

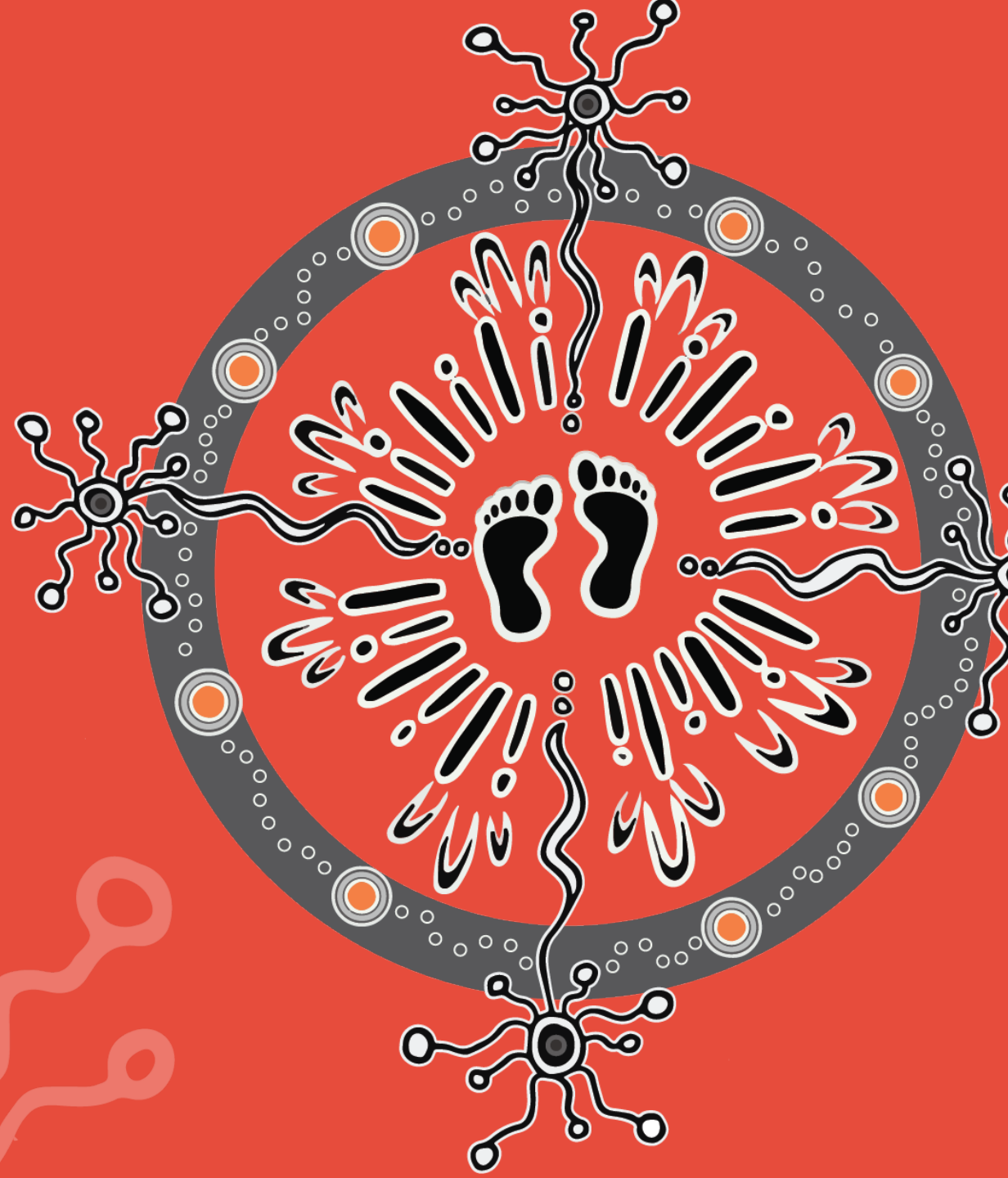
Department of Planning and Environment

Floodplain harvesting in the Namoi Unregulated River Water Sources

February 2023



Acknowledgement of Country



Overview of Proceedings

1. Welcome, introductions and house-keeping
2. Floodplain Harvesting in the Northern Basin
 - Namoi timeframes and influencing factors
 - Current status – Northern Basin
3. Context setting
 - Overland flow vs floodplain harvesting
 - Floodplain harvesting in unregulated rivers
4. Proposed floodplain harvesting rules - Namoi unregulated rivers
5. Measurement requirements
 - Floodplain harvesting
 - Overland flow

