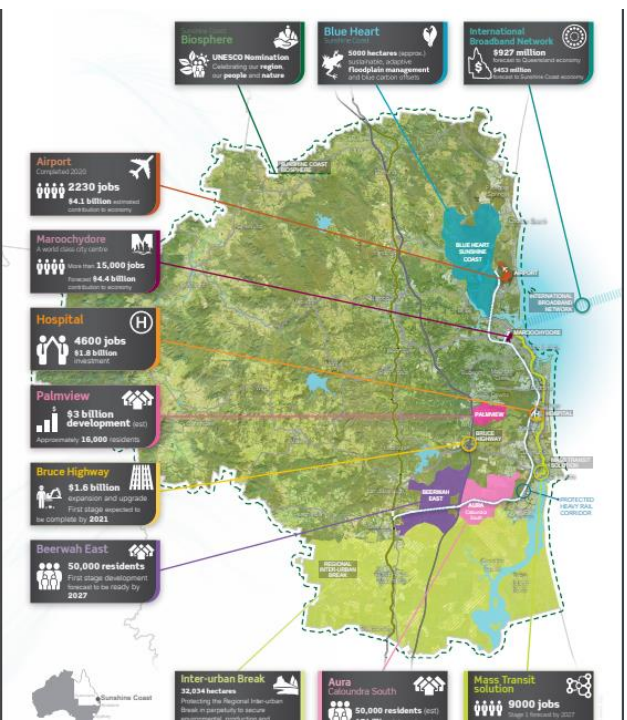
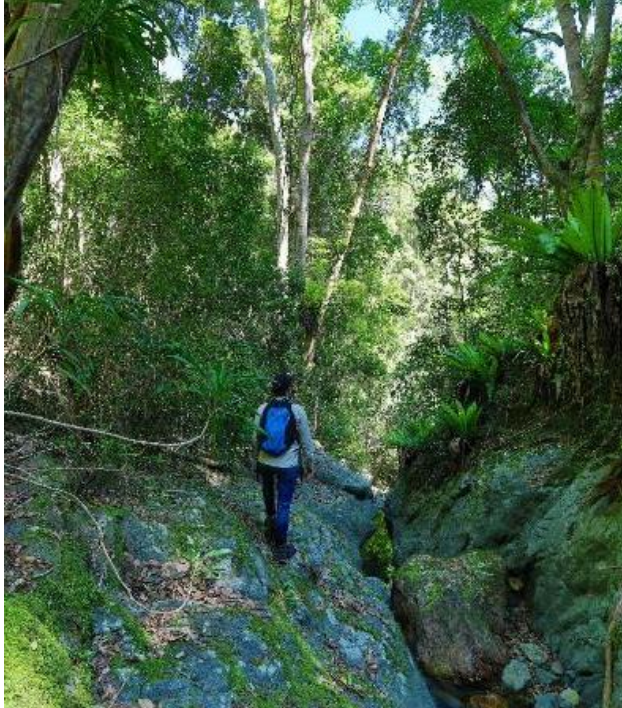


