Edward River Pumpers and Landholders (ERP&L)

Draft Murray Regional Water Strategy (RWS) May 2022

Recommendation

That the Murray RWS does not proceed until

- 1. The underlying principle of 'worst case' scenario is changed to reflect a more realistic and completed modelled scenario.
- 2. A Murray RWS Advisory Group of stakeholders outside the Departments and those already consulted is established to guide its development.

General comments

• This is a large and extremely detailed document and we need more time and discussion of each option to make a truly considered response.

I suggest establishing an Advisory Group of representatives selected by regional water stakeholder groups and specific workshop to discuss all options.

- The stated objective to 'Enable economic prosperity' will not be achieved by this strategy with the 'worst-case' drought mentality underpinning it.
- This Strategy appears to be trying to centralise and justify all current activities with only a few additional reviews, studies etc that are potentially the responsibility of other Departments.
- The Strategy will fail to deliver its stated objective to "Enable economic prosperity' unless the modelling scenario is changed to a more sensible and realistic scenario.
- Whilst we acknowledge the need for a RWS to co-ordinate and prioritise Departmental focus
 and attempt to justify Departmental expansion, the use of the 'worst case' scenario as the
 basis for all water related planning is neither sensible nor realistic other than in looking at
 future infrastructure building for additional drought reserves.
- Applying the worst- case scenario across other water related matters such as potential water sharing rule changes draws into questions the Departments competency and ignores the fact that the existing Available Water Determination process is adaptive in real time to dry low inflow years.

Model Scenario Selection

- It is unscientific and inappropriate to chose an extreme outlier of 'worst- case' scenario as the founding principle on which to base all aspects of water planning and policy
- This is unacceptable for anything other than infrastructure planning for drought preparedness.
- This Strategy fails to recognise that we have systems and AWD processes that are effective in managing water through variability in climate in real time.

Consultation Process in Strategy Development

- The consultation process in developing this Draft has been non-existent with those who will be most impacted by it.
- Interagency, local government and aboriginal all have their own agendas which are very obviously reflected in this unbalanced strategy.
- This 'Top down, not bottom up' approach to policy and planning will never lead to community acceptance and buy-in to change.
- Transparency and genuine consultation is totally lacking.

Initial comments on the Long List of Options

Inadequate water management framework to meet the needs and aspiration of Aboriginal people

Opportunities to protect and strengthen cultural landscapes, practices, knowledge and traditions. Supporting empowerment, self-determination and economic advancement of Aboriginal people, as well as strengthening community wellbeing.

1. Improve access to culturally significant areas and waterways for Aboriginal people

This option would investigate the benefits and constraints of developing formal access arrangements between Aboriginal people and landholders in the NSW Murray region.

- Not priority as already addressed by existing provisions contained in Aboriginal Land Rights Act 1983 (NSW)
- This is an access to land issue and doesn't fit with NSW water Strategy Priority 2 which is about access to water for economic purposes.
- 2. Review Aboriginal Cultural Water Access Licence framework

This option would undertake a review of water access licences for Aboriginal cultural uses to determine their effectiveness and identify opportunities for improvement.

- Part of the Aboriginal Water Strategy
- 3. Support long-term participation of local Aboriginal people in water-related matters

This option would provide support for local Aboriginal groups to be involved in water management processes.

- Already being done through Environment Department EWAG process and their consultations as the people responsible for E water NSW holds.
- 4. Fund water entitlements for Aboriginal communities

This option would provide funding to support Aboriginal people to purchase water entitlements and water infrastructure—such as pumps—that can be used to improve economic and cultural outcomes across the southern connected basin.

- Not a priority as the Federal Government has \$40M funding for that.
- No new water can be created, so they can purchase water for economic activities just as anyone else can.
- No new water can be created.
- 5. Secure flows for water dependent cultural sites

This option would investigate opportunities to improve the timing, rate and consistency of flows to places of cultural significance. The places would be identified by Aboriginal community members.

