

National Irrigators Council General Meeting

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20 October 2022

Acknowledgement of Country

We acknowledge that today we meet on many Aboriginal lands.

We acknowledge the traditional custodians of the lands and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work.



Nikita Ridgeway

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Water Resource Plans

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Water Resource Plans

-
- NSW is responsible for 20 out of the 33 water resource plans (WRPs) required across the Murray-Darling Basin.
 - WRPs directly adopt those parts of the relevant NSW water sharing plans (WSPs) that demonstrate NSW's compliance with the Murray-Darling Basin Plan.
 - All 20 NSW WRPs were submitted to the Murray-Darling Basin Authority (MDBA) before 30 June 2020
 - All 20 were later withdrawn following receipt of formal notice of grounds from the MDBA

WRPs

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- Five of the 20 WRPs were resubmitted before 30 June 2022
 - The NSW Border Rivers Alluvium, has been accredited
 - There are four groundwater WRPs currently (12 October 2022) being assessed for accreditation by the MDBA: Great Artesian Basin Shallow, MDB Fractured Rock, MDB Porous Rock and Macquarie Alluvial
 - There are 11 WRPs currently lodged with the MDBA for informal feedback
 - There are four WRPS still to be provided to the MDBA for informal feedback
 - Commitment to have submitted all 20 in December 2022
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WRP issues

- Meeting First Nation assessment expectations
- Clarifications about definition of PEW
- Minor cross-referencing issues

