Meeting Name

Project Name	Kangaroo Island Long Term Water Supply Plan review					
Purpose	Reference Group Meeting #3					
Date	1/02/2018		**Time**	6:00 pm		
Meeting No.	3		**Frequency**	Monthly		
Facilitator	Aaron Glossop		**Minute Taker**	All		
Venue	Parndana Hotel					
Attendance Ab = Absent Ap = Apologies P = Present	Mike Greig (MK)	Ap	Andy Young (AY)	P	Andy Boardman (AB)	Ap
	Catherine Murphy (CM)	P	Jayne Bates (JB)	Ap	Sue Florance (SF)	Ap
	Pierre Gregor (PG)	Ap	Graham Walkom (GW)	Ap	Graeme Connell (GC)	P
	Kevin Pratt (KP)	Ab	Tony Nolan (TN)	P	Fraser Vickery (FV)	P
	Damien Cooke (DC)	Ap	Peter Davis (PD)	P	Erin Faehrmann (EF)	P
	Haydon Wilkins (HW)	P	Gavin Ralston (GR)	P	Jason West (JW)	P
	Tara Hage (TH)	P	Nicki Putland (NP)	P	John Owens (JO)	P
	Daniel Pledge (DP)	P	Richard Trethewey (RT)	P		
Distribution Excluding invitees	Wendy Campana (WC)					

1 Welcome and Apologies

Aaron (AG) welcomed all representatives and introduced SA Water staff in attendance

AG acknowledged the members who couldn't make it to the meeting.

The agenda for the meeting was outlined on the PowerPoint presentation.

2 Minutes of Meeting #2 & Review of action items

AG asked if anyone had any changes to the draft minutes that were distributed after Meeting #2. No changes were needed and all agreed to ratify those minutes as accurate. The minutes and the agenda from Meeting #2 will be uploaded onto SA Waters website.

The current action items were explained and AG advised that a number of actions had been completed.

3 Landscapes

Erin (EF) provided a summary of the meetings discussion points, concentrating on another five landscapes - Water quality, Safety, Cost, Environment & Heritage and Social. The discussion is to provide a better understanding of the current state, the future state which will identify any

gaps which are present in the Kangaroo Island system as well as providing the background information we need to understand and balance when evaluating any possible options.

3.1 Water quality

Jason (JW) introduced himself and his role with SA Water. JW provided a summary of the islands water quality both at Penneshaw Desalination plant and the Middle River system.

JW showed a slide to explain the water quality challenges of the Middle River water supply. Key points were the levels of Bromide and Dissolved Organic Carbon with the seasonal rainfall. The treatment process to deal with these issues is complex and is expensive compared to conventional metropolitan facilities.

JW talked about

- the MIEX used to treat the water
- the use of aerator to treat the filtered water
- Bromide is high in summer trends with salinity and contributes to disinfection by products
- Discussed upgrade at Penneshaw to 400 kL/day. Running into the network with project finalisation /proving underway

The group asked about the corrosiveness of the potable water supply from the plant and asked what post treatment is installed.

Jason explained the Reverse Osmosis process and use of carbon dioxide gas plus Calcite media to add minerals into the water.

3.2 Safety

Haydon (HW) explained the safety element for all workers, visitors and the general public. SA Water's policy sets out its commitments to safety and these commitments are defined in the SA Water Safety Management System procedures.

- Corporate Goal: Zero Harm
- To embed a safety culture in all of SA Water's planning, systems, projects and processes
- To ensure that WHS Risk Management is embedded in Operational and Functional activities
- Our people are empowered with the principle "no job is too important that the safety of our people and the general public is compromised"

SA Water has a strategic safety program which allocated capital funding to be spent in the following order of prioritisation:

- Reactively addressing infrastructure non-compliances when legislation changes – e.g. Fire & Evacuation systems and asbestos management
- Reactively addressing serious injuries that occur outside SA Water that are directly relevant to SA Water's operations, e.g. improving the integrity of grids and grates
- Proactively targeting to prevent a reoccurrence of 'serious incidents' inside SA Water that can be eliminated or minimised through design, replacement or modification of infrastructure
- Proactively addressing 'unacceptable hazards' with high potential for serious injury or fatality associated with legacy infrastructure that can be eliminated or minimised through design, replacement or modification of infrastructure

All dams are managed by SA Water to keep the structures in a safe condition. We perform regular and extensive safety checks of the infrastructure, including annual engineering assessments.

