

Scenarios

Scenario 1 – Pink post-it notes

External conditions are favourable and the region makes the most of it:

- The region is proactive in harnessing new technology, accessing new markets, planning for shifts in demand and diversifying to increase business resilience – the region has a competitive advantage
- Early and targeted investment in alternative water sources has meant water is secure, affordable and accessible to all
- McLaren Vale wine remains a premium product popular with consumers and markets remain profitable
- The region faces extreme weather events (drought, flooding, hail etc) more frequently and with greater intensity than historical records
- The region values the environment, has invested in biodiversity and local ecosystems are resilient and thriving, though obviously impacted by climate change
- Land use planning ensures that urban areas remain within the existing urban footprint, utilising WSUD. Develop does not encroach on agricultural land or biodiversity
- Governance and regulation are local with a sustainable regionally driven regulatory environment, water is managed within sustainable limits, land use planning is undertaken locally and environmental assets are protected

Scenario 2 – Yellow/gold post-it notes

Conditions are good for some but it results in inequality:

- Some businesses harness new technology, access new markets and plan for shifts in demand, but this isn't widespread enough for the region as a whole to benefit from improved efficiencies or have a competitive advantage.
- Individual / private investment in alternative water sources means some have access but it is not accessible to all
- McLaren Vale wine remains a premium product popular with some consumers but markets contract and sales are more challenging and limited
- The region faces extreme weather events (drought, flooding, hail etc) more frequently and with greater intensity than historical records
- Governance and regulation is corporate sustainability driven – private companies imposing tougher environmental regulation than local or national government in order to meet their legal trade/compliance/other and customer demands.
- High value ecosystems have been maintained but biodiversity and ecosystem health has generally declined
- Land use planning ensures that urban areas remain within the existing urban footprint, and while there is no impact on agricultural land or biodiversity, planning is poor and the result is sub-standard housing, developments that detract from the rural village feel, and poor water management

Scenario 3 – Orange post-it notes

External conditions are good but there are missed opportunities:

