MINUTES

Meeting No 12 held Friday 4 July 2014 at 10.30am
Wudinna Community Club, Medley Tce, Wudinna

CONFIRMATION OF THESE MINUTES (endorsed out of session via email) July 15 2014
Moved: Mark Whitfield
Seconded: Roger Nield
Outcome: Resolved

IN ATTENDANCE:
Eyre Peninsula Natural Resources Management Board:
Heather Baldock (Presiding Member and Chair),
Mark Whitfield (Chair Water Resources Advisory Committee),
Diana Laube
Annie Lane (Regional Manager and EO to EP NRM Board)

Department Environment Water and Natural Resources:
Annie Lane (Regional Manager)
Andrew Klos
Christine Fiebig
Jonathan Clark
Julie Grant
Prabodh Das
Steve Barnett

SA Water
Matt Green
Glyn Ashman

District Council of Cleve: Roger Neild
District Council of Elliston: Damien Andrews
District Council of Streaky Bay: John Tillack and Trevor Gilmore
Regional Development Australia, Whyalla and Eyre Peninsula: Dion Dorward
District Council of Lower Eyre Peninsula: Megan Lowe
District Council of Kimba: Daryl Cears (left at lunchtime)
District Council of Franklin Harbour: Terry Barnes and Eddie Elleway
City of Port Lincoln: Rod Donaldson, Gordon Hartley
City of Whyalla; Alexander Poulton
Wudinna District Council: Alan McGuire
Member for Flinders: Peter Treloar

Community Observers
Jodie Reseigh: EP NRM Board member (until lunchtime)
John Grund: EP NRM Board Water Resources Advisory Committee

APOLOGIES:
District Council of Cleve: Peter Arnold
District Council of Lower Eyre Peninsula: Rod Pearson
Eyre Peninsula Local Government Association: Tony Irvine
District Council of Lower Eyre Peninsula: Julie Lowe
District Council of Tumby Bay: Trevor Smith
1. WELCOME AND INTRODUCTION

1.1 Welcome
Heather Baldock opened the annual meeting at 10.45 and welcomed everyone in attendance. She acknowledged that the Group is meeting on the lands of the Traditional Custodians.

1.2 Additional agenda items

2. CONFIRMATION OF PREVIOUS MEETING

2.1 Minutes of 11 June 2013
The minutes of the previous meeting held were received.

Recommendation 12.2.1
Motion: That the minutes of the previous Eyre Peninsula Water Security Reference Group meeting held 11 June 2013 be accepted as a true and accurate record of the business conducted at that meeting.
Moved: Trevor Gilmore
Seconded: Eddie Elleway
Outcome: Resolved

2.2 Issues / Actions arising from previous meetings
Action: Julia to resend information on FLOWS project

3. RESOURCE MANAGEMENT (Dept. for Environment, Water And Natural Resources)

3.1 Introduction (Julia Grant)
Julia noted that annual Demand and Supply Statement (DSS) for 2012/13 is the 3rd DSS for Eyre Peninsula. EP is the first region for which a DSS was developed and is considered to one of most challenging regions in terms of water security.

3.2 Status of the Groundwater Resources in the Southern Basins and Musgrave Prescribed Wells Areas (Steve Barnett)
Reports are produced annually. Purpose is to compare trends over the last 12 months

Coffin Bay A Lens
Total Extraction 2012-13 = 121 ML
Extraction 23% higher than in 2011-2012
2013 Status: no adverse trends in last 12 months indicating no risk to resource.

Southern Basins PWA
Status report developed for most lenses. Omitted are those that are small and from which extractions do not occur.
Ground water extraction trend over 10 years shows a general decline. However, increase of 23% in 12/13 compared with 11/12.
Since 2009, higher than average rainfall has resulted in a rise in water levels. Levels were higher in 2013 than in 2012 for all observation bores.
Salinity has decreased over last 12 months. Spikes in salinity caused by pumping which brings underlying saline water closer to the surface. 

