



TIWI ISLANDS

FIRE MANAGEMENT PLAN

2015

Since 2006 discussions have been held in the Tiwi Land Council, and subsequently in the Tiwi Islands Fire Management Committee, about fire management for greenhouse gas abatement. There has been unwavering and unanimous resolve for the development and implementation of a fire management plan that reduces greenhouse gas emissions. These reduced emissions can subsequently be sold in carbon markets, potentially generating income that can be used for the continuing employment of Tiwi Rangers.

Greenhouse gas emissions can be reduced by burning earlier in the year, and by burning less area overall. Early season burning (before the end of July) results in cooler fires, and these fires give off less greenhouse gas. Late season fires (fires after the beginning of August) are hotter and create more greenhouse gas. In addition, cool fires burn more patchily, and are less destructive to Tiwi plants and animals.

The Tiwi Islands Fire Management Committee meets regularly to develop strategies to inform Tiwi people, and to reduce the area of the Tiwi Islands that is burnt in the late dry season. On the 30th April 2015, the Committee signed off on the Tiwi Islands Fire Management Plan for 2015. Learning from the 2014 fire season, the management strategies being used to reduce late season fires in 2015 are:

- Creating firebreaks during the late wet season by spraying the grass with herbicide and then burning while the surrounding vegetation is still green (creating a spray break);
- Helicopter burning early in the dry season to reduce fuel loads and provide patches of burnt country that stop late fires from running (creating a helicopter break);
- Ground based burning along roadsides in the early dry season to reduce fuel loads and provide patches of burnt country that stop late fires from running (creating a road break);
- Grading firebreaks around assets such as plantations (plantation break) and outstations and burning off them early in the dry season (protection burning);
- Coastal burning along the banks of small creeks and rivers, accessed by boat, to reduce fuel loads and provide patches of burnt country that stop late fires from running (coastal burning).

The Tiwi Islands have been split into 8 areas for the purpose of fire management; shown on the the following maps. Areas are not based on Landowning boundaries - they are split up according to the landscape and natural features. This way each area can be treated as a separate unit so that fires from one area do not run into another area.

Each map shows the number of times areas have been burnt in the late dry season since 2000. Red areas have been burnt regularly in the late dry season, and are of particular focus for 2015 fire management. It is these areas that need to be burnt early to reduce greenhouse gas emissions, or protected from fire later in the season.

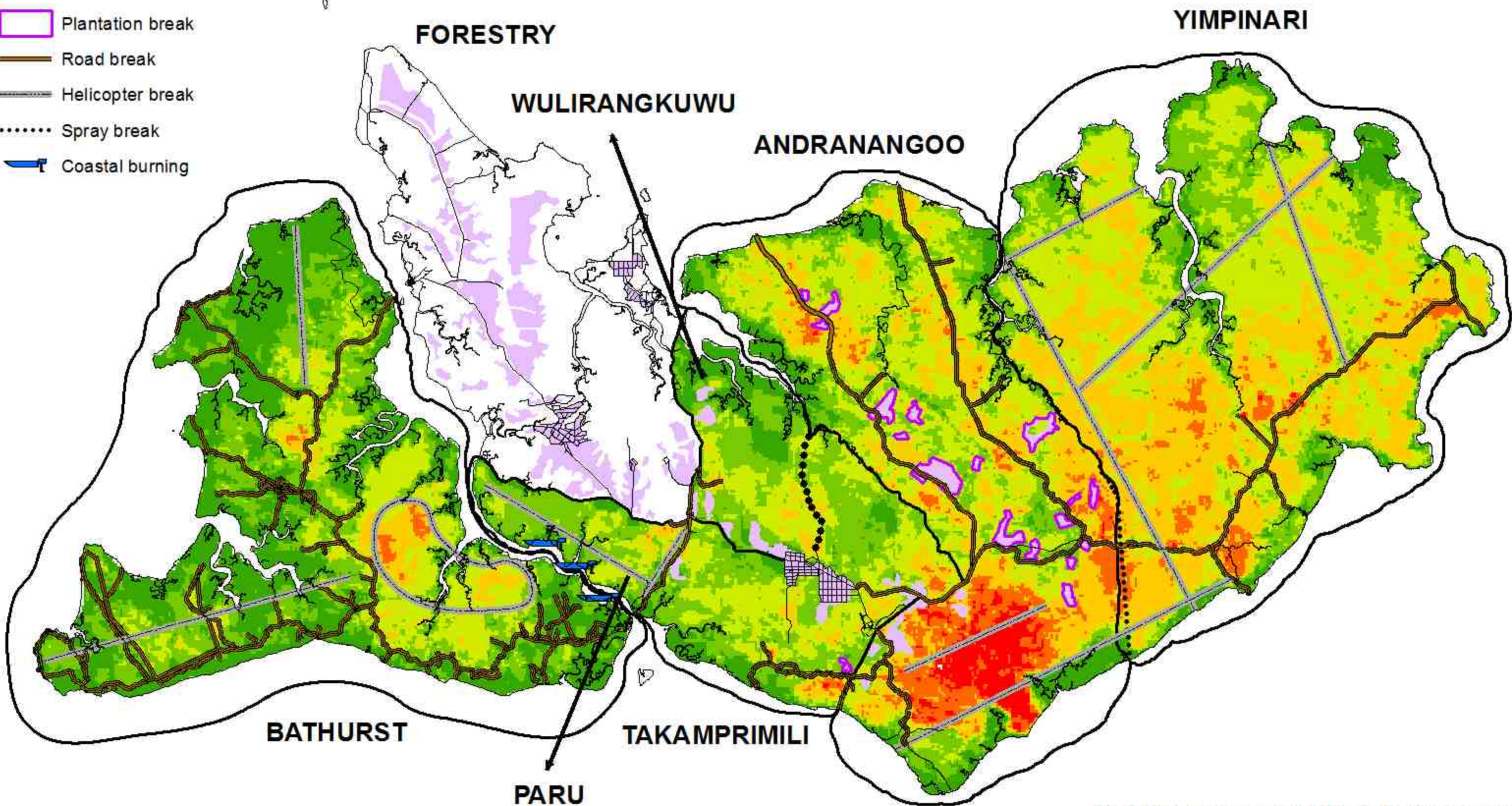
Management strategies for reducing late season fires are shown on the maps as Helicopter Break (grey line), Plantation Break (purple line), Road Break (Brown line), Coastal Burning (blue boat) and Spray Break (dotted line). The timing of operations and resources required are listed in a table following the maps.