Creating a Climate Ready Sunshine Coast

Gillian Smith
Sustainability Policy, Sunshine Coast Council

Hopeful Adaptation Plenary, 1 November 2022

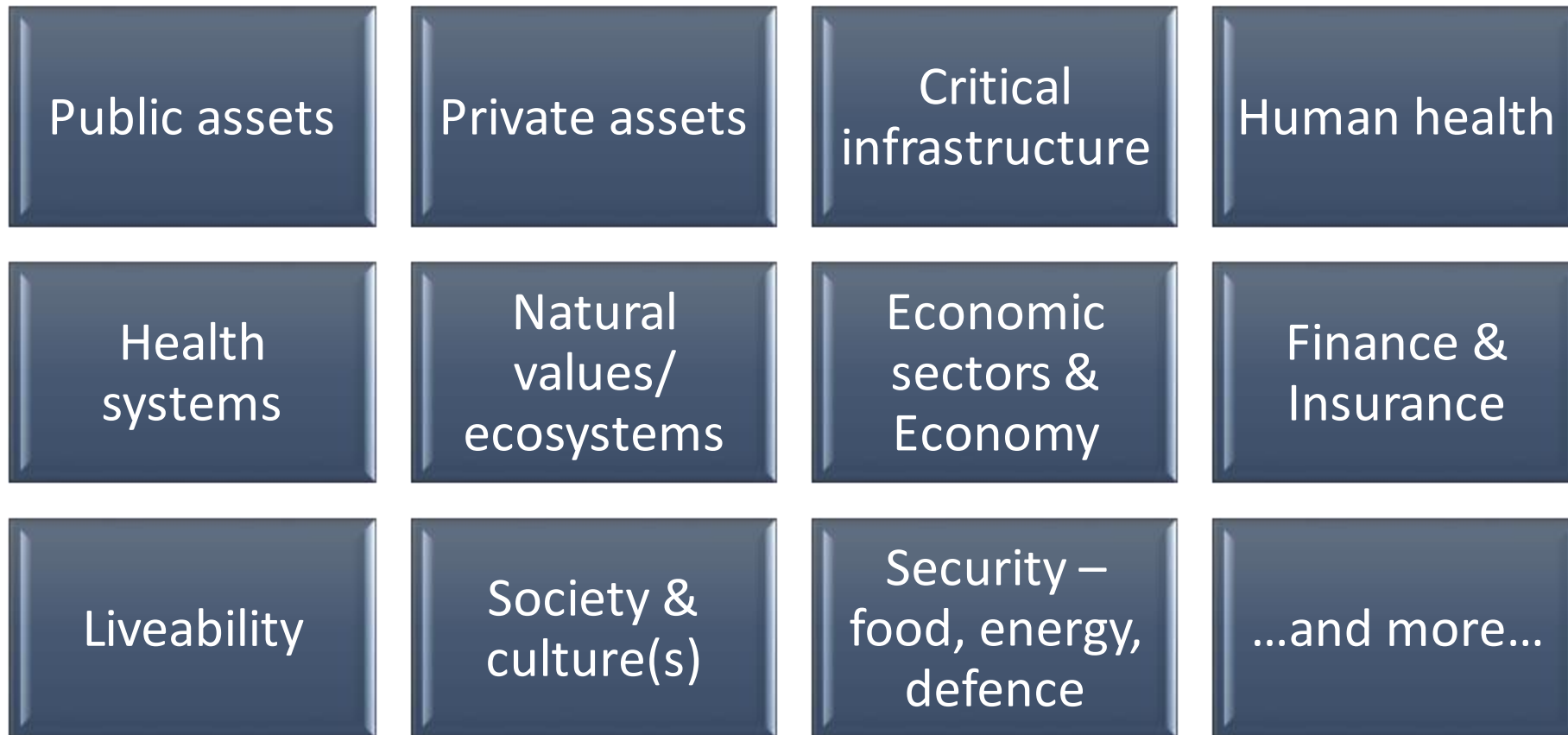


A diverse 'community of communities' undergoing rapid change

Impacts Already Upon Us

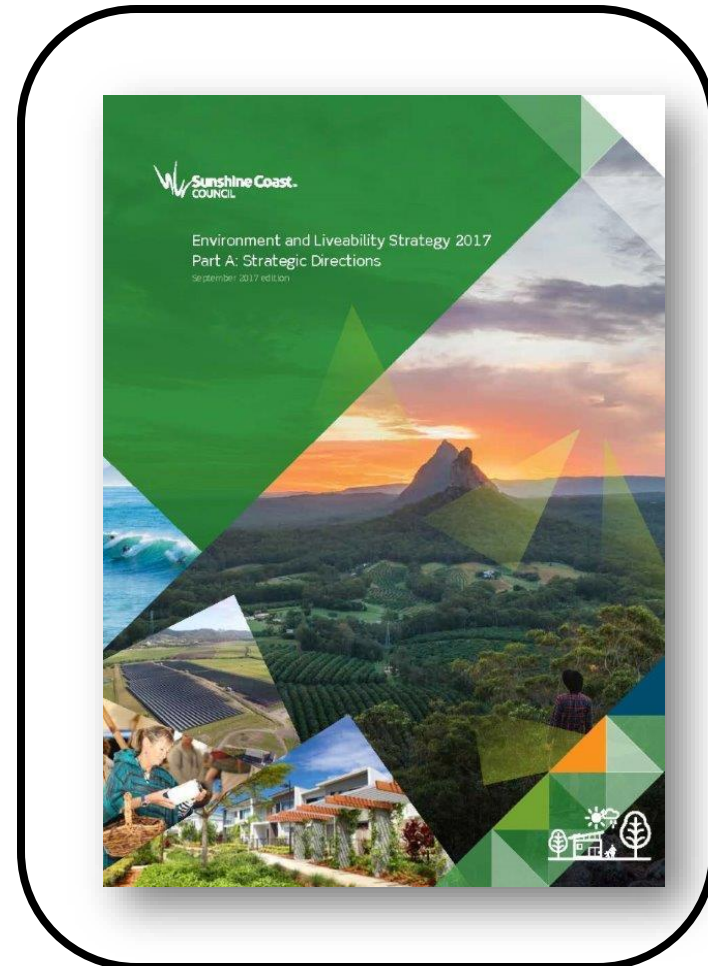
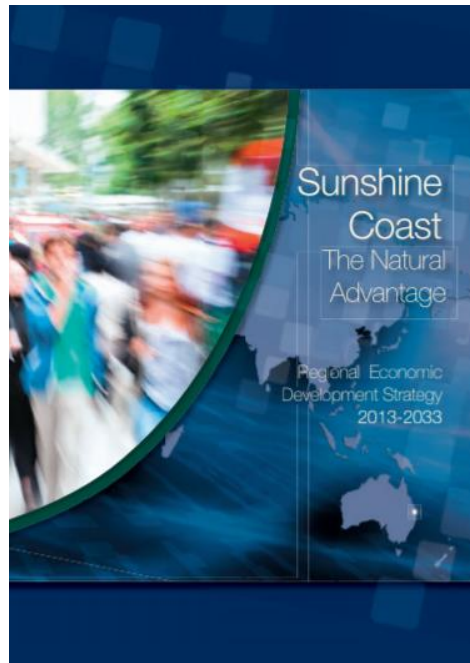


