



TIWI ISLANDS

FIRE MANAGEMENT PLAN

2014

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 has been meeting regularly over the past 6 months to develop a plan to reduce the area of the Tiwi Islands that is burnt in the late dry season. On the 20th May 2014, the Committee signed off on the Tiwi Islands Fire Management Plan for 2014. The four management strategies being used to reduce late season fires 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)

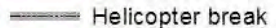
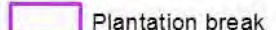
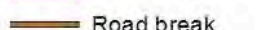
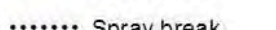
The Tiwi Islands have been split into 8 areas for the purpose of fire management; shown on the the following maps. Areas are not based on Landowning boundaries - they are split up according to the landscape and natural features. This way each area can be treated as a separate unit so that fires from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

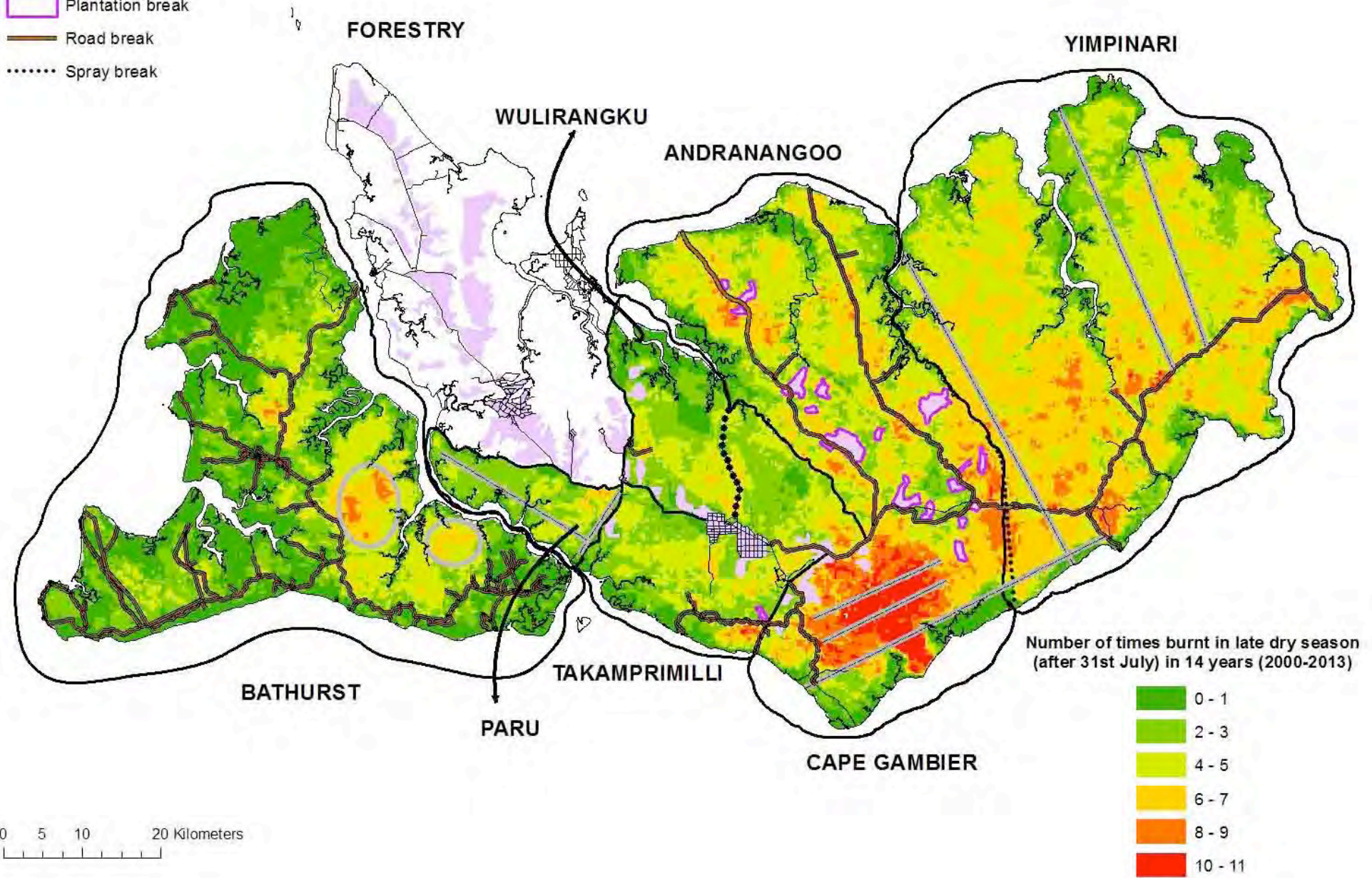
Each map shows the number of times areas have been burnt in the late dry season. Red areas have been burnt regularly in the late dry season, and are of particular focus for 2014 fire management. It is these areas that need to be burnt early to reduce greenhouse gas emissions, or protected from fire later 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) 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.