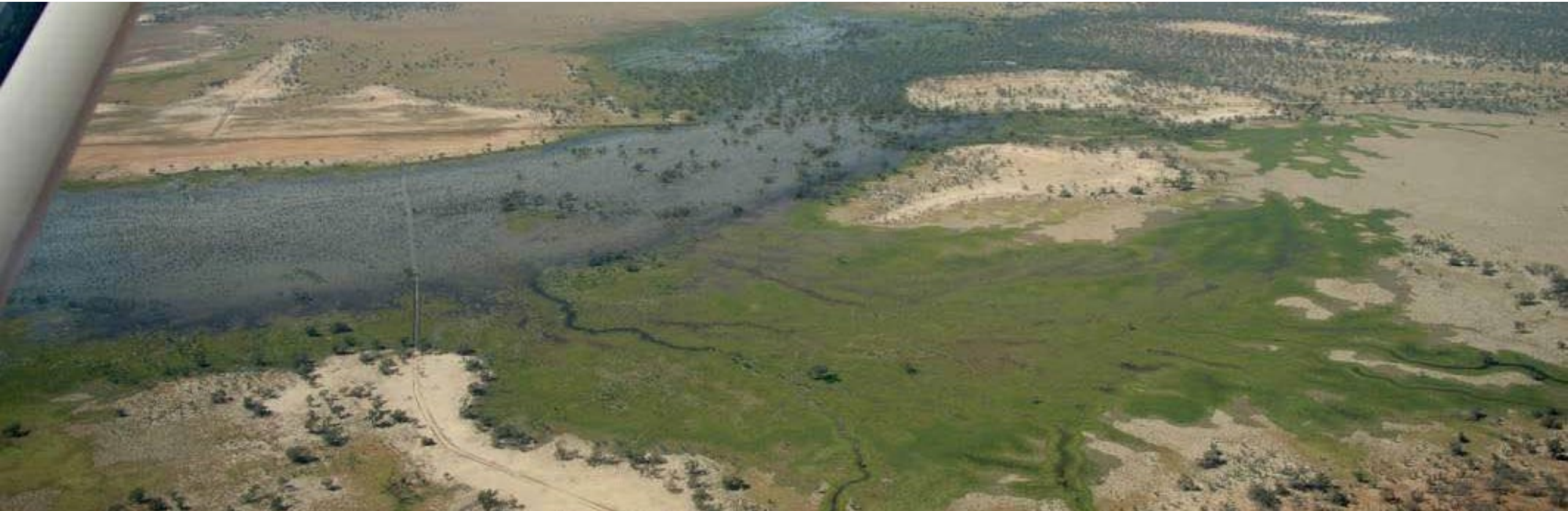
Introduction of Presenters

Facilitator

- **Steve Rossiter**, ATX Consulting

Presenters

- **Giselle Howard**, Executive Director Water Planning
- **Dan Connor**, Director Floodplain Management
- **Frances Guest**, Manager Floodplain Planning
- **Alastair McKenzie-McHarg**, Program Lead Metering & Measurement Implementation



Floodplain harvesting in the Northern Basin

Giselle Howard, Executive Director Water Planning

Floodplain harvesting reform - outcomes for NSW

Implementation of the policy will ➔



Current status – Northern Basin

Valley	WSP Consultation	Work Approvals	Licences	WSP Rules
Border Rivers	✓	✓	✓	✓
Gwydir	✓	✓	✓	✓
Macquarie	✓	✓	Q1 2023	✓
Barwon-Darling	✓	Q1 2022	Q1-Q2 2023	Q1-Q2 2023
Namoi	Q4 2022 – Q1 2023	Q1-Q2 2023	Q1-Q2 2023	Q1-Q2 2023

Namoi unregulated FPH: timelines and influencing factors

Consultation extended for FPH in unregulated rivers ONLY

	December	January	February	March	April	May	June
WSP public exhibition period							
WWH report published							
WSP amendments							
Entitlement determination							

Note, framework commencement date depends on:

- public submissions
- concurrence to amend the WSP

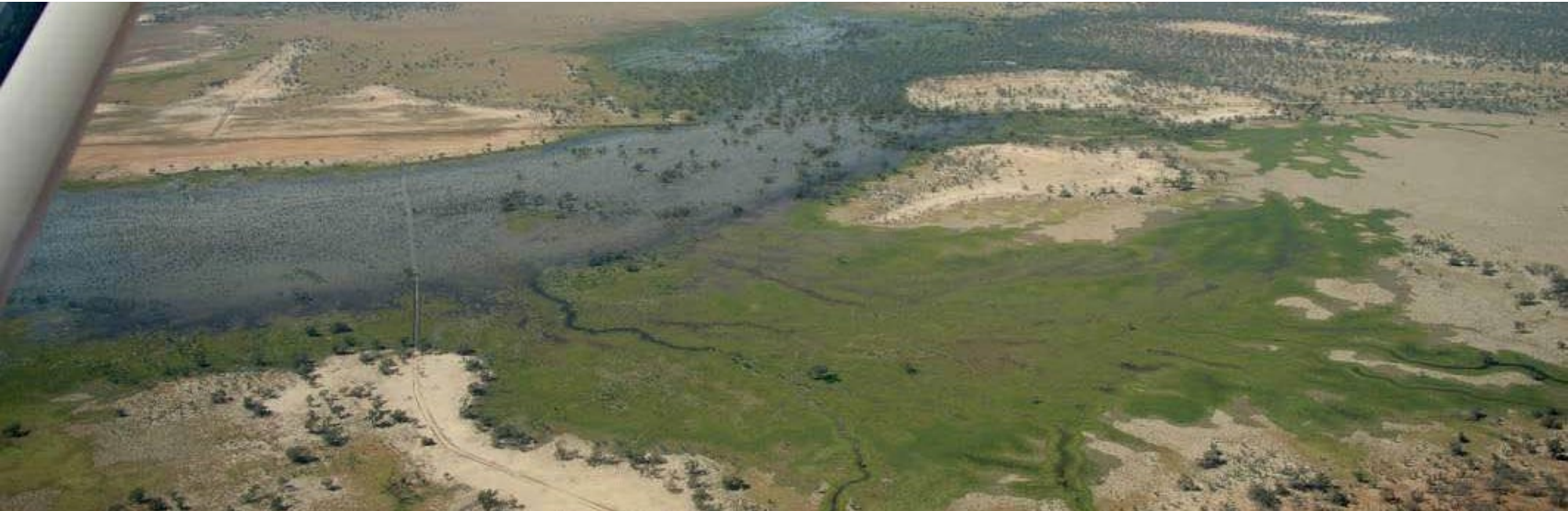


Current stage- WSP Consultation - Namoi

- Webinar, 6 December
- Public meeting in Wee Waa, 13 December 2022
- Public meeting in Gunnedah, 7 February 2023
- Submissions close – 28 February 2023 (extended for unregulated river water sources)
- What we heard report – April/May 2023

