



MENINDEE LAKES WATER SAVING PROJECT

October 2018 Menindee Lakes engagement summary

Published by NSW Department of Industry

industry.nsw.gov.au

Title: October 2018 Menindee Lakes engagement summary

First published: April 2019

Department reference number: PUB18/773

More information

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Foreword

Under the Murray–Darling Basin Plan 2012 (the Basin Plan), the sustainable diversion limit (SDL) can be adjusted by implementing projects that deliver equivalent environmental outcomes with less water. This means that more water can remain in the Murray–Darling system.

The SDL adjustment mechanism (SDLAM) operates across the southern connected Murray–Darling Basin. Collectively, New South Wales (NSW), Victoria and South Australia have proposed 36 projects that will reduce recovery required to achieve the SDL by 605 GL. The Menindee Lakes Water Saving Project (the project) is one of 23 projects that NSW is either leading or is a co-proponent on with other states.

The current project proposal is in the early stages of development. This development so far includes a concept design for infrastructure works and operational measures that aim to reduce water losses from the Menindee Lakes storage system. These savings make a considerable contribution to the NSW component of the 605 GL outcome agreed to under the Basin Plan's SDLAM.

We are starting the planning stage of this project. It is important to note that at this point, impact assessments (social, economic or environmental) haven't commenced, and the proposal hasn't been assessed through the Infrastructure NSW Gateway process. This process provides quality assurance for NSW investment in major infrastructure projects.

Both the assessment processes and the gateway will require us to identify the potential impacts from the proposal, and investigate mitigating actions or alternative options to address them. Alternative options would need to enable NSW to meet its commitments under the Basin Plan but also improve local environmental, social and economic outcomes.

We are only at the start of our engagement with the local community on this project proposal. We recognise the community's concerns regarding previous engagement.

The NSW Government is committed to transparent and meaningful engagement throughout the process of developing Basin Plan projects.

The NSW Department of Industry (the department) held 12 meetings with the community and stakeholders in the region from 29 to 31 October 2018 to discuss the proposed Menindee Lakes Water Saving Project.

Nearly 400 people attended these meetings on the current proposal and shared their concerns about the project as it currently stands. This report summarises what we heard. There were consistent issues raised across all meetings, as well as issues specific to individual stakeholder groups.

The purpose of this report is to present the views expressed by people who participated in the meetings to ensure there is a record and to inform the development of the project. The report does not seek to endorse, reject or respond to the views expressed.

The department will use the feedback provided during the consultation process to improve the information we provide and the way that we communicate, engage and consult on this proposal.

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October 2018 engagement summary

The Menindee Lakes Water Saving Project (the project) is currently at the concept design stage, and consists of a package of proposed infrastructure works and measures that together aim to deliver better river operations and water efficiency savings.

During 29–31 October 2018, the NSW Department of Industry (the department) held meetings in the Lower Darling region to provide information and gain feedback on the proposed design of the project.

Discussions were held during 12 separate meetings in Wentworth, Pooncarie, Menindee, Sunset Strip, Broken Hill and Wilcannia, where approximately 400 people attended (Table 1). The meetings were facilitated by the Land and Water Commissioner. Presentations and information were provided by the department and technical experts, the Murray–Darling Basin Authority (MDBA) and WaterNSW.

Presentations provided at the meetings and information on the proposed Menindee Lakes Water Saving Project can be found here:

industry.nsw.gov.au/water/plans-programs/water-recovery-programs/sustainable-diversion-limits/menindee-lakes

Table 1. Summary of meetings, Menindee Lakes Water Saving Project, October 2018

Date (2018)	Location	No. of attendees	Groups represented
Monday 29 October	Wentworth	~75 people	<ul style="list-style-type: none"> Local farmers and irrigators Interested community members Local council
Monday 29 October	Wentworth	~15 people	<ul style="list-style-type: none"> Lower Darling Horticulture Group
Monday 29 October	Pooncarie	~14 people	<ul style="list-style-type: none"> Pooncarie business and tourism community
Monday 29 October	Pooncarie	~75 people	<ul style="list-style-type: none"> South West Water User Group Landholders Local council
Tuesday 30 October	Menindee	1 person	<ul style="list-style-type: none"> Local Aboriginal peoples representative
Tuesday 30 October	Menindee	~17 people	<ul style="list-style-type: none"> Menindee tourism and business community
Tuesday 30 October	Menindee	~60 people	<ul style="list-style-type: none"> Menindee local farmers and irrigators Interested community members
Tuesday 30 October	Menindee	~17 people	<ul style="list-style-type: none"> Barkandji Native Title Group and Aboriginal community National Parks and Wildlife
Tuesday 30 October	Sunset Strip	~24 people	<ul style="list-style-type: none"> Sunset Strip residents Broken Hill Councillors Central Darling Shire Councillors
Tuesday 30 October	Broken Hill	~35 people	<ul style="list-style-type: none"> Broken Hill City Council Interested community members
Wednesday 31 October	Wilcannia	~40 people	<ul style="list-style-type: none"> Central Darling Shire Councillors Landholders Wilcannia local business community Aboriginal peoples community Interested community members
Wednesday 31 October	Broken Hill	~7 people	<ul style="list-style-type: none"> Pastoralists Association of West Darling

Consistent themes and issues raised by community

There were a number of issues that were consistently raised by community across multiple meetings. These included:

1. **Consultation on this project proposal has been inconsistent over too many years** and this has led to community mistrust and confusion over what the project is meant to achieve and how it will develop. The community wants transparent engagement with input as to how that occurs.
2. **The community is being asked to comment on a project when they haven't had access to the science, supporting documents and expertise used to develop it.** As a result, the community feels they cannot make informed decisions, and seeks a commitment that the department will provide sufficient information to assist their contribution to the development of the project.
3. **The current Menindee Lakes Water Saving Project is a 'done deal' that ignores local knowledge of the river and lakes system and provides no opportunity for community or stakeholder input into the final design of the project.** The community wants a commitment that the department will consider and assess alternatives to the current proposal.
4. **Reducing the volume at which NSW Government resumes control of the Menindee storages to 80 GL will not provide adequate water security for Lower Darling water users and will result in water quality issues.** The community wants alternative options to consider an increase in the 80 GL storage reserve currently proposed.
5. **The current proposal will result in environmental benefits in areas of the Murray–Darling Basin at the expense of the Lower Darling region.**
6. **The Lower Darling River provides a number of benefits beyond that of providing water to Lower Darling residents,** including: amenity, recreation and tourist attractions; social wellbeing and positive economic and mental health outcomes; and a boundary fence for river properties (reducing stock wandering and biosecurity issues).
7. **Previous studies, information and reports produced in support of the current concept proposal have not adequately assessed potential local and regional economic, social and environmental impacts.**
8. **Recent management of the lakes has resulted in decreased water security in the Lower Darling.** The community does not understand management decisions that have resulted in lakes that were recently relatively full now being empty.
9. **Water management in the northern Murray–Darling Basin is negatively impacting water security in the Lower Darling.** There is a general feeling that the river must be treated holistically and management actions must commence in the northern basin before changes are made in the Lower Darling.
10. **There has been significant delay in negotiating water security outcomes for high security entitlement holders in the Lower Darling River.** This has impacted agricultural business security and made business decisions increasingly difficult.
11. **Uncertainty around the project is creating significant uncertainty for the Menindee community, hampering investment decisions and people's ability to plan.**
12. **The Barkandji People hold native title rights and interests in the area. There are considerable Aboriginal cultural heritage impacts that could arise if the project is implemented in its current concept design.**

Knowing these issues will help us:

- engage and consult with the community in a meaningful way
- provide information the community needs to allow them to actively engage with the consultation
- design the engagement and consultation strategy for the project
- ensure community issues can be addressed during the design and assessment processes for the project.