**2013 Status: no adverse trends in last 12 months indicating no risk to resource.**

**Uley Wanilla Lens**
Extraction decreased steadily over last 5 years. Natural discharge is relatively high. SA Water reduced pumping to rest basin. Salinity trends are positive. 
Total Extraction 2012-13 = 5.2 ML
Extraction 92% less than in 2011-12

**2013 status: no adverse trends in last 12 months indicating no risk to resource.**

**Lincoln Basin Lenses**
Basins close to sea level, hence a potential issue with salt water intrusion. Pumping from 2004 has steadily decreased. Total extraction 99% less in 2012/13 than in 11/12. 

**2013 Status: no adverse trends in last 12 months indicating no risk to resource.**

**Uley South Lens**
Main basin for town water supply, especially as other basins are being rested. Extraction has decreased over last 5 years but increased by 8% in 2013. Widespread rise in water levels since 2009. Salinity has slightly decreased over last 12 months but overall stable.

Since end of drought in 2009, water levels have risen about 0.3m on average
This translates to a net increase in storage of about 4,500 ML
Total Storage 2013 ~ 100,000 ML
Recharge (average) ~ 14,000 ML
Extraction 5,400 ML

Amount extracted annually is a small percentage of total resource and about half of annual recharge.
Strong correlation between rainfall and water level for all lenses.

**2013 Status: no adverse trends in last 12 months indicating no risk to resource.**

**Bramfield Lens**
Extraction decreased in 12/13 by 26%. Increase in water level in last 12 months. 
Total Extraction 2012-13 = 67 ML
Extraction 26% less than in 2011-12

**2013 Status: no adverse trends in last 12 months indicating no risk to resource.**

**Polda Lens**
Since prohibition in 07/08, negligible extraction. Virtually no pumping from Polda currently. Aquifer level responds differently to rainfall across the lens. Some areas continue to rise over years but others show different trend, despite no pumping, due to natural discharge from the system. Recharge is the key.
If water levels decrease while salt increases this indicates natural discharge is through evapotranspiration as saline water is not flowing out.
Since end of drought in 2009, water levels have risen about 0.8m on average. This translates to a net increase in storage of about 4,560ML.

**2013 Status: Gradual adverse trends indicating a low risk to the resource in the medium term.**

**Summary of status for all lenses: all at no risk except Polda with low risk**

**Questions arising**
Robinson basin: monitoring continuing. It is recovering gradually but no plans to use the basin. Infrastructure will stay in place.
Monitoring, management and reporting focused on lenses from which extraction occurs. Other lenses are monitored but there are insufficient resources to produce annual status reports for all lenses.

Question on relationship between eucalypt dieback and water extraction. Discussion around other factors responsible such as insects, drought, age and grazing. Die back occurs in areas where extraction does not occur.

Monitoring of the interface between salt and freshwater is undertaken regularly in coastal locations. Bores are located in shallow limestone aquifer and tertiary aquifer. SA Water reported that the interface remains stable.

**3.3 Water Allocation from Southern Basins and Musgrave Prescribed Wells Area 2014/2015 (Christine Fiebig)**

**Process for determining allocation**
- Allocation based on percentage of annual recharge available for allocation in relation to Quaternary Aquifer
- Based on recharge area of land from where the water is to be taken

**Musgrave**
Analysis of water level data from the Musgrave lenses indicates a slight increase in storage in some lenses and a slight decrease in others. Overall, variability was minor compared to last year.

Musgrave: allocation remains the same as for 13/14.
Prohibition in place since 2008 and continues to apply until Dec 2014. Max volume that can be taken is maximum volume taken between July 1 2005 and 30 June 2008.

**Southern basins**
The lenses of Coffin Bay West, Central and East, along with the lenses of Uley South, Lincoln D and Lincoln D West have recorded increased water levels.
An increase in allocation over the 2013/14 year's recharge rates is proposed.
The lenses of Uley Wanilla, Wanilla, Uley East, Lincoln A, B and C, and Minor lenses have not shown the same pattern of water level increase as the other lenses in the Southern Basins PWA. Accordingly allocation will remain at 2013/14 levels for these lenses.

