



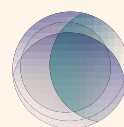
**Drought
Ready
Tasmania**

North-West Tasmania

Regional Drought Resilience Plan 2025



Australian Government
Department of Agriculture,
Fisheries and Forestry



Future
Drought
Fund



Tasmanian
Government

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 practical steps to help the region be prepared for, cope with and recover from future droughts and climate variability events. The development of the plans has been co-funded through 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 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?

A community-led process identified key themes and goals (over the page) to show how we can achieve our vision for a resilient North-West Tasmania.

It is important to understand that the system is complex and there are interdependencies between the goals, meaning achieving one can depend on others also being achieved.

While the plan identifies themes, goals and action areas that will support North-West 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, lessons learnt and new priorities as they emerge.





To build drought resilience using knowledge, communication and collaboration to take a practical, useful innovative action.



Interconnected nature of drought

Stakeholders have the knowledge, awareness, and understanding of drought's interconnected impacts across ecosystems, agriculture, and communities, and take action to build resilience.

Knowledge and education

Increase knowledge and awareness of drought and climate variability through education, training, tools, guides, communication and knowledge creation and sharing.

Climate and environmental solutions

Coordinate and collaborate on policy, strategy and action planning for climate adaptation.

Community and social resilience

Build community resilience by supporting local networks, behaviour change actions and diversification.



Drought governance

Coordinated, integrated and appropriate governance structures to lead, plan and resource drought resilience actions.

Coordinated drought resilience planning

Collaborate with government, industry and private stakeholders to create unified drought and climate adaptation strategies

Financial and economic preparedness

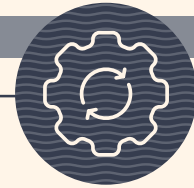
Ensure communities have access to financial support and guidance, and strategic funding to build economic resilience and enhance community drought preparedness.

Community mobilisation and communication

Encourage communication and collaboration between local government, all sectors and community members to ensure coordinated actions and problem-solving.

Research and capacity building

Undertake further research and knowledge sharing to address gaps in regional drought preparedness and improve access to financial incentives like carbon and biodiversity markets.



Community self-reliance

Knowledge, networks, access to services and support to become better prepared for climate variability and drought.

Social connectivity and community building

Support actions to foster strong social networks and community bonds that enhance collective resilience during drought.

Mental health and wellbeing support

Support initiatives to improve mental health awareness, support systems, and reduce stigma in rural communities affected by drought.

Localised and participatory approaches to drought resilience

Prioritise community-centred strategies that incorporate local knowledge, Indigenous perspectives and youth engagement to address unique resilience needs.

Economic resilience and food security

Strengthen local economies and secure food supply through local markets, shorter supply chains, and community education on food security.

Community-led water management

Encourage water-sensitive urban design, water conservation and efficient water usage within communities to build awareness and prepare urban areas for drought conditions.



Land management

Land managers have knowledge, access to services and funding, and ability to take action to strengthen drought and climate variability preparedness.

Land management and adaptation

Explore climate-adaptive practices for farms, forests and natural landscapes to enhance resilience to drought and climate change impacts.

Fire preparedness and education

Improve fire detection, response and community preparedness, including training on culturally informed and ecologically aware fire management.

Water planning and management

Prioritise strategies to enhance water storage, efficiency, and quality to ensure reliable water resources during drought periods.

Technological innovation

Encourage the use of innovative technologies and digital tools to monitor, mitigate and adapt to drought conditions and other climate variability.

Socio-ecological resilience

Facilitate meaningful ways community members can take action to care for country.



Industry and infrastructure

Industry and infrastructure that is well coordinated, appropriate and engaged in increasing drought resilience.

Strengthening local agricultural economies

Explore opportunities to build economic resilience and support sustainable farming practices.

Adaptation, research and innovation

Focus on long-term climate strategies and cross-sector innovation to support stakeholders in adaptive change.

Infrastructure development

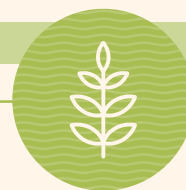
Enhance critical transportation and logistics infrastructure to support uninterrupted access to markets and resources.

Drought-resilient water systems

Undertake coordinated and detailed water infrastructure planning for resilient water sources, including household water supplies and sustainable irrigation practices to support long-term water management.

Corporate social responsibility

Advocate for local corporate social responsibility that supports drought and climate resilience.



Globally significant ecological communities and Aboriginal cultural landscapes

Globally significant ecological communities and cultural landscapes are protected, actively managed and exist for future generations by coordinated, well-resourced and innovative action.

Adaptive land management and biodiversity

Develop adaptive land management practices to preserve biodiversity and ensure long-term ecosystem resilience in the face of climate change.

Water and fire management

Address water scarcity and prepare for fire risks to protect and conserve globally significant ecological communities.

Aboriginal knowledge and community engagement

Encourage knowledge sharing and use of Aboriginal land management practices, such as cultural burning, to enhance ecosystem resilience.

Drought monitoring and species protection

Establish clear drought monitoring indicators and triaged next steps to protect species and maintain biodiversity during periods of extreme environmental stress.

Addressing knowledge gaps

Address knowledge gaps and build community and stakeholder understanding of innovative ecological adaptation and intervention approaches.

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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1

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 community led Regional Drought Resilience Plan (RDRP), guided by a regional Project Advisory Group.

The plan has been shaped by residents' stories and experiences of drought. With community, we explored what actions can be taken at a regional level to help us prepare, and these actions are summarised in this plan.

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 North-West 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.

The RDRP is a community-level strategic plan. It does not attempt to cover the drought and climate resilience needs of an individual farm, enterprise or household. It 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 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 activities taken to develop the North-West RDRP are shown in Table 1. A stakeholder engagement summary is provided in [Appendix B](#).

TABLE 1: North-West Tasmanian RDRP development – key steps and timing

Timing	Stage	Key activities
Nov 2023 – Dec 2023	Establish project team, governance and planning approach	- Regional project inception and planning - Establish project team and Project Advisory Groups - Statewide Forum
Dec 2023 – Mar 2024	Baseline studies: understanding drought impact	- 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
Apr – June 2024	Developing vision, themes and goals	- Community engagement to explore vision, themes, goals and action areas (engagement summary provided in Appendix B) - Review strategies and policies to inform plan development (Appendix C) - Undertake systems analysis
July – Sep 2024	Exploring initiatives and priorities	- Community engagement to further refine themes and potential actions (outcomes provided in Appendix D) - Future drought scenarios workshop to validate findings to date
Oct 2024 – Jan 2025	Plan development	- Develop draft plan based on key engagement and strategic review outcomes - Seek feedback on key aspects of the draft RDRP, including themes, goals and action areas
Early-mid 2025	Plan implementation	- Formalise coordination, governance, measurement and learning approaches for implementation - Establish grant programs and other resourcing approaches - Launch plan; support regional engagement and collaboration towards shared goals.

1.3 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 decision-making around drought resilience.

1.4 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.

2

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?

“If it doesn’t rain for three weeks, it’s a drought.”

— Third-generation farmer, Preston, Tasmania

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 differ, depending on environmental, climatic and community context. What is viewed as drought in one region may not be seen as a drought in another. This is particularly the case in North-West Tasmania, where a high and reliable rainfall has characterised the evolution of the landscape. This means that less rain or a change in the pattern of rainfall, as recently experienced on King Island, can create drought-like conditions and have significant impacts for communities and producers.

Four common categories are used to help us understand drought (White and Walcott 2017). These are meteorological, agricultural, hydrological and socioeconomic droughts (Figure 2).

FIGURE 2: Definitions of drought



METEOROLOGICAL DROUGHT
as measured by rainfall deficiency



AGRICULTURAL DROUGHT
as measured by soil moisture deficiency



HYDROLOGICAL DROUGHT
as measured by surface and groundwater deficiency



SOCIO-ECONOMIC DROUGHT
as measured by people’s perception of whether they were currently or had been in drought in recent periods, determined by experience and observations

2.2 What does drought resilience mean?

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 individuals and community. This is often called 'adaptive capacity' (IPCC 2012). More resilient communities, that is those with greater adaptive capacity, are better able to respond to problems that arise from a changing environment.

Figure 3 shows the five parts (referred to as the Five Capitals Model) which influence a community's adaptive capacity.

FIGURE 3: Five capitals model



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

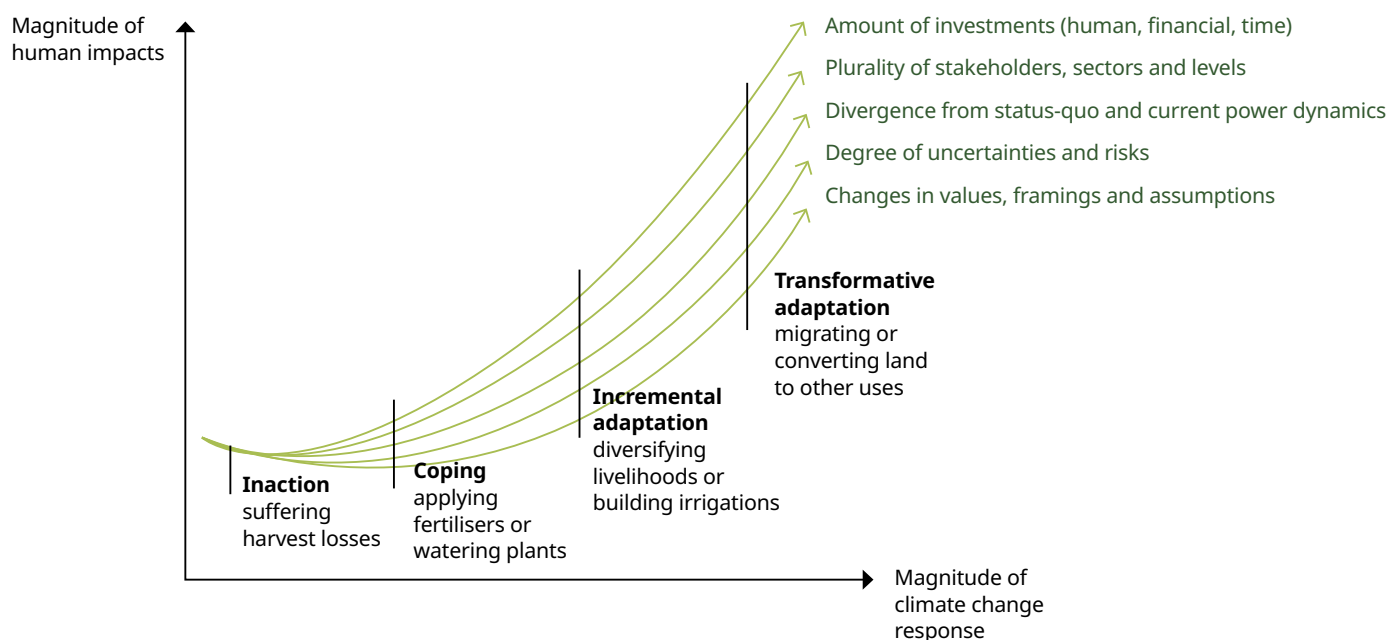
2.4 Types of change

Different types of actions can build drought resilience, depending on the scale of 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 4 shows these different change types on a spectrum and their relationship to complexity, impact, resourcing and time.

FIGURE 4: Types of adaptation and change



(Source: Fedele et al 2019)

3

About North-West Tasmania



The North-West region covers the western third of Tasmania and has a land area of approximately 23,000 km² (RMCG 2023; Cradle Coast 2024). Relatively remote, the landscape is rich and diverse, and recognised globally for its agriculture, Aboriginal cultural sites, and wilderness and rainforest areas. The North-West's natural assets, industries and communities are all affected by drought and climate variability.

The region is made up of the local government areas of Kentish, Latrobe, Devonport City, Central Coast, Burnie City, Waratah-Wynyard, Circular Head, West Coast and King Island.



FIGURE 5: North-West Tasmania region



3.1 About the North-West community

The region has a relatively stable population of just under 120,000 (approximately 21 per cent of Tasmania's total population) (Cradle Coast 2024). Compared to Tasmania as a whole, households in North-West Tasmania:

- are skewed towards the lower end of household incomes
- have lower levels of education
- have relatively more affordable housing and lower mortgage costs
- are older, and
- are more likely to need care (RMCG 2023).

Across the region, projected population growth is low, at less than one per cent (Cradle Coast 2024). There is no single dominant centre, and 70 per cent of the population lives along the northern coastline in small-scale individual towns. These towns are well-connected by transport, energy and communication systems (Cradle Coast 2024).

Some communities are relatively remote. King Island, located 86 km offshore, has special characteristics shaped by its island geography. It also experiences a range of unique challenges around linkages to the main centres and services (see [Appendix E: A spotlight on King Island: resilience and lessons learnt during drought](#)). The Circular Head and West Coast local government areas (LGAs) also experience geographic isolation, which increases disadvantage and vulnerability.

3.2 The cultural landscape

People have lived in North-West Tasmania for tens of thousands of years, and “the Cradle Coast region shares a rich and extensive history of habitation by Aboriginal communities and cultures” (Cradle Coast Authority 2022 p11). Prior to European invasion, Tasmanian Aboriginal people lived on the coastal areas in the winter and moved inland during the summer. The landscape was actively managed with fire.

This fire management regime shaped the landscape and ecology of highland and coastal environs to the point where North-West Tasmania has very fire-sensitive ecological communities in close proximity to fire-dependent ecological communities (DCCEEW 2021).

Aboriginal organisations and people care for Country, passing on traditional knowledge to the next generation. This can include cultural heritage management, such as burning, being undertaken across the region.

3.3 Economy and agriculture

The North-West region is noted for its prime agricultural land along its northern coast. The region’s primary production includes agriculture, fisheries and forestry, as well as the infrastructure and workforce servicing these industries. The primary production industries contribute significantly to state and regional economies. They are major exporters and employers, with an approximate workforce of 4,500. In the 2021-22 financial year, the primary production sector contributed 21 per cent of the region’s economic value, the most of any sector (RMCG 2023).

The agriculture industry includes growers, livestock farmers and nurseries. The range of agricultural products and the value of production vary considerably across the region.

The value of agriculture for the region was \$819,929 million in 2020-21, and Circular Head, Central Coast and Latrobe accounted for 73 per cent of it. Dairy, livestock products (excluding dairy) and vegetables make up approximately 83 per cent of the value of agriculture in the region, with fruit an additional 11 per cent.

The percentage of the workforce employed in the agriculture sector also varies greatly across LGAs. A quarter of the population in Circular Head and King Island, and a fifth in Latrobe, work in this industry, making them particularly vulnerable to the impacts on agriculture from drought and climate variability.

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

3.4 The natural environment

The North-West is known globally for its clean air, unique World Heritage-listed wilderness areas, the largest temperate rainforest in the southern hemisphere and the Aboriginal cultural landscape and archaeological sites in the Takayna/Tarkine (Cradle Coast 2024). The region's environment has evolved with regular high rainfall. The vegetation includes coastal scrubs, dry eucalypt forest, native grasslands, wet eucalypt forest, rainforest and Gondwanan relic species, and endemic alpine vegetation communities (RMCG 2023). These vegetation communities are all affected by drought and climate variability.

The region is formed by both wet rugged and remote landscapes, as well as places of moderate maritime climate and accessible and habitable landforms (Cradle Coast 2024). Around 60 per cent of the landscape has "international, national or state protected status because of the uniqueness or importance of its plant and animal communities and geological features" (Cradle Coast 2024).

Conservation areas include Cradle Mountain-Lake St Clair and Franklin-Gordon Wild Rivers National Parks, which form part of the Tasmanian Wilderness World Heritage Area, the Arthur Pieman Conservation Area, and the land recently recognised as the Tarkine natural area. There are also internationally recognised sites within the northern coastal area including Lavinia on King Island and Narawantapu, Robbins Passage and Rocky Cape.

The North-West region has been shaped by a much higher and more frequent rainfall than most other parts of Australia. Mt Read, on the west coast, records 282 rain days per year and an average rainfall of over 3500mm (BOM 2024). Being so regularly wet has suited one of the oldest trees on the planet, the Mt Read Huon pine (Huon pine is a species that predominately grows on the banks of rivers), which grows close to the summit of Mt Read (1,123 m) (PWS 2001).