Information provided by the department

The department provided the following information during the community meetings:

- The project is at concept design stage only. NSW Government developed a pre-feasibility 'business case' in June 2017 for the Commonwealth Government, and after assessment, the current proposal was considered capable of providing water recovery offsets under the SDLAM process of the Basin Plan. On this basis, it was included in the package of 36 SDLAM projects across the southern basin.
- The proposed project must now be subject to more detailed design, planning, formal impact assessment and approvals processes.
- The proposed project is currently in the pre-construction stage and is not a 'done deal'.
- The department will consider options or alternatives that allow the NSW Government to address issues identified by the community and improve local environmental, social and economic outcomes and also meet its commitments under the Basin Plan.
- It is highly likely that the proposed project will be considered 'State-significant infrastructure', and therefore would require an environmental impact statement under the *NSW Environmental Planning and Assessment Act 1979* before construction can commence.
- The proposed project must be subject to the Infrastructure NSW Gateway process, which includes options analysis and preliminary business case development during Gate 1. The department must present alternatives to the current proposal and analyse the benefit–cost of all options. Gate 1 will result in a preferred option which will continue to be assessed.
- A NSW Treasury-compliant business case must be prepared for the preferred option and proceed through Gate 2 of the gateway process before an investment decision can be made.
- The preferred option needs to be assessed under the *NSW Environmental Planning and Assessment Act 1979*. Early analysis indicates the project will be State-significant infrastructure under Part 5 of the Act, which requires a full Environmental Impact Statement (environmental, socio-economic and Aboriginal cultural heritage). The Environmental Impact Statement (EIS) process requires community and stakeholder engagement, and the EIS will be placed on public exhibition with invitations for submissions.
- At the end of the public exhibition phase, the NSW Minister for Planning will approve or refuse the project after consideration of all submissions, and ensure that appropriate conditions are applied to the project to manage potential impacts.
- The preferred option must also be assessed and approved through the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. Approval for the project to proceed is required from the Commonwealth Minister for the Environment.
- The Barkandji People hold native title rights and interests in the Lower Darling River and Menindee Lakes system so the project needs to comply with the Commonwealth *Native Title Act 1993*.
- The department will engage with the community in a meaningful and transparent way. We will use suggestions provided during these meetings to help design the project with the community in a way that is acceptable to them.
- The department will establish formal mechanisms that include community and stakeholders in the governance structure for the project. We will seek nominations for community and stakeholder advisory committee membership.
- The department acknowledges that information on a number of issues raised during meetings is required, and will work on developing this information and making it publicly available.

Issues raised at each meeting

Tables 2 to 13 summarise key messages and issues raised at each of the meetings.

Table 2. Issues raised at Wentworth by local farmers and irrigators, and interested community members

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> • Need options to promote economic growth. • Concern there was no focus on growing the population. • Suggested government should look to promote economic, eco-tourism and agriculture growth. • Services across the whole community decline as the population does. • Anything that stagnates the population means a decline in services and this has a compounding impact. • The current situation (dry lakes/Darling) is causing increased stress on people's lives and ability to run businesses.
Project/timeline/engagement/process	<ul style="list-style-type: none"> • Concern that the project is a done deal. • There is a history of periodic meeting on this project since the 1990s with very little progress. • Has anyone looked at the failures of previous engagement attempts? • What action will government take that's different this time? • How will the views from this meeting influence decisions? • The community is being asked for comment on a plan for which they haven't had access to the science, supporting documents, business case, etc. People feel they cannot make informed decisions. • Suggest there should be a community consultative committee established to inform the project with generational local knowledge. Community could assist with recommending a group of experts to work through each of the issues.
Aboriginal people and Aboriginal cultural heritage	<ul style="list-style-type: none"> • The Aboriginal community wants the Darling (Barka) to continue running. • The Barkandji People feel they have been abandoned. • Barkandji People expressed their preference to be treated as property owners and managers. • Expressed concern that work completed to date increases the risk of dividing Northern and Southern Aboriginal communities. • Suggested Aboriginal community has decades of experience and knowledge and can help with development of project.
Environmental impacts	<ul style="list-style-type: none"> • Menindee Lakes need to be managed so there is a fish nursery, bird breeding ground, listed Ramsar Convention site and partnership with Aboriginal people. • Emphasis on the critical need for flowing water and connectivity along the Darling River.
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> • The lakes being dry now has more to do with water management upstream and not the drought. • You have to run the river as a whole. If you sacrifice the Lower Darling, you sacrifice the system. • Community feels they are being sacrificed for the benefit of those both up and downstream. • You need SA, Victoria and others on side.

Theme of issue	Key issues raised
	<ul style="list-style-type: none"> It is not clear how separating river use from community needs makes any sense.
Credibility	<ul style="list-style-type: none"> The community stated that the government has a credibility issue. Needs to be fixed with actions.
Reports	<ul style="list-style-type: none"> The community expressed concern over recent reports and lack of community input and support.
Technical measurement and modelling	<ul style="list-style-type: none"> Community suggested there is a lack of belief that evaporation is as significant an issue as currently suggested. If Menindee evaporation is being measured, so too should on-farm storage evaporation.
Infrastructure	<ul style="list-style-type: none"> Suggestion that government should use the Tandou channel already commissioned to drain lakes more quickly rather than construct new infrastructure. Concern was expressed that the anabranch operation and pipeline has made things worse. The Barkandji People stated that the location of some infrastructure will have significant cultural heritage impacts.

Table 3. Issues raised at Wentworth by the Lower Darling Horticulture Group

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> The community wants to keep permanent plantings. If this can't happen, how will the NSW Government support the community? Concern that current management of the lakes (drawdown) results in decreased water security in the Lower Darling. Community believe properties have decreased in value since discussions commenced with government in 2014. Believe this is due to water security and quality issues. Concern expressed that the focus is on environmental impacts with no regard to social impacts to date. Residents want a structural adjustment package so that they may stay in the region. Timeliness of discussions with the Commonwealth is imperative.
Project/timeline/engagement/process	<ul style="list-style-type: none"> In 2014, the government commenced discussions on structural adjustment. That was already four years ago. If this Menindee project isn't due until 2024, that's a decade without action for those on the land. Not being able to make investment decisions for a decade is crippling. What do these families do between now and 2024 to ensure they have a secure supply of water? This is a long-term project, but what about right now?
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> Concern that there is no connectivity between water sharing plans, including no integration or assessment of cumulative impacts. The community feel that you can't come to the middle of the water system and try to fix it. Go to the top and fix it from there.

Theme of issue	Key issues raised
	<ul style="list-style-type: none"> Concerns relating to lack of extraction embargoes in the north. Community believe Menindee has been drawn down too quickly. Suggestion that first flush rules need to be actively managed. A first flush after a dry period is important and needs to be included in water sharing plans.
Reports	<ul style="list-style-type: none"> The community expressed concern over recent reports and lack of consideration of community input and support.

