

Local catchment group working on water quality

OLW is an important and founding member of the Ord Catchment Reference Group (OCRG). The OCRG is a partnership of community organisations, such as OLW, industry groups, Aboriginal organisations and Government Departments that are involved with managing the land and water assets of the Ord river catchment.

As part of an agreement between the State and Australian Governments the Ord river catchment is regarded as a priority catchment under the National Action Plan for Salinity and Water Quality (NAPSWQ), and is eligible to apply for funding for projects aimed at improving the condition of the Ord with a focus on water quality and preventing salinity.

There are currently 14 projects operating in the region and they include projects focused on trialling and promoting best practice land management in both the irrigation and pastoral areas, monitoring water quality throughout the catchment including downstream of the irrigation area, removing weeds and managing stormwater in Lake Kununurra and the lower Ord. Other projects are also developing new knowledge about a range of threats to the Ord such as soil erosion in the pastoral area, the condition of vegetation along the river and the impact of varying water levels and nutrient loads on the lower Ord River.

As they are completed results from these projects will be made available to the public through public meetings, newspaper articles and other publications. In the meantime for more information please contact Liz Brown at the Ord Catchment Reference Group 9169 2610.



Liz Brown Executive Officer of the Ord Catchment Reference Group

What's that algae?

Have you ever wondered what causes all the algae growth in the irrigation channels? Well the Ord Irrigation Cooperative should find out why in the next few months as results from their project investigating aquatic plant biomass in the channel system are finalised. The project which is funded by the State and Australian Government's National Action Plan for Salinity and Water Quality program is studying the driving factors for plant biomass growth in the irrigation network. This includes investigating environmental conditions such as temperature and light availability, the impact of water flow conditions and nutrient inputs from Lake Kununurra, sewage effluent release and sugar mill waste water.

Plant biomass is a problem in the irrigation area because it blocks infrastructure including siphons, and slows movement of water in the system, which in turn causes uneven watering of crops and reduced irrigation efficiency. It also means that the chemical acrolein needs to be used to kill growth to ensure clean efficient water movement during the peak growing season.

Working out what types of algae grow where in Lake Kununurra and the irrigation system is an important part of the project. Nine sites have recently been sampled for a period of 7 weeks for algae growth and included sites throughout the irrigation system and Lake Kununurra. The samples will show what type of algae grows under what conditions. By having this information the OIC can target its management of the irrigation system to reduce the growth and thereby improve water flow and hopefully reduce chemical usage. For more information please contact Anna Price at Broilga's Environment 0400 693 961



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Nuke the Neem on track



Neem trees that would have threatened this baobab in a few short years destroyed as part of the OLW project

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Algae found in an irrigation channel

Merry Christmas

The Board and Staff of Ord Land and Water would like to wish everyone a Merry Christmas and a happy and safe New Year.

Funding secured

OLW has been fortunate enough to secure \$380,000 to remove neem trees from around Kununurra over the next two years. By far the largest amount of funding has come from the Department of Environment and Conservation's Biodiversity and Conservation Initiative. Also contributing to the project is the Australian Government Envirofund and Lotteries WA.

It is expected that with this significant amount of funding the task of eventually ridding the area of the pest tree will become feasible.

The funding will be used for salaries, equipment and chemical. Most trees will be killed by applying a herbicide and diesel mixture to the trunk of the tree from ground level up to a height of between a metre and a metre and a half. This method is very selective affecting only the tree that has been treated reducing the risk to other trees in the area. Neems are spread predominantly by birds so tend to be found underneath larger native trees.

Two 25 ha trial areas have been set up to monitor regrowth through reinfestation from both outside the areas and from reserves of seed present in the ground. One is on Weaber Plains Rd and the other on Lake Kununurra.

OLW is keen to map the full extent of the trees spread in the area so we don't miss any isolated pockets in the bush or along the river.

Anyone who knows of trees that are growing off the beaten track can call in the information by phone on 91 622 222 or e-mail dick@olw.com.au

Good progress made on neem control

If you think you've seen a few dead neem trees around Kununurra that's because they have been killed on over 1,000 hectares of land in 2006 by OLW. The work has centred on two main areas, from Cave Springs along the M2 Reserve and Weaber Plains Road and an area of foreshore both sides of Lake Kununurra a couple of kilometres downstream of Spillway Creek. The Weaber Plains infestation had some of the highest density populations encountered to date with between 25 and 40 adult trees and literally hundreds of immature trees found per hectare.

Other areas worked on include around Swim Beach, the Airport and Packsaddle Road. Currently OLW is working back towards town on the land in between the house blocks on Weaber Plains Road and the M1 channel. While to the south work is being maintained on the heavy infestation around the Mud Springs area.

Erosion workshop at Nelson Springs

An erosion workshop was held on Mistake Creek Station in mid October. Mistake Creek Station is a part of the Nelson Land System. This area is very prone to erosion requiring special management techniques to be employed by land users. The Land system also includes the Ord River Station that was resumed from production in the mid 1960s and is now managed by the Department of Environment and Conservation. The two day workshop focused on the remedial work that has been ongoing in the area since 1960 and the equipment and techniques used over the decades of rehabilitation. Pastoralists are very aware of erosion and land degradation issues on their land. To reduce the risk of land degradation they employ a property management strategy that includes stock rotation, weed control and a fencing program. The workshop was organised by OLW, the Victoria River District Conservation Association and the Halls Creek – East Kimberley Land Conservation District Committee. Funding came from the National Action Plan For Salinity and Water Quality and the National Landcare Program. Over 50 people attended the event with speakers coming from as far away as Perth and Darwin. The workshop was also filmed and an instructional DVD will be produced for the benefit of local land managers.



