

Upper Murrumbidgee Demonstration Reach

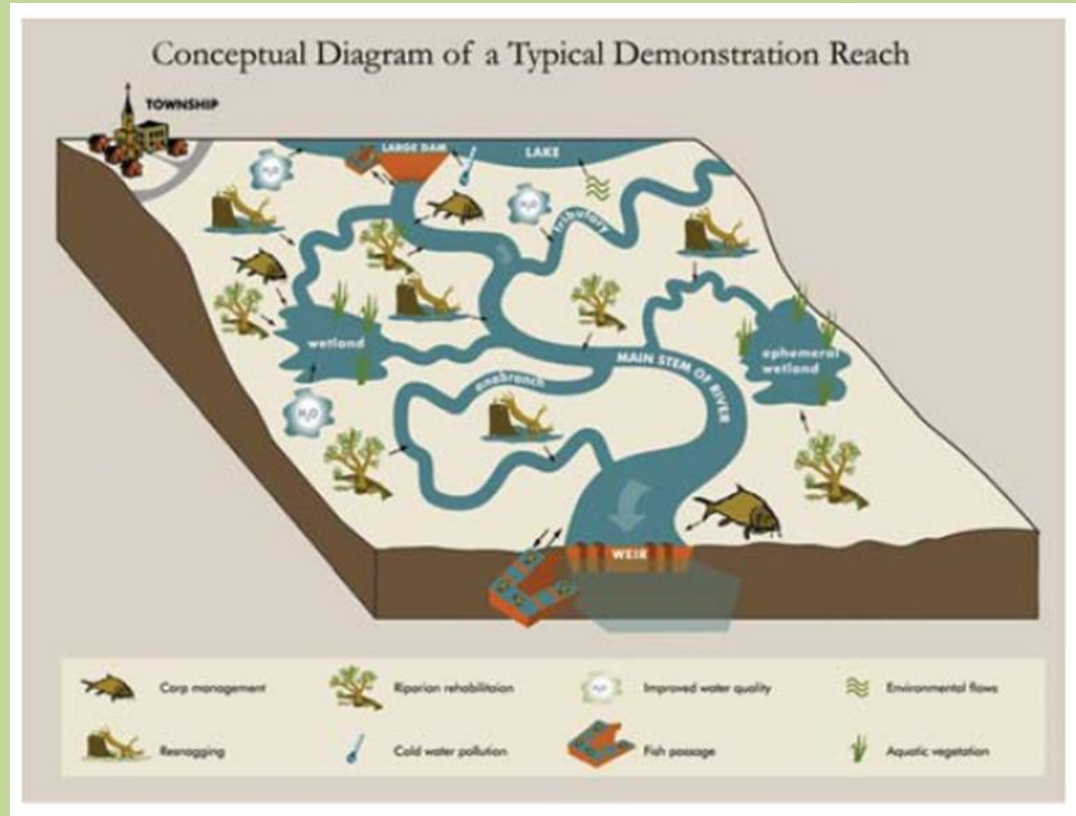


This initiative is proudly supported by:



What is the Upper Bidgee Reach?

- Established in 2009 as part of the then Native Fish Strategy
- Involves all catchment stakeholders
- Aims to implement multiple interventions to assist recovery of river health
- Supported by scientific planning and monitoring to evaluate change



Above: diagram showing different types of pressures across a catchment which can affect river health. The demo reach aims to reduce these pressures in an integrated and strategic way

