



Executive Summary

King Island Fire Management Area Fire Protection Plan

This report summarises the findings contained in the Fire Protection Plan for the King Island Fire Management Area 2016 review.

The purpose of Fire Protection Plans is to identify and prioritise bushfire risks in the landscape and strategically identify work that can be done to mitigate that risk.

Fire Protection Plans have been prepared for each of the ten fire management areas in Tasmania in accordance with the requirements of the *Fire Service Act 1979*. These plans were developed for the first time in 2014 in a collaborative effort by members of Fire Management Area Committees made up of local stakeholders.

The objective of the Fire Protection Plan is to effectively manage bushfire related risk within the King Island Fire Management Area in order to protect people, assets and other things valuable to the community.

In preparing the Fire Protection Plan, a tenure blind approach to strategic fuel management was taken. The identification of areas and communities at risk from bushfire together with the identification of areas of potential strategic value for undertaking risk mitigation activities was undertaken by Fire Management Area Committee members without regard to land tenure/ownership.

In taking this approach, Fire Management Area Committees have recognised that strategic fuel management needs to occur across public and private property boundaries in order to be effective.

The management of bushfire related risk is not the sole responsibility of any one land manager or agency. It is a shared responsibility of the whole community.

The tenure blind approach to bushfire risk mitigation planning as undertaken by Fire Management Area Committees creates opportunities for collaboration between public and private land managers and owners and promotes the development of a centrally coordinated bushfire risk mitigation program.

King Island Fire Management Area Background

- The King Island Fire Protection Plan covers the whole of King Island, an area of 110,975 ha or 1095 square kilometres. King Island has an estimated residential population of 1646 people.

- King Island lies at the western entrance to the Bass Strait, midway between the state of Victoria and mainland Tasmania in the path of the “Roaring Forties”, a strong prevailing westerly wind that reaches over 100km per hour. The island is generally quite flat, with the highest point being 168m above sea level at Gentle Annie in the south east of the Island.

Key findings for the King Island Fire Management Area

- Approximately 20% of the King Island Fire Management Area is public land and 80% is private/freehold land. The management of fire risk on private land is a significant challenge for the King Island Fire Management Area.
- A total of 10.1% of the fire management area was identified as being at extreme risk from fire under current fuel loads.
- The vast majority of fires on King Island since European settlement appear to have been caused by human actions.
- Much of the vegetation of King Island has been modified into agricultural land since European settlement. The majority (65%) of the fire management area contains agricultural, urban and exotic vegetation that has a medium flammability rating. Close to a third (30%) of the broad vegetation groups in the fire management area includes scrub, heathland and coastal complexes which have a high to very high flammability rating.
- A total of 72% of the Fire Management Area (80,111 ha) including agricultural land has been classified as untreatable. The remaining 29,272 ha (or 28% of the total land area) although technically treatable by fuel reduction burning is not considered suitable for planned burning due to the fire history of the area.

Bushfire threat in the King Island Fire Management Area

- The fire season for King Island is traditionally from November to March, although fires can and do occur outside this peak season. The bushfire threat for the King Island Fire Management Area increases in late December with January and February generally being the driest and hottest months when bushfires are more difficult to control.
- King Island has been subject to a high frequency of fires with fires having had dramatic and adverse effects on King Island’s forest communities since the 1800s. In recent times, fires in 2001 and 2007 have burnt extensive tracts of the Island’s remaining native vegetation, in particular within Lavinia State Reserve. Repeated damage to the Island’s natural assets has resulted in a strong desire in the community to prevent and rapidly contain any bushfires in the future in order to protect the remaining natural environment as well as productive grassland environments on the island.

Special issues for the King Island Fire Management Area

With the exception of some areas of reserved land on the Island, the preferred treatment method to reduce fire risk for the majority of vegetation on King Island is slashing of strategic trails and fire breaks.

King Island has a number of issues unique to the Island that are important in understanding the community's reluctance to introduce any further fire into the landscape in the near future (either through hazard reduction burning or through uncontrolled bushfire events).

For the most part, due to the history of intensive land clearing, high fire frequency and high value of pasture lands on the Island, coupled with relatively limited fire-fighting resources, fire is not currently seen as an acceptable management tool for reducing fire risk on King Island.

The exception may be for large areas of native vegetation contained within State Reserves and Conservation Areas on the island once they have had sufficient time to recover from recent fires.

