

Discussion Paper: Emergency Preparedness and Response for Biodiversity and Agricultural Natural Capital Assets in Southern Tasmania

Questions for consultation discussion:

The 'Biodiversity and Agricultural Natural Capital Emergency Preparedness and Response Plan' represents a critical step in addressing the growing challenges posed by natural disasters in southern Tasmania. NRM South aims to foster collaboration, enhance and support preparedness, and strengthen capabilities, to safeguard natural assets for current and future generations.

Timeframes for development of the Plan have been tight, however initial consultation has been undertaken to identify high level input regarding priority natural capital assets, threats, and data / information and consider impacts, actions and responsibilities to prepare, respond and recover from emergencies.

We are now at a stage where we have a draft Preparedness and Response Plan for broader consultation and would like to engage with key stakeholders. The aim of this further consultation is to provide information about the purpose of the draft Plan, the Plan development process, relevance to Council's NRM and emergency management roles, and to seek any feedback and information to support finalisation of the Plan.

This discussion paper invites stakeholders to provide feedback and insights to:

- Support NRM South to refine and improve the first version of the Plan;
- Ensure the Plan is targeted at protecting biodiversity and agricultural natural capital assets in the region; and
- Identify gaps and further work required (for future update and review of the Plan).

These questions aim to solicit feedback from stakeholders on various aspects of the Plan, including its scope, effectiveness of proposed actions, collaboration efforts, resource allocation, communication strategies, and considerations for future reviews and updates.

1. Does the Plan accurately reflect roles and responsibilities for emergency management in Tasmania?
2. Do stakeholders agree with the potential roles for NRM South identified in the Plan? Any feedback on how NRM South should define the scope of their role in addressing natural hazard events such as bushfires, floods, droughts, and biosecurity threats?
3. How can collaboration and coordination among stakeholders be improved to ensure effective emergency management for natural assets? How should NRM South connect with the roles and responsibilities of others' needs in emergency management (focusing on biodiversity and agricultural natural assets)?
4. Any comments regarding the assessment of the susceptibility of specific natural assets identified in the region to each type of emergency?
5. Any comments regarding the gaps and opportunities identified in the Plan to improve protection and restoration of natural assets in the face of emergencies? Are the actions identified to prepare, respond and recovery appropriate?
6. Are there any specific preparedness, response, or recovery actions that you believe should be prioritised by NRM South?
7. How can communication protocols be enhanced to ensure effective coordination and information dissemination during emergency management efforts?

8. What are your thoughts on expanding communication programs (focusing on outcomes for biodiversity and agricultural natural assets) to engage with the broader community, including landowners?
9. What do they feel are the most important factors in successful implementation of the Plan? What are the greatest barriers?
10. What do they see as the next steps for the Plan and its implementation?
11. Are there any additional factors or emerging issues you believe should be included in future updates?

It is relevant to note that the in current project funded the development of the Plan and delivery of identified actions will be dependent on securing further funding.

Information about the Emergency Preparedness and Response for Biodiversity and Agricultural Natural Capital Assets in Southern Tasmania

Context and drivers

Australia's variable climate and unique geography predispose its regions to frequent and high-intensity natural hazard events. Southern Tasmania has experienced escalating challenges from natural disasters and extreme weather events, including bushfires, floods, and biosecurity incursions. These events not only endanger lives and property but also threaten biodiversity, agricultural natural assets, and cultural values.

In response to these challenges, the Australian Government has tasked NRM South with developing a comprehensive 'Biodiversity and Agricultural Natural Capital Emergency Preparedness and Response Plan' (the Plan). This Plan aims to identify key assets and risks, enhance preparedness and mitigation, facilitate swift and coordinated responses to safeguard natural assets in the face of emergencies and in response and such events.

Southern Tasmania boasts internationally significant biodiversity assets, including Ramsar-listed wetlands, UNESCO World Heritage Sites, and diverse species and ecosystems. These assets face threats from natural hazards, necessitating proactive planning and preparedness, and emergency management and recovery responses. Similarly, agricultural natural capital assets, essential for the region's economy and food security, are vulnerable to disasters like bushfires, floods, and biosecurity incursions.

Cultural values and practices of the Palawa people of Lutruwita hold profound significance. C land management practices, such as cultural burning, are integral to landscape resilience and recovery. Recognising the stewardship role and practices of the Palawa people and their role in decision making and on-ground resilience and recovery is crucial in fostering community empowerment and resilience. Objectives

The primary objectives of the Plan are to:

1. Enhance preparedness by identifying, assessing, and reducing risks to biodiversity and agricultural natural capital assets.
2. Strengthen stakeholder capabilities through clear communication, capacity building, and strategic actions tailored to the unique needs of natural assets.
3. Collaborate with relevant agencies to foster partnerships, coordination, and resource sharing for effective emergency planning and management.

