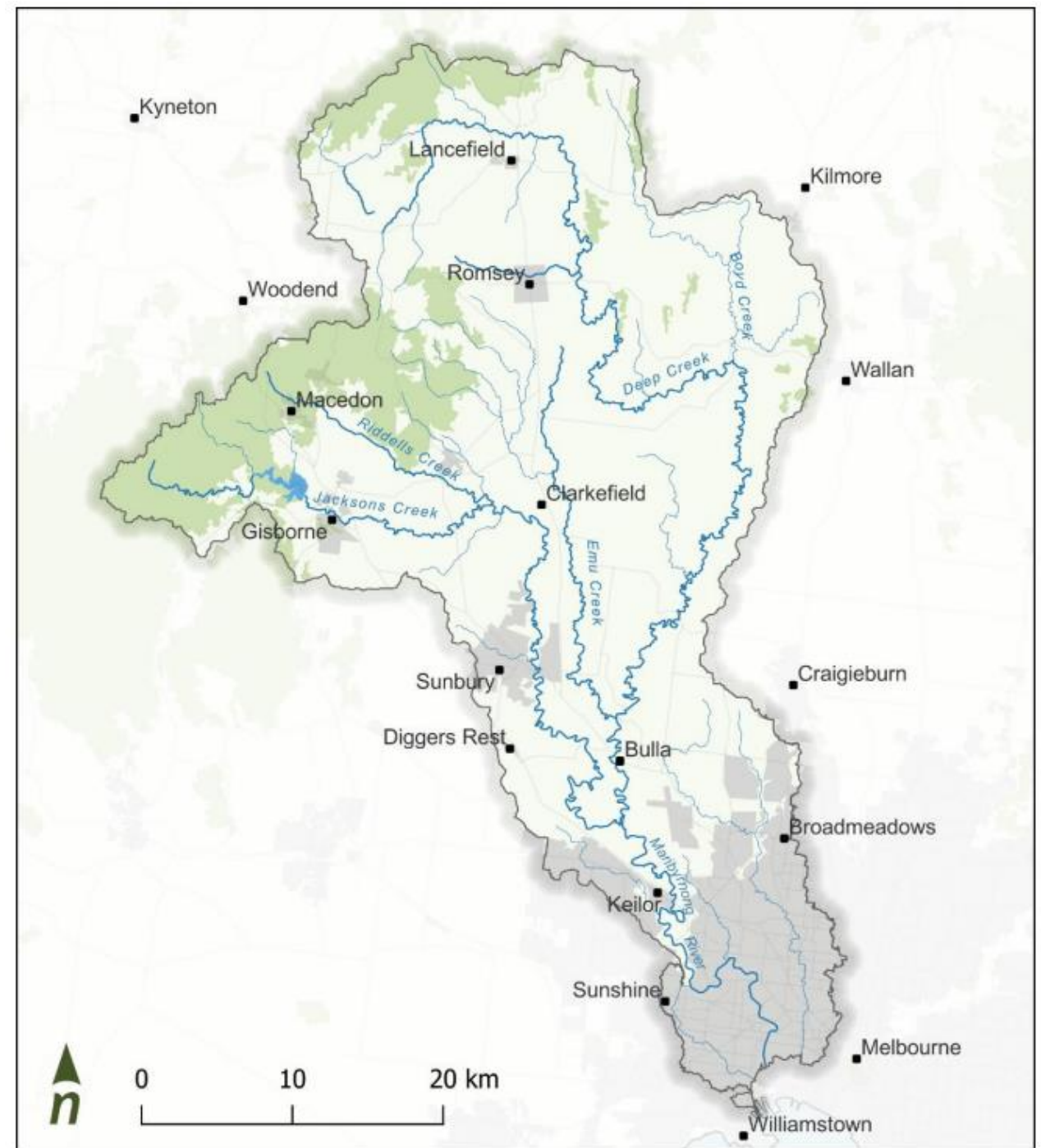




From the ground up: the Water Think Tank



The Water Think Tank is a network of people living in the headwaters of the Maribyrnong River who want to understand water and waterways, the way they are being managed, and the options ahead.

We meet monthly to get answers to the questions we are asking.



