



SHIRE OF MORAWA

ORDINARY COUNCIL MEETING

ATTACHMENTS

Thursday, 15 August 2024



WESTERN AUSTRALIA'S
WILDFLOWER COUNTRY

Agenda Attachments

Shire of Morawa

Ordinary Council Meeting

15 August 2024

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Attachment 1- 11.1.3a Scanlon, A., Roetman, P., Stead, M., Gray, S., Lethbridge, M. (2017) Little Corellas: social and ecological research for management in South Australia. Discovery Circle Initiative, University of South Australia, Adelaide.

Item 11.1.3- Corella Control Survey Outcome

Little Corellas

SOCIAL AND ECOLOGICAL RESEARCH FOR MANAGEMENT IN SOUTH AUSTRALIA

Annette Scanlon, Philip Roetman, Michael Stead, Steven Gray and Mark Lethbridge



Scanlon, A., Roetman, P., Stead, M., Gray, S., Lethbridge, M. (2017) **Little Corellas: social and ecological research for management in South Australia**. Discovery Circle Initiative, University of South Australia, Adelaide.



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- **University of South Australia**
- **Department of Environment, Water and Natural Resources**
- **Local Government Association of South Australia**

As well as six local government areas:

- **Alexandrina Council**
- **City of Marion**
- **City of Salisbury**
- **District Council of Mount Barker**
- **The Flinders Ranges Council**
- **Town of Gawler**

Project team

Discovery Circle, University of South Australia:

- **Dr Annette Scanlon** is an environmental scientist and works as a research assistant at the **Discovery Circle** at the University of South Australia. For this project, she was particularly involved in developing and conducting the social survey, Mental-Modeler workshops, field data collection, data analysis and contributed to project design. Annette also led the writing of this report.
- **Dr Philip Roetman** is the research leader of the **Discovery Circle** initiative; he is particularly interested in citizen science – actively involving the wider community in research projects. Philip was the overall project leader for the **Little Corellas** project and was particularly involved in developing the research design of the project as well as developing and conducting the social survey, Mental-Modeler workshops and data analysis, and he also contributed to the writing of this report.
- **Michael Stead** is an applied ecologist and professional scientist with experience and expertise relating to: ecological and mathematical modelling; pest and overabundant species management; survey and monitoring design; landscape ecology and restoration; aerial surveys. He was employed at the **Discovery Circle** to contribute to the **Little Corellas** project. Michael undertook the habitat modelling and wrote the habitat modelling section of this report.

Michigan State University and Mental Modeler:

- **Dr Steven Gray** is an Assistant Professor in the Department of Community Sustainability at Michigan State University and lead developer on the **Mental Modeler** software. Steven provided research planning support for designing the modelling workshops, including analysis of the models and scenario building.

Flinders University:

- **Dr Mark Lethbridge** has research interests in vegetation condition monitoring using field and remote sensing, optimization algorithms, decision support tools in production and natural resource management and ecological, movement and spatial modelling. Mark oversaw the habitat modelling and contributed to project design.

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Key results and recommendations

Introduction

While many people enjoy seeing little corellas, large flocks in urban and rural areas cause considerable problems in the warmer months. The most common problems are damage to trees (defoliation), taking grain, and disturbing residents with loud vocalisations. These native birds can also damage buildings, particularly when they chew flashing or wiring, tarpaulins, wooden structures, cars and a variety of crops. There is significant public contention regarding the management of little corellas.

Managing little corellas can be difficult. Many local councils have a history of problems with little corellas, and they have invested significant resources into developing strategies for their management. Extensive experience and knowledge of little corellas exists within these individual agencies and in local communities, but little information sharing or coordination of activities occurs among groups.

The purpose of the Discovery Circle's **Little Corellas** project was to explore management issues in city and town areas around South Australia in partnership with state government, local government and local communities. For the **Little Corellas** project, we used a mixed-methods approach, including:

- A social survey (1,270 respondents)
- Nine community workshops
- Field surveys at 144 little corella sites
- Development of models for little corella habitat suitability and land use preferences
- Synthesis of data into a master model for little corella management in South Australia using **Mental Modeler** (<http://www.mentalmodeler.org/>)

Our approach recognised that social, environmental and regulatory factors are necessary considerations for effective management of wildlife ([Kellert and Clark, 1991](#)); where:

- *Social factors*: interactions between stakeholders and the values held by stakeholders should influence decision-makers
- *Environmental factors*: biological and ecological requirements of the wildlife should guide the entire process
- *Regulatory factors*: the legal (or policy) system in which managers are operating also guides the process. The need for a state-wide little corella management plan was identified before this project commenced; we collaborated with local and state governments to frame the approach to little corella management

What's in this report

This report contains the results of our research and provides practical tools and strategies for the management of little corellas in South Australia. We propose an [integrated approach](#) (involving multiple strategies and stakeholders) with long-, medium- and short-term foci, including:

- [Creating barriers to roosting and feeding resources \(including practical recommendations\)](#)
- [Creating barriers to water resources \(including practical recommendations\)](#)
- [Identifying and creating sacrificial sites \(including key considerations for site selection and creation\)](#)
- [Using Mental Modeler to understand and educate about the management of little corellas \(including management strategies and trade-offs, with examples\)](#)

This report also contains case studies that demonstrate the use of the actions we propose and the use of Mental Modeler in three different scenarios:

1. [Aldinga](#)
2. [Hawker](#)
3. [Hewett Primary School](#)

In this “Key results and recommendations” section we also summarise the [results](#) of our research and provide [recommendations](#), based on our research, for a new Little Corella Management Plan for South Australia, to be developed by the Department of Environment, Water and Natural Resources (DEWNR).

Key results

1. Social factors

Social factors include community knowledge, community acceptance, and how communities work together; we found:

- Some form of little corella management is generally desired, and the development of a **state-wide management plan for little corellas was widely supported**
- **Few participants actually disliked little corellas**, but many did dislike their destructive behaviours (particularly to trees) and their noise
- **Contention exists about the types of management** that are effective and desirable
- **Some management strategies were supported** by survey respondents who place a high intrinsic value on little corellas, and by survey respondents who are concerned about the impact of little corellas (e.g. encouraging little corellas to alternate sites). Other strategies were **opposed by both groups** (e.g. removing tree roosts and “doing nothing”). Neutral responses were recorded for both **effective** (e.g. increasing shrubs, managing water assets) and **ineffective** (e.g. falconry) control measures. Support for some actions (e.g. lethal deterrents) increased in workshops when they were explained
- While some people have extensive experience and holistic views on the management of little corellas, **many members of the community are not aware of the complexities of little corella management**, the actions that are taking place, or the costs involved
- The **Little Corellas** project workshops were useful in both the collection and dissemination of information, enabling a focussed and fair discussion of participants’ knowledge and ideas about the causes and management of little corellas problem sites. Workshops were also useful for increasing **tolerance** and **understanding** of the issues
- Participants indicated that the workshops helped them to understand the complexity of little corella management, how costly management could be, and changed their opinions about the desirability of living with little corellas (overall, a convergence of attitudes was most noticeable, some participants became **more accepting** of little corellas when they realised the complexities of management, while others became **more concerned** about little corellas when they realised the difficulties involved in their management)
- Considerable confusion and misuse of terms was observed in the workshops, indicating that some responses to the survey might have been different if respondents had **more understanding of the terminology** and complexities of little corella management
- The practicalities of little corella management are **frustrated by the absence of any organised way to share resources or knowledge, or coordinating responses** among agencies, and the efforts of some councils maybe undermined by the actions or inaction of others
- A number of people around the state have **extensive experience observing and managing little corellas** (their input was invaluable throughout the project). Extensive discussions about management options were focussed on:

- **Habitat management and modification** (to reduce the attractiveness of problem sites to little corellas)
- **Sacrificial sites** (selecting sites and increasing their attractiveness to little corellas)
- **Lethal deterrents** used to reinforce other controls (and minimising attempts to control the little corella population using lethal methods)

2. Environmental factors

Environmental factors include the biology and behaviour of the wildlife species and the landscape in which the species exists; our results included:

- **Over 2,300 little corella sites identified by the public** were mapped within the Adelaide metropolitan area, Mount Lofty and Fleurieu Peninsula region (including Kangaroo Island), along the River Murray, in the Upper and Lower South-East and Mid and Far North sites
- Habitat modelling indicated important resources for little corellas:
 - **At a state-wide level:** river red gums, irrigated green space and major creeks
 - **Around the Adelaide and the Mount Lofty Ranges:** irrigated green spaces and major creeks
- Conversely, our modelling indicated that **little corellas avoid bushland areas**
- Land use analysis indicated that **recreational, agricultural and residential land uses** were consistently the best predictors of little corella distribution – these areas provide abundant food and water resources
- **Field surveys supported the findings of the habitat modelling and land use analysis.** Sites where little corellas are reported typically included extensive irrigated exotic lawn areas, freely available water, open habitat (low tree density, often with pine trees), very few shrubs, and low site “nativeness”. Sports ovals (often surrounded by Aleppo pines) were commonly cited as little corella sites

Recommendations

The environmental factors described above clearly demonstrate that we have developed ideal conditions for increases in the distribution and abundance of little corellas in South Australia. Little corellas thrive in the agricultural and urban landscapes that we have created. Little corellas were **not** abundant or problematic in most of the state 50 years ago. Now that these birds are abundant and problematic, **isolated management actions are ineffective**. The approach and culture of pest management practices in urban areas needs revision; proactive and coordinated activities should be ingrained in our approach to these problems, and our reliance on reactionary and isolated (often inefficient) controls needs to be reduced. Further, management that does not account for social factors will be problematic. Therefore, we recommend an [integrated management approach](#), including **long-, medium- and short-term actions** that consider both environmental and social factors. Importantly, it is **necessary to focus on long-term actions first**, as these actions are key to reducing issues at little corella problem sites. Medium- and short-term actions may then be used to alleviate issues while long-term plans are actioned.

*While this report includes practical actions to alleviate problems with little corellas, our recommendations move the **focus away from controlling birds** (short-term impact only) and on to **landscape management to deter birds**, and to reduce their abundance in problem areas over the long-term.*

Long-term actions and considerations

Long-term actions include planning on a 10+ year timeframe, with actions to be commenced as soon as possible. Long-term actions and considerations include:

- A long-term guided approach to **threat abatement**, including proactive management, to minimise future impacts of current and **emerging urban-adapting** and **urban exploiting** species (see [Glossary](#) for their definitions)
- **Reducing the availability of food and water resources** to little corellas (or creating barriers to these resources), including:
 - **Removal of any unnecessary, open food or water storage** at and around problem sites (e.g. grain piles, water troughs, water tanks)
 - **Installing or planting [barriers to water resources](#)** at and around problem sites (e.g. install trough covers, increase bank height, increase vegetation around water resources to reduce direct access; increase vegetation or screening near water resources because little corellas prefer drinking at open locations)
 - **Installing or planting [barriers to food resources](#)** (e.g. cover grain piles, increase vegetation or screening around food resources as little corellas prefer feeding at open locations)
 - Note that the removal of tree roosts (i.e. removal of trees) is not a management action that is acceptable to the community; targeted tree removal may also increase site openness and site attractiveness to little corellas, compounding site problems

- **Habitat modification** to reduce the attractiveness of problem sites and surrounding areas to little corellas, including large-scale habitat planning (e.g. including parks, street trees and paddock wind breaks) to:
 - Increase the **density of trees** (little corellas prefer narrow corridors of trees, which provide vantage points for safety)
 - Increase **understory planting** (e.g. shrubs and groundcovers; little corellas prefer trees without understorey as open habitats provide vantage points for safety)
 - Decrease **irrigated lawn areas** (e.g. some areas of irrigated lawn can be replaced with native plantings that are more water efficient, or interspersed with [islands of native vegetation](#) while maintaining park amenity)
 - Increase “**nativeness**”. This action enhances local biodiversity, increasing *inter-specific competition* (i.e. competition for resources from other birds). Further, some exotic plants provide far greater food resources than equivalent native species would provide (e.g. Aleppo pines compared to sheoaks or hakeas). Therefore, exotic species should be replaced by native species where possible and acceptable (considering community expectations and potential impacts on other species such as black cockatoos)
 - Modification of problem sites must be done in a strategic way (i.e. considering the broader landscape, all management resources and potential partnerships), which is **sensitive to community needs**
- **Proactive management** should consider sites where little corellas are currently problematic as well as sites where little corellas or other bird species may become problematic in the future. In some locations the ‘problem site’ is quite obviously the central park in a town (usually along a creek). However, in some cases the problem is more dispersed, where little corellas have plentiful food, water and roost resources (e.g. along the Murray River). In these cases the initial focus needs to be in the most affected areas (e.g. where the community feel the ‘biggest’ problem exists). Additionally, little corellas may continue to increase in distribution across the state. While the actions described here are designed specifically for little corella problem sites, they will also reduce the chance of other urban adapting/exploiting bird species becoming problematic (e.g. noisy minors, sulphur-crested cockatoos, ibis and rainbow lorikeets). A long-term guided approach to **threat abatement**, including proactive management, will minimise future impacts of current and emerging *urban-adapting* and *urban exploiting* species
- **Development of a management planning template:** local governments across South Australia should use a management-planning template, based on these recommendations. The aim of the template is to streamline the development of little corella management plans among local councils, and provide the architecture for amending existing strategies. The template should include the glossary from this document to facilitate consistent terminology. This approach will create state-wide uniformity in the management plans. The template must include a strategic and integrated approach to little corella management, with long-, medium- and short-term actions for each local government area, and identify sites where little corellas are problematic
- **Further research:** our focus has been on little corellas in urban and peri-urban areas, including regional townships. Further research into resource availability for little corellas in regional (ex-urban) areas, and how best to reduce these resources is needed; agricultural food and water resources are of particular interest

Medium-term actions and considerations

Medium-term actions include planning on a 2-9 year timeframe, with actions to be commenced as soon as possible. Medium-term actions should only commence once long-term actions have been planned and set-in-motion. Medium-term actions and considerations include:

- Information sharing and strategic management requires the **establishment of a forum for discussion among groups** and individuals involved in the management of little corellas around South Australia, particularly among local government areas, and with community and state government input. We recommend:
 - Annual community meetings in areas with problem sites
 - Annual meetings of staff involved in the management of little corellas and related community education (from local and state government, and NRM Boards). While this report is focussed on little corellas, we recognise that other, similar issues exist around the state, and therefore recommend the meeting be an **Abundant Bird Species Forum**, to encourage collaboration and the sharing of knowledge in relation to the management of, and education about, abundant bird species in South Australia. These forums should include training in the use of **Mental Modeler** for running little corella management scenarios for management and educational purposes
 - A review of progress every six years, including data collection from the wider community, local government, state government and NRM Boards. The reviews of progress should repeat a social survey, community workshops, and field surveys as conducted during the **Little Corellas** project in order to measure change in social and environmental factors. A literature review should also be conducted to incorporate any related new research findings into management and to update ongoing education initiatives. These reviews should be planned and managed in collaboration with any long-term research (described above)
- Increasing **information and education** to increase public knowledge and tolerance of little corellas, as well as **acceptance of management actions**. Public expectations need to be realistic and based on an understanding of social and environmental factors, as well as management practices. Education should include:
 - **Consistent terminology** (see [glossary](#) in this document)
 - **The relationship between the habitat we create and the species it attracts** (i.e. little corellas and other problematic bird species are not in themselves problematic; these species are utilising resources that we provide for them including open habitat, food and water resources)
 - **The complexities and costs associated with the management of little corellas**. The 'Mental Modeler' models created for this project are available online and useful in explaining these issues
- Creation of **sacrificial sites** as a refuge for little corellas. Land managers and relevant stakeholders should plan, identify and survey potential sacrificial areas and consult widely with those who may be impacted at these sites. If a suitable sacrificial site is available, short-term 'disruption' actions should be orchestrated to promote little corella movement to the sacrificial site. Further details about sacrificial sites are available within this document ([here](#))

Short-term actions and considerations

Short-term actions include planning on an annual timeframe, with actions to be commenced as required. Short-term actions should only commence once long- and medium-term actions have been planned and set-in-motion. Short-term actions and considerations include:

- **Disruption of little corellas at problem sites.** It is important to note that disruption is best done when little corellas have somewhere else to go (e.g. a sacrificial area) and in conjunction with long-term plans to reduce the attractiveness of the problem site (so that little corellas are less likely to return and **habitual behaviours are affected**). While disruption can be immediately effective (i.e. the birds fly away), without the medium- and long-term strategies described above, the effectiveness of disruption will likely be short-lived (birds will return unless they have somewhere better to go, a sacrificial site)
- Disruptive activities can include:
 - **Spotlighting** (hand-held or automatic)
 - **Noise generation** (hand-held or automatic, including clapping, starter-pistols, guns, gas guns)
 - **Lasers** (hand-held)
 - **Lethal deterrents** (shooting to deter flocks)
- Some disruptive activities may be unacceptable to the local community (e.g. lethal actions in built-up areas and noise generation in residential areas). However, activities may be accepted with engagement and education so that the community understand how the actions fit in with the overall strategy. For example, the acceptance of lethal deterrents may be increased where lethal deterrents are used to increase the effectiveness of non-lethal measures, where the strategic approach is understood by the community, and where lethal deterrents are clearly differentiated from lethal controls see our section about [communication barriers](#), discussed as part of the Community Workshop outcomes)
- Many managers around the state have extensive experience and have had some success at moving little corellas away from problem sites – out of towns and into sacrificial sites (e.g. in The Flinders Ranges Council area). These operators can provide expert knowledge and advice to other managers (i.e. through an Abundant Bird Species Forum), promoting communication and information sharing among groups

Responsibility for management actions

A broad level of collaboration and engagement is required to manage little corellas in South Australia. Local government manages most of the sites where little corellas are problematic. With our proposed **focus away from controlling birds** and on to **landscape management**, it is reasonable that local government will continue to make an important contribution to the management of little corellas. However, we recommend increased support for local government. Increased support is already evident through the collaboration of state government, the LGA, universities, and local communities on the **Little Corellas** project. State government is also taking responsibility for the development of a state-wide management strategy. Further opportunities exist to collaborate with NRM Boards and other organisations like Birds SA, Conservation Volunteers, Greening Australia, Landcare Australia,

Trees for Life, local plant nurseries, community groups and individuals, agricultural and grain groups. These groups and individuals can assist with community development, revegetation activities and giving advice. It is important to ensure that all groups and individuals are working collaboratively towards the common goals outlined in the local government management plans (described above). See Table 1 below for the types of relevant activities that each group does.

Actions recommended above should be supported as follows:

- Natural Resources Management Boards (NRM Boards) should support local councils to plan and implement landscape management, collaborating with other affected landholders (e.g. schools and private landholders)
- Local councils and NRM Boards should facilitate annual community meetings
- LGA and DEWNR should facilitate annual meetings of local and state government staff
- Funding for long-term research should be sought through traditional research grants with leverage funding provided by state government, the LGA and NRM Boards
- Reviews of progress should be conducted by state government, the LGA and NRM Boards
- Whole-of-council approach: in addition to collaborating with other councils and agencies (e.g. NRM, schools) and individuals to manage little corellas, councils should spread the burden of management within their agencies. Pest animal managers should work closely with parks and maintenance staff, environmental and natural resource managers, arborists, town planners and others to develop cohesive plans for problem sites and areas
- DEWNR should provide policy and scientific/environmental management advice to guide available actions to reduce impacts of little corellas at problem sites
- Local community groups and individuals can provide volunteer hands-on assistance with revegetation activities, and identifying water, food and roost resources, in and around urban areas

Table 1 *Relevant organisations and groups for potential collaborations, and their activities*

ORGANISATION/GROUPS	SUPPORTED ACTIVITIES
Bird groups: Birds SA , Birdlife Australia (including Birdlife Kangaroo Island and Birdlife South East SA)	Promotes local interest and awareness of birds; conducts bird conservation work; provides a source of scientific expertise and speciality knowledge of birds and bird ecology; manages bird resources
Conservation Volunteers	Works in partnership with government (all levels) and communities on environmental projects; mobilises and coordinates volunteers for land restoration, revegetation and weed control activities
Greening Australia	Works on landscape-scale projects, including WildEyre in South Australia; focuses on environmental projects that encourage involvement (and engagement) of local communities
Landcare Australia	A community owned and driven initiative, works on integrating management of environmental resources and farmland (e.g. weed control), and promotes sustainable management of private land. Also manages resources for local groups and activities
Trees for Life	A community-based organisation that works on land restoration, revegetation and conservation projects (including establishing biodiverse plantings on private land, and regenerating bushland)
Local plant nurseries	Can grow locally native plant species for sale and provide information around their use and importance, may decrease availability or discourage the purchase of declared weeds
Community groups and individuals	Can be engaged and mobilised to promote biodiverse landscapes at schools and private gardens, for example
Agricultural and grain handling groups	Large grain storage and handling groups, such as Viterro, conduct little corella control activities at some sites; pest managers there may be able to share information and collaborate with councils to enhance the effectiveness of control activities more broadly

Glossary of Terms (relative to little corellas)

Call birds	Or early birds; small numbers of birds that arrive in an area before the main flock. See also “Scout birds”
Citizen Science	A scientific endeavour generating new knowledge or understanding that actively involves citizens; the citizens collaborate with scientists and have meaningful roles in projects
Controls	Management activities that include lethal and non-lethal actions that aim to deter or remove birds (or reduce their numbers) in an area in order to reduce their impacts. See page 30
Carrying capacity	The greatest number of little corellas that an area can support, given the available resources
Cull	To destroy (kill) birds, usually in large numbers, to reduce the overall population size. See also “Lethal population control”
Dietary breadth	A measure of diet variety; highly specialised species have a narrow dietary breadth (specialising on a single food source perhaps), whereas generalist species have great dietary breadth and would feed on many different types of food
Exotic plants	Non-native plant species, also called weeds, introduced plants; can include Australian native plants that are not indigenous (i.e. from other places in Australia)
Exterminate	To destroy (kill) every individual bird and remove the species entirely and permanently from all areas (synonymous with extinction); see also “Cull”; “Lethal Population Control”
Flock	A large number of birds congregating together in a single area; a few birds does not constitute a flock. See also “Flocking behaviour”
Flocking behaviour	A common and natural behaviour in many bird species; cockatoos are highly social and vocal birds, and flocking allows social bonds to develop and provides some safety against predators
Habitat	The environment in which an organism exists and derives its needs; little corella habitat includes roosting and nesting, watering and feeding areas
Habitat modification	Modifying habitat in some way, such as planting reeds along water banks or increasing shrub cover; as a management strategy, habitat modification may be used to attract or deter particular wildlife from target areas
Human-wildlife conflict	Experience of negative interactions with wildlife; causes of this conflict can be varied, from real or perceived danger (i.e. dangerous animals), to economic losses (e.g. crop losses), to a reduction in amenity (e.g. damaging trees or fouling of water)

Inter-specific competition	The competition for resources among species, including from other birds
“Landscape of fear”	An ecological term that describes the level of fear of predators felt by a prey species in its environment; creating a “landscape of fear” involves increasing perceived risk
Lethal deterrent	Lethal destruction of a small number of birds in order to deter a large flock of birds from the area, typically used in conjunction with non-lethal measures
Lethal population control	Lethal destruction of a large number of birds in order to reduce overall population size. See also “Cull”
Loafing behaviour	Loafing areas are where little corellas digest food, preen, play and rest (different to feeding or watering behaviour, for example)
Local enhancement	When the presence (calls and activities) of a few little corellas attracts more little corellas to that area
Mind map	Information organised in a diagram, which shows relationships between different factors associated with a central idea
Mental Models	The output from community workshops using the Mental Modeler software (developed by S. Gray). The models capture experiences and knowledge about little corellas, and can illustrate the outcomes of different management scenarios
Nesting habitat	Hollows in large trees and cliffs comprise nesting habitat for little corellas. Nesting behaviour (forming pair bonds and rearing young) is different to roosting behaviour. Compare “Roosting”
Non-lethal deterrent	Non-lethal actions that deter birds from an area; making noise and flashing lights are typical non-lethal measures
Population reduction	To destroy large numbers of birds to reduce the overall population size. See also “Lethal population control” and “Cull”
Positive reinforcement	Positive reinforcement involves the use of an additional measure (e.g. a lethal deterrent) to reinforce non-lethal activities, with the aim of increasing the effectiveness of the non-lethal activities
Problem site	The <i>Little Corellas</i> project focused on sites identified by participants, where the presence of little corellas is of concern to them, and where management action is wanted. Problem sites may include those with large numbers of birds creating mess and noise or other factors, such as dispute about management at that site
Resident flocks	Traditionally, little corellas form large flocks during warm months in the southern areas and form pair-bonds and disperse north during winter to breed; however, some southern areas are now experiencing small resident flocks of little corellas that persist year-round
Roosting	Birds sleep at their roosts, typically little corellas settle at night in large roost trees. Compare “Nesting”

Sacrificial sites or areas	Identified, suitable areas deliberately set aside for little corella habitat as part of integrated management activities; little corellas are not be moved on from these sites. Where possible, management plans should identify sacrificial areas and strategies to encourage birds to these areas and away from problem areas. The term “sacrificial” in this context does not imply that the site is of no value, but that the area is set aside for this purpose
Scout bird	Or early bird (see also “Call bird”); small numbers of birds that arrive in an area ahead of a main flock. Scout bird is an imprecise term implying that birds report back to other birds in an organised and strategic way about their planned movements, which they don't. Early bird or call bird are preferred terms. See also “Local enhancement”
Trap and gas/euthanize	A method of “Lethal population control”, where birds are captured and then destroyed by carbon dioxide narcosis
Urban adapters	Species that live in natural and modified areas, e.g. little corellas. Compare “Urban avoiders”, “Urban exploiters”
Urban avoiders	Sensitive species that disappear or decline with urban development, e.g. wrens. Compare “Urban adapters”, “Urban exploiters”
Urban exploiters	Species that thrive in modified areas and even depend on urban resources; e.g. rock dove, house mouse and red-backed spiders. Compare “Urban adapters”, “Urban avoiders”
Vocalications	Sounds made by birds that include calls and screeches, which are important for bird communication, e.g. alarm calls, social calls
Wildlife acceptance capacity	A measure of human tolerance of a wildlife species or of a situation involving wildlife (e.g. little corella acceptance capacity), assessed locally or for the general public depending on the situation. Tolerance varies with attitudes, values, background and experiences or understanding of the problem. Varying levels of wildlife acceptance help explain contention surrounding the management of little corellas in some areas. For example, some people enjoy seeing large flocks of little corellas and oppose any control activities whereas other people may have bad experiences with them, do not enjoy seeing them, and want them controlled

Acronyms

DEWNR	Department of Environment, Water and Natural Resources
NRM	Natural Resources Management
NSW DPI	New South Wales Department of Primary Industry
LGA	Local Government Association of South Australia
NPW Act	<i>National Parks and Wildlife Act 1972</i>
UniSA	University of South Australia

Introduction

Scope and purpose of the report

The purpose of this report is to:

- Inform a new **Little Corella Management Plan for South Australia** being developed by the Department of Environment, Water and Natural Resources (DEWNR) in collaboration with the Local Government Association (LGA) of South Australia and other interested parties
- Provide a **relevant and useful resource** that reflects community attitudes towards and experiences with little corellas in South Australia, which is supported by detailed data collection and analysis
- Report back to **community and stakeholder groups** on the findings of the *Little Corellas* project
- Help all stakeholders make **informed decisions** about little corellas
- Develop recommendations to **facilitate communication** among and within agencies working on little corella management in South Australia
- Provide recommendations and tools for **strategic and coordinated state-wide approach** to the management of little corellas
- Develop practical and effective recommendations for **landscape-level and site-specific** management of little corellas in South Australia (long-, medium- and short-term actions)

No “silver-bullet” or “solution” to management issues associated with little corellas or other wildlife exists. Rather we aim to identify steps, based on extensive research and consultation, to reduce issues with little corellas. These steps include long-, medium- and short-term actions to alleviate problems at targeted sites. The numbers of little corellas and site problems will continue to increase without long-term coordinated management strategies, and short-term actions are also needed. We focus here on “problem sites” in urban and peri-urban areas, including townships, across South Australia.

Legislation, Permits and codes

Most **native species in South Australia are protected** under the [National Parks and Wildlife Act 1972](#) (NPW Act), although specific levels of protection may vary among species. **Two corella species** occur in South Australia, and they have two different levels of protection afforded under the NPW Act:

Little corellas (*Cacatua sanguinea*)

- Listed as an “unprotected” species under Schedule 10 of the NPW Act because they are abundant and can be destructive
- Landowners and shooters acting for landowners **do not** require a *Permit to Destroy Wildlife*, they can shoot an unlimited number of little corellas on their land
- Shooters must comply with the [Code of Practice for the humane destruction of birds by shooting in South Australia](#) and with **all provisions** of the [Firearms Act 2015](#); including those relevant to the storage, transportation and use of firearms and ammunitions
- Lethal trapping and gassing of little corellas requires a permit

Long-billed corellas (*Cacatua tenuirostris*)

- Long-billed corellas are sometimes mistakenly identified as little corellas
- Listed as “protected” species under the NPW Act, they are not considered to be abundant
- Long-billed corellas were highly threatened and in decline until the 1970s when they started exploiting new cropping resources, their numbers and range have now recovered and even expanded into some areas
- Their natural range includes the south east of South Australia, and a [Permit to Destroy Wildlife](#) **is required** to destroy them

Department of Environment, Water and Natural Resources (DEWNR) has developed Codes of Practice for the destruction of birds in South Australia and provides training and accreditation to ensure that managers have sufficient knowledge of bird behaviour, know how to use the traps effectively and give due consideration to the welfare of the animals being caught. DEWNR has also developed a series of guidelines and action plans, undertaken ecological research, convened expert reference groups and committees to help define the problems, develop management plans, implement plans and evaluate results. DEWNR provides scientific and technical advice to local councils regarding the various control methods available to minimise impacts of little corellas on communities and individuals.



Background to little corella problem sites in South Australia

Worldwide, there are hundreds of different species of parrots. They are intelligent birds, often brightly coloured, with curved bills, an upright stance and distinctive feet (two toes forwards and two toes backwards). Cockatoos are a family of parrots found in Australasia, from southern Australia to as far north as the Philippines. Cockatoos nest in tree hollows and are monogamous (they form long-lasting pair-bonds for breeding). Common Australian cockatoos are galahs, sulphur-crested cockatoos, cockatiels, long-billed corellas and little corellas.

While many people enjoy seeing these native birds, large flocks of cockatoos in urban and rural areas can cause considerable problems in the warmer months. The most common problems are damage to trees (defoliation), taking grain and disturbing residents with loud vocalisations. Little corellas can also damage buildings, particularly when they chew flashing or wiring, and to tarpaulins, wooden structures, cars and a variety of crops (Photo panel 1).

Significant public contention exists regarding the management of little corellas in South Australia.



Photo panel 1 Little corellas can cause damage to infrastructure by chewing wiring and flashing (A, B); they can also cause serious defoliation of trees (C)

A mixed-methods approach to investigate a contentious environmental issue

This research project focused on sites, identified by participants, where little corellas are causing significant problems and where management actions may be required. Problem sites were defined as those areas where large numbers of birds were impacting on site amenity and areas where management actions were locally disputed. Sites were considered problematic if some members of the local community declared them as such (agreement was not required among all members of the community as a site can be a problem for some, but not for others). We aimed to collect existing knowledge and ideas from local communities to explore what made those particular sites problematic. We also aimed to understand the intrinsic factors leading to particular sites being popular with flocks of little corellas and what were the problems faced by the local community.

- This project report **makes practical recommendations** designed to directly influence decision makers and stakeholders so that they can make informed little corella management plans to help reduce the occurrence of problem sites
- The research project involved the local community as much as possible – a “citizen science” approach. The benefit of this approach was that it ensured that all stakeholders had the best-possible understanding of the complex ecological and social dynamics that determine sites where little corellas are reported as problematic. The participatory approach and sharing of knowledge generation maximised learning, **built community resilience and increased ownership of the outcomes of the project** for the people involved.

Human-wildlife conflict

Human-wildlife conflict is **not unusual**; it is formed by negative experiences with wildlife, and is largely a result of human activities and our **modification of the landscape**. Globally, causes of human-wildlife conflict include:

- **Agricultural areas** expanding into the habitats of animals that can damage or consume crops, livestock and infrastructure. For example, in Africa, elephants eat and trample crops and damage farm infrastructure. Elephants are sometimes shot or poisoned in retaliation. Thus, the human-elephant conflict has poor outcomes for both people and elephants.
- **Residential areas** expanding into the habitats of animals that are (or are perceived to be) dangerous or annoying to people (e.g. wolves, bears, and birds that swoop or are noisy). It should be noted that residential development often displaces wildlife by removing resources such as foraging grounds, roosting trees or shelter. Conversely, residential areas can also attract wildlife by providing these same resources, albeit in a different context. Both displacement and attraction of wildlife can generate human-wildlife conflict.

Two South Australian examples of human-wildlife conflict are:

- 1 **Common brushtail possums** were once common and widely distributed across South Australia, but changes to the landscape, including the removal of trees for agriculture, has led to largescale declines and the species is now listed as rare under the [*National Parks and Wildlife Act 1972*](#). In contrast, in highly urban landscapes changes have benefited brushtail possums and their abundance in these areas is relatively high. Urban brushtails can generate conflict when

they inhabit and cause damage inside residential roof spaces (a substitute for a tree-hollow), damage ornamental gardens and make excessive noise at night.

- 2 ***Grey-headed flying foxes*** are listed [nationally as vulnerable](#) and [rare in South Australia](#). However, in several large urban centres including Cairns, Brisbane, Sydney, Melbourne, Geelong and Adelaide, flying foxes roost in large numbers forming “camps”. Urban areas provide year-round food and water supplies, including from native and non-native urban tree plantings. Human-wildlife conflict can occur when people get upset about the flying foxes damaging trees, producing excessive noise and droppings in urban areas.

Although wildlife are directly involved in human-wildlife conflict, they are not always the crux of the conflict. Human-wildlife conflict may sometimes be more accurately described as **human-human conflict over wildlife** according to [Charles and Linklater \(2013\)](#). Wildlife managers have to grapple with practical problems associated with urban wildlife, as well as public expectations, which may be divergent. For example, in both of the South Australian examples above, there are people who support attracting these species into urban areas and people who support discouraging the species from urban areas.

While humans may respond in different ways to wildlife, wildlife also responds in different ways to humans. Some species of wildlife do not persist in urban areas. These species may not be able to find enough suitable food or shelter, or they may be susceptible to predation in an urban environment. They are termed “**urban avoiders**” and examples include small woodland birds, like wrens and thornbills. In contrast, some species persist in urban areas, as well as persisting in their natural habitats. These species find the resources they need amongst the urban matrix of buildings, streets and parks. They are termed “**urban adaptors**” and both brushtail possums and grey-headed flying foxes fit in this category, as do little corellas. One further category of wildlife response to urbanisation exists, the “**urban exploiters**”. These species exist in urban areas, but are not typically found in natural habitats. Urban exploiters include house mice and red-back spiders.

The range of foods that an animal will consume is known as the [dietary breadth](#) of the species. While some species will consume only a limited range of foods, others will consume a varied diet. In urban areas, an ability to exploit a variety of foods enables ready access to abundant urban foods. Abundant food can enable population growth and **increased densities**, which test human tolerance levels and **amplify conflict** experiences. For little corellas, the abundance and permanency of urban and peri-urban food resources may also **reduce the need for seasonal movements** and increase the permanency of flocks (i.e. increases in “resident flocks”, see [Glossary](#)).

Human-bird conflict

Typically^a, negative experiences with birds leading to conflict in urban areas relates to one or more of these actions:

1. Nesting or roosting behaviours and locations
2. Aggressive behaviours, including attacking humans
3. Fouling of non-roost sites
4. Damaging infrastructure

^a See [Charles and Linklater \(2013\)](#)

Feral pigeons or rock doves are non-native birds found in large numbers in many Australian towns and cities. Their **great dietary breadth** (including scavenging for food scraps) and **flexible roosting** requirements (including a variety of urban structures) enables them to exploit urban areas successfully. [SA Health](#) identify the transmission of disease, odour and noise issues and damage to infrastructure as health risks associated with feral pigeons and the [Australian Transport Safety Bureau](#) consider rock doves to be “a serious risk to aircraft as they take off”. Many local councils in South Australia have control programs for feral pigeons within their Animal Management Plans (e.g. [Town of Gawler](#)).

Native Australian crows and ravens occur in diverse habitats and some are very common in cities and suburbs of southern Australia. As scavengers and predators, their broad omnivorous diet includes meat, insects, fruit, vegetables, bread, crop seeds, eggs, nectar and foliage (see NSW Department of Primary Industry’s, DPI, [Crows and ravens Fact Sheet](#)). Australian ravens can create disease risk, mess and excessive noise, they attack other birds, and damage infrastructure. Crows and ravens also damage agricultural and backyard crops of fruits, grains and nuts (e.g. grapes, cherries, olives, plums, berries, pineapples, passionfruit, potatoes, almonds, peanuts).

It is important to recognise that both introduced and native Australian species can generate human-bird conflict in urban areas. Research in many towns and cities around the world has demonstrated some similarities in the way bird species respond to urbanisation. Typically, as urbanisation increases, the number of bird species decreases. Highly urban areas provide resources for only a small number of species, including the introduced species of urban exploiters, like blackbirds and starlings. Urban areas also tend to have quite similar groups of birds present, regardless of where they are in the world, including mostly larger omnivorous and granivorous birds^b, like little corellas.

While both introduced and native species can generate human-wildlife conflict, there should be a preference for supporting a range of **native species** in cities. Supporting native biodiversity can be beneficial for both birds and humans. Urban areas can support a range of bird species, rather than being dominated by the urban exploiters. Indeed, well planned residential areas can attract and support a diversity of bird species, including species that typically avoid urban areas, like small woodland birds. Supporting small woodland birds is important as many of these species are in decline.

Urban areas with a **diversity of plants and birds are beneficial to people**. Australians certainly appreciate the natural environment in and around Australian cities, demonstrated in a 2014 Property Council report^c where residents scored various attributes of the cities they lived in. The two most highly-ranked attributes were the range of recreational outdoor environments and the attractiveness of the natural environment. While we may intuitively like to live in attractive natural environment with recreational opportunities, research also shows that living and working in more natural environments improves health and productivity, and may increase house prices^d.

^b Chance and Walsh (2006) Urban effects on native avifauna: a review. *Landscape and Urban Planning* 74(1): 46-69

^c Property Council of Australia (2014) My City Report

^d See [Roetman and Daniels \(2008\)](#)

Biology and ecology of little corellas^e

Description

Little corellas are a small white cockatoo with body length 35-40 cm and body mass 430-580 g. They have a short upright crest, bare blue-grey skin around the eye and salmon-pink lores (the area between the eyes and nostrils). The underwing and undertail feathers are pale yellow. Little corellas are not sexually dimorphic, i.e. male and female birds are indistinguishable with external examination. Little corellas do look similar to long-billed corellas, but unlike long-billed corellas, little corellas have no red breast feathers and they have a relatively short bill; see photo 1.

Little corellas naturally form large, noisy flocks during warm months; their vocalisations include guttural sounds and high-pitch screeches.



Photo 1 Little corella (above and below right) and long-billed corella (below left)

Distribution

Pre-European distribution is poorly understood, and is inferred from records of early pastoralists, explorers and naturalists. Until the 1920s little corellas appear to have been largely restricted to the far north east of South Australia. Since then **little corellas have extended their range slowly southwards**; from the 1960s onwards little corellas were recorded continuously and increasingly in the Flinders Ranges, Mount Lofty Ranges and surrounding areas. This movement was probably facilitated by native vegetation clearance as well as the provisions of new permanent water sources (e.g. stock troughs, dams), food from grain crops, and other factors such as drought. In addition to their range expansion, little corellas appear to have increased in abundance ([DEH, 2007](#)).

Little corellas are now widespread throughout inland, western and northern Australia. In South Australia little corellas are common in the eastern parts of the state, including: the Mid North, North East, Flinders Ranges, Riverland, Adelaide Plains, Fleurieu Peninsula, Kangaroo Island and in the South East. Little corellas often congregate along tree-lined watercourses from adjacent plains. They have been observed in a wide variety of other habitats including savannah woodland, mallee, mulga, rangelands, spinifex sandhills, gibber, saltbush, native cypress, crops, stubble, mangroves, offshore islands, dams, tanks and cliffs. Increasingly, little corellas occur in urban areas (i.e. “Urban adaptors”).

Reproduction

Between May and September little corellas spread out across a vast landscape in their breeding pairs or small family groups. Breeding usually occurs from August to October; typical nesting sites are tree hollows lined with decayed woody fragments, however little corellas will also excavate cavities in cliffs and in termite mounds to nest in. Two to four white oval eggs are laid per clutch; the incubation period is 24-26 days, and parents share incubation duties and caring for the young. After seven weeks the fledglings and parents join a large nomadic foraging flock, which increases their individual safety. In contrast to the large raucous summer flocks of little corellas, breeding birds are quiet and somewhat inconspicuous. The species is long-lived with captive individuals reaching in excess of 50 years of age, although wild animals are unlikely to reach this age.

^e Modified from [DEH \(2007\)](#) and references therein, and from [Simpson and Day \(2004\)](#), [St John \(1994\)](#), and [Rowley \(1997\)](#) in [DEH 2007](#)

Food, water and roosting resources

Little corellas are strong fliers that can travel great distances in search of food, water, roosting and nesting resources, or the safety of a larger flock. The species has habitual roosting sites that flocks return to in successive years (DEH, 2007). However, flock composition is not fixed and individual birds may move among different flocks and roosts each year (DEH, 2007).

At their roosts little corellas preen and socialise. They use loud vocalisations to communicate regularly with the other members of the flock. They also defoliate their roost trees to **create a clear view, increasing visibility of the site and their perceptions of safety from potential predators (e.g. raptors).**

Roost sites tend to be established near accessible fresh water and food resources. Little corellas are opportunistic foragers of food. For example, in spring they will feed on grass seeds and bulbs, in summer they may congregate in large numbers to feed on stubble remains in paddocks after harvest, and in late summer-autumn they might exploit grain around stock feed troughs. In the southern Flinders Ranges they feed almost exclusively on fallen grain in stubble paddocks. They also exploit artificial water sources (e.g. stock troughs, dams and lakes).

History of little corella problems

Many local council areas have a history of problems with little corellas, and they have invested **significant resources into developing strategies** for their management (see Figure 1). Extensive experience and knowledge of little corellas exists within these individual agencies and communities, but little information sharing or coordination of activities occurs among councils, and the efforts of **some councils maybe frustrated by the inaction** (or uncoordinated actions) of others. A state-wide strategy that umbrellas local plans is needed; **streamlining access to management resources for local actions should improve uptake and coordination of management activities across the state.**

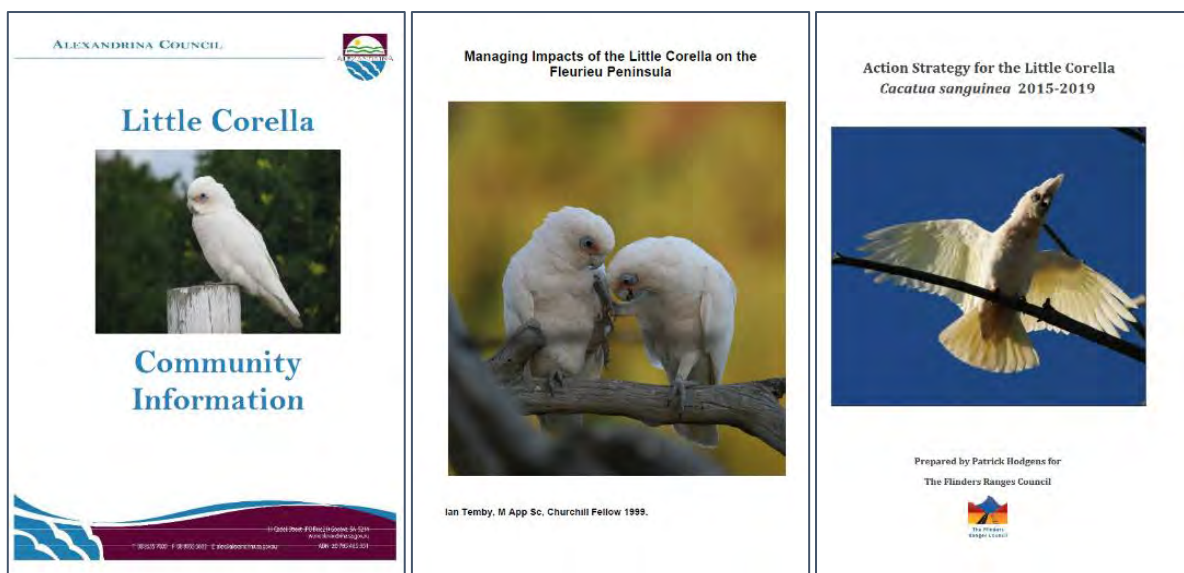


Figure 1 Many local councils have invested significant resources into developing materials for the community and management strategies for little corellas

Our mixed-methods approach

The **Little Corellas** project was conducted during 2015 and 2016. The project had a number of distinct phases using a variety of methods to help us understand community experiences of little corellas, how little corellas are managed, and to develop recommendations for future management.

Phase 1: Online survey

We developed a short online survey to collect information about people's opinions of and experiences with little corellas. The survey was designed to identify people and places to involve in subsequent phases of the project. The survey was open from November 2015 to March 2016 (5 months), with traditional and social media used to encourage community participation. The survey was also promoted by project collaborators, and paper copies of the survey were available.

Phase 2: Community workshops – creating interactive “Mental Models”

We hosted nine community workshops across the state with people affected by, or concerned about, little corellas. At the workshops we explored causes of problem locations using purpose-built software called **Mental Modeler**, which was developed by project collaborator Dr Steven Gray of Michigan State University. The software enabled participants to share their ideas and concerns about little corellas. In each workshop we created interactive maps of this complex problem, which included defining relationships between components and creating scenarios for different management regimes. Workshops were held during December 2015 and January 2016 in Hawker, Milang, Onkaparinga, Quorn and Strathalbyn, and two workshops each were held in of Gawler and Mount Barker. The community models were made available to view and download, along with instructions on how to edit and run the models (<http://www.discoverycircle.org.au/projects/little-corellas/community-models/>).