The northwest area of Melville Island is not included in this fire management plan. This is the area where most of the plantation forestry is located, and forestry managers implement a separate fire protection plan for the plantations. The Tiwi fire crew will be working closely with forestry fire crews in this area, and may undertake additional burning once the plantations are adequately protected.

The 2015 Tiwi Fire Plan includes a dedicated week between the 18th and 22nd May to travel to each community on the Tiwi Islands with educational material about fire and greenhouse gases. 'Tiwi Fire Week' will involve the Tiwi Land Council, Tiwi Land Rangers, CSIRO and Bushfire NT.

Fire management options

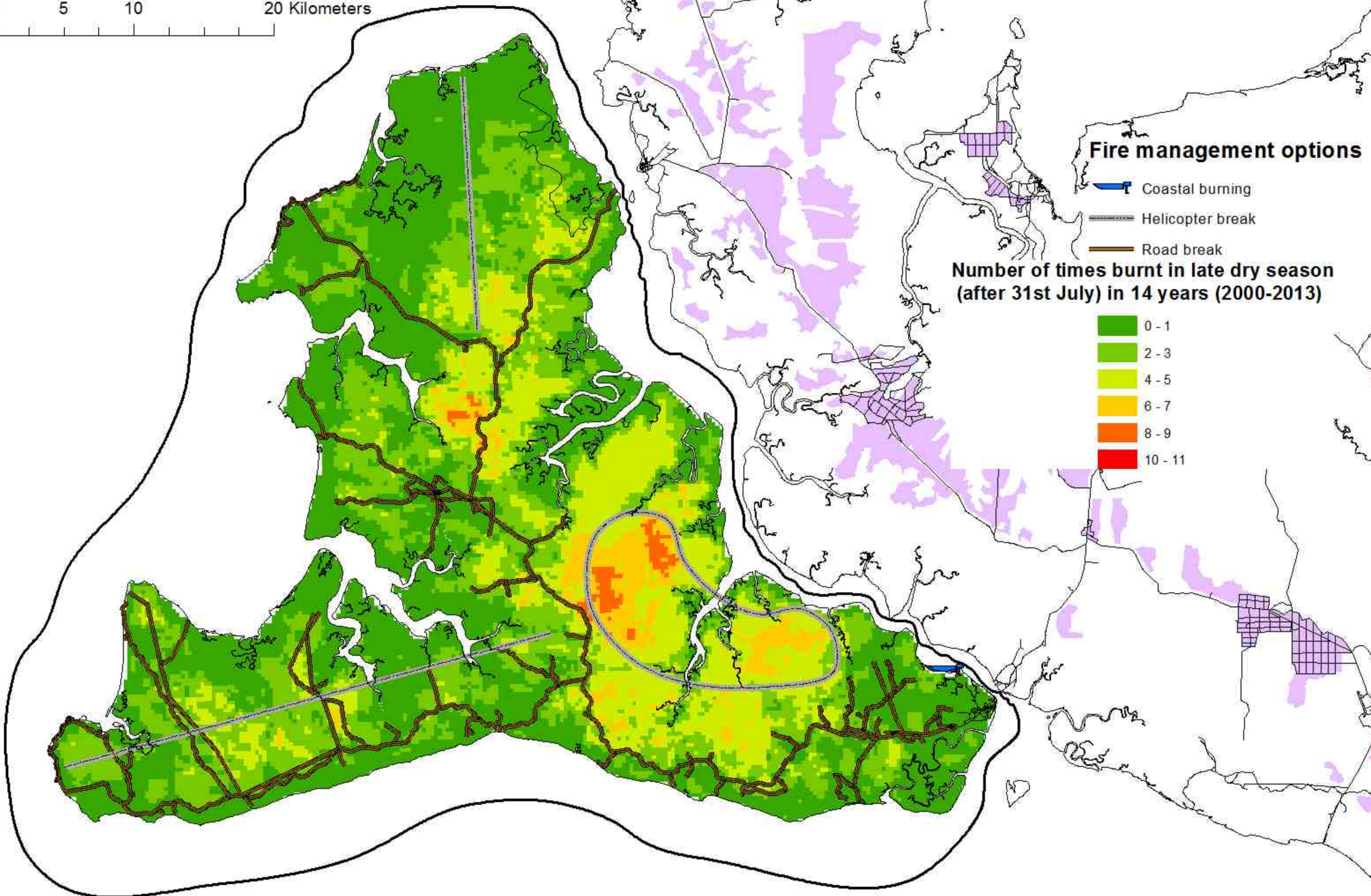
- Plantation break
- Road break
- Helicopter break
- Spray break
- Coastal burning



