

South East NSW Natural Resource Management Plan

2022-2026



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More information

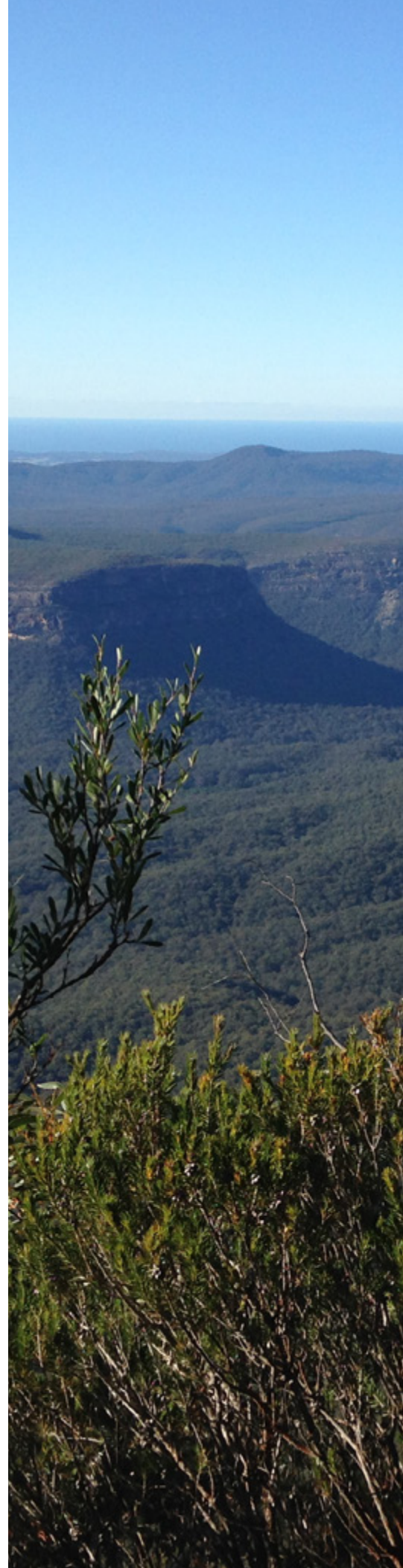
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Acknowledgments

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing March 2022. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Local Land Services or the user's independent adviser.



Acknowledgement to Country

South East Local Land Services acknowledges the Traditional Custodians of the land and pays respect to Elders past, present and emerging. We also recognise the unique, diverse and enduring cultures of First Nations Peoples in NSW.

First Nations Peoples have a strong ongoing social, spiritual and cultural connection with their Traditional Lands and Waters. Obligations to care for Country remain integral to Aboriginal & Torres Strait Islander law, identity, culture and social and emotional well-being. The way in which Traditional Lands are being managed is of great interest to First Nations communities and South East Local Land Services understands that Aboriginal people have a significant contribution to make in relation to land management in the region.

First Nations Peoples hold special knowledge and rights regarding the management of land and its resources. Aboriginal people occupied all areas of the region with Tangible and Intangible sites and show as evidence such as campsites, scarred and carved trees, rock shelters, grinding grooves, rock art, and ceremonial and burial areas present across all landscapes.

Cultural values across the region may also relate to natural resources such as native bush medicines, foods and tradable goods including ochre and stone suitable for tool making. Songlines, spiritual landscape storylines and intellectual property in relation to traditional knowledge is also acknowledged.

The South East region holds many Aboriginal cultural heritage values, and the preservation and management of these values is best determined by the Traditional Custodians of Country.

South East Local Land Services is committed to building strong relationships with First Nations communities, seeks to understand their aspirations and ensure that Aboriginal people have a voice to provide input into land management issues and in particular the management of cultural values.

South East Local Land Services acknowledges the different ways Aboriginal people are identified, e.g. First Nations, Aboriginal, Indigenous and Aboriginal and Torres Strait Islander.

Executive Summary

This South East Natural Resource Management (NRM) Plan is a five-year plan (2022-2026) that define the direction of South East Local Land Services (South East LLS) NRM services. It provides an overview of our natural assets and identifies goals, key initiatives and activities that will support us to deliver against our state outcomes of vibrant communities in productive healthy landscapes, and productive and sustainable land use. Our services aim to support and enable land managers to better manage natural resources in a collaborative way, working in partnership with land managers and stakeholders. This plan has a supporting document, an evidence plan, which provides greater detail on how the plan was developed, where our evidence comes from and what tools we will use to prioritise activities in the region.

The South East Region is a diverse region supporting a distinct mixture of landscapes, lifestyles and cultural values. Our natural resource assets range from coastal, estuarine and freshwater environments, through to tall forests, woodlands and grasslands and alpine environments. The regions economic prosperity is driven by agriculture (sheep, beef, dairy and cropping),



horticulture, aquaculture, water harvesting, commercial and recreational fishing, heavy industry, forestry, mining, urban and lifestyle development, tourism and recreation. This prosperity is dependent upon the health and sustainability of the region's natural resources. Our customers include private land managers such as primary producers or farmers, hobby or lifestyle land managers, Aboriginal land managers, >10 ha land managers and corporate land managers. We also provide services to public land managers including National Parks and Wildlife Service, Crown Lands and Local Government.

Our plan identifies three priority landscape themes for investment, threats to these themes and drivers of these threats. Our priority themes are: 1) connected native vegetation, 2) healthy soils, and 3) resilient aquatic assets. Collaboration was identified as a fourth and overarching theme. These themes evolved through a series of workshops across the region with key stakeholders, a review of community and stakeholder aspirations and reviews of recent publications. They also align closely with the South East LLS Catchment Action Plan 2016-2021. Targeting these themes will help us to support our customers to use natural resources within their capabilities and to improve their condition so that they are resilient to threats. Threats to our priority themes include loss of key habitat, connectivity and ground cover, management beyond capability, inappropriate use of chemicals, cultivation and fire, invasive species and disease, climate variability impacts, reduction in aquatic habitats, and reduced water quality and quantity. Drivers of these threats are knowledge and skills, financial resources and opportunities, policy and decision making, social capital, values and motivation, and climate change.

Our plan has three goals:

- Customers are improving and restoring native vegetation.
- Customers are protecting and improving soils.
- Customers are improving and restoring riparian lands.

Each goal has a set of key results and actions which are linked directly to the LLS NRM Framework 2021-2026, identifies performance metrics aligned with LLS statewide outcomes, identifies key customers, stakeholders and priority activities.

