



Customer and Community Advisory Group (CCAG)

August 2020



Darren Cleary

Managing Director

Our current storage

Our water levels drop faster than most other major Australian urban centres during hot, dry periods because we have shallow water storages and high evaporation rates. Below is a snapshot of our current storage levels today.

81.1%

AS AT 21 AUG 20

↑ 0.0%

1 WEEK AGO

↑ 10.8%

1 MONTH AGO

↑ 17.0%

1 YEAR AGO

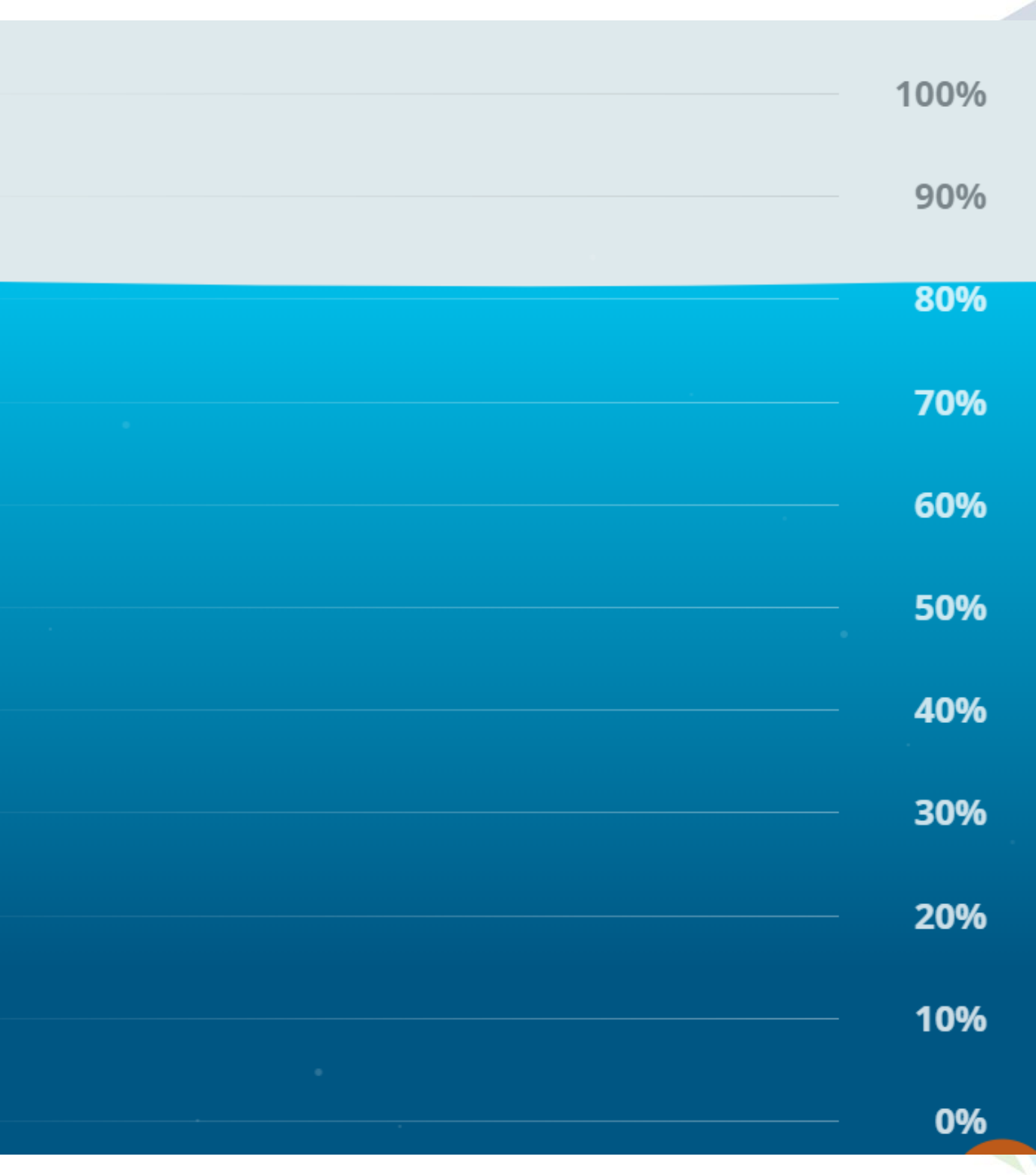
[VIEW DETAILED HISTORY AND FORECASTS](#)



LEVEL 1 WATER RESTRICTIONS NOW APPLY

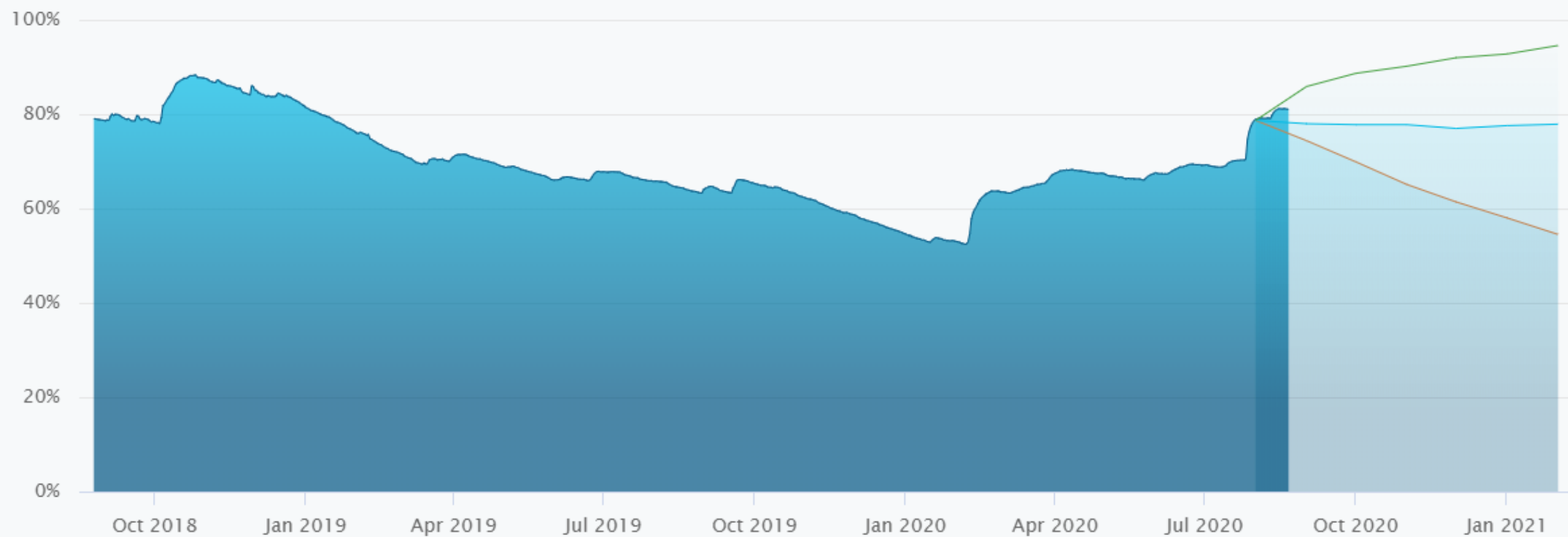
Level 1 water restrictions apply to outdoor water use.

[LEARN MORE](#)



