



creek to coast

MID COAST ENVIRONMENT NEWS

BUSHFIRE RECOVERY ACTIONS



The 2019 bushfires in the MidCoast region had a significant impact on humans, animals, bushland and waterways. As the region is recovering it will need assistance to ensure that native bushland is healthy, native animals have areas of refuge and waterways are protected.

MidCoast Council has put together a three year plan to implement post fire environmental remediation to minimise and mitigate the impacts of the bushfires on sensitive areas.

The fires had a significant impact on the local environment with some fauna species approaching an extinction threshold. Habitat loss and fragmentation as a result of the fires is the main contributing factor and will be addressed by ensuring that existing vegetation communities such as littoral rainforest and coastal wetlands are healthy and resilient.

Council's project aims to restore burnt littoral rainforest, coastal wetlands and other native forest communities on 2,364 hectares of Council managed land within 35 reserves. A range of important management actions are being undertaken including intensive weed control, the propagation and replanting of local native species including food trees, and the provision of nestboxes and other supplementary habitat measures for displaced and affected fauna.

The project also aims to increase the resilience of other nearby areas not directly affected by the bushfires by controlling invasive environmental weeds which will in turn reduce the threat of weeds re-infesting those areas recovering from the bushfires. These areas will also provide a refuge for displaced fauna while burnt areas recover.

Council will be working with a number of partners on the project including local volunteer groups, and will also support the bush fire recovery efforts of other government agencies such as NPWS and wildlife rescue groups such as Koalas in Care.

The project is supported by the New South Wales Government through its Bushfire Affected Coastal Waterways Program and MidCoast Council's Environmental Levy.



Nesting boxes in burnt areas will provide habitat for wildlife as the region recovers

FILTERING URBAN RUNOFF TO PROTECT WALLIS LAKE

Works to refurbish the Townsend Street constructed wetland have commenced ensuring it can continue to protect the water quality of Wallis Lake.

Constructed in 2001 and treating stormwater from 90 hectares of the surrounding suburban area, the wetland has reached the end of its expected functional lifetime, and now requires a full makeover to ensure it continues its good work.

Constructed wetlands are scattered throughout Forster Tuncurry's urban areas, and work to remove pollutants and sediments from our stormwater runoff before it enters Wallis Lake.



Sediments in the estuary reduce the amount of light available for seagrass to grow, which is a natural habitat for aquatic life. Excess nutrients fuel algal blooms which also lead to habitat loss, impacting fish and aquatic bug populations. The wetland helps prevent this by removing sediment and filtering nutrients from urban runoff prior to discharge into the Lake.

The refurbishment of Townsend Street wetland involved removing built-up sediment, an upgrade to the bypass channel as well as structural works to replace the trash racks that filter out litter before it enters the wetland. A major part of the project will also be the replanting of native wetland species which are very effective at removing nutrients and improving the quality of urban stormwater.

The refurbishment is expected to be completed in July and will ensure that the wetland can continue to help improve water quality for many years to come.

These works are supported by the New South Wales Government through its Coast and Estuary Program and Council's Stormwater Management Services Charge.



Townsend Wetland during construction

EXTREME WEEDING

Not for those scared of heights

Works to remove environmental weeds along some of our most rugged coastlines are currently underway using some extreme but effective methods.

As part of Council's 'war on weeds', different weed control techniques are being used throughout the MidCoast region depending upon the species, its life cycle, and the locality of the weeds being targeted. Since 2012, a targeted weed control program has been underway utilising abseiling to tackle invasive weeds in hard to reach places.

Two weed management projects are currently in full swing at Hallidays Point and Burgess Beach focused on removing priority weeds such as Ground Asparagus, Easter Cassia, Bitou Bush, Lantana and Morning Glory from gaps in the canopy and along the wind-sheared edges of the cliff faces. So far this work is having a positive result, with a reduction of weeds clearly present at both sites.

These two places contain important stands of 'exposed headland littoral rainforest' which grow on steep cliff faces and make up nearly 36% of all littoral rainforest areas mapped in the Midcoast area. Littoral rainforest is home to numerous threatened flora and fauna species protected under both State and Federal Legislation and are of significant Aboriginal cultural heritage value. However, these areas are also under threat due to the clearing and fragmentation of vegetation, invasion of weeds which smother and outcompete native species, and the impacts caused by visitation and recreational use.