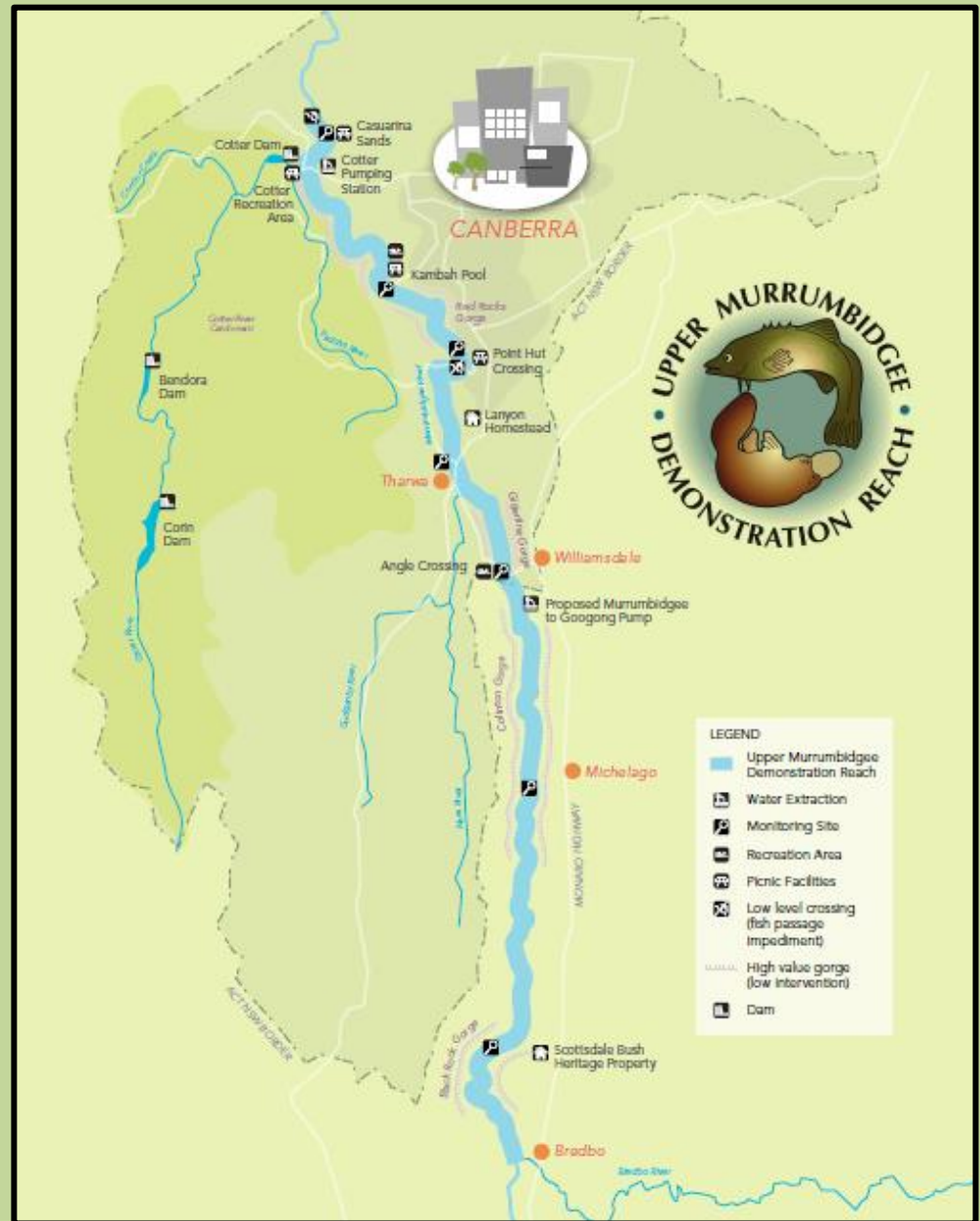
Objective

A healthier, more resilient and sustainable river reach and corridor that is appreciated and enjoyed by all communities of the national capital region.

The Reach is.....

- 100km long, from Bredbo (NSW) to Casuarina Sands (ACT)
- A collaborative partnership between all catchment stakeholders

*For more info see-
www.upperbidgeereach.org.au*



UMDR Partners

- Bush Heritage Australia
- ACT Government
- UM Waterwatch
- Murray Darling Basin Authority
- NSW DPI
- ACTEW Water
- Uni of Canberra
- SE Local Land Services (formerly MCMA)
- ANU
- ARRC
- Capital Region Fishing Alliance
- SACT CG
- Local fishing groups
- UMCCC
- K2C
- Landholders
- Community

UMDR partners with the Hon Katrina Hodgkinson, NSW Minister for Primary Industries, launching the UMDR CWC project, Jan 2014