Historical water storage levels

AS AT 21 AUGUST 2020





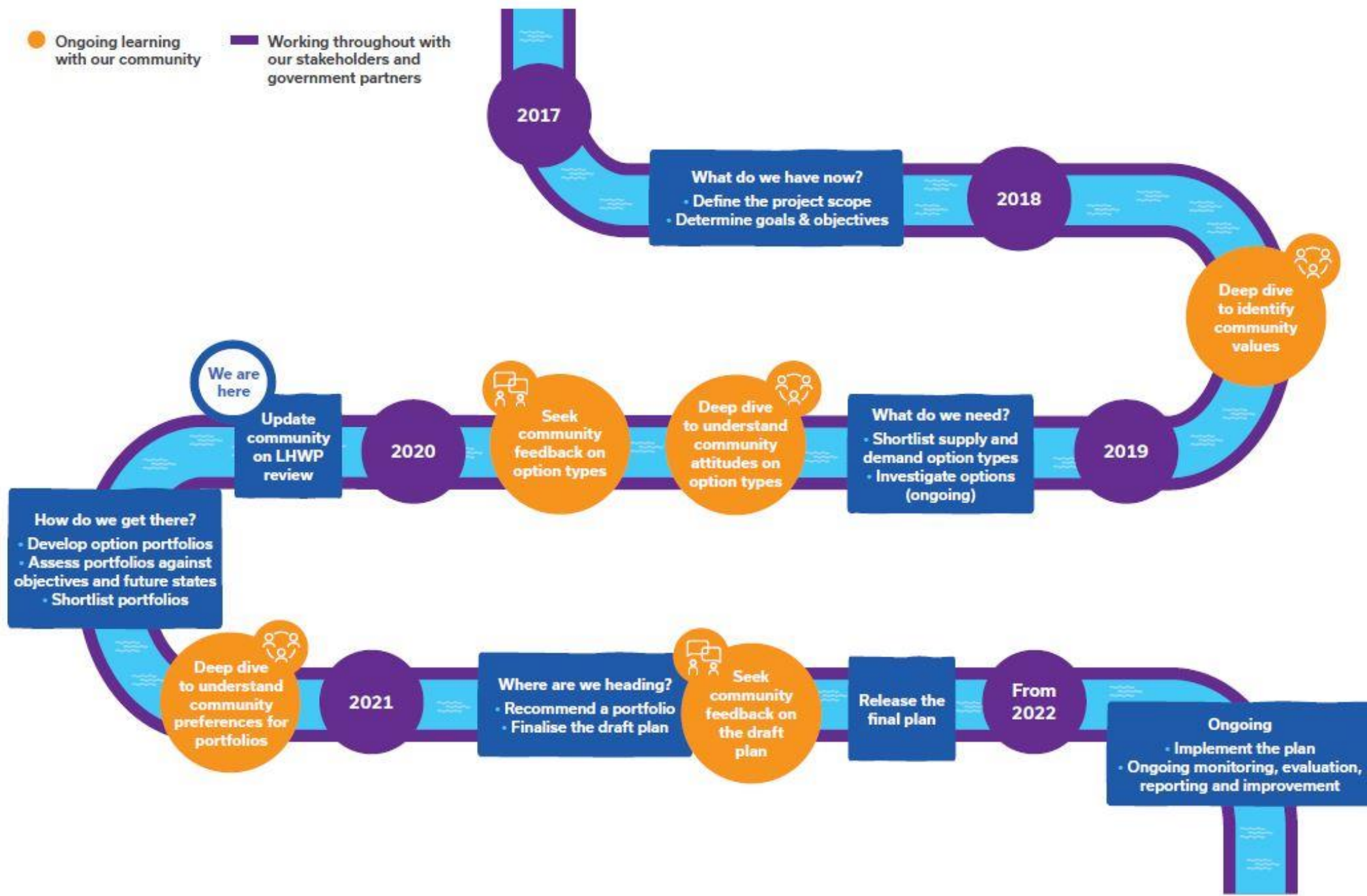
LHWSP Update

August 2020

How we're developing the Lower Hunter Water Plan

● Ongoing learning with our community

■ Working throughout with our stakeholders and government partners



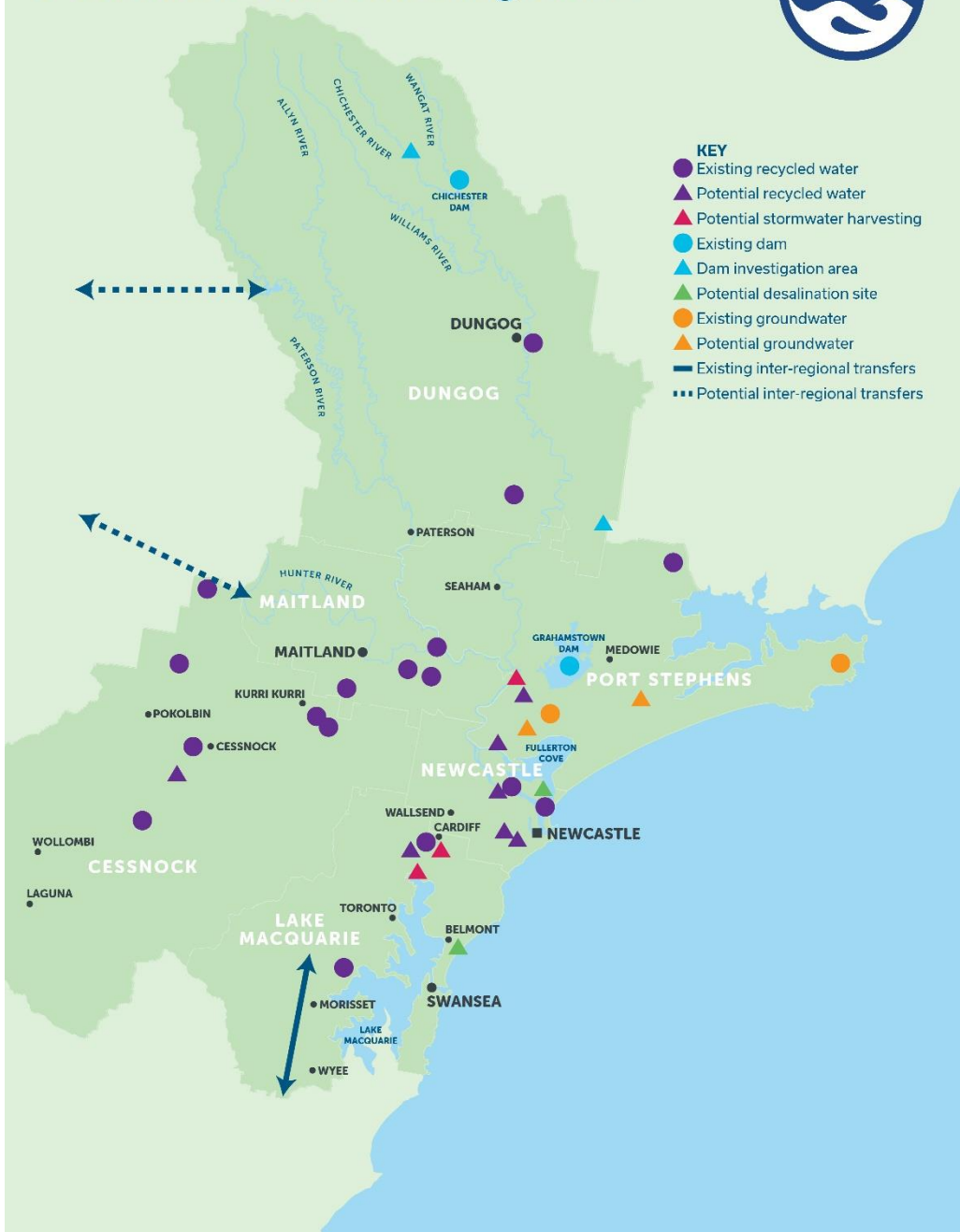


Option types to be considered

Water conservation	Desalination	Groundwater
Stormwater harvesting	Water sharing (Inter-regional transfers)	Research and Development
Recycled water	Dams	Planning reform



Supply and demand options Potential and existing sites





COVID-19 Monthly Report August 2020

Our Customers & Community

- 97% Customer Satisfaction Score (@17 Aug)
- 79% Customer Experience Score (@17 Aug)
- Customer Activity (all channels) increased by 15% since June due to weather events
- 580 Hardship Customers (\$362k)
 - Down from peak 999 Customers (\$657k) in May
- Aged Debt \$3.5M
- Customer Counters remain closed, though are prepared for re-opening

Finance

- Hunter Water has experienced no material financial impacts to date
- Future inflation forecasts impacted by volatile financial markets. Mixed economic data suggests short-term volatility likely to continue.

Our People

- 0 Hunter Water Cases (since COVID started)
- Some employees have isolated (close contacts)
- Remote Work Continues
 - 5-30 People working at Honeysuckle (weekdays)

Our Supply Chain

- No material impact to operations
- Monitoring contractor impacts
 - Job Keeper extension should push back potential impact to contractors
- Sustainable stocks held of PPE and cleaning/hygiene products



Melinda Pavey
Minister for Water, Property and Housing

MEDIA RELEASE

Friday 24 July 2020

RENEWABLE ENERGY PROJECT POWERS HUNTER WATER TOWARDS 2030 CARBON-NEUTRAL GOAL

The NSW Government will invest more than \$15 million over the next four years to install renewable energy systems at Hunter Water's water treatment plants and pump stations as part of the water utility's push towards becoming carbon neutral.

The first installation of a solar panel array has been finished and is being commissioned at the Branxton Wastewater Treatment Works.

Minister for Water, Property and Housing Melinda Pavey said this is the first installation on an operational site for Hunter Water with the overall project expected to reduce Hunter Water's carbon footprint by 7,200 tonnes of emissions per year - the equivalent of taking 1,500 cars off the road.

"This investment is all about innovation and supporting jobs in the Hunter while also reducing Hunter Water's electricity bill," Mrs Pavey said.

"The 100 kilowatt system at Branxton Wastewater Treatment Works is the first in Hunter Water's push for many solar projects, with savings generated helping to maintain affordable bills."

Hunter Water Managing Director, Darren Cleary, said the 252-panel solar array installed at Branxton includes both roof and ground-mounted panels, with scope for future expansion.

"We're really excited by the Renewable Energy Project and what lies ahead of us," Mr Cleary said.

"Electricity is one of our major expenses, accounting for about 10 per cent of our operating costs and solar is one of a number of opportunities available that can help to reduce these costs, and reduce carbon emissions.

"Once the program has been rolled out, we estimate an annual saving of \$1.15 million on our electricity costs, which equates to a 7.37% reduction.

"We are working with a shortlist of more than 20 priority sites as the initial focus of our solar rollout, including at Morpeth, Kurri Kurri, Raymond Terrace, and Boulder Bay





Pricing Update

2020-2024



IPART Determination Summary

- IPART released final pricing determination in late June 2020, with prices commencing from 1 July 2020
- Typical household bills fall by \$48 per year (3.6%) to \$1,271 per year
- Change in composition of water charges: fixed charges fall by 76 per cent (to \$24 per year), and water usage charge of \$2.46 per thousand litres (kL)
- Endorsement of Hunter Water's capital investment program of \$653 million over four years (31 per cent increase compared with previous period)
- Introduction of a drought price when storages fall below 60 per cent (additional 44 cents per kL to \$2.90 per kL, when triggered). A 15 per cent reduction in usage during drought would fully offset this increase
- Approval of discretionary expenditure for stormwater naturalisation, and recycled water





Melinda Pavey
Minister for Water, Property and Housing

MEDIA RELEASE

Friday, 14 August 2020

BOOST FOR REGION'S PENSIONERS WITH INCREASE TO HUNTER WATER PENSION REBATE

In welcome news for Lower Hunter pensioners, the NSW Government has announced a \$700,000 boost to Hunter Water's pension rebate.

The additional funding increases the rebate to \$330 per eligible property, bringing Hunter Water's total assistance for pensioners to more than \$15 million.

It comes as the region's pensioners are already experiencing falling water bills as a result of new prices introduced by the Independent Pricing and Regulatory Tribunal (IPART) on 1 July 2020. The average pension household will now pay \$722 for water, wastewater and drainage services this financial year, down from \$748 in 2019-20.

Minister for Water, Property and Housing, Minister Pavey said this is a welcome boost for Lower Hunter pensioners and will put more money back into the pockets of those in need.

"Hunter Water's pension rebate assistance will total \$15.2 million this financial year with the inclusion of this extra funding, which is a great investment across the region," said Mrs Pavey.

Parliamentary Secretary for the Hunter and Cost of Living, Catherine Cusack, encouraged eligible pensioners not yet registered for the rebate to contact Hunter Water:

"There are close to 44,000 pensioners who are already registered with Hunter Water and will receive the increase automatically. For those eligible customers who are not yet registered, please contact Hunter Water online or over the phone to enrol for the rebate.