Climate Change – Systemic, Wicked and Complex



Our Climate Change Policy – Strategic, Integrated and Comprehensive

Our Vision – Australia’s most sustainable region



Our UNESCO Biosphere - Strengthening Our Strategic Approach

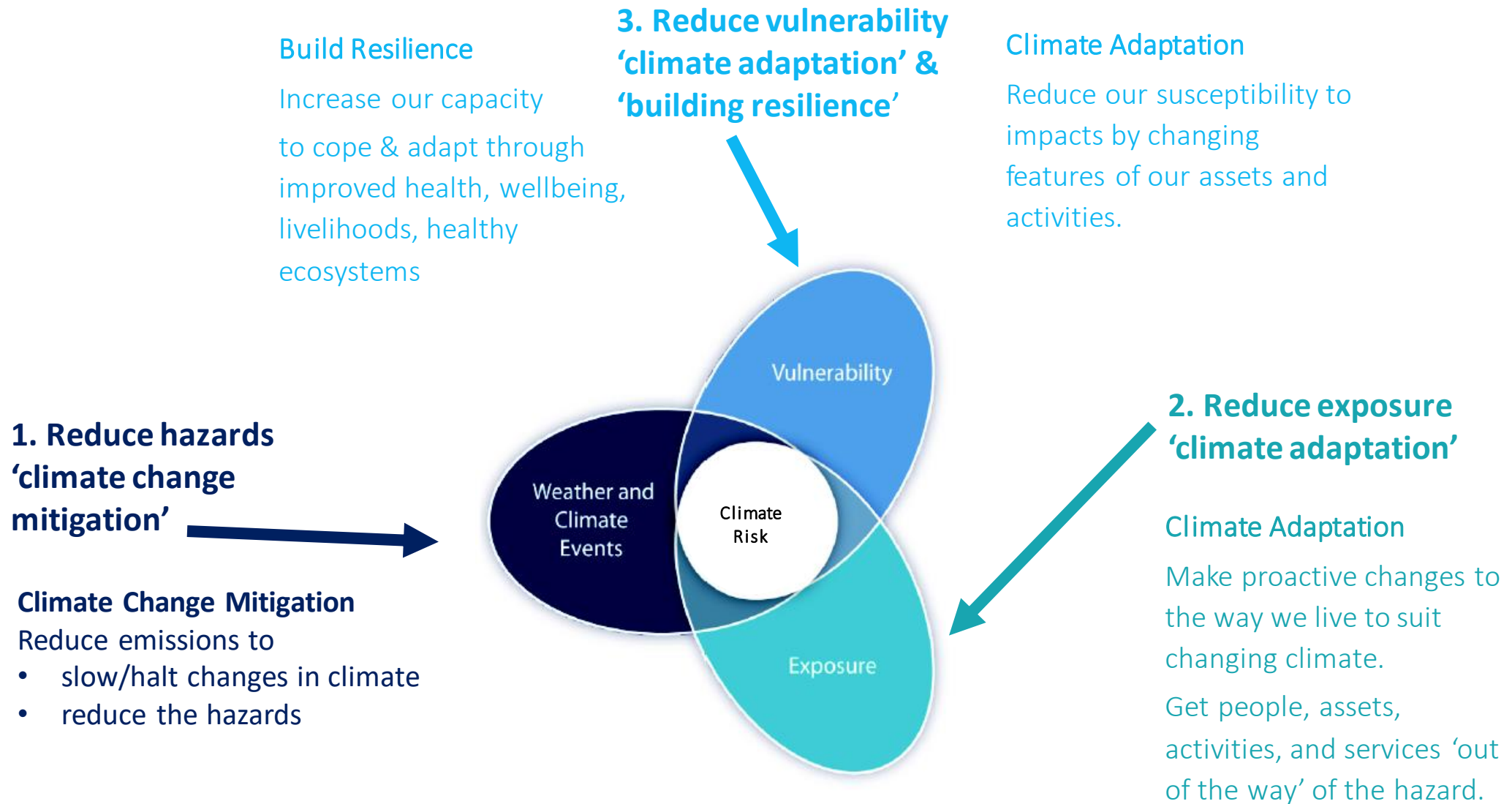


SUSTAINABLE DEVELOPMENT GOALS



Internationally renowned as a place where people live, learn, work and play sustainably.

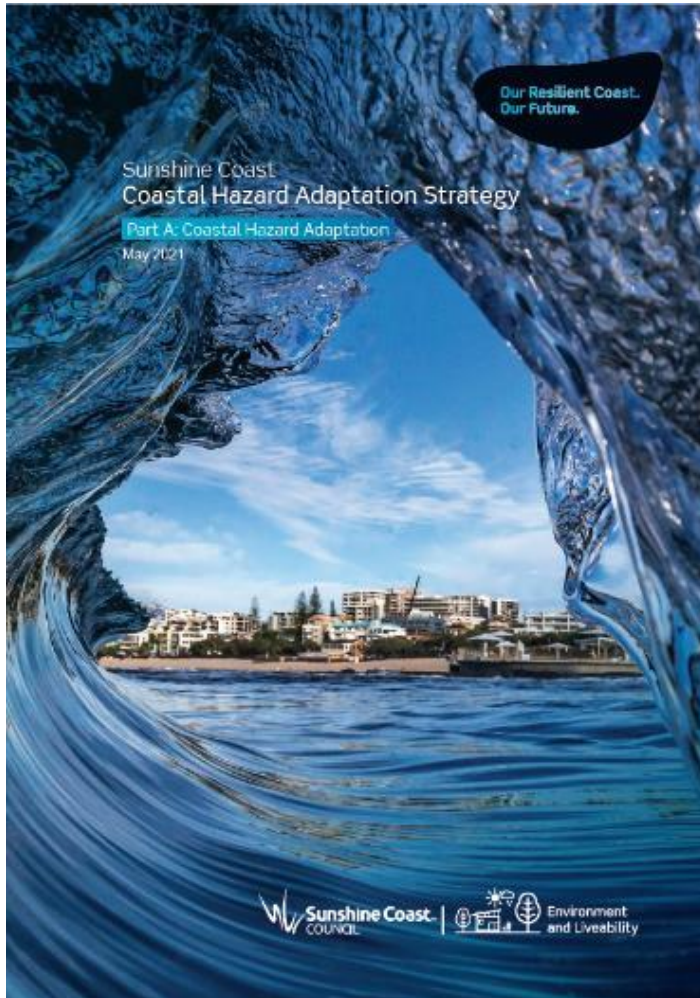
Climate Risk Management Framework Guiding Our Response



