

Control Strategies for EI

- EMAI
- 15th and 16th Dec 2008
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- Deputy Chief Veterinary Officer -
NSW

Reasons for successful control

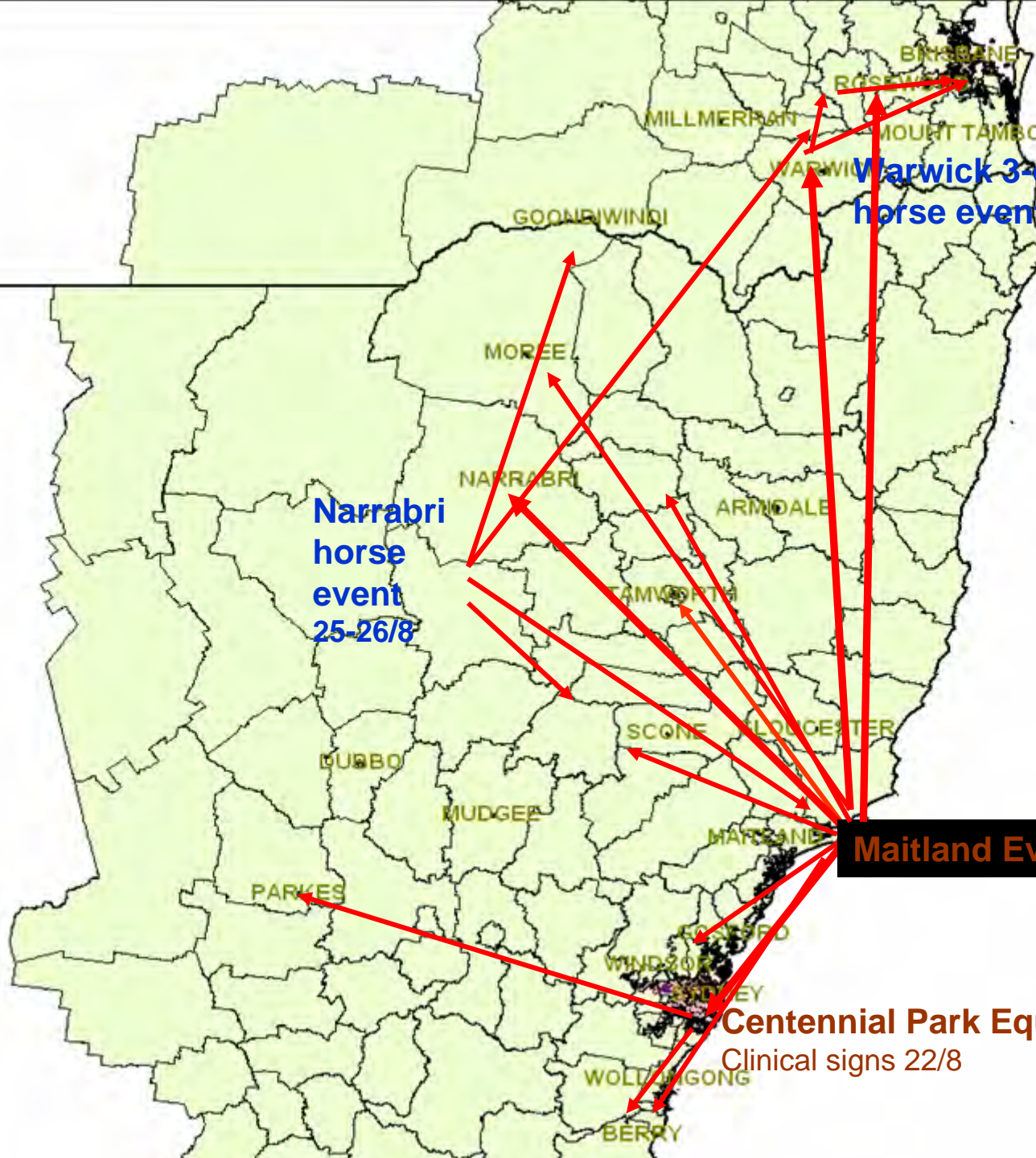
- Infection detected early – good use of Hotline
- AUSVETPLAN manual
- SDCHQ rapidly setup and ready to go prior to confirmation of lab results.
- Cost sharing agreements in place

Understanding EI.

- Highly contagious viral infection, short incubation period
- Affects horses, donkeys, mules and zebras
- Does not infect humans, but humans can mechanical spread the virus
- Recovered horses are fully immune and don't carry the virus

How does EI spread?