- This should be done by Environment Department in consultation.
- 6. Shared benefit project (environment and cultural outcomes)

This option would investigate opportunities to work more closely with environmental water holders for shared benefits from using water for the environment that would also achieve cultural environmental outcomes, recognising it does not replace the provision of cultural flows.

• This should be done by Environment Department in consultation.

7. Incorporate Aboriginal history of water and culture in the southern Basin into water data

This option would aim to document and integrate Aboriginal science and culture into government processes to help better manage the river systems.

 Co-ordinating Environmental flows to meet cultural needs is already happening

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Current water sharing arrangements based on 125 years of data

Opportunities to consider the adequacies of existing water sharing and management arrangements in the region under a more variable and changing climate.

- No-one will accept any further negative change in allocation reliability for GS licence holders
- This can only be done when a credible, sensible modelling scenario has been selected, not the current extreme outlier model currently being favoured by some in the Department and underpinning this Strategy.
- We suggest establishing an Advisory Group and specific workshops to discuss all options in a meaningful way.
- 8 Review drought rules for the NSW Murray region.

This option would review the adequacy and effectiveness of the Murray Incident Response Guides by testing them against the new climate data and updated modelling now available for the Murray Regional Water Strategy.

- Not a priority as we have a proven system that works and is adaptable in real time.
- No-one will accept any further negative change in allocation reliability for GS licence holders
- This can only be done when a credible, sensible modelling scenario has been selected, not the current extreme outlier model currently being favoured by some in the Department and underpinning this Strategy.
- We suggest establishing an Advisory Group and specific workshop to discuss all options.

9 Review the allocation and accounting framework in the NSW Murray (regulated system).

This option would review several settings of the current water accounting and allocation process in the NSW Murray Regulated River system, and consider whether and how the climate data should be used when making allocation decisions.

- No-one will accept any further negative change in allocation reliability for GS licence holders
- This is clearly a very high priority but only after a credible, sensible modelling scenario has been selected, not the current extreme outlier model currently being favoured by some in the Department and underpinning this Strategy.

- We suggest establishing an Advisory Group and specific workshop to discuss all options.
- We tried to have these issues looked at during the WSP SAP process- to no avail.
- Obviously the under-use issue needs to be addressed, as does the opportunity to take advantage of wet years to try and rebalance the impacts of the dryer years.
- The policy can potentially further erode General Security property rights enshrined in the National Water Initiative and add to the negative impacts of cumulative rule changes on access to allocation.

10. <u>Investigate Murray River system water sharing, delivery and accounting arrangements</u> under the Murray- Darling Basin Agreement.

This option would review current water management arrangements under the Murray-Darling Basin Agreement in the context of a changing climate and reduced water availability.

- This should not be done until a credible modelling scenario has been determined.
- We suggest establishing an Advisory Group and specific workshop to discuss all options.
- Unrealistic to believe SA would ever let anything change unless it was to their advantage
- Aspirational priority.
- Any review would need to look at the unnecessary SA Additional dilution flow rule that results in a substantial waste of water.

11. Review groundwater extraction limits

This option would review the existing NSW groundwater extraction limits to incorporate up-to-date information, including scientific studies that incorporate new climate variation and climate change datasets to give an improved understanding of groundwater processes.

- The016 Murray Valley has had a 68% cut in Ground Water entitlements.
- It has been reviewed already and no required changes were identified although adjustments from the Basin Plan were needed.
- NSW Department continues to issue new licences despite the objections of existing entitlement holders.
- The new government policy not to advertise such licence applications taking away the opportunity of people to lodge objections.

12. Provide increased clarity about sustainable groundwater management

This option would review, revise and develop policies to give water users greater clarity and certainty in how groundwater is managed in NSW.

13. <u>Investigate Water Access Licence conversion</u>

This option would test the potential risk and benefits of allowing voluntary conversion from general security to high security, and high security to town water supply water access licences in the NSW Murray Regulated River Water Source.

- I do not support this concept at all as it would massively impact on General Security entitlement depending on the conversion ratio used.
- The storages are inadequate to meet any additional demand for High Security or town water supplies.
- The use of recycled water or desalinated ground water should be the only options to cater for any increase in their demand.