SDLAM projects

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Overview

SDLAM

SDLAM Acceleration

Reconnecting River Country

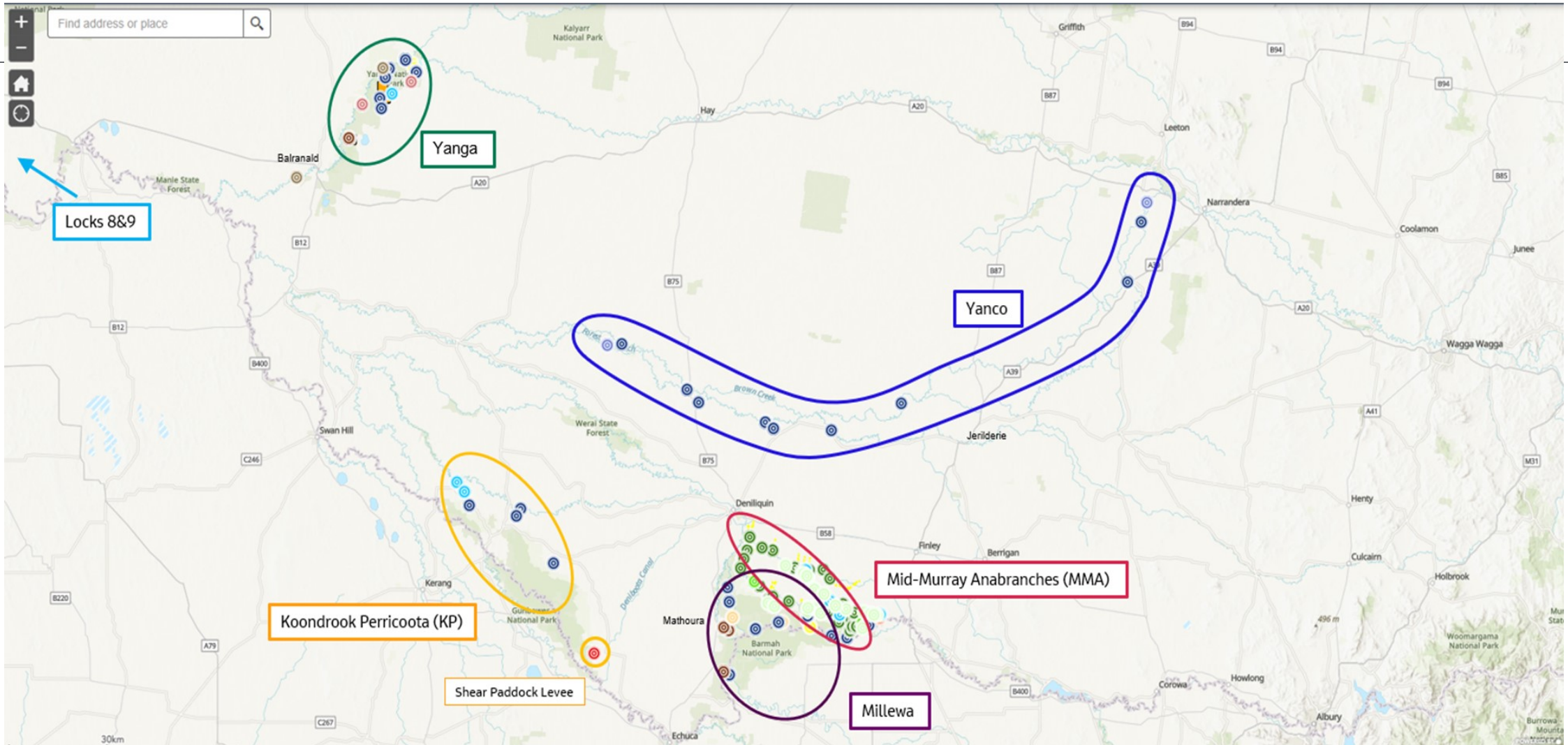
Next Steps for NSW





SDLAM Acceleration Projects

Project Recap



Construction is underway and more is coming

Locks 8&9

- Millewa Pump Station (underway)
- Carrs, Cappitt's & Bunberoo works (mid 2023)
- Resource stockpiling (Completed)

Koondrook Perricoota

- Sandy Creek Bridge (underway)
- Shear Paddock Levee (early 2023)

Mid Murray Anabranches

- Tuppal Creek Bridges (underway)

National Parks Project

- Access Track Upgrade (Completed)
- Resource stockpiling (Completed)

Yanco Modernisation

- Hydrometric Stations - gauge posts (Completed)



Next Steps and Challenges

- Global supply chain issues continue to create challenges for delivery
- Floods and high rivers also continue to challenge projects, especially the Yanga National Park Project
- Project teams are looking at how to package works to maximise fast delivery
- The challenge of 2024 is real so NSW is proactively talking to the Commonwealth about contingencies and other options given delays being experienced due to ongoing wet weather and flooding.

