

Newstreams

A NSW DPI email newsletter for recreational fishers and others interested in improving fish habitat to build native fish stocks

No 18 February 2009

About Newstreams

Newstreams is an email newsletter to keep people up to date about NSW fish habitat activities and important aquatic habitat developments elsewhere. It is published electronically every two months by NSW Department of Primary Industries. In NSW many estuarine and freshwater habitats for juvenile and adult fish have been degraded or lost through urban, industrial and agricultural development. Communities around NSW work actively to restore fish habitat.

NSW DPI NEWS

Free forum: Fishers for fish habitat



NSW DPI's Fishers for fish habitat project is ramping up with preparations underway for the inaugural forum in Ballina on 18-19 June. The forum is free to all recreational fishers with an interest in habitat. It will provide an opportunity to discuss habitat issues and ways to improve habitat so that it makes more fish. There will of course be time to wet a line!

Fishing writer and presenter Steve 'Starlo' Starling will be a guest speaker at the forum and hopes recreational fishers of NSW will join him: 'The simple truth is that without healthy, balanced aquatic ecosystems, recreational fishing has no long-term future. Because, without sound habitat, there will be no fish! The future of this wonderful pastime we all share such a passion for ultimately depends on us.' To find out more about the forum or to register contact Charlotte Jenkins NSW DPI on 02 6626 1107.

charlotte.jenkins@dpi.nsw.gov.au

Second Namoi carp muster on 7-8 March

The second Namoi carp muster will be held at Narrabri on March 7-8.

Organisers are NSW DPI, Namoi Catchment Management Authority and Narrabri Amateur Fishing Club. They are hoping for an even bigger turnout than last March when more than 300 people caught more than 500kg of carp from the Namoi River. More than a tonne of carp was caught at a similar event in Manilla in November, and a fourth muster is scheduled for Boggabri on 25-26 April.

All carp caught will be weighed for a chance of winning one of the many prizes. Category winners including the biggest carp caught, and mystery prizes for both junior and senior categories. NSW DPI conservation manager, Milly Hobson says the muster offers the community a fantastic opportunity to learn more about the impact of carp on native fish and how planting trees, removing willows and re-snagging the river can benefit native fish.

Registration will be at the River Room, Crossing Theatre, Narrabri, 8am - 5pm on Saturday 7 March, and 8am - 12 noon on Sunday 8 March. Cost is \$2 for children and pensioners and \$5 for adults. For more information call Milly Hobson on 02 6763 1206 or Tony Townsend on 02 6763 1440.



Wollongong fish barrier to be removed at Cabbage Tree Creek

NSW DPI has negotiated with University of Wollongong and Wollongong City Council to redesign a proposed road crossing on Cabbage Tree Creek at Fairy Meadow, Wollongong. The university had proposed to replace the existing causeway (right) with small pipes that would have continued to block fish passage. After discussions with regional staff from NSW DPI, Department of Premier and Cabinet, Department of Water and Energy and the university, the causeway will be replaced with a fish friendly crossing using box culverts. For more information contact NSW DPI's south coast conservation manager Trevor Daly.

trevor.daly@dpi.nsw.gov.au



New fishway helps fish in Sydney's inner west

A new fishway will improve the aquatic ecology of Wollie Creek, one of Sydney's long suffering waterways and a tributary to Cooks River. Turella Weir acts as the tidal limit of Wollie Creek and restricts fish movement upstream in all but the largest flows. The new fishway was built in partnership between Rockdale and Canterbury City Councils, the Sydney Metropolitan CMA, and NSW DPI through the Bringing back the fish project. A series of steps and pools now allow fish to negotiate small rises in water level and move upstream past the weir and into relatively inaccessible habitats. Although site difficulties and the flow regime of the creek led to a modified design that will only work at the top of the tidal cycle, it is a vast improvement to previous conditions where fish movement was limited to when the weir was drowned out. Works were overseen by Rockdale City Council, while pre- and post monitoring has been headed up by Canterbury City Council with the help of NSW DPI. Species likely to benefit from this fishway include common galaxius, freshwater mullet, and at least two species of gudgeon - all of which have been captured in sampling leading up to the fishway being built. Capture of these fish goes to show that despite a waterway being present in a high density environment like Sydney, it can still harbour good fish fauna, and continues to be worth looking after. If you could like more information on this project, contact Scott Nichols.

scott.nichols@dpi.nsw.gov.au



Wilcannia make more fish?