Bolinda

Riddells Creek

Gisborne

Gisborne

Mount Charlie
Nature
Conservation
Reserve

Kerrie

Cherokee

Sanatorium Lake
Nature Walk

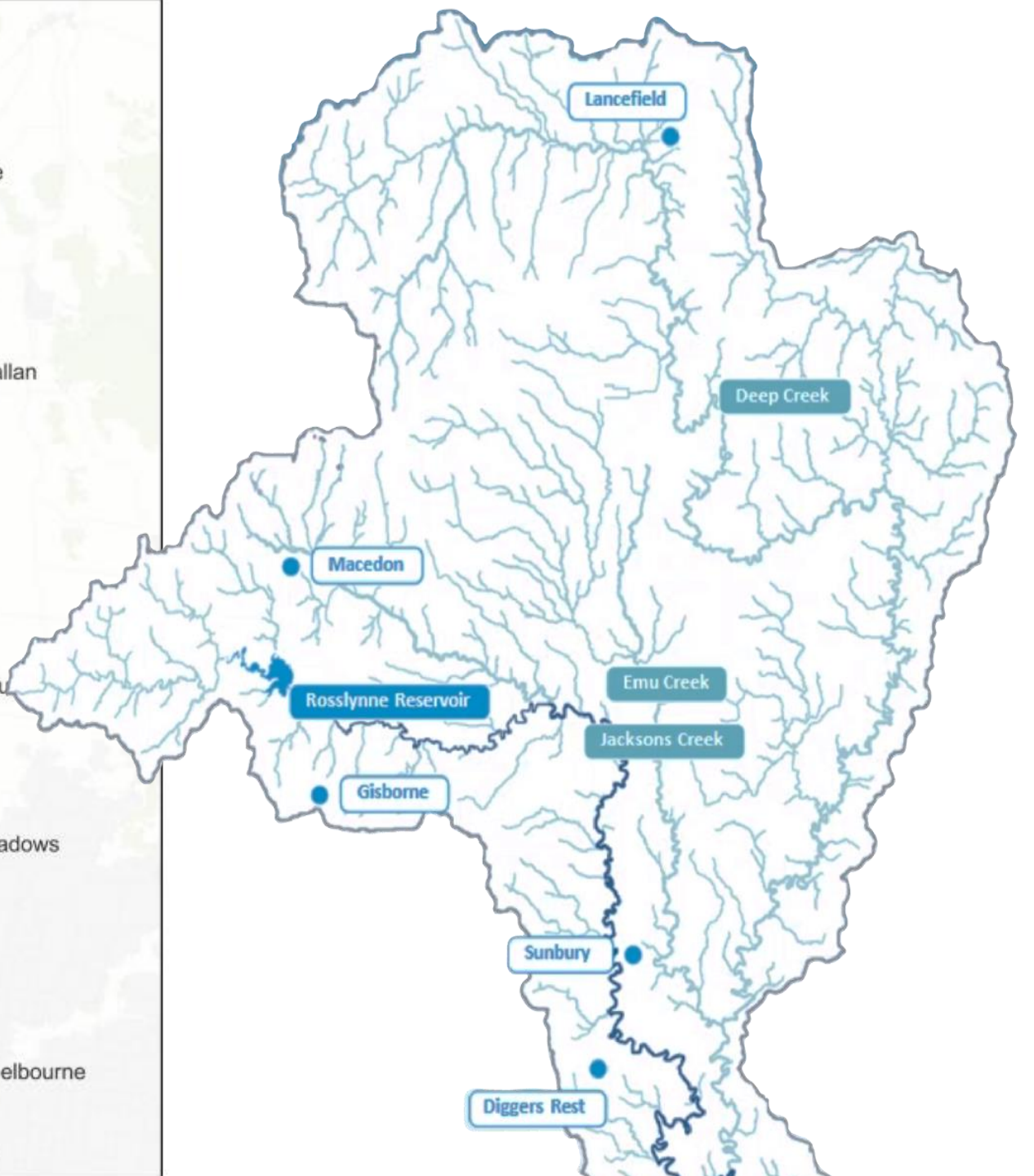
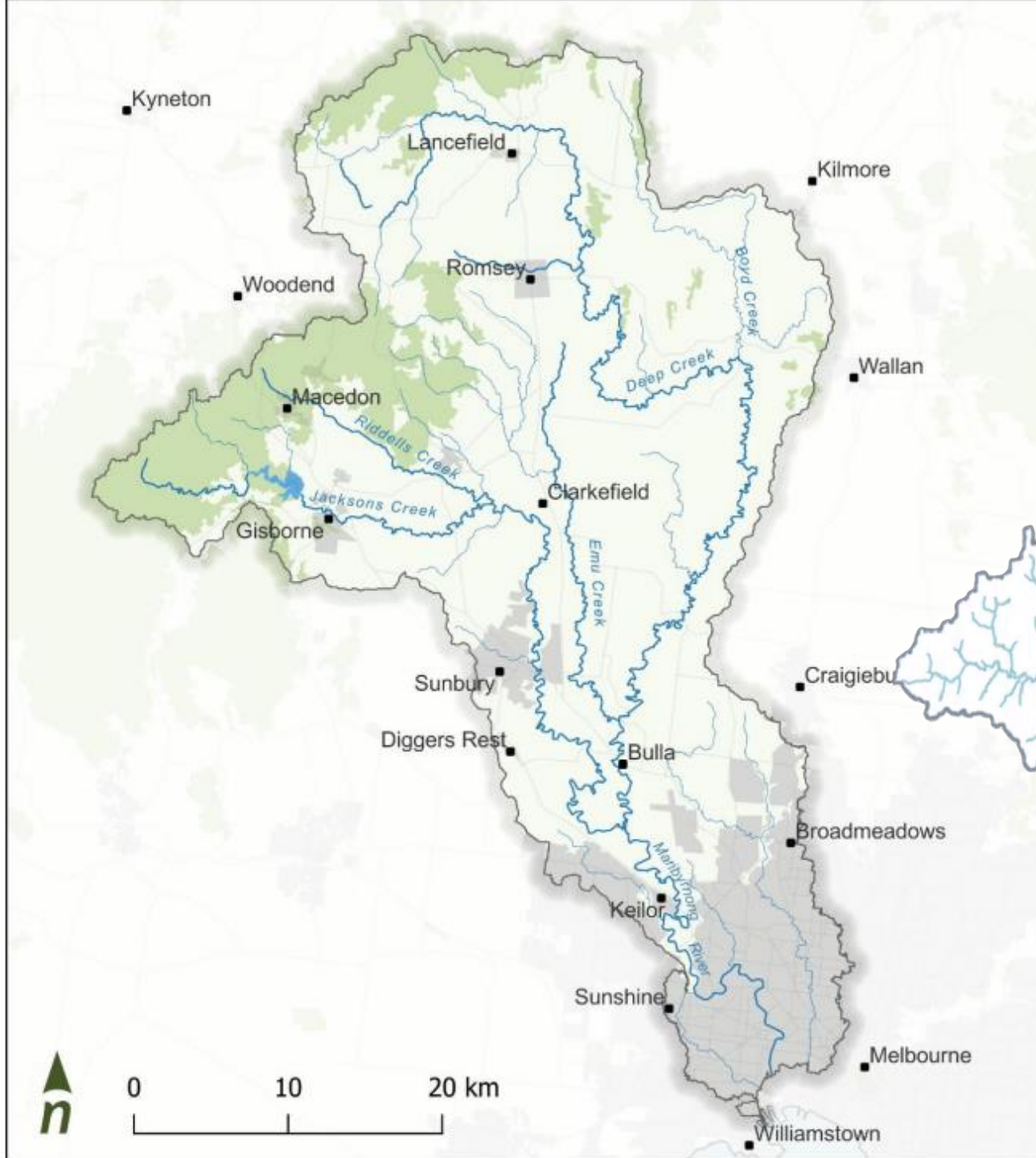
Mount
Macedon

Macedon

Macedon
Regional Park

Hesket





Why the Water Think Tank started

What we have discovered

What's next

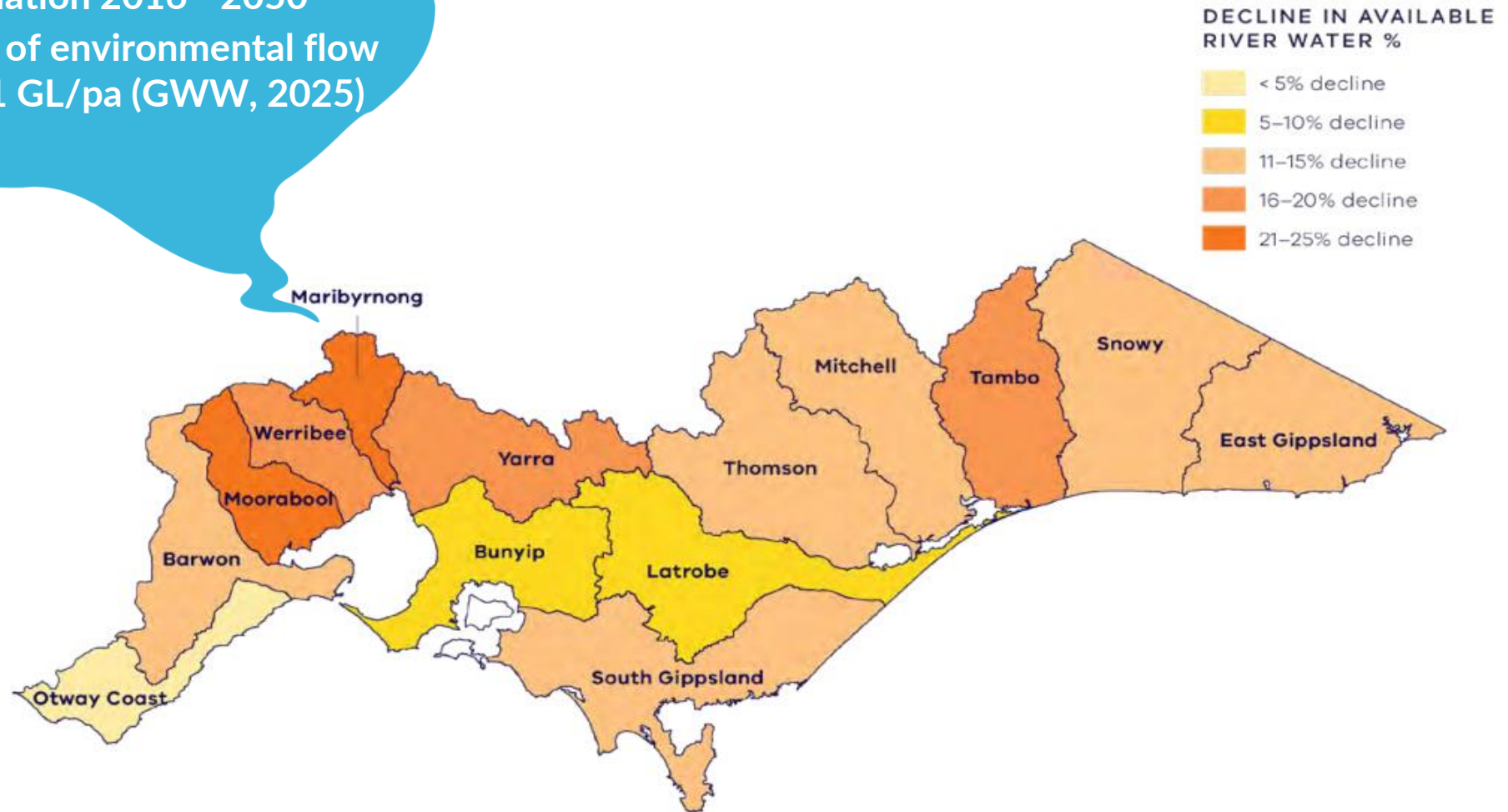
This is an invitation to join in.