Number of times burnt in late dry season (after 31st July) in 14 years (2000-2013)



BATHURST



Fire management options

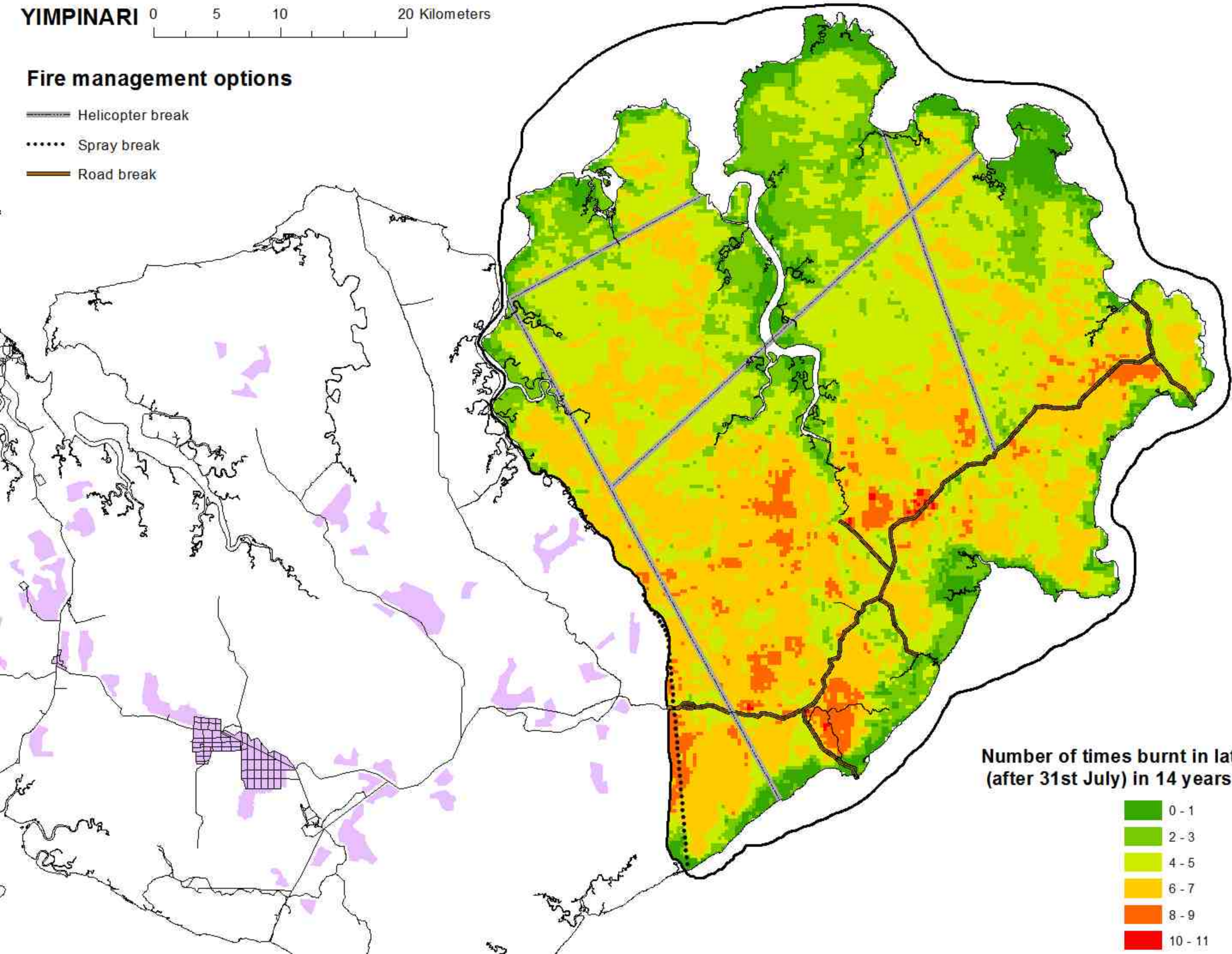
-  Coastal burning
-  Helicopter break
-  Road break