In these important but hard to reach places we have to look at how we can best work on removing the weeds while protecting the fragile environment surrounding them. Council applies an integrated approach to weed management, and in these situations, the most suitable method is to send highly qualified abseilers to remove the weeds using manual and hand spray techniques that help reduce the weed biomass, protect native species and close the gaps in the canopy to prevent further weed growth.

Weed management is an essential activity which safeguards our economy, environment and community. This project is supported by the New South Wales Government through its Environmental Trust's Restoration & Rehabilitation Program and Council's Environmental Rate.

SHARE THE SCIENCE

MidCoast Council is pleased to partner with Local Land Service to bring you the Marine and Catchment Discovery Series, free and informative events designed to give you an insight into our unique waterways, the animals that live there and great tips on what you can do to protect these beautiful natural resources.

Three webinar events were recently livestreamed for residents to enjoy and covered topics including:

Restoring underwater forests - Associate Professor Adriana Vergés outlined two NSW-based projects that combine science and community engagement to restore key seaweed and seagrass species.

Shorebirds Connect our World - Milly Formby from Birdlife Australia shared the incredible story of the lives of our migratory shorebirds. The MidCoast region provides nesting habitat and summer feeding grounds for several of the world's endangered shorebirds, and is increasingly important as coastal habitats decline.

Saving our species: Manning River Turtle - Andrew Steed from the Ecosystem and Threatened Species unit of the NSW DPIE updated us on findings from recent surveys of the Turtle, including the impact on its habitat from the recent extended drought, bushfires and floods. The Manning River Turtle Conservation Group also talked about their valuable work.

Videos of the webinars will be available on our website in the coming weeks. Visit www.midcoast.com.au/sharethescience for more information.



Abseilers hard at work

RESTORING THE CORE

Over the past three years a bush regeneration project entitled 'Restore the Core' has aimed to restore and strengthen a number of littoral rainforest remnants against the presence of weeds found at Hallidays Point. Littoral rainforest is extremely rare comprising less than one percent of the total area of rainforest in NSW. This project assisted the hardworking Hallidays Point Landcare Group, bushland regenerators and specialist abseil professionals - who scale the cliff-face removing weeds to reduce their potential to recolonise the rainforest.



These combined efforts have had resounding success. The core of our littoral rainforest communities at Hallidays Point has been restored. This success enables the project to shift into the most important phase, on-going maintenance, ensuring that we don't lose our hard won gains and continue to protect the diversity of plants and animals that once again call this place home.

The success of this project could not have come at more opportune time. The recent fires have shown just how important this work has been. One of the many, shocking aspects of the recent extreme drought and bushfires was that plant communities that typically avoid bushfires, such as rainforest, burnt including littoral rainforest.

The strong core of littoral rainforest at Hallidays Point is in close proximity to areas of burnt littoral rainforest. It has become an important refuge for animals, particularly birds to reside in. In addition, the diversity of rainforest plants that have re-established in the core will prove imperative for regeneration of neighbouring burnt littoral rainforest with birds and animals moving rainforest seeds between the remnants.

MidCoast Council would like to take the opportunity to thank the hard work of the bush regenerator volunteers, Hallidays Point Landcare, bush regeneration contractors for their support over the past three years to bring this project to success. This project has been assisted by the NSW Government through its Environmental Trust and Council's Environmental Rate.



Tropical Soda Apple Plant

EMERGENCY WEED ERADICATION PROJECT

MidCoast Council's Weed Biosecurity Officers are currently working on an emergency response to an outbreak of Tropical Soda Apple, an extremely invasive weed.

Recent inspections across the MidCoast have detected multiple instances of the weed on both private properties and roadsides, particularly in the Wingham, Mt George and Cooplacurripa areas.

Tropical Soda Apple typically invades open to semi-shaded areas including pastures, forests, riparian zones, roadsides, recreational areas, horticulture and cropping areas. It grows to up to 2 metres in height and has broad-based, cream coloured prickles, white flowers and broad, flat leaves. Mature fruit are yellow and about the size of a golf ball, while immature fruit are pale green with dark green veins.

Its prickles restrict cattle and native animals grazing and thickets can make it difficult for animals to access shade and water. It's also concerning that the plant is a host for many diseases and pests of cultivated crops, as well as being poisonous to humans.