### 3.4 Eyre Peninsula Demand and Supply Statement 2013 *(Julia Grant)*

Demand and Supply Statements are improving each year due to improved data and process. They set a precedent for management of water across Australia.

**Background**

*Water for Good* Action 64 – Regional Demand and Supply Statements for each NRM region by 2014

*Water for Good* Action 4 – annual review of assumptions of Regional Demand and Supply Statements

*Water for Good* Action 3 – Minister to establish Independent Planning Process five years prior to projections indicating demand exceeding supply

*Water Industry Act 2012* – annual report of the demand and supply status of various regions of the State

DEWNR and SA Water are confident that five years is sufficient to implement alternative water supplies. This considers that substantial work has already been undertaken to evaluate a preferred site for a desalination plant on lower EP. It was noted that desalination is but one option, there are others and a combination of sources may well be the best option.


EP has the best information available of all regions to develop accurate statements. Information is provided by Local Government, ABS, DEWNR, SA Water, DPTI, DMITRE

**Projections**

Projections are developed for:

- Drinking quality resources and demand
- All water sources and demands
- High and low population growth climate change impact scenarios
<table>
<thead>
<tr>
<th>Document</th>
<th>Time of projected shortfall for worst case projection</th>
<th>Key drivers for change from original statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Statement 2009-10</td>
<td>2017-18</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Annual Review 2010-11</td>
<td>2023-24</td>
<td>Climate change on water resources impacts less severe</td>
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<td></td>
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<td>Actual population growth higher than low population projection but lower than high population projection</td>
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<td>A small 73ML increase in Southern Basins PWA allocation</td>
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<tr>
<td>Annual Review 2011-12</td>
<td>2020-21</td>
<td>A large 417ML decrease in Southern Basins PWS allocation</td>
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<td></td>
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<td>Population growth rate tracking with low population projection</td>
</tr>
<tr>
<td>Current Annual Review 2012-13</td>
<td>2024-25</td>
<td>A large 445 ML increase in Southern Basins PWA allocations</td>
</tr>
</tbody>
</table>

**Annual review 2012-13**

Projection 1 Findings (potable):

Demand projected to not exceed supply before 2024-25

Projection 2 Findings (all water):

Demand projected to not exceed supply before 2050

- Mains water consumption in the Eyre Peninsula region was 15.4 GL or around 840 ML lower than the previous year
- This included around 10 GL River Murray water and 5.6 GL from groundwater (including delivery)
- 4045 ML surplus of drinking quality water was recorded in the region compared with originally projected best and worst-case scenarios of 1270 ML and 1106 ML, respectively
- 7345 ML surplus was recorded for all drinking and non-drinking quality water compared to best and worst-case scenarios of 4032 ML and 3851 ML, respectively.

**General Discussion**

Ratio of River Murray to aquifer water provided to EP changes from year to year. However, remaining steady at around 15%. Consumption has been generally declining over recent years despite lifting of restrictions.
Discussion around establishing alternative water infrastructure to consider potential drought and support development rather than wait until it’s required. SA Water reported that they have gone as far as possible at this stage in developing plans for building of a desalination plan. Discussion around alternative water supplies such as third party desalination plant, river Murray and/or Adelaide Desalinised water.

Mining – mining companies must provide their own water. If in a prescribed area they would need to apply for an allocation under the same conditions as other licensees. In terms of population growth in towns, this would require additional water supply.

Members of the EPWSRG are encouraged to provide current data to DEWNR including projections for growth for inclusion in development of statement.

Community concern around water on EP is generally high. Communication on the current status of water resources and planning for the future could have a higher profile. Having media pick up and promote positive water stories is challenging but important to ensure the facts are heard.

**Projections:** Demand for potable water not exceed supply until 24-25. All water in 2050 Projection of when demand will exceed supply has steadily been extended since first statement in 09-10.
Timing for independent planning process to be implemented is now 2019-2020.

Key points:
Data quality and volume, including projections, will improve the quality of demand and supply statements and therefore certainty around water security into the future.
Annual review analyses trends using current information and allows for active adaptive management based on real evidence.