Other factors complicating the management of fire on King Island include:

- A vegetation clearing moratorium is currently in place on King Island and has been since 2004. Since European settlement, more than 70% of native vegetation has been cleared for agricultural production, resulting in a loss of biodiversity values on the Island. The moratorium on broad scale land clearing was introduced by the state government's Forest Practices Authority to allow an assessment of the remaining native vegetation on King Island, and to decide on land management into the future.
- **Equipment challenges:** Until recently, due to the logistical challenges associated with island living, it has been difficult to source appropriate machines and operators with appropriate OH&S compliant machinery and training to undertake fire break and slashing operations in accordance with government requirements.
- **Livestock shelter belts as potential fire wicks:** A recognised issue specific to King Island is the potential for livestock shelter belts on the island (narrow rows or belts of trees and shrubs used to provide shelter to stock from wind) to act as 'wicks' and rapidly carry fire into adjoining thickly vegetated areas. Shelter belts are highly valued by agricultural and livestock producers on King Island but those that run into adjoining heavily vegetated blocks require breaks within them – at least a vehicle width but preferably 10m to 20m wide. A shelter belt management program is required on King Island in order to create appropriate and effective breaks in these potential 'wicks'.
- **Threatened Species at risk from fire:** Bushfire continues to be a major ongoing threat to both the quality and extent of King Island's biodiversity and is considered to be a major threat to threatened species on King Island.
- **Peat:** Peat is an organic soil which consists of the accumulated remains of dead plants over a very long period of time. The organic soils underlying the pastures on King Island contribute significantly to the high productivity of the island and are likely to be at least hundreds if not thousands of years old. Peat or organic leaf matter in soils has both a high economic and environmental value but can also be an issue for extinguishment following bushfires. Where

swamps have been drained for agricultural purposes or dry out during drought years, peat if exposed to fire can be burnt away and totally and permanently destroyed. Bushfire poses a risk to peat deposits on King Island.

- **Trigger Points for bushfire response on King Island:** The remoteness of King Island from mainland Tasmania means that assistance from “off island” in the form of extra resources and crews that may be required to control a large scale bushfire on the island can take considerable time and money to organise. Experience has shown that early recognition of the likely need for assistance together with an early request for additional resources from off island represents the best opportunity for fast and effective response to large bushfires on the island. In response to issues faced by the community on King Island during the 2007 bushfires, a trigger point has been identified for requesting assistance for bushfire suppression from ‘off island’ resources.

Planned burning on King Island may provide an effective means of overcoming vegetation clearing restrictions currently in place under the vegetation clearing moratorium on King Island. Narrow strips of fire applied immediately adjacent to either or both sides of permitted cleared fire breaks have the potential to allow the extension of breaks to a more effective width.

Bushfire risk analysis results for the King Island Fire Management Area

Key communities and assets considered to be at risk of bushfire on King Island were identified and prioritised during preparation of the King Island Bushfire Management Plan (February 2009).

In addition to the original risk analysis conducted for the 2009 King Island Bushfire Management Plan, computer based fire behaviour tools were used to conduct a broad scale bushfire risk assessment across the King Island Fire Management Area for the current Fire Protection Plan. A more detailed assessment using locally specific processes and knowledge was then conducted by members of the Fire Management Area Committee to produce risk analysis results contained in the current Fire Protection Plan 2015/16.

High risk areas for bushfire

Computer modelling results indicate that areas of highest bushfire risk identified for the King Island Fire Management Area are located:

- in the far north eastern corner of the island (Lavinia State Reserve)
- around the human settlement area of Currie in the central west of the island
- around the human settlement area of Naracoopa in the central eastern part of the island
- in the far south eastern part of the island

Community Risk Assessment

The results of the strategic assessment of communities at risk in the King Island Fire Management Area determined all communities on the Island to be at equally high risk from fire:

- Currie
- Loorana
- Naracoopa
- Grassy

At present none of the communities on King Island have specific bushfire response or protection plans in place, the preparation of these plans is a very high priority for the King Island Fire Management Area.