Wilcannia make more fish? is a collaborative project between NSW DPI and the Western CMA to improve native fish habitat in a 60km reach of the Darling River between Murtee and the Ten Mile Rocks near Wilcannia. This project will address some of the key threats to native fish and other aquatic species in the Darling River through on-ground works. The project will resnag priority reaches, manage alien fish species, revegetate riparian areas, and fence off and limit stock access to riverbanks to protect riparian vegetation.

The works were determined by a previous DPI study which resulted in the Murtee to Ten Mile Rocks habitat management plan. The project will also tag fish to monitor the success of the on-ground works and provide training and employment opportunities for some local residents of Wilcannia.

For more information, contact David Cordina, NSW DPI 02 6881 1277

david.cordina@dpi.nsw.gov.au

Wetlands on farms program expands

Jon Pocknell, right, from 'Springvale' north of Walgett, is one of 24 NSW landholders in NSW's eight inland catchments who last year developed wetland management plans for their properties.

The plans were part of the Wetlands on Farms project managed by NSW DPI and funded by NHT/National Action Plan and the Western CMA.

In the Western Division, the Wetlands on Farms team worked closely with 11 landholders to develop plans across a combined property area of 511,336 hectares. Five landholders successfully applied for incentive funds to carry out on-ground rehabilitation and protection works around their wetlands. Examples of works included building trap yards to reduce feral goat numbers and establishing stock watering points away from sensitive wetland areas.



**Jon Pocknell, 'Springvale' Walgett.
Photo: Western CMA**

The success of the project has enabled the program to continue, with the Central West, Lachlan and Western CMAs collaborating with landholders and NSW DPI to develop a further 27 wetland plans in 2009. Participants will receive a property specific wetland management plan, and an assessment report of their wetland's condition. Advice and assistance will also be provided to prepare incentive funding applications for wetland plan activities. For more information on the project contact: NSW Department of Primary Industries Dubbo Office on 6881 1284.

Repaired floodgate restores water quality

NSW DPI has restored tidal flow in Windeyers Creek near Raymond Terrace on the NSW lower north coast after replacing a missing part on a tidal floodgate. The floodgate was installed three years ago to improve water quality in the creek. The tidal flushing lowered turbidity and nutrient levels, and increased dissolved oxygen. Local landholders are now looking forward to seeing more fish and water quality improvements in the creek upstream of the repaired floodgate, as tidal water flushes out the stagnant water. The repairs were funded by Hunter Central Rivers CMA. For more information contact Jenny Fredrickson on 4916 3834.

Jenny.Fredrickson@dpi.nsw.gov.au

Right: Windeyers tidal floodgate opens during low-medium tides to allow tidal flushing, then closes during floods and high tides to maintain flood mitigation capacity.



Changes to the NSW DPI's aquatic habitat protection unit

NSW DPI is currently implementing a restructure of the aquatic habitat protection unit in response to budget cuts. The changes, effective from 1 July 2009, will see the number of conservation manager positions reduced from 6 to 4. Positions will remain inland at Albury and Dubbo, and on the coast at Cronulla and Wollongbar. Existing positions at Batemans Bay and Tumut will cease from July. The 3 existing senior conservation manager positions based at Wollongbar, Port Stephens and Huskisson remain unchanged. The changes are part of a range of cost saving measures being implemented across NSW DPI.