3.5 Drought risk and resilience assessment

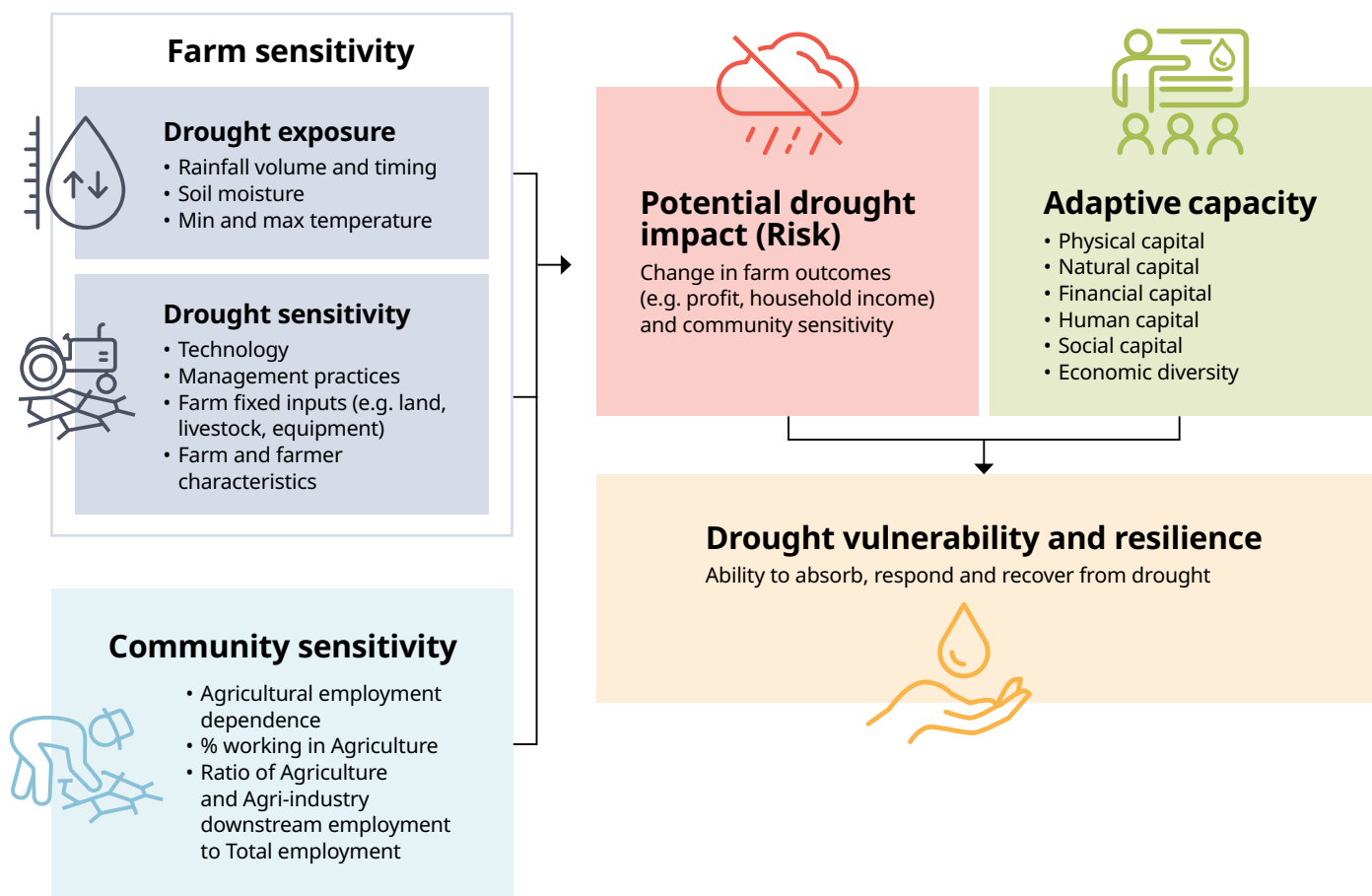
Drought and climate variability are part of complex systems, making their impacts across North-West Tasmania difficult to predict. To help in understanding regional drought resilience, regional assessments were undertaken as part of this program (refer to [Appendix A](#)).

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 6 (RMCG 2023).

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 6: Drought risk, adaptive capacity and resilience assessment model



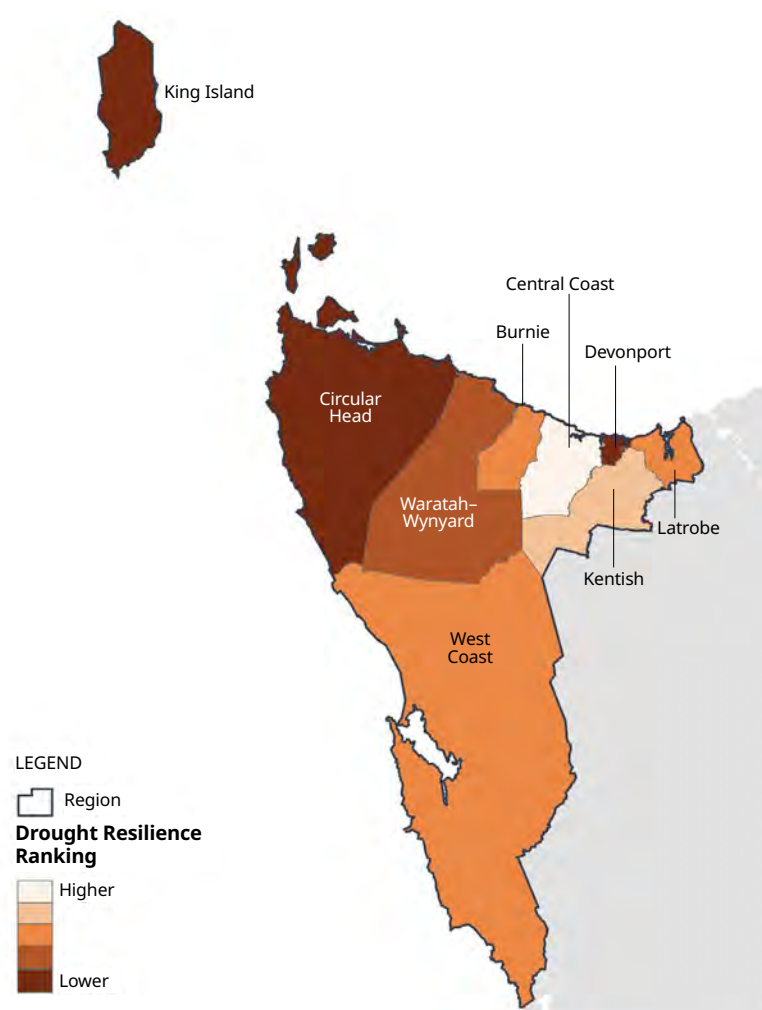
(Source: ABARES)

The assessment (shown in Figure 7) found that the North-West region has moderate resilience to manage future drought conditions. King Island, Circular Head and Devonport LGAs were assessed as having lower resilience to drought, with the Central Coast LGA assessed as having higher resilience to drought (RMCG 2023).

Climate change will increase the frequency, severity and duration of extreme events such as periods of intense heat or rainfall.

While the drought risk may be projected to increase in most of North-West Tasmania, it is going to be one of many factors that land managers and communities need to prepare for and respond to in the future. Climate change is already impacting on agriculture and the natural environments and communities on which it relies. If communities can increase their adaptive capacity and resilience to future drought events, then it will also assist in increasing their resilience to other extreme events. More frequent, longer duration and severe droughts may reduce adaptive capacity.

FIGURE 7: North-West Tasmania drought resilience assessment



“Drought risk? We don’t have any real drought risk. I live in the middle of a rainforest. There’s no issue that I see... we’re more concerned about the flooding.”

— Stakeholder discussion



4

Climate trends for North-West Tasmania



Historically, North-West Tasmania is known for its high and dependable rainfall with wetter winters and drier summers.

“Rainfall is highest on the central plateau and along the west coast. Temperatures tend to be mild along the northern coast, becoming more extreme with elevation and falling latitude.”

— (Cradle Coast Authority 2024).

Tasmania has been experiencing impacts from climate change for over a century. This has led to greater frequency of droughts. Over the past 100 years, we have experienced:

- an increase in average annual temperature by 1.1°C since 1910
- a decrease in annual rainfall since 1900
- an increase in the number of dangerous bushfire days, when wind, humidity, temperature and precipitation levels favour fire (RMCG 2023).

Recent major droughts have occurred across North-West Tasmania in 2006 and 2015, with more localised droughts occurring in 1994, 2008, 2014, 2017 and 2019.

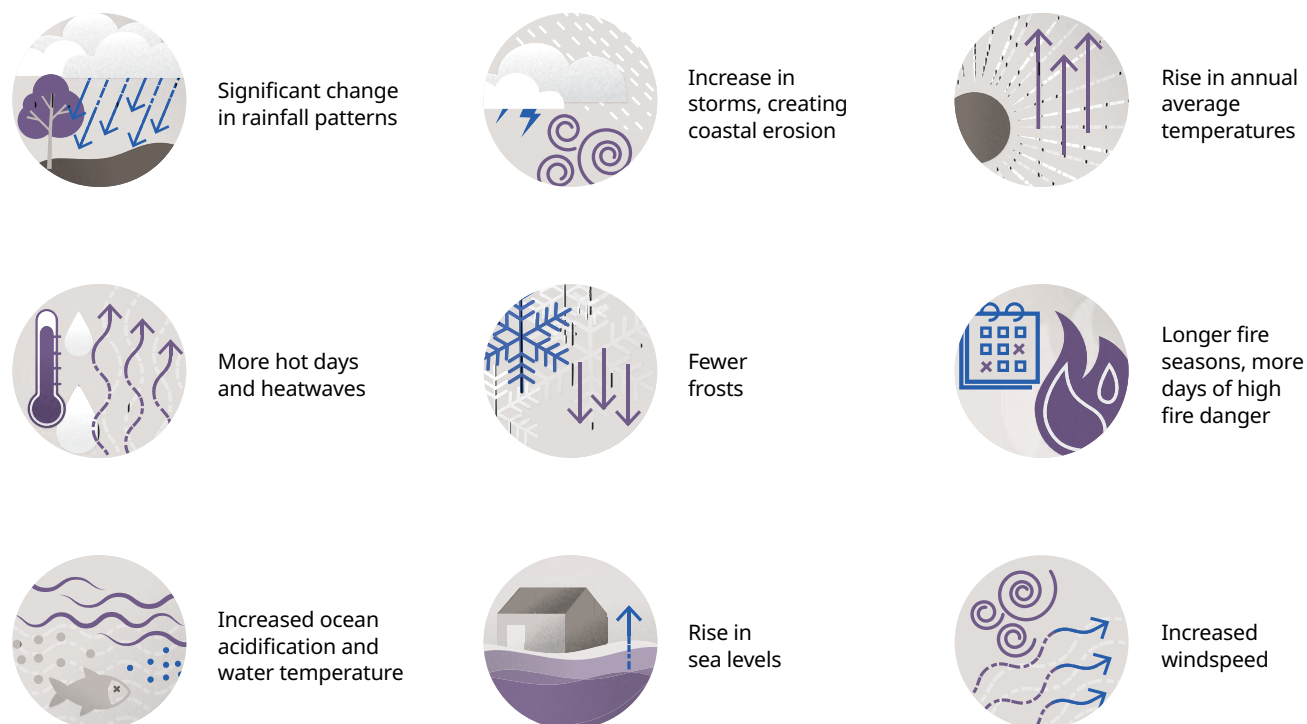
At the time of writing, King Island was experiencing some of the driest conditions on record. These events offer insights into the impacts on agriculture and the natural environment, and the potential resilience of communities to adapt and manage the impacts of future drought and climate variability.



4.1 Future climate

Figure 8 details the projected changes to 2100 across the whole of Tasmania (ReCFIT 2024).

FIGURE 8: Projected climate change impacts for Tasmania



(Source: ReCFIT)

It is easy in the typically green and wet conditions of North-West Tasmania to overlook the risk of drought and climate variability.

Climate change projection models for the region to 2070 indicate that we can expect further changes, including:

- slightly lower five-year average rainfall levels
- increases in dry event lengths and changes to the seasonality of rainfall, meaning we could receive rainfall in different patterns than we are used to, such as a season's rain in one or two events rather than spread more evenly across a season
- fewer frost days
- an increase in average temperature by another 1-2°C
- heat wave days increasing by eight days per year and severe risk to humans working outside increasing by 40 days per year (Remenyi et al 2019)
- an overall decrease in regional summer soil moisture
- marked decreases in summer and autumn river flows,
- an increase in evapotranspiration¹, potentially affecting plant growth (RMCG 2023).

These climate trends will have significant implications for the region's primary industries and for agriculture, such as in water availability for irrigation, water storage, soil moisture and rain-fed grazing systems. While wet years can lead to a false sense of security among the community, drought impacts pose a real risk to the environmental system, liveability and livelihoods across the region. It is important that drought resilience efforts focus on behaviour change and awareness raising through evidence-based education.

Rainfall

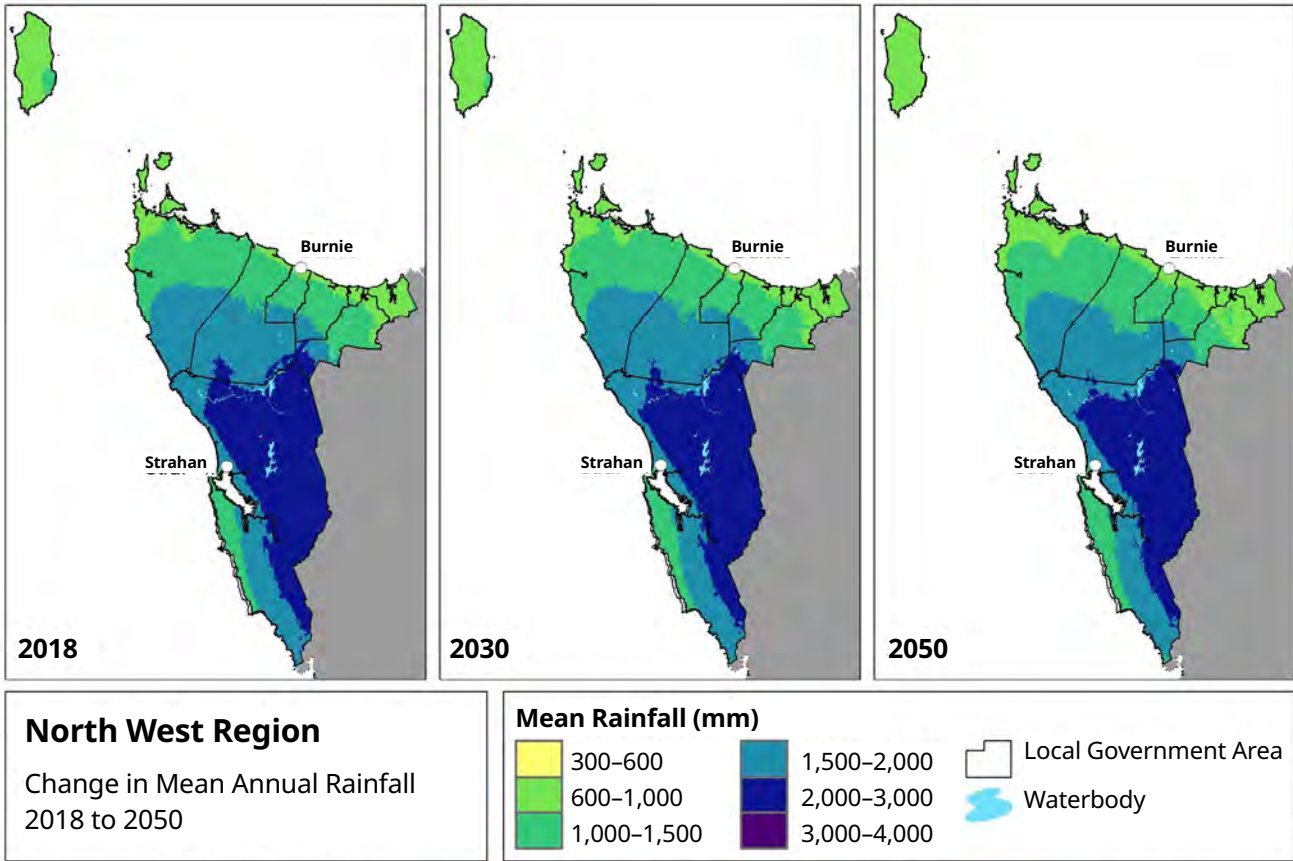
Mean annual rainfall in the North-West region is projected to slightly decrease over the next 30 years (RMCG 2023). Figure 9 indicates that rainfall will retract southwards.