Number of times burnt in late dry season (after 31st July) in 14 years (2000-2013)

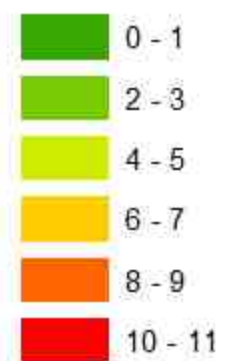


Fire management options

- Helicopter break
- Spray break
- Road break

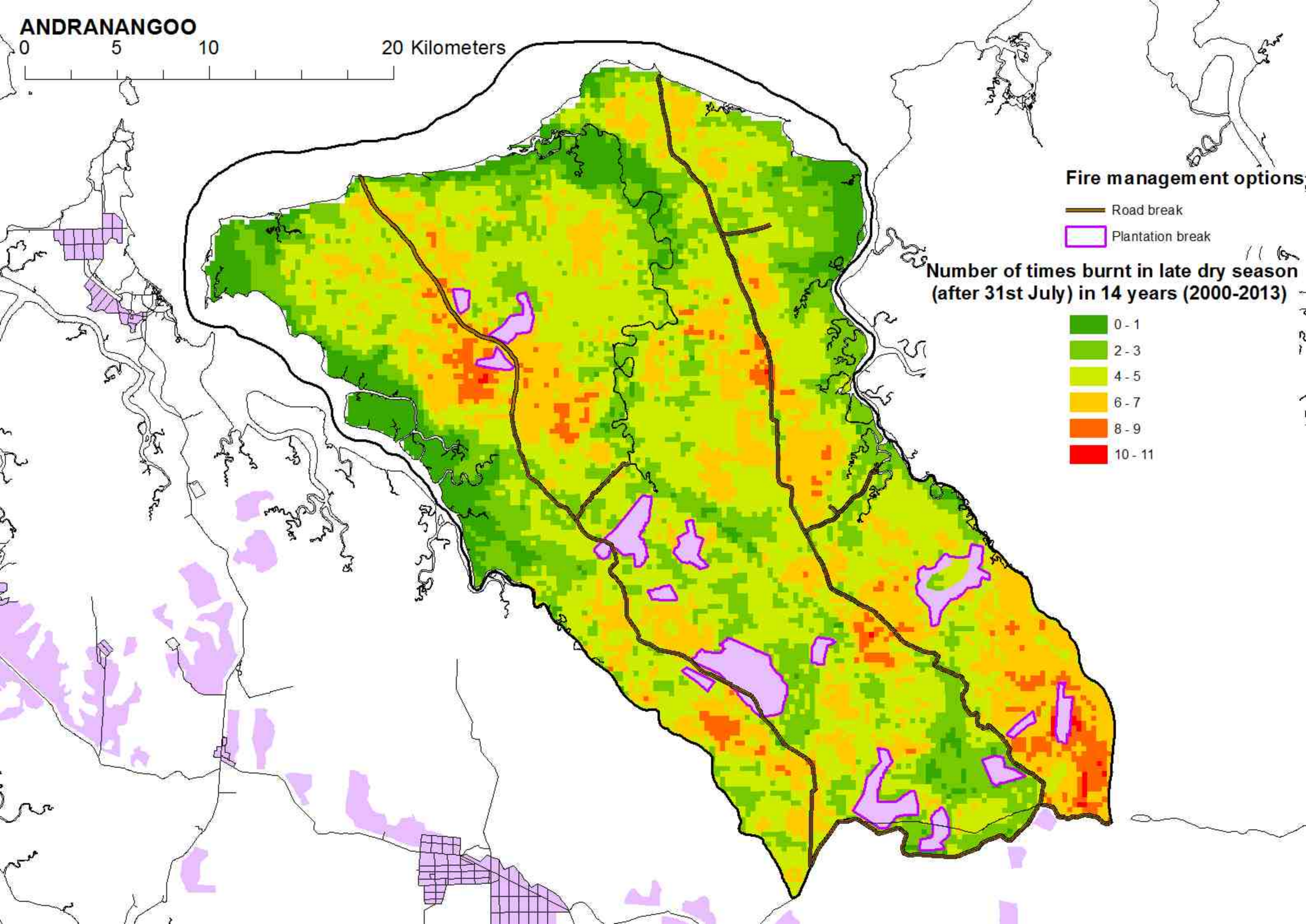


Number of times burnt in late dry season (after 31st July) in 14 years (2000-2013)