Endangered native plant *Solanum sulphureum* can look similar to Tropical Soda Apple so if you think you have come across this pesky plant and need an ID or if you want more information contact MidCoast Council on (02) 7955 7777.

IMPROVING WATER AND FISH HABITAT IN THE WALLAMBA

Rock fillet works along the Wallamba River



Water quality and fish habitat in the lower Wallamba River have received a recent boost following the implementation of a restoration project. Works nearing completion include rock fillets, revegetation and stock exclusion fencing on severely eroded riverbanks at Darawank and Nabiac.

Council secured funds through the Local Land Services under the NSW Marine Estate Management Strategy (MEMS) to implement the projects in key areas of the Wallamba River. The MEMS is a 10-year strategy, a key deliverable under the Marine Estate Management Act 2014 and aims to deliver the NSW Government's vision of 'a healthy coast and sea, managed for the greatest community wellbeing, now and into the future'.

Project works commenced in April 2020 and have seen the construction of 930m of rock fillets that provide immediate and direct erosion control and enable the recruitment and regeneration of mangroves behind the fillets that provide important habitat for juvenile fish and crustaceans. Addressing the erosion of the riverbanks also helps to improve water quality by reducing sediment and nutrient inputs to the Wallamba River and downstream Wallis Lake. Additional works to benefit the river have also involved the establishment of 370m of stock exclusion fencing to keep cattle off riverbanks and 2,000 native tube-stock will be planted to re-establish and enhance riparian vegetation that will provide important habitat for marine life and terrestrial fauna.

The project, which has also been supported by funds from Council's Environmental Rate is expected to be completed by July 2020 and in the long term will deliver on the objectives of the Lower Wallamba River Rivercare Plan, Wallis Lake Estuary and Catchment Management Plan and the implementation of the Wallis Lake Wetlands Strategy.

It is one of a suite of projects to reduce sediment in waterways being co-funded by MidCoast Council and the Marine Estate Management Strategy. Other projects underway include rock revetment of the Lansdowne River at Moto Road and numerous projects through the MidCoast region to reduce erosion from dirt roads.



Extensive rock fillet works at stock exclusion fencing have been installed along the Wallamba River.

FEED OR FOE FROM FODDER?

Producers urged to check now for weeds emerging from feed

Ongoing weed management is an essential activity which safeguards our economy, environment and community.

MidCoast Council and Hunter Local Land Services are urging producers to be checking their paddocks regularly for new weed incursions, after several sightings of unwanted weeds in our region.

Of particular concern is the number of weeds emerging in sites used to feed out fodder during the drought.

There is still enough moisture and warmth in the ground for weeds to germinate and with the good rainfall we saw in late summer and early autumn it has provided ideal conditions.

We're asking producers to be vigilant in checking any spots they fed out fodder brought in during the drought so we can stop incursions of new weeds into our region.

The recent discovery of parthenium weed in two Upper Hunter locations is a good example of best practice weed identification and management.

While the first incursion has been linked to machinery, the second it's believed is the result of a fodder drop during the drought. In the more recent case, a landholder reported an unusual looking specimen in their paddocks to the Upper Hunter Weeds Authority, and it has now been confirmed as Parthenium Weed and the site is being controlled.

It is advised when handfeeding to restrict fodder distribution to certain containment paddocks so as not to risk spreading imported weeds across your property. Now the seasons have improved, weeds are quickly taking hold in some pastures.

Producers also need to be keeping a close eye on emerging weeds as it is easier to eradicate these weeds in small patches now than to be managing them for generations to come, so if producers see something unusual they need to get in contact with their local authorities.

It is also recommended when purchasing fodder you request a Fodder/Commodity Declaration, so any weed infestations emerging from purchased fodder can be traced back to the source.

If you wish to report a suspicious weed, please contact MidCoast Council's Weed Team on (02)7955 7777.

If you need advice or support managing your livestock feeding and drought management contact the Hunter Local Land Services Agricultural Extension Team by calling 1300 795 299.

For more information on weed management in the MidCoast Region visit our website www.midcoast.nsw.gov.au/weeds.

There's also plenty you can do to help us manage weeds across the MidCoast and keep our natural environment beautiful! Our Landcare and Dunecare groups are always looking for new volunteers.