The spread of rainfall across the seasons is also projected to change ((CSIRO and Bureau of Meteorology 2024). As noted in the data report ([Appendix A](#)), spring, summer and autumn rainfall decreases will be somewhat offset by a winter increase of on average seven per cent, however, for this water to be used for agricultural production it will need to be stored.

Modelling by Climate Futures (2024) indicates that while rainfall may decrease overall, the fewer rainfall events that do occur are likely to be more intense.

¹ Evapotranspiration is both evaporation and transpiration (water loss from plants). Increased evapotranspiration needs to be balanced by increased rainfall to avoid overall water loss.

FIGURE 9: North-West Tasmania expected mean annual rainfall to 2050



(Source: LISTmap)

While mean annual rainfall is projected to reduce slightly over time, the most significant change will be in the regularity of the rainfall. It has been projected that the number and duration of long dry events will increase.

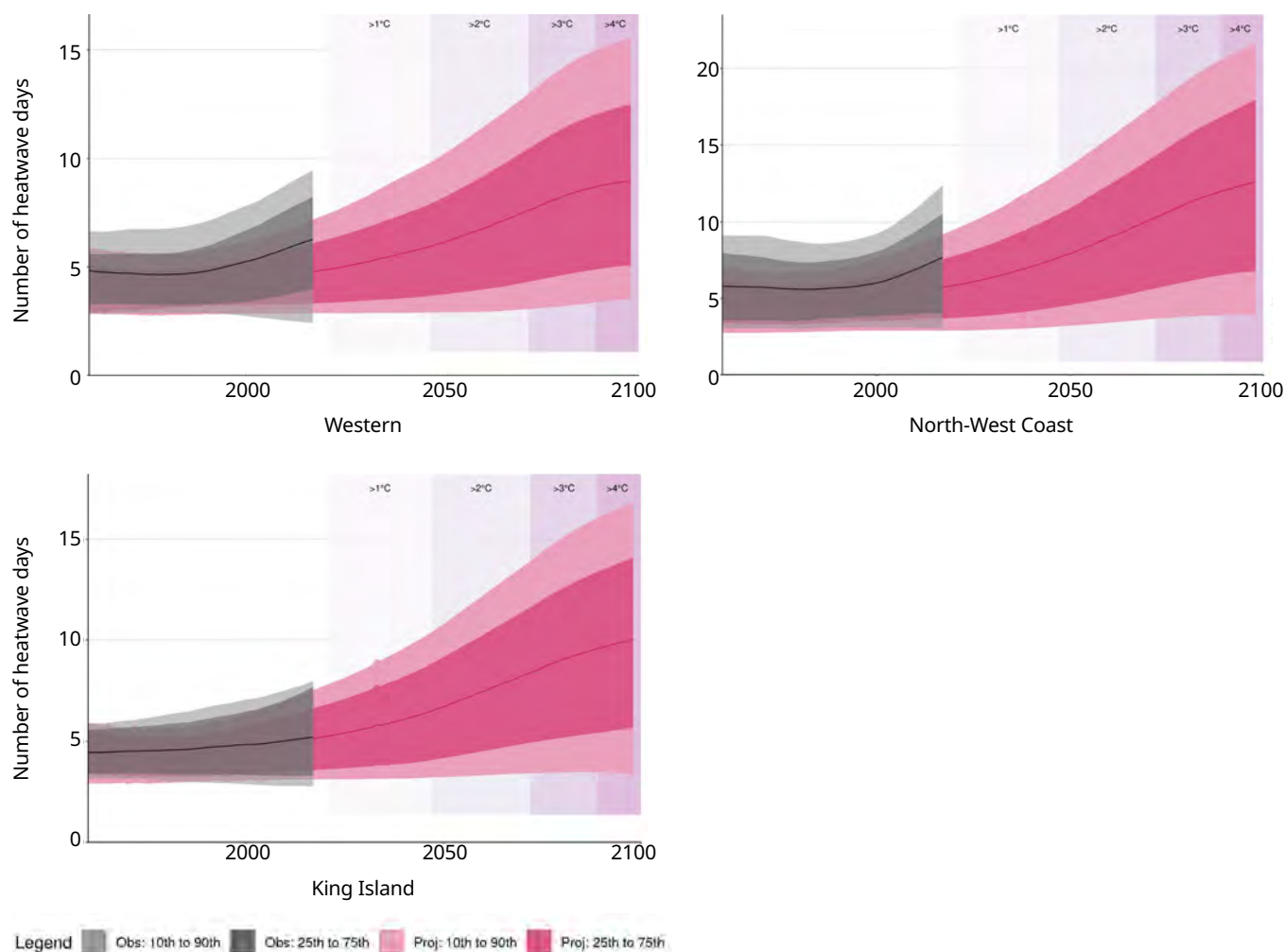
This has implications for agriculture, such as rain-fed beef and dairy enterprises, as well as increased bushfire and impacts on the vegetation communities that have evolved with the regular rainfall.

Temperature and heatwaves

The average maximum temperature for the key towns of the North-West region is projected to increase by 1.8-2.3°C by 2070, with the average minimum temperatures also projected to rise by 1.6-2.1°C. This means there will be fewer frosts and more hot days (RMCG 2023).

Figure 10 shows the projected increase in heatwave days (pink), the actual observed increase in hot days (grey), and the average of observed hot days across the region (solid black line). As can be seen, we are already experiencing conditions that are at or above the 75th percentile of what was projected (Remenyi et al 2022).

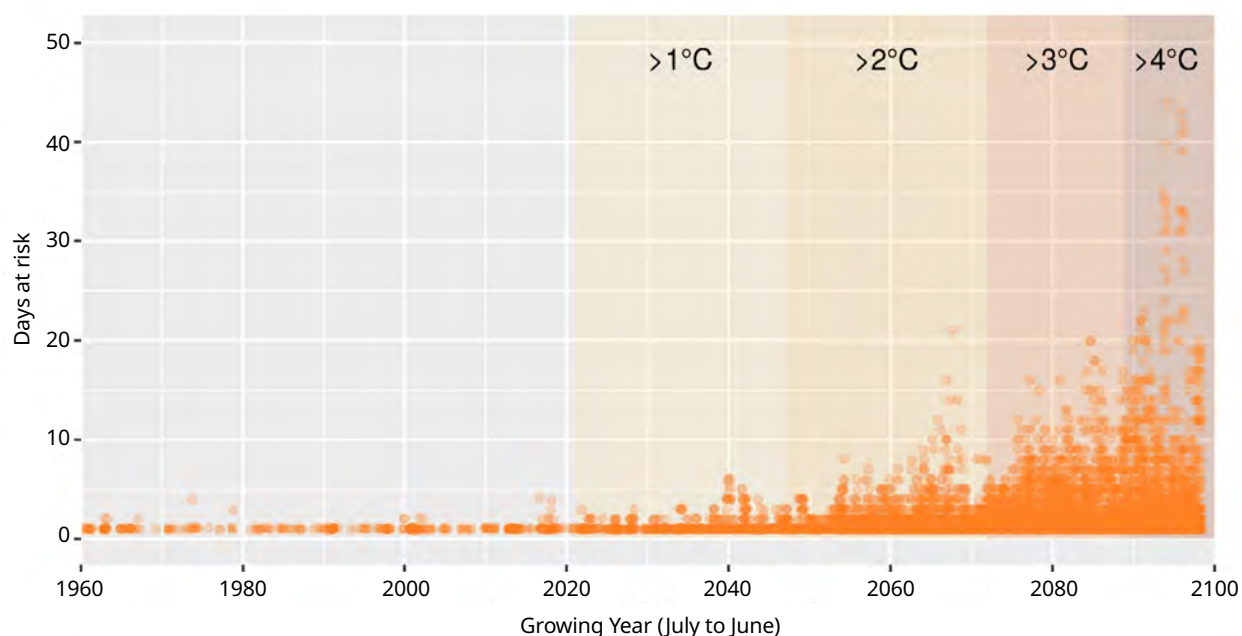
FIGURE 10: Projected annual number of heatwave days from 1961 to 2100



(Source: Atlas of Earth System Hazards)

Agricultural workers are exposed to the elements with activities mostly occurring outside. It is projected that by 2100 there will be over 40 days a year with a severe risk to humans working outside (Remenyi et al 2019). Figure 11 shows the projected changes to 2100.

FIGURE 11: Projected number of days with severe risk to humans working outside



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

Evaporation and evapotranspiration

By 2050, we expect to see a significant increase in evaporation 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. It is also predicted to increase, particularly in spring and summer.

This, combined with a decrease in spring and summer rainfall, means that we will likely see considerably drier summer soil. This increases bushfire risk and vegetation stress and decreases pasture production across dryland grazing systems, leading to low feed availability and increased risks of soil erosion (RMCG 2023).

Aridity

Aridity is the combination of increased temperatures and decreased moisture availability. Increased evapotranspiration needs to be balanced with increased rainfall to avoid water deficit. When evaporation exceeds rainfall, a region is considered ‘arid’.

Climate change is bringing increasing aridity to North-West Tasmania. Our community is already witnessing the effects of increasing aridity in the landscape. Projected mean annual aridity shows us changes in the aridity index

(annual rainfall/pan evaporation) indicating significant drying of the landscape is anticipated for the North-West region. Into the future, a warmer landscape with enhanced evaporation, but with similar (or less) rainfall, means a drier landscape (Remenyi et al 2019).

TABLE 2: Projected mean annual aridity

Region	1997 – 2017	2041 – 2060	2081 – 2100
King Island	0.75	0.66	0.58
North-West Coast	1.17	1.01	0.87

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

Temperature and evaporation are also correlated, which can lead to water being evaporated at faster rates from storages, lakes and rivers, drying out the landscape faster. It is projected that evaporation rates will increase by 19 per cent in the North and West of Tasmania to 2100 (Climate Futures 2024). A faster drying landscape increases fire danger. Increasing temperatures decrease mist and cloud cover at altitude, which is required by highland ecological communities. These combinations are best described as the effects of increasing aridity.

Fire risk

The increasing aridity in North-West Tasmania is creating new fire management challenges for land managers. Community members working within the land management and fire services reported through the consultation process 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 planned burn limits more regularly. The risks of bushfires are increasing and some of the mitigation options like planned burning are becoming more difficult with shorter windows leading to increased pressure for planners and crews and increased costs.

In 2016 and 2019 bushfires burnt areas traditionally seen as “unburnable” with fires burning fire sensitive vegetation communities that have never experienced fire.

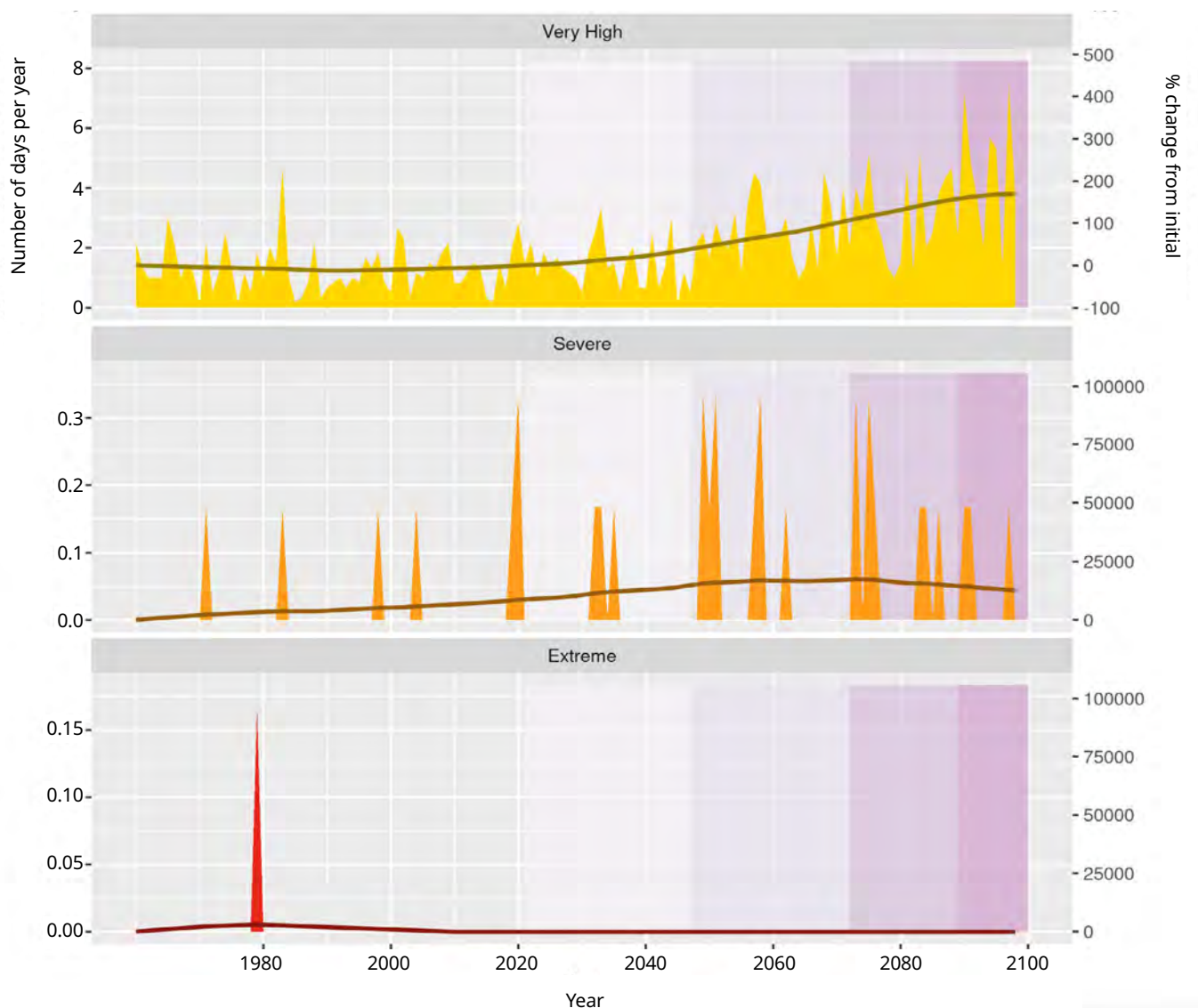
In 2025, dry lightening caused fires that burnt through significant areas of takayna/ Tarkine rainforest and Cradle Mountain Lake St Clair National Park. A stand with 3000+ year old Huon Pines was fortunately saved by metres, however other stands of the extremely fire sensitive Huon Pines were lost.

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

Figure 12 shows the changes in the bushfire danger ratings days to 2100 (Remenyi et al 2022).