Questions and answers

Steve Rossiter

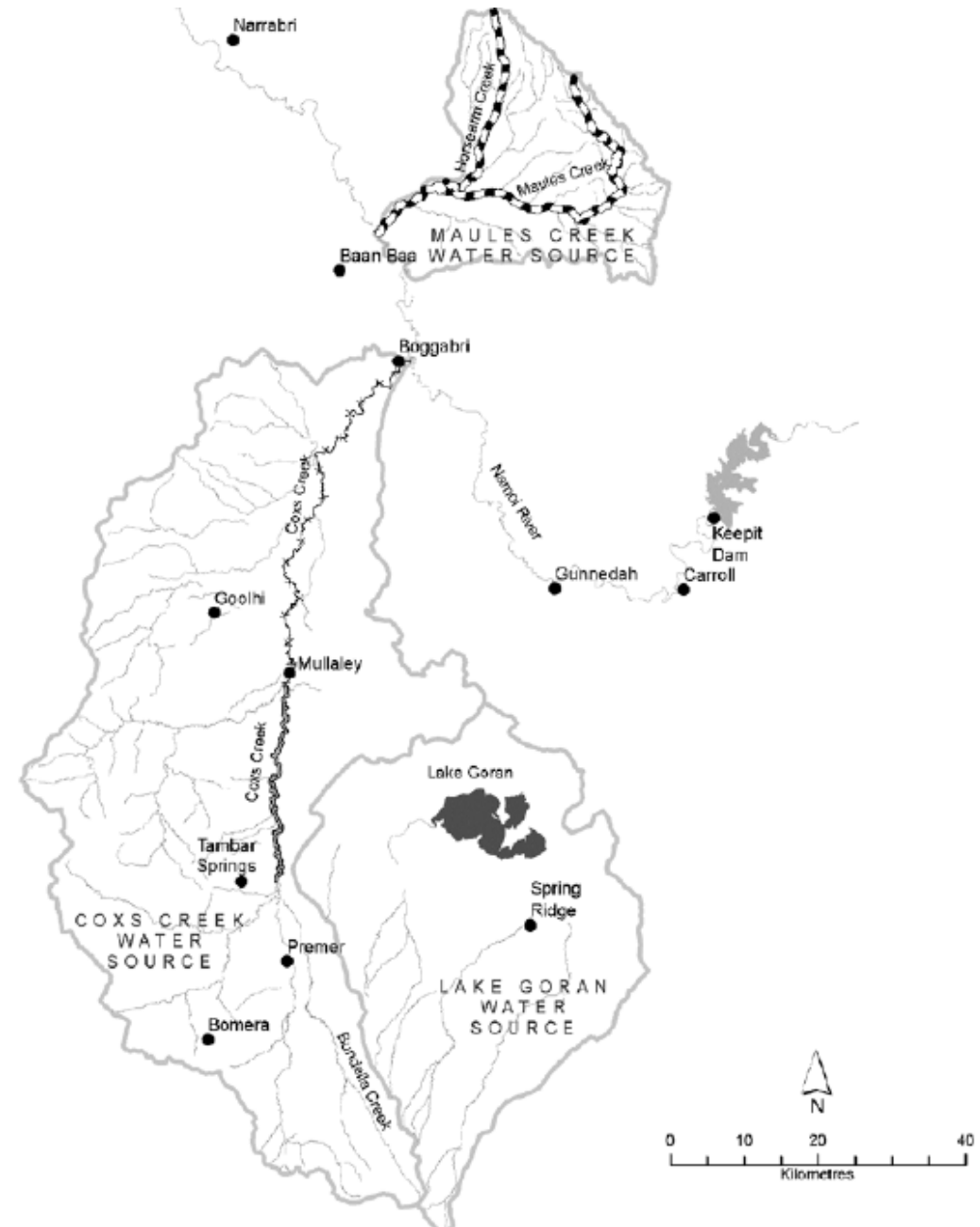


Context: overland flow and floodplain harvesting

Dan Connor, Director Floodplain Management

What is overland flow?

- Defined under section 4A of the Water Management Act 2000
- All water flowing or lying naturally on the surface of the ground.
- Includes floodwater, rainfall run-off and urban stormwater.
- An unregulated river water source includes all overland flow within the boundaries of the water source



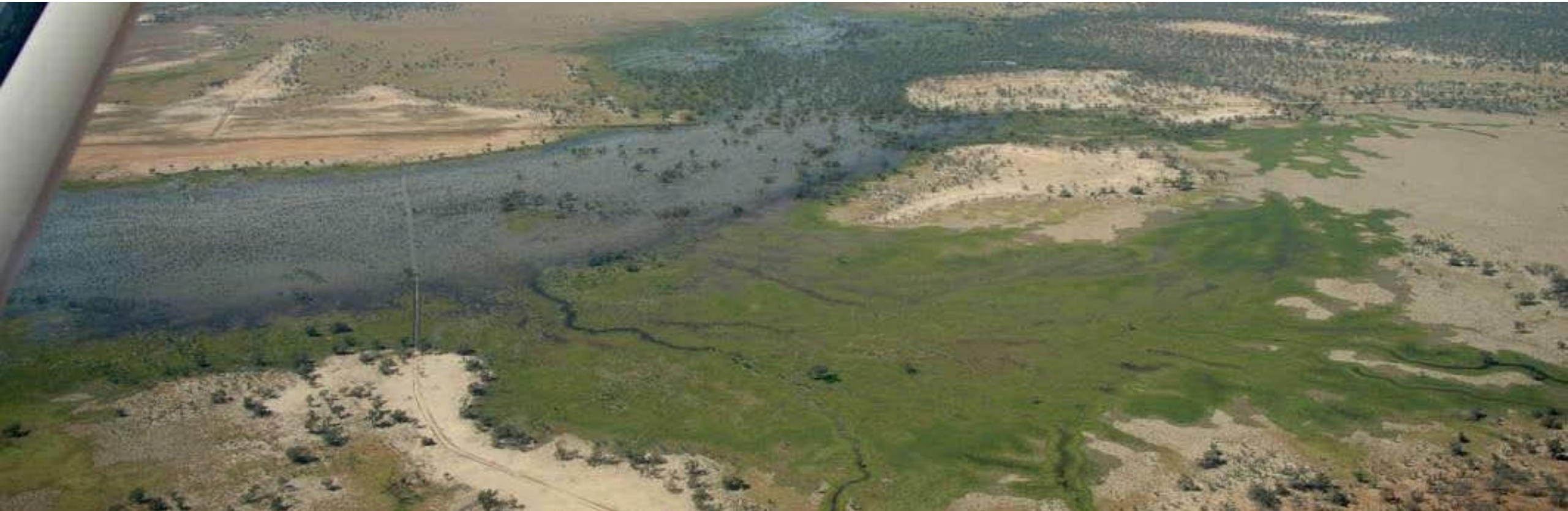
Overland flow and floodplain harvesting

Overland flow can be taken under:

- A basic landholder right (harvestable rights)
- An unregulated river access licence
- A floodplain harvesting access licence

Floodplain harvesting

- Only water taken under a floodplain harvesting licence
- Can only take overland flow within a designated floodplain



Background: FPH in unregulated rivers

Dan Connor, Director Floodplain Management

NSW Floodplain Harvesting Policy (2013)

LTAELs in unregulated river water sources

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In unregulated river water sources (excluding the Barwon–Darling), the total volume of water available for floodplain harvesting is in most cases already accounted for within the existing access licence share components and the LTAELs. The reason is that when the *Water Act 1912* licences were volumetrically converted, the process was based on area planted and water needed to meet associated crop water requirements to work out a water demand. In order to validate associated crop water requirements, water users were also requested to provide information, if available, on how much water was extracted. This means that in most cases the issued access licence share components and unregulated river LTAELs effectively include floodplain harvesting extractions.