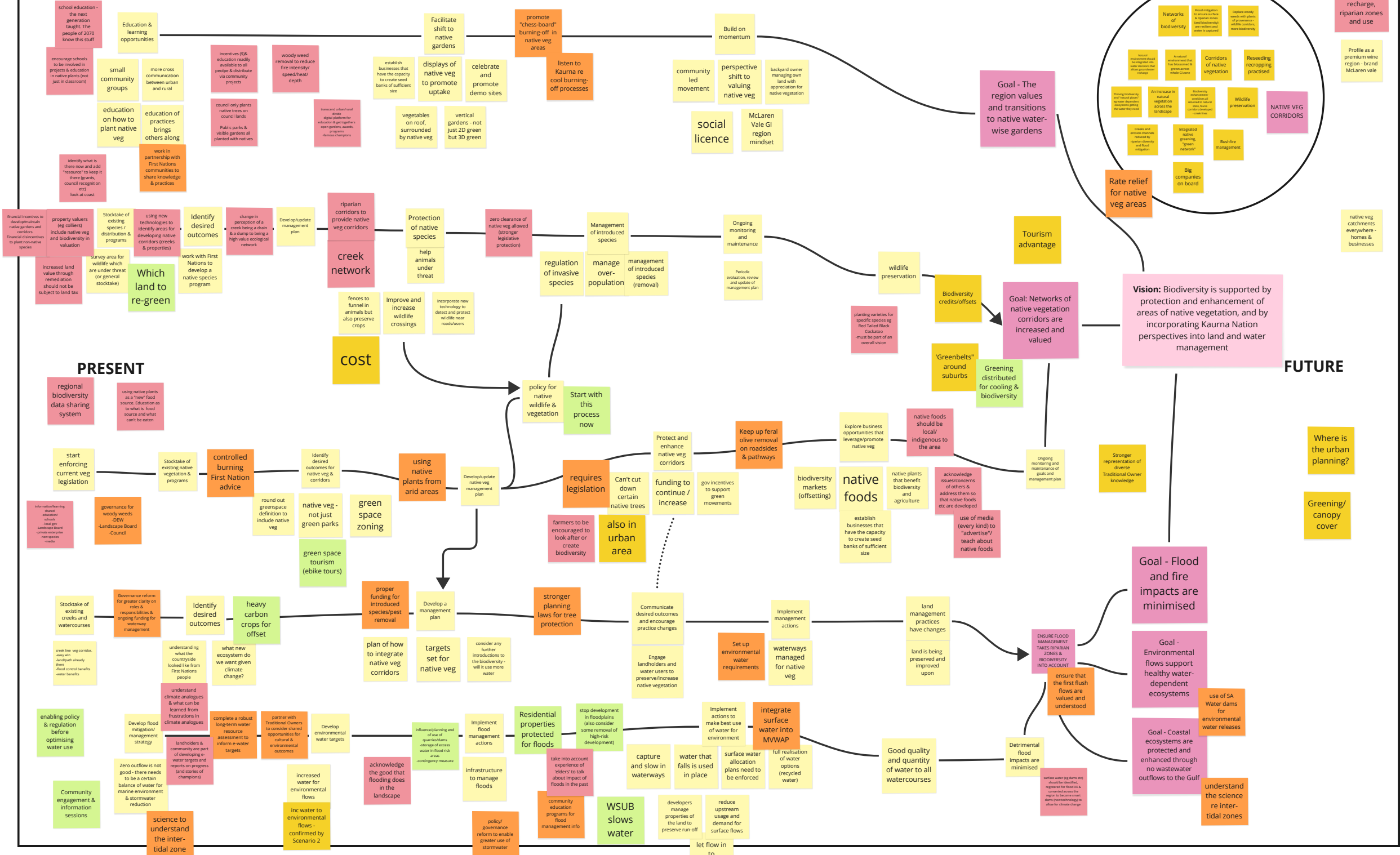
- The region is resistant to uptake of new technology and markets, businesses have been slow to adapt to shifts in demand impacting on business resilience – the region as a whole becomes less competitive.
- There is investment in alternative water sources but they are climate-dependent and not secure in all years
- For those that have premium wine to sell, McLaren Vale wine remains popular and profitable in international markets
- Governance arrangements are in place to support regional outcomes, but there is complacency to make the decisions needed to do this
- The region faces extreme weather events (drought, flooding, hail etc) more frequently and with greater intensity than historical records
- Lack of sustained and coherent protection and investment eventually results in ecosystems that are in poor health
- Planning is poor and the result is sub-standard housing, developments that detract from the rural village feel, and poor water management

