

Northern Tasmania

Regional Drought Resilience Plan 2025



Department of Agriculture, Fisheries and Forestry





Executive Summary

Drought is a major risk across all of Tasmania. It causes significant financial, social and environmental impacts for people, primary producers, other businesses and the community. As an island state our geographic isolation brings unique challenges that increase the impacts of drought and climate variability events.

This is one of three Regional Drought Resilience Plans developed by Tasmanians for Tasmanians. They are community-level strategic plans built on community voices as well as historic and recent experiences of drought and climate variability.

The plan aims to give communities a way to achieve practical steps which will help the region be prepared for, cope with and recover from future droughts and climate variability events. The plan development has been co-funded by the Australian Government's Future Drought Fund and the Tasmanian Government. Drought and resilience hold different meanings across communities, depending on the environment, climate and local experiences. Given this, drought resilience planning needs to be adaptable to constantly changing conditions, as well as accessible to a range of people. This is why each of the three Tasmanian regional plans may look slightly different as no two communities are the same and different engagement methods have been used.

In each region, the plans can be used to guide future effort and investment across all areas and sectors. They can be used by community groups, businesses, not-for-profit organisations and all levels of government to understand the considerations and actions they can take to make a meaningful difference to drought resilience.



FIGURE 1: Drought impacts across Tasmania

In a drought, our agricultural, social and ecological systems are affected in complex ways.

When the landscape is very dry, biology is subdued, and ecosystem services are diminished. These include the fertility maintaining action of earthworms, dung beetles and soil biology, insect predation by birds and other animals, pollination and seed dispersal.

Without rainfall, environmental flows in surface waterways are seriously affected and some may dry out completely.

Where irrigation water is fully utilised, environmental flows in waterways further decline. In some cases groundwater systems can be affected and salts may rise to the surface, impacting soil health.

Ecological

As vegetation dries out and dies, bushfire risk increases. The complex food chain can also be affected, resulting in a loss of wildlife. Topsoil can become damaged from wind erosion. This can reduce its future water holding capacity and increase flooding.

There is also increased opportunity for pests, diseases, weeds and other invasive species, which can impact on the health of native species.



Economic/ agricultural

The landscape becomes barren, affecting agri-tourism visitor numbers. This can harm extra business income that support many Tasmanian farms.

Low water supply can lead to a lower quality crop, affecting profit. Livestock suffer and must be sold off early for less income. Dairy cows must be dried off, economic and intellectual investment in breeding is lost, and transport costs increase. Property prices may be affected as landowners sell due to economic uncertainty.

Social systems

Whole systems of income are missed, exacerbating debt and increasing pressure on farming communities. This means less time and money for recreation and volunteering, and higher levels of stress.

This stress and reduced participation in community life can lead to mental health challenges, substance abuse, family violence and social isolation.

Regional towns suffer from less community engagement and reduced spending, which can lead to job losses and a declining population. This can affect the viability of local schools, clubs and businesses.

How can we achieve a resilient region?

Building resilience is a complex process and there are interdependencies between all the goals, meaning achieving one can depend on others also being achieved.

While the plan identifies action areas that will support Northern Tasmania to achieve its vision for a resilient future, it does not try to list all possible actions that might contribute. Those already working on resilience initiatives should be able to see how their efforts contribute to towards this plan, and those seeking to get involved should find ideas and inspiration for how to take action. This plan is a living document that will be reviewed and updated over time to reflect progress, insights and new priorities as they emerge.

A community-led process identified key themes and goals, to show how we can achieve our vision for a resilient Northern Tasmania. This is shown over the page.



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People and communities

Communities are informed, connected and prepared, enabling people to adapt and thrive through drought and climate challenges.

Informed and prepared communities

Communities have knowledge, understanding, tools, and resources to engage in transformative responses to drought and climate risks, and proactively prepare and adapt.

Strong connection, participation and action

Strong social support networks, including collaboration with Tasmanian Aboriginal people and organisations, foster participation, collective action and a sense of belonging.

Equitable access to wellbeing and mental health

Culturally appropriate and accessible support enables all community members, especially vulnerable groups, to strengthen mental health, wellbeing, and resilience to drought and climate challenges.



Agriculture and economies

Sustainable agricultural practices and strong local food systems and supply chains enable diverse and adaptive local economies.

Resilient farming practices

Climate-smart, low-impact farming practices are adopted at scale, improving landscape resilience, farm productivity, and environmental outcomes.

Diverse and adaptive local economies

Regional economies thrive through diverse and sustainable livelihoods, supported by innovation, financial security, and strong local food systems that reduce reliance on vulnerable supply chains and build economic self-reliance.

Empowered leaders and entrepreneurs

Agricultural and business leaders champion resilience, driving adaptation and innovation across sectors and communities, strengthening local value chains.



Landscapes and ecosystems

Landscapes and ecosystems are healthy, biodiverse, protect Tasmanian Aboriginal cultural heritage and natural capital, and support community needs through climate variability.

Protected landscapes

Aboriginal cultural values, biodiversity hotspots, native vegetation, and vulnerable ecosystems are safeguarded and maintained for longterm ecological health.

Restored and resilient environments

Degraded landscapes are rehabilitated into vibrant ecosystems that sustain biodiversity, support agriculture, and reduce drought and climate risks.

Community-led stewardship

Communities, in partnership with Tasmanian Aboriginal knowledge-holders, are actively engaged in land and ecosystem management, combining Aboriginal knowledge with innovative practices to sustain ecological health and resilience.

ate variability.



Water systems and infrastructure

Water security and droughtresilient infrastructure meets community and agricultural needs under changing climate conditions.

Reliable water access

Water capture, storage and delivery systems are optimised for equitable access under drought conditions.

Circular systems and practices

Communities and industries embrace circular water systems and practices, including recycling, reuse, and efficient management.

Climate-resilient infrastructure

Public and private infrastructure is planned, built and adapted to withstand drought and climate challenges.



Systems of governance, collaboration and learning

Stakeholders and communities work effectively together to build lasting drought resilience.

Adaptive governance

Transparent and responsive governance structures facilitate coordinated, equitable, and longterm drought resilience efforts.

Inclusive collaboration

Diverse stakeholders across the region, including Tasmanian Aboriginal people and young people, are working together towards shared resilience goals.

Active learning and improvement

Resilience-building efforts are measured and shared to support active learning, and continuous improvement.

Opening Statement from the Project Advisory Group

Northern Tasmania is a region of incredible liveability, great beauty, creativity, and strength. Our communities are knowledgeable, resourceful and adaptable. We consistently show that we can navigate challenges and make the most of opportunities. Yet, we are in a period of transition. Our economy is supported by agriculture and forestry. Drought and a changing climate pose significant challenges for both sectors, as well as our regional communities.

This Regional Drought Resilience Plan is a catchment-wide, landscape-scale community plan. It provides a shared vision and a call to action for individuals, households, businesses, communities, organisations and all levels of government to work together in building drought and climate resilience. Central to our plan is our vision developed through conversations with Northern Tasmanians:

Northern Tasmania works together in a collaborative, supportive and inclusive way to prepare for, adapt, survive and thrive in increasing drought and climate variability. Our plan is a guide that provides a common foundation for collaboration. It offers direction, inspiration and ideas for working together to take action to build drought resilience, helping us adapt to the inevitable changes our region will face. Valuable lessons and opportunities from our response to climate hazards such as flooding, bushfires, heatwaves and storms are a solid foundation to build on.

This plan is for everyone. While governments play a vital role, real progress will depend on collaboration across all sectors and levels. Look for where you see yourself in this plan, whether as an individual, a household, a business, or part of a community network. We encourage you to ask, *'what can I do to help build drought and climate resilience in my community?* Use the action areas and example projects to spark ideas, connect with others, and take the first step. Together, we can unify efforts across the region, adapt to a changing climate, and build a sustainable future for generations to come.

Thank you for being part of drought and climate resilience for Northern Tasmania.

- Northern Tasmanian Project Advisory Group

Acknowledgement of Country

We acknowledge the Aboriginal people of Lutruwita/ Tasmania. We pay our respect to Elders past and present and recognise their culture and their rights as the original and ongoing Custodians of this Land. We respect their deep wisdom and practices in caring for Country including Land, Sky and Waterways as we work to prepare for a changing climate.



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Introduction



1.1 Project background

Regional drought resilience planning has been funded across Australia from the Australian Government's Future Drought Fund (FDF) – a key investment aimed at building resilience across the agriculture sector, landscapes, and communities.

As part of the FDF's 'Better Planning Stream', the Tasmanian Government developed three regional drought resilience plans, for each of the North, South and North-West regions of Tasmania, with the following aims:

- Empower communities to identify the impacts of drought and develop regional drought resilience and management plans.
- Support communities to consider the incremental, transitional and transformational opportunities needed to strengthen drought resilience and encourage innovative initiatives at the regional level.
- Facilitate increased community understanding of their drought resilience, including by encouraging communities to share their learnings with each other.
- Encourage improved natural resource management capability through planning.

The Tasmanian Department of Premier and Cabinet (DPAC) worked with regional communities and key stakeholders from November 2022 to October 2024 to prepare a communityled Regional Drought Resilience Plan (RDRP), guided by a regional Project Advisory Group. This plan has been developed in collaboration with community members of the Northern Tasmanian region, and shaped by their insights, stories and experiences of drought. The goals and actions described in the plan have emerged through a series of conversations, surveys and workshops to understand the region's greatest challenges and opportunities to build drought resilience.

The RDRP is intended as a guide for community, government, not-for-profits and the private sector to align their efforts and to help shape projects and practices for improved drought resilience across Northern Tasmania. It aims to increase collaboration, coordination and consistency across organisations.

The plan does not indicate how each strategic action will be resourced or the organisation responsible as the actions are far-reaching across different sectors and types of change.

As a community-level strategic plan, the RDRP does not attempt to cover the drought and climate resilience needs of an individual farm, enterprise or household. This plan is a 'living' document that will need to be monitored, reviewed and updated over time to reflect progress, new climate data and revised priorities.

This RDRP has been developed in collaboration with regional communities and guided by a regional Project Advisory Group. Views and perspectives expressed in this plan reflect those of engaged stakeholders and may not necessarily represent the broader views of the Tasmanian Government.

1.2 Approach to developing this plan

The development of this plan has been coordinated by the Tasmanian Government Department of Premier and Cabinet, in consultation and collaboration with experts, regional stakeholders and community members. The key stages and activities of the plan's development are shown in Table 1 below.

TABLE 1: Northern Tasmanian RDRP – Development stages and activities

Timing	Stage	Key activities
Nov 2022 – Dec 2023	Establish project team, governance and planning approach	 Regional project inception and planning Establish project team and Project Advisory Group (PAG) Statewide Forum
Dec 2023 – Mar 2024	Building evidence and understanding of drought impact and resilience	 Develop a 'Drought Risk, Resilience and Adaptive Capacity Data Report', to be read in conjunction with this plan (Appendix A) Community survey to understand regional drought impacts (engagement summary provided in Appendix B)
Apr – Oct 2024	Aligning on vision, goals and actions	 Community engagement to explore vision, themes, goals and actions Review strategies and policies to inform plan development (Appendix C) Future Scenarios Workshop to explore wider implications of drought and climate variability in the region Stakeholder discussions to surface challenges and opportunities (Appendix B) PAG workshops to validate and prioritise goals and actions
Oct 2024 – Feb 2025	Plan development	 Develop the draft plan based on input from experts, regional stakeholders and community members PAG advice and workshops to guide and refine the draft Flinders Island community workshop (Appendix F)
Early–mid 2025	Plan implementation	 Formalise governance, measurement and learning approaches for implementation Establish grant programs and other resourcing approaches Launch plan; support regional collaboration towards shared goals

1.3 Understanding the bigger picture

There is a growing number of policies and laws across different levels of government that relate to social, economic or environmental resilience. As the demand for resilience planning increases, the policy landscape will continue to grow in diversity and complexity. Appendix C: Strategic context summarises the RDRP's statewide strategic landscape and identifies opportunities for further alignment through implementation.



1.4 How you can use this plan

Individuals, businesses, land managers and community groups can use this plan to:

- Increase knowledge of our region's risks, expected changes to our climate, and the impact of drought and climate variability on people, businesses, infrastructure and natural systems.
- Get ideas and inspiration for how to take action, minimise drought and climate impacts and proactively build local resilience.
- Gain better understanding of our complex and inter-dependent systems.
- Align local resilience activities with a wider regional approach.

Federal, state and local governments can use this plan to:

- Understand community priorities and aspirations to align future projects, strategy and funding.
- Better understand our complex and interconnected social and ecological systems, and how we can best adapt to change over the long-term.
- Guide policy, resourcing and decisionmaking around drought resilience.







Defining drought and climate resilience

A changing climate is leading to more extreme and variable weather. Climate extremes include more extreme rain, floods, wind, storm surge, evaporation and drought. The National Disaster Risk Reduction Framework (2018) refers to a "growing potential for cumulative or concurrent, large-scale natural hazards to occur," meaning that communities could need to deal with major events of a scale and type not experienced before.

A resilient community is able to cope, respond and transform to change, using strengths, resources and capacities to adapt to change. While the focus of this plan is on drought, a resilient community will be able to cope with a range of climate shocks and extremes, not only drought.

2.1 What does drought mean?

Drought is a defining feature of much of the Australian landscape. It is forecast to become more frequent, severe and long lasting in many regions as the climate changes.

While there is no one definition of drought, for the purpose of Tasmania's Regional Drought Resilience Plans, drought is defined as **'a prolonged, abnormally dry period when the amount of available water is insufficient to meet our normal use'** (Bureau of Meteorology 2024). Drought and community understandings of drought conditions differs, depending on environmental, climatic and community context. What is viewed as drought in one region may not be seen as a drought in another.

2.2 What does drought resilience mean?

"I feel like we're pretty well prepared. We've had droughts in the past, and we know we'll have them again. And because of this, most of us know what we need to do."

Community conversation participant

According to the Future Drought Fund Drought Resilience Funding Plan 2024-2028 Determination 2024, drought resilience is the ability to "adapt, reorganise or transform in response to changing temperature, increasing variability and scarcity of rainfall and changed seasonality of rainfall, for improved economic, environmental and social resilience". For drought resilience planning in Tasmania, community resilience means how well a community can come together to address its vulnerabilities and use its strengths to prepare for, adapt to and recover from challenges while maintaining or even improving its overall wellbeing. The Tasmanian Disaster Resilience Strategy defines resilience as "the ability of communities and individuals to survive, adapt and thrive in the face of turbulent change or acute stresses" (DPAC 2020).

Drought affects different social groups in varying ways. We might automatically think of drought as something that affects farming communities and businesses economically and by increasing stress. However, it can also affect other communities through higher food prices and reduced availability, water restrictions, and increased temperatures in urban environments, for example. The most vulnerable in any community are usually those in lower socio-economic categories, whether they live in rural or urban settings.

2.3 What does adaptive capacity mean?

Research shows that a community's ability to adapt to a changing climate is shaped by a combination of strengths, attributes and resources available to the individual and community. This is often referred to as 'adaptive capacity' (IPCC 2018). More resilient communities, that is those with greater adaptive capacity, are better able to respond to problems that arise from a changing environment. Figure 2 shows five key areas which contribute to a community's adaptive capacity (referred to as the Five Capitals Model).