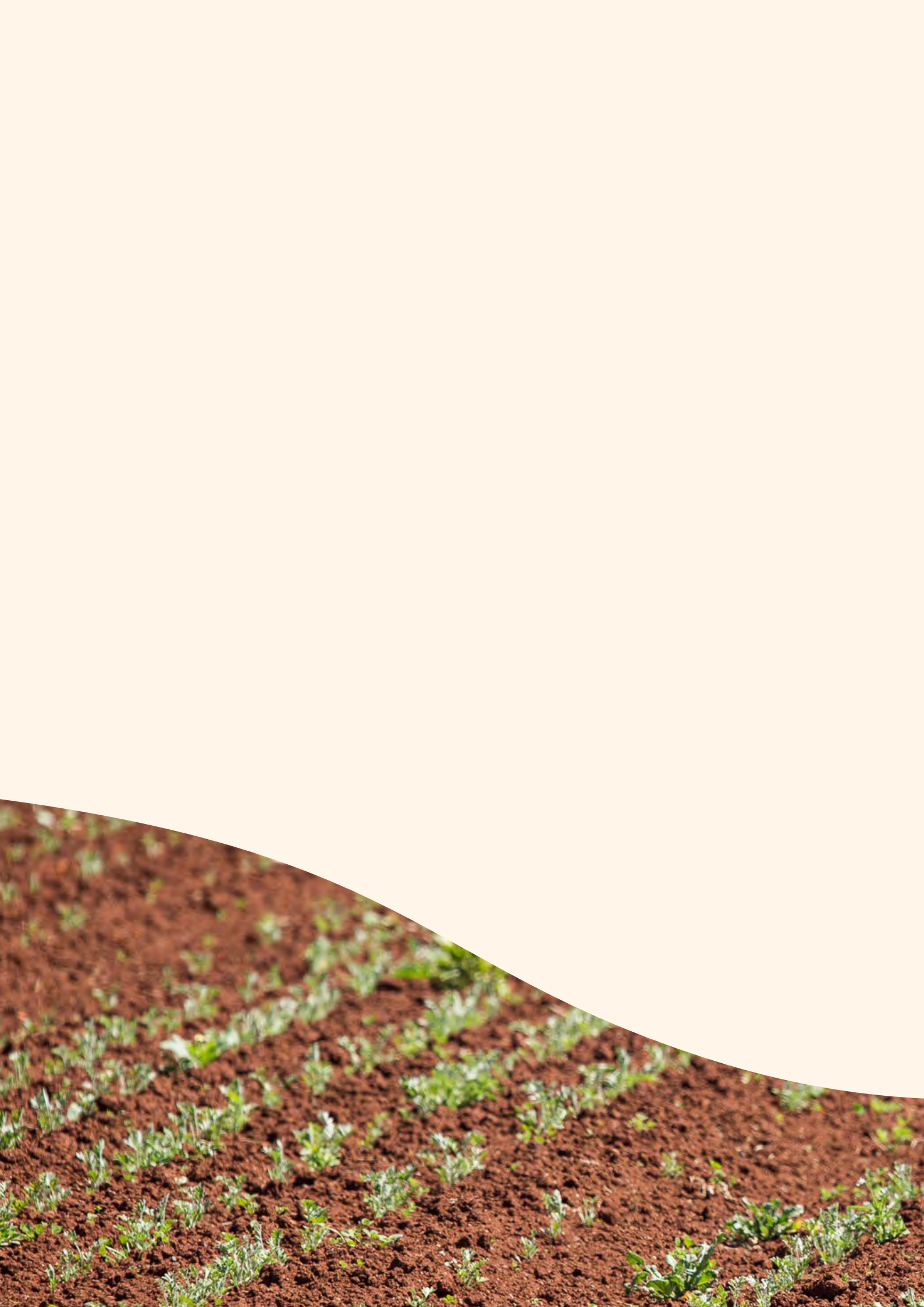


FIGURE 12: Projected number of days per year with very high, severe or extreme bushfire ratings
North-West coast



(Source: Atlas of Earth System Hazards for Tasmania)





5

A resilience action plan for North-West Tasmania





The plan for building drought and climate resilience across North-West Tasmania is organised under themes and goals identified through community consultation. These themes and goals are further supported by a list of potential initiatives that communities can use to help identify ways to prepare for drought and climate resilience (see [Appendix D](#)).



To build drought resilience using knowledge, communication and collaboration to take a practical, useful innovative action.



Interconnected nature of drought

Stakeholders have the knowledge, awareness, and understanding of drought's interconnected impacts across ecosystems, agriculture, and communities, and take action to build resilience.

Knowledge and education

Increase knowledge and awareness of drought and climate variability through education, training, tools, guides, communication and knowledge creation and sharing.

Climate and environmental solutions

Coordinate and collaborate on policy, strategy and action planning for climate adaptation.

Community and social resilience

Build community resilience by supporting local networks, behaviour change actions and diversification.



Drought governance

Coordinated, integrated and appropriate governance structures to lead, plan and resource drought resilience actions.

Coordinated drought resilience planning

Collaborate with government, industry and private stakeholders to create unified drought and climate adaptation strategies

Financial and economic preparedness

Ensure communities have access to financial support and guidance, and strategic funding to build economic resilience and enhance community drought preparedness.

Community mobilisation and communication

Encourage communication and collaboration between local government, all sectors and community members to ensure coordinated actions and problem-solving.

Research and capacity building

Undertake further research and knowledge sharing to address gaps in regional drought preparedness and improve access to financial incentives like carbon and biodiversity markets.



Community self-reliance

Knowledge, networks, access to services and support to become better prepared for climate variability and drought.

Social connectivity and community building

Support actions to foster strong social networks and community bonds that enhance collective resilience during drought.

Mental health and wellbeing support

Support initiatives to improve mental health awareness, support systems, and reduce stigma in rural communities affected by drought.

Localised and participatory approaches to drought resilience

Prioritise community-centred strategies that incorporate local knowledge, Indigenous perspectives and youth engagement to address unique resilience needs.

Economic resilience and food security

Strengthen local economies and secure food supply through local markets, shorter supply chains, and community education on food security.

Community-led water management

Encourage water-sensitive urban design, water conservation and efficient water usage within communities to build awareness and prepare urban areas for drought conditions.

FIGURE 13: A plan for building drought and climate resilience in North-West Tasmania



5.1



Theme 1 The interconnected nature of drought

Droughts impact ecological, social and economic systems in complex and connected ways. Understanding these relationships is crucial for effective drought resilience actions and response.

Drought doesn't only reduce water availability for agriculture and ecosystems. It also impacts fire risks, community health and wellbeing, logistics and shipping services, energy generation and regional economies.

The interconnected nature of drought requires a systems-based response, where all affected sectors work together to develop integrated, long-term resilience strategies.

Goals

1

Knowledge and education: Increase knowledge and awareness of drought and climate variability through education, training, tools, guides, communication and knowledge creation and sharing.

2

Climate and environmental solutions: Coordinate and collaborate on policy, strategy and action planning for climate adaptation.

3

Community and social resilience: Build community resilience by supporting local networks, behaviour change actions and diversification.

5.2



Theme 2 Drought governance

Governance plays a critical role in preparing for drought, particularly in coordinating efforts across various sectors and regions. In North-West Tasmania, there is an absence of coordinated policies, climate data-sharing and drought-specific strategies. This absence highlights the need for a more integrated governance structure.

Effective governance ensures that agencies, land managers and communities can work together to develop cohesive plans, share resources and implement best practices for drought resilience.

Goals

- 4 Coordinated drought resilience planning:** Collaborate with government, industry and private stakeholders to create unified drought and climate adaptation strategies.
- 5 Financial and economic preparedness:** Ensure communities have access to financial support and guidance, and strategic funding to build economic resilience and enhance community drought preparedness.
- 6 Community mobilisation and communication:** Encourage communication and collaboration between local government, all sectors and community members to ensure coordinated actions and problem-solving.
- 7 Research and capacity building:** Undertake further research and knowledge sharing to address gaps in regional drought preparedness and improve access to financial incentives like carbon and biodiversity markets.



Theme 3 Community self-reliance

Community self-reliance is vital for building drought resilience because it equips local populations with the knowledge, skills and resources to respond quickly and effectively to drought conditions.

When communities are empowered to manage drought impacts independently, they become less dependent on external assistance, which can be slow or insufficient during widespread crises.

By fostering local initiatives in water conservation, resource protection and sustainable agricultural practices, communities build lasting resilience. This ensures they are better prepared to protect their economic, social and environmental stability in the face of future droughts and climate variability.

Goals

8

Social connectivity and community building: Support actions to foster strong social networks and community bonds that enhance collective resilience during drought.

9

Mental health and wellbeing support: Support initiatives to improve mental health awareness, support systems, and reduce stigma in rural communities affected by drought.

10

Localised and participatory approaches to drought resilience: Prioritise community-centred strategies that incorporate local knowledge, Indigenous perspectives and youth engagement to address unique resilience needs.

11

Economic resilience and food security: Strengthen local economies and secure food supply through local markets, shorter supply chains, and community education on food security.

12

Community-led water management: Encourage water-sensitive urban design, water conservation and efficient water usage within communities to build awareness and prepare urban areas for drought conditions.



Theme 4 Land management

Land management involves adopting sustainable practices that enhance the resilience of farmlands, forests and natural areas against drought and climate variability.

Effective land management includes strategies like improving water retention in soil, optimising plant species for changing conditions, and managing land to reduce erosion and evaporation. By integrating these practices, land managers can mitigate the impacts of drought, support ecosystem health, and maintain productivity even under dry conditions.

This proactive approach is essential for preserving natural resources, reducing vulnerability to climate shocks, and ensuring long-term sustainability for agricultural and forested areas.

Goals

- 13 Land management and adaptation:** Explore climate-adaptive practices for farms, forests and natural landscapes to enhance resilience to drought and climate change impacts.
- 14 Fire preparedness and education:** Improve fire detection, response and community preparedness, including training on culturally informed and ecologically aware fire management.
- 15 Water planning and management:** Prioritise strategies to enhance water storage, efficiency, and quality to ensure reliable water resources during drought periods.
- 16 Technological innovation:** Encourage the use of innovative technologies and digital tools to monitor, mitigate and adapt to drought conditions and other climate variability.
- 17 Socio-ecological resilience:** Facilitate meaningful ways community members can take action to care for country.



Theme 5 Industry and infrastructure

Industry plays a critical role in drought resilience by driving innovation, establishing sustainable resource practices, and supporting economic stability in vulnerable regions.

By adopting water-efficient technologies, supporting resilient supply chains and investing in local communities, industries can reduce the environmental impacts of drought while helping communities adapt to climate challenges.

Industry involvement, through corporate responsibility initiatives and partnerships with local governments and agricultural sectors, also strengthens economic resilience, ensuring that essential goods and services remain accessible even during prolonged drought conditions.

Goals

- 18 Strengthening local agricultural economies:** Explore opportunities to build economic resilience and support sustainable farming practices.
- 19 Adaptation, research and innovation:** Focus on long-term climate strategies and cross-sector innovation to support stakeholders in adaptive change.
- 20 Infrastructure development:** Enhance critical transportation and logistics infrastructure to support uninterrupted access to markets and resources.
- 21 Drought-resilient water systems:** Undertake coordinated and detailed water infrastructure planning for resilient water sources, including household water supplies and sustainable irrigation practices to support long-term water management.
- 22 Corporate social responsibility:** Advocate for local corporate social responsibility that supports drought and climate resilience.



Theme 6 Globally significant ecological communities and Aboriginal cultural landscapes

Protecting globally significant ecological communities is essential for drought resilience. The takayna rainforest – the largest remaining temperate rainforest in the southern hemisphere, an irreplaceable ecosystem with ancient Gondwanan relic species – is under threat from climate change, drought and fire. Protecting its biodiversity, carbon storage and the ecosystem services it supplies to the agricultural zone is vitally important.

The Tasmanian Wilderness World Heritage Area (TWWHA) is similarly at risk from the combination of drought, increased temperatures and wildfires. The takayna, the highlands and the TWWHA form a Tasmanian Aboriginal cultural landscape shaped by sustainable land stewardship practices developed over millennia. These practices and cultural connection to country offer vital insights for building ecological and community resilience against drought.

Goals

- 23 Adaptive land management and biodiversity:** Develop adaptive land management practices to preserve biodiversity and ensure long-term ecosystem resilience in the face of climate change.
- 24 Water and fire management:** Address water scarcity and prepare for fire risks to protect and conserve globally significant ecological communities.
- 25 Indigenous knowledge and community engagement:** Encourage knowledge sharing and use of Aboriginal land management practices, such as cultural burning, to enhance ecosystem resilience.
- 26 Drought monitoring and species protection:** Establish clear drought monitoring indicators and triaged next steps to protect species and maintain biodiversity during periods of extreme environmental stress.
- 27 Addressing knowledge gaps:** Work to address knowledge gaps and build community and broader stakeholder understanding and support for innovative ecological adaptation and intervention approaches.



6

Implementation approach



The implementation of the North-West 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 North-West 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 interest, 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 Next steps

Next steps in 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.
- **Opportunities for strategic alignment:** efforts will be required to integrate the Regional Drought Resilience Plans.
- **Broader FDF program direction:** RDRPs may be able to provide greater strategic direction and clarity across the FDF program.
- **Resilience assessment review:** it is recommended a review of the plans, supporting resilience assessments and maps be undertaken when significant changes occur, such as when new fine-scale or 'downscaled' climate projections for Tasmania are available. Future reviews should also consider further refinement of the indicators used in the resilience assessment.



7

Monitoring, evaluation and learning



The proposed monitoring, evaluation and learning (MEL) approach for the North-West 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, other Tasmanian RDRP Program activities will be monitored according to the RDRP 2.0 Outcomes Framework.

MEL activities for the North-West Tasmanian RDRP will aim to measure progress against the plan's six key themes and corresponding goals.

The monitoring and evaluation approach for the RDRPs must be streamlined, simple and efficient to implement. Community feedback will be a critical component. 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, 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 North-West 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 in line with the longer-term governance arrangements for the program.

Ultimately, the plan aims to improve overall drought resilience in North-West 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 3 outlines the proposed MEL approach for the North-West Tasmanian RDRP.



TABLE 3: North-West Tasmania RDRP MEL approach

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
North-West RDRP Theme and outcome	RDRP MEL adapted outcomes
Interconnected nature of drought (knowledge, awareness, understanding) North-West Tasmania and stakeholders have the knowledge, awareness, and understanding of drought's interconnected impacts across ecosystems, agriculture, and communities, and take action to build resilience.	• Communities use relevant data and information to better understand their resilience to drought and make decisions • Actions, pathways and opportunities (including innovative and transformative) to improve regional drought resilience, mitigate risks and adapt to change are identified • The number of, and participation in, local networks and programs to enhance drought resilience increases
Drought governance (planning, priorities, funding, coordination) North-West Tasmania has coordinated, integrated and appropriate governance structures to lead, plan and resource drought resilience actions.	• Regional level drought resilience planning leverages and aligns with planning at other scales • Regional representatives continue to consider and plan incremental, transitional and transformational opportunities to strengthen resilience • Partnerships, networks and engagement are built between stakeholders planning for drought and climate resilience
Community self-reliance North-West community has knowledge, networks, access to services and support to become better prepared for climate variability and drought.	• Communities are given the opportunity to communicate regional drought resilience needs and priorities which may inform future investment • Communities use relevant data and information to better understand their resilience to drought and plan for resilience to drought • Communities share knowledge, collaborate and partner with government more often around drought and climate resilience

North-West RDRP Theme and outcome	RDRP MEL adapted outcomes
Land management (farming, forestry, fire, flow) North-West land managers have knowledge, access to services and funding, and ability to take action to strengthen drought and climate variability preparedness.	• Land managers use relevant data and information to better understand their resilience to drought and make decisions • Natural resource management capability is improved across the region
Industry and infrastructure (profitability, diversity, transport, reticulation, reliability) The North-West community has industry and infrastructure that is well-coordinated, appropriate and engaged in increasing drought resilience.	• Drought resilience planning draws on a wide range of inputs, informed by effective partnerships within the region • Regional leaders are in a stronger position to implement strategic actions, adapt to change and take advantage of opportunities to build economic resilience as they arise • Primary producers and businesses are supported to improve their sustainability and resilience • Regional public and private infrastructure adaptations have contributed to increasing drought and climate resilience
Globally significant ecological communities and Aboriginal cultural landscapes (protection, adaption, mitigation, extinction planning) North-West Tasmania's globally significant ecological communities and cultural landscapes are protected, actively managed and exist for future generations by coordinated, well-resourced and innovative action.	• Regional leaders are in a stronger position to implement strategic actions, adapt to change and take advantage of opportunities to build ecological resilience as they arise • Increased community understanding of the region's current and future drought resilience, considering the region's environmental characteristics • Natural capital is preserved while also improving productivity and profitability

8

A resilient region: case studies



There are so many good examples of community-based initiatives that are already having a positive impact in strengthening resilience.