Insufficiently integrated land and water planning and management

Opportunities to better integrate water resource management into other processes, including assessing current land uses and land-use trends in the Murray to better understand spatial changes in the region's water uses and emerging pollution and flooding risks.

14. <u>Investigate land use change and population growth impacts on water resources.</u> This option would investigate opportunities to better integrate the NSW land use planning and water resource management frameworks.

- This is a high priority.
- There needs to be a SEPP put in place stopping any further permanent plantings in Local Government areas below Wakool Junction.
- There also needs to be a SEPP stopping any further plantation forestry in the upper catchment to reduce water interception impacts on inflows, bushfire risk and subsequent water quality issues.
- 15. Develop climate risk evidence base to inform the next Snowy Water Licence Review.

This option would seek to gather information and evidence to inform the next Snowy Water Licence Review in 2027.

- Not a priority until sensible modelled scenario selection has been made.
- Snowy operation and methodologies already take account of evidence based climatic risks both known and projected.
- 16. Enhance southern inland floodplain management plans.

This option would develop valley-wide, connected floodplain management plans using the northern NSW Murray-Darling Basin floodplain management plan (NSW Healthy Floodplains Project) template.

- Not a Priority
- Unlike the Northern Floodplains we have long had Flood Management Plans in place.
- The issue with them is that the Department never actioned them.
- They are well consulted and done in stages to reflect the extremely diverse areas of the system and complexity of flood flows through them.
- Any changes to Central Murray Floodplain Management Plans(CMFMP) will impact negatively on private landholders who are compliant with existing licence requirements.
- The Department needs to advise water stakeholders why and how and where Floodplain Harvesting would be permitted in the Southern Basin when it is not currently permitted in our WSP.
- The Department needs to explain why the former 50ML limit on FPH under our previous WSP was removed and what volume would potentially be considered.

17. <u>Investigate water quality improvement measures</u>

This option would explore a gap analysis of water quality information to identify opportunities to support water quality management plans in the NSW Murray region.

- The Strategy needs to recognise the success of existing programs and actions that are already in place.
- Regulations in place do not allow off farm discharge of contaminated water into waterways.

18. Manage groundwater salinity

This option would explore a range of related actions to address groundwater salinity challenges in the NSW Murray region.

- Salinity Management in the Murray Valley has been extremely effective and existing programs manage any risks well, and this needs to be acknowledged
- DPIE should reconsider granting new groundwater licences that can increase risks of salinity in existing groundwater zones.

19. Monitor sediment compaction over the long term.

This option would develop a long-term monitoring program for the NSW Murray region to ensure sediment compaction does not occur in the future, reducing risks to groundwater storage and long-term bore yields.

 This is not a high priority as there is no evidence of this actually happening in the region.

Vulnerability of town water supplies and amenity

Opportunities to improve policy and planning around water re-use and recycling, and strengthen water security for local communities and important water-related amenity in the region.

- Before going into this, you actually need to stop and assess which towns may have a problem and which do not.
- If this is all about Albury city not having adequate allocation, then they need to factor in the potential for re-use of water before heading straight to desal plant
- No new water can be created to meet their needs.
- They can also enter the market to access any additional allocation they require just like every other water user.
- Recycling and desalination of groundwater are the only real options here other than increased storm water runoff.
- If there is a real need to increase Town supply volumes, then water should be purchased from SA entitlement as the most reliable water in the valley.

20. Review impediments to water recycling projects

This option would review impediments (such as cost, pricing, regulatory or engineering constraints, and community acceptance) to water recycling projects in the NSW Murray.

- This is a Local Government responsibility where they have a problem.
- Recycling on farms is highly developed, however a focus on town water recycling is appropriate.

21. Managed aquifer recharge investigations and policy.

This option would investigate opportunities to undertake managed aquifer recharge in the NSW Murray region, including investigating the recharge capacity of sites for temporary storage of stormwater, river flow or purified recycled water in aquifers.