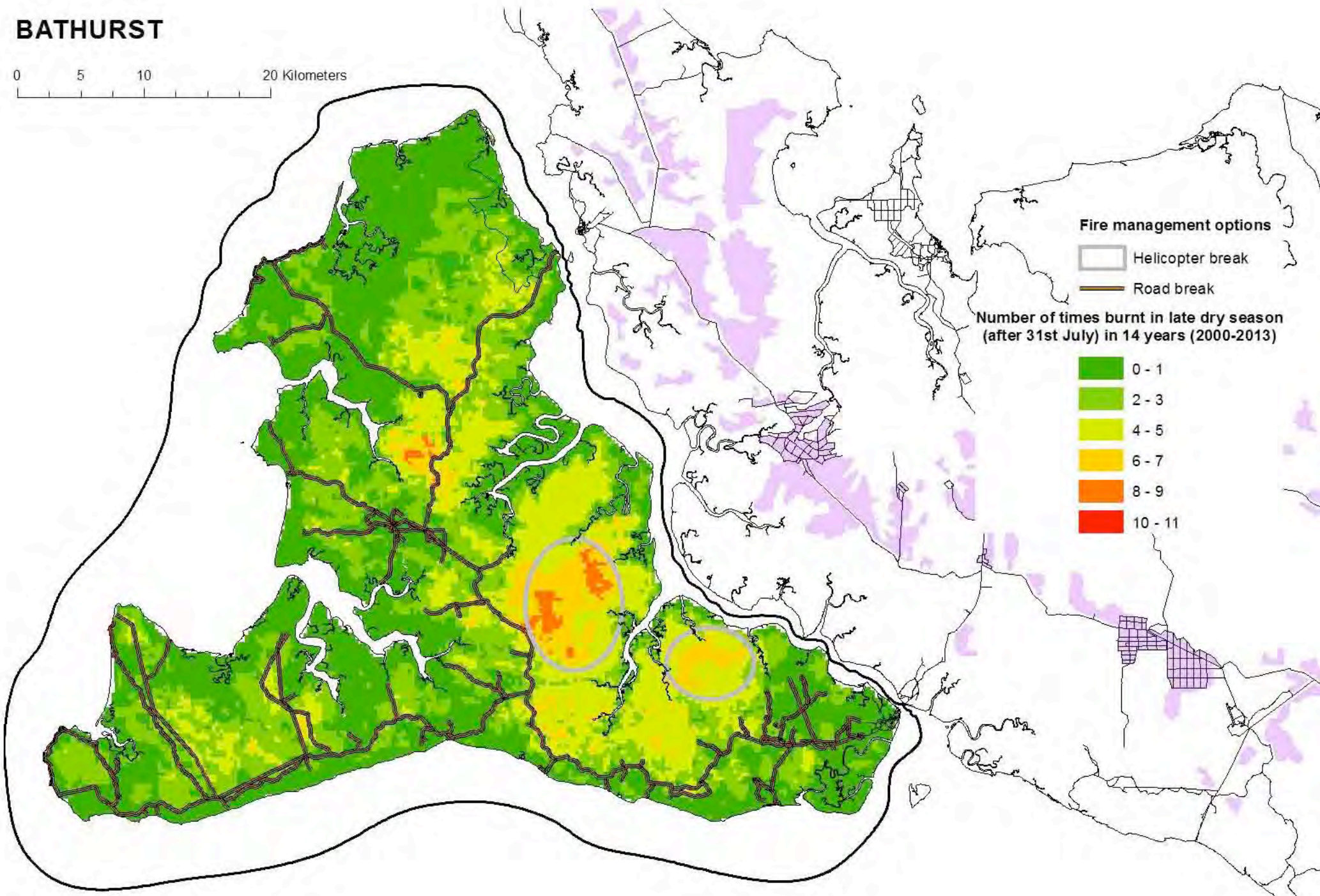
Fire management options

-  Helicopter break
-  Plantation break
-  Road break
-  Spray break



BATHURST

0 5 10 20 Kilometers



Fire management options