The unit is actively involved in the protection of fish habitats within marine, estuarine and freshwater ecosystems. This includes regulating activities that involve dredging and reclamation, harm to marine vegetation, or use of explosives. The unit is also involved in protecting spawning sites, administering fish passage provisions, assessing development proposals that impact on aquatic habitats, providing advice to local government, and undertaking a range of policy and compliance activities related to aquatic habitats.

NSW NEWS

Water releases kill fish in Wakool system



The NSW Department of Water and Energy had to postpone water releases along the Wakool River system earlier this month after releases in January flow resulted in fish kills in Merran and Colligen creeks. The fish kills were the result of severely reduced oxygen levels in the water at the head of the flow, caused by high water temperatures coupled with high organic loads. In some localised areas this may have been exacerbated by the impact of acid-sulfate sediments. DWE met with

landholder representatives from the Wakool River system and they agreed to postpone the releases until they did not have such an adverse impact on fish remaining in the drought-stressed system.

<http://theland.farmonline.com.au/news/state/agribusiness-and-general/general/water-releases-postponed-on-wakool-system/1428255.aspx>

Lower Murray Darling CMA wetland restoration

The Lower Murray Darling CMA wetland rehabilitation project has reinstated a wetting and drying cycle to 700 ha of freshwater ephemeral wetland systems in the catchment. Culverts and/or regulators have been constructed at eight wetlands within the catchment to improve fish and flow passage. Other works included the removal of earthen levees which were impeding flow to a wetland, fencing, installation of stock watering points and the monitoring and evaluation of all works.

http://www.lmd.cma.nsw.gov.au/pdf/e_news_2008-No15Dec2008FINAL.pdf

\$408,000 fine for wetland clearing

A landholder has been fined \$408,000 for bulldozing a wetland on Yarrol Station, near Moree, in 2006 and 2007. The 486 ha wetland was an important bird breeding site, part of the Gwydir wetland, one of the largest inland wetlands in NSW, which has declined by 90 per cent in recent decades. Justice David Lloyd of the Land and Environment Court found that the offence was committed despite the express instructions given to the owner that native trees were not to be cleared. Wetlands expert Richard Kingsford from the University of NSW said the land clearance could have a big impact on breeding because there are no nesting areas for the birds to return to.

<http://www.smh.com.au/environment/conservation/bulldozing-wetland-costs-farmer-400000-20090211-84rn.html>

INTERNATIONAL NEWS

Plant diversity reduces nitrogen in waterways

US researchers have found that a greater variety of crops grown on farmland reduces the amount of dissolved nitrogen in rivers and lakes. Fertiliser nitrogen not used by plant roots leaches through soils to groundwater and runs into waterways. Excess nitrate in water can lead to growth of aquatic algae, which can use up most of a water body's oxygen when they die and are decomposed, creating dead zones that cannot support aquatic life. The researchers believe the nitrate impact is reversible if farmers grow a great variety of crops, reduce paddock size, increase the width of riparian areas and non-crop areas at the edge of paddocks, and incorporate more native perennial grasses.

<http://www.sciencedaily.com/releases/2009/02/090211094033.htm>

HABITAT RESOURCES

Inland acid sulfate wetlands

Murray–Darling Freshwater Research Centre has produced a multimedia presentation on sulfidic sediments, how they can be recognised, and how wetlands containing sulfidic sediments can be managed to reduce their impact on water quality and fish.

<http://www.mdfrc.org.au/sulfidic/SulfidicSediments/ssdefault.htm>

The water in this wetland is affected by sulfidic sediments and is extremely acid. Photo: Murray Darling Freshwater Research Centre



Murray river odyssey

Last year the Albury Wodonga Border Mail newspaper sent a journalist and photographer to trace the Murray River from source to sea. Read about their journey on the paper's website.

