Meeting 2 Notes

PROJECT: Future Water Source Community Consultation Group
CLIENT: Water Corporation
DATE: August 2025
VERSION: 2 FINAL

When will you have your next Aha! moment?

Aha! CONSULTING

Contents

1 Introduction

As part of exploring new water sources for the Lower Great Southern Towns Water Supply Scheme, the Water Corporation (the Corporation) has formed a Community Consultation Group (CCG). The expression of interest form set the purpose of this group as:

> "Consult with a diverse mix of community members to better understand the decision-making process the Water Corporation is undertaking for its future water source planning in the Great Southern Region. This will include consulting on potential sites for a seawater desalination plant in Albany."[1]

A series of meetings have been scheduled for 2025 and 2026. The second of these meetings was held on the 12th of August 2025 at the Water Corporation Offices from 5:00pm to 7:30pm.

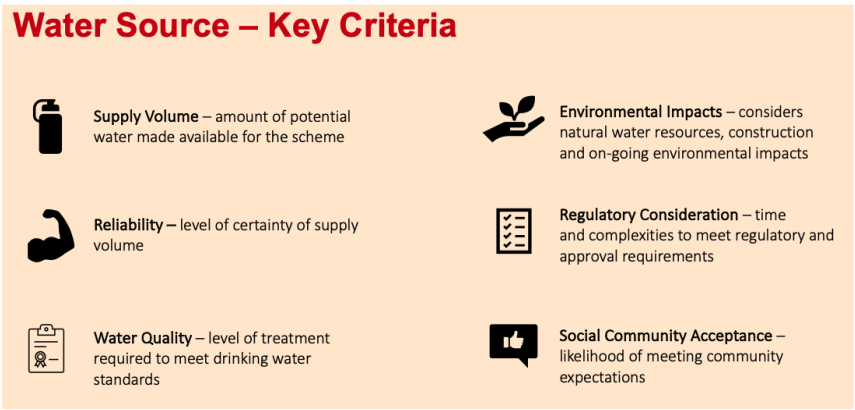
Prior to the meeting, additional information requested by the CCG at meeting one was provided to CCG members.

The participants at the meeting can be found in Appendix One of this report.

The meeting covered two topics:

1. A presentation from Rebecca Palandri, Regional Director (South Coast), Department of Water and Environmental Regulation (DWER).
    - The notes from this presentation will be made available in the CCG portal and do not form part of this report.

2. Exploring the water source selection process and rationale used by the Water Corporation in their selection of desalination.
    - The group was asked to achieve the target supply level (6000 million litres) by compiling an aggregation of different water sources. To be viable, any water source needs to meet the following criteria.



What follows are the core discussion points from this meeting.

[1] Water Corporation: Lower Great Southern new water source investigations. Expression of Interest - Community Consultation Group March 2025.

2 Group Purpose and Agreements

The terms of reference define the group's purposes in the following way.

The Albany Community Consultation Group (CCG) is a place where community members and the Water Corporation can talk about future water plans for the Lower Great Southern Region.

CCG objectives

- Help obtain the views of members on the various options available to the Water Corporation
- Suggest ways to engage with the local community
- Offer advice to the Water Corporation on how issues or concerns may be addressed

Decision-making

The CCG doesn't make decisions; it is a forum for sharing information.

2.1 Agreements

Further to the code of conduct established as part of the CCG's terms of reference, the group discussed its own agreements that would contribute to robust, constructive, and productive delivery of the group's purpose.

- Respect
    - Not talking over other people
    - Making space for others to express their views (kindness)
    - Provide time for people to be able to respond
    - Make eye contact with people
- Be curious
    - Ask "what does it look like?" if you hear different views
    - Take the time to be clear about what the other is saying
- Work together
    - Working to a shared goal
    - Draw on each other's strengths
    - Be solution focus
    - Bring passion in a way others can receive
- Trust
    - Share with openness
    - Encourage two-way conversations