(Source: National Climate Change Adaptation Research Facility, Australian Government)

2.4 Types of change

Different types of actions can build drought resilience depending on the scale of the change needed. At a basic level, there are two types of change:

- Incremental change: Changes to existing practices or behaviours that allow existing social, ecological and economic systems to absorb, accommodate or embrace change (Dilling et al 2023; Barnes et al 2020).
- *Transformative change*: Changes that involve foundational shifts in values, power dynamics, goals, relationships and mindsets that enable reorganisation towards a more resilient society (Dilling et al 2023; Barnes et al 2020).

Transformative change is less common and can be harder to achieve than incremental change, but there is growing consensus that both types of change are needed to address the scale, complexity and magnitude of climate challenges. Figure 3 shows these different change types on a spectrum and their relationship to complexity, impact, resourcing and time.

FIGURE 3: Types of adaptation and change



(Source: Fedele et al 2019)

Guiding resilience principles

This plan has been guided by the following resilience principles – building on global best practice published by the Stockholm Resilience Centre, and adapted for the context of Northern Tasmania:

PRINCIPLE 1: Increase diversity

Greater diversity within social and environmental systems leads to more resilience. A wider variety of people, organisations, businesses, and solutions developed across the region will compensate for vulnerability by ensuring there are other options available if parts of the system are in distress.

PRINCIPLE 2: Strengthen connectivity

Well-connected systems recover from disturbances more quickly, but overly connected systems may also be vulnerable to rapid breakdown such as through reliance on global supply chains for food security. The region can continue to build strong connections while managing the challenges of being interconnected.

PRINCIPLE 3: Monitor long-term changes

Long-term changes across the region help us to understand shifts in both natural systems (for example, soil health, groundwater levels) as well as social systems (for example, community wellbeing). Monitoring these slow changes allows us to detect early warning signs and take preventive actions.

PRINCIPLE 4: Build systems awareness

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Our environment and communities are interconnected and constantly changing. By embracing this complexity, we can develop flexible strategies that adapt to evolving drought and climate challenges.

PRINCIPLE 5: Encourage learning

Social and ecological systems are in constant evolution, with recurring patterns that emerge over time. Continuous reflection, experimentation and learning will support the region to learn from past experiences and best practices to continually prepare for changes ahead.

PRINCIPLE 6: Broaden participation

Climate variability affects the whole region and so requires a collective response. Involving a wide range of stakeholders from across neighbourhoods, towns, organisations and sectors will strengthen resilience efforts and ensure that the benefits of adaptation are enjoyed equally across the community.

PRINCIPLE 7: Enable local decision-making and action

Communities are more resilient when they have the power to take action at the local level. Regional approaches should enable decision-making and resourcing within neighbourhoods, towns and communities, while also supporting region-wide coordination and collaboration where possible.



About Northern Tasmania

Northern Tasmania is a region of high liveability, diverse landscapes and unique opportunities. Ranging from Flinders Island in the north-east, the Tamar Valley near Launceston, and the agricultural region of Meander Valley, the region has a land area of 20,116 km² and is made up of eight local government areas including Break O'Day, Dorset, Flinders, George Town, Launceston, Meander Valley, Northern Midlands and West Tamar.

Agriculture plays a key role in the region and acts as a pillar to Tasmania's renowned food economy. Across the region, there are large areas of modified land. Within these, there are distinct areas of prime agricultural land. Tamar Valley has been named one of the top 10 regions in the world to visit in 2025 (Lonely Planet, 2025), and Launceston has been designated as a UNESCO city of Gastronomy. Drought and a changing climate pose significant challenges to these landscapes, economic opportunities, and reliant communities.



3.1 About the Northern Tasmanian community

Accounting for just over a quarter (27 per cent) of the state's population, around 150,000 people (with almost half in Launceston) live across the region. Launceston and its surrounds act a critical transport and business hub for the region and wider Tasmania (NRLUS 2021).

The region reports greater social disadvantage than the Tasmanian average, characterised by greater healthcare needs, ageing population, relatively low formal educational attainment and areas of social isolation (RMCG 2023).

West Tamar has the lowest level of disadvantage across the Northern region, and George Town has the highest. According to the University of Tasmania's ISLAND project, residents of Break O'Day report the greatest social isolation, followed by West Tamar, while Dorset residents report as the most socially connected (RMCG 2023).



3.2 The cultural landscape

Aboriginal people have lived in Northern Tasmania for tens of thousands of years. Culturally significant areas are found across the landscape, with concentrations "on the coast and along river valleys that provided pathways from alpine to coastal resources" (NRM North 2022, p36).

Aboriginal-managed land across Northern Tasmania includes Lungtalanana (Clarke Island), Babel Island, Big Dog Island, larapuna (Eddystone Point), Wybalenna, Truwana (Cape Barren Island), and Tebrakunna (Cape Portland) (NRM North 2022). Aboriginal organisations and people care for Country, passing on traditional knowledge to the next generation. This can include environmental and cultural heritage management, such as burning, being undertaken across the region.

3.3 Economy and agriculture

Dorset, Meander Valley and Northern Midlands account for 81 per cent of agricultural output in the region, made up of livestock, vegetables, dairy, fruit, crops and wine (in order of economic size).

The primary production sector (agriculture, fisheries and forestry) accounts for 18 per cent of the region's economic output — the largest of any sector. In terms of employment, approximately seven per cent of people are employed in agriculture, forestry and fishing across the region, compared to 17 per cent in healthcare and social services, and 10 per cent in retail trade (RMCG 2023).

The Tasmanian Government has a vision to grow the annual value of the state's agriculture to \$10 billion by 2050, which means increasing the rate of growth of this industry, within a warming and more variable climate.

Further detail is provided in the data report (Appendix A).

3.4 The natural environment

Tasmania's natural capital is one of the state's most valuable assets. Northern Tasmania is home to well-known landscapes, including the Western Tiers, the Bay of Fires along the north-east coast, as well as the islands of the Furneaux and Kent Groups. In total, conservation and natural environments cover 6,980 km² (around 35% of the region) (NRM North 2022). These areas draw visitors from across the world, supporting regional businesses and economic diversity. Meander Valley and Northern Midlands host the northern part of the Tasmanian Wilderness World Heritage Area. The Northern Midlands is also home to one of 15 biodiversity hotspots in Australia (Tasmanian Planning Commission 2024).



3.5 Drought risk and resilience assessment

Drought and climate variability are part of complex systems, making their impacts across Northern Tasmania difficult to predict (see the Futures Wheel captured in Appendix D). To help in understanding regional drought resilience, regional assessments were undertaken as part of this program (refer to Appendix A: Northern Region Drought Risk, Resilience and Adaptive Capacity Data Report).

Regional assessments considered drought resilience across each of the region's Local Government Areas (LGAs) through two key factors: potential drought impact (risk) and the ability of communities to adapt (adaptive capacity). The assessment adopted the ABARES drought resilience criteria, as shown in Figure 5.

The outcomes of the risk and resilience assessments are useful in helping to quantify current risk and resilience including gaps, key risk areas, and to measure progress. There are opportunities in the future to expand the data sets and indicators used to ensure future assessments offer a more comprehensive analysis.

FIGURE 5: Drought risk, adaptive capacity and resilience assessment model



The assessment found that the region demonstrates moderate resilience to future drought conditions, though there are differences between LGAs. Meander Valley shows higher adaptive capacity, while George Town and Flinders Island are more vulnerable due to lower adaptive capacity and higher drought risk. Launceston and West Tamar, on the other hand, have higher resilience. Climate change is expected to increase the frequency and severity of extreme weather events, posing challenges for agriculture, forestry, and fisheries, which are vital to the region's economy. Strengthening adaptive capacity to drought will also boost resilience to other climaterelated events. Investments in water security, irrigation, and diverse agricultural enterprises contribute to existing resilience, but ongoing planning and collective action will be essential to address future challenges and build long-term economic, social, and environmental resilience.

Figure 6 shows the overall drought resilience rankings of the region's LGAs.

FIGURE 6: Northern Tasmania drought resilience assessment





Dam water storage on Truwana/Cape Barren Island. Photo: Caroline Spotswood, Department of Premier and Cabinet.

Water security on Truwana/Cape Barren Island

South of Flinders Island off the northeast coast of Tasmania, Aboriginal-owned and managed Truwana/Cape Barren Island is part of the Furneaux Group of islands in the Bass Strait. Truwana/Cape Barren Island is classified as very remote, and is Tasmania's only defined discrete Aboriginal community with a population of around 50 Aboriginal persons and 20 non-Aboriginal persons in 2024.

Islander families that live on and off the island regard Truwana/Cape Barren Island as their cultural homeland, with the island considered Aboriginal land. Generations have lived on the island, sharing stories, music and way of life on Country for many families and community.

The East Coast Cape Barren Island Lagoons was listed as a Wetland of International Importance in 1982 under the Ramsar Convention.

Particularly vulnerable to drought and climate change, the landscape is culturally important to the island community, who are actively involved in the management of the site alongside Pakana rangers Truwana rangers land and TAC sea ranger groups and other associated support groups. Increasing climate-related drought occurrences and extreme weather events have reduced water security on the island and the community currently faces a significant water supply challenge. Adding to the challenge, water infrastructure including the island's two dams, pipes as well as residential rooftop tanks are in various condition, with differing degrees of age, suitability, quality and reliability, and have been insufficient for security of supply in drought periods.

In 2023 and 2024, the island's drought conditions led to critically low storage in both rainwater tanks and the storage dams. The low water level in the dams meant the water treatment plant could not function, resulting in untreated water being supplied to the community. During this time, water was transported from Flinders Island to fill key community tanks, and drinking water was provided in bottles for the community. The Tasmanian government supported water to be transported water to the island.

In 2025, due to the low dam levels, untreated water is again being provided to residents, with people relying on rainwater tanks and bottled water for drinking water. Some households have empty rainwater tanks and are collecting drinking water from community tanks. There has been converted efforts to locate other water water resources on the island, such as ground water bores.

With a growing population, the insecure water supply has led to significant concerns, in particular around the care and wellbeing of the community and essential services at the Cape Barren Island health clinic, school, the general store and fire outbreaks. The construction of further Infrastructure is also restricted until the island's water security issues are resolved.

Drought and climate resilience priorities

Key drought and climate resilience priorities for the Cape Barren Island Aboriginal Association and island community include:

- Addressing short-term water issues and securing an enduring water supply
- Transitioning away from diesel reliance, and making needed upgrades to solar and wind energy on island
- Making upgrades to existing water infrastructure, including diverting a greater amount of water into existing dams
- Continuing to deliver ranger programs around invasive species management and bushfire management including fire breaks
- Ensuring other essential infrastructure such as roads and drains have the capacity for rainfall events.

As dry conditions continue as a result of a changing climate, it will be critical that community and environmental water use and supply issues continue to be addressed through aboriginal led shared actions decision-making.

Tasmanian Government agencies are collaborating and working in partnership alongside the Cape Barren Island Aboriginal Association chairperson and CEO to support the island community with short term and long-term water solutions.

Case study developed in collaboration with the Cape Barren Island Aboriginal Association.




Current and future climate trends



4.1 Current climate

The Northern region is temperate with dry, mild/ warm summers and marked cold, wet winters (more than 800 mm rainfall per year). There is a corridor down the Tamar Valley to the midlands, and a coastal strip across the north including the Furneaux group, of lower rainfall (500-800 mm per year) and warm summers. The south-east of the region has uniform rainfall across the seasons with less overall rainfall (500-800 mm per year). Droughts occurred in the Northern region of Tasmania in 2006, 2015, 2017 and 2019. These events offer insights on the impacts to agriculture and the natural environment, and the potential resilience of communities to future droughts.



4.2 Future climate

Many climate change-driven phenomena are already occurring in Tasmania. Figure 7 details the projected changes to 2100 across the whole of Tasmania according to the Climate Futures for Tasmania project (ReCFIT 2024).

FIGURE 7: Projected climate change impacts for Tasmania



Significant change in rainfall patterns



Increase in storms, creating coastal erosion



Rise in annual average temperatures



More hot days and heatwaves



Fewer frosts



Longer fire seasons, more days of high fire danger



Increased ocean acidification and water temperature

(Source: ReCFIT)



Rise in sea levels



Increased windspeed

Rainfall

Mean annual rainfall in the Northern region is projected to stay relatively stable over the next 50 years. Some regions will experience a decrease (such as Scottsdale, four per cent decrease), while others will experience an increase (such as Campbell Town, three per cent). However, averages can hide extreme weather that can drive floods and drought. Modelling completed by Climate Futures indicates that there is likely to be an increase in extreme rainfall events (Australian Government 2023; RMCG 2023).



FIGURE 8: Expected mean annual rainfall by 2050

(Source: CSIRO and Bureau of Meteorology 2024; RMCG 2023.)

Temperature and heatwaves

In Northern Tasmania, the average maximum temperature and average minimum temperature for key towns will increase by 2-3°C by 2070

(RMCG 2023). Hence, there will be fewer frosts and more hot days. Figure 9 shows the projected increase in days over 30°C.





(Source: My Climate View)

Evaporation and evapotranspiration

By 2050, evaporation is expected to increase across the Northern region during spring and summer – the start and middle of the growing season (CSIRO and Bureau of Meteorology 2024).

Evapotranspiration is the combination of evaporation from the earth's surface and transpiration from plants. This is also projected to increase across the Northern region, particularly in spring and summer, by four per cent (RMCG 2023).

This, combined with a slight change to summer rainfall of -1 per cent, means we will likely see slightly drier soil moisture levels during summer. This has the potential to affect plant growth, increasing irrigation requirements. This pattern suggests that the region will be more volatile to droughts in low rainfall years, because soils will dry out more rapidly (RMCG 2023).

Aridity

Aridity is defined as rainfall divided by evaporation. When evaporation exceeds rainfall, a region is considered 'arid'. Drying is expected across the region, as shown in Table 2, which depicts an increase in arid conditions over time based on this equation. Into the future, a warmer landscape with enhanced evaporation, but with similar (or less) rainfall, means a drier landscape (Remenyi et al 2019).

Region	1997 - 2017	2041 - 2060	2081 - 2100
Furneaux Islands	0.64	0.56	0.50
Central North (Lilydale, Westbury, Cressy and Launceston)	0.77	0.66	0.58
North East (Bridport, Scottsdale and Ringarooma)	0.97	0.82	0.71

TABLE 2: Projected mean annual aridity

(Source: Australia's Wine Future – A Climate Atlas)

Water availability

Water availability modelling is currently underway (RMCG 2023). The planning process should consider new water modelling when it is released. Current projections forecast a significant change in water availability. The north-east, midlands and east coast catchments will see an increase in available water. For example, the Macquarie Catchment, which is fed by Lake Leake, is projected to see a 23 per cent increase in flows. However, the Meander Dam, which is fed by the central highlands and provides irrigation water through the Meander Valley is projected to have its flows decrease by around 13 per cent, due to a projected decrease in rainfall in the Central Highlands of Tasmania (RMCG 2023).