- Extremely easily spread, usually by direct contact between horses (over 200 new properties per day at peak).
- Aerosol potentially spread up to 3 km in right conditions
- Spread by fomites (things which just carry the virus)
 - Contaminated humans (hands or clothing)
 - Vehicles such as floats
 - Horse gear – bridles, halters etc



Warwick 3-day horse event 24-26/8

Equine Influenza Week 1 spread

Narrabri horse event 25-26/8

Maitland Event 18-19/8

Centennial Park Equestrian Centre
Clinical signs 22/8



MANAGER'S OFFICE

STOP

Exit

2007 / 9 / 11

Complex horse industries

- Complex demographics - over 60 separate horse organisations in NSW alone, estimated 400,000 horses, probably over 100,000 owners, many thousands of jobs and associated small businesses
- Thoroughbred and standard bred racing and breeding – generate massive revenue, but only 20% of total horse population
- Other horses (80%) e.g. Arabs, Stockhorses, Miniatures
- Equestrian competition sector – Olympics, showing, endurance, rodeo, polo, polocrosse etc.
- The social fabric - country shows, pony clubs, Riding for the Disabled, traditional farm work stock horses, camp drafters, drovers etc.
- Needs to be understood to allow successful disease control

Strategy – control and eradication

- Stop horse movements as soon as possible both state and nationally – no permitted movements until disease spread fully appreciated.
- Quarantine infected properties or areas
- Create zones to limit disease spread and facilitate ‘low risk’ movement and resumption of usual industry activity
- Create buffers using geographic features, low horse numbers and vaccination
- Vaccination of horses in high risk areas to reduce production of virus and hence reduce risk of spread by fomites



Strategy – control and eradication (2)

- Fill in vaccination
 - in areas where high levels of disease occurring
i.e. Purple and red zones
- Surveillance to detect, control and eradicate.

Vaccination

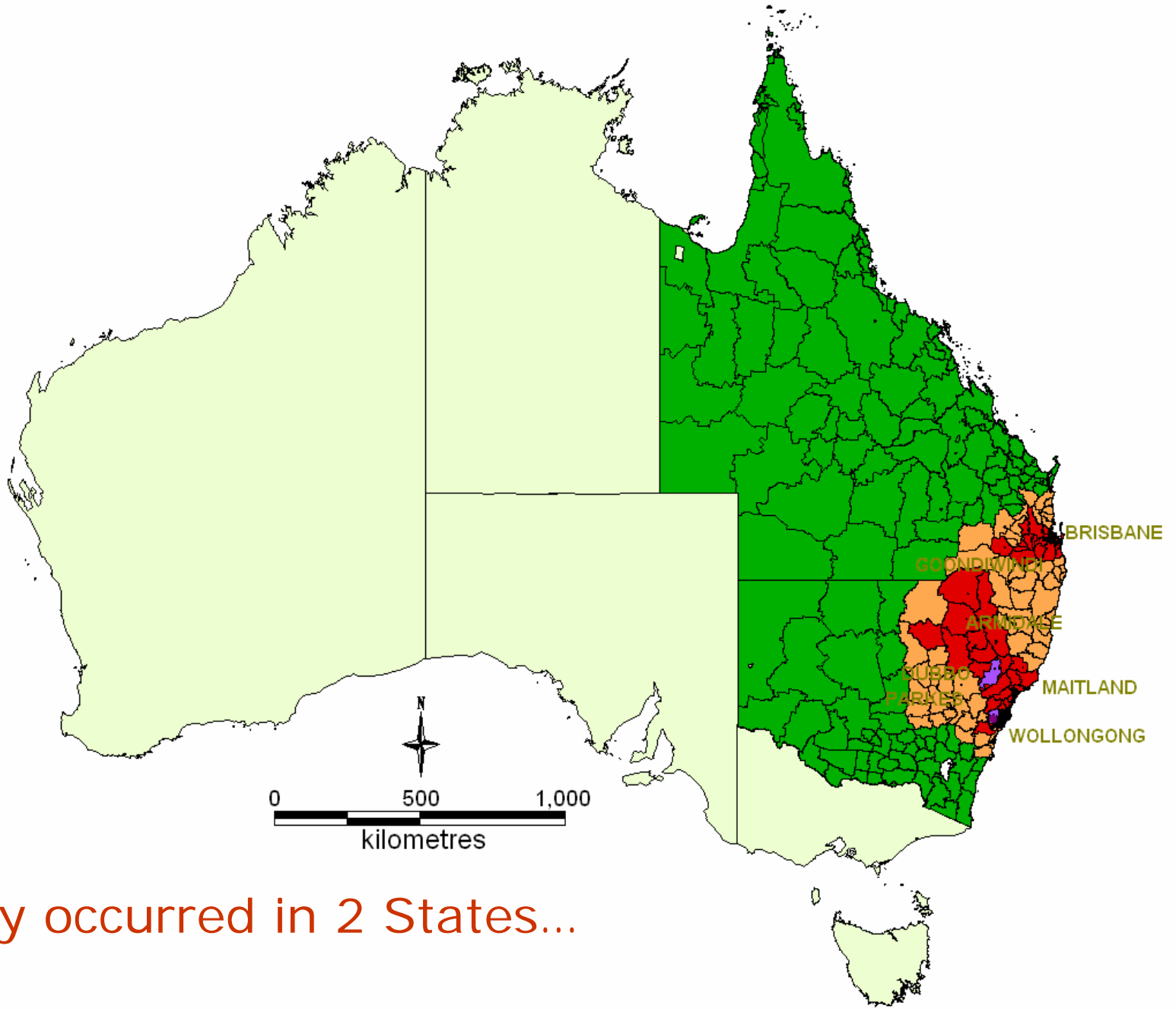
- **New live canary pox vaccine** – much more effective than old killed vaccines, but GM, therefore deployment delayed and special use controls imposed
- Vaccine was used strategically to limit disease spread

