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Latest news from the REC

The NSW Roadside Environment Committee (REC) has again sponsored the NSW Roadside Environmental Management Award as part of the Local Government Excellence in the Environment Awards (see article below).

The 2020 Award submissions were judged by some representatives of the REC.

REC Executive Officer, Neil Dufty, presented the Award during a virtual ceremony held on 13 October 2020.

2020 NSW Roadside Environmental Management Award winner announced

Held annually, the Local Government Excellence in the Environment Awards aim to recognise outstanding achievements by NSW councils in managing and protecting the environment. One of the award categories is the Roadside Environmental Management Award sponsored by the NSW Roadside Environment Committee (REC).

The Roadside Environmental Management Award recognises on-ground achievements in roadside environmental management, as well as strategic initiatives that build capacity to deliver these achievements over time and across tenures.

This award recognises activities which:

- Improve the condition of roadside vegetation, including through the management of threats.
- Build capacity to deliver on-ground roadside environmental management initiatives.
- Promote co-operation and collaboration in roadside environmental management across tenures.
- Build and/or disseminate knowledge about roadside environmental values and management.

This year due to COVID-19 restrictions a virtual ceremony was held in October to present the awards.

There were two finalists for the Roadside Environmental Management Award both from Division C (councils with a population of more than 70,000 people).

The winner of Division C and Overall Winner was:

Port Stephens Council: Discovering Mahony's Toadlet – a journey to expand the Hunter and Central Coast Roadside Environmental Marker Scheme

In 2016 a newly discovered amphibian species, Mahony's Toadlet (*Uperoleia mahonyi*), was identified in the Port Stephens area and was listed as a threatened species the following year.

To address the potential impacts of the council's maintenance program on the species, ecological surveys were conducted of roadside environments to assess for likely habitat of Mahony's Toadlet to include in the council's Environmental Management System. The council took the opportunity to integrate this project into the existing Hunter Joint Organisation Regional Roadside Environment Marker Scheme, creating a new roadside marker category for amphibians that can be used by other road authorities across the Hunter Region.

Read the case study at https://lgnsw.org.au/Public/Public/Members-Services/Environment-Awards/2020-winners/REM_award.aspx

Mahony's Toadlet

Highly Commended in Division C was:

Sutherland Shire Council: Green Streets Program GIS layer with interactive community consultation
Sutherland Shire Council has developed a spatial tool that allows tree planting design, stakeholder review, community consultation, installation and maintenance to be captured and edited while in the field. The development of the green streets GIS layer with interactive community consultation has successfully created avenues to meaningfully interact and engage with residents about the value of street trees and has enabled the 2020 planting program of 3,000 street trees to continue during COVID-19 restrictions.

Environmental Finalists' Forum

A free virtual Finalists' Forum will be held on 1 December 2020 to showcase this year's finalists in the Local Government Excellence in the Environment Awards. More details at https://lgnsw.org.au/Public/Public/Members-Services/Environment-Awards/Excellence-in-the-Environment-Awards.aspx

Management Agreement Permits on TSRs

Long term grazing leases for Travelling Stock Reserves (TSRs) have been replaced by five-year Management Agreement (MA) Permits. Access to MA Permits has been made available through open tender.

Local Land Services promotes equitable access and allocation of TSRs. Local Land Services has undertaken a thorough review and assessment of TSRs, including those previously leased under long term permits in 2014, to identify only appropriate TSRs are made available for MA Permits.

Under new measures introduced by Local Land Services earlier this year, the MA Permits across NSW are now standardised, and the process of assessing the tenders is more robust.

Successful Tenderers will be selected, based on selection criteria that include the Tenderer's proposed grazing practices and experience as well, as how they plan to manage pests, weeds and drought impacts.

The MA Permit Tender makes doing business with Local Land Services easier for customers and provides more transparency in the process.