Integrated Emissions Reduction – Zero-net by 2041

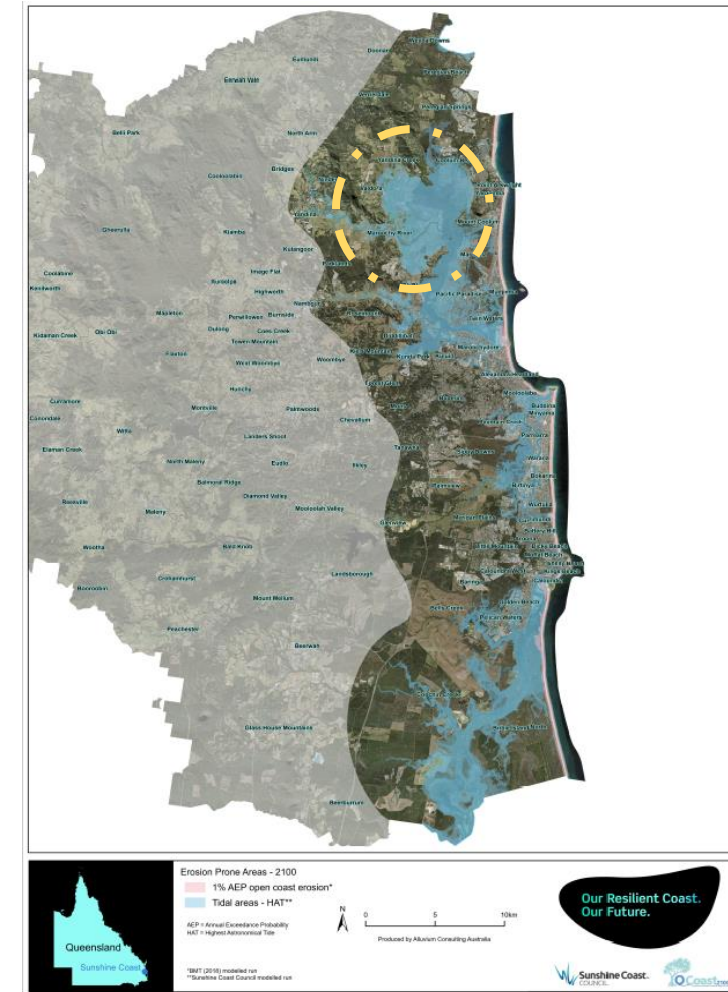


Coastal Hazard Adaptation – Proactive Long-term Planning and Change Management Process