<http://www.bordermail.com.au/news/local/news/general/a-river-odyssey-from-source-to-sea/1379393.aspx>

Wetlands art competition

Winning entries in WetlandCare Australia's 2009 national art competition can be viewed at WCA's website.

http://www.wetlandcare.com.au/Content/templates/news_detail.asp?articleid=720&zoneid=1

Saltwater wetland rehabilitation manual

The Saltwater wetland rehabilitation manual published by the NSW Department of Environment and Climate Change provides a general overview of saltwater wetland environments and their rehabilitation with specific advice for planning and implementing rehabilitation projects. Detailed information about saltwater wetland characteristics and processes is also provided. Copies of the manual are available by contacting Kerryn Stephens by email or on 02 4224 9639.

Kerryn.stephens@environment.nsw.gov.au .

Restore your river country

This cotton industry fact sheet focuses on riparian lands immediately alongside small creeks and rivers, including the riverbank itself. It is one of a series on improving biodiversity in cotton growing areas.

http://www.cottoncrc.org.au/content/Catchments/Publications/Biodiversity/Biodiversity_fact_sheets.aspx

River journeys

River journeys features the river restoration works around the world that have won the Thies Riverize at the International River Symposium held in Brisbane for the past 10 years. It features personal accounts from river managers working for the re-establishment of natural processes in our ecosystems, for the healthy habitat of wildlife, and for the benefit of humankind. It is available for sale online.

<http://www.riverfoundation.org.au/>

HABITAT DATES

12-15 May

Qld coastal conference, Gold Coast

<http://www.bmrg.org.au/information.php/2/110>

18-19 June

Fishers for fish habitat forum, Ballina

<http://www.dpi.nsw.gov.au/fisheries/habitat/rehabilitating/fishers-for-fish-habitat/fishers-for-fish-habitat-forum>

21-24 September

12th international river symposium, Brisbane

<http://www.riversymposium.com/>

18-21 October

International river health conference, Canberra

<http://www.onelifeoneworldourfuture.com/index.php?pageid=218>

18-24 October

National water week

<http://www.nationalwaterweek.org.au/>

ABOUT NSW DPI AND FISH HABITAT

NSW DPI is responsible for management of, and research into, fish habitat in NSW.

On-ground activities

- Map, priorities and modify structures that block fish passage
- Map and rehabilitate aquatic habitat such as wetlands.
- Reintroduce snags (large woody debris) into streams.
- Revegetate streambanks to provide habitat and improve the quality of water running into streams.

Research activities

- Document the fish communities associated with different aquatic habitats
- Understand the basic biology of key fish species- what they eat, when they breed, and their habitat requirements.
- Evaluate management actions to see how effective they have been and what improvements may be possible.

Policy and planning activities

- Review developments that may impact on fish habitats and negotiate impact reduction and/or compensatory works
- Incorporate aquatic habitat protection requirements into land use planning, water

management, and estuary and floodplain management.

- Help developers, local councils and other state agencies understand the importance of aquatic habitats for fish and options for ensuring their protection and rehabilitation.

Aquatic habitat staff

Sydney (Cronulla) 02 9527 8411

Sydney (Wollstonecraft) (02 8347 4909

Batemans Bay 02 4478 9103

Huskisson 02 4441 8969

Port Stephens 02 4982 1232

Wollongbar 02 6626 1200

Tamworth 02 6763 1100

Dubbo 02 6881 1270

Tumut 02 6947 4188

Narrandera 02 6959 9021\

Albury 02 6042 4200

Research staff

Port Stephens 02 4982 1232

Narrandera 02 6959 9021

Cronulla 02 9527 8411

Website

<http://www.dpi.nsw.gov.au/fisheries/habitat>

Send us your news

If you have news about fish habitat activities in your area, we'd like to hear from you. Email Rebecca Lines-Kelly with your news and suggestions.

rebecca.lines-kelly@dpi.nsw.gov.au

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rebecca.lines-kelly@dpi.nsw.gov.au

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