



Integrated
Water
Management
Forums



Victoria's Integrated Water Planning Framework – The Goulburn Broken Case Study

STORMWATER 2018
PRESENTATION

10 OCTOBER 2018

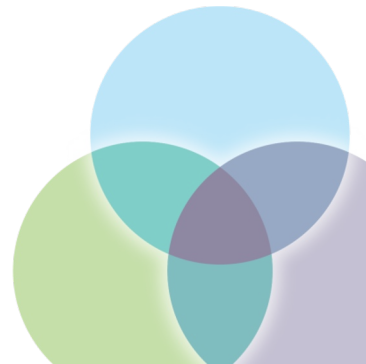
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Environment,
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and Planning

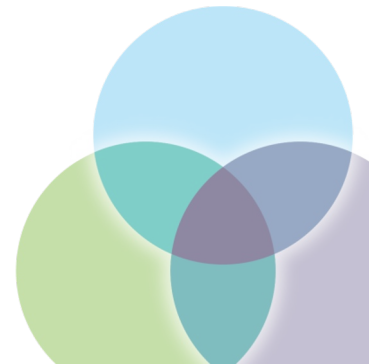
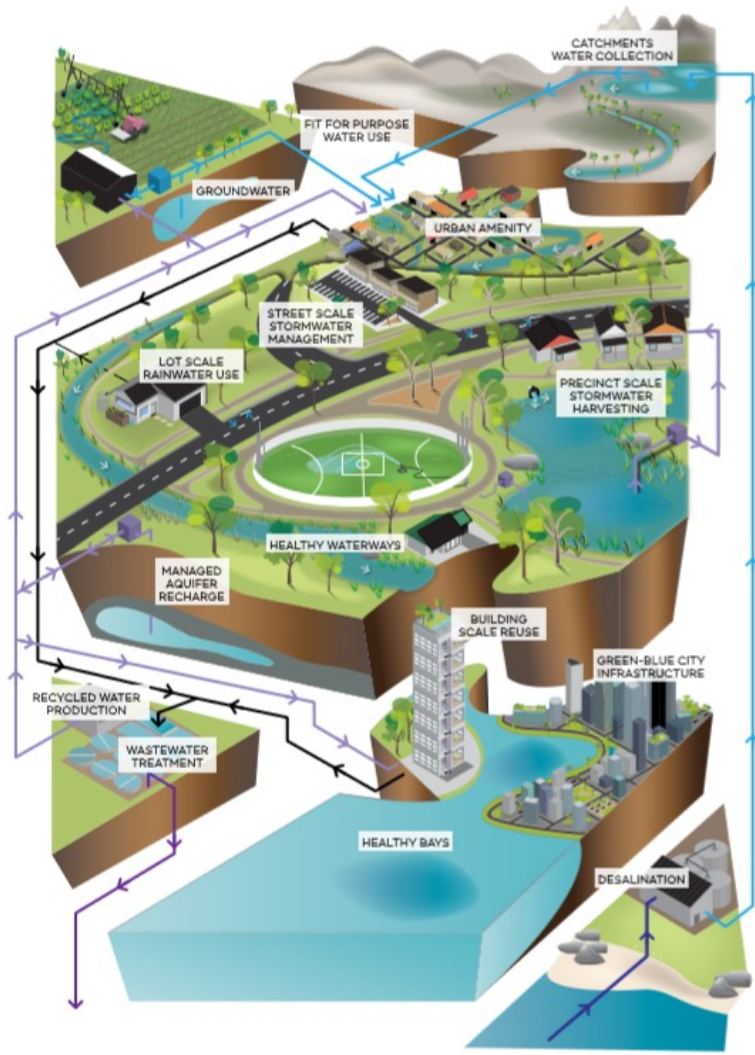
Content

- Introduction - IWM Framework for Victoria
- Context – Goulburn Broken Region
- Framework Implementation
- Outcomes
- Lessons