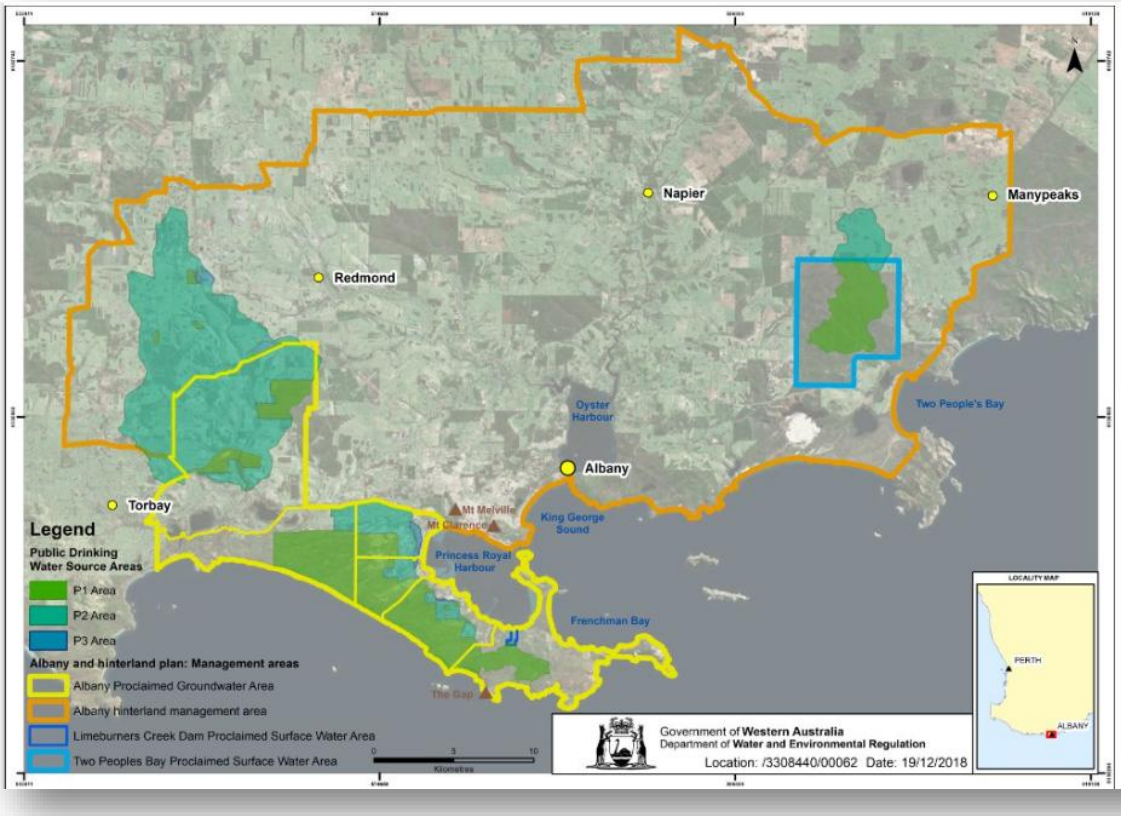
3 Department of Water and Environmental Regulation

Rebecca Palandri, Regional Director – South Coast or the Department of Water and Environmental Regulation (DWER), presented the broader water context to the group.

Her presentation outlined a few key elements.

(1) The role of DWER is

- Regulating the take and use of groundwater and surface water
- Managing water in catchments and estuaries
- Water planning, policy, and programs
- Providing advice to local government on land planning and development applications



Current regulatory boundaries for water in our area

(2) Who are the main users of water in the region

OFFICIAL

Government of Western Australia
Department of Water and Environmental Regulation

Local groundwater users and scale of use

- Approx 20% of groundwater abstracted is for private use by licensees and garden bores (unlicensed)

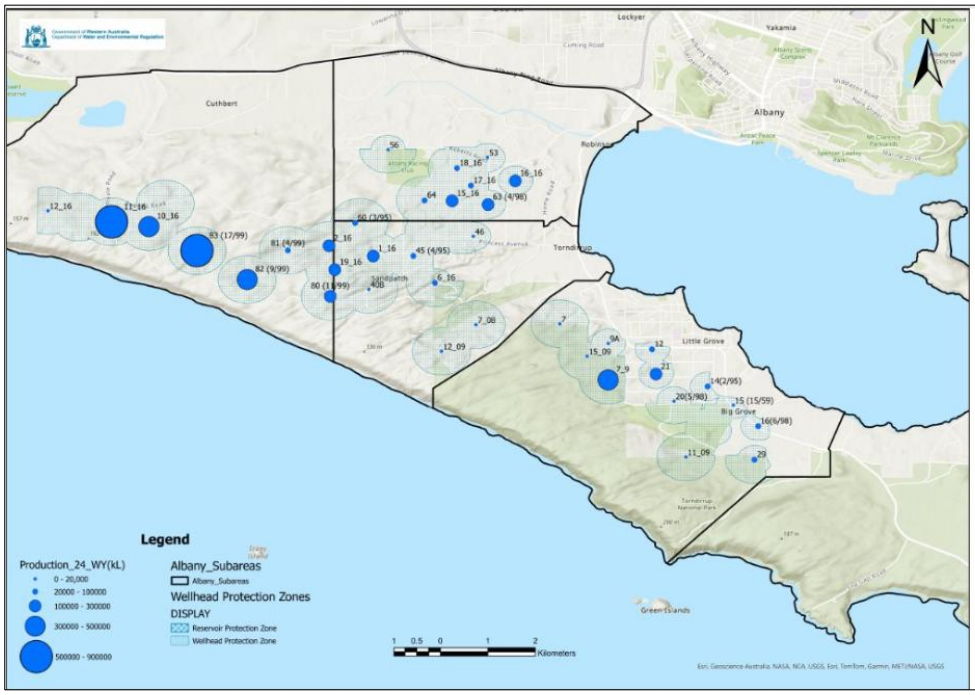
- Majority of licensed groundwater use is for irrigation
- Usually, licences are for less than 10,000 kL/yr
- Local licences across the Albany groundwater area total approx 335,000 kL/yr
- Approx 330,000 kL/yr is unlicensed garden bores

