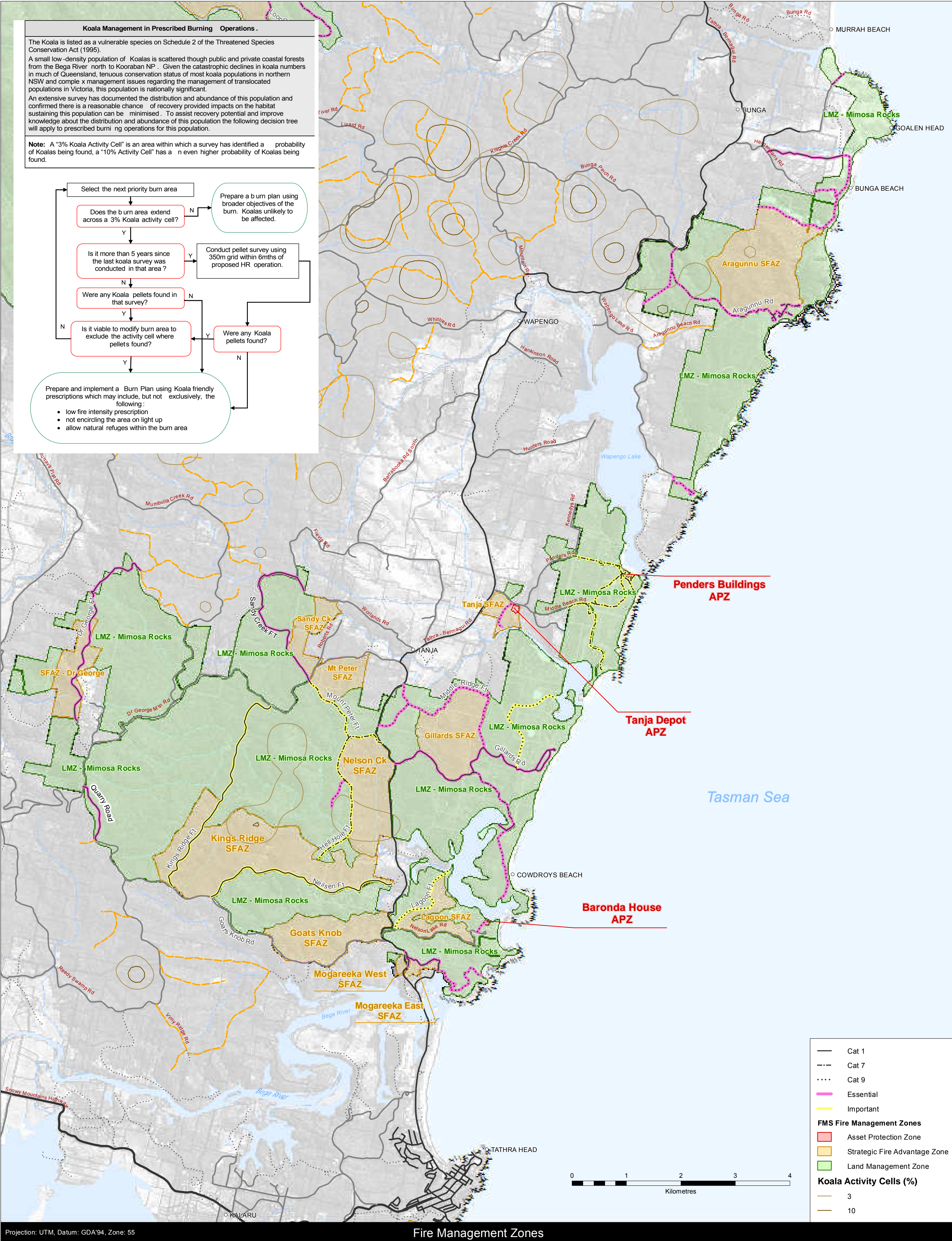
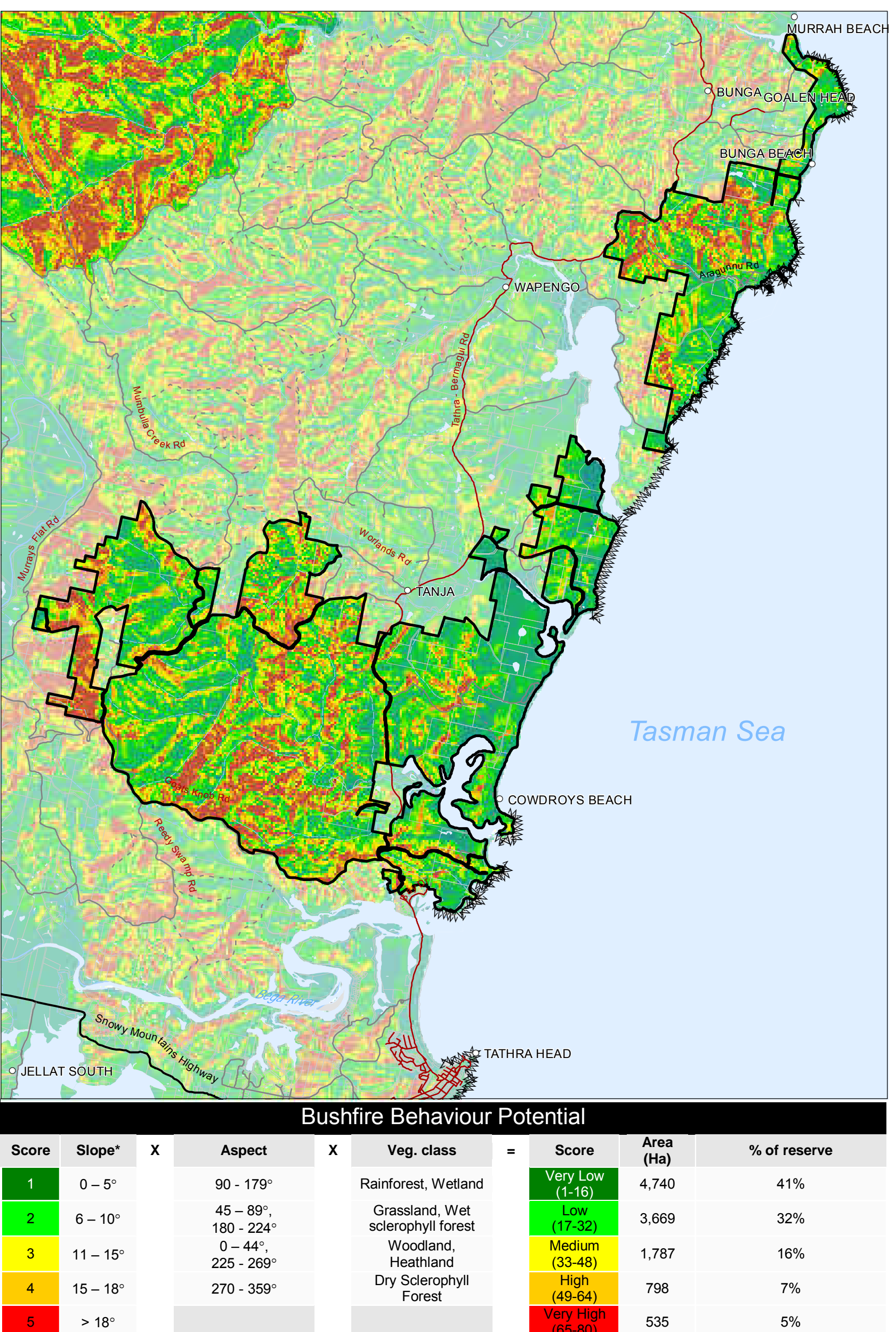