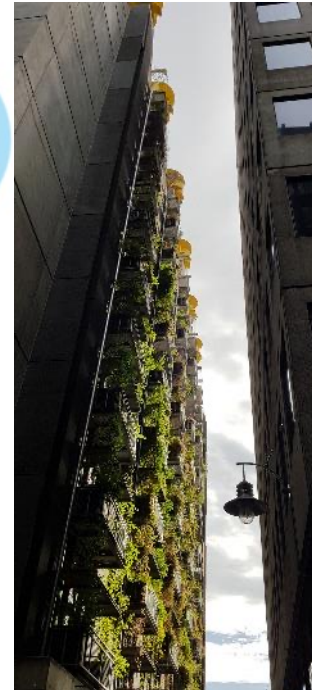
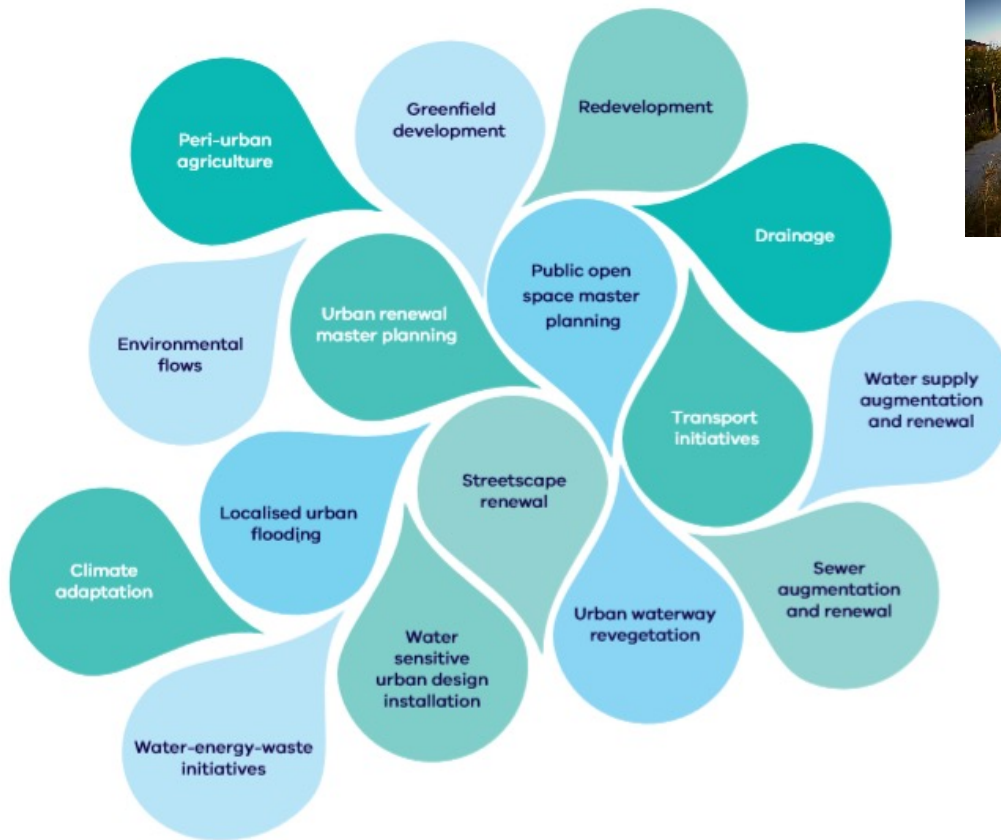




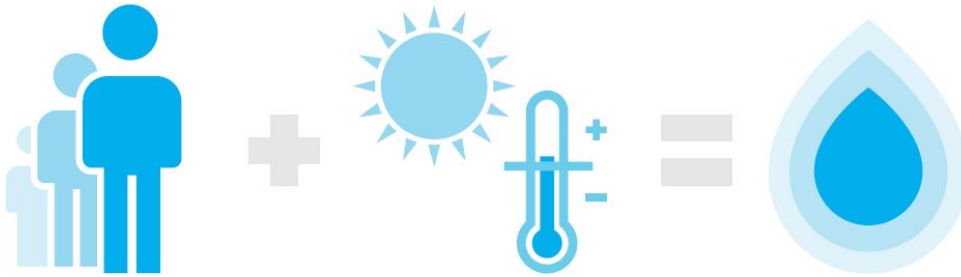
Integrated Water Management



Integrated Water Management



Water for Victoria



Population growth

Victoria's population is projected to reach 10.1 million by mid-century. That's a lot of extra people who all need access to water.

Climate change

Climate change will mean Victoria becomes drier over the long-term, with more extreme events including droughts, floods and heatwaves.

Less water

By 2065 streamflows to some of our catchments could reduce by around 50 per cent per year. This means less available water in our storages.

Action 5.7 Represent community values and local opportunities in planning



Action 5.8 Put integrated water management into practice

IWM Framework for Victoria

Integrated Water Management Framework for Victoria

An IWM approach to urban water planning and
shared decision making throughout Victoria



Safe, secure and affordable
supplies in an uncertain future.



Effective and affordable
wastewater systems



Avoided or minimised existing
and future flood risks



Healthy and valued urban and
rural waterways



Healthy and valued waterways,
wetlands and lakes

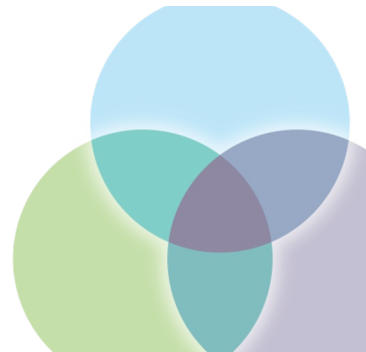
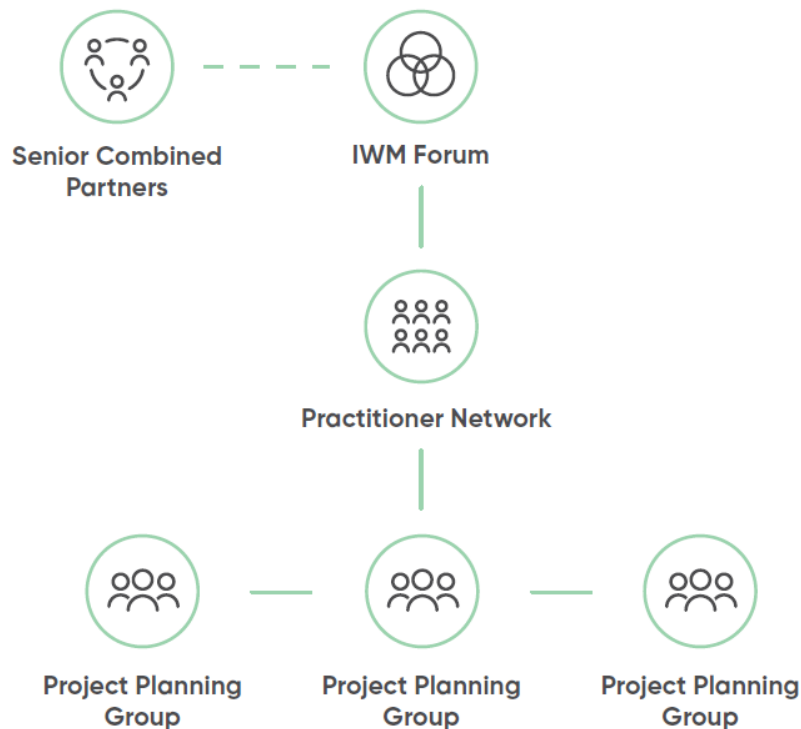


