



The NSW Reconnecting River Country Program

Community-Led Feedback Project



Western Murray
Land Improvement Group

September 2022

ACKNOWLEDGEMENTS

The Western Murray Land Improvement Group (WMLIG) thanks the Wakool, Moulamien, Koraleigh, Barham and surrounding communities for their contributions to our NSW Reconnecting River Country Program - Community-Led Feedback Project held in August and September 2022.

WMLIG acknowledges the Barapa Barapa, Yorta Yorta, Wemba Wemba and Wadi Wadi people as the Traditional Custodians of the Country we work and play on. We recognise their continuing connection to the land and waters, and thank them for protecting this country since time immemorial. We pay our respects to Elders past and present, and extend that respect to all First Nations people.

WMLIG thanks the Koondrook-Perricoota Alliance; Wakool Landholders Association; the Wakool River Association; YACTAC; Murray Valley Private Diverters; Murray Regional Strategy Group; Little Merran Creek Water Trust; Speewa Creek landholders; Poon Boon Lake system landholders; Collagen Niemur Group; Bringan Trust; Eagle Creek Trust; Murrakool Land for Wildlife; and Pollack Working Group for their many valuable contributions and their dedication to the best outcomes for our environment and communities.

We thank the NSW Department of Planning and Environment's Water Infrastructure NSW for their support of the project.

Authors:

Jacqueline McArthur, Maggie McDonald, Lydia Grant, Roger Knight
Dan Hutton, Dr John Conallin, Jane O'Connor

© 2022 Western Murray Land Improvement Group, Inc. All rights reserved.

The contents of this document are the intellectual property of the communities surveyed.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	2
TABLE OF CONTENTS	3
INTRODUCTION	4
OUR MID-RIVER DELTA	8
COMPONENT ONE: FLOW OPTIONS AND INUNDATION MAP FEEDBACK	10
SUMMARY	11
FLOW OPTIONS AND INUNDATION FEEDBACK	12
01 RIVER SYSTEM INTERCONNECTIVITY	12
02 ENVIRONMENTAL OPPORTUNITIES	14
03 INADEQUATE MAXIMUM FLOW FOR ECOLOGICAL ENHANCEMENT	17
04 MER2	18
05 GENERAL COMMENTS AND HISTORICAL REFLECTIONS	20
06 MANAGEMENT CONSIDERATIONS	22
THULE LAGOON	25
YARREIN CREEK	26
MERRAN CREEK	27
POON BOON LAKES	29
COMMUNITY-LED RECONNECTING RIVER COUNTRY PROGRAM PUBLIC WORKSHOPS AND ONLINE SURVEY FEEDBACK REPORT	30
INTRODUCTION	30
METHOD	31
COMMUNITY WORKSHOPS	32
RESULTS	33
SURVEY FEEDBACK REGARDING CONSULTATION DESIGN AND EXPERIENCE WITH ENVIRONMENTAL WATER	42
RESULTS	43

TABLE OF CONTENTS

COMMUNITY-LED RECONNECTING RIVER COUNTRY PROGRAM PUBLIC WORKSHOPS AND ONLINE SURVEY FEEDBACK REPORT	46
DISCUSSION	46
ACTIONABLE INSIGHT: COMMUNITY CONNECTIVITY	48
RESOURCING AND SUPPORTING COMMUNITY CO-DESIGN OF ENVIRONMENTAL WATER MANAGEMENT - COMPONENT 1	48
ENVIRONMENTAL BENEFITS AND RISK ASSESSMENTS - COMPONENT 2	50
COMMUNITY COMMENTS AND QUESTIONS.....	54
LANDHOLDER NEGOTIATION FRAMEWORK - COMPONENT 3	57
CONCLUSION	62
REFERENCES	64
APPENDIX	65



"True co-designing of how environmental water is used and valued in our landscape – this is where we need to go, it hasn't happened yet but we live in hope."

Barham workshop participant



INTRODUCTION

Our community has spoken openly and honestly about the potential impacts and benefits of proposed environmental flow options.

The depth of inter-generational local knowledge about water in our landscape on display at public workshops and within this report, together with the demonstrated passion for the best achievable outcomes for our environment and communities, is significant.

That knowledge constitutes invaluable on-ground data which will provide an informed future pathway.

This community-led engagement highlights the local capacity and willingness to understand and protect our environment by

co-designing how environmental water is used and valued in our landscape.

With a profound understanding of the regional importance as a food bowl, dependent townships, biodiversity hotspots, a Ramsar wetland complex and Murray Darling Basin icon sites at its heart, our community has expressed a desire for ongoing and full inclusion into the policies that directly impact them.

The community has stated: Achieving a balanced outcome across economic, environmental, social and cultural



considerations requires a seismic shift in community engagement methods to date.

After a decade of inadequacy, the community is insistent on seeing a move away from how governments and authorities have communicated with them.

The government's approach of informing as opposed to collaboration is considered to be at the heart of successive failed processes.

Greater transparency of information flow, proper investment in proactively seeking community input and pursuing agreed and endorsed community outcomes for the wider benefit rather than the imposition of policy, are among the main themes of discussion.

Having engaged in a successful community-led consultation model, Western Murray Land Improvement Group demonstrates here that there are a number of people standing ready to engage if given the appropriate opportunity.

Our collation of a wider range of inputs from across the region is critical to fully inform flow options, infrastructure works, environmental improvement opportunities and community sentiment about collective negotiations that would engender trust, social license and more democratic long-term outcomes.

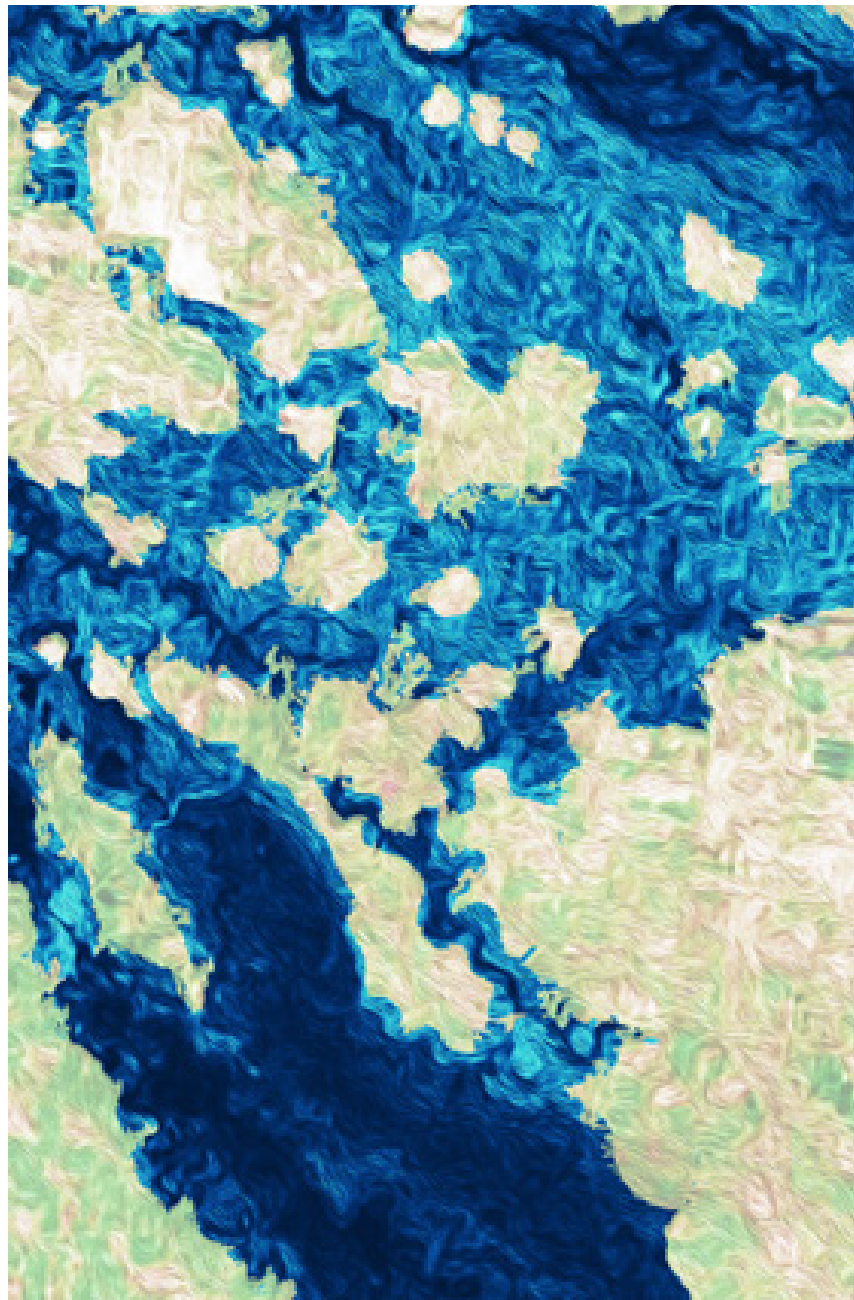
This community has given up much more productive water than other regions.

It wants to see environmental water returned to its landscape in a way that protects and enhances the natural attributes of this mid-river delta, which cannot be done effectively without its input.

The other option is a continuation of a failed, centralised 'top down' approach.

OUR MID-RIVER DELTA

The mid-Murray River delta is home to three Living Murray icon sites which together form an internationally significant Ramsar-listed wetland complex.