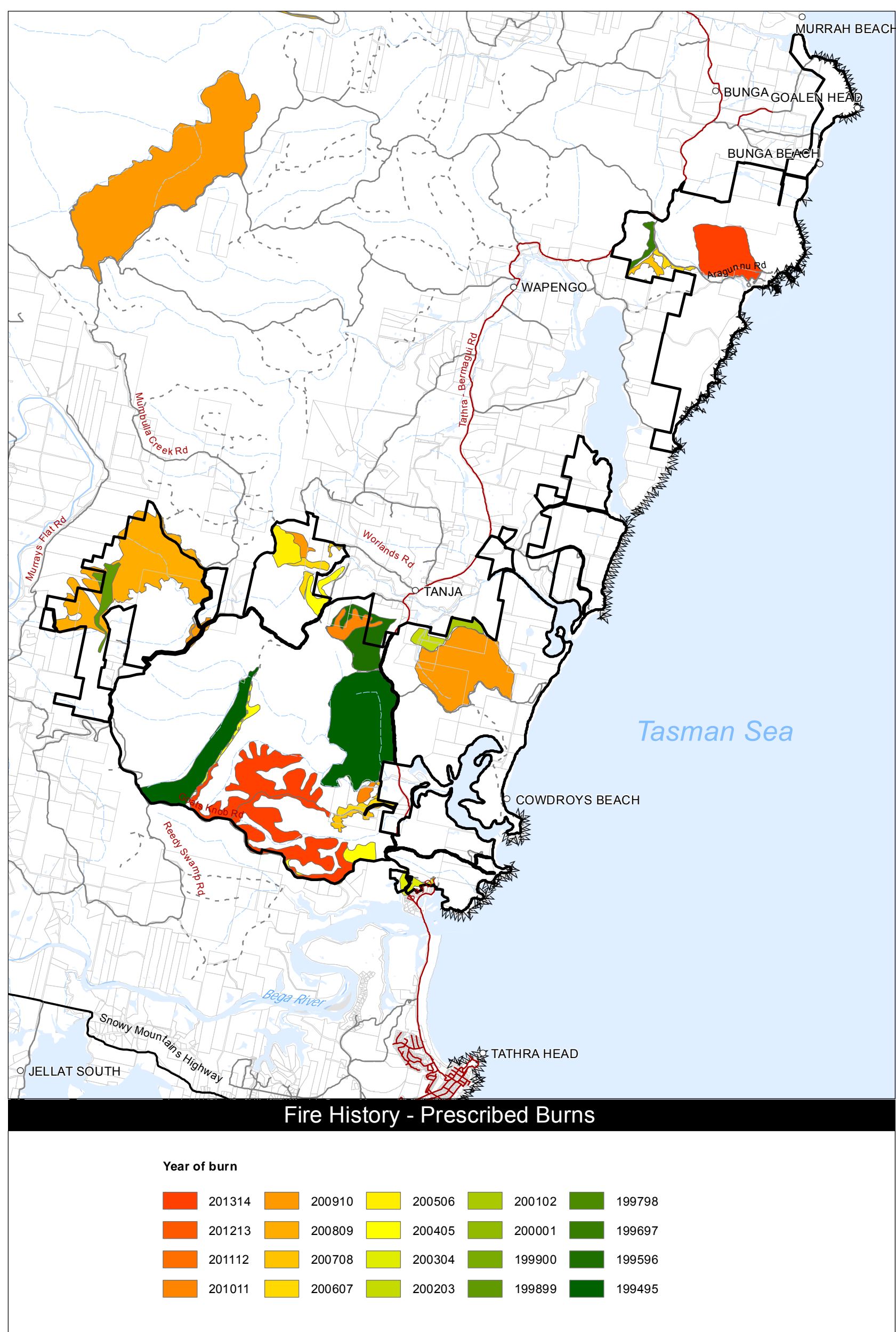