Community values reflected in place
based planning



Jobs, economy and innovation

IWM Framework for Victoria

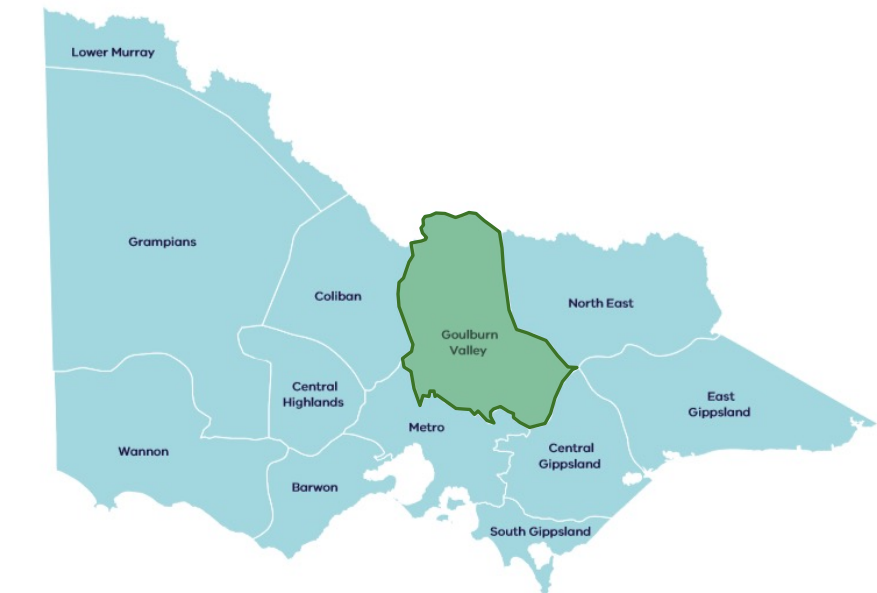
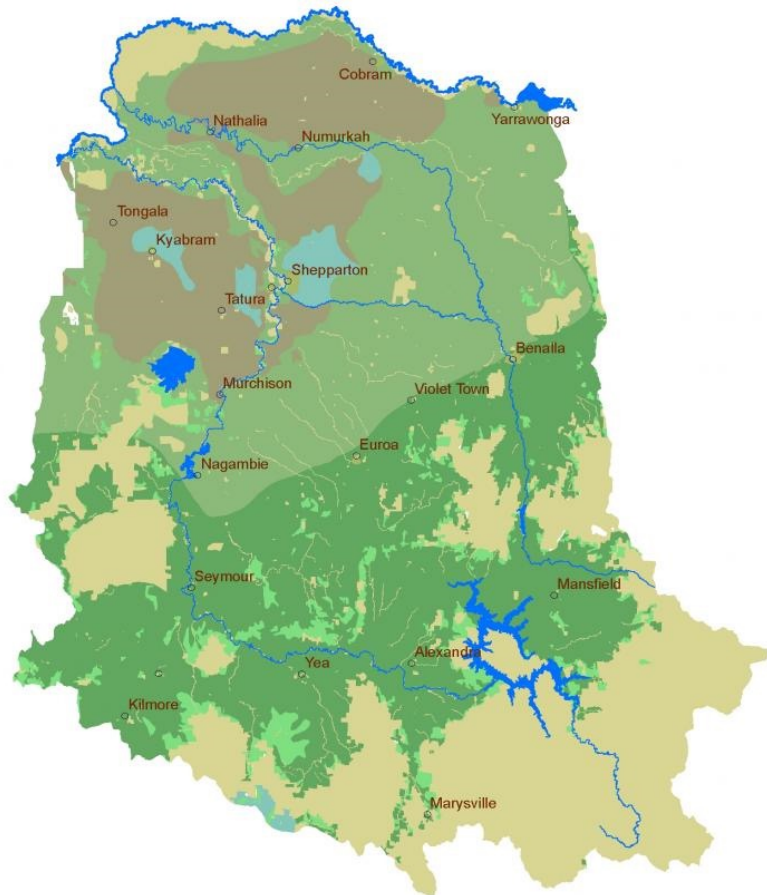