NSW Floodplain Harvesting Policy (2013)

Share components in unregulated river water sources

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The process for determining share components for floodplain harvesting access licences in unregulated river water sources (except for the Barwon–Darling) will be different from that used in regulated water sources.

Where existing floodplain harvesting works in unregulated river water sources meet the eligibility criteria for assessment and it can be demonstrated that the area irrigated using water taken by those works is in addition to the area assessed during the volumetric conversion process, a new access licence may be issued. The share component of the issued access licence will be determined using the volumetric conversion process that was used for unregulated river access licences in the same water source.

Floodplain harvesting: unregulated rivers



Volumetric Conversion - the next stage

A booklet for landholders
with licences on unregulated
rivers in NSW

Eligible FPH landholders that on 3 July 2008 did not hold regulated river licences but instead held:

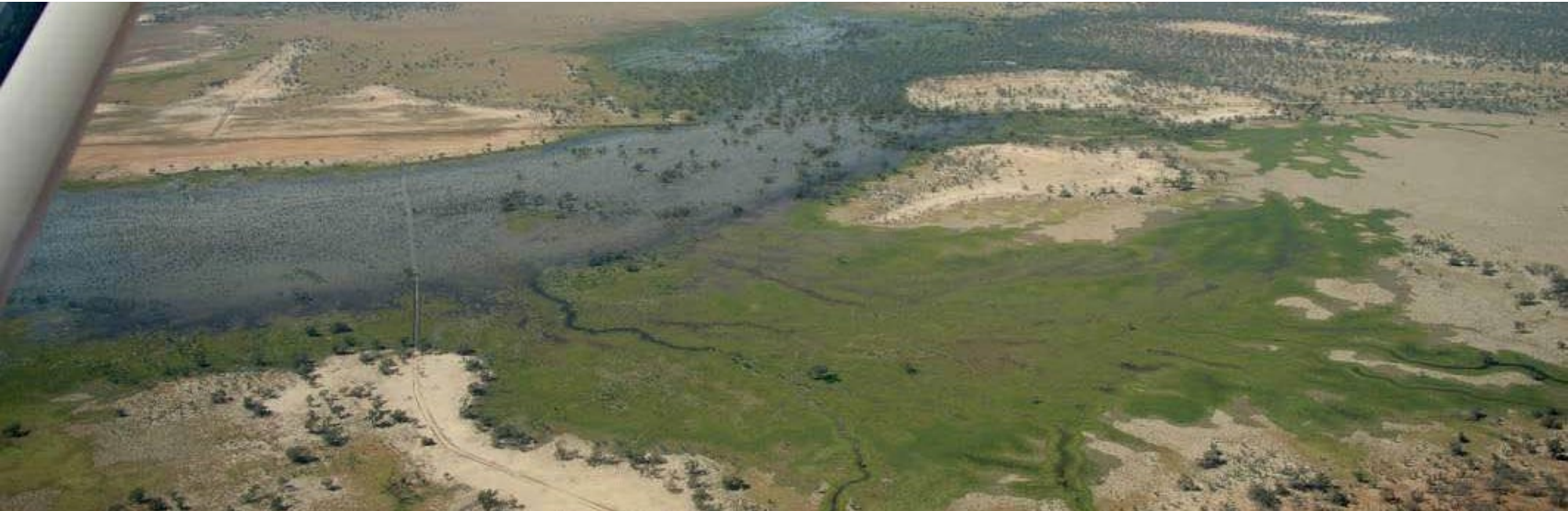
- unregulated river licences with a max irrigated area (93-99) in excess of the Part 2 'authorised area'
- groundwater only licences with a max irrigated area (93-99) multiplied by the VolCon rate gives a vol that is greater than the metered GW usage in that year



Remote sensing has been used to identify max irrigated areas. The Dept has engaged a consultant to quality-check its remote sensing-derived irrigation areas. This report will be published for transparency.

Questions and Answers

Steve Rossiter



FPH Rules – Namoi Unregulated River

Frances Guest, Manager Floodplain Planning

Water sources and floodplains

Floodplain harvesting (unregulated river)

Namoi Unregulated River Water Sources

Lower Namoi Valley Floodplain

Upper Namoi Valley Floodplain



Namoi: Floodplain harvesting in water sharing plans

Report to assist community consultation

November 2022



Account management rules

Same licence process as unregulated river = same accounting rules

- *Take limit:* 3ML/unit share over 3 consecutive years
- *Account limit:* 3ML/unit share at any time



Allocations

Account initialisation of 1 ML per unit share

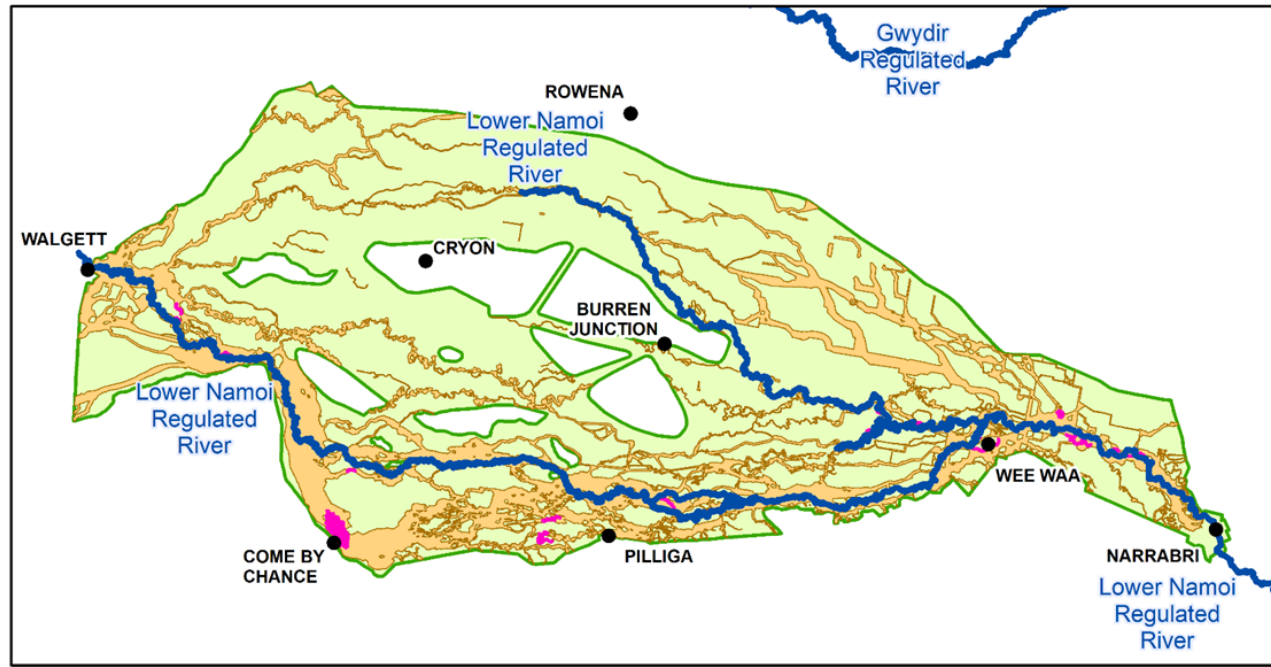
Maximum of 1 ML per unit share each year