The new measures have meant the successful tenderers on TSRs have:

- read and understood the 'TSR Plan of Management: TSR - Delivering better TSR Services for our customers' document
- read and understood the 'Best Environmental Management Practice Toolkit for TSRs'
- committed to completing and submitting an annual report via a survey on the condition of TSR, including a photo
- paid a one-off $300 application and permit fee
- committed to being able to meet all other requirements outlined in the permit Terms and Conditions.

The five-year timeframe of the MA Permits provides benefits for both producers and Local Land Services, which include:

- Tenderers get certainty of TSR access, helping them plan and manage their business while also taking on the responsibility of being a custodian of public land.
- Provision of an income stream to Local Land Services for ongoing maintenance and management of TSRs.

More details at: https://www.lls.nsw.gov.au/help-and-advice/growing,-grazing-and-land/travelling-stock-reserves/apply-for-long-term-tsrs

Travelling Stock Reserves Management Agreement Permits

This fact sheet provides an overview of the application process for lodging a tender for a Management Agreement (MA) Permit over a Travelling Stock Reserve (TSR). The fact sheet also describes the subject TSRs and the assessment criteria for all applications.

Note: Management Agreement Permits were previously known as Long-Term Grazing Permits

Tender eligibility

Local Land Services promotes equitable access and allocation of TSRs. From time to time, Local Land Services may advertise TSRs that are available for grazing purposes under an MA Permit. The advertisements will be published on the Local Land Services website.

If you wish to tender for an advertised grazing opportunity, you will need to:

- have a Property Identification Code
- be able to obtain public liability insurance to the value of $20M
- submit a TSR MA Permit tender
- read and understand the 'TSR Plan of Management: TSR - Delivering better TSR Services for our customers' document
- read and understand the 'Best Environmental Management Practice Toolkit for TSRs'
- commit to completing and submitting an annual reporting via a survey on the condition of TSR, including a photo
- be prepared to pay the one-off $300 application and permit fee if successful in securing the tender
- be able to meet all other requirements outlined in the permit Terms and Conditions.

Proposed tenure

Local Land Services seeks to collaborate with producers to grant a MA Permit over the site for grazing. The permit will commence from the date the Local Land Services delegated Officer executes it. The permit allocation is region-specific but will be for five years.

The legislative authority for granting of the new permit is in accordance with the provisions of the *Local Land Services Act 2013*.

Inspection

Applicants can inspect the TSR before submitting a tender. Applicants should consider the current condition of fencing, the presence of weeds, and any other land management issues on the TSR when submitting their tender.

Confidentiality of information

All applications will remain the property of Local Land Services. Local Land Services will treat the contents of the applications as commercial-in-confidence.

Selection criteria

The following selection criteria will be used by the selection committee when making their recommendation on tender submissions (not necessarily in order of priority):

1. **proposed use of grazing** on TSR (e.g. particulars of intended grazing purpose, any existing and proposed structures required to supplement use, if used in conjunction with adjoining land or as a 'stand-alone' parcel of land and any other information relation to the use of the TSR)
2. the **type of stock** and the **stocking rate** intended to apply to the TSR
3. immediate **management issues** considered to be a priority
4. the applicant's **experience in land management** and his or her ability to ensure appropriate ongoing management of the TSR (e.g. training courses undertaken. i.e. Prograze, grazing for profit)
5. proposed **drought management strategy** (strategy to maintain acceptable groundcover during drought conditions, e.g. de-stocking, restricted grazing)
6. proposed **bushfire hazard reduction plan** (under the *Rural Fires Act 1997*, landholders are required to take the necessary steps to prevent the occurrence and spread of bushfires)

NSW GOVERNMENT | Local Land Services

Inland Rail Narrabri to North Star section gains environmental approval

Contractors are one step closer to breaking ground on the Inland Rail section from Narrabri to North Star, in NSW, as it gains environmental approval.

Deputy Prime Minister and Minister for Infrastructure, Transport and Regional Development Michael McCormack welcomed the approval, providing further certainty on Inland Rail's delivery and the significant local jobs and investment the freight rail line will bring.