Scope

The Plan focuses on 'in-scope' events, including bushfires, flooding, drought, and biosecurity threats, which pose significant risks to biodiversity and agricultural natural capital assets. It outlines preparedness, response, and recovery gaps, opportunities and actions for these events specific to biodiversity and agricultural natural assets. However, it excludes chronic impacts such as those related to incremental climate change, and other human-induced crises.

The scope of the Plans was required to impacts on biodiversity and agricultural natural capital assets as per below:

Biodiversity assets:

- EPBC listed threatened species with a focus on those prioritised through the Threatened Species Action Plan 2022-2032.
- EPBC listed threatened ecological communities.
- Ramsar wetlands.
- Other regionally important species, communities and places identified through the Regional Strategies.

Natural capital assets in agricultural areas that contribute to the capacity and productiveness of agricultural landscapes:

- Soil health
- Surface and ground water quality and quantity
- Vegetated riparian zones
- Shelter belts
- Remnant native vegetation on farms
- Fertile floodplains and productive hillslopes

Roles and responsibilities

As the statutory body responsible for strategic planning and management of natural resources in the region, NRM South:

1. Plans, coordinates, and delivers programs to support healthy and productive landscapes, communities, and industries.
2. Establishes regional networks to address identified needs across diverse ecosystems and tenures, ensuring a holistic and integrated approach to landscape management.
3. Facilitates access to information, data and knowledge to support best practise conservation, restoration and resource use.
4. Maintains a regional focus on landscape resilience and preparedness and long-term recovery and beyond immediate natural hazard crisis responses.

As such, NRM South plays an important role in strengthening emergency preparedness, resilience, response, and recovery efforts in southern Tasmania for natural resources.

Within the framework of the *Emergency Management Act 2006* and the Tasmanian Emergency Management Arrangements (TEMA), clear roles and responsibilities are defined to govern emergency planning and management in Tasmania. These roles are essential for ensuring a structured and coordinated approach to prevention, mitigation, preparation, response, relief, and recovery efforts across the state.

These key roles and responsibilities provide a structured framework for collaboration and coordination among stakeholders, ensuring effective management of emergencies impacting Tasmania.

This Plan complements the statewide emergency management framework with a focus on biodiversity and agricultural natural capital assets in southern through:

- **Shared objectives:**
Both frameworks share the common goal of reducing the impact of emergencies and enhancing the resilience of communities and the environment. They aim to achieve this through a combination of prevention, preparedness, response, and recovery strategies.
- **Complementary roles:**
The TEMA outlines the roles and responsibilities of various agencies and organisations, including NRM South. On the other hand, NRM South's Plan identifies more specific roles and actions for managing natural assets in the southern region of Tasmania before, during and after natural hazard emergency events.
- **Collaboration and coordination:**
The frameworks both advocate for strong inter-agency and governmental collaboration. This is essential for NRM South to successfully integrate this Plan with the TEMA. Both frameworks emphasise the importance of communication, cooperation and coordination among various stakeholders. The TEMA outlines the mechanisms for coordination among different agencies and organisations. At the same time, NRM South's Plan describes opportunities to interact with relevant stakeholders within the broader emergency management framework and with stakeholders outside of the framework with a focus on natural assets.
- **Consistent approach:**
Both frameworks adopt a consistent approach to emergency planning and management based on risk management principles and continuous improvement. They recognise the need to adapt to changing circumstances and to learn from new information and past experiences.
- **Integration of strategies:**
Both frameworks encourage risk-based planning and management. NRM South's Plan supports the TEMA by identifying specific risks and vulnerabilities related to natural resources and opportunities for actions.
- **Mutual support:**
The two plans support each other in achieving their respective objectives. The TEMA provides the policy and strategic context for NRM South's Plan. In contrast, NRM South's Plan identified gaps and opportunities to provide practical actions and initiatives that support the broader objectives of the TEMA.