My role

Why the Water Think Tank?

1. Because creeks are in crisis.
2. Because we're sick of tick-box, hit-and-run consultation
(and how we got started).
3. Because we are into creeks.

21-25% less surfacewater 1970-2020
20-40% less surfacewater by 2065
Doubling of population 2016 - 2050
Deficit of 7 GL/pa of environmental flow
(SWS, 2022) or 11 GL/pa (GWW, 2025)



Key findings

- **Observations show:**
 - reductions in cool season rainfall
 - Increases in temperature and potential evaporation
 - Increase in high intensity rainfall events
 - Shifts in rainfall-runoff response during Millennium Drought, continuing in some catchments
- **In future** – likely drier, warmer future, but with more extreme events
 - Less streamflow overall, but changes in flow patterns with likely increases in the rare very high flows

Webinars and other resources:

<https://www.water.vic.gov.au/our-programs/climate-change-and-victorias-water-sector/hydrology-and-climate-science-research>

Or search for “Victorian Water and Climate Initiative”

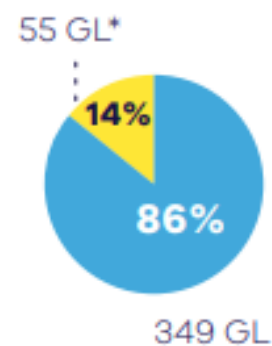
Source: WTT Session 18, Climate Scenarios for the Maribyrnong, Geoff Steendam, Senior Manager Hydrology Climate and Energy team, Department for Energy, Environment and Climate Action

Water supply sources in Greater Melbourne: 2010-2070

(Source: Greater Western Water et al. 2022)

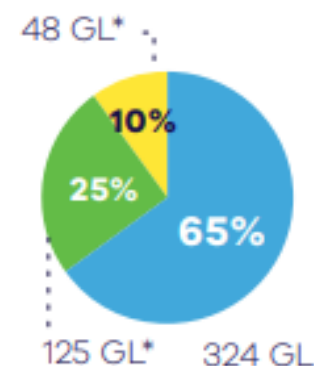
2010

WATER
SOURCES



2020

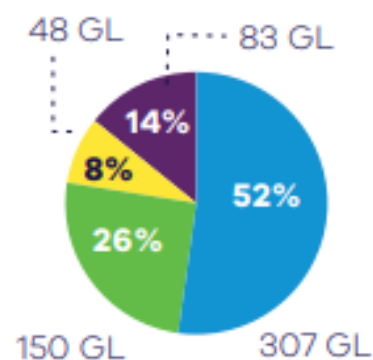
WATER
SOURCES



2030

PROJECTED
WATER SOURCES

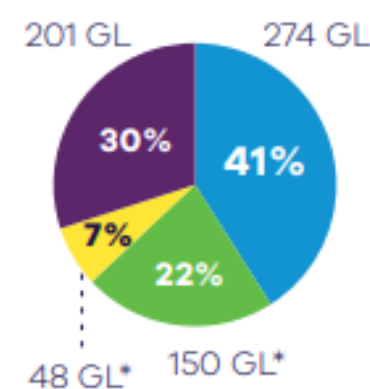
High climate change,
high demand



2040

PROJECTED
WATER SOURCES

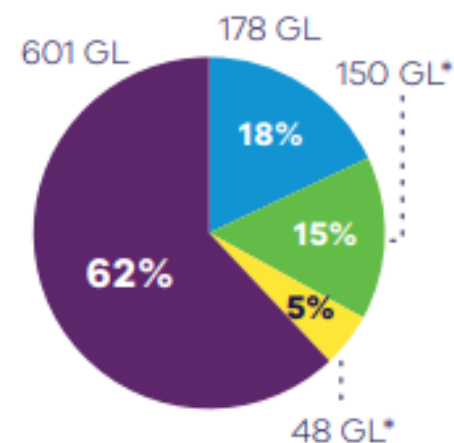
High climate change,
high demand



2070

PROJECTED
WATER SOURCES

High climate change,
high demand



Total volume of water sources

400 GIGALITRES

500 GIGALITRES

588 GIGALITRES

670 GIGALITRES

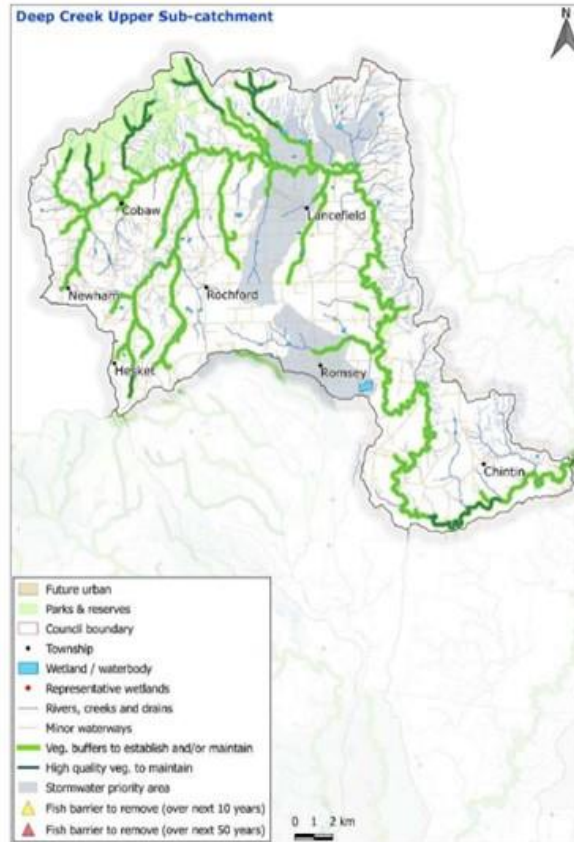
980 GIGALITRES



Why the Water Think Tank started

1. Because creeks are in crisis.
2. Because we're sick of tick-box, hit-and-run consultation (and how we got started).
3. Because we are into creeks.