Allocation = X ML per unit share



WAL1 – 100 shares WAL 2 – 200 shares

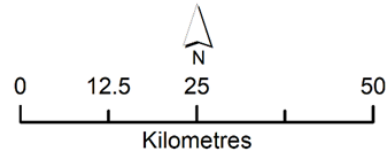
Rules – protecting identified areas



- Based on floodplain management plan zones
- No new works or increased capacity to take from the zone

Legend

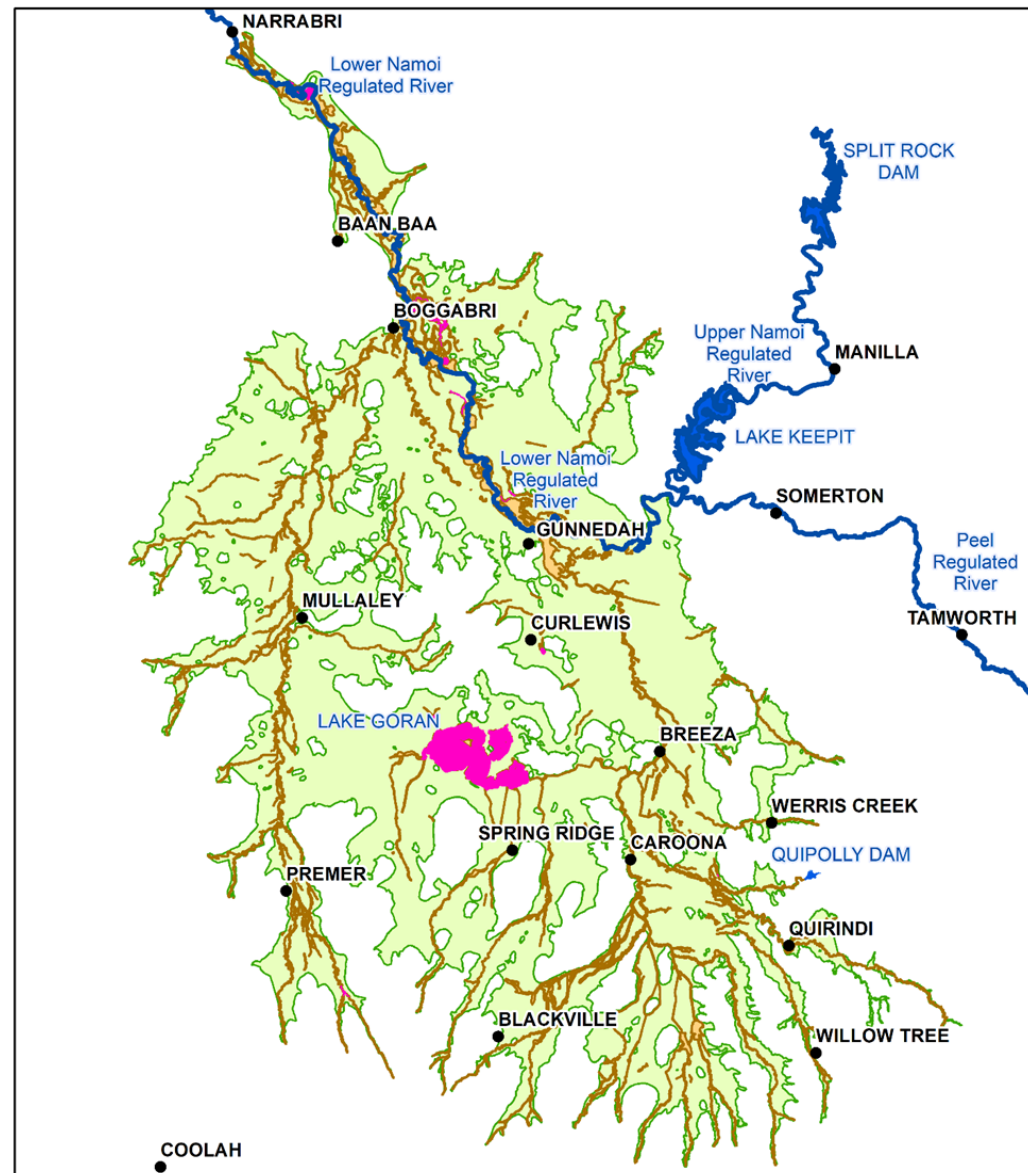
- Town
- Lower Namoi Regulated River Water Source
- FMP Management Zone AD
- FMP Management Zone D
- Lower Namoi Valley Floodplain



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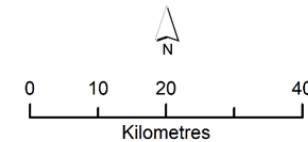
Completion Date: 7/11/2022