- Helicopter break
- Road break

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

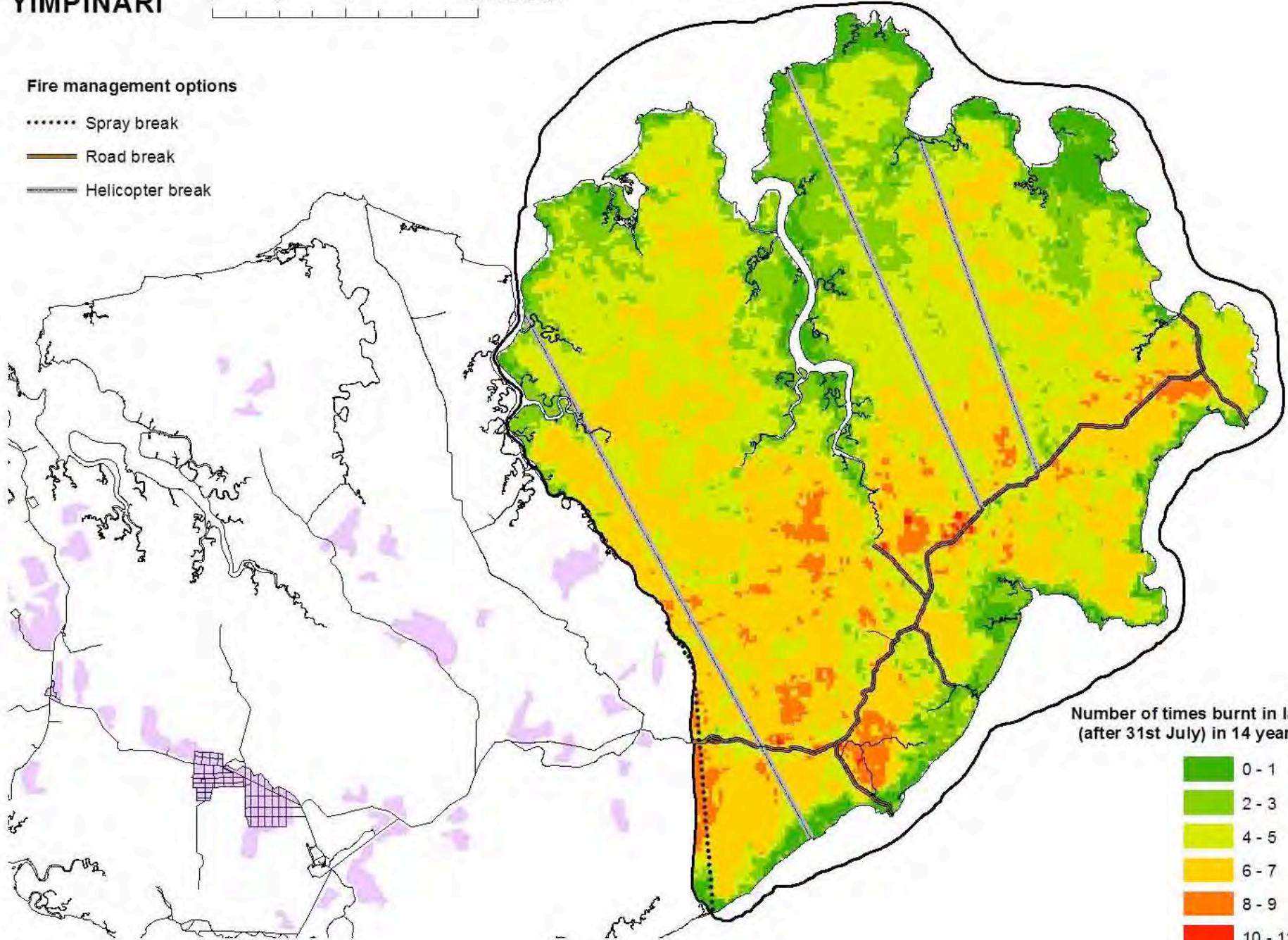
- 0 - 1
- 2 - 3
- 4 - 5
- 6 - 7
- 8 - 9
- 10 - 11

