Demonstration reaches: Queensland

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Painting by
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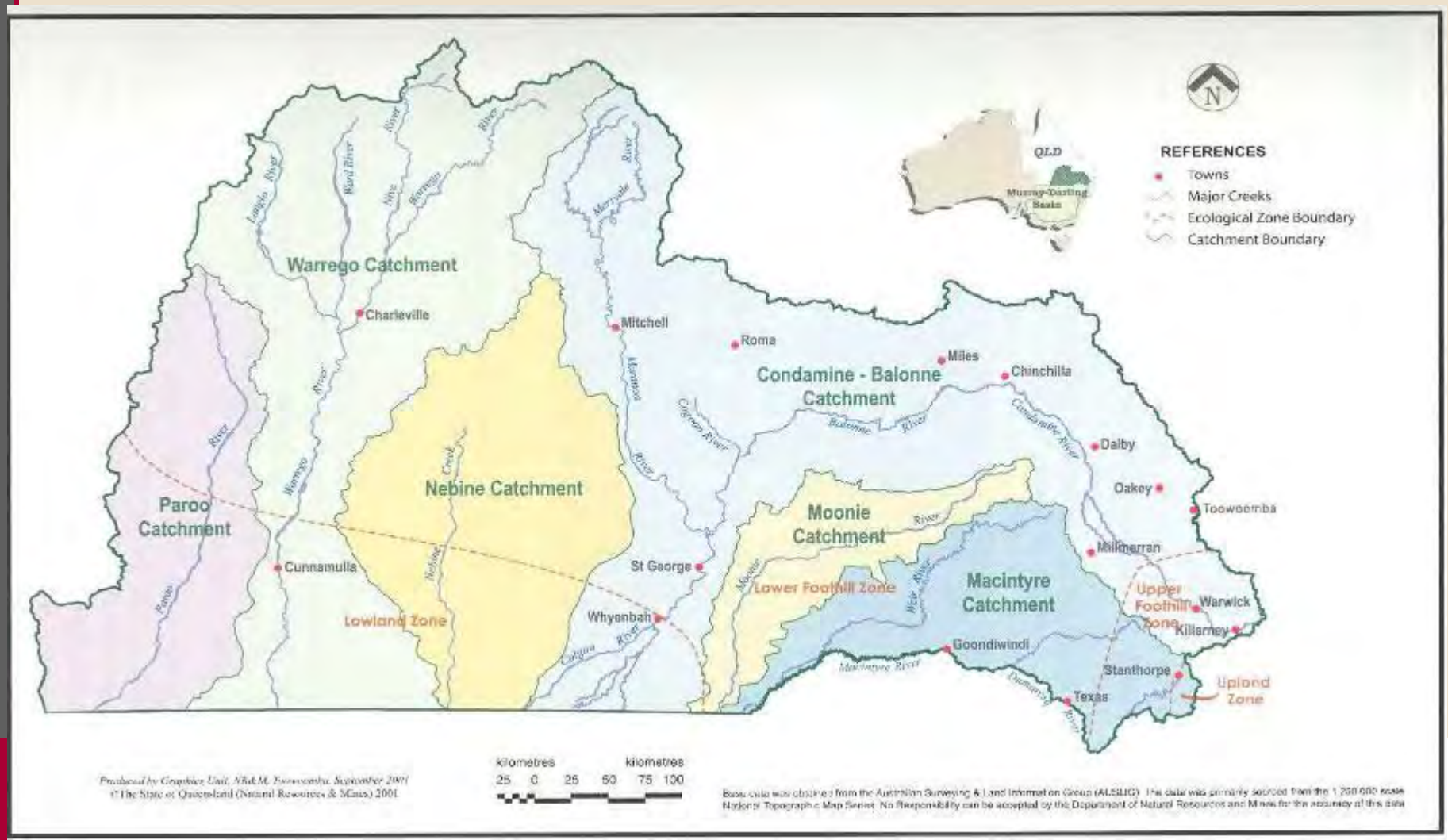
Queensland Murray Darling Basin