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1. Introduction

This South East Natural Resource Management Plan is a plan (2022-2026) to define the direction of South East LLS (NRM) services. It provides an overview of our natural assets and identifies goals, key initiatives and activities that will support Local Land Services deliver against our state outcomes of

“Vibrant communities in productive healthy landscapes”

“Productive and sustainable land use”

The protection and enhancement of natural resources in South East NSW is a shared responsibility among state and local governments, communities and individuals. Natural resource management decisions made by individuals, communities and industries directly influence the sustainable use and care of natural resources. South East LLS NRM services aim to support and enable land managers to better manage natural resources and support land uses that are sustainable and productive. South East LLS seek to do so in a collaborative way, working in partnership with land managers and stakeholders.

Recent years have highlighted significant stresses to the natural resources in South East NSW, prompting a review of LLS NRM priorities. Our natural resources and their associated ecosystems (terrestrial, aquatic, coastal and marine) underpin our agricultural production systems. Ecosystems provide services, through direct consumption and use (e.g. fossil fuels, timber, soil fertility and water) and important functions, such as pollination, insect predation and shelter for livestock. To make effective NRM decisions, we need to integrate the way we manage the natural system and take a whole-of-landscape view of human activities and their impacts (LLS NRM Framework, 2021).

We recognise the Aboriginal community connection to Country and work with our communities to conserve Aboriginal cultural heritage, share traditional land management knowledge and to care for Country.

The South East region

The South East Region (Figure 1) is a diverse region supporting a distinct mixture of landscapes, lifestyles and cultural values. The region covers an area of 55,600 km² from Wollongong to the north, Crookwell, Boorowa and Jindabyne in the west and the Victorian border to the south. The region extends three nautical miles out to sea to the east, including 673 km of coastline (40% of the NSW coast) and is home to approximately 700,000 people, including approximately 23,000 Aboriginal people (SELLS, 2021).

Our natural resource assets are diverse and range from coastal, estuarine and freshwater environments, through to tall forests, woodlands and grasslands and alpine environments. The region is located within the temperate and warm-temperate coastal lowlands, escarpment and undulating highlands and tablelands characterised by complex patterns of terrain and geology which support significant native plants, animals and ecosystems.

The regions economic prosperity is driven by agriculture (sheep, beef, dairy and cropping), horticulture, aquaculture, water harvesting, commercial and recreational fishing, heavy industry, forestry, mining, urban and lifestyle development, tourism and recreation. This prosperity is dependent upon the health and sustainability of the regions natural resources.



Figure 1: The South East Region and six local area management units

Our customers and stakeholders

Local Land Services customers include private land managers such as primary producers or farmers, hobby or lifestyle land managers, Aboriginal land managers, >10 Ha land managers and corporate land managers. We also provide services to community groups and public land managers including National Parks and Wildlife Service, Crown Lands and Local Government. The breakdown of land managers, land use and income sources are described within the South East NRM Evidence Plan.

Our stakeholders include investors, partners and beneficiaries. Investors are organisations for whom we provide services and deliver programs on their behalf eg. NSW and Australian Government agencies. Partners are organisations and groups we work with to provide services and implement programs, eg. Landcare, Local Aboriginal Land Councils. Beneficiaries are the people of NSW, the environment and its natural and cultural resources.

Plan alignment

We deliver our services in accordance with the *NSW Local Land Services Act 2013* and other applicable legislation relating to land management, threatened species, waterway management, Aboriginal cultural heritage and invasive species. Our [South East Local Strategic Plan](#) provides our organisation's direction, and the Local Land Services Performance Standard establishes principles that ensure we deliver quality outcomes.

Local Land Services is clear about its role in NRM (see [LLS NRM Framework 2021-2026](#)) and believe that we make the greatest impact and have the most unique roles to play by:

1. Delivering NRM practice change through **direct action and investment** including
 - Demonstration and extension services.
 - Advice and information to land managers.
 - Implementing on-ground interventions.
2. Delivering outcomes at scale, through **partnership and connection** by:
 - Collaborations and partnerships across private and public land.
 - Coordination of effort locally and state-wide.
 - Connections to our customers.

Australian Government priorities

South East LLS have a formal arrangement with the Australian Government as their service provider from 2018-2023, delivering projects under the Regional Land Partnerships Program. The Australian Government are therefore recognised as a key stakeholder for this plan, along with their priority outcomes relevant to the South East NSW region including:

Environment Outcomes

- **Outcome 1:** By 2023, there is restoration of, and reduction in threats to, the ecological character of Ramsar Sites, through the implementation of priority actions.
- **Outcome 2:** By 2023, the trajectory of species targeted under the Threatened Species Strategy, and other EPBC Act priority species, is stabilised or improved.
- **Outcome 3:** By 2023, invasive species management has reduced threats to the natural heritage Outstanding Universal Value of World Heritage properties through the implementation of priority actions.
- **Outcome 4:** By 2023, the implementation of priority actions is leading to an improvement in the condition of EPBC Act listed Threatened Ecological Communities.

Agriculture Outcomes

- **Outcome 5:** By 2023, there is an increase in the awareness and adoption of land management practices that improve and protect the condition of soil, biodiversity and vegetation.
- **Outcome 6:** By 2023, there is an increase in the capacity of agriculture systems to adapt to significant changes in climate and market demands for information on provenance and sustainable production.



2. Themes

A series of workshops across the region with key stakeholders, a review of community and stakeholder aspirations, along with recent science, as described in the South East LLS NRM Evidence Plan, identified three priority themes for investment. They also identified priority activities to protect natural resource assets and address top threats to landscape and catchment health in South East NSW (see Section 3). Priority landscape themes are: 1) connected native vegetation, 2) healthy soils, and 3) resilient aquatic assets. Collaboration was identified as a fourth and overarching theme.

Connected native vegetation

Connected native vegetation support processes that occur in a healthy environment and allows for the movement of native species between different areas of habitat, provides shelter for stock, and protection of soils. Connected vegetation may be continuous links (often referred to as 'corridors'), smaller 'stepping stones' such as paddock trees in the landscape, or buffers around natural areas. Maintaining connectivity is a key strategy for managing biodiversity in the face of climate change. The South East landscape is a patchwork of native vegetation which is largely public land zoned for conservation such as National Parks and State Forest, and Nature Reserves, and also land zoned for agriculture and development which is typically privately owned. Supporting private land managers to connect native vegetation is a regional priority for healthy landscapes and is aligned with Australian Government **Environment Outcomes**.