Priorities for Upper Maribyrnong



Deep Creek Upper Performance Objectives

ID	Condition Supported	Performance Objectives
1	Water for Environment	Maintain critical flow components in refuge reach
2	Water for Environment	
3	Vegetation Quality	Maintain or achieve riparian vegetation monitoring and management
4	Participation	Increase participation rates from high to very high through rural programs.
5	Stormwater condition	Improve stormwater condition by treating existing 1% in Five Mile Creek before Deep Creek confluence. 5.0 ML/y and infiltrate 1.4 ML/y. For existing urban 5.0 ML/y and 0.1 GL/y is required for Lancefield and
6	Water Quality - Environmental	Improve water quality for environmental values, vegetated buffers in headwater streams.
7	Vegetation Extent	Establish a continuous riparian vegetated buffer benchmarks to at least a level 3 vegetation quality
8	Physical form	Investigate and mitigate threats to physical form
9	Vegetation Quality	Improve understanding of the extent, composition and threats.
10	Fish (value)	Investigate opportunities to translocate Yarra pygmy perch into suitable habitat along the creek corridor.

* Please also refer to the regional Performance Objectives that apply to all sub-catchments.

Water for Environment
Vegetation Quality
Participation
Stormwater condition
Water Quality – Environmental
Vegetation extend
Physical form
Vegetation Quality
Fish

SECURING OUR WATER FUTURE

50 YEAR PLANNING FOR VICTORIA'S CITIES AND TOWNS



Water management planning framework

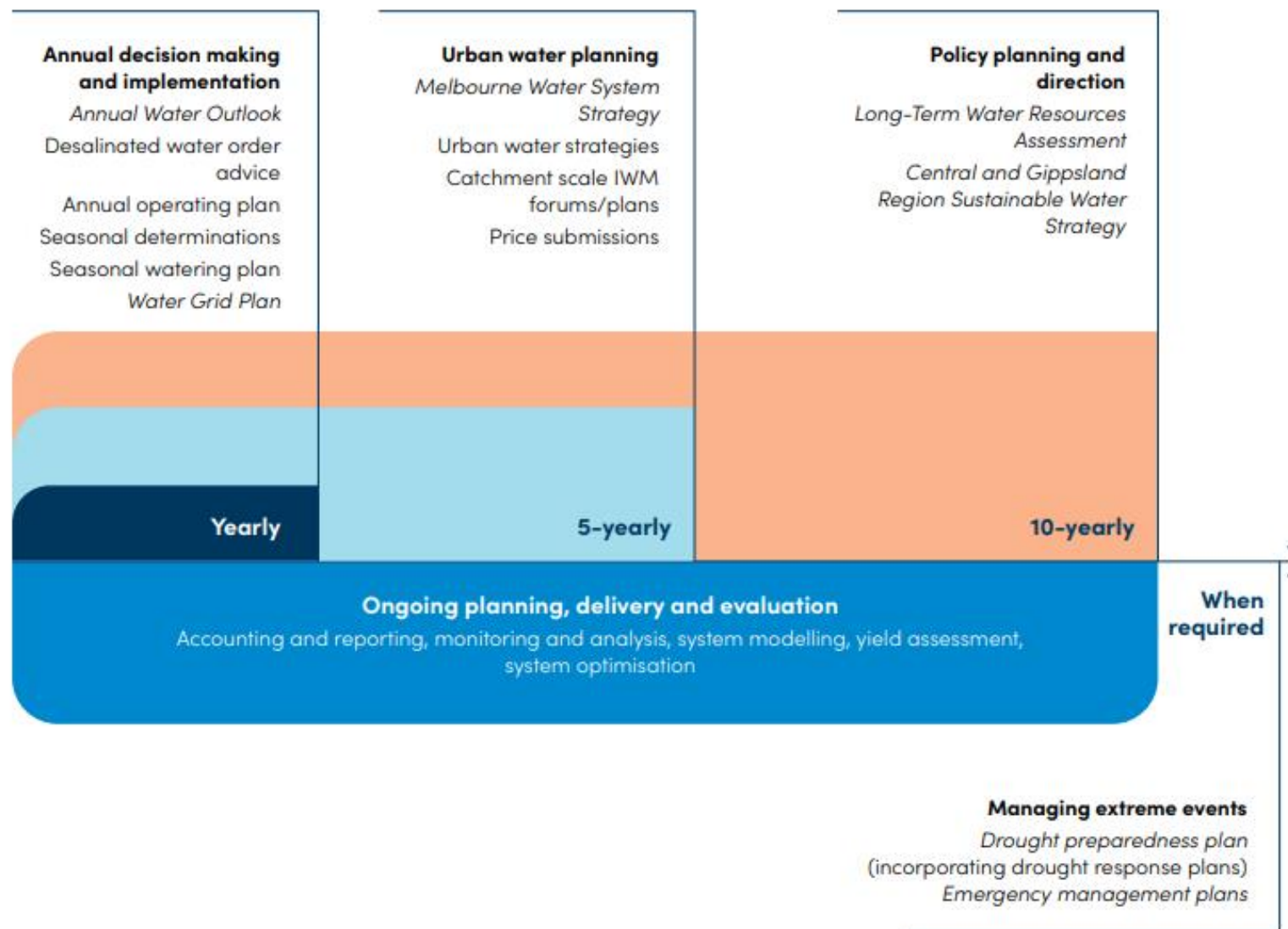


Figure 42: Victoria's existing water management planning processes

More people and less water can't be managed with
20th Century governance

- decision making is top-down, inside silos
- technical experts define the options, and political expediency narrows to choices
- the community is invited in when the big options are on the table
 - citizens leave it to the experts, and hope for the best

We need to create **governance fit for the 21st Century**

PARLIAMENT

Creates legislation



So how did we get started?

An audible uneasiness entered the room I said:

If you want to go that way, we will do that, but reluctantly. But the next time GWW invites us to a consultation, more than a few of us will probably decide it just isn't worth it.

We're tired of hit-and-run, tick-the-box consultation.

Here we were, knowledgeable, environmentally motivated people from around the range: can't we do better than this?

We want a chance to hear what we each think, and to push things back and forth. We wanted a long conversation. We want to understand what was happening with water and its management.

Why don't we head in that direction?

Why the Water Think Tank started

1. Because creeks are in crisis.
2. Because we're sick of tick-box, hit-and-run consultation
(and how we got started).
3. Because we are into creeks
(most of us have one).

Gisborne
tessori School

Kerrie

Mount Charlie
Nature
Conservation
Reserve

Conglomerate
Gully FR

Rowallan Scout Camp

Riddells Creek
Primary School

Riddells Creek



Search Google Maps

Restaurants

Hotels

Things to do

Museums

Public transport

Saved

Recents

Melbou...