YIMPINARI

0 5 10 20 Kilometers

Fire management options

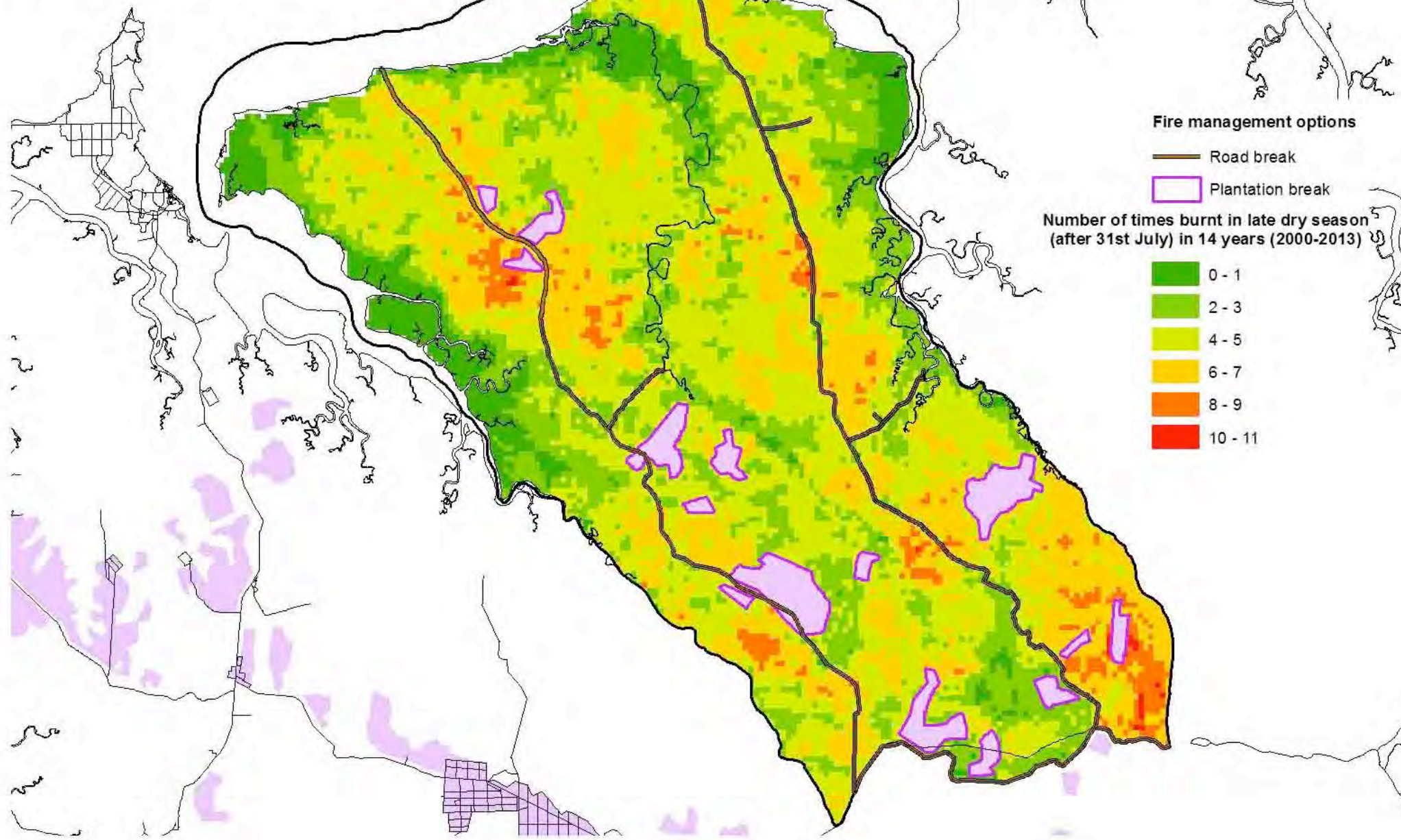
- Spray break
- Road break
- Helicopter break