What are the effects of parthenium weed?

Parthenium weed invades pastures and crops. It can also cause severe human health problems including:

- respiratory problems
- severe dermatitis

Parthenium weed is also:

- unpalatable to livestock
- outcompetes pastures
- can taint meat or milk
- reduces crop yields
- contaminates grain
- is a host plant for crop viruses

PROTECTING OUR WATERWAYS FROM GROSS POLLUTANTS

The MidCoast region is home to a large variety of rivers, wetlands and lakes. When these waterways are healthy they support a healthy environment, society and economy, including more liveable cities and strong, resilient communities.

Thriving aquatic ecosystems, which have strong biodiversity and abundant plants and animals also, need healthy waterways. This means stressors such as pollutants and the impacts of development need to be well managed.

Stormwater is any rain that falls on roofs or collects on paved areas like driveways, roads or footpaths. This surface run-off water and everything it carries with it is a major source of pollution in our waterways. As water flows over land it picks up pollutants and moves them into rivers, lakes, estuaries, beaches and groundwater.

To help protect our waterways from the run-off Council has installed Gross Pollutant Traps (GPTs) throughout the local area. These GPTs filters that catch stormwater pollution before it has a chance to enter waterways.

Council has recently completed an audit all the GPTs in the area to assess how well they are functioning and ensure that they are all in working order. Following the audit a comprehensive clean of each device is being undertaken and rectification works are underway on several devices that had started to deteriorate with age.

Utilising funding from Council's Stormwater Management Services Charge works will continue for the next 12 months to ensure that all devices are operating at their full capacity and protecting our waterways for many years to come!



Staff undertaking maintenance on underground Gross Pollutant Trap

PROVIDING HABITAT FOR ANIMALS AFTER FIRE

The recent fires in the MidCoast region lead to the loss of many habitat trees, those old enough to have formed natural hollows, which are necessary for native wildlife. In some instances it can take decades to a century for a habitat tree to form. A variety of animals including parrots, possums, phascogales, gliders, antechinus and microbats all require tree hollows for protection from the elements and predation.

Council has been working to replace this lost resource by installing nesting boxes in affected areas. Community groups, FAWNA, Conservation Volunteers Australia (CVA) and our local Men's Sheds have speedily come to our animals' assistance by donating over 150 nest boxes. These nest boxes will provide habitat for a range of tree loving animals and support them while the ecosystem regenerates.

MidCoast Council would like to thank the all the groups involved in this important project for their continual support across the community.



Volunteers from FAWNA and CVA have helped build nesting boxes for our wildlife

DREDGING IN HAWKS NEST

A major dredging project has commenced in Hawks Nest to remove 120,000 cubic metres of marine sand from the eastern channel of the lower Myall River.

The project began in May and will continue for 27 weeks with 20,000 cubic metres of sand being used to replenish Jimmys Beach, while the remainder of dredged material will go to the existing stock-pile at Winda Woppa.

Council received a grant from the NSW Government's Rescuing our Waterways Program, which covers half of the \$1.7 million project cost, to support the delivery of the project.

RMS Boating Safety Officers and regular boat users around Tea Gardens and Hawks Nest have identified shallow zones in the eastern channel that are affecting the ability for boat traffic to move through the area safely.

Dredging of this section of the river takes place intermittently, based on feedback from a number of local groups who regularly use that section of our river and this will result in improved navigation, while also having the added bonus of being able to assist with beach erosion.

100,000 cubic metres of the dredge spoil will be pumped via a pipeline to Winda Woppa, where it will top up the stock pile that is needed for the Sand Transfer System, and the other 20,000 cubic metres will immediately provide a temporary sand buffer for ongoing beach erosion at Jimmys Beach.

Boat users are advised to be aware of changed conditions in the area during the works period, including underwater, anchored pipelines and limited thoroughfare in the channel, with RMS approved navigation markers in place.

A closure of the Moira Street boat ramp will be required at the end of the dredging for the contractor to demobilise.

Once the beach nourishment operations begin at Jimmys Beach there will be restricted access to parts of the beach to make way for the machinery.

The community will continue to be updated on the progress of this project and there will be signage in place and a clear workzone established.

To find out more about this and other dredging projects Council is undertaking, head to their website www.midcoast.nsw.gov.au/dredging

Dredging is underway at Hawks Nest



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