Healthy soils

Healthy soils underpin resilience to climate change and natural disasters, reducing carbon emissions, sustaining productive agriculture, and securing human health, food and water security, and biodiversity. Supporting land managers to understand, value and improve soil health is a priority in the South East Region. Supporting land managers to manage land within land capability and address specific degradation problems such as erosion, soil acidification, salinity, soil nutrient deficiencies and pasture decline are all ways to maintain or improve soil health. This theme is aligned with Australian Government **Agriculture Outcomes** and *National Soils Strategy 2021-2041*.





Resilient aquatic assets

Aquatic assets that have the capacity to adapt to changes and disturbance while maintaining the same basic structure, function, and interactions will be able to 'bounce back' from disturbance. Aquatic assets are the 'life-blood' of landscapes and take the form of creeks and rivers, wetlands, estuaries and farm dams. Supporting land managers to keep priority aquatic assets in good condition or potentially recovering degraded assets will contribute directly to healthy landscapes, support sustainable agriculture, support local industries (such as oyster farming and tourism) and improve the trajectory of threatened species. These priorities are aligned with Australian Government [Environment Outcomes](#).

Collaboration

We will seek opportunities to collaborate with partners (including Aboriginal) and contribute to long lasting change in communities. Elements for success include:

- Partners have a common agenda, understand problems together and appreciate joint approaches for solutions.
- Open and continuous communication.
- Coordination of skills in ours and other organisations to complete priority activities for all partners.
- Recognition of the value of collecting data and analysing results consistently across the region to assist in maintaining accountability.



3. Top threats to the landscapes and catchments of South East NSW

The key factor that influences the condition of land and water resources is whether they are managed within their capability. When the resource is used beyond its capabilities, there are a range of undesired outcomes on and off site. When it is managed within its capabilities, economic and social outcomes are maximised, and the resource condition is maintained or improved. Top threats to landscape health in South East NSW have been defined by consideration of the key drivers of change to the state of landscapes. The management (use and care) of natural resources is driven by a variety of overlapping factors such as knowledge and skills, networks, health and wellbeing (Figure 2).

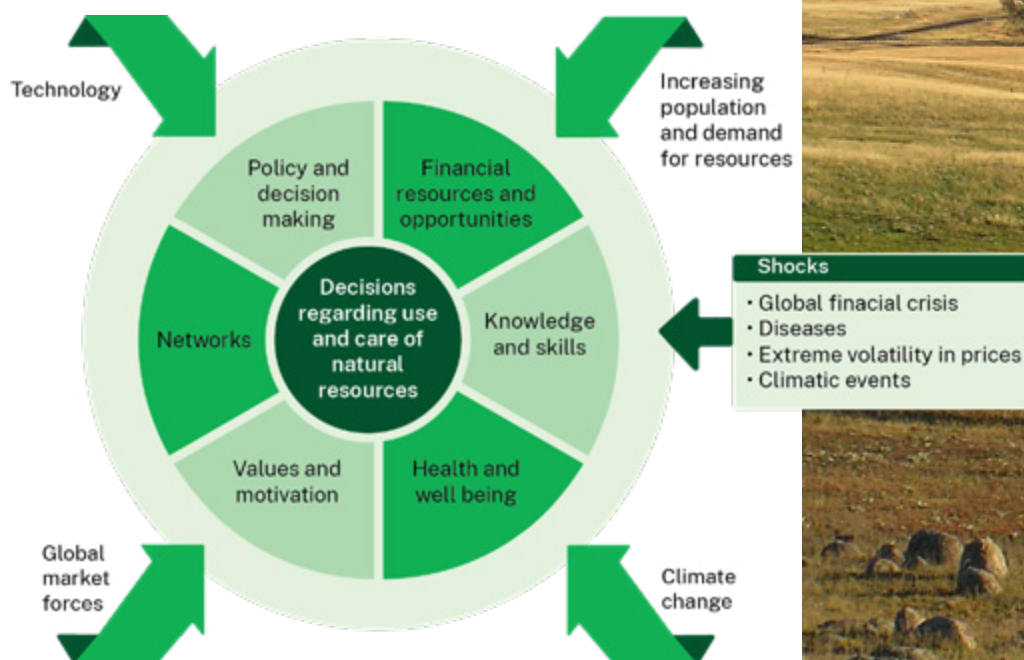


Figure 2: Drivers of decisions regarding use and care of natural resources (after South East Catchment Action Plan 2016 – 2021)



The top threats and drivers of change to our three priority landscape themes of connected native vegetation, healthy soils and resilient aquatic assets is presented in **Table 1**.

Table 1: Top threats to priority natural assets in the South East Region (after South East Catchment Action Plan 2016 – 2021)

Theme	Threats	Drivers of change
Connected native vegetation	<ul style="list-style-type: none"> • Loss of key habitat and connectivity • Land that is managed beyond its capability • Inappropriate use of chemicals, cultivation and fire. • Weeds, pests and diseases • Climate variability impacts 	<ul style="list-style-type: none"> • Knowledge and skills • Financial resources and opportunities • Policy and decision making • Social capital • Values and motivation • Climate change
Healthy soils	<ul style="list-style-type: none"> • Loss of ground cover • Inappropriate use of chemicals, cultivation and fire • Land that is managed beyond its capability • Weeds, pests and diseases • Climate variability impacts 	<ul style="list-style-type: none"> • Knowledge and skills • Financial resources and opportunities • Policy and decision making • Social capital • Values and motivation • Climate change
Resilient aquatic assets	<ul style="list-style-type: none"> • Land that is managed beyond its capability • Invasive species and aquatic diseases • Loss of native riparian vegetation • Localised streambank or streambed erosion • Reduction in large woody debris (rivers) • Sedimentation and reduced water quality • Reduction in water quantity and habitat • Climate variability impacts • Barriers to water flow and/or fish passage 	<ul style="list-style-type: none"> • Knowledge and skills • Financial resources and opportunities • Policy and decision making • Values and motivation • Climate change





To develop this NRM plan, we held six workshops which reviewed top threats and identified priorities to address these threats (see NRM Evidence Plan for more details). The findings from the workshops were analysed and four themes emerged as discussed above. Three themes related to landscapes and the fourth, collaboration spanned all themes. Table 2 is a summary of the findings for the six workshops under the landscape themes.