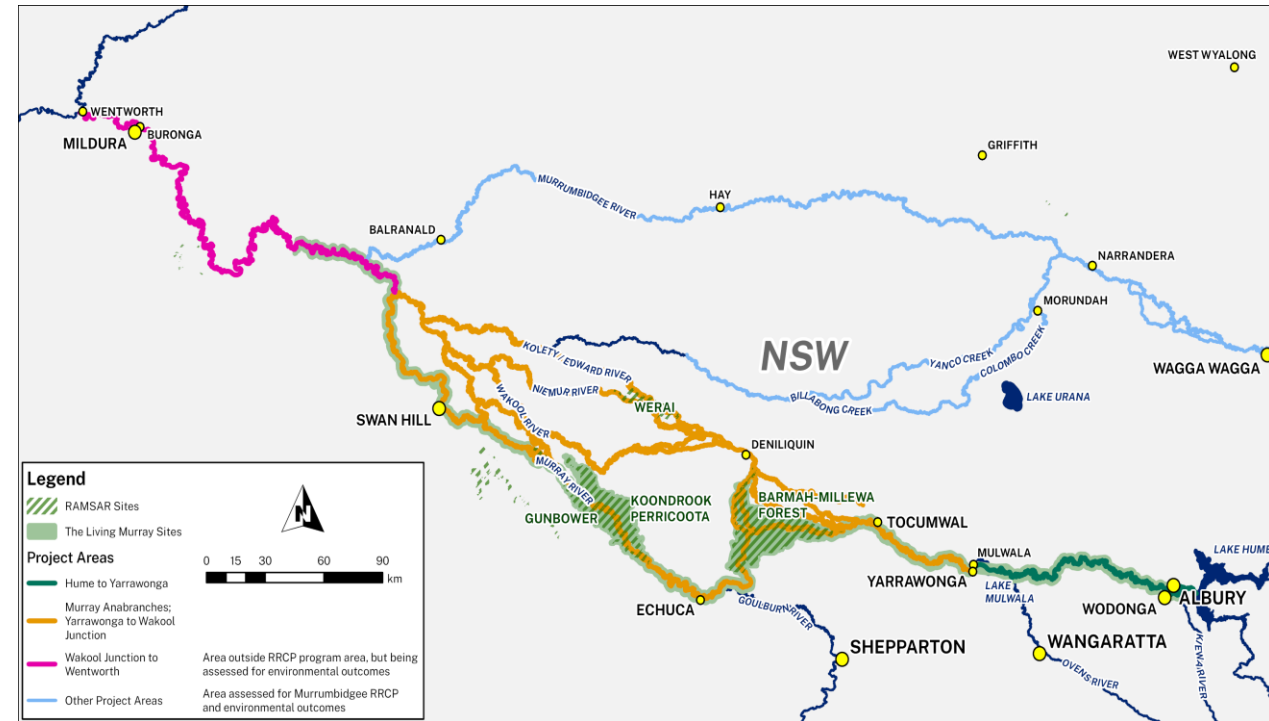




Reconnecting River Country Program

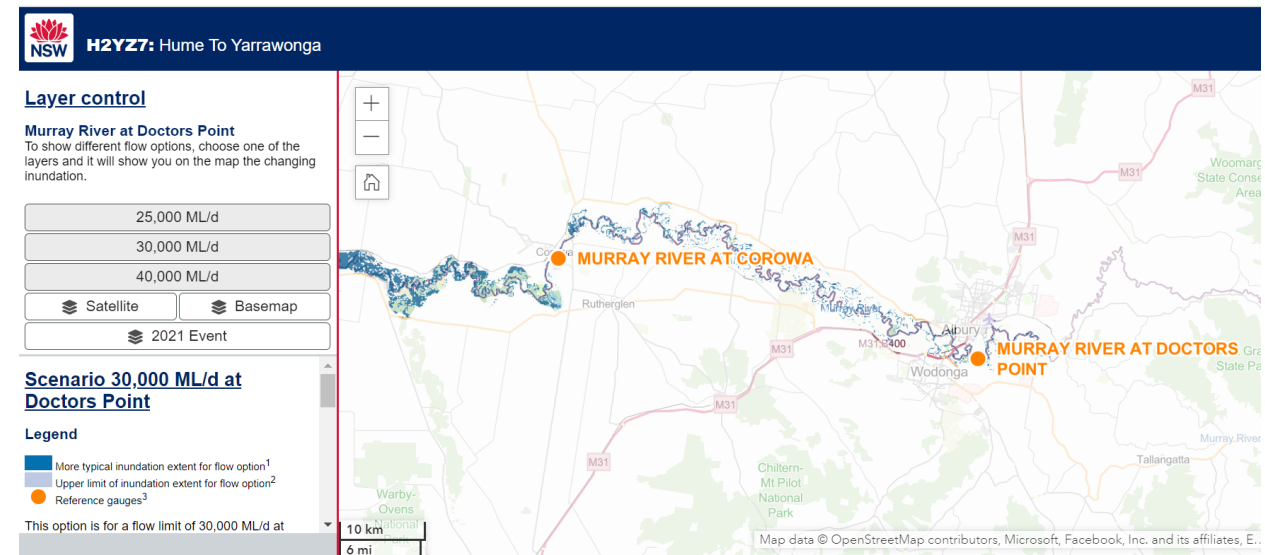
What is Reconnecting River Country Program?

