# **Evaluation of the NSW Environmental Trust's Linear Reserves Program** November 2022





Natural Resources Commission

# Enquiries

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### Acknowledgement of Country

The Natural Resources Commission acknowledges and pays respect to traditional owners and Aboriginal peoples. The Commission recognises and acknowledges that traditional owners have a deep cultural, social, environmental, spiritual and economic connection to their lands and waters. We value and respect their knowledge in natural resource management and the contributions of many generations, including Elders, to this understanding and connection.

# List of acronyms

CRR	Council roadside reserves
REF	Review of Environmental Factors
LGNSW	Local Government NSW
LLS	Local Land Services
The Commission	Natural Resources Commission
The Program	Linear Reserves Program
The Trust	Environmental Trust
Trust administration	Environmental Trust staff housed within the Department of Planning and Environment with functions related to the design, governance and administration of Trust programs and grants
TSR	Travelling stock reserves

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Document No. D22/1980

ISBN: 978-1-925204-89-6

#### Cover images from left to right:

- 1 Emu Plains Council Roadside Reserve, Wagga Wagga, image courtesy of Local Government NSW
- 2 Grazing in fenced TSR, Murray LLS Region, image courtesy of Local Land Services

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# **Executive summary**

Between 2016 and 2020, the Environmental Trust (the Trust) funded the Linear Reserves Program (the Program) to improve the management of the conservation values of linear reserves. The Program consisted of two separately funded projects:

- The \$4.75 million Managing Travelling Stock Reserves (TSR) for Sustainable Conservation Outcomes project, delivered by Local Land Services (LLS), in partnership with the former Office of Environment and Heritage (now Department of Planning and Environment – Environment and Heritage Group (EHG))
- The \$2.08 million Council Roadside Reserves (CRR) project, delivered by Local Government NSW (LGNSW)

The Natural Resources Commission (the Commission) has evaluated the Program to assess whether, and to what extent, intended program outcomes have been achieved, and to identify lessons for future projects.

Although the two projects that made up the Program targeted separate organisations and were delivered differently, they were fundamentally trying to achieve the same outcome: to build the capacity of the organisations to better manage linear reserves. Both projects made progress in this regard, though they are parts of a larger and longer-term effort to enhance management of these valuable reserves.

The key findings for the TSR project were:

- The project generated considerable new data on conservation values on TSRs, which are now available through a centralised, publicly accessible database. However, the assessment methodology developed to assess conservation values has limitations as a tool to prioritise future investment in on-ground work for environmental outcomes on TSRs.
- The project was unsuccessful in progressing new funding options for TSR conservation management by LLS, impacting the achievement of the project's vision.
- Despite funding limitations and uncertainty, some LLS regions are applying the tools developed in the project to inform on-ground management.
- The training rolled out under the project was fit-for-purpose, but additional efforts would assist in managing risks from staff turnover and ensure skills are maintained over the long-term.

The key findings for the CRR project were:

- The project successfully developed a framework to support the integration of roadside reserve management into Integrated Planning and Reporting (IP&R) systems. However, challenges remain to ongoing integration of natural asset management in these systems.
- The project had a range of benefits for council staff in terms of improving their general capabilities in conservation management of roadside reserves.
- There was overall positive feedback from councils on the practicality of the framework and supporting resources, but there was significant regional variation in the types of supporting resources required.
- A range of outcomes are likely to last beyond the life of the CRR project and contribute to benefits for roadside reserve management, including resources and general practice change. However, councils will require ongoing support to ensure this occurs.

From these findings, the Commission has developed eight recommendations to improve future funding programs.

## Recommendations

- 1 For future projects, the Trust should ensure that site assessment methods designed by proponents appropriately stratify and prioritise the sites for conservation investment and make clear how assessments will contribute to on-ground conservation outcomes.
- 2 For future projects, the Trust should ensure that when site assessments inform management actions, that proponents specify what resources, capabilities and funds are required to deliver the on-ground conservation work.
- 3 When considering project applications that may be contingent on unknown future funding levels (such as the amount of future funding LLS may receive for managing TSRs), the Trust should assess, based on an assessment from the grantee, to what extent the project objectives are dependent upon additional external funding and the consequences to the project if that funding is not obtained.
- 4 Future Trust investment in identifying new funding mechanisms for land managers should be informed by detailed risk assessments focussed on potential future funding options for the project.
- 5 Future Trust projects with significant investment in training should consider how to deliver long-term impact in light of the risks of high levels of staff turnover.
- 6 LGNSW should continue to promote the use by councils of the published Council Roadside Environmental Management Framework and other resources developed under the CRR project to support the ongoing integration of roadside reserve management into council process and IP&R systems.
- 7 For future devolved grants programs, the Trust should support the grantee to ensure the project business plans articulate how project outputs, such as templates and other tools, cater for the needs of different end users.
- 8 The Trust should ensure high risk components of each project are sufficiently described and supported by risk assessments and planning in project business plans. (This recommendation links to Recommendation 4).

# 1 Context

Linear reserves include travelling stock reserves, roadside reserves, rail corridors and infrastructure easements. Together these comprise an estimated 6 percent of the total area of NSW,<sup>1</sup> and have a range of environmental, community and heritage values.

To improve the management of linear reserves' environmental values, the Environmental Trust (the Trust) funded the Linear Reserves Program (the Program) from 2016 to 2020. Trust administration<sup>2</sup> engaged the Natural Resources Commission (the Commission) to independently evaluate the Program at its completion.

The Commission's evaluation covers the two separately funded projects under the Program – the Travelling Stock Reserves (TSR) project and the Council Roadside Reserves (CRR) project.

# 1.1 Travelling stock reserves

TSRs are parcels of Crown land reserved under the *Crown Land Management Act 2016* for use by travelling stock.<sup>3</sup> There are over 6,500 TSRs in NSW, covering around 2 million hectares (**Figure 1**). About 75 percent of the TSR network is in the western division and is generally covered by western land leases, which means leaseholders are responsible for a large part of their management.<sup>4</sup> Local Land Services (LLS) manages more than 500,000 hectares of TSR land, mainly in the central and eastern divisions.<sup>5</sup>

The role of LLS in managing TSRs includes:

- authorising and monitoring stock and other users
- controlling weeds listed in the Regional Strategic Weed Management Plan and under general biosecurity obligations
- controlling pest animals and insects
- providing and maintaining fencing and other infrastructure
- considering land management and animal health legislation.<sup>6</sup>

The TSR network was established more than 150 years ago to allow livestock to move to and from markets. It is believed that many of these routes followed pathways used traditionally by Aboriginal peoples and are therefore important for access and connection to Country, cultural practices and cultural heritage.<sup>7</sup>

TSRs remain important for travelling stock and grazing, but are also widely acknowledged for their environmental values and benefits, including:

 supporting threatened species and ecological communities that have largely been cleared and are poorly represented in the formal conservation estate

<sup>&</sup>lt;sup>1</sup> NSW Roadside Environment Committee (2014) <u>Managing Roadsides – Planning</u>

<sup>&</sup>lt;sup>2</sup> Trust administration's functions include: reviewing and evaluating programs and procedures; researching, designing and implementing new programs; developing and managing program governance; providing technical assistance to grantees; servicing Trust meetings; negotiating grants and agreements; and, monitoring and acquitting funded projects.

<sup>&</sup>lt;sup>3</sup> LLS (2020) <u>Travelling Stock Reserves State-wide Plan of Management</u>

<sup>&</sup>lt;sup>4</sup> DPE (n.d.) <u>*Travelling Stock</u>*</u>

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Local Government NSW (2020) <u>Council Roadside Environmental Management Framework</u>. Prepared by Eco Logical Australia for Local Government NSW.

<sup>&</sup>lt;sup>7</sup> LLS (2020) <u>Travelling Stock Reserves State-wide Plan of Management</u>

- linking otherwise isolated patches of habitat, providing connectivity and opportunities for genetic flow
- providing important sources of native seed.<sup>8</sup>

TSRs also provide public open space for passive recreation such as bush walking, horse riding and bird watching, as well as valued access points to rivers and creeks for fishing and boating.<sup>9</sup>

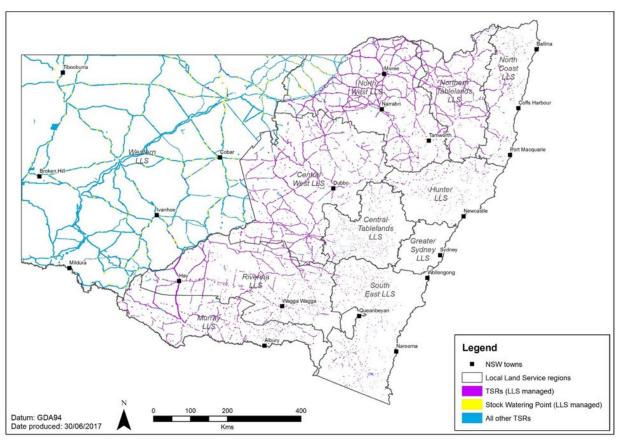


Figure 1: TSRs managed by LLS<sup>10</sup>

# 1.2 Council roadside reserves

Of NSW's total linear reserve network, approximately 2.5 million hectares is comprised of roadside vegetation, much of which is owned and/or managed by local councils<sup>11</sup> as transport corridors and for other values. The management of roadside reserves must consider several values, including:

- road safety
- conservation values
- cultural values

<sup>8</sup> LLS (2020) Travelling Stock Reserves State-wide Plan of Management

<sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> Figure taken from OEH and LLS (2017) *Compiling conservation value data for Travelling Stock Reserves*. Final report to the NSW Environmental Trust.

<sup>&</sup>lt;sup>11</sup> Dufty, N. (2010) 'Leading Practice in the Environmental Management of New South Wales Linear Reserves the Role of the NSW Roadside Environment Committee'. <u>Australasian Plant Conservation: Journal of the</u> <u>Australian Network for Plant Conservation, 19 (2): 5-6</u>.

- use for firewood collection
- bushfire risk
- recreational use
- development pressures and legal requirements.<sup>12</sup>

Roadside vegetation can have significant ecological value and provide a range of environmental and ecosystem services, such as connectivity in fragmented landscapes and support for endangered ecological communities.<sup>13</sup>

LLS' functions in managing TSRs can overlap with council roadside reserve activities in areas where TSRs follow road corridors.  $^{\rm 14}$ 

# 1.3 Linear Reserves Program background

The Program aimed to 'develop a land management and funding framework to increase the capacity of land managers to manage key conservation assets to ultimately protect and enhance the condition and connectivity of the linear reserve network in NSW<sup>2</sup>.

The Program expanded on the Trust's past investment in linear reserves through their Roadside Vegetation Implementation Project (RVIP), which was run by councils in two stages between 2011 and 2014.