The upper Murrumbidgee River

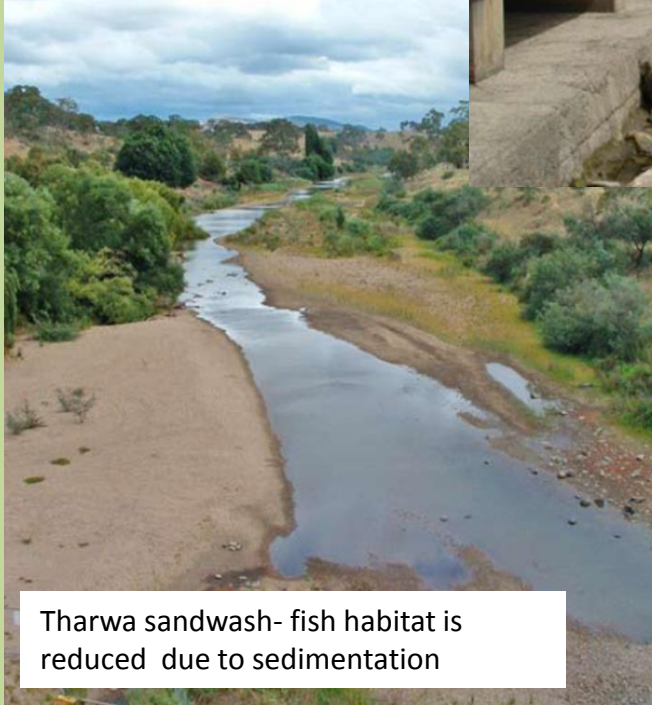
- Health has declined but ecosystem is likely to respond to interventions
- Small but resilient native fish populations
- Has a significant catchment community
- Threatened, migratory and iconic species incl. three nationally listed threatened native fish species
- Protected areas and significant aquatic and riparian ecosystems (incl listing on the register of national estate)
- Cultural heritage sites
- Is a recreational, social and economic asset



Threats



Pt Hut Xing- an artificial fish barrier



Tharwa sandwash- fish habitat is reduced due to sedimentation

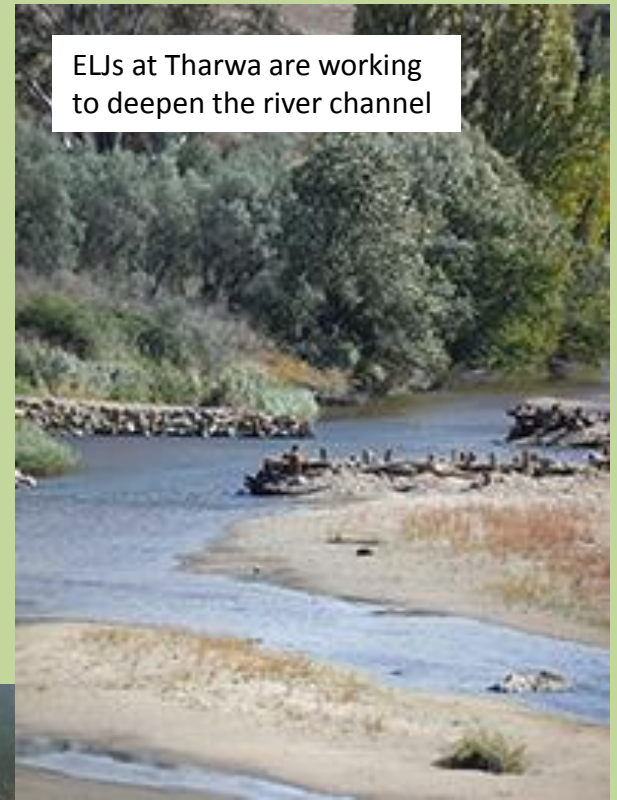


Bank erosion affects water quality and riparian habitat

- Barriers to fish movement
- Gross sediment
- Water quality decline
- Invasive species such as Carp
- Altered flow regimes
- Spread of weeds such as willows and blackberry
- Lack of instream habitat complexity
- Decline in riparian areas and loss of native vegetation

UMDR Current activities

- Engineered Log Jams (ELJs)
- Riparian restoration (willow control and plantings)
- Carp research project
- Macquarie perch research
- Scientific and community monitoring