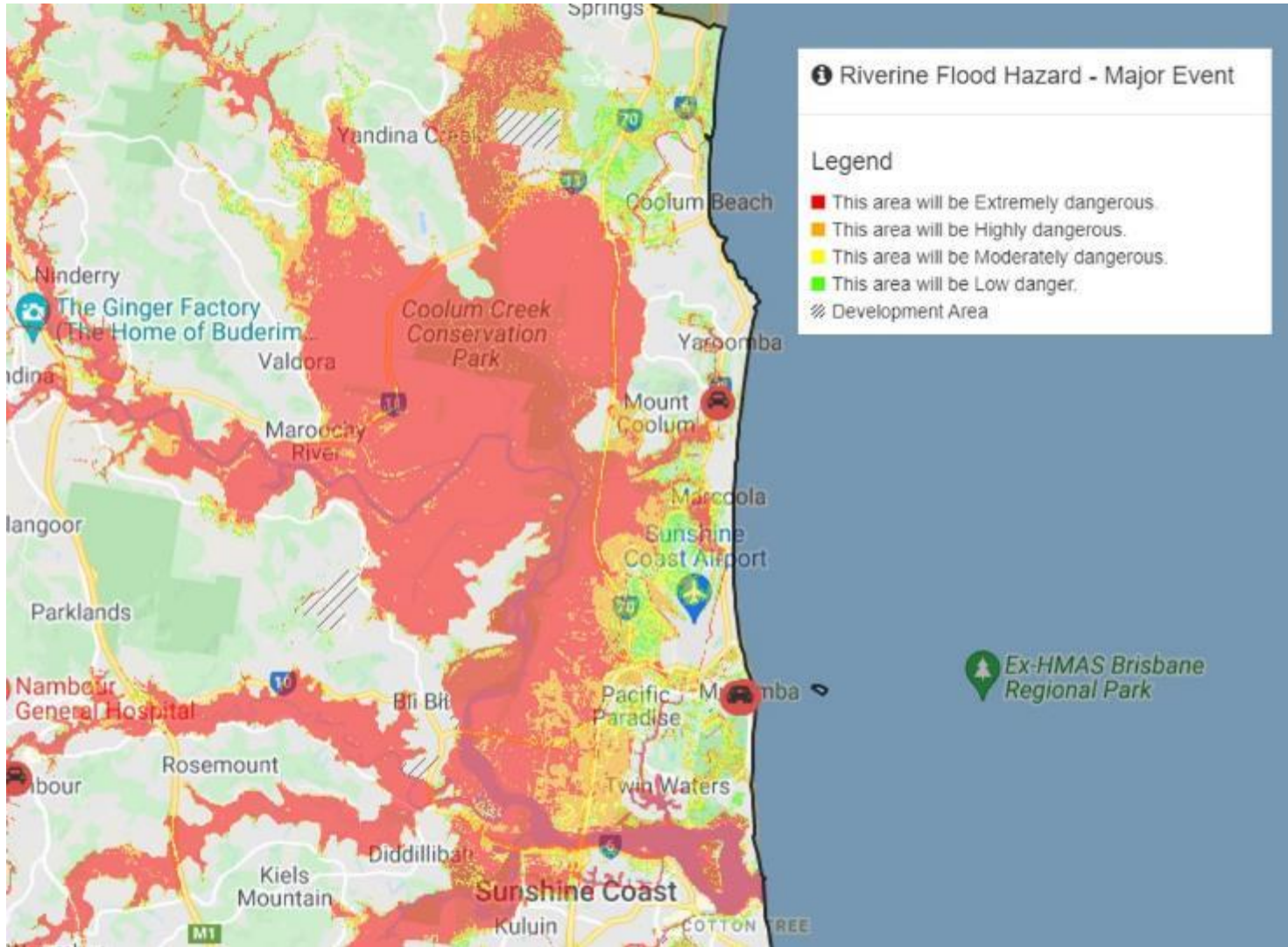
Multiple Coastal Hazard Scenarios

Present day	2041	2070	2100	CHAS Storm tide	ARI	Coincident flooding	Present day	2041	2070	2100
					1 in 2	39% AEP				
				10% AEP	1 in 10	10% AEP				
				5% AEP	1 in 20					