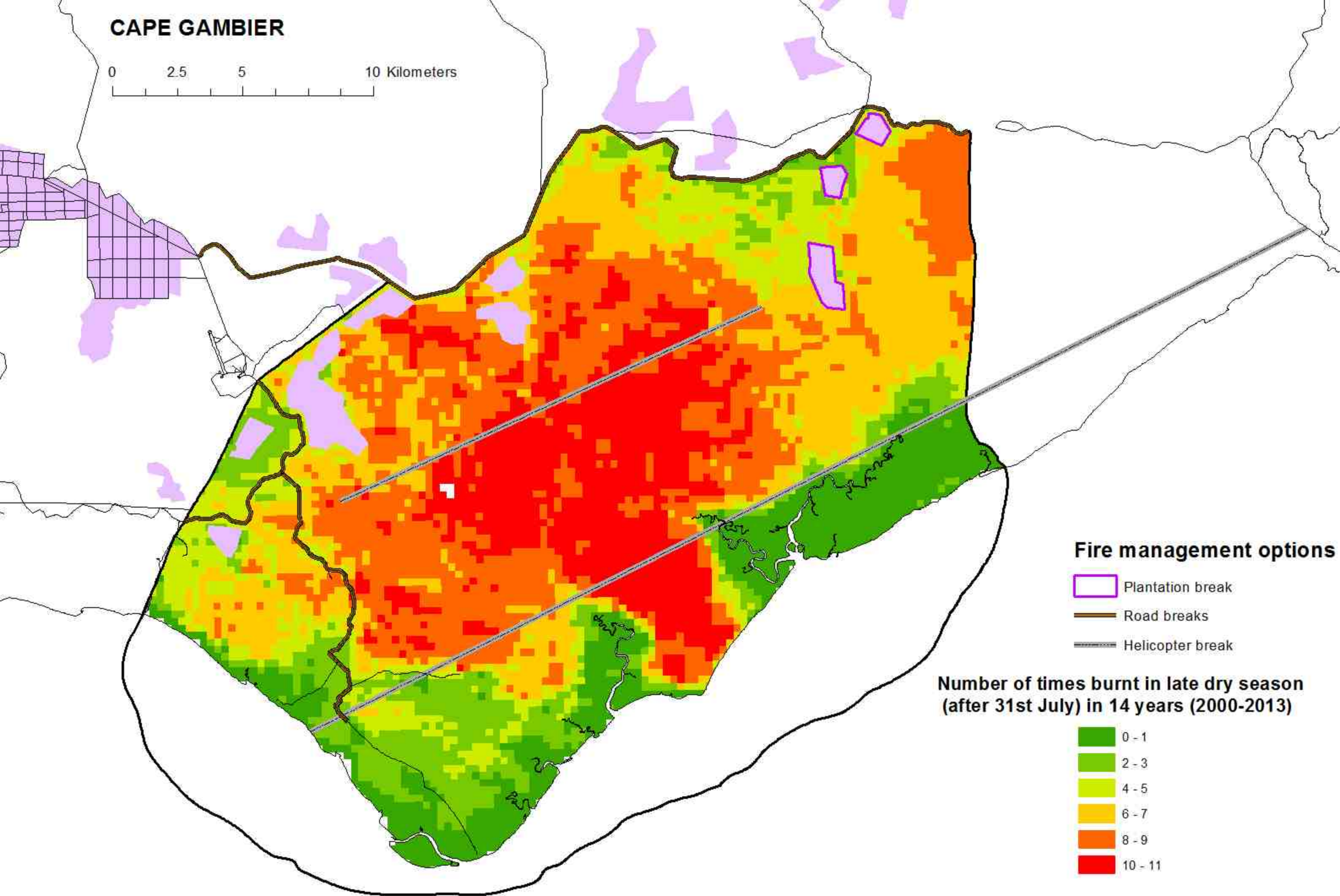
ANDRANANGOO

0 5 10 20 Kilometers



CAPE GAMBIER

0 2.5 5 10 Kilometers



Fire management options

- Plantation break
- Road breaks
- Helicopter break

Number of times burnt in late dry season (after 31st July) in 14 years (2000-2013)