"Of course the pension rebate isn't the only form of assistance provided by Hunter Water. I'd encourage anyone experiencing difficulty paying their water bills to get in touch with Hunter Water to see how they can help, with options such as payment extensions and support for tenants available," said Ms Cusack.

To access the pension rebate, eligible pension concession card holders and DVA Gold Card holders need to contact Hunter Water to provide their property details and Services Australia (Centrelink) Pension or CRN number.

The pension rebate is provided by the NSW Government under the Community Service Obligation (CSO). Eligible Hunter Water customers will see the increased rebate on their second and third water bills of 2020-21.

For more information, visit www.hunterwater.com.au/pensionrebates

Pension rebate increase to \$330 per eligible pension property per year

Eligible customers can register online: www.hunterwater.com.au/pensionrebates

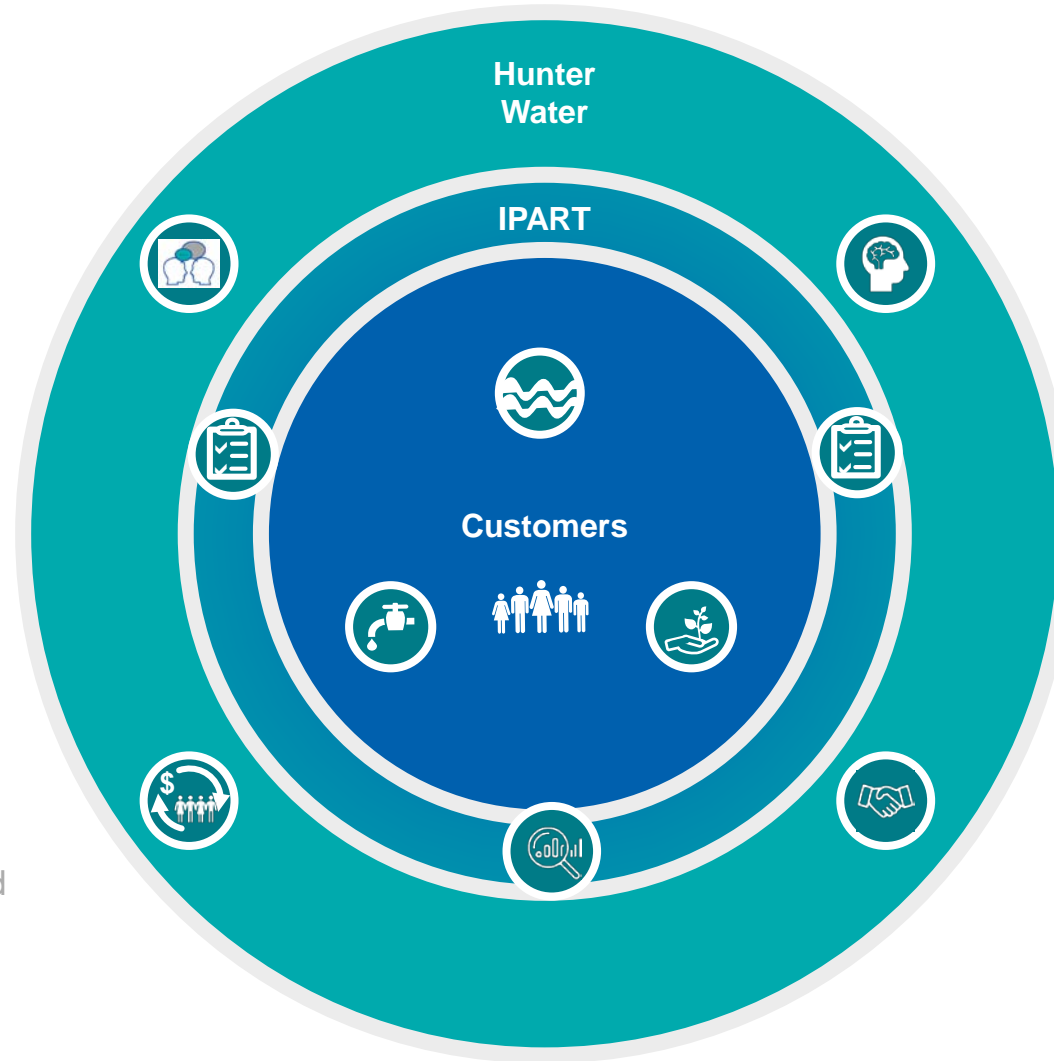
Motivation – A Voice of the Customer initiative

Hunter Water strategic priority

- Deeper understanding of customer/ community expectations is a strategic priority (focus area) in Business Plan
- Golden Thread – running through the business to inform decisions and as a driver for change

Customer expectation for communication & involvement

- Want to communicate expectations
- Value for money concerns are always top of mind
- Customer views are strongly influenced by the nature of their interactions with Hunter Water staff and relative ease of public facing processes



Customer input to IPART processes: setting service standards and pricing proposals

- Operating Licence: Input to re-setting system performance standards & rebates
- Price reviews: customer input required including to test willingness to pay, price-service level trade-offs
- Regulatory framework review: modernisation may consider better incentivising and rewarding service outcomes and customer satisfaction

Key objectives and scope of this customer research

What is Hunter Water seeking to achieve?

Robust customer research to produce:

- A **list of service levels and attributes** that Hunter Water's residential and non-residential customers consider important
- **Gap analysis** showing where there is a gap between the relative importance and current level of satisfaction in relation to service level outcomes and attributes
- A list of service failures for which customers and consumers **expect a rebate**



To provide deeper understanding and robust evidence of customer and community needs and expectations – ***and a firm foundation for future work***

Service levels phase 1 - research program overall



KNOWLEDGE AUDIT

Review of 31 reports and datasets of previous customer, consumer and community research. In addition, a literature review of 107 service outcomes and 220 attribute measures from across Australia



INTERVIEWS WITH CUSTOMER- FACING STAFF

Understanding commonly raised issues in discussion with internal stakeholders



MODERATED ONLINE BULLETIN BOARD

3 days with 50 people (30 from independent sample; 20 from Your Voice) answering almost 60 questions with 3,000 posts



DEPTH INTERVIEWS WITH AFFECTED PEOPLE

10 people that have recently interacted with Hunter Water in relation to a complaint, extended unplanned interruption or account assistance



PHASE 1 ONLINE SURVEY 4 ACCESS PATHS

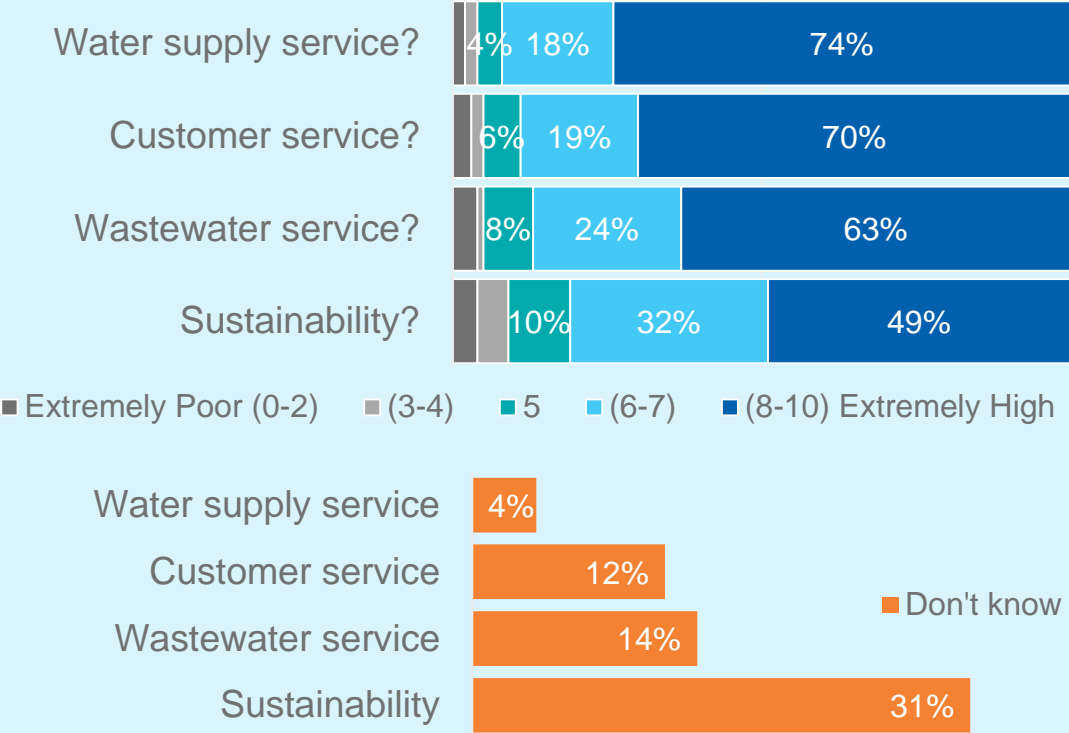
Online panel n=500 households
HW database n=539 database of household customers

Results weighted to reflect known populations (ABS) - age, gender, income and home ownership status

