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Latest news from the REC

- The REC sponsored the Roadside Environmental Management Award category of the 2015 Local Government NSW Excellence in the Environment Awards to be announced on Tuesday 1 December. More details at <http://www.lgnsw.org.au/events-training/environment-awards>

Finalists in the roadside environmental award category are Cowra Shire Council and Wingecarribee Shire Council.

Call for public comment on TSR Draft State Planning Framework

Local Land Services (LLS) is responsible for the care and control of the almost 500,000 ha of Travelling Stock Reserves (TSRs) in NSW. TSRs are important resources for travelling or grazing stock as well as public recreations, apiary sites, and conservation.

LLS has developed a draft planning framework for TSRs across the entire state. This framework is the first of its kind and will help support the future management of TSRs.

LLS has invited the public to comment on the TSR Draft State Planning Framework 2016-19. Comments will help LLS understand what the public value most for TSRs.

The opportunity for public comment has been extended until 5pm Friday 4 December 2015. Comments should be lodged by email to tsr.feedback@lls.nsw.gov.au

For more details: <http://www.lls.nsw.gov.au/livestock/stock-routes>

NRC Review of Roadside Vegetation Implementation Project

The Natural Resources Commission (NRC) has completed an evaluation for the NSW Environmental Trust assessing the appropriateness, effectiveness and efficiency of the Roadside Vegetation Implementation Project (RVIP).

The NSW Environmental Trust provided approximately \$2.35 million of funding for local councils under the RVIP completed in two stages between 2011 and 2014.

The NRC was asked to evaluate the RVIP against four objectives:

1. to allow for the protection, revegetation and regeneration of large areas of linear reserves across the State
2. to improve environmental condition and enhance ecological corridors in NSW
3. to provide funds to regional councils and help regional economies
4. to add value to a considerable investment already made by the NSW Environmental Trust which funded councils to prepare Roadside Vegetation Management Plans in 2005.

The NRC provided the results of the assessment to the Trust in December 2014 in the form of two reports. The first report evaluated Stages 1 and 2 of the Project, and the second report provided advice for investment priorities and a possible third stage of the Project.

The Trust has since released a report in response to the NRC reports stating that it has either accepted or partially accepted all of the NRC recommendations and confirmed that the advice provided by the NRC will inform the design of a potential third stage of the project.

View the reports at: <http://www.nrc.nsw.gov.au/environmental-trust>

Local Land Services Draft Strategic Plan – What do you think?



Local Land Services has prepared a draft State Strategic Plan which will help shape the direction for the organisation throughout NSW over the next ten years. The plan sets the vision and goals for the LLS and outlines the strategies through which these goals will be achieved.

The draft plan can be viewed online and the LLS is currently inviting people to review the document and provide feedback using the online submission form before 22 November 2015.

Each of the 11 Local Land Services regions has developed a local strategic plan. Each region has identified local priorities and determined how the goals and strategies of the State Strategic Plan are best achieved. More details: <http://www.lls.nsw.gov.au/about-lls/community-consultation/strategic-plans>

Roadside Vegetation Implementation Project Highly Commended at the Green Globe Awards

The achievements of NSW local councils funded through the NSW Environmental Trust's Roadside Vegetation Implementation Project (RVIP) were recognised at the 2015 Green Globe Awards. The NSW Environment Minister, Mark Speakman announced the winners with the RVIP awarded a [Highly Commended](#) in the Natural Environment category.

RVIP grants assisted local councils with existing roadside vegetation management plans to carry out priority roadside vegetation works such as weeding, revegetation and regeneration. The grants also assisted with training of council staff across maintenance and works crews, protection of threatened species and installation of signage identifying priority roadside vegetation areas.

Councils involved in the project achieved the following:

- regeneration of more than 400 hectares of roadside vegetation
- revegetation of more than 600 hectares
- weeding of 2,200 hectares
- 49 training sessions with 751 participating council staff.

Visit the [Green Globe website](#) for more information on the winners.



Photo: Minister Speakman, Environment Minister with Highly Commended Winners of Green Globes.