Finance Minister Mathias Cormann said Inland Rail would deliver many benefits to New South Wales, both in the short and over the longer term, by facilitating increased local business investment, substantial improvements to our freight network and the creation of more new jobs.

Minister for Regional Health, Regional Communications and Local Government and Federal Member for Parkes, Mark Coulton welcomed the approval and encouraged local communities to engage with the project to make the most of the local construction opportunities.

"Inland Rail will be a game changer in Northern NSW and there are endless opportunities for local businesses to take advantage of the next stage of construction between Narrabri and North Star," Coulton said.

"The first recently completed section – Parkes to Narromine – provided a significant boost to businesses across a range of industries, including concrete supply, transportation, fencing, earthmoving, accommodation, hospitality and security in what has been a difficult time for many rural businesses with drought, fires and now COVID-19."

The first section of Inland Rail was completed in September this year, between Parkes and Narromine.

Read the full article in Roads & Infrastructure Australia:
https://www.roadsonline.com.au/inland-rail-narrabri-to-north-star-section-gains-environmental-approval/

Threatened species being protected on TSR near Warren

Little Mount Travelling Stock Reserve (TSR) is north of Warren and is valuable for its biodiversity and unique geology.

Whilst Little Mount TSR is not particularly productive or suitable for grazing, Central West Local Land Services is managing it for its biodiversity.

Little Mount TSR is home to three known species of threatened flora: the Hairy Rockfern (*Cheilanthes sieberi subsp. pseudovellea*) listed as endangered in NSW; the Greenhood Orchid (*Pterostylis cobarensis*) and the Pine Donkey Orchid (*Diuris tricolor*), both listed as vulnerable in NSW.

Central West Local Land Services, in partnership with the Biodiversity and Conservation Division of the Department of Planning, Industry and Environment through the Saving our Species program, is managing the species through grazing management, weed control and ongoing monitoring. Grazing and weed competition are two of the main threats to these plants.

The Hairy Rockfern is a perennial fern with brown scales and a creeping wiry underground stem. Fronds are hairy on both sides with twisted white to brown branched hairs. Plants usually die off in drought and grow again after adequate seasonal rainfall.

The Greenhood Orchid is one of the most drought tolerant orchids in Australia. Plants only stick their head out and flower between September and November. Otherwise they die back to a large underground tuber. The flowers are transparent with brown and green markings.

The Pine Donkey Orchid has two to six flowers on each stalk. The flowers are bright yellow to orange, speckled with red to purple and white markings. The sepals are very long and often crossed. It is found mainly in sandy soils, either on flats or small rises.

Central West Local Land Services had not been able to find these plants whilst monitoring the reserve over the past couple of years, no doubt due to the prolonged drought. However, recently the Hairy Rockfern was found again and Central West Local Land Services will be monitoring the site over the next few months in anticipation of the Greenhood Orchid flowering again after recent rainfall.

Greenhood Orchid

The Eco-Arts Red Gum Trail

Originating in South West Victoria in 2015, the Celebrating Red Gums initiative aims to provide opportunity for all who share a connection with Red Gums to celebrate their affinity with these magnificent and inspiring trees

The Eco-Arts Red Gum Trail uses artistic mediums to signpost and inspire participation via the creation of an accessible, interactive, educational, emotionally connective and safe self-drive, ride and/or walking trail network encompassing public roads, parks and spaces.

Currently in the conceptual stage, potential trail deliverables include:

- Towns host 'information sites' about the Red Gum Trail connected with their area. These sites could take the form of murals, mosaics, dioramas, sculptures, sound and light displays.
- Trail-goers are guided by a GPS-triggered App, depicting imagery and sound of historical, environmental or cultural portrayal at significant sites.
- The Trail features artworks at select locations, which are of significance to that place, or depict an artist's or community's connection with that location.
- The Trail facilitates art and photography activities, by providing structured spaces at opportune points.
- The Trail delivers take-home activities (e.g. information gathered via an App along the trail can be presented at a local business in exchange for a calendar, colouring or sticker sheet).
- The Trail promotes physical activity and mental health well-being; denoting appropriate sites where individuals, families and groups can gather to participate in activities, and provides points of access for persons with special physical needs.
- Historical knowledge and the future of the landscape; The Trail highlights the cultural history of the area, as well as the significance of Red Gums in the establishment and European settlement of the rural towns and districts, via interactive displays or artistic interpretations at key locations.
- The Trail promotes understanding of the changing nature of the landscape, including land use change and habitat value.
- The Trail may value-add to existing trails.