Kyoto

View more

Get the app

Layers

Map

Street View

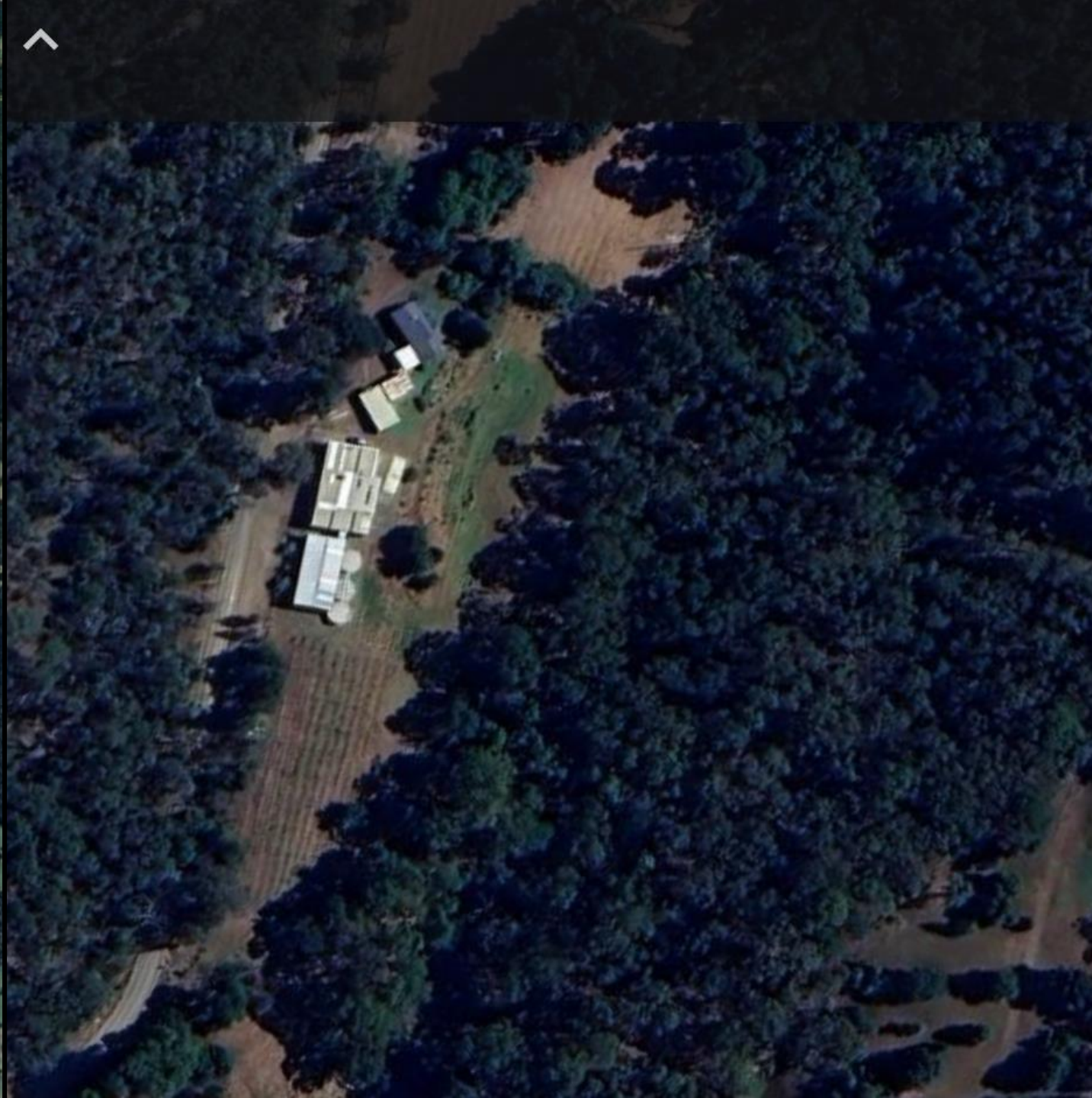
3D

Satellite

Hybrid

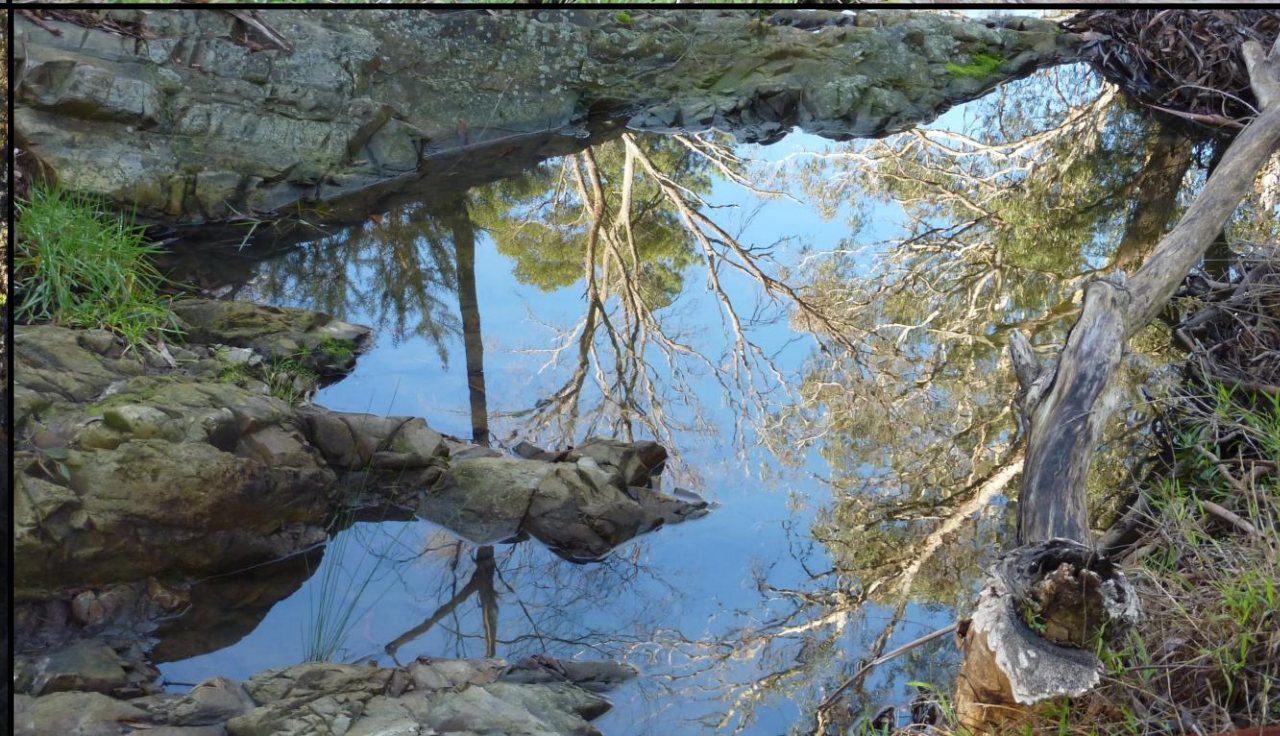
200 m

Map of a suburban area in Australia. The map shows a network of streets including Greythorn Rd, Winfield Rd, Clifton St, and Elgar Rd. A blue line representing Koonung Koonung Creek runs diagonally across the center. Green areas indicate parks and reserves, such as Wilsons Road Reserve, Katrina Gully Reserve, and Elgar Park. Various points of interest are marked with icons, including Birralee Primary School, St Bridget's Catholic Church, and several businesses like Silverleap and Fluffy Puppies Dog Grooming Pty. The map interface includes a search bar at the top, navigation controls on the left, and a bottom bar with map style options and a scale indicator.









Sometimes all that time weeding and planting and fencing, and the standing and gazing while taking a break, and walking down to see how things are going, all that time with a creek, sometimes, in a way that's hard to pinpoint, a person falls in love with a creek.

This is the alchemy of landcare: you start taking responsibility for where you live. You do the work, and knowledge and wonder grow, and at some point, the place where you live – the country and the people - makes a claim on you.

And you do that with people alongside you who also care about the place they live.

Your nearest creek.