As stated on the ANCOLD website, unlike some other Australian states and territories, South Australia does not currently have specific dam safety legislation. However as a responsible member of the South Australian community and as a member of ANCOLD, we follow their guidelines.

The safe operation of our dams is of paramount importance, for the safety of surrounding communities (this includes offline dams), and in terms of being able to safely and reliably store and manage water supplied through our network to customers.

3.3 Cost

HW ran through current water supply cost per kl including operating expenses. Smart meters are being considered for use in systems where costs are high. These are aimed at comparing water flow into an area and what is going out. This will allow the identification of water loss and early investigation into the loss.

3.4 Environment & Heritage

Tara (TH) ran through what is important in terms of the Environment and Heritage and what considerations are made when assessing potential impacts from our activities e.g. pipeline routes on roadways impact vegetation, dams and water flows etc. SA Water's aim is to reduce negative impacts to environment and heritage aspects e.g. impacts on important habitat, loss of vegetation, impacts on heritage, waterways etc.

Kangaroo Island has unique flora and fauna so there is a need to consider planning/ assessing impacts well before construction.

This includes:

- looking at terrestrial and marine ecosystem impacts of possible options
- assessing the Carbon Footprint
- looking at risk of impacts to heritage (Aboriginal or European)

As part of the 2009 Long Term Plan and since a fair bit of work has been completed modelling Middle River and potential impact of raising the Middle River dam wall (increase capacity) e.g. glossy black cockatoo feeding habitats in catchment area.

Peter asked have SA Water considered installing smaller dams upstream of the Middle River dam to hold more water in the catchment and then feed into the dam.

It was mentioned that Magill's dam hasn't spilled for years – there isn't the catchment that's why the farmer stopped using it.

With regards to a desalination option - a lot of work goes into reviewing the impact of the receiving marine environment in particular. TH mentioned that since it was installed monitoring of the Penneshaw desalination plant has been undertaken and no impacts to the environment have been identified.

Environmental disturbance needs to look at what would be the net loss. Some environmental impact can be positive to some environments.

Question: Should SA Water run pipelines through paddocks to reduce maintenance cost of roadside verges and avoid constraints around digging in DPTI/ council road verge? This would impact on productivity of that land for farming etc.

3.5 Social

Erin (EF) provided some information regarding the Social criteria from the 2009 Plan and sought feedback on:

- what criteria we should use to evaluate the options.
- how SA Water can work together with local communities to be the water utility the Kangaroo Island community expects.

There were a number of comments raised at this point, listed below:

- Use Penneshaw desalination plant to provide more water in nearby areas – use that asset more
- Take water from under-used dams on the Island and create a network that distributes that water to where it needs to be – a connected network. Could be irrigated / 'raw water'. Could also add point-of-use treatment as optional. Could also have farmers selling that water in to the grid.
- Build 'beaver-dams' upstream of Middle River reservoir to catch smaller pools of 'water banks' to reduce volume out to sea in winter without having to expand capacity of the actual reservoir
- Bring water from the mainland, say from Adelaide desalination plant which isn't being fully used
- Run a raw water system (for stock, fire-fighting and irrigation) and drinking water system in parallel [similar to Clare valley]?
- Desalination for golf course with solar panels

4 Other business

No other business

5 Next meeting

AG suggested dates for the next 3 meetings being:

- 21 February 2018 in American River
- 21 March 2018 in Emu Bay (tbc)
- 19 April 2018 at a location to be determined

Open Action Items Register

No.	Action	By Whom	Date Raised	Date Due	Status
1.	Update SA Water website with FAQ's as need arises	SA Water	14/11/17	ASAP	Ongoing
2.	SA Water to look for CFS online link to inspections on fire plugs	SA Water	1/2/2018	ASAP	Open
3.	SA Water to provide a copy of the 2009 Long Term Plan to the Reference Group	SA Water	1/2/2018	ASAP	Closed
4.	SA Water to provide a copy of the New Community connections fact sheet when completed	SA Water	1/2/2018	ASAP	Open
5.	SA Water to provide information to the group on the safety of the Middle River dam	SA Water	1/2/2018	ASAP	Open