Scenario 4 – Green post-it notes

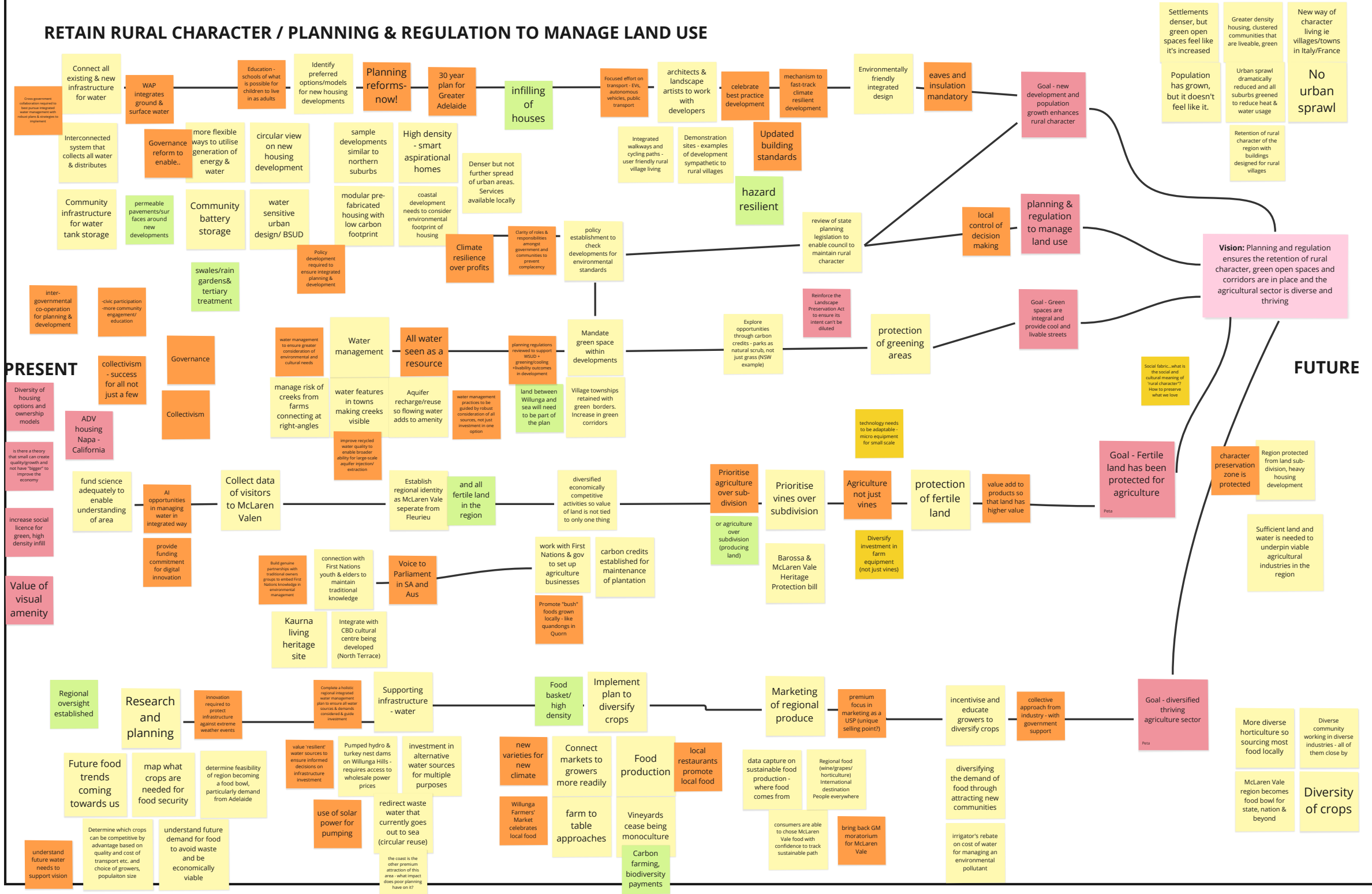
External circumstances are challenging but the region makes the best of it:

- The region has been proactive in harnessing new technology, accessing new markets, planning for shifts in demand and diversifying to increase business resilience – efficiency has improved and the region has a competitive advantage.
- Early and targeted investment in alternative water sources has meant water is secure, affordable and accessible to all
- Over time consumers have moved away from alcohol
- The region faces extreme weather events (drought, flooding, hail etc) more frequently and with greater intensity than historical records
- Centralisation of regulatory functions means regions have less influence over water, land use and environmental regulations.
- Nevertheless, the region values the environment, and has invested in biodiversity
- Regional action seeks to ensure that urban areas remain within the existing urban footprint, utilising WSUD, and minimises impacts on biodiversity wherever possible. Local ecosystems are resilient and thriving where they have been protected.

NATIVE VEGETATION - FLOOD - FIRE MANAGEMENT



RETAIN RURAL CHARACTER / PLANNING & REGULATION TO MANAGE LAND USE



CIRCULAR ECONOMY

community ask for regulation and policy

Education for all households as to effective use of water (less)
Internet of things harnessed for better real-time data monitoring (supply and demand)
Realise that water going out to sea is vital for good ecological outcomes
Storm outflows to sea are still maintained and unpolluted to maintain seagrass and marine ecosystems

Use Aquifer Storage and Retrieval everywhere for use in drought!!
Integrate water sources
"used" water is gathered in smaller physical areas (suburb 7 etc) and recycled i.e. gathering stations!!
Facilitate case with council and government applications for on farm change of water source

Enabling policy and regulation
Fully circular water supply - no more output to the gulf
efficient circular water resilience prepares for the future
Closed loop water use through an integrated water network

closed loop of all water
Water flows are slowed and harvested more - this happens much earlier

water insecurity (growing demand, water allocation, growing population, climate change etc)