Phase 3: Field data collection at little corella sites

We visited over 150 sites **identified by survey participants** as locations where little corellas are causing problems for local people, and we surveyed 144 of these sites across South Australia (see Figure 2). Survey areas included: metropolitan Adelaide, Aldinga, Birdwood, Clayton Bay, Cockatoo Valley, Crystal Brook, Gawler, Goolwa, Hawker, Hewett, Mannum, Melrose, Milang, Mount Barker, Murray Bridge, Nuriootpa, Old Noarlunga, Palmer, Port Augusta, Port Elliot, Quorn, Roseworthy, Sandy Creek, Snowtown, Strathalbyn, Tailem Bend, Tanunda, Two Wells, Victor Harbor, Virginia, Williamstown and Wilmington. At each site we assessed and recorded the habitat type, and estimated the nativeness and cover of ground layer, shrub and tree vegetation (see details in Table 2).

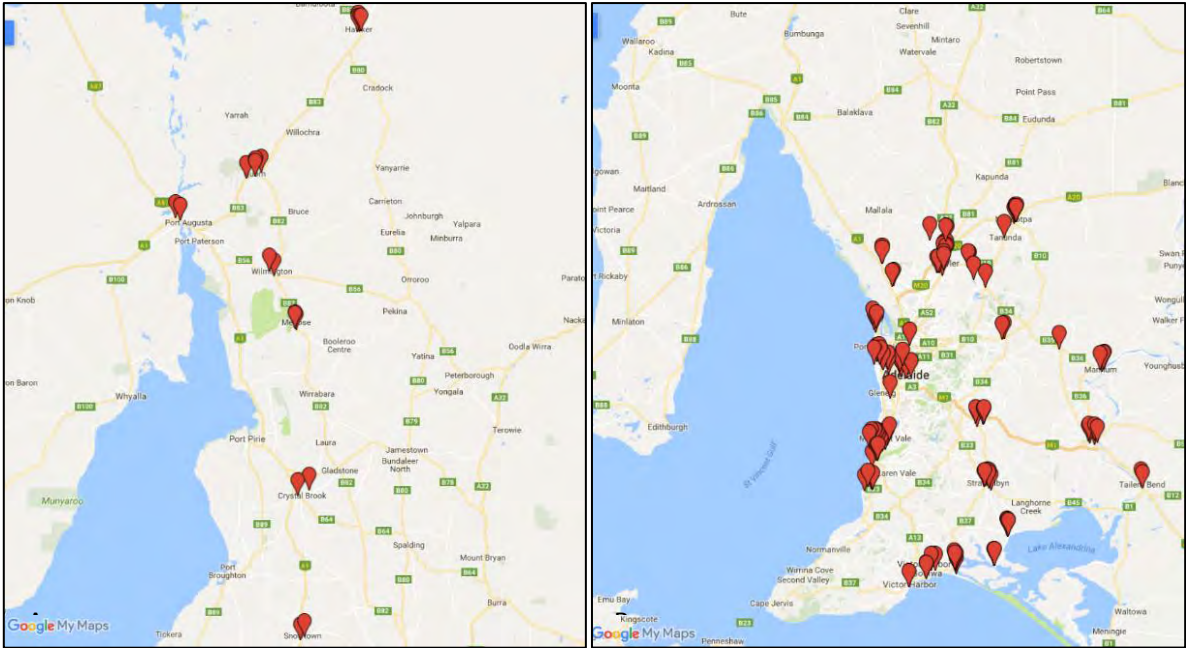


Figure 2 Maps of sites surveyed during the **Little Corellas** project; sites were identified from a community survey

A) Sites ranging from Hawker to Snowtown; B) Nuriootpa to Victor Harbor

Table 2 Scoring system for estimating nativeness and cover of ground, shrub and tree vegetation at little corella sites

NATIVENESS (0-5)	COVER (0-6)
0. Zero, or nearly zero species	0. Zero cover, or almost zero cover
1. Exclusively, almost exclusively exotic species	1. Sparse cover, < 5%
2. Mostly exotic species	2. Plentiful, but little cover < 5%
3. Mixed native and exotic species	3. Cover of 5 to 25%
4. Mostly native species	4. Cover of 26 to 50%
5. Exclusively, almost exclusively native species	5. Cover of 51 to 75%
	6. Cover of >76%

We also noted the presence, abundance and height of tree species of interest at each site. Species of interest were determined from the literature and from survey responses, they were: Aleppo pines, Norfolk Island pines, Monterey pines, native pines, other conifers, sheoaks, river red gums, other gums and native trees, fruit trees and ornamental trees. The overall cover for all trees was recorded, and we recorded whether any visible tree damage or perceived damage/reduced amenity by little corellas (including defoliation, tree pruning and mess from pruning) was present at the site.

In terms of water resources, we recorded whether the site had: 1) irrigated areas, 2) a water resource, 3) whether any water resource was permanent or ephemeral, 4) the accessibility of water to little corellas (e.g. vegetation barriers or other barriers) and 5) any other point of interest.

Phase 4: Little corella habitat suitability models

In order to create little corella habitat models for South Australia we asked: *What landscape features favour little corellas in South Australia?* The purpose of the habitat modelling was to:

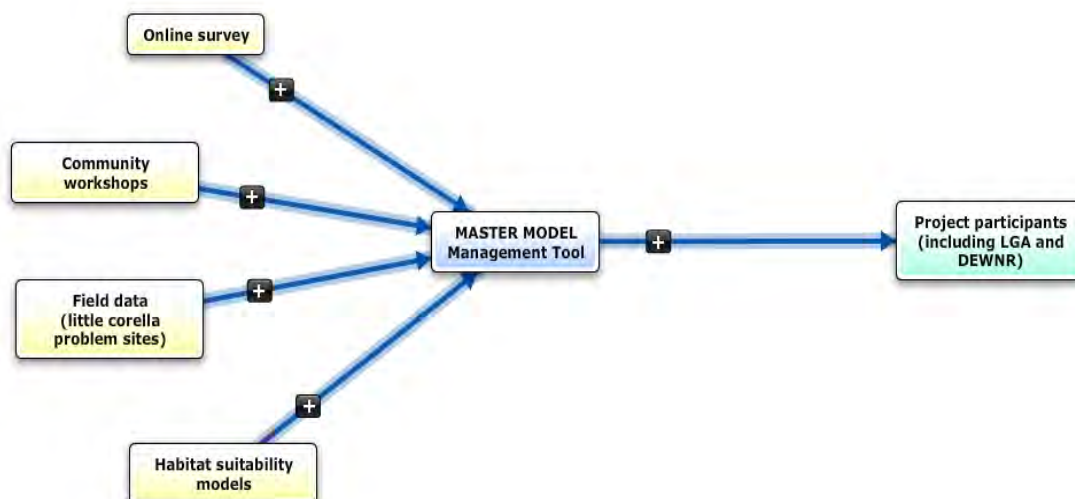
- Understand **little corella distribution across South Australia** (including potential future movements)
- Determine **habitat variables** associated with little corella presence
- Identify **land uses** associated with little corella presence
- Identify potential **habitat management tools** for little corellas

Modelling specifications were:

- Presence-only modelling using community (**Little Corellas** project) survey data; BirdLife Australia **BirdAtlas** data
- Maxent modelling software (version 3.3.3k)
- Habitat variables were identified from the community survey and workshop data, and from a review of the existing literature, they included distance (m) to nearest:
 - Major creek
 - Irrigated green space (i.e. council reserves, golf courses, ovals)
 - Exotic pine
 - Grain storage
 - River red gum

Phase 5: Data synthesis - creating the master model

We synthesised results from the survey and community workshops, as well as from field data collection, habitat modelling and previous research, to **develop a master model for little corella management** using **Mental Modeler** software. The master model is available to download and operate from the [Discovery Circle](#), it can also be upgraded and refined as new research or technologies emerge. The model enables users to create different management scenarios for little corellas, and identifies trade-offs and outcomes.



Phase 6: Sharing results

We delivered results from the survey and workshops during the project as they became available. For example, we created a map of little corella sites identified from the survey and posted it on the [Discovery's Circle's webpage](#). The models created during community workshops were also posted there along with an instruction manual for operating the software. Information about the project, getting involved and getting results were posted online (via Facebook, e-mail, Twitter), via postcards and traditional media; see examples in Photo panel 2.



Photo panel 2 Social (top row) and traditional (bottom row) media was used to promote the project, to increase reach and participation and to update participants on project findings

Results

The Little Corella Survey

Broad community engagement

- We received a **strong community response** with 1,270 people completing the survey^f
- In terms of geographic coverage, we recorded **widespread participation** with residents from 60 of 68 (88%) local councils being represented
- **City of Onkaparinga** had the most respondents (16%, or n = 137 respondents), followed by **Alexandrina** Council (9%, n = 76), **Mid Murray** Council (7%, n = 63) and Town of **Gawler** (4%, n = 37). Appendix 1 lists the frequency of respondents per local government area or authority
- Respondents' residential locations were: 51% urban, 30% peri-urban and 19% non-urban

Participant opinions of and experiences with little corellas

- General opinion of little corellas was nominated by participants on a scale from love to hate. We found that **few respondents hated little corellas** outright (4%, n = 53), many more respondents reported to love them (21%, n = 268; see Figure 3). Overall, 60% of respondents reported a positive opinion^g, just 29% reported any negative opinion of little corellas^h

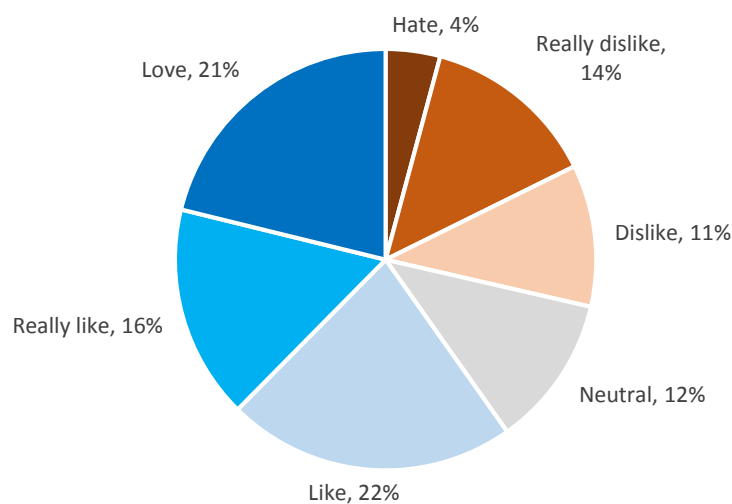


Figure 3 Survey respondents' general opinion of little corellas

^f A total of 1,571 survey responses were received, we removed incomplete surveys (those with only a few questions answered), surveys where participants were unengaged (little or no variation in response, low standard deviation), and repeated surveys

^g Participants that selected "Love", "Really like", or "Like"

^h Participants that selected "Hate", "Really dislike", or "Dislike"

- We grouped open-ended responses to the questions: **What do you LIKE about little corellas?** **What do you NOT like about little corellas?** into the themes that emerged (Tables 3 and 4)

Table 3 Themes in participant responses to the survey question: *What do you LIKE about little corellas?*

THEME	COMMENTS
<i>Intrinsic value of native wildlife</i>	Comments about little corellas being native birds, Australian wildlife, biodiversity, part of nature, having a role to play and linked to habitat health
<i>Value to self</i>	Comments about spiritual or sentimental value of little corellas, feeling connected to nature or landscape and loving all creatures
<i>Enjoy seeing them</i>	Comments about enjoying their interactions, behaviours, intelligence, socialising, gregariousness, flocks, calls, or beauty
<i>Other</i>	Miscellaneous comments on infrequent themes
<i>Negative comments</i>	Comments where nothing was liked about little corellas

Table 4 Themes in participant responses to the survey question: *What do you NOT like about little corellas?*

THEME	COMMENTS
<i>Destructive, cause damage</i>	Categorised divided into sub-themes: <ul style="list-style-type: none"> a. <i>Destructive, cause damage</i> – to unspecified objects b. <i>Damage to infrastructure</i> – property damage c. <i>Damage to trees, vegetation</i> – defoliation, tree deaths d. <i>Damage to crops, orchards</i> – damage to crops, seeds, vineyards, fruits, nuts e. <i>Damage to lawn, grass, greens</i> – damage to grass
<i>Noise</i>	Comments about excessive noise
<i>Mess, droppings</i>	Comments about large mess, debris
<i>Reduced amenity</i>	Comments about feeling anxious or stressed about little corellas, about their behaviours affecting a lifestyle
<i>Over-abundance</i>	Comments about them being a pest or plague
<i>Disease, health risks</i>	Comments about diseases, mites and rainwater contamination
<i>Reduce biodiversity</i>	Comments about deterring other birds or biodiversity
<i>Community divisions</i>	Comments about other people in the community being upset, feeling upset that people complained about little corellas, creating social divisions and harm and perception and intolerance issues
<i>Other</i>	Miscellaneous comments on infrequent themes
<i>Positive comments</i>	Comments where nothing was disliked about little corellas

What do you LIKE about little corellas?

- Most people **enjoyed seeing little corellas**, they enjoyed their intelligent behaviours, interactions, gregariousness and beauty (48%, n = 519; Photo 2)
- The quotes below demonstrate *Intrinsic value as native wildlife* (Quote 1) and *Value to self* (Quote 2) themes; see Figure 4

Quote 1 *“I enjoy the variety of parrots that come in waves over our property - Galahs followed by little Corellas followed by Sulphur crested and finally Rosellas. The Corellas are part of that cycle and I’m sure have a role to play in the ecosystem”*

Quote 2 *“Corellas are truly Australian. Their call always reminds me of good times camping in the bush as a child. Now that I live in the bush the sight and sound of corellas always makes me smile”*



Photo 2 Many people enjoy seeing little corellas

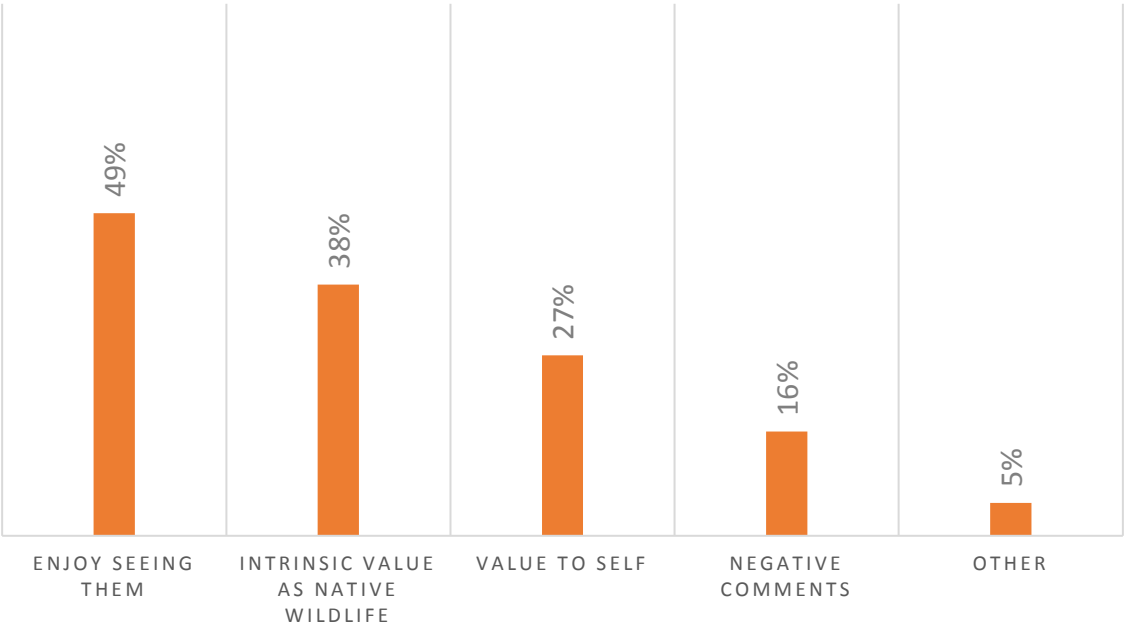


Figure 4 *Participant responses to the question: What do you LIKE about little corellas? Sample size was 1,072 respondents*

What do you NOT like about little corellas?

- Most respondents **disliked the damage caused by little corellas** or their destructive behaviours, highlighted in Figure 5 with red columns (70%, n = 762; Photo 3). Respondents also disliked the **noise** made by little corellas (42%, n = 446); **damage to trees** was most disliked form of damage (28%, n = 301); see Photo panel 3
- Little corellas were perceived to be over-abundant (see Quotes 3 and 4). Some people felt that little corellas were creating community divisions (Quotes 4, 5 and 6); see Figure 5

Quote 3 they are “noisy, destructive, are in plague proportions and need to be culled”

Quote 4 “I don't like their impacts as an over-abundant species. I don't like the way people get passionate about these birds while ignoring their impacts”

Quote 5 “They do make a racket. I know they have caused management problems for some towns. A town near us implemented their “de-corella” strategy... and now the corellas have moved onto our town. So now the park is quite noisy and filled with birds”

Quote 6 “I don't like people complaining about them”



Photo 3 Many people dislike damage to trees by

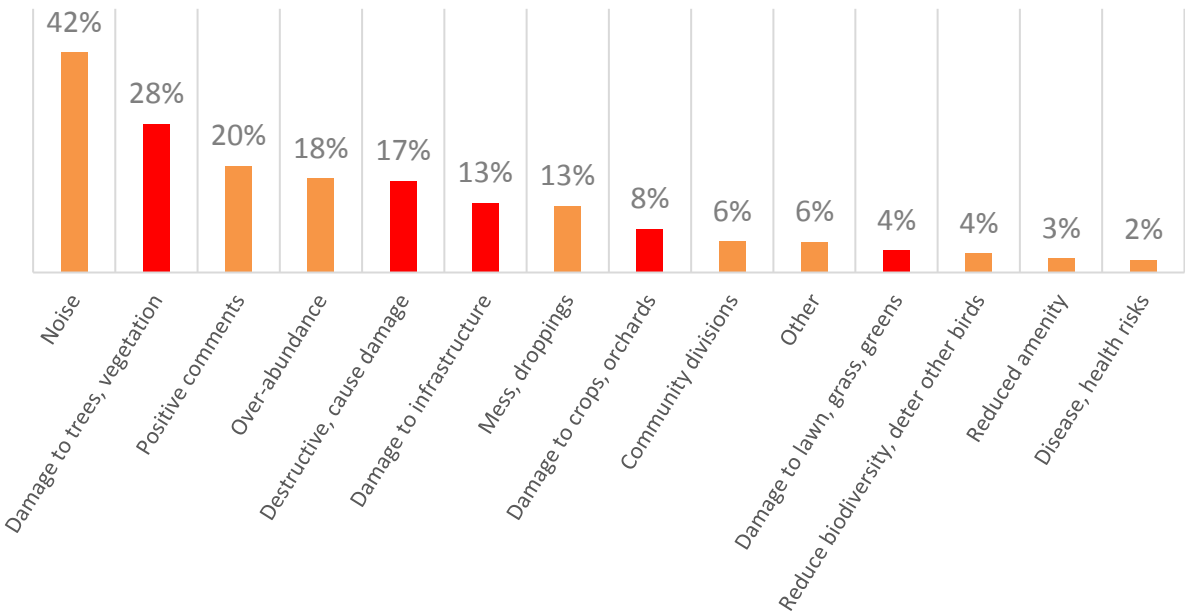


Figure 5 Participant responses to the question: What do you NOT like about little corellas? Items shaded red all refer to damage caused by little corellas (the cumulative total of these damage-related items is 70%)

Overall, 1,067 people responded to the question.



Photo panel 3 Defoliation of trees by little corellas

A) Norfolk Island pine at Old Noarlunga; B) lemon-scented gum at Lockleys Oval; C) gum tree at Aldinga; D) sugar gums at Palmer; E) Aleppo pine at Old Noarlunga; F) gum tree at Wilmington; G) Norfolk Island pine at Aldinga Hotel; H) gum trees at the Hawker Golf Course

Trends in little corella presence

- Respondents were divided when asked about **how long little corellas had been an issue** in their area. About a third of respondents (33%, n = 367) indicated that little corellas were not a problem. Of the respondents who indicated a problem existed (67%, n = 753), 26% indicated that little corellas had been a problem for 1–5 years, 20% selected 6–10 years, 8% selected 11–15 years and 13% selected 16–20+ years
- About a third of the respondents (34%, n = 395) reported that the little corella population in their area had *stayed the same* in the **last five years**. The same percentage of respondents reported that they would like the population to *stay the same* for the **next five years**
- Almost half (46%, n = 537) the respondents reported that the little corella population had *increased somewhat* or *increased greatly* in their area over the last five years. Similarly, 44% (n = 516) of respondents wanted the population to *decrease greatly* or *decrease somewhat* in the next five years. This pattern is repeated, but inverted, when a similar number of respondents that had observed little corellas to decrease in the last five years wanted them to increase in the next five years (see Figure 6)

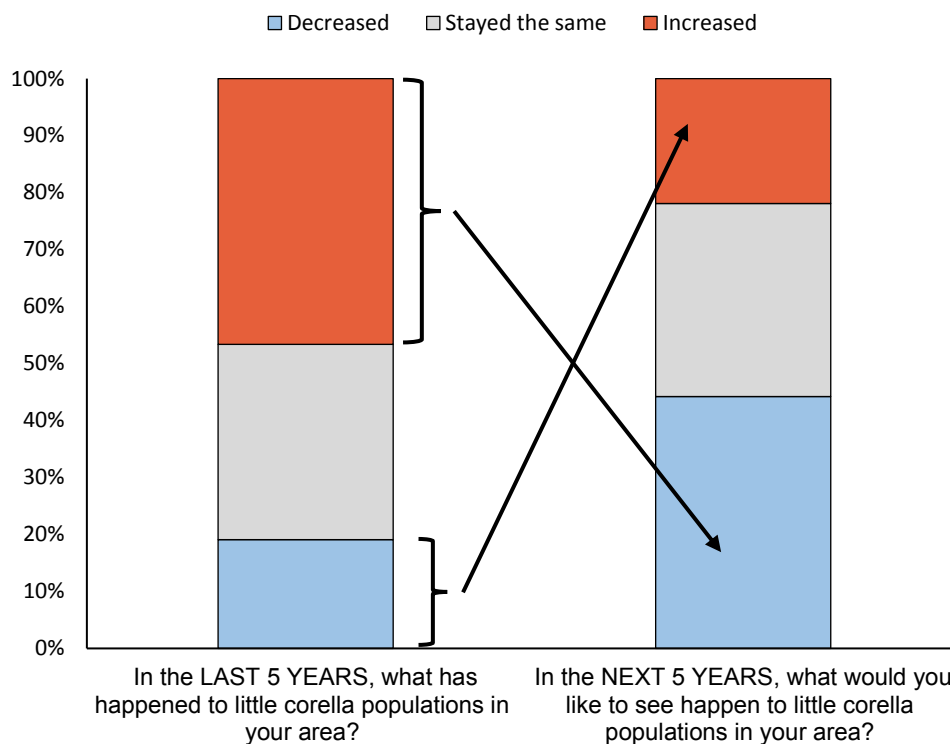


Figure 6 Survey responses to two statements: 1) In the LAST five years, what has happened to little corella populations in your area? 2) In the NEXT five years, what would you like to see happen to little corella populations in your area?

Sample sizes were n = 1,152 for statement one and n = 1,167 for statement two. Arrows indicate the opposite trends in recent experience and future expectation

- We tested this trend statistically and found a **strong negative association** between what respondents experienced with little corella populations in the last five years and what they would like to see have in the next five yearsⁱ
- As expected, **strong seasonal trends** in little corella presence were also captured by the survey; these data are presented in Figure 7
- Most respondents reported very few interactions during the cooler months, whereas most people reported **noticing little corellas on a daily basis** during summer (56%, n = 480)^j.

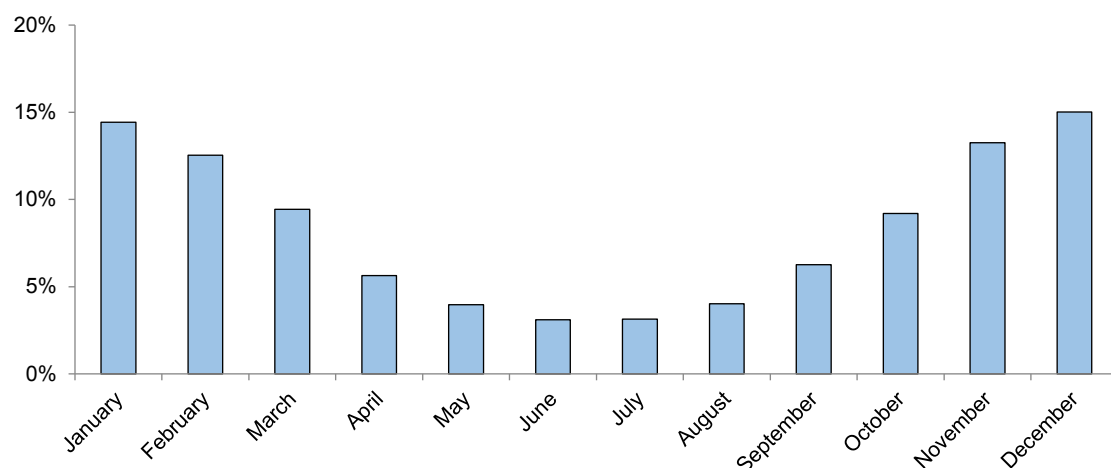


Figure 7 Frequency of little corella site visits among month

Sample size was 973 respondents and 4,057 monthly observations

ⁱ Pearson Chi-Square test of association between two categorical variables (278.121, df = 1, P < 0.001); Phi test for affect size (-0.695, P < 0.001)

^j Other responses to frequency of sighting during summer were: *every few days*: 20% (n = 175); *weekly*: 7% (n = 62); *every few weeks*: 8% (n = 69); *less often*: 8% (n = 68)

Management of little corellas in South Australia

- Most respondents (66%, n = 831) agreed that there is **a lot of conflict** about the management of little corellas^k. Few respondents disagreed with this sentiment (9%, n = 117)^l
- Little corella management was perceived as the **responsibility of all stakeholders**, with 33% (n = 304) of respondents citing *everyone involved* should take responsibility. Individuals and local communities alone had little perceived responsibility. **Local government was an important agency** (24%, n = 224). *No-one*, indicating no management is necessary, was also cited frequently; see Figure 8

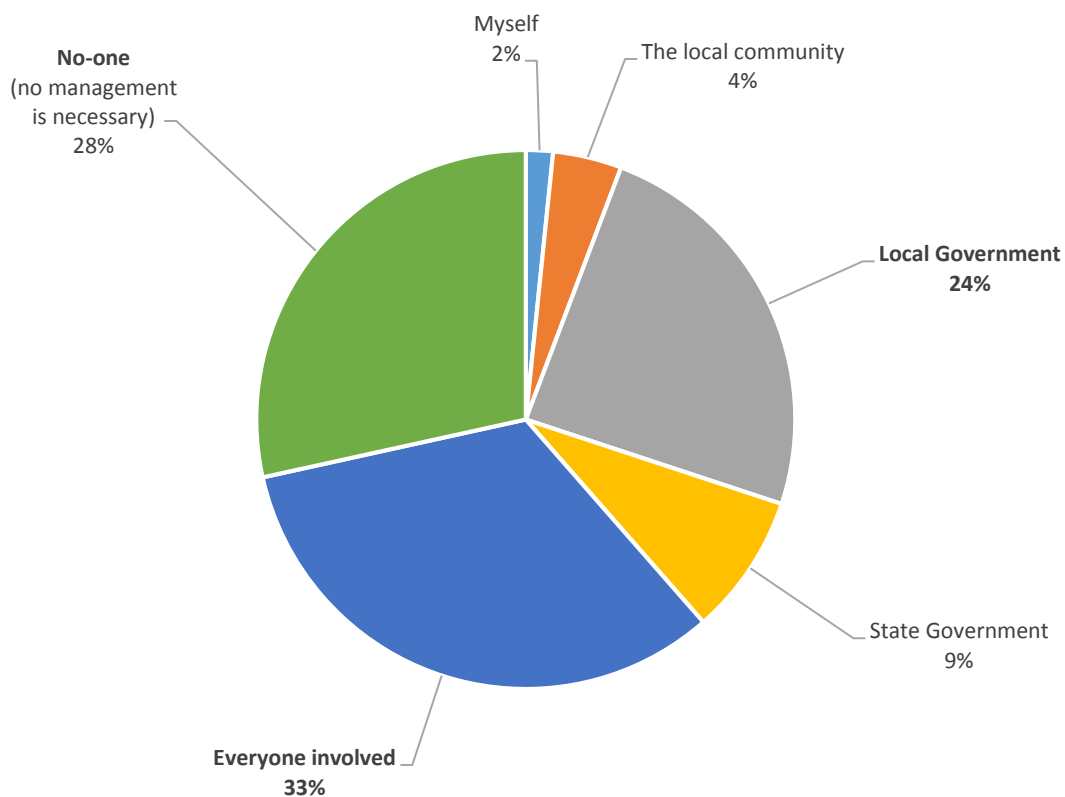


Figure 8 Agencies considered responsible for little corella management by survey respondents

Sample size was 921 respondents

^k They selected “slightly agree”, “agree”, or “strongly agree”

^l They selected “slightly disagree”, “disagree”, or “strongly disagree”,

- We gauged survey participants’ level of **support or opposition** and perceived **effectiveness or ineffectiveness** to a series of little corella management actions, presented in Table 5

Table 5 *Little corella control measures for which level of support or opposition and perceived effectiveness or ineffectiveness was gauged in the survey*

CONTROL ACTION	CONTROL DESCRIPTION
Falconry	Using birds of prey to scare little corellas to other sites
Spotlighting	Using spotlights to scare little corellas to other sites
Lasers	Using lasers to scare little corellas to other sites
Noise-generating devices	Using noise to scare little corellas to other sites
Trapping and gassing, lethal control	Destroying little corellas to reduce flock size
Shooting to deter flocks, lethal control	Shooting a small number of little corellas to scare flocks to other sites
Habitat modification, increase shrubs	Making sites less attractive to little corellas by increasing shrubs and reducing lawn
Habitat modification, tree removal	Removing trees that little corellas roost in
Do nothing	No management actions
Education program	Developing education materials to increase acceptance of little corellas
Encourage alternate sites	Identify suitable sites and encourage flocks to those areas
Supplementary feeding	Luring little corellas to alternate sites by providing food
Crop netting	Netting crops to reduce impact of little corellas
Asset management, built	Modifying built structures (like antennas) to prevent them from being damaged by little corellas
Asset management, water	Modifying water troughs to prevent access by little corellas

- In terms of support for different management actions, 68% of respondents supported^m little corellas being **encouraged to alternate sites** (36% of respondents were *highly supportive* of this particular action). Other actions with more support than opposition were: modifying built structures (60%); education (58%) and supplementary feeding (53%); see Figure 9
- Respondents were particularly **opposed to habitat modification involving tree removal**, over 80% of participants were opposed to this action (*highly opposed*: 60%; *opposed*: 14%; *slightly opposed*: 7%). Many participants were equally **opposed to lethal actions**, with 63% of respondents opposed to trapping and gassing and 62% opposed to shooting to deter flocks
- Another poorly-supported action was use of noise-generating devices (51% of respondents were opposedⁿ), and 49% of respondents were **opposed to do nothing**, indicating their support of some action
- Fewer people engaged with the associated survey question about **perceived effectiveness** of management actions, see Figure 10. On average, 165 fewer responses^o were recorded for this question than for the previous one about support for control actions. Considerable ambiguity was also recorded within the responses (i.e. a high percentage of *neutral* responses), indicating that the relative **effectiveness of various control actions is poorly known** or understood within the community. Increasing education around management options will likely increase knowledge and acceptance of management activities, and NRM Boards or other groups may be effective in this role
- The space between actions that are acceptable to the community and the demonstrated effectiveness of various actions should **provide a focus area for managers**, including in any education actions. For example, falconry was lo 49% of survey respondents, but 41% of respondents rated its effectiveness as *neutral*. Using falconry to create a “landscape of fear” for little corellas is very expensive, the effects are temporary, and the action is generally considered to be unfeasible (e.g. Temby 1999). Scare birds and retail kites (Photo 4) are also generally ineffective because little corellas quickly become habituated to them



Photo 4 In Aldinga a roof-mounted scare bird sits adjacent to a tree with little corella damage, illustrating their *ineffectiveness for long-term management*

^m They selected “slightly supportive”, “supportive”, or “highly supportive”

ⁿ They selected “slightly opposed”, “opposed”, or “highly opposed”

^o ± 1.0 , $n = 15$ (matched categories), the range was 157-169 fewer responses to the question about perceived effectiveness than to the associated question about support for little corella control actions

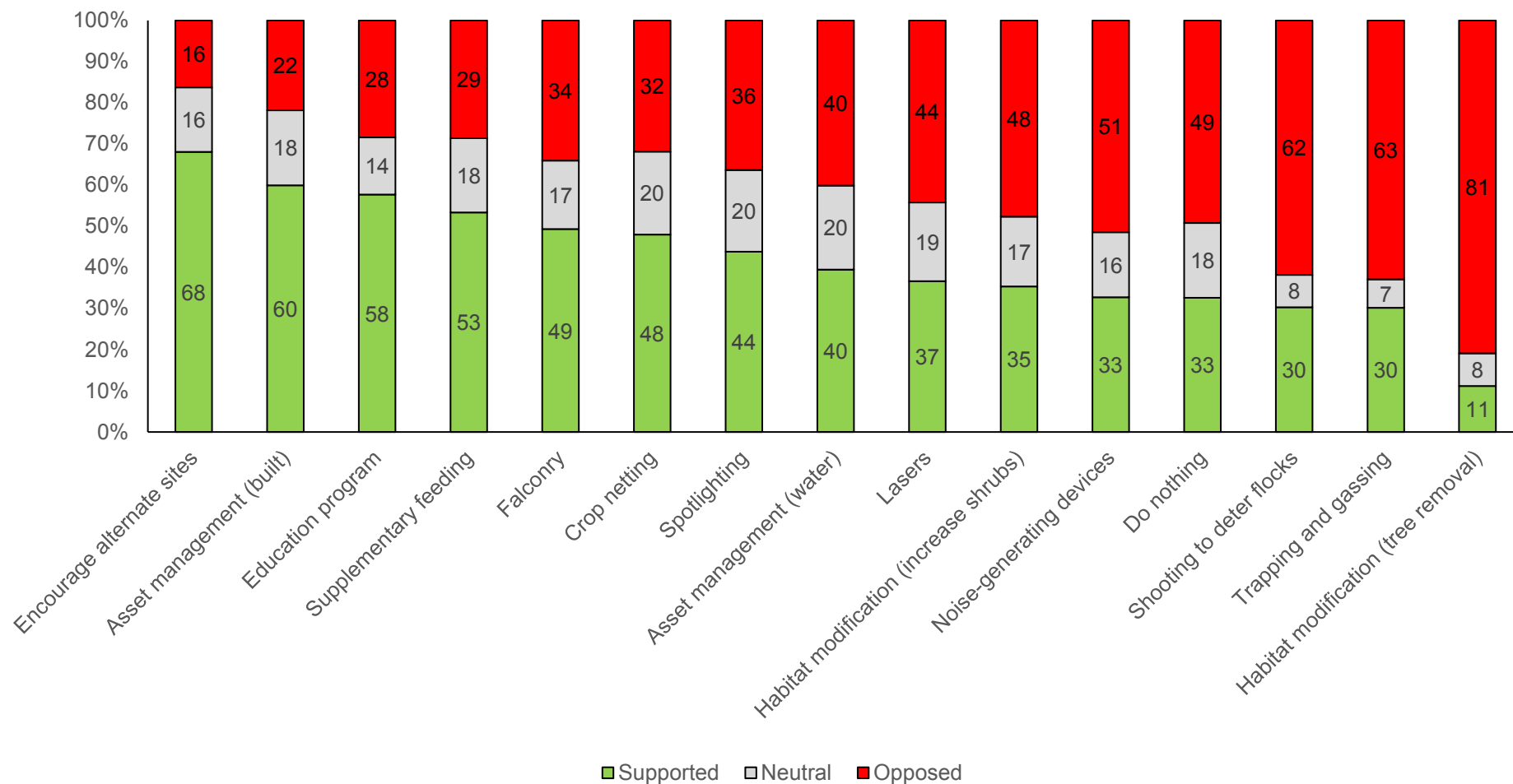


Figure 9 Survey participants' support and opposition of little corella management actions

The sample sizes were Encourage alternate sites: n = 873; Asset management (modify built structures): n = 871; Education program: n = 870; Supplementary feeding: n = 870; Falconry: n = 884; Crop netting: n = 873; Spotlighting: n = 877; Asset management (modify water access): n = 872; Lasers: n = 871; Habitat modification (increase shrubs): n = 868; Noise-generating devices: n = 876; Do nothing: n = 861; Shooting to deter flocks: n = 877; Trapping and gassing: n = 881; Habitat modification (tree removal): n = 870

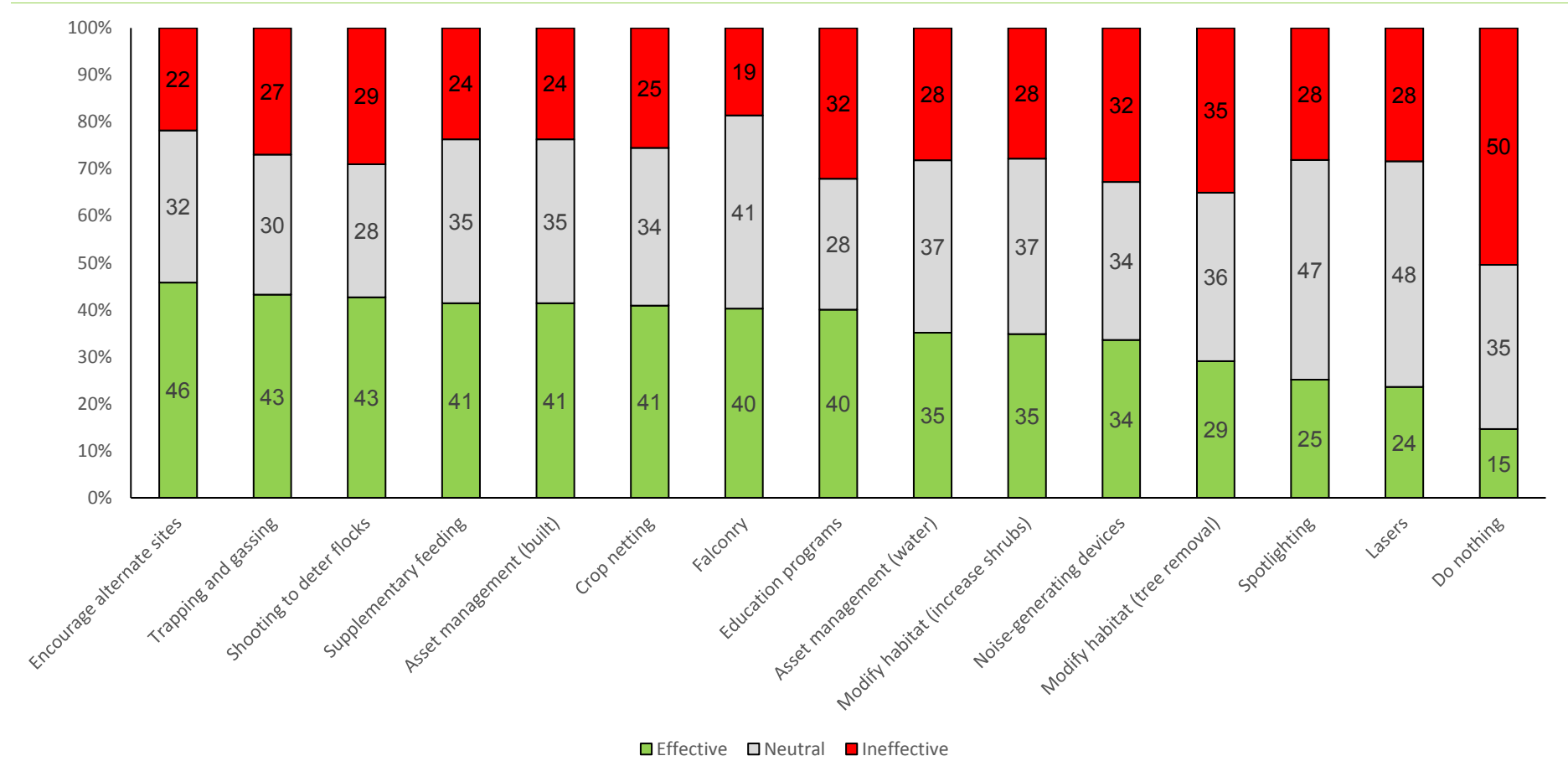


Figure 10 *Survey participants’ perceived effectiveness and ineffectiveness of little corella management actions*

The sample sizes were Encourage alternate sites: n = 707; Trapping and gassing: n = 712; Shooting to deter flocks: n = 710; Supplementary feeding: n = 705; Asset management (modify built structures): n = 705; Crop netting: n = 706; Falconry: n = 715; Education program: n = 704; Asset management (modify water access): n = 703; Habitat modification (increase shrubs): n = 709; Noise-generating devices: n = 717; Habitat modification (tree removal): n = 705; Spotlighting: n = 712; Lasers: n = 712; Do nothing: n = 704

Little corella sites across South Australia

- As part of the public survey, South Australians identified over **2,340 little corella sites** across South Australia. See sites in the map below, Figure 11
- **Recreational parks** represented 28% of primary sites identified by survey respondents, and **schools** (10%) and **sporting ovals** (7%) were also commonly identified sites
- Large clusters of sites were recorded within the Adelaide metropolitan area, Mount Lofty and Fleurieu Peninsula region (including Kangaroo Island), along the River Murray from Wellington to Renmark, in the Upper and Lower South-East (Keith to Mount Gambier) and Mid and Far North sites ranged from Gawler to Coober Pedy
- Two survey respondents reported **little corellas sites on Eyre Peninsula**, where they have been reported previously (in 2001^P). These respondents correctly identified different bird species in the survey, and the reported sites were typical of little corella habitat (recreational reserves and a school in Tumby Bay and a caravan park in Port Lincoln). However, local experts have not observed little corellas on the Eyre Peninsula, and know of no recent record of little corellas in the region (G. Kerr, pers. comm. 2016)
- Generally, survey participants demonstrated good bird identification skills for sulphur-crested cockatoos and galahs (84% and 89% correctly identified, respectively). Little corellas were identified correctly by 78% of respondents and long-billed corellas were less successfully identified, with 62% correct (15% were unsure and 22% incorrect)
- Fourteen people mentioned long-billed corellas in their survey responses. Places where small numbers of long-billed corellas were recorded (during all phases of this project) co-occurring within little corella flocks included: metropolitan Adelaide (parklands, Torrens River, Urrbrae), Mount Barker, Mylor, Old Noarlunga, Noarlunga, and Willunga. Large flocks of long-billed corellas mixed with little corellas were reported in the South East. One report was that **90% of corellas in Naracoorte were long-billed corellas**
- Long-billed corellas are native to the Lower South East in South Australia, but little corellas seem newly arrived to some areas there, one project participant mentioned that, *“We already had long-bills, but we didn’t get little corellas in Millicent until we got the new grain bunker”*



Photo 5 Grain stores and bunkers provide food resources for little corellas, many major facilities like this one in Tailem Bend will have ongoing little corella control programs; image from Google Earth

^P [Species list for NRM Region Eyre Peninsula, South Australia \(2011\). Australian Government, Department of Sustainability, Water, Population and Communities](#)

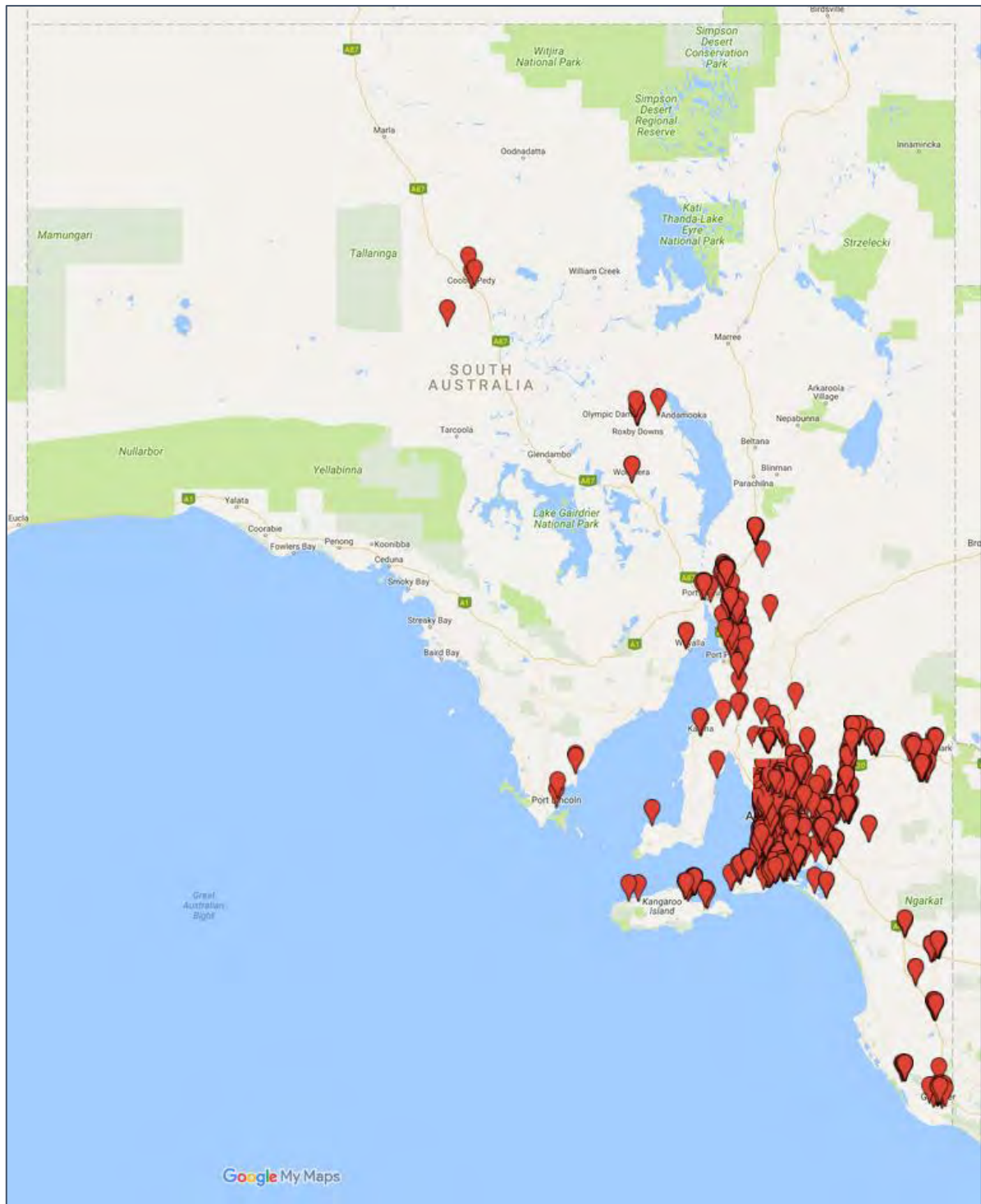


Figure 11 A map of little corella sites in South Australia, nominated through our community survey of 1,270 people

Sites were placed as close as possible to the locations described by survey respondents. For privacy reasons, private residences were mapped to the street described rather than on an actual house. An interactive version of this map is available at: <http://www.discoverycircle.org.au/projects/little-corellas/>

Little corella acceptance capacity

We used participant responses to a series of statements about a flock of little corellas around their house to **generate a measure of each individual's acceptance capacity**. On a 7-point Likert-type scale from *strongly disagree* to *strongly agree*, participants selected their response to 12 statements:

1. *I would enjoy seeing the little corellas*
2. *I would enjoy hearing the little corellas*
3. *I would think that people should learn to live with little corellas*
4. *The little corellas would make me feel close to nature*
5. *I would be concerned about the noise of the little corellas*
6. *I would be concerned about damage to plants by the little corellas*
7. *I would be concerned about damage to property by the little corellas*
8. *I would be concerned about the cost of fixing damage by little corellas*
9. *I would be concerned about diseases spread by little corellas*
10. *I would want the little corellas to be removed*
11. *I would try to scare the little corellas away*
12. *The only good little corella is a dead one*

We conducted a factor analysis to help us understand variations in the way people had responded to these statements. This analysis helped us to identify **two underlying factors** that can be used to **understand how people feel about little corellas**:

- **FACTOR 1: CONCERN ABOUT IMPACT OF LITTLE CORELLAS**

- This factor relates to concerns with impacts and management associated with little corellas, and 47% of the variance in our data was explained by this factor
- Survey respondents with **HIGH SCORES** on this factor typically agreed with these statements:

I would be concerned about damage to property by the little corellas

I would be concerned about the cost of fixing damage by little corellas

- Survey respondents with **LOW SCORES** on this factor typically agreed with this statement:

I would think that people should learn to live with little corellas

- **FACTOR 2: INTRINSIC-VALUE OF LITTLE CORELLAS**

- This factor relates to loving little corellas and enjoying them as part of nature, and 23% of variance in our data was explained by this factor
- Survey respondents with **HIGH SCORES** on this factor typically agreed with this statement:

The little corellas would make me feel close to nature

- Survey respondents with **LOW SCORES** on this factor typically agreed with this statement:

I would want the little corellas to be removed

Rather than disliking little corellas, decreased acceptance of little corellas typically stemmed from **frustrations or concerns relating to their impacts and management** (Factor 1). People who scored high on this factor were concerned about damage to property and plants, the cost of damage and the noise, they also wanted little corellas removed or scared away. In contrast many people reported in the survey that they **loved little corellas**, and they held intrinsic values about little corellas (Factor 2). These **respondents enjoyed seeing and hearing little corellas**, and little corellas helped them to feel close to nature. We found that:

- As **experience of impacts increased, general opinion of little corellas decreased**
- Impacts increased with an increase in **little corella numbers** in the last five years
- People with high concern for impacts want the little corella population to decrease in the next five years
- Males typically scored higher concern for impact scores
- No moderate or strong correlations and no significant differences occurred between the intrinsic-value factor and most other measures, suggesting that this factor is relatively stable; **if people hold intrinsic value for little corellas, it may be difficult to change this value** (see Appendix 2)

Opinions about management actions by factor groups

We compared the median **level of support** for different little corella management actions among three groups:

1. *All survey respondents together*
2. *Respondents concerned about impacts of little corellas* ([Factor 1](#))
3. *Respondents that intrinsically value little corellas* ([Factor 2](#))

This analysis enabled us to determine which actions are likely to be **widely accepted, tolerated or contentious within diverse local communities** (i.e. people within communities experience little corellas differently). We generated an overall community **support index** for each control measure. The support index is a score out of 100 (presented in Table 6 as a percentage) based on the combined level of support from the three groups. The support index was calculated by adding the median scores of each group and converting the result into a percentage. Control measures with high percentages are likely to be well supported within the community whereas those with low percentages are likely to be opposed. Key findings were:

- **Benign actions received broad support** (support index greater than 60)
- **Encouraging alternate sites** (i.e. creating sacrificial areas away from problem sites) was supported by all groups, and “**do something**” was also strongly supported (i.e. little corella management is wanted)
- Both **effective and ineffective benign** activities were supported
- Neutral support was universal for increasing shrubs and managing water assets (effective measures)
- **Lethal control measures were contentious**; overall, survey respondents were highly opposed and, as expected, people concerned about little corella impacts were more supportive of these measures than were people who value the birds intrinsically
- **Tree removal is unacceptable to the community**

Table 6 Support for different management actions for three groups of people: all survey respondents, survey respondents concerned about the impacts of little corellas (Factor 1), and survey respondents who intrinsically value little corellas (Factor 2)

Median response on a scale from highly opposed to highly supportive is given for each group (i.e. from highly supportive to highly opposed for each management action) and the sample size is provided in parentheses below the median response

Actions are ranked from most supported (towards the top of the table) to least supported (the lower rows in the table) based on a “**support index**”; the support index was calculated by adding the median scores of each group and converting the result into a percentage.