- NSW SDLAM constraints projects:
 - Hume to Yarrawonga
 - Yarrawonga to Wakool
 - Murrumbidgee
- The program reinforces the NSW's commitment to Basin Plan outcomes:
 - local environmental and community benefits,
 - balanced economic, social, cultural and environmental outcomes across Southern NSW
 - improved wetland health and floodplain connectivity
- The program focuses on removing constraints that impact the delivery of water for the environment across the southern-connected Murray–Darling.



Where is the program at?

- Strategic business cases (SBC) for the Murray and Murrumbidgee submitted to Australian Government for consideration
- Information released stakeholders to gain their input and update on progress:
 - Online inundation mapping derived from comprehensive hydraulic modelling
 - Frequency, timing and duration of flow options under investigation
 - Environmental benefits assessments findings
 - Landholder Negotiation Framework, ‘What You Said, What We Did’ Report released August 2022
- Continuing engagement with key stakeholders to collaborate and seek feedback on:
 - Flow options, impacts, benefits, mitigation measures (Impact Management Toolbox) and Landholder Negotiation Framework



Murray and Murrumbidgee Strategic Business Case: Impact Mitigation

To mitigate potential impacts from higher flow limits a range of processes, tools and mitigation measures will be implemented:

- **Landholder Negotiation Framework** - will provide a transparent, equitable and fair process to negotiating agreements with affected landholders.
- **Impact Management Toolbox**– guiding principles, methodologies and mitigation measures to manage Program impacts. It will be developed in consultation with stakeholders.
- **Negotiation Assistance Package** - will provide financial assistance landholders to negotiate mitigation agreements.

Potential infrastructure mitigations	Potential non-infrastructure mitigations
• New or upgraded culverts, pumps, bridges, crossings and fences. • Road raising • Protecting or relocating infrastructure such as sheds to protect against flooding. • Levee modification	• Easements • Targeted management of invasive weeds • Financial support for negotiation costs • Voluntary land acquisition • Maintenance, repairs and clean up

Murray and Murrumbidgee Strategic Business Case key findings

Benefits to regional communities

- Contribute to the Sustainable Diversion Limit (SDL) offset, reducing the need for further water recovery
- Extensive investments in local bridges, roads and other infrastructure
- Reduced inundation impacts from natural river flows through improved infrastructure
- Support the recreational fishing industry and tourism for river communities.
- Improved flood resilience and mitigation from dam airspace management

Environmental and cultural benefits

- Ability to connect flows between the river, wetlands and floodplain vegetation communities
- Increased abundance and breeding habitat for native fish and other fauna
- Enhanced ability for First Nations people to access Country and be part of water management decision-making

Benefits



Native fish



Lateral connectivity



Waterbirds



Ecosystem production



Wetland and floodplain vegetation

Murray and Murrumbidgee Strategic Business Case recommendations

- That the Australian Government invest in a final business case that will:
 - Investigate **four flow options** in the Murray and **three flow options** in the Murrumbidgee in close consultation with landholders and the community
 - recommend a **preferred flow option** and
 - refine implementation **costings**
- Continue stakeholder engagement to understand stakeholder views on the:
 - flow options
 - potential impacts and
 - preferred mitigation measures.