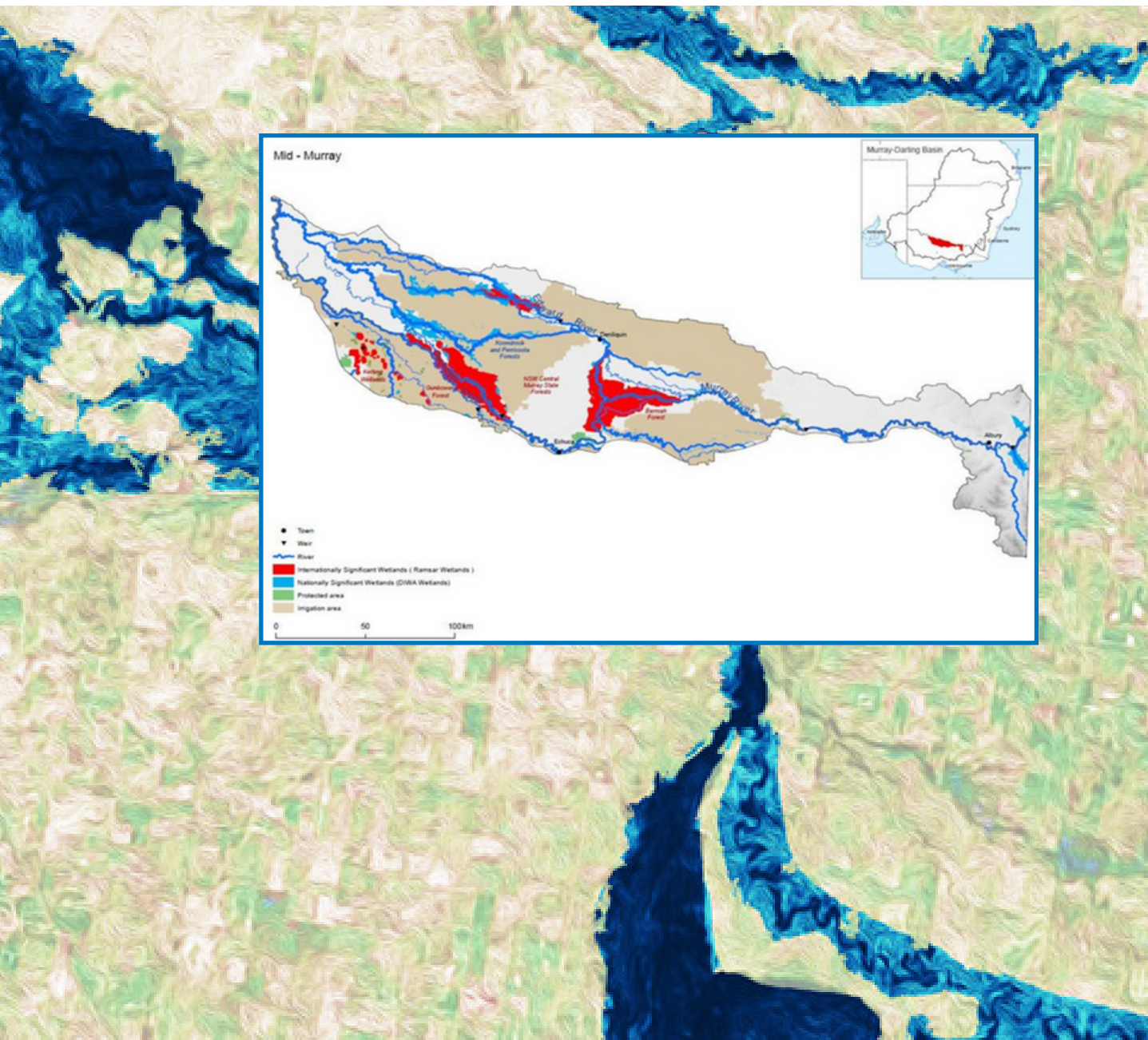


Figure 1: The study area extends along the Murray River from Wamboona to Goodnight and includes Barham, Wakool, Moulamien and other communities within the mid-Murray River delta.

COMPONENT ONE:

FLOW OPTIONS AND INUNDATION MAP FEEDBACK

Several strong themes emerged in many discussions and analysis of survey responses from community members across the region.

Among them is a strong desire for more involvement in co-designing environmental opportunities for water to be returned to creeks, lagoons and on-farm wetlands that may or may not receive beneficial flows under the proposed maximum flow option associated with the RRCP modelling.

Concerns about property inundation are mostly addressed with practical suggestions for new or updated infrastructure. A desire for ground-truthed and representative data to be shared back to community members is also a strong theme in discussions.

A multi-disciplinary approach to data collection, including various methods of capturing local knowledge, would assist with

gaining greater trust in policy development.

There is confusion about modelled flow options and the lack of information about contributions from tributary flows like the Goulburn and Loddon Rivers. Running to static state is seen as irrelevant by several stakeholders. However, most understand it was modelled this way to inform maximum extent for property impact considerations.

The following themes outline in more detail the issues stakeholders wanted highlighted.

The themes are derived from the six community-led feedback workshop discussions and a comprehensive report on comments noted at the workshops and from an online survey.



SUMMARY

WMLIG's stakeholder engagement design deliberately avoided prescribing categories. We believe the emergence of strong themes would be valuable in assessing what matters most to community members when considering proposed environmental flow options.

The nine feedback categories brought forward from discussions, map notes and surveys, include; 1. Adverse Impact, 2. Infrastructure, 3. Regulatory/Licensing, 4. Ecological Observation/Environmental Opportunity, 5. General Comment/Historical Note, 6. Management Considerations, 7. Mapping Accuracy, 8. River Systems & Interconnectivity, 9. Inadequate Maximum Flow/Water Delivery Options Required.

From these categories, six strong themes emerged.



FLOW OPTIONS AND INUNDATION FEEDBACK

01 RIVER SYSTEM INTERCONNECTIVITY

A consistent theme in community-led discussions was a desire by attendees for their current and historical knowledge of how water behaves in their landscape to be valued and used appropriately, which is not necessarily represented in modelled inundation maps.

Reference was often made to infrastructure considerations and water management decision making to be founded on valued local tacit knowledge about water in the landscape not only remote satellite modelling and fly-in experts. This includes important details they would like acknowledged by decision makers, because they believe it is key to how to best use environmental water. Many stakeholders indicated that infrastructure investment was considered

an opportunity not just for impact mitigation but for improving connectivity of water to environmental assets they value.

From the farm level, interconnectivity to farm environmental assets such as wetlands and oxbow lakes were considered as important as whole-of-system connectivity. Many of these assets are highly valued by generations of family members. They are not only considered inherently valuable but also contributors to enhanced food and fibre growing productivity. The interconnectivity across systems at the reach level is important to stakeholders who want to see a healthy braided network of creeks, rivers and wetlands.

This is the region's unique identity - it is a mid-river delta.

“Lunette located here, we all know where the water went and where it used to go.”

Map Comment 10



02 ENVIRONMENTAL OPPORTUNITIES

“There are 400 year-old red gums we are watching die along creek beds, considering how much environmental water that is available and how much water is in the system this season, this should not be happening.”

Koraleigh workshop attendee

It was widely acknowledged that the delivery of water for the environment will provide essential and valuable ecological outcomes for the river systems and for native species.

The majority of feedback collected throughout this program demonstrated a passion for the environment and distress surrounding the ecological condition of the landscape (before October 2022 flooding).

Constructive information about geo-located environmental opportunities have been documented.

Stakeholders mentioned many opportunities for investment in infrastructure that will

return water to a more accepted frequency. The required investment in mitigation infrastructure to protect private assets to do so is seen as equally important.

In Koraleigh, there is a fear that environmental opportunities won't be realised by policy makers. They welcome much improved engagement as a step towards environmental rehabilitation.

Even in this wet year, stakeholders point to constraints that need to be removed for natural flows to reach key locations that are suffering environmental degradation.

“Black Aggie was an open woodland with sparsely spaced big red gums and now you can not move for all of the red gum suckers everywhere.” Comment 6





Some stakeholders have been able to identify the actions or volumes of water required to bring water into these systems.

03 INADEQUATE MAXIMUM FLOW FOR ECOLOGICAL ENHANCEMENT

At each public workshop it was noted in several locations that the upper flow option of 40,000 ML/Day at Yarrowonga would not be enough to service many key environmental assets important to stakeholders.

Ten comments, noted in our report, indicate that 40 GL/day was insufficient to achieve environmental outcomes or deliver water to environmental assets of high value. It was also noted that flow volumes below 40 GL/day were not a concern that could not be addressed with infrastructure.

Some stakeholders have been able to identify the actions or volumes of water required to bring water into these systems.

Several stakeholders, in workshop conversations, will not support flows over 40GL/day because they believe, particularly

some areas upstream, will be negatively impacted when flows are scheduled on the back of natural flood events. Those flows that pre-wet or prime the system prior to natural events, could also exacerbate flooding inputs from unregulated flows. These locations have not been specified in map-based comments.

These stakeholders are concerned there will be inadequate and untimely investment in mitigation and the true goals are not environmental outcomes, but intended to service the Murray-Darling Basin Plan (MDBP).

187 comments requested new or updated infrastructure. No comments specifically indicated there were adverse impacts that could not be mitigated.

“House at the end of Drysdale Lane will need a levee.”

Comment 39

“Pipe under road will go under water, Cutting access - Bill Cumming, Mill Park.”

Comment 39

“Pipes aren’t enough to drain water! Regulator needed - Coobool Creek.”

Comment 31

04 MER2

Some stakeholders identified a needed update for the Murray Darling Basin Authority's Basin Condition Monitoring program (Monitor, Evaluate, Research), known as the MER model.

Through experience, stakeholders have suggested that a more comprehensive monitoring program could incorporate the additional elements of measure, engage and report (MER2).

A more egalitarian and fit for purpose model is outlined below:

Measure - Measuring in-field ecological values with a wider scope will yield a more complete and trusted understanding of the landscape. Using local scientists, traditional owners and farmers to ground truth and measure would have multiple benefits, according to discussions in some workshops. Relying on satellite data and remote analysis

by FIFO (fly in/fly out) scientists often using isolated data sets, does not engender trust, according to several stakeholders.

Investment in local expertise would encourage young professionals to the region and upskill and empower local people. This could offset the huge job losses associated with the water reform processes in this region. Ground-truthed data would provide superior information for decision-making and positive shared outcomes.

Monitor

Engage - Many stakeholders have indicated that both State and federal departments and the MDBA need to engage more effectively to draw on the lived experience of people on the ground. This report should give a strong indication of the wealth of knowledge that exists.



Evaluate

Research

Report - Several stakeholders expressed concern about a "closed loop of government decision makers and their scientists". Communicating findings in a timely and transparent manner would engender trust and give community members a clearer understanding of the status of local and connected ecological functioning so they can contribute to decision-making. Several landholders have indicated that they have spent hundreds of hours over the years with scientists in consultation and in giving access to their properties but have not received any data or analysis in return. In one example, a 2010 tree crown survey on private land conducted during the Millennium Drought by the Murray CMA took many hours of landholders' time.

The findings, valuable for all stakeholders, were never shared and due to agency attrition is now lost.

This data can't be compared for future evaluation and the landholder believes investments in environmental watering may be based on poor data stewardship.

- M** MEASURE
- M** MONITOR
- E** ENGAGE
- E** EVALUATE
- R** RESEARCH
- R** REPORT

“The community consultation carried out by WMLIG has been outstanding. They explained, they listened to what the community had to say and they took notes. I have never been to a community consultation event where the people consulting with the community showed so much interest in what the community had to say.

I believe this is because all of the people running the events were local and had some local knowledge and interest in the subject. There is a lesson here for government agencies on how to do community consultation”.

Comment 76

05 GENERAL COMMENTS AND HISTORICAL REFLECTIONS

Stakeholders were keen to be actively engaged on a variety of related topics.

Reflections on their own farm diaries and family stories showed a large and detailed body of knowledge about water inundation and movement in historical events.

Flows during floods in years like 2010 and 2016 were referenced often in discussions and noted in comments.

There were observations that the RRCP inundation maps seemed ‘stitched together’ and comparable flow contributions from tributaries like the Goulburn, Loddon and Campaspe rivers were not accounted for properly in the modelling if you looked closely at flooding in those years.

Sentiments were expressed that the workshops presented an interesting and important opportunity to look at large maps of the river systems together and focus on the landscape as a whole with open questions.

A strong message conveyed was that when government representatives were present at workshops the dynamic was tied to informing on tight timelines and agendas for policy reform. Many workshop participants said this changed the meeting dynamic as people invariably went into fight or flight mode due to Basin Plan impacts.

“People don’t want to see that there are different roles of government agencies, they are the government and they developed the Basin plan without our input.”(Wakool workshop participant)

Previous interactions never provided an opportunity to talk about history, or family-owned wetlands or lakes loved by neighbours, or the details about the practicalities of regular watering of 400-year-old red gums.