Source: Local Government NSW

New NSW Biosecurity Act

The *NSW Biosecurity Act 2015* is expected to come into effect in 2017. The act will wholly or partially replace 14 existing pieces of biosecurity legislation. It will facilitate a more consistent approach to managing biosecurity risks to the environment, community, and economy. It will also make it simpler for stakeholders and regulators to understand and manage their biosecurity risks.

The act was assented to in September but the regulations, other legal instruments, policies and procedures that will support the act still need to be reviewed and developed. This process will require engagement and participation from stakeholders. To help with this process, the Biosecurity Advisory Committee has been established.

If you have any questions about the *NSW Biosecurity Act 2015* or you would like further information you can email submissions.biosecuritylegislation@dpi.nsw.gov.au

Source: <http://www.dpi.nsw.gov.au/biosecurity>

Death of a Landscape

After slowly declining in health for more than a decade, an entire landscape of Eucalyptus trees has died in the Cooma-Monaro region of NSW.

A recent survey found that within the 2,000 km² area, almost every Ribbon Gum (*Eucalyptus viminalis*) is either dead or showing severe signs of stress and dieback. While other tree species in the area seem to be surviving, the Ribbon Gums appear to be falling victim to an infestation of the Eucalyptus Weevil (*Coniapterus* sp.). The study also found that the dieback is occurring regardless of local environmental factors such as the presence fencing, grazing or fertilization.

Despite the fact that the Ribbon Gums in the Cooma-Monaro region may never regenerate, the dieback has received little attention or action.

Source: <https://theconversation.com/death-of-a-landscape-why-have-thousands-of-trees-dropped-dead-in-new-south-wales-48657>



Amphibians and Reptiles Face Mass Extinction

Amphibians and reptiles may be facing mass extinction. In a recently published paper, John Alroy used an extremely conservative Bayesian method to estimate the number of recent amphibian and reptile extinctions in nine tropical and subtropical regions. The study computed extinction probabilities for each of the species included in the study based on its sighting frequency and latest sighting date.

Based on the world's history of steadily accumulating extinctions and severe population crashes since the 1970s, the fact that at least 3.1% of frog species have already disappeared and the conservative method used, the study's best estimate of the global grand total is roughly 200 extinctions.

The findings of the study are consistent with previous results. It suggests that frog losses will be heavy in Latin America due to the impact of the pathogenic chytrid fungus *Batrachochytrium dendrobatidis*. It found that at least another 6.9% of all frog species may be lost within the next century.

Source: <http://www.pnas.org/content/112/42/13003.abstract>

HerpMapper

A new cooperative project is helping people gather and share information about amphibian and reptile observations throughout the world. HerpMapper allows people to create records of their amphibian and reptile observations.

This information is then made available to groups who use the records for research, conservation, and preservation.