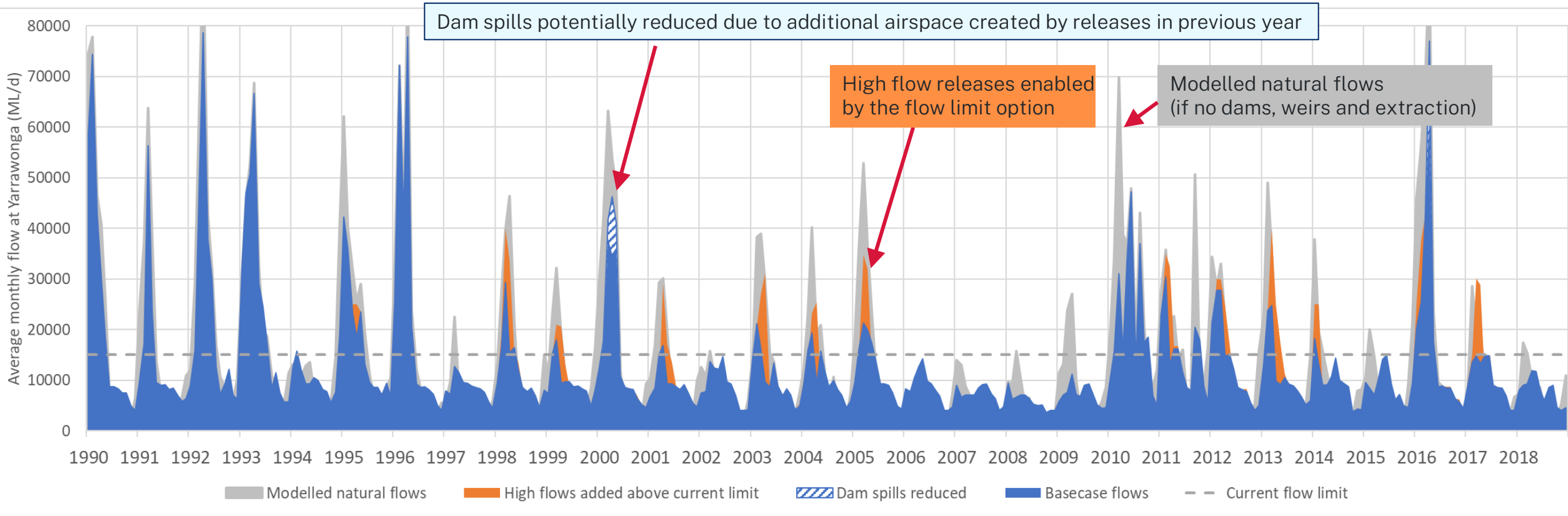
Flow option	Flow Limit at Wagga Wagga (ML/day)
Base Case	22,000
Option 1	32,000
Option 2	36,000
Option 3	40,000

Flow option	Hume to Yarrawonga reach (@ Doctors Point)		Yarrawonga to Wakool River Junction (@ D/S Yarrawonga)	
	ML/day	Metres	ML/day	Metres
Base Case	25,000	3.75	15,000	2.25
Option 1	25,000	3.75	25,000	3.28
Option 2	30,000	4.12	30,000	3.68
Option 3	40,000	4.82	40,000	4.42
Option 4	40,000	4.82	45,000	4.70

Murray River *downstream* of Yarrawonga Weir gauge

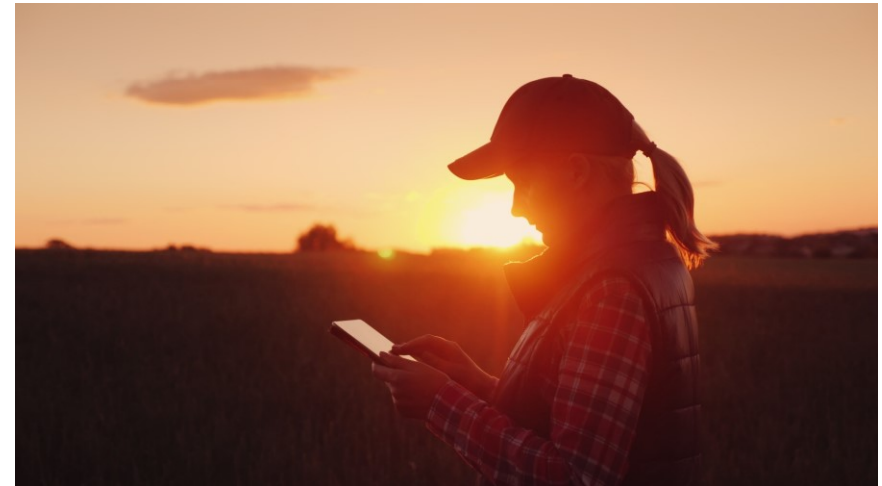
- potential delivery pattern 1990 to 2018, 40,000 ML/d flow limit