Fire risk

The increasing aridity in Northern Tasmania is creating new fire management challenges for land managers. Through stakeholder engagement, we heard that the window for doing asset protection and biodiversity planned burning is becoming shorter every year. This is due to increasing temperatures and evapotranspiration and reducing rainfall leading to Fuel Dryness Index scores being outside of planned burn limits more regularly.

Modelling of future dry events for the region shows this trend continuing to increase, leading to significant implications for the region.

Figure 10 shows the changes in the bushfire danger ratings days to 2100 (Remenyi et al 2022).



FIGURE 10: Projected daily number of days per year with bushfire ratings, North East Tasmania

(Source: Atlas of Earth System Hazards)





action plan for Northern Tasmania





The plan for building drought and climate resilience across Northern Tasmania is captured in Figure 11, over the page.

It includes five themes that are supported by a set of goals and key action areas. These are shown in Section 5.6. Appendix E provides a full list of possible initiatives that communities can take to help in building drought and climate resilience.

Building drought resilience in our region is complex process and there are many connections and interdependencies across these themes – actions in one theme will likely support those in another.



Northern Tasmania works together in a collaborative, su adapt, survive and thrive in increasing drought and clim



hemes

People and communities

Communities are informed, connected and prepared, enabling people to adapt and thrive through drought and climate challenges.

ioals

Informed and prepared communities

Communities have knowledge, understanding, tools, and resources to engage in transformative responses to drought and climate risks, and proactively prepare and adapt.

Strong connection, participation and action

Strong social support networks, including collaboration with Tasmanian Aboriginal people and organisations, foster participation, collective action and a sense of belonging.

Equitable access to wellbeing and mental health

Culturally appropriate and accessible support enables all community members, especially vulnerable groups, to strengthen mental health, wellbeing, and resilience to drought and climate challenges.



Agriculture and economies

Sustainable agricultural practices and strong local food systems and supply chains enable diverse and adaptive local economies.

Resilient farming practices

Climate-smart, low-impact farming practices are adopted at scale, improving landscape resilience, farm productivity, and environmental outcomes.

Diverse and adaptive local economies

Regional economies thrive through diverse and sustainable livelihoods, supported by innovation, financial security, and strong local food systems that reduce reliance on vulnerable supply chains and build economic self-reliance.

Empowered leaders and entrepreneurs

Agricultural and business leaders champion resilience, driving adaptation and innovation across sectors and communities, strengthening local value chains.



Landscapes and ecosystems

Landscapes and ecosystems are healthy, biodiverse, protect Tasmanian Aboriginal cultural heritage and natural capital, and support community needs through climate variability.

Protected landscapes

Aboriginal cultural values, biodiversity hotspots, native vegetation, and vulnerable ecosystems are safeguarded and maintained for longterm ecological health.

Restored and resilient environments

Degraded landscapes are rehabilitated into vibrant ecosystems that sustain biodiversity, support agriculture, and reduce drought and climate risks.

Community-led stewardship

Communities, in partnership with Tasmanian Aboriginal knowledge-holders, are actively engaged in land and ecosystem management, combining Aboriginal knowledge with innovative practices to sustain ecological health and resilience.

apportive and inclusive way to prepare for, ate variability.



Water systems and infrastructure

Water security and droughtresilient infrastructure meets community and agricultural needs under changing climate conditions.

Reliable water access

Water capture, storage and delivery systems are optimised for equitable access under drought conditions.

Circular systems and practices

Communities and industries embrace circular water systems and practices, including recycling, reuse, and efficient management.

Climate-resilient infrastructure

Public and private infrastructure is planned, built and adapted to withstand drought and climate challenges.



Systems of governance, collaboration wand learning

Stakeholders and communities work effectively together to build lasting drought resilience.

Adaptive governance

Transparent and responsive governance structures facilitate coordinated, equitable, and longterm drought resilience efforts.

Inclusive collaboration

Diverse stakeholders across the region, including Tasmanian Aboriginal people and young people, are working together towards shared resilience goals.

Active learning and improvement

Resilience-building efforts are measured and shared to support active learning, and continuous improvement. 5.1



Theme 1 People and communities

This theme's focus is on developing informed, connected and active communities with the knowledge, skills and support systems to equitably adapt through drought and climate challenges.

The plan seeks to build on the existing strengths of the region's communities – such as strong social connections, shared identities, local resourcefulness and increasing diversity – while addressing challenges that limit resilience.

The intent is not just to adapt and survive drought and climate variability but to strengthen community bonds and foster a culture of shared learning and collective action that enables the region and its communities to thrive through change.

Goals

Informed and prepared communities: Communities have knowledge, understanding, tools, and resources to engage in transformative responses to drought and climate risks, and proactively prepare and adapt.

2 **Strong connection, participation and action:** Strong social support networks, including collaboration with Tasmanian Aboriginal organisations and people, foster participation, collective action and a sense of belonging.

Equitable access to wellbeing and

and accessible support enables all community members, especially

health, wellbeing, and resilience to drought and climate challenges.

mental health: Culturally appropriate

vulnerable groups, to strengthen mental

3

5.2



Theme 2 Agriculture and economies

This theme focuses on building resilient agriculture and local economies through climatesmart farming practices, diverse livelihoods, adaptive leaders and locally-driven supply chains.

Agriculture sits at the heart of the Northern region's economy and cultural identity, making it critical to support the sector to adapt and thrive in a changing climate. Strengthening farming practices to be more sustainable and regenerative will help safeguard livelihoods, protect natural resources, and improve the resilience of rural landscapes.

At the same time, the region's economic resilience depends on reducing its exposure to external shocks. As island-based communities, Northern Tasmania faces unique challenges from disrupted supply chains and market volatility. Strengthening local food systems, fostering circular economy practices, and growing new industries – such as tourism, technology, and education – will create a more self-reliant and adaptable economy, better equipped to navigate future uncertainties.

Goals

- **Resilient farming practices:** Climatesmart, low-impact farming practices are adopted at scale, improving landscape resilience, farm productivity, and environmental outcomes.
- 5 Diverse and adaptive local economies: Regional economies thrive through diverse and sustainable livelihoods, underpinned by innovative technologies, financial security, and robust local food systems that reduce dependency on vulnerable supply chains and improve economic self-reliance.

6 Empowered leaders and entrepreneurs: Agricultural and business leaders champion resilience, driving adaptation and innovation across sectors and communities, strengthening local value chains.



Theme 3 Landscapes and ecosystems

This theme addresses how the region can nurture healthy and resilient landscapes and ecosystems that withstand drought and climate variability, protect natural capital, and support agriculture, biodiversity, and community needs.

The region's natural environments face significant challenges related to increasing drought frequency and intensity, leading to land degradation, reduced biodiversity, and stress on natural and agricultural systems. Shifts in rainfall patterns are increasing erosion risks, placing pressure on water resources and soil health.

However, there are opportunities to build on existing efforts in natural resource management and regenerative practices to ensure the region can protect and enhance ecosystem function and reduce the impacts of drought and climate variability.

This plan recognises the knowledge and practices held by Tasmanian Aboriginal people in ecosystem care and management and seeks to promote collaboration and learning to develop shared approaches. These initiatives aim to build a collective approach to protecting and enhancing the region's landscapes and ecosystems to support the wellbeing of current and future generations.

Goals

8

9

- **Protected landscapes:** Aboriginal cultural values, biodiversity hotspots, native vegetation, and vulnerable ecosystems are safeguarded and maintained for long-term ecological health.
- **Restored and resilient environments:** Degraded landscapes are rehabilitated into vibrant ecosystems that sustain biodiversity, support agriculture, and reduce drought and climate risks.
- **Community-led stewardship:** Communities, in partnership with Tasmanian Aboriginal knowledgeholders, are actively engaged in land and ecosystem management, combining Aboriginal knowledge with innovative practices to sustain ecological health and resilience.

5.4



Theme 4 Water systems and infrastructure

This theme is focused on strengthening reliable and climate-resilient water systems and infrastructure that enable secure access to water and support circular practices and sustainable development under changing climate conditions.

The region will face ongoing challenges of water security and infrastructure resilience. The region's reliance on agriculture makes efficient water management critical.

While governments hold significant responsibility in planning, delivery and maintenance of critical public infrastructure, there is much that can be done at the levels of households, communities and businesses to support adaptable water practices, systems and infrastructure.

Goals

- **Reliable water access:** Water capture, storage and delivery systems are optimised for equitable access under drought conditions.
- 11

10

Circular systems and practices: Communities and industries embrace circular water systems and practices, including recycling, reuse, and efficient management.

12 Climate-resilient infrastructure: Public and private infrastructure is planned, built and adapted to withstand drought and climate challenges.



Theme 5 Governance, collaboration and learning

This theme envisages communities and stakeholders working together inclusively and effectively on drought planning, implementation and continuous improvement towards a drought-resilient future.

Building regional drought resilience requires many stakeholders and organisations contributing and working together in coordination – across communities and sectors, and across multiple levels of government.

Drought resilience is strongest when all voices are included and empowered. Collaboration across diverse groups – including farmers, businesses, young people, service providers, community organisations and marginalised communities – will foster practical, locally driven solutions. By working and learning together, communities can build stronger connections, share knowledge and adapt to a changing climate.

Central to this work is recognising and respecting the deep and enduring connection of Tasmanian Aboriginal people to land, water and Country. Meaningful partnerships with Aboriginal organisations are vital to ensure that governance and decision-making processes are culturally appropriate, grounded in Aboriginal knowledge systems, and foster self-determination.

Goals

13

- Adaptive governance: Transparent and responsive governance structures facilitate coordinated, equitable, and long-term drought resilience efforts.
- **14 Inclusive collaboration:** Diverse stakeholders across the region, including Aboriginal people and young people, are working together towards shared resilience goals.
- **15** Active learning and improvement: Resilience building efforts are measured and shared to support active learning, and continuous improvement.

5.6 Action plan

The following table outlines key action areas for building drought and climate resilience across Northern Tasmania. It includes change type, timeframe and suggests potential partners to support and lead delivery. Organisations are already working towards many of these actions, and while some of these have been listed as potential partners, there will be many more not listed here. Potential partners may or may not take up the action they are listed against but have been included in recognition of their existing role and mandate relating to that action area. Coordination between organisations will be key to reduce duplication and leverage effort for maximum benefit.



Potential partners and collaborators		Delivery partners (such as NRM North, local councils, and social and humanitarian sector organisations), community activators (such as Tasmanian Aboriginal organisations, Landcare Tasmania, and neighbourhood houses), community connectors (such as schools, community groups, and sporting clubs), advocates and communicators (such as local media and youth organisations), and policy and technical enablers (such as DPAC and ReCFIT)	Delivery partners (such as social and humanitarian sector organisations, local councils, and neighbourhood houses), community connectors (such as sporting clubs, men's sheds, and community groups), community activators (such as Landcare Tasmania, volunteer groups and Tasmanian Aboriginal organisations), service providers (such as schools, rural health services, and community centres), convenors and facilitators (such as RAW Tasmania), and advocates and communicators (such as Advocacy Tasmania, Working It Out, and youth organisations)	Delivery partners (such as NRM North, Rural Business Tasmania, DairyTas, TasFarmers, and Tas Farm Innovation Hub), community activators (such as Rural Youth Tasmania, local agricultural groups, Landcare Tasmania, and Tasmanian Aboriginal organisations), community connectors (such as neighbourhood houses, sporting clubs, and community groups), convenors and facilitators (such as local councils, RAW Tasmania, and RDA Tasmania), and advocates and communicators (such as Youth Network of Tasmania and local media)
Time frame		Medium term	Medium term	Medium to Long term
Change type		Incremental and Transformative	Transformative	Transformative
Description	Theme 1: People and communities	Build capacity in knowledge, understanding and tools required to respond to drought and climate risks and take proactive measures to prepare for and adapt to these challenges	Foster connections and networks within communities to increase sense of belonging, mutual support, and resilience during times of drought and climate stress	Support current and emerging leaders, particularly young people, to take active roles in building community resilience and mobilising others to be involved
Action area	Theme 1: People	Building community knowledge and preparedness	Strengthening social connections and belonging	Nurturing community leaders
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TABLE 3: Action plan for building drought and climate resilience, Northern Tasmania

Ref	Action area	Description	Change type	Time frame	Potential partners and collaborators
1.4	Promoting mental health and wellbeing	Address the psychological impacts of drought and climate challenges through accessible mental health resources and services, with an emphasis on reducing stigma and supporting rural residents	Incremental and Transformative	Short to Medium term	Service providers (such as rural health services, neighbourhood houses, medical centres, and community centres), community connectors (such as sporting clubs, men's sheds, and community groups), community activators (such as councils and grassroots wellbeing groups), and advocates and communicators (such as Advocacy Tasmania, Headspace, and Working It Out)
1. 5.	Supporting vulnerable and marginalised groups	Provide targeted support and resources to vulnerable groups to ensure that resilience is built equitably across communities and those already experiencing hardship are not further disadvantaged	Incremental and Transformative	Long term	Delivery partners (such as social and humanitarian sector organisations, neighbourhood houses, and rural health services), community connectors (such as sporting clubs, men's sheds, and community groups), community activators (such as Tasmanian Aboriginal organisations and grassroots inclusion-focused groups), advocates and communicators (such as Advocacy Tasmania, MRC Welcome, Working It Out, and COTA Tasmania), and convenors and facilitators (such as local councils and RAW Tasmania)
1.6	Mobilising community- wide action and creativity	Support widespread community participation in resilience activities, encouraging local people to respond with agency and creativity to climate challenges	Transformative	Medium term	Delivery partners (such as social and humanitarian sector organisations and local councils), community activators (such as Landcare Tasmania, Rural Youth Tasmania, and grassroots environmental and arts groups), community connectors (such as neighbourhood houses, community groups, and volunteer networks), and advocates and communicators (such as community arts groups, local media, and youth organisations)
	Theme 2: Agricu	Theme 2: Agriculture and economies			
2.1	Nurturing business leaders	Empower agricultural and business leaders —including emerging leaders, entrepreneurs and small business owners — with the skills, knowledge, and networks to champion climate resilience and adaptation in their companies and sectors	Transformative	Medium term	Delivery partners (such as NRM North, Rural Business Tasmania, TasFarmers, DairyTas, and Tas Farm Innovation Hub), community activators (such as Rural Youth Tasmania, local agricultural groups, and industry development programs), advocates and communicators (such as chambers of commerce and industry networks), service providers (such as Rural Business Tasmania), and convenors and facilitators (such as local councils and RDA Tasmania)