GOULBURN BROKEN REGION

Context

GOULBURN BROKEN REGION CONTEXT



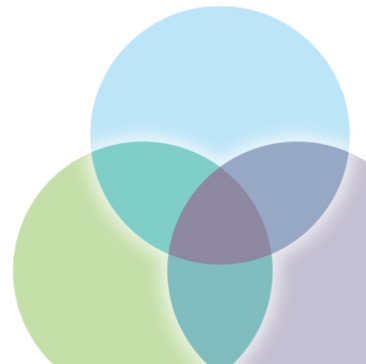
LANDUSE

- Grazing and Cropping
- Horticulture
- Irrigated Pasture
- Public Land
- Dryland Grazing
- Remnant Vegetation
- Urban Area



Regions Stakeholders

- Yorta Yorta Nation Aboriginal Corporation
- Taungurung Clans Aboriginal Corporation
- Campaspe Shire
- Moira Shire
- Mansfield Shire
- Mitchell Shire
- Greater Shepparton City Council
- Strathbogie Shire
- Murrindindi Shire
- Goulburn Valley Water
- Goulburn Murray Water
- Goulburn Broken CMA
- Department of Environment, Land, Water and Planning



Values



Summary Context

POPULATION GROWTH

175,000 NOW (2018)

270,000 BY 2040



54%
INCREASE

WATERWAYS

44,000 KM

MODERATE CONDITION ³



TEMPERATURE



2-3°C

INCREASE

BY 2065 ¹

CHANGE IN RAINFALL



4%

DECREASE

BY 2065 ²

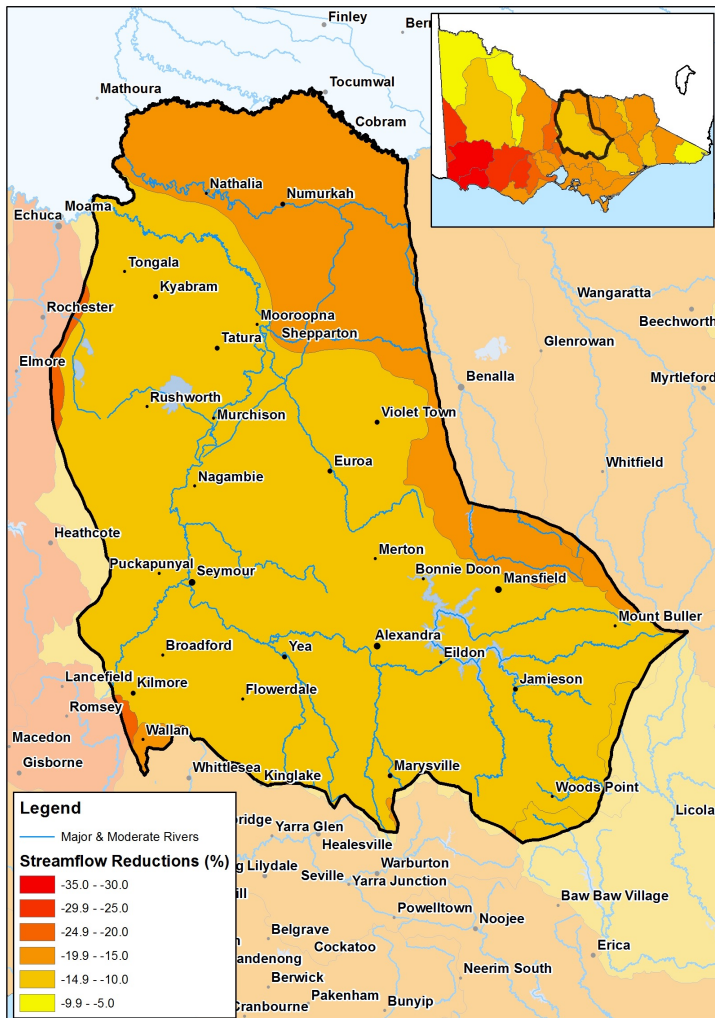
Health

Local Government	People reporting being obese	Registered mental health clients per 1,000	GP attendances per 1,000 population	People who do not meet physical activity guidelines
State Average	18.8%	11.9	5,889	54.0%
Moirā	31.7%	15.4	6,312	58.4%
Greater Shepparton	23.4%	19.4	6,608	54.4%
Campaspe	32.3%	13.8	6,484	55.2%
Benalla	26.9%	26.3	5,473	60.5%
Strathbogie	21.7%	14.6	8,309	58.5%
Mitchell	28.8%	15.0	5,811	57.9%
Murrindindi	22.0%	15.1	6,500	50.8%
Mansfield	16.3%	13.5	4,572	58.7%