The following are just a couple of examples to inspire thinking of future drought resilience activities as part of the implementation of this plan.

CASE STUDY 1

Farm dam enhancement project

Themes

Land management;
industry and infrastructure

About this project

During 2025, Landcare Tasmania, in partnership with the TAS Farm Innovation Hub and the ANU's Sustainable Farm Program, will deliver Farm Dam Enhancement (FDE) workshops. Funded out of the Future Drought Fund (FDF), workshops are designed to help Landcare groups and farmers increase their resilience to drought and climate variability, to highlight the production and ecosystem benefits from improved farm dam management, and to keep more water in the landscape for longer. Workshops will provide the opportunity to build local connections, encourage collaboration and increase ground activities to contribute to catchment-scale climate resilience.

In addition to the community workshops, a series of 'train the trainer' activities will also be held to build a network of local community members with the knowledge needed to provide advice to other landholder around dam design, construction and efficiency.

GIS mapping completed as part of the FDF project will be used in planning workshops with landholders and Landcare networks, to identify priorities for future on-ground works. Mapping will involve participants pinpointing shared values, threats, and priority areas for action, fostering collaborative efforts to enhance catchment health.

"We hope this project, supported by robust modelling of each area, will help Landcarers to identify priority on-ground work and improve catchment health"

— (Landcare Tasmania CEO Peter Stronach).

Impact

The farm dam enhancement project delivers the following impacts:

- Shares information and builds knowledge amongst landholders.
- Builds interest amongst local communities in enhanced dam design and construction.
- Encourages more efficient dam design and use
- Creates a network of trained community members to give advice on enhancing farm dams.

Case study and image courtesy of Landcare Tasmania.

Well-managed farm dams can help with drought resilience.
Photo: Anna Minchin.



CASE STUDY 2

Small business community learning workshops

Themes

**Drought governance;
community self-reliance**

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 work day, with networking over breakfast). Workshops aimed to build the 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.

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.

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



CASE STUDY 3

Community creativity focusses on drought preparedness in video project

Themes

Interconnected nature of drought; community self-reliance

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 participants aged 18-35 years, 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 and encourage awareness and preparedness in the face of significant changing environmental conditions 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.

Case study and image courtesy of Rant Arts 2024.

A screenshot from community drought preparedness video.



CASE STUDY 4

Technology in bushfire management

Themes

Globally significant ecological communities and Aboriginal cultural landscapes; land management

About this project

The West Coast of Tasmania has some of the most remote and inaccessible vegetation and ecologically significant communities in the state. In recent years, Tasmania's three fire management agencies (the Park and Wildlife Service, Sustainable Timber Tasmania and the Tasmanian Fire Service) have been collaborating to operationally trial a network of fixed and mobile fire detection cameras. This includes on the Elliot Ranges in Western Tasmania, to help in monitoring on potential bushfires, to speed up identification and response.

Impact

The program has the potential to:

- Accurately monitor bushfire activity, alerting authorities early when a fire occurs.
- Ensure rapid response to high-risk bushfire areas.
- Benefit other vulnerable areas if the pilot program is successful.

Next steps

After the success of this trial Sustainable Timber Tasmania in collaboration with PWS and TFS are working on a business case for a Tasmanian Integrated Fire Camera Network of up to 30 cameras and a central portal for their visualisation. This business case will seek funding through the Disaster Ready Fund.

Case study and image courtesy of Sustainable Timber Tasmania and Indiciu Dynamics.

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A fire camera installed as part of the camera trial project. Photo: Harry Fiotakis.





9

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Appendices



Appendix A: Drought Risk Resilience and Adaptive Capacity Data Report, North-West Tasmania, 2023

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

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

Appendix B: Stakeholder engagement summary

1. Approach

From November 2022 to February 2025, as part of the development of the North-West Tasmanian Regional Drought Resilience Plan (RDRP), approximately 220 regional stakeholders and community members across a diverse range of interests and industries shared their knowledge, views and ideas around strategic actions.

The consultation process for the development of the North-West RDRP has involved:

1. Establishment and coordination of a Project Advisory Group (PAG) comprising 12 members. The PAG met three times during the plan's development, with numerous out-of-session interactions occurring between members. Members were selected to ensure a broad range of views were represented across environmental, social and financial, health and wellbeing and community arts sectors. The PAG has involved representatives from local government, TAS Farm Innovation Hub, Cradle Coast Authority, UTAS, Cradle Coast NRM, DairyTAS, Rural Alive and Well, two community arts organisations, as well as community members with interests in climate forecasting, mental health advocacy, and food systems and innovation.
2. The facilitation of a future drought scenarios workshop in September 2024.
3. A 'lessons learnt' lived experience workshop in King Island, in December 2024.
4. Attendance at a range of stakeholder events and meetings.
5. Targeted one-on-one regional discussions with over 70 stakeholders.
6. Participation via the Drought Ready website (<https://droughtready.tas.gov.au/>).

During plan development, 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.

1.1 Drought futures exercise workshop

On 17 September 2024, a drought futures workshop was conducted in Wynyard, undertaken and facilitated by Dr Darryl Stellmach, Lecturer in Emergency Management, UTAS.

Attended by 12 community participants, the workshop developed future scenarios based on a potential drought of a similar scale to the King Island 2023-24 drought, which had received significant media attention across the region and therefore participants were familiar with the scenario.

Participants identified likely strengths and vulnerabilities within the community, and were invited to imagine what a collaborative, community-based response might emerge as a result. The meeting then explored what it would take to bring this positive response into reality. Throughout the session, participants were encouraged to examine the actions proposed using the STEEPLE guidelines (social, technological, economic, environmental, political, legal and ethical). Key actions identified throughout the discussion were incorporated into the thematic analysis for key themes, goals, and the potential actions list provided in [Appendix D](#) of this plan.

1.2 King Island lessons learnt workshop

On 12 December 2024, a whole-of-community workshop was conducted on King Island by the TAS Farm Innovation Hub, the Tasmanian Government Department of Natural Resources and Environment, and the Regional Drought Resilience Planning team, working closely with Rural Alive and Well (RAW).

The workshop aimed to review the drought response activities undertaken in late 2023 and 2024 and to formalise discussions about future drought resilience actions and directions. Key insights from the workshop have been used to validate the key themes and goals captured in this plan. Island priorities are also captured in the King Island Case Study provided in [Appendix E](#).

2. Organisations engaged

Organisations engaged to help shape the development of the North-West plan are listed here:

- Cradle Coast NRM
- King Island Council
- Six Rivers Aboriginal Corporation
- Big hART
- King Island Landcare
- Sustainable Timber Tasmania
- BOM
- Landcare Tasmania
- TAS Farm Innovation Hub
- Burnie City Council
- Latrobe Council
- Tas Farmers Red Meat Council
- Central Coast Council
- Northern Tasmanian Alliance for Resilient Councils (NTARC)
- TasFarmers King Island Drought Coordinators
- Circular Head Council
- NW Regional Emergency Management Committee
- Tasmanian Aboriginal Centre
- Climate Systems Hub –Adapt Land and Sea
- Optimum Standard
- Tasmanian Fire Service
- Cradle Coast Authority
- Private Forest Tasmania
- Tasmanian Land Conservancy
- Cradle Mountain Canyons
- RANT Arts
- TasWater
- DairyTas
- Reconciliation Tas
- TFGA Vegetable Council
- Devonport City Council
- Red Hot Tips
- UTAS Engineering
- Farm Business Resilience
- Regional Development Australia
- UTAS
- Forico
- RMCG
- VegNET Tasmania
- Friends of Henty Landcare
- Rural Alive and Well
- Wynyard Council

Organisations engaged at a program-wide perspective are listed below:

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

3. Engagement insights

Table 4 summarises the key messages and insights from engagement. Key messages and insights were thematically analysed, with outcomes used to inform the development of the RDRP's themes and goals. A full list of potential actions relating to each theme is also provided in [Appendix D](#).

TABLE 4: Key insights from stakeholder engagement

Topic	Stakeholder insights
Water Management	• Uncoordinated water resource management: Water management in North-West Tasmania is complicated by fragmented responsibilities across multiple agencies (Hydro Tasmania, TasWater, Tas Irrigation, etc), leading to inefficiencies. There is a lack of coordinated data sharing between these entities, hindering efficient water management during droughts. • Vulnerability of water supply: Changes in catchment yields due to climate change are predicted to affect the reliability and timing of water supplies. Current water management arrangements are not well adapted to these changing conditions. • Water infrastructure limitations: Existing infrastructure, such as the King Island Water facility, is under threat (for example through privatisation or lack of emergency water sources), and there is an over-reliance on dams that may not hold up during prolonged droughts. • Irrigation security: While irrigation schemes have been beneficial, participants stated they can create a false sense of security. In the event of severe droughts, even these systems may fail, leaving farmers without access to water.
Policy and Planning	• Lack of specific drought plans: Various sectors and agencies in Tasmania, such as the Tasmania Fire Service, Sustainable Timber Tasmania, and Tasmania Parks and Wildlife Service, currently don't have specific policies or plans to address drought and climate change impacts. This leaves the region vulnerable to reactive, rather than proactive, responses. • Absence of coordinated drought policies: There is no overarching or integrated drought preparedness or climate resilience policy across the government, forestry, agricultural and environmental sectors in Tasmania. • Short-term funding cycles: Projects related to drought preparedness and resilience often suffer from short-term funding, which means once the project ends, the knowledge and capacity are lost. This limits the region's ability to implement long-term resilience strategies.
Ecosystem and Biodiversity	• Ecological vulnerability to drought: North-West Tasmania's rainforests, alpine ecosystems, and carbon storage assets are at risk of being degraded by drought. This includes increased risks of fire and the release of stored carbon from forests. • Inadequate ecosystem management for drought: There is a lack of coordinated actions to protect critical ecosystems from the impacts of drought. Conservation efforts such as managing riparian zones, planting drought-tolerant vegetation and protecting biodiversity assets are insufficient. • Carbon market and biodiversity funding gaps: Opportunities to leverage carbon markets and biodiversity credits for ecosystem protection are under-explored. These mechanisms could provide financial incentives for protecting at-risk ecosystems.

Topic	Stakeholder insights
Fire Risk and Preparedness	• Increased fire risk from drought: Drought conditions exacerbate fire risks, particularly in forestry and agricultural areas. However, feedback indicates that current fire response plans (such as from the Tasmania Fire Service) do not appear to sufficiently incorporate climate variability and drought risks. Ability to undertake mitigation actions are being increasingly limited by shortened planned burning seasons. • Gaps in fire detection and response systems: While there are recommendations for expanding networks of remote sensing cameras for fire detection, they have not been fully implemented, leaving some regions vulnerable. Additionally, there are no dedicated, innovative fire suppression resources, such as drones equipped for firefighting in remote areas.
Community Vulnerability and Preparedness	• Limited community awareness and education: Local communities, particularly farmers, are not adequately prepared for long-term drought impacts. There is a need for more extensive educational programs on sustainable water use, drought preparedness and financial management during drought. • False sense of security: There is a cultural perception that drought is a distant concern, especially during wet years. This attitude results in a lack of long-term planning and preparedness for drought when it does occur. • Lack of coordinated communication: During drought or dry periods, there is a lack of organised communication strategies between agencies and communities, leading to delayed action and increased risk. This includes insufficient public awareness about drought conditions and a need for prompt, clear communication during emergencies. • Inadequate support for cultural practices: The Firesticks program, which promotes cultural burning practices for land management, lacks reliable funding. These practices could play a significant role in managing both natural and agricultural landscapes more sustainably.
Financial and Economic Considerations	• Debt-driven financial weakness: Farmers in North-West Tasmania face financial challenges in investing in drought resilience, often relying on debt to improve their land. This increases vulnerability during prolonged droughts, as debt burdens accumulate, creating long-term economic instability. • Lack of financial products for resilience: There is a need for financial products that do not exacerbate farmers' debt levels. The lack of robust financial tools for drought preparedness, such as resilience grants or low-interest loans, leaves farmers underprepared. • Limited access to grants and funding: While there are ad hoc grants for drought-affected areas, such as for King Island, access to consistent, long-term financial support for primary producers is limited, leaving communities unprepared to manage ongoing drought impacts.

Topic	Stakeholder insights
Collaboration and Long-Term Planning	• Fragmentation of efforts: Across sectors (water, agriculture, forestry), there is a lack of collaboration and coordination in drought preparedness efforts. This fragmentation weakens the overall ability to manage drought impacts at a regional scale. • Regional infrastructure gaps: There are notable infrastructure gaps in some areas, such as King Island, which lacks adequate planning and basic infrastructure to handle drought conditions and emergency water needs for firefighting and livestock. • Short-term focus on drought response: Many stakeholders focus on immediate drought relief rather than long-term adaptation and resilience-building strategies. This is exacerbated by reactive rather than proactive planning across government and private sectors.
Geographical Areas	• Geographical areas of higher vulnerability: Places including King Island, Circular Head and the highland vegetation communities and rainforests may be more vulnerable to drought. • Rain-fed or dryland agriculture: Participants noted that dryland farming systems, which includes most of the red meat industry, are particularly vulnerable to drought. These systems are concentrated in Circular Head and King Island. The size of these sectors increases drought vulnerability to those communities. • Western and highland forests and ecological communities: Western and highland areas that have been considered 'unburnable' in the past are now at risk of fire.
Agriculture	• Farming systems: Participants felt that some specific farming systems may be more susceptible to drought. These include dryland farming systems like beef farming, irrigated agricultural systems without irrigation scheme backup, corporate grazing enterprises, processing sectors and logistics when in crisis. • Water use efficiency: There is a lack of education and training in best practice water use and potential to improve productivity per megalitre of water applied. • Farm management practices: There is a lack of information and uptake of actions to increase water stored in soils and in shallow farm dams, resulting in less water stored in the landscape than possible. • Lack of awareness of evaporation: Farmers and water managers are not aware of the losses through evaporation and actions available to reduce those losses. • Land clearing: Land clearing for grazing is removing drought buffers and water storage zones within the landscape, leading to a decrease in drought resilient landscapes.

Appendix C: Strategic context

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

TABLE 5: Strategic context, North-West Tasmanian RDRP

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.
<u>National Health and Climate Strategy</u>	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, while 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.
<u>National Disaster Mental Health and Wellbeing Framework</u>	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.

Document / strategic initiative	Document purpose and opportunities for strategic alignment
Statewide	
Climate change	
<u>Climate Change (State Action) Act 2008</u> Tasmania's Climate Change Action Plan 2023-25	<i>Tasmania's Climate Change Action Plan 2023-25</i> 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.
<u>Tasmania's Emissions Reduction and Resilience Roadmap 2024-29</u>	Developed by RECFIT to link together the six Sectoral Emissions Reduction and Resilience Plans and <u>Tasmania's Risk Assessment for Climate Change 2024</u> , 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.
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 support 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.

Document / strategic initiative	Document purpose and opportunities for strategic alignment
Agriculture	
<u>Agrivision 2050 plan: Tasmanian Government's Competitiveness of Tasmanian Agriculture for 2050 White paper</u>	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. 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.
<u>Impacts of climate change on Tasmanian agriculture</u>	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.
<u>Agriculture Sector Emissions Reduction and Resilience Plan (ERP) 2024-2029</u> <i>State of Play report – Tasmania's Agriculture sector</i>	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. There may be an opportunity to integrate the FDR goals and RDRPs into this sector-wide action plan for agriculture.
<u>Tasmanian Agri-Food ScoreCard</u>	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.
Water	
<i>Water Management Act 1999</i>	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.

Document / strategic initiative	Document purpose and opportunities for strategic alignment
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.
Tasmanian Irrigation Annual report: Tasmanian Irrigation Annual Report 2022/23	Annual report of Tasmanian Irrigation, which exists to be recognised as a leader in working with others 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.
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.

Document / strategic initiative	Document purpose and opportunities for strategic alignment
Healthy Active Tasmania: Tasmanian 20-Year Preventative Health Strategy 2026-2046	The Tasmanian Government is currently 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. 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 State 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	
Cradle Coast NRM 2030 Strategy	The CCNRM 2030 Strategy guides investments in sustainable management of Land, Water and Biodiversity resources. Actions and priorities within the CCNRM Strategy informed the NW RDRP development.
Cradle Coast Regional Land Use Planning Framework	The Cradle Coast Regional Land Use Planning Framework sets out the strategy and policy basis to facilitate and manage change, growth, and development. 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 framework.