Three Natural Resource Management (NRM) Bodies



Qld Demonstration Reaches

1. Condamine River (Condamine Alliance)
   - From Source to Chinchilla

2. Macintyre River (QMDC, Qld and BRG CMA, NSW)
   - From to Glenlyon Dam to Torwood

3. Planned - Warrego River (SW NRM)
   - From Charleville to Wyandra

Condamine Alliance River Rescue

Mission:

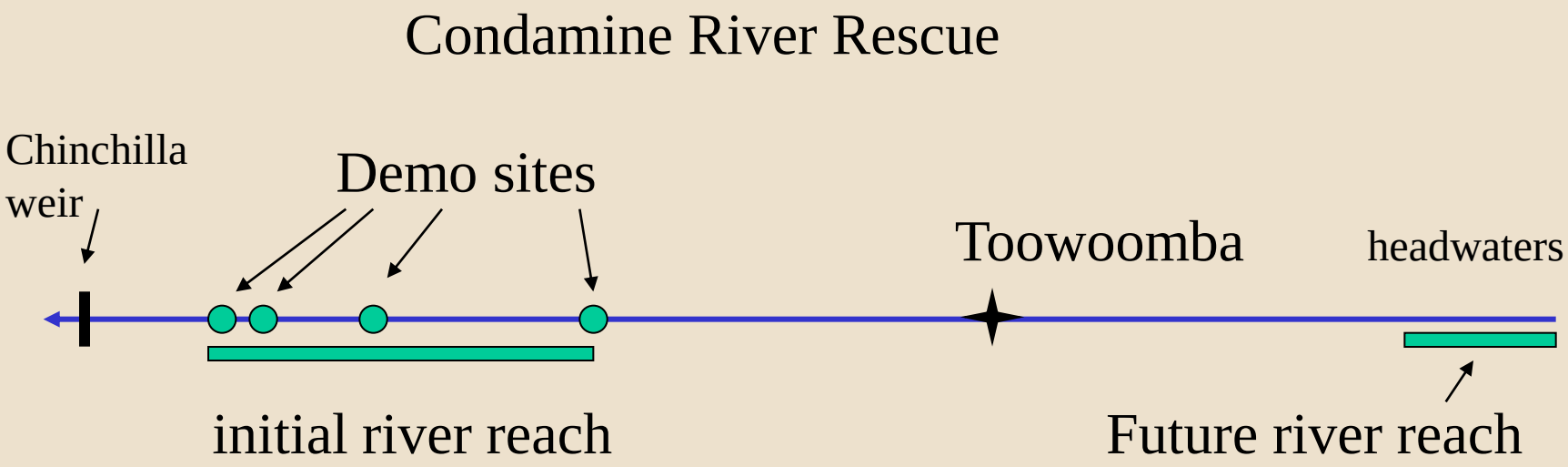
1. Restore riparian vegetation on each bank for 400km of the Condamine River