ACTION	ALL SURVEY RESPONDENTS	FACTOR 1 CONCERN ABOUT IMPACT	FACTOR 2 INTRINSIC VALUE	INTERPRETATION	SUPPORT INDEX
Encourage alternate sites	Supportive (863)	Slightly supportive (401)	Supportive (390)	All respondents, respondents concerned about the impacts of little corellas (Factor 1), and respondents with intrinsic value for little corellas (Factor 2) typically supported encouraging alternate sites	81%
Do something	Neutral (852)	Highly supportive (399)	Slightly supportive (383)	Overall the survey respondents were neutral , while both respondents concerned about the impacts of little corellas (Factor 1) and respondents with intrinsic value for little corellas (Factor 2) typically supported doing something .	76%
Falconry	Neutral (869)	Supportive (406)	Slightly supportive (391)	While overall the survey respondents were neutral, both respondents concerned about the impacts of little corellas (Factor 1) and respondents with intrinsic value for little corellas (Factor 2) typically supported falconry	71%
Supplementary feeding	Slightly supportive (861)	Slightly supportive (398)	Slightly supportive (389)	All respondents, respondents concerned about the impacts of little corellas (Factor 1), and respondents with intrinsic value for little corellas (Factor 2) typically supported supplementary feeding	71%
Asset management, built	Slightly supportive (862)	Neutral (401)	Slightly supportive (389)	Overall the survey respondents and respondents with intrinsic value for little corellas (Factor 2) were typically supportive of managing built assets , while respondents concerned about the impacts of little corellas (Factor 1) were typically neutral	67%
Spotlighting	Neutral (866)	Slightly supportive (404)	Neutral - Slightly opposed (390)	Overall the survey respondents were typically neutral , while respondents concerned about the impacts of little corellas (Factor 1) were typically supportive of spotlighting, and respondents with intrinsic value for little corellas (Factor 2) were typically slightly opposed	64%
Lasers	Neutral (860)	Slightly supportive (403)	Neutral (384)	Overall the survey respondents and respondents with intrinsic value for little corellas (Factor 2) were typically neutral , while respondents concerned about the impacts of little corellas (Factor 1) were typically supportive of using lasers	62%

ACTION	ALL SURVEY RESPONDENTS	FACTOR 1 CONCERN ABOUT IMPACT	FACTOR 2 INTRINSIC VALUE	INTERPRETATION	SUPPORT INDEX
Education program	Slightly supportive (861)	Slightly opposed (399)	Slightly supportive (389)	Overall the survey respondents and respondents with intrinsic value for little corellas (Factor 2) were typically supportive , while respondents concerned about the impacts of little corellas (Factor 1) were opposed to education	62%
Crop netting	Neutral (864)	Neutral (401)	Slightly supportive (391)	Overall the survey respondents and respondents concerned about the impacts of little corellas (Factor 1) were typically neutral towards crop netting , while respondents with intrinsic value for little corellas (Factor 2) were typically supportive	62%
Habitat modification, increase shrubs	Neutral (858)	Neutral (400)	Neutral (386)	All respondents, respondents concerned about the impacts of little corellas (Factor 1), and respondents with intrinsic value for little corellas (Factor 2) were typically neutral towards increasing shrubs	57%
Asset management, water	Neutral (862)	Neutral (401)	Neutral (390)	All respondents, respondents concerned about the impacts of little corellas (Factor 1), and respondents with intrinsic value for little corellas (Factor 2) were typically neutral towards managing water assets	57%
Noise-generating devices	Slightly opposed (863)	Neutral (401)	Neutral (389)	Overall the survey respondents were typically slightly opposed , while both respondents concerned about the impacts of little corellas (Factor 1) and respondents with intrinsic value for little corellas (Factor 2) were typically neutral towards using noise-generating devices	52%
Trapping and gassing, lethal control	Highly opposed (870)	Slightly supportive (405)	Opposed (392)	Overall the survey respondents and respondents with intrinsic value for little corellas (Factor 2) were typically opposed , while respondents concerned about the impacts of little corellas (Factor 1) were typically supportive of using lethal population control	38%
Shooting to deter flocks, lethal control	Highly opposed (866)	Slightly supportive (403)	Opposed (390)	Overall the survey respondents and respondents with intrinsic value for little corellas (Factor 2) were typically opposed , while respondents concerned about the impacts of little corellas (Factor 1) were typically supportive of using lethal deterrents	38%
Habitat modification, tree removal	Highly opposed (860)	Opposed (400)	Highly opposed (386)	All respondents, respondents concerned about the impacts of little corellas (Factor 1), and respondents with intrinsic value for little corellas (Factor 2) were typically opposed to tree removal	19%

Community workshops

In the workshops the modelling software enabled participants to **articulate diverse views** and observations (social, ecological, economic) pertaining to little corellas and helped us to facilitate **complex discussions around the issues**. Comments supporting the value or approach of the workshops, the complexity of the issue, changing opinions and other observations are detailed in Appendix 3.

The model created in each of the nine workshops also reflected the priorities and context or experiences of the participants, so although overlap in some themes occurred among workshops, **new themes also emerged**. For example, in a workshop in Onkaparinga we discussed the acceptance of little corellas and factors leading to sites becoming problematic (a social focus), whereas in one workshop in The Flinders Ranges Council area, considerable attention was given to the effectiveness of different controls (a management focus). An example of a model built during one workshop is presented in Figure 12. In addition to broad community participation, members of at least seven local councils, including two local mayors, were involved in the workshops. All models and instructions on the modelling are available online at: <http://www.discoverycircle.org.au/projects/little-corellas/community-models/>

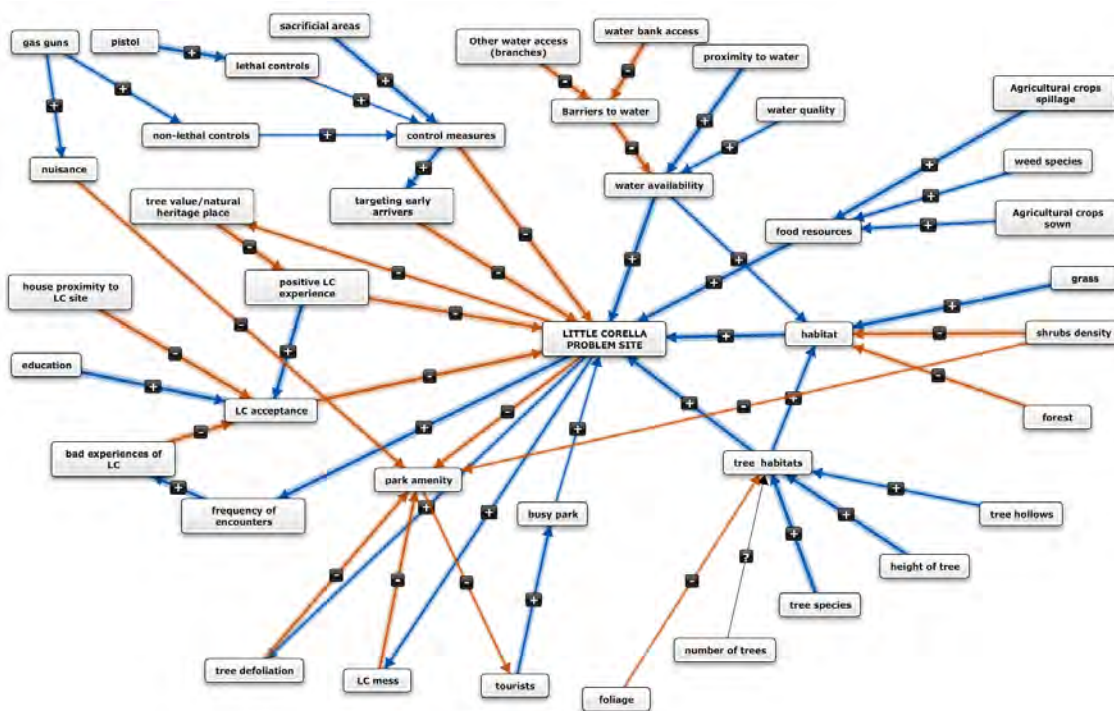


Figure 12 A model created during a little corella community workshop using the Mental Modeler software

Arrows indicate the connection, direction, the type and strength of the relationship between components. Each connection occurs between two components only, the direction is indicated by the arrow (e.g. “water availability” leads to a “little corella problem site”), the type of relationship can be positive or negative and the strength is indicated by line. Detailed instructions on using the software are [here](#)

Key themes and insights from the workshops

The nature of problem sites

Problem sites comprised isolated locations, a series of neighbouring sites or diffuse problem zones (e.g. corridors of sites along the River Murray). During the warmer months the experience of problems associated with little corellas can be ongoing (i.e. for people living adjacent to a problem site) and/or associated with a particular event – such as a ceremony in a memorial garden or the Mannum Hot Rod Show; **communities fear the loss or disturbance of their events** by little corella presence. In addition to seasonal inundations and large flock sizes, conspicuousness of little corellas is enhanced by their use of high profile public spaces (such as schools or recreation parks), which increases public encounters (and conflict) and awareness of little corellas generally.

Terminology is a barrier

We found **considerable confusion and misuse of terms** associated with little corella management. We found terms such as “cull” and “extermination” (implying large-scale destruction and extinction of little corellas) were interchanged for targeted lethal deterrents (destroying a few birds to move a flock). “Scout birds” was also used widely; we do not support the use of this term because it implies that a few birds investigate sites and report back to the flock to inform their movements. We prefer the terms “early bird” or “call bird”. Whatever the context (discussion, report, correspondence) it is important to define clearly all terms.

Communication is a barrier

Many people didn’t understand wildlife management actions, the complexity of management issues, the justification for various approaches, or the problems experienced by councils. The costs of management options were also poorly understood. One cost relayed to us was for \$24,000 to destroy 1,500 birds using trapping and gassing. The little success and limited effect of such an exercise coupled with the high cost would be useful information for a public wanting action. The exorbitant costs of using falconry should also be released in order to increase public understanding of this option and the costs (many people support the idea of this action, but have no understanding of the cost or temporary nature of any effect produced).

We also noted that understanding of lethal deterrents was low. Often people were opposed to lethal deterrents and considered them to be similar to lethal population control measures (like trapping and gassing birds). We found that **people changed their minds about the use of lethal deterrents** during our workshops. Comments from workshop participants suggested that they changed their minds for two main reasons. First, workshop participants better understood the complexities of little corella management. Second, workshop participants better understood the use of lethal deterrents, particularly how lethal deterrents can be used in conjunction with non-lethal measures (e.g. spotlighting or noise-generation) to increase the effectiveness of the non-lethal measures. For example, if a few birds are shot during an initial spotlighting effort to disrupt a flock of little corellas, subsequent spotlighting efforts with no shooting will likely be more effective at disrupting the flock (as birds associate the spotlighting with the shooting). Further discussion also brought to light that the careful use of lethal deterrents may help reduce the overall numbers of birds being destroyed (i.e. by avoiding lethal control measures). Thus, the use of lethal deterrents is likely to receive more support from the community than our survey results suggest, but only where lethal deterrents are used to increase the effectiveness of non-lethal measures, where the **strategic approach is understood by the community**, and where lethal deterrents are clearly differentiated from lethal controls.

Local councils want support and co-ordinated action

Many councils feel that they need to be acting on little corellas, and know that the public want action. They want their activities to be meaningful and effective, but they're not always sure about what to do, what works, and what strategic approaches to take. Many councils have worked in isolation to eventually learn the same lessons; they may react as a problem arises and enact ad-hoc trials of different approaches to manage little corellas. Some councils were curious about what other local councils were doing. They have **no organised way of sharing resources or knowledge, or coordinating responses** among agencies, and many supported the notion of a state-wide strategy. Many councils invest considerable resources into little corella management and have detailed knowledge of their management (e.g. Figure 12), but little reporting, data collection or monitoring occurs. Managing time (field staff) and public expectations are key challenges for some councils. Councils also want residents to know how complex wildlife management is, and for the public to take ownership of the issue.

Little corella habitat suitability models

For an abundant species, surprisingly little is understood about the mix of landscape characteristics that influence the distribution of little corellas. The aim of this habitat modelling was to identify these landscape features and drivers of little corella distribution, and to understand why little corellas favour certain areas in South Australia. This information should help inform future management strategies.

- We used observations and insights of citizen-scientists collated from the **Little Corellas** project to inform our analyses and merged these with observations of little corellas from *BirdLife Australia Second Atlas*. To our knowledge this is the **first time that habitat suitability models** have been generated for the little corella
- We created two habitat suitability models for little corellas: a state-wide **South Australian model** and a **Mounty Lofty Ranges model**. The second model was necessary because the landscape features of this region are generally uncharacteristic of the rest of the state

Results suggest that little corella habitat was generally characterised by the presence of one or more of the following habitat features: 1) *river red gums*; 2) *major creek lines*; 3) *irrigated green space*; and 4) *pine trees*. However, **depending on where you are in South Australia**, the relative importance of these landscape features differed. Interestingly, although **grain silos may exacerbate** existing little corella issues at a local scale, they were found not to be a strong determinant of little corella distribution in our models.

We believe this study is first to consider the **influence of native vegetation cover and land use type** on little corella distribution. The results of these analyses indicate that:

1. Little corellas **avoid bushland areas** and favour highly fragmented environments
2. **Habitats provided by recreational** (i.e. irrigated green spaces), **agricultural**, and **residential land uses are preferred**

The analyses presented here show us the landscape characteristics favoured by little corellas and provide potentially useful **habitat manipulation strategies**. The relative suitability of the Mount Lofty Ranges, and other temperate agricultural regions, compared to the rest of the state **poses management challenges**; the availability of *irrigated green spaces* is clearly an attractant in these regions^q. Below we summarise the modelling methods and results. An in-depth description and discussion of the models, including modelling methodology and model limitations, is provided in Appendix 4.

South Australian model

- Little corella input data included 3,069 presence locations (1972–present); Photo panel 4A
- The habitat suitability model is shown in Figure 13; **model performance was good-excellent**
- State-wide, the most important habitat features for little corellas were *river red gums*^r, *irrigated green spaces* and *major creek lines*. These three variables combined explained 90% of the little corella distribution
- Model results suggest that as distance (m) from nearest *river red gum*, *irrigated green space* or *major river* increases, the **probability of little corella presence declines** (Appendix 4)
- *Pines* were less important. Probably because they are planted less frequently in regional South Australia, particularly in the state's pastoral zones
- Unsurprisingly, as human population density increased so did the occurrence probability of little corellas. This trend is likely to reflect the increased availability of food and water resources within human-dominated environments
- Some uncertainty exists about the current status of little corellas on the Eyre Peninsula. Our habitat models suggest that the habitat conditions are favourable for their establishment there

^q The predicted habitat suitability values at some of the sites shown in the maps may not be as expected because of two factors: 1) some input datasets are known to be incomplete (e.g. *irrigated green spaces*, *red gums*) and, consequently, information on one or more of these habitat variables is not available at all sites; or 2) other site specific factors not captured by the habitat models influence little corellas at these sites. One or both of these factors will influence the final model predictions. These maps should be considered as indicative of potential little corella distribution only

^r *Eucalyptus camaldulensis*

Mount Lofty Ranges model

- Little corella input data included 718 presence locations (1972–present); Photo panel 4B
- The habitat suitability model is shown in Figure 14; model **performance was good-excellent**
- Two-thirds of little corella distribution within the Mount Lofty Ranges was explained by the availability of, and proximity to, **irrigated green space**. The **probability of little corellas increased** as the distance to the **nearest irrigated green space decreased** (Appendix 4). The availability of these spaces within the region is much greater than for the rest of the state
- **Distance to nearest major creek line** was also a factor in determining little corella distribution within the region. Tall eucalypts are used as roost sites. These trees are often concentrated along watercourses in highly fragmented environments
- The influence of **distance to nearest pine** (*Pinus* sp.) tree on little corella distribution was greater within the Mount Lofty ranges than for the rest of the state. Pine trees⁵ are largely confined to agricultural regions of South Australia, especially the Mount Lofty Ranges, so are more readily available. That said, little corellas feed primarily on the seeds of grasses and herbaceous plants. Pine seeds may comprise only a minor dietary component ([Higgins, 1999](#))
- Distance to nearest river red gum was not as an important factor within the region. This species of gum is not confined to watercourses and rivers within the Mount Lofty Ranges, as it is across the rest of the state. Further the diversity of tall, emergent tree species within the region is comparatively higher than for the rest of the state. Therefore the dependence of little corellas on river red gums in this region is likely to be less than in other areas of the state

⁵ *Pinus* species

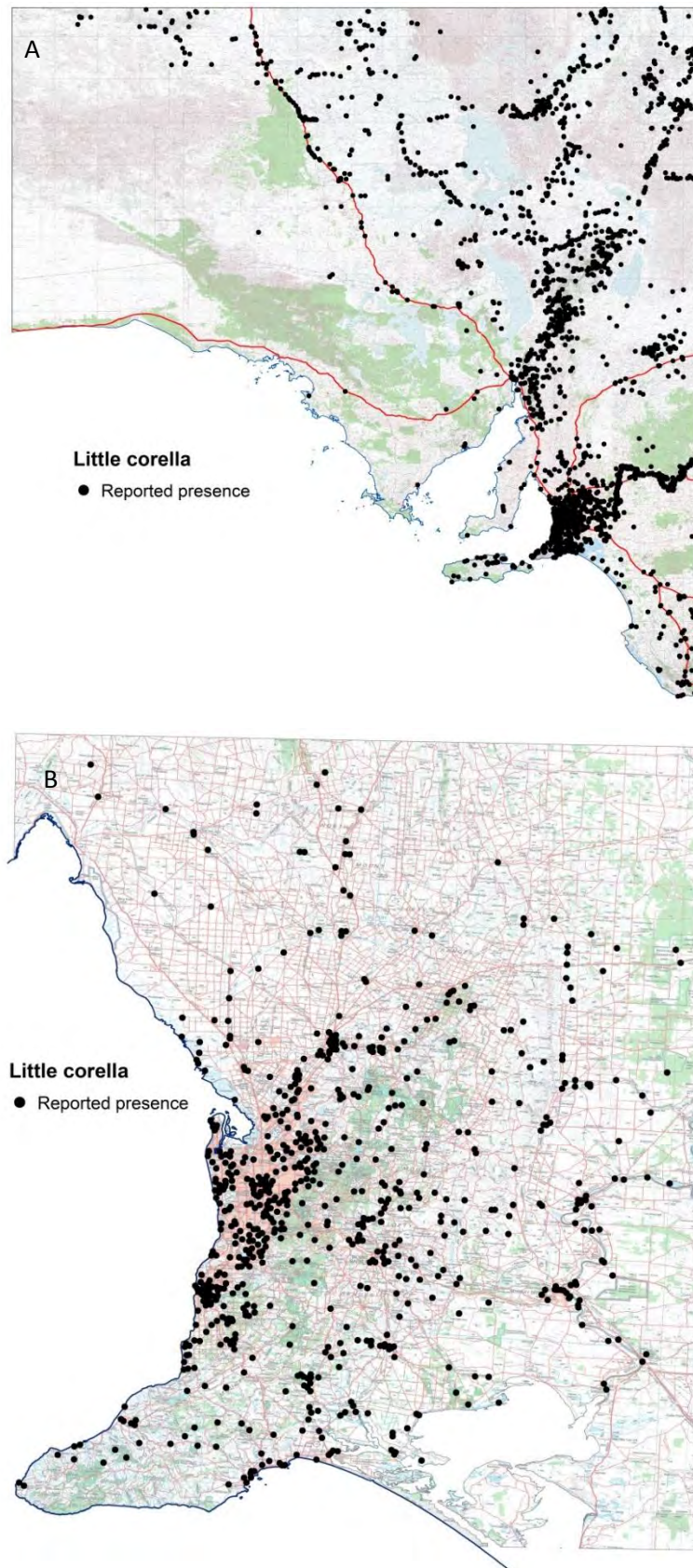
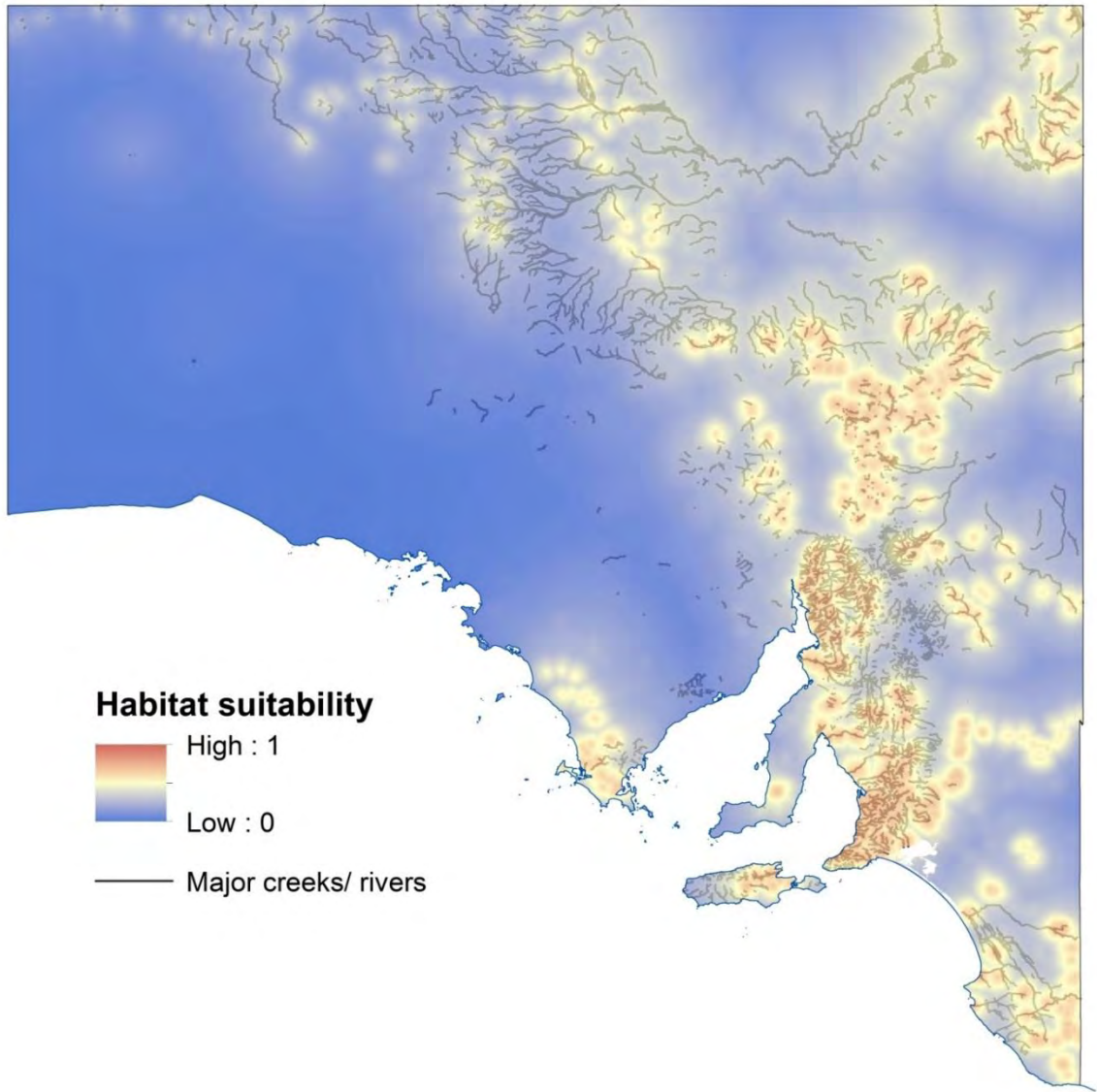


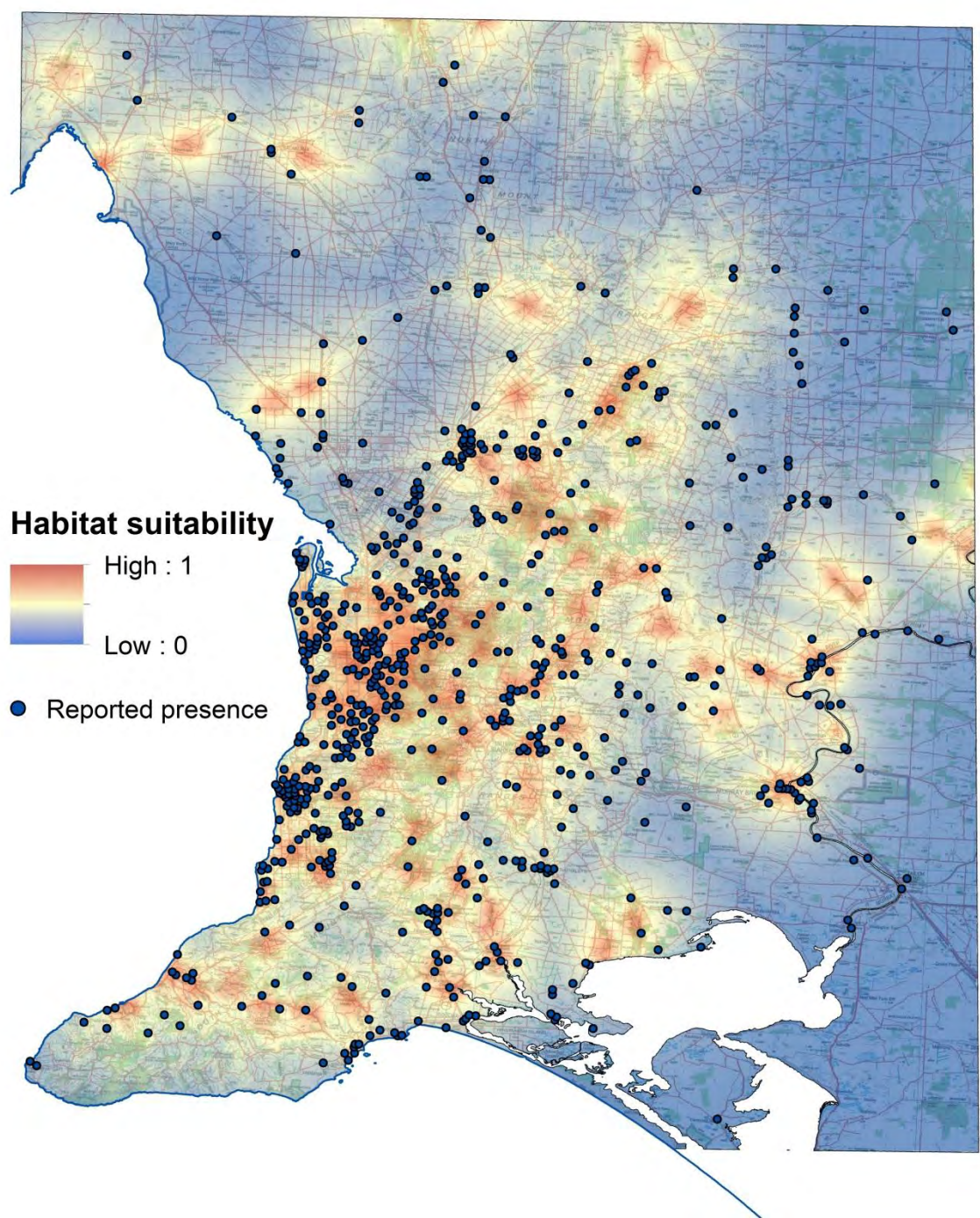
Photo panel 4 *Little corella presence locations across South Australia (A) and for the Mount Lofty Ranges (B) used to create habitat suitability models*



VARIABLE	RELATIVE IMPORTANCE
Distance to nearest <i>river red gum tree</i> ^t	49.1
Distance to nearest <i>irrigated green space</i>	20.1
Distance to nearest <i>major creek</i>	19.2
Distance to nearest <i>pine tree</i>	1.1

Figure 13 Little corella habitat suitability model for South Australia, with the relative importance (%) of each habitat variable to the final model

^t Note that “red gum” and “major creek” are highly correlated. This relationship can conflate the relative contribution rankings



VARIABLE	RELATIVE IMPORTANCE
Distance to nearest <i>irrigated green space</i>	59.8
Distance to nearest <i>major creek</i>	23.9
Distance to nearest <i>river red gum tree</i>	14.7
Distance to nearest <i>pine tree</i>	1.7

Figure 14 Little corella habitat suitability model for the Mount Lofty Ranges, with the relative importance (%) of each habitat variable to the final model

Analysis of land use and vegetation fragmentation

Landscape composition is likely to have a significant influence on the distribution of little corellas in South Australia. In separate analyses, we examined the influence of land use and native vegetation cover on little corellas. With regard to land use, we were interested not only in the pattern of land uses (i.e. the number, shape and size of patches), but also the relative influence of competing land uses on little corella occurrence. We are not aware of any similar analyses for little corellas. Because of computational complexity, land use was only considered for the Mount Lofty Ranges subregion.

Summary

- Irrespective of analysis type (i.e. pattern or proportion), **recreation, agricultural and residential land uses** were consistently **the best predictors** of little corella distribution; see Table 7
- Residential areas and agricultural environments are attractive to little corellas because of their diversity of land uses and habitats, as well as the abundance food and water resources
- Recreation areas (i.e. irrigated green spaces), such as ovals, golf courses, and caravan parks, also provide feeding resources
- Interestingly, both the land use and native vegetation cover analyses suggested that:
 - **Little corellas actively avoid bushland areas** (i.e. “Reserve” in Table 7)
 - Little corellas **favour highly fragmented patches of native vegetation** (e.g. vegetation along roads/rivers, surrounding ovals and in council parks and gardens; see Appendix 4)
- Because little corellas avoid large areas of native vegetation **increasing nativeness of existing parkland areas represents a constructive action to reduce site attractiveness** to little corellas
- In terms of landscape pattern, the probability of little corella presence increased with the number of patches of **recreation, agricultural or residential land uses** in surrounding areas (Table 7)
- More recreational land uses (i.e. irrigated green spaces), such as ovals, golf courses, and parks, equates to more potential feeding resources
- As the number of agricultural and/or residential properties within a 1 km radius increases, in general, so does the availability and diversity of these resources. Smaller agricultural holdings are commonly associated with lifestyles and hobby farms. These environments, in particular, provide opportunistic food and water resources for little corellas
- Interestingly, both the land use and native vegetation cover analyses suggested that little corellas actively avoid bushland areas and favour highly fragmented patches of native vegetation (i.e. vegetation along roads/rivers, surrounding ovals and in council parks and gardens). Therefore, increasing the nativeness of existing parkland areas represents a constructive action to reduce site attractiveness to little corellas

Table 7 Average explanatory power of land use categories surrounding little corella sites

Average values are based on radii of 1, 3, 6, 9 and 12 km surrounding little corella sites

LAND USE TYPE	EXPLANATORY POWER (%)
Residential	9.9
Recreation	8.5
Agriculture, livestock, vacant	5.6
Industry	2.4
Commercial	1.4
Forestry, horticulture	0.3
Reserve	0.0

Favoured
by little
corellas

Little corellas
avoid bushland

Site-specific characters

- Landscape-level habitat characters (distance to creek, river red gum or irrigated green space) and land use (recreational, residential, agricultural and bushland) will predispose different areas to little corella presence across the state, but site-specific characters are also influential. Site characters can **exasperate existing problems**, or **be manipulated to reduce attractiveness of problem sites** to little corellas in conjunction with other activities (i.e. integrated management)
- We looked for commonalities among 144 little corella sites surveyed during the project (individual sites listed in Appendix 5). Key site characters associated with little corella presence were: **extensive exotic lawn areas, access to water, open habitat** (i.e. low tree density, often including pine trees) **and very few shrubs**; see Table 8, Figure 6, Photo panel 5



- ✓ Exotic lawn
- ✓ Water access
- ✓ Open habitat
- ✓ Few shrubs

Table 8 Characteristics of 144 little corella sites surveyed during the project

CHARACTER	DESCRIPTION AND MEASURES
Irrigated lawn	<ul style="list-style-type: none"> • HIGH OCCURRENCE: irrigated lawn occurred at 100% of sites • HIGH COVER: median score for lawn cover was the maximum of 5 (> 75% cover) • LOW NATIVENESS: median score for grass nativeness was 1 (exclusively/almost exclusively exotic species)
Shrubs	<ul style="list-style-type: none"> • LOW COVER: median score for shrub cover: 0 • LOW NATIVENESS: median score for shrub nativeness: 0
Trees	<ul style="list-style-type: none"> • LOW COVER: median score for (short) trees < 10 m was 2 (< 5% cover) • MEDIUM COVER: median score for (tall) trees > 10 m was 3 (5-25% cover) • MEDIUM NATIVENESS: median score for nativeness in short and tall trees was 3 (mixed exotics and natives) • HIGH OCCURRENCE (PINES): pine trees (<i>Pinus</i> spp.) were present at 63% of sites • MEDIUM COVER (PINES): median score for <i>Pinus</i> spp. was 3: 5-25% cover • HIGH DAMAGE: damage to roosting trees such as Norfolk Island pines^u and native tree species was common. they prune these trees to increase visibility and perceptions of safety, and to maintain good beak condition
Water	<ul style="list-style-type: none"> • MEDIUM WATER ACCESS: an obvious^v water resource occurred at 50% of sites; a permanent water resource occurred at 39% of sites • LOW BARRIERS: fewer than 5% of sites with water had a barrier to the resources (vegetative barrier or another barrier such as dam lining)



Photo 6 Little corellas (indicated by red arrow) roosting in tall trees at the Tailem Bend Ferry Terminal

This site has a permanent water resource, irrigated green lawn, tall sparse trees and few shrubs – perfect habitat for little corellas

^u *Araucaria heterophylla*; Norfolk Island pines have a single trunk, and simple symmetrical branching such that damage to these trees has great visual impact (loss of symmetry)

^v Water resources were only assessed at the immediate site, obscure adjacent resources may have been missed

Ovals with irrigated grass and Aleppo pines are typical little corella sites



Photo panel 5 Town ovals with irrigated grass and Aleppo pines were typical sites for little corella activity

A) Two Wells; B) Strathalbyn; C) Cockatoo Valley/Sandy Creek; D) Goolwa; E) Milang; F) Tanunda; G) Wilmington oval

Access to food resources at problem sites



Photo panel 6 Food resources accessed by little corellas

A) seeds and bulbs in grass and lawn areas; B) pine nuts, especially from Aleppo pines; C) flower nectar; D) fruits and seeds of olive groves, and other nuts such as almonds; E) spilt grain in farm paddocks and paddock stubble; F) ideal little corella habitat is created by an Aleppo pine windbreak with adjacent paddocks and permanent water accessed via the stock trough (photo F: D. Wingrove)

Access to water resources at problem sites



Photo panel 7 Water resources readily accessed by little corellas

A) a school dam in Gawler; B) wetlands at an Adelaide golf courses; C) a dam at a golf course in Mount Barker; D) a large water body in the Roseworthy industrial area; E) a lake at Bonython Park in Adelaide; F) a lake at Keith Stephenson Park in Mount Barker. Clear open banks allow ready access to the resource (red arrows), whereas vegetated areas create a partial barrier with minimal effect on site amenity (blue arrows) – these barriers need to be complete (whole) in order to reduce little corella access to site resources

Access to water resources at problem sites, continued



Photo panel 8 Water resources readily accessed by little corellas

A) on the banks of the Onkaparinga River; B) the Murray River; C) stock troughs; D) birds drank from this swimming pool in Strathalbyn; E) small puddles on roadsides were used (little and long-billed corellas together); F) small sticks and snags were used to access water at a Strathalbyn park, but it was not the preferred access point

Recommendations for management actions

Integrated management

- Integrated management is vital for managing little corella problem sites. Integrated management should occur at different levels and time frames; while immediate and site-specific actions are needed now, land managers also need to **consider future trends and emerging problems** (e.g. new problem sites or new problem species)
- With unlimited access to resources and a reduction in predators near towns, the population growth of little corellas will continue to increase. Control actions then become a **permanent fixture of management regimes**, and **new problems** will continue to emerge. An integrated approach seeks to reduce problem sites and, in the long-term, reduce the need for management of little corellas (managing the sites, rather than the birds)
- It is important that no action should occur in isolation, but as part of a **cohesive plan**; if little corellas are excluded from some areas, then alternate suitable refuge areas will assist in keeping little corellas away from problem sites. These [“sacrificial areas”](#) need to be incorporated into the strategy and good communication among the community is also necessary so that control activities are not undermined or confused
- Managers must **coordinate and target actions at identified problem sites** to make those sites less attractive to little corellas. By **targeting interventions at problem sites** managers avoid spreading resources thinly across a large area with little impact.
- Creating **barriers to resources** is vital and an effective means for reducing problems at targeted sites. Habitat modification (increasing shrubs) and modifying water troughs received better public support compared to some other measures (e.g. lethal population controls or noise deterrents)
- **Increasing “nativeness” of sites** affected by little corellas is key to alleviating little corella pressure, enhancing local biodiversity, and diminishing future threats of over-abundant urban-adapting species thriving in these areas (e.g. Australian white ibis, rainbow lorikeets, noisy minors)
- Irrigated green areas are important for recreation, and modifications need to be meaningful and planned, as well as **sensitive to community needs**
- Enacting integrated management will require **coordination and collaboration within councils and among other agencies and organisations**. For example, within a council it is necessary to have planners and park/landscape managers involved in little corella management, as well as executive support. Council staff will need to liaise with other agencies and organisations to assist and support the integrated management. For example, local Natural Resources Management Boards, schools, golf courses, caravan parks, and other members of the community

1. Creating barriers to roosting and feeding resources

Site managers need to differentiate between problem and non-problem sites and tailor any management strategies appropriately:

Non-problem sites:

- Identify suitable **areas where little corellas are not problematic** “non-problem sites”, and designate these areas as “sacrificial” areas where little corellas will not be disturbed

Problem sites:

- **Identify and engage with all stakeholder groups associated with the problem site**, including the local Natural Resources Management Board and local community groups who use the park
- **Identify feeding and roosting resources associated with a problem site**, and **list priority trees** for protection at that site (e.g. special heritage trees, memorial trees and trees at risk from pruning/defoliation by little corellas)
- **Develop an integrated action plan** to disrupt how little corella flocks use the problem site; the plan should include:
 - Revegetation activities to **add screening vegetation**, such as an understory shrub layer, to reduce site attractiveness to little corellas (visual screens decrease the openness of habitat and reduce little corella perceptions of safety – remove a clear view of the surrounding area)
 - Photo panel 9 depicts a park where little corellas are not problematic; it includes spaces for **recreation set amongst islands of vegetation** with well-developed understory, shrub-layers and trees
 - Photo 7 depicts a non-problem site (no management problems exist); little corellas feed on grass areas, but they do not roost there. A native woodland patch that reduces little corella perceptions of safety and limited water access decreases the overall site attractiveness to little corellas for roosting
 - Revegetation activities in an area, including street tree selection, should focus on locally native species. **A council-wide approach to native plant selection** should be adopted
 - **Local native plants are optimal** because native flora and fauna are adapted for local conditions, whereas introduced plant species provide new resources and greater risk of creating new problems (adaptive species learn to exploit new resources and have little competition, leading to increased abundance)
 - Note that if local native plants are not feasible/suitable they can be substituted for **non-native alternatives that mimic the structure and character** (e.g. ornamental hedges, shrubs and/or garden beds) of native vegetation to deter little corellas
 - Increased nativeness includes establishment of a **complex understorey** (grasses, shrubs)
 - Native shrubs reduce the openness of problem sites (vantage decreases) and their attractiveness to little corellas will also decrease
 - Complex understories also enhance biodiversity; the loss of bird biodiversity was of particular concern to the community. Noisy minors are also associated

with open urban parks (sparse trees over irrigated lawn). Once established they dominate and exclude small birds, and they are listed as a [national threatening process](#). Grasses, shrubs and complex tree layers will deter noisy minors and little corellas, and will prevent their attraction to the site initially (i.e. low risk, preventative management)