Rules – protecting identified areas



Legend

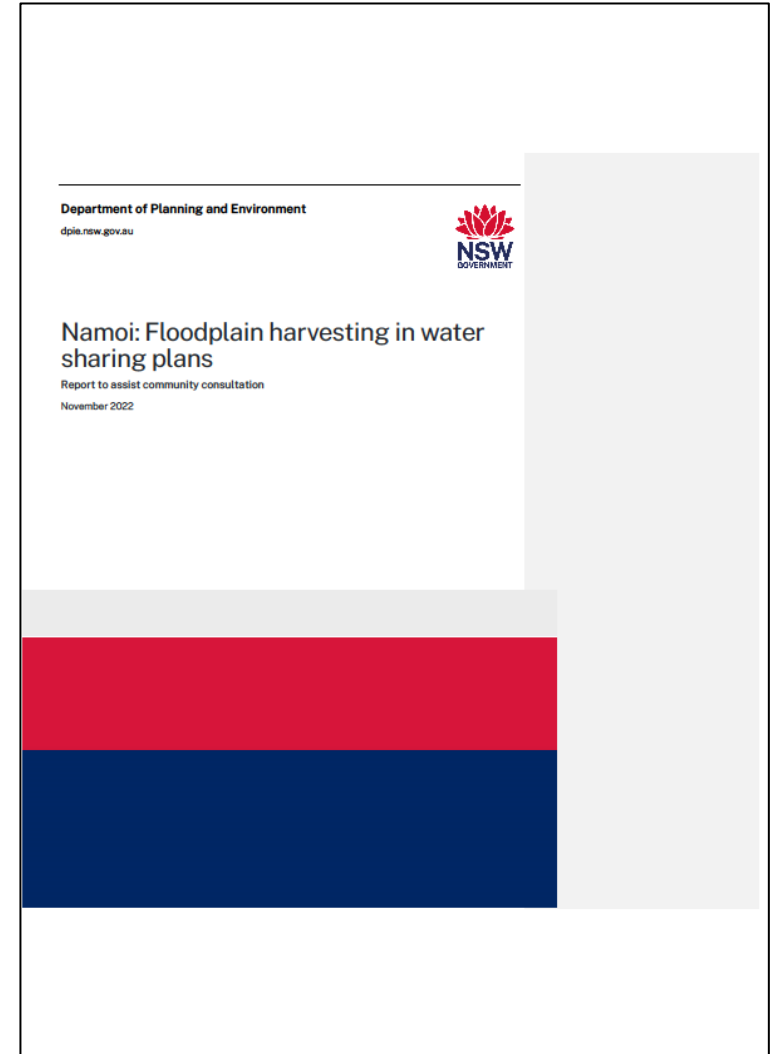
- Town
- Regulated River Water Sources
- FMP Management Zone AD
- FMP Management Zone D
- Reservoirs and Lakes
- Upper Namoi Valley Floodplain



Completion Date: 7/11/2022

Trade Rules

- Reflect those currently applied to unregulated river licences, *plus*
- Rules unique to floodplain harvesting:
 - within designated floodplain
 - no new works in management zones AD and D
- Supported by rules for granting or amending of approvals



Comparison of rules

Floodplain harvesting and overland flow (unregulated river access licence)



- In-river access rules not applied to floodplain harvesting
- Minor difference in account mgt rules:
 - Unregulated river – carryover limit
 - Floodplain harvesting – account limit
- Additional rules for floodplain harvesting:
 - Trade rules
 - Protect sensitive areas of floodplain
 - No temporary trade (aligns with policy)
 - Only within declared floodplain
 - Water supply work approvals
 - Protect sensitive areas of floodplain
 - Only within declared floodplain
- Different measurement requirements – more info in next session



HAVE YOUR SAY

Submit your online feedback

Water sharing plan rules for floodplain harvesting at:

www.industry.nsw.gov.au/water/plans-programs/healthy-floodplains-project/water-sharing-plan-rules

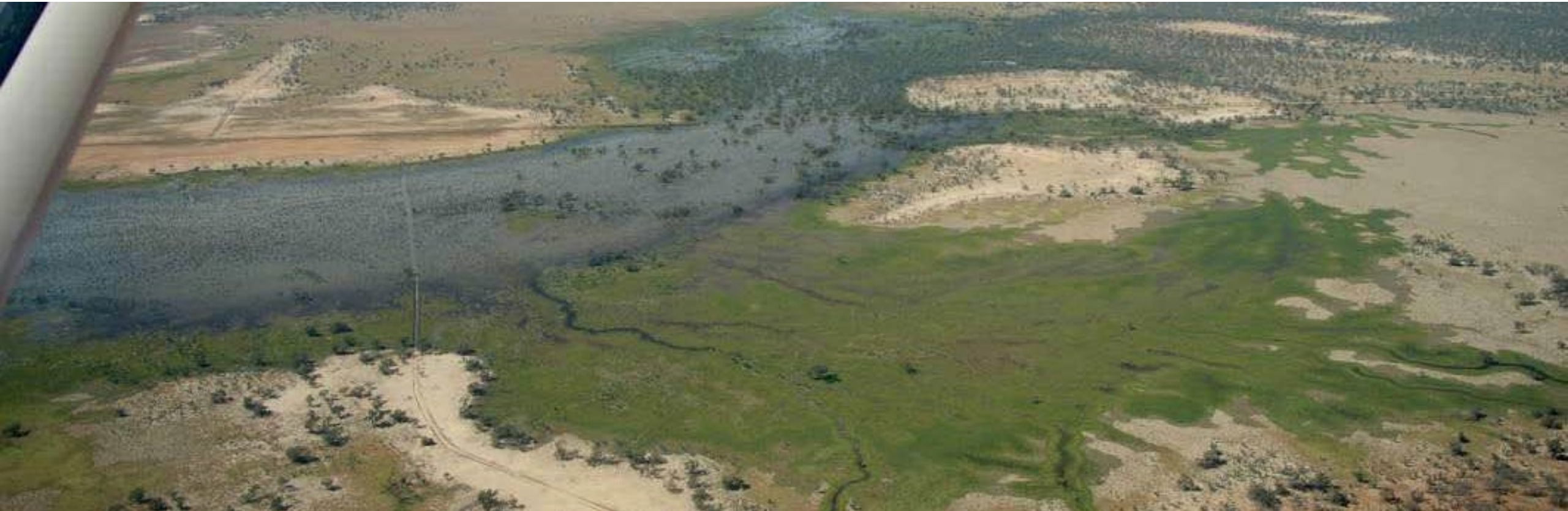
Submissions accepted until 11.59 pm, Tuesday 28 February 2023.

For unregulated water sources only. Late submissions wont be accepted.