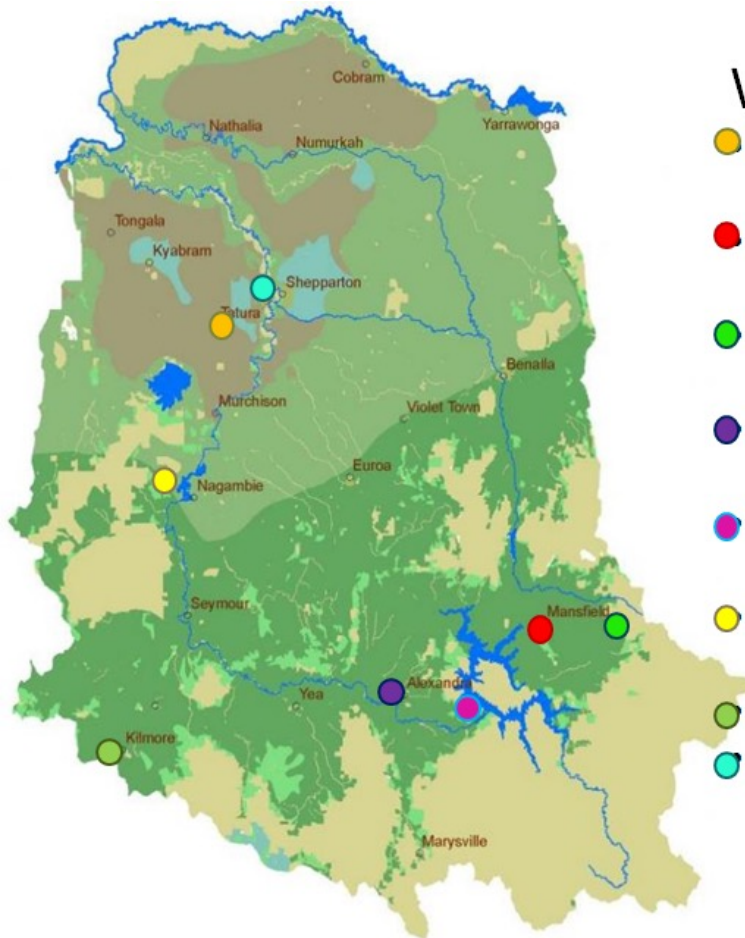


Climate Change

- Streamflow reduction predicted under median climate change scenarios by 2065
 - Goulburn system -13.7%
 - Broken system -16.8%



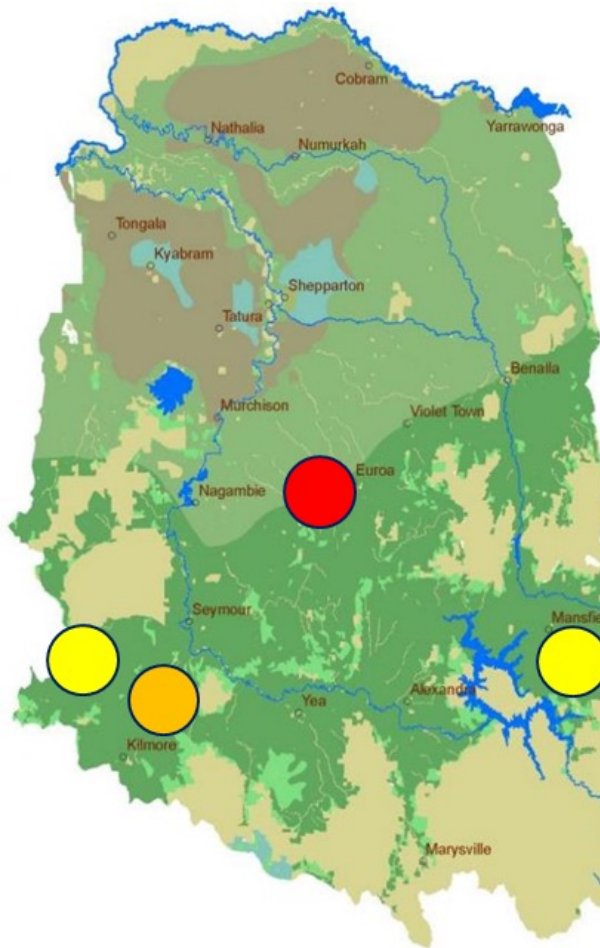
Infrastructure



Wastewater: 2018-2023

- Tatura: Winter storage upgrade 2019 & offsite reuse pipeline 2022
- Mansfield: Land purchase 2019 & Offset project 2021
- Sawmill Settlement: Irrigation capacity upgrade 2020
- Alexandra: Sludge management upgrade 2021
- Eildon: Secondary TP & sludge handling upgrade 2023
- Nagambie: Irrigation capacity upgrade 2021
- Kilmore: Offset project 2022
- Mooroopna: irrigation capacity upgrade 2023

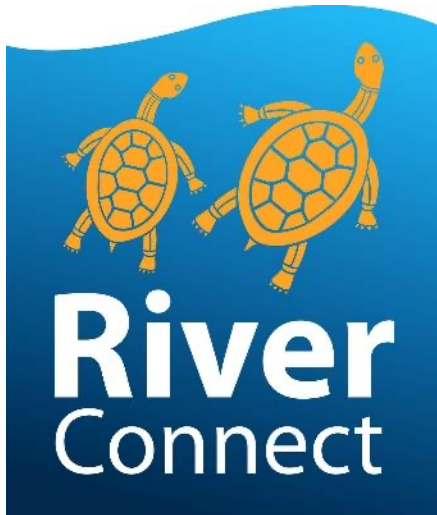
Infrastructure



Water:

- Supply < Demand
 - Sevens Cks (Euroa) system: Raw water storage augmentation 2019, Gooram pipeline replacement 2022, Replacement of Abbinga Res 2023
 - 2021 Supply < Demand
 - Sunday Ck (Broadford/Kilmore) system: WTP upgrade 2021, Broadford-Kilmore Pipeline and Kilmore Nth Tank 2030
 - 2040 Supply < Demand
 - Mollison Ck (Pyalong) system: RWPS upgrade 2020, Additional off-stream storage 2032
 - Delatite River (Mansfield) system: WTP upgrade 2026
- All other systems 2064 Supply > Demand