Table 4. Issues raised at Pooncarie by the local business and tourism community

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> Strong view that 80 GL as a minimum reserve is not enough for the environment nor economic viability of the area. Currently only just surviving on 300 GL. Would like to see options that focus on increased storage levels, and therefore 'more to play with', acknowledging that storing water for long periods of time is problematic and should be avoided. Feel the needs of the local community are not a priority when compared to needs of northern annual plantings. Community believe there are increased health issues relating to water quality and requested water quality testing up and down the river to assist in addressing these issues.
Project/timeline/engagement/process	<ul style="list-style-type: none"> The project timing is too far away—community is concerned about the immediate situation and the prospect of having no water come December. How are timelines going to change if/when both governments change?
Environmental impacts	<ul style="list-style-type: none"> Sixty per cent of fish in this region come from this area—how do we deal with these impacts? Community does not understand how environmental equivalence is demonstrated with a proposal that suggests they will run out of water sooner and stay dryer for longer. Further information and engagement is required before they make decisions on what is best for the environment. Concern expressed regarding potential damage to river red gums resulting from increased releases and rate of river flow.
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> Government needs to demonstrate 'connectivity of rivers' to the community. Community showed a preference for a flowing river as the only viable option.
Reports	<ul style="list-style-type: none"> The community expressed concern over recent reports and lack of consideration of community input and support. Community suggested they had no faith in information that is being provided—-independent scientific analysis would

Theme of issue	Key issues raised
	be their preference.
Technical measurement and modelling	<ul style="list-style-type: none"> • The community has no faith in information that is being provided—independent scientific analysis would be the preference. • Community would like to see modelling and long term release data based on historical assumptions and independent assessment of this data. • Community would also like to see more accurate evaporation measurement methods than those currently used in the Menindee Lakes.

Table 5. Issues raised at Pooncarie by the South West Water Users Group and by landholders

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> • Strong view that 80 GL as a minimum reserve is not enough for the environment nor economic viability of the area. Currently only just surviving on 300 GL. • Don't believe community should bear any cost of the project. • Believe farmers should be provided free agistment of stock until water is returned to the system. • Need to be supported financially—have fees waived. • Raised concern there seemed to be no contingency in place for the community and that they may have been better off before the Basin Plan. • Expressed concerns over finding a triple bottom line solution for the Lower Darling. • Community feel that the environment is being prioritised over people.
Environmental impacts	<ul style="list-style-type: none"> • An option to explore might be increasing the storage levels at Menindee and Cawndilla. • Community feel that if you send 14 GL down the river and close off the Darling tributaries, what happens in flood? The land is not used to this much water. • Diverting savings to the Hume Dam/Weir is a different system and therefore unacceptable to local communities.
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> • Community feel that drawdowns from Menindee are premature. • Until the Menindee SDL project is decided and the issues are satisfactorily resolved, any taking of Menindee water is premature. • If there is a rain event and some inflows, community want a commitment to restrict water trading until local water supply and quality issues are resolved. • Need to look at alternative such as increased storage at Menindee.

Theme of issue	Key issues raised
Project/timeline/engagement/process	<ul style="list-style-type: none"> • Call for elected representatives to meet with the community face to face to hear their concerns.
Reports	<ul style="list-style-type: none"> • The community expressed concern over recent reports and lack of consideration of community input and support. • The community suggested reports on water security options for the Lower Darling underestimate stock and domestic take and needs. Amount of water needs to be calculated at maximum stocking rates.
Technical measurement and modelling	<ul style="list-style-type: none"> • Community suggested there is a lack of belief that evaporation is as significant an issue as currently suggested.
Infrastructure	<ul style="list-style-type: none"> • Suggestion that a pipeline creates more issues than it solves in terms of stock movement (where the river acts as a boundary fence) and biosecurity issues for organic farmers (where there will be increased stock crossing).

Table 6. Issues raised at Menindee by local Aboriginal representative

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> • Without the Darling (Barka) flowing, there will be ongoing issues. • Crime statistics go down when the water flows. • It seems there are now so many toxins in the Murray River. • More water brings more water. Suggested we should be talking about alternatives with increased water. • Decreased water flow results in increased drug and alcohol abuse and suicide.
Aboriginal people and Aboriginal cultural heritage	<ul style="list-style-type: none"> • Suggested that skeletal remains have been taken from Pamamaroo.

Table 7. Issues raised at Menindee by the local tourism and business community

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> • 80 GL supply in Menindee is not accepted by the community, particularly when it comes to issues surrounding economic security and keeping the Darling flowing. • Hard to know if this is a dry period or if this is the new normal. • The community feel the lakes are critical to the community's mental well being • The community feels the proposal at the moment would decrease economic prospects for the town.

Theme of issue	Key issues raised
	<ul style="list-style-type: none"> • The community believe a cumulative impact is migration away from this rural community, fewer trades, people who can no longer operate businesses and eventual closure of a community. • Current inaction and lack of decision is stifling business—there is no encouragement for growth. • Suggestion that as a result of no local shire council to present a clear voice for this community, they are relying on NSW Government as the voice to speak on their behalf. • Community suggested economic analysis was needed including predicted impacts of proposed changes. • Suggested the population used to be around 1,000 people—and that this has now halved due to no water.
Aboriginal people and Aboriginal cultural heritage	<ul style="list-style-type: none"> • Aboriginal people are concerned there are separate meetings for white people and others for Aboriginal people. • Aboriginal people also expressed concern regarding cultural water allocations—where are they?
Environmental impacts	<ul style="list-style-type: none"> • The theory of evaporation is not accepted by the community. Natural lakes system—man-made drought. • Community feels that savings here are at the expense of the environment and communities to compensate for the north. • Current proposal will result in a decrease in fish population because of an increase in water temperature and low dissolved oxygen. • Fish breeding happens in the lakes. Letting water out for fish breeding in lower rivers is at the expense of fish breeding in the lakes. • The community believes that evaporation results in rain so whilst we are trying to save on evaporation, the result is less rain.
Project/timeline/engagement/process	<ul style="list-style-type: none"> • The community suggests they have been consulted on numerous occasions and the result is no change, no impact. They feel they are not being listened to.
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> • Over-extraction upstream is the issue. Government are impacting local lifestyle when it's the upstream doing the wrong thing. The community believes you can't come into the middle of the system and fix it. Focus needs to remain on the root cause at the top of the system. • It's the management of the water that is most important, not the infrastructure. Release the water more slowly for continuous flow instead of releasing quickly and having 'run dry' events. • Tandou e-water is going to benefit another system and that just doesn't make sense. • Suggest more weirs and potentially regulators upstream. • The community suggested preparing for drought and increased dry/water loss through bed and bank wetting. Suggested holding more water in the lakes and releasing more slowly. • Community suggests it is not so much how you do the project; it is more the way it is operated once installed. Look at efficient management rather than more money on infrastructure. • Suggestion that 'no cease of flow' down the Darling is the ultimate goal to ensure outcomes wanted by this community.

Theme of issue	Key issues raised
Credibility	<ul style="list-style-type: none"> • There is no trust in government as decision makers.
Reports	<ul style="list-style-type: none"> • Would like a fish report on how fish breeding patterns downstream work. What are the benefits of the flush/fish breeding event versus the negative outcome of letting the river run entirely dry? • We need visibility of Western Weirs report. • We need visibility of Broken Hill Pipeline Business Case.
Technical measurement and modelling	<ul style="list-style-type: none"> • Community suggested there is a lack of belief that evaporation is as significant an issue as currently suggested. • The community suggests that having full lakes will result in increased rain.