Find out more: <http://www.herpmapper.org/about>

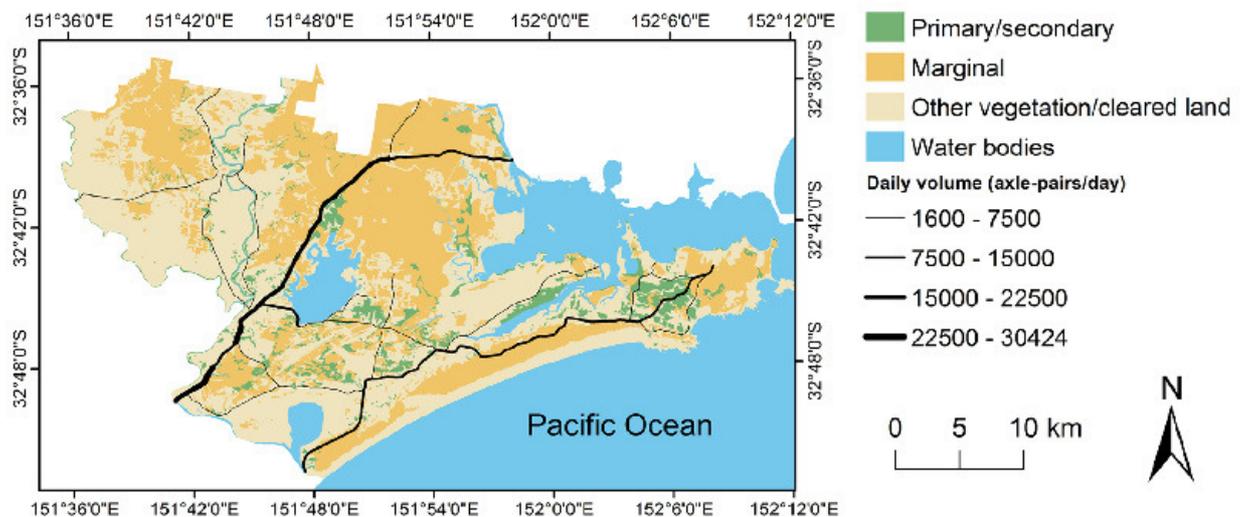
Using Maths to Plan Roads for Wildlife

There is currently a lack of comprehensive plans to make our road networks as safe as possible for wildlife. This issue is currently being addressed by University of Queensland (UQ) researchers who are using maths to develop new planning tools for environmentally sensitive road planning.

Roads have a significant impact on wildlife throughout the world, with some people believing roads are one of the greatest emerging threats to biodiversity.

The impact of roads on wildlife can be reduced by changing where roads are located or by constructing mitigation structures such as fences and overpasses. In two recent studies, UQ has developed insights into principles for road placement and tools for prioritising mitigation structures and their location.

The first study applied a mathematical model to determine if designing a whole new road network to accommodate increases in traffic would minimise the impact on wildlife compared to upgrading the existing roads. Using koala populations around Port Stephens as an example, the study found that in almost all cases, building new roads was more detrimental to wildlife populations than upgrading existing roads. This is because the impact of animals having to cross additional roads was greater than the impact of increased traffic volume on the existing roads.



Map of study area near Port Stephens used in the analysis of whether new roads or upgraded roads had more impact on koalas. The map shows the estimated distribution of koala habitat, and the estimated average daily traffic volume (axle-pairs day) on major roads. The biggest roads in the area carry over 20,000 vehicles per day. (From Rhodes et al, 2014)

In the second study, a new framework was developed to prioritise the different road mitigation options available to help minimise the impact of roads on wildlife. The framework also identifies where the mitigation options should be positioned so that the abundance of a species is maximised with regard to cost. For this study a koala population on the Koala Coast was used. The study found an almost linear relationship between the benefit to koalas and the cost of the mitigation option.

Source: <http://decision-point.com.au/article/using-maths-to-plan-roads-for-wildlife/>

Habitat Fragmentation Damaging Ecosystems

An extensive study of global habitat fragmentation found that 70% of existing forest lands around the globe are within 0.8 km of the forest edge. The study also tracked seven major experiments on five continents that examine habitat fragmentation and found that fragmentation of habitats reduce the diversity of plants and animals by between 13 and 75%. The most negative effects found in the smallest and most isolated fragments of habitat.

The study examined seven existing major experiments on fragmented habitats currently being conducted across the globe; some of these experiments are more than 30 years old.

Covering many different types of ecosystems, from forests to savannas to grasslands, the experiments combined to show a disheartening trend: fragmentation causes losses of plants and animals, changes how ecosystems function, reduces the amounts of nutrients retained and the amount of carbon sequestered, and has other deleterious effects.

"The initial negative effects were unsurprising," Haddad said. "But I was blown away by the fact that these negative effects became even more negative with time. Some results showed a 50 percent or higher decline in plant and animals species over an average of just 20 years, for example. And the trajectory is still spiralling downward."

Haddad points to some possible ways of mitigating the negative effects of fragmentation: conserving and maintaining larger areas of habitat; utilising landscape corridors, or connected fragments that have shown to be effective in achieving higher biodiversity and better ecosystem function; increasing agricultural efficiency; and focusing on urban design efficiencies.

"The key results are shocking and sad," Haddad said. "Ultimately, habitat fragmentation has harmful effects that will also hurt people. This study is a wake-up call to how much we're affecting ecosystems – including areas we think we're conserving."

The study was supported by the National Science Foundation.

Source: <https://news.ncsu.edu/2015/03/bad-effects-shrinking-habitats/>

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 on the REC, including how to develop roadside vegetation management plans, go to:

<http://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
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