2. Restore in-river native fish habitat.

3. Promote & implement Best Management Practice by landowners.

Condamine River Rescue

- 4 Demonstration sites established
- 1 priority reach in the planning phase



Three Riverine Demonstration Sites

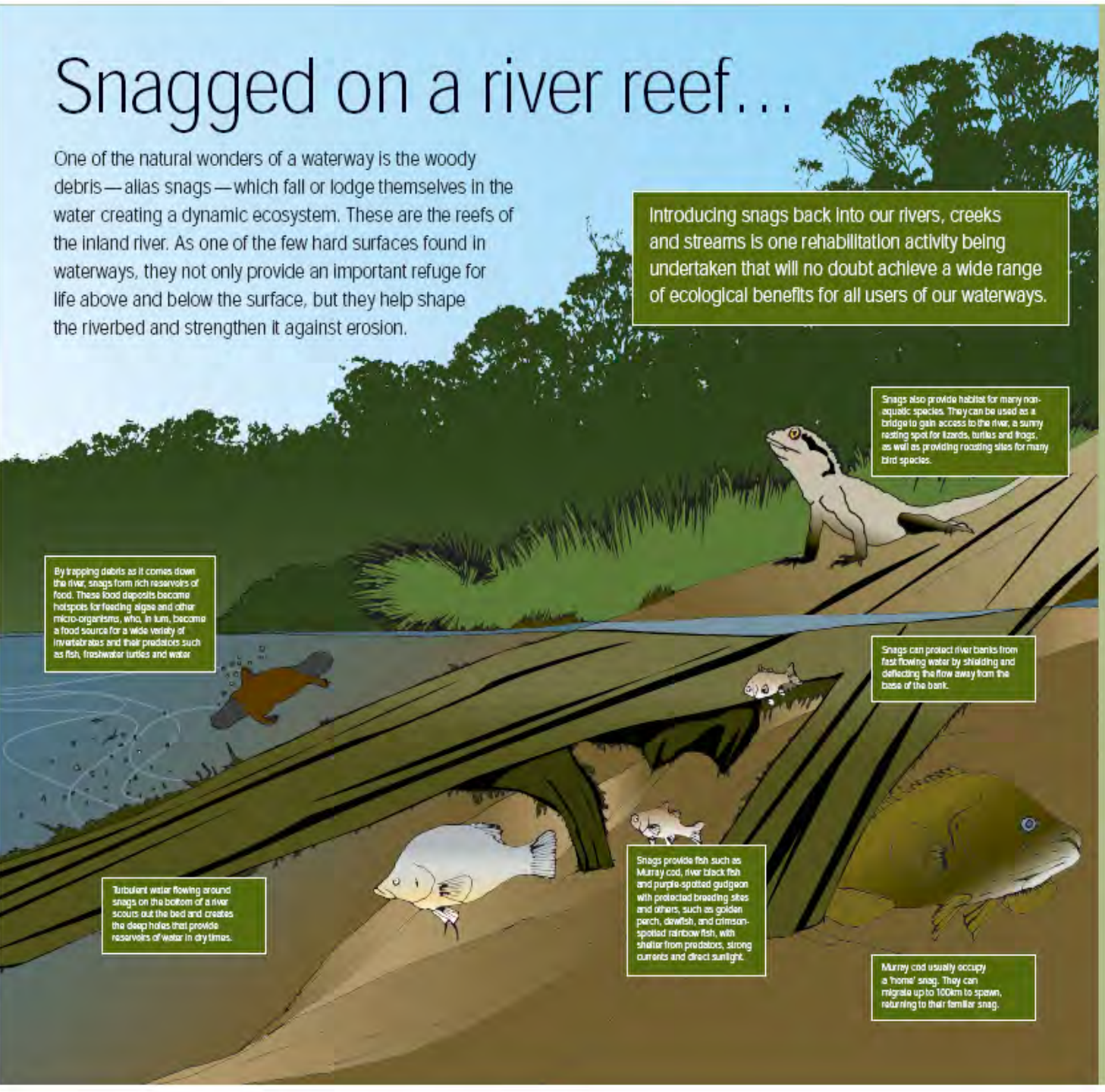
1) Archer's Crossing
2) Bowenville Reserve
3) Passmore Reserve

- Demonstration sites developed to raise awareness and build community capacity
  - re-vegetation
  - re-snagging
  - interpretive signage projects

Snagged on a river reef...

One of the natural wonders of a waterway is the woody debris—alias snags—which fall or lodge themselves in the water creating a dynamic ecosystem. These are the reefs of the inland river. As one of the few hard surfaces found in waterways, they not only provide an important refuge for life above and below the surface, but they help shape the riverbed and strengthen it against erosion.

Introducing snags back into our rivers, creeks and streams is one rehabilitation activity being undertaken that will no doubt achieve a wide range of ecological benefits for all users of our waterways.



The misunderstood snag...

In the past, snags were removed as they were thought to:

- Reduce the rivers capacity to deliver water;
- increase the severity of flooding;
- cause excessive riverbank erosion; and
- be unsightly.

The truth about snags...

But with further knowledge we now know that these perceptions were incorrect and snags in fact:

- Do not significantly decrease the channel capacity;
- do not influence the size and duration of floods;
- are a natural part of erosion and deposition processes, and although the odd snag might be seen to cause unwanted erosion, most actually assist in reinforcing the bed and banks of the river; and
- play a vital role in ecological processes, including the web of life.

Fish passage Demonstration site

- Loudon weir fishway
  - Priority fish barrier in Queensland

Fish passage Demonstration site

- Loudon weir fishway
  - Modifications to fishway are designed
  - Recommended interventions underway
  - DAFF (Rec fishing) funds to continue modifications

River Rescue
Future Fish passage site?