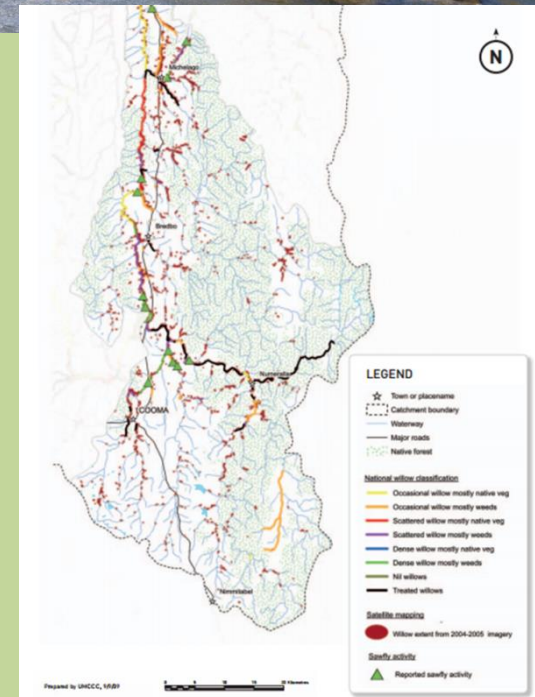
Riparian restoration

- Riparian restoration works in the Bumbalong valley
- UMDR Community Willow Control project- all adventurous volunteers welcome



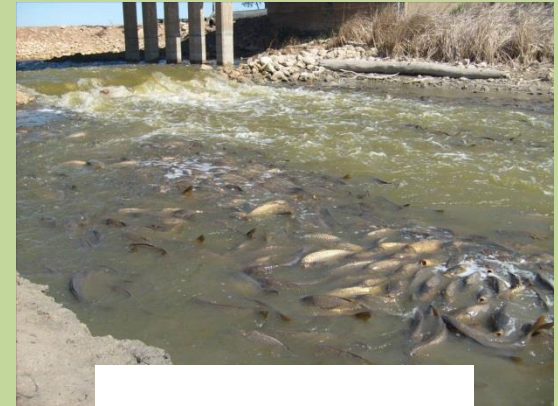
Riparian revegetation at Bumbalong

Adventurous volunteers helping to control willows in Black Rock Gorge



Carp Research Project

- Seeks to address key knowledge gaps about carp in the upper Murrumbidgee catchment
- Multi year collaborative project between UMDR, BHA, NSW DPI, Prue McGuffie, Assoc Prof Mark Lintermans, ACT Gvt, UMWW, IA CRC, CRFA and local fishing groups
- Three part project involving a trapping program, a tracking study and a community carp investigation to ID breeding sites and hotspots



Carp reduction plan for the Upper Murrumbidgee Demonstration Reach and surrounding region

July 2010



Trapping program

Below: Peter Saunders , Scottsdale Reserve Manager, with Murray cod caught at Scottsdale during the April 2014 fish survey

- Trapping to provide reduction in aquatic habitat pressures for the benefit of native fish
- Carried out at Scottsdale Bush Heritage Reserve
- Demonstrates excellent river stewardship for native fish conservation by BHA
- Multi year trapping program (summer & winter)
- Will collect 300 otoliths for population model and to calibrate the CARPSIM model
- Native fish and aquatic habitat response will be monitored