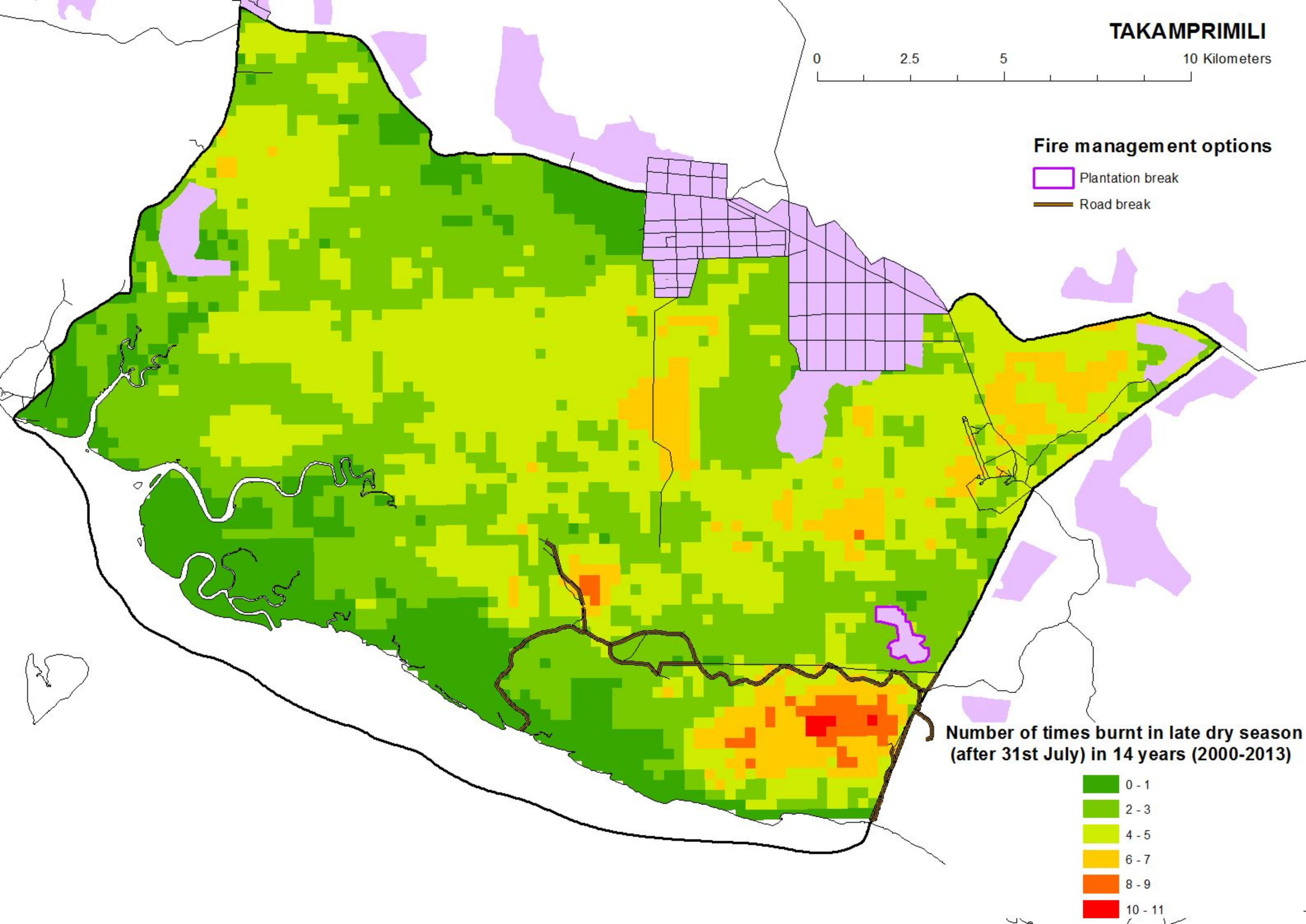
- 0 - 1
- 2 - 3
- 4 - 5
- 6 - 7
- 8 - 9
- 10 - 11

TAKAMPRIMILI



Fire management options

- Plantation break
- Road break

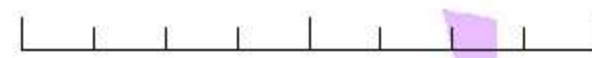


Number of times burnt in late dry season (after 31st July) in 14 years (2000-2013)