Workshop attendees listening to Darryl Hill from Soil Save Katherine explaining the workings of the crocodile plough.

Drains are just for rain

Urban drains running into Lily Creek are getting some special attention through a National Action Plan for Salinity and Water Quality program managed by the Shire of Wyndham East Kimberley.

In a joint venture between Work Base and the Shire the drain outlet at the end of Messmate Way will be the first of a number of drains to be rehabilitated to reduce litter, sediment loads and other pollutants entering the Lagoon.

In addition an Envirofund grant has been received by OLW to upgrade the stormwater drain outlet located next to Lakeside Caravan Park. Site works for this project will be carried out in conjunction with the Shire and community group Save Endangered East Kimberley Species.

As part of the program and for the Shire's Healthy Waterways Program local students of St Joseph's Primary School designed and painted stencils on stormwater drain lids in areas around Kununurra. The aim was to raise community awareness about the impacts of stormwater pollution on Lily creek lagoon and Lake Kununurra. The stencils are visible to both pedestrians on the footpath as well as passing motorists.

For further information about the program please contact Katya Tripp at the Shire on 9168 4100.

Study gives thumbs up to fishway

A study to determine fish assemblages in the Ord River has provided a snapshot of fish communities in different parts of the river and above the dam over two different seasons.

In total 27 species of fish were found below the dam and 20 species found above. Based on actual use of other fishways it's probable that most of those fish found below the dam would use a fishway once one was established on the dam wall.

Over 88% of the total catch below the dam were diamond mullet. This species is a major component of the diet of barramundi and would be an important source of food for barramundi once passage is possible into Lake Kununurra.

As well as the Dam, Ivanhoe Crossing was found to be a impediment to upstream migration of fish, especially when flood waters receded. Recommendations from the study included providing passage for up and down stream movement of fish past the dam with the building of a fishway and for sections of the Ivanhoe crossing to be removed and replaced with a bridge structure.

New staff member for OLW

OLW has recently doubled its staff numbers to two people. Nerylie Gaff (or Blu) has joined Coordinator Dick Pasfield as a project officer. Blu's main duties will be focussed on neem control but will also include other aspects of OLW's current projects that include erosion and fire control as well as weed management on Lake Kununurra.

Blu has worked in a variety of positions during her time in Kununurra, from cotton technician for CSIRO to agronomist for Pacific Seeds.

As part of her job orientation Blu travelled into the NT to inspect the neem infestation on the Wickham River. The trees have been growing uncontrolled on the river bank for many years and have formed a thick canopy that has choked out all other plants.

Now the surrounding land is completely bare except for the trees and their associated leaf litter.

Help for landholders clearing neem

Private landholders will soon be able to gain some assistance for removing neems off their property. Depending on circumstances OLW will be able to contribute between \$50 and \$100 per hectare for either materials and/or labour.

Funding is limited but will be spread over two years. Already some landholders have taken up the offer of assistance from OLW. Removing the adult trees predominantly on private property is a key factor to the success of the project.

For further information on the initiative landholders can phone OLW on 91 692 222 or e-mail the Coordinator at dick@olw.com



Blu inspecting a neem infestation on the Wickham River in the Northern Territory with Darryl Hill from Katherine

Shire attends erosion school

OLW held the second in a series of erosion workshops in November using erosion expert Darryl Hill from Soil Save in Katherine. The workshops highlighted to grader operators and land managers the damage that can occur to roadways and firebreaks on fencelines if proper precautions are not taken when building them.

Darryl pointed out the damage some roadside drains can cause to both the roadway and surrounding land and demonstrated ways to get water to flow over a road so as not to cause erosion.

Unfortunately some of the scheduled workshops had to be shortened or postponed due to late fires that required the grader and operator to be on call to put in fire breaks.

An inspection of firebreaks on fencelines around Kununurra has highlighted some erosion problems, in some instances creek lines have altered course to follow the firebreaks. Further workshops are planned for 2007 to help people deal with the emerging problems.



Shire employees Francis and Kingy survey a site for a bank across a roadway

Interpretive signage for Lily Creek and Molly Springs

A mural will be painted and erected in Celebrity Tree Park depicting the plants, animals and landmarks of Lily Creek and its surroundings. Both English and Miriwoong languages will be used on the sign and a gazebo style structure that will house it. In addition a sign showing the species of fish in Lake Kununurra and a map of the lake with place names in Miriwoong and English will be placed in the gazebo.

In a similar project interpretive signage will be erected by the Traditional Owners at Molly Springs to highlight the importance of the plants and animals that utilise the spring. A picnic table and shelter will be erected as part of the project and the walking trail to the spring upgraded.



Students and teachers from St Joseph's Primary School display their stencils to be painted on drain covers.



The study team collecting fish below the Kununurra dam