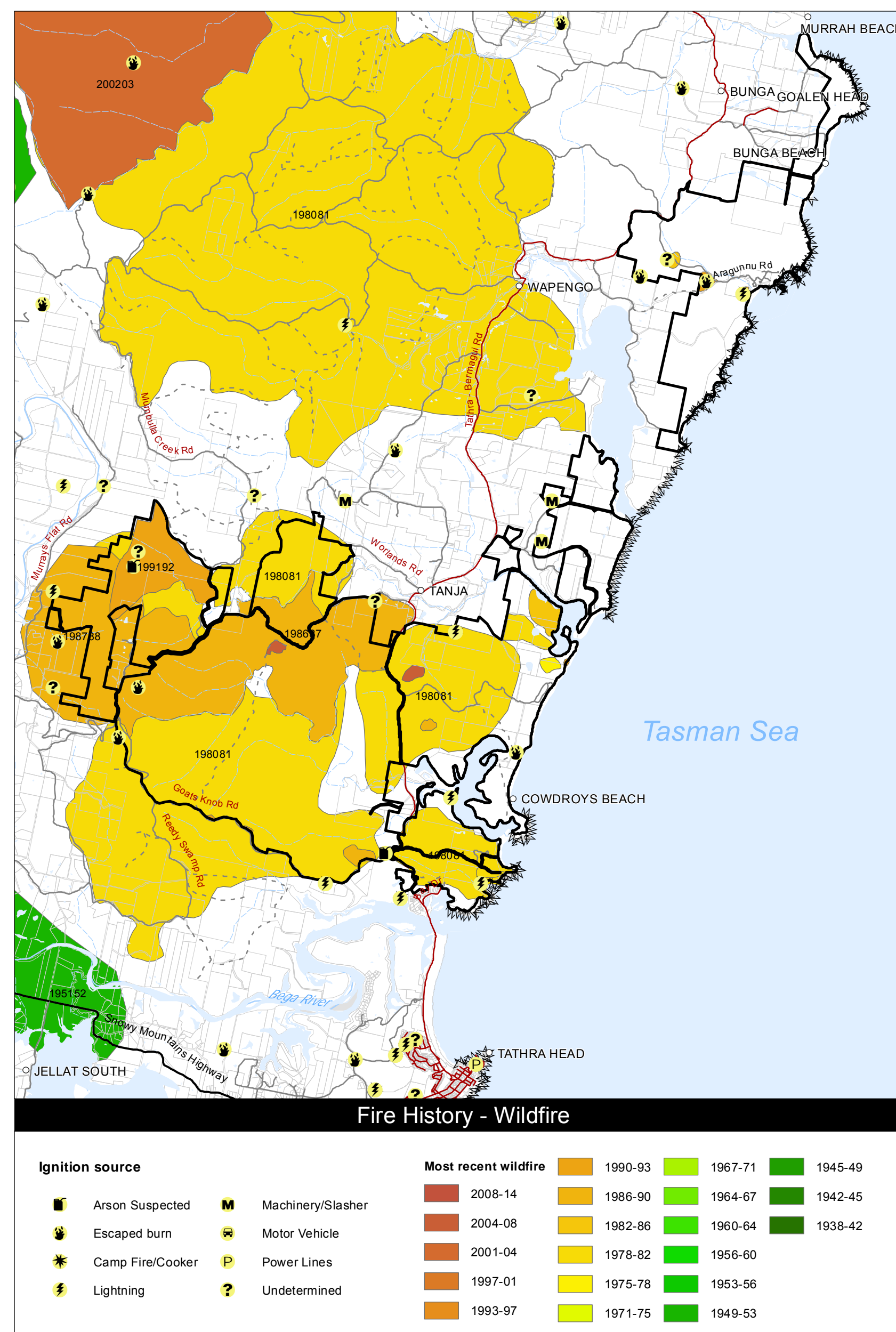
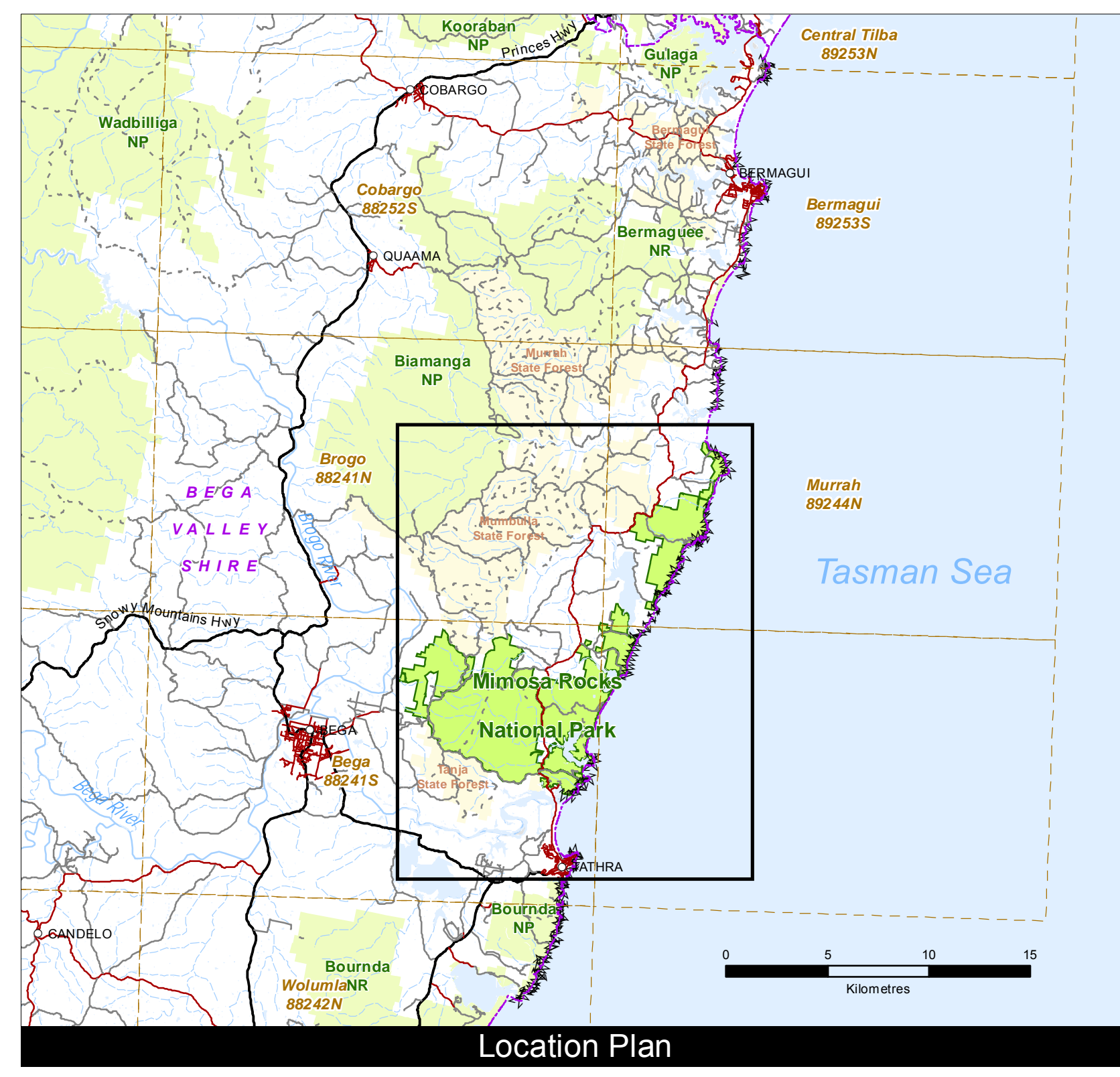