• This is potentially an option to be encouraged and investigated.

22. Secure and reliable access to groundwater for towns

This option would undertake a strategic review of groundwater use by towns across the NSW Murray region to improve understanding of the regional need, challenges and opportunities for towns to access groundwater.

See above

23. Maintain water-related amenity in the Murray during droughts

This option would investigate opportunities to maintain water related amenity, including town water lakes, local parks and recreational areas, in and around towns in the NSW Murray region during droughts or extended dry periods.

- No new ground water licences should be issued, however only drought emergency access for town water supplies.
- If they want a licence for use at any time then allocation needs to be purchased on the market to be consistent with trade rules to avoid third party impacts on existing users.

24. Investigate inter-regional connections.

This option would investigate the construction of inter- regional town water supply pipeline connections within and between the NSW Murray region and neighbouring regions.

- Is this relevant to NSW Murray?
- No new water can be created.
- MIL network can supply to many locations without a pipeline.

25. Investigate groundwater desalination for industry and towns.

This option would investigate the opportunities associated with desalination of groundwater to make it suitable for industrial and town uses.

• Desalination of groundwater must be confined to the Western part of the region where there is no or little groundwater extraction.

Degradation of riverine and floodplain ecosystems

Opportunities to address the risk to the environment, the ecology and groundwater dependent ecosystems and improve the health of the region's rivers and groundwater sources.

26. Improve protection of groundwater dependent ecosystems.

This option aims to advance our knowledge and management of groundwater dependent ecosystems in the NSW Murray region, such as Walla Walla Swamp.

- This appears to be a templated option from across NSW and barely an issue in NSW Murray.
- It is already addressed by the ground water extraction limits and doesn't require any further work.

27. Address cold water pollution in the Hume Dam.

This option would involve a program of work with the Australian Government including the Murray—Darling Basin Authority, and with other states through the Complementary Measures Program to address cold water pollution in Hume Dam.

- This is a long- standing issue unresolved due to no infrastructure funding by government.
- What exactly is meant by 'action on landscape health' as a response to address cold water releases from the bottom of Hume Dam?

28. Remediate fish passage.

This option would upgrade or remove instream barriers that disrupt native lifecycles and inhibit migration.

- I support improving fish passage through investment to deliver the Basin Plan objectives.
- This investment should be part of the SDLAM for a holistic approach.

29. Implement fish friendly water extraction.

This option would investigate the installation of screens on pumps and gravity diversions, considering the optimal approach velocity for improved juvenile fish survival.

- Not a priority
- Funded voluntary participation program only
- Possibly use SDLAM funding and program to implement.

30. Improve flows to important ecological sites.

This option would consist of several projects that aim to restore important ecological flows and connectivity between floodplains and the Murray, Edward Kolety and Wakool rivers.

Already part of BP implementation and E watering.

31. <u>Develop a river and catchment recovery program for the NSW Murray region.</u>

This option would consist of a program aimed at better managing catchment hydrology, addressing erosion issues and restoring riparian and river habitats at priority locations within the catchment. This program would also include a component that undertakes long-term analysis of the impact of climate variability and climate change on future water availability for the catchment with a focus on floodplains and river environments.

Already part of BP implementation and E watering

32. Review environmental water arrangements.

This option would use the new climate datasets and updated hydrologic models to review the effectiveness of existing water sharing plan rules to meet the environmental watering requirements as outlined in the Murray-Lower Darling Long Term Water Plan under long- term climate change projections.

 This should not even be considered until such time as the NSW Department use a credible modelling scenario to underpin this Strategy.

- As written it would potentially mean such significant detrimental change that it cannot be progressed without an Advisory Group being established of industry, irrigators and community stakeholders.
- There are much higher priorities than this that need addressing.
- This option is the Murray Long term Watering Plan which an aspirational plan and has not been passed into legislation yet is undermining legislation in regard to water property rights.
- 33. Re-establish threatened fish species through habitat restoration and conservation restocking.