Ref	Action area	Description	Change type	Time frame	Potential partners and collaborators
2.2	Promoting sustainable farming practices	Accelerate adoption of low-impact, sustainable, and climate-responsive agricultural practices that enhance landscape resilience and farm productivity	Incremental and Transformative	Medium term	Delivery partners (such as NRM North, TasFarmers, DairyTas, Tas Farm Innovation Hub, and Tasmanian Institute of Agriculture), community activators (such as local Landcare and catchment groups supporting sustainable land stewardship alongside farming), community connectors (such as industry networks and local agricultural groups), and advocates and communicators (such as industry networks and clocal as industry networks and clocal as industry networks and clocal as industry networks and chambers of commerce)
2.3	Supporting, digital literacy, innovation and technology adoption	Improve digital literacy and innovation capacity, and build capacity for experimentation with innovative practices, technologies, and products that support economic diversity, resilience, productivity, and or sustainable farming systems	Incremental and Transformative	Long term	Delivery partners (such as Tas Farm Innovation Hub, Rural Business Tasmania, and DairyTas), community activators (such as Rural Youth Tasmania and local agriculture groups), community connectors (such as chambers of commerce and industry networks), service providers (such as schools and education providers), and convenors and facilitators (such as RDA Tasmania and local councils)
2.4	Increasing access to resources and financial support	Provide streamlined and equitable access to financial incentives, grants, and technical support to enable farmers and businesses to invest in resilience and adaptation strategies	Incremental and Transformative	Short term	Delivery partners (such as Rural Business Tasmania, NRM North, TasFarmers and financial service providers), community connectors (such as industry networks and local agricultural groups), funders (such as the Australian Government via the Future Drought Fund, the Tasmanian Community Fund, and FRRR), and advocates and communicators (such as chambers of commerce and industry networks)
2.5	Strengthening local food systems and regional economies	Support the development of robust local food networks, resilient supply chains, and diversified regional economies to increase food security and economic sustainability	Transformative	Long term	Delivery partners (such as NRM North, TasFarmers, and local agricultural networks), community activators (such as farmers markets, local food cooperatives, and agricultural shows), community connectors (such as local fairs, chambers of commerce, and regional food networks), advocates and communicators (such as regional food networks and local media), and convenors and facilitators (such as RDA Tasmania and local councils)
2.6	Climate risk management solutions	Advocate for and test new resilience Incremental and insurance models so businesses Transformative and communities can access low- cost, natural hazard insurance and climate finance to manage climate risk and invest in climate adaptation	Incremental and Transformative	Medium term	Delivery partners (such as Rural Business Tasmania, TasFarmers, NRM North, and financial service providers), advocates and communicators (such as chambers of commerce and industry bodies), researchers and evaluators (such as Tasmanian Institute of Agriculture and Climate Futures Research Group UTAS), policy and technical enablers (such as DPAC and ReCFIT), and convenors and facilitators (such as RDA Tasmania and local councils)

Ref	Action area	Description	Change type	Time frame	Potential partners and collaborators
	Theme 1: Lands	Theme 1: Landscapes and ecosystems			
	Monitoring ecosystem health for targeted management	Establish systems for assessing and monitoring the health and risk of ecosystems, including mapping biodiversity hotspots, evaluating drought and climate risks, and prioritising vulnerable areas for targeted management	Incremental	Medium term	Delivery partners (such as NRM North, Tasmanian Parks and Wildlife Service, and Tasmania Fire Service), community activators (such as Landcare Tasmania and local Landcare and catchment groups), researchers and evaluators (such as Tasmanian Institute of Agriculture and Climate Futures Research Group UTAS), and policy and technical enablers (such as DPAC and ReCFIT)
3.2	Protecting biodiversity hotspots	Safeguard areas of high ecological value to preserve species diversity and maintain ecosystem health. Focus on protecting native vegetation, conserving vulnerable species, and implementing measures to prevent habitat loss and land degradation	Incremental and Transformative	Medium to Long term	Delivery partners (such as NRM North, Tasmanian Parks and Wildlife Service, Landcare Tasmania, and Tasmanian Land Conservancy), community activators (such as local Landcare and catchment groups, Tasmanian Aboriginal organisations, and Wildcare Tasmania), community connectors (such as schools and volunteer events), researchers and evaluators (such as UTAS and RMCG)
ю. Ю	Restoring degraded ecosystems	Rehabilitate areas impacted by degradation, drought and other stressors to enhance water retention and sequester carbon while supporting biodiversity and sustainable land use. Activities include river and wetland restoration, reforestation projects, and soil health programs.	Transformative	Medium to Long term	Delivery partners (such as NRM North, Landcare Tasmania, Tasmanian Parks and Wildlife Service, and Tasmanian Institute of Agriculture), community activators (such as local Landcare and catchment groups, and Tasmanian Aboriginal organisations), advocates and communicators (such as local media and environmental advocates)
8. 4.	Strengthening community stewardship	Enable community-led initiatives that restore and maintain healthy landscapes and ecosystems, including supporting Aboriginal land management practices, school and community planting projects, and partnerships with local groups	Incremental and Transformative	Short to Medium term	Delivery partners (such as NRM North, Landcare Tasmania, and Tasmanian Parks and Wildlife Service), community activators (such as local Landcare groups, catchment groups, and Tasmanian Aboriginal organisations leading land stewardship), community connectors (such as schools and volunteer bushcare events), advocates and communicators (such as environmental advocates and local media), and convenors and facilitators (such as local councils coordinating local stewardship initiatives)

Potential partners and collaborators	Delivery partners (such as Tasmania Fire Service, NRM North, Tasmanian Parks and Wildlife Service, and TasFarmers), community activators (such as local Landcare groups, catchment groups, and Tasmanian Aboriginal organisations with fire management knowledge), advocates and communicators (such as local media), and policy and technical enablers (such as the DPAC and ReCFIT), and convenors and facilitators (such as local councils supporting community bushfire preparedness partnerships)	Delivery partners (such as NRM North, Landcare Tasmania, TasFarmers, Tasmanian Institute of Agriculture, and Tas Farm Innovation Hub), community activators (such as local Landcare and catchment groups and Tasmanian Aboriginal organisations), community connectors (such as local agricultural groups, markets and shows), advocates and communicators (such as industry networks and local media), and convenors and facilitators (such as local councils)		n Delivery partners (such as TasWater, Hydro Tasmania, Tasmanian Irrigation, NRM North, and TasFarmers), community activators (such as local Landcare and catchment groups engaging landholders in water management), community connectors (such as local agricultural groups and rural producer networks), advocates and communicators (such as industry networks and chambers of commerce), policy and technical enablers (such as local councils supporting regional water access partnerships)	Delivery partners (such as NRM North, TasWater, and local councils), community activators (such as local Landcare and catchment groups, Tasmanian Aboriginal organisations, and grassroots water stewardship programs), community connectors (such as schools, community groups, and neighbourhood houses running water-wise initiatives), advocates and communicators (such as regional media, environmental organisations, and industry networks promoting sustainable water use), and policy and technical enablers (such as DPAC and ReCFIT)
Time frame	Medium term	Medium term		Long term	Short to Medium term
Change type	Equip landholders and communities Incremental with the resources, training, and infrastructure needed for effective fire management – including planned burn support, ecosystem recovery projects, and permanent water infrastructure for bushfire protection in vulnerable areas	anagement Transformative ce land nce soil health, on. Provide al assistance, and holders to adopt h productivity with	frastucture	ify water storage Incremental s to ensure communities, dustry, irm water security	Inderstanding Transformative a ustainable ough education, ms, and resources viduals and onserve water and ctices
Description	Equip landholders and communitie with the resources, training, and infrastructure needed for effective fire management – including planned burn support, ecosystem recovery projects, and permanent water infrastructure for bushfire protection in vulnerable areas	Encourage land management practices that reduce land degradation, enhance soil health, and mitigate erosion. Provide education, technical assistance, and incentives for landholders to adopt practices that align productivity with ecological health	systems and in	Expand and diversify water storage and supply systems to ensure reliable access for communities, agriculture, and industry, supporting long-term water security	Build community understanding and participation in sustainable water practices through education, awareness programs, and resource that empower individuals and organisations to conserve water an adopt efficient practices
Action area	Building fire-resilient ecosystems	Promoting sustainable land management	Theme 4: Water systems and infrastuctur	Strengthening water storage and access	Increasing water literacy and engagement
Ref	3.5	3.6		4.1	4.2

Ref	Action area	Description	Change type	Time frame	Potential partners and collaborators
4.3	Promoting water recycling and reuse	Encourage the sustainable use of water through recycling and reuse initiatives that reduce pressure on natural water sources and demonstrate innovative approaches to water management	Transformative	Short to Medium term	Delivery partners (such as TasWater, Tasmanian Irrigation, NRM North, and TasFarmers), community activators (such as local Landcare and catchment groups, and grassroots environmental organisations promoting water reuse practices), community connectors (such as local councils and schools engaging communities in reuse initiatives), advocates and communicators (such as industry networks and local media promoting water conservation narratives), and policy and technical enablers (such as ReCFIT and NRE Tas Water Management teams)
4.4	Optimising irrigation and water efficiency	Improve the efficiency and sustainability of irrigation systems by upgrading infrastructure, adopting advanced monitoring technologies, and managing groundwater resources responsibly	Incremental	Medium to Long term	Delivery partners (such as Tasmanian Irrigation, NRM North, TasFarmers, DairyTas, and Tas Farm Innovation Hub), community activators (such as Landcare and catchment groups), community connectors (such as local agricultural groups and industry networks), advocates and communicators (such as industry bodies and local media), and policy and technical enablers (such as DPAC, ReCFIT, and NRE Tas Water Management teams)
4.5	Climate- resilient public infrastructure	Assess and adapt public and essential infrastructure to withstand climate risks, ensuring critical services and systems remain operational and are strategically located to reduce exposure to drought-prone areas	Incremental	Long term	Delivery partners (such as local councils, TasWater, and TasNetworks), community activators (such as local emergency management groups), advocates and communicators (such as chambers of commerce), policy and technical enablers (such as DPAC, ReCFIT, SES Tasmania, and Tasmanian Fire Service), and convenors and facilitators (such as NTARC and local councils coordinating regional infrastructure resilience efforts)
4.6	Water sensitive planning	Incorporate water-sensitive and climate-adaptive design principles in urban and town planning to reduce vulnerability to drought and climate impacts	Transformative	Medium to Long term	Delivery partners (such as local councils, NRM North, and TasWater), community activators (such as local Landcare and catchment groups), advocates and communicators (such as environmental organisations and local media), policy and technical enablers (such as DPAC, ReCFIT, and the Tasmanian Planning Commission), and convenors and facilitators (such as NTARC and local councils facilitating regional planning collaboration)

Ref	Action area	Description	Change type	Time frame	Potential partners and collaborators
	Theme 5: Gover	Theme 5: Governance, collaboration and lear	earning		
5. 1	Strengthening governance and coordination	Establish trusted, transparent, and effective governance structures with clear roles and responsibilities to guide resilience efforts. Focus on long-term planning, dedicated coordination roles, and adaptive funding mechanisms that ensure stability and responsiveness over time	Incremental and Transformative	Medium to Long term	Delivery partners (such as the RDRP coordinating team within DPAC, NRM North, and local councils), policy and technical enablers (such as DPAC, ReCFIT, and NRE Tas), decision makers (such as the Australian Government and Tasmanian Government agencies involved in resilience and climate adaptation), convenors and facilitators (such as the Australian Government via the Future Drought Fund, Tasmanian Community Fund, and FRRR)
5.2	Fostering regional collaboration and alliances	Build and sustain collaborative networks across councils, agricultural organisations, Aboriginal groups, and community stakeholders to align resilience efforts. This includes forming alliances, conducting comprehensive stakeholder mapping, and ensuring coordinated planning and delivery across sectors	Transformative	Medium term	Delivery partners (such as the RDRP coordinating team within DPAC, NRM North, and local councils) community activators (such as Tasmanian Aboriginal organisations, Landcare Tasmania, and agricultural groups), convenors and facilitators (such as NTARC, RDA Tasmania, and local councils), decision makers (such as the Tasmanian Government and local government leadership teams), and advocates and communicators (such as chambers of commerce and regional industry networks)
5.3	Engaging communities and diverse voices	Facilitate meaningful community participation in resilience planning and action by engaging diverse groups, including palawa communities, young people, and marginalised groups. Initiatives may include community conversations, public forums and co-design processes	Incremental and Transformative	Short to Medium term	Delivery partners (such as the RDRP coordinating team within DPAC, NRM North, and local councils), community activators (such as Tasmanian Aboriginal organisations, Rural Youth Tasmania, and Landcare Tasmania), community connectors (such as neighbourhood houses, sporting clubs, and community groups), advocates and communicators (such as RDA Tasmania, and local media), and convenors and facilitators (such as RDA Tasmania)
5.4	Promoting best practices and knowledge sharing	Develop, document, and advocate for region-wide best practices in resilience. Initiatives include creating guidelines, hosting annual summits and exchanges, and celebrating successes through resilience awards and showcases to inspire and align efforts	Incremental and Transformative	Short to Medium term	Delivery partners (such as the RDRP coordinating team within DPAC, NRM North, TasFarmers, and Tas Farm Innovation Hub), community activators (such as Tasmanian Aboriginal organisations and Landcare Tasmania), advocates and communicators (such as industry networks, chambers of commerce, and local media), convenors and facilitators (such as RDA Tasmania and local councils), and researchers and evaluators (such as Tasmanian Institute of Agriculture)

Ref	Action area	Description	Change type	Time frame	Potential partners and collaborators
5.5	Enhancing measurement, learning and improvement	Embed learning and evaluation into resilience efforts to ensure continuous improvement. Establish systems for measuring progress, reviewing plans with stakeholders, and integrating new data and evidence to refine strategies over time	Incremental	Short term	Delivery partners (such as the RDRP coordinating team within DPAC, NRM North, and Tas Farm Innovation Hub), researchers and evaluators (such as Tasmanian Institute of Agriculture, UTAS, and Climate Futures), convenors and facilitators (such as RDA Tasmania and local councils), and policy and technical enablers (such as DPAC and ReCFIT)
5.6	Building trusted partnerships and delivery capacity	Forge partnerships with trusted organisations to implement and deliver resilience plans effectively. Focus on leveraging existing strengths, resources, networks and community trust	Transformative	Short to Medium term	Delivery partners (such as the RDRP coordinating team within DPAC, NRM North, and Tas Farm Innovation Hub), community activators (such as Tasmanian Aboriginal organisations and Landcare Tasmania), convenors and facilitators (such as RDA Tasmania, NTARC, and local councils), advocates and communicators (such as chambers of commerce and industry networks), and funders (such as the Australian Government via the Future Drought Fund and the Tasmanian Community Fund)





Implementation approach



The implementation of the Northern Regional Drought Resilience Plan will be community led, with support from the Tasmanian Government. There are two elements: guiding and supporting.

Guiding means promoting the plan and the identified actions as a roadmap to align community, government, not-for-profit and private sector effort. The intent here is to educate Northern Tasmanian leaders and communities about how to shape existing and future projects and practices to ensure we are all working in the same direction toward better drought resilience for our region.

Under the supporting element, the Regional Drought Resilience Planning Program will offer a targeted program of support for identified projects that will work towards the RDRP actions.