In 2014, Trust administration requested the Natural Resources Commission (the Commission) to undertake an independent evaluation of the RVIP.<sup>15</sup> The evaluation assessed the appropriateness, cost-effectiveness and achievements of the RVIP, and recommended improvements to the design and delivery of future roadside vegetation programs, including the Linear Reserves Program.<sup>16</sup>

The Commission recommended that future roadside vegetation programs focus investment on:

- easy to use assessment protocols that provide improved prioritisation criteria for investment in projects to achieve environmental outcomes
- cost-effective assessments of roadsides that can be readily incorporated into broader council activities and contribute to a state-wide database
- a program that builds council capacity and commitment to proactively manage high biodiversity value roadside reserves by leveraging councils' need to manage environmental compliance risk
- strategically located on-ground projects to enhance landscape function and corridors with more targeted design criteria and a clear program logic
- joint investment across tenures for greater impact.

<sup>&</sup>lt;sup>12</sup> Dufty, N. (2010) 'Leading Practice in the Environmental Management of New South Wales Linear Reserves the Role of the NSW Roadside Environment Committee'. <u>Australasian Plant Conservation: Journal of the</u> <u>Australian Network for Plant Conservation, 19 (2): 5-6</u>.

<sup>&</sup>lt;sup>13</sup> Local Government NSW (2020) *Council Roadside Environmental Management Framework*. Prepared by Eco Logical Australia for Local Government NSW.

<sup>&</sup>lt;sup>14</sup> *Ibid*.

<sup>&</sup>lt;sup>15</sup> Natural Resources Commission (2014) <u>Evaluation of the NSW Environmental Trust Roadside Vegetation</u> <u>Implementation Project (Stages 1 and 2)</u>

<sup>&</sup>lt;sup>16</sup> Natural Resources Commission (2014) <u>Recommendations for potential future NSW Environmental Trust</u> <u>investment in roadside vegetation</u>

Informed by the RVIP evaluation, the Program was designed as a large-scale program to manage natural assets using a collaborative and integrated model. It comprised two separately funded projects:

- Managing Travelling Stock Reserves for Sustainable Conservation Outcomes (TSR project).
- Council Roadside Reserves (CRR project).

Both projects were designed to build capacity within councils and LLS to manage large areas of linear reserve land with potential biodiversity value. The projects focussed on developing the underlying frameworks and resources to support ongoing management, rather than directly funding on-ground work.

# 1.4 TSR project objectives

The project plan for the TSR project stated that the vision for the TSR project was to 'develop, trial and make recommendations on sustainable management and funding models for TSRs based on management practices that support cost effective maintenance and enhancement of environmental values, to maintain and enhance the linear reserve system in NSW.'<sup>17</sup> **Appendix 1** provides the program logic showing the key components and expected outcomes of the TSR project.<sup>18</sup>

The project aimed to enhance reserve managers' ability to actively manage TSR to maintain and improve conservation values through implementing appropriate management regimes, supported by sustainable funding mechanisms.<sup>19</sup>

The Trust awarded \$4.75 million to support the TSR project.<sup>20</sup> This was to be provided to LLS over four years from 2015/16 to 2018/19 undertake the following planned activities:

- developing a standard method to assess conservation value on TSRs known as the Rapid Assessment Methodology (RAM), through a partnership between LLS and the former Office for Environment and Heritage, now Department of Planning and Environment (DPE) – Environment and Heritage Group (EHG)
- assessing conservation values on TSRs by compiling existing conservation value data and using the RAM to assess the conservation values of TSRs not previously assessed (this represents approximately 136,000 hectares of the total 500,000 hectares of TSRs managed by LLS in the Eastern and Central Divisions<sup>21</sup>)
- training land managers training programs aimed to build the capacity of LLS staff and other land managers, including council staff, to assess TSR conservation values
- developing a spatial dataset packaging TSR conservation value data into a single spatial dataset for use by LLS and other linear reserve managers
- informing TSR categorisation using conservation value data to inform land use categorisation of TSRs in regional TSR management plans, management options and classification of TSRs across NSW

<sup>&</sup>lt;sup>17</sup> NSW Environmental Trust (2016) *Project Business Plan: Linear Reserves – Managing travelling stock reserves (TSRs) for sustainable conservation outcomes.* 

<sup>&</sup>lt;sup>18</sup> Developed by the Commission in consultation with Trust administration to guide the evaluation.

<sup>&</sup>lt;sup>19</sup> *Ibid*.

<sup>&</sup>lt;sup>20</sup> NSW Environmental Trust (2016) *Project Business Plan: Linear Reserves – Managing travelling stock reserves (TSRs) for sustainable conservation outcomes.* 

<sup>&</sup>lt;sup>21</sup> Office of Environment and Heritage and LLS (2017) *Compiling conservation value data for Travelling Stock Reserves.* Final report to the NSW Environmental Trust.

- trialling management options identifying and testing innovative management arrangements and funding models on parts of the TSR network
- developing a long-term sustainable management funding options paper
- developing resources for reserve managers including a toolkit/manual with best practice information and vegetation guides for each TSR region
- developing a TSR conservation value monitoring framework and data capture systems – to measure change over time of the different TSR management arrangements.

# 1.5 CRR project objectives

The project plan for the CRR project stated that the objective of the project was to 'build the capacity of NSW councils to manage their linear reserves, protecting biodiversity and enhancing biodiversity values in roadside and other linear reserves in an integrated way.'<sup>22</sup> Appendix 1 provides the program logic showing the key components and expected outcomes of the CRR project.

The Trust awarded \$2.08 million to Local Government NSW (LGNSW) to support the CRR project from 2015/2016 to 2018/2019.<sup>23</sup> LGNSW developed tools and resources to assist councils to manage natural assets on roadside reserves and embed these into their integrated planning, reporting and asset management systems.

The tools and resources developed were trialled and tested by 22 councils or council groups<sup>24</sup> in 19 projects. These projects were funded through a devolved grant program administered by LGNSW as part of the CRR project. Councils were invited to apply for grants of up to \$50,000, while amalgamated councils or regional collaborative groups could apply for up to \$80,000 for projects to:

- assess the value of natural assets to strategically plan for priority on-ground works
- protect and enhance natural assets and eco-services.

Other key planned activities of the CRR project were:

- developing a framework to integrate natural assets including reviewing existing assessment frameworks / protocols to develop a new framework for councils to integrate natural assets into the Integrated Planning and Reporting (IP&R) Framework and asset management systems of councils
- supporting participating councils to test and trial the draft framework including training to implement roadside environmental management across all areas of council, risk management guidance and training to support the integration of natural asset management with council asset management
- developing resources to support councils in managing roadside reserves including a council roadside environmental management framework, roadside vegetation

<sup>&</sup>lt;sup>22</sup> NSW Environmental Trust (2015) Project Snapshot – Project Plan - Linear Reserves – Council Roadside Reserves.

<sup>&</sup>lt;sup>23</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Bellingen Shire Council; Bourke Shire Council (Brewarrina and Walgett Shire Councils were also involved in the project); Coffs Harbour City Council; Edward River Council; Glen Innes Severn Shire Council; Griffith City Council; Hawkesbury River County Council (includes four member Councils); Hunter Councils Inc. (includes 10 member Councils); Moree Plains Shire Council; Narrandera Shire Council; Oberon Council; Parkes Shire Council; Penrith City Council; Port Stephens Council; Queanbeyan-Palerang Regional Council; Snowy Valleys Council; Temora Shire Council; Wagga Wagga City Council and Lockhart Shire Council; Wingecarribee Shire Council.

management plan template, natural asset plan templates and a range of 'review of environmental factors' templates and supporting documents

• **sharing the framework and best practice** with councils working to integrate roadside vegetation management into their IP&R frameworks.

## **1.6** The Commission's evaluation approach

The broad objectives of the Commission's evaluation were to:

- assess whether, and to what extent, program outcomes had been achieved
- assess whether the project design and approach were effective
- provide recommendations and identify lessons for future Trust projects, and for land managers of linear reserves.

These objectives were translated into a series of key evaluation questions for each of the projects (**Appendix 2**), also taking into consideration evaluation questions from the project business plans.

To obtain the necessary evidence, the Commission:

- reviewed project and program documentation (Appendix 3)
- conducted an online survey of 50 LLS staff who had participated in training under the TSR project and remained at LLS. We received 10 responses.
- conducted an online survey of councils not directly involved in the CRR project to understand the extent to which they have been made aware of the tools and resources developed through the project, and whether they have chosen to implement any of these. The survey was sent by LGNSW on behalf of the Commission to relevant council mailing lists and contacts, including the approximately 20 councils that were unsuccessful in receiving a grant. We received 12 responses.
- Interviewed 36 participants in the projects (with five being across both projects), including:
  - two current or former Trust administration staff who were involved in the program and both projects
  - 17 project team members and technical, advisory or steering committee members involved in running the TSR and CRR projects, of which four were across both projects
  - 10 council staff for the CRR project
  - seven consultants involved in the TSR or CRR projects.

# 2 TSR project outcomes

# 2.1 Overview

This chapter explores the extent to which the TSR project achieved its expected outcomes. The key findings from this evaluation were:

- The TSR project generated considerable new data on conservation values on TSRs available through a centralised, publicly available database. However, there are questions around the robustness and usefulness of assessment methodologies, particularly as a tool to prioritise investment (**Section 2.2**).
- The TSR project was unsuccessful in progressing new funding options for TSR conservation management. While funding for LLS management of TSRs is an inherently difficult area, this is a lost opportunity and impacts achievement of the project's vision (Section 2.3).
- Training was fit-for-purpose and new resources continue to be useful, but more can be done to manage risks from high staff turnover and ensure skills are maintained over the long-term (Section 2.4).
- While some regions are applying the tools developed in the project to inform on-ground management, broader issues of funding availability and strategic focus have a significant impact on on-ground outcomes (Section 2.5).

# 2.2 Understanding the conservation values of TSRs

The TSR project developed a new method for assessing conservation values and generated new baseline data which are now available in a centralised, publicly accessible database. The method can be used for ongoing monitoring of TSRs and other linear reserves. However, the method has limitations for prioritising future investment in on-ground conservation work for TSRs.

One of the key areas of focus for the TSR project was consolidating information on conservation values on TSRs and developing tools to assess and prioritise these values for monitoring and management. The actions completed as part of this area of focus included:

- collating pre-existing information on TSR conservation values based on existing data from previous land management agencies – this was undertaken by LLS in partnership with EHG
- developing and implementing the Rapid Assessment Methodology (RAM), which allowed for conservation values of previously unassessed TSRs to be surveyed and categorised – this was undertaken by LLS in partnership with EHG, LGNSW and ecological consultants
- integration of TSR conservation value data into a centralised spatial database, undertaken by LLS and EHG.