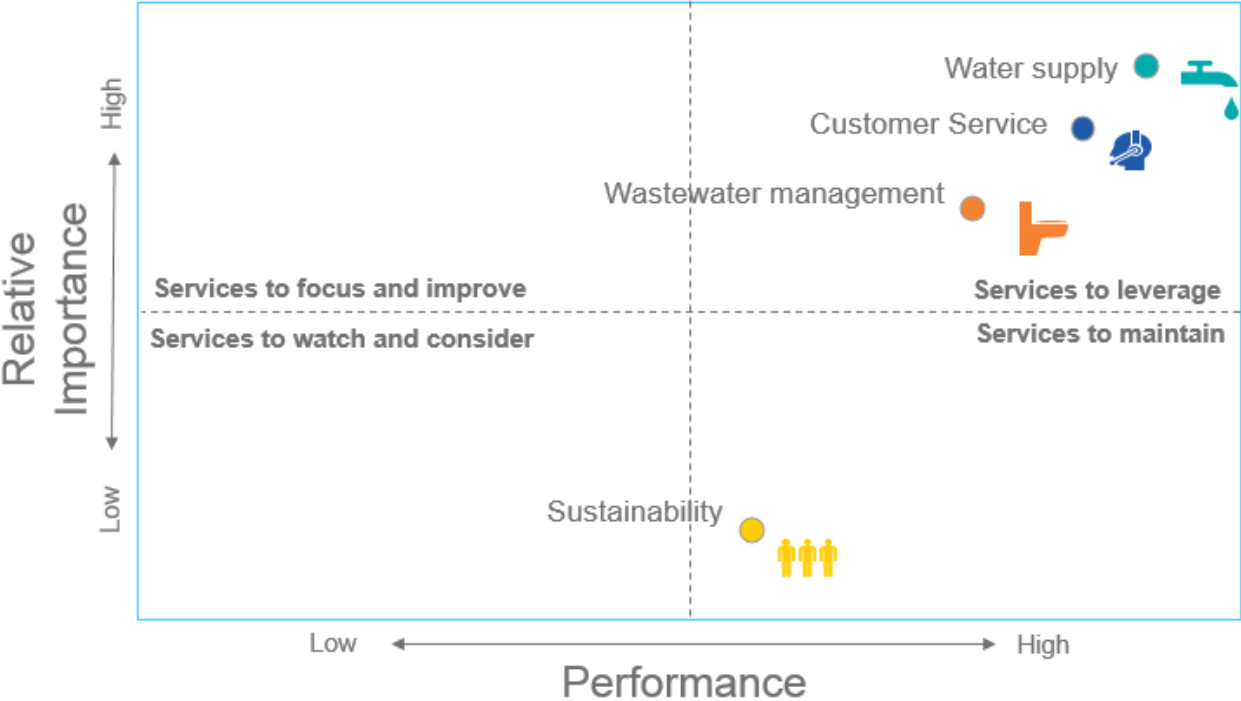
Separate open links were provided to staff and were also promoted via social media

Service levels phase 1 – survey findings

% At an overall level how well do you think Hunter Water is performing in terms of...



We perform well at the services that matter (are most likely to drive satisfaction)



Story board video link: https://youtu.be/-3WDdxLvr_I

Expectations of rebates following disruptions are not high.

For even the most disruptive situations, only around half indicated that a rebate was always necessary.



"I don't think a rebate is the right approach. An explanation and an apology maybe...honesty. Forthrightness."

1. People are most likely to always require rebates for disruptions that involve water supply services and wastewater overflows.
2. Only a minority would always require rebates for disruptions that involve poor customer service or communication.
3. When expectations of rebates were not clear cut, it often depended on the frequency, duration and timing of the interruption. This reflected findings from the qualitative research where people described a threshold of acceptability – i.e. **infrequent disruptions that are rectified promptly do not require rebates.**
4. Providing advance notification or alternative supplies offset the expectation of a rebate.

Staff sample – Differences

More likely to have children under the age of 16.

48%
(21% main sample)



Much more likely to have a total household income above \$130,000.

53%
(12% Main sample)



Much more likely to be connected to town water and wastewater (or at least to know they are).

92%
(62% main sample)



Much less likely to receive some form of government support payment, pension or allowance.

4%
(39% Main sample)



More than two thirds are aged between 34 and 54yrs.

69%
(25% main sample)

34-54

More likely to live in a household with 3-4 people.

51%
(27% Main sample)



Less likely to rate Hunter Water's performance extremely high at ensuring planned water supply interruptions occur on time.

58%
(71% Main sample)



Much more likely to indicate that they are extremely satisfied with Hunter Water overall.

83%
(71% Main sample)



Less likely to rate Hunter Water's performance at wastewater management as extremely high.

58%
(39% Main sample)



Much less likely to rate Hunter Water highly, in terms of its performance at:

- Recycling wastewater;
23%
(50% Main sample)
- Using renewable energy;
17%
(49% Main sample)
- Reducing greenhouse gases.
22%
(46% Main sample)



Social Media sample (including Your Voice Hunter Water) – Differences

Less likely to have children under the age of 16.

11%
(21% main sample)



More likely to have a total household income below \$52,000.

43%
(59% main sample)



A similar proportion indicate that they are extremely satisfied with Hunter Water overall.

70%
(59% main sample)



Much more likely to rate engaging with the community on key decisions as one of the most important aspects of community and resource management.

More likely to be male.

63%
(45% main sample)



Much more likely to provide 'prefer not to answer' responses across many demographic questions.



More likely to rate Hunter Water's performance at advising the community on actions they can take to save water 'extremely high'.

81%
(60% main sample)



52%
(60% main sample)



More likely to be older than 55 years.

81%
(59% main sample)



More likely to own their home.

96%
(59% main sample)



Less likely to rate Hunter Water highly, in terms of its performance at using renewable energy.

41%
(49% main sample)





Where numbers are green, staff or social media respondents are **significantly more likely** to believe a situation requires a rebate and where numbers are red they are **significantly less likely** to believe that a situation requires a rebate (than the general public/ main sample).

Situation	Main Sample (n=1,037)	Staff (n=108)	Social media (n=54)
If wastewater overflows onto your property several times per year (Note: cleaned and disinfected as soon as possible)	59%	74%	78%
If the tap water has an unpleasant smell or taste	56%	33%	50%
If the tap water is dirty (it is discoloured)	51%	27%	41%
If there is noticeable wastewater odour	36%	18%	35%
If there is an unplanned interruption to water supply 3+ times in a year	37%	59%	41%
If there is a planned interruption to water supply three or more times in a year	24%	37%	28%
If there is a planned interruption to water supply (e.g. for maintenance) - and advance notice is provided	13%	7%	9%
If a phone call is not answered (or is put on hold) for more than 10 minutes	19%	7%	22%



Hunter River Estuary Wastewater Masterplan

Frances Rutledge



TODAY

- What is water quality like in the estuary and what are the key processes that influence water quality?
- What is Hunter Water aiming to achieve through the Masterplan?
- How can the Hunter River Estuary Wastewater Masterplan influence water quality and deliver on community values?