While the RDRP program will provide some funding for implementation, communities are encouraged to use the plan to help secure additional funding. Implementation will be a collaborative effort between regional communities, stakeholders and government. Implementation will reflect the following principles:

- Goals and action areas detailed in RDRPs will guide allocation of funds.
- Community voices in decision-making will continue to guide where available funding is spent.
- Available funding will be accessible to a diverse range of interested groups, varying in focus, scale and capacity.
- Where appropriate, vulnerable areas will be prioritised.
- There will be fairness in funding across regions.
- Implementation will focus on place-based local solutions.
- Implementation will aim to place as little administrative burden on stakeholders as possible.

The first round of implementation will be coordinated by the project team within the Tasmanian Government's Department of Premier and Cabinet, in collaboration with Project Advisory Groups or a similar community voice. After the first round, monitoring, evaluation and learning (MEL) outcomes will be used to refine the plans and a long-term owner will be identified.

6.1 Roles in implementation

To build a shared understanding of the region and support ongoing collaboration towards this plan's goals, roles involved in building drought resilience in Northern Tasmania have been mapped and are shown below.

FIGURE 12: Key roles in building drought resilience in Northern Tasmania



The position of a group or role within the mapped system is indicative only and may change depending on a group's level of interest in program delivery.

It is also important to note that the system is dynamic, and roles may evolve over time as new priorities, projects and partnerships emerge. Given its adaptive nature, stakeholder mapping will be reviewed as part of implementation.

Table 4 describes each category and role captured in the drought resilience system.

Category	Role
Leading	Coordinating team drives plan implementation and coordination across the system.
Coordinating, delivering, and activating drought resilience initiatives at	Delivery partners implement drought resilience projects and services at scale across the region.
regional and community levels.	Community activators mobilise local people, build momentum, and organise grassroots resilience initiatives.
Enabling Influencing, resourcing,	Decision makers make key strategic and operational decisions shaping resilience outcomes.
and creating the conditions for long-term drought resilience.	Policy makers develop and implement policies, frameworks and regulations that guide and govern drought resilience efforts.
	Funders provide financial and in-kind resources to enable resilience initiatives.
	Researchers and evaluators generate evidence, insights, and assess the impact of resilience actions.
	Convenors and facilitators bring people together, foster partnerships, and create spaces for collaboration and shared problem-solving.
	Advocates and communicators influence public narratives, amplify community voices, and champion systemic change through storytelling and outreach.
Participating Shaping and	Land managers and producers manage land and water resources, contributing to and directly impacted by drought resilience strategies.
experiencing resilience through direct involvement and contribution to life in	Tasmanian Aboriginal organisations are carers and custodians of Country, holders of cultural and ecological knowledge, contributing to land and water stewardship, and supporting community wellbeing.
local communities.	Lived experience and community voice relates to community members sharing first- hand insights on local drought impacts and solutions.
	Marginalised groups are groups disproportionately affected by drought, whose inclusion is essential for equitable and just resilience solutions.
	Community connectors build relationships, trust, and cohesion within and across communities.
	Service providers deliver essential services that strengthen community wellbeing, capacity, and resilience to drought.

TABLE 4: Key roles involved in building drought resilience in Northern Tasmania

6.2 Next steps

Next steps for the Regional Drought Resilience Planning Program are:

- Greater coordination: while there are pockets of strategic work underway, across the state there is currently no consolidated approach to drought and climate resilience planning. Work needs to continue to drive greater coordination across all parts of government and sectors. This will help to achieve a more holistic and strategic response to drought and climate resilience planning.
- Access and availability of centralised data: further work is needed to improve the availability of, and access to, centralised climate data and to understand future implications for key agricultural industries and natural resource management, including cropping, dryland grazing and landscape function.
- Aboriginal involvement: there are opportunities to enable and involve Aboriginal organisations and people in drought and climate resilience planning, using outcomes to shape future implementation. This approach must reflect the principles of self-determination and community priorities and needs.

- Role clarity and purpose: efforts to clarify roles and responsibilities of key departments, agencies and organisations involved in drought and climate resilience in Tasmania are needed to address stakeholder confusion and fatigue (both statewide and regional).
- **Opportunities for strategic alignment:** efforts will be required to integrate the Regional Drought Resilience Plans with complementary strategic documentation and framework.
- **Broader FDF program direction:** RDRPs may be able to provide greater strategic direction and clarity across the FDF program.
- **Resilience assessment review:** To ensure plans remain up-to-date and to inform longerterm monitoring, evaluation and learning activities, it is recommended a review of the plans, supporting resilience assessments and maps be undertaken when significant changes occur, such as when new finescale or 'downscaled' climate projections for Tasmania are available. Future reviews should also consider further refinement of the indicators used in the resilience assessment.





Monitoring, evaluation and learning



The proposed monitoring, evaluation and learning (MEL) approach for the Northern Regional Drought Resilience Plan has been informed by the Future Drought Fund MEL Framework, December 2020, and the RDRP MEL Framework. As well as monitoring and evaluating the plan, broader Tasmanian RDRP program activities will be monitored according to the RDRP 2.0 Outcomes Framework.

MEL activities for the Northern Tasmanian RDRP will aim to measure progress against the plan's key themes.

The monitoring and evaluation approach for the RDRPs must be streamlined, simple and efficient to implement. Community feedback will be a critical component to MEL activities. This may be collected through a range of activities, including grants acquittal processes, surveys and community focus groups, aligned with monitoring and evaluation efforts of other FDF programs or activities. Data and information will be collected at key milestones during implementation, including at the completion of projects and at the completion of the first round of implementation.

MEL outcomes and findings will be used to refine the Northern Tasmanian RDRP, as well as the broader program structure and funding approach.

The RDRP project team will be responsible for undertaking MEL activities for the first round of implementation. After this, MEL responsibilities will be determined in line with the longer-term governance arrangements for the plan.

Ultimately, the plan aims to improve overall drought resilience in Northern Tasmania, as measured by the baseline resilience assessment and mapping. As noted in the previous section on next steps, it is recommended that the assessment be repeated, ideally within five years.

Table 5 outlines the proposed MEL approach for the Northern Tasmanian RDRP.

Whole-of-plan objectives (RDRP Program Framework)	The RDRP is used to drive decisions, actions and investments to proactively manage drought and climate variability preparedness (FDF long-term outcomes 4+ years)
FDF Impact Areas	 Agricultural communities are resourceful, adaptable, and thriving Primary producers and businesses are self-reliant, productive, and profitable Agricultural and natural landscapes are functional and sustainable, with healthy natural capital

TABLE 5: Northern Tasmania RDRP MEL approach
Theme	Outcomes/indicators	Timeframe
People and communities	Communities use relevant data and information to better understand their resilience to drought and plan for resilience to drought	1-4 years
Communities are informed, connected and prepared, enabling people to adapt and thrive through drought	Increased community understanding of the region's current and future drought resilience, considering the region's unique economic, environmental and social characteristics	1-4 years
and climate challenges.	The number of, and participation in, local networks and programs to enhance drought resilience increases	1-4 years
(AR)	Stronger connectedness and greater social capital within communities, contributing to wellbeing and security	4+ years
	Communities implement transformative activities that improve their resilience to drought	4+ years
Agriculture and economies Sustainable agricultural practices and strong	Producers, small business and other connected stakeholders report they have access to the localised information and resources they need to make decisions, adapt to change and leverage off future economic opportunities as they arise	1-4 years 4+ years
local food systems enable diverse and adaptive local economies.	Business owners are pursuing opportunities to increase financial security of their business before, during and after drought and climate-related events	1-4 years
	Local food systems and supply chains are robust and adaptive	4+ years
	Increased diversity and innovation in agriculture and regional economies	4 years
Landscapes and ecosystems	Partnerships, networks and engagement are built between stakeholders managing natural resources	1-4 years
Landscapes and ecosystems are healthy, biodiverse, protect	Natural resource management capability is improved across the region	4+ years
Tasmanian Aboriginal cultural heritage and natural capital, and	Land managers are implementing practices to assess and monitor the ecological function and health of native and productive landscapes	1-4 years 4+ years
support community needs through climate variability.	More primary producers preserve natural capital while also improving productivity and profitability	4+ years
	Increase in restored and protected ecosystems	4+ years
~	Strategic and local planning provisions prioritise and protect natural capital	4+ years

Theme	Outcomes/indicators	Timeframe
Water systems and infrastructure	Water systems are being planned and managed to meet the needs of a changing climate	2-4 years
Water security and drought-resilient infrastructure meets community and	Investment in building, maintaining and improving infrastructure has contributed to increasing the communities' drought and climate resilience	4+ years
agricultural needs under changing climate conditions.	Greater sharing of learnings and collaborative planning related to water and drought resilience between community, government and agencies	4+ years
Systems of governance, collaboration and learning	Number of activities underway to progress strategic actions identified in the plan	1-4 years 4+ years
Stakeholders and communities work	Plans have growing buy-in from key stakeholders in the region	1-4 years
effectively together to build lasting drought resilience.	Regional representatives continue to identify and review incremental, transitional and transformational opportunities to strengthen resilience	2, 4 years
	Actions, pathways and opportunities to improve regional drought resilience, mitigate risks and adapt to change continues to be identified and planned for	1-4 years

more often to build drought resilience	
Communities implement transformative activities that improve their resilience to drought	4+ years

Communities share knowledge, collaborate and partner with government

Greater sharing of experiences and lessons related to drought resilience 1-4 years between communities

1-4 years



A resilient region: case studies



There are many examples of community-based initiatives already having a positive impact in strengthening resilience. The following examples have been prepared to inspire future drought resilience activities as part of the implementation of this plan. There are more case studies at Appendix G.

CASE STUDY 1 Small business community learning workshops

Themes

People and communities; agriculture and economies; governance, collaboration and learning.

About this project

Funded through the FRRR Future Drought Funding Program, Rural Business Tasmania delivered a series of breakfast workshops around drought preparedness - scheduled to fit in with business demands (learning session before start of workday, with networking over breakfast). Workshops aimed to build capacity of small businesses to prepare for drought and help develop long term resilience to underpin community wellbeing, pride and togetherness.

Workshops were held across the state and explored succession planning strategies, social and mental health skillset development, community learning and network building.



Stephen Hansen, Project Manager, Rural Business Tasmania, delivering a community learning workshop.

Impact

- Communities learned and shared innovative ways to build drought resilience.
- Increased awareness and shifted attitudes to drought preparedness at the community level.
- Local leadership support and capacity development, as well as networking and social support.
- Mentors, networks and organisations were activated towards driving action on drought resilience.

Case study and image courtesy Rural Business Tasmania.

CASE STUDY 2 Break O'Day drought weeds project

Themes

Landscapes and ecosystems; agriculture and economies.

About this project

The 2019 drought allowed weeds to spread and the Tasmanian Weed Action Fund responded with special funding for drought affected municipalities. Key priorities for the Break O'Day Drought Weeds Project were reducing impact on agricultural production, dryland cropping and pasture weeds (including thistles, ragwort serrated tussock and Paterson's curse), new incursions and threats, farm weed managers and best practice.

Impact

- Dedicated Weeds Officer: This person visited farmers on-farm, providing weed management and biosecurity support, identifying weeds and threats and helping develop weed treatment plans.
- Increased weed knowledge: The program helped to increase knowledge of weed threats to farm productivity in drought, through serrated tussock Paterson's curse workshops, weed management and control planning.



Pete Heading, Drought Weeds Officer seconded from NRM North. Photo: P. Buchhorn. Break O'Day Council/NRM North.

- Weed management funding: \$29,000 of direct funding was provided to landholders for 10 projects to control drought weeds impacting farm production. While funding was helpful, simply providing financial support to farmers to help control their drought weeds is not enough, due to competing priorities and time limitations.
- Local collaboration: The program initiated landholder collaboration to coordinate Spanish heath control across neighbourhood and property boundaries. Coordination of weed control efforts across properties and landholders was critical.
- Weed Plan: A Break O'Day Farm Sector Drought Weeds Plan was developed for priority weeds and biosecurity risks.





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Appendices



Appendix A: Northern Region Drought Risk, Resilience and Adaptive Capacity Data Report

The Drought Risk Resilience and Adaptive Capacity Data Report for Northern Tasmania was compiled in 2023 to provide baseline data for drought resilience planning. The report is a snapshot in time of the indicative and potential drought impacts for the Northern region of Tasmania and answers the following three questions:

- What is the prevalence, severity and impact of drought?
- What is the likely prevalence, severity and impact of drought?
- What are the vulnerabilities, gaps in preparedness and adaptive capacity for drought and other related permanent transitions to a changing climate?

This report analyses the resilience of agricultural, natural environment and community systems to drought.

The Drought Risk Resilience and Adaptive Capacity Data Report, Northern Tasmania heavily informed this Northern Tasmania Regional Drought Resilience Plan and can be considered the partner document to the RDRP.

The Drought Risk Resilience and Adaptive Capacity Data Report, Northern Tasmania, 2023 can be accessed at: https://droughtready.tas.gov. au/northern-regional-drought-resilience-planning

Appendix B: Stakeholder engagement summary

1. Approach

From November 2022 to February 2025, as part of the development of the Northern Tasmanian Regional Drought Resilience Plan (RDRP), approximately 280 regional stakeholders, organisations and community members across a diverse range of social, environmental and economic interests shared their knowledge, views and ideas around strategic actions.

The consultation process for the development of the Northern Tasmanian RDRP has involved:

- Establishment and coordination of a Project Advisory Group (PAG) comprising eight members. The PAG met eight times during the plan's development. The PAG has involved representatives from local government, Rural Business Tasmania, TAS Farm Innovation Hub, NRM North, Tamar NRM, RDA Tasmania and communitybased arts organisation RANT Arts.
- 2. Facilitation of a future drought scenarios workshop in August 2024.
- 3. Facilitation of a community resilience drought and actions workshop that tested key findings to date, held on Flinders Island in February 2025.
- 4. Attendance at a range of stakeholder events and meetings.
- 5. Targeted one-on-one regional discussions with over 200 stakeholders.
- 6. Participation in feedback surveys via the Drought Ready website (<u>https://</u>droughtready.tas.gov.au/).

In addition, approximately 25 stakeholder meetings were held with statewide project partners. The outcomes of these meetings were used to inform the statewide program direction and implementation plans. The project team also worked closely with a project steering committee made up of key stakeholders to guide the strategic direction of the plans.

All feedback gathered as part of the engagement process, including actions identified through the futures workshop and PAG discussions, were reviewed and thematically analysed to identify the key themes for Northern Tasmania, as well as directly influencing the development of the goals and action areas captured in this plan. Draft themes and goals were discussed in detail with the regional PAG over three sessions to validate the information.

1.1 Future scenarios workshop

Facilitated by Disruptive Co, a full day future scenarios workshop was held with 22 participants from a range of industries including state and local government, education and training, the not-for-profit sector, agribusiness, tourism, private business and research. While futures and foresight approaches often involve identifying and mitigating risks, this work was equally about supporting the community to focus on what they want to achieve rather than simply avoiding harm, which built agency in shaping their own future. Through a participatory approach, scenarios were developed that were based on current data and evidence, but also the realities, hopes, and concerns of those in our communities who are affected by climate challenges. Actions identified through this process were used to inform the development of the themes, goals and actions in this plan.

1.2 Flinders Island drought resilience workshop

On 12 February 2025, a community workshop was held on Flinders Island, to explore community strengths, vulnerabilities, as well as actions and key priorities for building drought and climate resilience for the island community. This workshop was attended by over 25 community members across a range of community, agriculture and business interest areas.