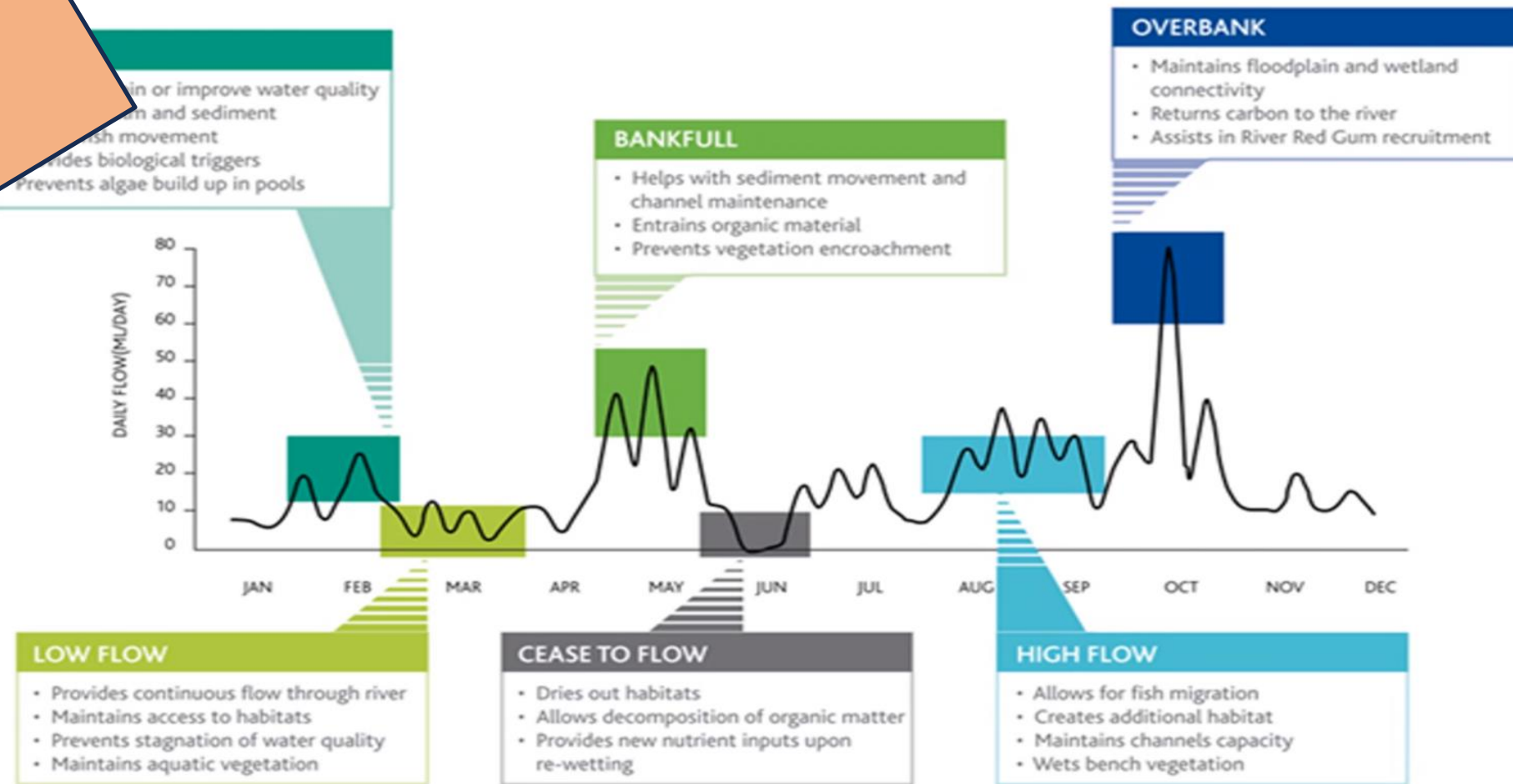
*One moment in your journey
with creeks and rivers.*

✓ Why the Water Think Tank

What we have discovered

What's next

Flow



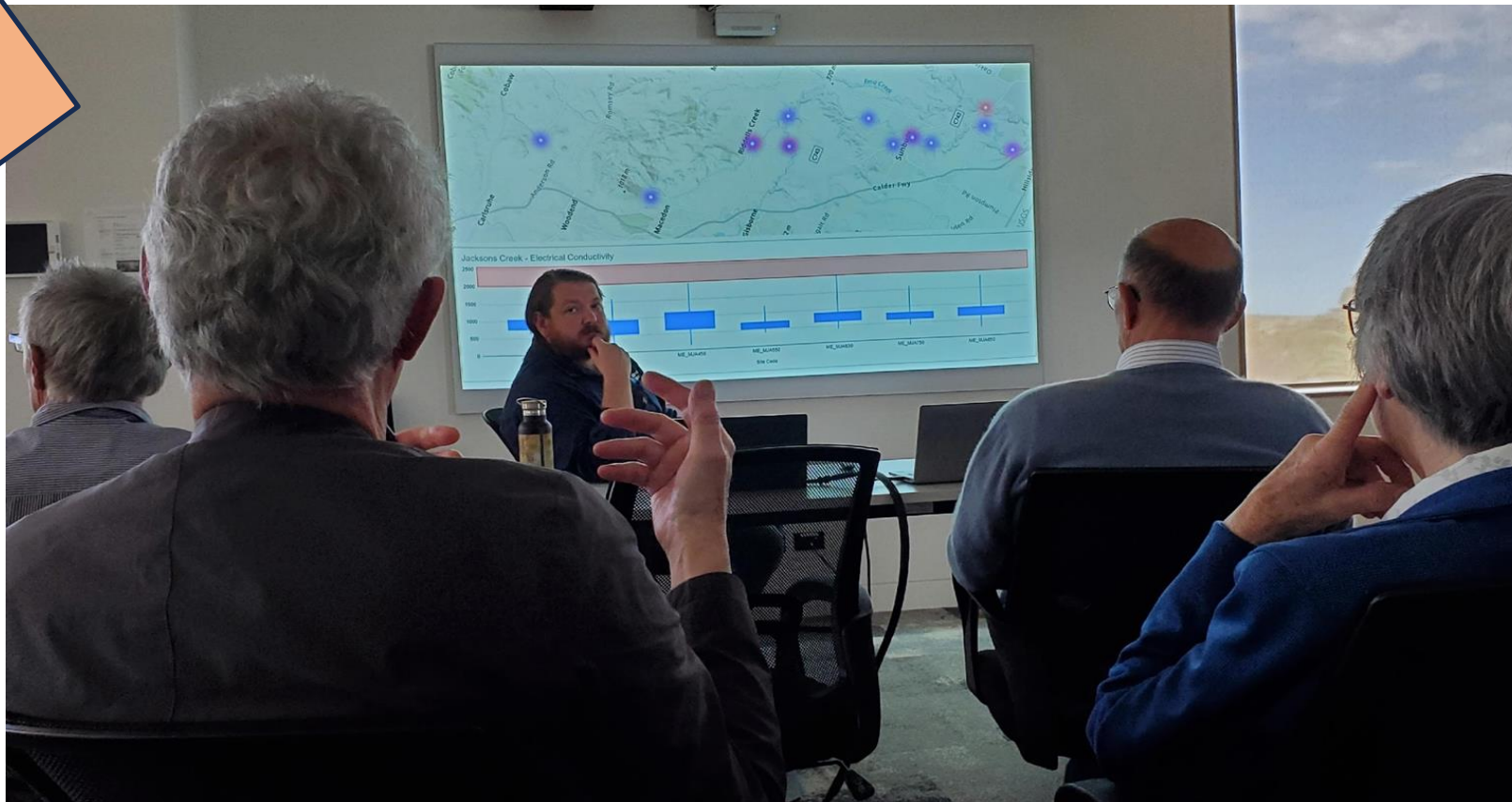
The creeks of the Maribyrnong are short on flow, and it's getting drier.

There's no legislated environmental entitlement.

MW knows, reach by reach, what flow flora and fauna need to survive.

We don't have control of the use of surface water and groundwater.