Table 8. Issues raised at Menindee by local farmers and irrigators, and by interested community members

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> • Where are the local benefits? • 80 GL supply in Menindee is not accepted by the community—the community would like a full environmental and socio-economic assessment of issues, options and alternatives. • Need a baseline socio-economic analysis for irrigators. • Criticism over lack of Aboriginal employment on the projects and, more broadly, in the department. • Expressed concern over trading—if you buy out high security below Weir 32, you impact trade because you can only trade within the Lower Darling. Therefore, if no one is below Weir 32, those high-security users above the weir are unable to trade. Suggestion to enable trade into the Murray from the Lower Darling. • Salinity is increasing and irrigators are still drawing water, resulting in production impacts. • The community finds it offensive that the media continues to suggest there will be no jobs lost in Menindee. They believe there have already been many job losses and they would like protection for those remaining.
Project/timeline/engagement/process	<ul style="list-style-type: none"> • Criticism over process to date—delayed timing, lack of engagement, new people each time. • Would like Barkandji Board invited to next meeting. • Criticism over advertising of sessions being inadequate.
Environmental impacts	<ul style="list-style-type: none"> • Strong view that 80 GL as a minimum reserve is not enough for the environment nor economic viability of the area. • Suggestion to take the fish ladder out—there is no benefit in having it there—and return the lakes to the way they were. • The community wants to understand where the savings will be stored.

Theme of issue	Key issues raised
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> • Government needs to stop giving water away upstream so it can get down to the Menindee Lakes. • Want a commitment that the goal is for continuous flow. • Why can't we have managed aquifer recharge?
Reports	<ul style="list-style-type: none"> • The community expressed concern over recent reports and lack of consideration of community input and support.
Technical measurement and modelling	<ul style="list-style-type: none"> • If you're going to model evaporation rates on watercourses, wouldn't it be fair to also measure on-farm storages? • Community suggested there is a lack of belief that evaporation is as significant an issue as currently suggested. • The community feel 480 GL is the bare minimum required for survival of local communities.

Table 9. Issues raised at Menindee by the Aboriginal community and by National Parks and Wildlife

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> • The Darling River is referred to as 'the Barka' by Aboriginal peoples and there is no such thing as upper and lower—it is all one river. • The current social impacts are significant. Crime statistics go down when the water flows. Menindee is on life support at the moment. This is the forced closure of the community. • Strong view that 80 GL as a minimum reserve is not enough for the environment nor economic viability of the area. Currently only just surviving on 300 GL. • Suggestion there needs to be a commitment toward Aboriginal employment and training. • Belief that government is not taking social impacts seriously—having water increases social benefits.
Environmental impacts	<ul style="list-style-type: none"> • Salinity is increasing.
Project/timeline/engagement/process	<ul style="list-style-type: none"> • Barkandji People suggest future meetings are notified via school newsletter and that town halls are not the preferred venue—propose a park instead. • Talk to the Aboriginal people about how they want to be engaged. • You should take a Barkandji person with you during engagement activities. • Concern that separate meetings provide opportunity for inconsistent messages. Suggestion that engagement needs to be open to ensure government tells a consistent story. • Suggested future meetings not to be held in town halls due to bad acoustics.
Aboriginal people and Aboriginal cultural heritage	<ul style="list-style-type: none"> • Community want cultural water to be stored in Pamamaroo Lake and to be managed by the Aboriginal (Barkandji) community. • Aboriginal community wants cultural water for everyone to enjoy and only way to do this is to have a flowing Barka.

Theme of issue	Key issues raised
	<ul style="list-style-type: none"> It was made clear in the meeting that Murray Lower Darling Indigenous Nations (MLDRIN) and Northern Basin Aboriginal Nations (NBAN) do not represent Barkandji People.
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> The Darling River is known to Aboriginal people as the Barka—there is no upper or lower, just the Barka. Aboriginal peoples want their cultural water for everyone to enjoy and the only way to do this is to have a flowing Barka river. Menindee isn't broken. Fix upstream and leave the lakes alone to repair themselves. Aboriginal community needs to better understand their place in water sharing plans (WSPs). They want to ensure Native Title negotiations drive WSPs and that there is increased focus on cultural flow/entitlements. Interest in understanding timing of Wilcannia Weir and will need to be consulted on placement of Weir to ensure no impact on Aboriginal Cultural Heritage. Strong view that 80 GL as a minimum reserve is not enough for this community.
Reports	<ul style="list-style-type: none"> The community expressed concern over recent reports and lack of consideration of community input and support along with lack of commitment made toward any set outcome.
Infrastructure	<ul style="list-style-type: none"> Morton Boolka is being looked at as a regulator. Aboriginal community want it to be removed from consideration—it is a 'no-go' zone in terms of Aboriginal Cultural Heritage. It came up 20 years ago and the Aboriginal community don't want to have to tell anyone again in another 20 years. A channel through Menindee Lake is unacceptable due to potential impact on Aboriginal Cultural Heritage. Community agrees to a fishway at Main Weir Menindee.

Table 10. Issues raised at Sunset Strip by residents, Broken Hill Councillors, and Menindee Councillors

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> Concerned about economic and recreational impact on the Sunset Strip community. Recreation is extremely high on the agenda in this community. Concerned about health impacts—mental and physical. Suggestion to develop Menindee ecotourism and agricultural industries rather than de-incentivise them. The department was requested to name one thing in the proposal that will benefit the residents of Sunset Strip. Belief that 60 years ago there was a large economic contribution toward the community through agriculture, tourism and recreation—this is now all no longer being contributed toward this community because of water supply and quality issues. Belief that as a result of this there are only 130 ratepayers in Sunset Strip—they are paying the highest rates and

Theme of issue	Key issues raised
	<ul style="list-style-type: none"> being treated as of the lowest importance. Listen to the people—they know the river.
Project/timeline/engagement/process	<ul style="list-style-type: none"> The department needs to publish a meeting summary and record of issues. The department needs to communicate environmental water events more effectively—why they occur and what the outcomes were. There needs to be grounds for compromise in the proposal—it is boom or bust only as it stands. Bring the work forward—how can the process be accelerated? The community would like a commitment prior to 2022.
Environmental impacts	<ul style="list-style-type: none"> Strong view that 80 GL as a minimum reserve is not enough for the environment nor economic viability of the area. The community suggested that Tilpa, Louth, Wilcannia, Menindee, Pooncarie are now all without water. This has impacted all the native birds and fish. Community suggested a quick release of water only further damages the river, riverbanks and ecological functions.
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> The community believes issues are a result of northern operations. The community wants the lakes managed like they were in 2003—Pamamaroo and Menindee need to be kept full. The community would like restoration of the lake, all the rivers running and licences revoked from northern irrigators. The community would like a commitment that the system is fixed as a whole. The community would like to see the lake made deeper in front of their houses to keep water in front of homes. Suggestion to divert the Clarence River inland. Suggestion that Menindee Lake should remain at 80% and that Pamamaroo remains full. In addition, 30% supplement to be provided to South Australia and replace the 480/640 GL split by leaving Lake Menindee to Broken Hill and Menindee towns. Suggestion to flush the anabranch when Cawndilla is full.
Reports	<ul style="list-style-type: none"> The community expressed concern over recent reports and lack of consideration of community input and support.
Technical measurement and modelling	<ul style="list-style-type: none"> Do not trust modelling figures.
Infrastructure	<ul style="list-style-type: none"> Sunset Strip community suggested dirt required for the Weir be dug from a 3-km basin nearest Sunset Strip to create a recreational pool when the rest of the lake runs dry.