Average monthly flows in the Murray River *downstream* of Yarrawonga Weir gauge



Next steps for Reconnecting River Country Program

- Expanding stakeholder engagement
- We will be reaching out to landholders, First Nations Peoples, public land managers and regional community to:
 - continue discussions and seek feedback on flow options and their frequency, timing and duration
 - continue conversations about environmental and property-scale impacts and benefits, inundation mapping and appropriate mitigations
 - discuss the feedback received on the proposed Landholder Negotiation Framework and Impact Management Toolbox
- Continuing development of the Landholder Negotiation Framework and Impact Management Toolbox
- Refinement of inundation mapping through on-ground validation



For the latest Program information and to sign up for an online case study, visit <https://caportal.com.au/dpe/rcc>



Next Steps

Looking ahead to June 2024

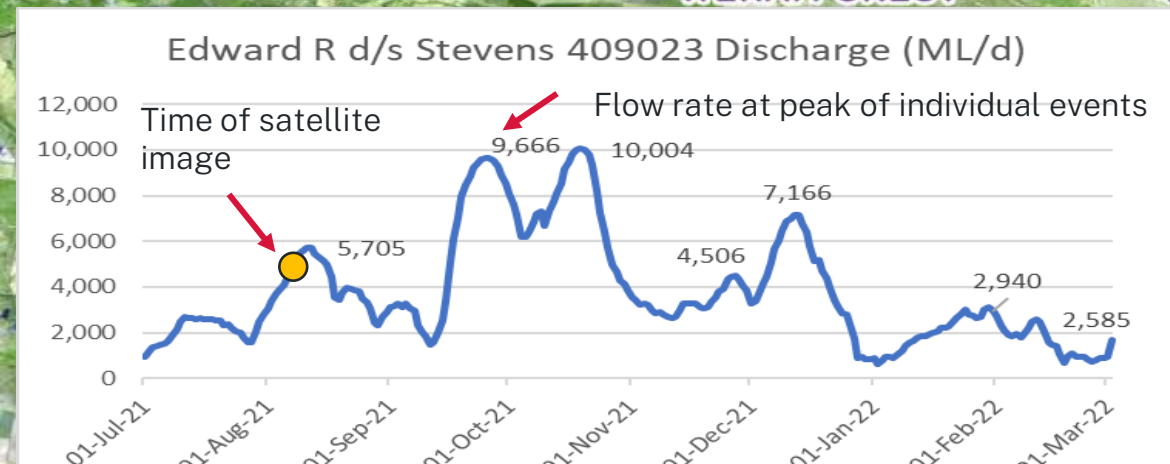
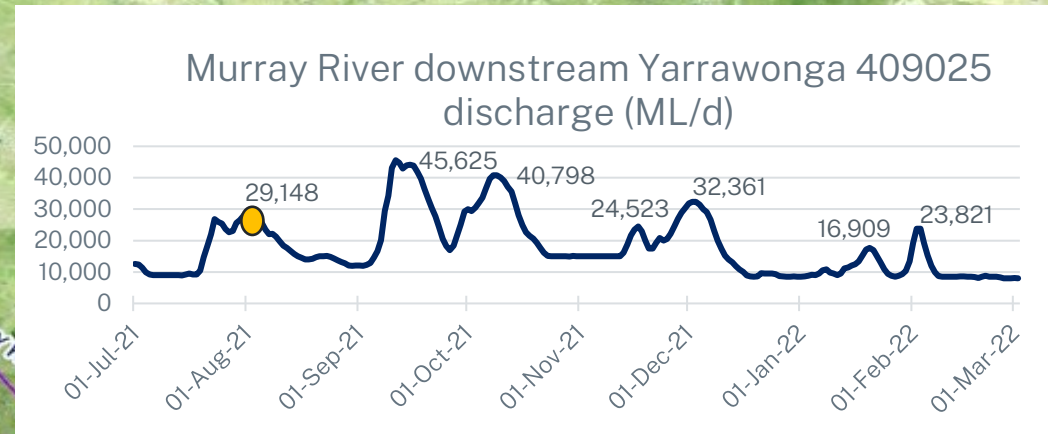