				1% AEP	1 in 100	1% AEP				
				0.2% AEP	1 in 500	0.2% AEP				
					1 in 2000	0.05% AEP				
				Erosion prone area*						
				1% AEP	1 in 100					

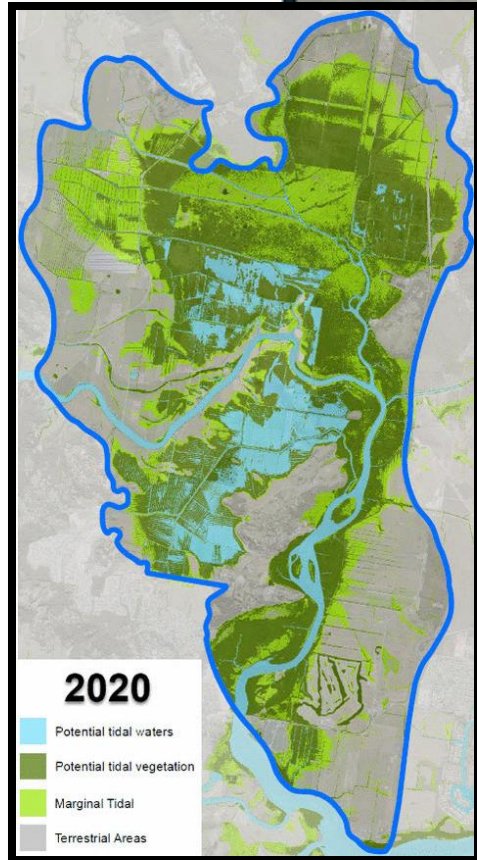
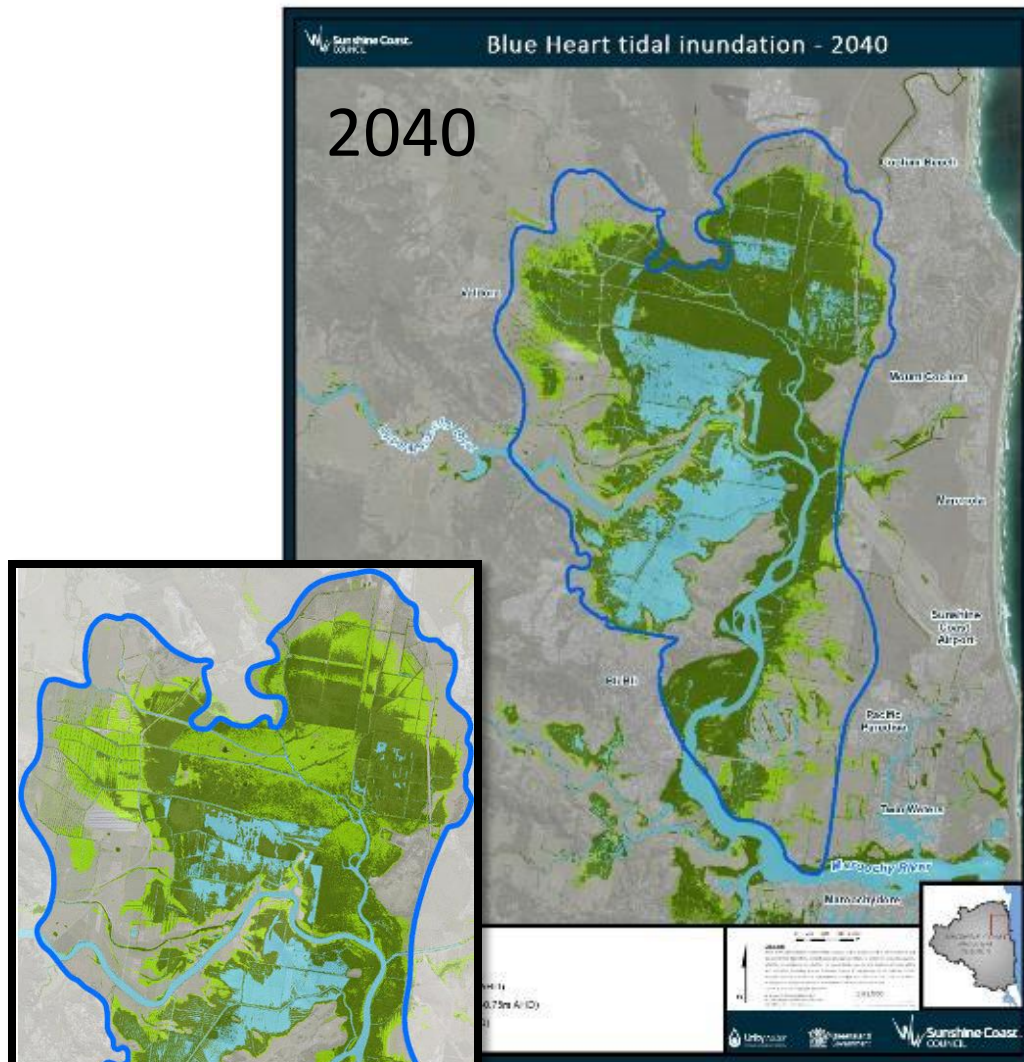