Farley WWTW

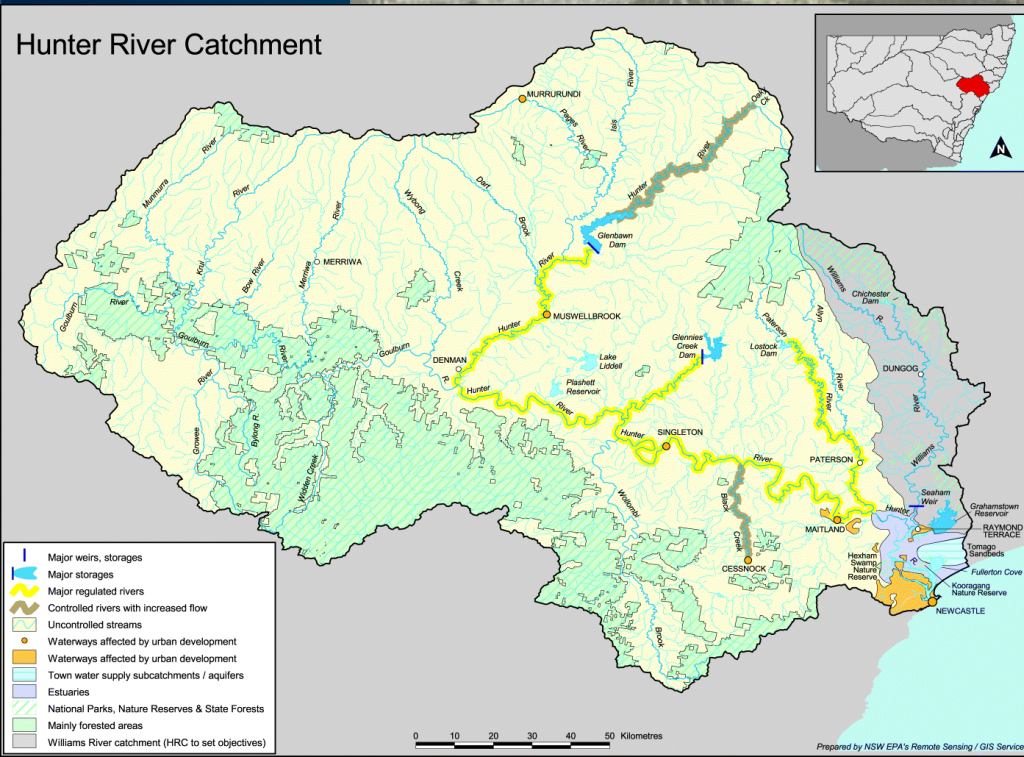
Morpeth WWTW

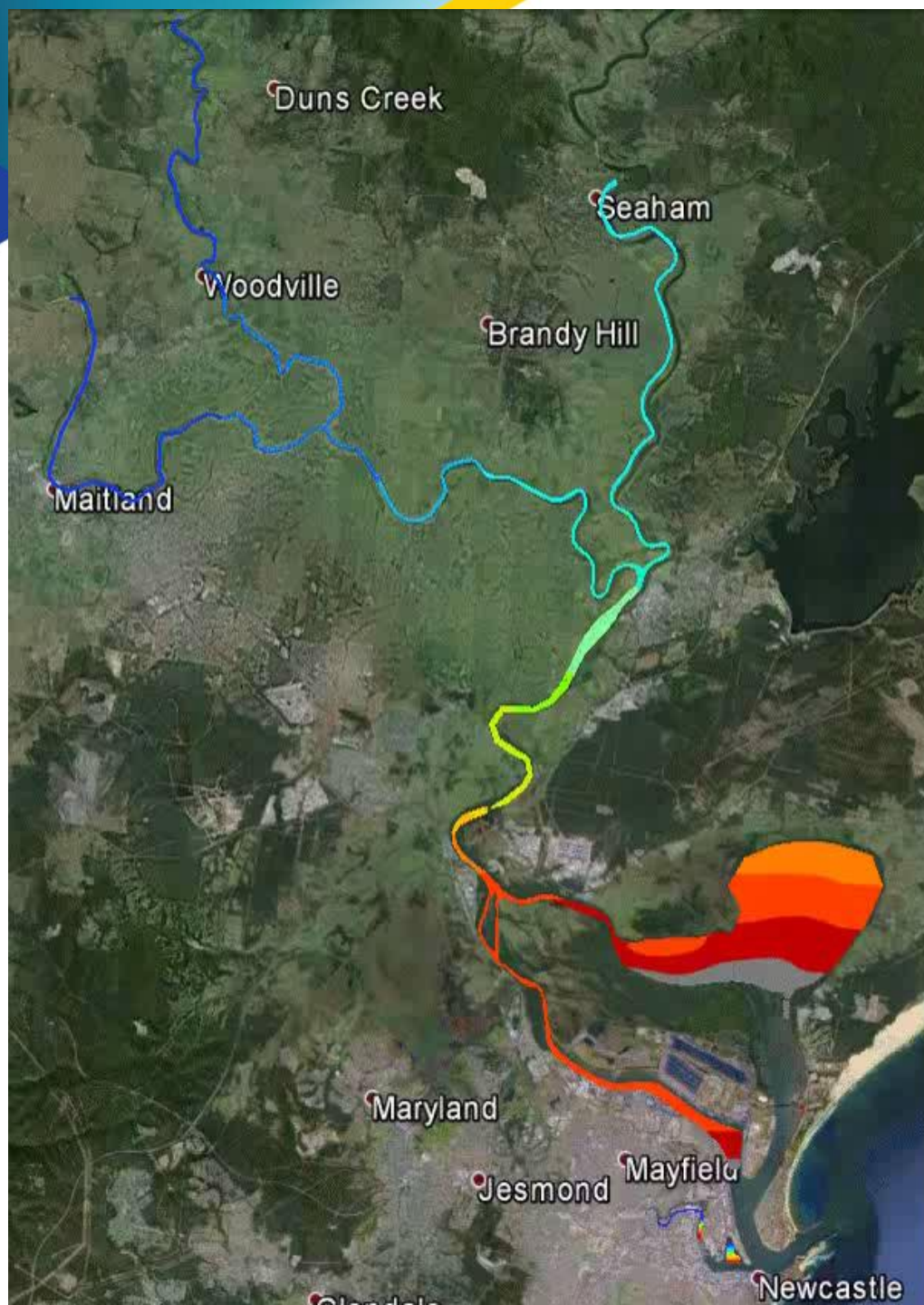
Raymond Terrace WWTW

Kurri Kurri WWTW

Shortland WWTW

Hunter River Catchment





Hunter River inflow

boundary inflows unknown

Patterson River

High biomass due to long residence times and internal nutrient recycling

Williams River

High biomass due to long residence times and internal nutrient recycling

Hunter River tidal pool

Freshwater biomass peak due to high nutrient concs and moderate residence times

Transition zone

Biomass limited by short residence times

Mid Estuary

Estuarine biomass peak due to high nutrient concs and moderate residence times

Lower Estuary

Low biomass due to short residence times

Throsby Creek

moderate biomass due to high nutrient concs and long residence times

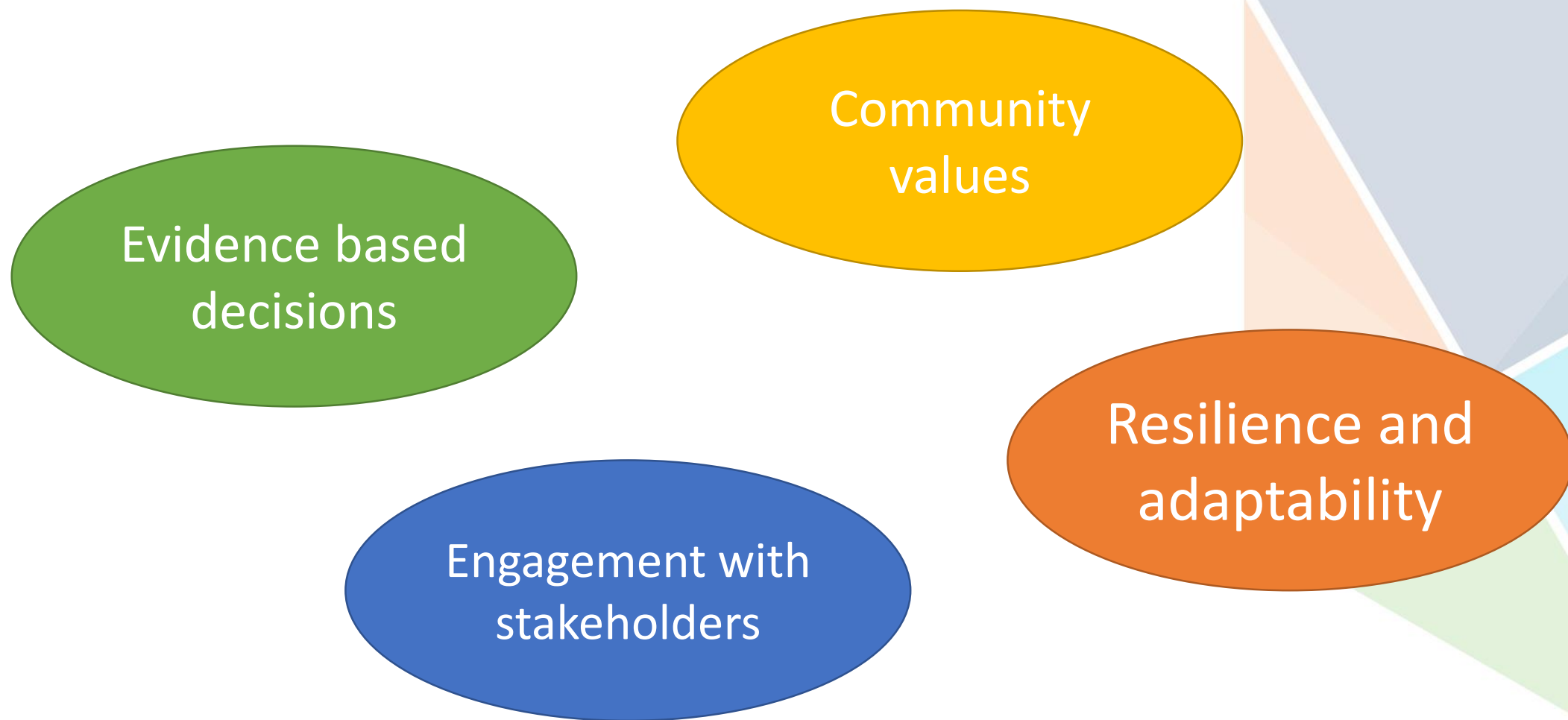


VISION & GOALS

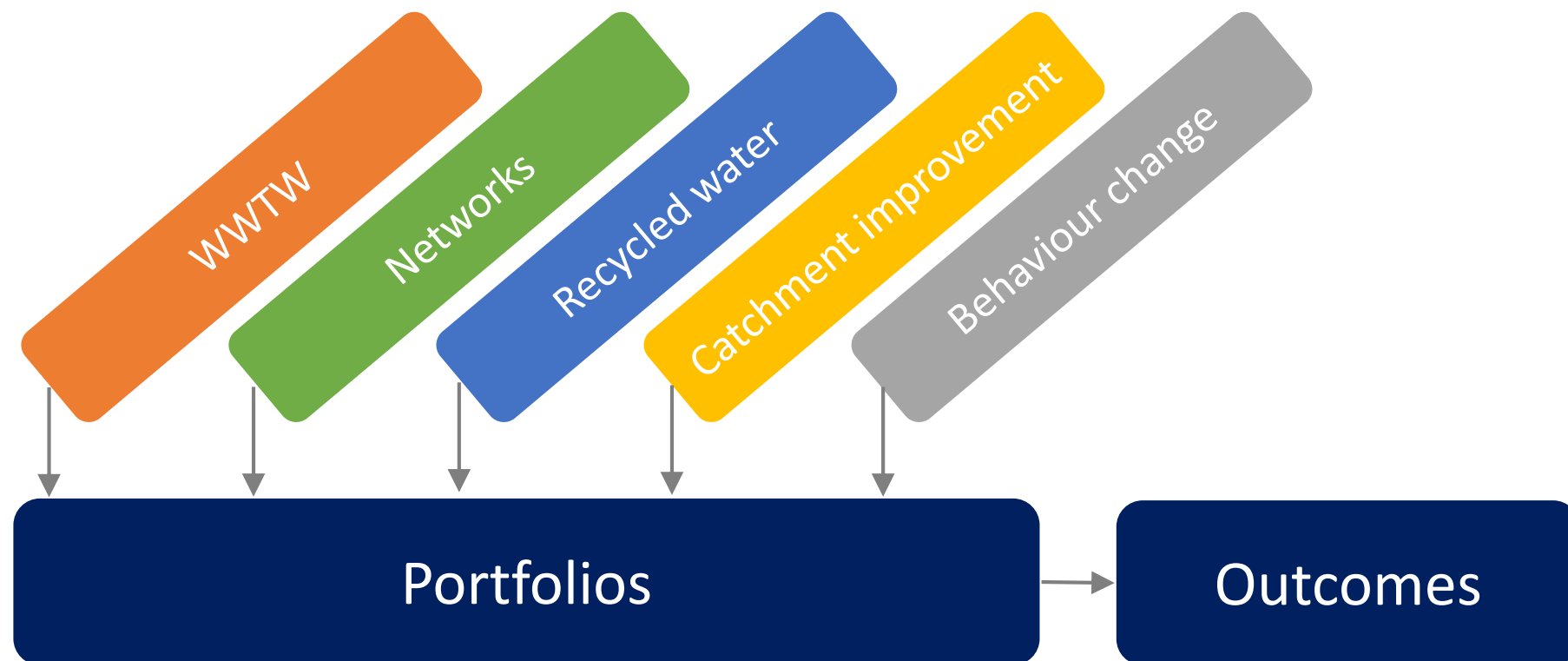
A resilient "Resource Recovery" system that, through collaboration, enables a healthy environment, thriving communities and a sustainable economy

