- Adaptation to support water management were firstly land manager practice change focused, followed by regulatory mechanisms. Variation in responses with no stand out option supports that adaptation will need to be multi-faceted.

Water Security

Overview

- Respondents were generally concerned about all aspects of water security, with continued drainage of the land and loss of wetlands as the highest concerns.
- Increased demand for water by industry is viewed as more of a concern than increased demand for water by towns.
- The approaches most preferred by respondents for management water resources in the region were:
 - reduce water being drained from the landscape
 - manage water use to protect dependent wetlands from further decline.
- 78.31% of respondents were concerned or fearful about water security in the future.
- Respondents saw the most important goals for water managers as:
 1. Redirecting water in drains to other uses, not going out to sea
 2. Innovation to achieve water efficiency
 3. Creating limits to water use to manage for future changes to climate, land use, population or food production needs
 4. Ensuring that wetlands are protected for habitat
 5. Protecting naturally wet places for flora, fauna and people to use.
- Respondents were not accepting of negative environmental impacts and were neutral on accepting positive economic or wellbeing impacts if water use increases.
- Specific to water licence holders:
 - 85.71% of respondents have concerns about the future condition and availability of groundwater in their prescribed well area.
 - 42.86% of respondents have concerns about their capacity to continue to conduct their enterprise at its current level into the future.

Key points

- Respondents didn't rate drought or decreased rainfall as primary concerns of water security, suggests that climate change is given less emphasis than water use.
- Need for support to increase knowledge and understanding of complexities of drainage system, limited opportunity as management option for water resource.
- Opportunity for increased engagement on Drainage Network Assessment and Managed Aquifer Recharge Feasibility Study.
- Managing use and protecting the environment were key themes in goals for water managers for the respondents.
- Indicates there is primarily negative connotations associated with increased water use, as opposed to the potential benefits. This may indicate there is low social licence for developing the resource further until there is a supported shift in this sentiment. Noting that this response would likely reflect differently depending on representation of predominate respondents.
- Uncertainty and lack of trust will contribute to respondents being concerned or fearful about water security in the future. This response reflects the general sentiment of the respondents throughout the survey and need for further engagement on water resource management.

Engagement

Overview

- Respondents:
 - 76.93% feel like they need more information on Limestone Coast water resources.
 - 71.25% feel like they need more information on how water is managed in the Limestone Coast.
 - 67.47% of respondents don't feel that there are opportunities to be heard on issues that are important to them in relation to water resource management.
- Water licence holders:
 - 54.55% are comfortable with the information and knowledge they have about how water use is regulated in their prescribed well area.
 - Identified the source of their information about water resource management as:
 - Personal observation / research
 - LC Landscape Board
 - Former SE NRM Board.
 - Identified grower or irrigator group and self-representation are the most relied on when it comes to participating in consultation about changes to structures or systems like water allocation plans.
 - For the upcoming review process, responses indicate neutral to positive trust is placed in (in order):
 1. Hydrogeological science
 2. Own capacity to participate
 3. Stakeholder Advisory Group
 4. LC Landscape Board
 5. Grower or irrigator group that represents my interests
 6. Department for Environment and Water.
 - Respondents were less than neutral or negative in their trust with industry groups, environment groups, SA Water, First Nations organisations and local government.

Key Points

- Responses consistently indicate community want more information and opportunity to engage on water, including increased visibility and transparency of water resource data.
- Opportunity to improve the information and knowledge that licence holders have about how water is regulated in their PWA, including forestry provisions .
- Opportunity for engagement on Drainage Network Assessment and Managed Aquifer Recharge Feasibility Study.
- 'Grower or irrigator groups' are more likely to represent licence holders in consultation participation over 'industry peak body', with respondents more likely to represent themselves before turning to a peak body. Water allocation plan reviews need to include grower or irrigator groups wherever possible.
- Emphasis on own observations / research as primary source of information is a concern and challenge to build credibility and trust to allow data to be communicated to support water allocation plan reviews and policy development.

Appendix 1

Survey Questions

1. Which postcode do you live in?
2. Where do you live?
3. Your age group is?
4. Do you identify as Aboriginal or Torres Strait Islander?
5. How did you hear about this survey?
6. Before this survey, were you aware of the Limestone Coast Landscape Board?
7. If yes, how were you aware?
8. How much do you feel you know about the Limestone Coast's water resources?
9. Do you feel like you need more information?
10. Thinking about your understanding of the water resources in the region, how would you rate (list of water resources provided)
11. How do you use water?
12. Thinking about industries, how much do you agree that they use water sustainably (list of industries provided)
13. Any other comments?
14. Can you think of any examples of excellent water use?
15. Where do you think improvements could be made?
16. Rank the following concepts (economy environment balance) in order of importance
17. Who or what benefits from water use generally?
18. Thinking about water in our landscape now, what changes seem apparent or likely to you?
19. Any other comments?
20. How well do you understand how water is managed in the Limestone Coast?
21. Do you feel like you need more information?
22. To what extent do you trust the following (list of bodies provided) to manage our water resources responsibly?
23. Any other comments?
24. Thinking about the natural environment, how satisfied are you with the management of our water resources?
25. Thinking about the region's economy, how satisfied are you with the management of our water resources?
26. Thinking about how decisions are made in relation to water resource management, how much do you agree there are opportunity to be heard and how decisions are made?
27. Any other comments?
28. Thinking about water security, how concerned are you about the following (list of environmental water resource management considerations provided)
29. If you were responsible for managing water resources in the region, what would you say was the best approach to take?
30. Which statement best described how you feel about water security in the future?
31. What are the most important goals for water managers?
32. If water use increases, and any of these impacts occur, how accepting would you be?
33. Any other comments?

34. If you had to summarise your feelings about water use in the region in a couple of sentences, what would you say?
35. Which Prescribed Wells Area (PWA) is/are your water licence or licences in?
36. What do you believe is the purpose of Water Allocation Plans?
37. Are you comfortable with the information and knowledge you have about the water use is regulated in your Prescribed Well Area/s (PWA/s)?
38. 'If you don't feel like you have enough information, what more do you need?
39. Where do you get your information about water resource management?
40. When it comes to participating in consultation about changes to structures or systems like WAPs, who represents you?
41. If you said you don't participate, why not?
42. If you selected a grower or irrigator group, or a peak body in the questions above, which one/s are they?
43. How well do you feel the WAP in PWA manages the current condition (quality and quantity) of the groundwater resource?
44. Any comments?
45. In your opinion, how is the current condition (quality and quantity) and availability of the groundwater in your PWA?
46. What concerns, if any, do you have about the current state of groundwater in your PWA?
47. Do you have concerns about the future condition and availability of groundwater in your PWA?
48. Please explain your choice.
49. Do you have concerns about your capacity to continue to conduct your enterprise at its current level, into the future?
50. Please explain your response.
51. What adaptations do you think would help manage our water resources in the future?
52. Do you, personally, hold a water licence (or more than one) in the Lower Limestone Coast PWA?
53. What is the enterprise associated with the principal or sole water licence in your answer above?
54. If your answer referred to more than one, what other enterprises are other licences you hold or make decisions for, associated with?
55. Thinking about the review process that is commencing, where is your trust placed?
56. Are there other participants in this process that you trust, that we haven't mentioned?
57. Please explain your response.

End of Survey.