- Tree cover in the Adelaide metropolitan area is considered to be artificially high because the urban forest has replaced large areas of **low woodlands and shrublands** ([Smith, 2010](#)). Low-statured trees and shrubs help create complex layers for wildlife and should be incorporated into revegetation activities
- Although falconry as a control technique is prohibitively expensive and any effects produced are temporary, **predatory birds** do cause unease within little corella flocks and these raptors may be encouraged to problem sites through the provision of low-cost specialised roosting/[nesting platforms and hunting perches](#)
 - International resources and tools are available for supplementing raptor habitat (e.g. [building nest boxes for falcons](#)), but activities in South Australia will need to target the requirements of local raptor species and should be developed with advice from local bird experts (research, trials and monitoring maybe required)
- **Irrigated grass areas** (including invasive environmental weeds such as kikuyu) should be reduced where possible
 - Schools and councils pay large sums to irrigate turf areas, native lawn alternatives should be used in suitable areas to **replace lawn and decrease water use**
 - Substituting turf for appropriate native perennial ground covers will remove food resources for little corellas, and can alleviate public fears about increased risks of snakes in tall vegetation adjacent to paths
- **Protect important trees at risk** using an electric track system (such as BirdJolt) to stop the use and defoliation of significant trees by little corellas:
 - These systems give a **non-lethal** electric fright to birds that land on it
 - The system can be moved among affected trees and in response to observations and monitoring activities
 - Displaced birds should be monitored to ensure that new roosting areas are suitable (and that the problem is not transferred elsewhere)
 - Temporary netting is also effective for excluding little corellas from trees at risk, including for medium-sized trees (e.g. Morton Bay figs; [Hodgens, 2015](#))
- **For non-tree roosts at problem sites**, such as fences and buildings at the Hewett Primary School and the Strathalbyn Swimming Pool, the electric track system could also be used to deter little corellas from roosting (Photo panel 10)
 - Screening vegetation or other visual barriers (e.g. canvas screens) should also be used to deter birds from these roosts, note that little corellas will exploit areas if small gaps occur in the screens

- **Remove declared weeds, particularly Aleppo pines**, and replace with locally native trees. Aleppo pines were common at little corella problem sites (see Photo panel 11) where they provide rich food and roosting resources
 - The weed potential of *Pinus* species, especially Aleppo pines (*P. halepensis*) in the Mount Lofty Ranges, provides sufficient justification to consider their removal from public and private lands in South Australia. Their role in exacerbating impact of little corellas at problem sites provides even a greater impetus
 - The negative affect of pine removal on yellow-tailed black cockatoos^w needs to be considered carefully and incorporated into a planned replacement
 - Locally native cone-bearing plants should be included when replacing Aleppo pines
 - Contact the [Natural Resources Management Board](#) and other identified stakeholders (e.g. Bird groups) to coordinate their removal and to plan revegetation programs
- Use dense planting of **short statured trees adjacent to agricultural crops** and other open areas to reduce site attractiveness and to protect crops from little corella foraging activities ([Jarman, 1986](#))
 - Visibility at these sites may also be reduced by synthetic screens (hessian, canvas, plastic). The low cost of these materials mean that they can be used to experiment with screen configuration
 - Manage the removal and replacement of Aleppo pines as paddock windbreaks (if not before, then particularly as these trees reach senescence)
- **Use traditional management and control activities** to deter and disrupt little corella flocks in trees at problem sites
 - Non-lethal techniques (such as noise and spotlighting) should be favoured as they are most accepted by the community (bearing in mind that some noise-producing devices can be problematic, particularly when their use is ongoing)
 - Non-lethal techniques can be more effective if reinforced by lethal deterrents. Lethal deterrents should only be used with appropriate permissions and safety considerations, and with careful consideration of community attitudes (see our section about [communication barriers](#), discussed as part of the Community Workshop outcomes) where we discuss how acceptance of lethal deterrents may be increased where lethal deterrents are used to increase the effectiveness of non-lethal measures, where the strategic approach is understood by the community, and where lethal deterrents are clearly differentiated from lethal controls)
 - Avoid trapping and gassing or falconry, which are ineffective (e.g. Temby 1999; also supported by workshop data and other data collected during this study – e.g. on the River Murray some people feed carp to encourage kites that then

^w*Calyptorhynchus funereus* (listed as Vulnerable in SA)

scare away the little corellas, but noticed little corellas returned when the kites leave)

- Coordinate with landholders to **reduce problems on private land**, and encourage communities to promote [urban biodiversity in private gardens](#) (collaborate with NRM groups on these activities), seek and/or promote beneficial collaborations with other groups and programs (e.g. [Paddock Tree Project](#) by Trees For Life)
- **Communicate with the public** about actions at problem sites; erect signs about management activities at problem sites
- Identify any **other factors that contribute** to the site being problematic. Specifically, adjacent watering areas
- Monitor and review



Photo panel 9 *Beaumont Common: increasing site nativeness in urban areas also decreases site attractiveness to little corellas*

Revegetation activities that include understory planting can create beautiful urban parks without compromising on a sense of openness and safety. While little corellas may still use the grassed areas, Beaumont Common was not a problem site



Photo 7 Enfield Memorial Park and Folland Park: a non-problem site

Managers of the Enfield Memorial Park reported that little corellas visit the site and feed on grass areas, but that no management problem exists at the site. Limited water access and decreased perceptions of safety for roosting there from a native woodland patch (3.2 hectares) likely reduces the attractiveness of this site to little corellas



Photo panel 10 Non-tree roosts at problem sites

Problem sites: little corellas roosting on a fence at Hewett Primary School (A) and on steel beams at Strathalbyn Swimming Pool (B)

Aleppo pines should be removed from problem sites, where possible



Photo panel 11 Aleppo pines (*Pinus halepensis*) were commonly found at little corella sites

A) the corner of Honeypot and South Road; B) Strathalbyn oval; C) Strathalbyn cemetery; D) Grange golf course; E) North Adelaide golf course; F) new Aleppo saplings at Royal golf course; G) Murray Bridge township; H) Aldinga township; I) Roseworthy university campus; J) windbreak at Old Noarlunga; K) windbreak at Melrose; L) Aleppo corridor at Aldinga; M) Two Wells oval

2. Creating barriers to water resources (lakes, dams, pools, ponds and rivers)

Site managers need to:

Non-problem sites:

- Do not disturb little corella access to water resources at non-problem sites

Problem sites:

- **Identify all stakeholder groups** associated with the problem site
- **Identify drinking/watering resources** associated with a problem site
- Develop an integrated action plan to **restrict access to water resources** at problem site; the plan should include:
 - For problem sites with built banks around the water bodies being used by little corellas, to **increase bank height** (or decrease water level) so the distance from bank to water level is greater than the body length of little corellas (i.e. at least 45 cm; see Photo panel 11, 12)
 - In the workshops some people were concerned that changes to bank levels would affect other birds negatively, but we observed common parkland bird species readily accessing water resources from raised banks; however, galahs are also likely to be negatively affected at problem sites. Generally, high public approval was received for this action **once it was explained**
 - Note that we do not propose the replacement of natural banks with built structures, but recommend the slight modification of existing structures at problem sites as an effective approach
 - When communicating this strategy, it is important to stress that water resources will not be removed, rather that little corella **access to the resource is being constrained**
 - If little corellas are observed using **tree snags in lakes or rivers** to land on and drink from at problem sites, then these structures should be pruned to below the water surface
 - Note that tree snags **should not be removed** (only trimmed below the water surface) because they are important aquatic habitat
 - For lakes and ponds with bare earth banks, a physical barrier to water resources should be created by **planting thick reed vegetation** around the edge
 - Note that vegetative barriers should be complete, small gaps may be exploited
 - If large open earth bank areas are required at problem sites, then other actions should be taken to reduce visibility (openness and clear view) and perceptions of safety near those areas. Adjacent dense tree plantings and screening shrub vegetation or material/synthetic screens to remove a clear line of sight when little corellas are drinking will decrease their perception of safety at the site, and make it a less attractive watering site

- Polyethylene **dam liners** may also provide an effective barrier at dam sites because they are reportedly difficult for little corellas to walk on
- **Swimming pool covers** should be used in problem areas such as at Strathalbyn when the pool is closed (see Photo panel 8D), and used in conjunction with other deterrents
- **Stock trough modifications** can be very effective when targeted correctly; PVC pipe on wire around the rim of a trough creates a spinning edge as little corellas try to land and drink. Water levels could also be adjusted so that distance from edge to water level exceeds little corella body length, i.e. > 45 cm (see Photo 8)
 - Stock troughs near problem sites should be targeted first
 - Trough modifications will be more effective in some areas than in others, in dry areas compared to river sites for example
- **Landscape-level considerations:** little corella problem sites may have an obvious watering point or the resource may be at an adjacent site, or not known
 - See examples of problem sites relative to water resources for Bonython Park (Photo panel 13), University of Adelaide Roseworthy Campus (Photo panel 14A) and Snowtown (Photo panel 14 B-C)
 - For problem sites associated with large rivers (e.g. Mannum, Tailem Bend, Murray Bridge, Loxton, Berri etc.), management activities should focus on problem sites and constraining access to water at those sites via reed plantings and screening vegetation in conjunction with other management activities
- **Access to river water at problem sites** should also be reduced. Problematic sites along rivers have typical little corella habitat (i.e. open areas of exotic irrigated grass, and ready access to water and roosts). Water access should be reduced by reedy vegetation barriers and increased site nativeness (including native shrubs) to decrease perceived safety at the site for drinking (and for feeding on grass areas); see Photo panel 15
- **Monitor and review**

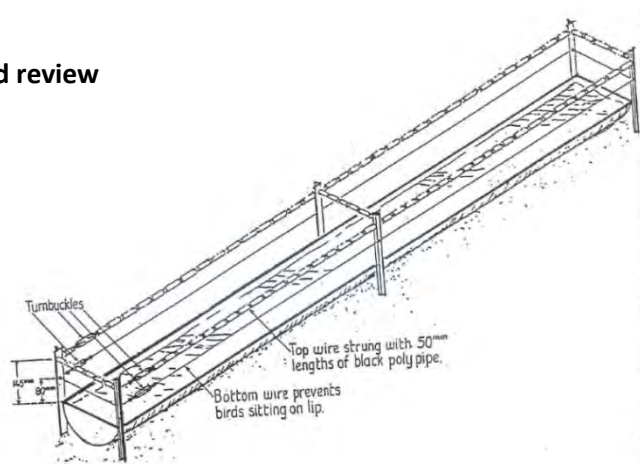


Photo 8 Trough modification to prevent access by little corellas

Image from [St John \(1994\)](#)

Increase bank height

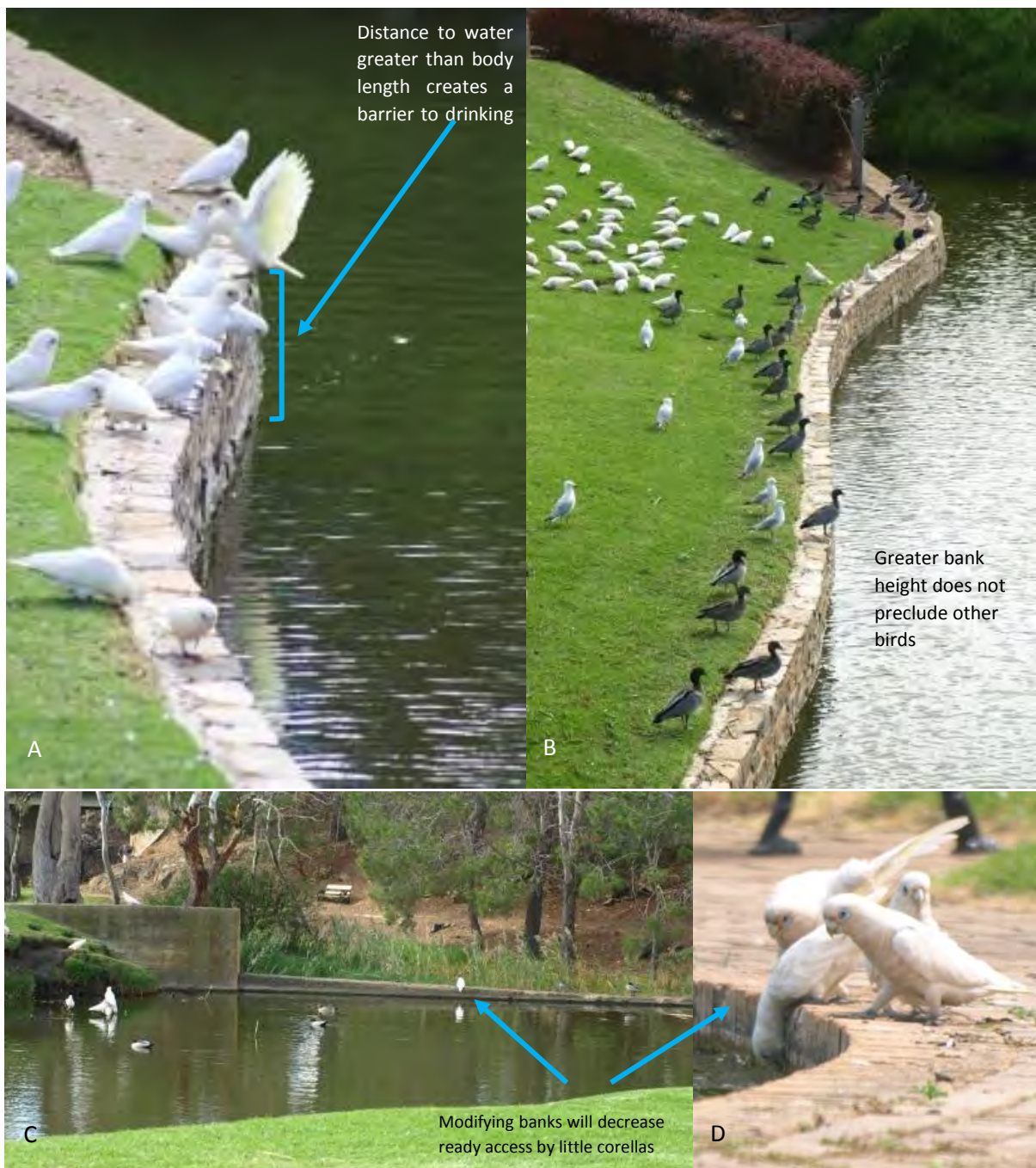


Photo panel 12 Limit little corella access to water resources by increasing bank height

A) we watched little corellas repeatedly try to drink water from this high bank, but they were unsuccessful; B) ducks and water fowl used the area and accessed the water from this bank; C) increasing bank height along this levee would reduce water access to little corellas, although snags in the water were also used, they were not preferred and could also be removed as part of an integrated plan; D) a favoured little corella watering resource is within reach at Bonython Park, Adelaide; raising the bank or lowering the water level will exclude little corellas

Target water resources at landscape level



Photo panel 13 Bonython Park: an emerging resident population of little corellas

A) West Terrace ovals near Adelaide High School, and the water pond at Bonython Park (red arrow); B) little corella sites identified by the survey; C) defoliation of a roost tree adjacent to the water resource; D) little corellas drinking water at Bonython Park

Little corella sites were reported throughout the West Parklands around the Adelaide High School ovals and Bonython Park, Adelaide City. Little corellas feed on the grassed areas of these sites, and move to Bonython Park to drink (B, D). Increasing bank height at Bonython would remove this resource and would influence overall site attractiveness. An integrated plan would also include revegetation activities to increase understory areas, removal of Aleppo pines, and communication and community education components.

Target water resources at landscape level



Photo panel 14 Target little corella water resources associated with problem sites

A) At University of Adelaide Roseworthy Campus a water treatment pond with black plastic lining excludes little corellas, but other dams with bare banks provide ready access, and stock troughs and Aleppo pines are also abundant at the site; B-C) at Snowtown water resources of town dams are readily available to little corellas (C) and Aleppo pines are abundant (B)

(no)Barriers to river water at problem sites

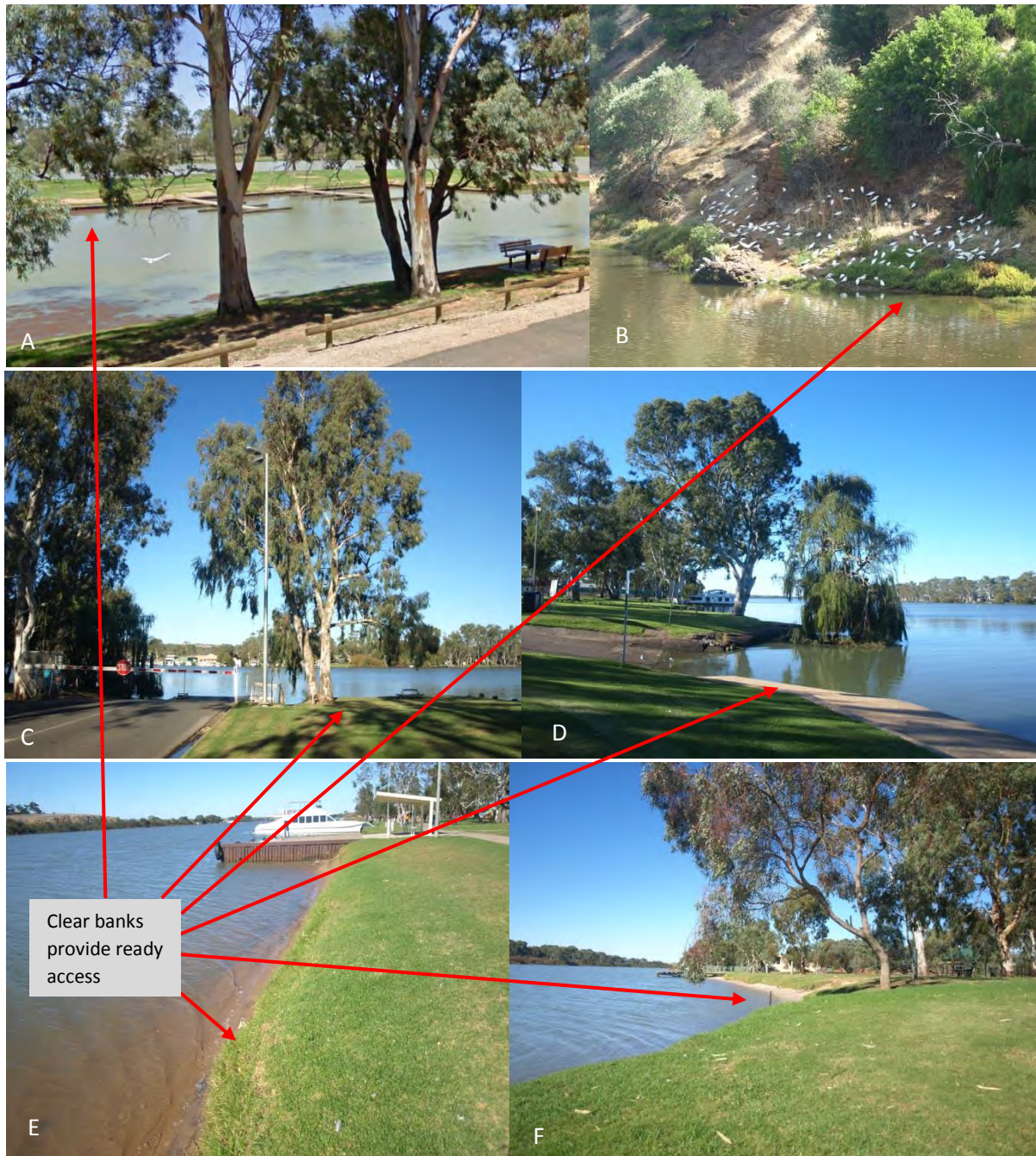


Photo panel 15 Little corella access to water at river sites

Open habitat with good vantage (high perceptions of safety for little corellas) and exotic grass banks with no shrubs and adjacent roosting resources at: A) Riverside Drive, adjacent to Berri Riverside Caravan Park; B) Old Noarlunga; C) Mannum Ferry Terminal; D) Many Ann Reserve, Mannum; E) Sturt Reserve, Murray Bridge; F) Long Island Boat Marina, Murray Bridge

3. Identifying and creating sacrificial areas

Sacrificial sites are:

- Identified, suitable areas deliberately set aside for little corella habitat
- Sites where no deterrence or control activities occur
- Sites that little corellas are encouraged to move into and away from problem sites
- Sites that provide suitable feeding, watering, and roosting resources
- Sites that little corellas should eventually become accustomed to and return to habitually

Note that the term “sacrificial” in this context does not imply that the site is of no value, but that the area is set aside for this purpose, to offset damage to and concern about specific sites elsewhere.

A recipe for a sacrificial site

- Is the site near or adjacent to a major creek or other **suitable reliable water** source?
- Does it have **tall scattered gum trees** (trees must not be too dense)?
- Is the **habitat open with good visibility**? (Can little corellas see threats coming from all directions?)
- Is the grass irrigated? If so, does little corella presence conflict with use/users?
- Is the **grass slashed** regularly? (Little corellas feel unsafe in long grass because visibility is reduced)
- Do the **surrounding landholders** want (or tolerate) the little corellas there?
- Are **supplementary** feeding and watering provisions required during roost establishment?
 - Water provision (e.g. a trough) may be sufficient in the long-term
- Are the birds **free of harassment** at this site and on surrounding properties (e.g. from shooting)?
 - Birds should not be harassed when commuting to and from this site

Broader considerations for sacrificial sites

- Previously when little corellas have been displaced from their usual roosting (problematic) site, **where did they go**?
 - Do they always go to the same location?
 - Is this location suitable as a sacrificial site, or is it a “no go” location for the community?

- Is it better that they stay where they are?
- Local councils may need to experiment with the flock by deliberately displacing them to determine **their behaviour and site preferences**
- Little corellas may in part seek out townships for **reasons of safety**, including:
 - A general absence of predators (e.g. eagles); and/or to
 - Escape hostility in the surrounding landscape (e.g. shooting)
- Councils must cooperate to ensure that they don't play "**aerial ping-pong**" with little corella flocks
- Councils must **monitor and review** their sacrificial site strategies

An important consideration for all sacrificial areas is **what actions are co-occurring at problem sites** to make the sacrificial area effective as a management tool. Isolated management tools won't work. Little corellas need to be discouraged from problematic sites and, simultaneously, encouraged to sacrificial sites.

Little corella management tool – Master model and management scenarios

The little corella management modelling tool has been developed to increase understanding of the complex relationships among factors influencing little corella problem sites. The model is necessarily simplified in order to make it comprehensible. The model (depicted in Figure 15) was developed in **Mental Modeler** and is available for download at: <http://www.discoverycircle.org.au/projects/little-corellas/community-models/>

The model is general and may need to be adapted to local conditions. Table 9 includes descriptions of each of the components in the model. Table 10 provides some working examples of different management scenarios:

- [Increasing sacrificial areas ONLY](#)
- [Increasing lethal population control ONLY](#)
- [Noise deterrents ONLY](#)
- [Noise deterrents and lethal deterrents](#)
- [Increase understory plantings \(shrub layer\) ONLY](#)
- [Public education ONLY](#)
- [Do nothing \(i.e. little corella problem sites increase\)](#)
- [Integrated management](#)

Three integrated management case studies are also provided:

1. [Aldinga](#)
2. [Hawker township](#)
3. [Hewett Primary School](#)

Instructions in the use of **Mental Modeler** are available online and are also included as [Appendix 6](#) of this report.

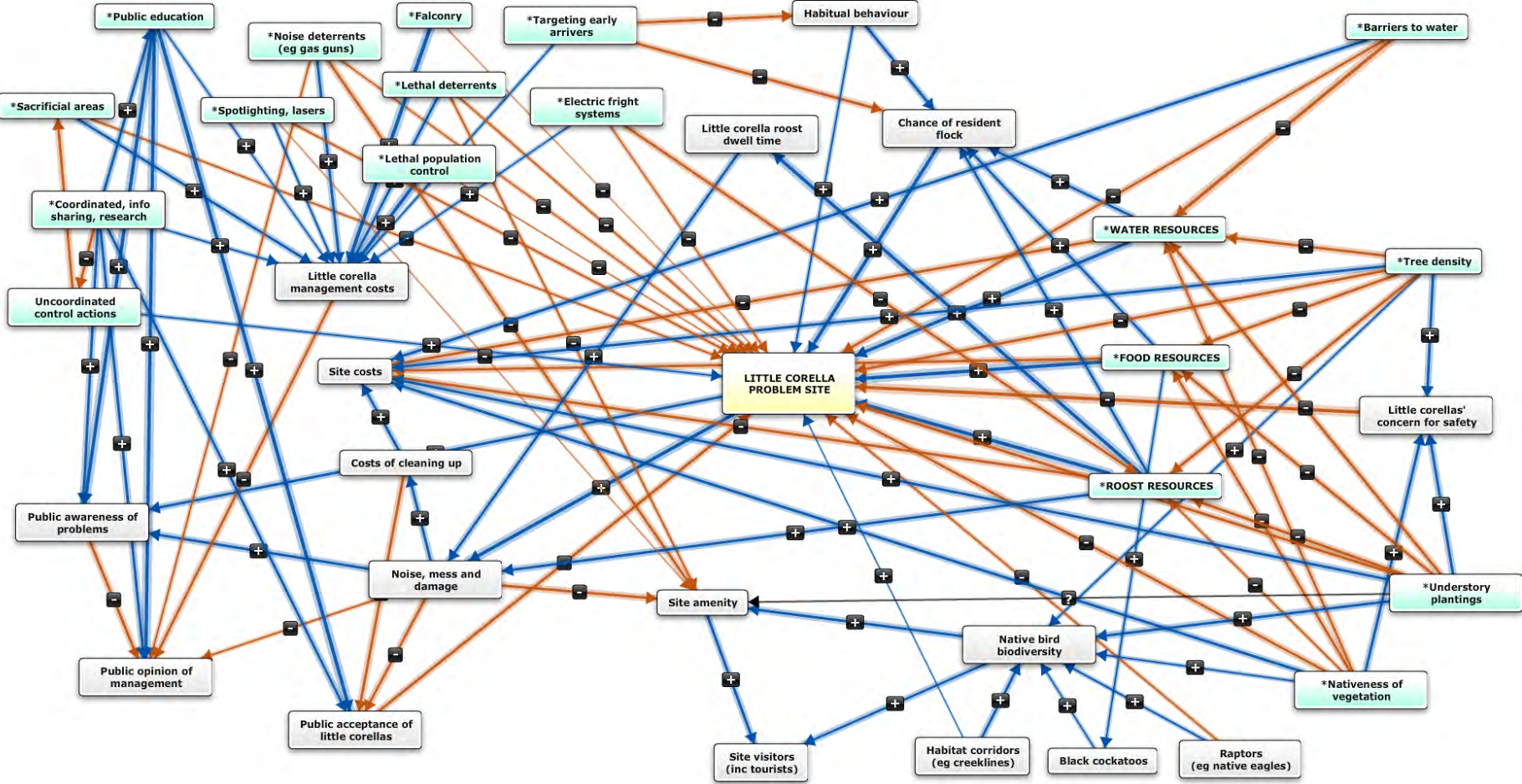


Figure 15

The master model created during the Little Corellas project

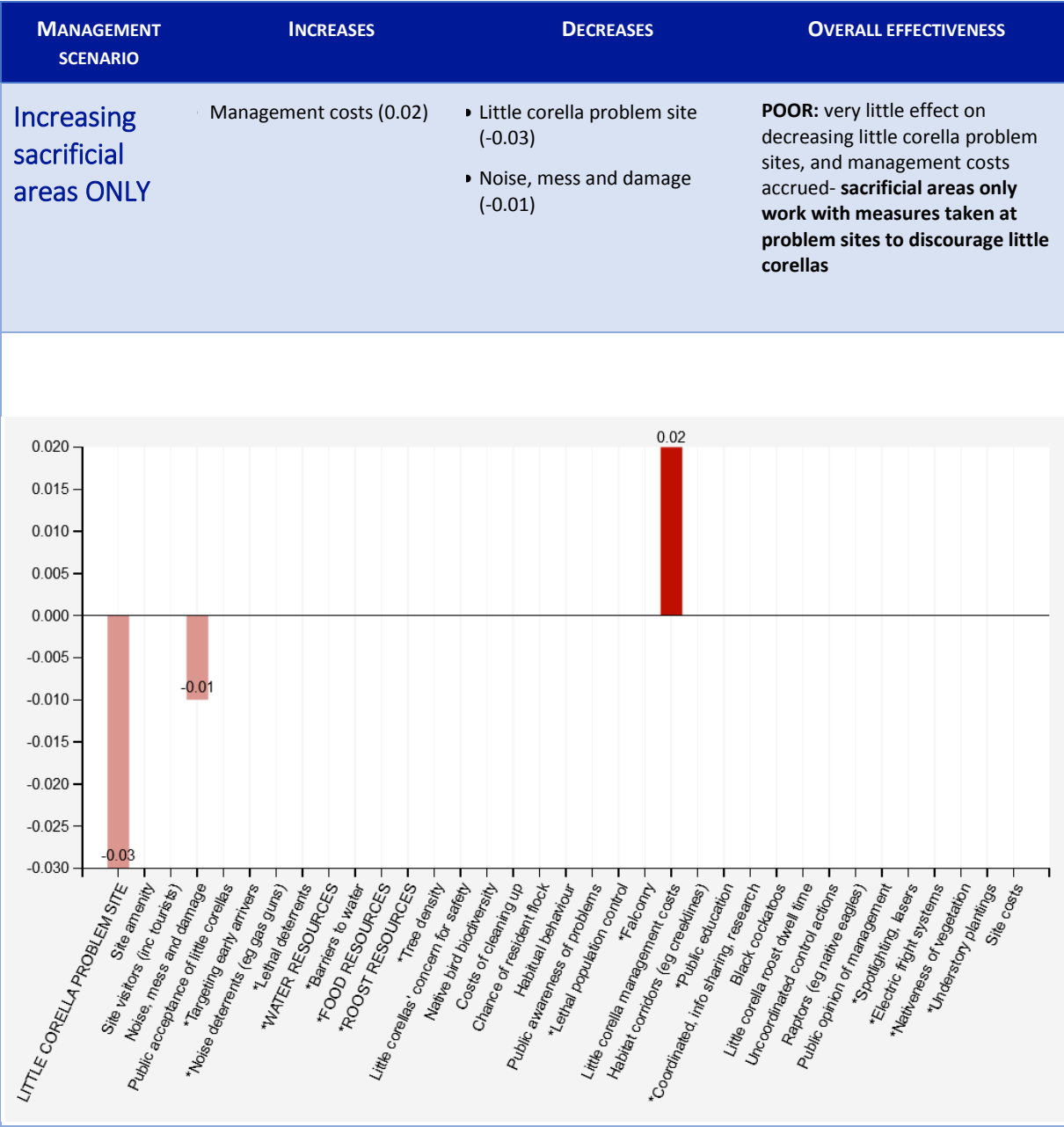
Table 9 Description and influence of mental model components

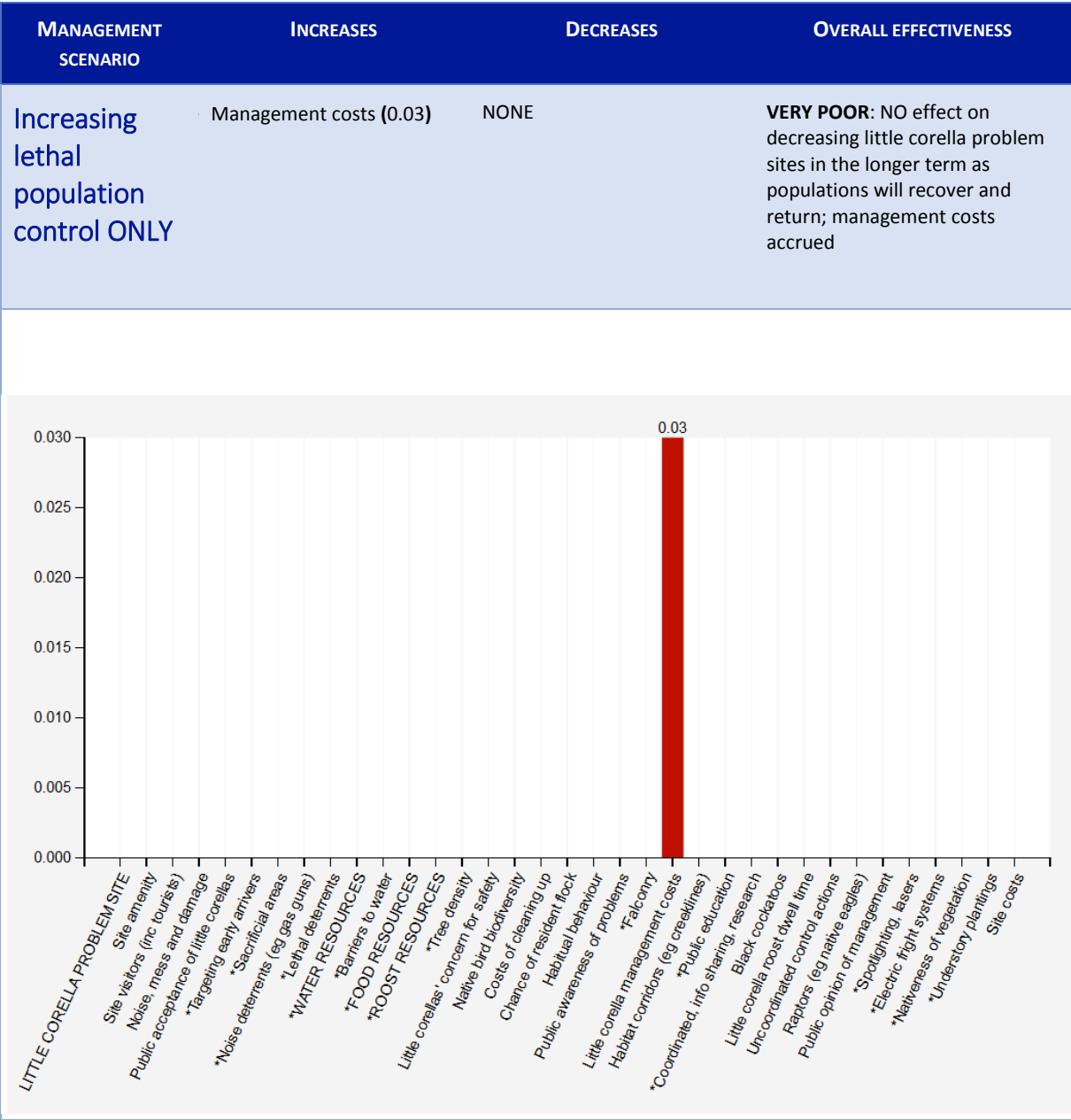
MODEL COMPONENT	COMPONENT DESCRIPTION AND INFLUENCE
LITTLE CORELLA PROBLEM SITE	Identified, specific locations where little corella presence is problematic to some members of the community
Water resources	Typically, <i>problem sites</i> and <i>resident flocks</i> have water access: rivers, creeks, wetlands (natural and reconstructed), effluent ponds, dams, and stock troughs. Water resources decrease as <i>nativeness of vegetation</i> , <i>tree density</i> and <i>understorey plantings</i> increase (visual barriers decrease little corella perceptions of safety)
Barriers to water	Physical barriers can reduce access to water, including stock trough modifications, dam lining, reeds at water edge, increased bank height, and other screens
Food resources	Typically, <i>problem sites</i> have food access including: irrigated grass, agricultural spillage, crops, exotic pines and open ground. Food resources decrease as <i>nativeness of vegetation</i> , <i>tree density</i> and <i>understorey plantings</i> increase
Roost resources	Typically <i>problem sites</i> are roosting areas, resources include low density tall trees in open habitat. <i>Roost resources</i> decrease as <i>nativeness of vegetation</i> , <i>tree density</i> and <i>understorey plantings</i> increase and <i>bird fright systems</i> increase. <i>Roost resources</i> also increase <i>roost dwell time</i> and <i>public experience of noise, mess and damage</i>
MANAGEMENT ACTIONS	
Management costs	All control activities (indicated by asterisk * in the model) incur a cost; cost vary among activities, e.g. <i>lethal population control</i> is more expensive than <i>spotlighting</i>
Targeting early arrivers	Control activities that <i>target early arriving</i> little corellas (ahead of the main flock) will be more effective than actions delayed until the flock resides at the problem site. By <i>targeting early arrivers</i> , managers aim to reduce the <i>chance of resident flock</i> and alter <i>habitual behaviour</i> of flocks from returning to that roost in the future
Habitual behaviour	Little corellas flock to sites habitually; <i>targeting early arrivers</i> may deter main flocks from <i>problem site</i> . <i>Resident flocks</i> increase with habitual use of problem sites
Chance of resident flock	<i>Resident flocks</i> are small groups of little corellas that reside year-round at <i>problem sites</i> instead of dispersing for several months in the cool periods. These flocks are increasing in some areas, and resident birds increase incidences of <i>problem sites</i> when the main flock returns to join them there. Reliable and freely-available <i>water</i> , <i>food</i> and <i>roost resources</i> increases the <i>chance of resident flock</i>
<ul style="list-style-type: none"> • Noise deterrents • Lethal deterrents • Lethal population control • Spotlighting/lasers • Electric fright system • Falconry • Sacrificial areas 	<p>These control measures are all linked to <i>management costs</i> and to reducing <i>little corella sites</i>; the weighting of their cost and influence varies among techniques. For example, <i>falconry</i> has high management costs and little negative influence on <i>problem sites</i>, <i>lethal deterrents</i> have a lower relative cost and greater affect in conjunction with other actions (strategic effort)</p> <p>From our survey and workshops we found that <i>noise deterrents</i>, <i>lethal deterrents</i> and <i>spotlighting</i> also had various levels of negative influence on <i>site amenity</i></p>
Uncoordinated control actions	These activities, including non-strategic shooting nearby, undermine coordinated actions and may increase <i>problem sites</i> . <i>Uncoordinated actions</i> also decrease the effectiveness of <i>sacrificial sites</i> as a management tool
Information sharing and research, process formalised	A cohesive approach enhances effectiveness of strategic tools, such as <i>sacrificial sites</i> , and decreases problem sites. It also increases <i>public education</i> , <i>public awareness of issues</i> , <i>public opinion of management actions</i> , and <i>public acceptance of little corellas</i>
Public education	Education includes <i>information sharing</i> ; it enhances <i>public awareness of problems</i> , <i>public acceptance of little corellas</i> and <i>public opinion of management actions</i>

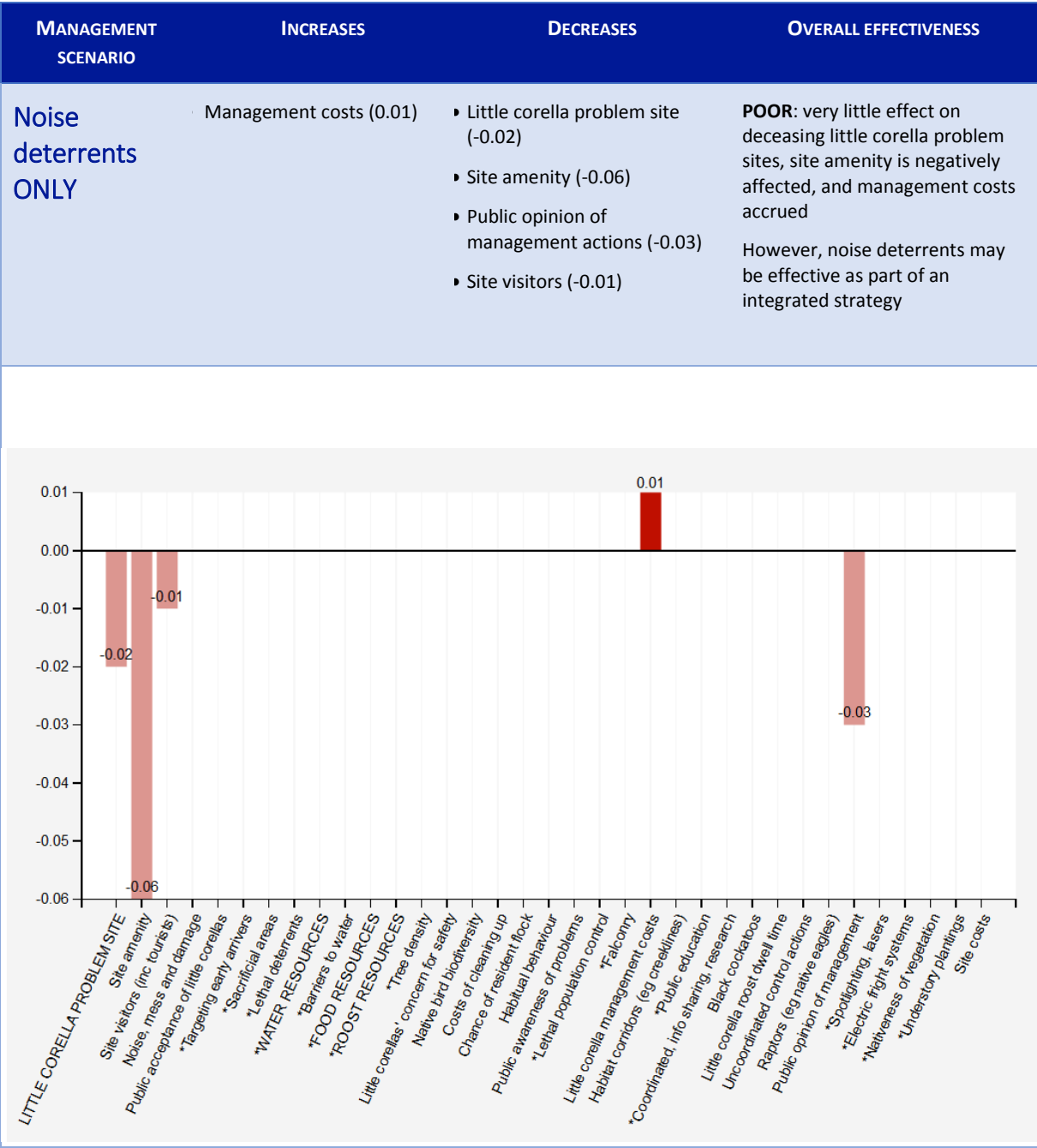
MODEL COMPONENT	COMPONENT DESCRIPTION AND INFLUENCE
INCREASING SITE NATIVENESS	
<i>Nativeness of vegetation</i>	Revegetation programs, restoring sites with native plants, decreases <i>problem sites</i>
<i>Tree density</i>	Increasing <i>tree density</i> tends to reduce <i>roosting resources</i> for little corellas, because they like tall sparse trees in open landscapes for good visibility (perception of safety)
<i>Understorey plantings</i>	Revegetation programs, restoring and amending sites to <i>enhance understorey vegetation</i> (especially shrubs) with local native plants, reduces <i>problem sites</i>
<i>Bird biodiversity</i>	The range of bird species present at the problem site; we found no evidence that little corellas decrease <i>bird biodiversity</i> at <i>problem sites</i> (often sites are in townships with already reduced bird biodiversity). However, increasing <i>site nativeness</i> and improving <i>understorey vegetation</i> will benefit <i>bird biodiversity</i> at managed sites
<i>Black cockatoos</i>	These birds enhance overall <i>bird biodiversity</i> , and share some <i>food resources</i> with little corellas (e.g. pine nuts); therefore, if <i>food resources</i> for little corellas are reduced then <i>black cockatoos</i> may also be affected (the model will flag this impact and it needs to be considered carefully as some black cockatoos are endangered)
<i>Little corellas' concern for safety</i>	A clear field of view provided by open habitat increases little corella perceptions of safety and their association with a particular site. Increasing the <i>nativeness of vegetation</i> , <i>tree density</i> and <i>understorey plantings</i> will decrease site vantage and <i>problem sites</i> . <i>Raptors</i> also decrease perceptions of safety
<i>Habitat corridors</i>	These areas include creek lines, which provide favourable habitat (<i>food, water roost resources</i>) for little corellas and increase <i>problem sites</i>
OTHER SITE FACTORS	
<i>Site amenity</i>	Amenity at the <i>problem site</i> ; <i>site amenity</i> will decrease at <i>problem sites</i> ; noise controls may also decrease amenity, but reducing the problem will enhance amenity
<i>Site visitors</i>	Visitors are linked to <i>site amenity</i> , including tourists; site visitation will decrease as little corella site problems increase
<i>Little corella roost dwell time</i>	The time spent by little corellas in tree roosts at problem sites; <i>roost resources</i> will increase <i>dwell time</i> and the more time that little corellas spend there the more opportunity for the <i>public to experience noise, mess and damage</i> to trees by the birds
PUBLIC EXPERIENCE AND OPINION OF LITTLE CORELLAS	
<i>Public experience of noise, mess and damage</i>	Includes experience of damage to trees and infrastructure, and droppings and tree debris (mess). This component increases with increases in <i>problem sites</i> , and decreases with their reduction
<i>Costs of cleaning up after little corellas</i>	These costs increase with <i>problem sites</i> , as <i>public experience of mess, noise and damage</i> increases
<i>Public acceptance of little corellas</i>	As <i>problem sites</i> decrease, <i>public acceptance</i> of little corellas increases. <i>Public acceptance</i> also decreases as experience of impacts and associated costs increases
<i>Public opinion of management actions</i>	Public opinion decreases with increases in <i>problem sites</i> , and <i>opinion of actions</i> increase as <i>problem sites</i> decline (i.e. the public want effective actions)
<i>Public awareness of problems</i>	<i>Problem sites</i> and their impacts will increase <i>public awareness</i> of management issues, so does <i>information sharing</i> and <i>public education</i>