Table 2: Summary of priorities identified to address threats at six workshops held in October 2021

Connected Native Vegetation

- Ensure good understanding of connectivity priorities in the landscape and educate land managers about this.
- Provide education and awareness raising opportunities for land managers regarding native vegetation values including threatened species and native grasses.
- Provide support to the implementation of projects that enhance connectivity and protect priority vegetation communities and threatened species habitat.
- Ensure a good understanding of the potential impact of climate change predictions and support land managers to prepare for this.
- Improve collaboration, knowledge and resource sharing among stakeholder groups.
- Provide support to community groups to implement their priority projects.
- Ensure NRM messages are incorporated into other functions supporting landscape health – agricultural advice, biosecurity support for example.
- Promote local leaders and innovators to enable peer to peer learning.
- Connect land managers to information to assist their decision making such as up to date research, information about climate markets and climate change predictions.
- Support Aboriginal Community to share traditional practices and participate in local projects, application of cultural burning as an ecological tool and implementing projects of their design.
- Increase land manager awareness of cultural values in the landscape.
- Ensure pest animal threat abatement activities are incorporated into projects to protect priority natural assets.
- Increase land manager capacity to manage invasive non-native grasses and promote a range of management activities including application of traditional ecological practices.
- Support community initiatives to collect information on the condition of local environments (e.g. monitoring of biodiversity values, pest animals, weeds and other threats).

Healthy soils

- Increase land manager awareness of vulnerable soils, and how to manage soils to prevent erosion, maintain healthy soils and store carbon.
- Increase land manager awareness of the value of native pastures and how to manage them for good soil health, moisture retention, soil stability and weed suppression.
- Support land managers to implement grazing management practices that focus on retention of diverse perennial groundcover, enhancing soil carbon and preparation for future drought.
- Support land managers to implement practices that protect vulnerable soils.
- Provide a role to improve collaboration, knowledge and resource sharing among stakeholder groups.
- Provide support to community groups to implement their priority projects.
- Ensure NRM messages are incorporated into other functions supporting landscape health – agricultural advice, biosecurity support for example.
- Promote local leaders and innovators to enable peer to peer learning.
- Increase land manager awareness of cultural values in the landscape.

Resilient aquatic assets

- Support education and awareness raising activities for land managers to understand the role of aquatic assets on farm including biodiversity pathways (waterways, wetlands, farm dams), resilience to erosion, water retention and their value and benefit.
- Educate and support land managers to manage riparian weeds including willows.
- Invest in large scale projects in high value waterways including improvements to threatened fish habitat, reducing threats to industries reliant on these natural resource assets or to demonstrate activities that prepare for climate change predictions.
- Provide a role to improve collaboration, knowledge and resource sharing among stakeholder groups in South East NSW.
- Provide support to community groups to implement their projects.
- Ensure NRM messages are incorporated into other functions supporting landscape health – agricultural advice, biosecurity support for example.
- Promote local leaders and innovators to enable peer to peer learning.
- Connect land managers to information to assist their decision making.
- Support Aboriginal Community to share traditional practices and participate in local projects, application of cultural burning as an ecological tool and implementing projects of their design.
- Increase land manager awareness of cultural values in the landscape.
- Ensure pest animal threat abatement activities are incorporated into projects to protect priority natural assets.

4. Tackling landscape threats and assessing our performance

The key to our success is in identifying the priority activities that achieve our goals, along with identifying the priority locations, via the use of mapping and local knowledge and prioritisation tools across our region (as described in the South East LLS NRM Evidence Plan) and in delivering the right mix of services that support improved decision making in land managers across NSW.

Our South East NRM Plan is aligned directly with the LLS NRM Framework. First we identified goals for each of our three regional themes, and under each goal we have identified how we can contribute to the key results and actions drawn directly from the Framework.

The Framework identifies five objectives for our NRM services to respond to the opportunities and challenges facing NSW's natural resources and LLS' NRM services, and to contribute to LLS' State Outcome

“Productive and Sustainable Land Use”.

The South East NRM Plan uses key results and initiatives verbatim from the Framework, identifying how they link to our three landscape themes. The Framework also contains an aspirational goal for our NRM services

“By 2026, 80 per cent of our customers receiving our NRM services have adopted improved NRM practices on their properties.”

South East LLS also aspire to demonstrate this goal in the services we offer.

Our South East NRM Plan is also aligned to the outcomes of the Australian Governments Regional Land Partnership Program, as demonstrated in Table 3.



Table 3: Aligning the South East NRM Plan Key Results to Regional Land Partnership Outcomes:

South East NRM Plan Key Results	Regional Land Partnership Outcomes					
	1	2	3	4	5	6
Key Result 1.1: Our customers are improving and restoring native vegetation (enhancing habitat quality, connectivity and biodiversity), as measured by area of native vegetation enhanced, rehabilitated or protected.	✓	✓	✓	✓		
Key result 1.2: Our customers are increasing their understanding, awareness and willingness to trial or adopt evidence based NRM practices that have both environmental and economic/financial benefits, as measured by increases in knowledge and attitudes.	✓	✓	✓	✓	✓	✓
Key Result 1.3: Our customers are empowered to seize opportunities arising from change, and to manage natural resources to adapt to change, as measured by increases in knowledge and skills.		✓	✓	✓		
Key Result 1.4: Our enabling services such as partnerships brokering and collaboration are highly valued and are supporting the delivery of state and federal outcomes, as measured by increases in the proportion of NRM funds allocated to collaboration and engagement activities.	✓	✓	✓	✓	✓	✓
Key Result 1.5: Increased number of opportunities for Aboriginal people and other land managers to promote, showcase and share traditional and contemporary land management knowledge and practices, including cultural fire practices, while ensuring the protection of cultural rights and knowledge, as measured by area of improved practices.		✓	✓	✓	✓	
Key result 2.1: Our customers are maximising ground/vegetative cover, as measured by increased year-round groundcover in priority areas.	✓			✓		✓
Key result 2.2: Our customers are increasing their understanding, awareness and willingness to trial or adopt evidence based NRM practices that have both environmental and economic/financial benefits, as measured by increases in knowledge and attitudes.					✓	✓
Key result 2.3: Our customers are reducing erosion and protecting water quality as measured by increased year-round groundcover/vegetation cover in priority areas.	✓			✓		
Key result 2.4: Our enabling services such as partnerships brokering and collaboration are highly valued and are supporting the delivery of state and federal outcomes, as measured by increases in the proportion of NRM funds allocated to collaboration and engagement activities.	✓				✓	✓
Key result 3.1: Our customers are rehabilitating waterways and their riparian zones in high priority catchment areas, as measured by stream length river/estuary enhanced, rehabilitated or protected and area of wetlands enhanced, rehabilitated or protected.	✓			✓		
Key result 3.2: Our customers are increasing their understanding, awareness and willingness to trial or adopt evidence based NRM practices that have both environmental and economic/financial benefits, as measured by increases in knowledge and attitudes.					✓	✓
Key result 3.3: Increased number of opportunities for Aboriginal people and other land managers to promote, showcase and share traditional and contemporary land management knowledge and practices, including cultural fire practices, while ensuring the protection of cultural rights and knowledge, as measured by area of improved practices.	✓			✓	✓	
Key result 3.4: Our enabling services such as partnerships brokering and collaboration are highly valued and are supporting the delivery of state and federal outcomes, as measured by increases in the proportion of NRM funds allocated to collaboration and engagement activities.	✓			✓	✓	✓

Connected native vegetation

1.0 Goal: Customers are improving and restoring native vegetation

Key result 1.1

Our customers are improving and restoring native vegetation (enhancing habitat quality, connectivity and biodiversity), as measured by area of native vegetation enhanced, rehabilitated or protected.