- Water Corporation is licensed for 5,050,000 kL/yr

Clarification: There was a question asked about the percentages quoted not adding up to figures provided on the slide.

Sums on Total allocation limit at 6,471,000 kL/year.

- Water Corporation uses 5,050, 000 kL/yr (which is 78% of total allocation limit and was rounded up to 80% for the purpose of the presentation)
- Licensed general users & Exempt (backyard and stock bores) use 664, 000 kL/yr (which is 10% of total allocation limit figure)
- Remaining (unallocated) 755, 000 kL/yr = 12% *this is the remaining % of groundwater that was included in the total allocation limit of 6,471,000 kL/year, but was not shown on the slide. Noting: DWER has confirmed this water is not available for use. Allocation limits are currently under review for all sub-areas and will likely be reduced.

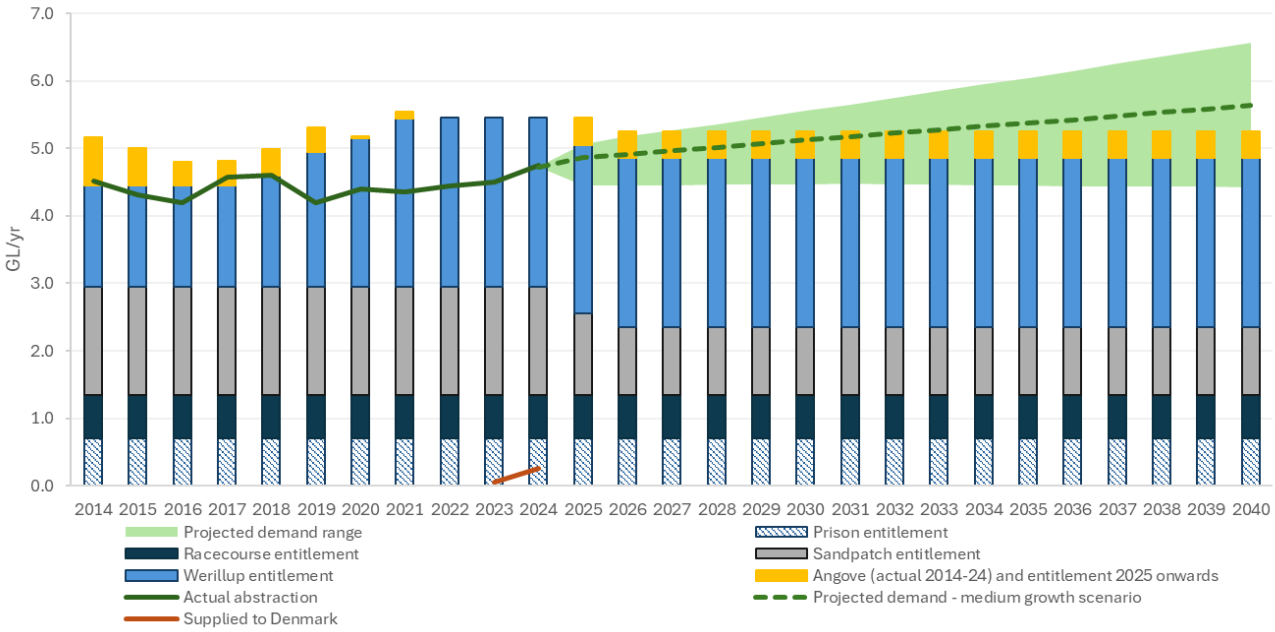


Current groundwater abstraction by Water Corporation

(3) Projected demand

DWER confirmed

- The demand in 2040 is forecast to be around 6000 million litres per year
- The challenge with using treated wastewater for groundwater recharge (groundwater replenishment) based on the make-up of the aquifer, not being the same as Perth



Clarification: There was a question asked on the night about why DWER's graph shows demand outstripping supply in 2033, whereas Water Corporation's graph shows 2030.