Outcomes and priority actions identified through the workshop will be used to help direct implementation funding for the island. A summary of priorities is provided in the Flinders Island Snapshot (Appendix F).

2. Organisations engaged

Organisations engaged to help shape the development of the Northern Tasmanian RDRP are:

- Break O'Day Council
- Cape Barren Island Aboriginal Association Inc.
- CWA Whitemark
- Environment Tasmania
- Farm Schools Field Centres
- Fingal Valley Neighbourhood House
- Flinders Island Business Inc. (FIBI)
- Flinders Island Council
- George Town Council
- Islander Way Regenerative Tourism (Flinders Island)
- Launceston City Council
- Meander Valley Council
- Northern Tasmania Alliance for Resilient Councils (NTARC)
- NRM North
- RANT Arts
- RDA Tasmania
- Rural Business Tasmania
- Tamar NRM
- Tas Farm Innovation Hub
- TasFarmers
- Tas Irrigation
- Tas Leaders

Organisations engaged across the statewide RDRP program:

- Australian Rural Leadership Foundation (ARLF)
- Department of Environment (NRE)
- Department of Health (Public Health focus)
- Department of State Growth (ReCFit)
- Foundation of Rural and Regional Renewal (FRRR)
- Hydro Tasmania
- Landcare
- Local Government Association of Tasmania (LGAT)
- National Emergency Management Agency (NEMA)
- Neighbourhood Houses Tasmania
- Rural Alive and Well (RAW)
- Rural Youth Tasmania
- Sustainable Timber Tasmania
- Tasmanian Conservation Trust
- TasCOSS
- Tasmanian Chamber of Commerce and Industry
- Tasmania Fire Service
- Tasmanian Institute of Agriculture
- Tas Parks and Wildlife
- TasNetworks
- TasWater

3. Engagement insights

During plan development, stakeholders contributed knowledge, vulnerabilities, gaps and ideas relating to drought and climate variability across Northern Tasmania. Table 6 summarises the key messages and insights from engagement. These, along with other engagement data and inputs, were used to inform theme, goal and action development.

TABLE 6: Key insights from stakeholder engagement

Theme	Stakeholder insights
People and communities	 Informed communities: There is a knowledge gap about drought and climate issues among the broader community, with many believing Tasmania is unaffected by climate challenges. Connected Communities: Resilience is enhanced by strong social networks and community-led initiatives (for example, the Furneaux Collective on Flinders Island). Preparedness: Vulnerable groups such as the elderly, disabled, and migrants are underrepresented in current resilience planning. Effective engagement is needed to support these groups. Youth engagement: Youth prefer creative, empowering approaches like art-based programs (for example, RANT Arts). Mental health: Communities experience long-term mental health impacts from cumulative disasters, emphasising the need for support systems.
Agriculture and economies	 Sustainable practices: Increased adoption of regenerative agriculture practices (such as. rotational grazing, use of perennial pastures) has shown resilience benefits. Local food systems: Initiatives to reduce reliance on imports and foster "grow local, stay local" systems can improve food security. Economic resilience: Small-scale and organic farmers face barriers to accessing grants compared to large-scale operations, suggesting a need for more equitable funding models. Innovation and education: Tools like Farming Forecaster and programs like Tas Farm Innovation Hub are key to adapting agricultural practices.
Landscapes and ecosystems	 Ecosystem restoration: Restoring wetlands and retaining native vegetation significantly enhance ecological resilience and community wellbeing. Natural capital: There's a need to value and protect natural capital in decision-making, as landscapes degraded by clearing are less resilient to climate challenges. Biodiversity: Enhancing biodiversity across farming systems reduces vulnerability to pests and diseases and increases resilience to drought.
Water systems and infrastructure	 Water security: Infrastructure such as expanded farm dams, improved irrigation systems, and potential desalination plants are needed to ensure water availability during dry periods. Efficient use: Fixed water allocation schemes may encourage waste; more flexible systems are needed to adapt to varying seasonal demands. Collaboration: There are perceptions that integrated water management across key entities like Tasmanian Irrigation and Hydro Tasmania is limited.
Governance, collaboration and learning	 Empowered stakeholders: Building capacity and leadership among community groups and stakeholders is critical for collective action (for example, Tas Leaders DRIP program). Removing silos: Inter-agency collaboration and long-term strategic planning are needed to move beyond short-term election-cycle thinking. Education and messaging: Clear, accessible communication is essential to engage communities and foster understanding of drought and climate challenges. Inclusive governance: Aboriginal organisations and other underrepresented groups must be included meaningfully.

3.1 Regional priorities from futures workshop

Regional priorities from the Northern Tasmanian futures workshop are summarised below.

- Youth engagement and co-design: A priority for participants was making youth co-design a standard practice in resilience planning, ensuring that the next generation's ideas and concerns are central to long-term solutions.
- Aboriginal leadership and land management practices: Participants hoped to see traditional Aboriginal land management practices more widely reintroduced, recognising the importance of engaging with palawa people to develop shared approaches to environmental stewardship and resilience.
- Diversified and efficient water management: Participants emphasised the need to diversify water storage options at both farm and urban levels, including removing barriers to domestic water tanks and improving water use efficiency across sectors.
- Increased support for innovation: Participants saw a greater role for government and industry to play in removing barriers to innovation, nurturing emerging sustainability leaders and initiatives, and enabling investment, resources and opportunities to support experimentation and growth.
- **Community-led resource management:** Participants pointed to the value of initiatives that supported local communities to manage natural resources, particularly catchment and river systems, which were seen as essential for preparing for shocks and protecting vital ecosystems.

- Building capacity in the community: Participants advocated for knowledge transfer across generations and sectors, incorporating climate resilience education in schools and training across industries.
- Circular economy and regenerative development: Participants called for investment into circular economy practices that minimise waste, and regenerative practices that seek to restore and replenish natural and social systems rather than extract from and deplete them.
- Collaborative governance and strategic coordination: A key priority was enhancing cooperation between the three tiers of government, adopting a collaborative governance model, and creating interagency roles to coordinate efforts on drought and climate resilience.
- Futures literacy and community planning: Participants were eager to see more collaborative futures planning initiatives, including future scenario workshops for different sectors and more opportunities for community planning workshops.
- Transparent, inclusive, and evidence-based decisions: Participants called for governments to prioritise action and investment based on best practice, best evidence and community guidance. They emphasised the need to remove politics from climate challenges and ensure that all stakeholders have a voice in shaping resilience plans.

Appendix C: Strategic context

Key strategic documentation relevant to the Tasmanian RDRP Program is summarised in the following table.

Document/ strategic initiative	Document purpose and opportunities for strategic alignment
Commonwealth	
Future Drought Fund Act 2019	The FDF Act provides the legislative framework for the FDF program, and specifically the RDRP program. The object of this Act is to enhance the public good by building drought resilience. It will be critical that long-term plans for the implementation of the Tasmanian RDRP align with the Act, including any future amendments to the Act that may be made.
Future Drought Fund (Drought Resilience Funding Plan 2024-2028) Determination 2024, 7 Feb 2024	The FDF Determination provides the framework to guide spending under the Future Drought Fund. Moving into implementation, it will be important that this is considered in the design of the grants implementation program.
National Health and Climate Strategy	Australia's first National Health and Climate Strategy sets out a whole-of-government plan for addressing the health and wellbeing impacts of climate change, whilst also addressing the contribution of the health system. This strategy should continue to be reviewed for further insights into opportunities and needs for building community resilience around drought.
National Disaster Mental Health and Wellbeing Framework	The National Disaster Mental Health and Wellbeing Framework provides guidance to recovery workers to support disaster-affected communities' mental health and wellbeing. This strategy should continue to be reviewed for further insights into opportunities and needs for building community resilience around drought.
Statewide	
Climate change	
<i>Climate Change (State Action) Act 2008)</i> Tasmania's Climate Change Action Plan 2023-25	Tasmania's Climate Change Action Plan 2023-25 outlines the government's plans for action on climate change until 2025, to help reach our target to maintain net zero greenhouse gas emissions, or lower, from 2030. The action plan guides the delivery of priorities. Through the implementation of the RDRPs, there may be opportunities to strengthen and contribute to the targets listed in the action plan.
Tasmania's Emissions Reduction and Resilience Roadmap 2024-29	Developed by RECFIT to link together the six Sectoral Emissions Reduction and Resilience Plans and Tasmania's Risk Assessment for Climate Change 2024, and set out how Tasmania will maintain net zero emissions across our economy through to 2030 and beyond.
Tasmanian Local Government Climate Capability Program	A statewide local government climate capability program initiated by councils that is coordinated by LGAT and the Tasmanian Government. There are opportunities to strategically align priorities with the RDRP program.

Document/ strategic initiative	Document purpose and opportunities for strategic alignment
Tasmanian Positive: our state's sustainability strategy	The Tasmanian Government is currently developing a statewide sustainability strategy. The purpose of the strategy is to ensure that future generations have what they need to live well, including a healthy environment, social equity, and economic prosperity, while also meeting the needs of the present.
	During implementation, there will be opportunities to explore opportunities for alignment and collaboration between the two programs.
Aboriginal policy	
Closing the Gap, Tasmanian Implementation Plan	The Tasmanian Implementation Plan for Closing the Gap supports the implementation of the National Agreement on Closing the Gap 2020. 'It sets priorities for government agencies and Aboriginal community-controlled organisations to deliver improvements to the inequalities faced by many Aboriginal and Torres Strait Islander people so that their life outcomes are equal to all Tasmanians' (2021).
	Where suitable, the Tasmanian Closing the Gap Implementation Plan can be used to guide funding priorities, and to prompt thinking around possible projects and initiatives for building community resilience around drought and climate variability.
Agriculture	
Agrivision 2050 plan: Tasmanian Government's Competitiveness of	The Tasmanian Government has an ambitious goal to grow the annual value of the State's agriculture to \$10 billion by 2050. Investment in agricultural research, development and extension (RD&E) is a key factor to achieving the growth rate necessary to reach this target.
Tasmanian Agriculture for 2050 White paper	Policy makers and industry should consider how this agricultural growth target is compatible within emissions reduction scenarios across agriculture for policy coherence and mutually reinforcing goals.
Impacts of climate change on Tasmanian agriculture	This is a good public resource for farmers on a range of topics, including climate impacts on agriculture, emissions reductions, and opportunities to adapt and plan for a changing climate.
	There is an opportunity to continue integrating resilience, productivity and emissions reduction goals in agriculture and food policy goals.
Agriculture Sector Emissions Reduction and Resilience Plan (ERP) 2024-2029	This report provides a high-level summary of Tasmania's agriculture sector, its emissions, and the impacts of climate change on the sector. It also outlines emissions reduction and resilience opportunities and barriers, and relevant policies and actions at the local, national and international level.
State of Play report – Tasmania's Agriculture sector	There may be an opportunity to integrate the FDR goals and RDRPs into this sector-wide action plan for agriculture.
Tasmanian Agri-Food ScoreCard	The ScoreCard measures and reports on the value and final market destinations of the state's agriculture, food and beverage production.
Tas Institute of Agriculture – Current Projects	The Tasmanian Institute of Agriculture (TIA) is a specialist institute at the University of Tasmania with a mandate to deliver research, industry development and education for the agri-food industry of Tasmania.
	Moving forward, there is opportunity for the RDRP's to provide strategic insight around community priorities for building resilience.

Document/ strategic initiative	Document purpose and opportunities for strategic alignment
Water	
Water Management Act 1999	The <i>Water Management Act 1999</i> is part of the state's integrated Resource Management and Planning System and provides for the management of Tasmania's freshwater resources. Future community resilience planning initiatives need to align closely with the water management legislative framework and operational environment. There is an opportunity to support the water industry in further educating communities on key roles and responsibilities for water management in Tasmania.
Rural Water Use Strategy	The Tasmanian Government has developed the Rural Water Use Strategy to ensure that our freshwater resources are available to support the wide range of water uses and environments that depend on them as well as new opportunities for innovation and growth. There is opportunity to integrate resilience goals into rural water use in the context of a changing climate, as well as support further community education and awareness raising around key roles and responsibilities.
TasWater Tasmania Long Term Strategic Plan 2018 2037	TasWater's Long Term Strategic Plan (LTSP) sets out organisational outcomes over a 20- year period, from 2018 to 2037.
TasWater Water Security Strategy 2023	The purpose of the Water Security Strategy is to ensure customers receive enough drinking water to meet their needs over the long term. This document sets out how TasWater needs to work together with customers, community, regulators and other water catchment stakeholders in Tasmania. There are opportunities to support TasWater in these efforts.
Tasmania Water Future Community Advisory Panel Report and Recommendations	Report and recommendations from the 45-member community panel which guide TasWater's price and service plan submission.
Tasmanian Irrigation Annual Report	Annual report of Tasmanian Irrigation, which aims to sustainably grow the Tasmanian economy through providing reliable, cost-effective irrigation. Moving forward, there is opportunity for the RDRPs to provide Tasmanian Irrigation with strategic insight around community priorities for drought resilience.
Land use planning	
Tasmanian Planning Policies (TPP) (currently under review)	The TPPs are currently under review. In future reviews, it will be important for the key priorities detailed in the RDRPs to be considered in the TPP framework.
Public health	
Tasmanian Disaster Resilience Strategy 2020 2025 (under review)	Tasmania's first Disaster Resilience Strategy brings together sectors and communities to build on current actions that support disaster resilience. It provides a vision of a disaster resilient Tasmania and paths to work towards that vision. Currently under review, there is an opportunity to integrate with the strategy in the areas of prevention and preparedness in disaster resilience planning and regional resilience planning, to ensure efficient, effective and systemic resilience planning for regions and communities.

Document/ strategic initiative	Document purpose and opportunities for strategic alignment
Food relief to Food resilience Tasmanian Food Security Strategy 2021, and action plan (2023-2025)	The Food Relief to Food Resilience Strategy 2021-24 encourages collaboration across government and communities to help meet demand for food relief and increase the resilience of communities to prepare, store and have access to healthy and nutritious food. There are opportunities the RDRP program support the implementation of these principles.
Healthy Active Tasmania: Tasmanian 20-Year Preventative Health	The Tasmanian Government is developing a 20-year preventative health strategy, with a vision to transform Tasmania's health outcomes. Once developed, it will replace the Healthy Tasmania 5-year strategy.
Strategy 2026-2046	The strategy's discussion paper identifies a range of health risks from a changing climate, including "increased frequency and severity of natural disasters such as bushfires or floods, increased air pollution and pollen, and mental health challenges" (2024, 27).
	As the strategy is developed, there will be opportunities for community drought resilience principles and key priorities to be incorporated into the plan.
Healthy Tasmania 5-year strategic plan 2022-2026	Tasmania's current strategic plan around a Healthy Tasmania, the vision for the plan 'is for all Tasmanians to have the opportunity to live healthy, active lives in communities that support connections to people, place and culture'.
	The plan promotes working together across all areas of government and community refers to the many government agencies working together to develop, support and invest in key areas of action.
	Opportunities are noted above in the long-term preventative strategy (currently under development).
Child and Youth Wellbeing Strategy (DPAC)	The Wellbeing Strategy provides a long-term direction for the Tasmanian Government to improve the wellbeing of children and young people aged 0-25 years with a specific focus on the first 1,000 days.
	There may be opportunities through the RDRP program implementation, to contribute to the outcomes of the wellbeing strategy.
Energy	
TasNetworks planning documentation	TasNetworks continuously reviews the adequacy of the Tasmanian electricity transmission and distribution networks for both current and future needs and optimises associated network development plans.
	Opportunities for how the RDRP program can work alongside the energy sector will be further explored through implementation.
Regional Development	
Strategic Regional Plan for Tasmania 2023	This Strategic Regional Plan (SRP) outlines regional priorities for Tasmania, and reflects the vision of the Australian Government, the Tasmanian Government and local governments in Tasmania.
	During implementation, there will be opportunities for the Strategic Regional Plan, and the RDRPs to complement each other's strategic priorities, particularly around community priority one: 'Ensuring communities are resilient to emerging threats of climate change and resource protection'.