Fire Management Zones	
Asset Protection Zones	The objective of APZs is the protection of human life and property. This will have precedence over guidelines for the management of biodiversity. Maintain Overall Fuel Hazard at Moderate or below.
Strategic Fire Advantage Zones	The objective of SFAZs is to reduce fire intensity across larger areas. Maintain Overall Fuel Hazard at High or below, however adherence to guidelines for biodiversity will take precedence where practical.
Land Management Zones	The objective of LMZs is to conserve biodiversity and protect cultural and historic heritage. Manage fire consistent with fire thresholds.



Fire Season Information

Wildfires

- Have been known to occur as early as Spring, but the potential for fires is greatest between November and February
- During this period in dry seasons, fires may exhibit high intensity behaviour in windy conditions

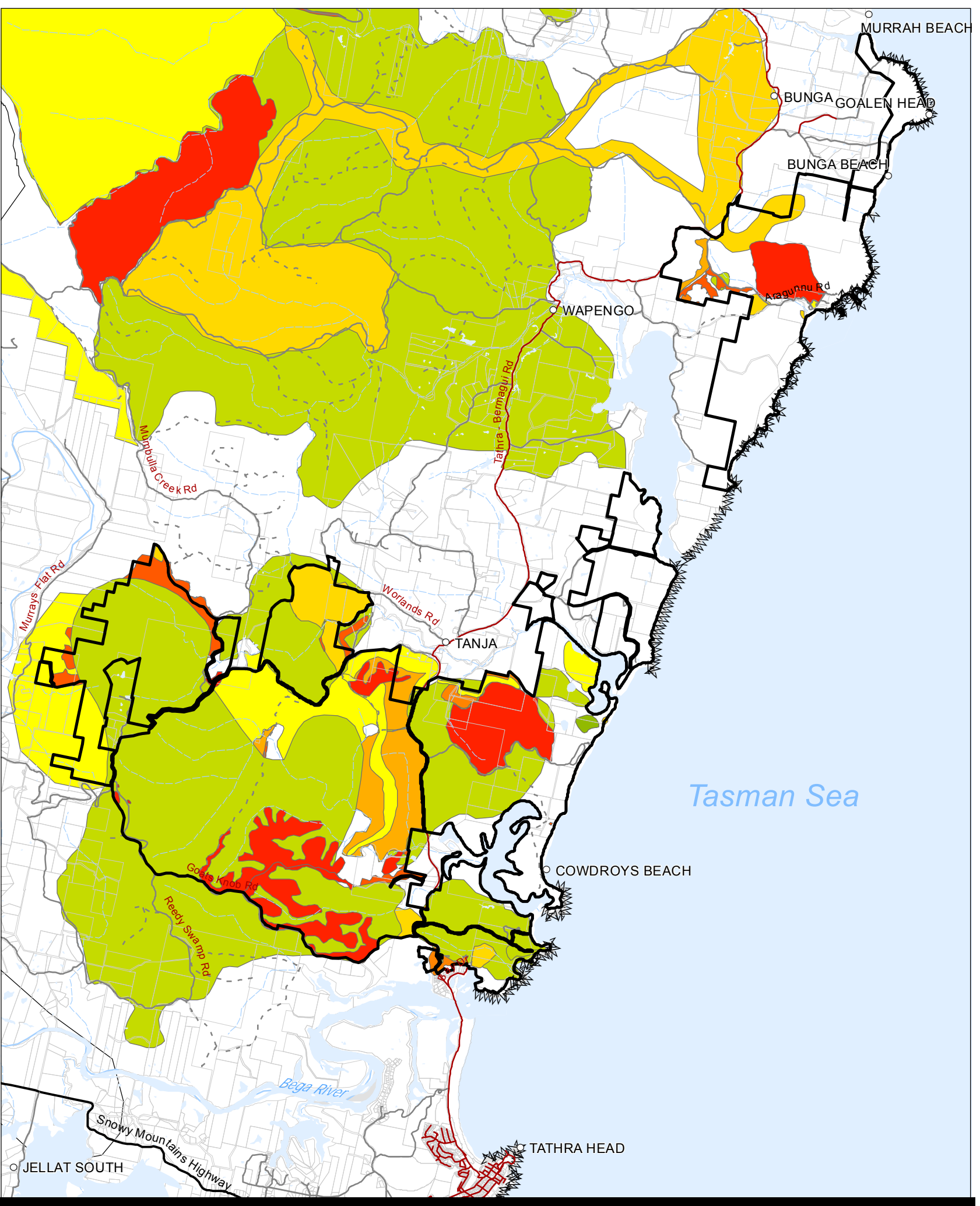
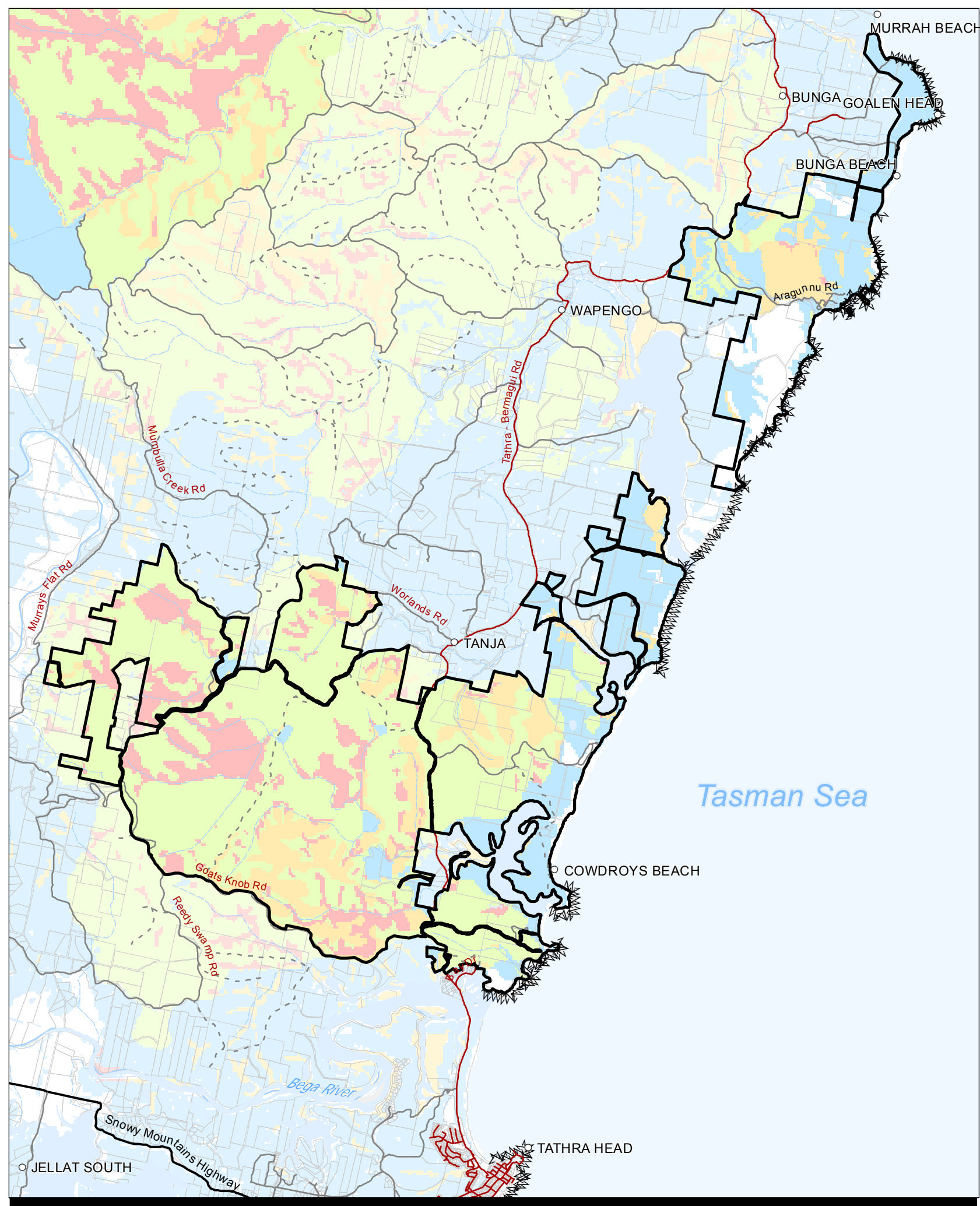
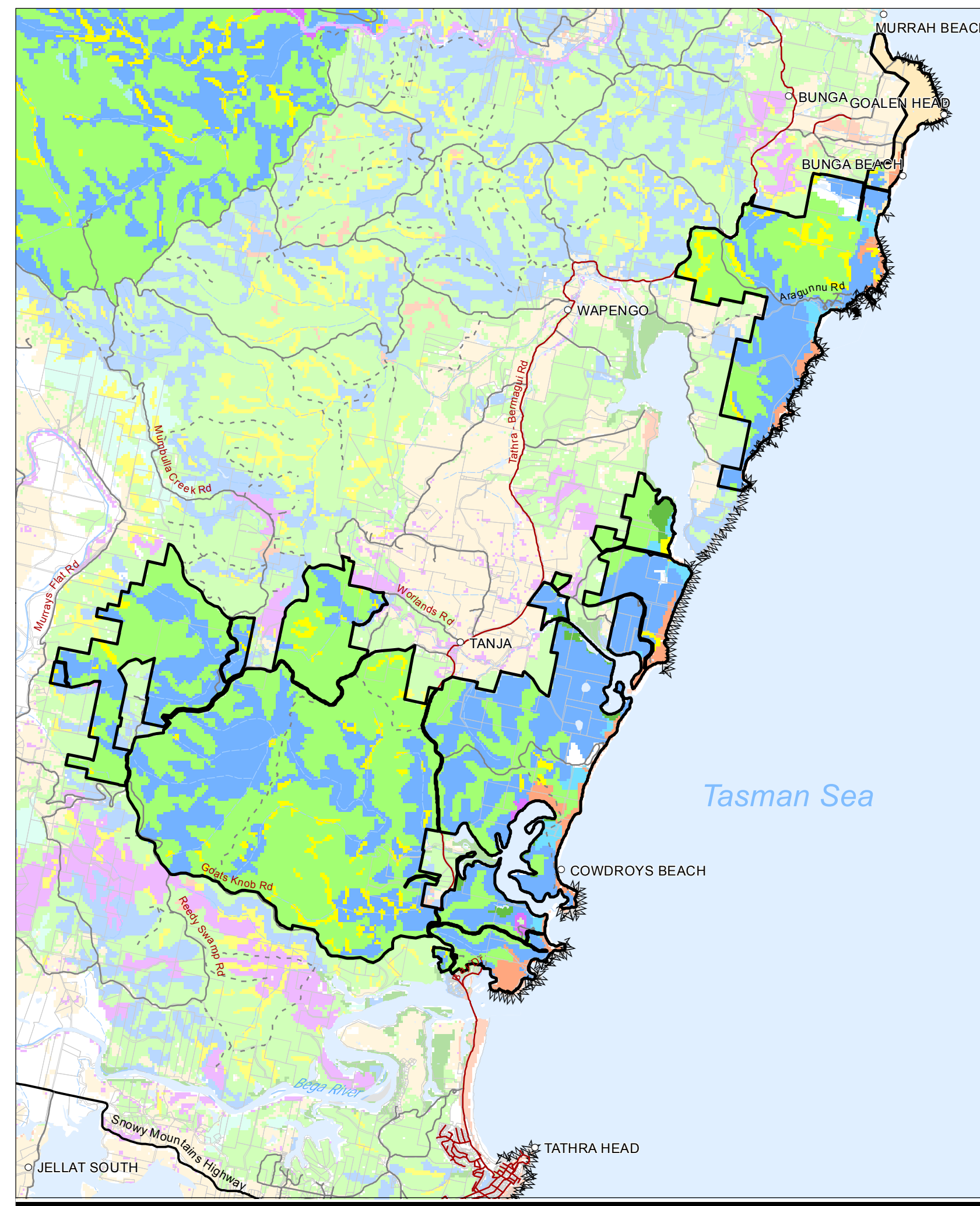
Prescribed Burning (NPWS FMM 4.7)