Condition



Creeks or drains? That depends on what the humans do.
MW tracks waterways health, reach by reach, instream and riparian. That information is available, but most people don't see it.
Riparian condition is improving, slowly, but flow is king.
Groundwater flow in summer keeps the deep pools alive.



MW supplies, GWW purifies and retails, the ESC overlooks spending.
The region grew up around local water supply. All towns in the headwaters
are now part of Melbourne's integrated supply.
Small reservoirs and groundwater extraction are cheaper than MW supply.
But if we retired reservoirs, there would be more flow for creeks.

Stormwater



Urban growth means more hard surfaces, and more stormwater. 26% increase in stormwater runoff by 2050.

Unmanaged stormwater hits creeks with cold and dirty water.

Innovation in managing stormwater could deliver environmental flow, but responsibility is dispersed between developers, MW, Local Government.

Integrated Water Management (IWM) guidelines for urban development are not mandatory *"as far as is practicable"*

Sewerage



Sewerage is treated in lagoons (Romsey, Riddell) or concrete boxes (Gisborne, Sunbury).

This produces recycled water fit for irrigation, but not fit for creeks or humans.

Emerging contaminants are a sleeper.

Towns are growing. GWW has limited space and fewer irrigators.

Reverse osmosis can deliver water fit for creeks, but it will cost.

Governance

The WTT sessions bring people closer to government, and government closer to communities.

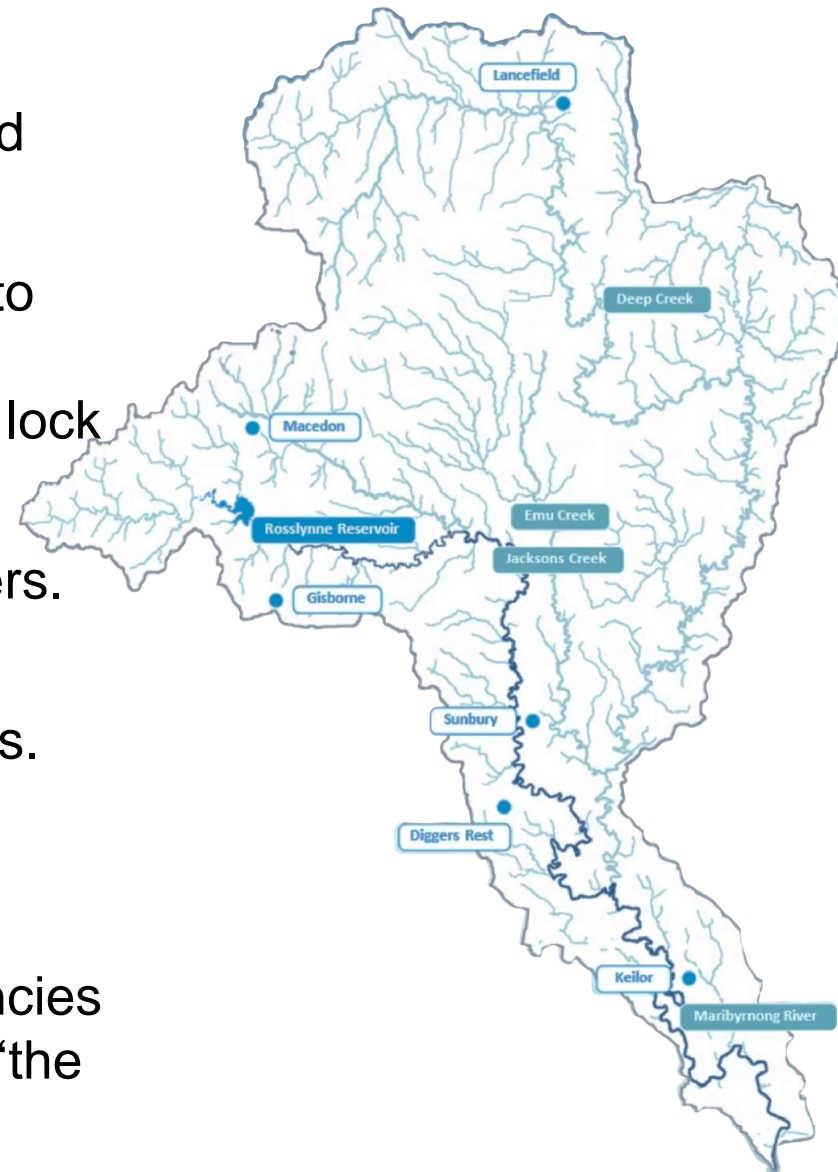
Community opinion matters. Business-as-usual will have to shift. Politicians will take up new options if the electorate wants this. Agency staff can't lobby. Vocal minorities may lock out options that ought to be investigated.

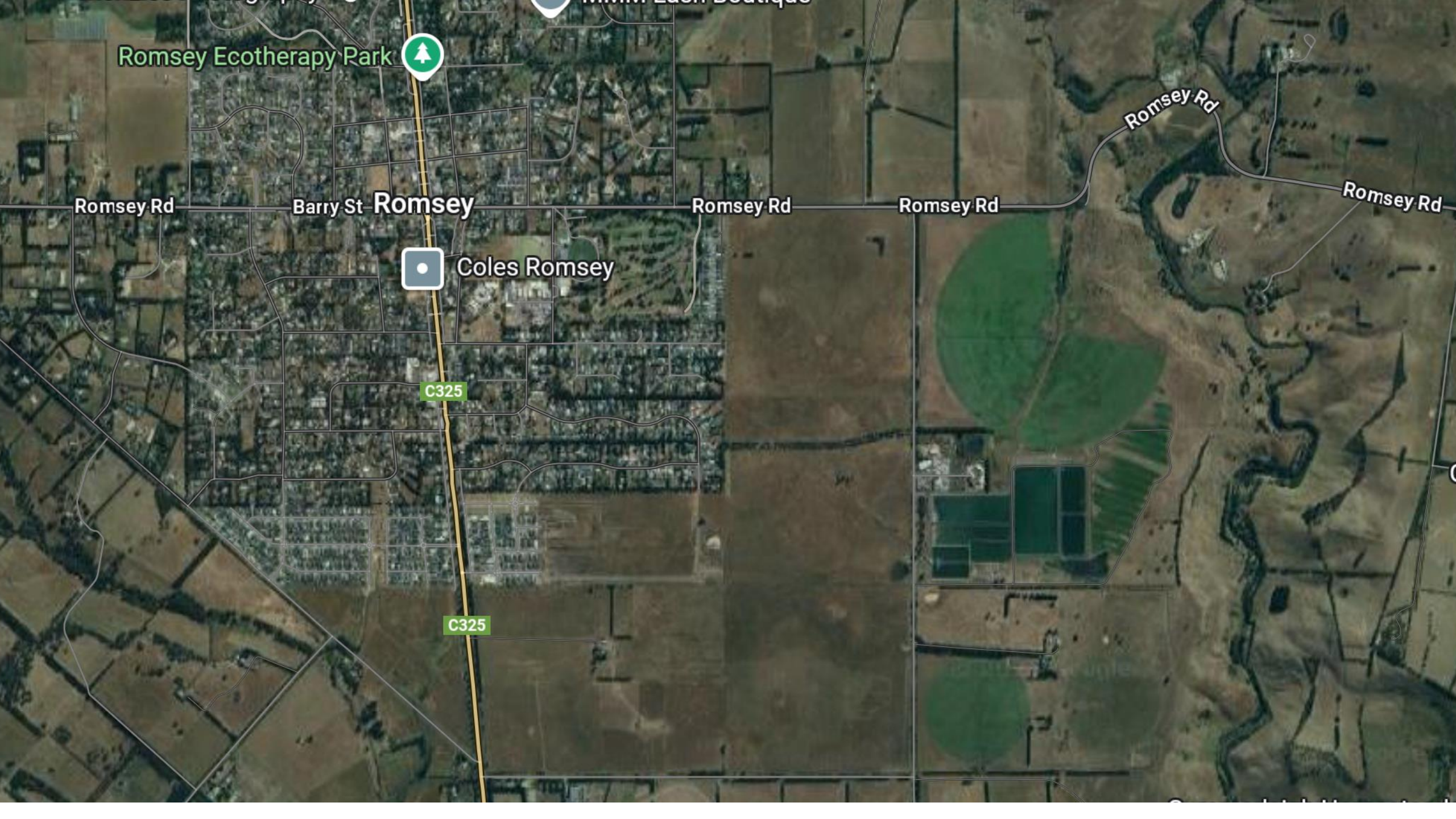
Every issue has operational, management and policy layers. Every issue has interdependencies. *See Romsey.*