Appendix D: North-West Tasmania: community drought and climate resilience action areas

Table 6 outlines key actions areas for building drought and climate resilience across North-West Tasmania, according to themes and goals. It includes:

- change type – incremental (I) or transformational (T)
- timeframe – short- (S), medium- (M) or long-term (L)
- suggested potential partners to support and lead delivery.

While early consultation has been undertaken on potential partners, further consultation is needed as part of implementation to test ownership, capacity and resources.

It is important to note that 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.

TABLE 6: Action plan for building drought and climate resilience, North-West Tasmania

Theme	Goals and potential actions ¹
Theme 1  Interconnected nature of drought	Knowledge and education • Increase climate adaptation mindsets: Raise awareness in communities about the potential for drought and the necessity of proactive preparation. Educate the community that the past is not always a reliable indicator of the future. Possible actions include behaviour change programs around drought risks, the future of climate change, and the increasing need for resource efficiency (water, energy). (S, M, L; Transformational; All partners) • Promote and develop climate adaptation skills and tools: Equip land managers and business owners with adaptive management tools and knowledge for climate variability. This could include (but not be limited to) literacy and training resources around enterprise drought plans and actions, ecological management strategies and actions, and climate change impacts. (S, M; Incremental; TAS Farm Innovation Hub, Ag extension, CCNRM, Landcare Tasmania, industry, state government agencies) • Improve communication on drought and climate change: Develop strategies to communicate effectively about drought risk and climate change impacts, focusing on long-term resilience rather than short-term fixes. Tailor messages to different audiences, ensuring that knowledge is accessible and relevant. (S, Transformative; All Partners) • Support research on effective education methods: Conduct research on how to best engage people on drought resilience. (S, Transformative; research organisations, TAS Farm Innovation Hub, Industry communication partners) • Develop direct action guides: Create plain English revegetation species selection guides suggesting suitable species for drought futures revegetation. (S, I; research organisations, ENGOS, Landcare, state government agencies) • Develop drought warnings and triggers for management action: Develop early warning systems for drought and provide education on potential drought conditions, including district-level drought risk warnings for farmers to trigger drought management plan actions. (S, I; TAS Farm Innovation Hub, research organisations, industry partners, state government agencies) • Valuing Tasmanian Aboriginal land management knowledge: Offer more community education on Tasmanian Aboriginal land management practices and improve knowledge sharing between Tasmanian Aboriginal organisations and people and non-Aboriginal communities including through social and networking events. (S, M, L, T; Tasmanian Aboriginal community) • Communicate innovation and knowledge: As new information becomes available, fill regional gaps in knowledge and services through research and stakeholder involvement. (S, M, L, I, T; All partners)

¹ Prioritisation codes: S=short term, M=medium term, L=long term, I=incremental change, T=transformative change; Possible implementation partner

Theme 1



Interconnected
nature of
drought

Climate and environmental solutions

- **Region-wide landscape and biodiversity planning:** Prioritise the development of coordinated multi-agency landscape policy and management plans for conservation of threatened alpine and Gondwanan relic ecosystems. (S, I, state government agencies, research organisations, Tasmania Aboriginal organisations and people, private land managers, Cradle Coast NRM, ENGOS)
- **Action plans with trigger points:** Research and design trigger point action plans (for example, hydrological manipulation actions) to protect high value at-risk ecological communities from climate stressors. (S, I; research organisations, state government agencies, private land managers)
- **Coordinate and engage market-based policy tools and financial instruments:** Leverage emerging carbon and biodiversity markets to simplify access to capital and provide financial support for land managers protecting at-risk ecosystems and high carbon assets from climate change instigated threats (for example, bushfire and drought). (S, T; state government agencies, private land managers, research organisations)
- **Investigate and apply novel adaptation actions:** Identify and apply nature-based solutions to address environmental challenges to drought and fire resilience. (S, M, L, I, T; research organisations, community NGOs, industry, private land managers, TAS Farm Innovation Hub, Cradle Coast NRM)

Theme 1



Interconnected
nature of
drought

Community and social resilience

- **Build social networks:** Strengthen local and regional social support networks, especially in times of drought, to support community adaptability. (S, M, L, I; community NGOs, local govt, Cradle Coast NRM, state government agencies)
- **Increase financially resilient agricultural enterprises:** Support strategies (for example, direct market sales, tourism, accommodation) for agricultural producers to diversify their businesses to reduce climate associated risk, and to maintain profitability. (S, M, L, I; local government, state government agencies, rural business advisers, Agritourism Tasmania, TAS Farm Innovation Hub, Tourism NGOs)
- **Community-wide water conservation:** Encourage behaviour change towards water conservation at household and community levels. (S, M, L, I; TasWater, local government)
- **Support local government leadership:** Encourage councils and community stakeholders to educate on drought preparedness and implement strategic actions. (S, M, L, I; local government, Cradle Coast NRM, state government agencies)

¹ Prioritisation codes: S=short term, M=medium term, L=long term, I=incremental change, T=transformative change; Possible implementation partner

Theme 2



Drought governance

Coordinated drought resilience planning

- **Strategic landscape-wide interagency planning:** Fund coordinated landscape-wide drought and climate change policies and action plans across government and industry sectors (for example, agriculture, Cradle Coast NRM, Sustainable Timber Tasmania, Parks and Wildlife Service, Tasmania Fire Service). Invite large private land managers (for example, Forico and Tasmania Land Conservancy) to be involved in the process to leverage innovation and collaboration across all land managers. (S, M, L, T; industry, Cradle Coast NRM, state government agencies, Tasmanian Aboriginal community, private land managers)
- **Develop coordinated water management systems:** Develop integrated water management plans involving multiple water entities, (for example, Hydro Tasmania, TasWater and others), to improve data sharing and resource management. (S, M, L, I; NRE, Hydro Tasmania, Tas Water, Tasmanian Irrigation)
- **Climate variability planning:** Encourage strategic drought management plans for agriculture and forestry sectors, focusing on long-term management and adaptive strategies. (M, L, I; TAS Farm Innovation Hub, Private Timber Tasmania, state government agencies)
- **Coordinate climate projections:** Implement a statewide coordination system for climate data and drought modelling to ensure consistency and accuracy in planning. (S, M, I; state government agencies, UTAS, TAS Farm Innovation Hub)
- **Local government:** Encourage system-focused regional management and engagement with local councils, ensuring they are equipped to handle climate resilience challenges. (S, M, I; state government agencies, Cradle Coast Authority)

Theme 2



Drought governance

Financial and economic preparedness

- **Financial tools for resilient land managers:** Develop financial products that reduce reliance on debt for farmers and land managers, enabling them to invest in drought preparedness without increasing financial risk. (S, M, L, T; Rural Business Tasmania, state government agencies, TAS Farm Innovation Hub, private equity partners)
- **Long-term investment in resilience building:** Provide long-term funding and avoid short-term funding cycles that limit the continuity of drought resilience projects and knowledge transfer. (S, M, L, T; Australian Government, state government agencies, local government, TAS Farm Innovation Hub)
- **Climate variability grants:** Offer grant possibilities to primary producers to action drought management plans to become better prepared for drought. (S, M, L, I; state government agencies, TAS Farm Innovation Hub, Australian Government through the FDF)

¹ Prioritisation codes: S=short term, M=medium term, L=long term, I=incremental change, T=transformative change; Possible implementation partner

Theme	Goals and potential actions ¹
Theme 2  Drought governance	Community mobilisation and communication • Drought coordinators: Establish local government-hosted drought and climate variability coordinators to facilitate communication between services, industries and communities. (S, M, L, T; local government, state government agencies, Australian Government through the FDF) • Foster collaboration: Encourage collaboration across all sectors (for example, between producers, processors, water managers and government at all levels), ensuring coordinated actions, increased communication, efficient resource use and better problem-solving. (S, M, L, T; industry, TasFarmers, state government agencies, UTAS, TAS Farm Innovation Hub) • Support volunteers: Develop strategies to mobilise and support community-based volunteers effectively. (S, M, L, I, T; community NGOs, local government, Cradle Coast NRM, state government agencies, industry, private philanthropy, corporate social responsibility funding and in-kind support)
Theme 2  Drought governance	Research and capacity building • Continuous improvement through research: Undertake research to understand and fill local and regional and industry knowledge gaps in drought preparedness, identifying where and how to make the biggest differences. (S, M, L, T; UTAS, community NGOs, research partners, Cradle Coast NRM, state government agencies) • Increase access to carbon markets: Develop a statewide system for carbon accounting and assess the impact of anthropocentric climate change and bushfire risks on Tasmania's carbon storage and biodiversity assets. (S, M, L, T; state government agencies, UTAS, Sustainable Timbers Tasmania, forest industry partners, Parks and Wildlife Service, Cradle Coast NRM, large land managers, Landcare Tasmania) • Increase understanding of biodiversity markets: Investigate the role of biodiversity and carbon markets in funding mitigation actions for ecosystems at risk due to anthropocentric climate-induced drought and fires. (S, M, L, T; state government agencies, UTAS, Sustainable Timbers Tasmania, forest industry partners, Parks and Wildlife Service, Cradle Coast NRM, large land managers, Landcare Tasmania)

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Theme 3



Community
self-reliance

Social connectivity and community building

- **Strengthen rural social connections:** Encourage actions that build social connections in good times, creating support networks that increase resilience when drought impacts rural towns, personal relationships and mental health. (S, M, L, I, T; community NGOs, Tasmanian Aboriginal groups, environmental NGOs, Landcare Tasmania, RAW, TasFarmers, local government, Cradle Coast NRM, state government agencies, industry groups)
- **Foster stronger local networks:** Promote initiatives that bring people together, such as small gatherings in local halls, saleyards and undertaking landcare actions, to build stronger social infrastructure. (S, M, L, I, T; community NGOs, Tasmanian Aboriginal groups, environmental NGOs, Landcare Tasmania, Cradle Coast NRM, industry groups)
- **Create spaces for community engagement:** Foster community spaces for dialogue, such as climate grief circles and events that bridge Indigenous and non-Indigenous perspectives on land and water management. (S, M, L, T; community NGOs, Tasmanian Aboriginal groups, environmental NGOs, Landcare Tasmania, Cradle Coast NRM, local government)
- **Support community-building through arts and recreation:** Leverage activities such as music, art and community sports (such as running or walking clubs) to enhance mental health, foster connectedness and prepare communities for drought. (S, M, L, I, T; community arts organisations, community NGOs, Tasmanian Aboriginal groups, local government)

Theme 3



Community
self-reliance

Mental health and wellbeing support

- **Mental health first aid:** Equip service providers and retailers (often the first point of contact) with mental health first aid to better support communities during tough times. (S, M, L, I; Rural Alive and Well, rural supplies retailers, agricultural extension, community NGOs, industry groups)
- **Enhance mental health support:** Build on current proactive mental health support systems (for example, Rural Alive and Well) that can quickly deploy during drought, targeting vulnerable groups like farming families. (S, M, L, I; Rural Alive and Well, rural supplies retailers, agricultural extension, community NGOs, industry groups, state government agencies)
- **Encourage mental health awareness:** Use ongoing community engagement and activities, such as walk/run clubs, to keep mental health on the agenda and reduce stigma, especially in rural areas where seeking help can be challenging. (S, M, L, I; Rural Alive and Well, Rural supplies retailers, Agricultural extension, Community NGOs, Industry groups, State Govt agencies)

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Theme 3



Community
self-reliance

Localised and participatory approaches to drought resilience

- **Place-based strategies:** Focus on localised, place-based approaches that engage community members in resilience planning and actions. Recognise that different communities (for example, King Island community) and farmers have unique needs and circumstances (such as isolation). (S, M, L, T; industry partners, TasFarmers, state government agencies, UTAS, TAS Farm Innovation Hub, environmental NGOs, Landcare Tasmania, Cradle Coast NRM, local government)
- **Engagement with Aboriginal knowledge:** Increase community understanding and integration of Indigenous knowledge in drought resilience practices. Host events and discussions that bring together Aboriginal and non-Aboriginal communities to foster cross-cultural learning. (S, M, L, T; Tasmanian Aboriginal groups, community NGOs, environmental NGOs, Landcare Tasmania, Cradle Coast NRM, local government, large land managers, state government agencies)
- **Empower youth and future leaders:** Focus on engaging the next generation by fostering opportunities for youth leadership and planning for succession in agricultural communities. (S, M, L, I, T; community NGOs, Tasmanian Aboriginal groups, industry groups, environmental NGOs, TasFarmers, local government, state government agencies, Australian Government)
- **Integrate local and scientific knowledge:** Foster collaboration between local communities and scientific experts to enhance drought resilience. Encourage combining traditional knowledge with modern science for a more robust approach to managing drought and other climate variability events. (S, M, L, T; UTAS, TAS Farm Innovation Hub, Tasmanian Aboriginal Community, industry groups, community NGOs, environmental NGOs, TasFarmers, local government, state government agencies, Australian Government)
- **Build drought support networks:** Establish drought support networks that remain active between droughts, ensuring that communities are prepared when drought occurs. These networks should involve peer support and formal assistance systems. (S, M, L, I; industry partners, TasFarmers, TAS Farm Innovation Hub, environmental NGOs, Landcare Tasmania, Cradle Coast NRM, local government, state government agencies)

Theme 3



Community
self-reliance

Economic resilience and food security

- **Strengthen local economies:** Seek out opportunities for shorter supply chains to keep value within regions and increase economic resilience against climate shocks. (S, M, L, I; industry partners, UTAS, TAS Farm Innovation Hub, environmental NGOs, Cradle Coast Authority, local government, state government agencies)
- **Increase use of local markets:** Explore ongoing procurement opportunities to increase use of Tasmanian food by local institutions (for example, aged care, hospitals, schools) to improve farm gate returns and provide a stable market for farmers. (S, M, L, I; industry partners, UTAS, TAS Farm Innovation Hub, environmental NGOs, Cradle Coast Authority, local government, state government agencies)
- **Promote food security through education:** Educate the public on the importance of food security and sustainable water management by supporting community gardens and other local food initiatives. (M, L, I, environmental NGOs, community NGOs, local government)

¹ Prioritisation codes: S=short term, M=medium term, L=long term, I=incremental change, T=transformative change; Possible implementation partner

Theme 3



Community
self-reliance

Community-led water management

- **Promote water-sensitive urban design:** Encourage practices such as rainwater harvesting, greywater recycling, and infrastructure that maximises water retention and minimises runoff through revegetation and other means. (S, M, L, I; Tas Water, UTAS, environmental NGOs, Cradle Coast NRM, local government, state government agencies)
- **Promote urban water use efficiency:** Support programs that increase community awareness of urban water usage efficiency and preparing for drought. (S, M, L, I; Tas Water, UTAS, Cradle Coast NRM, local government, state government agencies)

Theme 4



Land
management

Land management and adaptation

- **Support climate variability adaptation actions for farmers:** Promote actions that increase drought and climate variability preparedness. This could include raising drought awareness and education, supporting farm-level drought action plans, irrigation efficiency tools, fodder storage and stocking rate calculators adapted to new climate projections, water management works (for example, cleaning dams and actions to reduce evaporation), revegetation activities and water conservation actions, as well as other initiatives that build resilience to shocks caused by climate variability. (S, M, L, T; TAS Farm Innovation Hub, industry partners, TasFarmers, Tasmanian Beef Trust, UTAS, Landcare Tasmania, state government agencies)
- **Support climate variability adaptation actions for farm foresters:** Support actions to increase knowledge, skills and confidence for long-term silviculture investments within the context of drying and warming climate, including species selection guides, fire management practices (including fire risk modelling), planting design for shelter and reduced evaporation, and other initiatives that increase landscape, financial and ecological resilience. (S, M, L, I, T; industry partners, Private Forests Tasmania, Sustainable Timbers Tasmania, UTAS, TAS Farm Innovation Hub, state government agencies)
- **Support community-led action and management in the landscape:** Support 'Friends Of ...' programs, Wildcare, Land for Wildlife and Landcare group actions within the farmlands, forests and reserve areas to foster greater ownership and stewardship by the community of the landscape. (S,M, L, I, Landcare Tasmania, environmental NGOs, community NGOs, Cradle Coast NRM, local government, state government agencies, private philanthropy, corporate social responsibility support)
- **Support climate variability adaption actions for native forest managers and natural area managers:** Support actions to build native area land managers' understanding and capacity to plan and adapt to climate variability. This could include assisted migration of forestry-managed vegetation communities, identifying trigger points for water application to threatened vegetation communities, fire management practices including tolerable fire intervals for varying vegetation communities, actions to protect revegetation from browsers (such as deer) and other actions around biosecurity and ecosystem dieback to improve knowledge and actions. (S, M, L, T; UTAS, Parks and Wildlife Service, Sustainable Timbers Tasmania, Forico, Tasmanian Land Conservancy, Tasmanian Fire Service, Wildcare, state government agencies, Australian Government)