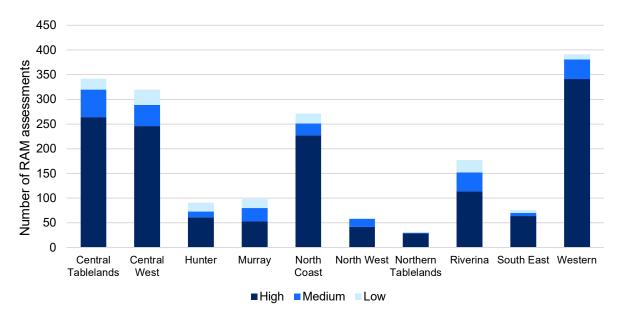
This work has added to the understanding of conservation values of TSRs. The collation and categorisation of pre-existing information represents a substantial amount of work,<sup>25</sup> and there is

<sup>&</sup>lt;sup>25</sup> This work is documented in OEH and LLS (2017) Compiling conservation value data for Travelling Stock Reserves – Report for the Linear Reserves – Managing travelling stock reserves for sustainable conservation outcomes project. Report to LLS

also now a centralised database of TSR conservation value data publicly available on the NSW SEED data portal.<sup>26</sup>

The database contains just under 8,000 TSR assessment records, including pre-existing data and new RAM assessments. Stakeholder feedback indicates that this database is used by other agencies, councils, independent consultants, and researchers for planning management activities, informing research and monitoring.<sup>27</sup>

The RAM was used to survey around 1,800 sites on TSRs across NSW (**Figure 2**).<sup>28</sup> The RAM surveys increased the proportion of TSRs managed by LLS (by area) that have been assessed for conservation values from 71 percent to 97 percent.<sup>29</sup>



# Figure 2: Number of RAM assessments done under the TSR project in different LLS regions (High, Medium and Low refers to the conservation value assessment yielded from the RAM)

While the application of RAM has significantly increased the proportion of TSRs assessed, there was varied feedback on the appropriateness of the RAM to survey and categorise conservation value data in a meaningful way. This was evident across stakeholder interviews as well as in a survey of LLS staff, noting the low response rate (**Figure 3**).

<sup>&</sup>lt;sup>26</sup> NSW Government (2022) <u>SEED data portal</u>

For example: interviewee's indicated some LLS regions carry out photo point monitoring described in the RAM guidelines to monitor previously assessed sites; feedback from CRR grant recipients to LGNSW included that some councils use RAM to inform their roadside vegetation management plans; some councils also engage consultants to assess environmental values of sites using the RAM to inform their management.

<sup>&</sup>lt;sup>28</sup> Based on analysis of data extracted from <u>Conservation value of NSW Travelling Stock Reserves</u> spatial data

<sup>&</sup>lt;sup>29</sup> Based on analysis of data extracted from <u>Conservation value of NSW Travelling Stock Reserves</u> spatial data

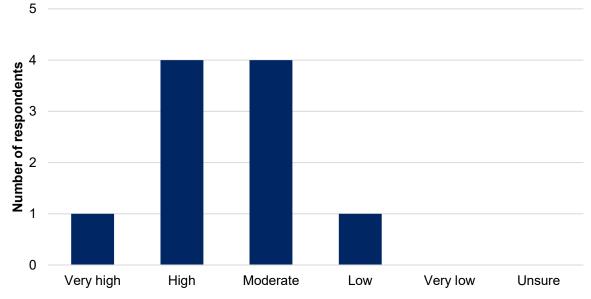


Figure 3: Survey respondents' perceptions of the extent to which the RAM provides useful information on conservation values to guide management (for example, standardised and repeatable results that are consistent, enough resolution to prioritise sites for management) (from 10 responses)

The key issues related to the RAM identified in this review are discussed in the following sections and primarily relate to:

- its ability to be used by land managers
- the robustness of data generated
- its appropriateness for prioritising sites for conservation management.

#### Ability for the RAM to be used by land managers

The RAM was intended to allow linear reserve land managers (for example, LLS staff) to assess the conservation value of many previously unassessed TSRs in a relatively short timeframe and collate and compare that information with other sites.<sup>30</sup> While efforts were made to design a tool that was fit for purpose for use by reserve land managers, there still appeared to be barriers to land managers widely applying the RAM.

The RAM classifies sites based on three elements. Two of these are desktop assessments of spatial data to determine conservation status and landscape context and connectivity.<sup>31</sup> The third is a field-based assessment to *'broadly categorise vegetation condition'*<sup>32</sup> (including vegetation cover, regeneration potential, and tree, shrub and ground layers) using a modified VAST (vegetation assessment state and transition) model, which assesses the degree of change that has occurred to native vegetation relative to its estimated pre-colonial condition.<sup>33</sup>

By focussing on broad vegetation condition, instead of more detailed flora and fauna surveys, the RAM was able to be applied much more quickly than other conservation assessment methods used in NSW. For example, one study indicated that the RAM takes less than 40

 <sup>&</sup>lt;sup>30</sup> Davidson, I. (2017) <u>Rapid Conservation Assessment Method Training Package and Guidelines</u>. Report to LLS.
 <sup>31</sup> Unid

<sup>&</sup>lt;sup>31</sup> *Ibid*.

<sup>&</sup>lt;sup>32</sup> Ibid.

<sup>&</sup>lt;sup>33</sup> Thackway R and Lesslie R (2006) 'Reporting vegetation condition using the Vegetation Assets, States, and Transitions (VAST) framework'. *Ecological Management and Restoration*, 7 (Supp. I) 1 53-62.

percent of the time of the more detailed Biodiversity Assessment Method (BAM).<sup>34</sup> The rapid nature of the assessment was noted in stakeholder interviews:

'I think it was a really good product at the end of the day because it gave that snapshot. It was not perfect, but it gave that snapshot and, and the important bit, especially from LLS' point of view, was that the fact that it was rapid ... you didn't need to get consultants in to spend half a day on each TSR' (LLS interviewee)

The development of the RAM underwent several iterations in response to feedback on its appropriateness for use by land managers:

- An original methodology designed by a consultant and published in 2017<sup>35</sup> was considered too complicated to be used by LLS staff.<sup>36</sup> Following this, Trust administration then commissioned a peer-review by '... a consultant with more than 20 years of experience in TSR assessment and management ... to provide independent technical advice to the Subcommittee, to assist in its assessment of the Rapid Assessment Methodology'.<sup>37</sup> The advice strongly supported the value of a RAM-type assessment but considered the structure of the original RAM would make it difficult for LLS staff to implement, including issues with vegetation identification, field-work burden and attributes that were difficult to assess and provided limited value.
- Following this peer-review, a second, simplified version of the RAM was developed and used to train LLS staff.<sup>38</sup> Feedback from interviewees about the training process and methodology was positive (see Section 2.4), but some stakeholders indicated the methodology could still be further simplified and would still be difficult for some staff to implement.

There were 126 LLS staff trained to use the RAM. Despite this, over half of the assessments were undertaken by consultants. Interviewees indicated that this was because resources within LLS would not have allowed that scale of assessment to be done within a reasonable timeframe. Given this, it appears that the rapid on-ground assessments are not always practical for this purpose.

The Commission notes that insight on a TSR's conservation value could come from the two desktop components of the RAM – which are lower cost and less time-intensive – as well as existing knowledge about the value of TSRs as areas of remnant vegetation corridors in modified landscapes. This raises questions about the value of having the wide-scale on-ground assessments specifically, given the limited availability of staff resources to undertake the assessments and training required. While these assessments have provided baseline vegetation condition data important for ongoing monitoring, this has been variably adopted (see **Section 2.4**).

Going forward, assessment effort may be better focussed on remote-sensing data and a prioritised schedule of ground-truthing. For future projects where land managers are expected to deliver on-ground work, consideration should be given to the resources, capabilities and funding likely to be available for this work.

<sup>&</sup>lt;sup>34</sup> NRC (2021) *Community Bush Regeneration Program Evaluation: Final Report.* Currently under review by the NSW Environmental Trust.

<sup>&</sup>lt;sup>35</sup> Ecosure (2017) *Development of a rapid assessment method for conservation value of linear reserves in NSW.* Report to LLS.

<sup>&</sup>lt;sup>36</sup> Based on interviews conducted for this review.

<sup>&</sup>lt;sup>37</sup> Unpublished independent advice to Trust administration.

<sup>&</sup>lt;sup>38</sup> Regeneration Solution (2017) *Rapid conservation assessment method - Training package and guidelines.* Report to LLS.

#### Robustness of data generated

There were discussions during the project rollout about whether the RAM was providing sufficiently robust, consistent and useful results. In response, Trust administration requested LLS commission an audit of the RAM using consultant ecologists.<sup>39</sup> The audit compared the RAM to the BAM and the BioBanking Assessment Methodology (BBAM) at 36 sites in three regions. The three methods were used to collect data at grassy woodland sites in the Riverina and Central-West, as well as forest sites in the South-East regions. The results of the assessments were compared for the different methods and ecosystem types. Results were also compared for 24 RAM assessments conducted by LLS staff to RAM assessments done by contracted ecologists.

The RAM assessment scores were 'found to be a poor predictor of values that are generated by BAM and BBAM', particularly in grassy woodland regions. Based on the regression statistics presented in the audit report, RAM results were not found to significantly correlate with BAM results in any of the three regions assessed but did correlate significantly with the BBAM results for forest sites in the South East region, where variability between the scores was generally lower (**Table 1**). That said, the report acknowledges the sensitivity of these results linked to 'observer error' and it is noteworthy that even results from the BBAM and BAM did not always correlate with each other, as seen for the Riverina region (**Table 1**).

LLS staff and contractors produced different RAM scores for the same sites in some cases but did align in 65 percent of cases, and the report concluded '*the RAM is able to be applied fairly consistently*'. The results of this analysis should also be interpreted with some caution because the assessments were done 12 months apart and may partly relate to inter-annual variation.

From the analysis undertaken and scrutiny of a database of RAM scores collected at TSRs across the state, the audit concluded that the RAM is not a particularly robust method for determining the conservation value of TSRs. It is limited in its ability to provide land managers with a way to prioritise investment because the majority of sites are assigned to the highest category for conservation value (discussed in the following section). Therefore, the audit report stated that RAM does not appear sensitive enough for assessment among TSRs, but still noted that RAM has merit as it appears to compare to BBAM fairly closely, it is somewhat repeatable by different users and it is adaptable to forest ecosystems.

Pogion accord	RAM to BAM	RAM to BBAM	BBAM to BAM
Region assessed	(r², p-value)	(r², p-value)	(r², p-value)
Riverina	<0.01, 0.91	0.24, 0.10	0.11, 0.30
Central West	0.09, 0.35	<0.01, 0.95	0.50, <0.01
South East	0.19, 0.16	0.32, 0.05	0.55, <0.01

 Table 1: Correlation between RAM, BAM and BBAM assessment scores for the three different regions audited (n=12 for each region)<sup>40</sup>

Ecoplanning (2020) A review of the rapid assessment methodology for assessing TSRs. Report to LLS.
 RAM to BAM and BBAM comparisons are based on results presented in the audit report, while BBAM to BAM results are based on separate analysis using the audit data.

#### Appropriateness of RAM for achieving intended outcomes

One of the key concerns raised by stakeholders is that a very high number of assessments yielded a result of 'high conservation value' (89 percent of TSR area; **Table 2**). This has limited its usefulness as a prioritisation tool and highlights the limitations of using these conservation value scores alone to target investment.

These results are likely to be partly driven by the relatively coarse nature of RAM assessment when differentiating between TSRs that were already valued as vegetation corridors in modified landscapes. This stemmed from the simplification needed to make the methodology rapid, low-cost and useable. While the conservation value assessment between high value sites could be made more detailed, it is also possible that a more detailed assessment of conservation value could have yielded similar results given the inherently high conservation value of many TSRs.