06 MANAGEMENT CONSIDERATIONS

River operational controls and regulatory frameworks

Feedback from community members identified management constraints associated with operations of currently used and redundant structures.

Stakeholders stated that there are impediments to improving environmental and social outcomes because of operational regulations and controls of existing infrastructure and suggested a review to reflect a changed water management environment.

Examples include delivery of water to the Poon Boon Lakes system, Waddy Creek, Speewa Creek and Bullockhide Creek.

"Regulator here not allowed to be utilised, so all floodwater flows back into the river." (Comment 11)

This comment refers to the Poon Boon Lakes system which is identified by stakeholders as being in environmental distress.

A natural sill between the river and lake system was removed when a regulator was installed. Now the regulator has become redundant and boards removed, however the natural sill has not been re-instated meaning the lake's water rapidly drains back to the river when naturally filled.

Many stakeholders have noted that easements, historical operational rules and general public awareness of the operational conditions needs to be understood and communicated better.

Flow duration, timing and frequency

The events of September 2022 indicated anomalies in inundation modelling for close river observers.

“Just take a look at the flow options presented and the current flows at Torrumbarry and allow a day’s travel time to Barham. In summary, I reckon the Torrumbarry/Barham figures are out of whack i.e. their Barham figure is either way too high or Torrumbarry too low.

Flows are currently 39,600 @ Torrumbarry and 26,600 @ Barham

Koondrook–Perricoota Forest - YWJZ3

Scenario 30,000 ML/d at Yarrawonga Weir

*Murray River at Torrumbarry = 35,000ML/d
7.16m*

Murray River at Barham = 26,000ML/d 5.86m

Scenario 40,000 ML/d at Yarrawonga Weir

*Murray River at Torrumbarry = 40,000ML/d
7.43m*

Murray River at Barham = 28,000ML/d 5.97m”

An example of the confusion concerns the gap between relaxed constraints upper limit flow rates versus where natural event classification starts.

The question posed by Murray Valley Private Diverters and others is: What happens in the no man’s land between these figures referenced in the Watering Plan?

Does that mean infrastructure/third party impact mitigation will be provided up to the natural level?

(Note: Major flooding in the region, with flows of 120GL/day at Yarrawonga Weir, did not occur until October with inundation continuing into November 2022.)





THULE LAGOON

*Wendy McDonald
Artist/Farmer, Thule NSW*

“The Thule Lagoon is the ancient bed of the Murray River. A small community of landholders live on this lagoon and hold it with deep regard and appreciation. I am both farmer and practising artist. The driver behind my artistic practise is to be a voice advocating for the renewed health of our floodplain landscapes in this world significant delta. The inherent natural and indigenous and non-indigenous cultural value of this landscape is such that artists, writers and musicians visit Thule on a regular basis to absorb the workings of our habitats.

Our property, Glencoe, at Caldwell has approx. 100 acres of this ephemeral lagoon country, surrounded by significant stands of remnant Redgum forest. Past records indicate a flooding regime of about 3 times every 10 years. We have owned the property since 2003 and the lagoon has only filled twice ... in 2010 and 2016.

We have observed the last of the pre white settlement trees become stressed. Some have died and others are pressured by insect attack with their resilience affected, we feel, by climate shifts, a general drop in water tables due to the removal of water from the general landscape and specifically a lack of regular lagoon inundation.

I feel extremely strongly that Thule Lagoon is SIGNIFICANT habitat.

The magnitude of the trees is unmatched generally in the Koondrook–Perricoota forest now, as many of those pre settlement trees in the KP have been logged in the past. Future water flows to Thule Lagoon must be made available via Thule regulator on a regular basis to save this habitat and ensure its health in the future. In the past we have initiated canopy and wildlife surveys and would love to continue this work.

We are working with Murray Wetlands Working Group to rehabilitate a section of the lagoon wetland adjacent to the main body of the Lagoon. These micro habitats are essential in providing connection between the KP forest and outer creeks and ecosystems of the area. They also provide a flora and fauna refuge in years where water is absent from other areas of the district.

I am happy to provide photographic records of the Lagoon habitat being referred to. Local landholders must be involved in decisions about inflows to the lagoon and the operation of the regulator. We live here and are all dedicated to preserving this amazing habitat.

As landholders, Peter and I look forward to the day when the management of our local wetlands can be held up world-wide as an exemplary model of community environmental co design ... we also look forward to the day when my landscape paintings can be ones of celebration of a healthy, thriving, working environment.”

A photograph of a creek with several large, dead trees in the foreground and lush green trees in the background. The sky is blue with some white clouds. The water in the creek is calm and reflects the surrounding greenery.

YARREIN CREEK

"None of the modelled environmental flows appear to affect the Yarrein Creek so I would appreciate consideration to using private infrastructure as well as Murray Irrigation to supply water for the dying trees along the lower reaches of the Yarrein Creek. Also would appreciate higher flows (>40,000ML/day) for commence to flow levels to run water into the Yarrein Creek system."

MERRAN CREEK

“Bring it on!! We want all of the billabongs off the Merran Creek to get water!”

“It will need at least 2 months to inundate the entire Merran system at 40,000ML/day. Even this timing may not be long enough to fulfil the breeding cycle of wildlife and allow vegetation to mature and reset seed again.”







POON BOON LAKES

"50%, at least, of redgums are dead or dying here!!! This is terrible!"

"We want yabbies!!! They are not here when the lakes only fill every now and then"

"Lake Talpile filled in 2000 and 2011 and 2016, we want to see more of it! We want this lake system filled as much as possible!"

COMMUNITY-LED RECONNECTING RIVER COUNTRY PROGRAM PUBLIC WORKSHOPS AND ONLINE SURVEY FEEDBACK REPORT

INTRODUCTION

Communities surrounding Barham, Wakool, Moulmein, Koraleigh and Swan Hill were invited to a series of workshops to discuss the RRCP program and give their feedback on the program's proposed flow options.

The number of attendees at each event averaged 30 landholders and interested community members.

In total, 160 people attended six events in person.

Stakeholders represented significant land and water holdings, major contributions to community life and an important collective body of knowledge about how water works in the environment.

Prior to our engagement activities, on average 10% of attendees at the workshops had heard of the RRCP and 5% had viewed the program's website.

There were 10 online survey respondents.

The following is a summary of our stakeholder engagement methodology and the results.

Appendix 6 is the full report which includes tabulated data and location coordinates. It is available as a separate document.

Appendix 7 is the raw data.

Please note the comments are the intellectual property of the communities we engaged with and not for further publication without consent.



METHOD

Community feedback for the Reconnecting River Country Program (RRCP) modelled inundation maps and flow options was gathered via two methods.

In community workshops, Western Murray Land Improvement Group (WMLIG) facilitated a review of modelled inundation and flow options and collected location-specific feedback.

In a survey format (online and printed), community members were invited to review the same maps and provide their feedback on flow outcomes, mapping accuracy, and general strategic comments. Survey respondents and workshop attendees were invited to review the RRCP

modelled inundation maps relevant to their communities and industry.

Community members were continuously encouraged to use the RRCP virtual rom, contact NSW Local Land Services (LLS) and register for detailed online case studies.

Participants were also encouraged to take photos of inundation levels in the natural flood events occurring at the time to ground truth the real data.

COMMUNITY WORKSHOPS

WMLIG facilitated workshop sessions in Moulamein, Wakool, Swan Hill, and Koraleigh. After an initial explanation of the RRCP including flow options and inundation modelling, attendees of each workshop were invited to review maps YWJZ2, YWJZ3, YWJZ4 and YWJZ5, examining the modelled inundations at 15,000, 20,000, 30,000, and 40,000 megalitres per day (ML/d) flow option downstream of Yarrawonga Weir.

A total of 16 printed maps were provided to attendees for review (four modelled flow options per map area). Community members were asked to call upon their local knowledge, expertise and lived experience to consider among those issues they found important:

- The accuracy of each flow option and corresponding modelled inundation map
- The social, ecological, commercial, accessibility, impacts and opportunities
- The general outcomes of each modelled flow option.
- The influence of flow timing, frequency and duration on these outcomes
- The ways in which each flow option may interact with existing infrastructure, and

infrastructural accommodations that may need to occur to mitigate adverse impacts of flow options.

Attendees were assisted and encouraged to write location-based feedback onto sticky-notes and affix these to the printed maps.

Handwritten data was collected by WMLIG staff after each workshop and recorded alongside specific location coordinates, the name of the relevant map, and the modelled flow option. Individual comments were assigned unique numerical identifiers and later mapped in a Google Earth Pro kml file.



RESULTS

*In order to gather community response data that was specific, constructive, and actionable, the questions provided in the survey were necessarily exhaustive in nature. A list of survey questions is attached in **Appendix 6**.*

The survey provided a link to the RRCP modelled flow options and asked respondents to select the relative map for review. Respondents were asked to assess each modelled flow option separately, again considering:

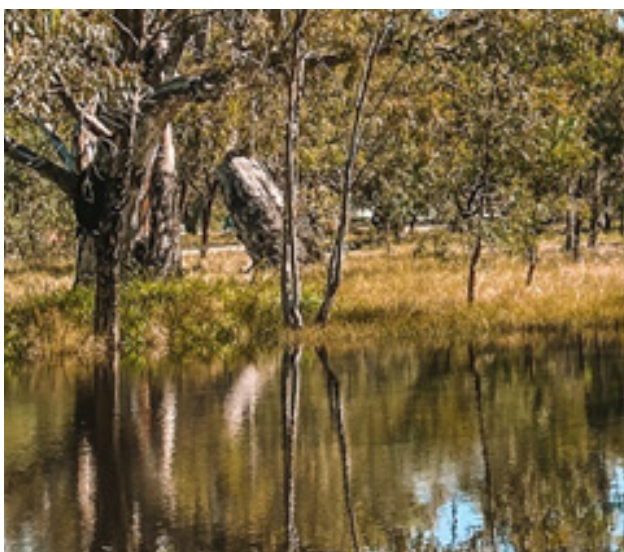
- The accuracy of each modelled inundation flow option
 - Positive outcomes or benefits for properties, landscape and communities
 - Negative outcomes or impacts to property and community.
 - The influence of flow timing, frequency, and duration on the aforementioned outcomes.

The concluding section of the survey asked some general questions about respondents' experience with water for the environment and provided space to consider the design of environmental water delivery. Participants were also encouraged to provide constructive suggestions for the community consultation design (draft Landholder Negotiation Framework (LNF)) of the RRCP.

RESULTS

Comment location coordinates.

Most comments are presented alongside associated location coordinates. These location coordinates are especially helpful when pinpointing the locations of unmarked infrastructure, potential adverse impacts, and mapping inaccuracies and discrepancies. Comments with associated coordinates have been mapped in a Google Earth .kml file and provided alongside this document. The community feedback data presented in Tables 2-10 includes a column labelled **comment number**.



The comment number associated with each item of feedback is used as a unique comment identifier in the .kml file. Not all comments have corresponding coordinates, so not all comment numbers are present in the .kml file.