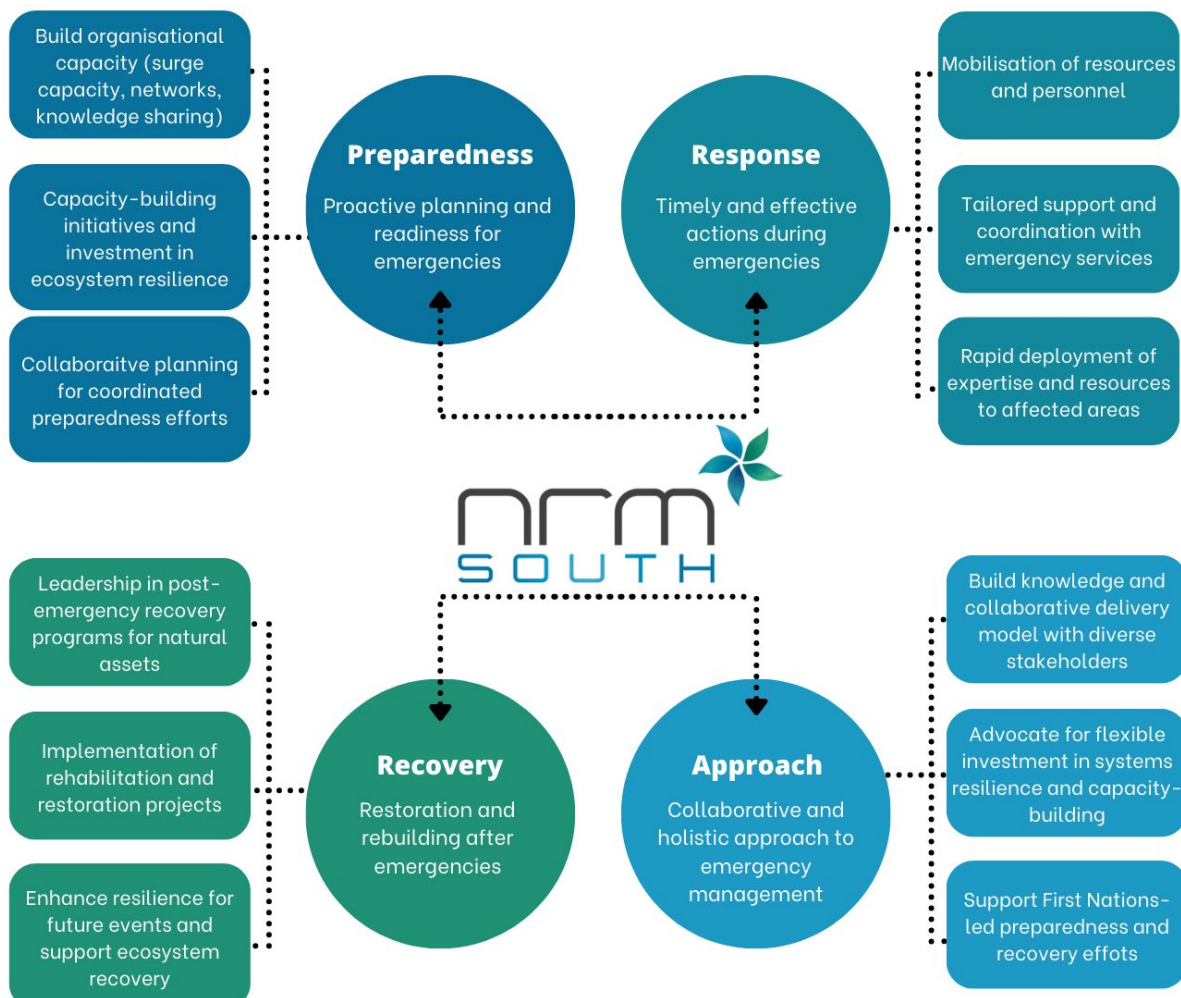


FIGURE 1. NRM South's approach to emergency management.

Biodiversity

In the NRM South region, the identification of priority biodiversity assets is crucial for effective emergency preparedness and response. With over 600 threatened species in the region, a triage approach has been adopted to prioritise a subset of these species. The prioritisation criteria includes:

1. Relevant Matters of National Environmental Significance (MNES), encompassing listed threatened species, threatened ecological communities, Ramsar wetlands, and world heritage sites.
2. Regional biodiversity priorities outlined in the 2030 NRM Strategy for Southern Tasmania.
3. Other regional priorities relevant to 'in-scope' emergencies, informed by the susceptibility of certain species or communities to emergencies and stakeholder feedback.

The mapping and risk analyses of these priority biodiversity assets are continually reviewed and adapted to accommodate evolving issues and new information. As such the mapping represents a point in time picture.

During the preparedness phase, NRM South focuses on enhancing resilience in biodiversity assets and conducting comprehensive planning and preparation for potential future events. Broadly strategies include:

- Building resilience through reducing the impact of threatening processes and implementing protective measures.

- Identifying effective responses tailored to different assets and land tenures, informed by scientific evidence and engagement with First Nations organisations.
- Continuous improvement through regular reviews, post-event evaluations, and risk analysis to ensure the effectiveness of future management actions.

Potential responses prior to emergencies, such as bushfires, floods, and droughts, include implementing actions to enhance resilience, suppressing fires, managing fuel loads, constructing flood control structures, and preparing for drought through strategic water and land management.