- NSW continues to advocate for sensible solutions to the challenge of 2024 and implementing the Basin Plan
 - NSW is advocating for:
 - Flexibility on time frames for projects esp. Reconnecting River Country
 - Recognition of broader environmental benefits – not just volumes
 - Funding to implement complementary measures and programs like Better Baaka and Better Bidgee that will support Basin Plan outcomes
 - Balanced conversations around water purchase and efficiency measures
-

Werai Forest – 8 August 2021

Sentinel satellite imagery

This image records the flow of **5,097 ML/d** at Edward River, downstream of Stevens Weir, just before the peak of 5,705 ML/d a few days later. This flow related to the flow of approximately **27,988 ML/d** downstream of Yarrawonga Weir gauge on 31 July 2021 (allowing for typical travel times).

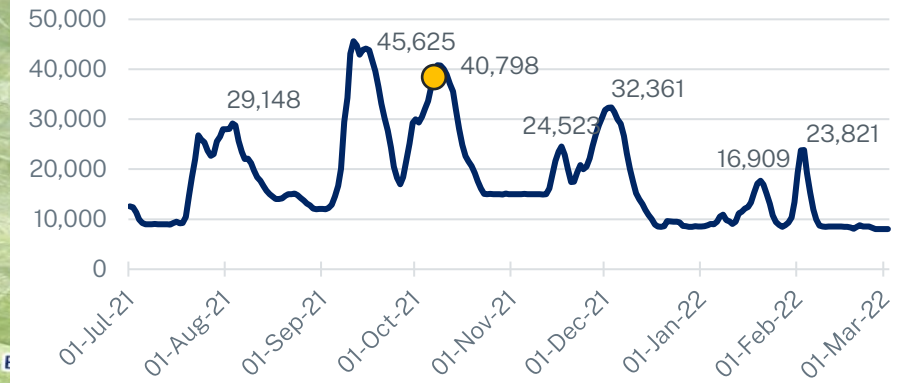


Werai Forest – 22 October 2021

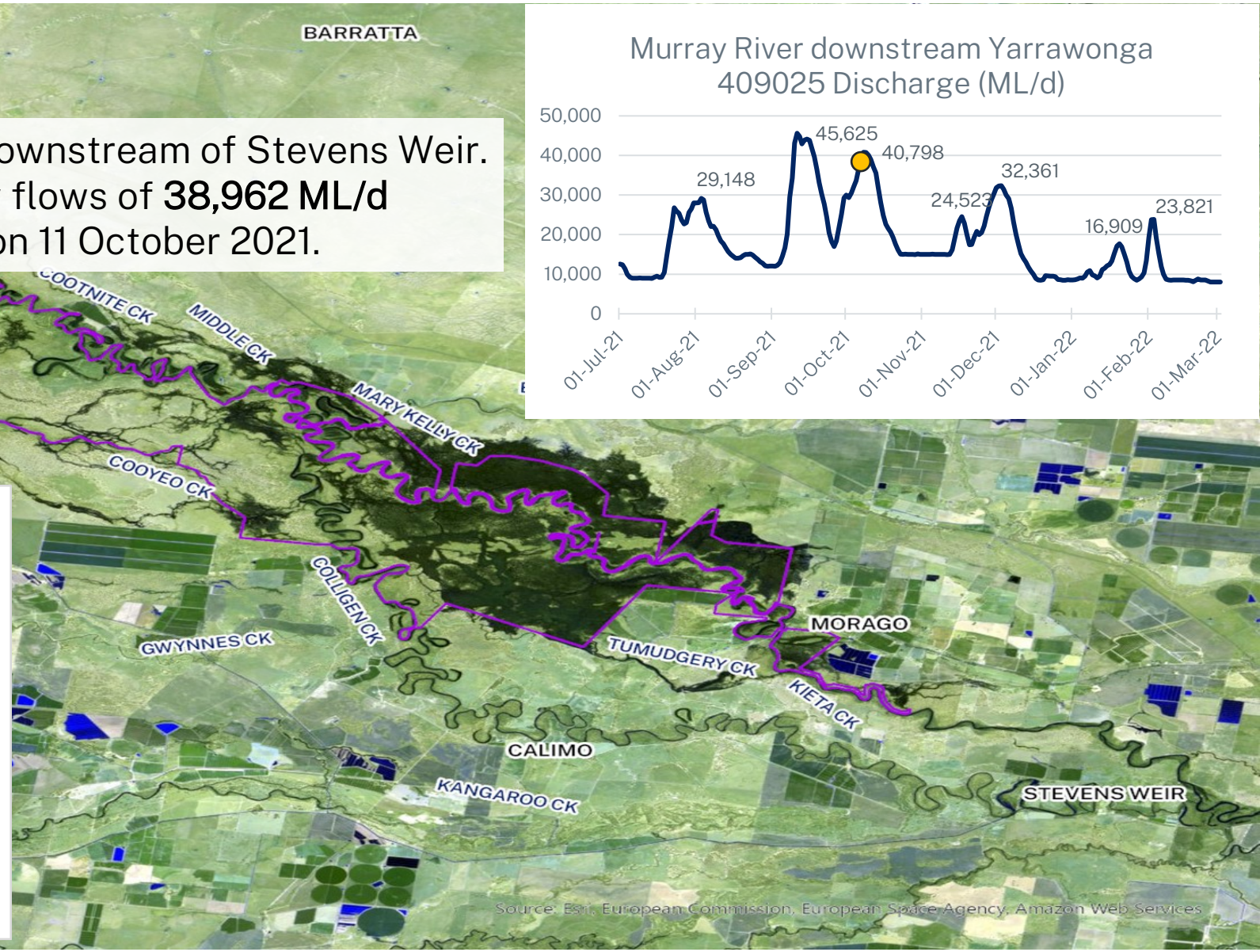
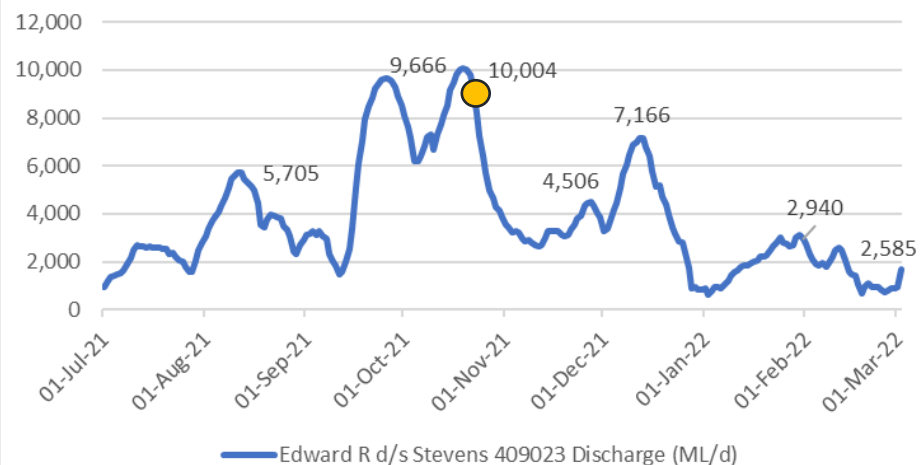
Sentinel satellite imagery

This flow was 9,340 ML/d Edward River downstream of Stevens Weir. The flow related to approximately Murray flows of 38,962 ML/d downstream of Yarrawonga Weir gauge on 11 October 2021.

Murray River downstream Yarrawonga
409025 Discharge (ML/d)



Edward R d/s Stevens 409023 Discharge (ML/d)



Questions