- 0 - 1
- 2 - 3
- 4 - 5
- 6 - 7
- 8 - 9
- 10 - 11

WULIRANGKUWU

0 2.5 5 10 Kilometers

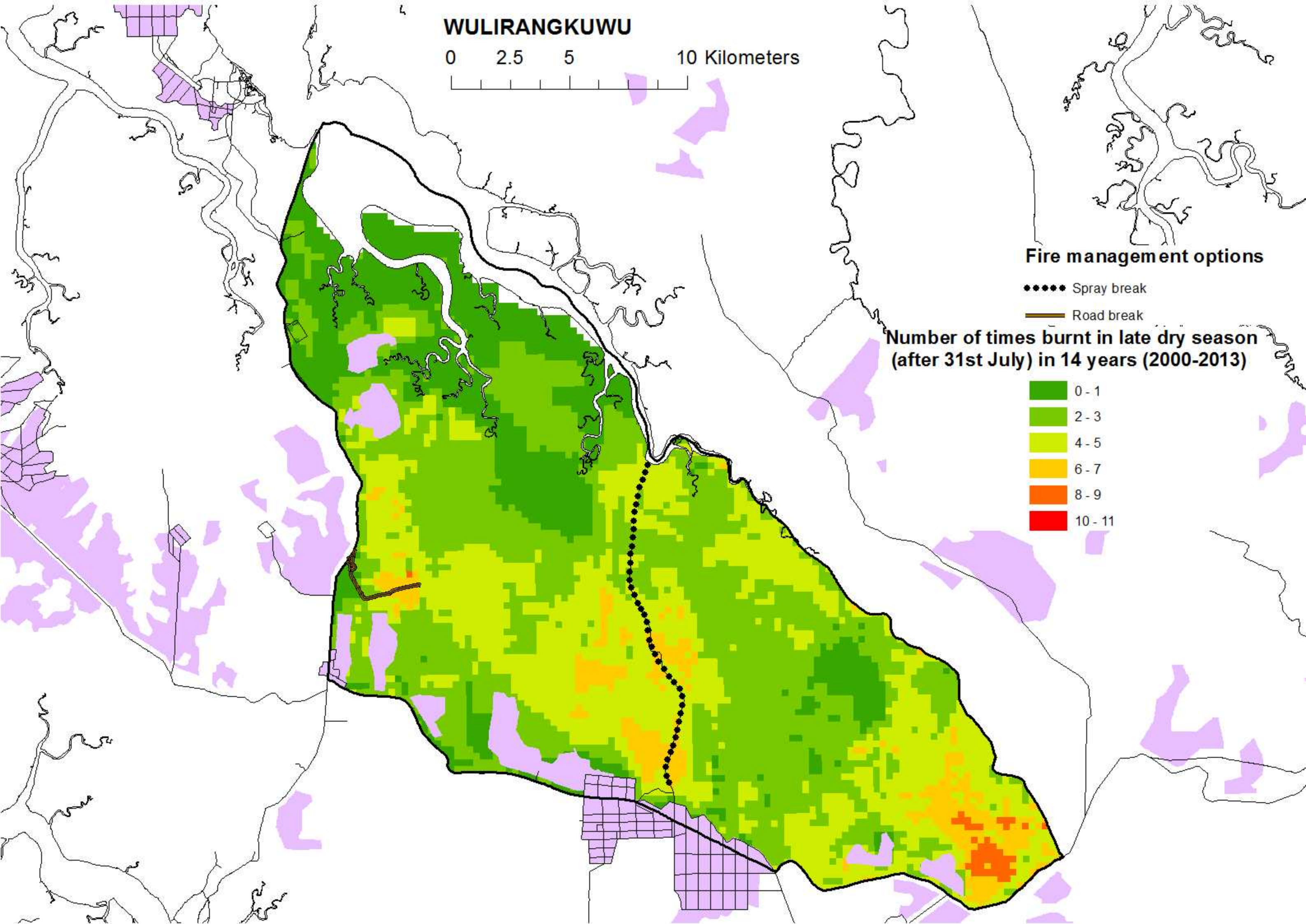


Fire management options

••••• Spray break

— Road break

Number of times burnt in late dry season
(after 31st July) in 14 years (2000-2013)



