

PROJECT UPDATE: LODDON STRESSED RIVER

August 2011

Welcome to the update for the Loddon Stressed River project for August 2011. In the months since our last update in December we have seen the largest flood in the Loddon River since European settlement. The Loddon Stressed River team is committed to supporting landholders with flood recovery; whilst continuing with project activities where possible.

After recent flood events, the North Central CMA conducted flood impact assessments on many previous work sites and public assets. The January flood event resulted in the third round of flood impact assessments. These assessments have now been collated and the findings of the assessments used in the development of a bid for funding to deliver a flood recovery program. We are currently awaiting confirmation of this funding and hope to have some news very soon.

The severe flooding across the Loddon, Campaspe and Avon-Richardson catchments caused significant damage to riparian fencing and many revegetation areas. High water flows have also caused significant stream bed and bank erosion along some reaches of the Loddon River.

The floods impacted on CMA work programs; and due to long-term inundation at proposed work sites, a majority of the planned onground works were postponed. These works included fencing, revegetation and fish habitat reinstatement.

You may recall, from our last project update, that the installation of fish monitoring equipment in the Kerang Weir Fishway also had to be postponed. This equipment, known as a Passive Integrated Transponder (PIT) tag reader, has now been installed and is assisting in monitoring fish movement through the fishway.

Keep an eye out for a new sign which will be installed at the site in the near future, providing more information on the new PIT tag reader.

WHAT'S COMING UP?

- Flood recovery program & working with landholders to reinstate damaged fencing.
- Monitoring at the Kerang Weir fishway.
- Habitat surveying in Tullaroop Creek & Pyramid Creek.
- Naturally Loddon "A Wonderland in Spring" festival to be held from September to October. Go to: www.nccma.vic.gov.au for more information.

ONGROUND WORKS DECEMBER 2010 - AUGUST 2011

Fish Monitoring

Conducted fish tagging at Box Creek regulator, Pyramid Creek and Kerang Weir.

Riparian Protection and Enhancement

- Riparian fencing debris removal.
- Emergency reinstatement of flood damaged riparian fencing.

Kerang Fishway

Installation of the PIT tag reader within the fishway.

LODDON STRESSED RIVER ONGROUND FLOOD REPONSE

It is the North Central CMA's role in managing flood events:

- to assist emergency services,
- to collect flood information; and,
- to implement recovery programs.

The projects onground team has been very busy responding to the flood events across the catchment.

Catchment Restoration Officers are working with landholders to complete flood assessments, remove damaged fencing and attend to flood debris blockages.

The instream blockages have been a priority for the onground crew. Staff have been out in the field attending to landholder requests for site inspections, managing the blockage removal process and conducting blockage assessments.

These blockages are assessed, prioritised and cleared if safe to do so; with the highest priority being sites where backed up or diverted water could potentially damage critical public assets.

A work program is underway to repair strategic breaches. Levee repairs have been a priority, with 105 levee breaches having been identified to date across the North Central CMA catchment.

This has been a very large job and so far we have been able to attend over eighty requests for blockage removals.

Conservation Volunteers Australia (CVA) and the North Central CMA's Dja Dja Wurrung crew have also been assisting landholders to clear flood debris from damaged fences.





Welcome to the Dja Dja Wurrung NRM Work Crew

The Loddon Stressed River team welcomes the Dja Dja Wurrung work crew to the North Central CMA team.

Throughout the new two year project the crew will undertake a range of onground training including fencing, weed control, pest management and revegetation.

These onground work skills will contribute greatly to the health of our rivers and catchments.

The crew is already working on flood recovery

projects across the North Central CMA catchment. Their knowledge and experience will be a valuable contribution to all the projects at the North Central CMA including the *Loddon Stressed River* project.

The work crew are currently undertaking Graduate Certificate III in *Conservation and Land Management* at Bendigo TAFE

We look forward to having the crew working with the team on the *Loddon Stressed River* project.

Macroinvertebrate Monitoring

North Central Victoria experienced record breaking rains over the summer period of 2010-2011, which saturated the catchment. The land did not have a chance to dry out when, in January 2011, many areas received up to five times the average rainfall. Prior to 2010, the Loddon River catchment had experienced a 13 year drought. Record breaking rains and high flows in the Loddon River system presented an opportunity for the North Central CMA to research the response of macroinvertebrate recovery after a drought.

As macroinvertebrate depend on water as part their life cycle, communities become threatened with the affects drought has on their habitat. This is of significant concern as macroinvertebrates are at the bottom of the food chain and essential for the survival of life.

There is a significant diversity of survival strategies among macroinvertebrate species which determines their ability to re-colonise after a prolonged dry period. Although the life cycles of macroinvertebrates are relatively short, the flood events created suitable water conditions for many species; which may present an opportunity for re-colonisation within a once dry river system. This effect resulted in the establishment of a joint monitoring program between the *Loddon Stressed River* project and the *North Central Waterwatch Program*.