Table 11. Issues raised at Broken Hill by Broken Hill City Council and interested community members

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> • The community does not agree with 80 GL as a minimum reserve. • Who will be paying for the fence once the river runs dry? Without the barrier to keep stock in place, this will be required immediately and should not be at the expense of the landholders. • Need a baseline socio-economic analysis for irrigators. • Listen to the people—they know the river. • A 2022 start date is too late for this community—action is required now. • Community suggested that if the 80 GL proposal goes ahead with water held only in Lake Wetherall, Copi Hollow and Sunset Strip suffer also. The community questioned government's understanding of the social implications of such a project. Suggested this proposal has the potential to destroy the social fabric of the community. • Questioned how the community would benefit. Would it bring back tourism? More fish? • Suggested trying to attract working professionals to town is impossible due to water security and that investment is being lost to Wentworth and Mildura.
Project/timeline/engagement/process	<ul style="list-style-type: none"> • The community thinks options have been going on way too long and that continues to create uncertainty. • Suggestion made by the community to buy back licences, pay the right rate and be transparent with the community about the transaction. • Suggestion that no one has been out into the paddocks with them to have a yarn. • We just want someone to listen—we've had so many people come and talk. All we want is to be part of the solution. • Suggestion that the Environmental Impact Statement (EIS) be advertised on the front page of the <i>Barrier Daily Truth</i>. • Suggestion to also ask the community where they want the EIS displayed.
Aboriginal people and Aboriginal cultural heritage	<ul style="list-style-type: none"> • Most people would agree about putting in a weir between Morton–Bookla and Menindee Lake (however, from an Aboriginal community perspective, this is a no-go zone). • How have Aboriginal people been considered in water sharing plans?
Environmental impacts	<ul style="list-style-type: none"> • Strong view that 80 GL as a minimum reserve is not enough for the environment nor economic viability of the area. • Community feel that if you send 14 GL down the river and close off the Darling tributaries, what happens in flood? The land is not used to this much water. • Strong view in the community that evaporation creates its own weather pattern and rain. Average rainfall was historically four inches at a time. • Strong belief that the river would not be able to handle increased flow at 14 GL—the result will be flood.
Connectivity/water management/Northern Basin	<ul style="list-style-type: none"> • Suggestion that the problems start in the north. • Floodplain harvesting remains an ongoing issue for the community. Concern is that the Lower Darling is being sacrificed in order to increase economic activity on the Northern Basin.

Theme of issue	Key issues raised
activities/drought	<ul style="list-style-type: none"> Community considers all issues with the lakes and water to be a result of northern management and particularly the Barwon Darling Water Sharing Plan. The community questioned how the proposal would impact the Murray River. When water is taken from one spot and moved to another, how will that impact places such as Beechworth and Yarrawonga? Any impacts need to be communicated to those communities.
Credibility	<ul style="list-style-type: none"> Trust is gone.
Technical measurement and modelling	<ul style="list-style-type: none"> Community suggested there is a lack of belief that evaporation is as significant an issue as currently suggested.
Infrastructure	<ul style="list-style-type: none"> Various alternatives were raised at this meeting—this community is ready for workshopping alternatives. Suggestion to use the channel from Tandou, along the boundary of the National Park, to run water back to the river.

Table 12. Issues raised at Wilcannia by Wilcannia Council, landholders, the local business community, Aboriginal peoples community, and interested community members

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> 80 GL as a minimum storage capacity is unacceptable to this community. Trading was raised as an issue—the only place we can trade is upstream which is unacceptable to this community. Suggested that Lower Darling high security licences have historically had 98% reliability and general security have had 96% reliability, but this is not the case now. Suggests the community operates for six months on a full Wilcannia Weir pool but increased salinity means they have to use bore water.
Project/timeline/engagement/process	<ul style="list-style-type: none"> Perception that this project is a done deal. The community wants more information. The community agrees that water should be kept in the top two lakes and access needs to occur before quality deteriorates.
Aboriginal people and Aboriginal cultural heritage	<ul style="list-style-type: none"> Provide a Wilcannia Weir update. Concern over continuing proposal to have a structure (outlet regulator and channel) in a 'no go' zone (Morton–Boolka regulator) due to high Aboriginal cultural heritage value. Concern also with a channel through Lake Menindee for the same reason.

Theme of issue	Key issues raised
	<ul style="list-style-type: none"> Aboriginal peoples agree to a fishway at the Main Weir at Menindee.
Environmental impacts	<ul style="list-style-type: none"> Community feel that savings here are at the expense of the environment and communities to compensate for the north.
Credibility	<ul style="list-style-type: none"> Trust is gone.
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> Problems start in the north. Concern that there is no connectivity of water sharing plans including no integration or assessment of cumulative impacts. The community believe the proposed project is masking a bigger problem, which is to get water below Bourke to Menindee, and that water needs to be in the river before it gets to the lake. The community suggested they do not see the four governments coming together to work on solutions, and this is what is needed.
Infrastructure	<ul style="list-style-type: none"> The community believes you cannot fix a river with pipelines, and that the objective should be connectivity. Community wants a weir at Wilcannia. Concern that modelling does not consider floodplain harvesting.

Table 13. Issues raised at Broken Hill by the Pastoralists Association of West Darling

Theme of issue	Key issues raised
Economic and social impacts	<ul style="list-style-type: none"> Economic assessment needs to be undertaken—not just Basin- or state-wide, but local impacts analysed closely. Expressed concerns over inability to trade or shift entitlements into the Murray. The community does not accept 80 GL as minimum storage capacity
Project/timeline/engagement/process	<ul style="list-style-type: none"> Need to conduct better engagement. Keep talking to the community and conduct more meaningful engagement. Business case depicts the anabranch regulators in a confusing way—needs to be addressed in future communications. Expressed concern that this project is a 'done deal'. The community would like more information on: <ul style="list-style-type: none"> environmental water flows in the anabranch water to Louth and downstream stock and domestic water boundary fencing resulting from no river (who pays?)

Theme of issue	Key issues raised
	<ul style="list-style-type: none"> ○ who pays for construction of any infrastructure? ○ Tourism—no water, no tourism ○ impacts on Aboriginal communities ○ irrigators—high security entitlement holders above Weir 32 ○ impacts on aquatic and riparian ecosystems ○ impacts on floodplain health.
Environmental impacts	<ul style="list-style-type: none"> ● Strong view that 80 GL as a minimum reserve is not enough for environment nor for economic viability of the area. ● Community feels that if you send 14 GL down the river and close off the Darling tributaries, what happens in flood? The land is not used to this much water. The only environmental outcome will be a dead river and dead fish. ● The theory behind evaporation is not accepted by this community. They believe there is more evaporation from on-farm storages and Lake Victoria—so Menindee should not be targeted. Belief that evaporation causes rain. ● Belief that the more water that is provided as environmental water, the more the community will be frustrated. ● The community believes there is enough water in the system—it just needs to be spread out further, and to do that flood irrigation practice needs to be investigated further.
Connectivity/water management/Northern Basin activities/drought	<ul style="list-style-type: none"> ● Floodplain harvesting remains an ongoing issue for the community. Concern is that the Lower Darling is being sacrificed in order to increase economic activity on the northern basin. ● Community considers all issues with the lakes and water to be a result of northern management, and particularly the Barwon–Darling water sharing plan. ● Community would benefit from further information on floodplain harvesting. ● The community is confused over six options being discussed (within the Deloitte report on water security for the Lower Darling) and then this option (the Menindee Lakes Water Saving Project proposal) and distinction between upper and lower Darling—believe assessment as ‘one’ needs to occur.
Credibility	<ul style="list-style-type: none"> ● Trust is gone.
Technical measurement and modelling	<ul style="list-style-type: none"> ● If you’re going to model evaporation rates on watercourses, wouldn’t it be fair to also measure on-farm storages? ● Allocations should be based on weather predictions and not dam levels. ● Suggested that if there is 200 GL dead storage at Cawndilla and 60/70 GL dead storage at Menindee, and evaporation off both—that would seem to equal much more than the Menindee Lakes Water Saving Project target.
Infrastructure	<ul style="list-style-type: none"> ● Concern was expressed that the anabranch operation and pipeline has made things worse. ● An alternative might be to take regulators out of Emu Lake.