IWM Experiences



Kilmore Environmental Offsets Project



Victoria Park Lake, Shepparton



Eastbank Lake, Shepparton

Forum Participants



Environment,
Land, Water
and Planning



Forum Participants



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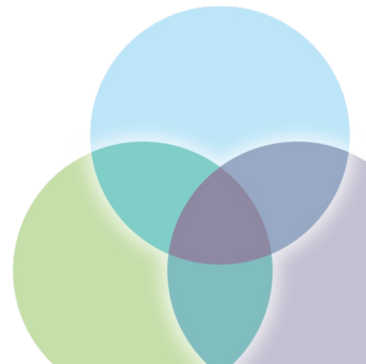


FRAMEWORK IMPLEMENTATION

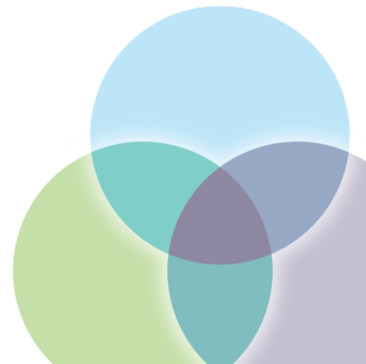
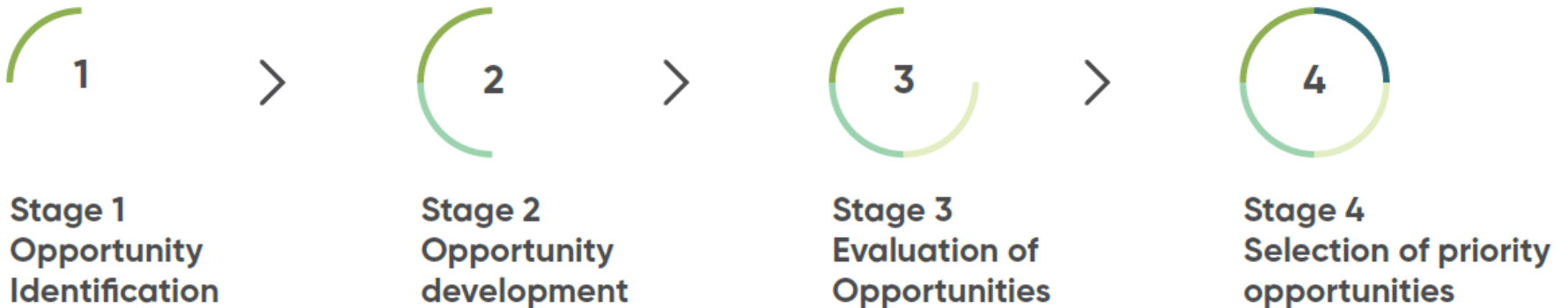
Framework Implementation

- Strategic Direction Statement Content:
 - Outline of key strategic drivers for region:
 - Definition of the landscape for the region
 - Potential impacts of climate change – rainfall and streamflow
 - Population projections
 - Waterways
 - Water Services
 - Health Statistics
 - Delivery program of IWM projects

-



Framework Implementation



Stage 1 – Opportunities Identification

- Phase included:
 - Meeting with individual stakeholders and introduction to IWM
 - Understanding organisational buy in, capacity and key stakeholders relating to IWM
 - Key local drivers relating to IWM
 - Exploring potential IWM project ideas
 - Sharing project ideas – facilitated workshop
 - Engagement at CEO and practitioner level
 - Setting clear strategic drivers around IWM – Draft SDS

1 >

Stage 1
Opportunity
Identification

2 >

Stage 2
Opportunity
development

3 >

Stage 3
Evaluation of
Opportunities

4

Stage 4
Selection of priority
opportunities



Stage 2 – Opportunities development

- Phase included:
 - Spending time to develop IWM project ideas
 - Defining cross organisational commitment – in kind and financial
 - Considering multiple benefits of projects
 - Sharing ideas across organisations – Stakeholder Practitioner Workshop

1
Stage 1
Opportunity
Identification



2
Stage 2
Opportunity
development



3
Stage 3
Evaluation of
Opportunities



4
Stage 4
Selection of priority
opportunities



Stage 3 – Evaluation of opportunities

- Phase included:
 - Confirmation of final project scope and project partners
 - Final funding applications, refinement of earlier IWM Project Ideas
 - Confirmation of organisational commitment – in kind and financial
 - Prioritising opportunities – Stakeholder Practitioner Workshop
 - Engagement at the Forum level – timing, scope and scale of projects

1
Stage 1
Opportunity
Identification



2
Stage 2
Opportunity
development



3
Stage 3
Evaluation of
Opportunities



4
Stage 4
Selection of priority
opportunities



Stage 4 – Selection of priority opportunities

- Phase included:
 - Project scope finalised
 - Funding submissions
 - Project award and commencement