- Autumn to late Winter. Burning is possible in early Spring but not desirable on a regular basis for ecological reasons. Furthermore, any fire ignited in Spring has the potential to be problematic if not contained within safe boundaries. Strong southwest and westerly winds in August/September are a common feature on the south coast and can rapidly enhance the intensity of a fuel reduction burn

Model details

Bushfire behaviour potential was modelled using a combination of slope, aspect and vegetation type. The model equation is: Slope score (1-5) x Aspect score (1-4) x Vegetation score (1-4). Giving an overall range of 1 to 80. Class intervals were defined as: Very low (1-16), Low (17-32), Medium (33-48), High (49-64), Very high (65-80).

*Source: Planning for Bushfire Protection, NSW Planning 2001



NB. Fire thresholds are defined for vegetation communities to conserve biodiversity

NB. These are indicative guidelines based on broad statewide vegetation formations (using the classification of Keith (2002)). These guidelines are not intended to be interpreted as prescriptions. They define a domain of acceptable fire intervals consistent with the maintenance of existing plant species.

Operational Guidelines

- Refer to Fire Management Manual
 Brief all personnel involved in suppression operations on the following issues:
- General Guidelines**
- The use of bombing aircraft should support containment operations by aggressively attacking hotspots and spot-overs.
 - The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstances.
 - Where practicable foam should be used to increase the effectiveness of the water.
 - Ground crews must be alerted to water bombing operations.
- Aerial Ignition**
- Aerial ignition may be used during back-burning or fuel reduction operations where practicable, but only with the prior consent of NPWS Regional Manager or Section 44 delegate.
 - Utmost care must be taken to ensure back-burns down slope where required.
- Backburning**
- Temperature and humidity trends must be monitored carefully to determine the safest times to implement back-burns.
 - Generally, when the FDI is Very High or greater, backburning should commence when the humidity begins to rise in the late afternoon or early evening. With a lower FDI backburning may be safely undertaken during the day.
 - Where practicable, clear a 5m radius around dead and flower-barked trees adjacent to containment lines prior to backburning, or wet down these trees as part of the backburn ignition.
 - Avoid ignition of backburns at the bottom of slopes where a long and intense up slope burn is likely.
- Command & Control**
- The first combatant agency on site may assume control of the fire, but then must ensure the relevant land management agency is notified promptly.
 - On the arrival of other combatant agencies, the initial incident controller will consult with regard to the ongoing command, control and incident management team requirements as per the relevant BFMIC Plan of Operations.
 - Construction of new containment lines should be avoided, where practicable, except where they can be constructed with minimal environmental impact. New containment lines require the prior consent of a senior NPWS officer.
 - Where practicable, containment lines should be established and rehabilitated as part of the wildfire suppression operation.
 - All containment lines not required for other purposes should be closed at the cessation of the incident.
 - All personnel involved in containment line construction should be briefed on both natural and cultural heritage sites in the location.
- Containment Lines**
- Earthmoving equipment may only be used with the prior consent of a senior NPWS officer, and then only if the probability of its success is high.
 - Earthmoving equipment must be always guided and supervised by an experienced officer, and accompanied by a support vehicle. When engaged in direct or parallel work, the vehicle must be a firefighting vehicle.
 - Particular care should be taken when using earthmoving equipment on Cable fire trail as the optical fibre cable is shallower than the depth cast on marker posts in some locations.
 - Containment lines constructed by earthmoving equipment should consider the protection of drainage features, observe the Protected Species and Cultural Heritage Operational Guidelines, and be surveyed, where possible, to identify unknown cultural heritage sites.
 - Earthmoving equipment should be washed down, where practicable, prior to entering NPWS estate.
- Fire Advancing**
- All fire advantages used during wildfire suppression operations must be mapped and where relevant added to the database.
- Fire Suppression**
- Writing and foaming agents (surfactants) are permitted for use in wildfire suppression.
 - The use of retardant is only permitted with the prior consent of the senior NPWS officer, and should be avoided where reasonable alternatives are available.
 - Exclude the use of surfactants and retardants within 50m of rainforest, watercourses, dams and swamps.
 - Areas where fire suppression chemicals are used must be mapped as per the user product's name register.
 - The Threatened Species Operational Guidelines are to be observed.
- Rehabilitation**
- Where practicable, containment lines should be established and rehabilitated as part of the wildfire suppression operation.
 - The potential impacts of smoke and possible mitigation tactics must be considered when planning for wildfire suppression and prescribed burning operations.
 - If smoke becomes a hazard on local roads/highways, the police and relevant media must be notified.
 - Smoke management must be in accordance with relevant RTA traffic management guidelines.
- Smoke Management**
- The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.
- Visitor Management**

Aboriginal Cultural Heritage

- Aboriginal Cultural Heritage Site Management**
 (NPWS Parks & 11)
- As far as possible protect site from fire.
 - Do not cut down trees.
 - Use of baits, wetting agents & retardant is acceptable.
 - As far as possible protect site from fire.
 - Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites.
 - Avoid water bombing which may cause ground disturbance.
 - Avoid ground disturbance including hand tools, dozers.
 - Avoid water bombing which may cause ground disturbance.
 - Site may be burnt by wildfire, backburn, prescribed burn.

Historic Heritage Management

- Historic Heritage Management**
 (NPWS Parks & 11)
- High RCM's priority.
 - As far as possible protect site from fire.
 - Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites.
 - Avoid water bombing, which may damage site.
 - High RCM's priority.
 - As far as possible protect site from fire.
 - Avoid all ground disturbance including the use of earthmoving machinery, handline construction and driving over sites.