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



ANDRANANGOO

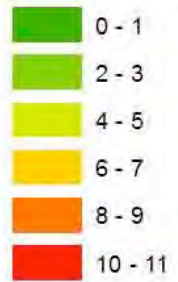


Fire management options

— Road break

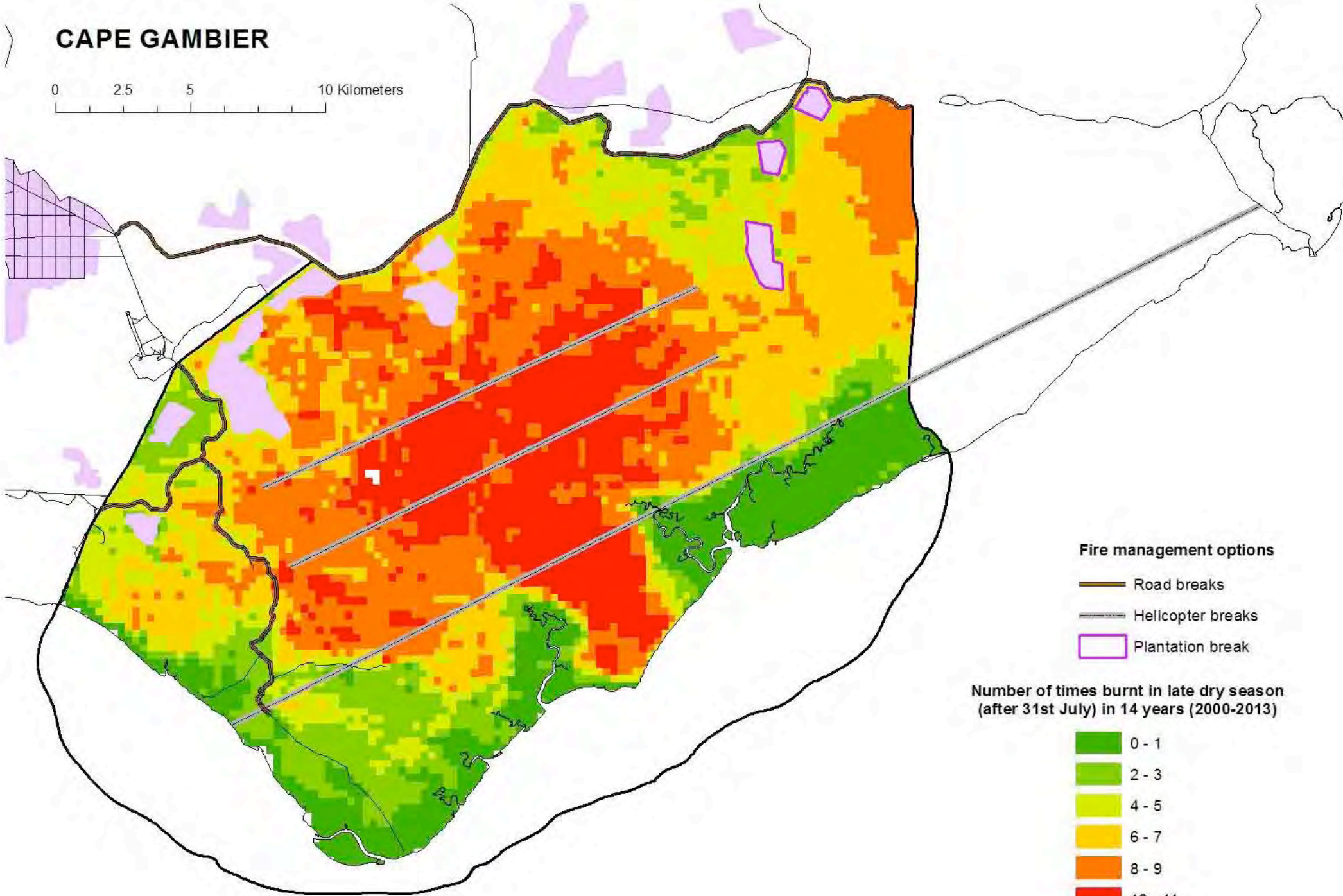
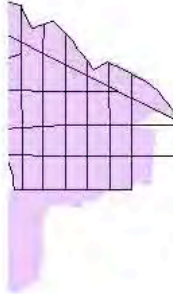
■ Plantation break