The placemarks within the Google Earth .kml file use the World Geodetic System of 1984 (WGS84) the following map codes, each corresponding to one of the RRCP inundation modelling maps:

Google Earth map code	RRCP map name	RRCP map code
Map A	Swan Hill to the Boundary Bend	YWJZ5
Map B	Wakool	YWJZ2
Map C	Koondrook and Perricoota Forests	YWJZ3
Map D	Edward River	YWJZ4

RESULTS

Community Workshop Feedback.

The tables presented in the full report, available in the Appendix 7, display community feedback as received from attendees to the community workshops, where stakeholders gathered to review printed copies of the inundation modelling maps as developed by NSW DPE.

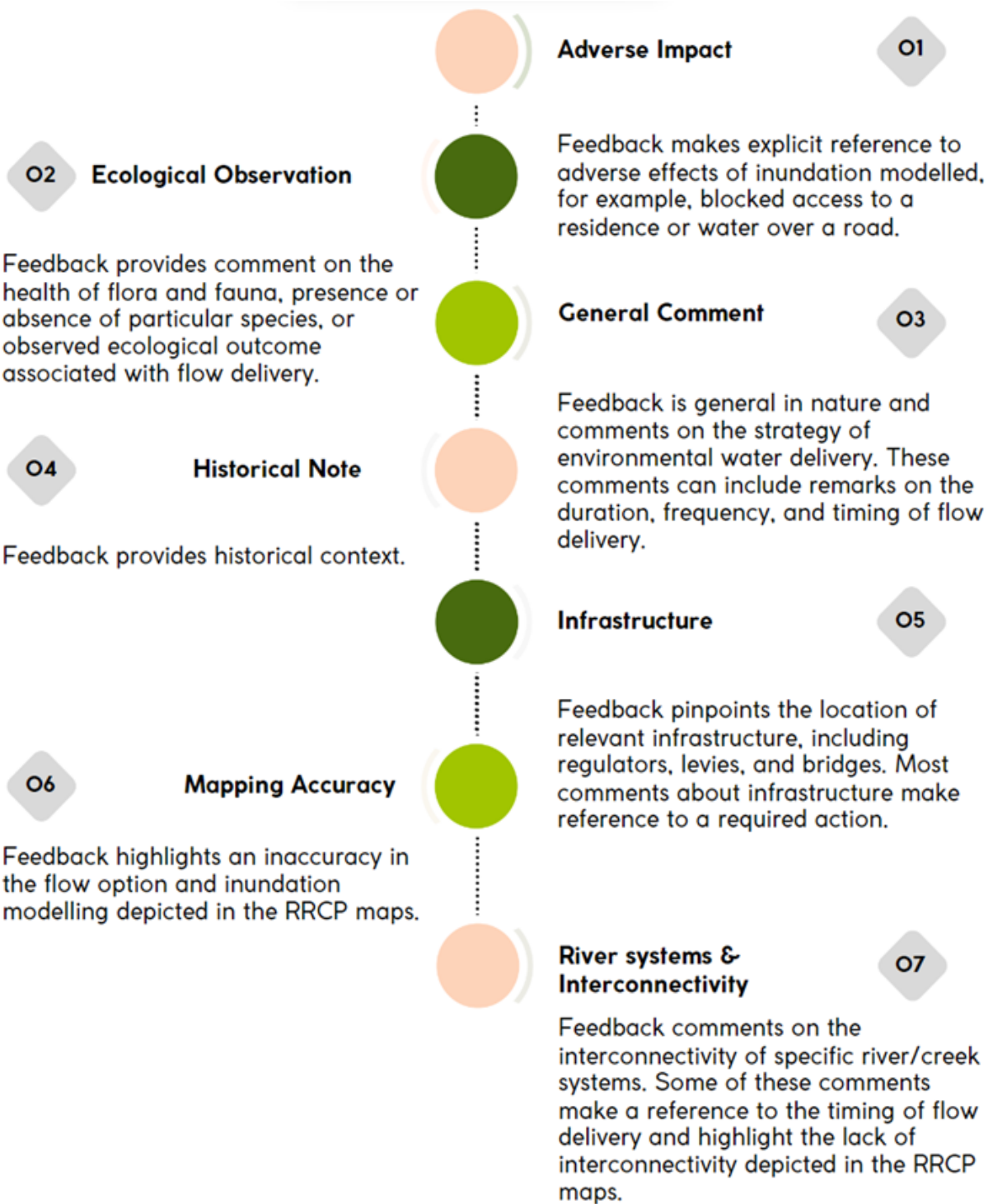
Each of the four tables represents a single flow option and inundation modelling map. While some consultation data refers to a specific flow option modelled in the RRCP maps, other feedback is general or historical in nature and is not attached to a specific flow option. The comments provided in this feedback table have been transcribed exactly as they were received, without corrections.

Some stakeholders have chosen to attach their names to their comments while others chose not to do so. Workshop feedback is divided into seven categories.

Due to the complex nature of feedback received, some comments are tagged with more than one category. For thematic readability, comments have been presented in categorical order. To view the comments ordered numerically by comment number, view the raw data spreadsheet.



CATEGORIES





RESULTS

Workshop feedback received in response to map YWJZ2 – Wakool.

A total of 83 comments were received in response to the Wakool inundation modelling maps.

Fifty-four (67.5%) of these comments were provided with reference to the modelled delivery option of 40,000 ML/d. Twenty two comments were not provided in response to a specific flow volume, and have instead been marked with N/A in the 'flow volume' column. In two responses, flow volume data appears to be missing rather than omitted with intention. This missing data is marked clearly in Table 2 **(Available in the full report - Appendix 6)**

Four comments highlight specific adverse impacts of modelled flow options. Two of these comments are missing data in the 'flow volume' column.

The impacts noted include access to homes and paddocks, impact of flows on irrigation systems, and potential inundation of private property/farming land.

31 comments made reference to infrastructure, four of which highlighted a specific adverse impact. Infrastructure-related comments included comments referring to regulators in need of assessment; bridges and crossings obstructed by flooding; pipe capacities; and action required for regulators and levee banks.

These comments provide actionable feedback about both existing and required infrastructure.

The location coordinates provided alongside infrastructure data are valuable here, as many of these place-marked locations are not visible in the RRCP inundation maps.

Of 17 ecological observations, 8 were made about native fish and bird species. Five of these comments pinpointed known historical locations of native fish species. Another 6 of these comments made direct reference to an urgent need for environmental water in identified and place-marked locations.

Six feedback responses were general in nature. Some of these comments include strategic notes about the timing and delivery method of environmental flows. Similar in nature, 5 comments have been categorised as historical notes. These remarks provide context on particular locations, some of which highlight historical comments about specific areas.

There are 12 mapping or inundation modelling inaccuracies flagged within community feedback. Many of these comments call upon lived experience and note the ways in which this lived experience differs from flows depicted in the modelling.

Sixteen comments refer to the interconnectivity of river systems, and the ways in which modelled flow options would interact with and be influenced by connecting systems not depicted in the mapping. Five of these comments flag mapping inaccuracies – these have been marked with both categories in the table and are included in the previous paragraph.



RESULTS

Workshop feedback received in response to map YWJZ3 – Koondrook and Perricoota Forests.

17 workshop comments were provided in response to the YWJZ3 Koondrook and Perricoota Forests map. These comments are presented in Table 3 (**Appendix 6**). Five of these comments (33.33%) were made in response to the modelled flow volume of 25,000 ML/d. Six comments (40%) were made regarding the modelled delivery of 40,000 ML/d. Six comments were not made in response to a specific flow volume and have been marked with N/A in the corresponding column.

Feedback received for this map was provided primarily in relation to infrastructure (11 comments or 73%). Infrastructure notes include comments about required and existing infrastructure and highlight the influence of regulators on actual vs. modelled

flows. One of these comments is also categorised under 'mapping accuracy'.

Five landholder comments flagged mapping inaccuracies in the modelled flows, pinpointing systems that would be flowing at a certain delivered amount, and which are not reflected in the modelling.

One comment about accuracy highlights the need for a map to model flows downstream at Torrumbarry. One comment, marked as 'river systems and interconnectivity', asks about environmental water classification at the Barmah Choke.

Two comments provide a detailed historical account of previous floods at various place-marked locations in the map area.



RESULTS

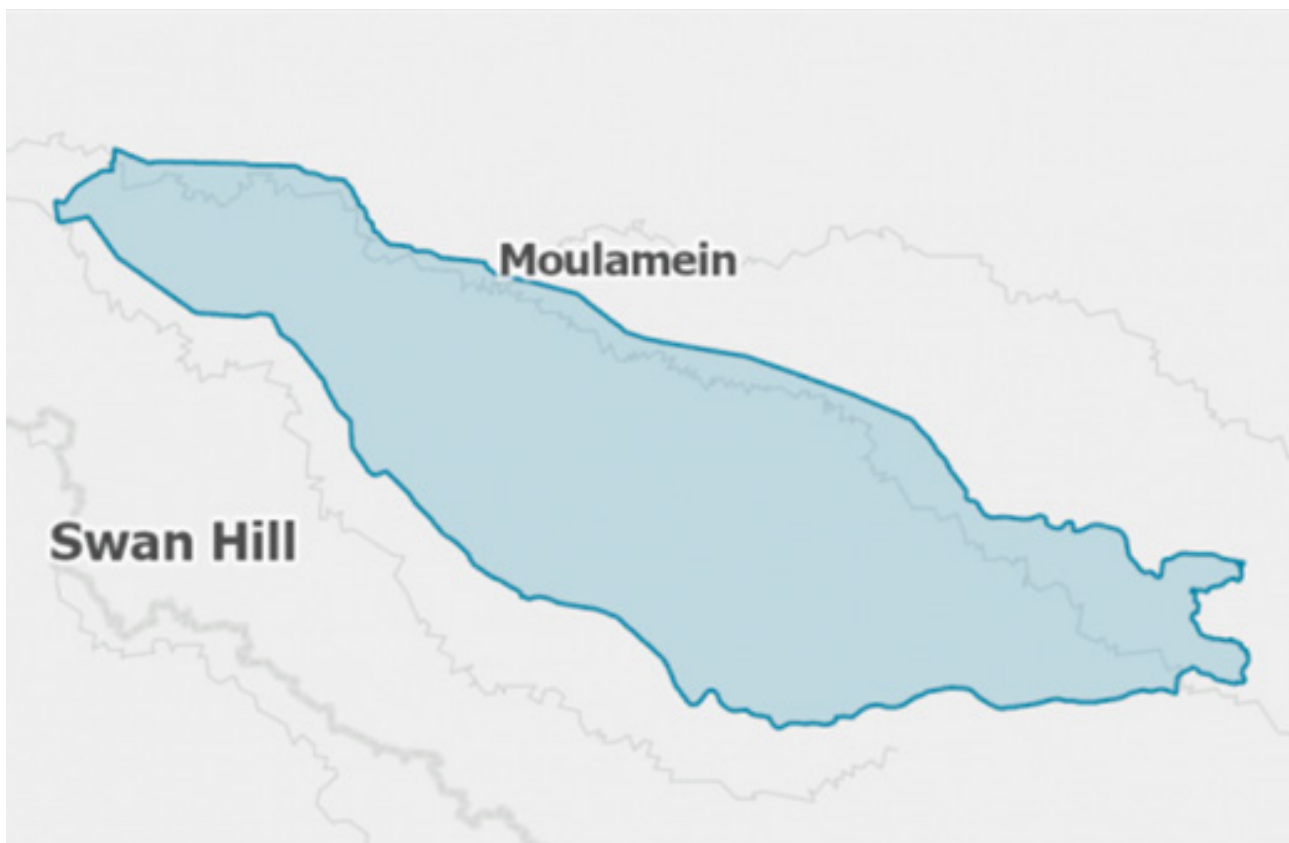
Workshop feedback received in response to map YWJZ4 – Edward River.