More details from sam.middleton@bigpond.com

Survey finds 71 per cent of koala populations died in some NSW fires

Koalas (photo: Cole Bennetts)

According to an article in the Sydney Morning Herald, the first comprehensive scientific study of the impact of the Black Summer bushfires on the state's koala population found more than 70% of koalas were killed in the six study areas.

At one location, the Kiwarrak area south of Taree, there was no evidence of any living koalas, according to the ecological consultancy Biolink, which surveyed 123 sites at six fire grounds for a study on behalf of the World Wildlife Foundation.

Four major blazes – the Wardell fire, the Busby's Flat fire, the Crestwood-Lake Innes fire, and the Hillville Road fire – swept through the study areas on the NSW north coast.

"This is the first scientific study to enter charred forest and quantify the impact of the bushfire crisis on koalas," said WWF-Australia chief executive Dermot O'Gorman.

"A 71 per cent decline is massive, nearly three quarters of koalas in these locations were lost. That's why it's so important that national environment laws are strengthened to protect koalas and all threatened species."

Mr O'Gorman said the Australian bushfires showed the world a "future that nobody wants".

Read the full article at:
https://www.smh.com.au/environment/conservation/survey-finds-71-per-cent-of-koala-populations-died-in-some-nsw-fires-20200905-p55so2.html

Fall foliage along New Hampshire (USA) motorway

Planetary 'safety net' could halt wildlife loss and slow climate breakdown

Scientists at the environmental research organisation Resolve have drawn up a blueprint for a planetary "safety net" of protected areas they say could help halt catastrophic biodiversity loss.

Lead author Eric Dinerstein told the Guardian that the analysis, published in Science Advances, pulled together the most widely used global datasets of biodiversity features to identify areas that require additional conservation attention.

"We wanted to cover everything from those species with the narrowest ranges – like the Udzungwa partridge, only found in a specific mountain range in Tanzania – to phenomena like the caribou migration in the Canadian tundra which happen over vast areas. Because all of that is biodiversity."

Earlier this year the UN presented a draft plan to protect 30% of lands and oceans by 2030, which will provide the backbone to an agreement on nature to be finalised in Kunming, China, in 2021.

The move was welcomed by environmental campaigners and wildlife experts, although some said that the 30% number reflected what was politically feasible rather than what the science recommended.

Read the full Guardian article at https://www.theguardian.com/environment/ng-interactive/2020/sep/29/planetary-safety-net-could-halt-wildlife-loss-and-slow-climate-breakdown-aoe

Out West, Building Wildlife Crossings Brings Return on Investment

Wildlife bridge at Trappers Point, USA (photo: National Geographic)

According to a recent article published by the Pew Trusts, in the USA about 26,000 people are injured by wildlife-vehicle collisions every year, costing Americans more than $8 billion in vehicle repair, medical costs, towing, and other expenses. The average cost of a vehicle colliding with a moose exceeds $44,000 in 2018 dollars.

As for the wildlife, 1 million to 2 million deer, elk, and other large animals die every year after being struck by a car or truck.

But state and federal lawmakers, working with various partners, can do something about it. Today, data and research reveal a lot about where deer, elk, and other animals move, and where wildlife-vehicle collisions are most likely to happen. These "hot spots" show where investments in transportation infrastructure such as wildlife overpasses or underpasses could provide a win-win for animals and motorists alike.