DWER

- Forecast source availability: assumed volumes based on licence entitlement.
- Forecast demand: projected range, with an average projected demand for a medium growth scenario (WA Tomorrow).
- Outcome: demand exceeds supply in 2033.

Water Corporation

- Forecast source availability: assumed volumes based on licence entitlement, contingency and yield.
- Forecast demand: actual rate of growth over recent years together with information available on the future development projects to determine a reasonable future growth rate for residential/commercial developments. This growth rate has been applied to actual abstraction for LGSTWSS (less Denmark) in 2024/25 for 2025/26 and beyond, and then assumed 0.25GL will be transferred to Denmark each year to supplement the local sources.
- Outcome: demand exceeds supply in 2030.

4 Build Your Water Source

As part of the prereading, information was provided on the following potential water sources.

1. Existing groundwater
2. Water efficiencies (Demand management)
3. System efficiency (Water loss prevention)
4. Household rainwater tanks
5. Seawater desalination
6. Groundwater replenishment (wastewater recycling)
7. Additional groundwater

Small groups were asked to build a water source plan with as many water sources as needed to achieve the projected demand, approx 6000 million litres per year.

As part of the prereading, the pros and cons of the various water sources were outlined from the Water Corporation's analysis.

Criteria	Additional Groundwater	Groundwater Replenishment	Seawater Desalination	System Efficiencies	Water Efficiency	Household Rainwater Tanks
Supply Volume	Existing borefield: Nil extra. Further reductions in allocation possible. Manypeaks: Moderate. 600,000 kL/yr possible but needs confirmation.	Moderate. 2,150,000 kL/yr possible, significant uncertainty.	High. Scalable to meet future demand beyond 2050.	Variable. Volume dependent on ability to detect and cost effectively recover losses, extent of leaks and theft, etc.	Low. 26,000 kL saved in 2023/24. Potential for up to 40,000 kL/yr with strong uptake.	Variable. Volume dependant on tank size, rainfall, funding source, customer uptake. Up to 82 kL/yr possible from 150m² roof area, based on 23/24 rainfall data.
Reliability	Moderate. Proven technology but declining reliability due to drying climate.	Uncertain. Regulatory complexity, environmental concerns and uncertain recharge-to-abstraction ratio.	High. Climate independent. Proven technology.	Low and variable – dependent on detection and cost-effective repair; some leaks and theft are hard to resolve.	Low and variable. Dependant on voluntary uptake.	Low and declining. Dependent on rainfall. Carted water may be needed in dry years if not connected to the LGSTWSS.

Criteria	Additional Groundwater	Groundwater Replenishment	Seawater Desalination	System Efficiencies	Water Efficiency	Household Rainwater Tanks
Water Quality	Risks from agricultural activity, salinity and iron (likely) that will require treatment.	Intensive treatment (ultrafiltration, reverse osmosis, ultraviolet disinfection) required.	Treatment required.	Excellent – water saved is already scheme supply.	Excellent – water saved is already scheme supply.	Not recommended for drinking. Water Corporation rebates only for garden/laundry/toilet use.
Environmental Impacts	Potential impact on groundwater dependent ecosystems. Clearing required for infrastructure.	Potential aquifer and ecological impacts. Loss of current tree farm irrigation.	Brine discharge and short-term construction impacts. Mitigated through brine dispersion and approvals.	Minimal – some impacts possible, e.g., excavation may disturb vegetation during repairs.	Nil.	Minimal. Tanks installed on cleared private land.
Regulatory Considerations	Difficult. Established source but additional groundwater not preferred by DWER due to climate, environmental concerns.	Complex. Lengthy approvals expected for health and environmental concerns.	Long. State and Commonwealth environmental approvals required. Extensive environmental and social review.	Variable – some repairs may require approvals if on private land or involve environmental impact.	Simple. Voluntary programs with no regulatory barriers.	Simple. Local government building approval and licensed plumbing required.
Community Acceptance	Mixed. Land acquisition and vegetation clearing may receive negative feedback.	Mixed. Community "yuck factor" and aquifer concerns.	Mixed. Concerns around amenity, industry impacts, and marine environment.	Generally positive – though large repairs may cause local disruption.	Generally positive. Voluntary uptake can be limited despite promotion.	Generally positive. Real uptake can be lower.
Timeframe to Implement	Moderate-long. Depends on land access and approvals.	Long. 6+ years for investigation, 3.5 years for delivery.	Moderate-long. Site selection and approvals required. Scalable once built.	Moderate. Dependent on scope of repairs and infrastructure upgrades.	Short. Programs can be implemented and scaled annually.	Short. Household-level installation.