As noted above, from a landscape perspective, many of the TSRs are valuable areas of vegetation by their very nature as corridors in heavily modified landscapes. This is particularly so if they have threatened species or communities present. It should be noted that RAM assessments for CRRs, which were not so concentrated in cleared landscapes, produced a greater spread of ratings (see discussion in **Section 3.3**). A separate process for categorising the conservation value of TSRs based on pre-existing data and surveys still yielded a reasonably high proportion (71 percent) of 'high value' sites (**Table 2**).

Conservation rating	Analysis of pre-existing assessments <sup>41</sup> (% area of TSRs)	RAM assessments <sup>42</sup> (% area of TSRs)
Low	2	2
Medium	27	9
High	71	89

# Table 2: Area of TSRs classified as high, medium and low by the data compilation part of the TSR project and the subsequent RAM assessments

Noting that some LLS regions are using the RAM results as part of their planning and prioritisation processes for TSR management (see **Section 2.5**), prioritisation can also consider other important criteria, such as cultural heritage, stock use and recreation.

The usefulness of conservation value assessments, such as the RAM, could also be enhanced by including information on key threats to sites and recommended management options and opportunities. For example, this might include highlighting key weed species that should be treated as a priority, where revegetation work might be required or where groundcover needs a rest from grazing:

'We don't have any information about how we might be able to enhance these areas. It would have been better if there was something ... that highlights where there are gaps – 'in the future the works to be done include xxx'. Then we could be managing and using that as a guide.' (Stakeholder interviewee)

<sup>&</sup>lt;sup>41</sup> As published in OEH and LLS (2017) Compiling conservation value data for Travelling Stock Reserves – Report for the Linear Reserves – Managing travelling stock reserves for sustainable conservation outcomes project. Report to LLS.

<sup>&</sup>lt;sup>42</sup> Based on analysis of data extracted from <u>Conservation value of NSW Travelling Stock Reserves</u> spatial data

The Commission recognises that prioritisation was not the only aim of the RAM assessments. The TSR Business Plan describes the land use categorisation process proposed under the draft NSW TSR State Planning Framework 2016-19, which aimed to ensure that sites are appropriately categorised and managed. It also stated that the results from RAM assessment could inform land use categorisation of TSRs in Regional TSR Management Plans across NSW. From this perspective, the issues associated with the lack of differentiation between the large number of sites that are high value are less impactful.

Further, an interviewee was very pleased with the RAM in its current form, using it for ongoing monitoring and to inform management actions on TSRs in an LLS region. It was noted that RAM has been useful for conducting rapid assessments over large areas to show trends on a large scale, and because it is easy and quick to use, it can be done regularly to monitor through time:

'I still use the RAM... as part of assessments yearly to see condition and gauge against other work... tells us whether to seed or to graze...' (LLS interviewee)

However, for future projects where sites are being assessed as part of a broader initiative to prioritise investment or inform management actions, there should be clarity about what information is needed from the assessments and how it will be used to deliver on-ground outcomes.

In addition to limitations in the usefulness of RAM results to prioritise investment, there did not appear to be comprehensive consideration of the amount of funding or resources likely to be available to use the results of RAM for actual on-ground works, although some on-ground projects focused on enhancing TSR environmental values have been put in place (see **Section 2.5**). Future prioritisation should also consider the potential costs and feasibility of on-ground works and alignment to other nearby investments.

## Recommendations

- 1 For future projects, the Trust should ensure that site assessment methods designed by proponents appropriately stratify and prioritise the sites for conservation investment and make clear how assessments will contribute to on-ground conservation outcomes.
- 2 For future projects, the Trust should ensure that when site assessments inform management actions, that proponents specify what resources, capabilities and funds are required to deliver the on-ground conservation work.

# 2.3 Funding options and models for managing TSRs

# The project was unsuccessful in progressing new funding options for TSR conservation management by LLS, impacting the achievement of the project's vision.

A key driver of the TSR project was the need to expand the amount and types of funding available for conservation management on TSRs. This was recognised in the stated vision of the project 'to develop, trial and make recommendations on sustainable management and funding models for TSR based on management practices that support cost effective maintenance and enhancement of environmental values, to maintain and enhance the linear reserve system in NSW.<sup>43</sup>

<sup>&</sup>lt;sup>43</sup> NSW Environmental Trust (2016) *Major Projects Grant – Project Business Plan Linear Reserves – Managing travelling stock reserves (TSR) for sustainable conservation outcomes* (internal document).

While the conservation values of TSRs are well recognised, LLS does not receive a specific and ongoing allocation of government funding for managing these values on TSRs. Currently permits and leases generate most TSR revenue for LLS, which is used to fund compliance, statutory obligations, and routine management on a cost recovery basis. This funding model means that very little revenue is invested in other public benefits.<sup>44</sup>

To address these issues, the project set out to trial new and innovative management approaches and sustainable funding models (Project Milestone 6) and to analyse trial outcomes and develop a funding model options paper (Project Milestone 9).<sup>45</sup> Based on annual planning documentation, approximately \$2.75 million of project funding appears to have been reserved to deliver Milestones 6 and 9.<sup>46</sup> This represents a significant portion (57 percent) of the project budget and the delivery of these milestones were seen as critical to the overall project success. Note this finding applies to the TSR project only and there is no equivalent finding for the CRR project, which did not have a component related to funding mechanisms.

While some work was delivered against Milestones 6 and 9, it was ultimately decided by Trust administration and LLS that it would be discontinued under the project.<sup>47</sup> The timeline for this work and decision making is presented below:

- in the first year of the project, there were delays with the establishment and running of regional TSR management trials (Milestone 6) to provide more time for planning and linking this work to the completion of conservation assessments<sup>48</sup>
- in the second year of the project, a draft framework was prepared for this work, but a variation request was also submitted to reallocate funding from this milestone to support LLS in completing conservation assessments on TSRs<sup>49</sup>
- in the third year of the project, LLS considered potential funding options but there were no outcomes
- following this, LLS and the Trust administration agreed to put further work on Milestones 6 and 9 on hold, noting that the NSW Travelling Stock Reserves Review, which began in April 2017, had not been finalised.<sup>50</sup>

Discontinuing work under these milestones has meant that the TSR project was unsuccessful in making material progress against the part of its project vision related to funding models for TSRs. It also resulted in a significant reduction in the TSR project budget and represented much of the underspend for the entire TSR project, which totalled \$2.84 million (**Section 4.2**).

Reports and plans published towards the end and after the completion of the TSR project indicate that LLS funding levels for multiuse management of TSRs remains an ongoing issue, including the:

<sup>44</sup> LLS (2018) <u>Travelling Stock Reserves State-wide Plan of Management</u>

 <sup>&</sup>lt;sup>45</sup> NSW Environmental Trust (2016) Major Projects Grant – Project Business Plan Linear Reserves – Managing travelling stock reserves (TSR) for sustainable conservation outcomes (internal document).
 <sup>46</sup> Local Land Services (2018) Annual implementation Plan 2018/19 (internal document).

Local Land Services (2018) Annual implementation Plan 2018/19 (internal document).
 Local Land Services (2019) Project final report - Linear Reserves – Managing Travelling Stock Reserves (TSRs) for sustainable conservation outcomes. p. 3 (internal document).

 <sup>&</sup>lt;sup>48</sup> Local Land Services (2016) Annual implementation plan (July 2016 to June 2017). Report to NSW Environmental Trust

<sup>&</sup>lt;sup>49</sup> Local Land Services (2017) *Annual implementation plan (July 2017 to June 2018)*. Report to NSW Environmental Trust

<sup>&</sup>lt;sup>50</sup> Local Land Services (2018) *Annual implementation plan (July 2018 to June 2019)*. Report to NSW Environmental Trust

- TSR State-wide Plan of Management, which identifies a need for further funding to invest in public benefits<sup>51</sup>.
- NSW Government response to the review of the TSR network in NSW, which notes stakeholder concerns about the existing funding model for the management of TSRs by LLS (largely based on grazing activity) does not enable TSRs to be adequately managed for multiple uses. This document also indicates support for the exploration of opportunities to strengthen funding to support the management of TSRs in the Central and Eastern Divisions.<sup>52</sup>
- Recent LLS Local Strategic Plans (2021-2024) that discuss risks to TSRs citing a lack of secure funding being a key threat to TSR management.

The Commission notes that funding for LLS management of TSRs is inherently difficult. It is a complex area with diverging stakeholder views, variations in management approaches and preferences across LLS regions, and one that intersects with other government legislation, reviews, plans and policies.<sup>53 54 55 56 57 58</sup> Recognising this, there are several project aspects that could be improved to ensure better outcomes in future projects:

- **Providing adequate guidance** The level of guidance and detail presented in the project business plan on new TSR funding mechanisms does not appear commensurate with the complexity and challenges of the task and project vision, and ostensibly left a large onus on the LLS project team to develop solutions for this part of the project. For example, in identifying the milestones and steps to be taken by LLS in delivering trials for sustainable funding models and a funding models options paper, the breakdown of proposed activities was high level (for example, '*Review and compilation of innovative management approaches for TSR conservation enhancement*' and '*LLS regions collaborate with regional stakeholders to identify priority TSR sites/networks for trialling different conservation funding model regimes…*'). Similarly, the examples of potential funding sources were also high level, with limited guidance (for example, bio banking and stewardship programs).<sup>59</sup>
- Ensuring risks are identified and mitigated The project risk assessment did not identify any risks or mitigation strategies directly related to the funding source components of the project, even though it initially represented over half the total project budget and was critical to the delivery of the project vision. Most risks focussed on the conservation assessment components of the project or general project risks. Further, this activity warranted more rigorous risk assessment as it set out to identify innovative funding mechanisms, so by its nature was a high-risk undertaking.
- Understanding and clarifying interdependencies of different project elements The project's core activities related to training and undertaking conservation assessments on TSRs and trialling and developing innovative management approaches and funding models. To a large extent, these activities were designed to be rolled out simultaneously over three years, although some of the funding model work was planned for the tail-end of this period.<sup>60</sup> However, the project's 'outcomes hierarchy' describes the project objective

<sup>&</sup>lt;sup>51</sup> Local Land Services (2020) <u>Travelling Stock Reserves State-wide Plan of Management</u>

 <sup>&</sup>lt;sup>52</sup> NSW Government (2018) <u>NSW Travelling Stock Reserve Network – Review and Government Response</u>
 <sup>53</sup> Independent Pricing and Regulatory Tribunal NSW (2013-2014), <u>Review of a funding framework for Local</u> Land Services NSW

<sup>&</sup>lt;sup>54</sup> Local Government NSW (2017) <u>NSW Travelling Stock Reserves Review</u>

<sup>&</sup>lt;sup>55</sup> Local Land Services (2020) <u>Travelling Stock Reserves State-wide Plan of Management</u>

<sup>&</sup>lt;sup>56</sup> NSW Department of Planning, Industry and Environment (2020) <u>Travelling stock reserves dealings procedure</u>

<sup>57</sup> NSW Government Local Land Services Act 2013 No 51

<sup>&</sup>lt;sup>58</sup> NSW Government <u>Crown Land Management Act 2016 No 58</u>

<sup>&</sup>lt;sup>59</sup> LLS (2016) *Project Business Plan - Linear Reserves – Managing travelling stock reserves (TSR) for sustainable conservation outcomes* (internal document).