Above: Upper Murrumbidgee River at Scottsdale where trapping will occur

Trap design

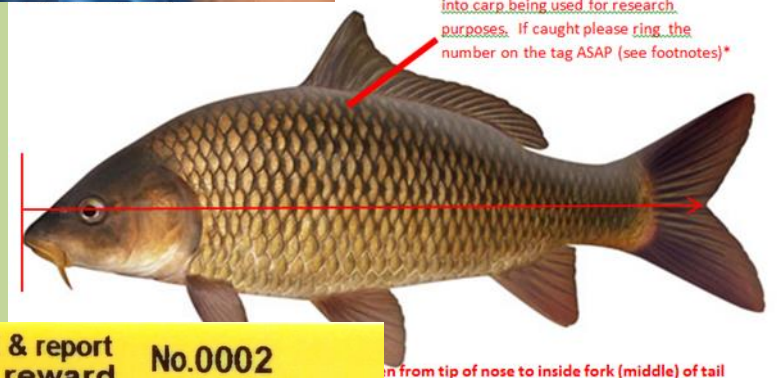
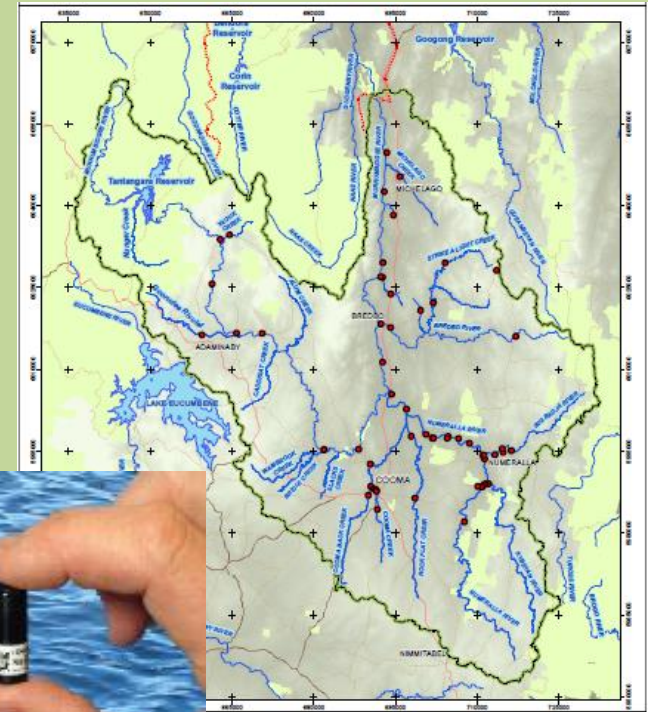
- Trap used is a modified fyke net designed by Qld DAFF which includes feeding regime with trapping
- Has shown increased rates of catch compared to all other catch methods
- Will trial inclusion of thermal plume to exploit carp wintering behaviours
- Trapping pool has natural fish barrier at the top



Andrew Norris, DAFF Qld (center) showing members of ACT Gvt, BHA & K2C the carp trap design

Acoustic telemetry (carp tracking)

- Lack of data on carp movement in upland systems
- Working in with Macquarie perch research project & NSW DPI
- Will track carp between Kissop's flat and Michelago until 2016



Macquarie perch PhD research project



Macquarie Perch – Life on the edge of extinction

This project, conducted by Prue McGuffie in association with NSW DPI, ANU and UC, will track Macquarie perch to identify breeding and habitat requirements of macquarie perch in the upper Murrumbidgee.

To follow this project go to www.facebook.com/macquarieperch

To contact Prue- 02) 44789 120

Community Carp Investigation

- Currently there is little/no collated data on where carp breed in upland systems
- This investigation will collect data on carp breeding areas and hotspots across the entire upper Murrumbidgee catchment
- Collect community based information by:
 - Angler diaries
 - Online carp portal and mobile phone app to report sightings
 - Regional carp out event



Angler diaries

- We are looking for dedicated anglers to record their catch over next years :)
- The aim is to collect info on native and non native fish, all rivers in upper Murrumbidgee catchment, as well as lakes and dams are included
- This information will also be used as reference information to compare carp numbers caught in trapping program
- Fishing records in current carp free areas are also important