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Theme 4



Land
management

Fire preparedness and education

- **Coordinated fire monitoring and detection:** Support the Forest Foresight project for coordinated bushfire detection. (S, T; Sustainable Timbers Tasmania, Forico, Tasmanian Fire Service, Private Forests Tasmania, UTAS, Parks and Wildlife Service, Tasmanian Land Conservancy, state government agencies, Australian Government)
- **Fast bushfire ignition response:** Install technical solutions to enable rapid fire ignition response (for example, automated drones applying fire retardant) in high value, high risk and isolated areas. (S, T; Sustainable Timbers Tasmania, Forico, Tasmanian Fire Service, Private Forests Tasmania, UTAS, Parks and Wildlife Service, Tasmanian Land Conservancy, state government agencies, Australian Government)
- **Fire manager education:** Educate fire managers on ecological principles and sustainable outcomes when fighting fire or undertaking planned burns (for example, protecting endangered species, community and NRM plantings and weed spread). (S, M, I, T; Sustainable Timbers Tasmania, Forico, Tasmanian Fire Service, UTAS, Parks and Wildlife Service, Cradle Coast NRM, Tasmanian Land Conservancy, state government agencies)
- **Community fire management capacity building:** Continue and increase support for both the Firesticks Alliance organisation, enabling cultural burning practices, and the Red Hot Tips program to assist landholders with fire management. (S, M, L, I; Sustainable Timbers Tasmania, Forico, Tasmania Aboriginal Community, Tasmanian Fire Service, Private Forests Tasmania, UTAS, Parks and Wildlife Service, Tasmanian Land Conservancy, state government agencies, Australian Government)
- **Seed banks for post disaster remediation:** Implement strategic seed banks and broaden seed collection zones for reforestation after fires. (M, L, T; UTAS, Sustainable Timbers Tasmania, Parks and Wildlife Service, Tasmanian Land Conservancy, state government agencies.)
- **Firefighting infrastructure:** Support actions to improve firefighting logistics including maintaining access to firefighting equipment, identifying helicopter water access points and improving road networks to ensure rapid deployment in times of fire. (S, M, L, I; Tasmanian Fire Service, Parks and Wildlife Service, Sustainable Timbers Tasmania, Forico, Tasmanian Land Conservancy, state government agencies, Australian Government)
- **Community fire preparedness:** Continue to support programs aimed at rural landholders increasing preparedness for increased fire risks including clarification of rules surrounding construction of fire survival bunkers. (S, M, L, I; Tasmanian Fire Service, UTAS, local government, state government agencies, Australian Government)

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Theme 4



Land
management

Water planning and management

- **Store more water on-farm:** Increase on-farm water storage through a range of actions including improved on-farm storages (for example, deepening existing storages), increasing water retention within the soil profile, and using shelter belts and other technological solutions (such as floating solar arrays) to reduce evaporation. (S, M, L, I, T; Tasmanian Irrigation, industry partners, Tasmania Landcare, Private Forests Tasmania, UTAS, TAS Farm Innovation Hub, state government agencies).
- **Support 'healthy dam' initiatives:** Establish campaigns for healthy dams to safeguard water quality and availability during dry periods as well as improvements to dam design to reduce evaporation loss. (S, M, L, I, T; industry partners, Tasmania Landcare, Cradle Coast NRM, TAS Farm Innovation Hub, Tasmanian Irrigation, state government agencies)
- **Support drought-tolerant species:** Supply information to the farming sector on drought-tolerant crops and pasture species to optimise water use especially in dryland grazing systems. (S, M, L, I, T; industry partners, TasFarmers, Dairy Tas, Tas Beef Trust, Cradle Coast NRM, TAS Farm Innovation Hub, UTAS, state government agencies)
- **Water management training:** Support better irrigation technology and water use efficiency training (for example, Dairy Australia's pilot course on irrigation). (S, M, L, I, T; industry partners, TasFarmers, Dairy Tas, Tas Beef Trust, Cradle Coast NRM, TAS Farm Innovation Hub, UTAS, state government agencies)
- **Increase water use efficiency:** Strengthen water use efficiency, particularly in irrigation schemes, to avoid over-reliance on water reserves during dry periods. (S, M, L, I, T; industry partners, TasFarmers, Dairy Tas, Tas Beef Trust, Tasmanian Irrigation, Cradle Coast NRM, TAS Farm Innovation Hub, UTAS, state government agencies)

Theme 4



Land
management

Technological innovation

- **Support exploration innovation to solve problems:** Support investigation and trialling of technological solutions to drought and climate variability adaption challenges. (S, M, L, I; UTAS, industry partners, Tasmanian Fire Service, Parks and Wildlife Service, Sustainable Timbers Tasmania, Tasmanian Irrigation, Cradle Coast NRM, TAS Farm Innovation Hub, private philanthropy, state government agencies, Australian Government)
- The following were identified during consultation with the community:
 - Install **soil moisture probes** for real-time drought condition monitoring across the major agricultural districts linked to communication tools and drought plans.
 - Install **automatic fuel moisture sensors** to monitor fire risks and improve preparedness.
 - Improve **fodder storage** and **feed testing** as a drought mitigation strategy.
 - Use **drones with retardant loads** for faster and more efficient fire suppression in high-risk areas.
 - Explore the feasibility and application of **floating PV solar panels** on water bodies to reduce evaporation and generate energy for water pumping and other uses.
 - Support the uptake of innovative practices through **digital literacy training**, ensuring that farmers and businesses can access and use the latest drought resilience tools.

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Theme 4



Land
management

Socio-ecological resilience

- **Create community connections to the landscape:** Facilitate meaningful ways community members can take action to care for country and facilitate events that bridge Indigenous and non-Indigenous communities, fostering stronger social ties and emotional resilience. (S, M, L, I, Tasmanian Aboriginal organisations and people, Landcare Tasmania, environmental NGOs, community NGOs, Cradle Coast NRM, local government, state government agencies, private philanthropy, corporate social responsibility support)
- **Protection of natural capital:** Protect key ecological assets (for example, 3 million Ha of native vegetation and threatened species) through comprehensive risk mitigation strategies (including against key threats of drought, fire, temperature rise and land clearing) to prevent biodiversity and carbon loss. (S, M, L, I; UTAS, Tasmanian Fire Service, Parks and Wildlife Service, Sustainable Timbers Tasmania, Cradle Coast NRM, large land managers, state government agencies, Australian Government)

Theme 5



Industry and
infrastructure

Strengthening local agricultural economies

- **Shorter supply chains:** Keeping economic value within the region by promoting shorter, more resilient supply chains. (S, M, L, I; industry, NGOs, state govt agencies.)
- **Increase awareness of farm-level financial planning:** Educate farmers on using financial gains and current financial tools during prosperous periods to prepare for droughts. (S, M, L, I; industry, rural business advisers, state government agencies.)
- **Market diversification:** Encourage farmers and processors to diversify their markets through continued innovation in crops and pursuing market opportunities. (S, M, L, I, Industry, TasFarmers commodity groups, Rural business advisors, State Govt agencies)
- **Supply chain collaboration:** Support the development of agricultural clusters to foster collaboration between growers, manufacturers and value-adding processors. (S, M, L, I, industry, TasFarmers, rural business advisers, state government agencies)
- **Support for future leaders:** Focus on developing the next generation of agricultural leaders rather than relying on established voices. Continued support for succession planning to ensure long-term business viability for future generations. (S, M, L, I, industry, TasFarmers, TAS Farm Innovation Hub, NGOs, state government agencies)
- **Water-sensitive agricultural practices:** Promote efficient irrigation and sustainable farming practices that conserve water, even during periods of abundance. (S, M, L, I, industry, TAS Farm Innovation Hub, state government agencies)
- **Recycled water:** Explore irrigation and environmental flow opportunities with recycled water. (S, M, L, I, industry, Tas Water, Tasmanian Irrigation, state government agencies)

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Theme 5



Industry and
infrastructure

Adaptation, research and innovation

- **Cross-sector innovation:** Encourage collaboration between agriculture, renewable energy, and manufacturing to promote innovation, productivity and resilience. (S, M, L, I, industry, UTAS, TAS Farm Innovation Hub, state government agencies)
- **Long-term planning for climate change:** Shift focus from short-term responses to long-term strategies that integrate climate change projections and anticipate extended periods of drought. (M, L, T, industry, UTAS, TAS Farm Innovation Hub, state government agencies)
- **Carbon and biodiversity credits:** Explore programs to assist small and medium businesses to access the carbon and biodiversity credit markets. (S, M, L, T, industry, UTAS, TAS Farm Innovation Hub, Sustainable Timbers Tasmania, large land managers, environmental NGOs, private philanthropy, state government agencies)
- **Climate change projections for industry:** Support projects that use the best available climate projections tailored to specific industries/practices (such as dryland grazing) to inform adaption and mitigation actions. (S, M, L, T, UTAS, TasFarmers, agricultural extension, Cradle Coast NRM, state government agencies)

Theme 5



Industry and
infrastructure

Infrastructure development

- **Improve transportation and logistics:** Enhance transportation networks (for example, port infrastructure on King Island) and logistics planning (for example, seasonal forecasting for shipping) to ensure timely access to markets and essential inputs for farmers during drought conditions. (S, M, L, I, industry, TasPorts, state government agencies)
- **Strengthen critical infrastructure:** Ensure vital infrastructure, including transportation routes and utilities, is resilient to drought-related disruptions and climate change impacts (such as trailer washdown facility in Devonport to facilitate timely stock trailer movement). (S, M, L, I, industry, TasPorts, state government agencies)

Theme 5



Industry and
infrastructure

Drought-resilient water systems

Strengthen local water infrastructure: Establish emergency water sources and supporting infrastructure in areas identified as highly vulnerable (for example, King Island groundwater facility) for firefighting and stock water during drought. (S, M, L, I, local government, TasWater, state government agencies)

Resilient reticulation systems: Support strategic planning to maintain high quality and high reliability reticulated water supplies, including through reducing reticulation leakages and losses. (S, M, L, I, local government., TasWater, state government agencies)

Secure household water supplies: Provide education and support for communities not supported by reticulated water systems to become more resilient to longer dry periods. (S, M, L, I, local government., TasWater, state government agencies)

Support sustainable land management practices: Connect public investment in irrigation scheme development to sustainable farm management practices (for example, land clearing cessation, water use efficiency and carbon farming). (S, M, L, I, Tasmanian Irrigation, TAS Farm Innovation Hub, state government agencies, Australian Government)

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Theme 5



Industry and
infrastructure

Corporate Social Responsibility (CSR)

- **Corporate role in drought resilience:** Encourage corporations to integrate drought resilience and sustainability goals into their CSR strategies, particularly by improving water management and adopting low-emissions initiatives. (S, M, L, I, T, industry, NGOs, environmental NGOs, Tasmanian Landcare, state government agencies, Australian Government)
- **Encourage corporate investment in resilience actions:** Seek out and encourage corporations to partner and engage on drought resilience actions. (S, M, L, I, T, industry, NGOs, environmental NGOs, Cradle Coast NRM, Tasmania Landcare, large land managers, state government agencies, Australian Government)

Theme 6



Globally
significant
ecological
communities and
Aboriginal cultural
landscapes

Adaptive land management and biodiversity

- **Sustainable land management:** Develop an integrated, adaptive, coordinated, landscape-wide management plan that considers climate change's long-term impacts on biodiversity and natural values of North-West Tasmania. Strategies must focus on the protection of fragile ecosystems, identifying ecological communities that can be preserved, prioritising mitigation actions, and identifying research, coordination and resourcing requirements. (S, T, Parks and Wildlife Service, Sustainable Timbers Tasmania, Tasmanian Aboriginal organisations and people, Tasmanian Fire Service, UTAS, Tasmanian Land Conservancy, Landcare Tasmania, environmental NGOs, Cradle Coast NRM, local government, state government agencies)
- **Biodiversity protection:** Prioritise efforts to conserve vulnerable and endangered species, including protecting ecosystems like rainforests and alpine environments found in North-West Tasmania, from the impacts of climate change and fire. (S, T, Parks and Wildlife Service, Sustainable Timbers Tasmania, Tasmanian Fire Service, Tasmanian Aboriginal organisations and people, Tasmanian Land Conservancy, UTAS, Landcare Tasmania, environmental NGOs, Cradle Coast NRM, local government, state government agencies)
- **Community engagement:** Increase community involvement and acceptance of translocation strategies, to addresses any conflict with established social values or conservation rules. (S, M, T, Parks and Wildlife Service, UTAS, Sustainable Timbers Tasmania, Tasmanian Aboriginal organisations and people, Tasmanian Land Conservancy, Landcare Tasmania, environmental NGOs, Cradle Coast NRM, state government agencies)
- **Climate grief circles:** Establish community-based emotional support systems, such as climate grief circles, to help individuals process their concerns and grief about environmental degradation and disasters. These can also motivate collective climate action. (S, M, T, community NGOs, environmental NGOs, Tasmanian Aboriginal organisations and people, UTAS, Parks and Wildlife Service, Cradle Coast NRM, state government agencies)

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Theme 6



Globally significant ecological communities and Aboriginal cultural landscapes

Water and fire management

- **Hydrological manipulation:** Implement strategies to secure water for vulnerable ecosystems during drought. This could range from local interventions, such as installing sprinklers based on moisture stress trigger points, to larger scale engineering solutions. (S, M, L, T, Parks and Wildlife Service, UTAS, Sustainable Timbers Tasmania, Tasmanian Aboriginal organisations and people, Tasmanian Land Conservancy, Landcare Tasmania, environmental NGOs, Cradle Coast NRM, state government agencies)
- **Infrastructure for mitigation:** Invest in infrastructure for hydrological interventions and ecosystem management during drought. This includes building tools to deliver water to stressed ecosystems and developing large-scale systems to ensure the survival of critical habitats. (S, M, L, T, Parks and Wildlife Service, UTAS, Sustainable Timbers Tasmania, Tasmanian Aboriginal organisations and people, Tasmanian Land Conservancy, Landcare Tasmania, environmental NGOs, Cradle Coast NRM, private philanthropy, state government agencies)
- **Preparedness for fire:** Fire management strategies should incorporate ecological principles to protect biodiversity (for example, parrots, Gondwanan relic species, alpine ecosystems) and manage post-fire invasive species. The use of trigger points, (for example, 50 mm rainfall within last 30-day protection of rainforest fire), can guide preparedness efforts. (S, M, L, T, Parks and Wildlife Service, UTAS, Sustainable Timbers Tasmania, Tasmanian Aboriginal organisations and people, Tasmanian Land Conservancy, Landcare Tasmania, environmental NGOs, Cradle Coast NRM, private philanthropy, state government agencies)

Theme 6



Globally significant ecological communities and Aboriginal cultural landscapes

Tasmanian Aboriginal knowledge and community engagement

- **Cultural burning practices:** Support organisations, like Firesticks, which focus on cultural burning for landscape management, to continue teaching and training in Aboriginal fire management practices. This can benefit both agricultural and natural landscapes. (S, M, L, T, Tasmanian Aboriginal organisations and people, Parks and Wildlife Service Tasmanian Fire Service, UTAS, Sustainable Timbers Tasmania, large land managers, state government agencies)
- **Aboriginal land management and ownership:** Explore differing approaches to Aboriginal land management and ownership to enhance landscape resilience, in ways that support the United Nations Declaration on the Rights of Indigenous Peoples. This could include analysis of landscape and community resilience outcomes from a range of models, jurisdictions and agreements offering differing levels of self-determination. (S, M, L, T, Tasmanian Aboriginal organisations and people, Parks and Wildlife Service, UTAS, state govt agencies).