Threatened Fauna Management

- Threatened Fauna Management**
 (NPWS Parks & 12, 13)
- As far as possible, protect large and hollow-bearing trees in locations where these species are known to occur.
 - As far as possible, protect large and hollow-bearing trees in locations where these species are known to occur.
 - Avoid inter-fire intervals of <10 years in locations where these species are known to occur.
 - Avoid high intensity fires that consume canopies and fallen logs in locations where these species are known to occur.

Threatened Flora Management

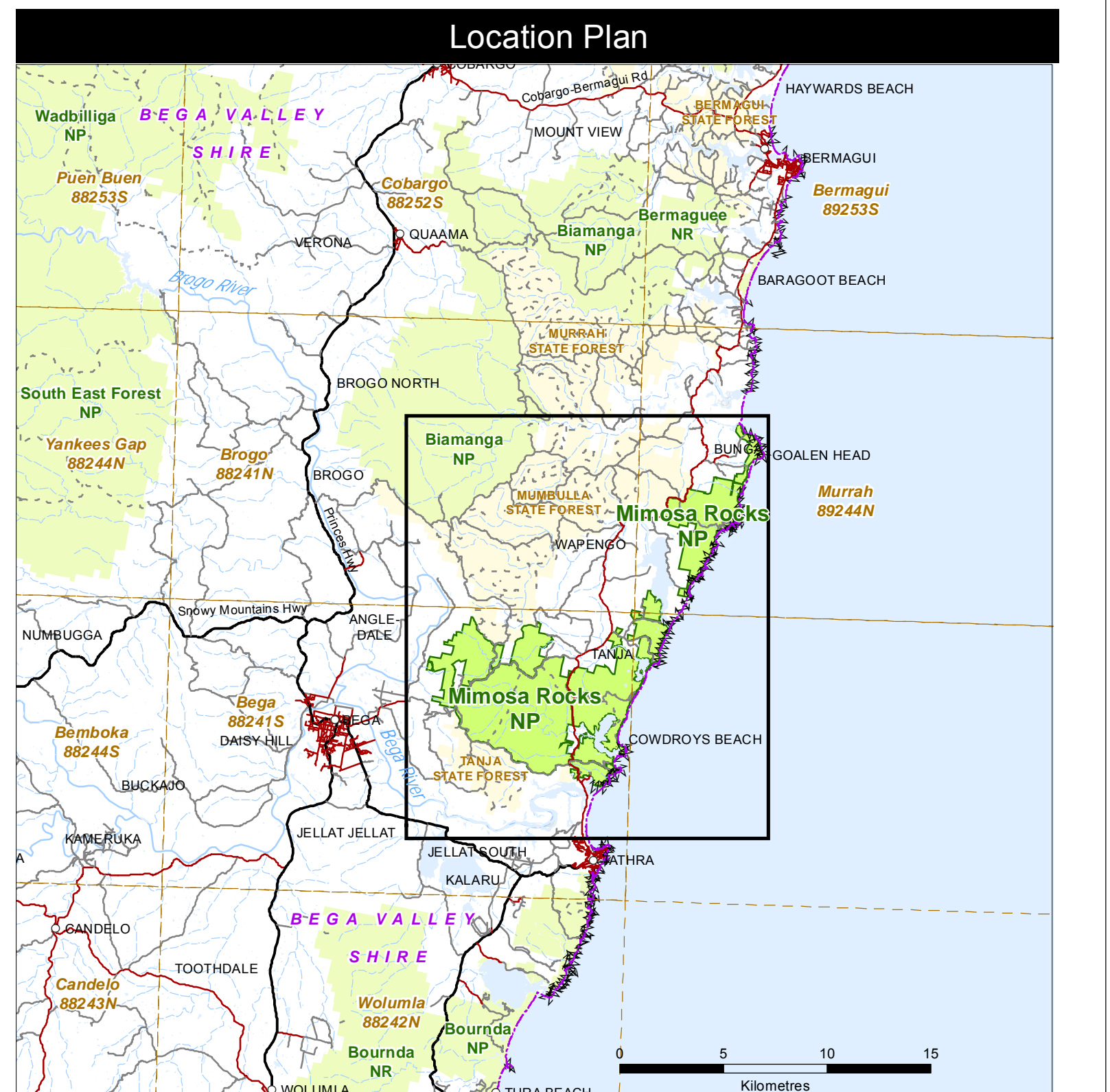
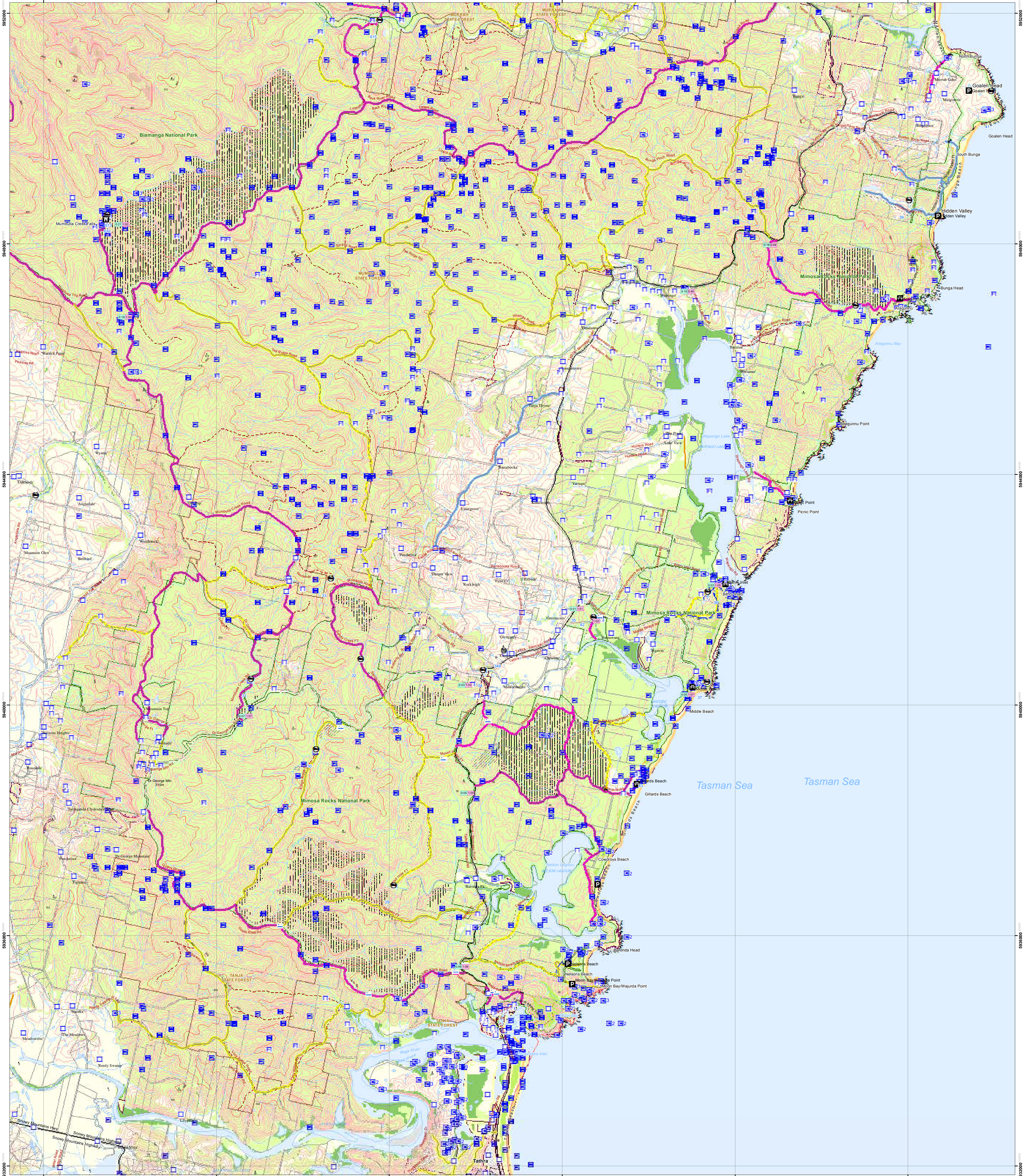
- Threatened Flora Management**
 (NPWS Parks & 12)
- Avoid inter-fire intervals of <10 years in locations where these species are known to occur.
 - Avoid the use of earth moving machinery in locations where these species are known to occur.
 - Avoid the use of retardant in locations where these species are known to occur.
 - As far as possible, exclude all fire from locations where these species are known to occur.
 - Avoid the use of earth moving machinery in locations where these species are known to occur.
 - Avoid the use of retardant in locations where these species are known to occur.