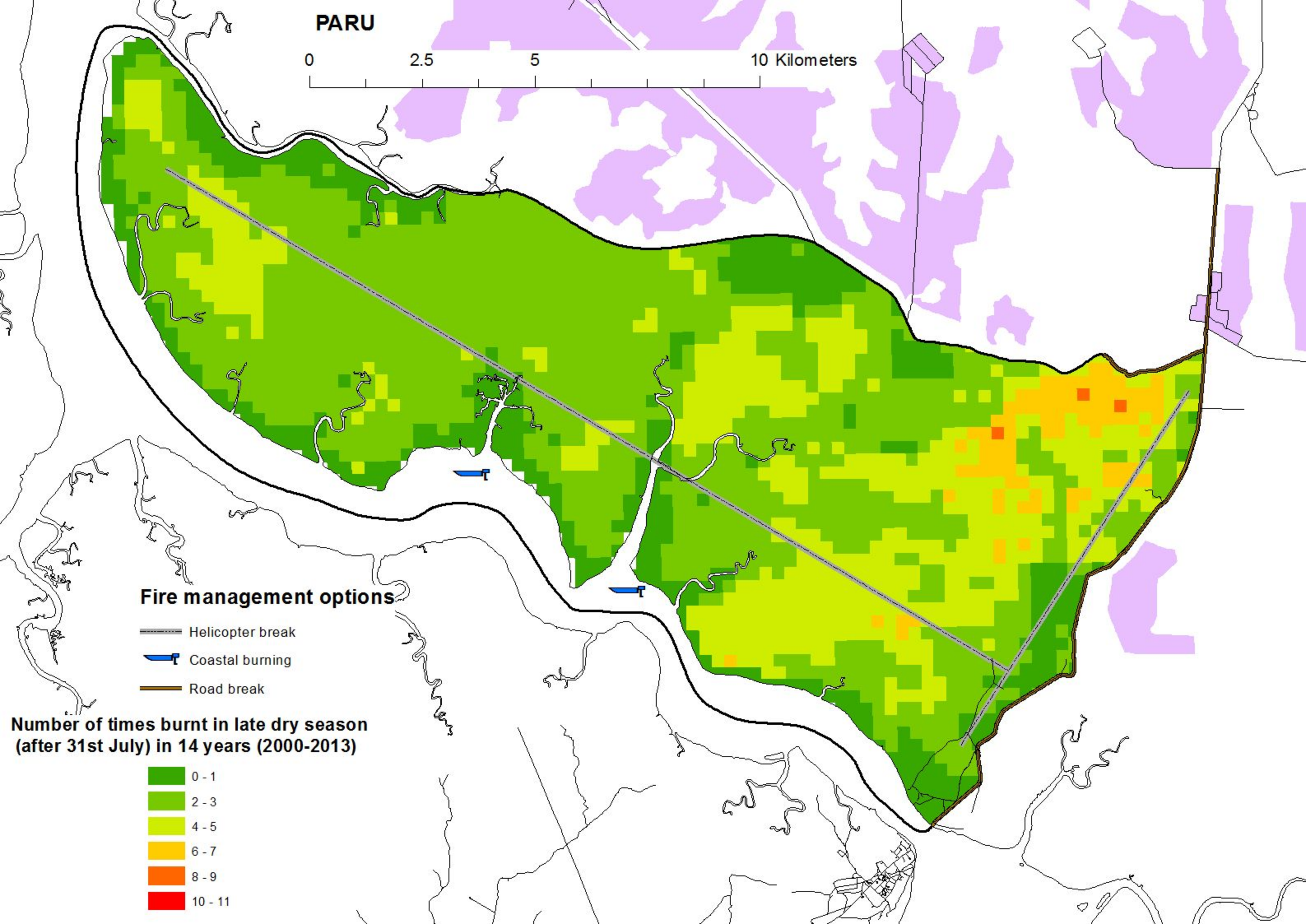
PARU

0 2.5 5 10 Kilometers

Fire management options

- Helicopter break
- Coastal burning
- Road break

Number of times burnt in late dry season (after 31st July) in 14 years (2000-2013)



TIMING

	Activity
1	Spray breaks in Yimpinari and Wulirangkuwu
2	Tiwi Fire Week
3	Check country for dryness in Yimpinari, Andranangoo and Bathurst
4	Grade plantation breaks
5	Roadside burns Bathurst and Yimpinari
6	Helicopter breaks Bathurst and Yimpinari
7	Protection burn around Paru and Taracumbi outstations; Wulirangkuwu spray break and Three Ways roadside burning
8	Protection burns around Telstra tower, Tiwi College, Takamprimili outstation and Pickataramoor plantations. Roadside burns Takamprimili
9	Helicopter breaks Paru and Cape Gambier. Roadside burning Paru
10	Redo helicopter burning where required in Bathurst and Yimpinari
11	Protection burning around plantation boundaries in Andranangoo and Jessie plantations
12	Roadside burns Andranangoo
13	Burn roadsides in Cape Gambier - include any missing main road areas
14	Coastal burning along southern Apsley Strait
15	CSIRO carbon plot annual and three year burns Pickataramoor, Taracumbi, Shark Bay & Imalu

Activity	Responsibilities/resources	Week starting											
		April 27th	May 4th	May 11th	May 18th	May 25th	June 1st	June 8th	June 15th	June 22nd	June 29th	July 6th	July 13th
1	Tiwi Fire crew & helicopter												
2	Tiwi Fire crew, TLC, CSIRO, Bushfires NT												
3	Tiwi Fire Crew and TOs												
4	Forestry												
5	Tiwi Fire crew												
6	Tiwi Fire crew & helicopter												
7	Tiwi Fire crew												
8	Tiwi Fire crew												
9&10	Tiwi Fire crew & helicopter												
11	Tiwi Fire crew & forestry												
12	Tiwi Fire crew												
13	Tiwi Fire crew												
14	Tiwi Fire crew												
15	Tiwi Fire crew & forestry	Timing will depend on curing											

TIWI ISLANDS FIRE COMMITTEE

Chair	Willie Rioli
NT Bushfires Council representative and TLC Chairman	Gibson F Illortaminni
Landowner delegates	Desmond Bruppacher Christopher Burak David Guy Vivian Kerinauia Jack Long Vincent Mungatopi Danny Munkara Jose Puruntatameri Willie Roberts Dennis Tipakalippa Connell Tipiloura Brian Tipungwuti John Wilson Kim Wommatakimmi Pedro Wonaeamirri
Tiwi Islands Fire Coordinator	Bruce Holland
TLC Manager for Land & Resources	Kate Hadden
Tiwi Plantations	Jodie Millsom, Alistair Emslie
Technical and operational support CSIRO Bushfires NT	Anna Richards, Adam Liedloff Mark Desailly