Actions to achieve target

1.1.1 Identify targets and priority areas across the region for the highest return-on-investment in: native vegetation management.

1.1.2 Deliver targeted threat and pressure minimisation programs and projects that arrest decline and improve natural resources.

Performance metrics

- Location of projects recorded digitally to enable comparison to areas identified as having priority.
- Area (ha) of threatened species, populations or ecological communities enhanced, rehabilitated or protected.
- Area (ha) of native revegetation.
- Number of agreements and area(ha) or native vegetation enhanced, rehabilitated or protected.
- Area (ha) pest control (vertebrates).
- Area (ha) weed control.

Key customers

- Private land managers, particularly those implementing land management practices with an impact on priority native vegetation.
- Community groups.
- Aboriginal groups and land managers.

Key stakeholders and partners for implementation

- South East Landcare Networks and groups.
- Local Aboriginal groups.
- Biodiversity Conservation trust.
- DPIE, Ecosystems and Threatened Species.
- ANU Sustainable Farms.
- Southern Drought Hub.

Priority activities

- Contributions to improving farm resilience to climate variability.
- Habitat for priority threatened species identified within the Threatened Species Strategy including habitat for Koala, Regent Honeyeater, Superb Parrot, Greater Glider, Yellow Bellied Glider and coastal migratory birds (as described in Appendix E).
- Rehabilitation of vegetation communities or habitat identified as priority due to bushfire impacts in South East NSW.
- Protection and enhancement of Endangered Ecological Community and Threatened Ecological Communities, with priorities described in Appendix E.
- Practices to protect and enhance native grasslands, including habitat for Grasslands Earless Dragon.

Key result 1.2

Our customers are increasing their understanding, awareness and willingness to trial or adopt evidence based NRM practices that have both environmental and economic/financial benefits, as measured by increases in knowledge and attitudes.

Actions to achieve target

1.2.1 Establish demonstrations of NRM practices in a diverse range of local settings, so that land managers can observe proof of economic, social and environmental outcomes.

1.2.2 Provide extension and information services on the economic benefits derived from investing in conservation and restoration of natural resources and landscapes.

Performance assessment

- Number of 1:1 landholder advice consultation (including Aboriginal as a subset).
- Number of community groups supported and number of participants (including Aboriginal as a subset).
- Number of awareness raising/capacity building events (including Aboriginal as a subset) and number of participants.
- Number of training events (including Aboriginal as a subset) and number of participants.

Key customers

- Private land managers, particularly those implementing land management practices with an impact on priority native vegetation.
- Community groups.
- Aboriginal groups and land managers.

Key stakeholders or partnerships for implementation

- South East Landcare and member networks and groups.
- Local Aboriginal groups.
- Biodiversity Conservation trust.
- DPIE, Ecosystems and Threatened Species.
- ANU sustainable farms.
- Southern Drought Hub.

Priority activities

- Awareness raising activities to support priorities identified in Key result 1.1.

Key result 1.3

Our customers are empowered to seize opportunities arising from change, and to manage natural resources to adapt to change, as measured by increases in knowledge and skills.

Actions to achieve target

1.3.1 Deliver services aimed at building land manager capacity to manage environmental change, in particular **climate change**, and make informed decisions in NRM.

1.3.3 Deliver information, advice and extension to land managers that helps to prepare their properties and natural resources for natural disasters and emergencies, and adapt to climate change.

1.3.2 As part of Agricultural and NRM services, deliver advice and extension that incorporates diversification of income streams, carbon planning and biodiversity markets.

1.3.4 Build staff capacity to deliver new focus areas in NRM services (e.g., environmental markets, climate change advice, customer-centred design, collaboration & facilitation).

Performance metrics

- Area (ha) for improved agricultural production.
- Number of 1:1 landholder advice consultations (including Aboriginal as a subset).
- Number of awareness raising/capacity building events (including Aboriginal as a subset) and number of participants.
- Number of training events (including Aboriginal as a subset) and number of participants.

Key customers

- Private land managers, particularly those implementing land management practices with an impact on priority native vegetation.
- Community groups.
- Aboriginal groups and land managers.
- South East LLS staff.

Key stakeholders or partnerships for implementation

- Department of Primary Industries.
- Southern Drought Hub.
- Research Organisations.
- Local Government.
- Farming Systems and Landcare groups.

Priority activities

- Awareness raising activities to support land managers, particularly:
- Southern Tablelands, SW Slopes and Monaro where climate change predictions and carbon sequestration activities are considered to have high impact.
- Private land managers in coastal catchments, enhancing blue carbon sequestration activities.
- Support staff to maintain up to date knowledge relevant for the region.

Key result 1.4

Our enabling services such as partnerships brokering and collaboration are highly valued and are supporting the delivery of state and federal outcomes, as measured by increases in the proportion of NRM funds allocated to collaboration and engagement activities.

Actions to achieve target

1.4.1 Support and increase visibility of champions and credible local leaders already adopting NRM, through active support of land manager networks and groups, such as Landcare and communities of practice.

1.4.2 Develop and foster formal collaboration agreements for priority partnerships, for catchment coordination activities.

Performance metrics

- Number of opportunities for people to support LLS decision-making, including number of participants (including Aboriginal as a subset).
- Number of partnerships with non-government community organisations, name of the organisations, name of the projects, number of associated grants and funding value of those grants, name of relevant local government area(s) and number of participants (including Aboriginal as a subset).

Key customers

- South East Regional Community of Practice.
- South East Landcare.
- South East Farmers Networks.

Key stakeholders for implementation

- South East Regional Community of Practice.
- South East Landcare.
- South East Farmers Networks.

Priority activities

- Activities that build capacity in and support groups contribute to NRM Plan Key Results.

Key result 1.5

Increased number of opportunities for Aboriginal people and other land managers to promote, showcase and share traditional and contemporary land management knowledge and practices, including cultural fire practices, while ensuring the protection of cultural rights and knowledge, as measured by area of improved practices.