Theme	Goals
Our Customers & Communities	Ensure healthy communities & enhance community wellbeing
	Provide affordable & high-quality service to our customers
Our Environment	Protect and restore our ecosystems & biodiversity values
	Contribute to a circular economy
Our Organisation	Be a valued partner
	Build an enabling policy and regulatory environment
	Support the regional economy
	Enhance organisational resilience

PRINCIPLES OF DECISION-MAKING

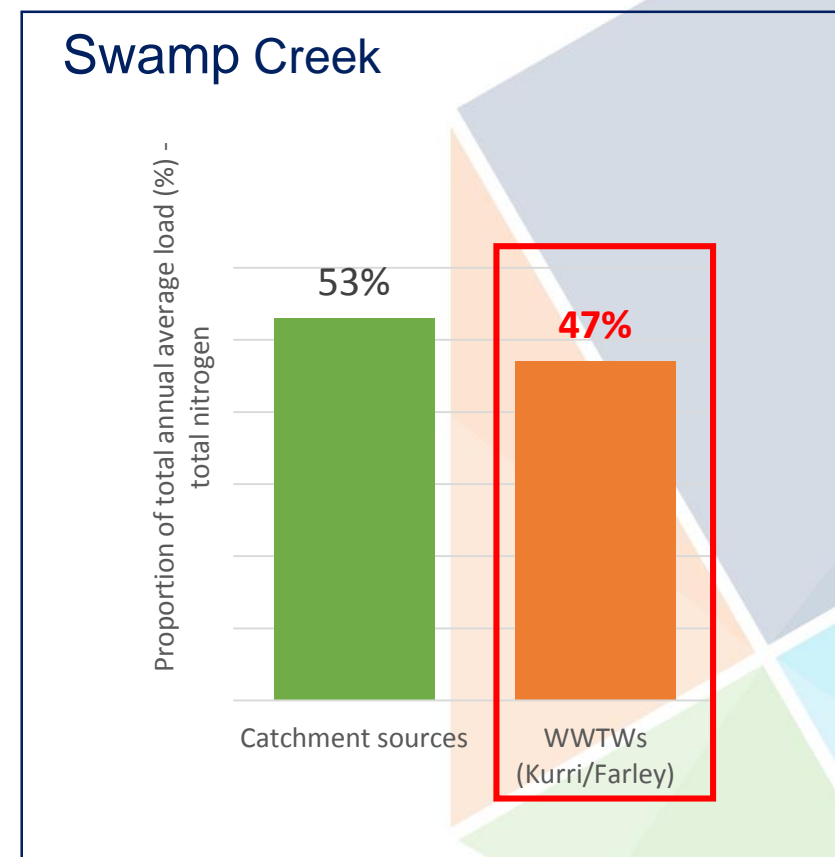
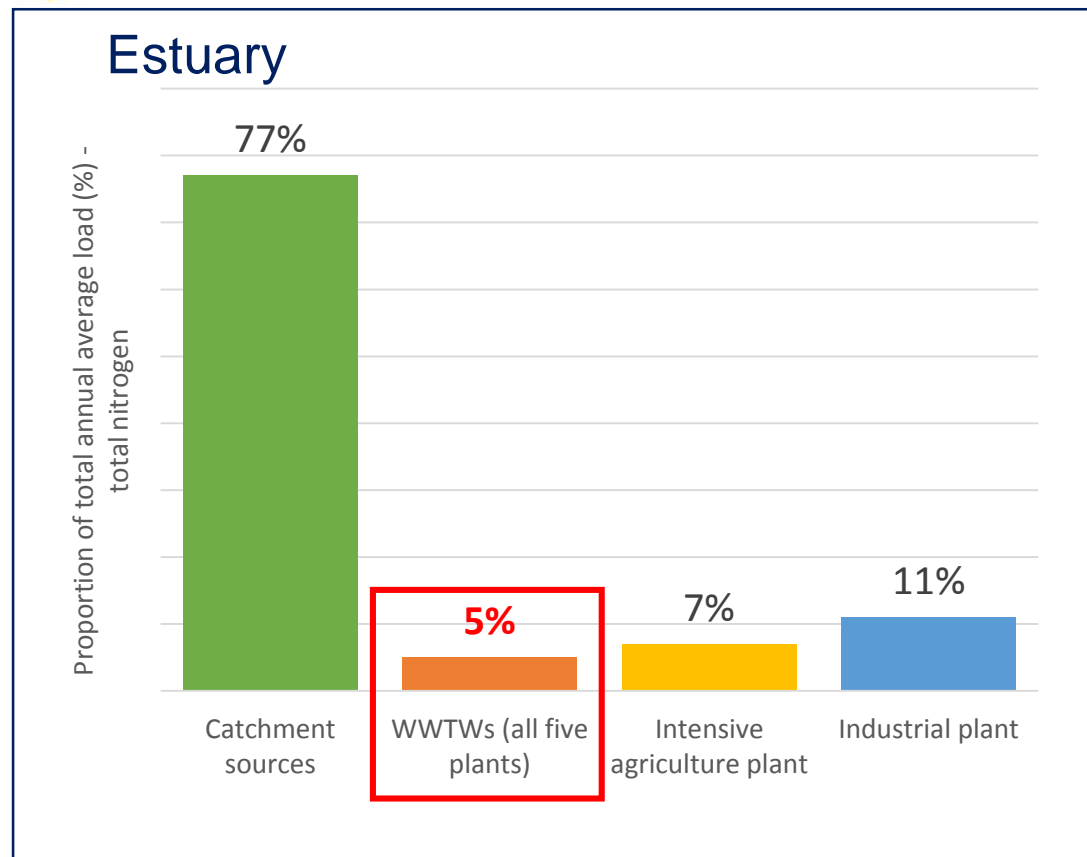


OPTIONS & PORTFOLIOS





HUNTER WATER'S ROLE IN CATCHMENT MANAGEMENT



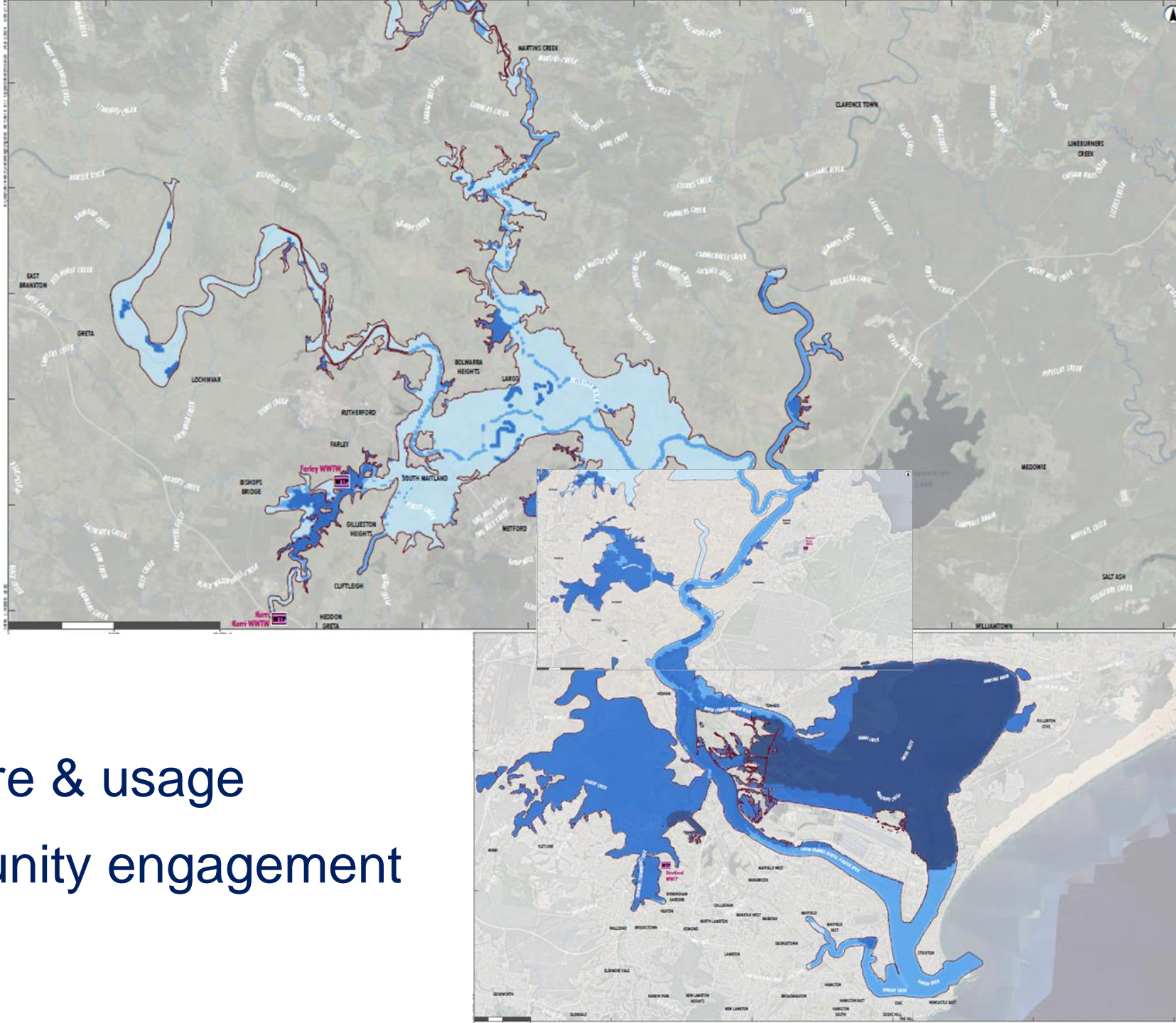
Build awareness

Align goals & get
feedback

Broader catchment
management

COMMUNITY VALUES

- Mapped values
- Validate values - where & usage
- Stakeholder & community engagement



KEY POINTS

- Aim to set strategic direction for HRE WWTWs
- Aligns and overlaps with a number of other strategic projects (Lower Hunter Water Security Plan, Biosolids Strategy, Reuse Program)
- Reflect community values in decision-making
- Estuary is dynamic and complex
- To get better outcomes for our customers and the community need to improve co-ordination in estuary management through advocacy



THANK YOU



LAUREN RANDALL

Program Lead Biosolids &
Resources

Hunter Water



WHAT WILL WE COVER TODAY?