Other mitigation activities to reduce the risk of fire for these communities may include:

- Fire trail and fire break construction/maintenance
- Mechanical fuel reduction through slashing, trittering or mulching
- Community education
- Other prescribed activities specific to community needs

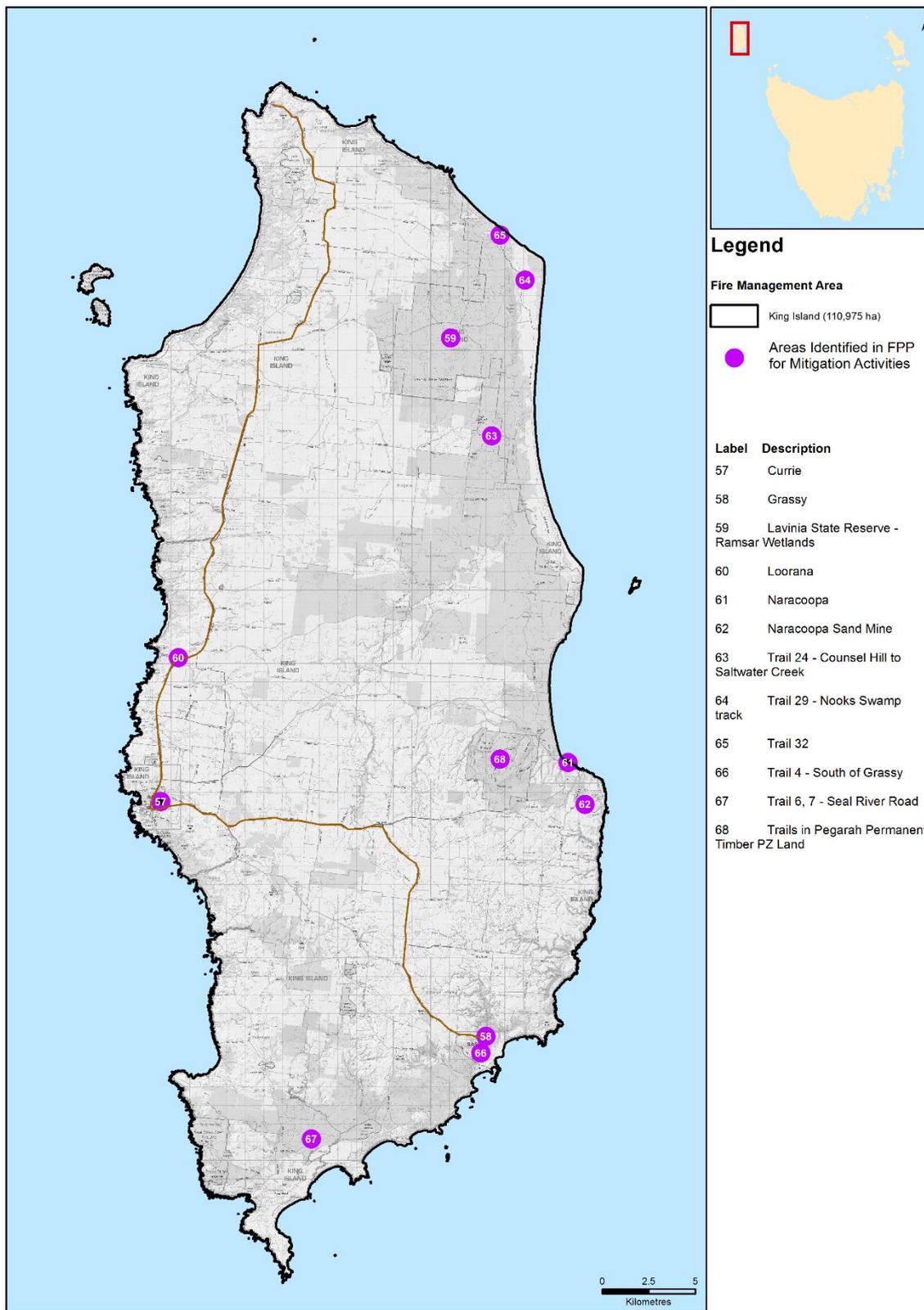
Some of these activities can be implemented in a relatively short time frame whilst others will need careful planning and consultation with the relevant stakeholders which will need to be done over a longer time frame.

Maps showing the location of communities and areas at high risk from bushfires, together with a map showing areas of potential strategic importance within the King Island Fire Management Area are contained below.