**Actions:** Julia to provide a communication piece for use by local councils
All presentations to be provided to the WSRG members and meeting participants.

**The meeting broke for lunch at 12.45 and reconvened at 13.15**

4. **LONG TERM WATER SECURITY PLAN FOR EYRE PENINSULA**

4.1 **SA Water Business Update (Matt Green)**
SA Water now regulated by ESCOSA (Essential Services Commission of South Australia). They are expected to have a strong customer focus and to operate prudently and efficiently.

4.2 **Water Security Plan**
Long term plan for EP released in 2008, now called water security plan. It’s a 25 year plan and an adaptive management tool. Reviewed annually and includes DSS undertaken by DEWNR as well as infrastructure needs. Distinct from the DEWNR DSS as only covers the SA
Water supply and network capacity. It’s an ongoing process and is informed by a range of stakeholders.

Triggers includes changes in population growth predictions, customer water use, water allocations, resilience to climate variability, and climate change. Information is provided by key stakeholders, including Councils, Regional Development Australia, DEWNR and the EPNRM Board.

SA Water manages 3,300 km pipe, about 17,000 water connections, 7,209 ML demand in 12/13.

Overall, consumption is steady, number of active connections is increasing, and consumption per connection is decreasing.

4.3 Demand and supply response
Demand not projected to exceed supply until 24/25 under a worst case scenario.
Key factors:
• Increase allocations of 14/15
• Population rates lower than expected
• Mining impacts lower than expected.

Available water resources are basically stable and continue to exceed demand.

In response to DSS, SA water has updated demand data. Overall trend has continued to decline.
Demand for 13/14 will be approx. 6,500ML (excluding Whyalla).

SA Water allocations for 2014/15:
• Southern Basins – total 8 400 ML/a
• Coffin Bay (not yet connected to overall system) – 111.9 ML/a
  – Lincoln Basin – 625 ML/a
  – Uley South – 7 353 ML/a
  – Uley Wanilla – 155 ML/a
• Musgrave Basins – total 1 155 ML/a
  – Elliston (not connected to overall system) – 1155 ML/a
  – Polda – Notice of Prohibition - 0 ML/a
• Iron Knob – Kimba – 1 700 ML/a
• Total water resources 10 700 ML/a

4.4 Current capital projects
**Coffin Bay**

Research undertaken in 2010 suggests more water available in Coffin Bay lens but needs to be proven.

Augmentation works are commencing and pipeline connection to the EP water supply network. This is 18km in length and estimated to cost about $3.5m. Ability to gravity feed water from Eyre Peninsula Water Supply System (Summit Storage Tanks) to Coffin Bay. Initially will only be looking to transfer a maximum of 20ML/a (within our existing allocation). Will increase security and flexibility of supply, and additional capacity for about 30 years of growth.

Augmentation

- The Water Works Act provided for the establishment of an augmentation charge to cater for future demand, thereby enabling SA Water to obtain a capital contribution for infrastructure works;
- Augmentation charges have been in place for Coffin Bay since 2002;
- Current augmentation for Coffin Bay is $7561 per allotment;
- Once the infrastructure has been delivered, the need for an augmentation charge will be reviewed;
- The augmentation charge will remain at least until the capital works have been completed.

**Tod River Reservoir**

Dam safety investigations undertaken.

$14m allocated to upgrade the dam in line with Australian National Committee on Large Dams guidelines.

Such work is being carried out for dams across the state.

SA Water continues to explore potential future uses for the Tod River Reservoir. Annual water quality flushing program is due to occur in July.

**Additional Works**

New monitoring bores and renewing existing production bores

Will form part of extensive monitoring program to improve knowledge.

Renewal of existing bores in Uley South will ensure their longevity.

Bores will be installed in Uley South and Kellidie Conservation Parks during 14/15.

SA Water is developing a fact sheet for communication across the region. The regional snapshot would include water security aspects and capital investment.

SA Water keen to have region involved in community awareness and education events.
5.1 Regional Development Information Update (Regional Development Australia, Whyalla and Eyre Peninsula – Dion Dorward)

RDA keen to meet with DEWNR and SA Water to compare notes on data used to project population growth.