Questions and Answers

Steve Rossiter



Measurement requirements

Alastair McKenzie-McHarg: Water Planning Implementation

Measurement requirements

Floodplain harvesting

Aligns with Floodplain
Harvesting Measurement
Policy

Storage or point of intake
measurement device

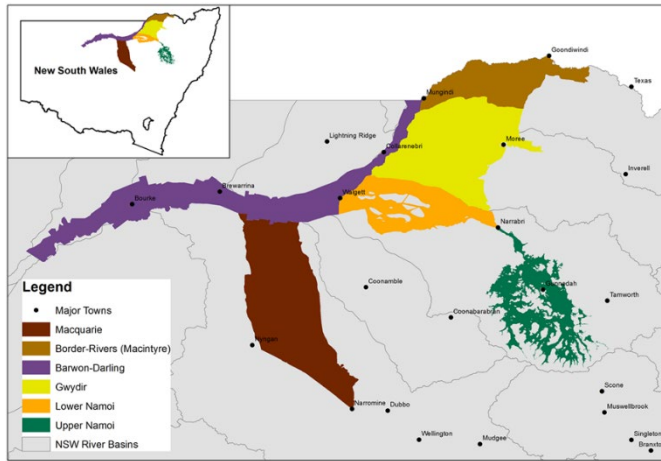
Overland flow (unregulated)

Aligns with non-urban metering
framework

Approved meter device

Exemption if it can be
demonstrated that
measurement is not possible
through metering equipment

2. Where will the floodplain harvesting measurement apply?



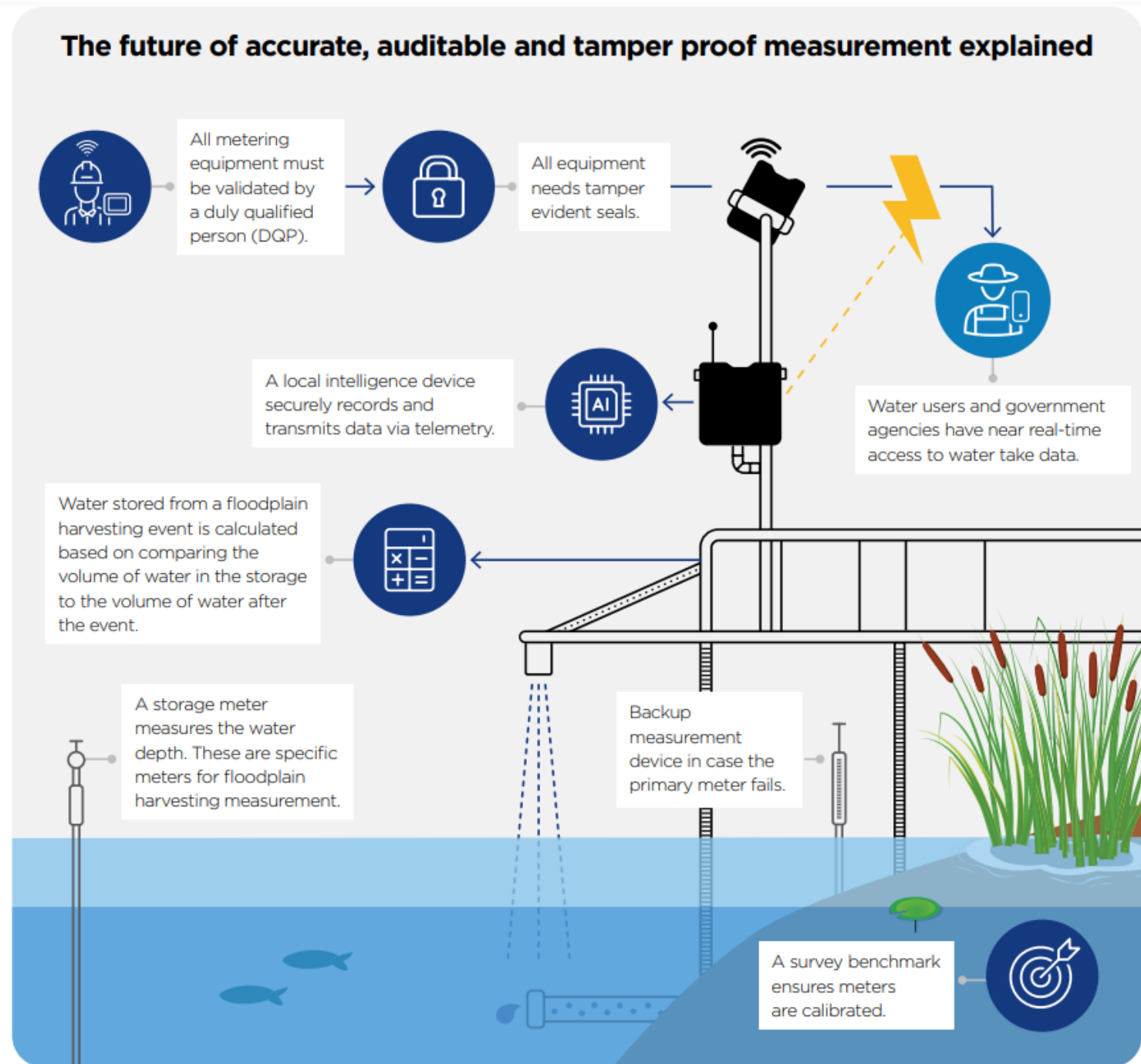
Valley	Storages
Gwydir Valley	324
Border Rivers	110
Macquarie	178
Barwon Darling	86
Namoi	447

Approx. 1,145 storages across northern valleys

Landholders have 12 months to install 'primary metering equipment' from when floodplain harvesting licences are first credited.

Landholder can use 'secondary metering equipment', such as a gauge board, if they wish to floodplain harvest during that time.

3. Measurement in practice



4. Measurement methods

Floodplain harvesting occurs when water is either collected and impounded in an on-farm storage or is directly used.

There are 2 ways you can measure floodplain take:

- at the storage method OR
- point-of-intake method.