Document/ strategic initiative	Document purpose and opportunities for strategic alignment
Environmental	
PWS – TWWHA Natural values and Climate Change Adaptation Strategy	The TWWHA Natural Values Climate Change Adaptation Strategy 2021-2031 provides a mechanism for integration of best available information to inform management responses necessary to ameliorate the impacts of climate change on the natural values of the TWWHA. RDRP implementation may provide opportunities to support the strategy's strategic priority areas.
FPA – State of the Forests Report	Covering the period 1 July 2016 to 30 June 2021, the report provides a comprehensive overview of forests, the condition they are in and any changes that have occurred in Tasmanian forests. Information on both production forest and reserved areas are included in the report. As part of RDRP implementation, there is an opportunity to better understand the importance of forests in relation to wellbeing, resilience and long term environmental, social and economic resilience.
Tas Planning Commission – State of the Environment Report, 2024	 SoE reporting in Tasmania is a requirement under the State Policies and Projects Act 1993. The 2024 report includes: recommendations for future action in relation to management of the environment the achievement of resource management objectives conditions, trends and changes in the environment. As part of implementation, there is an opportunity to further explore how the RDRP program can support the recommendations detailed in the report.
Regional strategies	
Northern Tasmania Regional Land Use Strategy (NRLUS) - under review	The NRLUS sets out the strategy and policy basis to facilitate and manage change, growth, and development to 2032, across Northern Tasmania. This strategy will undergo a comprehensive review as part of the Regional Land Use Strategies Review. As part of this review, there will be opportunities to advocate for the key themes captured in this plan to be reflected in the revised NRLUS.
Northern NRM Strategy	The NRM Strategy provides the framework for how NRM North will prioritise its investment. As part of implementation, there is an opportunity to align with the outcomes and principles detailed in the strategy.
Northern Tasmania Alliance for Resilient Councils (NTARC)	NTARC is a collaboration of the eight councils of north-east Tasmania to develop the region's resilience to increasing natural hazards and novel and emerging climates, and the challenges of transitioning to a low carbon economy. There are strong opportunities for the RDRP priorities for northern Tasmania to support and complement the focus areas of NTARC.

Appendix D: Futures wheel

A 'futures wheel' has been used to explore possible interconnected and cascading effects of drought over time across the Northern Tasmanian region. The process involves building on research insights to map connections, consequences and impacts over time (first, second and third order impacts). This systems-thinking tool helps to see larger narratives and patterns that may emerge over time and identify opportunities within systems to work on transformative change. Resilience planners and practitioners in the region may benefit from using tools like this periodically to review, update and anticipate impacts as new knowledge and events emerge.

The futures wheel is shown below and can also be viewed in high resolution online.



Appendix E: Example initiatives

Table 8 provides a list of example project ideas suggested by participants through engagement activities. The list can be used to help community members and organisations identify and develop a project idea to help in building community resilience to drought in Northern Tasmania. TABLE 8: Example initiatives for building drought resilience in Northern Tasmania

Initiative	People and A communities and	Agriculture and economies	Landscapes and ecosystems	Water systems and infrastructure	Governance, collaboration and learning
Community drought resilience toolkit: Develop a toolkit and run workshops to increase community knowledge on drought and climate risks, and resilience-building actions, targeting broad community reach.	>				
Establish and enhance community hubs, spaces and gardens: Fund new or expand existing community hubs in drought-prone areas to act as centres for social connection, learning, co-production and emergency coordination.	>	>			
Inclusive preparedness planning: Partner with local councils and support agencies to create inclusive resources and support for vulnerable groups, incorporating the DIDRR (Disability Inclusive Disaster Risk Reduction) model for disability inclusion and expanding access to emergency planning.	>				>
Community resilience grants: Support community initiatives to rapidly test and develop innovative and adaptive solutions at the local level.	>				>
Emerging leaders programs: Offer leadership and development programs to empower emerging leaders working on resilience-building activities in the community (for example, the Tasmanian Drought Resilience Impact Preparedness Leaders Program, and the Australian Rural Leadership Foundation change-makers program)	>				>
Skill and resource sharing: Support initiatives like the Community Shed, where residents can build skills, foster relationships and share resources, creating a foundation of social resilience for times of drought and change.	>				
Youth-led creative climate projects: Collaborate with organisations to support youth-led projects, providing platforms where young people can express and engage with climate resilience creatively.	>				
Drought and climate literacy programs: Expand programs like 'Curious Climate Tasmania' to build climate and drought literacy, with specific modules for schools, community events and digital outreach.	>				
Accessible info and learning resources: Create simplified, easily accessible resources across a range of formats and languages to increase understanding of climate projections and drought implications specific to the region.	>				

Initiative	People and communities	Agriculture and economies	Landscapes and ecosystems	Water systems and infrastructure	Governance, collaboration and learning
Rural mental health support: Partner with organisations to expand mental health support services to ensure they can be widely accessed in rural areas. This could include onsite counselling, helplines and programs to reduce stigma and encourage seeking support.	>				
Community outreach network: Establish and fund community-based outreach roles for individuals who live in or are deeply familiar with the area. These support workers would connect vulnerable residents to services, facilitate social cohesion and strengthen local support networks.	>				
Welcome and connect new migrants: Organise social events to welcome and connect new residents, including migrants, with existing community members to build relationships, belonging and social fabric.	>				>
Mental health training: Offer specialised training for community members, emergency responders and local leaders to understand and respond to mental health challenges associated with drought and climate variability – including stress, anxiety and burnout – and support them through more acute times of crisis.	>				
Community relocation assistance programs: Develop programs to assist people and families who need to relocate their homes or businesses to less drought-affected or isolated areas. Support could include financial assistance, relocation planning, links to new communities.	>				
Green spaces: ensure plans are made to keep public spaces such as sporting ovals and gardens green during dry times.	>				
Resilient agricultural leaders program: Support agricultural leaders to build adaptive leadership capabilities and sustainable farm practices such as drought-resistant crops, rotational grazing, and regenerative soil health practices.		>	>		
Streamlined resilience grant program: Deliver a grant and support scheme that supports businesses to access funding and technical assistance for resilience projects.	>	>			
Local food network expansion: Support the establishment and expansion of local food networks, community gardens, cooperatives and farmers' markets, emphasising local exchange to bolster regional food security and strengthen farm-to-community connections.		>			
Financial incentives for low-impact farming: Develop a targeted grant scheme that rewards small-scale and organic farmers for low-chemical and regenerative practices, supporting them in meeting certification costs or marketing for premium product differentiation.		>			

Initiative	People and communities	Agriculture and economies	Landscapes and ecosystems	Water systems and infrastructure	Governance, collaboration and learning
Food storage facilities: Incentivise the establishment of food storage facilities to prevent losses during drought and dry times, with secure, weather-protected infrastructure to stockpile essential goods.		>			
Farm resilience assessment and support program: Provide and expand existing resilience assessments for farms, identifying risks and opportunities for adaptation. These assessments could be followed by support and action planning, helping land managers diversify and strengthen their agricultural operations in response to climate variability.		>			
Circular economy pilots: Launch circular economy initiatives from early adopting hubs such as Flinders Island and Bega Valley with a focus on waste reduction, resource recovery, and local economic benefits. These pilot projects could explore innovative practices like nutrient recycling, community composting and circular food systems – sharing insights to inspire replication in other communities.		>			
Climate-responsive crop and commodity diversification: Deliver targeted support and education on crop and commodity diversification, tailored to local climate projections. This initiative would assist farmers in selecting climate-resilient and high-value crops, aligning with changing environmental conditions.		>			
Young agricultural leaders program: Inspire and support the next generation of farmers and entrepreneurs. This initiative would offer leadership training (such as the change makers program), mentorship , networking and access to seed funding for youth-driven projects that emphasise climate adaptation, low-impact farming and technology-driven solutions.		>			
Incubator and accelerator for resilient agriculture innovation: Provide funding and support programs for agricultural ventures that deliver adaptation and resilience benefits. The program could prioritise projects that experiment with technologies like nutrient efficiency monitoring, precision agriculture tools, and new methods in crop or feed storage.		>			
Freight and biosecurity vulnerability assessment: Conduct a targeted assessment to evaluate risks related to freight and biosecurity in relation to increasing climate variability. Use findings to inform preparedness strategies and protect essential supply chains.		>			
Diversification incubator program: Create an incubator to help agricultural businesses diversify into new sectors, such as renewable energy, ag-tech, or agritourism. This could provide mentoring, business development support, and access to funding opportunities for initiatives that promote economic diversity and resilience.		>			

Initiative	People and communities	Agriculture and economies	Landscapes and ecosystems	Water systems and infrastructure	Governance, collaboration and learning
Digital literacy improvement program for farmers and employees: Develop a program aimed at improving the digital literacy of farmers and employees, enabling them to make better use of digital tools and platforms. This could include training on the use of farm management software, precision agriculture, AI, and social media for business promotion and community connection.		>			
Ecosystem restoration projects: Implement riparian restoration and wetland conservation projects, particularly in areas affected by drought and soil degradation, with community and landowner partnerships.			>	>	
Integrated land management practices: Encourage on-farm biodiversity by supporting tree planting, habitat corridors and native grassland preservation, incentivising farmers through grants for land conservation.		>	>	>	
Soil health and erosion control programs: Conduct education and provide technical assistance for soil health, offering resources on erosion control, soil management and regenerative practices.			>	>	
Enable palawa practices: Enable and learn from Aboriginal ranger programs, like Firesticks, to manage land and water resources.	>		>	>	>
Community-led land regeneration projects: Support community-based initiatives that restore degraded landscapes and increase ecosystem resilience. Programs could provide technical guidance, financial incentives, and resources for planting climate-appropriate tree species that enhance soil health, reduce erosion and sequester carbon, while also benefiting farm yields and biodiversity.	>		>	>	>
Liaison service or coordinator function: Help farmers and community members navigate and access the funding and support available across different levels of government to build landscape and ecosystem health.		>	>	>	>
Mini-forests on public land: Establish mini-forests on under-utilised public land, particularly in urban or peri-urban areas, to increase tree canopy cover, enhance biodiversity, and provide climate refuges for local wildlife. Engage local communities and schools in planting and monitoring efforts to build stewardship and awareness.			>	>	
Protection of native vegetation areas: Implement stringent measures, incentives and regulations to halt the clearing of remnant native vegetation, especially in areas where agricultural expansion poses a risk to land degradation and loss of biodiversity.			>	>	

Initiative	People and communities	Agriculture and economies	Landscapes and ecosystems	Water systems and infrastructure	Governance, collaboration and learning
Ecosystem risk assessments: Establish a systematic approach to assessing and monitoring ecosystem health and risk across the region. This program would involve mapping and evaluating the vulnerability of critical habitats, biodiversity hotspots and natural resources to threats such as drought, land degradation and climate change.			>	>	
Vulnerable species conservation efforts: Invest in research and targeted conservation actions for species at risk, such as eastern quolls and eastern barred bandicoots. Engage with experts to prioritise habitat protection and restoration, and promote community involvement in species recovery initiatives.			>	>	
Fire-resilient ecosystem management: Provide increased resources and expertise for private landholders to conduct planned burns safely and effectively. Expand programs like 'Red Hot Tips' to include access to expert guidance and necessary equipment, such as fire vehicles for loan.			>	>	
Permanent water infrastructure for bushfire protection: Install permanent hose lays and other firefighting infrastructure in areas with high conservation value, such as sphagnum bogs, to defend against bushfires. Collaborate with local fire services and land managers to prioritise locations and maintain readiness.			>	>	
Catchment-based plantation management: Develop guidelines for the staging of plantation forestry to minimise water depletion in catchments. This strategy aims to balance forestry activities with the need to maintain adequate water flows and ecosystem health, particularly in regions susceptible to drought.			>	>	
Restoration of drained marshlands: Fund efforts to reinstate drained natural marshes using proven methods from organisations like Nature Glenelg Trust. This can involve filling in old drainage systems to restore wetland ecosystems, which increases resilience to drought and supports biodiversity. Prioritise sites where marsh restoration can have significant ecological and water retention benefits.			>	>	
Integrated riparian management programs: Strengthen efforts to protect and restore riparian vegetation through fencing, revegetation and agricultural codes of conduct that safeguard waterways. Work with landowners to establish streamside buffer zones, reducing erosion and improving water quality while providing habitat connectivity.			>	>	
Long-term planning and policy: Advocate for long-term approaches with funding commitments that transcend political cycles, enabling stable, long-term projects. For example, a wellbeing economy plan for the region (adopted by all local government areas) could establish new metrics to measure regional development.					>

Initiative	People and communities	Agriculture and economies	Landscapes and ecosystems	Water systems and infrastructure	Governance, collaboration and learning
Dedicated coordination and measurement: Fund and establish an ongoing team or role to support collaboration, coordination, evaluation and ongoing development of this plan and associated regional drought resilience activities.					>
Northern Tasmanian drought and climate alliance: Form a region-wide alliance that includes councils, agricultural organisations, Aboriginal groups and community stakeholders to enable coordinated planning, delivery and learning.					>
Best practice guidelines: Develop and advocate for a consistent, region-wide best practice approach to drought resilience, tailored to Northern Tasmania's strengths and needs.					>
Community conversations: Deliver a program of public forums, events and workshops to engage a diverse range of regional stakeholders in resilience dialogue, planning and action.	>				>
Adaptive funding mechanisms: Establish flexible funding schemes that adapt to emerging climate data, allowing swift support to farmers and communities in crisis without bureaucratic delays.					>
Trusted, reliable and integrated community partner: Implement this plan alongside a trusted community partner with networks, neutrality and governance capacity.					>
Resilience summit and knowledge exchange: Hold an annual gathering of resilience practitioners and stakeholders to share insights, stories and best practices. This could involve both statewide and regional events to foster wider collaboration and learning across regions.	>				>
Comprehensive stakeholder mapping: Develop a detailed stakeholder map that identifies all relevant regional actors and partners, their roles and resources. Use this map to improve coordination, prevent duplication of efforts, and minimise stakeholder fatigue.	>				>
Youth co-design: Actively involve young people in the planning, design and delivery of resilience initiatives. This could involve workshops, mentoring and leadership programs that empower young people to contribute ideas and influence decisions.	>				>
Resilience awards and showcase: Deliver awards program that identifies and celebrates outstanding examples of drought and climate resilience initiatives across the region.	>				>

Appendix F: A spotlight on Flinders Island: community resilience in action

This case study provides an overview of community resilience on Flinders Island. It has been prepared to outline the unique context of the island, and considerations for building drought and climate resilience in the future.