For instance, on a short stretch of U.S. Highway 191 near Pinedale, Wyoming, called Trappers Point, dozens of pronghorn antelope and mule deer were colliding with vehicles during the animals' seasonal migration between summer and winter habitats, resulting in about $500,000 in costs per year. In 2012, the Wyoming Department of Transportation built two wildlife bridges and six underpasses, and within three years, wildlife-vehicle collisions dropped 81 percent overall, and collisions with pronghorn were eliminated. As John Eddins, then the department's district engineer, noted, "These types of projects are expensive, but when you are saving $500,000 each year in vehicle crash costs and wildlife mortality costs, the project pays for itself in about 20 years."

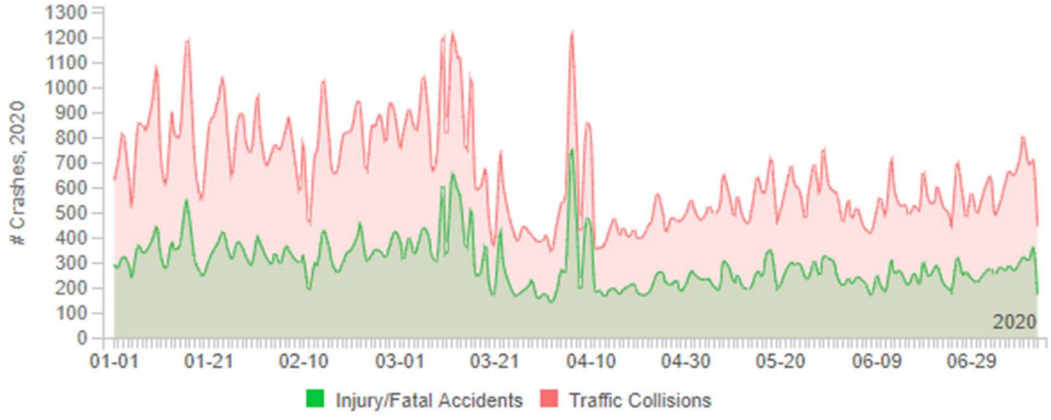
Read the full article at https://www.pewtrusts.org/en/research-and-analysis/articles/2020/02/25/out-west-building-wildlife-crossings-brings-return-on-investment

Reports on COVID-19 Mitigation and Traffic Impacts

In the USA, government guidance and orders for "shelter-in-place" in response to the COVID-19 pandemic went into effect throughout March 2020, triggering changes in traffic. The Road Ecology Center has published several reports on the impact of COVID-19 mitigation on traffic and the consequences of reduced traffic on crashes, fuel use, greenhouse gas emissions, fuel tax revenue, and wildlife vehicle conflict.

The research found that:

1. Nationwide traffic data suggests that most residents in all states significantly reduced their travel in response to "stay-at-home" orders.
2. Traffic reduction in US states was accompanied by statistically significant reductions in the number of Wildlife Vehicle Conflict (WVC). "We found that for CA, ID, and ME, the number of WVC recorded as crashes or carcasses in statewide WVC-reporting systems declined statistically between the 4 weeks prior to the stay-at-home order and the 4 weeks after the order. This is contrast to previous years, where WVC rates in this time period usually either stays constant or increases, due to transition from winter to spring."
3. Mountain lions in California experienced a 58% reduction in mortality on roads at a time when the state is considering legal protection for the species, in part because of lion-vehicle collisions. "Mountain lions are reported hit on California roads and highways up to twice per week. In a typical year, this rate either stays constant or increases slightly in the transition from winter to summer. We found that the rate of mountain lion mortality declined 58% between the 10 weeks prior to the state order and the 10 weeks after."
4. The distribution of WVC generally did not change between the period before and after the order. The density of WVC per unit area was calculated for the pre- and post-order periods for each state. "Generally, there was no obvious difference between patterns and distribution of WVC density before and after state stay-at-home orders, suggesting an evenly-distributed benefit to wildlife across the states."



California Crashes During "Shelter-in-Place" Orders, January - July 2020

More details at: https://roadecology.ucdavis.edu/

Roadkill study identifies animals most at risk in Europe

Around 194 million birds and 29 million mammals are thought to be killed each year on European roads, according to a new study that has ranked the most vulnerable species.