While the monitoring program is still in the data collection phase, the results aim to identify what major macroinvertebrate species have re-colonised within the Loddon River system - since experiencing a prolonged period of drought and then the flood events.



Photo: Male platypus surveyed by APC along the Coliban River.

PLATYPUS SIGHTINGS

In the recent wet conditions it was noted by North Central CMA staff that platypus had been seen moving throughout many rivers and waterways across the Loddon catchment.

Late last year the *Loddon Stressed River* project supported the Australian Platypus Conservancy (APC) to deliver platypus information sessions to community and school groups. Participants were encouraged to report sightings of any platypus they saw.

If you wish to report sightings or are interested in monitoring local populations of platypus, please contact the APC on **(03) 5157 5568** or online at <u>platypus.apc@westnet.com.au</u>

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FIELD DAYS AND MEETINGS

Working group meetings

The Loddon Stressed River working group met at the Cairn Curran Sailing Club in March. In June the group met again in Kerang with a tour of some flood affected areas downstream of Kerang.

Tamarix Workshop

The Loddon Stressed River team was fortunate enough to be able to take part in an Athel Pine and Tamarix weed management workshop held at Kerang.

This workshop was hosted by the North Central CMA. Weeds of National Significance (WoNS) National Athel Pine Coordinator Kay Bailey, spoke about the threat of Tamarix species; management techniques and future direction for control of this highly invasive species. For further info visit: www.weeds.gov.au

22nd Annual Field Staff Conference

Loddon Stressed River team members, Glenn Merrick and Tess Grieves, attended the annual field staff conference hosted by Goulburn Broken CMA, in Alexandria on the 19th-20th May.

The conference was a fantastic knowledge sharing experience which included; a visit to the Snobs Creek fish hatchery at Eildon and a range of expert speakers. Over the two days, speakers covered topics including flood impacts, fish passage and fishways, river health, public land compliance and riparian protection.

Loddon Landholder Interviews Jack Hewitt

Appin South, 30/5/11.

Jack Hewitt lives in Appin South, a small district outside Kerang of around fifty people. Sitting on 1,500 acres of mostly flat country, Jack and his family watched on as 1,000 acres of his mixed farm went underwater as the Loddon River flooded earlier this year. This is Jack's story of the flooding.

During the January flood Jack spent the Saturday and Sunday assisting three of his neighbours to move sheep up onto the higher ground of his property. Already having 500 head of his own mob on the hill, the neighbour's sheep joined his and remained safe there.

By Monday morning the river had risen 600mm and neighbouring stock were in trouble. Without a second thought Jack was out on foot, along with locals lan, Di and Jazmian on horseback.

Four hundred head of sheep waited, almost to their necks in the roly poly and burr filled floodwaters. The team spent no less than six hours trying to move the mob up onto and along the channel bank, but it wasn't all bad says Jack, "the water was surprisingly warm, that's one good thing about a flood in January, the waters quite warm".

Across the district all means of animals were moved from the usual sheep, cattle and horses- to the more unusual situation of a family with eighty dogs that had to be relocated with the assistance of the CFA. Jack estimates about three quarters of the local district left their homes to stay with friends or were helped with the assistance of the CFA to the evacuation centre in Kerang.

After the flood it took around ten days before Jack was able to get around without the need for a boat. Reflecting on the environmental impacts of the flood, Jack believes that the floods will result in 100%

improvement to the health of the river, "no harm has come to it at all". The red gums that were a potential instream blockage have died, the silt clogging the river has spilled out onto the floodplain and the cumbungi has all but gone and once you move further away from the river, things have never looked better," says Jack.

With the immediate issue of floodwater gone, things then took a sharp turn for the worst. The residual moisture and summer sun meant insects were abundant. Flies had particularly been a problem since the earlier floods before Christmas. Fly strike was the biggest issue faced on Jack's property. Within two weeks of shearing, the sheep were all affected by fly strike. This was something Jack had never experienced before and has been an ongoing issue for the stock at Appin South.

Before the flooding ten years of drought had affected the riparian zone. Jack noted cracks six foot deep in the ground as a result of the dry conditions. As a result of the water table decreasing, the soil has been slumping and depressions could be seen right across the landscape.

Jack describes the January flooding as a completely unnatural event. It caused great damage to his fencing with the straw and debris pushing against fences. He lost his entire hay paddock. Fortunately he had his stock on high ground and dry grain to fall back on.

Jacks' recollection of the flood is a great reminder of the local community spirit and attitude toward rivers. He looks forward to discovering if the flood renewed the old waterholes that once existed on his property, reaching around eight feet deep and lasting all summer. Over the years of drought, they all but dried up and filled in from the silt in the river. Jack welcomes the improved health of the Loddon River returning to its natural cycle... which will be a lot more realistic when the carp are out of the water troughs and aren't swimming along the roadside







Fish tagging at Kerang Weir, February 2011 (Photo by Tess Grieves)



Kerang Fishway during flood, February 2011 (Photo by Tess Grieves)