

# **Ecological Australia Biodiversity, Riparian Corridors and Bushfire Initial Findings**

Presented to Ingleside Community Reference Group on  
11 December 2013





# Ingleside – Biodiversity, Riparian, Bushfire

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# Project Status



- Commenced mid-October
- Desktop study and gap analysis, including information from Council
- Organised site access
- Fieldwork commenced early December



# Disciplines



- Biodiversity
  - Biodiversity Certification methodology
- Riparian
  - Follow Office of Water protocols
- Bushfire
  - Follow Planning for Bushfire Protection protocols





# What is Biodiversity Certification ?



- Biodiversity (Biocertification) Certification
- Enabling legislation (New Part 7AA of TSC Act)
- Voluntary Scheme designed for 'Planning Authorities' to undertake strategic assessments for large proposals with multiple land holdings early in the planning process
- Minister may confer 'biodiversity certification' on land if satisfied that biodiversity certification will improve or maintain biodiversity values



# What are the benefits of biocertification?



- Identifying and protecting high biodiversity values early in the planning process delivers better environmental outcomes at lower cost.
- Where biocertification is conferred on land, it 'switches off' the requirement to address biodiversity issues at the DA stage for the certification period – i.e. indefinitely or as specified
- Reduces referrals to regulatory agencies – saves time and cost



# How does Biocertification work?



- OEH Methodology
- Assess 'ecosystem' gain / loss based on:
  - Landscape assessment
  - Vegetation type, condition and predicted threatened fauna species
  - Plot data compared against benchmarks
- Assess 'species' gain / loss based on
  - Plants - Number of individuals
  - Animals – Area of habitat



# Vegetation

- Mapping History
  - 2008 Eco Logical Australia – limited access
  - 2011 Pittwater Council
  - 2013 (Oct) – Sydney Metro CMA
- Must follow 'biometric' vegetation types
- Using 2013 Sydney Metro CMA for base mapping
  - Will ground-truth vegetation
  - Gather plot / transect data