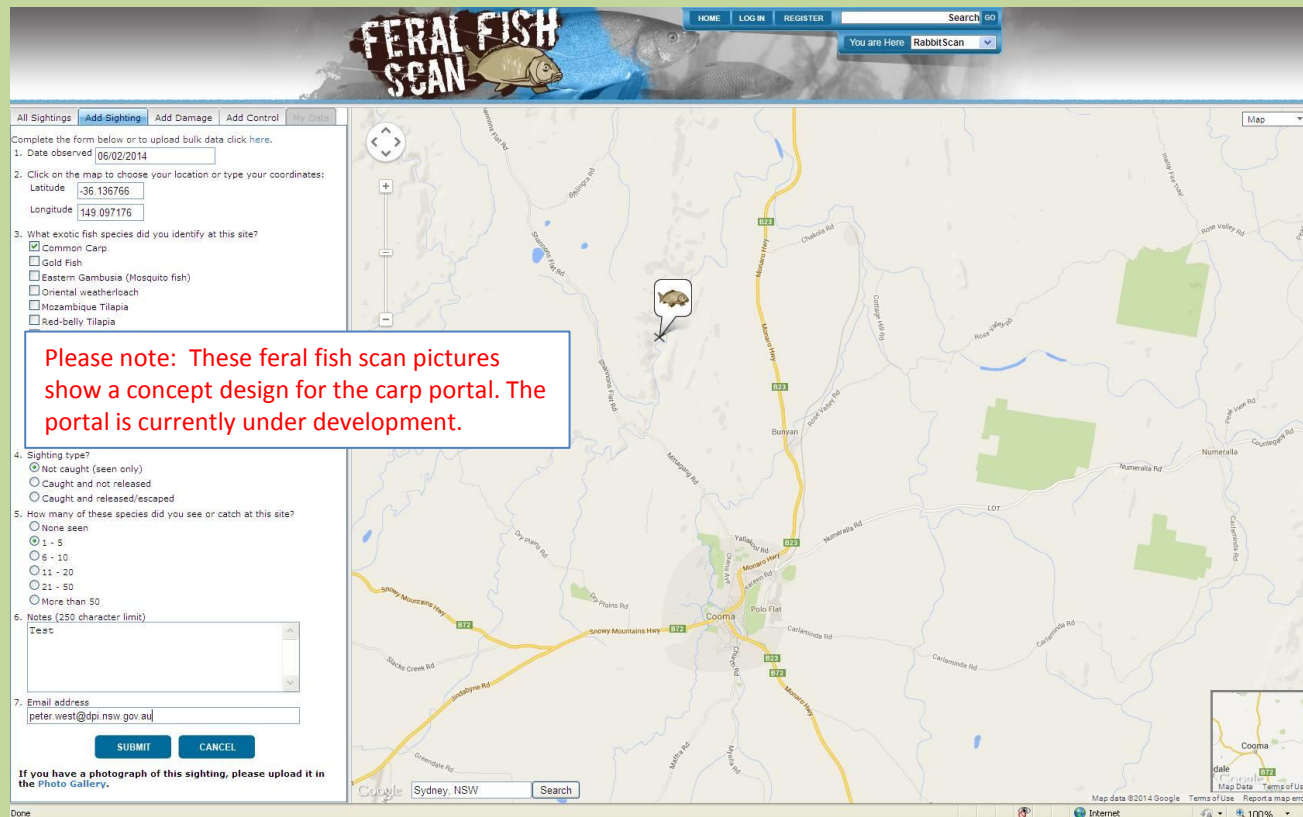
Date:		Name of angler:			
River name & nearest landmark:			Location (please be specific):		
Time fishing started:am/pm Time fishing ended:am/pm			Weather (please tick all relevant): <input type="checkbox"/> Sun <input type="checkbox"/> Wind <input type="checkbox"/> Cloud <input type="checkbox"/> Showers <input type="checkbox"/> Rain		
River height/flow (please tick one): <input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Flood			Habitat (please tick one): <input type="checkbox"/> River (pool) <input type="checkbox"/> Lake (open water) <input type="checkbox"/> Lake (reefs) <input type="checkbox"/> Wetland		
Target species:			Fishing method & no of lines: Lure: Yes- (Type:.....) Bait: Yes- (No of lines:.....)		
Fish	Species	Length*	Weight	Photo taken?	Fish tag ID or comment**
1	Kcpt/released?	ft/in/measured?	ft/in/weighted?	Y/N	
2	Kcpt/released?	ft/in/measured?	ft/in/weighted?	Y/N	
3	Kcpt/released?	ft/in/measured?	ft/in/weighted?	Y/N	
4	Kcpt/released?	ft/in/measured?	ft/in/weighted?	Y/N	
5	Kcpt/released?	ft/in/measured?	ft/in/weighted?	Y/N	
6	Kcpt/released?	ft/in/measured?	ft/in/weighted?	Y/N	
7	Kcpt/released?	ft/in/measured?	ft/in/weighted?	Y/N	