Actions to achieve target

1.5.1 All projects adhere to due diligence processes from the Local Land Services Aboriginal Cultural Heritage Handbook within regions' NRM business systems and processes.

1.5.5 Support upskilling of Aboriginal workforce in Traditional Owner organisations and Local Aboriginal Land Councils in NRM.

1.5.2 Utilise Aboriginal Community Advisory Groups or other engagement platforms to understand community aspirations and inform NRM program design.

1.5.6 NRM staff collaborate with Aboriginal Communities Officers early in NRM project development to plan activities such as cultural burning and cultural site assessments.

1.5.3 Preference Aboriginal owned business procurement for onground works, in support of Aboriginal Engagement Strategy target of >3%.

1.5.7 Work with Aboriginal land managers to identify cultural heritage impacted by climate change and options for protection and better management.

1.5.4 Broker partnerships between Aboriginal Land Management Teams and other parties to improve access to equipment, infrastructure, machinery, and provide project management capacity building where possible.

Performance metrics

- Area (ha) of Aboriginal projects.
- Number of opportunities for people to support LLS decision-making, including number of participants (including Aboriginal as a subset).
- Number of 1:1 landholder advice consultations (including Aboriginal as a subset).
- Number of community groups supported and number of participants (including Aboriginal as a subset).
- Number of partnerships with non-government community organisations, name of the organisations, name of the projects, number of associated grants and funding value of those grants, name of relevant local government area(s) and number of participants (including Aboriginal as a subset).
- Number of awareness raising/capacity building events (including Aboriginal as a subset) and number of participants.
- Number of training events (including Aboriginal as a subset) and number of participants.

Key customers

- Aboriginal groups and businesses within South East NSW.

Key stakeholders for implementation

- Aboriginal groups and businesses within South East NSW.
- DPIE, Cultural Fire Management Unit, Threatened Species unit.

Priority activities

- Support to South East Aboriginal groups to implement Aboriginal led programs including assistance in access to capacity building and experience in on-ground activities.

Healthy soils

2.0 Goal: Customers are protecting and improving soils

Key result 2.1

Our customers are maximising ground/vegetative cover, as measured by increased year-round groundcover in priority areas.

Actions to achieve target

2.1.1 Identify targets and priority areas across the state for the highest return-on-investment in groundcover management.

2.1.2 Deliver targeted threat and pressure minimisation programs and projects that arrest decline in natural resources.

Performance metrics

- Area (ha) managed for improved agricultural production.
- Area(ha) land managed for improved soil condition.
- Area (ha) pest control (vertebrates).

Key customers

- Primary producers and livestock owners, particularly those implementing land management practices with an impact on vulnerable soils.
- Community groups.
- Aboriginal groups and land managers.

Key stakeholders or partnerships for implementation

- South East Landcare networks.
- South East Regional Community of Practice.
- Farming Systems Groups.
- South East Farmer networks.
- NSW Department of Primary Industries.
- Water NSW.

Priority activities

- Practices that impact on vulnerable soils.
- Practices impacting on high production value soils.
- Practices to increase soil fertility and soil carbon.

Key result 2.2

Our customers are increasing their understanding, awareness and willingness to trial or adopt evidence based NRM practices that have both environmental and economic/financial benefits, as measured by increases in knowledge and attitudes.

Actions to achieve target

2.2.1 Establish demonstrations of NRM practices that address soil loss and erosion in a diverse range of local settings, so that land managers can observe proof of economic, social and environmental outcomes.

2.2.2 Provide extension and information services on the economic benefits derived from investing in conservation and restoration of natural resources and landscapes with particular focus on enhancing perennial groundcover and reducing erosion risk.

Performance metrics

- Area (ha) for improved agricultural production.
- Number of 1:1 landholder advice consultations (including Aboriginal as a subset).
- Number of awareness raising/capacity building events (including Aboriginal as a subset) and number of participants.
- Number of training events (including Aboriginal as a subset) and number of participants.
- Number of participants identifying improvements in understanding and awareness.

Key customers

- Private land managers, particularly those implementing land management practices with an impact on priority soils (those classified as vulnerable or highly productive).
- Community groups.
- Aboriginal groups and land managers.

Key stakeholders or partnerships for implementation

- South East Landcare networks.
- South East Regional Community of Practice.
- Farming Systems Groups.
- South East Farmer networks.
- NSW Department Primary Industries.
- Water NSW.

Priority activities

- Practices that impact on vulnerable soils.
- Practices impacting on high production value soils.

Key result 2.3

Our customers are reducing erosion and protecting water quality as measured by increased year-round groundcover/vegetation cover in priority areas.

Actions to achieve target

2.3.1 Establish demonstrations of NRM practices in a diverse range of local settings, so that land managers can observe proof of economic, social and environmental outcomes with particular focus on reducing erosion in vulnerable soils and protecting water quality for reliant industries.

2.3.2 Deliver targeted threat and pressure minimisation programs and projects that arrest decline in natural resources.

Performance metric <ul style="list-style-type: none"> Area (ha) land managed for improved soil condition. 	
Key customers <ul style="list-style-type: none"> Land managers with vulnerable soils. Land managers in catchments that support local industry reliant on water quality. 	
Key stakeholders or partnerships for implementation <ul style="list-style-type: none"> Water NSW. NSW Department primary Industry. Local Government. Rivers of Carbon. Farming Systems and producer groups. Farmer Networks. 	
Priority activities <ul style="list-style-type: none"> Practices that improve and maintain groundcover in areas within identified vulnerable soils. Practices that improve and maintain groundcover in catchments that support local industry reliant on water quality. 	
Key result 2.4 <p>Our enabling services such as partnerships brokering and collaboration are highly valued and are supporting the delivery of state and federal outcomes, as measured by increases in the proportion of NRM funds allocated to collaboration and engagement activities.</p>	
Actions to achieve target <p>2.4.1 Support and increase visibility of champions and credible local leaders already adopting NRM, through active support of land manager networks and groups, such as Landcare and communities of practice.</p>	<p>2.4.2 Develop and foster formal collaboration agreements for priority partnerships, for catchment coordination activities.</p>
Performance metrics <ul style="list-style-type: none"> Number of opportunities for people to support LLS decision-making, including number of participants (including Aboriginal as a subset). Number of partnerships with non-government community organisations, name of the organisations, name of the projects, number of associated grants and funding value of those grants, name of relevant local government area(s) and number of participants (including Aboriginal as a subset). 	
Key customers <ul style="list-style-type: none"> South East Regional Community of Practice. South East Landcare. South East Farmer Networks. South East Aboriginal groups. 	
Key stakeholders for implementation <ul style="list-style-type: none"> South East Regional Community of Practice. South East Landcare. South East Farmers Networks. 	
Priority activities <ul style="list-style-type: none"> Activities that support groups contribute to NRM Plan Key Results. 	