People need time to understand the pressures and options.

Water literacy/On-ground action/Advocacy reinforce each other.

WTT could be a bridge to the big decisions ahead. If agencies invest in water literacy, they would get support faster, but 'the community' is in the landscaping budget, not the build.





Romsey Ecotherapy Park



Romsey Rd

Barry St

Romsey

Romsey Rd

Romsey Rd

Romsey Rd

Romsey Rd



Coles Romsey

C325

C325

- ✓ Why the Water Think Tank started
 - ✓ What we have discovered

What's next



Spend some time with a creek

Come along to WTT seminars

WTT 19, 4 June, 10-12. 288 Gap Road, Riddells Creek.

Response to GWW on options at Sunbury RWP/WTT agenda for the rest of 2025/River Sensing

WTT 20, 2 July, 10-12. Hume Global Learning Centre, Sunbury.

How Stormwater from Sunbury growth can become environmental flow in Jacksons Creek. **Plus** Quantifying waterway health benefits from harvested stormwater. Priya van Ryn, Melbourne Water.

Possible future sessions: Progress with Biolinks Alliance planning for upper Deep Creek? Emerging Contaminants? Bioregionalism?

The Water Think Tank past sessions:

<https://drive.google.com/drive/folders/1GwLhh4qSYfAYk4Szx2AN3ntD7fqZyqWt?usp=sharing>

Get on the mailing list. Contact Ross Colliver,
ross.colliver@bigpond.com, 0411 226 519



Meet the creek: Make it easy to organise events

People want to connect to nature. New people arriving in our towns want to understand the landscape where they live. As local groups, we know our creeks and we can show people how they work and what they need.

BUT! The promotion and organising and follow up for events drains us. We don't have good systems. We do the event, then we want a break.

*Let's make it dead easy
for local groups to organise events.*

One site for *Meet the creek* events. Build booking, payment, email lists, publicity emplates, guidance notes for organisers at www.creekstories.net

Water and waterways, reach by reach

People start local, with the country they know.
Then they think wider.

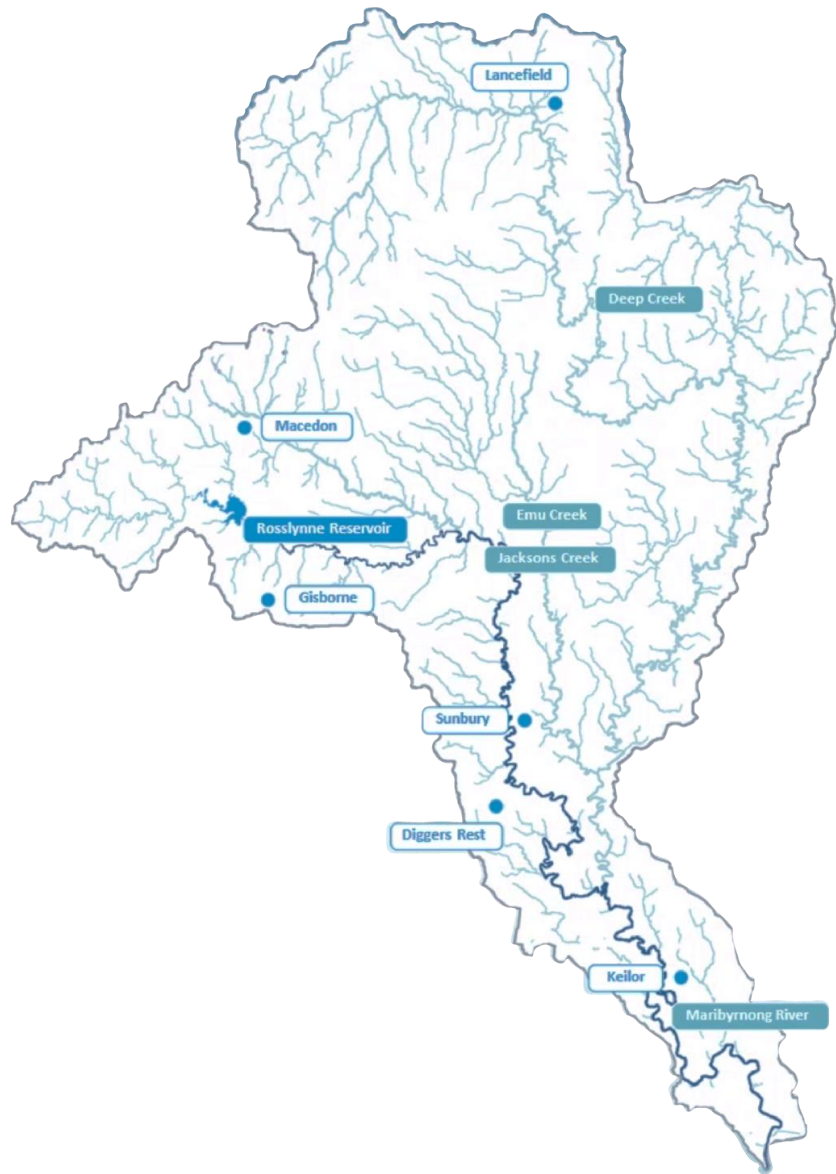
Water and waterway issues play out in a specific
way in each reach of the Maribyrnong.

*Let's assemble info on issues reach by reach,
and take that into discussion in each town.*

- Three sessions.
- Local thought leaders and agency staff.
- The options in a 20-year time frame.
- What you can do next – on-ground work and advocacy, plus learn more about water and waterways

Put the pieces together
for one reach and trial it.





Design for learning

'Management' does not imagine country has agency. It plans in order to secure predictability and control.

'Natural resources' means resources for human use. How is that working out, for us and the planet?

Do something different. Design for learning, in support of regenerative bioregionalism.

*The Earth is living.
It organises itself around water.
What if we worked with that?*

- Start right here, where we are. Connect to MRSB. Connect people of the headwaters to people of the city.
- Connect across Victoria's bioregions.

See Joe Brewer on
bioregionalism.

“To host the new is not to plan for it.
It is to become hospitable to the otherwise.
To ritualize insufficiency.
To let your methods fail.
To allow your expectations to ferment.
.... the most urgent responsibility is not to lead the new, but to
notice when you are being led by it.
The new is not forward; it is awkward.”

Bayo Akomolafe, philosopher, psychologist,
professor and poet of the Yoruba people of West
Africa, from a post on Facebook.