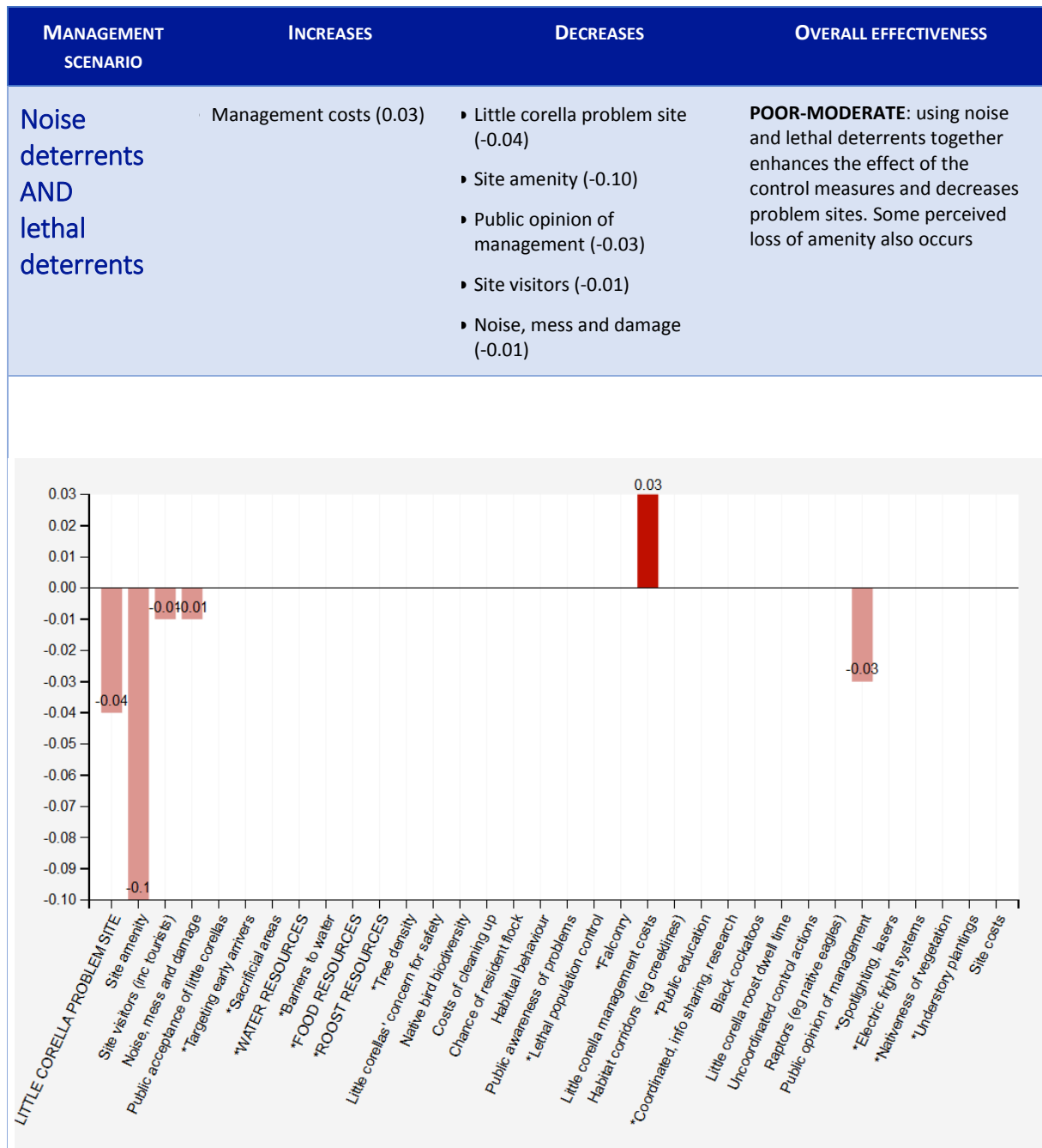
Table 10 Outcomes of simple and integrated little corella management scenarios

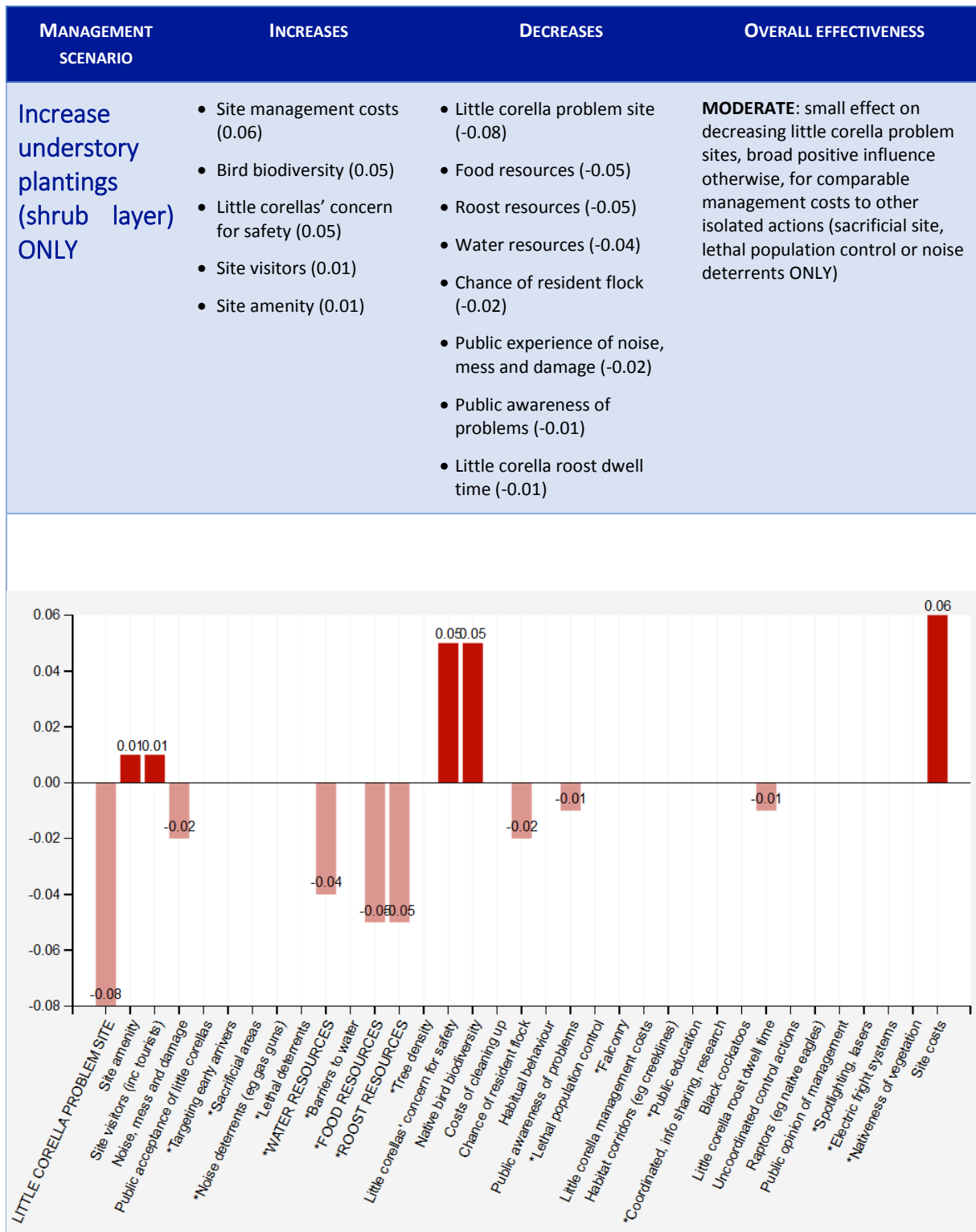
The Mental Model enables managers to see where trade-offs and benefits occur for different scenarios; Table 8 shows components that increased and decreased, and the level of effect

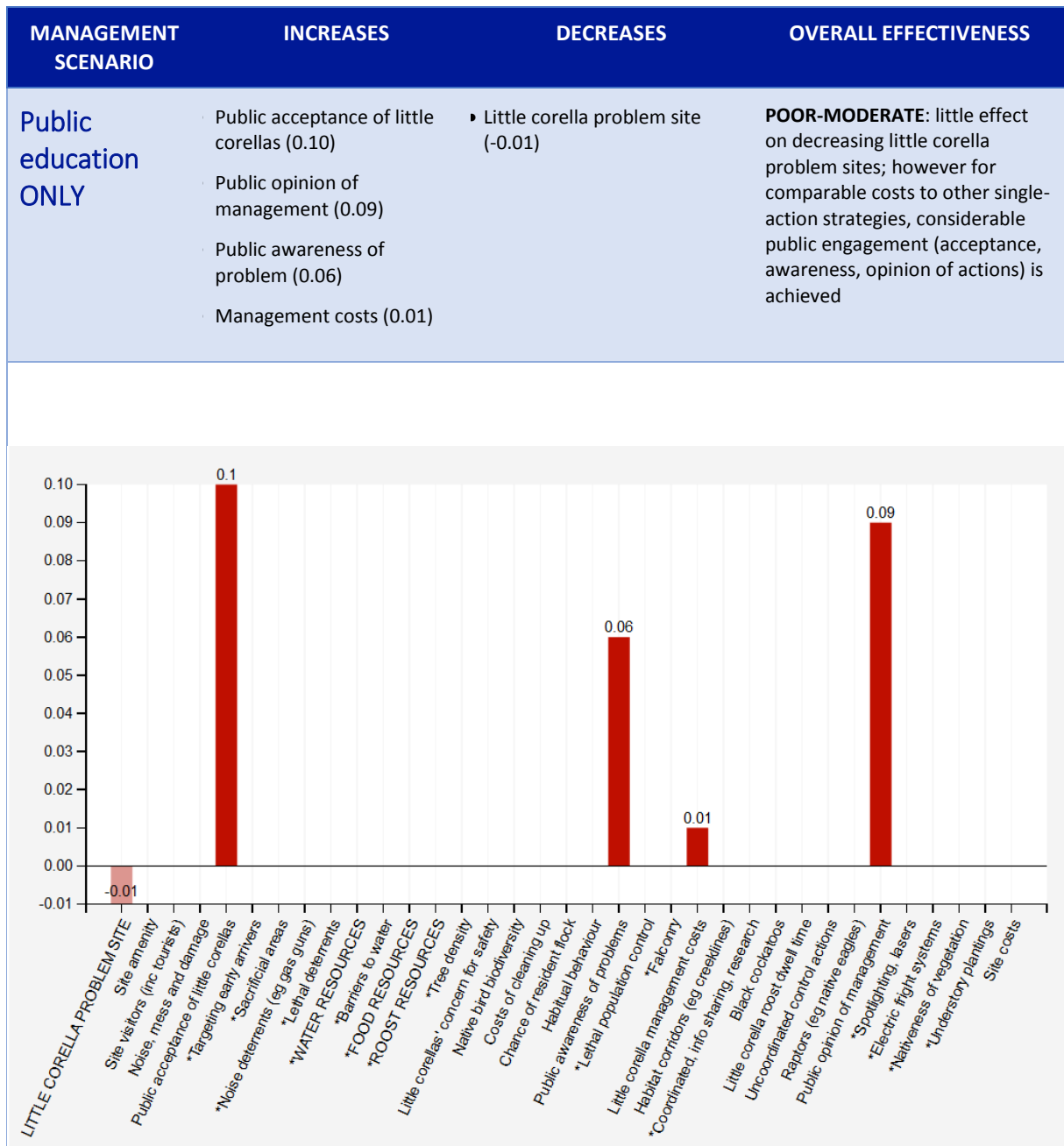


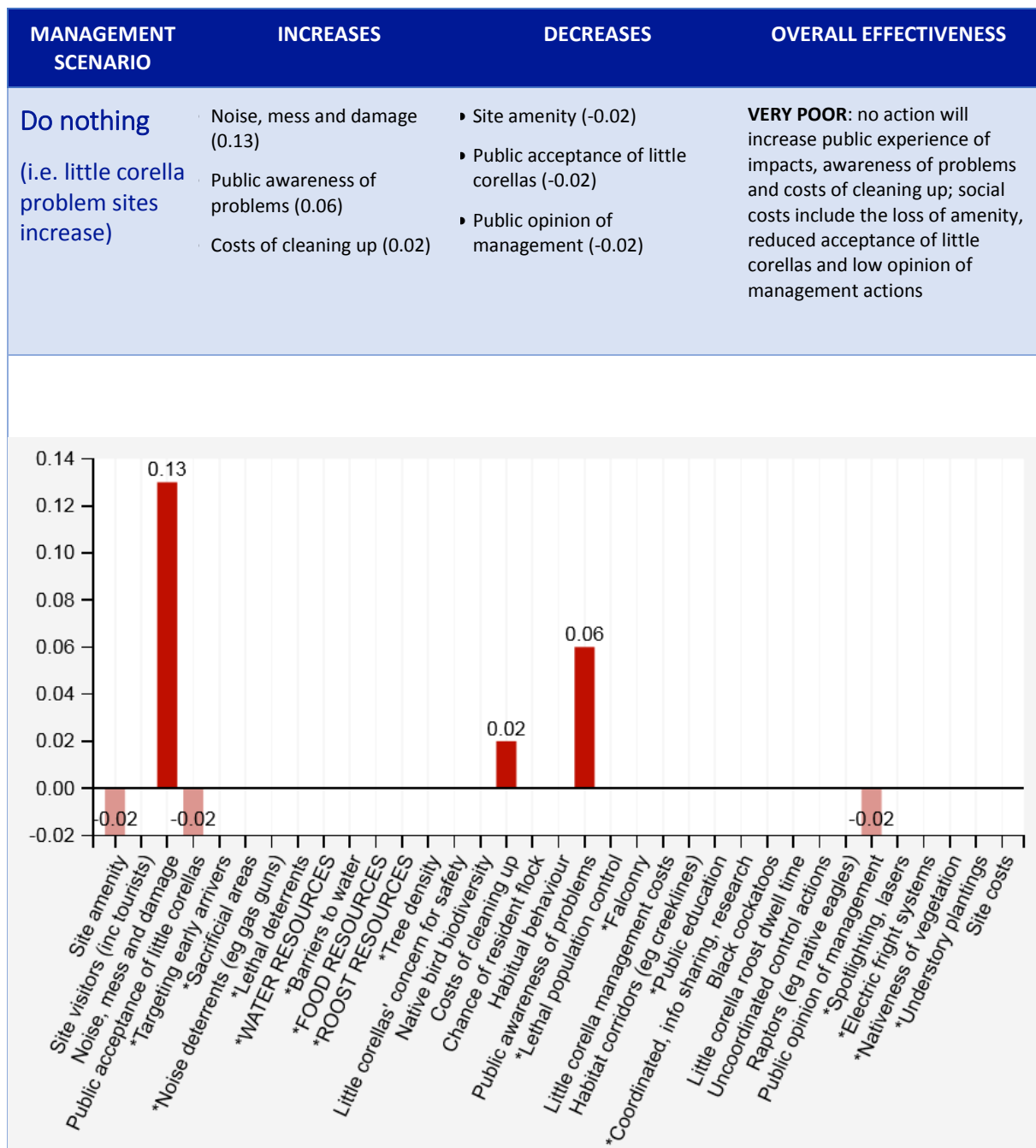


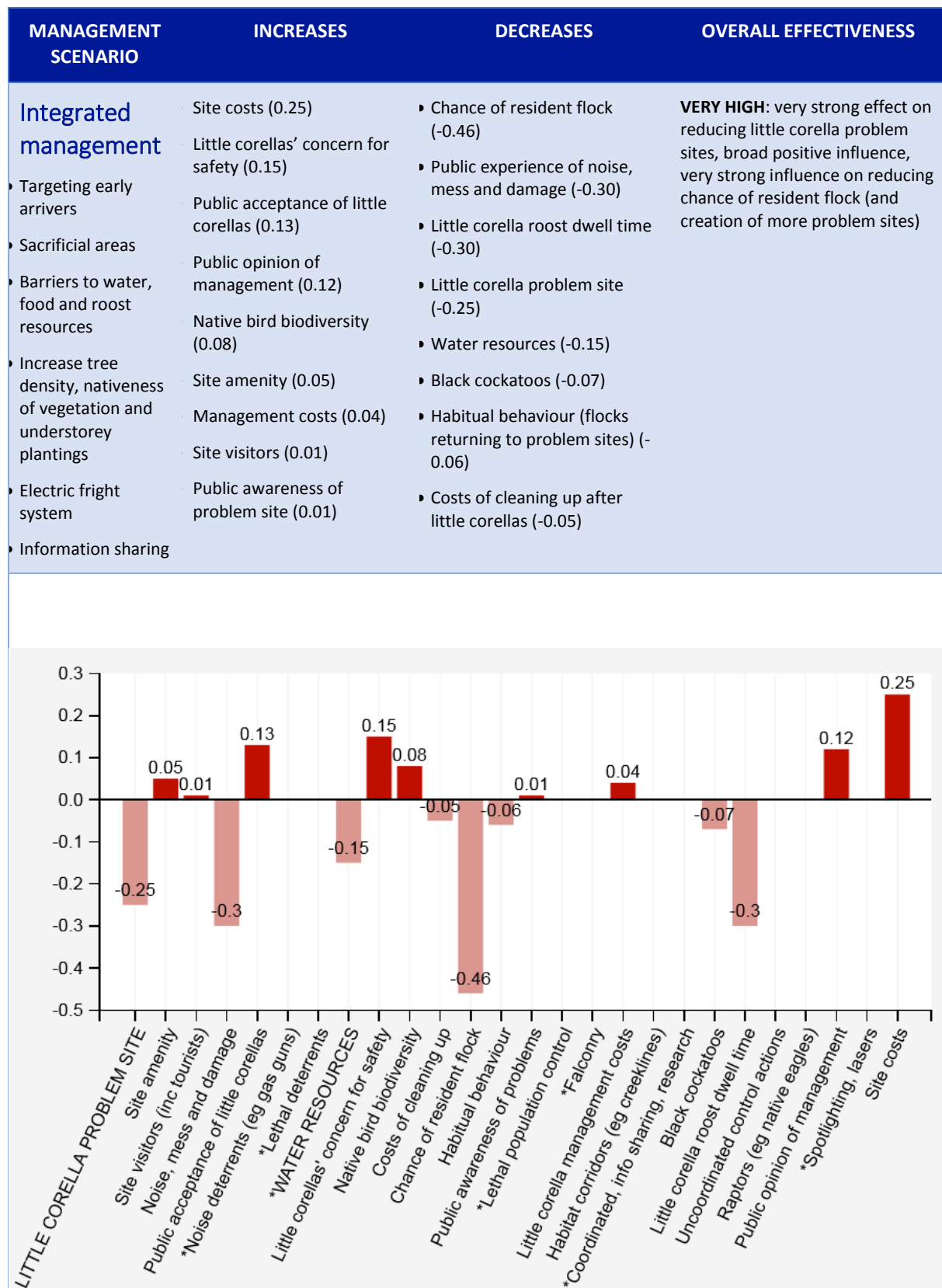










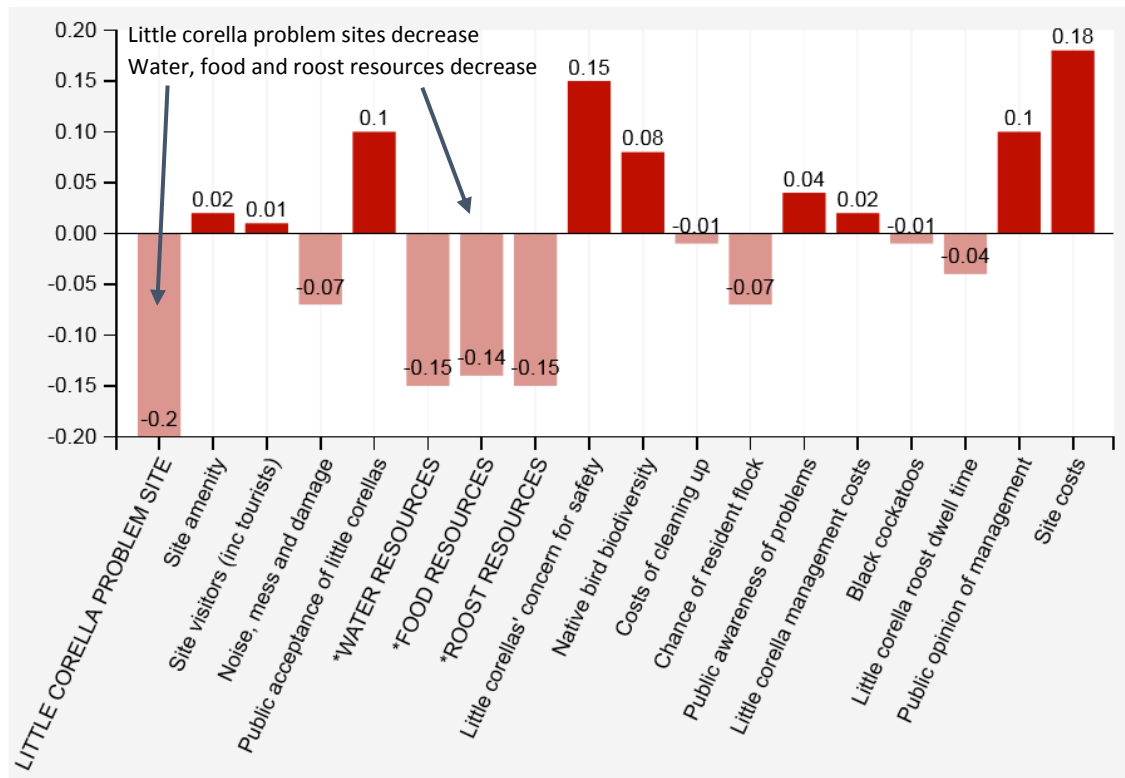


Case study 1: Aldinga



Recommended actions:

- Revegetate open roadside areas to increase shrub cover (and visual screening) and reduce foraging opportunities and perceptions of safety for little corellas
 - a. Dense plantings of low-statured trees is also effective and low maintenance
 - b. Use temporary material/synthetic screens to deter birds from revegetated areas
- Remove declared weeds, especially Aleppo pines, replace with local plant varieties
- Create a visual and/or physical barrier to water through planting reeds around dam edges, installing a dam liner, and increasing density and cover of native plants in adjacent areas
- Install barriers to stock troughs in the area
- Consider the social impact of removing significant trees, even declared weeds. Old trees need to be replaced eventually and local native species should replace them. More shrub and screening vegetation should occur around the oval to make it less attractive to little corellas overall
- Install a non-lethal electric bird fright system to deter little corellas from roosting in severely defoliated trees; move the system to affected (problematic roosting) areas as required
- Provide information materials for the public, consult and engage all stakeholders
- Monitor and review



Model actions were:

- Increase barriers to water
- Increase tree density
- Increase public education
- Increase understorey and nativeness of vegetation
- Increase electric fright systems

Management outcomes

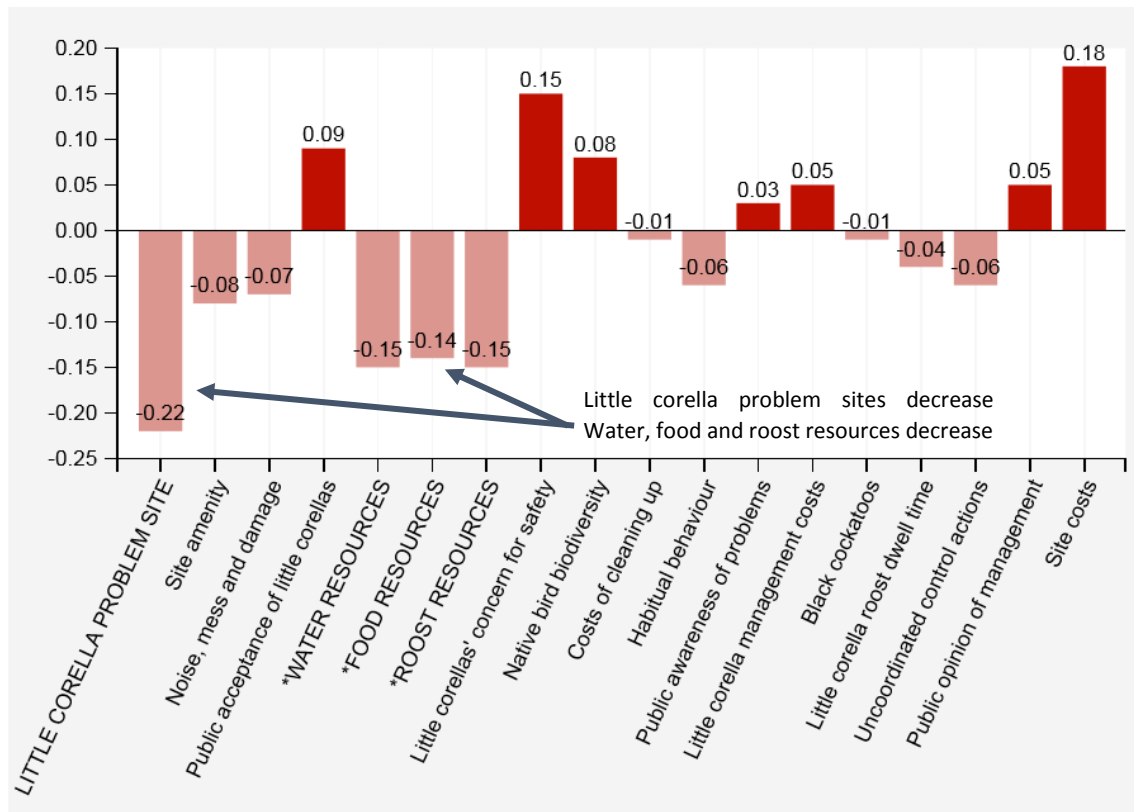
- Large decreases occur for: little corella problem sites; access to water, food and roost resources; chance of resident flock
- Noise, mess and damage (and costs of cleaning up) and roost dwell time also decreased
- Large increases occurred for site costs, little corellas' concern for safety, public opinion of management and native bird biodiversity
- Public awareness of problem increased (with public education); management costs and site amenity and site visitors increased slightly
- Black cockatoos decreased slightly because of reduced access to Aleppo pine resources, this management action should be considered closely and planned with advice from NRM and bird groups

Case study 2: Hawker Township



Recommended actions:

- Town dam (circled in red):
 - a) Install temporary hessian/canvas/shade cloth screens to fill in the gaps in existing vegetation and create a visual barrier to the water
 - b) Revegetate the gaps (over time) to create a long-term closed visual barrier to water
 - c) Install a dam liner to help conserve water
 - d) Consider removal of the tree at the dam site, (risk: high public opposition exists for tree removal generally), or
 - e) Install a non-lethal electric fright system (e.g. BirdJolt) within the tree to deter the birds from using it as safe retreat
 - Move the system around to other problematic areas in Hawker
- Modify stock troughs near the town to exclude little corellas; review and amend access to all water resources near other problem sites (hospital, golf course, and racecourse), including secondary dams (circled in orange)
- Increase understory vegetation and tree density at other problem sites (e.g. golf course)
- Install temporary signage to let local people know what is being done, and why
- Monitor and review



Management actions were:

- Target early arrivals
- Establish sacrificial areas
- Noise and lethal deterrents
- Establish barriers to water resources
- Increase tree density, vegetation understorey and nativeness
- Coordinate response, share information
- Electric fright system

Management outcomes

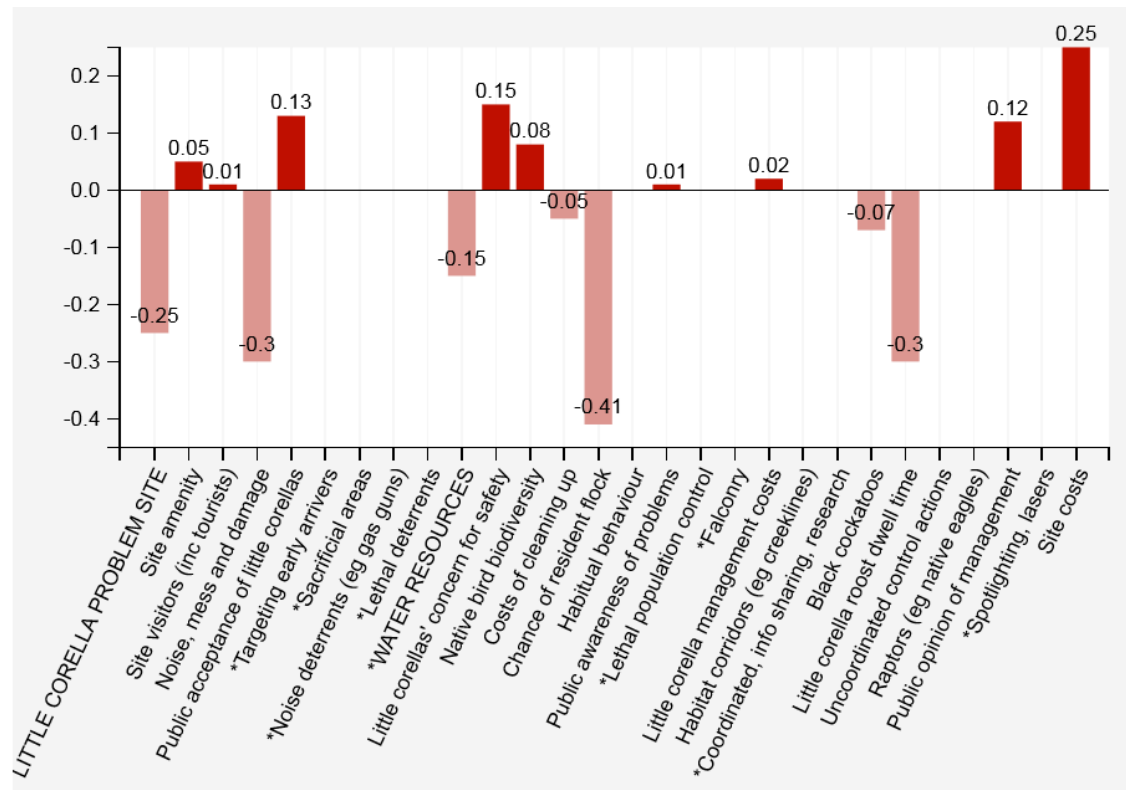
- Large decreases occur for: little corella problem sites; water, food and roost resources; site amenity; noise, mess and damage
- Uncoordinated control actions, habitual behaviour, roost dwell time and costs of cleaning up also decreased
- Large increases occurred for: site costs; little corellas' concern for safety; public acceptance of little corellas; native bird biodiversity; management costs; public opinion of management
- Black cockatoos decrease slightly; whenever this outcome is flagged management should consider closely the activities and plan them with advice from NRM and bird groups. However, black cockatoos do not occur in this area so this flag is not locally relevant and action can proceed

Case study 3: Hewett Primary School



Recommended actions:

- Revegetate around water resources to create a visual and physical barrier
- Revegetate understorey and increase tree density throughout the area (excluding oval)
- Revegetate bare ground areas around the school to remove foraging opportunities
- Use sturdy tree guards and/or temporary material screens at revegetation sites to deter birds from the area while the plants establish
- Install a non-lethal electric fright system on affected buildings, fences or trees to remove roosting resources; move system around to different areas as required
- Install temporary signage at the site to let local people know what is being done, and why
- Monitor and review



Management actions were:

- Establish barriers to water, reduce food and roost resources
- Increase tree density, vegetation understorey and nativeness (remove bare ground)
- Public education
- Electric fright system

Management outcomes

- Large decreases occur for: little corella problem site; chance of resident flock; noise, mess and damage; roost dwell time; water resources; costs of cleaning up
- Large increases occur for: site costs; little corellas' concern for safety; public acceptance of little corellas; public opinion of management; native bird biodiversity; site amenity
- Management costs, public awareness of problem and site visitors also increased
- Black cockatoos decreased slightly; this management action should be considered closely and planned with advice from NRM and bird groups

References/Resources

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Appendix 1: Local council areas or authorities represented by participants in the Little Corella Survey

Local Council Area or Authority	Number of respondents	Local Council Area or Authority	Number of respondents
Adelaide City Council	13	District Council of Mount Barker	26
Adelaide Hills Council	30	District Council of Mt Remarkable	12
Alexandrina Council	76	District Council of Orroroo Carrieton	1
Berri Barmerra Council	5	District Council of Renmark Paringa	2
Campbelltown City Council	10	District Council of Streaky Bay	1
City of Charles Sturt	31	District Council of Tumby Bay	1
City of Holdfast Bay	5	District Council of Yankalilla	6
City of Marion	17	Kangaroo Island Council	6
City of Mitcham	21	Kingston District Council	1
City of Mt Gambier	4	Light Regional Council	17
City of Onkaparinga	137	Mid Murray Council	63
City of Playford	20	Municipal Council of Roxby Downs	2
City of Port Adelaide Enfield	30	Naracoorte Lucindale Council	3
City of Port Lincoln	2	Northern Areas Council	3
City of Prospect	5	Outback Communities Authority	1
City of Salisbury	22	Port Augusta City Council	7
City of Tea Tree Gully	30	Port Pirie Regional Council	4
City of Unley	11	Regional Council of Goyder	1
City of Victor Harbor	12	Tatiara District Council	8
City of West Torrens	22	The Barossa Council	26
Clare and Gilbert Valleys Council	4	The City of Burnside	15
Corporation of the Town of Walkerville	3	The City of Norwood, Payneham & St Peters	11
District Council Ceduna	2	The Coorong District Council	2
District Council of Barunga West	2	The Corporation of the City of Whyalla	2
District Council of Cleve	1	The Flinders Ranges Council	12
District Council of Coober Pedy	1	The Rural City of Murray Bridge	21
District Council of Grant	7	Town of Gawler	37
District Council of Karoonda East Murray	1	Wakefield Regional Council	1
District Council of Kimba	1	Wattle Range Council	4
District Council of Loxton Waikerie	11	Yorke Peninsula Council	2
District Council of Mallala	9	Total	843

Appendix 2: Relationships between measures and demographic variables and two underlying factors (Concern for impact and Intrinsic-value).

Relationships were tested with non-parametric correlations (Spearman's rho, ρ). Statistically significant, meaningful results are highlight with coloured cells, with green cells indicating a positive relationship and red cells indicating a negative relationship

Measurement		Concern for impact factor (ρ)	Intrinsic-value factor (ρ)	Explanation/interpretation
General opinion of little corellas		-0.722*	0.104*	Strong negative relationship between general opinion of little corellas and concern for impact factor scores (typically, opinion of little corellas decreased as impacts increased) Positive but weak relationship between general opinions of little corellas and their intrinsic-value score
Opinion of little corellas at primary site		-0.759*	-0.114*	Strong negative relationship between general opinion at primary site and concern for impact factor score (typically, opinion decreased as impacts increased) Negative, but weak relationship between opinion of little corellas at a primary site and intrinsic value
Distance of little corella site to home		-0.135*	0.067*	Weak relationships, but directions of relationships are intuitive: as distance from little corella sites increases, concern for impacts decrease (slightly) and the intrinsic factor increases (slightly)
Largest no. of little corellas seen at a site		0.254*	0.041	Weak correlation between numbers of little corellas and concern for impact factor, in intuitive direction: impacts increase as little corellas numbers increase No significant relationship between numbers of little corellas and intrinsic-value factor
How often you notice little corellas in summer (frequency)		-0.138*	0.038	Weak and no relationship
In the LAST 5 YEARS , what has happened to little corellas in your area?		0.529*	0.010	Typically, people who feel populations have increased score higher on the concern for impact factor No significant relationship on the intrinsic-value factor
In the NEXT 5 YEARS , what would you like to see happen to little corellas in your area?		-0.693*	-0.001	Typically, people who score high on the concern for impact factor want populations to decrease No significant relationship on the intrinsic-value factor
Demographics	Age	0.093*	-0.055	Weak positive correlation. No significant relationship
	Education level	-0.012	0.047	No significant relationships
	Relationship with natural environment	0.194*	0.115*	Weak positive relationships: the directions and strengths of these relationships are interesting... It's not just people concerned for the natural environment that love corellas and are <u>not</u> concerned about the impacts of little corellas... while these people might typically be a slightly higher on the intrinsic-value factor, they are also slightly higher on the concern for impact-factor
	Gender (Mann-Whitney U)	Male 479*	Female 372	Male 421 Female 404 Males typically scored significantly greater concern for impact factor scores than did females There was not a significant difference between males and females on the intrinsic-value factor

Appendix 3: Participant comments and responses made during the community workshops supporting the value or approach of the workshops, the complexity of the issue, changing opinions and other observations

Themes	Participant comments and responses
About the workshop	<ul style="list-style-type: none"> that was <i>“a really valuable workshop”</i> One participant said that the modelling program was excellent, and that they could see lots of applications for the program in community engagement activities At the end of one workshop we asked whether there was anything else that participants would like to cover regarding little corellas, one participant said: <i>“you’ve covered it pretty well”</i>
Participation in the workshop	<ul style="list-style-type: none"> In several workshops some people indicated initially that they would not be participating. Yet many of these people couldn’t help participating and contributing when the discussion turned to their areas of interest or experience One participant said that he wasn’t going to come to the workshop because he felt frustrated with the history of little corella management. He felt that management too often consisted of releasing documents and he wanted to see actions being implemented. However, he was glad that he had attended the workshop, he could understand the process and why it was important, and he hoped to see some action soon. He was happy to see that something was happening
About little corella management	<ul style="list-style-type: none"> <i>“you can see how complex it is”</i> <i>“people think too simplistically about the issue; they’re looking for silver bullets”</i> We found some appetite for long-term approaches to little corella management: ... a <i>“long-term project is needed”</i>; <i>“Public education on the impacts of corellas and other over-abundant species, including kangaroos and koalas is important. I am in favour of addressing the causes of overabundance and management actions to reduce numbers”</i> People felt that the numbers were increasing People said that they didn’t know what the council was doing; they wanted to know what other councils were doing; others felt that council actions were focused on council assets only Some participants felt that <i>“poor farm hygiene”</i> (i.e. spilled grain) contributed to problems with little corellas; few farmers participated in the workshops and it was suggested that little corellas were preferred to rabbits or mice for cleaning up the grain
Attitudes and changing opinions	<ul style="list-style-type: none"> <i>“there were things I hadn’t considered”</i> Some people were surprised to find that they didn’t know or understand what other people in their community were thinking about the issue; some people were surprised to see how frustrated others were about little corella management One participant said that they liked little corellas, but could now understand how they would not want them in their tree Another participant said that they could now see both sides of the issue

Appendix 4: Supporting information for state-wide and Mounty Lofty Ranges suitable habitat models

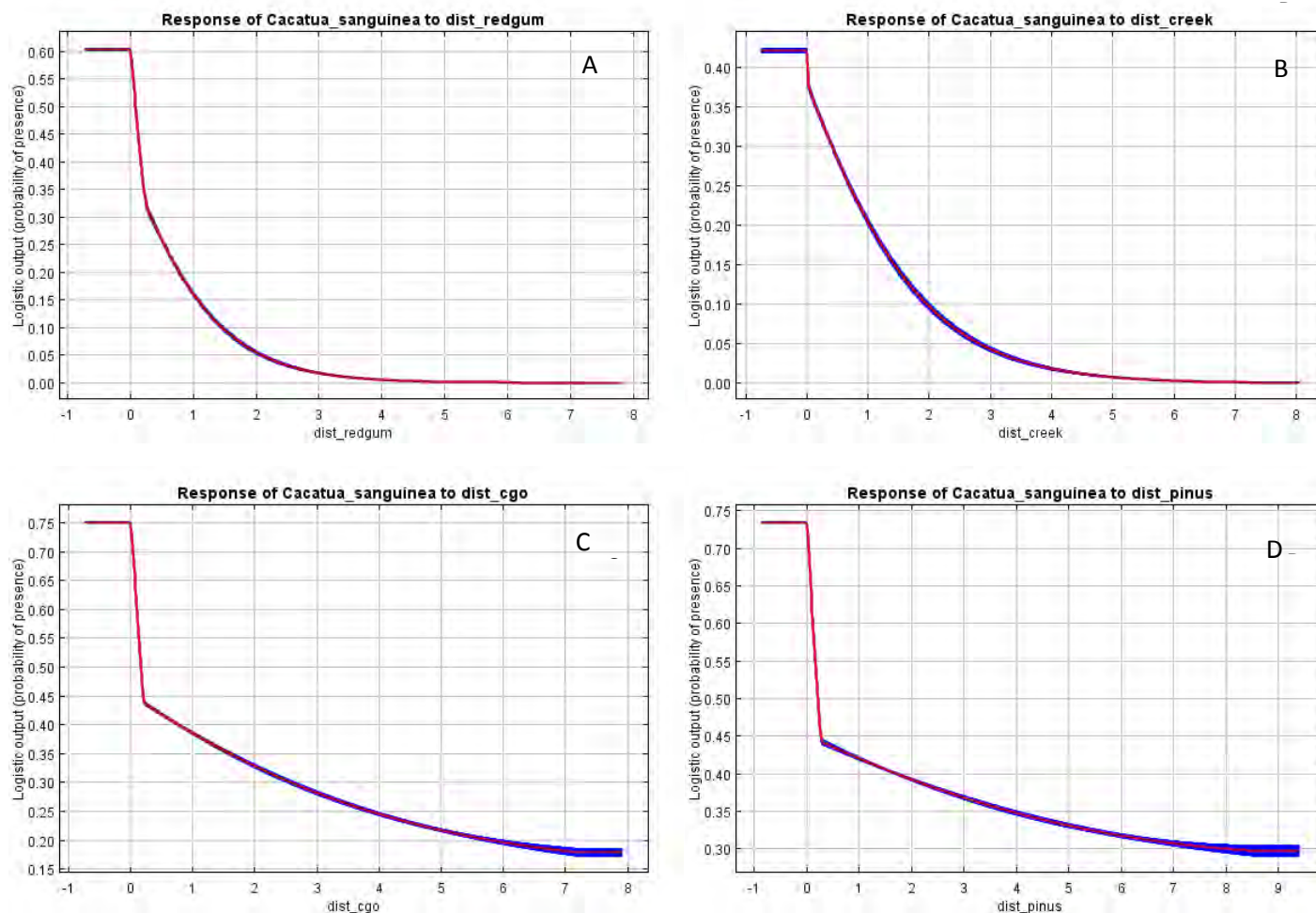


Figure 4.1 State-wide model: the response of little corellas to distance (m) to nearest: A) river red gum; B) major creek; C) irrigated green space; and D) pine tree. The blue shading indicates variability

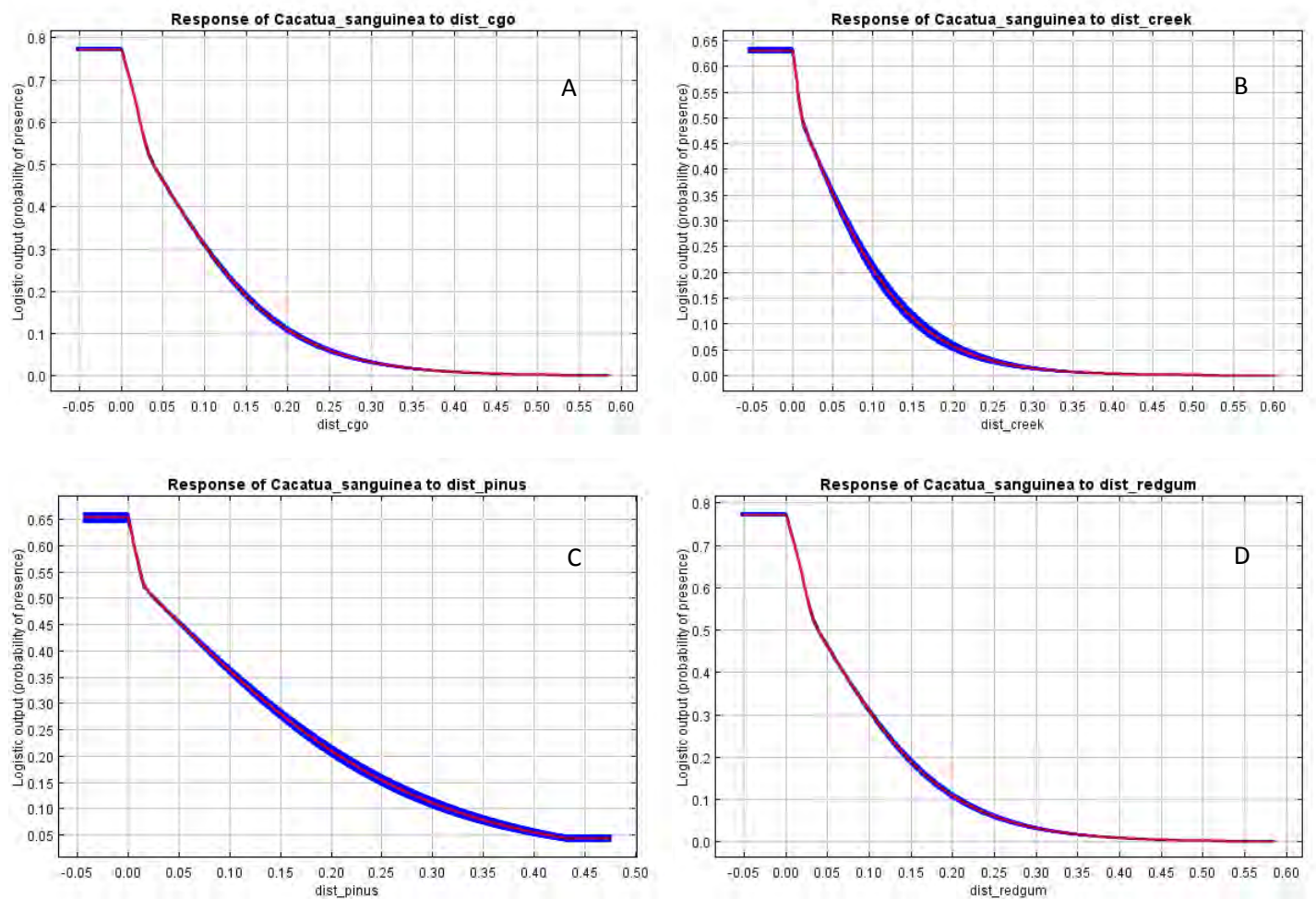


Figure 4.2 The response of little corellas to distance (m) to nearest: A) irrigated green space; B) major creek; C) pine tree; and D) red gum. The blue shading indicates variability