An international research team used 90 roadkill surveys from 24 European countries to create a new method of estimating both the birds and mammal species killed most often on roads, and the species most vulnerable to being wiped out of certain areas.

The research, published in *Frontiers in Ecology and Environment*, found that the species killed most often were not necessarily the ones most vulnerable to disappearing completely. This means action to preserve wildlife when new roads are built risks being targeted at the wrong species based on current methods.

Dr Manuela Gonzalez-Suarez, an ecologist at the University of Reading, and co-author of the study, said: "Road densities in Europe are among the world's highest, with 50% of the continent within 1.5km of a paved road or railway. Roads are therefore a significant threat to wildlife, and evidence shows deaths on them could even cause some species to disappear completely.

"Despite this, the long-term vulnerability of species is not currently considered when assessing the impact of new roads on wildlife, meaning we risk channeling support to the wrong species, doing nothing to help those most at risk. Better understanding which species are most vulnerable to roads is therefore important if we are to take more effective conservation action."

For more details about the research go to:

https://www.sciencedaily.com/releases/2020/06/200610135101.htm

LGNSW's Council Roadside Reserves Training

Developed specifically for councils to guide them through the complexities of roadside reserve management, four e-learning modules are now available to raise council staff awareness of their responsibilities when it comes to managing and working in the road reserve and ensuring roadside environmental management best practice - https://lgnsw.org.au/Public/Public/Policy/REM-pages/CRR_training.aspx

The Council Roadside Reserves (CRR) Project has also produced a range of other resources, which are now available for councils.

https://lgnsw.org.au/Public/Policy/Roadside-Environmental-Management-pages/Roadside-Environmental-Management.aspx

This project has been assisted by the NSW Government through its Environmental Trust

Wildlife vehicle strike and contributing factors

DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT

Wildlife vehicle strike and contributing factors

Koala Vehicle Strike Fact sheet 1

More than 900,000 kilometres of roads cover the Australian landscape. The ecological consequences of this network are immense and complex. Millions of native animals are injured and killed each year when they are struck by vehicles while trying to cross the road. Roads also create barriers to movement and fragmentation of habitat, among other impacts.

This fact sheet provides an introduction to the impacts of vehicle strike on koalas (*Phascolarctos cinereus*). The three other fact sheets in this series focus on how we can reduce the impact of vehicle strike on koalas:

- Fact sheet 2: How to keep koalas off the road
- Fact sheet 3: How to change driver behaviour
- Fact sheet 4: How to record koala vehicle strike and monitor mitigation efforts.

This fact sheets series aims to:

- provide a simple summary of current knowledge about koala vehicle strike
- increase understanding and awareness about
  - factors contributing to vehicle strike
  - how we can reduce the number of koala injuries and deaths from vehicle strike
  - how to effectively monitor koala vehicle strike and our efforts to mitigate it
- contribute to the development of local strategies to reduce koala vehicle strike.

environment.nsw.gov.au

Koala Vehicle Strike Fact sheet 1

This fact sheet provides an introduction to the impacts of vehicle strike on koalas (*Phascolarctos cinereus*). It is one in a series of 4 fact sheets developed to provide councils and the community with information about how we can reduce the impact of vehicle strike on koalas.

The three other fact sheets in this series include:

Fact sheet 2: How to keep koalas off the road

Fact sheet 3: How to change driver behaviour

Fact sheet 4: How to record koala vehicle strike and monitor mitigation efforts.

More details at:

https://www.environment.nsw.gov.au/research-and-publications/publications-search/koala-vehicle-strike-fact-sheet-1-wildlife-vehicle-strike-contributing-factors

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The aim of this newsletter is to share information about the management of NSW linear reserve environments and profile the NSW Roadside Environment Committee (REC).

For more information about the REC: https://www.rms.nsw.gov.au/about/what-we-do/committees/roadside-environment-committee.html

Please contact the REC Executive Officer if you wish to subscribe or unsubscribe.

NSW Roadside Environment Committee

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