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



CAPE GAMBIER

0 2.5 5 10 Kilometers



Fire management options

- Road breaks
- Helicopter breaks
- Plantation 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

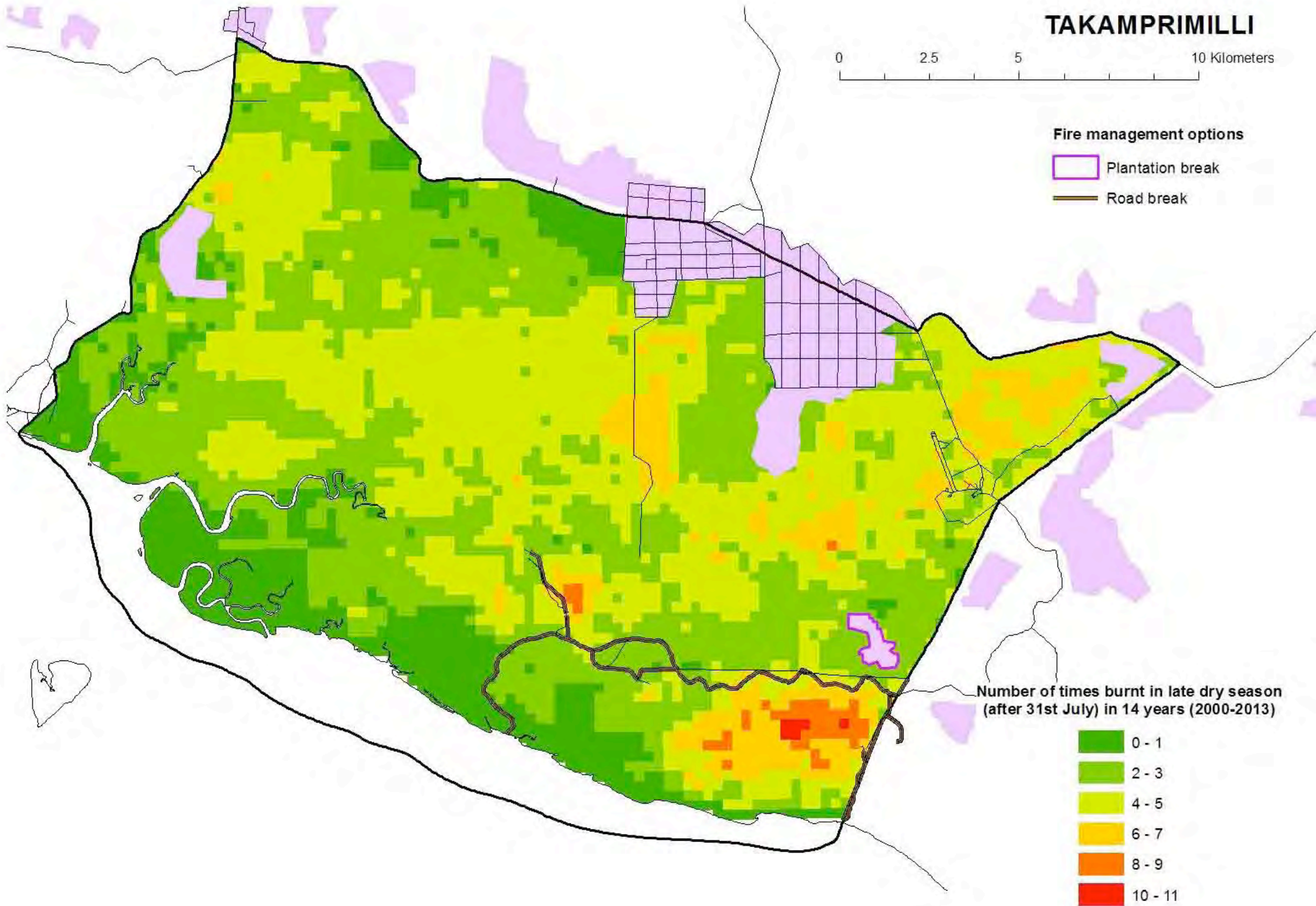
TAKAMPRIILLI

0 2.5 5 10 Kilometers

Fire management options

- Plantation break
- Road break

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



WULIRANGKU

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)