Five community comments were received in response to the Edward River inundation modelled in YWJZ4. These comments are presented in Table 4 (**Appendix 6**).

Two comments were received about bridges over Murrain Yarrein creek; an existing bridge in need of replacement and a new bridge required.

The remaining two comments flag map inaccuracies in two locations (**Appendix 6**), where overflow or flood occurs at 40,000 ML/d. This flooding and overflow is not reflected in the modelling.

One comment calls for the use of private infrastructure to facilitate water delivered to dying trees along the Yarrein Creek.



RESULTS

Workshop feedback received in response to map YWJZ5– Swan Hill to the Boundary Bend.

A single item of workshop feedback was received in response to YWJZ5. Most attendees of the Swan Hill workshop were from areas east of the map boundary.

This comment does not relate to a specific flow volume option, but instead provides an ecological observation and a desire for yabbies to return to an area.

Additional feedback about flow modelling in YWJZ5 has been provided in landholder responses to the online survey.



COMMUNITY-LED RECONNECTING RIVER COUNTRY PROGRAM PUBLIC WORKSHOPS AND ONLINE SURVEY FEEDBACK REPORT

SURVEY FEEDBACK REGARDING CONSULTATION DESIGN AND EXPERIENCE WITH ENVIRONMENTAL WATER

A total of 10 responses were received to the survey.

Respondents were not required to provide an answer to every question.

Where necessary for context, respondent comments have occasionally been edited with text in [square brackets].

Comment data is otherwise unedited.

Names of feedback providers have not been included in this section of the report, although 6 of 10 respondents indicated that they would like to be attributed to their comments, and 7 indicated that they would like to be contacted by the department about their feedback.

Individual survey responses and contact details will be provided to the department only when there is landholder consent, and survey responses are presented in combination here for the purpose of summary.

NSW Reconnecting River Country Program Community-led Feedback Survey

Thank you for your time and input in developing our community response to the inundation modelling provided by the Reconnecting River Country Program (RRCP).

The following survey invites your review of the inundation modelling maps presented by the department here: <https://caportal.com.au/dpe/rrc?hview=modalInteractiveMap>.



RESULTS

Five of 7 survey respondents indicated they would be interested in exploring community-led co-design of environmental water management. (Only 7 of the 10 survey respondents answered the optional questions about experience with Environmental water)

4 of 7 survey respondents indicated they had worked with the department previously to deliver environmental water to their properties/local environmental asset.

6 of 7 survey chose “yes” when asked if they would be interested in hearing more about the use of environmental water and landholder partnerships in their region.

In the survey, community members were asked where they had seen water for the environment used in their regions over the past few years, and the outcomes they had observed as a result of this water. The following responses were provided:

“Lower Bidgee Rebank North The growing of red gum, fauna and flora thriving. E.g Bellfrog”

“Neighbouring wetland with significant environmental benefits.”

“In any flood we see water for the environment.”

“NSW Government (Office of Environment and Heritage?) over the last 3-5 years have initiated and conducted regular watering events in the Thule Creek utilising Murray Irrigation infrastructure to improve the health

of surrounding immediate environment and provide intermittent connectivity with the Wakool River.

The health of the adjoining trees has improved remarkably, and the project/ concept has the enormous potential in the future to provide a fresh water refuge for fish in potential 'black-water' events.”

“In spring 2019 when environmental water was released into Perricoota Forest. It seemed, at the time, a misuse of water. The reason at the time for watering the forest was that the environmental water holder had some carryover and may as well use it, we were told. The water spilled out on to private landholder’s property, which was a bitter pill to swallow as we were in the second year with zero water allocation. The event was well timed, from memory, with a helicopter scenic flight showing the event to the newly appointed Inspector-General for the Murray Darling Basin Mick Keelty, but that may have been a coincidence.”

RESULTS

A sample of community comments

"Private wetlands and The Pollack Huge improvements in the wetlands."

"Having been facilitators of Environmental Water events with Office of Heritage and Environment. (2014/2015/2016/2018/2019). Through private irrigation system has had a positive but extremely short term benefit for Speewa Creek."

When asked how they would like to see environmental water used in their landscapes, participants provided the following responses:

"Would be good for the Lakes System [Poon Boon] to return to their original flows so that I can use the remaining water allocation for irrigation."

"Responsibly!"

"All environmental watering events should be community led and co- designed. This is a win win, if it is community driven and co designed it takes away all of the criticism from both sides and makes sure that outcome has the best chance of succeeding. If you go even further and employ local people, they will make sure that the desired

outcome is achieved and there will not be the change in staff halfway through an event, which is a big problem when outside staff are used. The community are on the ground, and have the knowledge and evidence of what can and can't be achieved."

"I would like to see the environmental water used in our landscape in a way so that it is beneficial to the environment and not to have negative impacts on the environment. That is running our water courses above their carrying capacity that just causes bank erosion and has no environmental benefit."

"In our region the parts of the environment that need the water the most are high up on the flood plain and running the rivers at ridiculously high levels does not reach the upper outer levels of the flood plain. To reach the upper outer levels of the flood plain the event needs to be planned and managed and the water channeled or pumped to these areas, not just more water running down river."

RESULTS

More samples of community comments

“We would like to see the environmental water used efficiently and with no hidden agendas, such as holding water back for later release because of downstream demands and in essence using the river and creeks as well as the MIL system as a Murray mid-river storage.”

“To enable continuation of a healthy and functioning creek system. Potentially improve the condition of vegetation both within and along creek banks. Create and sustain a healthy natural environment to ensure endemic species are attracted and have a sustainable habitat.”



COMMUNITY-LED RECONNECTING RIVER COUNTRY PROGRAM PUBLIC WORKSHOPS AND ONLINE SURVEY FEEDBACK REPORT

DISCUSSION

THE NATURE OF FEEDBACK HAS BEEN CONSTRUCTIVE, ACTIONABLE, AND TANGIBLE. THE LOCAL COMMUNITY HOLDS A WEALTH OF LOCAL, HISTORICAL, AND ENVIRONMENTAL KNOWLEDGE.

Differences in feedback data

While the community workshops and survey invited the same type of feedback from respondents, the lens applied to feedback differed slightly. The workshop environment led to a constructive and collaborative approach, and facilitation included a provision for assistance with location coordinates.

While equally constructive, responses to the survey held a primarily subjective and somewhat personal lens. In most instances, survey comments did not include corresponding location coordinates. However,

some survey respondents indicated an openness to further discussion with the department. This allows an avenue for further clarification as required.

Recurring themes and sentiments in feedback data

Landholders were able to contribute a great volume of feedback about the accuracy of flow modelling and potential outcomes of flow delivery.



Drawing upon lived experience and a wealth of long-term local knowledge, respondents were able to placemark key infrastructure, ecological, and strategic determinants of flow outcomes.

Community members observed that modelling did not include the flows of systems located in the periphery of model maps and posited that the timing of environmental water delivery must take system interconnectivity into account. Similarly, it was noted that as the modelling operated the flows to a 'static state', an accurate representation of flows that would be delivered in actuality could not be provided. The models did not provide any information about the 'when', 'how often', and 'how long'. These factors were recognised by landholders as having a fundamental influence on the actual movement and outcomes of flows.

By providing the locations of levies, regulators, bridges, and primary access routes, community members have initiated an inventory of infrastructural assessments and adjustments that may need to occur to minimise negative outcomes and maximise ecological and social benefits associated with the flows. For example, the modelling indicates that some landholders will not be able to access their homes, paddocks, or local access roads under certain flow conditions. In other instances, landholders have identified transport routes and farming properties that would be flooded under certain conditions, but where this is not reflected in modelling.

Additionally, it has been suggested by some respondents that regulators, levies, and irrigation diversions should be factored into flow modelling in order to achieve accurate flow predictions. It may be beneficial to include visible markers for this type of infrastructure in the RRCP maps.

Recognising the ecological value of water for the environment, the community has been able to identify numerous areas in urgent need of watering. There is a priority need for environmental water in many locations to receive flows not shown in the modelling.

Priority actions are needed to determine how to get water to environmental assets on the cusp of ecological collapse.

It was noted in many locations that the upper flow option of 40,000 ML/Day at Yarrowonga was not going to be enough to service many assets.

Some stakeholders have been able to identify the actions or volumes of water required to bring water into such systems. It was widely acknowledged that the delivery of water for the environment will have essential and valuable ecological outcomes for the river systems and for native species.

Consideration of the timing, duration, and frequency of flows was considered as vital for reducing the incidence or avoidance of blackwater events and proliferation of invasive species.

ACTIONABLE INSIGHT: COMMUNITY CONNECTIVITY

RESOURCING AND SUPPORTING COMMUNITY CO-DESIGN OF ENVIRONMENTAL WATER MANAGEMENT

COMPONENT 1 – Flow Options

There is a wealth of knowledge available from community members in the Western Murray Catchment region.

A safe space was created for constructive dialogue that respected the diversity of knowledge and perspectives to integrate community-driven considerations, needs and solutions from a localised level (e.g. farm level issues and opportunities) to more general (cross tenure asset and community level) and broader systems context.

This process is acknowledged by others in research literature. “Stakeholder engagement and participatory decision-making become paramount for reaching consensus-based sustainable compromises between the different water requirements.”

(Evans and Pratchett 2013; Harley et al. 2014; Yung et al. 2013).

Given the limited budget and time frames, WMLIG was unable to resource a more focused engagement within our 7500sqkm geographic footprint. The communities of Noorong, Mallan, Tooleybuc, Caldwell, Bunnaloo and Kyalite are examples of communities with many members known to be the keepers of valuable inter-generational land and water stewardship knowledge.

Numerous areas in urgent need of watering to service environmental assets have been identified in this report. The associated provisional infrastructure required to service these assets must be investigated. Landholders also provided feedback for



infrastructure required to mitigate impacts associated with environmental water delivery at modelled inundation levels.

Many stakeholders were adamant that procurement of infrastructure and related works should preference local service providers to create local employment and flow-on economic stimulus. Several stakeholders have said experiences with international or national corporations as service providers in previous water infrastructure works have left a considerable reluctance to invite them into the region or on to their properties again.

“Trust. You can do amazing things with it, but nothing without it.” – CSIRO CEO, Dr Larry Marshall

Community vision

WMLIG received requests from a number of stakeholders to re-engage to create a community vision for their environmental assets. The model they referred to was the process for gaining consensus for the Koondrook-Perricoota Forest Community Vision. **(Appendix 3)**.

This vision has become the foundation for a number of positive outcomes including a recommendation from the recent NSW timber industry inquiry that the KP co-design model be rolled out and

resourced in other areas of the state.