<https://www.sunshinecoast.qld.gov.au/Council/Planning-and-Projects/Council-Strategies/Coastal-Hazard-Adaptation-Strategy>

Flooding and Coastal Hazards



The Projected Transition (SLR)



Blue Heart Sunshine Coast – Nature-based Solution to a Transitioning Landscape



Blue Heart

SUNSHINE COAST

The Blue Heart is an area of more than 5000 hectares within the Maroochy River floodplain on the Sunshine Coast, Queensland.

It's an area where effective land and water management will proactively respond to a transitioning landscape, whilst delivering a variety of integrated environmental, social and economic outcomes.

These include ongoing agricultural activities and opportunities for conservation, water quality outflow and vegetation offsetting, carbon farming and recreational opportunities.

An innovative partnership

Adaptation

Resilience

Flood storage preservation

Conservation

Healthy waterways

Cultural connections

Carbon farming

Recreation

Transitioning landscape

 Sunshine Coast
COUNCIL



blueheart@sunshinecoast.qld.gov.au
www.sunshinecoast.qld.gov.au
07 5475 7272

Nature Based Co-benefits

Enhance biodiversity corridors and green space



Recreation



Agriculture



Cultural heritage



Blue carbon and marine plant offsets



Water Quality



Manage flood risk – catchment + sea level rise



Tracks, trails and visitor experiences

Regional Collaboration

QCRC Climate Risk Management Framework

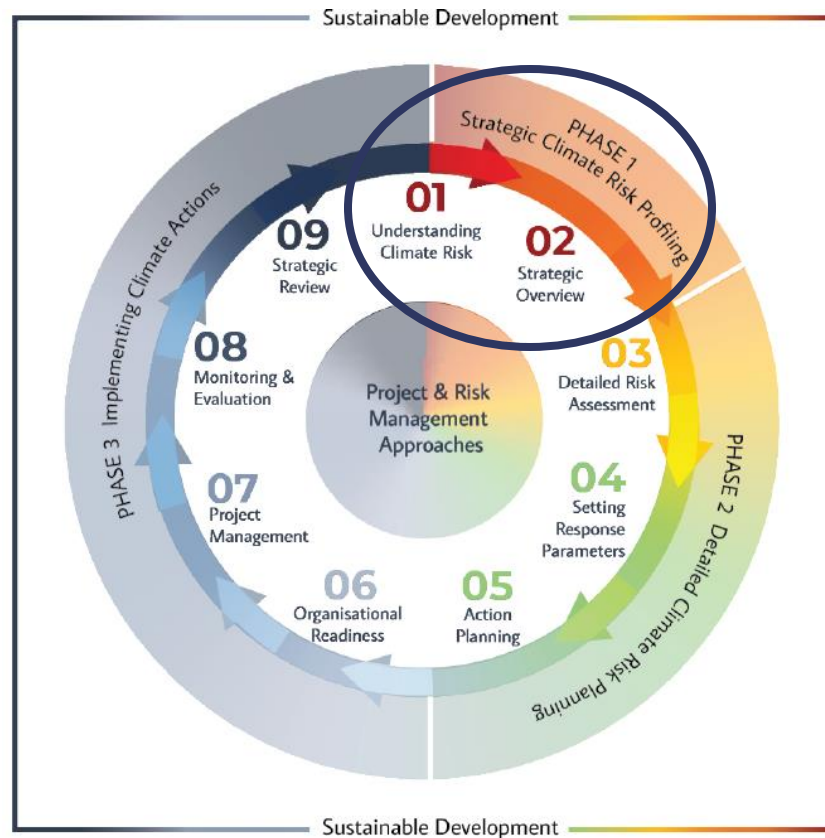


Figure 1 Climate Risk Management Framework for Queensland Local Government

Step 1: Assess understanding of climate risks

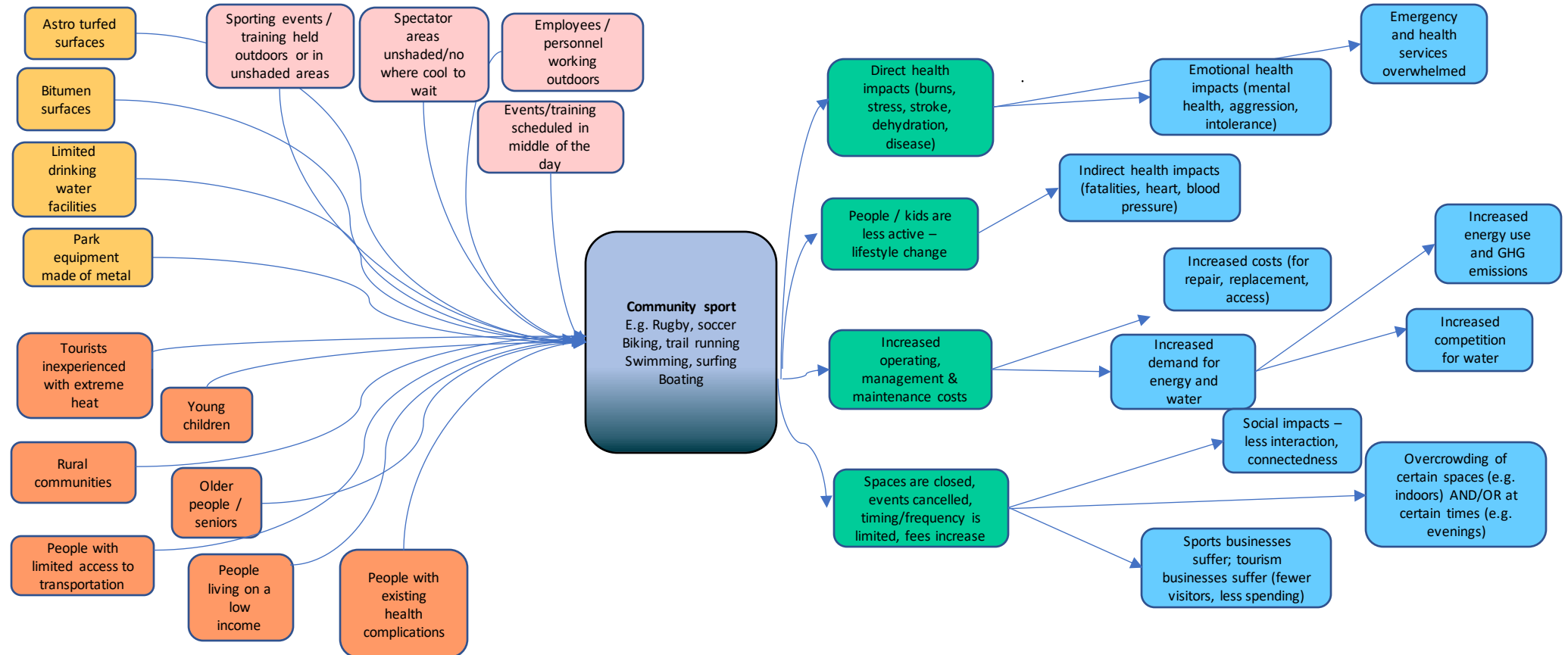
Step 2: Establish strategic direction, capacity, capability