Able to differentiate between vaccinated and natural infection

Doses used:

- 58 000 in buffers
- 42 000 in purple zone
- also industry use

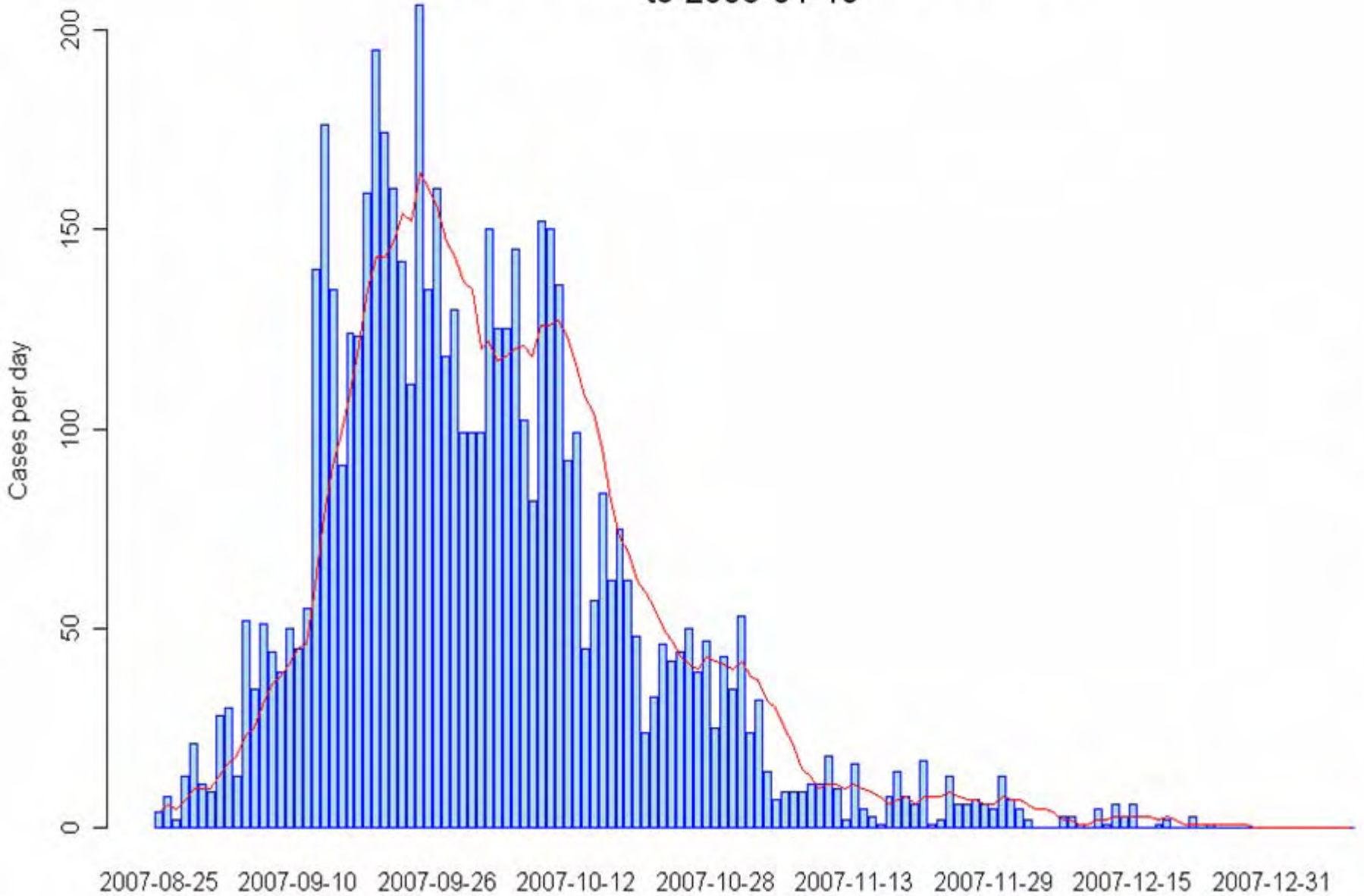




EI only occurred in 2 States...