## Legend

Site Boundary

Potential EECs

## Vegetation Community

1 Coastal Enriched Sandstone Moist Forest

2 Coastal Enriched Sandstone Sheltered Forest

3 Coastal Sandstone Gallery Rainforest

4 Coastal Sandstone Heath-Mallee

5 Coastal Sandstone Plateau Rock Plate Heath

6 Coastal Sandstone Riparian Forest

7 Coastal Sandstone Sheltered Peppermint-Apple Forest

8 Coastal Upland Damp Heath Swamp

9 Coastal Upland Wet Heath Swamp

10 Coastal Warm Temperate Rainforest

11 Hornsby Sandstone Exposed Bloodwood Woodland

12 Lower Hawkesbury Escarpment Moist Forest

13 Pittwater Spotted Gum Forest

14 Sydney Ironstone Bloodwood-Silvertop Ash Forest

15 Potential Remnant (high disturbance)

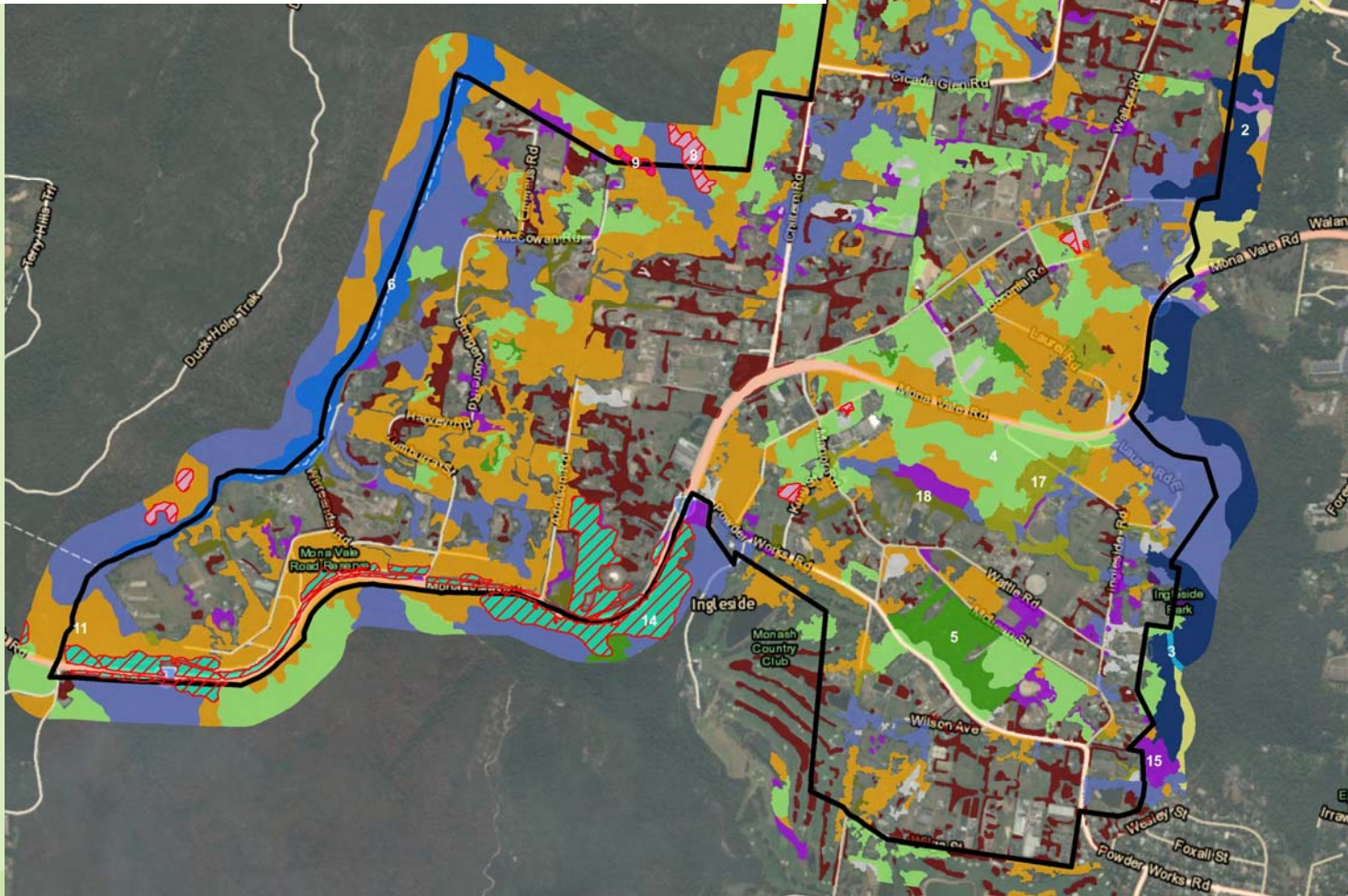
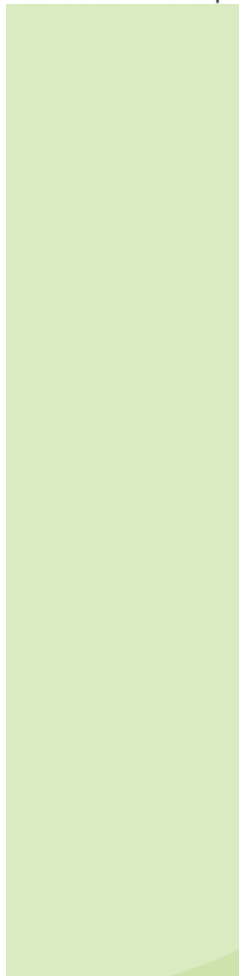
16 Potential Remnant (low disturbance)

17 Unknown

18 Exotic

19 Exotic / Native Plantings

20 Cleared





# Threatened Species

- Range of species including:
  - *Microtis angusii* (Angus Onion Orchid)
  - *Tetratheca glandulosa*
  - *Grevillea caleyi*
  - Eastern Pygmy Possum (*Cercartetus nanus*)
- Will survey for species or map habitat










## Legend

Site Boundary

### NSW Wildlife Atlas Threatened Flora

-  *Epacris purpurascens* var. *purpurascens*
-  *Eucalyptus nicholii*
-  *Pimelea curviflora* var. *curviflora*
-  *Syzygium paniculatum*
-  *Tetratheca glandulosa*