Mining and petroleum growth is somewhat unpredictable due to market forces. Growth and development is incremental. Challenge is the uncertainty and judging when to take action. However, it is a matter of when not if.

Community preference appears to be multiple options for water supply; local sources with low energy requirements (e.g. small desalination plants)

Need to consider potential private companies to develop water infrastructure. However, need access to SA Water’s infrastructure to distribute water.

5.2 Eyre Peninsula Local Government Association information update (Eyre Peninsula Local Government Association- Eddie Elleway)

Mining is the great unknown. Mining staff living in regional locations increases water demand. Community perception is that water will run out tomorrow. True story needs to be better sold.

5.3 Water Allocation Planning (EPNRM Board- Jonathan Clark)

NRM board responsible for preparation, review and amendment of WAP for prescribed water resources in the region (Southern Basins and Musgrave on EP).

Existing WAPs endorsed by minister in 2000/01. Included adaptive management approach and highly climate dependent water resources on EP.

Board undertook first WAP review in 05/06 followed by another review in 10/11.

Commenced significant scientific investigations in 06/07.

Science and investigation include research into GWDEs, monitoring, defining boundaries of the aquifers, and science supporting the WAP.

New WAP includes:

- Re-definition of consumptive pools
- Buffers – to protect the environment (ground water dependent ecosystems). Also buffers around direct connection between lower and upper aquifers
- Storage and triggers – better understanding of storage capacity. Triggers to manage resource allocation and risk of resource degradation.
- Separation of water rights ( unbundling) – four instruments to separate entitlement, allocation, works approval and site use approval (what the water is used for).
- Water access entitlements – considering volume of consumptive pool...
- Monitoring, evaluation, reporting and improvement plan – clarity around what, when and how frequently monitoring of bores will occur.
Engagement process (July-Dec 2014)
Key components are communication and media, interviews and discussions with key stakeholders, stakeholder reference groups, public forums, and written submissions. Minimum period for consultation is 21 days but this process will be about 4 months. Consultation draft by September. Final product by end 2014. Councils will be in caretaker period mid-Sep to mid-Oct. Restricted in their activities during this time. This needs to be factored into WAP engagement timing.

6. **OTHER BUSINESS** - 2:30pm

Augmentation charges: suggestion for a single augmentation charge across the state for all new developments. SA Water has responsibility and is based on government policy. Would need to have a better understanding of the policy and reasons or drivers behind augmentation.

Forum resolved to defer this issue to EPLGA.

Connections to SA Water – 30% of water users are not connected to SA Water. Question on whether DEWNR is satisfied it has sufficient information on the 30% of users that are not connected.

3rd party access regime is currently being developed under legislation. May be available by end of 2014. Has been on government agenda for some years.

Farm storage. Does DEWNR have data on storage on farms? EP undertook a project in 2008/09 to understand storage in farm dams. Have a reasonable understanding on number of dams and location. Some assumptions on volume need to be made. This information was included in first DSS. Water quality is a factor of dam location and management.

7. **CLOSE** - 2:50pm
### Actions arising

<table>
<thead>
<tr>
<th>Action</th>
<th>Who</th>
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<tbody>
<tr>
<td>Re-send information on FLOWS project to members of EPWSRG</td>
<td>Julia Grant</td>
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<tr>
<td>Develop a communication piece on demand and supply for use by local</td>
<td>Julia Grant</td>
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<td>councils</td>
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<td>Follow up interrogation and comparison of data used as part of the</td>
<td>Julia Grant, Glyn</td>
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<td>basis of assumptions around demand and growth.</td>
<td>Ashman, Dion</td>
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<td>Dorward</td>
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<tr>
<td>All presentations to be provided to the EPWSRG members and meeting</td>
<td>EP NRM</td>
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<td>participants</td>
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<tr>
<td>EPWSRG to write to EPLGA to request that they discuss application of</td>
<td>EP NRM</td>
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<td>a consistent augmentation charge across the state.</td>
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