Options and alternatives to current proposal

Various stakeholders raised issues to be considered when developing or assessing options or alternatives to the current project concept design— see Table 14.

Table 14. Issues to be considered during option development and assessment

Theme	Suggestions
River connectivity	<ul style="list-style-type: none"> • Aboriginal community emphasised the need for the Darling (Barka) to continue flowing. • Have to run the river as a whole. If you sacrifice the Lower Darling, you sacrifice the system. You need SA, Victoria and others on side.
Environmental/ ecological outcomes	<ul style="list-style-type: none"> • Menindee Lakes need to be managed so there is a fish nursery, bird breeding ground, listed Ramsar Convention areas and Aboriginal peoples partnership.
Infrastructure	<ul style="list-style-type: none"> • Use the Tandou channel already commissioned to drain lakes more quickly, rather than construct new infrastructure. • The anabranch operation and pipeline needs to be reviewed. • Increase the number of upstream weirs. • 2007 option—cells within the lake, bank across from boat ramp through middle of the lake. • Take regulators out of Emu Lake. • Use the channel from Tandou (Pemelco Channel) to run water back to the river. • Re-divert the run off out of Cawndilla to the Darling River via existing National Park channel? • The regulator between Menindee and Cawndilla would need a similar capacity to the fill capacity from Pamamaroo and Menindee. • Reinvestigate options for use of Pernalco channel.

Theme	Suggestions
Operation	<ul style="list-style-type: none"> • Use Cawndilla more effectively. Control Cawndilla independently of Menindee—full during wet, average three to five years will fill and hold for couple of months to water fringing vegetation, and then drain through anabranch. • Save water when it floods. • Increase the level of water which gives you more to play with and opens up some options. Increase the storage levels at Menindee and Cawndilla—similar to Lake Victoria. • Why can't we prepare for drought and increased dry and increased water loss from bed and bank wetting? You should hold more water in the lakes and release more slowly. • Menindee Lakes are already a water-saving, natural storage system providing benefits downstream. It's the management of the water you need to look at, instead of spending on infrastructure. • The only option is to increase storage volume from the 80 GL proposed, release the water more slowly for continuous flow instead of releasing quickly, and having run dry events. • Aboriginal community wants their cultural water stored at lake Pamamaroo and to be managed directly by Aboriginal (Barka) community. • Divert the Clarence River inland. • Have Menindee at 80% and always have water in Pamamaroo. Provide 30% supplement to South Australia, replace the 480/640 GL split and give Lake Menindee to Broken Hill and Menindee towns. • Flush the anabranch when Cawndilla is full. • Consider 275/615 GL option. • If you rerun with current data, would the percentage of evaporation change resulting from decreased volume because of increased dry periods? • Consider if modelling takes trade into account. • Compliance isn't where to look because most extraction is legal—need to focus on rules, need increase in cease to pump levels because low flows determine whether we have a river. • Use 10 GL in Toorale Station as extra water for the Darling. • If there is 200 GL dead storage at Cawndilla and 60/70 GL dead storage at Menindee, and evaporation off both, that would seem to equal much more than the Menindee Lakes Water Saving Project target.

Suggestions regarding future engagement and community information needs

The community provided a number of suggestions for consideration in the development of future engagement activities and communications materials—see **Error! Reference source not found.**

Table 15. Communications suggestions—October 2018 engagement

Theme	Engagement and communication suggestions and information needs
Engagement	<ul style="list-style-type: none"> • Ask Aboriginal communities how they would like to be engaged. Consider engagement venue in a park rather than town hall. • Consider taking a Barkandji community member on engagement activities. • Ensure inclusive Aboriginal engagement and advisory committee representation. • Workshop 80 GL figure with communities. • Workshop fish cycle and NSW Department of Primary Industries—Fisheries/community. • Ensure next round of engagement looks at issues, options and alternatives. • Ensure Local Aboriginal Land Councils are invited to engagement activities.
Communication	<ul style="list-style-type: none"> • Ask the community where best to display the Environmental Impact Statement (EIS). • Develop communications materials that demonstrate work being done to ‘connect the rivers’. • Publish a meeting summary and record of issues.
Information needs	<ul style="list-style-type: none"> • WaterNSW should continue updating community on block bank development and timing. • Communities require drought relief information. • Comprehensive list of all changes that have been made—floodplain harvesting, metering, water sharing plans, Murray–Darling Basin Plan—need the ‘full story’. • Reinstate old MDBA water information website providing details on flow river height and salinity data. • Clarification sought on anabranch regulators and their placement. There is more than one regulator. This is not clear in the business case—it’s pictured close to or on the Darling. [Need to clarify in any future communications materials]. • Commence socio-economic studies as soon as possible. • Fact sheet—why can’t we have managed aquifer recharge? • Fact sheet—floodplain harvesting: how will you measure this take? • Baseline socio-economic analysis for irrigators. • Conduct further modelling work on changes to the storage volume and what that does to the package of project outcomes. • Fact sheet—Murray–Darling Basin Plan measures implemented in the north and how this will increase flows into the lakes. • Publish presentations. • Fact sheet—potential benefits of the project. • Fact sheet—flood irrigation.

Responses to questions arising during meetings

A number of questions were asked after the meetings took place in late October. These questions and their answers are listed in Table 16.

Table 16. Questions raised after consultation meetings and corresponding answers

Question	Response
<p>Why make a decision to have a dividing line at Weir 32?</p> <p>All licence documentation states that we have licences on Lower Darling Regulated Supply. All current document presented stated that the proposed water savings plan relates to all high security and general security licences.</p> <p>Either keep at least the current levels of drought reserve to ensure water security and quality or enter a buyout agreement with all Lower Darling water licence holders.</p>	<p>During recent droughts, it has become clear that continuous flows cannot be maintained along the full length of the Lower Darling River solely using supplies from Menindee Lakes within the existing 640/480 GL control thresholds. However, supply to existing water users in the Weir 32 pool only requires very small releases from Lake Wetherell and these releases have been able to be maintained.</p> <p>The NSW Government understands that under all current modelling scenarios, water supply for high security licence holders above Weir 32 is expected to be maintained.</p>
<p>If there is a buyout agreement the deal should be the same deal as given to Webster's i.e. water prices based on Murrumbidgee prices and also compensation for lost of productivity.</p>	<p>Any discussions surrounding buybacks are a matter for the Australian Government.</p>
<p>If there is a buyout of licences below Weir 32, what happens to the area that those who are above Weir 32 can trade into and when? This change artificially depresses the market.</p> <p>Why can't we trade into Wentworth Pool when Broken Hill town supply was transferred there to enable the pipeline to be built?</p> <p>Loss of irrigation trade impacts on values of licences and block's land values in Menindee and surrounds.</p>	<p>Any potential structural adjustment package is a matter for the Australian Government. However, one option for a structural adjustment package could be to allow water users to transition from permanent plantings to other forms of irrigated agriculture that are less reliant on continuous river flows. Outside of the extreme drought periods, irrigated agriculture could still occur, and trade of account water along the Lower Darling and with the Murray system could still occur.</p> <p>The purpose of any potential structural adjustment is to lessen impacts if continuous river flows cannot be maintained. Therefore, entitlement holders would not be able to permanently trade high security entitlements to downstream of Weir 32. Entitlement holders above Weir 32 would still be able to engage in temporary trade of licensed account water to other licence holders below Weir 32.</p> <p>The Wentworth weir pool is considered as part of the Murray system. Lower Darling entitlement holders are permitted to trade to the Murray system when the lakes are in MDBA control. Allowing trade to the Murray when the lakes are in NSW control would require an inter-valley transfer of that water to the Murray. This undermines the point of there being a NSW control period that stops transfers to the Murray.</p>