### NSW Wildlife Atlas Sensitive Threatened Flora (Not Displayed)

*Callistemon linearifolius*  
*Grevillea caleyi*  
*Microtis angusii*

### NSW Wildlife Atlas Threatened Fauna


-  Eastern Bentwing-bat
-  Eastern Pygmy-possum
-  Giant Burrowing Frog
-  Greater Broad-nosed Bat
-  Grey-headed Flying-fox
-  Koala
-  Koala in the Pittwater LGA
-  Little Bentwing-bat

 Little Eagle

 Little Lorikeet

 Red-crowned Toadlet

 Rosenberg's Goanna

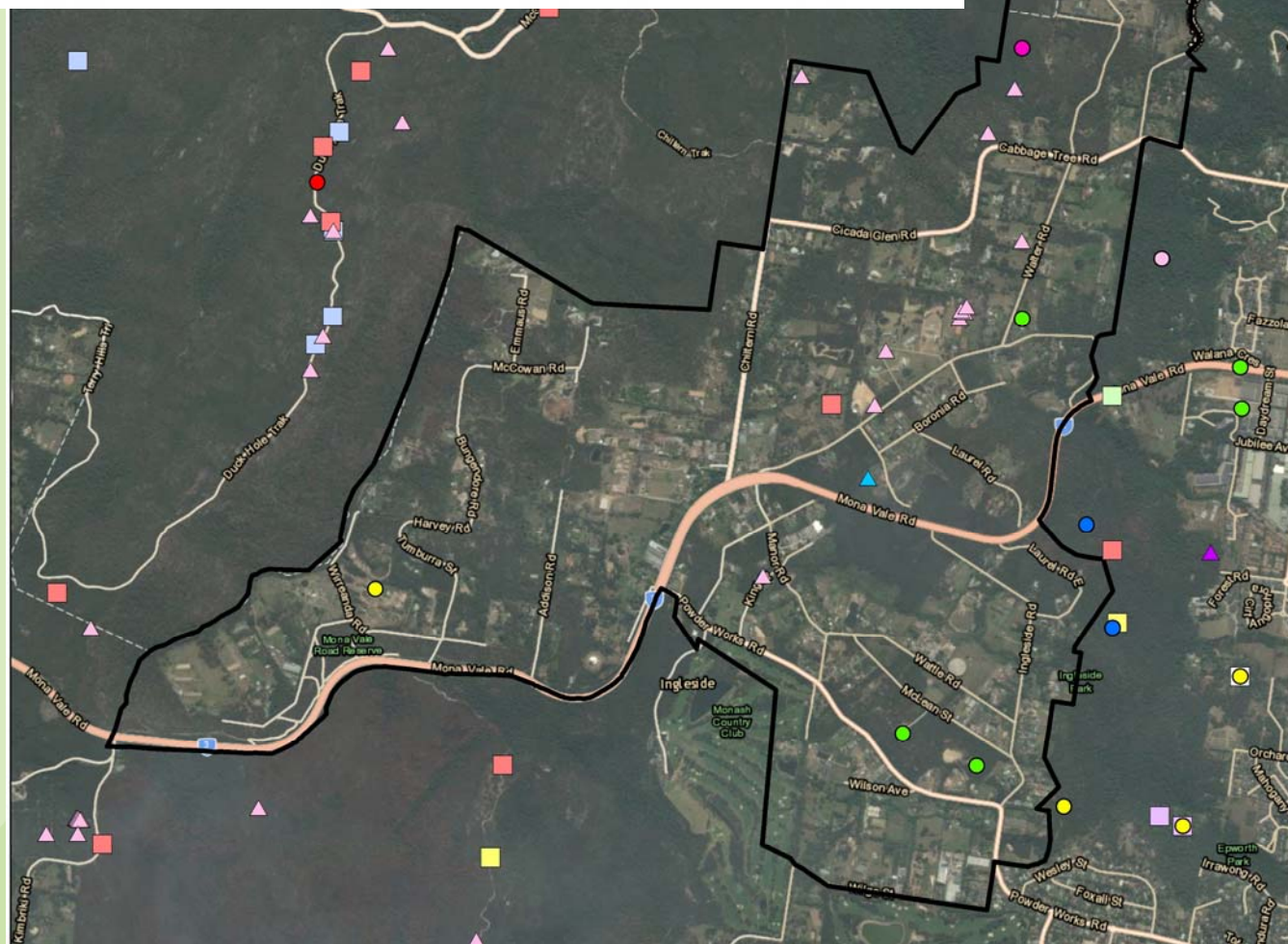
 Southern Brown Bandicoot (eastern)