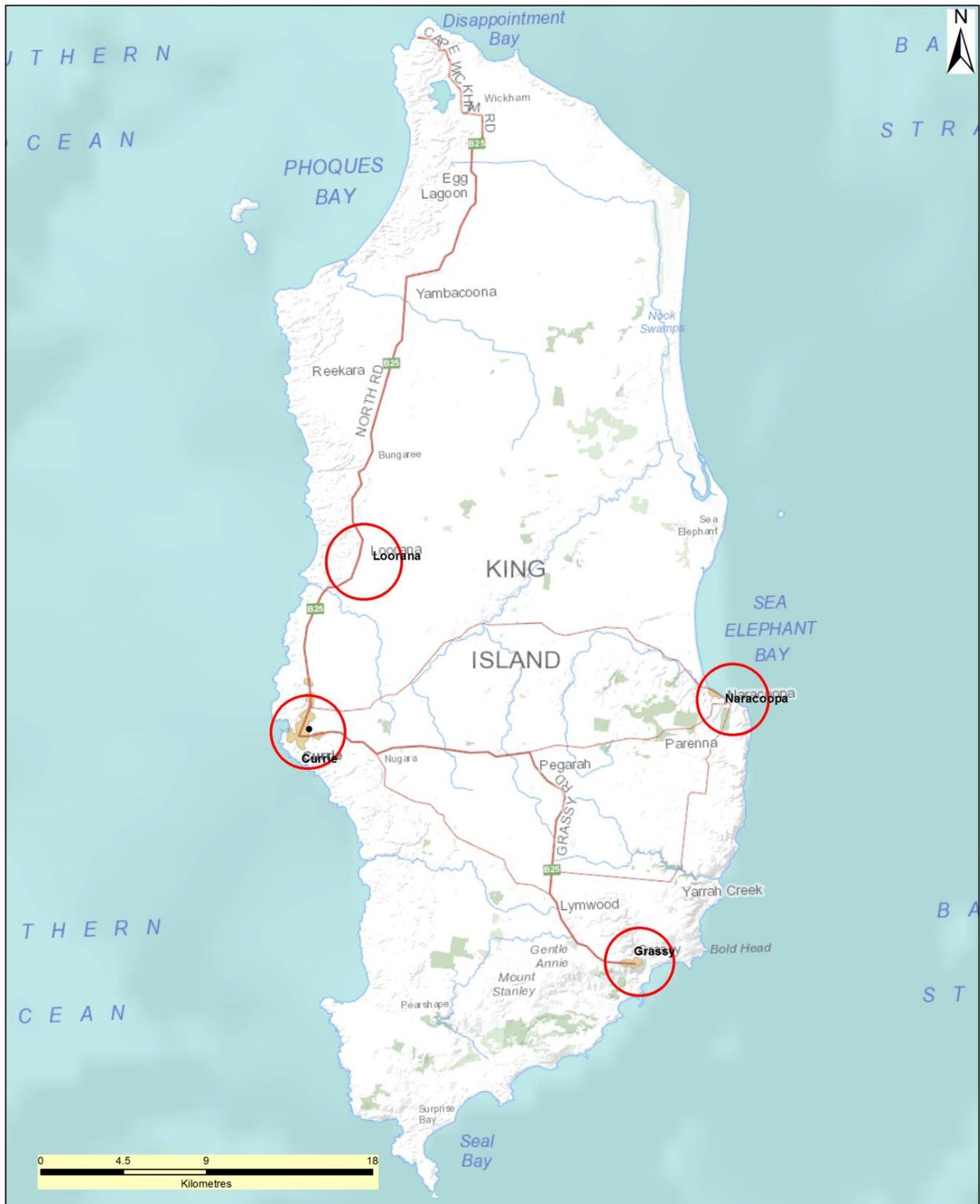
- Map 1 - Areas identified in the King Island Fire Protection Plan for mitigation activities
- Map 2 - Community Risk Assessment results
- Map 3 - Areas of potential strategic value for bushfire risk reduction

For further information please contact
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Map 1 - Areas identified in the King Island Fire Protection Plan for mitigation activities