1
Stage 1
Opportunity
Identification



2
Stage 2
Opportunity
development



3
Stage 3
Evaluation of
Opportunities



4
Stage 4
Selection of priority
opportunities

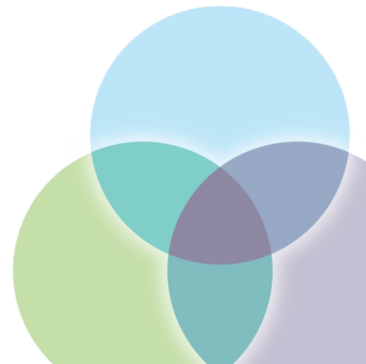




OUTCOMES

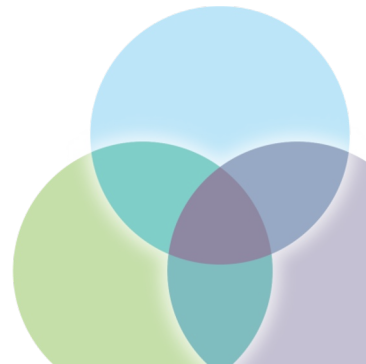
Opportunity Creation

- 13 projects developed through process
- Each project has multiple project partners committed to delivery – in kind and financial support
- Project factored into future strategic planning and budgetary processes
- Projects provide multiple benefits beyond a business as usual approach
- Efficient planning and capital funding



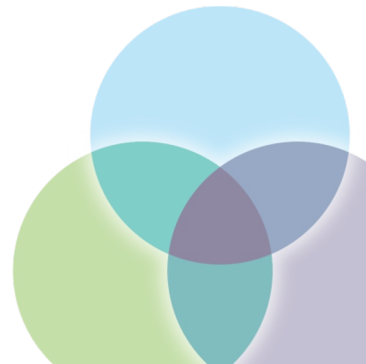
Engagement

- Community engagement an important factor
- Good lines of communication between organisations
- Opening up cross organisational (and community) support
- Sharing ideas and robust discussions



Capacity Building

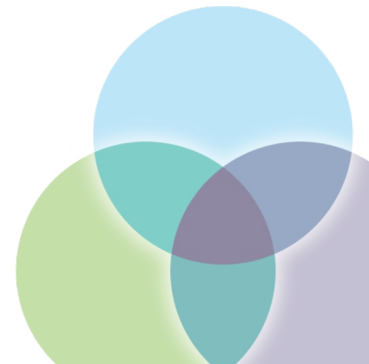
- Demonstrating how IWM can add value through projects – learning by doing
- Building an understanding of the IWM Framework
- Supporting organisational champions engage within their key internal and external stakeholders
- Coordinated capacity building programs
- Creating a collective strategic direction



Mansfield Water Quality Offsets



- Wastewater Treatment Plant upgrade – offset program
- Urban flooding and stormwater management
- Ford Creek revitalisation
- Township connectivity – pedestrians and cyclists
- Alternative water supplies for town greening