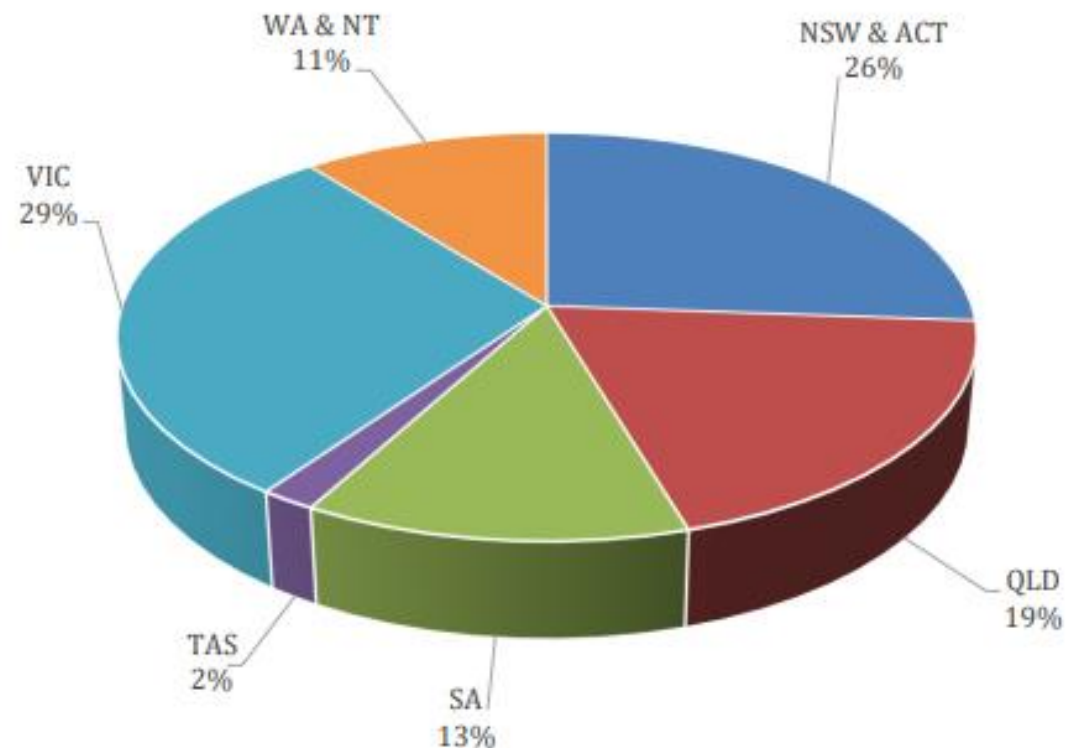
1. What are biosolids and what do we do with them?
2. What other options exist and why should we consider these?
3. How can we maximise the value of biosolids as a resource and improve environmental, social and economic outcomes for our customers and communities?



WHAT ARE BIOSOLIDS?

- By-product of sewage treatment
- 10%-85% water
- 15%-90% solids
- Nutrient rich
- Can be beneficially reused
- 371,000 dry tonnes (2.3 million wet tonnes) per year in Australia (ANZBP)

**Biosolids Production in Australia
(2018/19)**

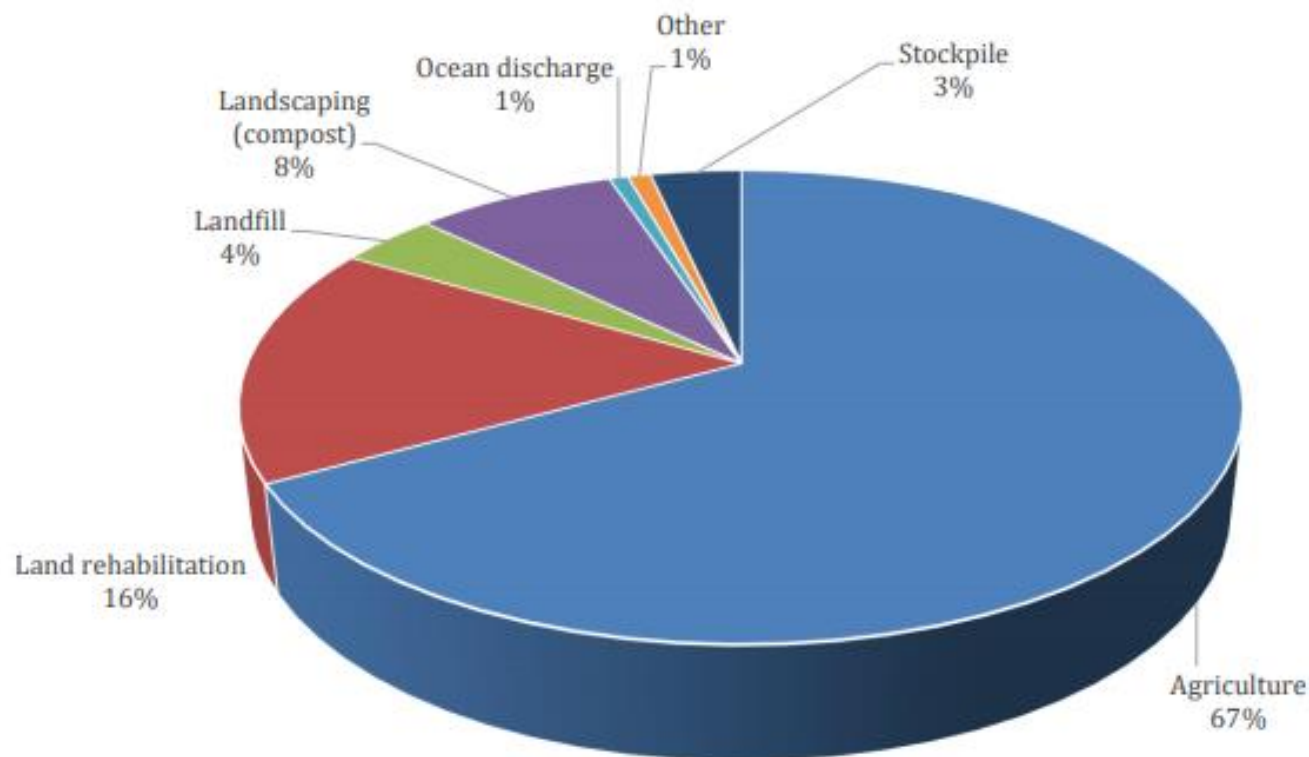


Source: Australian & New Zealand Biosolids Partnership

WHAT ARE BIOSOLIDS USED FOR?

- Soil improver / fertiliser
 - Agriculture
 - Land rehabilitation
- Compost
- Energy recovery
 - Electricity
 - Heat
 - Biofuels
- Other (e.g. construction)

Total Biosolids Production – Australia & New Zealand (2018/19)



Source: Australian & New Zealand Biosolids Partnership

BIOSOLIDS LAND APPLICATION

- Improve crop production and soil health
- Reduce erosion and protect water quality
- Strictly regulated



HOW ARE BIOSOLIDS TREATED?

- Stabilisation
 - Minimise odours
 - Reduce pathogens
 - Aerobic digestion
 - Anaerobic digestion
 - Sludge lagoons



Aerobic digestion



Anaerobic digestion and
co-generation

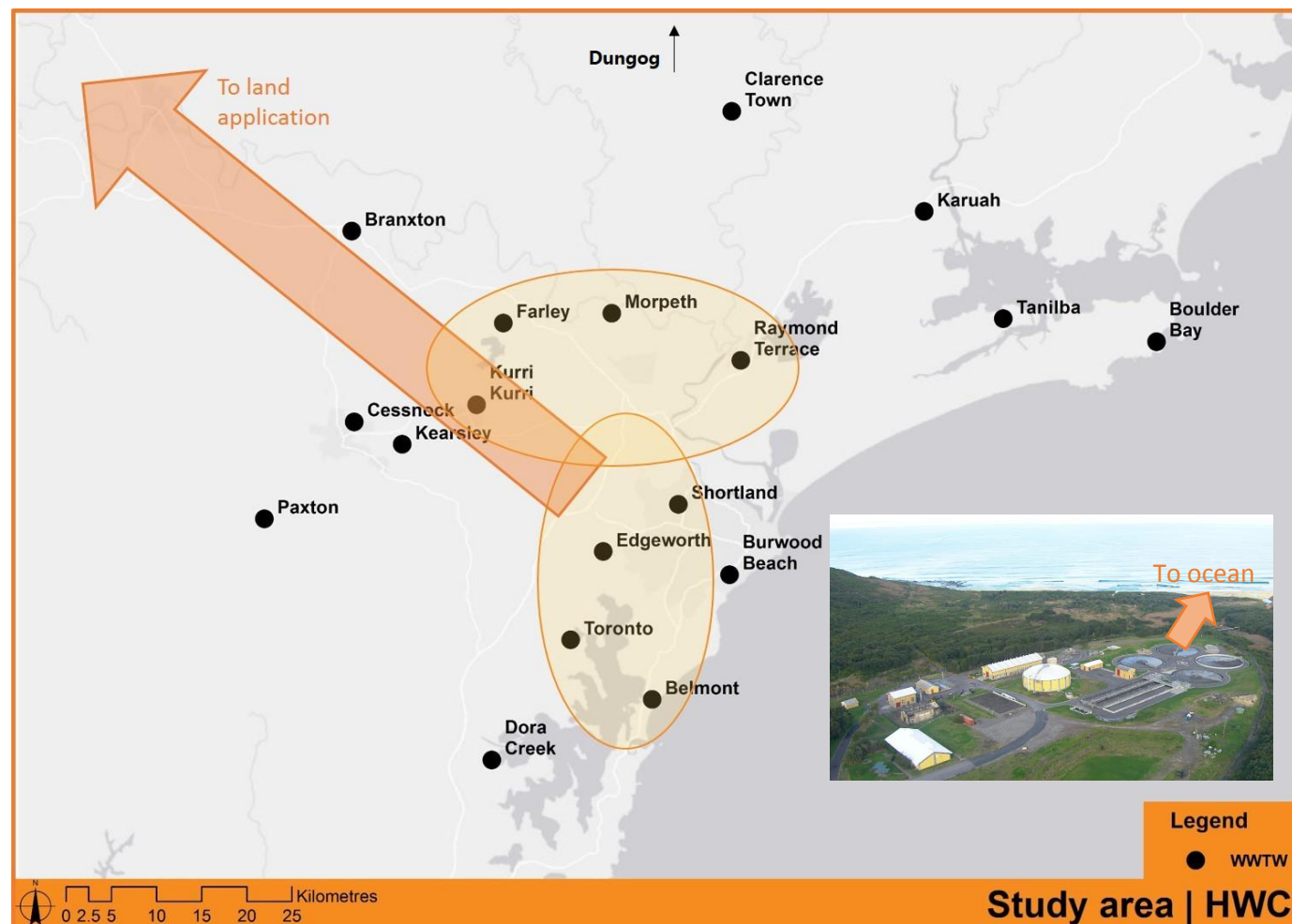
HOW ARE BIOSOLIDS TREATED?