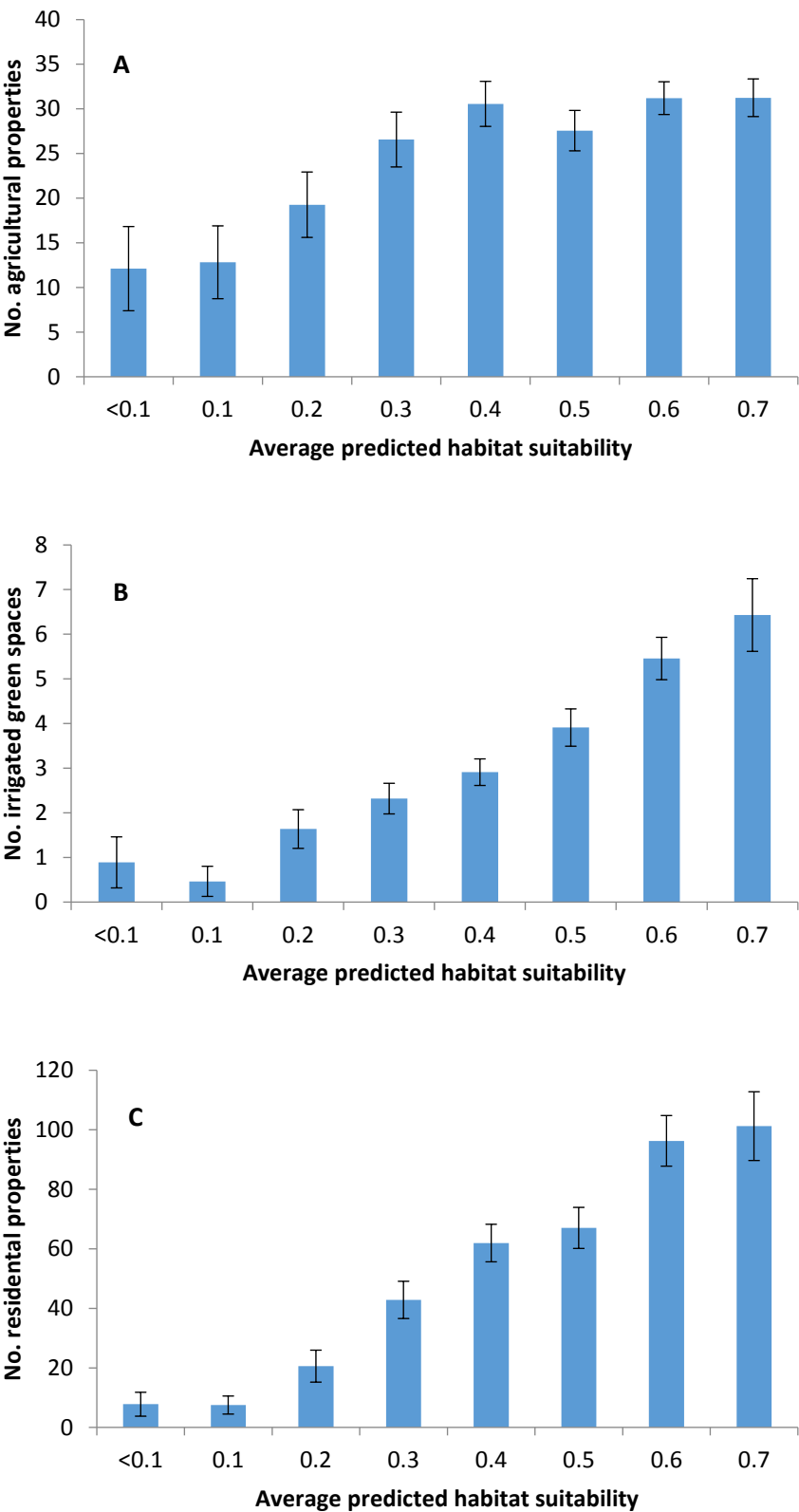


Figure 4.3 Average predicted habitat suitability for little corellas relative to number of: A) agricultural properties; B) irrigated green spaces; and C) residential properties within a 1 km radius of any given location

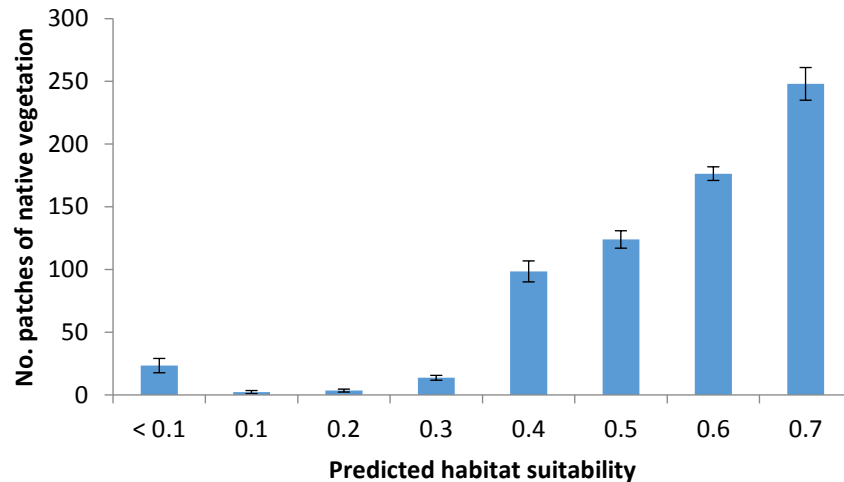


Figure 4.4 *Average predicted habitat suitability for little corellas at any given site versus the number of woodland patches within a 12 km radius*

Pattern versus proportion (%) of land uses

- The **pattern of surrounding land uses** was a better predictor of little corella presence than the relative proportion (%) of each land use
- *Pattern analysis:* The **best land use predictors** of little corella presence were the number of: 1) **recreation spaces** (i.e. irrigated green spaces); 2) **agricultural properties**; and 3) the number of **residential blocks** within 1 km radius (Appendix 4)
- Proportion (%) analysis: although poorer predictors of presence, the results of this analysis were in agreement with the above pattern analysis

Native vegetation cover

South Australia

- An analysis of native vegetation cover suggested that it was the number of woodland patches within a 12 km radius that was the biggest determinant of little corella presence
- Habitat suitability increased as the number of woodland patches increased indicating a **preference for highly fragment environments**

Mount Lofty Ranges

- The results of our analysis suggested that little corellas generally avoided bushland areas and preferred highly fragmented patches of native vegetation (i.e. vegetation along roads/ivers, surrounding ovals and in council parks and gardens). The best predictor for little corellas was the number of patches of woodland within a 3 km radius at any given point

Appendix 5: List of little corella sites surveyed during the project

Adelaide Aquatic Centre	Keith Stephenson Park	Quorn and District Memorial Hospital
Adelaide High School ovals	Lakala Reserve	Quorn Caravan Park
Aldinga Arts Eco Village	Laratinga Wetlands	Quorn Oval
Aldinga Football Club	Le Messurier Oval	Railway Station Park
Barossa Tourist Park and ovals	Lockleys oval	Roseworthy grain silos
Beautiful Valley Caravan Park	Lockleys Reserve	RSL Recreation Reserve
Birdwood High School oval	Long Island Reserve, boat marina	Sandy Creek Golf Club - Barossa Valley (formerly Gawler Golf Club)
Birdwood Park, football oval	Luard St, Milang	Sandy Creek Primary School
Bonython Park / Tulya Wardli	Mannum Caravan Park	Seaford wetlands
Bowman Park and caravan park, Crystal Brook	Mannum Community College oval	Seaton High School
Bute Rd, Snowtown	Mannum Ferry Terminal	Small reserve btw Martin St and Mindarie St
Carpark opposite Aldinga Hotel	Marcellin Technical College	Snowtown Primary School
Christies Beach High School	Market Square Reserve	Soldiers Memorial Gardens
Christies Beach Primary School	Mary Ann Reserve	Soldiers Memorial Gardens, Middleton
Clayton Bay Boat Club	Melrose Caravan and Tourist Park	Soldiers Memorial Park (Chase View Tce), Hawker
Clayton Bay Wetlands Caravan Park	Melrose Primary School	South Lakes Golf Club Inc.
Clonlea Park	Middleton Cemetery, Lines Rd	South Tce opposite Pulteney School
Collins Reserve, Kidman Park	Milang Bowling Club and park area	State Sports Park
Corner of Willyaroo Rd and Nine Mile Rd	Milang Football Club	Stoney Creek, Quorn
Coulthard Reserve	Milang Lakeside Caravan Park	Storm water retention basin
Crn Honeypot and Main South Rd	Mount Barker High School	Strathalbyn Caravan Park
Cruising Yacht Club of South Australia	Mount Barker Showgrounds	Strathalbyn cemetery, Parker Av
Crystal Brook grain silos	Mount Barker South Primary School	Strathalbyn Childrens Centre and reserve
Curdnatta Park, cricket club on Davies Rd	Mt Barker-Hahndorf Golf Club	Strathalbyn Football Club
Eastern Fleurieu School	Mt Barker-Hahndorf Golf Club	Sturt Reserve
Eastern Fleurieu School Strathalbyn R-6 Campus	Murray Bridge Golf Club	Symonds Reserve
Entrance to Melrose	Murray Bridge High School ovals	Tailem Bend Ferry Terminal
Evanston Gardens Primary School	Narnungga (Park 25) oval area	Tailem Bend Golf Course
Flinders Park Football Club oval	Noarlunga Football Club	The Grange Golf Club
Forsyth Reserve	Noarlunga Private Hospital	The Royal Adelaide Golf Club Inc.
Gawler & Barossa Jockey Club	North Adelaide Golf Club	Trinity College Gawler
Gawler and District College B-12	North Haven Golf Course	Two Wells Football & Netball Sporting Club
Gawler Aquatic Centre	North Haven Primary School OSHC	Two Wells Primary School and Hart Reserve
Gawler Caravan Park	Nuriootpa Bowling Club	University of Adelaide Roseworthy Campus
Gawler Oval Complex	Nuriootpa High School	Victor Harbor oval
Gawler Primary School	Nuriootpa Linear Park	Victoria Park Racecourse
Gawler Railway Station	Nuriootpa Primary School	Virginia Primary School
Goolwa Oval	Nuriootpa War Memorial Swimming Pool	Virginia Recreation Park, football oval
Goolwa Regatta Yacht Club	Oaklands Wetland and Reserve	West Terrace Cemetery
Goolwa wharf area	Ocean View College	Whispering Wall park area
Grange Recreation Oval Reserve	Old Noarlunga Primary School	Wilfred Taylor Reserve
Hackham Football Club	Opposite Leitchs Roseworthy Hotel car park	Willaston Cemetery
Hawker Golf Course	Palmer western end of town in sugar gums	Williamstown Primary School
Hawker Memorial Hospital	Pinkerton Creek Rd, Pinkerton Creek	Wilmington sports ground
Hawker race course	Port Augusta foreshore area	
Hewett Primary School	Port Augusta Golf Club	
Huntfield Heights Primary School	Port Elliot Oval	
Imperial Football Club Inc.	Port Noarlunga Primary School	
Investigator College	Public park on Haines Rd	
Karbeethan Reserve	Public park on Hindmarsh Blvd	

Appendix 6: Using Mental Modeler for the Little Corella project



The Little Corella project is being run by the Discovery Circle, a citizen science initiative at the University of South Australia: <http://www.discoverycircle.org.au/>

Part of the Little Corella project will use *Mental Modeler* which is an easy-to-use conceptual modelling computer program. It is designed to help individuals and communities identify the components of complex problems. It can also assist users to explore how identified components relate to each other. For the **Little Corella** project, we are using this program to:

1. Define components that contribute to problem sites (related to little corellas)
2. Define the strength of the relationships between these components
3. Run scenarios to test how the model might react to a range of possible actions

Tools required

You will need:

- A computer with internet access.
- A compatible internet browser such as *Google Chrome* or *Mozilla Firefox*.
- **Note:** the program does not work in some other internet browsers, like *Internet Explorer*
 - If you want to install *Google Chrome*, it is free to download ([click here](#))
 - If you want to install *Mozilla Firefox*, it is free to download ([click here](#))
 - **Note:** if you are using a work computer, you might need administrator privileges to install new programs.

Instructions

These step-by-step instructions will enable you to open the little corella model that has been sent to you. You will be able to:

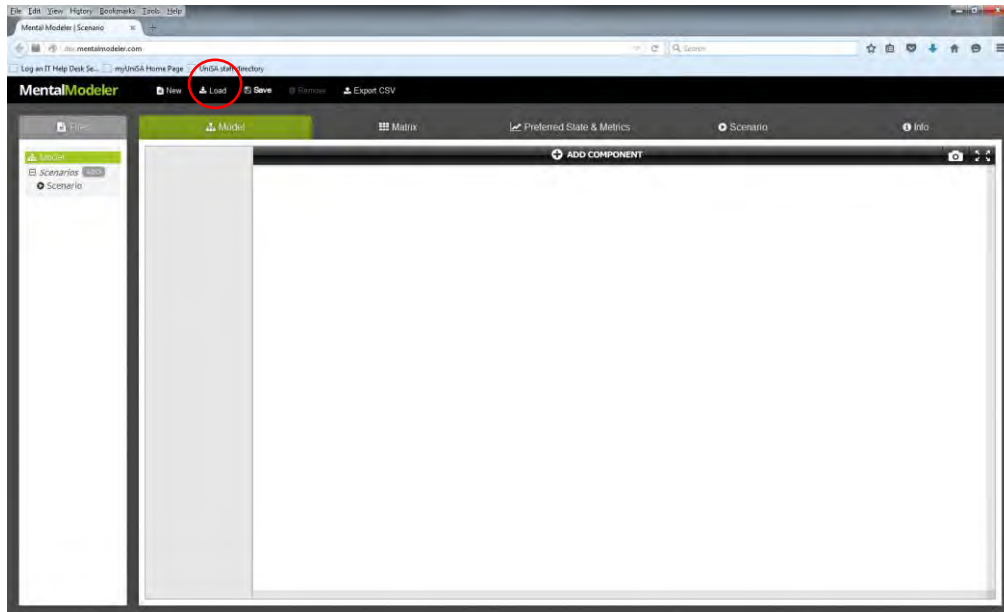
- (a) add or remove components
- (b) define relationships between components
- (c) define strengths of these relationships
- (d) run your own scenarios

Opening a model in *Mental Modeler*

1. If you are opening a model that was emailed to you, you must first save the file on your computer. The file name will end with the extension type for mental modeller files: **.mmp**
2. Open the online version of *Mental Modeler*, at: <http://dev.mentalmodeler.com/>

Note: If you have attended a workshop, you will notice that the online version of the program looks a little different. The online version has a few useful extra features, but the processes to use the program are the same.



3. Click “Load” to open your model, find your saved model, and then click “Open”.



4. The model will appear on the screen and the file name will appear in the “Files” column on the left.

Viewing a model in “full screen” mode


This mode allows a little more space to work.

1. Click on the  icon near the top-right of the screen.
2. A box will appear, asking “Allow full screen with keyboard controls?”
3. Click “Allow”.
4. To exit full screen mode, click “Esc” on your keyboard or click  on the screen.

Adding or removing components

You can add any component that you think is important to the little corrella issue. A component needs to be measurable (i.e. something that can increase or decrease). For example, “trees” could be a measurable component, with the measurement being the number of trees. Importantly, the number of trees can increase or decrease. Components can include things like:

- Biological or ecological considerations, such as food, habitat or shelter
- Management considerations, such as deterrents or costs
- Social considerations (for people), such as the amenity of parks, the value of biodiversity, acceptance or annoyance

1. **To add a component:** Click on  at the top of the screen. Enter a name for the component, use something intuitive that describes the component well (e.g. trees), and move the component around the screen by dragging it with the mouse.
2. **To remove a component:** activate the component by hovering your cursor over it – the component will light up and the icons of a bin (above) and an arrow (below) will appear. Click on the bin to remove the component.



- **Note:** please keep track of the components that you add, or ones that you remove from the original model, because we would like to see your models after you have worked on them.

Adding relationships between components

1. Activate the component by hovering your cursor over it.
2. **Direction of relationship**
Left click on the arrow icon and hold the mouse button down while you drag the arrow to a second component that you want to link with.



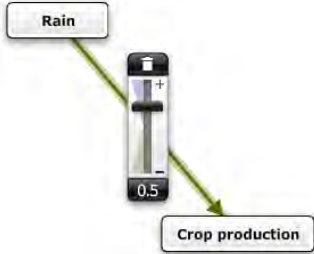

- **Note:** the arrow defines the direction of the relationship between the components. In the example below, “Rain” has an influence on “Crop production”, but “Crop production” does not influence “Rain”. Therefore the arrow points from rain to crop production. A good rule of thumb when defining relationships is to ask yourself: When One Component increases, does the other component, increase or decrease? In the example below, when rain increases, crops tend to increase.



3. Strength of relationships

The strength of the influence can also be defined. In the online version of *Mental Modeler*, the strength of the relationship is defined using a slide bar (see examples below). A good rule of thumb is to ask whether it increases a lot, a little or decreases a lot or a little.

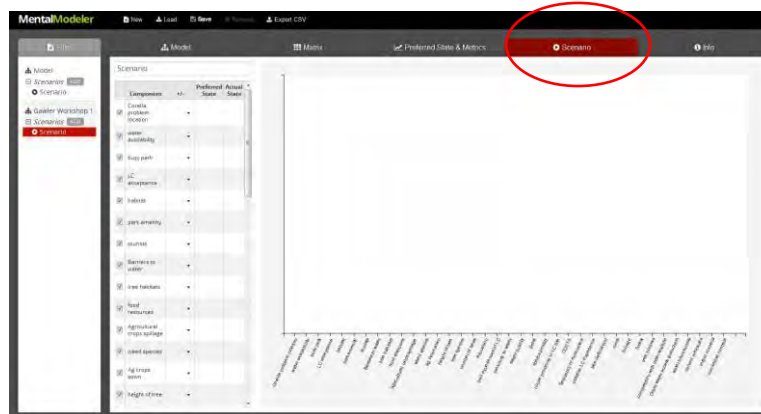
Note: This process is different in the desktop version of Menal Modeler that was used in the Little Corella workshops. The online version allows a more fine-scale adjustment.

EXAMPLE A	EXAMPLE B	EXAMPLE C	EXAMPLE D
			
Bar in middle of slide	Bar at top of slide	Bar between middle and top of slide	Bar at bottom of slide
(Strength = 0)	(Strength = 1)	(Strength = 0.5)	(Strength = -1)
In this example, rain has an affect on crop production, but the strength is not defined	In this example, rain has a highly positive influence on crop production, where heavy rain would be expected to generate high crop production	In this example, rain has an moderately positive influence on crop production, where heavy rain would be expected to generate moderately high crop production	In this example, rain has an highly negative influence on crop production, where heavy rain would be expected to generate very low crop production

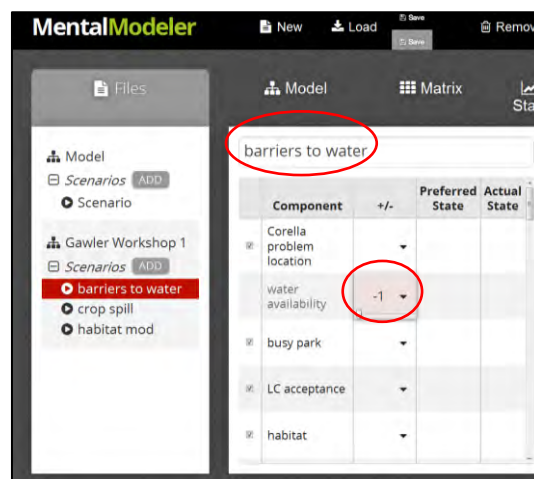
Running scenarios with *Mental Modeler*

Running scenarios with *Mental Modeler* will give insights into effective management actions (What will work? What are the trade-offs?) For example, in models about little corella problem sites, we would expect that a scenario involving the removal of all trees would also have a negative influence on the little corellas at problem sites. However, such an action would also have consequences elsewhere in the model, like the loss of park amenity and biodiversity. The types of connections between your components will determine how your model behaves under different scenarios.

1. To begin a scenario, click on the “Scenario” tab near the top-right of the screen. In this view, all the components of your model will be listed down the left-hand side of the screen.

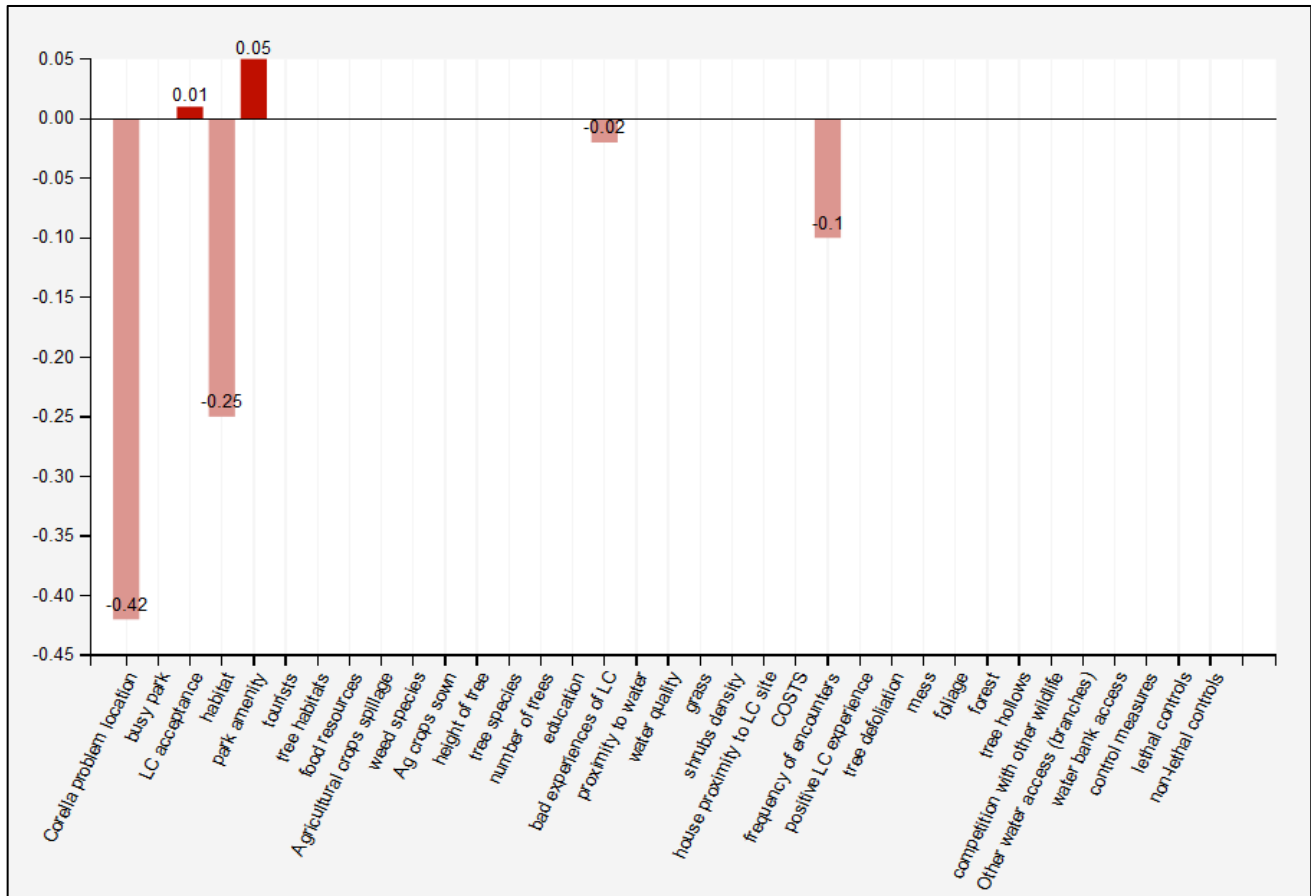


2. In the “Files” column on the left of the screen, click “ADD” to create a new scenario (you can add as many as you like). Above the list of components a space will appear where you can name the scenario – see “barriers to water” in the image below.
3. You can then create a scenario by adjusting the strength and direction of one or more components:
 - In the **+/-** column, click on the arrow corresponding to the component that you want to adjust and a slide bar will appear.
 - Move the slide bar to indicate the change of relationship that you want. A graph will appear (and update automatically) as you manipulate the components.
4. Once you have created scenarios, you can use the “File” column on the left of the screen to look at each scenario or move back to the model.



Interpreting the scenarios

The example below was generated using a model from a trial workshop. A scenario was created where “water availability” was reduced as much as possible. The columns in the graph indicate where the trade-offs occurred under this scenario. You can see that the *Corella probem locations* were decreased. Other components that decreased under this scenario were *habitat*, *bad experiences of little corellas*, and *frequency of encounters*. Conversely, two components increased, namely *Little corella acceptance* and *park amenity*.

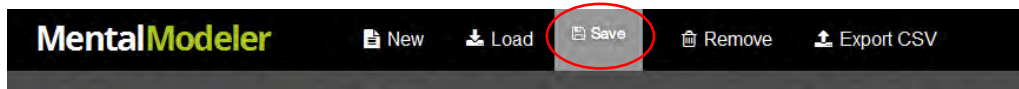


Note: When evaluating the scenarios, it is helpful to consider what the future might look like under the conditions you have set. If your scenario results are counter to your intuitive understanding, it could mean your model needs to be refined. You can go back and check:

- If a relationship between components has been overlooked (e.g. perhaps a connection needs to be added).
- If the relationships between the variables are correct (e.g. perhaps there is a positive relationship when a negative relationship is more appropriate).
- If the strengths of the relationships are correct. Adjustments in the strengths of relationships can have a surprising influence on outcomes of scenarios.

Saving your model

1. Click the “Save” tab at the top screen.



2. You will be asked to name the file and choose a location to save it in. Change the File name to include your surname and the date, for example:

Scanlon 12 Dec 2015.mmp

3. **Note:** the default file name will have “.mmp.mmp” at the end. You only need one .mmp at the end of your file name (you can delete the other one).
4. Please send the file to us (e-mail: discoverycircle@unisa.edu.au); we would appreciate a short summary of the changes that you have made (e.g. new components, plus interesting scenarios or observations about the model). Thank you!!

Additional resources for *Mental Modeler*

- **Mental Modeler:** <http://www.mentalmodeler.org/#resources>
- **Discovery Circle:** <http://www.discoverycircle.org.au/>

Discovery circle



Ordinary Council Meeting 15 August 2024

- | | |
|-----------------------------|---|
| <i>Attachment 1-</i> | <i>11.2.1a Monthly Financial Report for the period ending 31 July 2024</i> |
| <i>Attachment 2-</i> | <i>11.2.1b Bank Reconciliation for the period ending 31 July 2024</i> |
| <i>Attachment 3-</i> | <i>11.2.1c List of Accounts Paid for the period ending 31 July 2024</i> |
| <i>Item 11.2.1-</i> | Monthly Financial Report – July 2024 |
-



SHIRE OF MORAWA

_ 8260052

MONTHLY FINANCIAL REPORT

INCLUDES THE STATEMENT OF
FINANCIAL ACTIVITY

FOR THE YEAR ENDING
30 JUNE 2025



SHIRE OF MORAWA
MONTHLY FINANCIAL REPORT
(Containing the Statement of Financial Activity)
For the Period Ended 31 July 2024

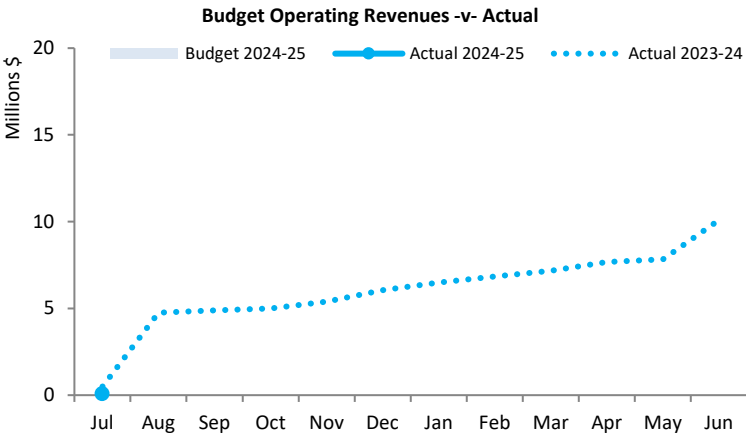
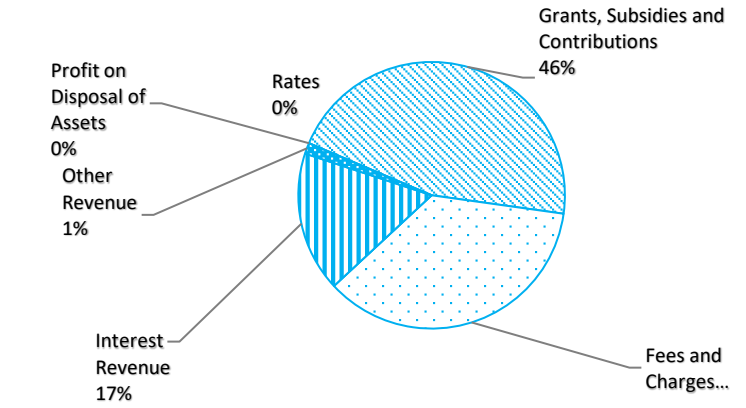
LOCAL GOVERNMENT ACT 1995
LOCAL GOVERNMENT (FINANCIAL MANAGEMENT) REGULATIONS 1996

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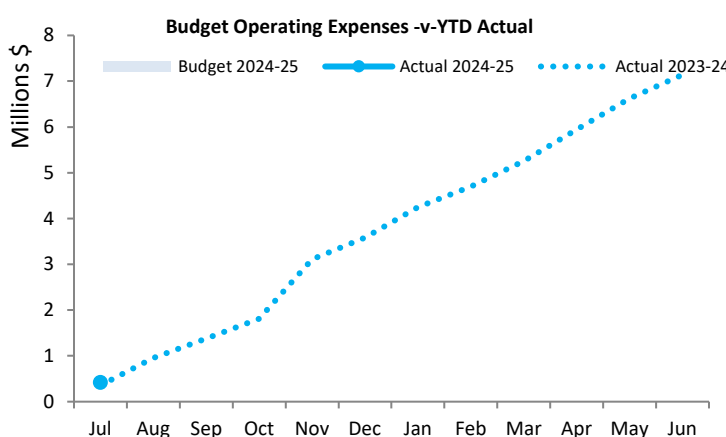
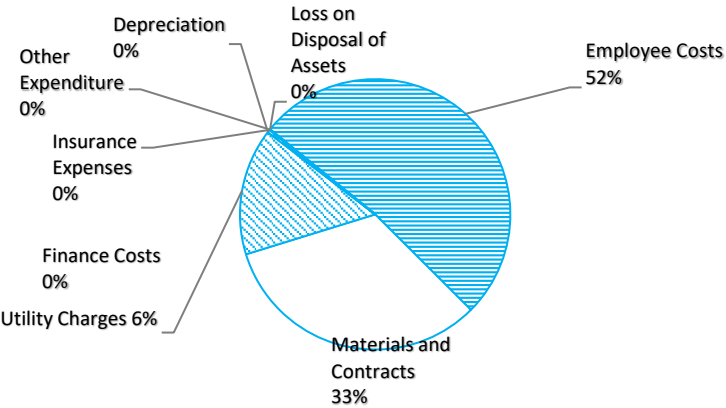
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OPERATING ACTIVITIES

OPERATING REVENUE

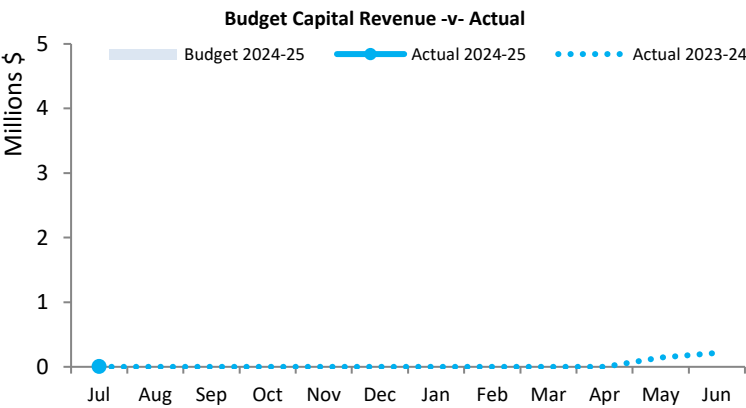


OPERATING EXPENSES

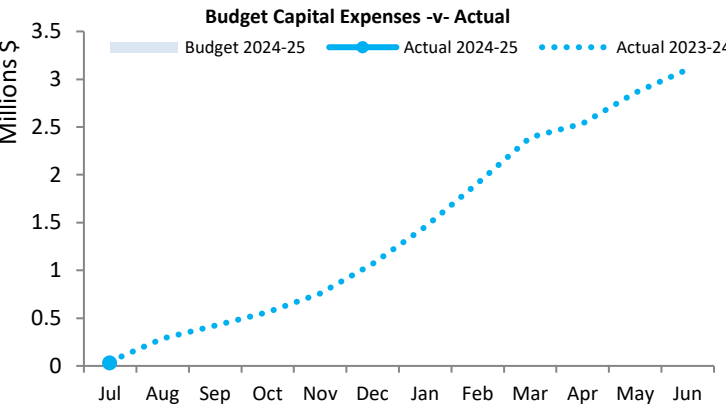


INVESTING ACTIVITIES

CAPITAL REVENUE



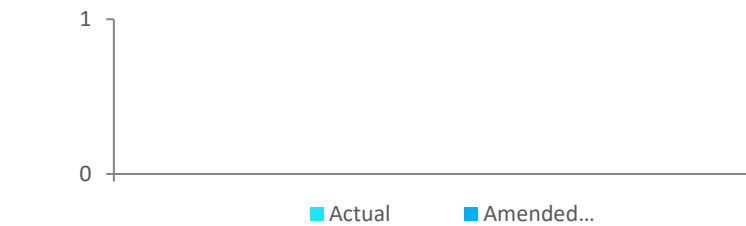
CAPITAL EXPENSES



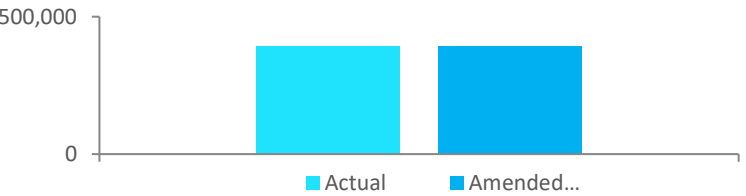
FINANCING ACTIVITIES

BORROWINGS

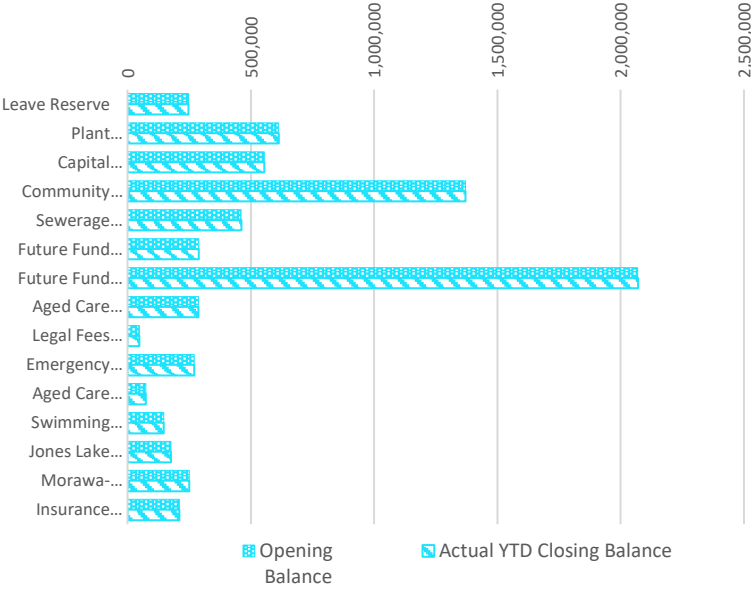
Principal Repayments



Principal Outstanding



RESERVES



This information is to be read in conjunction with the accompanying Financial Statements and Notes.

Funding surplus / (deficit) Components

Funding surplus / (deficit)				
	Amended Budget	YTD Budget (a)	YTD Actual (b)	Var. \$ (b)-(a)
Opening	\$0.00 M	\$0.00 M	\$3.90 M	\$3.90 M
Closing	\$0.00 M	\$0.00 M	\$3.53 M	\$3.53 M
Refer to Statement of Financial Activity				

Cash and cash equivalents		
	\$10.47 M	% of total
Unrestricted Cash	\$3.40 M	32.5%
Restricted Cash	\$7.07 M	67.5%
Refer to Note 2 - Cash and Financial Assets		

Payables		
	\$0.36 M	% Outstanding
Trade Payables	\$0.04 M	
0 to 30 Days		100.0%
30 to 90 Days		0.0%
Over 90 Days		0%
Refer to Note 5 - Payables		

Receivables		
	\$0.56 M	% Collected
Rates Receivable	\$0.49 M	0.6%
Trade Receivable	\$0.07 M	% Outstanding
30 to 90 Days		24.5%
Over 90 Days		21%
Refer to Note 3 - Receivables		

Key Operating Activities

Amount attributable to operating activities			
Amended Budget	YTD Budget (a)		Var. \$ (b)-(a)
\$0.00 M	\$0.00 M	(\$0.35 M)	(\$0.35 M)
Refer to Statement of Financial Activity			

Rates Revenue		
YTD Actual	(\$0.00 M)	% Variance
YTD Budget	\$0.00 M	0.0%
Refer to Note 6 - Rate Revenue		

Grants and Contributions		
YTD Actual	\$0.03 M	% Variance
YTD Budget	\$0.00 M	#DIV/0!
Refer to Note 13 - Operating Grants and Contributions		

Fees and Charges		
YTD Actual	\$0.02 M	% Variance
YTD Budget	\$0.00 M	0.0%
Refer to Statement of Financial Activity		

Key Investing Activities

Amount attributable to investing activities			
Amended Budget	YTD Budget (a)	YTD Actual (b)	Var. \$ (b)-(a)
\$0.00 M	\$0.00 M	(\$0.03 M)	(\$0.03 M)
Refer to Statement of Financial Activity			

Proceeds on sale		
YTD Actual	\$0.00 M	%
Amended Budget	\$0.00 M	
Refer to Note 7 - Disposal of Assets		

Asset Acquisition		
YTD Actual	\$0.03 M	% Spent
Amended Budget	\$0.00 M	0.0%
Refer to Note 8 - Capital Acquisitions		

Capital Grants		
YTD Actual	\$0.00 M	% Received
Amended Budget	\$0.00 M	
Refer to Note 8 - Capital Acquisitions		

Key Financing Activities

Amount attributable to financing activities			
Amended Budget	YTD Budget (a)	YTD Actual (b)	Var. \$ (b)-(a)
\$0.00 M	\$0.00 M	(\$0.00 M)	(\$0.00 M)
Refer to Statement of Financial Activity			

Borrowings	
Principal repayments	\$0.00 M
Interest expense	\$0.00 M
Principal due	\$0.39 M
Refer to Note 9 - Borrowings	

Reserves	
Reserves balance	\$7.07 M
Interest earned	\$0.00 M
Refer to Note 11 - Cash Reserves	

Lease Liability	
Principal repayments	\$0.00 M
Interest expense	\$0.00 M
Principal due	\$0.00 M
Refer to Note 10 - Lease Liabilities	

This information is to be read in conjunction with the accompanying Financial Statements and notes.

KEY TERMS AND DESCRIPTIONS
FOR THE PERIOD ENDED 31 JULY 2024

STATUTORY PROGRAMS

Shire operations as disclosed in these financial statements encompass the following service orientated activities/programs.

PROGRAM NAME AND OBJECTIVES	ACTIVITIES
GOVERNANCE To manage Councils' Elected Members	Includes Members of Council, Civic Functions and Public Relations, Council Elections, Training/Education of members.
GENERAL PURPOSE FUNDING To manage Council's finances	Includes Rates, Loans, Investments & Grants.
LAW, ORDER, PUBLIC SAFETY To provide, develop & manage services in response to community needs.	Includes Emergency Services, Fire Services and Animal Control
HEALTH To provide, develop & manage services in response to community needs.	Includes Environmental Health, Medical and Health facilities and providers
EDUCATION AND WELFARE To provide, develop & manage services in response to community needs.	Includes Education, Welfare & Children's Services, Youth Development
HOUSING To ensure quality housing and appropriate infrastructure is maintained.	Includes Staff and other housing, including aged care units and Dreghorn Street units.
COMMUNITY AMENITIES To provide, develop & manage services in response to community needs.	Includes Refuse Collection, Sewerage, Cemetery, Building Control and Town Planning.
RECREATION AND CULTURE To ensure the recreational & cultural needs of the community are met.	Includes the Swimming Pool, Halls, Library, Oval, Parks and Gardens and Recreational Facilities.
TRANSPORT To effectively manage transport infrastructure within the shire.	Includes Roads, Footpaths, Private Works, Plant Operating Costs, Outside Crew wages and maintenance of the Airstrip.
ECONOMIC SERVICES To foster economic development, tourism & rural services in the district.	Includes Tourism, Rural Services, Economic Development & Caravan Park.
OTHER PROPERTY AND SERVICES To provide control accounts and reporting facilities for all other operations.	Includes Private Works, Public Works Overheads, Plant Recovery Costs, Administration Overheads and Unclassified Items

**STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2024**

BY PROGRAM

	Ref Note	Adopted Budget	YTD Budget (a)	YTD Actual (b)	Var. \$ (b)-(a)	Var. % (b)-(a)/(a)	Var.
		\$	\$	\$	\$	%	
OPERATING ACTIVITIES							
Revenue from operating activities							
Governance		0	0	293	293	0.00%	
General purpose funding - other		0	0	16,697	16,697	0.00%	▲
Law, order and public safety		0	0	6,086	6,086	0.00%	
Education and welfare		0	0	200	200	0.00%	
Housing		0	0	6,832	6,832	0.00%	
Community amenities		0	0	5,000	5,000	0.00%	
Recreation and culture		0	0	2,975	2,975	0.00%	
Transport		0	0	19,770	19,770	0.00%	▲
Economic services		0	0	10,747	10,747	0.00%	▲
Other property and services		0	0	16	16	0.00%	
		0	0	68,615	68,615		
Expenditure from operating activities							
Governance		0	0	(61,255)	(61,255)	0.00%	▼
General purpose funding		0	0	(20,504)	(20,504)	0.00%	▼
Law, order and public safety		0	0	(4,126)	(4,126)	0.00%	
Health		0	0	(3,300)	(3,300)	0.00%	
Education and welfare		0	0	(14,299)	(14,299)	0.00%	▼
Housing		0	0	(10,206)	(10,206)	0.00%	▼
Community amenities		0	0	(29,905)	(29,905)	0.00%	▼
Recreation and culture		0	0	(148,654)	(148,654)	0.00%	▼
Transport		0	0	(72,298)	(72,298)	0.00%	▼
Economic services		0	0	(46,569)	(46,569)	0.00%	▼
Other property and services		0	0	(5,922)	(5,922)	0.00%	
		0	0	(417,036)	(417,036)		
Non-cash amounts excluded from operating activities	1(a)	0	0	45	45	0.00%	
Amount attributable to operating		0	0	(348,376)	(348,376)		
INVESTING ACTIVITIES							
Inflows from investing activities							
		0	0	0	0		
Outflows from investing activities							
Payments for Infrastructure	9	0	0	(25,410)	(25,410)	0.00%	▼
		0	0	(25,684)	(25,684)		
Amount attributable to investing activities		0	0	(25,684)	(25,684)		
FINANCING ACTIVITIES							
Inflows from financing activities							
		0	0	0	0		
Outflows from financing activities							
Transfer to reserves	11	0	0	(1,205)	(1,205)	0.00%	
		0	0	(1,205)	(1,205)		
Amount attributable to financing activities		0	0	(1,205)	(1,205)		
MOVEMENT IN SURPLUS OR DEFICIT							
Surplus or deficit at the start of the financial year	1(c)	0	0	3,900,854	3,900,854	0.00%	▲
Amount attributable to operating activities		0	0	(348,376)			
Amount attributable to investing activities		0	0	(25,684)			
Amount attributable to financing activities		0	0	(1,205)			
Surplus or deficit after imposition of general rates	1(c)	0	0	3,525,589			

KEY INFORMATION

▲ ▼ Indicates a variance between Year to Date (YTD) Actual and YTD Actual data as per the adopted materiality threshold.

Refer to Note ` for an explanation of the reasons for the variance.

The material variance adopted by Council for the 2024-25 year is \$10,000 or 10.00% whichever is the greater.

This statement is to be read in conjunction with the accompanying Financial Statements and notes.

KEY TERMS AND DESCRIPTIONS
FOR THE PERIOD ENDED 31 JULY 2024

NATURE DESCRIPTIONS

REVENUE

RATES

All rates levied under the *Local Government Act 1995*. Includes general, differential, specified area rates, minimum rates, interim rates, back rates, ex-gratia rates, less discounts and concessions offered. Exclude administration fees, interest on instalments, interest on arrears, service charges and sewerage rates.

GRANTS, SUBSIDIES AND CONTRIBUTIONS

Refers to all amounts received as grants, subsidies and contributions that are not non-operating grants.

CAPITAL GRANTS, SUBSIDIES AND CONTRIBUTIONS

Amounts received specifically for the acquisition, construction of new or the upgrading of identifiable non financial assets paid to a local government, irrespective of whether these amounts are received as capital grants, subsidies, contributions or donations.

REVENUE FROM CONTRACTS WITH CUSTOMERS

Revenue from contracts with customers is recognised when the local government satisfies its performance obligations under the contract.

FEES AND CHARGES

Revenues (other than service charges) from the use of facilities and charges made for local government services, sewerage rates, rentals, hire charges, fee for service, photocopying charges, licences, sale of goods or information, fines, penalties and administration fees. Local governments may wish to disclose more detail such as rubbish collection fees, rental of property, fines and penalties, other fees and charges.

SERVICE CHARGES

Service charges imposed under *Division 6 of Part 6 of the Local Government Act 1995*. *Regulation 54 of the Local Government (Financial Management) Regulations 1996* identifies these as television and radio broadcasting, underground electricity and neighbourhood surveillance services. Exclude rubbish removal charges. Interest and other items of a similar nature received from bank and investment accounts, interest on rate instalments, interest on rate arrears and interest on debtors.

INTEREST REVENUE

Interest and other items of a similar nature received from bank and investment accounts, interest on rate instalments, interest on rate arrears and interest on debtors.

OTHER REVENUE / INCOME

Other revenue, which can not be classified under the above headings, includes dividends, discounts, rebates etc.

PROFIT ON ASSET DISPOSAL

Excess of assets received over the net book value for assets on their disposal.

EXPENSES

EMPLOYEE COSTS

All costs associate with the employment of person such as salaries, wages, allowances, benefits such as vehicle and housing, superannuation, employment expenses, removal expenses, relocation expenses, worker's compensation insurance, training costs, conferences, safety expenses, medical examinations, fringe benefit tax, etc.

MATERIALS AND CONTRACTS

All expenditures on materials, supplies and contracts not classified under other headings. These include supply of goods and materials, legal expenses, consultancy, maintenance agreements, communication expenses, advertising expenses, membership, periodicals, publications, hire expenses, rental, leases, postage and freight etc. Local governments may wish to disclose more detail such as contract services, consultancy, information technology, rental or lease expenditures.

UTILITIES (GAS, ELECTRICITY, WATER, ETC.)

Expenditures made to the respective agencies for the provision of power, gas or water. Exclude expenditures incurred for the reinstatement of roadwork on behalf of these agencies.

INSURANCE

All insurance other than worker's compensation and health benefit insurance included as a cost of employment.

LOSS ON ASSET DISPOSAL

Shortfall between the value of assets received over the net book value for assets on their disposal.

DEPRECIATION

Depreciation expense raised on all classes of assets.

FINANCE COSTS

Interest and other costs of finance paid, including costs of finance for loan debentures, overdraft accommodation and refinancing expenses.

OTHER EXPENDITURE

Statutory fees, taxes, allowance for impairment of assets, member's fees or State taxes. Donations and subsidies made to community groups.

STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2024

BY NATURE

	Ref Note	Adopted Budget	YTD Budget (a)	YTD Actual (b)	Var. \$ (b)-(a)	Var. % (b)-(a)/(a)	Var.
		\$	\$	\$	\$	%	
OPERATING ACTIVITIES							
Revenue from operating activities							
General rates	6	0	0	0	0	0.00%	
Rates excluding general rates	6	0	0	(5)	(5)	0.00%	
Grants, subsidies and contributions	13	0	0	31,442	31,442	0.00%	▲
Fees and charges		0	0	24,622	24,622	0.00%	▲
Interest revenue		0	0	11,650	11,650	0.00%	▲
Other revenue		0	0	906	906	0.00%	
Profit on disposal of assets	7	0	0	0	0	0.00%	
Gain on FV Adjustment of Financial Asstes through P&L		0	0	0	0	0.00%	
		0	0	68,615	68,615		
Expenditure from operating activities							
Employee costs		0	0	(215,380)	(215,380)	0.00%	▼
Materials and contracts		0	0	(136,579)	(136,579)	0.00%	▼
Utility charges		0	0	(63,309)	(63,309)	0.00%	▼
Depreciation		0	0	0	0	0.00%	
Finance costs		0	0	(1,398)	(1,398)	0.00%	
Insurance expenses		0	0	0	0	0.00%	
Other expenditure		0	0	(369)	(369)	0.00%	
		0	0	(417,036)	(417,036)		
Non-cash amounts excluded from operating activities	1(a)	0	0	45	45	0.00%	
Amount attributable to operating activities		0	0	(348,376)	(348,376)		
INVESTING ACTIVITIES							
Inflows from investing activities							
Proceeds from capital grants, subsidies and contributions	14	0	0	0	0	0.00%	
Proceeds from disposal of assets	7	0	0	0	0	0.00%	
		0	0	0	0		
Outflows from investing activities							
Payments for infrastructure	8	0	0	(25,410)	(25,410)	0.00%	
Payments for property, plant and equipment	8	0	0	(273)	(273)	0.00%	
		0	0	(25,684)	(25,684)		
					0		
Amount attributable to investing activities		0	0	(25,684)	(25,684)		
FINANCING ACTIVITIES							
Inflows from financing activities							
Transfer from reserves	11	0	0	0	0	0.00%	
		0	0	0	0		
Outflows from financing activities							
Repayment of borrowings	9	0	0	0	0	0.00%	
Transfer to reserves	11	0	0	(1,205)	(1,205)	0.00%	
		0	0	(1,205)	(1,205)		
Amount attributable to financing activities		0	0	(1,205)	(1,205)		
MOVEMENT IN SURPLUS OR DEFICIT							
Surplus or deficit at the start of the financial year	1(c)	0	0	3,900,854	3,900,854	0.00%	▲
Amount attributable to operating activities		0	0	(348,376)	(348,376)	0.00%	
Amount attributable to investing activities		0	0	(25,684)	(25,684)	0.00%	
Amount attributable to financing activities		0	0	(1,205)	(1,205)	0.00%	
Surplus or deficit after imposition of general rates	1(c)	0	0	3,525,589			

KEY INFORMATION

▲ ▼ Indicates a variance between Year to Date (YTD) Actual and YTD Actual data as per the adopted materiality threshold.

Refer to Note ` for an explanation of the reasons for the variance.

This statement is to be read in conjunction with the accompanying Financial Statements and Notes.

**STATEMENT OF FINANCIAL POSITION
FOR THE PERIOD ENDED 31 JULY 2024**

	30 Jun 2024	31 July 2024
	\$	\$
CURRENT ASSETS		
Cash and cash equivalents	10,795,616	10,467,166
Trade and other receivables	552,703	545,114
Inventories	8,639	8,639
Other assets	84,900	2,943
TOTAL CURRENT ASSETS	11,441,858	11,023,863
NON-CURRENT ASSETS		
Trade and other receivables	14,282	14,282
Other financial assets	61,117	61,117
Property, plant and equipment	29,998,507	29,998,781
Infrastructure	62,707,932	62,733,342
TOTAL NON-CURRENT ASSETS	92,781,838	92,807,522
TOTAL ASSETS	104,223,696	103,831,385
CURRENT LIABILITIES		
Trade and other payables	407,247	363,357
Employee related provisions	313,930	313,930
TOTAL CURRENT LIABILITIES	721,177	677,287
NON-CURRENT LIABILITIES		
Borrowings	391,073	391,073
Employee related provisions	38,855	38,855
TOTAL NON-CURRENT LIABILITIES	429,928	429,928
TOTAL LIABILITIES	1,151,105	1,107,215
NET ASSETS	103,072,591	102,724,170
EQUITY		
Retained surplus	39,709,145	39,359,519
Reserve accounts	7,067,167	7,068,372
Revaluation surplus	56,296,279	56,296,279
TOTAL EQUITY	103,072,591	102,724,170

This statement is to be read in conjunction with the accompanying notes.

BASIS OF PREPARATION

The financial report has been prepared in accordance with Australian Accounting Standards (as they apply to local governments and not-for-profit entities) and interpretations of the Australian Accounting Standards Board, and the *Local Government Act 1995* and accompanying regulations.

The *Local Government Act 1995* and accompanying Regulations take precedence over Australian Accounting Standards where they are inconsistent.

The *Local Government (Financial Management) Regulations 1996* specify that vested land is a right-of-use asset to be measured at cost. All right-of-use assets (other than vested improvements) under zero cost concessionary leases are measured at zero cost rather than at fair value. The exception is vested improvements on concessionary land leases such as roads, buildings or other infrastructure which continue to be reported at fair value, as opposed to the vested land which is measured at zero cost. The measurement of vested improvements at fair value is a departure from AASB 16 which would have required the Shire to measure any vested improvements at zero cost.

Accounting policies which have been adopted in the preparation of this financial report have been consistently applied unless stated otherwise. Except for cash flow and rate setting information, the financial report has been prepared on the accrual basis and is based on historical costs, modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and liabilities.

THE LOCAL GOVERNMENT REPORTING ENTITY

All funds through which the Shire controls resources to carry on its functions have been included in the financial statements forming part of this financial report.

In the process of reporting on the local government as a single unit, all transactions and balances between those funds (for example, loans and transfers between funds) have been eliminated.

All monies held in the Trust Fund are excluded from the financial statements. A separate statement of those monies appears at Note 15 to these financial statements.

SIGNIFICANT ACCOUNTING POLICES

CRITICAL ACCOUNTING ESTIMATES

The preparation of a financial report in conformity with Australian Accounting Standards requires management to make judgements, estimates and assumptions that effect the application of policies and reported amounts of assets and liabilities, income and expenses.

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances; the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

GOODS AND SERVICES TAX

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO). Receivables and payables are stated inclusive of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with receivables or payables in the statement of financial position. Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to, the ATO are presented as operating cash flows.

ROUNDING OFF FIGURES

All figures shown in this statement are rounded to the nearest dollar.

PREPARATION TIMING AND REVIEW

Date prepared: All known transactions up to 31 July 2024

(a) Non-cash items excluded from operating activities

The following non-cash revenue and expenditure has been excluded from operating activities within the Statement of Financial Activity in accordance with Financial Management Regulation 32.

	Notes	Adopted Budget	Amended Budget	YTD Budget (a)	YTD Actual (b)
Non-cash items excluded from operating activities		\$	\$	\$	\$
Adjustments to operating activities					
Less: Movement in liabilities associated with restricted cash		0	0	0	45
Total non-cash items excluded from operating activities		0	0	0	45

(b) Adjustments to net current assets in the Statement of Financial Activity

The following current assets and liabilities have been excluded from the net current assets used in the Statement of Financial Activity in accordance with *Financial Management Regulation 32*.

		Last Year Closing	This Time Last Year	Year to Date
		30 June 2024	31 Jul 2023	31 Jul 2024
Adjustments to net current assets				
Less: Reserves - restricted cash	11	(7,067,167)	(6,737,542)	(7,068,372)
Add Back: Component of Leave Liability not Required to be Fu	12	247,340	240,272	247,385
Add: Borrowings	9	0	28,156	0
Total adjustments to net current assets		(6,819,826)	(6,469,114)	(6,820,986)

(c) Net current assets used in the Statement of Financial Activity

Current assets				
Cash and cash equivalents	2	10,794,091	9,740,302	10,465,641
Rates receivables	3	474,907	412,480	472,083
Receivables	3	77,795	37,741	73,031
Other current assets	4	93,539	25,160	11,583
Less: Current liabilities				
Payables	5	(405,721)	(566,614)	(361,832)
Borrowings	9	0	(28,156)	0
Contract liabilities	12	0	(274,221)	0
Provisions	12	(313,930)	(313,930)	(313,930)
Less: Total adjustments to net current assets	1(b)	(6,819,826)	(6,469,114)	(6,820,986)
Closing funding surplus / (deficit)		* 3,900,854	2,563,647	3,525,589

CURRENT AND NON-CURRENT CLASSIFICATION

In the determination of whether an asset or liability is current or non-current, consideration is given to the time when each asset or liability is expected to be settled. Unless otherwise stated assets or liabilities are classified as at current if expected to be settled within the next 12 months, being the Council's operational cycle.

Liabilities under transfers to acquire or construct non-financial assets to be controlled by the entity

* The 30 June 2023 closing surplus differs from the budgeted amounts shown in the SFA due to incompleted and unaudited financials. The above figure may change in future statements up to adoption of the financial statements

Description	Classification	Unrestricted	Restricted	Total Cash	Trust	Institution	Interest Rate	Maturity Date
		\$	\$	\$	\$			
Cash on hand								
Cash On Hand	Cash and cash equivalents	400		400			NIL	On Hand
At Call Deposits								
Municipal Cash at Bank	Cash and cash equivalents	2,294,640		2,294,640		Bankwest	2.50%	At Call
Muni Business Telenet Saver	Cash and cash equivalents	1,102,230		1,102,230		Bankwest	2.50%	At Call
CAB - ST N/Midlands Solar Thermal Power Reserve	Cash and cash equivalents	0	0	0		Bankwest	2.50%	At Call
CAB - ST Morawa Revitalisation Reserve	Cash and cash equivalents	0	0	0		Bankwest	2.50%	At Call
CAB - Aged Care Units Reserv Units 6-9	Cash and cash equivalents	0	0	0		Bankwest	2.50%	At Call
CAB - Refuse Transfer Station Reserve	Cash and cash equivalents	0	0	0		Bankwest	2.50%	At Call
CAB - Future Fund Grant (Interest) Reserve	Cash and cash equivalents	0	288,449	288,449		Bankwest	2.50%	At Call
CAB - Leave Reserve Account	Cash and cash equivalents	0	247,385	247,385		Bankwest	2.50%	At Call
CAB - Swimming Pool Reserve	Cash and cash equivalents	0	146,509	146,509		Bankwest	2.50%	At Call
CAB - Plant Replacement Reserve	Cash and cash equivalents	0	612,758	612,758		Bankwest	2.50%	At Call
CAB - Capital Works Reserve	Cash and cash equivalents	0	555,363	555,363		Bankwest	2.50%	At Call
CAB - Sewerage Reserve	Cash and cash equivalents	0	461,281	461,281		Bankwest	2.50%	At Call
CAB - Community & Economic Development Reserve	Cash and cash equivalents	0	1,370,880	1,370,880		Bankwest	2.50%	At Call
CAB - Future Funds (Principal) Reserve	Cash and cash equivalents	0	2,069,926	2,069,926		Bankwest	2.50%	At Call
CAB - Legal Reserve	Cash and cash equivalents	0	47,795	47,795		Bankwest	2.50%	At Call
CAB - Emergency Response Reserve	Cash and cash equivalents	0	270,183	270,183		Bankwest	2.50%	At Call
CAB - Aged Care Units 1-4 (JVA) Reserve	Cash and cash equivalents	0	74,322	74,322		Bankwest	2.50%	At Call
CAB - Aged Care Units (Excl. 1-4) Reserve	Cash and cash equivalents	0	287,324	287,324		Bankwest	2.50%	At Call
CAB - Jones Lake Road Rehab Reserve	Cash and cash equivalents	0	176,573	176,573		Bankwest	2.50%	At Call
CAB - Morawa-Yalgoo Road Maintenance Reserve	Cash and cash equivalents	0	249,964	249,964		Bankwest	2.50%	At Call
CAB - Insurance Works Reserve	Cash and cash equivalents	0	209,660	209,660		Bankwest	2.50%	At Call
Term Deposits		0						
TD: ... 8410 (Future Funds 1)	Cash and cash equivalents	0	0	0		Bankwest	3.50%	3/07/2024
TD: ... 8428 (Future Funds 2)	Cash and cash equivalents	0	0	0		Bankwest	3.50%	3/07/2024
TD: ... 8436 (Community Development Fund)	Cash and cash equivalents	0	0	0		Bankwest	3.50%	3/07/2024
Trust Deposits								
Trust Bank	Cash and cash equivalents	0			1,525		0.00%	At Call
Total		3,397,269	7,068,372	10,465,641	1,525			
Comprising								
Cash and cash equivalents		3,397,269	7,068,372	10,465,641	1,525			
Financial assets at amortised cost		0	0	0	0			
		3,397,269	7,068,372	10,465,641	1,525			

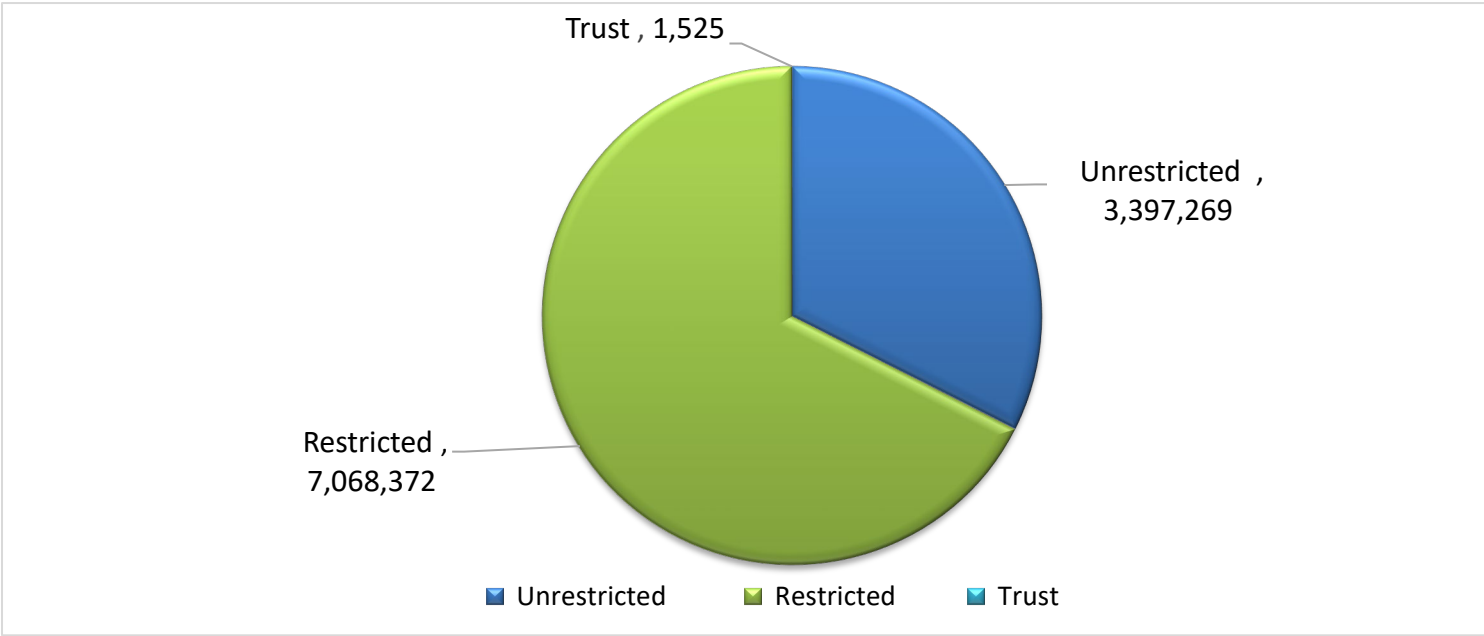
KEY INFORMATION

Cash and cash equivalents include cash on hand, cash at bank, deposits available on demand with banks and other short term highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes bank in value and bank overdrafts. Bank overdrafts are reported as short term borrowings in current liabilities in the statement of net current assets.

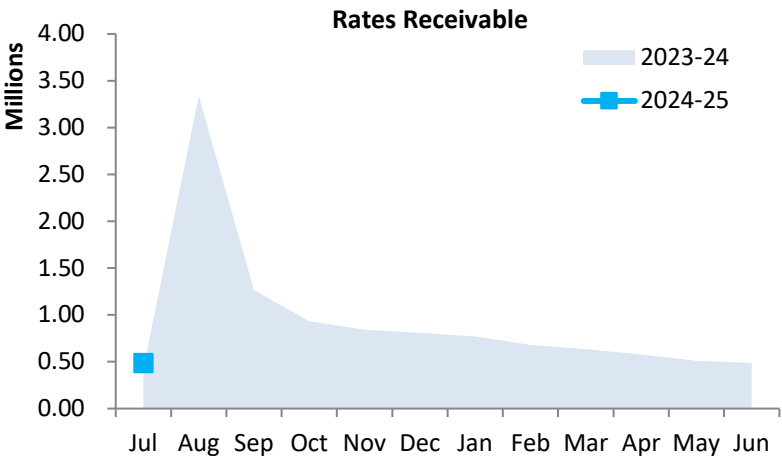
The local government classifies financial assets at amortised cost if both of the following criteria are met:

- the asset is held within a business model whose objective is to collect the contractual cashflows, and
- the contractual terms give rise to cash flows that are solely payments of principal and interest.

Financial assets at amortised cost held with registered financial institutions are listed in this note other financial assets at amortised cost are provided in Note 4 - Other assets.



Rates receivable	30 Jun 2024	31 Jul 2024
	\$	\$
Opening arrears previous years	457,888	489,189
Levied this year	3,442,156	0
Less - collections to date	(3,410,854)	(2,824)
Equals current outstanding	489,189	486,365
Net rates collectable	489,189	486,365
% Collected	87.5%	0.6%

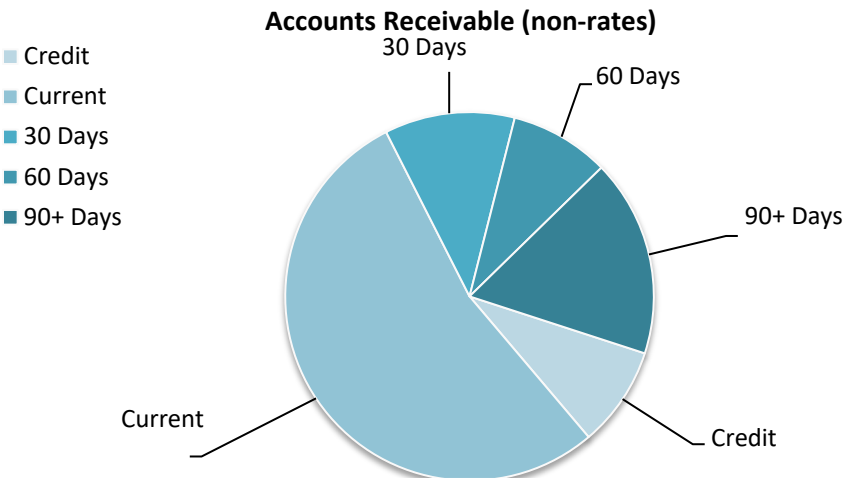


Receivables - general	Credit	Current	30 Days	60 Days	90+ Days	Total
	\$	\$	\$	\$	\$	\$
Receivables - general	(2,744)	16,713	3,557	2,719	5,386	25,631
Percentage	(10.7%)	65.2%	13.9%	10.6%	21%	
Balance per trial balance						
Sundry receivable						25,410
GST receivable						70,600
Increase in Allowance for impairment of receivables from contracts with customers						(25,012)
Rates Pensioner Rebate Allowed/Received						2,034
Total receivables general outstanding						73,031

Amounts shown above include GST (where applicable)

KEY INFORMATION

Trade and other receivables include amounts due from ratepayers for unpaid rates and service charges and other amounts due from third parties for goods sold and services performed in the ordinary course of business. Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current assets. Collectability of trade and other receivables is reviewed on an ongoing basis. Debts that are known to be uncollectible are written off when identified. An allowance for impairment of receivables is raised when there is objective evidence that they will not be collectible.



	Opening Balance 1 July 2024	Asset Increase	Asset Reduction	Closing Balance 31 Jul 2024
Other current assets	\$	\$	\$	\$
Inventory				
Fuel, Oils and Materials on Hand	8,639	0	0	8,639
Other current assets				
Accrued income	84,900	0	(81,957)	2,943
Total other current assets	93,539	0	(81,957)	11,582
Amounts shown above include GST (where applicable)				

KEY INFORMATION

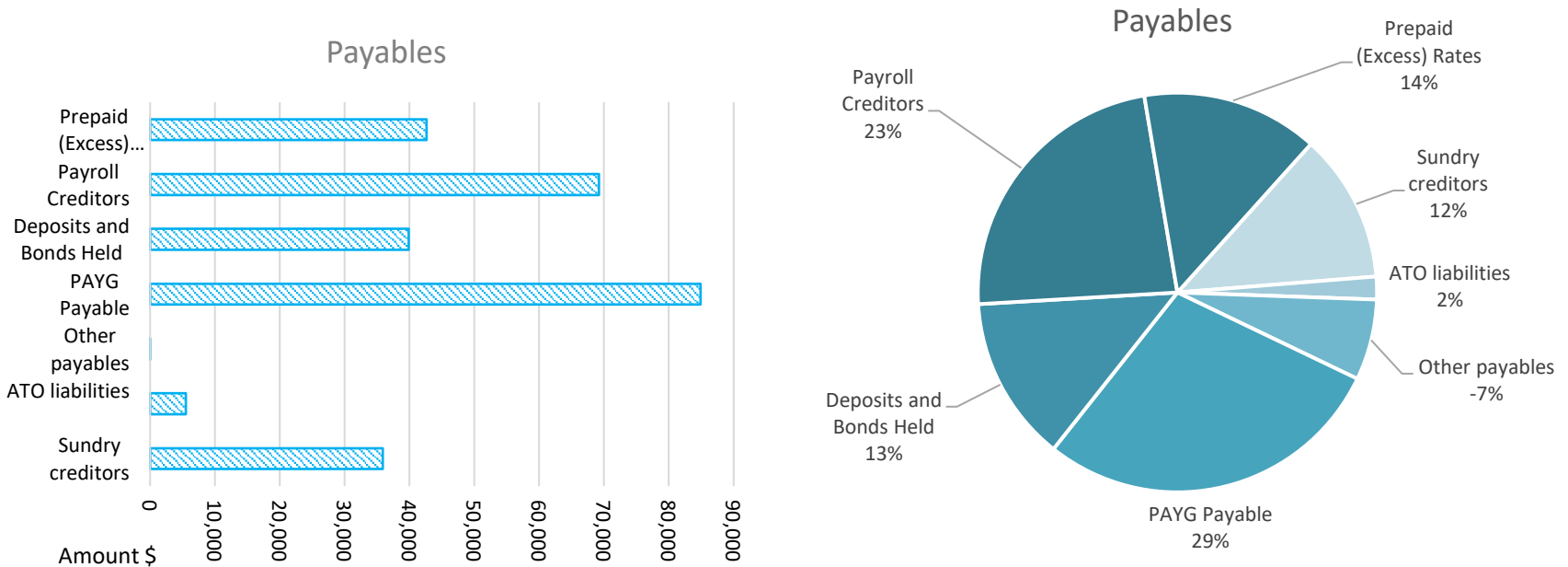
Inventory

Inventories are measured at the lower of cost and net realisable value.
Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Payables - general	Credit	Current	30 Days	60 Days	90+ Days	Total
	\$	\$	\$	\$	\$	\$
Payables - general	0	35,856	0	0	0	35,856
Percentage	0%	100%	0%	0%	0%	
Balance per trial balance						
Sundry creditors						35,856
ATO liabilities						5,485
Other payables						(19,471)
PAYG Payable						84,917
Deposits and Bonds Held						39,860
Payroll Creditors						69,208
Prepaid (Excess) Rates						42,611
Total payables general outstanding						361,834
Amounts shown above include GST (where applicable)						

KEY INFORMATION

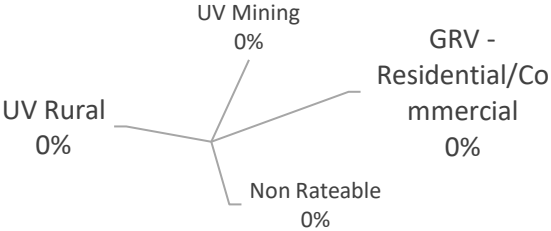
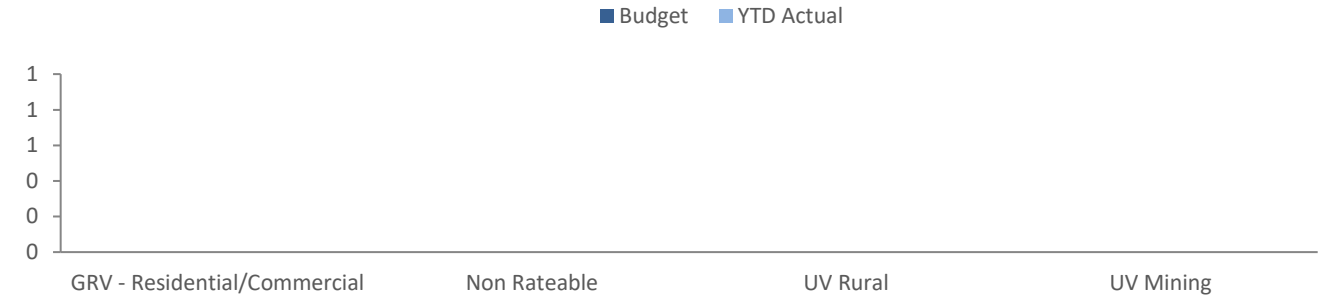
Trade and other payables represent liabilities for goods and services provided to the Shire that are unpaid and arise when the Shire becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are unsecured, are recognised as a current liability and are normally paid within 30 days of recognition.



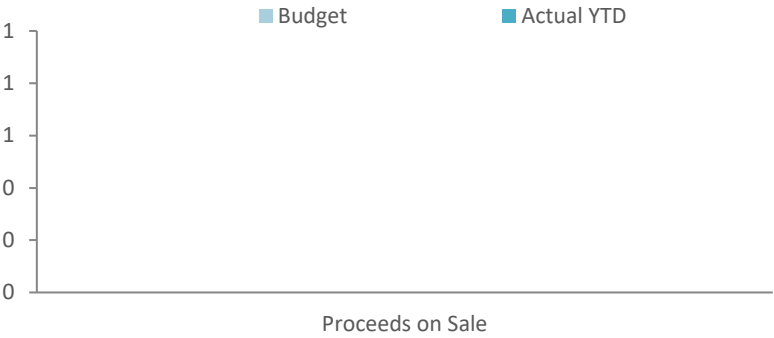
General rate revenue	Budget							YTD Actual			
	Rate in \$ (cents)	Number of Properties	Rateable Value	Rate Revenue	Interim Rate	Back Rate	Total Revenue	Rate Revenue	Interim Rates	Back Rates	Total Revenue
RATE TYPE				\$	\$	\$	\$	\$	\$	\$	\$
General Rate											
Gross rental valuations											
GRV - Residential/Commercial	0.088342				0	0	0	0	0	0	0
Non Rateable	0.000000				0	0	0	0	0	0	0
Unimproved value											
UV Rural	0.022728				0	0	0	0	0	0	0
UV Mining	0.301974				0	0	0	0	0	0	0
Sub-Total		0	0	0	0	0	0	0	0	0	0
Minimum payment											
Minimum \$											
Gross rental valuations											
GRV - Residential/Commercial	339				0	0	0	0	0	0	0
Unimproved value											
UV Rural	339				0	0	0	0	0	0	0
UV Mining	683				0	0	0	0	0	0	0
Sub-total		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0
Discount							0				0
Amount from general rates							0				0
Rates Written Off							0				(5)
Ex-gratia rates		0	0	0	0	0	0				0
Total general rates							0				(5)

KEY INFORMATION

Prepaid rates are, until the taxable event for the rates has occurred, refundable at the request of the ratepayer. Rates received in advance give rise to a financial liability. On 1 July 2023 the prepaid rates were recognised as a financial asset and a related amount was recognised as a financial liability and no income was recognised. When the taxable event occurs the financial liability is extinguished and income recognised for the prepaid rates that have not been refunded.



Asset Ref.	Asset description	Updated Budget				YTD Actual			
		Value	Proceeds	Profit	(Loss)	Value	Proceeds	Profit	(Loss)
		\$	\$	\$	\$	\$	\$	\$	\$
	Plant and equipment	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0

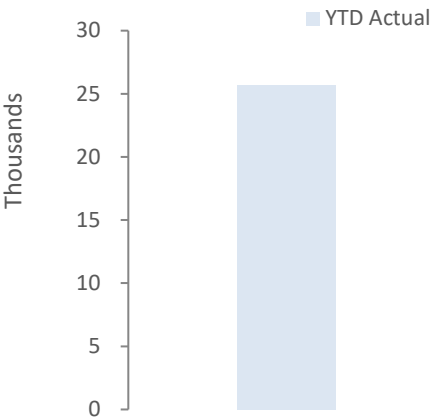


INVESTING ACTIVITIES
NOTE 8
CAPITAL ACQUISITIONS

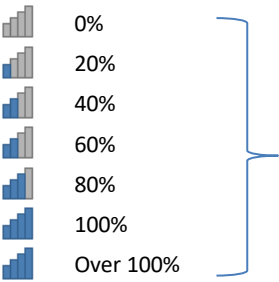
Capital acquisitions	Adopted Budget	YTD Budget	YTD Actual	YTD Actual Variance
		\$	\$	\$
Infrastructure - roads	0	0	18,453	18,453
Infrastructure - Other	0	0	6,958	6,958
Payments for Capital Acquisitions	0	0	25,684	25,684
Capital Acquisitions Funded By:				
		\$	\$	\$
Contribution - operations	0	0	25,684	25,684
Capital funding total	0	0	25,684	25,684

SIGNIFICANT ACCOUNTING POLICIES

All assets are initially recognised at cost. Cost is determined as the fair value of the assets given as consideration plus costs incidental to the acquisition. For assets acquired at no cost or for nominal consideration, cost is determined as fair value at the date of acquisition. The cost of non-current assets constructed by the local government includes the cost of all materials used in the construction, direct labour on the project and an appropriate proportion of variable and fixed overhead. Certain asset classes may be revalued on a regular basis such that the carrying values are not materially different from fair value. Assets carried at fair value are to be revalued with sufficient regularity to ensure the carrying amount does not differ materially from that determined using fair value at reporting date.





Capital expenditure total
Level of completion indicators



Percentage Year to Date Actual to Annual Budget expenditure where the expenditure over budget highlighted in red.

Level of completion indicator, please see table at the end of this note for further detail.

Adopted				
Account/Job Description	Budget	YTD Budget	YTD Actual	Variance (Under)/ Over
	0	0	0	0
Infrastructure Other				
 Cemetery Entrance Road & Carpark	0	0	(6,958)	0
	0	0	(6,958)	0
Infrastructure Roads				
 Stephens Road	0	0	(18,453)	(18,453)
	0	0	(18,453)	(18,453)
	0	0	0	0
	0	0	(25,684)	(18,726)

NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2024

Repayments - borrowings

Information on borrowings			New Loans			Principal Repayments			Principal Outstanding			Interest Repayments		
Particulars	Loan No.	1 July 2024	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget	Actual	Amended Budget	Adopted Budget
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Housing														
24 Harley Street - Staff Housing	136	233,496	0	0	0	0	0	0	233,496	233,496	233,496	841	0	0
Recreation and culture														
Netball Courts Redevelopment	139	157,577	0	0	0	0	0	0	157,577	157,577	157,577	557	0	0
Total		391,073	0	0	0	0	0	0	391,073	391,073	391,073	1,398	0	0
Current borrowings		0							0					
Non-current borrowings		391,073							391,073					
		391,073							391,073					

All debenture repayments were financed by general purpose revenue.

KEY INFORMATION

All loans and borrowings are initially recognised at the fair value of the consideration received less directly attributable transaction costs. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the effective interest method. Fees paid on the establishment of loan facilities that are yield related are included as part of the carrying amount of the loans and borrowings.

**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2024**

The Shire has no lease liabilities to report as at 31 July 2024

KEY INFORMATION

At inception of a contract, the Shire assesses if the contract contains or is a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At the commencement date, a right of use asset is recognised at cost and lease liability at the present value of the lease payments that are not paid at that date. The lease payments are discounted using that date. The lease payments are discounted using the interest rate implicit in the lease, if that rate can be readily determined. If that rate cannot be readily determined, the Shire uses its incremental borrowing rate.

All contracts classified as short-term leases (i.e. a lease with a remaining term of 12 months or less) and leases of low value assets are recognised as an operating expense on a straight-line basis over the term of the lease.

Cash backed reserve

Reserve name	Opening Balance	Budget Interest Earned	Actual Interest Earned	Budget Transfers In (+)	Actual Transfers In (+)	Budget Transfers Out (-)	Actual Transfers Out (-)	Budget Closing Balance	Actual YTD Closing Balance
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Leave Reserve	247,340	0	45	0	0	0	0	247,340	247,385
Plant Replacement Reserve	612,646	0	112	0	0	0	0	612,646	612,758
Capital Works Reserve	555,262	0	101	0	0	0	0	555,262	555,363
Community & Economic Development Reserve	1,370,630	0	250	0	0	0	0	1,370,630	1,370,880
Sewerage Reserve	461,197	0	84	0	0	0	0	461,197	461,281
Future Fund Grants (Interest) Reserve	288,396	0	53	0	0	0	0	288,396	288,449
Future Fund (Principal) Reserve	2,069,549	0	377	0	0	0	0	2,069,549	2,069,926
Aged Care Units (Excl. 1-4) Reserve	287,271	0	52	0	0	0	0	287,271	287,324
Legal Fees Reserve	47,786	0	9	0	0	0	0	47,786	47,795
Emergency Response Reserve	270,134	0	49	0	0	0	0	270,134	270,183
Aged Care Units 1-4 (JVA) Reserve	74,308	0	14	0	0	0	0	74,308	74,322
Swimming Pool Reserve	146,483	0	27	0	0	0	0	146,483	146,509
Jones Lake Road Rehab Reserve	176,541	0	32	0	0	0	0	176,541	176,573
Morawa-Yalgoo Road Maintenance Reserve	249,964	0	0	0	0	0	0	249,964	249,964
Insurance Works Reserve	209,660	0	0	0	0	0	0	209,660	209,660
	7,067,167	0	1,205	0	0	0	0	7,067,167	7,068,372

		Opening Balance	Liability transferred from/(to) non current	Liability Increase	Liability Reduction	Closing Balance
Other current liabilities	Note	1 July 2024				31 Jul 2024
		\$		\$	\$	\$
Provisions						
Provision for annual leave		156,384	0	0	0	156,384
Provision for long service leave		157,547	0	0	0	157,547
Total Provisions		313,931	0	0	0	313,931
Total other current liabilities		313,931	0	0	0	313,931
Amounts shown above include GST (where applicable)						

KEY INFORMATION

Provisions

Provisions are recognised when the Shire has a present legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

Provisions are measured using the best estimate of the amounts required to settle the obligation at the end of the reporting period.

Employee benefits

Short-term employee benefits

Provision is made for the Shire’s obligations for short-term employee benefits. Short-term employee benefits are benefits (other than termination benefits) that are expected to be settled wholly before 12 months after the end of the annual reporting period in which the employees render the related service, including wages, salaries and sick leave. Short-term employee benefits are measured at the (undiscounted) amounts expected to be paid when the obligation is settled.

The Shire’s obligations for short-term employee benefits such as wages, salaries and sick leave are recognised as a part of current trade and other payables in the calculation of net current assets.

Other long-term employee benefits

0%

The Shire’s obligations for employees’ annual leave and long service leave entitlements are recognised as provisions in the statement of financial position.

Long-term employee benefits are measured at the present value of the expected future payments to be made to employees. Expected future payments incorporate anticipated future wage and salary levels, durations of service and employee departures and are discounted at rates determined by reference to market yields at the end of the reporting period on government bonds that have maturity dates that approximate the terms of the obligations. Any remeasurements for changes in assumptions of obligations for other long-term employee benefits are recognised in profit or loss in the periods in which the changes occur. The Shire’s obligations for long-term employee benefits are presented as non-current provisions in its statement of financial position, except where the Shire does not have an unconditional right to defer settlement for at least 12 months after the end of the reporting period, in which case the obligations are presented as current provisions.

Contract liabilities

An entity’s obligation to transfer goods or services to a customer for which the entity has received consideration (or the amount is due) from the customer. Grants to acquire or construct recognisable non-financial assets to identified specifications be constructed to be controlled by the Shire are recognised as a liability until such time as the Shire satisfies its obligations under the agreement.

Grants, subsidies and contributions revenue					
Provider	Adopted Budget Revenue	YTD Budget	Annual Budget	Budget Variations	YTD Revenue Actual
	\$	\$	\$	\$	\$
Grants, contributions and subsidies					
Law, order, public safety					
Grant - ESL BFB Operating Grant	0	0	0	(5,845)	5,845
Community amenities					
Community Benefit Contribution	0	0	0	(5,000)	5,000
Transport					
Maintenance Contribution -Silverlake - Morawa Yalgoo Road	0	0	0	(20,597)	20,597
TOTALS	0	0	0	(31,442)	31,442

Capital grants, subsidies and contributions revenue					
Provider	Adopted Budget Revenue	YTD Budget	Annual Budget	Budget Variations	YTD Revenue Actual
	\$	\$	\$	\$	\$
Capital grants and subsidies					
TOTALS	0	0	0	0	0

**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2024**

**NOTE 15
TRUST FUND**

Funds held at balance date which are required by legislation to be credited to the trust fund and which are not included in the financial statements are as follows:

Description	Opening Balance 1 July 2024	Amount Received	Amount Paid	Closing Balance 31 Jul 2024
	\$	\$	\$	\$
Drug Action Group	660	0	0	660
Youth Fund Raising	865	0	0	865
	1,525	0	0	1,525

NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY
FOR THE PERIOD ENDED 31 JULY 2024

EXPLANATION OF MATERIAL VARIANCES

The material variance thresholds are adopted annually by Council as an indicator of whether the actual expenditure or revenue varies from the year to date Actual materially.
The material variance adopted by Council for the 2024-25 year is \$10,000 or 10.00% whichever is the greater.

Reporting Program			Explanation of negative variances	
	Var. \$	Var. %	Timing	Permanent
	\$	%		
Revenue from operating activities				
General purpose funding - other	16,697	0.00%	▲ 2024-25 Budget not yet adopted	
Transport	19,770	0.00%	▲ 2024-25 Budget not yet adopted	
Economic services	10,747	0.00%	▲ 2024-25 Budget not yet adopted	
Expenditure from operating activities				
Governance	(61,255)	0.00%	▼ 2024-25 Budget not yet adopted	
Community amenities	(29,905)	0.00%	▼ 2024-25 Budget not yet adopted	
Recreation and culture	(148,654)	0.00%	▼ 2024-25 Budget not yet adopted	
Transport	(72,298)	0.00%	▼ 2024-25 Budget not yet adopted	
Economic services	(46,569)	0.00%	▼ 2024-25 Budget not yet adopted	
Investing activities				
Payments for Infrastructure	(25,410)	0.00%	▼ 2024-25 Budget not yet adopted	

Shire of Morawa

SCHEDULE 02 - GENERAL FUND SUMMARY
Financial Statement for Period Ended
31 July 2024

	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING</u>						
General Purpose Funding	0	0	-	-	16,697	20,504
Governance	0	0	-	-	293	61,255
Law, Order, Public Safety	0	0	-	-	6,086	4,126
Health	0	0	-	-	0	3,300
Education & Welfare	0	0	-	-	200	14,299
Housing	0	0	-	-	6,832	10,206
Community Amenities	0	0	-	-	5,000	29,905
Recreation & Culture	0	0	-	-	2,975	148,654
Transport	0	0	-	-	19,770	72,298
Economic Services	0	0	-	-	10,747	46,569
Other Property & Services	0	0	-	-	16	5,922
TOTAL - OPERATING	0	0	-	-	68,615	417,036
<u>CAPITAL</u>						
General Purpose Funding	0	0	0	0	0	9
Governance	0	0	0	0	0	0
Law, Order, Public Safety	0	0	0	0	0	0
Health	0	0	0	0	0	0
Education & Welfare	0	0	0	0	0	0
Housing	0	0	0	0	0	66
Community Amenities	0	0	0	0	0	7,074
Recreation & Culture	0	0	0	0	0	300
Transport	0	0	0	0	0	18,614
Economic Services	0	0	0	0	0	680
Other Property & Services	0	0	0	0	0	146
TOTAL - CAPITAL	0	0	0	0	0	26,889
	0	0	0	0	68,615	443,925
Less Depreciation Written Back		0		0		0
Less Profit/Loss Written Back	0	0	0	0	0	0
Less Movement in Leave Reserve		0		0		(45)
Plus Proceeds from Sale of Assets	0		0		0	
TOTAL REVENUE & EXPENDITURE	0	0	0	0	68,615	443,880
Surplus/Deficit July 1st B/Fwd	0		0		3,900,854	
	0	0	0	0	3,969,469	443,880
Surplus/Deficit C/Fwd		0		0		3,525,589
	0	0	0	0	3,969,469	3,969,469

Shire of Morawa
SCHEDULE 03 - GENERAL PURPOSE FUNDING
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Rates		0		0		16,276
Other General Purpose Funding		0		0		4,227
<u>OPERATING REVENUE</u>						
Rates	0		0		6,765	
Other General Purpose Funding	0		0		9,931	
SUB-TOTAL	0	0	0	0	16,697	20,504
<u>CAPITAL EXPENDITURE</u>						
Rates		0		0		0
Other General Purpose Funding		0		0		9
<u>CAPITAL REVENUE</u>						
Rates	0		0		0	
Other General Purpose Funding	0		0		0	
SUB-TOTAL	0	0	0	0	0	9
TOTAL -	0	0	0	0	16,697	20,512

Shire of Morawa
SCHEDULE 04 - GOVERNANCE
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Members of Council		0		0		61,255
Governance General		0		0		0
<u>OPERATING REVENUE</u>						
Members of Council	0		0		0	
Governance General	0		0		293	
SUB-TOTAL	0	0	0	0	293	61,255
<u>CAPITAL EXPENDITURE</u>						
Members of Council		0		0		0
Governance General		0		0		0
<u>CAPITAL REVENUE</u>						
Members of Council	0		0		0	
Governance General	0		0		0	
SUB-TOTAL	0	0	0	0	0	0
TOTAL - PROGRAMME SUMMARY	0	0	0	0	293	61,255

Shire of Morawa
SCHEDULE 05 - LAW, ORDER & PUBLIC SAFETY
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Fire Prevention		0		0		775
Animal Control		0		0		2,755
Other Law, Order & Public Safety		0		0		596
<u>OPERATING REVENUE</u>						
Fire Prevention	0		0		5,845	
Animal Control	0		0		241	
Other Law, Order & Public Safety	0		0		0	
SUB-TOTAL	0	0	0	0	6,086	4,126
<u>CAPITAL EXPENDITURE</u>						
Fire Prevention		0		0		0
Animal Control		0		0		0
Other Law, Order & Public Safety		0		0		0
<u>CAPITAL REVENUE</u>						
Fire Prevention	0		0		0	
Animal Control	0		0		0	
Other Law, Order & Public Safety	0		0		0	
SUB-TOTAL	0	0	0	0	0	0
TOTAL - PROGRAMME SUMMARY	0	0	0	0	6,086	4,126

Shire of Morawa
SCHEDULE 07 - HEALTH
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
OPERATING EXPENDITURE						
Preventative Services - Meat Inspection		0		0		0
Preventative Services - Inspections & Admin		0		0		413
Preventative Services - Pest Control		0		0		242
Other Health		0		0		2,646
OPERATING REVENUE						
Preventative Services - Meat Inspection	0		0		0	
Preventative Services - Inspections & Admin	0		0		0	
Preventative Services - Pest Control	0		0		0	
Other Health	0		0		0	
SUB-TOTAL	0	0	0	0	0	3,300
CAPITAL EXPENDITURE						
Preventative Services - Meat Inspection		0		0		0
Preventative Services - Inspections & Admin		0		0		0
Preventative Services - Pest Control		0		0		0
Other Health		0		0		0
CAPITAL REVENUE						
Preventative Services - Meat Inspection	0		0		0	
Preventative Services - Inspections & Admin	0		0		0	
Preventative Services - Pest Control	0		0		0	
Other Health	0		0		0	
SUB-TOTAL	0	0	0	0	0	0
TOTAL - PROGRAMME SUMMARY	0	0	0	0	0	3,300

Shire of Morawa
SCHEDULE 08 - EDUCATION & WELFARE
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Other Education		0		0		268
Care of Families & Children		0		0		689
Other Welfare		0		0		13,342
<u>OPERATING REVENUE</u>						
Other Education	0		0		0	
Care of Families & Children	0		0		200	
Other Welfare	0		0		0	
SUB-TOTAL	0	0	0	0	200	14,299
<u>CAPITAL EXPENDITURE</u>						
Other Education		0		0		0
Care of Families & Children		0		0		0
Other Welfare		0		0		0
<u>CAPITAL REVENUE</u>						
Other Education	0		0		0	
Care of Families & Children	0		0		0	
Other Welfare	0		0		0	
SUB-TOTAL	0	0	0	0	0	0
TOTAL - PROGRAMME SUMMARY	0	0	0	0	200	14,299

Shire of Morawa
SCHEDULE 09 - HOUSING
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Staff Housing		0		0		4,237
Other Housing		0		0		4,763
Aged Housing		0		0		1,207
<u>OPERATING REVENUE</u>						
Staff Housing	0		0		2,020	
Other Housing	0		0		1,223	
Aged Housing	0		0		3,588	
SUB-TOTAL	0	0	0	0	6,832	10,206
<u>CAPITAL EXPENDITURE</u>						
Staff Housing		0		0		0
Other Housing		0		0		0
Aged Housing		0		0		66
<u>CAPITAL REVENUE</u>						
Staff Housing	0		0		0	
Other Housing	0		0		0	
Aged Housing	0		0		0	
SUB-TOTAL	0	0	0	0	0	66
TOTAL - PROGRAMME SUMMARY	0	0	0	0	6,832	10,272