*For notes on how to measure fish please see p. 7
 **If a tagged carp is caught, please record tag number and RELEASE fish. Please report catch ASAP to BHA- 0407700431. If a Macquarie perch is caught please photograph BOTH sides of the fish and check if it has a scar on its belly. Comments such as fish condition/disease etc. could also be made. Please contact the UMON Facilitator on 0429778693 to report Macquarie perch catch and submit photos.

Above: data sheet to be included in the angling diary

Carp portal

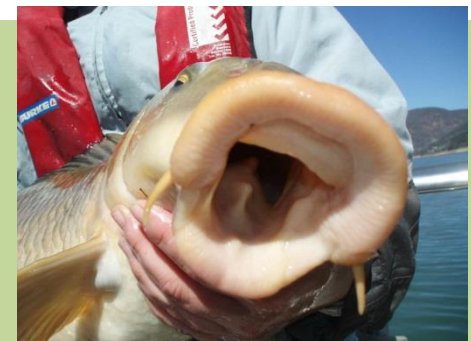
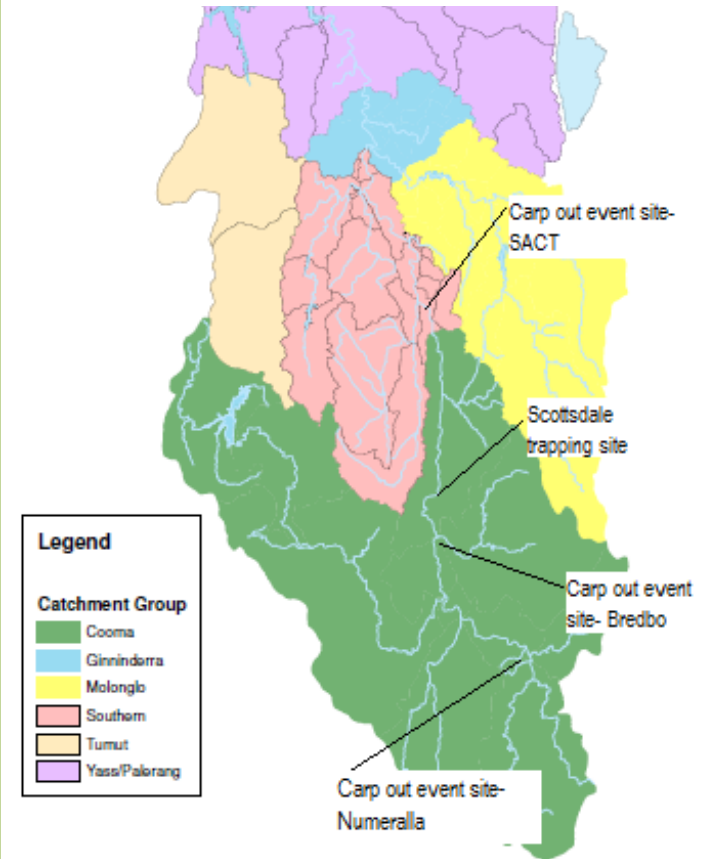
- Aims to record & map Carp sightings and behaviours in the upper Murrumbidgee
- User friendly
- Aimed at all river users incl. rec fishers
- Records opportunistic sightings



Regional Carp out

- To be held Australia day long weekend, January 2015
- 3 areas- upper Murrumbidgee in ACT, Bredbo area and Numeralla River
- We will record catch, can be used to ID breeding sites
- Sponsorship welcome 😊

Location of the carp outs to be held across the upper Murrumbidgee, the SACT event is in the Canberra area



How to become involved!

- Go fishing!! Join our angling diary program 😊
- Report carp sightings via our Feral Scan portal
- Volunteer on one of our river restoration days
- Join our mailing list to receive project updates
- Help us to gain sponsorship for the carp out event
- Tell others about the project and how to become involved