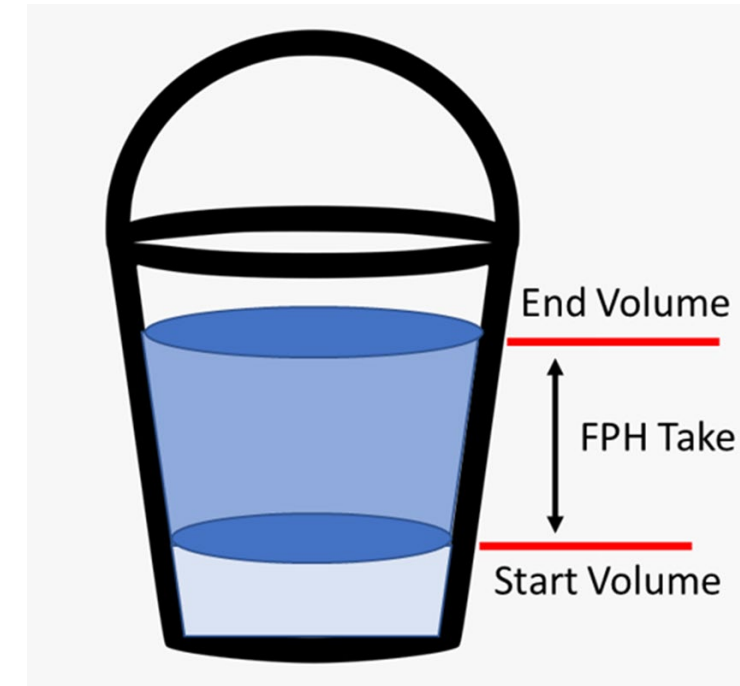
5. Measurement period

The measurement period ***STARTS*** when overland flow:

- Enters your property, or
- Mixes with water on the property.

The measurement period ***STOPS*** when overland flow water is no longer being moved into your property and all water in the buffer zones has been transferred to a metered storage.

Landholders nominate the beginning and end of a measurement period in iWAS.



6. Steps required to measure

1. Survey benchmark and storage curve
2. Primary metering equipment – storage meter and local intelligence device (LID)
3. Secondary metering equipment (optional)
 - Gauge board, or
 - Another approved system such as a storage meter



Floodplain harvesting – further information



Websites

<https://www.industry.nsw.gov.au/water/plans-programs/healthy-floodplains-project/measurement>

<https://www.dpie.nsw.gov.au/water/nsw-non-urban-water-metering>

Enquiries

metering.reform@dpie.nsw.gov.au

floodplain.harvesting@dpie.nsw.gov.au

Questions and Answers

Steve Rossiter



Thank you

For more information, please visit

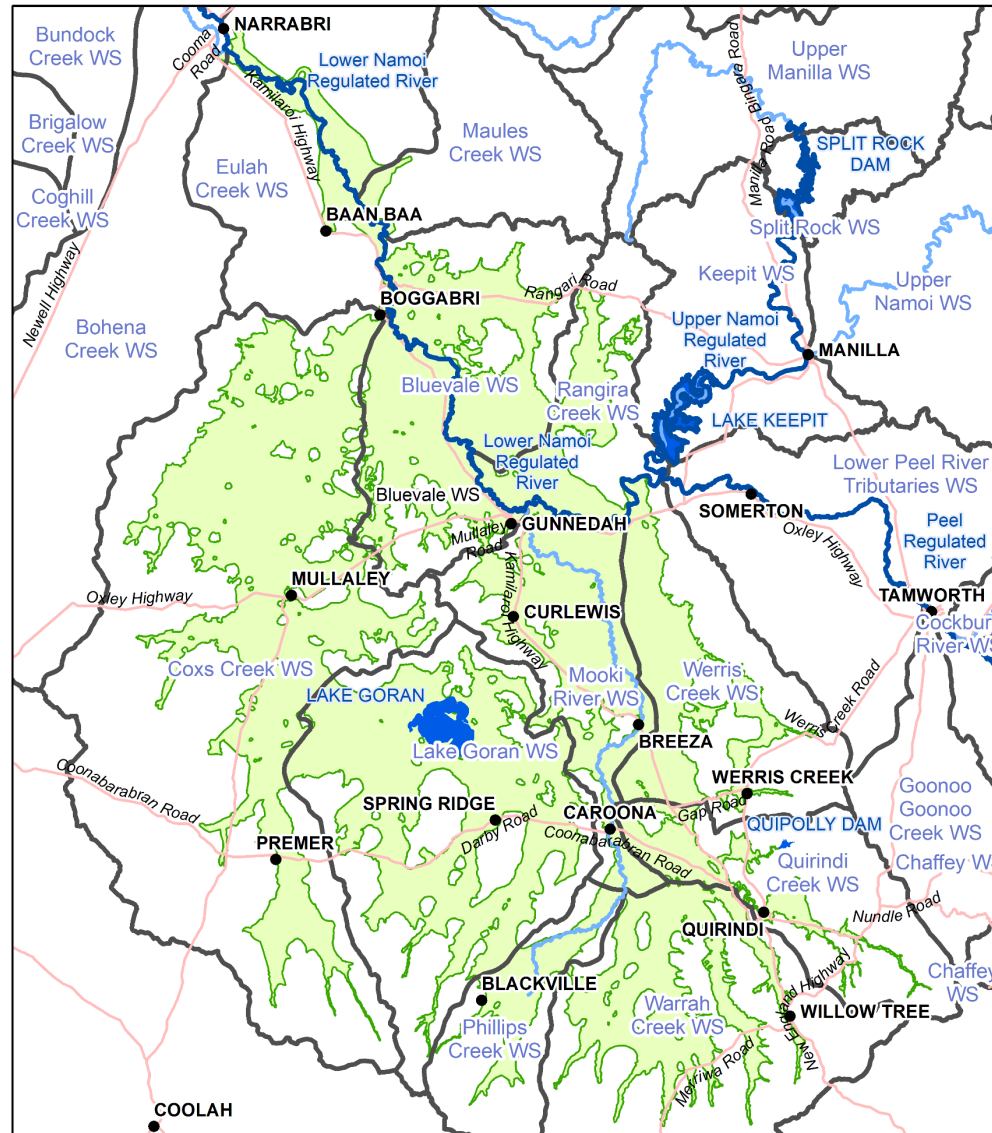
<https://www.industry.nsw.gov.au/water/plans-programs/healthy-floodplains-project>

<https://www.industry.nsw.gov.au/water/plans-programs/healthy-floodplains-project/faqs>

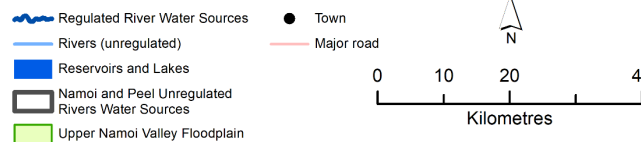
To contact us

floodplain.harvesting@dpie.nsw.gov.au

Map for ref



Legend



Reference scenarios

- Development levels

“Current” refers to infrastructure that has been built only