(Appendix 4)

The inquiry committee said it “considers this community consultation model to be a successful example of how an engaged and empowered community can work towards a common goal.”

Communities which regard themselves the multi-generational keepers of specific environmental assets such as the Poon Boon Lakes, Thule Lagoon and Yarrien Creek system are examples of those who would like to achieve positive outcomes from a democratic co-design process.

Several stakeholders have expressed their desire for landscape asset level community vision statements to inform broader regional environmental watering plans.



ENVIRONMENTAL BENEFITS AND RISK ASSESSMENTS

COMPONENT 2

WMLIG was asked to provide feedback on the adequacy of the technical information, including gap analysis and advice on communicating outcomes of the RRCP's environmental benefits and risks assessments.

Unfortunately, the full suite of the following list of assessments was not made available by September 30, 2022. These included:

- Waterbird population benefit and risk assessment
- Fish population predictive modelling
- Blackwater risk assessment
- Vegetation Condition and Predictive modelling
- Productivity Predictive Modelling
- Invasive species risks and benefits assessment
- Geomorphic assessment

Publicly available summaries of the environmental benefits and risk analysis were provided.

Copies of summaries were displayed and made available at a public workshop in Barham.

Key elements were outlined as published and requests for comments made in a community-led discussion on the topic.

There were many people who expressed their disappointment that the full assessments were not available as expected.

The community had requested local technical experts review the full assessment information. Dan Hutton and Dr John Conallin, have commented on the summaries and the related RRCP webinar.

Their observations are provided here:



DAN HUTTON

Technical assessments/studies used in the evaluation analysis were not provided, preventing an opportunity for thorough scientific review of;

- data sources
- evaluation analysis
- modelling, inputs & outputs
- gap analysis

Factsheets are approximately 1,000 word each and designed as a positive, promotional marketing tool only and not to provide robust, factual information. There is no mention of any potential adverse outcomes. Statements are rudimentary, crude, simplistic, naïve and non-attributed.

Potential environmental outcomes are;

- modelled and non-evidentially based.
- at best grossly simplistic and misleading, at worst inaccurate and incorrect.
- potential environmental percentage increases are complete fantasy, a ridiculous concept, non-measurable or attributable with no timeline.

Measurable improvement/decline on baseline is required.

All risks are not mentioned (exotic animal species, wildfire fuel loads, commercial interruption *and impacts to heritage*, red gum encroachment, both current and future potential resulting from the flow options.)

Statement relating to Water Quality, River

Form and Invasive Weeds contradict all data recorded over the past decade. No mentions of how environmental, social, cultural and economic benefits claimed will be monitored and measured.

In reference to the RRCP environmental benefits and risk analysis webinar on Friday 23 September 2022 which included a presentation by scientists from the Department of Planning and Environment's Biodiversity, Conservation and Science Team and Charles Sturt University, the following observations were made:

"Not once were community values mentioned or how communities can/will be involved.

"They fail to explain upfront over what timeframe the claimed increases will occur and what the baseline of the modelling is. That said, there was an incoherent reference to modelling being conducted over 110 and 120 years historical flow data and the baseline being set at Good Condition. How did they come to that conclusion?

"There's no reference to environmental water availability (or lack of it) within any of the modelling.

"It's a disgrace, with the possible exception of the fish modelling which is using actual recorded data and was independently validated.

" Management of environmental water delivery is currently grossly underfunded which prevents adequate monitoring, evaluation and proactive activities such as the control of pest species and red gum encroachment.

"There is no mention of how the delivery of RRCP flows will be monitored, evaluated and adaptively managed or funded.

"From the ground, this has no relation to reality at all.

"Apparently the full reports will be available now after our community-led comment period.

"Plus the modelling report on carp which was not included in any of this. "

DR JOHN CONALLIN

“Without being able to see any of the data or anything else, what more can we say?”

There is nothing on carp and everyone knows this water will breed carp - lots of them. We need to see that modelling, it's been done for sure.

It is impossible to see what baselines have been established, so what do the percentages mean? 100% increase on a 1 fish baseline is not a lot.

What is the target for each asset? If we don't know what baselines have been used, and what target we are aiming for, the trajectory of change can not be assessed? And, we have no idea where we are heading.

Does the invasive weeds section include red gum encroachment into wetlands? I don't think so.

The watering could either benefit or increase red gum encroachment, and that is a risk (or benefit) that should be calculated.

In relation to river form, the community wants to know what the following are:

“There are a range of water management techniques and actions as part of river works programs to reduce this risk from medium to low in most river reaches”.

They want bank protection works enacted



In reference to the RRCP environmental benefits and risk analysis webinar on Friday 23 September 2022, the following observations were made:

“Where is the modelling on what the community would like to see modelled such as carp? The modelling has been done, I have seen it from ARI (Arthur Rylah Institute for Environmental Research), this is an absolute must if community is to have any faith in what they have sent out.

“The only credible modelling is that of the fish and even then it is so esoteric to the community, no one can understand how they get there.

“It is not science as science is testable and repeatable.”

COMMUNITY COMMENTS AND QUESTIONS REGARDING ENVIRONMENTAL BENEFITS AND RISKS ASSESSMENTS

“The expected improvement outcomes indicated by summaries of the flora and fauna indicators were very generalised and improvements will not be linear across the landscape. The reader might be inclined to think there is incremental improvement across all of the landscape when in fact this is not the case. We don’t know what can be achieved yet – there was no footnote to explain this.”

*“It is unclear whether **complementary measures** to improve environmental outcomes (i.e not just the “add water” formula) such as infrastructure to improve fish connectivity are included in the Environmental Benefits and Risk Assessment. Does the RRCP fund these measures and, if so, how do we identify these measures and have them incorporated into the program’s resourcing?”*

Complementary measures are recognised as being important to the achievement of environmental outcomes. Measures such as fish screens, habitat restoration and carp control are recommended in the Murray Darling Basin Plan, as a “more than water” approach to deliver environmental outcomes.

Several stakeholders would like to pursue the opportunity initially provided to access the environmental assessments once available so they can have them reviewed by local trusted experts and comment on those observations and their own.

Transparent access to the scientific baselines and reasoning behind the benefits and risk analysis is considered a major priority.

Stakeholders expressed concerns that RRCP program leaders would never produce detailed environmental assessments because they believed local people would not value, understand or engage with the science underpinning the assessments.

CASE STUDY: Cadell and Murrakool Community Wildlife Surveys Legacy

From 2001 to 2008, ecologist Matt Herring lead an extensive series of community wildlife surveys in the NSW Murray catchment. They included 403 study sites, 300 farms, 3200 community attendees and spanned more than 3 million hectares.



The area of interest was east of Holbrook to Tooleybuc, from the Murray River to the south and the Billabong Creek to the north.

Participants in the Murrakool and Cadell survey sections still speak very highly of the experience and credit much of their understanding and passion for protecting their environment to the best practice community engagement of those times.

Environmental scientist, Maggie McDonald, whose family have farmed in the district for six generations, said it was heartening to discover at WMLIG's RRCP community-led feedback sessions that she was not the only one to value the significant and enduring impact of the Murrakool and Cadell Community Wildlife Survey events.

MAGGIE MCDONALD, ENVIRONMENTAL SCIENTIST

"They were a highlight of my childhood and I have met other people my age who say the same thing.

It has instilled in me a deep sense of appreciation for our unique wetland environment. This is a very special place.

I know it was a foundational experience, and subconsciously, I think it had a big impact on

why I am back in this region.

At our recent Koraleigh public workshop, I met a man in his 20s who mentioned how formative those Murrakool surveys were to him and said it was the reason why he had attended the event.

At the same workshop, the survey and its leader, Matt Herring, were mentioned by several people in open discussion, and in private, a woman said she wished she had brought along her copy of the survey findings for her farm, which included a two-page species list.

She said she cherished the document and had kept it in an easy to find place for the past 15 years.

It's obvious these events educated the community; they were fun and we all remember them.

As a 7-year-old running around wetlands, up to my belly button catching tadpoles, and having a ball, I must have made a decision about my career. I now have a pair of waders and an environmental science degree.

Matt Herring taught kids and parents, and all community members about the wildlife in our backyard and said, 'go for it!'

These community wildlife survey events meant our empowerment and 17 years later people are still talking about it."



“Matt Herring taught kids and parents, and all community members about the wildlife in our backyard and said, ‘Go for it!’. These community wildlife survey events meant our empowerment and 17 years later people are still talking about it.”



LANDHOLDER NEGOTIATION FRAMEWORK

COMPONENT 3

WMLIG was asked to gather community feedback on the RRCP's landholder negotiation framework in the form of a submission towards the next round of consultation after the exposure legislation was released by August.

The expected time frames for the draft amendments to the Water Management (General) Regulation 2018 have been extended and the community was not able to comment on it.

A community-led public workshop in Moulamein was held to discuss the framework, mitigation principles and the department's *'You Said, We Did'* report on the previous consultation round.

This report summarises the community and stakeholder engagement process carried out, and the 30 submissions received, during the public exhibition of the Landholder Negotiation Framework (LNF) discussion paper.

Discussed at the Moulamein workshop, were:

- The engagement and consultation process, including activities and timing
- The number and type of submissions received by various stakeholders
- The feedback received and issues raised in the submissions
- How the department has communicated its acknowledgement of consultation comments, how they have been responded to and how they were considered in refining and developing the LNF.
- Issues particular to regional involvement in SDLAM accelerated works negotiations
- Concerns about the lasting effect on community cohesion if negotiations are rushed, compensation or mitigation investments are unfairly distributed or inadequate to prevent damage or loss of access.

LANDHOLDER NEGOTIATION FRAMEWORK

Comments from participants at the WMLIG community-led workshop on the RRCP Landholder Negotiation Framework (LNF) and Mitigation Principles, Moulamein, 8 September 2022.

"There are a lot of questions here and it would be beneficial to have them answered.

- 1. Has the government looked at this region as a whole?*
- 2. Is this included in the proposed negotiated compensation for individuals?*
- 3. Is there a region-wide compensatory process in this, i.e what about all of our publicly owned assets or privately-owned but collectively used and valued assets?"*

"The environmental water holder is very aware of third-party impacts and if one drop of environmental water is put in the wrong direction, I believe they will have a major risk to manage."

"There are two main reasons why the consultation process to date has received only 30 responses out of more than 4000 affected landholders – (1) The majority think it is simply a fait accompli and (2) they are suffering from 'consultation fatigue'."

"We know local Government has been left out of the consultation process, but the impacts on existing infrastructure, requirement for new infrastructure and roads will be considerable. For instance, there are 9 environmental sites in Victoria and in 2019 when 50,000MG was released, it simply wouldn't go to where they wanted it to. The Victorian side of the border tried to co-ordinate the Victorian flows and

it didn't work at all. There will need to be significant collaboration between Vic and NSW to manage flows at the same time."

"The consultation timeline is clearly inadequate however what is currently happening in the rivers naturally this year allows landholders to 'ground truth' it. It still means landholders need to be engaged to be more proactive and be shown exactly what they are likely to lose (or gain)."

"The technology is available to calculate better models regarding the impacts, particularly satellite technology.