Eastbank Lake Revitalisation

ZONE 1

AMPITHEATRE AND TURTLE PLATFORMS

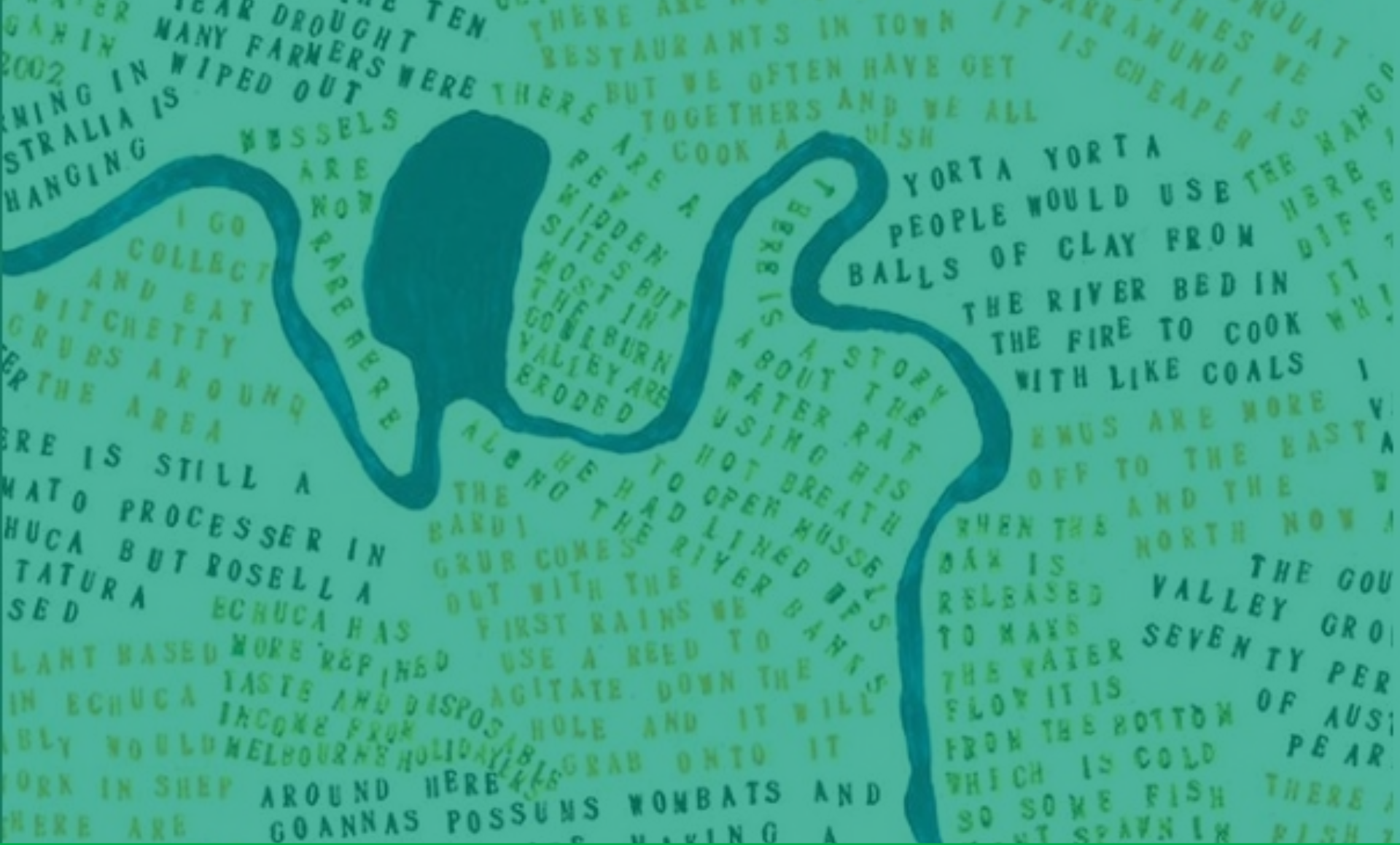
ZONE 2

MEMORIAL VIEWING DECK

ZONE 3

MONASH PARK



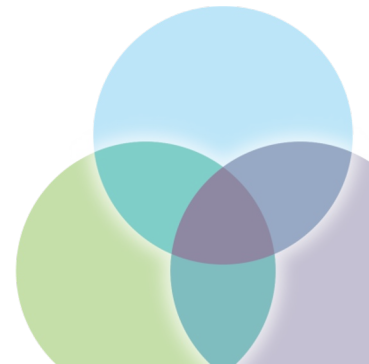


LESSONS



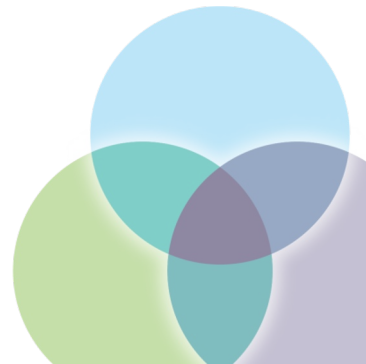
The value of regional leadership

- Goulburn Broken CMA and Goulburn Valley Water long term advocates for IWM
- Leadership demonstrated through:
 - In kind support
 - Time committed to build capacity and relationships
 - Seed funding
 - Advocacy
- Regional leaders are now leading discussions how embed the IWM framework:
 - What have we learnt one year on
 - What do we need to make this a long term success



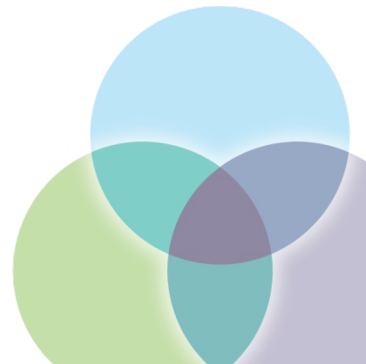
Open dialogue and a focussed approach

- The strategic direction statement set the focus and intent
- Regional leaders ensuring focus on getting outcomes
- Projects being prioritised, funded and delivered
- Having the hard conversation
- What hasn't worked in the past



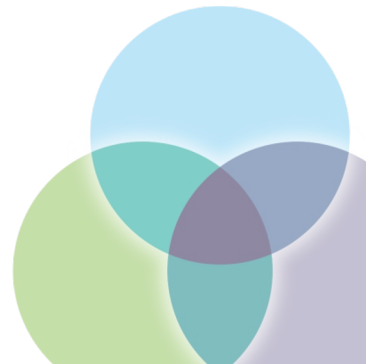
Good will and having 'skin in the game'

- Organisational commitment to projects changed the discussion
- Commitment provided through in kind and financial support
- Projects presented as partnering opportunities
- Discussion changed from – what might be an opportunity to making an opportunity real



Multiple values of projects

- All projects have high community engagement/involvement
- Jobs, economy and innovation – longer term realisation?
- Longer term view on project value

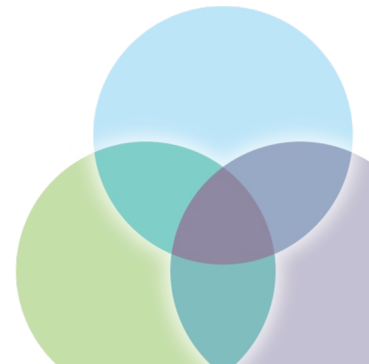


Acknowledgements

- Steve McKenzie – former chair of GBIWM Forum & Goulburn Valley Water
- Alan Tyson – Goulburn Valley Water
- Anna May – Department of Environment, Land, Water and Planning
- James Newton – Department of Environment, Land, Water and Planning



Environment,
Land, Water
and Planning



A scenic view of a riverbank with dense green trees and a clear blue sky. The trees are reflected in the calm water of the river. A teal banner is at the bottom of the image.

QUESTIONS