 Southern Myotis

 Spotted-tailed Quoll

### NSW Wildlife Atlas Sensitive Threatened Fauna (Not Displayed)

Barking Owl  
 Eastern Osprey  
 Glossy Black-Cockatoo  
 Powerful Owl  
 Swift Parrot



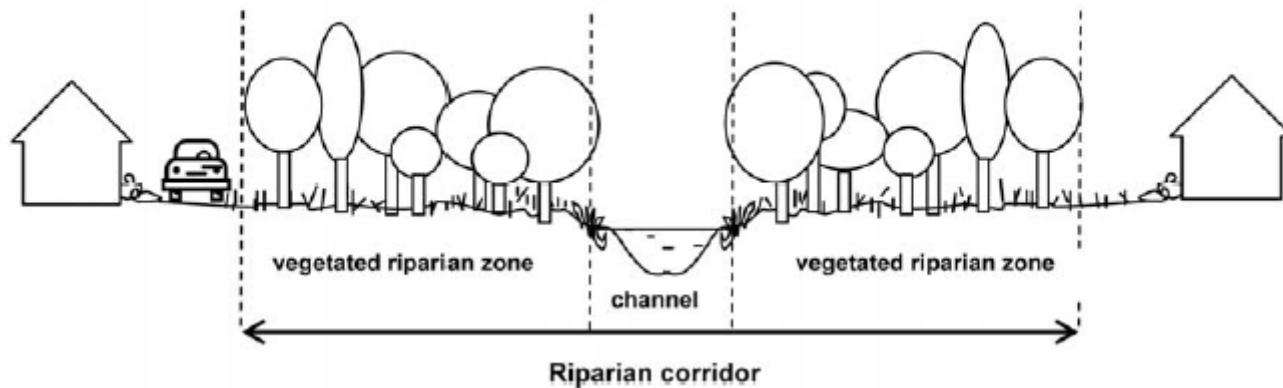


# Riparian

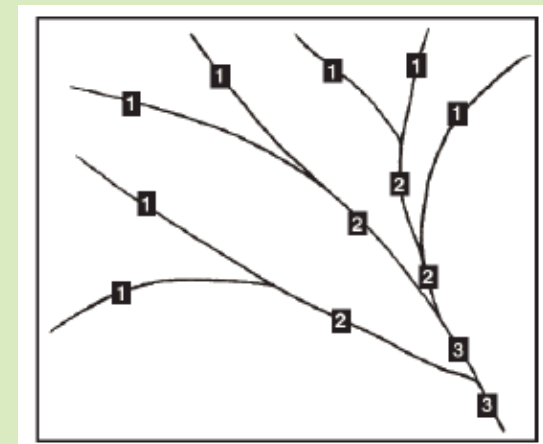


- Riparian corridor – bed, banks, and adjoining land

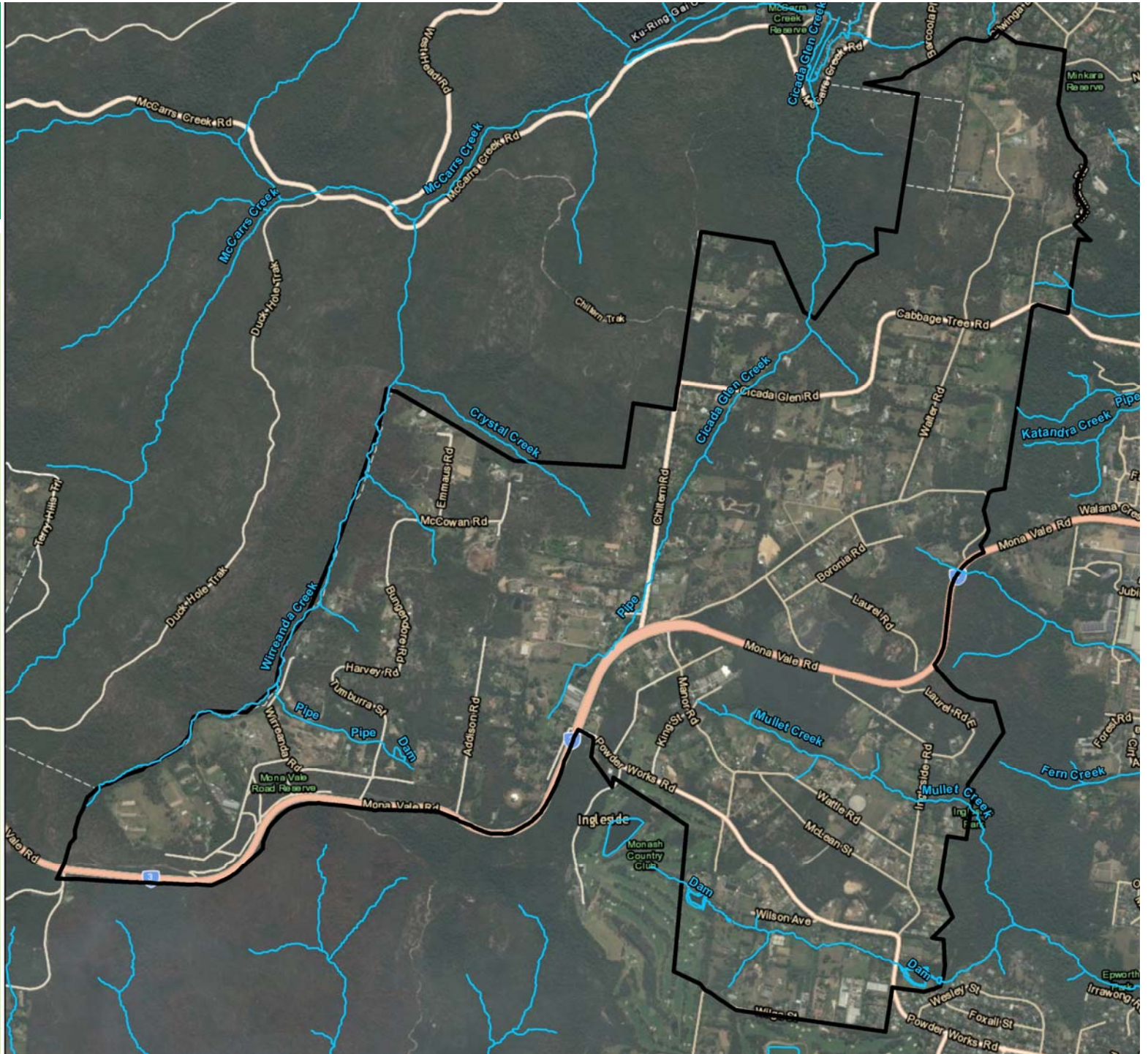
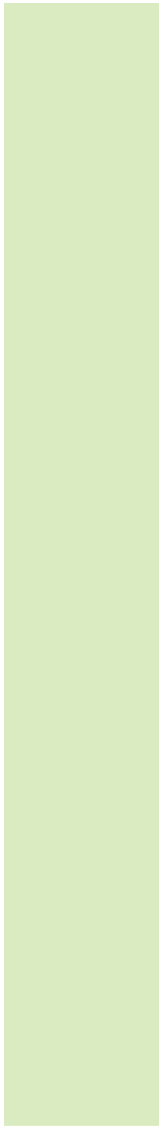
Figure 1. The riparian corridor



- Width:
  - 1<sup>st</sup> order = 20m + channel width
  - 2<sup>nd</sup> order = 40m + channel width
  - 3<sup>rd</sup> order = 60m + channel width









# Bushfire

- Approx 75% of site currently mapped as 'bushfire prone lands'
- Hazard constraint based on vegetation and slope
- When ILP available will assess:
  - Asset protection zones (APZs) required
  - Construction standards
  - Access / egress







# Next Steps

- Continue field work / analysis
- Work with PWG and stakeholders to resolve issues





# Questions?