<sup>&</sup>lt;sup>60</sup> LLS (2016) *Project Business Plan - Linear Reserves – Managing travelling stock reserves (TSR) for sustainable conservation outcomes* (internal document).

of enhancing the ability of managers to manage TSRs for conservation values by implementing appropriate management regimes with sustainable funding mechanisms.<sup>61</sup> To some extent, the approach to enhancing management was conditional on understanding the likely sustainable funding available – i.e. it hinged on knowing how much funding would be available and the assessment of funding options should have been done first, not in the third year of the project. As the sustainable funding component of the project was largely discontinued, in hindsight, there is a question about whether the project should have focused on enhancing TSR management within existing funding levels.

## Recommendations

- 3 When considering project applications that may be contingent on unknown future funding levels (such as the amount of future funding LLS may receive for managing TSRs), the Trust should consider, based on an assessment from the grantee, to what extent the project objectives are dependent upon additional external funding and the consequences to the project if that funding is not obtained.
- 4 Future Trust investment in identifying new funding mechanisms for land managers should be informed by detailed risk assessments focussed on the potential future funding options for the project.

## 2.4 Improving conservation assessment and management skills

# Training rolled out under the project was fit-for-purpose, and the resources continue to be useful. Additional efforts would assist in managing risks from high staff turnover and ensure skills are maintained over the long-term.

Another main area of focus for the TSR project was training in the use of the RAM and developing tools to support LLS staff in managing TSRs more effectively. As noted previously, key components of this included:

- training of 126 LLS staff in conservation assessment using the RAM
- development of:
  - a toolkit for best environmental management practices in TSRs
  - regional vegetation guides
  - a TSR monitoring and audit strategy.

Feedback at the time of the RAM training suggests that it was, overall, fit-for-purpose and worked effectively to upskill the majority of participants. The LLS final report indicates that:<sup>62</sup>

- over 80 percent of staff involved in the management of TSRs attended the training
- 100 percent of training attendees recorded an increase in capacity to undertake conservation assessment and knowledge of the conservation values of TSR and other linear reserves.

<sup>&</sup>lt;sup>61</sup> LLS (2016) *Project Business Plan - Linear Reserves – Managing travelling stock reserves (TSR) for sustainable conservation outcomes* (internal document).

<sup>&</sup>lt;sup>62</sup> LLS (2019) *Project final report - Linear Reserves – Managing Travelling Stock Reserves (TSRs) for sustainable conservation outcomes.* p. 3 (internal document).

However, as noted in **Section 2.2**, some interviewees suggested that although the RAM had been simplified significantly, the method and the associated training was still too complicated given the background and existing expertise of some participants:

'I went to one of the sessions ... and I was there with, with the TSR rangers on the day and I could feel on the day they were lost ... It was certainly delivered well, but it was just too technical.' (LLS interviewee)

A follow-up survey was sent as part of this evaluation to understand the ongoing impact of the training. Noting that there was a low response rate, responses to this survey indicate that the resources and training continue to be useful (**Figure 4**). However, in combination with feedback from interviews suggests that:

- there has been some waning of knowledge over time as trained staff have not had the
  opportunity to apply the lessons in their day-to-day work.
- there has been significant staff turnover, with one interviewee indicating that only 50 of the original 126 trained staff remain
- some regions are being proactive in undertaking refresher training, including Riverina LLS and Murray LLS.

Therefore, while the training had good reach and was largely well received, its impact may be shorter term. Future projects with significant investment in training should consider how training can be designed to achieve as long-lasting an impact as possible. Both staff turnover, high workloads, and a lack of expertise in ecological assessments appear to be barriers to longer-term improvements in LLS capabilities in managing TSRs. While these are higher-level issues than the project was aimed at, project planning should consider these risks and implement mitigation approaches. For example, while written resources developed for this project are effective, it might be useful videoing the training sessions so they can be provided to future employees.

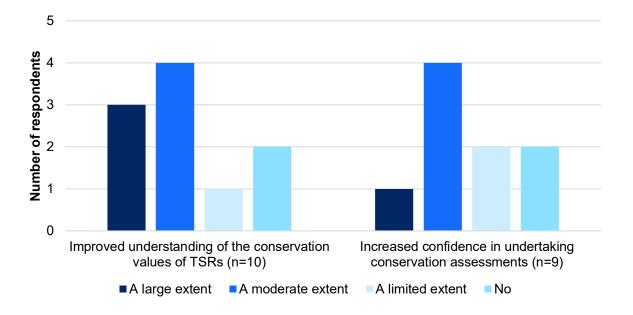
The Commission also notes that funding limitations (described in **Section 2.3**) and limited resources generally, meant a large portion of the RAM assessments were completed by consultants (described in **Section 2.2**).

It is also noted that several interviewees acknowledged the fact that LLS were coming off 'a low base' and that catalysing a wholesale shift in attitudes and capabilities was perhaps overly ambitious:

'Generally, I think it really lifted the game within LLS organisations that they see that they are responsible for these areas, that they do have great values, that there is opportunity to have those community benefits'. (LLS interviewee)

Furthermore, it has been recognised that in some regions LLS is not interested in conservation values. Several interviewees noted this is due to different political drivers:

'In some regions there is a perception that managing TSRs for conservation values is the greenies taking over, so the regions that are motivated to get environmental outcomes and have resources need to demonstrate how it works and set good examples.' (TSR project stakeholder)



# Figure 4: LLS survey respondents' reported changes in understanding conservation values of TSRs and confidence in undertaking conservation assessments as a result of the project (from 10 respondents)

A suite of tools was also developed to assist with the consistent management of TSRs across the state, including vegetation guides and the Best Environmental Management Practice toolkit.<sup>63</sup> These were considered useful by several interviewees:

'The vegetation community document that come out was very comprehensive ... it gives the TSR manager a good feel of the communities out there relevant to their region and they can start to understand some of the ecology for those veg communities.' (TSR project stakeholder interviewee)

Although the project worked to develop a state-wide monitoring strategy, feedback from stakeholders suggests this has been variably adopted by different LLS regions. Examples of TSR monitoring are occurring, however, including:

- photo point monitoring of TSR sites in the Riverina
- recent audits of TSRs in North Coast and Central Tablelands
- regular TSR groundcover monitoring in the North West.

### Recommendations

5 Future Trust projects with significant investment in training should consider how to deliver long-term impact in light of the risks of high levels of staff turnover.

<sup>&</sup>lt;sup>63</sup> Davidson, I. (2020) <u>Best Environmental Management Practice Toolkit for Travelling Stock Reserves.</u> Prepared for LLS by Regeneration Solutions.

# 2.5 Improving on-ground management of TSRs

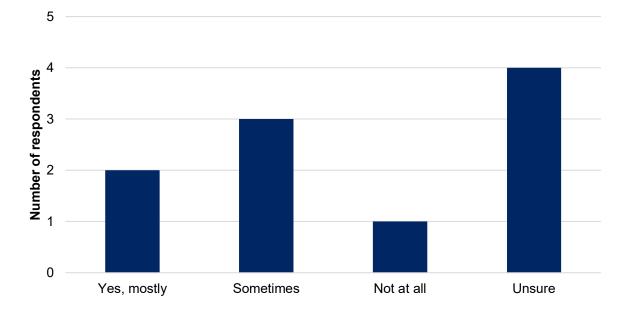
While some LLS regions are applying the tools developed in the project to inform onground management, broader issues of funding availability and strategic focus have greater impact on on-ground outcomes.

It is difficult to directly assess whether the on-ground management of TSRs has improved through this project. Several lines of evidence suggest that it is likely to have improved in some regions, and that there is a clearer management framework at the state level. In other regions, the evidence for improved management is less clear. As discussed in **Sections 2.2 and 2.3**, there remain significant funding limitations, which have material impacts on the ability of LLS to undertake on-ground conservation work in TSRs.

Of note, Riverina, Murray and at least three other LLS regions described using the conservation assessments from the RAM and the consolidation work as part of their planning and prioritisation of TSR management. Riverina and Murray were also noted to be using the RAM as a regular part of their TSR monitoring:

'[The conservation assessment] is one of the variables in our matrix that informs our annual management strategy and operational plan, which is about controlling weeds on high conservation value stuff. So yeah, we're keeping that in better condition.' (LLS staff interviewee)

Half of the small sample of survey respondents also indicated that the conservation assessments allow the conservation values in TSRs to be maintained or enhanced (**Figure 5**). This has integrated with a range of on-ground projects in the area that have focused on enhancing TSR environmental values through weed control, direct seeding and other proactive management practices.



# Figure 5: Survey respondents' perception of whether assigning TSRs with medium and high conservation values to land use management categories allow for these values to be maintained or enhanced (from 10 respondents)

In other cases, such as in the North West LLS region, it was indicated that TSRs still appear to be managed predominantly for their agricultural benefits consistent with their historic purpose. For example, the RAM assessment has been modified so that rangers are focused on

monitoring groundcover as the primary indicator of effective management. However, staff reported that, despite this agricultural focus, benefits are still flowing through to native vegetation recruitment.

'I think we've worked pretty good with our rangers to really understand the importance of ground cover and the importance of maintaining a certain amount of biomass, the importance of keeping weed frequency and density down. We're now being able to see some native veg recruitment and implementing some management to look after that, so it gets established. ... And it certainly built some understanding and some good culture around that'. (LLS interviewee)

However, some interviewees were highly critical of the approach of some LLS regions, such as the Hunter and North West, to TSR biodiversity values. In particular, one TSR stakeholder interviewee singled out the use of long-term grazing permits as a practice that risks *'turning a TSR into a cattle lot'*.

### Recommendations

Nil. (Recommendations 3 and 4 regarding funding for on-ground works are relevant to this section)

# 3 CRR project outcomes

## 3.1 Overview

This chapter explores the extent to which the CRR project achieved its expected outcomes. The key findings from this evaluation were:

- The CRR project successfully developed a framework to integrate roadside reserve management into IP&R systems. However, challenges remain to integrating natural asset management in these systems (Section 3.2).
- The CRR project also had a range of benefits for council staff in terms of improving their general capabilities in managing roadside reserves (**Section 3.3**)
- There was overall positive feedback from councils on the practicality of the framework and resources, but there was significant regional variation in the type of resources required (Section 3.4).
- A range of outcomes are likely to last beyond the life of the CRR project and contribute to benefits for roadside reserve management, including resources and general practice change. However, councils will require ongoing support to ensure this occurs (Section 3.5).

# 3.2 Integration of roadside reserve values into council IP&R systems

# The CRR project successfully developed a framework to support the integration of roadside reserve management into IP&R systems. However, challenges remain to integrating natural asset management in these systems.

A key intended outcome of the CRR project was for councils to '...have access to a framework that enables them to embed roadside reserve management into their IP&R (Integrated Planning & Reporting) systems'.<sup>64</sup> It was intended that, by helping councils recognise natural roadside assets within IP&R systems, councils will be able to manage these assets in a way that considers and addresses the complexities of road management requirements in a holistic way.<sup>65</sup>

All councils in NSW use the IP&R framework. It was introduced in 2009 as a way for councils to develop, document and report on their plans for the future of their communities.<sup>66</sup> IP&R systems includes a suite of integrated plans setting a vision, goals and strategic actions, and a reporting structure to communicate progress to council and the community.<sup>67</sup>

The CRR project undertook several actions to develop and disseminate a framework to help councils integrate roadside reserve management into their IP&R systems. These actions included:

• **Surveying councils and reviewing literature** to understand how councils are integrating natural assets into their asset management systems.