4.1 Combined list

The group cycled through a series of smaller group conversations, exploring a possible composite of water sources required to achieve the target.

The conversation was not completed on the night and aggregated input from the different tables is summarised below, ordered from most preferred to least preferred options to achieve the projected demand target.

Source	Rationale
Existing groundwater	• It is existing and already in use • It is needed to get to the quantity required
Water efficiencies (Demand management) / Household rainwater tanks	• It is important that the value of water is not lost and that people do not become complacent with their own responsibility to be water wise • This approach could become a requirement for new builds
Groundwater replenishment •	• This is better environmentally, will be a steady source of water • It is a greener option with lower operational costs (or similar cost as desal re: reverse osmosis) • It is a regenerative source of water
Desalination • At scale • Smaller Scale	• It is a known technology • It delivers a predictable supply • It is easier to get the cleanliness and quality level required than groundwater • It's already decided so go for it Small scale • Use this to bridge the gap for the next few years – and ongoing supplemental • Gives time for greater community acceptance of groundwater replenishment
New groundwater	• Only if other options are not taken up
System efficiency (Water loss prevention)	

4.2 Table notes

While there were individual notes, the following summary is taken from the 3 of the 4 groups that completed the final collective feedback template.

Source	Rationale
Existing groundwater	• Already using
Waste water recycling Direct potable?	
Desal	• Time sensitive • Known technology • Guaranteed supply
Water loss prevention	
Rainwater tanks	

Source	Rationale
Existing groundwater	• Existing
Home storage/community storage for new developments	• New source, connects people to value of water
Desal (smaller scale)	• Used for bridging gap for next few years – and ongoing supplemental • Give time for community acceptance of groundwater replenishment
Groundwater replenishment • Waste water treatment (non-potable) • Waste water treatment (potable)	• Will be a steady source, better environmental • Greener, lower operational costs
New groundwater	• Only if other options are not taken up

Source	Rationale
Groundwater replenishment (wastewater)	• Similar cost as desal re: reverse osmosis • It's regenerative
Desal	• Predictable supply • Clean water • It's already decided so go for it
Home storage/collection	• Culturally, will help people understand, realise the value of water

5 Request for additional information

As part of better understanding Water Corporations decision to utilise Desalination as the next primary water source, the CCG asked for more information on the following, for both Desalination and GWR:

- Footprint
- Noise level
- Timelines to build
- Indicative cost per kL produced
- More detail on the performance of each option on the criteria (e.g: aquifer hydrogeology)
- Guest speaker who is a subject matter expert on Groundwater Replenishment

6 Appendix One – Attendance

CCR Members

	Name	Meeting 2	Meeting 1
1	Aaron Williams	Apology	Present
2	Anthony Wise	Present	Present
3	Chris Meuzelaar	Present	Present
4	Derek van Buren	Present	Apology
5	Diane Evers	Present	Present
6	Frank Ruggera	Present	Present
7	Gary Crockford	Present	Apology
8	Harm Mulder	Present	Present
9	Jeremy Hadlow	Apology	Present
10	Jonathan Hoskin	Present	Present
11	Joy Mealor	Present	Present
12	Laura Bird	Present	Present
13	Natalie Reeves	Apology	Present
14	Rebecca Freeman	Present	Apology
15	Sam Williams	Apology	Present
16	Sandra Swain	Present	Present
17	Sarah-Louise Collins	Present	Present
18	Wendy Coffey	Present	Present

Water Corporation Staff

	Name	Meeting 2	Meeting 1
1	Adrian Stewart	Present	Present
2	Julia Phillips	Apology	Present
3	Matthew Bowman	Present	Present
4	Sally Courboules	Present	Present
5	Joel McClure	Present	Present
6	Kym Williams	Present	Present
7	Carina Harris	Present	Apology

– END –

EMAIL: admin@ahaconsulting.net.au
WEBSITE: ahaconsulting.net.au
PHONE: +61 8 9443 9474