*It is generally accepted that there isn't a perfect system where every element will be accurate and there does need to be a cutoff point, but **now is the time for data collection.**"*



Comments continued:

"There is no strong representation from local government in any of the areas affected. Questions such as environmental flows coinciding with tourism traffic and events have been sidelined in favour of the main drivers of the regional economy."

"I think everyone gets the feeling that the current environmental water debate has the potential to be a repeat of the water buy back – good for those who sold it."

"There is not and mostly likely will not be a community or region-wide submission that would canvas the impact on the value chain and public assets."

"The 'good faith' and statute of limitations (18 months) for any compensation claims to be agreed and settled, had the potential for compensation to go to 'the best bargainers'."

"There is also a danger that landholders who hadn't been engaged would miss out entirely, while neighbouring properties were compensated – this is seen as a potentially highly divisive social impact."

"The whole process should not be based just on flows, but on a range of measures that take into account climatic conditions and the general health of the environment, rather than a set release every so many years – complementary measures are key, and we can't understand why they don't get it."

"People on the ground were not being listened to; and there are too many 'cash for comment' scientists involved."

"Environmental water management won't be successful if other measures to manage feral animals and invasive plant species are not put in place as well."

"It does appear the LNF will reduce negotiation time or remove power or control, and indicated that negotiations should be transparent."

"We strongly disagree with the exclusion of liability on the part of the NSW Government if the process of mediation is unsuccessful. That 'good faith' clause is a killer".

LANDHOLDER NEGOTIATION FRAMEWORK

While respondents to the first round of government consultation were summarised as saying the potential impacts should be addressed on an individual landholder basis, those stakeholders WMLIG spoke with considered a collective response equally as important as individual negotiations.

Collective public assets or shared private assets like a private regulator, for example, were considered to require equal attention. Without this, a 'divide and conquer' approach to lengthy negotiations had the potential to exhaust landholders good will and set up disputes or distrust among neighbours who may not be kept informed or have input.

In Moulamein, there was also an opinion that there was not and wouldn't be a department request for community or region-wide submission that would canvas the impact on the value chain; lowered production levels; or the opportunity for a region as a whole to seek regional compensation.

Also, the 'good faith' element of the framework and statute of limitations (18 months) for any compensation claims to be agreed and settled, had the potential for compensation to go to 'the best bargainers' while others would lose out now and, in the future, if 'winners are picked'.

The community awaits the draft amendments to Water Management (General) Regulation 2018 and will comment once they are released.

CONCLUSION

Western Murray Land Improvement Group's conclusion is that there is an abundance of knowledge, passion and commitment in this region to address environmental issues and opportunities associated with the RRCP's modelled flow scenarios.

However, it is also reasonable to conclude from discussions with stakeholders in the public workshops, during both short and extensive phone calls and interviews, via survey responses and at local events that many members of the communities believe there is a proven inadequacy of governments in accessing this valuable knowledge.

Well resourced, supported and respected community-led engagement can access it. With a limited budget and short time frame, WMLIG has only touched the surface of landholders' and other community members' contribution towards environmental solutions which cannot be separated from their social, cultural and economic consequences in the place they call home.

Most stakeholders understood the urgency of finding a way to break through the status quo of government interaction.

All parties and our environment would benefit from the 'speed of trust' required to attain a momentum for positive change.

Again, engagement that engenders trust is a force multiplier investment: Get this right and there won't be a fourth failed process for removing constraints.





REFERENCES

Alexandra J 2019. Losing the authority – what institutional architecture for cooperative governance in the Murray Darling Basin?

Collay, R. 2010. A community conversation about a watershed. *Ecology and Society* 15(3): r2. [online] URL: <http://www.ecologyandsociety.org/vol15/iss3/resp2/>

Conallin et al. 2018. Stakeholder Participation in freshwater ME programs. Applying thresholds of potential concern with Environmental Flows

Conallin et al. 2018. Using strategic adaptive management to implement Environmental Flows Programs in Complex Social-Economic Systems

Conallin, J., Dickens, C., Hearne, D., and Allan, C. (2017) Stakeholder Engagement in Environmental Water Management. In *Water for the Environment: from policy and science to implementation and management*. (Eds. A Horne, A Webb, M Stewardson, B Richter and M Acreman). (Academic Press: Cambridge)

Charles et al 2020. *Community Science. A typology and its implications for governance of social-ecological systems*

Mark Evans, Gerry Stoker & David Marsh (2013) In conclusion: Localism in the present and the future, *Policy Studies*, 34:5–6, 612–617, DOI: 10.1080/01442872.2013.864082

Mark Evans, David Marsh & Gerry Stoker (2013) Understanding localism, *Policy Studies*, 34:4, 401–407, DOI: 10.1080/01442872.2013.822699

Evans & Pratchett et al. 2014. The Localism Gap – The Clear Failings of Official Consultation in the Murray Darling Basin.

Evans & Terrey et al. 2016. Co-design with citizens and stakeholders.

Flitcroft, R. L., D. C. Dedrick, C. L. Smith, C. A. Thieman, and J. P. Bolte. 2009. Social infrastructure to integrate science and practice: the experience of the Long Tom Watershed Council. *Ecology and Society* 14(2): 36. [online] URL: <http://www.ecologyandsociety.org/vol14/iss2/art36/>

Flitcroft, R., D. C. Dedrick, C. L. Smith, C. A. Thieman, and J. P. Bolte. 2010. Trust: the critical element for successful watershed management. *Ecology and Society* 15(3): r3. [online] URL: <http://www.ecologyandsociety.org/vol15/iss3/resp3/>

Sam Houston State University (Texas, USA), M. Fortunato, A. Ross & N. Davidson: 'Community Adaptability Engagement Research Final Report for the Murray Darling Basin Authority', 2017

McKercher, K,A. (2021). Beyond Sticky Notes. Cammeraygal Country, Australia ISBN: 9780648787501. (<https://www.beyondstickynotes.com/>) Sticky notes

IAP2 (2014). *Spectrum of Public Participation* (www.iap2.org.au)



APPENDIX

REPORT 1

Appendix 1: Murray Darling Basin Map

Appendix 2: Community Feedback Map

Appendix 3: Koondrook-Perricoota Community Vision

Appendix 4: WMLIG NSW Timber Enquiry press release

Appendix 5: Principle-based Engagement. Stakeholder Engagement in Environmental Water Management. In *Water for the Environment: from policy and science to implementation and management*.

REPORT 2

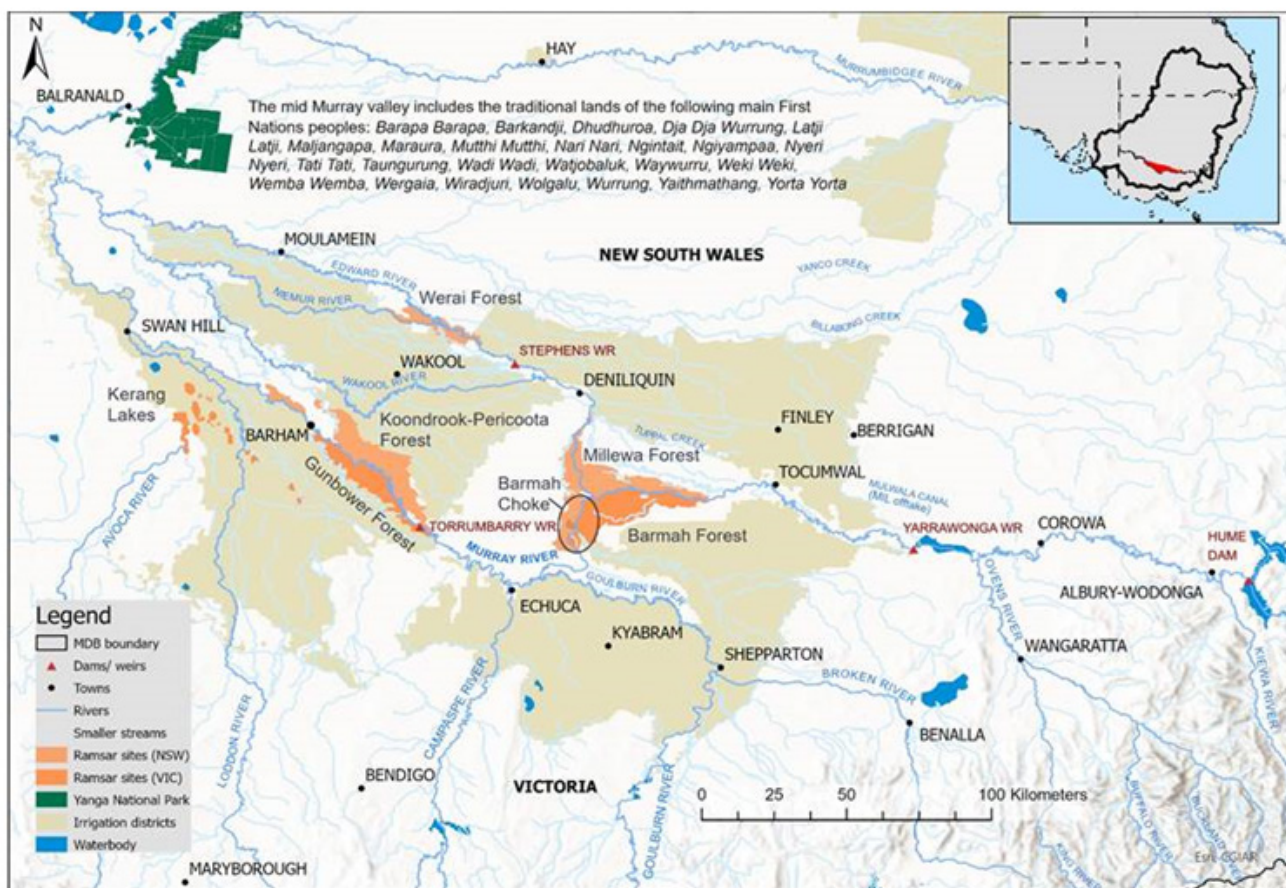
Appendix 6: Community Responses to Modelled Flow Options – Full Report