0 - 1

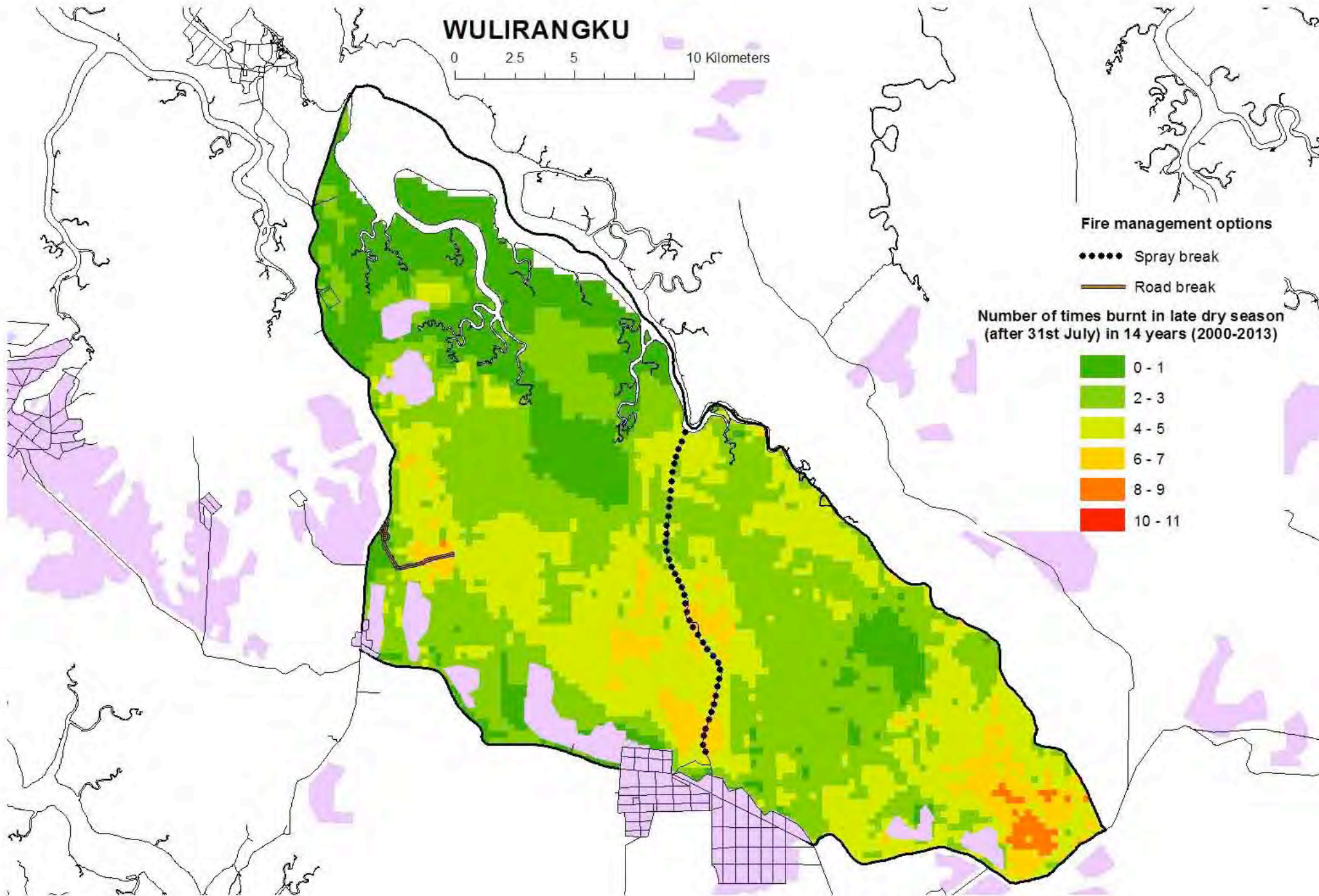
2 - 3

4 - 5

6 - 7

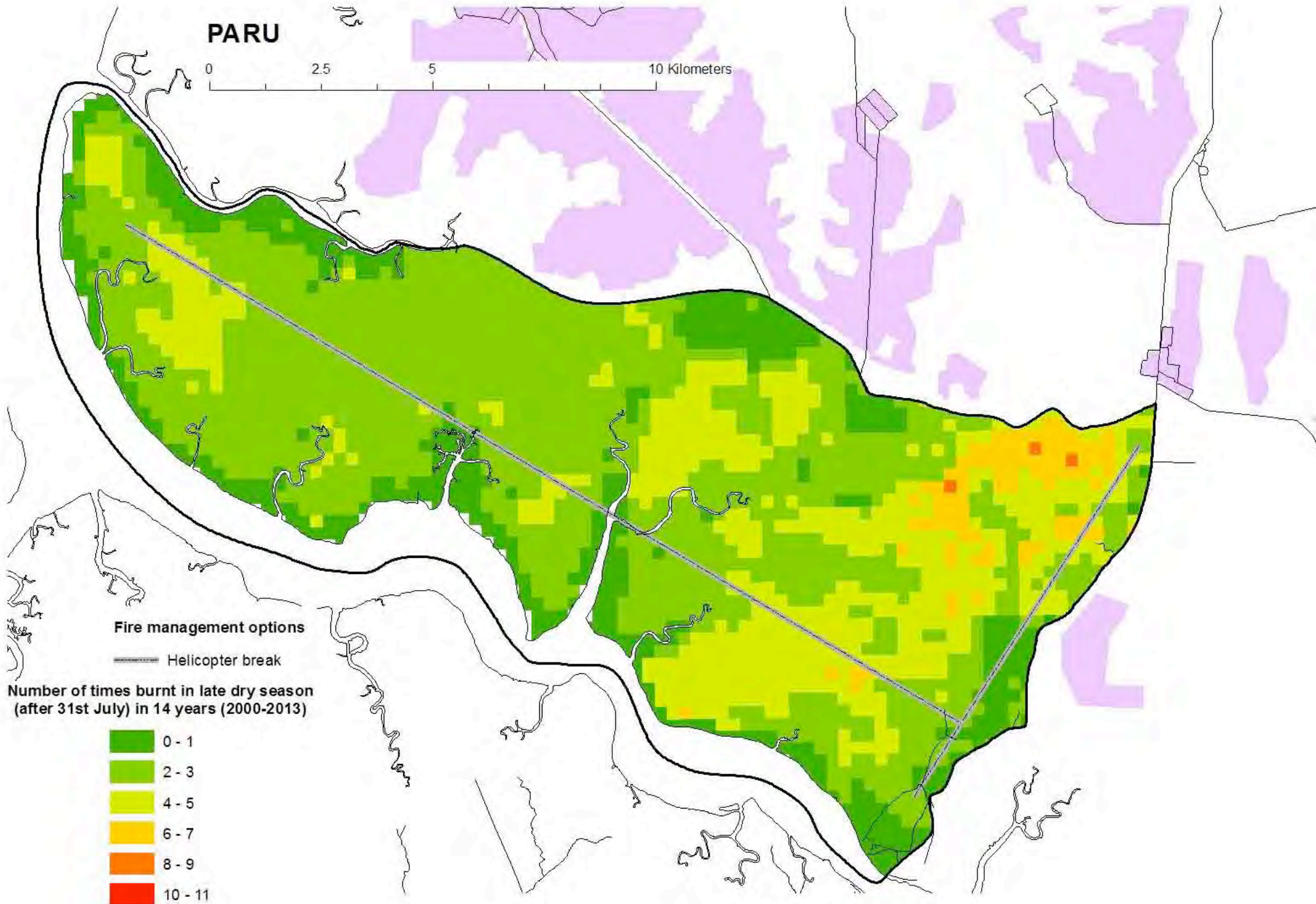
8 - 9

10 - 11



PARU

0 2.5 5 10 Kilometers



TIWI ISLANDS FIRE COMMITTEE

Chair	Willie Rioli
NT Bushfires Council representative and TLC Chairman	Gibson F Illortaminni
Members	Desmond Bruppacher Christopher Burak David Guy Colin Kerinauia Vivian Kerinauia Jack Long Vincent Mungatopi Jose Puruntatameri Willie Roberts Dennis Tipakalippa Connell Tipiloura Brian Tipungwuti John Wilson Kim Wommatakimmi Pedro Wonaeamirri
Tiwi Islands Fire Coordinator	Bruce Holland
TLC Environment Manager	Kate Hadden
CSIRO	Anna Richards