Question	Response
Unreachable water needs to be removed from the figures that show overall water resources in the lakes	The project modelling accounts for dead storage in its operation. The current levels of unreachable water that occur when the lakes are drawn down are one of the drivers for some of the proposed measures. The proposed works and measures include a channel which allows access to the dead storage at Lake Menindee. If the proposed channel is constructed (subject to comprehensive approvals and engagement processes), the intention is that the dead storage in Lake Menindee will be mostly accessible.
What impact will the 80 GL of water storage have on South Australia when they call for water out of Menindee Lakes to meet their demand?	<p>Release of water to supply demands on the Murray River, including to South Australia, would only occur when the total storage in the lakes is greater than 80 GL, plus any water required to meet existing Lower Darling allocations to the end of the current water year, rather than the current fixed 480 GL reserve. The changed reserve level, together with the other elements of the project, would result in more water being provided to the Murray over the long term, and reduced losses in the lakes.</p> <p>However, NSW understands that local communities believe 80 GL of water storage during drought conditions is not sufficient. This, along with all currently proposed infrastructure works and measures, will be subject to comprehensive assessment including environmental, cultural heritage and socioeconomic studies and extensive engagement to inform the ongoing development of the project.</p> <p>It should be noted that South Australia does not directly call water from Menindee Lakes, and that the choice of supply storages to meet South Australian demands is made independently by the MDBA following operational procedures developed jointly by all states. The 80 GL reserve is intended to meet Lower Darling riparian needs and to maintain Weir 32 levels.</p>
Has there been recent survey works on the depths of the lakes that takes into account silt level increases over the past 60 years. If not, can the work be completed?	Siltation is mainly an issue in Lake Wetherell, and this lake was resurveyed in 2001, with the storage level–storage volume relationship revised to reflect that new survey. Siltation is a gradual process, and it is not expected that the level of siltation has increased significantly since 2001 for Lake Wetherell.
Please provide regular feedback on status of processes and any changes that are made as a result of submissions.	<p>The project is at a concept design stage and is not expected to be complete until 2024.</p> <p>All proposed infrastructure works and measures will be subject to comprehensive assessment including environmental, cultural heritage and socioeconomic studies, along with extensive engagement to inform the ongoing development of the project.</p> <p>Regular engagement with the community will occur throughout the development of this proposal.</p>

Question	Response
What are the environmental impacts on fish survival?	All proposed infrastructure works and measures will be subject to comprehensive assessment including environmental, cultural heritage and socioeconomic studies along with extensive engagement to inform the ongoing development of the project. The Menindee Lakes and Lower Darling River have been recognised as important areas for native fish species, and there will be environmental assessments of the potential for impacts to fish undertaken as part of the requirement to undertake a comprehensive Environmental Impact Statement for the project.
Water quality when Broken Hill stops pumping	The water quality at Menindee Lakes is controlled by natural processes that are unaffected by whether or not pumping water to supply Broken Hill occurs. More generally, water quality is also influenced by the regime of inflows to Menindee Lakes. Overall, there are expected to be more inflows to Menindee Lakes as a result of the Basin Plan, but the timing and volume of any such increases will be dependent on future climate, and the eventual use of environmental water in the northern basin. The successful ongoing operation of the salinity interception scheme at Weir 19A is more relevant to water quality, as are more broad land management programs across the wider northern basin.
You told us that the 106 GL from Menindee plus the 10 GL for Broken Hill will be transferred to the Hume storage every year, regardless of connectivity between the Darling and the Murray. Why then can't the general and high security licences in this section of river be transferred for trade to the Murray every year regardless of connectivity?	<p>It should be noted that 106 GL of water is not expected to be transferred every year from Menindee Lakes to the Murray. If water is released from Menindee Lakes, as described by the project proposal, then more water will reach the Murray, and it is estimated that evaporative losses from the lakes would reduce by approximately 106 GL/year on average.</p> <p>The existing licence for Broken Hill water supply at Menindee Lakes will be cancelled once the pipeline is operational, and a new licence will be issued in the Murray system. The proposed arrangements for Broken Hill are not a trade of a licence; it is the creation of more town water entitlements in the Murray system.</p> <p>Extended periods where the Lower Darling system cannot supply water (beyond a small flow at Burtundy) to the Murray system has always meant that entitlement ('permanent') trade between the Lower Darling valley and the Murray is not possible, and account water ('temporary') trade is only possible during years where the Lower Darling is releasing water for the Murray system. For these reasons, the Lower Darling cannot sustain inter-valley trade in all years like the Murrumbidgee can, for example.</p> <p>The existing trade restrictions are expected to remain in place to protect all water users from impacts of moving account water and licensed entitlement between water sources (i.e. between the Murray and Lower Darling rivers).</p>

Question	Response
<p>You've already decided on the 106 GL—this is much larger than all the licences in the Lower Darling put together.</p>	<p>The Murray–Darling Basin Authority’s detailed hydrological modelling of the proposed project suggests there will be average, long-term water savings of around 106 gigalitres per year, made up of around 93 gigalitres in evaporative savings, and 14 gigalitres in Lower Darling delivery losses due to the reduction of high security water demand in this river. The evaporative savings are in part owing to the proposed Cawndilla Creek Regulator allowing the managed use of Lake Cawndilla for environmental outcomes and separate operations for the rest of the Menindee Lakes system. These savings will make more water available to achieve environmental outcomes without the need to recover additional water from productive uses, avoiding socioeconomic drawbacks.</p>
<p>Can you explain how, if Menindee stays disconnected for three years, this will affect allocations on the Murray, given that the 106 GL is transferred every year?</p>	<p>The water savings from the project will need to be protected for environmental outcomes into the future, but no decision has been made yet as to how that would occur.</p> <p>It should be noted that 106GL of water is not expected to be transferred every year from Menindee Lakes to the Murray. If water is released from Menindee Lakes as described by the project proposal, then more water will reach the Murray and it is estimated that evaporative losses from the lakes would reduce by approximately 106 GL/year on average.</p> <p>The method used to arrive at the initial estimate of 106 GL considers sequences of supply volumes from the lakes and how that interacts with the Murray system.</p> <p>The MDBA has undertaken some initial modelling to look at potential options for recognising the additional inflows to the Murray River and protecting them. However, further work will be undertaken to consider other ways in which this could occur. This further work will take into account the potential for extended periods when Menindee cannot significant flows supplies to the Murray River.</p>
<p>Can you tell me a single positive for the communities on the Lower Darling from the implementation of the MLWSP project?</p>	<p>There are some potential benefits for the Lower Darling communities:</p> <ul style="list-style-type: none"> • Modelling over the past 114 years of climate indicates that the project would result in higher water levels in Lakes Wetherell and Pamamaroo more often. • Some of the options being considered for the Lower Darling water users will provide an alternate source of water during extended dry periods that is not currently available. • A significant enhancement of the environmental values at Lake Cawndilla with expected benefits to wider system fish recruitments. • Certainty on how we will address the effects of either climate change or more extreme climate variability that we have observed since 2000.
<p>Given David Littleproud’s media release this week (stating that all the SDL projects need to have positive or neutral effect on local communities or the project cannot go ahead) how can you even consider allowing this project to go ahead in its current form?</p>	<p>The project is at a concept design stage and all proposed infrastructure works and measures will be subject to comprehensive assessment including environmental, cultural heritage and socioeconomic studies, along with extensive engagement to inform the ongoing development of the project.</p>