- Chinchilla Weir

9.1m high

Condamine River Rescue Status

- Seeking funds to expand on ground works around and between demonstration reach sites

- Appointing project officer

Queensland Murray Darling Committee Inc

- QMDC embraced the concept in 2005
  - Community Consultative Group
  - Core technical team

- Qld and NSW commitment

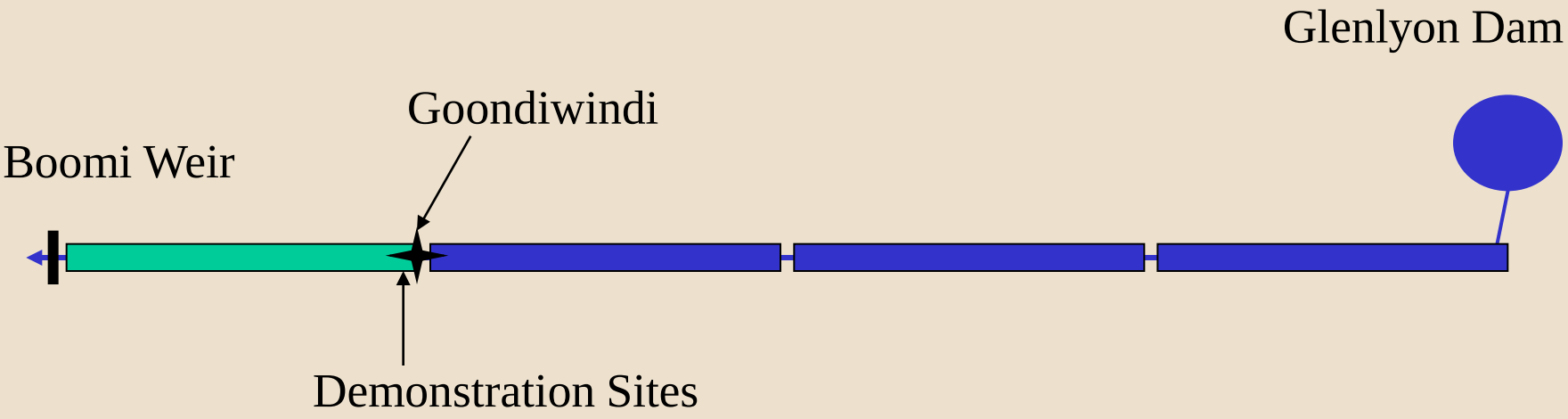
Macintyre Demonstration Reach Baseline data acquired

- Ecological Characterisation of fish fauna in the Macintyre River
- Potential Barriers to Fish Movement
- Aerial Video Mapping and associated data

Macintyre Demonstration Reach

- Community and scientific consultation selected 400km of Macintyre R around Goondiwindi

- Expert Technical Workshop (May 2007)



- Example of AVM

Baseline data in progress

- Mapping instream habitats (logs, pools etc) and riparian zones
- Desktop study of the rivers fluvial behaviour
- Identify control reach

Initial interventions planned:

- Strategic rehabilitation of degraded river sections in priority reach
  - Fencing and off-stream watering points
  - re-snagging
  - bank erosion control
  - aquatic plant establishment
- Improving fish passage
- Pest fish management

Community engagement

- Demonstration sites near Goondiwindi
  - High profile
  - Interpretative signage
  - Community education, not fish needs driven
- Better grazing land management practices across the floodplain in QLD and NSW
- Managing/promoting riparian zone workshops

Fish passage demonstration Site

- **Reilly's weir, Condamine River**
  - 1.5m high
  - Rock ramp fishway construction

    Oct 2007
  - Funds from QMDC and DAFF

South West NRM

- One demo reach planned
- SWNRM and community keen to be involved
- Possible reach identified as north of Charleville to Wyandra (~120KM)
- River rehab/demo reach workshop planned for Oct 2007

Impediments to Demonstration reach progress in Qld

- Baseline data (fish communities & geomorphology)
- Landholder focus mixed – economics/drought proofing
- Turn over of staff in regional NRM bodies
- FUNDING for Queensland's inland catchments

Thank You