Appendix 7: Raw Data Table



APPENDIX 1: MURRAY DARLING BASIN MAP

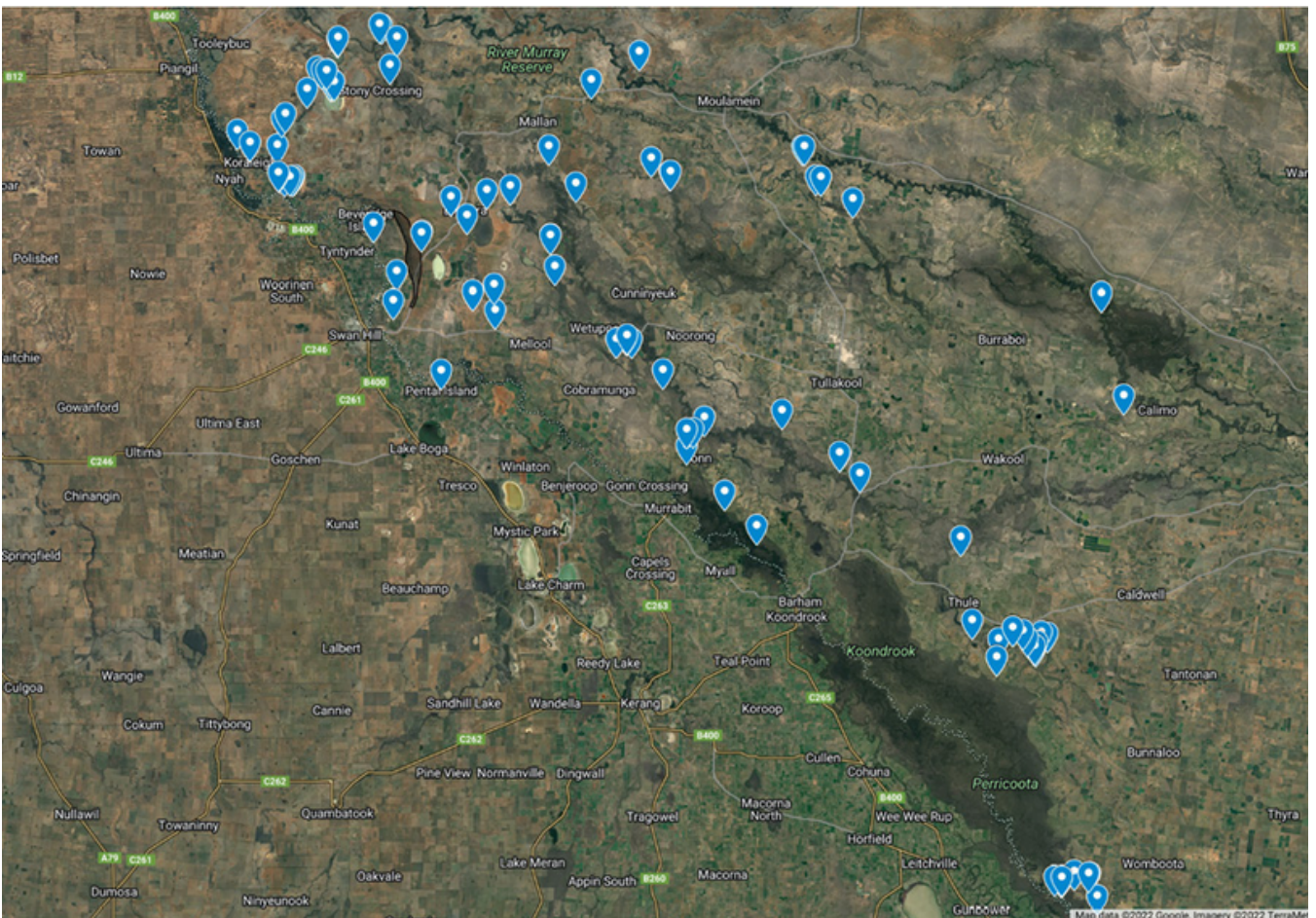
Mid-River Murray valley, including the Edward / Kolety–Wakool River system



APPENDIX 2:

COMMUNITY FEEDBACK MAP

109 OUT OF 187 COMMUNITY COMMENTS ARE GEOLOCATED



APPENDIX 3: KOONDROOK-PERRICOOTA COMMUNITY VISION

KEY VISION PILLARS

A HEALTHY FOREST

A FOREST WITH PERMANENT WATER HOLES TO SUPPORT RICH, DIVERSE FLORA AND FAUNA.

A FOREST WITHOUT DOMINANT PEST SPECIES.

A FOREST TO SUSTAIN BREEDING EVENTS FOR WATER BIRDS, WITH SUPPORTING POPULATIONS OF NATIVE FISH.

A FOREST WITH SELF-REGULATING NATURAL CYCLES.

A PEOPLE'S FOREST

AN ENGAGED AND EVOLVING COMMUNITY WITH A UNIFIED VOICE.

A FOREST WITH RECOGNISED CULTURAL HERITAGE, BOTH INDIGENOUS AND NON-INDIGENOUS.

A FOREST FOR LIFE-LONG ENVIRONMENTAL EDUCATION.

CO-DESIGNED, CO-MANAGED OBJECTIVES WITH TRANSPARENCY IN COMMUNICATION.

BROAD COMMUNITY AWARENESS AND NATIONAL, MAINSTREAM MEDIA ATTENTION.

A WORKING FOREST

A RECREATIONAL AND ACCESSIBLE FOREST WITH SUPPORTED INFRASTRUCTURE.

A FOREST FOR POSITIVE ECONOMIC OUTCOMES, INCLUDING TOURISM AND LOCAL EMPLOYMENT.

A FOREST WHERE FIREWOOD CAN BE GATHERED AND TIMBER CAN BE HARVESTED.

RECOGNITION OF THE FOREST AS A RAMSAR-LISTED SITE, CARED FOR AND MANAGED APPROPRIATELY.

APPENDIX 4: WMLIG NSW TIMBER ENQUIRY PRESS RELEASE

NSW Government Urged to Adopt The Healthy Working Forest Model For Koondrook–Perricoota and other areas in the State.

The NSW Committee of Enquiry into the Long Term Sustainability and Future of the Timber and Forest Products Industry has recommended the Western Murray Land Improvement Group's (WMLIG) Koondrook–Perricoota Forest Vision as a model that could be rolled out not only in this region, but in other areas of NSW.

The Legislative Council committee's recently released report to the NSW Government said the community consultation model was 'a successful example of how an engaged and empowered community can work towards a common goal'.

The WMLIG submission to the enquiry resulted in a recommendation 'that the NSW Government investigate ways in which it can facilitate the establishment of community-based initiatives supporting healthy working forests across the State'.

"We are encouraged by their efforts to recover and respond to the various changes impacting their region by working together to build a 'healthy working forest'.

"We share the group's position on balancing economic, community and environmental considerations when planning for and managing multiple uses for a State forest.

"We consider this community consultation model to be a successful example of how an engaged and empowered community can work towards a common goal", the committee's report said.

The recommendation was made amid the committee's overall finding that NSW is heading towards a timber supply crisis, particularly with regard to softwood plantation timber.

The committee also recognised the many people and communities dependent on the industry faced ongoing uncertainty from the widespread economic and social impacts of the current timber shortage.

In its submission to the inquiry, the WMLIG highlighted various severe impacts on the region following increased government reform, such as the Murray Darling Basin water reform process, the conversion of much of the Red Gum State Forest estate to National Parks and the Millenium Drought.

WMLIG supports a sub group of a collective of local community stakeholders, such as the Koondrook Perricoota Alliance, Indigenous groups, forest users and industry stakeholders, based in Barham near the Koondrook–Perricoota State Forest.

Its purpose was to facilitate and co-ordinate the community's agreed approach to the management model and future uses of the Koondrook Perricoota Group of Forests, namely 'a healthy working forest where native species can flourish and where local communities can connect and co-manage the forest for future generations'.

APPENDIX 4: WMLIG NSW TIMBER ENQUIRY PRESS RELEASE CONTINUED

WMLIG called for 'striking a balance between job retention and creation, community benefit and environmental reform and ongoing innovation' which they argued could be achieved by a 'cooperative approach' between government and the community actively managing multiple uses in the forest estate, such as the Koondrook-Perricoota State Forest and surrounds.

The KP community engagement process was facilitated by the WMLIG between December 2020 and March 2021 with a series of events and surveys involving 206 participants. The key pillars that emerged from the process were a desire for 'A healthy Forest', 'A Peoples' Forest and 'A Working Forest'.

With funding support from Murray Local Land Services, NSW Forestry Corporation, Murrakool Land for Wildlife, and the Australian Government's Healthy Rivers Program, WMLIG has conducted environmental, cultural and community educational activities in the KP Group of Forests for the past 10 years.

With further funding from Murray River Council and the Red Gum Timber industry, plus a contribution from WMLIG's own funds, this work and current initiatives were submitted to the enquiry and provided considerable evidence in support of a multi-use forest with community-led initiatives.

The Committee also said it was encouraged to hear about wood waste and crop residue initiatives as well as recycling programs in recognition of the industry as a circular economy.

"There is untapped potential for innovation in the timber and forest products industry that the NSW Government should be doing more to capitalise on".

The submission contributed to a recommendation that the NSW Government provide funding opportunities for the timber and forest products industry, particularly small-medium operators, to encourage innovation.

Furthermore, the committee heard of other innovative uses of wood waste products such as opportunities in Biochar and manufacturing recycling programs.

WMLIG has continued to explore the use of wood waste for Biochar that could be used as a soil conditioner for agriculture, livestock feed additive and other by-products with useful environmental outcomes that include a reduction in greenhouse gas emissions and emissions avoidance measures with potential benefits of between \$43-102 Million a year for the region.

During the committee's enquiry, it visited the K-P group of forests and surrounds and the WMLIG offices in Barham.

The NSW Government is required to respond to the report within 3 months.

**Further enquiries: Contact Jane O'Connor,
WMLIG 0407 318 648**

APPENDIX 5: PRINCIPLE-BASED ENGAGEMENT

Stakeholder Engagement in Environmental Water Management.
In Water for the Environment: from policy and science to implementation and management.

Table 7.1 Principle-based Engagement. Three Foundation Principles Within 10 Core Principles That Are Needed for Effective Stakeholder Engagement

	Principle	Goal (Overall Goal Centered on Building Trust and Ownership)
1	<u>Inclusiveness</u> ¹	Ensuring the participation of all stakeholders who have an interest in or who would be affected by a specific decision, including <i>hard-to-reach</i> groups. Valuing stakeholders input and different forms of knowledge.
2	<u>Transparency</u>	Ensuring that stakeholders have the information they need and in a way they can understand, that they are told where information is lacking or uncertain, and what they can or cannot influence.
3	<u>Commitment</u>	Showing respect for stakeholders by giving engagement the appropriate priority, and by demonstrating that it is a genuine attempt to commit, understand, and incorporate other opinions, even when these conflict with the existing point of view.
4	Resourcing	Providing adequate time, monetary, and expertise resources needed to facilitate engagement and build decision-making capability among different stakeholders.
5	Accountability	Ensuring that, as soon as possible, during stages of the engagement process participants receive an unambiguous account of how and why their contributions have, or have not, influenced the outcome, and ensuring that there are routes for follow-up, including reporting on final decisions, strategies, and/or implementation plans.
6	Adaptiveness	Ensuring that those involved in the consulting must be open to the notion that their existing ideas can be improved (or are wrong), that they change as new information is presented, and that the ideas will, if necessary, be amended.
7	Willingness to learn	Encouraging both the engagers and the engaged to learn from each other, with a style of process that is as interactive and as incremental as possible to build increasing layers of mutual understanding and respect.
8	Productivity	Establishing from the outset how the engagement process will make something better, and that resources will clearly lead to benefits. Being able to show clear outcomes.
9	Accessibility	Providing different ways for people to be engaged and ensuring that people are not excluded through barriers of language, culture, or opportunity, and that stakeholders have access to talk to the right people.
10	Responsiveness	Responding to and timely turnaround times on questions, submissions, or meetings, so that stakeholders are not left wondering if they are listened to, and what the next steps will be.

¹Fundamental principles are underlined.

Source: Adapted from Acland (2008) and Irvine and O'Brien (2009)



**Western Murray
Land Improvement Group**