- Thickening and Dewatering
 - Improve handling
 - Minimise haulage



HOW DO WE MANAGE OUR BIOSOLIDS?

- 19 treatment plants
- 45,000 wet tonnes (6,000 dry tonnes) per year
- 80% from 8 sites
- 70% to agriculture
- 30% to mines
- Burwood Beach biosolids released to ocean



AGRICULTURE – HUNTER VALLEY



Before



After

MINE REHABILITATION – HUNTER VALLEY



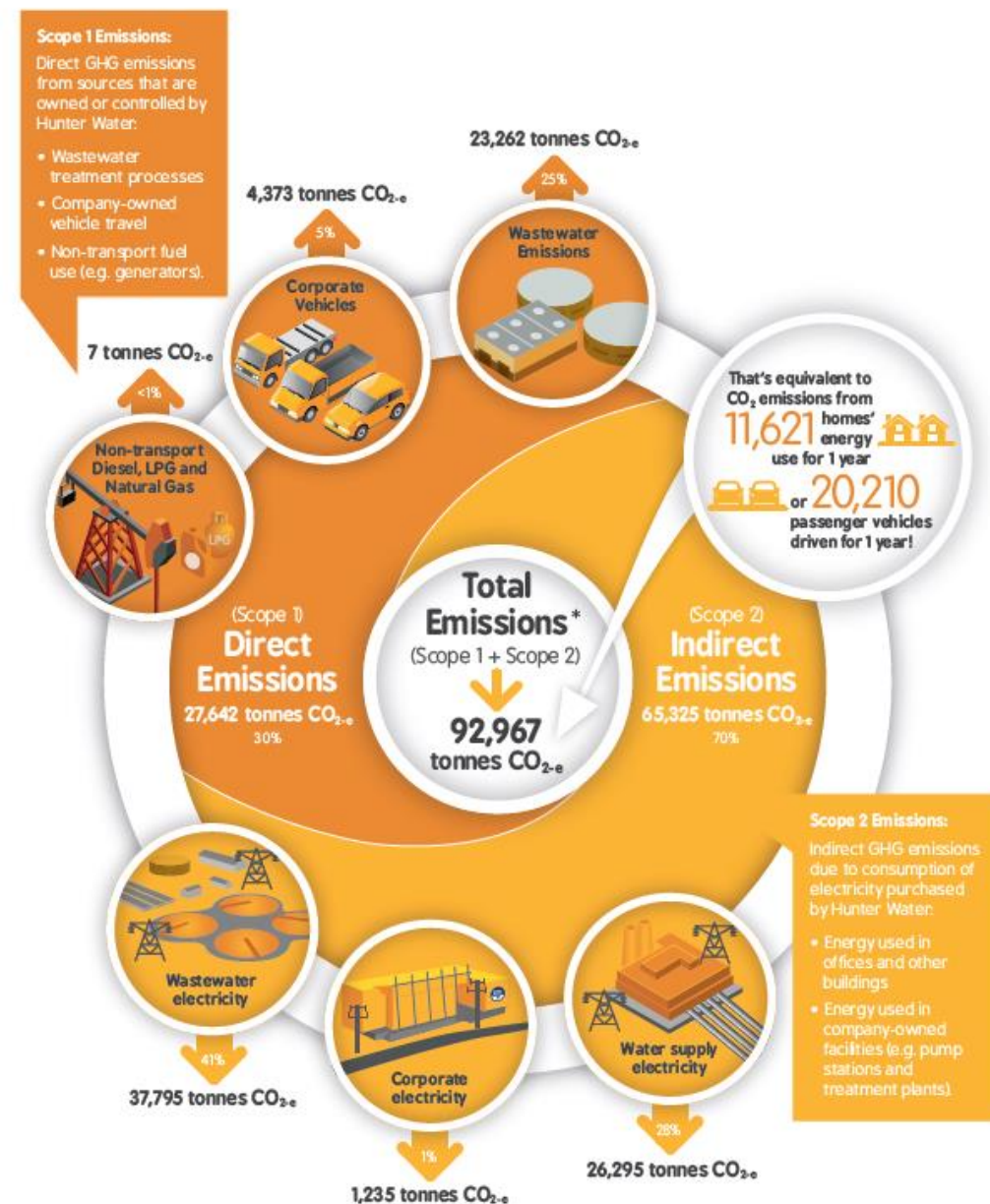
Before



After

WHY CONSIDER OTHER OPTIONS?

- Cost
- Growth
- Climate change (carbon neutral goal)
- Circular economy and resource recovery
- Uncertainty about the future:
 - Regulation
 - Markets



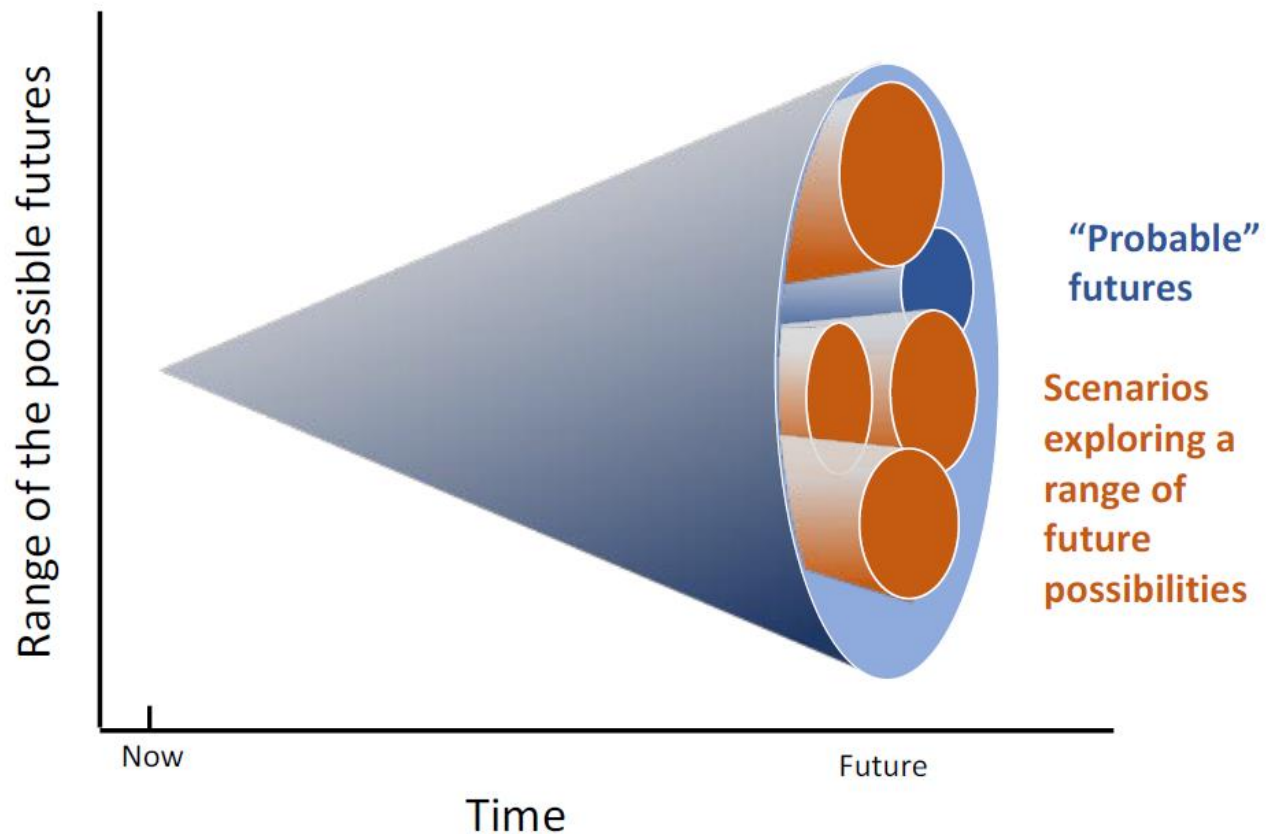


WHAT OPTIONS DO WE HAVE?

- Centralised biosolids treatment
- Energy recovery
- Co-treatment (biosolids and organic waste)
- Alternative technologies
- New product streams
- Potential revenue streams



WHAT IF THINGS CHANGE?



- Political
- Economic / markets
- Social / demographic
- Technological
- Legal / regulatory
- Environmental



WHAT IF THINGS CHANGE?

- Biosolids land application banned / market closure
- Organic waste to landfill banned / waste recovery targets
- Changes to biosolids guidelines
- Licence changes / nutrient recovery targets
- Carbon tax / market
- Biosolids to ocean ceased

**ADAPTIVE PATHWAYS PLANNING
APPROACH**





WHAT DO WE HOPE TO ACHIEVE?

- Improve financial and economic outcomes
- Enable sustainable growth
- Reduce carbon emissions
- Resource recovery / waste avoidance / circular economy
- Resilience through adaptive pathways planning approach



lauren.randall@hunterwater.com.au