Threatened Property

- Where possible property owners with assets at risk from a wildfire event should be kept informed regarding the progress of the fire, and asked for an assessment of their current level of asset protection preparedness.

Communications Information

Service	Channel	Location and Comments
VHF Communications (NPWS Two Way Radios)	230	Mumbulla Mtn – good coverage across most parts of the park
UHF-PMR (RFS Two Way Radios)		
Mobile Phone	3G	Telstra Next G coverage was limited to the higher points in the park at the time of printing



Contact Information

Agency	Position / Location	Phone
NSW National Parks & Wildlife Service	Narooma Office (0830-1630 Mon-Fri)	4476 0800
	NPWS Incident Response Answering Service (after hours)	1800 232 170
NSW Rural Fire Service	Bega Fire Control	6494 7400
NSW Fire Brigade	Emergency	000
Forestry Corp NSW	Eden	6496 3258
SES	Emergency	132 530
	Bega Unit Controller – John Dawson	6492 4123
Police	Emergency	000
	Bega	6493 4244 6492 9999
Ambulance	Emergency	000
	Bookings	131 233
Hospital	Bega	6492 9111
Council	Bega Valley Shire Council	6499 2222

Fire Control Advantages

Index	Type	Easting	Northing	Index	Type	Easting	Northing
29	Water Point Vehicle	763987	939697	39	Water Point Vehicle	772390	9348568
30	Water Point Vehicle	762815	933046	40	Water Point Vehicle	774321	9355472
31	Water Point Vehicle	761483	934207	41	Helipad	774382	9350505
32	Water Point Vehicle	763387	9340618	42	Helipad	767318	9341470
33	Water Point Vehicle	762870	9342005	43	Helipad	768249	9338600
34	Water Point Vehicle	765220	9340417	349	Refuge Area	765880	9340760
35	Water Point Vehicle	767301	9341540	612	Refuge Area	765881	9348242
36	Water Point Vehicle	766670	9341882	613	Water Point Vehicle	759002	9348316
37	Water Point Vehicle	766398	9340224	614	Water Point Vehicle	757750	9343461
38	Water Point Vehicle	771978	9346752	615	Water Point Vehicle	763723	9351703

Legend

- Asset
- Threatened fauna
- Threatened flora
- European Sites
- Aboriginal Sites
- Built-up area
- Pine Plantation
- Dormant, Category 9
- Dormant, Category 1
- Dormant, Category 7
- Important, Category 7
- Important, Category 9
- Important, Category 1
- Essential, Category 7
- Essential, Category 9
- Essential, Category 1
- Gate
- Walking track
- Travel time from Tanja
- Travel time from Narooma
- Airbase
- Base Camp
- Fire Tower
- Helipad
- Helicopter Landing Site
- Refuge Area
- Staging Area
- Vantage Point
- Water Point H & V
- Water Point Helicopter
- Water Point Vehicle
- Loading Ramp
- Heavy vehicle turn-around
- Major sealed road
- Minor sealed Road
- 4WD track
- Management Track
- Contour Lines - 10m
- Contour Lines - 100m
- High point
- Spot height
- Intermittent
- Perennial
- Dam
- Waterbody
- Landform
- Beach
- Waterbody edge
- Rock
- NPWS Estate
- State Forest
- Crown land parcel
- Cadastre
- Forest/Rainforest
- Grassland/Pasture
- Woodland/Heath
- Swamp/Wetland
- Rock/Scrub
- Prescribed burns (last 5 yrs)
- Wild fires (last 10 yrs)