Resilient aquatic assets

3.0 Goal: Customers are improving and restoring riparian lands

Key result 3.1:

Our customers are rehabilitating waterways and their riparian zones in high priority catchment areas, as measured by stream length river/estuary enhanced, rehabilitated or protected and area of wetlands enhanced, rehabilitated or protected.

Actions to achieve target

3.1.1 Deliver integrated land management practice change programs, landscape scale rehabilitation activities and riparian land management programs in priority catchments, coordinating action and investment of agencies.

Performance metrics

- Stream length (km) river/estuary enhanced, rehabilitated or protected.
- Area (ha) of wetlands enhanced, rehabilitated or protected.
- Number of agreements and area (ha) of native vegetation enhanced, rehabilitated or protected.
- Area (ha) pest control (vertebrates).

Key customers

- Private land managers, particularly those implementing land management practices with an impact on priority aquatic assets.
- Community groups.
- Aboriginal groups and land managers.

Key stakeholders or partnerships for implementation

- South East Landcare.
- Water NSW.
- Rivers of Carbon.
- South East Aboriginal groups.
- Local Government.
- NSW Department Primary Industries.
- NSW Department Infrastructure, Planning and Environment.

Priority activities

- Practices that protect high value waterways.
- Practices that protect high economic value waterways.
- Practices that rehabilitate and protect high priority bushfire impacted waterways.
- Practices that rehabilitate and protect priority species habitat.

Key result 3.2:

Our customers are increasing their understanding, awareness and willingness to trial or adopt evidence based NRM practices that have both environmental and economic/financial benefits, as measured by increases in knowledge and attitudes.

Actions to achieve target

3.2.1 Establish demonstrations of NRM practices in a diverse range of local settings, so that land managers can observe proof of economic, social and environmental outcomes.

3.2.2 Provide extension and information services on the economic benefits derived from investing in conservation and restoration of natural resources and landscapes, and connect.

Performance metrics

- Number of 1:1 landholder advice consultations (including Aboriginal as a subset).
- Number of awareness raising/capacity building events (including Aboriginal as a subset) and number of participants.
- Number of training events (including Aboriginal as a subset) and number of participants.

Key customers

- Private land managers, particularly those implementing land management practices with an impact on priority aquatic assets.
- Community groups.
- Aboriginal groups and land managers.

Key stakeholders or partnerships for implementation

- South East Landcare.
- Water NSW.
- Rivers of Carbon.
- South East Aboriginal groups.
- Local Government.
- NSW Department Primary Industries.
- NSW Department Infrastructure, Planning and Environment.

Priority activities

- Practices that protect high value waterways.
- Practices that protect high economic value waterways.
- Practices that rehabilitate and protect high priority bushfire impacted waterways.
- Practices that rehabilitate and protect priority species habitat.

Key result 3.3

Increased number of opportunities for Aboriginal people and other land managers to promote, showcase and share traditional and contemporary land management knowledge and practices, including cultural fire practices, while ensuring the protection of cultural rights and knowledge, as measured by area of improved practices.

3.3.1 All projects adhere to due diligence processes from the Local Land Services Aboriginal Cultural Heritage Handbook within regions' NRM business systems and processes.

3.3.5 Support upskilling of Aboriginal workforce in Traditional Owner organisations and Local Aboriginal Land Councils in NRM, through scholarships and training assistance.

3.3.2 Utilise Aboriginal Community Advisory Groups or other engagement platforms such as Landcare NSW to understand community aspirations and inform NRM program design.

3.3.6 NRM staff collaborate with Aboriginal Communities Officers early in NRM project development to plan activities such as cultural burning and cultural site assessments.

3.3.3 Preference Aboriginal owned business procurement for onground works, in support of Aboriginal Engagement Strategy target of >3%.

3.3.7 Work with Aboriginal land managers to identify cultural heritage impacted by climate change and options for protection and better management.

3.3.4 Broker partnerships between Green Teams/ Aboriginal Land Management Teams and other parties (e.g. councils) to improve access to equipment, infrastructure, machinery, and provide project management capacity building where possible.

Performance metrics

- Area (ha) of Aboriginal projects.
- Number of opportunities for people to support LLS decision-making, including number of participants (including Aboriginal as a subset).
- Number of 1:1 landholder advice consultations (including Aboriginal as a subset).
- Number of community groups supported and number of participants (including Aboriginal as a subset).
- Number of partnerships with non-government community organisations, name of the organisations, name of the projects, number of associated grants and funding value of those grants, name of relevant local government area(s) and number of participants (including Aboriginal as a subset).
- Number of awareness raising/capacity building events (including Aboriginal as a subset) and number of participants.
- Number of training events (including Aboriginal as a subset) and number of participants.

Key customers

- Aboriginal groups and businesses within South East NSW.

Key stakeholders for implementation

- Aboriginal groups and businesses within South East NSW.
- DPIE, Cultural Fire Management Unit, Threatened Species unit.

Priority Activities

- Support LLS staff to increase awareness and capacity.
- Support to Aboriginal Community groups to build capacity and opportunity to participate.

Key result 3.4:

Our enabling services such as partnerships brokering and collaboration are highly valued and are supporting the delivery of state and federal outcomes, as measured by increases in the proportion of NRM funds allocated to collaboration and engagement activities.

Actions to achieve target

3.4.1 Support and increase visibility of champions and credible local leaders already adopting NRM, through active support of land manager networks and groups, such as Landcare and communities of practice .

3.4.2 Develop and foster formal collaboration agreements for priority partnerships, for catchment coordination activities.

Performance metrics

- Number of opportunities for people to support LLS decision-making, including number of participants (including Aboriginal as a subset).
- Number of partnerships with non-government community organisations, name of the organisations, name of the projects, number of associated grants and funding value of those grants, name of relevant local government area(s) and number of participants (including Aboriginal as a subset).

Key customers

- Private land managers, particularly those implementing land management practices with an impact on priority aquatic assets.
- Community groups.
- Aboriginal groups and land managers.

Key stakeholders for implementation

- South East Landcare.
- Water NSW.
- Rivers of Carbon
- South East Aboriginal groups.
- Local Government.
- NSW Department Primary Industries
- NSW Department Infrastructure, Planning and Environment.

Priority activities

- Activities that support groups contribute to NRM Plan Key Results.