<sup>&</sup>lt;sup>64</sup> LLS (2016) *Linear Reserves Program – Council Roadside Reserves. Business Plan* p. 7 (internal document)

LLS (2016) Linear Reserves Program – Council Roadside Reserves. Business Plan p. 7 (internal document)
 NSW Office of Local Government (2021) <u>Integrated Planning and Reporting – Guidelines for Local</u>

Government in NSW
 NSW Office of Local Government (2021) <u>Integrated Planning and Reporting – Guidelines for Local</u> <u>Government in NSW</u>

- Developing the Council Roadside Environmental Management Framework to improve integration of roadside environmental management into other council activities, including road planning, construction, and maintenance consistent with IP&R (outlined in Box 1).
- Developing supporting materials and tools to help councils train staff, improve roadside reserve management and integration with council processes to complement the Council Roadside Environmental Management Framework (outlined in Box 1). These tools include the Roadside Vegetation Management Plan Template, which provides an example of how the plan fits with the IP&R framework.
- Piloting the framework and the tools with councils LGNSW provided devolved grants from the CRR project funding to 19 projects across 22 councils<sup>68</sup> that sought in various ways to improve and integrate their roadside reserve management. These councils were spread across NSW with a mix of peri-urban, regional and rural councils of varying sizes:
  - 52 percent councils with <30,000 residents
  - 19 percent councils with 30,000 70,000 residents
  - 29 percent councils with >70,000 residents.<sup>69</sup>
- **Publishing the framework and other resources** LGNSW published the framework<sup>70</sup> and other project resources, which are now available to guide all councils in integrating roadside reserve management into their processes and IP&R systems.

The CRR project has provided councils with access to a framework to embed roadside reserve management into their IP&R systems, and as such, delivers against the overall objective of the CRR project. However, challenges remain to integrating natural asset management in these systems.

Approaching roadside environmental management through IP&R is a new lens for managing natural resources and aligning built and natural assets to councils' asset planning processes is an emerging field of practice.<sup>71</sup> While the CRR project invested in new research with councils and piloted integration in the grant projects, there were complexities with valuing natural assets and incorporating the assets into systems with depreciation.

Despite this, some councils had significant success with simply integrating their datasets into accessible GIS systems and maps. This helped improve awareness of and access to this data without the challenges of nesting it within a particular asset-focused system:

'In terms of the asset management system, it was just as a whole big data set. So we didn't feel the need to bring it across into the system because it was already in the other GIS system. [The works crews] are aware of the data now and they know how to use it'. (Council interviewee)

Interim reporting on the grant projects from 2018 indicated that only around a third of participating councils had either commenced trialling or planned to commence this integration.

<sup>&</sup>lt;sup>68</sup> Bellingen Shire Council; Bourke Shire Council (Brewarrina and Walgett); Coffs Harbour City Council; Edward River Council; Glen Innes Severn Shire Council; Griffith City Council; Hawkesbury River County Council; Hunter Councils Inc.; Moree Plains Shire Council; Narrandera Shire Council; Oberon Council; Parkes Shire Council; Penrith City Council; Port Stephens Council; Queanbeyan-Palerang Regional Council; Snowy Valleys Council; Temora Shire Council; Wagga Wagga City Council and Lockhart Shire Council; Wingecarribee Shire Council.

<sup>&</sup>lt;sup>69</sup> NSW Office of Local Government (2020) *Final Project Report – Linear Reserves Program – Council Roadside Reserves* (internal document).

<sup>&</sup>lt;sup>70</sup> NSW Office of Local Government (2020) <u>Council Roadside Environmental Management Framework</u>

<sup>&</sup>lt;sup>71</sup> NSW Office of Local Government (2020) <u>Council Roadside Environmental Management Framework</u>

However, a follow up desktop survey of council websites (where documentation was available) indicated that, among the 19 grant projects, most had some mention of roadside reserves in their recent IP&R documentation. While it is unclear to what extent the CRR project played a role in this, this included:

- 12 out of 16 councils for which documents were available discuss roadside reserves in their annual reports and/or operational plans
- four councils have roadside reserves explicitly mentioned in their asset management strategy
- six councils have roadside reserves mentioned in their delivery program
- one council has roadside reserves mentioned in its community strategic plan.

Interviews as part of this review also indicated that the framework and supporting materials were beginning to be integrated into council systems:

'Previously we had a roadside vegetation management plan ... a couple of people knew about it but it had never been embedded and was not really looked at. So the benefits of doing this grant and the frameworks is that got it put into the IP&R framework ... so all of the data we have has gone into that, from project planning all the way down to operational maintenance, everything's embedded ... it's just everyday business now'. (Council interviewee)

While these results do not immediately show as extensive a formal integration into IP&R as might be expected from the language in the project business plan, some of the key components of IP&R systems take time to revise and update. As such, further evidence of roadside reserves being explicitly integrated into multi-year asset strategies and financial plans may be available in the future. Integration can also occur without explicit mentioning of roadside reserves in these documents but, rather, in supporting asset management plans and systems.

Feedback from participating councils also indicated that, while there has been some formal integration into IP&R systems, councils also improved their management of roadside reserves in a range of other ways (see **Section 3.3**) and the CRR project has had a range of benefits in terms of more general embedding of roadside reserve management in council systems. This is well-aligned with the recommendations from the Commission's evaluation of a previous iteration of the roadside reserve program, which highlighted a more general need for improved knowledge and integrated management of assets and risk.<sup>72</sup>

#### Box 1: Council Roadside Environmental Management Framework and supporting materials

#### The Council Roadside Environmental Management Framework

The framework<sup>73</sup> was designed to 'enable councils to be more active in natural asset management through understanding the value of their roadside reserves and planning for appropriate management, building partnerships and enabling strategic prioritisation of works'. The framework provides:

- background material on the value of, roles and responsibilities for roadside reserve management
- information on how to assess roadside values and threats and prioritise management, specifically referencing the RAM (developed under the TSR project) as a 'cost-effective survey method for collecting data on environmental attributes'
- information on the environmental assessment and approvals process as it applies to roadside environments, including providing links to assessment templates and information

<sup>&</sup>lt;sup>72</sup> Natural Resources Commission (2014). *Recommendations for potential future NSW Environmental Trust investment in roadside vegetation*. Report for the Environmental Trust.

<sup>&</sup>lt;sup>73</sup> Eco Logical (2020) *Council roadside environmental management framework*. Report for LGNSW.

- practical insights on how to improve management of on-ground works to reduce impacts on roadside reserves/enhance their value
- strategic planning information, including how roadside management can be aligned to high-level state and regional plans, integrated in council IP&R systems, and linked to council policies and strategic plans.
- In terms of IP&R integration specifically, the framework describes several high-level actions staff can take, including:
  - identifying links between roadside management objectives and high-level community strategic plans and delivery programs
  - identifying links to other strategies and plans
  - identifying staff with responsibilities relating to roadside management
  - exploring the costs and benefits to council for aligning work across council that can impact roadside values.

#### Supporting materials and tools

Materials and tools developed to complement the framework include:

- four e-learning modules, focusing on the rationale for roadside environmental management and how to approach 'good practice' management
- a series of templates for councils to use in completing reviews of environmental factors, helping them fulfil their obligations under the NSW Environmental Planning and Assessment Act 1979
- a template for completing a Roadside Vegetation Management Plan
- an app and training guidelines to help councils use the RAM to assess their roadside reserves
- asset management plan templates for trees and roadside vegetation to help councils integrate these natural assets into their asset management systems.

### Recommendations

6 LGNSW should continue to promote the use by councils of the published Council Roadside Environmental Management Framework and other resources developed under the CRR project to support the ongoing integration of roadside reserve management into council process and IP&R systems.

# 3.3 Improvements in council capacity to manage roadside reserves

In addition to integrating roadside reserve management in council processes and systems, the CRR project also had a range of benefits for council staff in terms of improving their general capabilities in conservation management of roadside reserves.

These included:

 General awareness raising about the value of roadside reserves among roadside management teams, managers and councillors. This was achieved through participation in training under the project, and through the general engagement undertaken by grant recipients across their councils as part of their project delivery. Development of project documents, such as roadside vegetation management plans, also helped as they typically received broad exposure across councils: 'What the grant did was give us that boost to make people understand that it's not just a team of tree huggers – it's a general need to protect that vegetation and put more emphasis on managing these areas'. (Council interviewee)

 Information and templates making it easier for councils to actively manage roadside vegetation. Interviewees highlighted that the resources and templates produced by LGNSW reduced barriers to progressing work in their councils, including by providing confidence that their documentation is appropriately scoped. Some interviewees also suggested that because their documentation is based on templates from LGNSW, they have higher levels of credibility than if they had been developed solely by environmental officers:

'There is a fantastic range of information and resources available. This makes it much easier for Councils to implement the Framework and helps to reduce barriers. We will continue to use the resources and plan on using them more.' (Council feedback to LGNSW on resources)<sup>74</sup>

 Culture change that supports roadside vegetation management. A range of councils and external stakeholders highlighted that the project helped to reinforce a broader cultural change in this space. This goes beyond just a greater awareness of the value of roadside reserves to more fundamental changes in the way that key stakeholders were thinking about and approaching management:

'In project planning they're taking in consideration how to save trees –they're now trying to avoid chopping down and negotiating with landholders to preserve trees. Before we had the plan, the engineers would never have thought that way. It's become quite embedded in their thinking'. (Council interviewee)

 Better data on the condition and conservation values of roadside reserves. Most of the councils involved in the project did some form of on-ground surveying or mapping of roadside reserves. Many used the RAM, and several used the RAM in combination with more detailed mapping work, including one project that collected fine-scale imagery using drones:

"...and if there's a threatened species on that section of road, that just pops up with a flag [for the road crews] ... so it's given us this map, which has a lot more sites on than what we previously knew". (Council interviewee)

A consolidated dataset contains information from 18 councils for 1,571 roads, covering 9,611 kilometres.<sup>75</sup> Across these councils and assessments:

- 42 percent of sites were rated as high conservation value
- 33 percent were medium conservation value
- 25 percent were low conservation value.