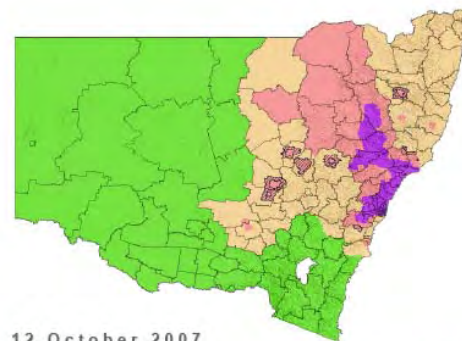
Epidemic curve for NSW

to 2008-01-10

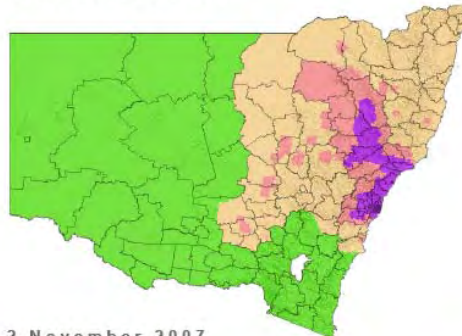




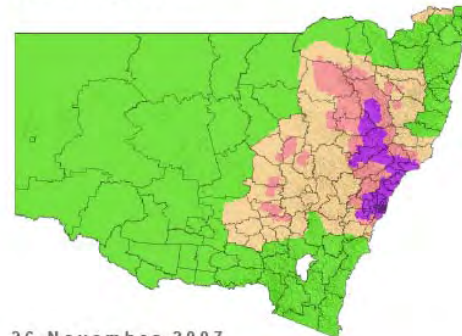
23 September 2007



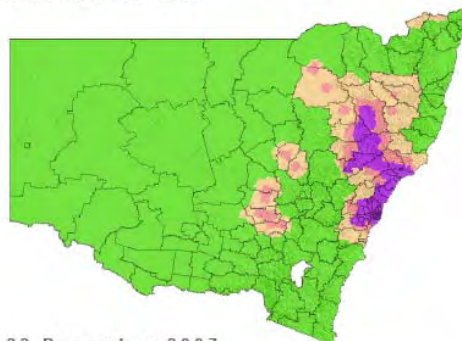
12 October 2007



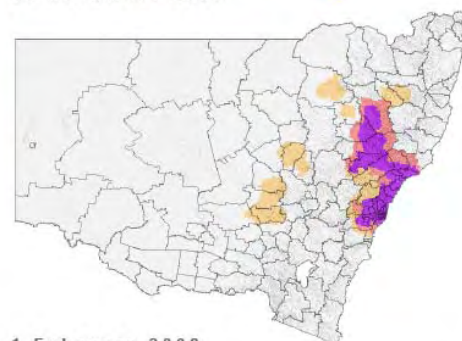
2 November 2007



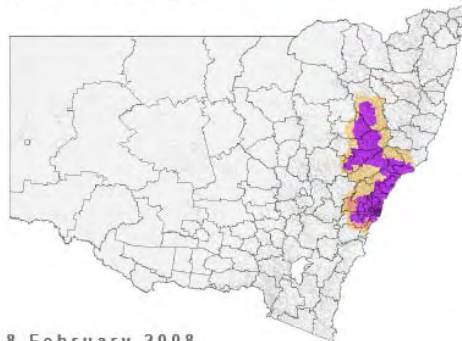
26 November 2007



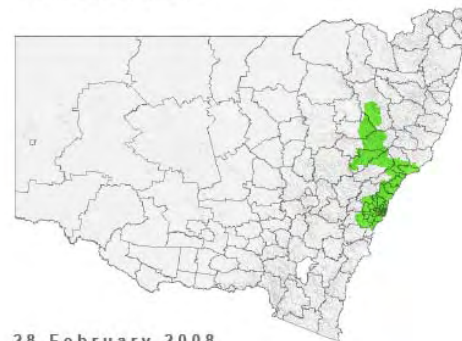
22 December 2007



1 February 2008



8 February 2008



28 February 2008

Communication challenges

- Vital to communicate the changing control strategies
- >250 media releases plus radio & TV
- 57 community meetings
- 60,500 hotline calls
- 150 web pages
- >500,000 website hits



Economic loss mitigation outcomes – key for maintaining support.

- Tailored movement and zoning restrictions.
- declaration of the **Special Restricted Area Purple** (all quarantines revoked and no prohibitions on internal movement or events)
- **racing** resumed in Amber Zone in November, and Purple Zone in December.
- **breeding** in purple zone