5. How these actions drive what we do

Local Land Services delivery commitments help to define the work within our projects and programs. We ensure we are:

- **Customer Outcome-focused** – delivery for our customers and the people of NSW, not process-focused.
- **High Impact** – investment in the services and issues that realise the greatest impact on achieving healthy landscapes.
- **Integrated** - linking NRM services with all other core services.
- **Partnering** – across tenures, groups and organisations.
- **Accountable** – inspiring confidence through robust governance and transparency.
- **Evidence-based** – having confidence that our interventions will work based on scientific evidence or experience. If we are experimenting, we will do it with our eyes open and capture learnings along the way.
- **Adaptive** – our NRM services will change in response to what we learn and as social, economic and environmental conditions change.

South East LLS have identified a range of core activities that are part of our NRM Services on a regular basis. We employ experienced NRM and Agricultural advisory staff who are able to deliver a range of key activities that will support the actions, key results and objectives identified in this plan. These staff are located across the South East landscape and provide local expertise and knowledge to ensure:

- We provide independent advisory services and up to date information to help land managers and the community implement best practice natural and cultural resource management. Importance in understanding and protecting our natural assets is impressed upon land managers via a number of mechanisms including 1:1 technical support and property visits, hosting of workshops and field events, production of communications products in printed and digital formats.

- We enable collective action and increase participation in best practice management techniques to build engagement in NRM and connection to Country by supporting organisations, community groups and networks. This is achieved by maintaining connection with community networks, ensuring our staff have access to up to date information and sharing this with land managers via our advisory services.
- We investigate the application of innovation in natural resource management and agriculture ensuring we are able to provide up to date information to landholder and the community to implement best practice natural and cultural resource management.
- We build and enhance connection to Country through collaborative Aboriginal community engagement and Indigenous participation plans. This is achieved via the employment of Aboriginal community engagement specialists who have the ability to build trust and relationships across the South East region and who can provide support to South East LLS staff to build their own knowledge and capacity.



In addition to these core services, South East LLS continue to seek opportunities to collaborate with other agencies, community groups and individuals to develop and maintain partnerships with a broad range of stakeholders, including Aboriginal and Landcare communities, to enhance program delivery, secure investment and leverage additional outcomes to ensure we achieve the best outcomes with the resourcing available when addressing top threats to the health and resilience of NSW landscapes and catchments.

South East LLS continue to investigate additional opportunities, via external funding to support the implementation of NRM best practice activities that align with the priorities within our NRM Plan. South East LLS recognises that prioritisation principles are required when demand outstrips supply. In the NRM context, this can be when the scale of the issue exceeds available resources.

Considerations for prioritisation can be complex and will vary from activity to activity, but broadly include:



Figure 3: Considerations for prioritisation of activities to address the top threats to landscape health

For example, for the Regional Land Partnership Program Priorities, we have applied the above principles to identify a range of high priority programs (Refer to Appendix E) of the South East NRM Evidence Plan:

Table 4: Regional Land Partnership Program priorities- high priorities for the South East Region

Outcome 1:	<ul style="list-style-type: none"> • Blue Lake RAMSAR Site.
Outcome 2	<ul style="list-style-type: none"> • <i>Phascolarctos cinereus</i> Koala (Qld, NSW, ACT) • <i>Petrogale penicillata</i> Brush-tailed Rock-wallaby • <i>Dasyurus maculatus</i> (Spot-tailed Quoll) • Yellow Bellied Glider • <i>Petauroides volans</i> Greater Glider • <i>Thinornis cucullatus</i> Hooded Plover (eastern) • <i>Botaurus poiciloptilus</i> Australasian Bittern • <i>Numenius madagascariensis</i> Eastern Curlew • <i>Lathamus discolor</i> Swift Parrot • <i>Anthochaera phrygia</i> Regent Honeyeater • <i>Callocephalon fimbriatum</i> (Gang Gang cockatoo) • Superb Parrot • <i>Tympanocryptis osbornei</i> (Grassland Earless Dragon) • <i>Prototroctes maraena</i> (Australian Grayling) • <i>Macquaria australasica</i> (Macquarie Perch) • <i>Galaxias tantangara</i> Stocky Galaxias • <i>Nannoperca australis</i> Southern Pygmy Perch • <i>Rhodomyrtus psidioides</i> Native Guava • <i>Pomaderris walshii</i> Carrington Falls Pomaderris • <i>Daphnandra johnsonii</i> Illawarra socketwood • Yass Daisy • Warty Zieria
Outcome 3	<ul style="list-style-type: none"> • Blue Mountains World Heritage Area.
Outcome 4	<ul style="list-style-type: none"> • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland. • Subtropical and Temperate Coastal Saltmarsh. • Illawarra-Shoalhaven Subtropical Rainforest of the Sydney Basin Bioregion. • Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland.
Outcome 5	<ul style="list-style-type: none"> • Community and Aboriginal Group coordination and capacity building. • Soil intelligence including enhancing soil fertility, biology and carbon. • Groundcover retention and improvement.
Outcome 6	<ul style="list-style-type: none"> • Drought preparedness and planning. • Soil intelligence. • Sustainable livestock enterprises.

6. How we will review the NRM Plan and its effectiveness

The monitoring and evaluation process for the NRM Plan has been established to assist in evaluating our progress in contributing to the South East region NRM Plan. It will allow us to see what is working and how, what isn't working and consider why and adjust our efforts as required.

The success of the South East NRM Plan is measured against three goals:

1. Customers are improving and restoring native vegetation.
2. Customers are protecting and improving soils.
3. Customers are improving and restoring riparian lands.



Performance assessment for each **Key Result** within these goals have been chosen to reflect:

- Good governance, collaboration and adaptive management.
- Increasing land manager participation and adoption of recommended practice.
- An increase in awareness and collaboration to protect and enhance priority NRM assets.
- Alignment of performance measures to LLS state-wide reporting framework.

Monitoring the progress of activities towards the NRM plan will be incorporated into Local Land Services achievements reporting, with information collected and presented on a bi-annual basis and contributing to identifying progress towards the South East NRM plan and the LLS NRM Framework.

This reporting information will be provided to the South East LLS Natural Resource Management Functional Team, with a comparison against the Plans Actions for the purpose of evaluation on the effectiveness of current activities towards achieving the plan, assessment of the success of programs and opportunity to develop and seek support for new activities to ensure progress towards the plan. This review will occur on an annual basis.

Additional information also to be collected on an annual basis including event participant feedback forms, estimation of funds allocated to collaboration in NRM activities and results of monitoring activities identifying improvements to groundcover. This regular collection of information will allow for identification of progress and consideration of adjustments that may be required.



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