During an event, NRM South’s objectives are to protect and restore biodiversity assets. Potential response actions include targeting monitoring activities, bushfire suppression efforts, flood control measures, drought management strategies, and targeted biosecurity surveys. Post-event recovery actions involve monitoring impacts and response effectiveness, implementing habitat restoration measures, conducting plant propagation and revegetation efforts, and addressing critical threats such as erosion and invasive species.

Agricultural Natural Capital Assets

In alignment with the approach for biodiversity assets, we have identified and summarised priority agricultural natural capital assets in the region. These assets include areas dedicated to production within relatively natural environments and dryland and irrigated agriculture. The vulnerability of these assets to emergencies is evaluated based on factors such as soil properties, slope, land cover, and the presence of natural vegetation.

Agricultural natural capital assets, including soil, water resources, and native vegetation, are essential for sustaining food and fibre production. Preparedness actions involve strategies to mitigate risks from emergencies such as drought, bushfires, floods, and contamination events. These actions include soil moisture management, vegetation protection, and water resource management.

During emergencies, swift and strategic response actions are necessary to safeguard agricultural natural capital assets. Response strategies include measures to protect soil integrity, native vegetation, and water quality. Recovery actions involve monitoring impacts and response effectiveness and implementing habitat restoration measures.

Key recommendations

This discussion paper outlines the Plan’s framework for informed decision-making and targeted intervention strategies to mitigate and manage impacts of potential natural hazard emergencies on natural assets more holistically and effectively.

The Plan identifies common themes across responses with respect to current gaps and opportunities for action. In summary, these can be grouped into the following themes:



Funding & Resources

Each stage of emergency management requires sufficient funding and resources to ensure wholistic, coordinated and streamlined execution. Securing funding and resources to fill known and emerging gaps across the emergency management phases with respect to biodiversity and agricultural natural capital assets will improve environmental outcomes into the future.



Information and Capacity building

Targeted capacity building, which may include information, education and training, with regards to priority and at-risk biodiversity and agricultural natural capital assets. This could include training a series of task forces that

are equipped to respond to emergencies and deliver management outcomes that also respond to natural asset risks.



Planning

To respond efficiently and effectively to natural hazard emergencies and recovery actions in a manner that considers priority and at-risk biodiversity and agricultural natural capital assets, integrated planning across the emergency management phases is crucial.



Communication

Identifying and filling gaps in emergency management communications frameworks with respect to natural values and resource managers will enhance holistic emergency management outcomes.

The following identifies key strategic recommendation in the Plan which support natural asset outcomes in emergency planning and management.

Funding and resources:

- Secure funding and resources for all stages of emergency management, with a focus on preparedness.
- Leverage available funding from various stakeholders to expedite response and recovery processes.
- Address gaps in funding for recovery and protection actions, especially for threatened species / communities.
- Improve the flexibility of emergency funding to tailor it to local priorities and conditions.
- Invest in long-term resilience-building efforts for populations, ecosystems, and natural resources.
- Ensure funding systems support planning, collaboration, and coordination post-event.

Information and Capacity Building:

- Identify and fill data, information, and knowledge gaps for at-risk biodiversity and agricultural natural capital assets.
- Share knowledge and expertise among stakeholders to inform planning, response, and recovery efforts.
- Conduct capacity-building activities with key stakeholders to address skills and knowledge gaps.
- Invest in building capacity to support Indigenous-led recovery response efforts.
- Prepare organisational systems and capacities to support prioritisation and action for at-risk assets.

Planning:

- Integrate biodiversity and agricultural natural capital asset information into existing or new emergency planning frameworks.
- Identify and address gaps in information and lines of responsibility for planning and coordination.
- Minimise duplicated efforts by integrating existing plans into statewide emergency plans.
- Implement adaptive management by incorporating lessons learned and updated interventions into revised plans.
- Develop specific emergency assessment and management plans for highest priority assets.

Communication:

- Define roles and responsibilities for response personnel/teams regarding high priority natural assets.

- Establish communication protocols for response personnel/teams covering each phase of emergency management.
- Establish relevant task forces capable of responding to emergencies.
- Identify opportunities to engage with the broader community and expand communication programs.

Future review

The Plan will require periodic review and updates in consultation with stakeholders. Future updates may consider out-of-scope values or issues, chronic impacts such as climate change, specific biosecurity issues, impacts on aquatic and cultural assets, terrestrial and marine heatwaves, and opportunities to address data gaps and monitoring for key assets. The review timeframe will be determined by future funding availability.

It is worth noting that this draft Plan is the first of its kind for NRM South and timeframes have resulted in challenges with regards to information and data gaps, and extent of consultation. The draft Plan acknowledges gaps in information/data, and opportunities to broaden the scope of the Plan in the future, subject to funding. Additionally, NRM organisations do not currently have an active role in emergency management and would need legitimacy in this space to progress the plans.

At this point in time the draft Plan presents a platform for further consultation, communication and collaboration going forward.