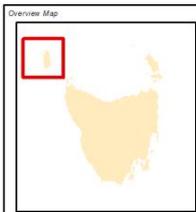
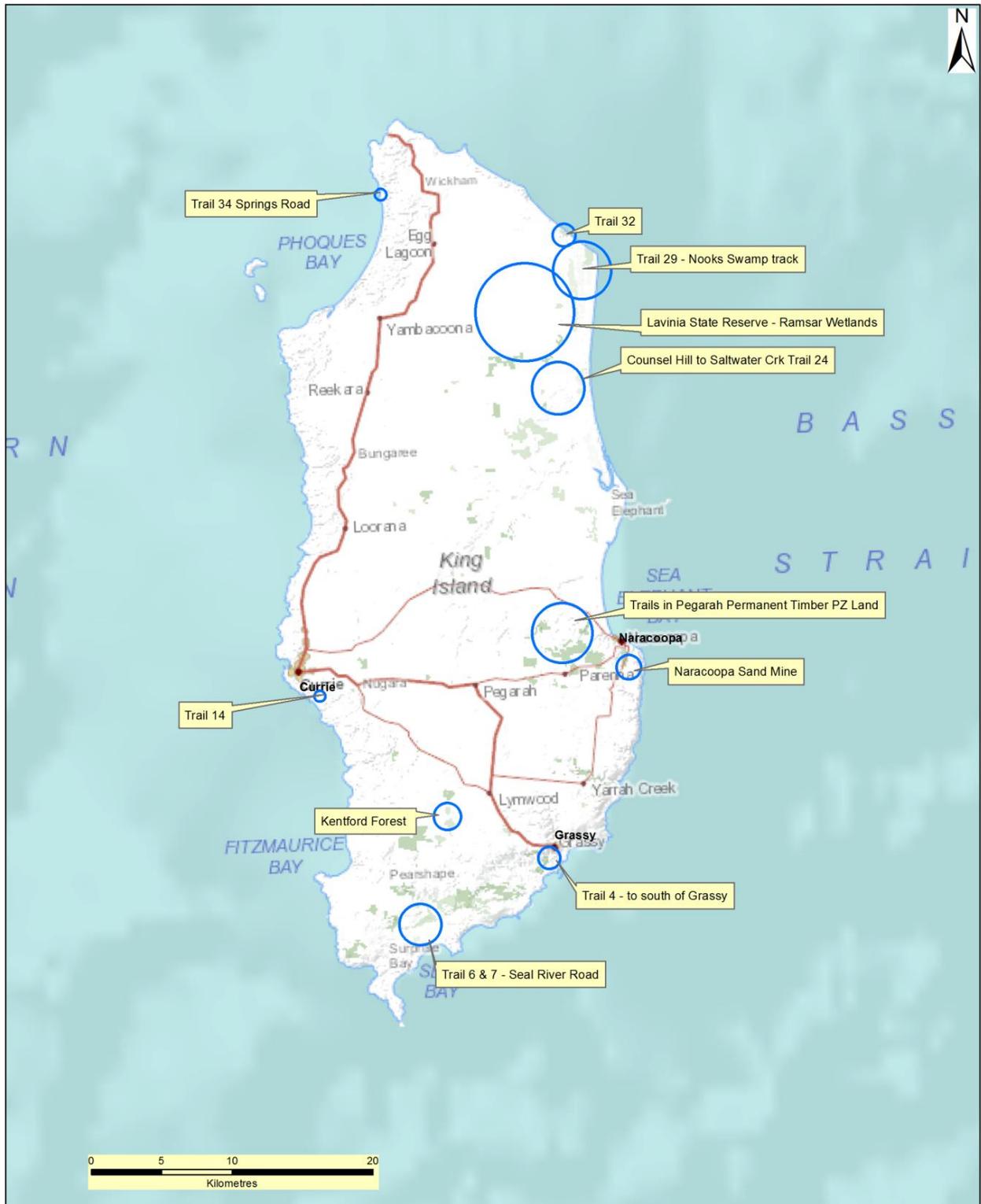
Map 2 - Community Risk Assessment results



Communities identified during strategic assessment process King Island FMAC

State Fire Management Council	
Map Title: TEMPLATE	Datum: GDA 1994
Author: megl	Projection: Transverse Mercator
Print Date: 20/11/2014	Coordinate System: GDA 1994 MGA Zone 55
Print Time: 16:18:36	
Scale: 1:150,728	1 centimetre = 1,507 metres (AS)
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Map 3 – Strategic areas and fire trails for mitigation works



Strategic areas & fire trails for mitigation activities King Island Fire Management Area

State Fire Management Council	
Map Title: TEMPLATE	Date: GDA 1994
Author: megl	Projection: Transverse Mercator
Print Date: 20/11/2014	Coordinate System: GDA 1994 MGA Zone 55
Print Time: 16:15:20	
Scale: 1:250,000	1 Centimetre = 2,500 metres (AS)
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