Making the Intangible, Tangible - Mapping to Service Delivery

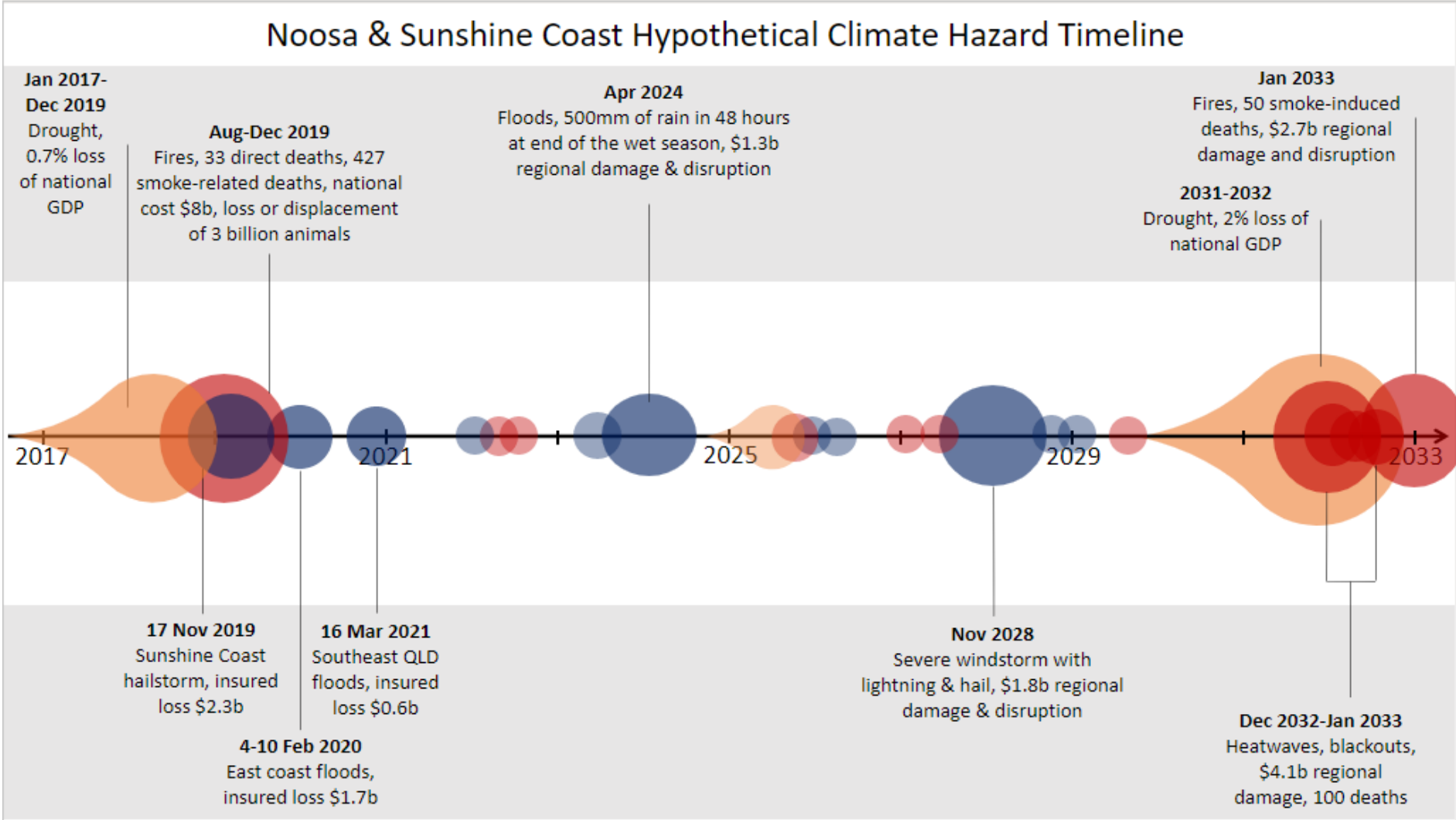
CAUSES		
Vulnerabilities		Exposure
Feature of asset or activity	Feature of population	Asset, activity or population exposed to hazard

Summer of heatwaves – 2027
 After 22 months of drought, exacerbated by global warming, the continent was exceptionally hot and dry. Persistent westerly winds caused a 10-day heatwave in southeast Queensland in early summer. Maximum temperatures reached 40-45°C each day, and overnight temperatures stayed above 30°C. This was followed by further heatwaves over the summer.

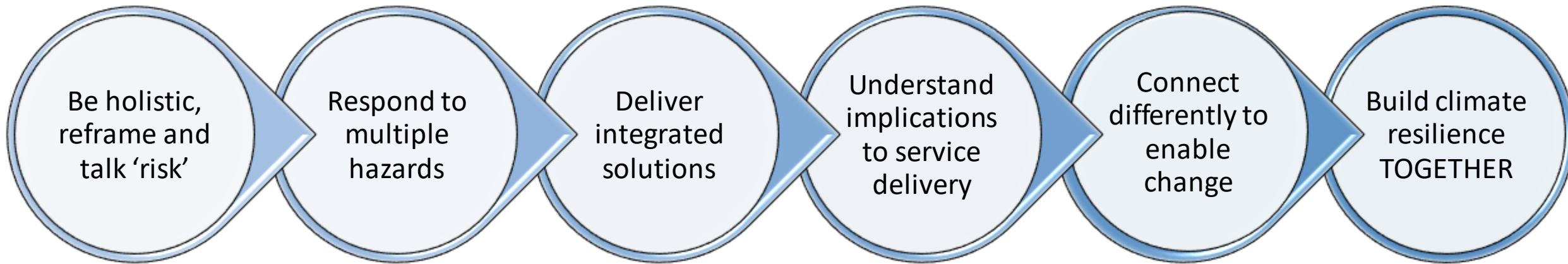
EFFECTS (=impacts/consequences)	
Direct impacts	Indirect impacts
Damage to assets, disruption of activity, impacts on people	Flow on effects e.g. on community, health & wellbeing, education, economy, environment



Making the Intangible, Tangible - Hazard Scenarios



What We've Learned to Create a Climate Ready Sunshine Coast



Climate change adaptation is a challenge...but not impossible...eyes wide open, relentless and focused action is a good start