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Theme 6



Globally significant ecological communities and Aboriginal cultural landscapes

Drought monitoring and species protection

- **Seed banks expansion:** Expand and better utilise seed banks, including ensuring that Tasmanian threatened plants are included in international collections like the Millennium Seed Bank. These efforts will support ecosystem recovery after disturbances like fire. (S, M, L, I, UTAS, Parks and Wildlife Service, environmental NGOs, state government agencies)
- **Ex-situ conservation:** Use nurseries to grow endangered species outside their natural habitats (ex-situ conservation), ensuring that these species can be reintroduced into the wild when conditions improve. (S, M, L, I, UTAS, Parks and Wildlife Service, private nurseries, environmental NGOs, state government agencies)
- **Species translocation:** Develop strategies for translocation or assisted migration of species to more climatically suitable areas after disturbances. This practice requires community acceptance and regulatory flexibility, as well as closing knowledge gaps regarding where and how to move species. (S, M, L, I, UTAS, Parks and Wildlife Service, Sustainable Timbers Tasmania, environmental NGOs, state government agencies)

Theme 6



Globally significant ecological communities and Aboriginal cultural landscapes

Addressing knowledge gaps

- **Ecological literacy:** Enhance ecological literacy within communities, especially regarding drought resilience and climate change impacts. Engaging local populations in conservation and adaptation efforts will foster a sense of ownership and responsibility. (S, M, L, T, UTAS, Tasmanian Aboriginal organisations and people, Tasmanian Land Conservancy, Landcare Tasmania, environmental NGOs, Cradle Coast NRM, Parks and Wildlife Service, private philanthropy, state government agencies)
- **Research on trigger points:** Conduct research to identify ecological 'trigger points' that indicate when interventions (for example, water provision, re-seeding) are needed to protect species and ecosystems. Understanding these triggers will help prioritise resources during drought. (S, M, L, T, UTAS, Parks and Wildlife Service, Sustainable Timbers Tasmania, Tasmanian Aboriginal organisations and people, Tasmanian Land Conservancy, state government agencies)

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Appendix E: A spotlight on King Island: resilience and lessons learnt during drought

This case study has been developed to capture the experiences and lessons learnt from the recent dry conditions experienced on King Island, Tasmania. It has been prepared with key insights from the King Island Community Drought Coordinator (TasFarmers), the Tasmanian Government's Department of Natural Resources and Environment (NRE), and the TAS Farm Innovation Hub, a Future Drought Fund initiative.

About King Island

King Island, located in the western side of Bass Strait, midway between Tasmania and Victoria, has a population of just over 1600 people (ABS 2021). The island has 85,000ha of grazing land, turning off around 35,000-45,000 head of beef for the well-known King Island beef brand, as well as milk to support a significant specialised cheese manufacturing factory. In total, the agricultural industry supports just over 40 per cent of the island's employment and generates almost \$47 million in products (ABS, 2021).

King Island has historically experienced a reliable climate, receiving an average rainfall of 846mm per year and mild temperatures, which have supported highly productive pastures and high stocking rates. Due to reliable rainfall, planning for dry times and drought has not been front-of-mind for most King Island livestock producers.

During the spring of 2023, King Island experienced the lowest spring rainfall in its history, recording 74mm over three months, compared to an average of 213mm. This continued through summer with 46mm (compared to an 120mm average) and autumn recording 78mm (202mm average), totalling less than 200mm of rain for an entire season. The drought conditions posed many challenges for livestock producers and the broader community, with many 'first in living memory' impacts on the grazing industry and community. A lack of preparedness for drought conditions on King

Island resulted in a collaborative response across TasFarmers, the Tasmanian Government (Department of Natural Resources and Environment and Department of State Growth), TAS Farm Innovation Hub, TasFarmers, Rural Alive and Well (RAW) and Rural Business Tasmania (RBT). A local community drought coordinator was appointed to support engagement and efforts across stakeholders and to work one-on-one with farmers to better understand key challenges, issues and support needs.

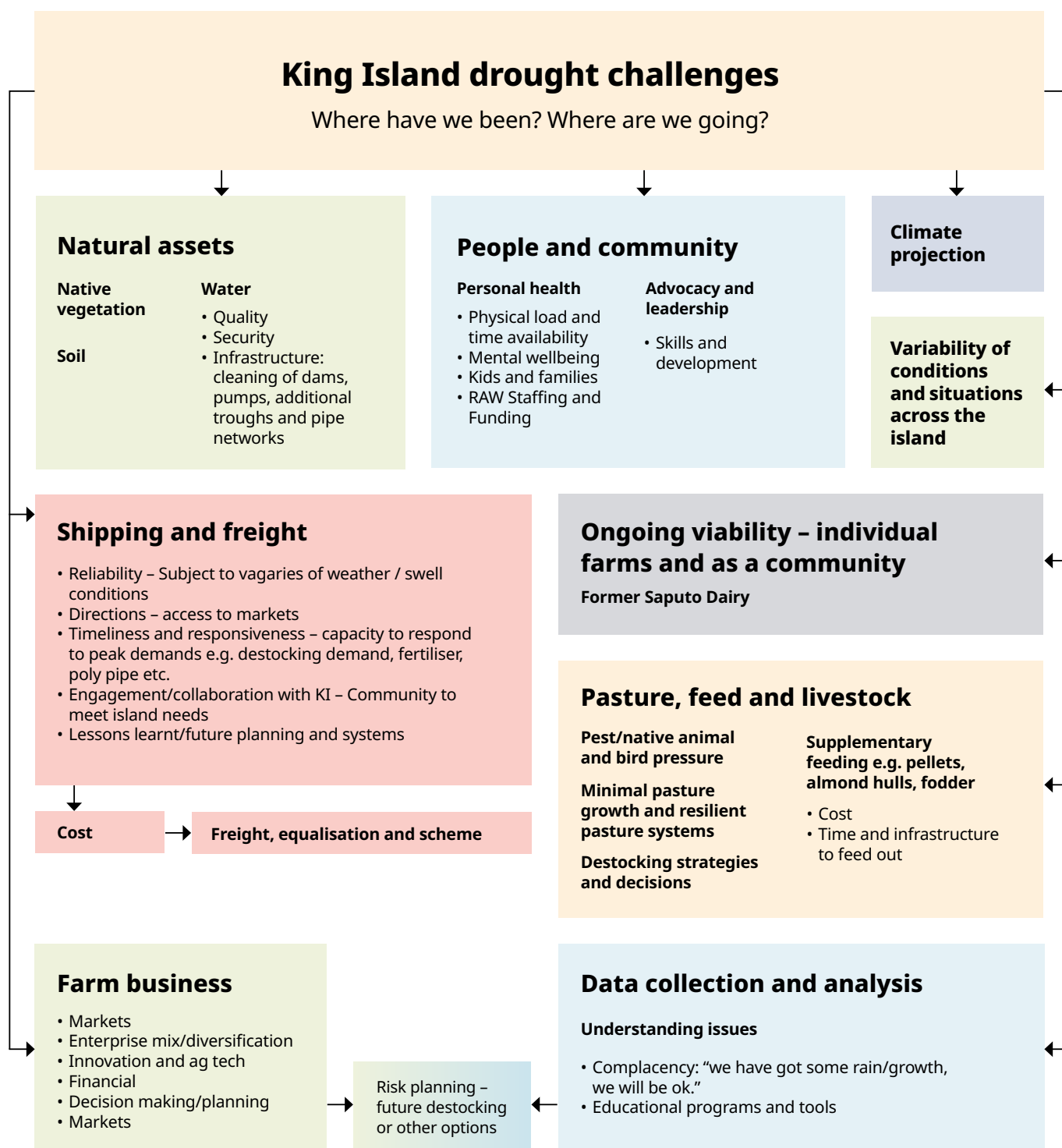
What were the key challenges faced by farmers and the broader community?

The drought conditions brought several key challenges, including:

- Reduced pasture availability and shortages of fodder
- Shortage of stock water
- Animal welfare issues from poor feed and water availability
- Logistical constraints with increased need for shipping services to enable destocking and importation of fodder onto King Island
- Sourcing feedstocks without biosecurity issues
- Mental health of farmers and community members dealing with the stress of drought
- Economic impacts from destocking, low prices, increased costs and flow-on effects from drought management decisions
- Long wait times for livestock processing in Tasmania due to increased demand from dry conditions across the state
- Wait times for rural products like troughs and pipe from mainland Tasmania.

The diagram in figure 15 was designed by the King Island drought coordinator to encapsulate the experiences.

FIGURE 14: King Island 2024 drought experiences and key challenges



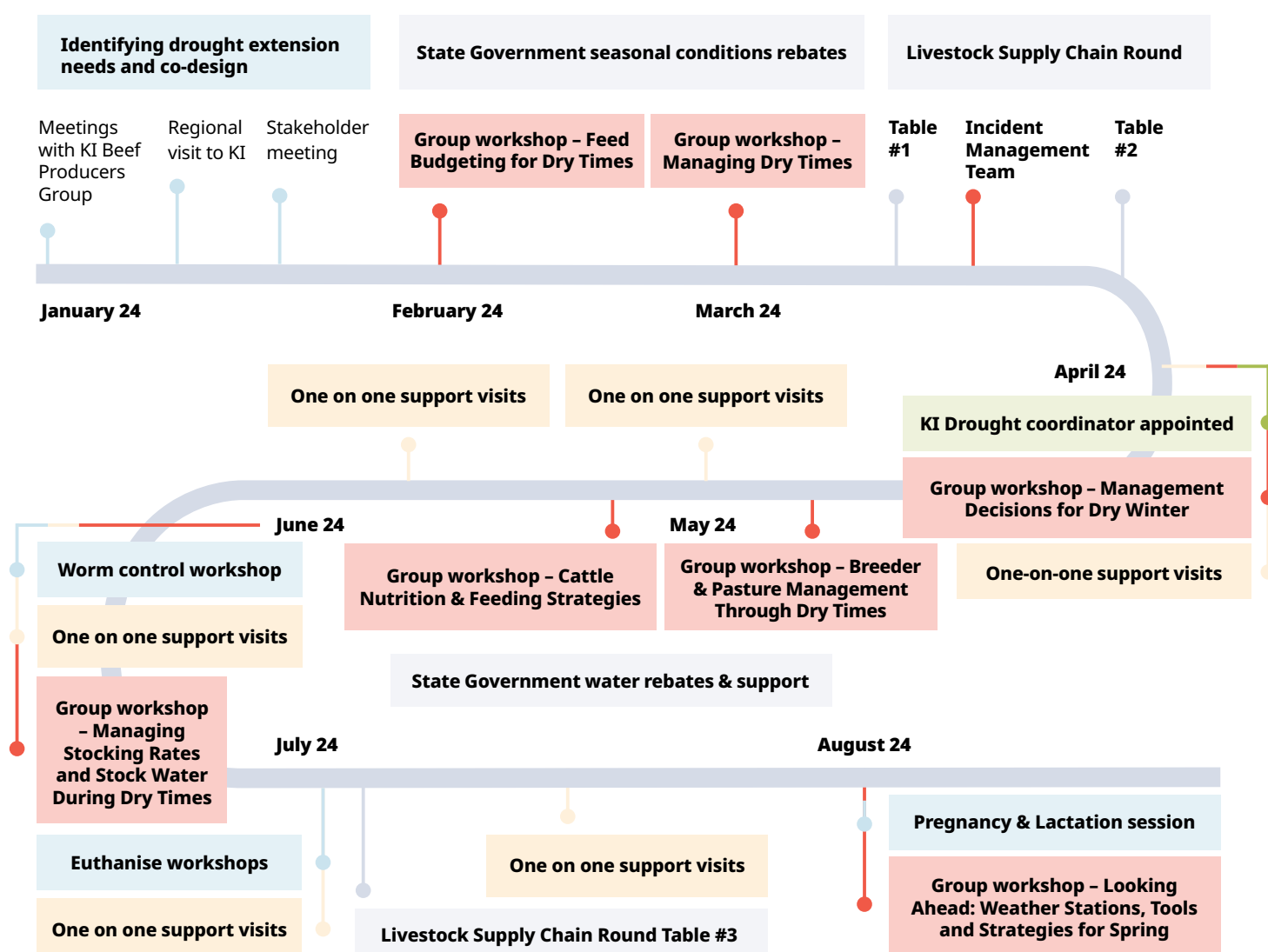
(Source: TAS Farm Innovation Hub)

What steps were put in place to respond to the drought experience?

Figure 16 shows the drought response activities delivered across all stakeholders. Of particular success was the appointment of a King Island Community Drought Coordinator, cofunded by the Tasmanian Government and TAS Farm Innovation Hub and hosted by TasFarmers. Local King Islanders were employed in the role.

This allowed the coordinator to quickly build trust with farmers to support them as they worked through the challenging dry times as well as provide a key point of contact for organisations off-island for information about conditions on island, local needs and to tailor drought response and extension activities.

FIGURE 15: King Island drought response, key activities



(Source: TAS Farm Innovation Hub)

What are the community's priorities to strengthen future drought and climate resilience?

In December 2025, a Drought Reflection and Resilience Planning workshop was held with King Island farmers and community members to reflect on key lessons learnt through the recent drought, and to identify priorities for building drought resilience moving forward. The below key action areas were identified by participants for strengthening future community drought and climate resilience. They will be used to help guide future drought resilience planning efforts.

Community-wide

- **Community collaboration and support:** Encourage community, farming and business groups to work together on issues such as freight logistics, wildlife management, and social resilience. Utilise government services and support, with a focus on upskilling the community in areas including leadership and succession.
- **People and community engagement:** Encourage community involvement and support through events and volunteer efforts, and through island community resilience planning initiatives. Address mental health and stress management by utilising government services and support, with a focus on upskilling the community in areas including leadership, succession and resilience. Provide centralised resources for health and wellbeing, including roles like the rural health nurse, and those services provided by other organisations such as Rural Alive and Well (RAW). Promote community understanding of drought impacts on agriculture and other businesses.
- **Shipping and freight management:** Maintain momentum on shipping and freight issues through community, farming and business advocates and government collaboration. Explore alternative port access in Melbourne and consider a trans-shipping service to build efficiencies. Ensure there is an island group working to streamline logistics.

- **Proactive decision making and planning:** Emphasise the importance of making early and regular decisions, such as forward booking shipping space for livestock, planning ahead for feed and water storage, and developing and regularly adjusting farm plans to ensure flexibility and preparedness for future droughts.
- **Natural assets management:** Implement effective strategies to manage wallabies and deer to prevent overgrazing of native vegetation. Engage in NRM, pasture and climate change projects and ensure water security. Invest in water and feed storage, as well as wildlife management. Improve ground water mapping and hydrology, along with water infrastructure and soil moisture data collection.

Farm-based

- **Improved water and feed management:** Focus on better methods of capturing and storing water, including the importance of infrastructure like troughs over dams and regular maintenance of water sources. Undertake drought management planning and identify triggers and actions. Implement feed budgeting practices, consider appropriate levels of fodder conservation and storage, and learn to use different feed options effectively.
- **Risk planning and financial management:** Emphasise the need for farmers to understand their business and plan ahead for drought. Evaluate the costs of holding animals versus selling them, understand cash flow, and explore funding options. Support farmers with feed budgeting and financial planning. Address high debt and consider diversification in farming practices.

- **Farm business management:** Build relationships with buyers to foster trust and ensure successful business operations. Emphasise the importance of understanding the business model, budgeting, and financial viability. Highlight the need for capacity building and education, along with support programs including the Farm Business Resilience (FBR) program.

References

Australian Bureau of Statistics (2021) King Island Council area – employed persons (usual residence), *Industry Sector of employment*, accessed 12 September 2024.