Question	Response
<p>The Commonwealth <i>Water Act 2007</i> makes the Commonwealth liable for decrease in the reliability of water licences. The Basin Plan also requires that the water savings project must ensure there are no detrimental impacts on reliability of supply of water to the holders of water access rights that are not offset or negated (p.32 Slattery report 'Trickle Out Effect'). Given historically high security reliability is 98% and general security is 96%, when can we start claiming compensation?</p>	<p>The Commonwealth is liable under the Act for decreases in the reliability of water entitlements caused by the Act. The Basin Plan extends this with a blanket clause that no part of the Basin Plan can require a state to take an action that would trigger that liability. The SDL adjustment measures framework also includes a number of requirements that the package of projects collectively do not detrimentally impact on reliability of allocations.</p> <p>The assessment of possible detrimental impacts occurred routinely throughout the development of the SDLAM package, and a special detailed assessment took place immediately prior to the final package release. These assessments will continue during the ongoing development of the Menindee project and the results will be publicly available as part of the final design to provide transparency.</p> <p>All proposed infrastructure works and measures will be subject to comprehensive assessment, including environmental, cultural heritage and socioeconomic studies, along with extensive engagement to inform the ongoing development of the project. All material impacts must be mitigated or offset.</p> <p>To the extent that Lower Darling water users are likely to experience longer periods of low or no flows as a result of the current proposed project, the NSW Government is considering options to mitigate or offset these impacts. The recently released report by Deloitte ('Lower Darling Water Security Options Analysis—Findings Report') evaluates six different options and recommends several of the options for further investigation.</p> <p>Entitlement holders could consider seeking compensation once a reduction in reliability can be demonstrated from either a rule change or a piece of infrastructure work has caused them harm. No rules changes or works have yet occurred for the Menindee Lakes Water Saving Project.</p> <p>The recent periods of low water availability are primarily due to unprecedented drought, and this has demonstrated that reliability levels are lower than previously thought. In contrast, long-term modelling of the project indicates that there are unlikely to be any significant impacts to GS and HS reliability above Weir 32.</p>

Question	Response
<p>The Pastoralists Association of West Darling has twice raised doubts about the integrity of measurements of releases from Menindee from dates 9/1/2017 though to 21/4/2017. My evidence to doubt these measurements is the fact that the Anabranche Offtake starts to run at 9,000 ML per day. I provide a photo taken on the 3/2/2017 as well as Weir 32 records that state flows were 4,888 GL that day. Given that it takes 3–4 days to get to the offtake from Menindee, even at 30/1/2017 flow was only 5,114 ML per day. The photo provided confirms it to be closer to 9,000 ML p/day. Several other eye-witness accounts from landholders all along the Lower Darling can be provided as evidence to support this discrepancy in flow data. Misrepresentations of flow data hugely exaggerate the water losses that are being 'claimed' as evaporation at Menindee.</p>	<p>WaterNSW manages the network of gauging stations across NSW consistent with Australian standards. While from time to time gauging stations may experience varying levels of accuracy, the maintenance and monitoring program for gauging stations ensures that accuracy is maintained within acceptable tolerances, and where error does occur data can be corrected in accordance with the standard procedures.</p> <p>There are 4 gauging stations on the Darling river downstream of the Menindee Lake system, these are:</p> <ul style="list-style-type: none"> • 425012—Darling River at Menindee Upstream of Weir 32 • 425048—Darling River at Great Darling Anabranche Offtake • 425005—Darling River at Pooncarrie • 425007—Darling River at Burtundy. <p>In responding to the question/concern raised, WaterNSW has considered each of these stations. While the gauging station 425012 is the primary indicator for storage releases to the Darling River, consideration of the other stations is important, as they can show trends of error if they exist.</p> <p>The maintenance and monitoring process for the gauging network includes the regular measurement or gauging of the flow rate at each station. This is used to determine the accuracy of the station. If inaccuracies occur, a calibration can be implemented. The calibration process is completed in accordance with standard procedures.</p> <p>Since flows recommenced in July 2016, each of the four gauging stations on the Lower Darling have been gauged between 15 and 20 times. The results of these gaugings can be used to verify the accuracy of the reported data during the period in question.</p> <p>The analysis completed covered the period 1/11/2016 to 30/4/2017—this is slightly beyond the period in the question but will assist in showing some additional gaugings for flow verification.</p> <p>Information tells us:</p> <ul style="list-style-type: none"> • There is consistency between the gauging stations with regarding to the flows being reported. • For the gaugings completed, that accuracy of the reported flow data was generally +/-3%. The exception was site 425048, with one gauging returning a result of -3.8%. All gauging results were within the target range of +/-5%. • The highest flow gauged at 425012—Darling River at Weir 32 was 4,366 ML/day. Unfortunately, the gaugings completed have not occurred during the peak of the release. • The gauging information presented demonstrates the data reported as being accurate to within the acceptable tolerances. <p>Unfortunately, this information does not explain the difference between reported data and the local knowledge regarding the commence to flow of the Great Darling Anabranche.</p>

Question	Response
	<p>Looking further at this issue, we have considered further the information available within the hydrometric gauging network. The network also includes a gauging station at the Great Darling Anabranche Offtake—site number 425050. The site information provides:</p> <ul style="list-style-type: none"> • Gauge zero—43.82 m AHD • Cease to flow—5.96 m gauge height = 49.78 m AHD. <p>This information provides that a water level of 49.78 m AHD is required for the Anabranche to flow. Looking to the site 425048—Darling River at Anabranche Offtake, the site information provides:</p> <ul style="list-style-type: none"> • Gauge zero—43.82 m AHD. <p>From the instantaneous data collected at this site, we can see that the peak level recorded during the period of interest in this analysis was:</p> <ul style="list-style-type: none"> • 4.68 m gauge height (16/1/2017) = 48.50 m AHD. <p>This data and information therefore suggests that the river level was still required to rise 1.28 m for the Anabranche to flow. The only suggestion we can make is, that while the pictures taken clearly show water backing up in to the Anabranche, the control point for flow into the Anabranche must be some way further downstream, and based on the evidence provided, substantially higher than the peak level recorded for the period of analysis.</p>

Next steps

The department will use the outcomes of the October engagement on the proposed Menindee Lakes Water Saving Project to inform the development of information material and strategic engagement plans and activities.

In the immediate future we will:

- provide our partner agencies with advice on community issues through the distribution of this report
- develop a strategic engagement and communication plan
- develop an Aboriginal engagement strategy
- develop new communication products to address community information gaps
- collate options and alternatives to the current project proposal for discussion with the community and for future assessment
- commence establishment of a community and stakeholder project advisory group and interagency steering committee
- commence baseline socio-economic studies as early as possible.

We will particularly focus on developing information to help the community more fully understand how the current proposal was developed. We understand that this needs to include information on the science and modelling that supported that development.

We also understand that the community feels that there is more information needed on a number of water management issues across the Murray–Darling Basin and we will work on collating this and making it publicly available.