The greater spread of RAM ratings for the CRR project compared to the TSR project may be due to many TSRs being in cleared landscapes. This is consistent with the findings of the RAM audit report, which noted it is the isolation of native vegetation within a matrix of cleared land that makes TSRs valuable and drives the majority of them to be in the high conservation value category.<sup>76</sup>

• **Updated plans and processes**. Several councils developed new or updated roadside environmental management plans, while others developed internal processes to support better roadside vegetation management. This included stronger links between existing

<sup>&</sup>lt;sup>74</sup> NSW Office of Local Government (2018) *CRR resource feedback report - Attachment C* (internal document)

<sup>&</sup>lt;sup>75</sup> Based on GIS data provided by LGNSW as part of the Council Roadside Reserves project

<sup>&</sup>lt;sup>76</sup> Ecoplanning (2020) *A review of the rapid assessment methodology for assessing TSRs*. Report to LLS.

data and road maintenance teams (noted above), and modifications to processes related to, for example, scheduling of road maintenance and environmental assessments:

'They were adding to their existing asset management strategies and planning processes ... which is a clear winner because it demonstrated an expansion in integration as opposed to the environment section having an Excel spreadsheet'. (CRR stakeholder interviewee)

As the tools and resources developed through the program were made available online, the capability benefits have begun to spread to councils beyond those who participated in the project participants. While the extent of uptake among NSW councils is unclear, the LGNSW project team did extensive work to promote the materials, contacting staff in councils across NSW to let them know about what was available. LGNSW staff also report that they are still receiving *ad hoc* feedback and enquiries about the materials from other councils.

The evaluation survey targeted at councils not involved in the project showed relatively high levels of awareness and use of the materials and tools, although some care should be taken when interpreting these results because of the low response rates (**Figure 6**).<sup>77</sup> Overall, 83 percent of respondents had used at least one of the project outputs. This was most commonly the Roadside Vegetation Management Plan template and the broader Council Roadside Environmental Management Framework.

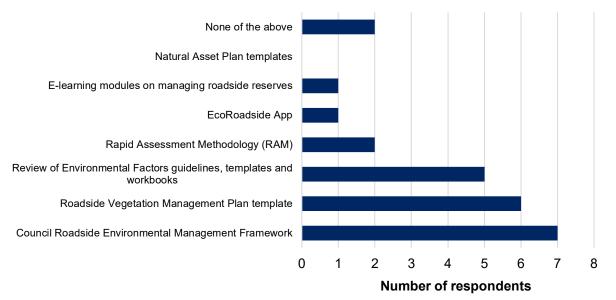


Figure 6: Use of CRR project tools and resources as reported by council survey respondents, where the survey was targeted at non-participating councils (from 12 respondents)

## Recommendations

Nil. (Recommendation 6 regarding ongoing promotion of the project resources across councils is relevant to this section)

<sup>&</sup>lt;sup>77</sup> Acknowledging the low response rate and potential for respondents to include councils who did participate in the project.

## 3.4 **Practicality of the management framework and resources**

#### There was overall positive feedback from councils on the practicality of the framework and supporting resources, but there was significant regional variation in the types of supporting resources required.

The practicality and usefulness of the Council Roadside Environmental Management Framework and supporting resources is a key consideration in determining the overall value of the CRR Project. The supporting resources included the templates, training material and the site assessment methodologies. The results presented above suggest that they were indeed important components of the project that supported improvements in council capabilities to manage roadside reserves. There was overall positive feedback about the breadth and content of the resources. Specific insights on these outputs include:

- Early feedback collected from councils involved in the project indicates that they were
  particularly useful in helping framing issues for council staff and as key resources they
  could provide to consultants as part of project scoping.
- In line with the intent of the project, most councils noted that they adapted and tailored the resources to suit their needs. However, some councils indicated some of the resources (including templates, training material and the RAM assessment) were either too complicated for non-environmental staff or too simple for councils that had already made good progress in this area. This reinforces the underlying challenge LGNSW faced in addressing the diverse needs of councils. As noted by one interviewee in relation to the training material provided for councils:

'The issue was that it was good for an enviro person, but when we tried to get it to the road crews [training for roadside management crews], it was too technical. So we amended it and made it a bit more tailored. It still has the right information, it's just simplified a bit'. (Council interviewee)

• The Review of Environmental Factors (REF) templates in particular were highlighted as having issues. This included having out-of-date references and being 'overly complicated for the small-scale assessments likely to be undertaken by client councils' (council feedback to LGNSW).

Despite these issues, it is important to note that, since the project, some of the councils have further improved their capacity and processes related to the project and are now in a better position to take advantage of the materials on offer. As noted by one consultant who worked with councils:

'The tools provided through the program weren't used because the councils were not ready for them. They were not using GIS previously, but is now starting to be used and evolving as a tool and this is as a result of the project'. (CRR ecological consultant)

## Recommendations

7 For future devolved grants programs, the Trust should support the grantee to ensure the project business plans articulate how project outputs, such as templates and other tools, cater for the needs of different end users.

# 3.5 Improvements to CRR management beyond the life of the project

# A range of outcomes are likely to last beyond the life of the CRR project and contribute to benefits for roadside reserve management, including resources and general practice change. However, councils will require ongoing support to ensure this occurs.

The resources developed through the project are likely to continue to be useful for councils over the long-term, particularly for those councils in NSW which are seeking to improve their management of roadside reserves.

Evidence from interviews suggests that the work of the project in building capability and supporting the embedding roadside reserves in council systems will have an ongoing impact on their management. Councils report a range of practice changes that should flow through to improved benefits for the environmental values in roadside reserves. These include:

- construction and maintenance crews which have changed their practices to minimise impacts on vegetation and other aspects of roadside reserves such as:
  - minimising the footprint of site offices
  - re-using of old turn-around zones rather than constructing new ones
  - altering mowing and slashing schedules to avoid threatened orchids
  - placing signage that signals sensitive sections of roadside
  - expansion of council controls over firewood harvesting
  - more targeted approaches to weed spraying to reduce damage to non-invasive vegetation and prioritise the maintenance of high-value reserves.

'It's about where they're setting up their site office, where are the turnaround. It's brought that stuff to the forefront. It used to be about 'where is it easy'. Now there's more thinking about the footprint of the site and the works'. (Council interviewee)

'We've then got high conservation area layer and put that on top of the weeds map – bring those activities to the fore and helped us to plan where we should be targeting'. (Council interviewee)

What remains unclear is the extent of good practice roadside reserve management by councils broadly across the state. Interviewees consistently suggested that there are a range of councils who could benefit from further support in this space. Similarly, councils also noted that while things like the training were beneficial, they needed to make sure there were regular 'refreshers' scheduled to help remind staff and cater for employee turnover.

### **Recommendations**

Nil (Recommendation 7 is relevant to this section)

# 4 TSR & CRR project design and delivery

# 4.1 Overview

This chapter explores how well the TSR and CRR projects under the Linear Reserves Program were designed and delivered. As part of this evaluation, the Commission considered delivery against scope, budget and timeline, as well as the overall approach, risk management and stakeholder engagement for the projects in combination. From this, the Commission made an overall assessment of:

- how efficiently they were delivered and whether they made best use of available resources (Section 4.2).
- the challenges and enablers to delivery (Section 4.3).

# 4.2 Efficiency of delivery and use of resources

The CRR project appears to have been delivered efficiently, producing a broad range of outputs and outcomes while leveraging in-kind contributions at the council-level. The project ran on budget, with half (50 percent) of the budget spent on devolved grants that allowed direct action among 22 local councils across NSW (**Table 3**). The resources produced from the project are still available and being used by other councils (see **Section 3.2** for further details). Stakeholder feedback was consistent in saying the project represented good value for money.

The efficiency of delivery of the TSR project was more variable. It also produced resources for TSR managers across the state, including the RAM and vegetation guides, and leveraged inkind contributions from LLS and EHG. The comprehensive set of conservation assessment data for TSRs was seen to be valuable among senior LLS staff (see **Section 2.2** for further discussion on the RAM). The project also contributed to some shifts in LLS' management of TSRs (see **Section 2.5** for further details).

However, some LLS staff and consultants to the TSR project indicated that the project did not optimise the use of funds. The TSR project had an underspend of \$2.84 million based on the final financial report for the project (**Table 3**), which was mostly associated with the lack of progress on the two project milestones related to trialling of new and innovative management approaches and sustainable funding models (Milestone 6), and analysing the trial outcomes and developing a funding model options paper (Milestone 9) (see **Section 2.3** for further details). The Commission also noted a variation between the total budget reported in the TSR financial report (\$4.42m) and the original grant amount approved for the project and included in the TSR business plan (\$4.75m). Trust administration investigated this variation and attributed it to a combination of issues with the annual budget reporting process, LLS not allocating the full grant amount in their annual budgets, and administrative oversight. Trust administration advised that expenditure of grant funds was not impacted.

Other concerns raised with the efficiency and use of resources for the TSR project related to issues with the RAM development. As discussed in **Section 2.2**:

- The RAM took a long time and multiple consultants to finalise. Combined with the lack of widespread ongoing use and the concerns of its rigour, this detracted from the overall value-for-money of the project.
- Although the RAM was designed to be used by TSR rangers, over half of the assessments were completed by consultants. While this allowed large numbers of TSRs to be assessed, it was not the most efficient or sustainable approach, particularly given

the original intent of developing an assessment methodology that could be implemented by LLS staff.

Recommendations to address these delivery issues are outlined in Sections 2.2 and 2.3.

Table 3: Budget and expenditure summary for the TSR and CRR projects.				
Note: this represents Trust funding only*				

Component	TSR budget	TSR expenditure	CRR budget	CRR expenditure
Salaries and oncosts	\$815,318	\$504,667	\$505,043	\$485,644
Consultancies	\$1,561,074	\$902,816	\$218,312	\$259,381
Materials	\$40,000	\$39,542	\$0	\$0
Transport	\$199,179	\$74,256	\$23,069	\$11,630
Grants	\$1,650,000	\$0	\$1,044,875	\$1,013,569
Other**	\$102,000	\$42,307	\$256,871	\$229,837
Administration	\$53,500	\$21,020	\$35,179	\$33,632
Total	\$4,421,071***	\$1,584,608	\$2,083,349	\$2,033,693

\* Budget and expenditure data is based on information from the final financial reports for the projects and does not include the final program evaluation costs.

\*\* Includes items described in the project financial report as training workshops and trials (for TSR project) and evaluation, natural assets and grants to councils (for CRR project).

\*\*\* This amount does not include the full grant allocation, as noted under Section 4.2

Trust administration closely monitored, managed and supported the TSR and CRR projects throughout their delivery, which is a key positive for these projects and future Trust projects. This helped to progress project delivery while also being responsive to change as the need arose. Nevertheless, we note there were reductions in scope, budget underspends and extension of completion dates across both projects. Key elements of the scope and timelines for the two projects are outlined in **Table 4**.

#### Table 4: Scope and timeline considerations for each of the TSR and CRR projects

Delivery element	TSR project	CRR project	
Scope	Partially delivered in line with the original scope. The significant exception was the agreement between LLS and the Trust not to proceed with the trialling of innovative management models. This was driven by the finding that there were few viable alternative funding models.	Delivered in line with the original scope. Slightly fewer councils than originally planned participated in the grant program (22 vs 30) and fewer training sessions/workshops were run because of COVID-19.	
Timeline	Key components of this project took longer than planned, including development of the RAM, or were discontinued, including the innovative management trials. The original project completion date (June 2019) was extended to October 2019.	Several of the key components of this project took longer than planned. Some of the delays were caused by delays with the RAM, others related to council-level projects that took longer than anticipated. The original project completion date (June 2019) was renegotiated to August 2020.	