Optimise water use
outsourcing of water intensive production
water (quality, quantity, accessibility, stability)
Precision irrigation in viticulture
water efficient tech

Check out if Lonsdale land is available
Water storage is built
Sun farming
precision agriculture
digitised and sensors - precision watering
energy & water microgrids at neighbourhood scale
Innovation/new technology
Less Murray water, more self sufficient

optimising existing assets
consistent & sustainable for all waste water sewage systems
Integrated data management - portal
More use of River Murray water especially when excess
energy and water utility connection integrated

Centralised government regulation (delivery can be decentralised)
price on nitrogen content in water flowing out to sea
Gov. intervention and rules for wastewater - underpin recycling
Green Industries SA/DIWP/PSA - what role? Governance, policy setting and legislation, incentives?
Redirect WWTP CapEx upgrade funding to beneficial reuse of nutrient rich recycled water to 777 golf discharge ???

water resource education and knowledge sharing has created behaviour change
Excess housing runoff is reused locally for greening and habitat
Road runoff too

environment
why? for what?

Vision: Resources are used in a closed loop at all levels and scales - from water to housing to agriculture, and the concept of 'waste' no longer applies

PRESENT

Circular economy awards and funding
Circular economy taught in schools
education, research and training
university /industry research
environment & economy not mutually exclusive (mindset)
utilise crisis points eg drought, bushfire recession...
Comms - literacy of water security
work as a network across the Greater Adelaide region
"nudge" behavior change
tap into local "champions" who understand water is a finite resource
water efficiency - should use and zone water resource savings recycling methods
Incentivise behaviour change
Levels - regulation (min. standards) -incentives
Pricing elements to encourage behaviour change
How to reward "good behaviour" with water usage?
Mayor's prize for innovation funded by biggest water users
Water efficiency champions award/reward/cel celebrate efficiency in industry and households
Short/effective education TV/Facebook/TikTok shows to save water
Rewards for circularity and reuse
New practices and mindset embedded
The concept of "waste" is old fashioned. A truly circular economy is in place
Export and benefit from knowledge base
Export communities knowledge regarding water
Knowledge tourism - visitors come to learn from expertise in the region
Promote through a regional conference

FUTURE

environmental & economic benefits weighted equitably
"natural asset value" is equitably derived & applied
The economy is circular, diversified and industries are sustainable

Integration between Government Departments
cross-jurisdictional scanning
positive deviance
What can we innovate towards
Community + cultural elements
Legislation/permits
Cultural engagement
Demand is clear as is use for water
Planning and research
masterplan
Proactive planning for the future
Diversify training, skills for the future
Co-ordinator to make sure it gets delivered
Employment equity
explore new business models for circularity
University research
Open up opportunities for new industries
Studies into where water should go
Market research
make it clear what risks are being managed
Enablers to support diversification
holistic infrastructure/planning/funding/delivery (whole of system needs to be considered)
Integrate policy, technology, design construction (solutions already possible but integration the problem)
tourism/hotel accommodation
Port Stanvac development - innovation hub (catalyst)
Investigate use of Port Stanvac/ Lonsdale for water storage
Enablers for circularity
Government investment and regulation
price waste
Industry collaboration - resource recovery
reducing water and carbon footprint of products
Viticulture - identify what can be repurposed/reused or designed out
ecological factory & carbon
There's a mindset of no such thing as waste - everything is designed with the end in mind
Decarbonised green branding - attracts visitors
complementary agricultural products to viticulture
wine whales windmills
Circular utilisation of resources. Localised value-adding of agricultural produce
new market demands eg non-meat protein
Cultural tourism
linked to Tour Down Under - an eco friendly activity
Diversification of the economy
diversifies experiences in local areas
Co-ops
farm gate stores
eating local
households
Aldinga Sustainable Development
design crisis - not livable retrofitting
housing crisis - what's the opportunity?
community
streetscapes, parks, greenspaces [council controlled]
collaborative "fast enough" process
industries
outsourcing of water intensive production
Look at international examples where viticulture has been diversified
embedding sustainable practices in related trades eg plumbers
landscape/environment
Environment - right water at the right time

ALL SOURCES INTEGRATED, NO OUTFLOW OF WASTEWATER, ALL USE MONITORED