This option aims to improve the condition, connectivity, and resilience of native fish by restoring habitat through protection and rehabilitation of priority areas using best practice management, while building the skills and sharing the knowledge of local landholders, community groups and Aboriginal people.

- Already being done for over
- 34. Better understand the economic value of ecosystem services of riverine environmental assets.

This option would seek to improve the valuation of ecosystem services in the NSW Murray River to provide a more coherent, consistent and comparable set of information regarding the environmental, social and economic benefits provided by ecosystems services of riverine environmental assets.

This is not a priority

Limits to water availability in times of a changing climate

Opportunities to better understand water use behaviour, and to develop strategies and information to build greater resilience

35. Better understand water use with data collection and analytics.

This option would undertake a research project to better understand water use and water user behaviour in the Murray regions.

- This could be a PhD.
- As any mixed farming irrigator what they make their annual program decisions.
- 36. Improve the understanding of groundwater sources and processes, risks and impacts.

This option will combine desktop studies, field studies and numerical models—delivered in collaboration with consultancies and research centres—to give water users and towns access to data and information about groundwater resources.

Is this already available to those who want it?

37. <u>Undertake a water dependent industry resilience study</u>

This option would include a comprehensive long-term study on the impacts of climate variability and climate change on future water availability to determine the impacts on water dependent industries in the NSW Murray region, including those reliant on town water supply systems.

- It is obvious that if the basic underlying principle of worst- case scenario isn't changed then water dependent industries will disappear along with the vertical integration of processing.
- Jobs will go and population will again be reduced as happened during the millennium drought.
- We don't need a study to understand that. The data was collected previously. Review a decade of community, local government and industry submissions.

38. Develop targeted education and capacity-building programs.

This option would develop targeted education and capacity- building programs to build community confidence in water management, with a focus on the Murray region, and help communities, industries and the environment to better manage their water needs and water-related risks.

- This can be done through a Stakeholder Advisory Group being established which allows for local community observers to come and learn how things work.
- 39. Investigate water availability in the Murray region.

This option would consider whether there is systemic reduction in available water in the Murray region and investigate possible causes and potential responses.

- This is the highest priority action.
- Establish a Stakeholder Advisory Group to investigate with the Department to ensure transparency.
- 40. <u>Investigate non- residential water efficiency (towns and industries)</u>

This option would investigate opportunities to improve the efficiency of non-residential water use of both raw and town water supplies such as by agriculture, schools, hospitals, industrial uses (e.g. food processing) and recreational and amenity uses (water parks, sports ovals, town water lakes).

- This is not a high priority as the volumes of water used are not substantial, except for mineral sands.
- 41. Investigate the expansion of cloud seeding in key water supply catchments

This option would investigate potential additional benefits from expanding current cloud seeding activities into the Upper Murray–Indi catchment.

- I fully support this as option.
- 42. Undertake joint exploration for minerals and groundwater with the NSW Geological Survey

This option would use regional and locally targeted geophysics to identify potential resources (fractured and porous rock systems like the Lachlan Fold Belt and Western Murray Porous Rock) followed by drilling, testing and water quality analysis to assess the resource's suitability for supply.

- This is generic across all RWS's.
- It must be taken into consideration exactly what water needs any potential mining has.
- No new water can be created due to third party impacts on GS allocation.
- 43. Review water markets and trade.

This option would progress the implementation of water market reforms, based on the recommendations of the Australian Competition and Consumer Commission's Murray–Darling Basin water markets inquiry.

- This is a high priority
- It over laps with other options and is already being done
- Develop sub categories on GS licences to identify HS water transferred onto GS licences so it maintains its characteristics and spills from account at the end of the water year.

44. Consider hydrological processes in bushfire management.

This option would investigate how bushfire management could be strengthened in priority watersheds by including protection of rainfall-run-off processes as a key bushfire management priority in national parks and reserves.

- Allow and expand 'cool burns' to reduce bush-fire severity and risk.
- Water shed area is so extensive in this catchment that other options would be unrealistic.
- SEPP prohibiting plantation forestry development in the upper catchment.