The CRR project's business plan identified only a narrow set of project risks and did not identify timing-related challenges – something that should have been identified based on prior work with councils – and risks relating to the technical and other challenges of integrating roadside reserves into IP&R systems. The TSR project's business plan identified a broader set of risks, including that some elements of the project would not be completed in time, but the risk was considered 'unlikely'. As discussed in **Section 2.3**, there was also a lack of consideration of the risks associated with the new funding options component of the TSR project.

# Recommendations

Nil (Recommendations 1, 2, 3, 4 and 8 are relevant to this section)

# 4.3 Challenges and enablers to delivery

In addition to the specific issues raised in the previous sections, both the CRR and TSR projects faced a range of challenges to delivery that are common for these types of projects, including:

- delays to project commencement (of the projects themselves, as well as grant projects funded under the CRR project)
- COVID-related disruptions (particularly for planned training and face-to-face workshops)
- bushfire and other natural-disaster related disruptions in some council areas.

For the TSR project, there was also evidence of some tension between the intent of the project (i.e. its focus on improving the management of TSRs for conservation values) and the historic purpose and valid, ongoing agricultural focus of TSR management in some LLS regions.

In many cases, the funds for managing TSRs come from grazing permits and leases, and these are therefore important sources of revenue for LLS. Without this revenue source, there would be fewer resources available for TSR management. However, these funds are inadequate to support extensive additional investment in a range of public benefits, including conservation management. Further, at the outset of the project, LLS was still relatively new as an organisation and TSR management was still strongly linked to staff with agricultural backgrounds.

The TSR project had an element of focus on effecting cultural change in LLS, but this was not clearly articulated in the planning documents and specifically the project business case. It came through in interviews with key stakeholders, who noted an underlying element of wanting to change how linear reserves were managed by changing perceptions of and attitudes to their value. As noted by one interviewee:

'The grants for linear reserves were there to produce a step change ... a phase change in philosophy and management of areas ... to shed light on the lack of funding and politicise it'. (Key stakeholder interviewee)

The Trust considered travelling stock, short-term grazing permits and recreational uses to be compatible with biodiversity conservation, although it raised concerns around long-term grazing leasing not being appropriate for sites with higher biodiversity conservation values. There were indications of limited agreement amongst some senior LLS staff and boards around this element of the project, which potentially limited the project having more substantial impact.

The differences between LLS regions were also a challenge for the TSR project. In particular, the above-noted tension between agricultural and environmental objectives for TSRs appeared

to be more significant for some regions than others. While this meant that some regions could become examples of what is possible in TSR conservation management, it also made the state-wide approach more challenging.

'It just varied from one region to another. There are some regions where the process was just not accepted simply because the politics are such that those people on boards, et cetera, just don't see the values and don't want to see the values.' (LLS staff interviewee)

A key challenge for LGNSW in managing the CRR project was around the diverse capabilities and contexts of the various councils. For example, while some councils had an extensive and well-developed approach to roadside management (for example, with funded environmental officers and comprehensive data sets), others did not even have a road vegetation management plan.

Compounding the differences in capability between councils were the differences in the types of roadside reserves councils were managing, and the priority of these reserves in the broader conservation context. For some councils (particularly those to the east), roadside vegetation is just one of many areas of important habitat areas that councils manage. In other areas, such as western NSW, roadside corridors are one of the few remaining patches of remnant vegetation that councils manage (often as part of a very long road network).

Because of these differences, councils had different needs from the CRR project resources. The program met these needs to varying degrees, with several interviewees suggesting that low-resource councils are likely to have benefited most from the templates and on-ground work, while councils with high levels of existing capability would have benefited from the opportunity to further embed roadside management into their systems and processes.

Staff from both LLS and LGNSW also noted that translating the relatively high-level business plan into a working project was a difficult task. This is a key stage in the project design and implementation process where there is some risk of the project rationale and objectives not being fully realised in the details of the project. In particular, the Commission considers that the TSR business plan did not include sufficiently detailed background, guidance and risk information on the funding options and mechanisms component of the project (see **Section 2.3** for further details). The CRR business plan also included reasonably high-level detail around the drivers, steps and risks in facilitating councils to embed natural roadside assets within IP&R systems.

Stakeholders and project documents highlighted some enablers that helped the projects overcome these challenges, including:

- A flexible and accommodating approach taken by the LGNSW team. There was consistent and highly positive feedback from councils about LGNSW responsiveness, communications, and fit-for-purpose reporting requirements.
- Strong working relationships between Trust administration and funded project staff. Both LGNSW and LLS staff noted that, although there were staff changes during the project that were difficult, Trust administration staff were helpful and worked hard to get the most from projects:

# 'We really felt like [the Trust staff member] was part of the project.' (Program stakeholder).

 That projects that worked across multiple councils appeared to have a range of efficiency and knowledge-sharing benefits. There was also strong interest from multiple councils in future cross-council collaborations to share resources and knowledge. Consultants also appeared to be important links here, helping to connect councils and identify where they were able to learn from each other or collaborate on projects.

# **Recommendations**

8 The Trust should ensure high risk components of each project are sufficiently described and supported by risk assessments and planning in project business plans. (The recommendation links to Recommendation 4).

# Appendix 1: Program logics

Activities	Outputs	Short-term outcomes	End-of-project outcomes	Long-term outcomes
	Rapid assessment method developed and documented; Existing TSR	used to assess TSR conservation value	Method provides useful and cost-effective insights on TSR conservation values	Better targeting of resources among TSRs, with all TSRs with medium and high conservation
Assess conservation values of TSRs	data collated; Management system developed; Priority TSRs assessed; Shared		Conservation values of TSRs recognised in	values being managed to maintain and improve these
	state-wide spatial dataset on TSR conservation values	increased	regional TSR plans of management	Improved, sustainable management practices adopted
Develop resources and build capability of LLS in	Best practice conservation management guides and toolkits; Key stakeholders completed training; Options paper for innovative	managers' capability in assessing and knowledge	Managers have a better ability to prioritise resources among TSRs and	
TSR management	management; Trials of 10 regions; Long-term sustainable management funding options paper	Better understanding of what options are available for TSR management	implement appropriate management	Conservation values of linear reserves maintained and improved
Develop long-term monitoring strategy	Long-term monitoring strategy for TSRs		Monitoring strategies guides monitoring plans in each LLS region	<ul> <li>Knowledge on TSR status</li> <li>and management efficacy improves over time</li> </ul>

#### Figure A1.1: Project logic for TSR project

**Notes**: the timeframe for outcomes has been adjusted from the business plan to clarify the outcomes that were expected to occur by the end of the project (the 'ultimate outcomes' in the business plan) as well as outcomes that were expected to flow from this in the longer-term.

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Activities	Outputs	Short-term outcomes	End-of-project outcomes	Long-term outcomes
Investigate current tools and approaches for integrating natural assets into the IP&R system	Investigation report	Improved understanding of how councils are approaching natural asset management		
Draft a framework to support councils in building knowledge of roadside and linear reserves	Draft framework	Tools and guidelines available to councils to support natural asset management		Landscape function and condition improves
Trial draft framework with councils	Grants program; Involvement of councils with high, medium and low capacity and from metro, regional and rural locations	Participating councils apply the framework to their roadside reserves	Participating councils have improved knowledge and skills in identifying, funding and managing natural assets	On-ground management of roadside reserves improves and becomes more strategic
Update and disseminate framework to councils across NSW	Updated framework; Materials to support use; Councils trained/engaged		Councils across NSW are aware of the framework	Other councils build their capabilities and embed roadside reserve management into their IP&R systems

#### Figure A1.2: Project logic for CRR project

**Notes:** the timeframe for outcomes were adjusted from the business plan to clarify the outcomes that were expected to occur by the end of the project (the 'ultimate outcomes' in the business plan) as well as outcomes that were expected to flow from this in the longer-term.

# Appendix 2: Key evaluation questions and sub-questions

# Table A2.1: Key evaluation questions and sub-questions for the Commission's evaluation of theTSR project

#### Key evaluation question and sub-questions

1. To what extent did the TSR project achieve its expected outcomes

- a) To what extent has the project led to better methods and strategies for monitoring and managing TSRs?
- b) To what extent has the project led to new options and models for managing TSRs?
- c) Have the conservation assessment and management skills of LLS staff and other linear reserve managers increased?
- d) To what extent has the project led to better TSR management?
- e) Have there been any unexpected outcomes, either positive or negative?

#### 2. How well was the TSR project delivered?

- a) How efficiently were these outcomes achieved did the project make best use of available resources?
- b) What were the challenges and enablers to delivery?
- c) To what extent was the project delivered in line with its scope, budget and timeline? Why or why not?
- d) Were the methods/ approach to the project appropriate?
- e) Were all key risks identified and appropriately managed?
- f) To what extent was stakeholder engagement effective and appropriate?

#### 3. What are the lessons for future Trust projects?

- a) What are the overall lessons on project design?
- b) What are the overall lessons on project delivery and evaluation?

# Table A2.2. Key evaluation questions and sub-questions for the Commission's evaluation of the<br/>CRR project

#### Key evaluation question and sub-questions

1. To what extent did the CRR project achieve its expected outcomes

- a) To what extent are councils integrating roadside reserve values into their IPR systems?
- b) To what extent has there been an increase in the capabilities of councils around roadside reserves [or natural asset management more generally?]
- c) Is the final framework practical?
- d) How likely are these outcomes to last beyond the life of the project and what are the associated long-term benefits likely to be for land management?
- e) Have there been any unexpected outcomes, either positive or negative?

#### 2. How well was the CRR project delivered?

- a) How efficiently were these outcomes achieved did the project make best use of available resources?
- b) What were the challenges and enablers to delivery?

#### Key evaluation question and sub-questions

- c) To what extent was the project delivered in line with its scope, budget and timeline? Why or why not?
- d) Were the methods/ approach to the project appropriate?
- e) Were all key risks identified and appropriately managed?
- f) To what extent was stakeholder engagement effective and appropriate?

#### 3. What are the lessons for future Trust projects?

- a) What are the overall lessons on project design?
- b) What are the overall lessons on project delivery and evaluation?

# Appendix 3: Project and program documentation used in the evaluation

Key documents reviewed include project planning, management and reporting documents, project deliverables and evaluations undertaken as part of the projects. These include but are not limited to:

- project business plans
- annual implementation plans
- project financial reports
- reporting to the Trust
- assessment data for conservation values
- Council Roadside Environmental Management Framework (LGNSW 2020)
- various templates, including Roadside Vegetation Management plan and Natural Assets plan templates
- Local Land Services Rapid Conservation Assessment Method Training package and guidelines (Regeneration Solutions 2017)
- Council Roadside Reserves Project: Rapid Assessment Methodology (RAM) Guide (EMAP 2019)
- Travelling Stock Reserves Vegetation Guides (prepared by different consultants for different regions)
- Compiling Conservation Values Data for Travelling Stock Reserves (LLS and OEH 2017)
- Travelling Stock Reserves State-wide Plan of Management (LLS 2020)
- Best Environmental Management Practice Toolkit for Travelling Stock Reserves (Regeneration Solutions 2020)
- Travelling Stock Reserves Monitoring and Audit Strategy (Regeneration Solutions 2020)
- A Review of the Rapid Assessment Methodology for Assessing TSRs (Ecoplanning 2020)
- Roadside Assessment Method Training Evaluation Report (EcoServer 2020).