With their permission, we have used the insights provided by the Islander Way, Flinders Island's regenerative tourism project: https://www.islanderway.co

Flinders Island, located in the Bass Strait between Tasmania and mainland Australia, is renowned for its stunning landscapes, rich biodiversity, and tight-knit community of just over 900 residents (ABS 2021).

As shared by the Islander Way (2024),

"The islands of the Bass Strait have a long and interesting geological, environmental and cultural history. Until approximately 12,000 years ago, the islands formed part of a land bridge that joined what is now Tasmania to the Australian mainland. Aboriginal people traversed the land bridge until around 8,000 years ago when sea level rise isolated the Aboriginal people on the big island of Tasmania". From the time of European settlement, a dark period of history followed, with Aboriginal survivors of the frontier wars interned on Flinders Island at Wybaleena. Many died under very poor conditions, awaiting the promised return to their country (Islander Way 2024).

Challenges and opportunities for building drought and climate resilience on Flinders Island

Today, the island faces a range of challenges stemming from its isolation, a changing climate, limited infrastructure, and demographic shifts. Yet, these challenges have built a unique resilience, with the island known for its close community, resourcefulness and ability to adapt to hard times, including drought. In recent years, a range of initiatives to address challenges facing the island have been actioned. Table 9 captures the key challenges facing the Flinders community. Key community strengths and actions are captured in Table 10.

"Living on an island, we are all weather watchers."

"Good times do not prepare people for bad times – only scars received are remembered."

Workshop participant 2025

TABLE 9: Key challenges facing the Flinders Island community

Domain	Challenge
Environmental	 More frequent droughts and changing rainfall patterns. These changes increase risks to island agriculture and natural ecosystems Invasive species such as weeds and feral animals exacerbate ecological pressures Dependence on rainfall and individual water storage capacity in most areas, supplemented by dams for reticulated water in Whitemark and Lady Barron The existing potable water supply is perceived by the community as an area needing review and additional capacity, both for residential and agricultural purposes Limited knowledge about the island's groundwater. During 2025, the Department of Natural Resources and Environment is undertaking a study to explore this
Economic	 A reliable and fit-for-purpose shipping service is critical to the island's economy,particularly in times of drought, when extra feed, abattoir access and destocking is needed Barriers to primary producers securing feed for stock and accessing abattoir facilities The freight equalisation scheme is perceived by some as a key barrier to achieving a more level economic playing field Heavy reliance on agriculture (especially beef and lamb) and tourism, which are sensitive to external shocks like market fluctuations and transportation issues Ability of infrastructure and services to meet visitor demand during peak times. The island currently has a focus on regenerative tourism to address this (Dredge et al 2024) Amalgamation of small family farms into large properties, which has seen a decline in rural families over the last 20 years; the local school once had 200 students, today it only has 60 Limited opportunities (social, education and employment) for young people contributes to families and young adults leaving the island, impacting the labour force. This trend is expected to reach a tipping point in 7-12 years, when there may be a shortage of staff for community services (The Islander Way 2024)
Social	 The island's remoteness makes access to services and resources more challenging, particularly in healthcare and education Housing shortage, with a third of properties on the island estimated to be holiday homes or short stay accommodation and not enough houses for residents and workers

Domain	Opportunities and actions
Environmental	 The natural environment is valued by the Flinders Island community, which helps in conservation and volunteer efforts. There is also strong local knowledge to support and inform environmental actions
	 Business and community efforts are underway to reduce waste and promote circular economy practices, benefiting both the environment and local businesses
	 Conservation programs have restored native habitats, reduced invasive species, and mitigated climate impacts. Efforts have been made to engage local landowners to tackle and manage invasive species
	 The island has embraced renewable energy solutions, including solar and wind power, to ensure energy security
	 The island's isolation and limited water availability has resulted in an improvement in community water-conscious practices, which help during dry conditions
	• Recently, local waste hubs have been developed to reduce household and rental accommodation waste. These hubs also can deliver education to visitors around island waste (Dredge et al 2024)
Economic	 Farmers on Flinders Island are adopting regenerative practices including rotational grazing, soil health improvements and use of shelter belts. These methods help combat drought and improve productivity sustainably
	 Sectors understand the importance of planning for tough times, using strong seasons to offset future drought-proofing initiatives
	• Islanders have pursued opportunities for economic diversification including eco-tourism, and more recently regenerative tourism. The Islander Way promotes sustainable tourism that respects the island's cultural heritage and natural environment. Visitors are encouraged to engage meaningfully with the community and leave a positive impact (The Islander Way 2024)
Social	 Previous experiences of drought are seen by the community as key to building knowledge and resilience, supporting them to adopt and cope with future drought events: "I feel we're pretty prepared. We've had droughts, and we'll have them again, and we pretty much know what we need to do." (workshop participant 2025)
	• The island's remoteness builds resourcefulness and adaptability amongst its residents, with one workshop participant sharing: <i>"We're naturally resourceful because we have a moat, and we need to use it."</i> (2025)
	 Volunteers are seen as the backbone of the Flinders community. There are a range of active networks and initiatives that are addressing island challenges and building resilience. As well as longstanding traditional clubs such as the CWA and Lions Clubs, more recent initiatives include:
	 The Furneaux Collective: with a focus on collaboration, the collective works across a range of initiatives to contribute to a thriving community. One of their initiatives is the local food network, which builds on a community of gardeners and aims to share produce on a regular basis
	 Islander Way: a collective formed to promote regenerative tourism practices to ensure visitors to the island continue to drive benefit to the community and environment as well as economy
	• Killiecrankie Glass Crushes: a group which crushes glass wine bottles, using the product

TABLE 10: Opportunities and actions to strengthen resilience

Future priorities and actions

In February 2025, a community workshop was held on Flinders Island to explore community strengths and vulnerabilities, and to explore actions to prepare for future drought and climate variability events.

Actions identified through engagement are summarised in Table 11. These actions, in addition to the goals and action areas detailed in the Northern Tasmanian Regional Drought Resilience Plan, can be used to help inform future drought resilience initiatives. As part of the workshop, participants conducted a prioritisation exercise. Insights from this exercise indicated that:

- Actions relating to the 'Water Systems and Infrastructure' theme received highest prioritisation amongst community participants.
- Participants felt that the completion of a groundwater study, which the Department of Natural Resources and Environment has recently commenced, was of highest priority.
- Actions related to the 'Agriculture and Economies' theme received the second highest prioritisation.
- Participants highlighted the interrelationships between all actions, noting that often one would be reliant on another.

Theme	Action/ initiative
People and communities	 Water efficiency and conservation programs for the general community as well as key segments including school-aged children, older people, newcomers and visitors Mental health programs accessible for all community members Check-ins to normalise asking for help, and to encourage community members to check in with each other
Agriculture and economies	 Follow regenerative farming practices. This could include using less urea, building better biology in the soil and transitioning to drought resilient pastures Encourage landowners to explore and develop less water intensive industries and work to transition away from mono-cropping Improve and grow more shelterbelts/ trees to reduce evaporation, including appropriate fencing and protection Distribute information on best endemic species for planting Secure government assistance to support and off-set costs of feed and adaptation of water systems Increase flexibility and security of shipping services, and ensure there is capacity for additional services when needed Continue to support farmers through drought workshops Work to increase food security through education, the establishment of a seedbank, community gardens, and a continued focus on sharing of produce

TABLE 11: Flinders Island drought and climate resilience identified actions

Theme	Action/ initiative
Landscapes and ecosystems	 Develop a seedbank nursery for endemic plants, fodder and edibles Establish more drought resilient plants, with a focus on vulnerable areas Support more controlled burns, including Firestick Aboriginal programs Review existing fire trails, including emergency exit plans, and maintain fire trails for remote settlements
Water systems and infrastructure	 Conduct a baseline study to better understand groundwater, including quantity and availability, and use these outcomes to plan for island water use and supply Undertake further research into water use – including capacity planning and runoff Explore opportunities to increase island water supply, including: the construction of a larger dam for extra potable water storage extra water tanks for households mandating water tanks for new builds, particularly in townships ensuring buildings can capture water maintaining existing drainage (weirs and draglines) a switch system for town and tank water access to the existing school water tank for community purposes desalination Develop an app for water storages of Henderson dam to support community awareness Develop a plan for Lady Barron Island, which explore alternate options other than ongoing use of bores Funding for water saving programs to encourage people to invest in water efficient appliances/ bathroom fittings Be a test site for innovative thinking
Governance, collaboration and learning	 Initiative land use planning changes to include water saving initiatives as standard practice Undertake detailed planning to better understand the longer-terms impacts of climate change on the island (floods, droughts and storms) Ensure the council communicates with other levels of government, with a focus on driving progress and sharing updates Encourage farm groups, government and education groups to work together for greater education

Actions identified through other on-island engagement activities

Actions identified through one-onone engagement across the island are summarised below:

- The implementation of a community composting program using the HotRot composting system, to address increasing waste management concerns, improve soil health, reduce organic waste, and promote environmental awareness and engagement.
- Increase tree planting and use of shelter belts across the island and in areas where drought proofing is needed.
- Leadership and development programs for community leaders, such as the Australian Rural Leaders change makers program.
- More sophisticated financial tools to support producers manage and plan for the impacts of drought.

References

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Appendix G: Case studies

CASE STUDY 3 Community wellbeing pilot project in Break O'Day

Themes

People and communities

About this project

Funded through the Tasmanian Community Fund, the Break O'Day Community Wellbeing project seeks to build community capacity to cultivate their own, and other people's, wellbeing through multiple strategies including community conversations and the creation of local community-led actions. The project aims to:

- strengthen community capacity to manage and build personal wellbeing and make positive and proactive choices
- increase opportunities for community connection and create an inclusive and open forum to learn about and share experiences around wellbeing, identify community strengths, and to develop a shared language of wellbeing through introducing people to wellbeing literacy and wellbeing tools and using principles of positive psychology.

More information is at: <u>https://</u> wellbeingaction.org/about

Impact

The following initiatives have been delivered as part of the program:

- An eight-week community wellbeing certificate program: This strengthsbased program encourages participants to reflect on what they do well and to help them turn that into creating more good things for their community. In total, 80 community members have participated in the program.
- Appreciative inquiry community wellbeing summit: This workshop was attended by around 50 community members, and encouraged community members to reflect on why they love where they live. The summit was powerful in strengthening community connections across a diverse range of community members.
- Wellbeing project website (wellbeingaction.org): This website acts a key education piece to support wellbeing learning and showcase actions across the community.



Break O'Day Festival of Wellbeing. Photo: Break O'Day Council.

- The annual Festival of Wellbeing: Held annually since 2021, the council and volunteer run event adopts a holistic approach to community health and wellbeing. Attended by around 400 people, the event involves about 60 contributors each year who create interactive experiences and share local information on programs and activities, from the community choir, to suicide prevention programs.
- Small local actions building on individual and community strengths: Examples include the Play it Forward card game, to help community members connect and explore where they live, a local games group, a women's surfing circle and a men's table.

• Wellbeing champions: Identification of wellbeing champions across the community helps to recognise some of the great work underway across the municipality

Project evaluation also identified having a dedicated Project Manager and local trainers for the certification program as key success factors.

'Wellbeing is thinking well, doing well and being well. It is our ability to live well and function effectively while navigating the ups and downs of life.'

— Break O'Day Council 2024



Educational workshops for smallholder famers and land managers. Photo: NRM North.

CASE STUDY 4 Educational workshops for smallholder farmers and land managers

Themes

Landscapes and ecosystems; Agriculture and economies.

About this project

The Small Farm Living Project supports smallholders in the Northern region to care for their natural resources and achieve sustainable productivity and biodiversity goals on their properties. NRM North's Sustainable Agriculture facilitators, along with a DIY Property Planning Tool, provide farmers with resources, information and local support networks to enable improved land management practices.

Impact

Rick and Liz Mahnken, from Summerlea Farm in Tasmania's north-east, run a small beef cattle operation. Rick's family has lived in the area for six generations. The family wanted to improve productivity and biodiversity values on the property, supported by a grant and access to a training workshop, along with the DIY Property Planning Tool, the Mahnkens set realistic goals, built a shared vision, and planted thousands of trees which have, in turn, protected riverbanks and improved biodiversity values on the property.

Case study courtesy of NRM North.



A giant freshwater crayfish project site. Photo: NRM North.

CASE STUDY 5 Giant freshwater crayfish project

Themes

Landscapes and ecosystems; governance, collaboration and learning.

About this project

The Tasmanian giant freshwater crayfish is the largest invertebrate in the world, is endemic to Northern Tasmania and is culturally significant to the Tasmanian Aboriginal community. The crayfish faces threats from climate change, erosion and habitat disturbance. The Giant Freshwater Crayfish Project engaged landholders to co-invest in habitat restoration works, which included raising awareness, weed control, riverbank restoration, and rehabilitation of habitats within priority streams of the Pipers, Brid and Boobyalla catchments. Liz Mahnken of Summerlea Farm says,

"we work hard to respect and care for the land, for generations to come."

Impact

- The project achieved river fencing, exotic weed control, revegetation, the provision of alternative stock water sources.
- 300 volunteers helped plant 16,000 native seedlings over 17kms.
- 170 people trained in citizen science to carry out ongoing assessments and monitoring to reduce threat to the crayfish by reducing habitat disturbance and establishing shade.

Case study courtesy of NRM North.



A screenshot from community drought preparedness video called "We are better together". Image: Rant Arts 2024

CASE STUDY 6 Close up: drought preparedness video project

Themes

People and communities

About this project

Close Up: Drought Preparedness Project is a series of three short videos created through creative workshops with young people from Tasmania promoting community resilience, education and connectivity to prepare for, adapt to and recover from the impacts of drought.

Workshop participants worked with designers T3D to produce creative content which were incorporated into the final videos. With a focus on participants aged 18-35, this project aimed to make the young people of the Tasmania active guardians and advocates of their environment.

Videos are community resources that are freely available <u>online</u> and encourage awareness and preparedness in the face of significant changing environmental conditions in Northern Tasmania and focus specifically on drought and climate variability preparedness. While the project has a regional focus on Tasmania the final videos will be shared locally, statewide and nationally meaning that the messages will have a significant and broad reach.

Impact

- Promotion of community resilience, education and connectivity to prepare for, adapt to and recover from the impacts of drought.
- Opportunities for young artists from regional areas to develop skills in video production. In this process, young artists developed skills in story boarding, drawing and sketching, script writing, voice overs, animation, stop motion and video editing.
- Mentoring opportunities for emerging artists looking for work in this field, and project examples to share with potential employers.





Department of Agriculture, Fisheries and Forestry