Shire of Morawa
SCHEDULE 10 - COMMUNITY AMENITIES
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
OPERATING EXPENDITURE						
Sanitation - Household Refuse		0		0		12,957
Sanitation - Other		0		0		862
Sewerage		0		0		5,951
Urban Stormwater Drainage		0		0		0
Town Planning & Regional Development		0		0		3,983
Other Community Amenities		0		0		6,153
OPERATING REVENUE						
Sanitation - Household Refuse	0		0		0	
Sanitation - Other	0		0		0	
Sewerage	0		0		0	
Urban Stormwater Drainage	0		0		0	
Town Planning & Regional Development	0		0		0	
Other Community Amenities	0		0		5,000	
SUB-TOTAL	0	0	0	0	5,000	29,905
CAPITAL EXPENDITURE						
Sanitation - Household Refuse		0		0		32
Sanitation - Other		0		0		0
Sewerage		0		0		84
Urban Stormwater Drainage		0		0		0
Other Community Amenities		0		0		6,958
CAPITAL REVENUE						
SUB-TOTAL	0	0	0	0	0	7,074
TOTAL - PROGRAMME SUMMARY	0	0	0	0	5,000	36,979

Shire of Morawa
SCHEDULE 11 - RECREATION & CULTURE
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Public Halls and Civic Centres		0		0		15,119
Swimming Areas & Beaches		0		0		28,051
Other Recreation and Sport		0		0		84,442
TV and Radio Re-broadcasting		0		0		0
Libraries		0		0		1,445
Other Culture		0		0		19,597
<u>OPERATING REVENUE</u>						
Public Halls and Civic Centres	0		0		0	
Swimming Areas & Beaches	0		0		0	
Other Recreation and Sport	0		0		1,498	
TV and Radio Re-broadcasting	0		0		0	
Libraries	0		0		0	
Other Culture	0		0		1,477	
SUB-TOTAL	0	0	0	0	2,975	148,654
<u>CAPITAL EXPENDITURE</u>						
Public Halls and Civic Centres		0		0		273
Swimming Areas & Beaches		0		0		27
Other Recreation and Sport		0		0		0
TV and Radio Re-broadcasting		0		0		0
Libraries		0		0		0
Other Culture		0		0		0
<u>CAPITAL REVENUE</u>						
Public Halls and Civic Centres	0		0		0	
Swimming Areas & Beaches	0		0		0	
Other Recreation and Sport	0		0		0	
TV and Radio Re-broadcasting	0		0		0	
Libraries	0		0		0	
Other Culture	0		0		0	
SUB-TOTAL	0	0	0	0	0	300
TOTAL - PROGRAMME SUMMARY	0	0	0	0	2,975	148,954

Shire of Morawa
SCHEDULE 12 - TRANSPORT
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Construction Roads, Bridges and Depots		0		0		0
Maintenance Roads, Bridges and Depots		0		0		63,117
Plant Purchases		0		0		510
Transport Licensing		0		0		5,271
Aerodromes		0		0		3,401
<u>OPERATING REVENUE</u>						
Construction Roads, Bridges and Depots	0		0		0	
Maintenance Roads, Bridges and Depots	0		0		20,597	
Plant Purchases	0		0		0	
Transport Licensing	0		0		(826)	
Aerodromes	0		0		0	
SUB-TOTAL	0	0	0	0	19,770	72,298
<u>CAPITAL EXPENDITURE</u>						
Construction Roads, Bridges and Depots		0		0		18,502
Maintenance Roads, Bridges and Depots		0		0		0
Plant Purchases		0		0		112
Aerodromes		0		0		0
<u>CAPITAL REVENUE</u>						
Construction Roads, Bridges and Depots	0		0		0	
Maintenance Roads, Bridges and Depots	0		0		0	
Plant Purchases	0		0		0	
Aerodromes	0		0		0	
SUB-TOTAL	0	0	0	0	0	18,614
TOTAL - PROGRAMME SUMMARY	0	0	0	0	19,770	90,912

Shire of Morawa
SCHEDULE 13 - ECONOMIC SERVICES
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Rural Services		0		0		676
Tourism & Area Promotion		0		0		19,866
Building Control		0		0		2,906
Other Economic Services		0		0		10,908
Economic Development		0		0		12,212
<u>OPERATING REVENUE</u>						
Tourism & Area Promotion	0		0		8,116	
Building Control	0		0		0	
Other Economic Services	0		0		287	
Economic Development	0		0		2,344	
SUB-TOTAL	0	0	0	0	10,747	46,569
<u>CAPITAL EXPENDITURE</u>						
Tourism & Area Promotion		0		0		0
Economic Development		0		0		680
<u>CAPITAL REVENUE</u>						
Economic Development	0		0		0	
SUB-TOTAL	0	0	0	0	0	680
TOTAL - PROGRAMME SUMMARY	0	0	0	0	10,747	47,249

Shire of Morawa
SCHEDULE 14 - OTHER PROPERTY & SERVICES
Financial Statement for Period Ended
31 July 2024

PROGRAMME SUMMARY	2024-25 Adopted Budget		2024-25 YTD Budget		2024-25 YTD Actuals	
	Income	Expense	Income	Expense	Income	Expense
	\$	\$	\$	\$	\$	\$
<u>OPERATING EXPENDITURE</u>						
Private Works		0		0		643
Public Works Overheads		0		0		(30,901)
Plant Operation Costs		0		0		11,501
Stock, Fuels and Oils		0		0		(9,105)
Administration		0		0		33,783
Unclassified		0		0		0
<u>OPERATING REVENUE</u>						
Private Works	0		0		0	
Public Works Overheads	0		0		0	
Plant Operation Costs	0		0		0	
Stock, Fuels and Oils	0		0		0	
Administration	0		0		16	
Unclassified	0		0		0	
SUB-TOTAL	0	0	0	0	16	5,922
<u>CAPITAL EXPENDITURE</u>						
Administration		0		0		146
<u>CAPITAL REVENUE</u>						
Administration	0		0		0	
Unclassified	0		0		0	
SUB-TOTAL	0	0	0	0	0	146
TOTAL - PROGRAMME SUMMARY	0	0	0	0	16	6,068

Shire of Morawa
Bank Reconciliation Report
For Period Ending 31 July 2024

	Municipal Account	Municipal Online Saver	Trust Account	Reserve Account
Balance as per Bank Statement	2,288,054.94	1,102,229.53	1,525.11	7,068,371.50
Balance as per General Ledger	2,294,639.59	1,102,229.53	1,525.11	7,068,371.50
Unpresented Payments				
Unpresented Payments	-431.37			
Outstanding Deposits	7,016.02			
Difference	2,294,639.59 0.00	1,102,229.53 0.00	1,525.11 0.00	7,068,371.50 0.00

Shire of Morawa
List of Payments Report
For Period Ending 31 July 2024

Chq/EFT	Date	Name	Description	Amount	Bank
EFT18202	16/07/2024	Rip-It Security Shredding	Archive Storage - June 2024	104.50	1
EFT18203	16/07/2024	St John Ambulance WA - Morawa Sub	Replacement Defibrillator pads	924.00	1
EFT18204	16/07/2024	Kats Rural	Miscellaneous Maintenance items - various locations	5,731.11	1
EFT18205	16/07/2024	Morawa Traders	Restock Chambers & Staff Farewell	373.72	1
EFT18206	16/07/2024	Landgate	Mapping update - Geospatial Data	515.90	1
EFT18207	16/07/2024	City of Greater Geraldton	Building Certification Services - April to June 2024	219.55	1
EFT18208	16/07/2024	Think Water Geraldton	Reticulation parts - Entrance & Wildflower park	632.55	1
EFT18209	16/07/2024	Greenfield Technical Services	Stage 2 - Proposal of Nanekine Rd widening	5,522.00	1
EFT18210	16/07/2024	Bunnings Group Limited	Cleaning items & Door locks	326.43	1
EFT18211	16/07/2024	Hille, Thompson & Delfos Surveyors &	Drawing - Drainage Levels, Solomon Tce	495.00	1
EFT18212	16/07/2024	Adage Furniture	Bulk Chair replacement - Hall	21,021.00	1
EFT18213	16/07/2024	McLeods Lawyers	Legal Advice - Residential Leases	1,416.80	1
EFT18214	16/07/2024	Aerodrome Management Services Pty	Aerodrome - Solar Power supply Pole & lights	20,735.00	1
EFT18215	16/07/2024	Total Toilets	Trailer Mounted Portable Toilet Hire - 01.06.24 to 30.06.24	935.00	1
EFT18216	16/07/2024	Peter Cekanaukas	Asbestos removal - Oval House	1,777.13	1
EFT18217	16/07/2024	Jupps Floor Coverings & Tile Specialists Geraldton	Supply & Install Resilient floor & Blinds @ Town/Lesser Hall	6,150.00	1
EFT18218	16/07/2024	Officeworks	Various Office Stationary	191.29	1
EFT18219	16/07/2024	RJ & LJ King	Supply & Fit 4 x tyres - P293 EMCCS	1,633.72	1
EFT18220	16/07/2024	Great Southern Fuel Supplies	Fuel Card Purchase - Diesel - P293 - 0 MO	78.99	1
EFT18221	16/07/2024	Infinitum Technologies Pty Ltd	IT Support for new Library system change over	572.00	1
EFT18222	16/07/2024	Avon Waste	Waste Collection Services - June 2024	7,068.60	1
EFT18223	16/07/2024	Terra Form Contracting	Road Verge Vegetation mulching and de-mobilisation	17,710.00	1
EFT18224	16/07/2024	Team Global Express	Freight charges & bulk paper delivery	478.48	1
EFT18225	16/07/2024	Breeze Connect Pty Ltd	Admin VOIP lines - Charges for June 2024	234.42	1
EFT18226	16/07/2024	Bob Waddell Consultant	Assistance with Monthly Statements - June 2024	822.25	1

Shire of Morawa
List of Payments Report
For Period Ending 31 July 2024

Chq/EFT	Date	Name	Description	Amount	Bank
EFT18227	16/07/2024	Core Business Australia PTY Ltd	AGRN1021 DRFAWA Supervision Claim 21 - May 2024	17,475.26	1
EFT18228	16/07/2024	AFGRI Equipment	Maintenance parts - P265 Grader & P246 Loader	1,010.21	1
EFT18229	16/07/2024	Resonline Pty Ltd	Monthly Fee - Booking Software - June 2024	134.31	1
EFT18230	16/07/2024	Cohesis Pty Ltd	Monthly Fee - ICT Services vCIO - June 2024	2,200.00	1
EFT18231	16/07/2024	Megan Howlett Premium Business Concepts	Professional HR Services - May to June 2024	3,311.00	1
EFT18232	16/07/2024	LG Best Practices Pty Ltd	Monthly Charges - End of Month rates services	1,848.00	1
EFT18233	16/07/2024	Cloud Collections Pty Ltd	Solicitor & Service Fee's - 3 properties	2,936.61	1
EFT18234	16/07/2024	Lisa Smith	Reimburse Dash Mat for P268 - DMax	118.95	1
EFT18235	16/07/2024	Everlon	Plaque - Lloyd Plough	438.90	1
EFT18236	16/07/2024	Novis Healthcare	Tripsafe Cable Cover - 2 x 10m	369.60	1
EFT18237	16/07/2024	Benjamin Davey - Hire A Hubby	House Renewal Works - 2 Caulfield St	17,930.00	1
EFT18238	16/07/2024	Lucindas Everlastings	Wholesale Seed & Freight	1,290.00	1
EFT18239	16/07/2024	ATC Work Smart	Administration Trainee - 3 Ordinary Days	330.42	1
EFT18240	16/07/2024	Community Facilitation	Consultancy Services - Info & Drop in Day - June 2024	2,400.00	1
EFT18241	16/07/2024	GNC Quality Precast Geraldton	Concrete drainage - Solomon Tce	2,455.20	1
EFT18242	16/07/2024	E & MJ Rosher Pty Ltd	Maintenance on Generator - Assy Holder Brush	539.14	1
EFT18243	16/07/2024	Morawa Pharmacy	Burn & Bite Gel - Admin Kitchenette	14.99	1
EFT18244	22/07/2024	Australian Services Union	Payroll Deductions/Contributions	53.00	1
EFT18245	24/07/2024	North Midlands Electrical	Electrical Works - Canna Chalet & Unit 4 Yewers Ave	609.51	1
EFT18246	24/07/2024	BOC Limited	Argoshield Universal Gas - G Size - Depot	76.21	1
EFT18247	24/07/2024	Morawa Drapery Store (MJ & BL Thornton)	Work Safety Books - 2 employees	399.90	1
EFT18248	24/07/2024	WesTrac Equipment Pty Ltd	Maintenance Parts - P227 Roller	1,871.44	1
EFT18249	24/07/2024	IT Vision Australia Pty Ltd (ReadyTech)	Annual Subscription - Altus & Synergyssoft - 1 Jul 24 to	58,539.80	1
EFT18250	24/07/2024	Canine Control	Ranger Services - 2 visits	2,180.64	1
EFT18251	24/07/2024	GH Country Courier	Freight from Butcher - 1 chiller box for NAIDOC	95.70	1

Shire of Morawa
List of Payments Report
For Period Ending 31 July 2024

Chq/EFT	Date	Name	Description	Amount	Bank
EFT18252	24/07/2024	WALGA	Members convention & training	5,248.40	1
EFT18253	24/07/2024	Frank Gilmour	Pest Control - 53 Grove St	265.00	1
EFT18254	24/07/2024	Shire of Perenjori	CESM Shared Costs - 4th Quarter - April to June 2024	2,346.00	1
EFT18255	24/07/2024	Shire of Mingenew	Quarterly Fee & Usage June 2024 - Damstra Online Training	223.58	1
EFT18256	24/07/2024	Snap Osborne Park	Rates Notice Stationary x 500	333.00	1
EFT18257	24/07/2024	Champion Music	Art Show Entertainment - Final 50% Balance	1,210.00	1
EFT18258	24/07/2024	Blackwoods Geraldton	Spillfix Floorsweep 4 x 50L	140.45	1
EFT18259	24/07/2024	Officeworks	Various Office items & Stationary	379.20	1
EFT18260	24/07/2024	Quality Press	A4 Tourist Booklet x 1000	1,726.70	1
EFT18261	24/07/2024	Mitchell and Brown Communications	Quarterly security monitoring - 4 Caulfield	154.50	1
EFT18262	24/07/2024	Corsign WA Pty Ltd	Street Name Plates, Signs, Posts, Caps & Cones	13,674.10	1
EFT18263	24/07/2024	NodeOne	Monthly Fee - Internet @ Gym	119.00	1
EFT18264	24/07/2024	Jacqueline Hawkins	Window Shields for P293 - Pajero Sport	120.00	1
EFT18265	24/07/2024	Daphne's Timeless Treats	Catering - All Staff Meeting 12th July & VIP Lunch 17th July	1,410.00	1
EFT18266	24/07/2024	Theresa Louise English	Reimbursement - Gym Key Bond	30.00	1
EFT18267	24/07/2024	Shahs Art Studio	Dreamtime Galactic Art workshop - School Holiday	3,026.20	1
EFT18268	24/07/2024	Cloud Collections Pty Ltd	Court Filing Fee's x 3	1,095.00	1
EFT18269	24/07/2024	The Collab Effect	40 Hours work - WHS Document & research	3,960.00	1
EFT18270	24/07/2024	Wallace Plumbing and Gas	Install new HWU - Canna Chalet	1,241.82	1
EFT18271	24/07/2024	ATC Work Smart	Admin Trainee - Ordinary Hours 25.83	408.01	1
EFT18272	24/07/2024	RJ Cox Engineering	3 x Round Table Trolleys - Old Roads Board Building	8,514.00	1
EFT18273	24/07/2024	Inform Communicate Motivate	NAIDOC - Guest Speaker - A Janz	6,928.90	1
EFT18274	24/07/2024	Dynamic Gift International Pty Ltd	NAIDOC Event - Socks & drawstring bags	3,113.00	1
EFT18275	24/07/2024	Inlander Pty Ltd t/as Green Oil Tree Nursery	Farm trees & shrub planting - Seroja tree planting NACC	11,000.00	1
EFT18276	24/07/2024	Kite Kinetics	School Holiday Kite Workshop	1,017.90	1

Shire of Morawa
List of Payments Report
For Period Ending 31 July 2024

Chq/EFT	Date	Name	Description	Amount	Bank
EFT18277	24/07/2024	Cameron Brew	Reimbursement - Gym Key Bond	30.00	1
EFT18278	30/07/2024	Local Government Professionals Australia WA	2024-2025 Bronze Local Government Subscription	550.00	1
EFT18279	30/07/2024	Rural Health West	Memebrrship for 2024-2025	100.00	1
EFT18280	30/07/2024	Mid West Chamber of Commerce & Industry	MWCCI Annual Membership 01 July 2024 to 30th June 2025	852.50	1
EFT18281	30/07/2024	Barrett Exhibition Group	50% Deposit - Supply of Display screen, legs & Feet, LED lights, brackets and gallery hooks	4,755.74	1
EFT18282	30/07/2024	Northern Country Zone of WALGA	Annual Subscription 01 July 2024 to 30 June 2025	1,800.00	1
EFT18283	30/07/2024	Onemusic Australia	Annual licence for 01 July 2024 to 30 June 2025	378.55	1
EFT18284	30/07/2024	Thinkproject Australia Pty Ltd	RAMM Transport Annual Support & Maintenance for 01	8,984.12	1
EFT18285	30/07/2024	Midmech Pty Ltd	2 x vehicle service & air con repair	1,587.53	1
EFT18286	30/07/2024	Inform Communicate Motivate	Transport for Guest Speaker from Perth Airport - Janz	123.59	1
Total EFT Payments				<u>301,145.02</u>	

Shire of Morawa
List of Payments Report
For Period Ending 31 July 2024

Chq/EFT	Date	Name	Description	Amount	Bank
DD10001.1	04/07/2024	Beam Super	Superannuation Batch Payrun 80, Fortnight end 03 July 2024	9,758.90	1
DD10016.1	02/07/2024	Water Corporation	Water Use & Service Charge 08 Apr - 10 Jun 2024 - 1 account	742.55	1
DD10035.1	05/07/2024	Water Corporation	Water Use & Service Charge - 11 Apr to 13 Jun 2024 - 18 accounts	18,309.92	1
DD10035.2	05/07/2024	Telstra Corporation Limited	Telephone Expenses - Various - June 2024 - 2 accounts	652.29	1
DD10036.1	18/07/2024	Synergy	Electricity Usage & Supply Charges 30 Apr 2024 - 27 Jun 2024 - 21 Accounts	9,021.21	1
DD10037.1	19/07/2024	Synergy	Electricity Usage & Supply Charges 25 Apr 2024 - 25 Jun 2024 - 1 account	75.57	1
DD10038.1	17/07/2024	Synergy	Electricity Usage & Supply Charges 27 Apr 2024 - 26 Jun 2024 - 17 Accounts	4,491.24	1
DD10039.1	16/07/2024	Synergy	Electricity Supply & Usage charges 25 Apr to 25 Jun 2024 - 1 Account	288.26	1
DD10040.1	11/07/2024	Water Corporation	Water Use & Service Charges 17 Apr to 19 Jun 2024 - 1 account	14.34	1
DD10040.2	11/07/2024	Synergy	Electricity Supply & Usage charges 21 May to 17 Jun 2024 - 1 Account	193.95	1
DD10041.1	10/07/2024	Synergy	Electricity Usage & Supply 16 May to 19 June 2024 - 1 Account (Pool)	2,023.16	1
DD10042.1	09/07/2024	Water Corporation	Water Use & Service Charge - 15 Apr to 17 Jun 2024 - 8 accounts	15,967.66	1
DD10043.1	04/07/2024	Water Corporation	Water Use & Service Charges 15 April 24 to 17 Jun 24 - 6 accounts	2,467.31	1
DD10044.1	01/07/2024	Water Corporation	Water Use & Service Charge 11 Apr - 13 Jun 2024 - 13 Accounts	5,462.30	1
DD10044.2	01/07/2024	Exetel Pty Ltd	Monthly Charge - Corporate Internet - July 2024	877.50	1

Shire of Morawa
List of Payments Report
For Period Ending 31 July 2024

Chq/EFT	Date	Name	Description	Amount	Bank
DD10045.1	24/07/2024	Telstra Corporation Limited	Telephone Expenses - Shires Operational Landlines - July 2024	519.34	1
DD10046.1	23/07/2024	Synergy	Electricity Usage & Supply Charges - Streetlights - 25 May to 24 Jun 2024	3,958.93	1
DD10047.1	22/07/2024	Synergy	Electricity Usage & Supply Charges 30 Apr 2024 - 01 July 2024 - 9 Accounts	1,778.94	1
DD10047.2	22/07/2024	Telstra Corporation Limited	Telephone Usage & Service Charges - July 2024 - Landlines	108.23	1
DD10053.1	18/07/2024	Beam Super	Correction to Superannuation - Pay run 82 fortnight end 17/07/2024	9,420.44	1
DD10055.1	17/07/2024	Synergy	Electricity Supply & Usage Charges 25 Apr to 25 Jun 2024 - 1 account	63.01	1
DD10055.2	17/07/2024	Telstra Corporation Limited	Telephone expenses - Mobiles, iPad Sim's, Data usage, Dongles - June 2024	1,196.22	1
Total Direct Debit Payments				87,391.27	

Shire of Morawa
List of Payments Report
For Period Ending 31 July 2024

Chq/EFT	Date	Name	Description	Amount	Bank
2425-01.01	1/07/2024	Bankwest	Bank Fees (Counter, Maintenance, Transaction)	77.40	1
	31/07/2024	Shire of Morawa	Caravan Park & Gym Toggle Refunds	456.00	1
2425-01.02	3/07/2024	CBA	Merchant Fees	235.28	1
	3/07/2024	Shire of Morawa	Payroll Deductions - Pay Run 80	637.36	1
APPAY80	4/07/2024	Shire of Morawa	Altus Payroll Pay Run 80	57,269.46	1
		Shire of Morawa	Payroll Deductions - Pay Run 82	421.37	1
APPAY82	18/07/2024	Shire of Morawa	Altus Payroll Pay Run 82	51,922.62	1
	31/07/2024	Centrelink	Centrelink Fee's July 2024	17.82	1
	31/07/2024	DOT	Transport Debit Payments July 2024	23,303.00	1
	18/07/2024	Department of Communities	Payment for Yes Cadets Grant Refund	5,896.00	1
	23/07/2024	WA Treasury Corp	Audit & Loan Guarantee Fee's	1,457.83	1
Total Bank Transfers/ Payments				141,694.14	
	Fuel Card - 94937892 - 0 MO - EMCCS - P293				
Included in					
EFT18220		Great Southern Fuel Supplies	Diesel - Fuel Card purchase	78.99	1
TOTAL Fuel Card				78.99	

Shire of Morawa
List of Payments Report
For Period Ending 31 July 2024

Chq/EFT	Date	Name	Description	Amount	Bank
2425-01.05		Bankwest	Corporate card purchases in June 2024		
	Coroprate Credit Card - EMCCS				
	31/05/2024	Starlink - Doctors	Starlink - Doctors Surgery	139.00	1
	1/06/2024	The Good Guys	Cordless Vacuum Cleaner - Administration Office	599.00	1
	1/06/2024	Spotlight	Linen - 17 Solomon Tce	269.20	1
	5/06/2024	Post Office Morawa	Telstra Samsung Phone	229.00	1
	12/06/2024	Coles Express	Fuel 0 MO	92.75	1
	12/06/2024	Coorow Fuel Supply	Fuel 0 MO	40.00	1
	14/06/2024	Big W Online	Audio Cables - Video player in town hall	29.90	1
	15/06/2024	Dongara Road House	Fuel 0 MO	100.01	1
	19/06/2024	Post Office Morawa	Telstra Prepaid Internet Dongle - Visitors Cente	79.00	1
	22/06/2024	Spotlight	Linen - 17 Solomon Tce	25.00	1
	25/06/2024	Starlink - Doctors	Starlink - Doctors Surgery	139.00	1
	26/06/2024	Australian Airports	Training - Aerodrome	674.19	1
Sub Total				2,416.05	
	Coroprate Credit Card - CEO				
	31/05/2024	DWER Water	DWER - Clearing permit, Evaside Road	400.00	1
	5/06/2024	Zoom. US	Zoom Standard Pro Monthly Subscription for Council	23.05	1
	5/06/2024	Kinatiko Ltd	National Police Check	54.90	1
	6/06/2024	Freight Lines Group	Freight - ex Edge workshop - Fencing	1,018.38	1
	13/06/2024	Mingenew Bakery	Refreshments - Wild Flower Country Meeting	15.00	1
	24/06/2024	BP Kardinya	Fuel MO 0	124.52	1

Sub Total **1,635.85**

TOTAL Corporate Credit Card Payment **4,051.90**

TOTAL PAYMENTS FOR COUNCIL APPROVAL **534,282.33**



Ordinary Council Meeting 15 August 2024

<i>Attachment 1-</i>	<i>11.2.2a Met Mast Development Application</i>
<i>Attachment 2-</i>	<i>11.2.2b Advertising Schedule of Submissions</i>
<i>Item 11.2.2-</i>	Renewable Energy Facility (Wind Measurement Mast) Development Application

**SHIRE OF MORAWA**

Phone: (08) 9971 1204

Email: admin@morawa.wa.gov.au

PO Box 14, MORAWA WA 6623

26 Winfield Street, MORAWA WA 6623

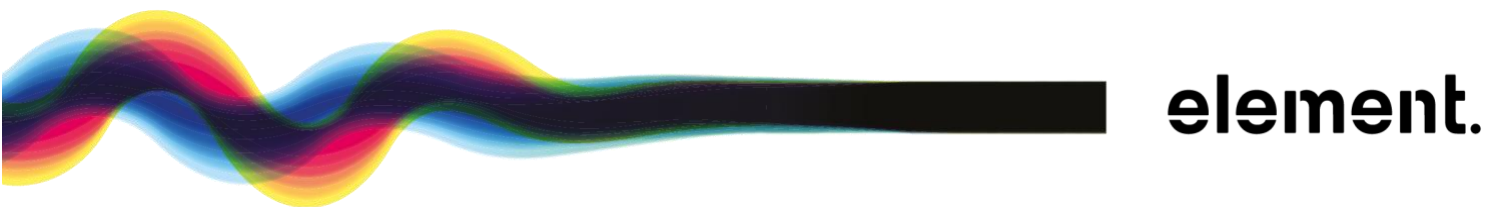
8.30am - 4.30pm, Monday to Friday

SHIRE OF MORAWA**Development Approval Application****INFORMATION TO BE PROVIDED:**

- ☐ All details within this form are to be completed to avoid a returned or cancelled Application.
- ☐ Plans are to be submitted with this application in accordance with section 5.
- ☐ Payment of an applicable fee is required when submitting the Application.
- ☐ Signatures of both property owner and applicant are required to process the Application.
- ☐ Please complete and submit 'The Essential Documents Checklist' with the Application.

Owner Details		
Name John Peter Flanagan and Mark Andrew Flanagan		
Postal Address PO Box 32 Mullewa WA 6630		
Phone Number	Mobile Number	
Email	DocuSigned by: [Signature]	
Signature	Date May 27, 2024	May 27, 2024
Applicant Details		
Name element Advisory		
Postal Address Level 18/191 St Georges Terrace Perth 6000		
Phone Number 9289 8373	Mobile Number	
Email fiona.atkins@elementwa.com.au		
Signature [Signature]	Date 6 June 2024	
Property Details		
Lot Number 8558	House/Street Number	Location Number
Street Name Ludlow Road		Suburb Pintharuka
Nearest Intersection Fitzgerald Street		
*Certificate Of Title Volume/Folio No. 105/86A		Diagram/Plan No. 152118
*Title Encumbrances (If Any)		
*Information (including copy of title, volume and folio numbers and encumbrances) can be sourced from Landgate on the following web address- https://www.landgate.wa.gov.au/		
Proposed Development		
Nature of development	<input type="checkbox"/> Works	<input type="checkbox"/> Use <input checked="" type="checkbox"/> Works and Use
Description of proposed works and/or land use Temporary Approval (Five (5) years - Wind Measurement Mast (Renewable Energy Facility)		
Estimated cost of proposed development \$520, 564.00		
Estimated time of completion 2024		
Office Use Only		
Date Received	Document Number	
Fees Paid	Officer	
Receipt Number	Response	
Application Number	Assessment Number	

Essential Documents Checklist	Applicant	Officer
Application		
Required information completed including Owner and Applicant details with signatures	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Plans listed are copied at a scale of not less than 1:500	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Payment of the applicable fee is made when submitting this application	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Site Plan at a scale of not less than 1:500 details		
Street name/s; lot number/s; north point; lot dimensions; location of all existing and proposed structures and environmental features, boundary setback distances to existing and proposed buildings, use of new buildings, existing and proposed access	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Location, number, dimensions and layout of car parking spaces, location and dimensions of service areas, landscaping, open storage or trade display areas if applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floor Plan at a scale of not less than 1:500 details		
Dimensions of specific rooms and outdoor living areas identified including vehicle parking under main roof	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Elevation Plan at a scale of not less than 1:500 details		
Reference to natural ground level, height of walls, and total height to roof pitch	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Details of external wall cladding, colours and materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stormwater Drainage Plans		
Include method of disposal. Note: Local Government encourages on-site retention methods to reduce the amount of water entering the local drainage network.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Optional Plan	Applicant	Officer
Landscaping Plan		
To include location and area of landscaping to be shown with species and types of plants and their height	<input type="checkbox"/>	<input type="checkbox"/>
Fees		
As per the Shire of Morawa Fees & Charges		



Development Application - Wind
Meteorological Measuring Mast (Met Mast) –
Lot 8558 Ludlow Road Pintharuka

June 2024 | 22-559

Document ID:

Issue	Date	Status	Prepared by	Approved by	
			Name	Name	Signature
D1		Draft	Fiona Atkins	Matt Raymond	MR
F1		Final	Fiona Atkins	Matt Raymond	MR

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1. Executive Summary

This report has been prepared by **element** on behalf of BP Low Carbon Energy Pty Ltd in support of an application to erect a temporary meteorological measuring mast (met mast) at Lot 8558 Ludlow Road, Pintharuka (the subject site).

The purpose of installing a met mast on the subject site is to record meteorological information such as wind conditions over a five year period (as per temporary mast's design life) to determine whether the area is suitable for the generation of renewable energy. This application forms part of BP's broader strategy to develop renewable energy facilities within Western Australia. Whether or not a renewable energy facility is developed on the subject site is dependent on a number of matters relating to the viability of such a project.

In support of this application this report includes:

- Site analysis including a summary of the environmental and heritage considerations;
- A detailed description of the development;
- An assessment of the proposal against the applicable planning framework;
- Certificate of Title documents contained at Appendix 1; and
- Development Plans contained at Appendix 2.

The temporary met mast is considered compatible with the existing land use and surrounding area, will have minimal impact on the local amenity, is consistent with the purpose and intent of the zone and meets the applicable provisions of the planning framework.

We respectfully request that the application be approved subject to a condition limiting the approval term to a period of five (5) years.

2. Introduction

2.1 Subject Site, Current Land Use and Existing buildings

The met mast is proposed to be located at Lot 8558 Ludlow Road Pintharuka, a 3,401,155 m² (340.115 ha) lot that forms part of an agricultural landholding. The land use is zoned as 'Rural' under the Shire of Morawa's Local Planning Scheme No. 3 (LPS3).

The subject site consists of a mix of soil types, with both the Noolagabbi System and the Pindar System being present on site. The outcome is land characterised by extensive level flats to very gently inclined slopes in broad valleys, featuring red and deep yellow coloured sandy type soils.

2.2 Local Context

The subject site is located approximately 200km south east of Geraldton and 10km east of the smaller town of Pintharuka. The subject site includes a residential dwelling, and shares its southern boundary with a neighbouring site (Lot 8314 Ludlow Road) that also includes a residential dwelling. As these properties are owned by the same landowner, advertising is not required in this instance.

The sites that abut the western and northern lot boundaries, as well as the site that is surrounded by the subject site on its eastern boundary abutting Ludlow Road, are owned by different landowners, and advertising may be required to ascertain the potential impact of the met mast on these landowners. Approximately 25km south west of the site lies the Morawa Airport, and the Mullewa Aerodrome is approximately 95km to the north west. Refer to Figure 2 – Local Context .

2.3 Regional Context

The subject site is within the locality of Pintharuka, approximately 200km south east of Geraldton's Central Business District (CBD) and 325km north east of Perth's CBD.

2.4 Environmental and Heritage Matters

Based on a desktop environmental assessment including previous records for the site, the subject lot is designated as Bushfire Prone but does not, or is unlikely to, contain any of the following:

<ul style="list-style-type: none"> National parks or nature reserves 	<ul style="list-style-type: none"> 'Threatened' or 'Priority' fauna
<ul style="list-style-type: none"> Caves 	<ul style="list-style-type: none"> Black Cockatoo roosting, breeding and nesting sites
<ul style="list-style-type: none"> 'Threatened' or 'Priority' flora 	<ul style="list-style-type: none"> Sensitive agricultural use
<ul style="list-style-type: none"> Department of Biodiversity, Conservation and Attractions (DBCA) lands of interest 	<ul style="list-style-type: none"> Threatened/priority ecological communities
<ul style="list-style-type: none"> Ramsar sites 	<ul style="list-style-type: none"> Acid sulphate soil
<ul style="list-style-type: none"> Important wetlands 	<ul style="list-style-type: none"> Contaminated soils
<ul style="list-style-type: none"> Groundwater dependent ecosystems 	<ul style="list-style-type: none"> Public drinking water source areas
<ul style="list-style-type: none"> Offset Areas 	

Native vegetation

While native vegetation is present in proximity of the proposed met mast, no native vegetation clearing and/or impacts to flora and fauna habitat are proposed to occur, as all works will be constrained to the previously disturbed cropped area.

Aboriginal Heritage

A desktop search of the Aboriginal Cultural Heritage Inquiry System identified that the proposed location for the met mast is within the boundaries of a lodged Aboriginal Heritage Place being Nullewa Lake 1 (ID Number 5384), identified as an artefact/scatter site.

The proposal intends to avoid any physical impacts to extant cultural heritage through appropriate siting of the proposed met mast on previously disturbed land that is used for cropping.

Consultation with the Yamatji Southern Regional Corporation is being undertaken to ensure potential risks to Aboriginal heritage are avoided.

European Heritage

There are no listed heritage items or places within the subject site. There are heritage places listed on the Shire of Morawa's Local Heritage Inventory, however these are located 8 -15km away from the subject site, and therefore the proposed development will have no impact on them.

Protected areas

A number of Environmentally Sensitive Areas are located around the subject site, the closest being 1km away from the proposed Met Mast location. An unnamed Timber Reserve is located over 3km to the east. None of these protected areas will be impacted by the development of the Met Mast.

Figure 1 Aerial Site Plan

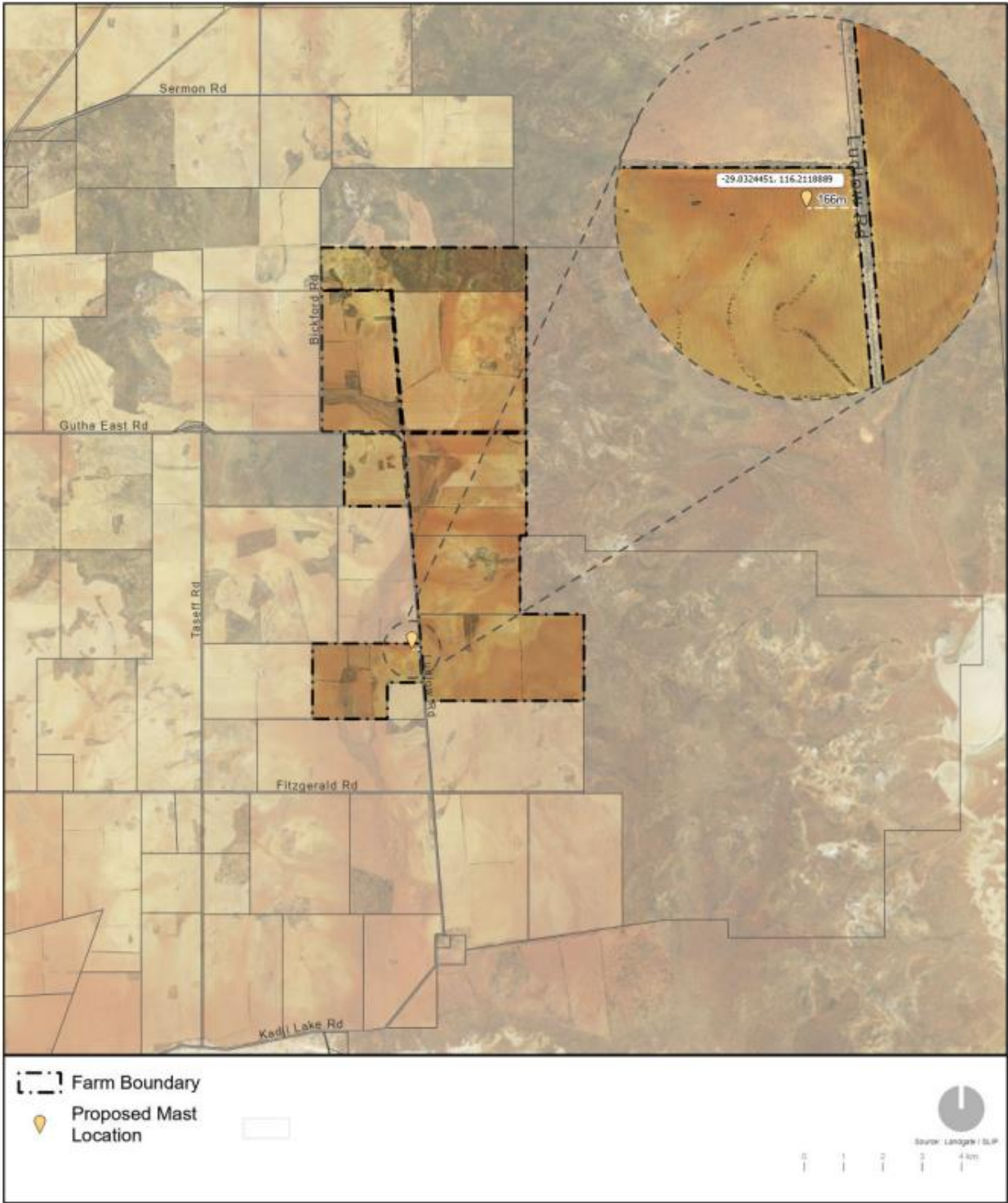


Figure 2 Local Context Location Plan



Figure 3 Regional Context Plan

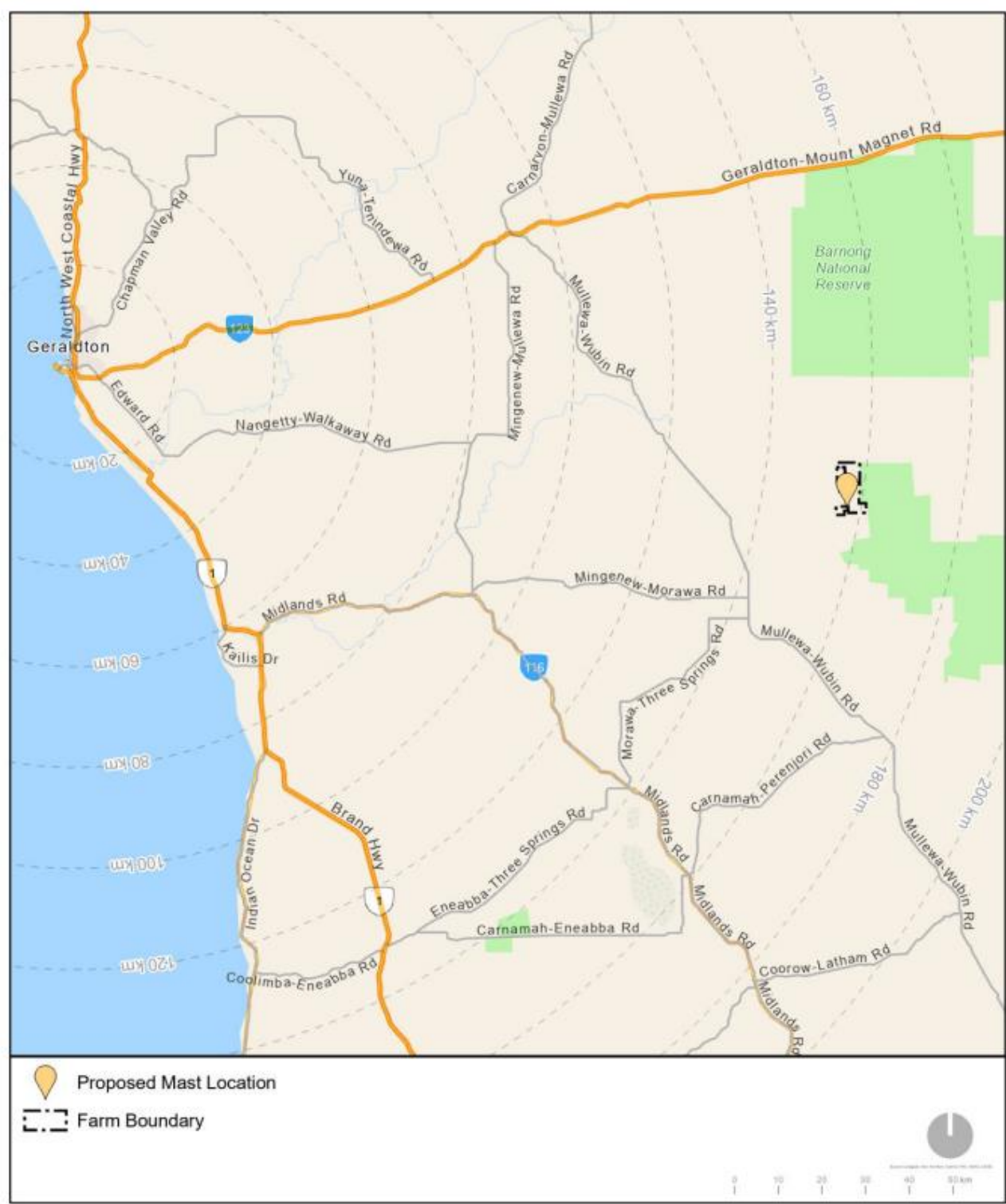


Figure 4 Remnant Native Vegetation

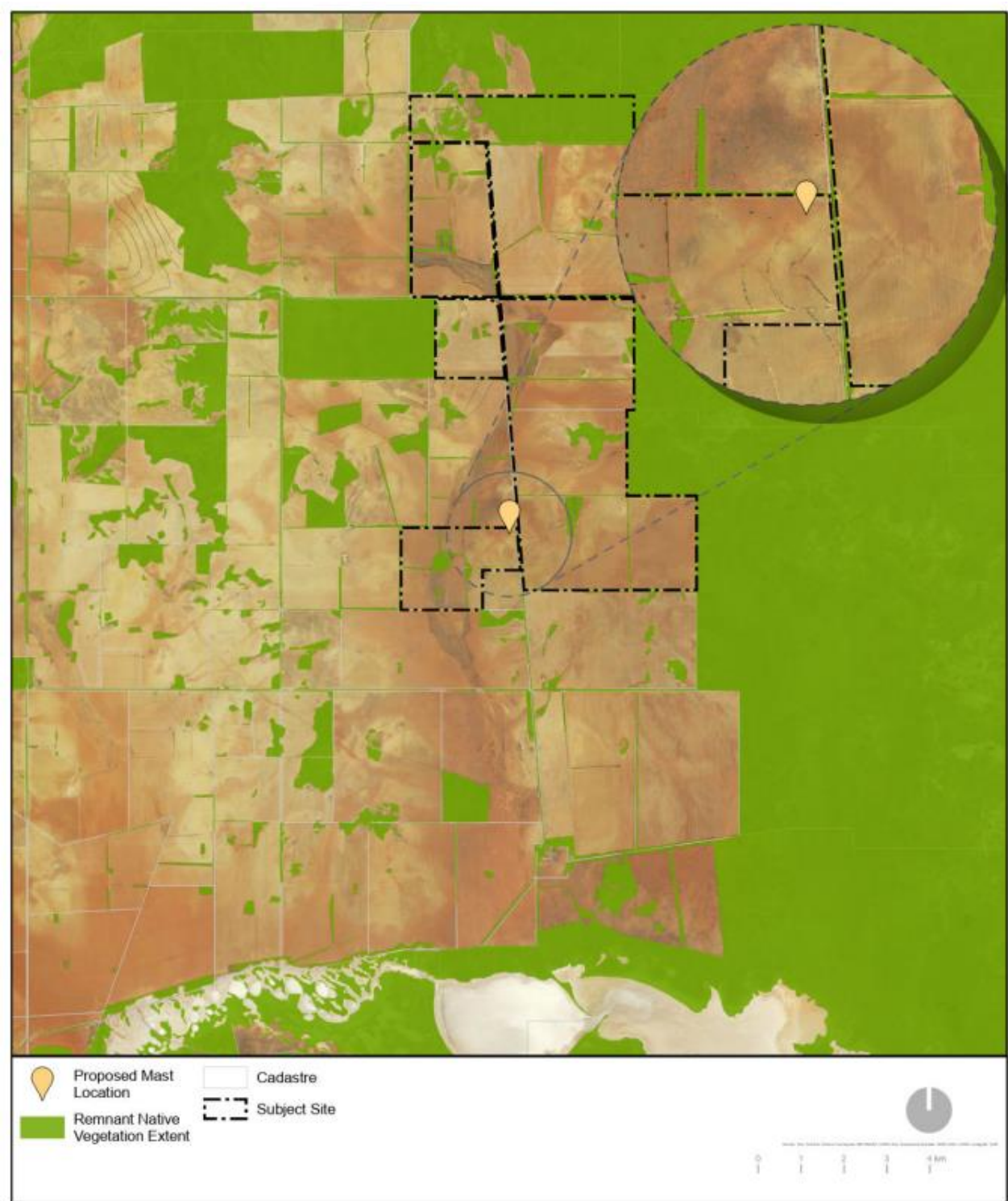
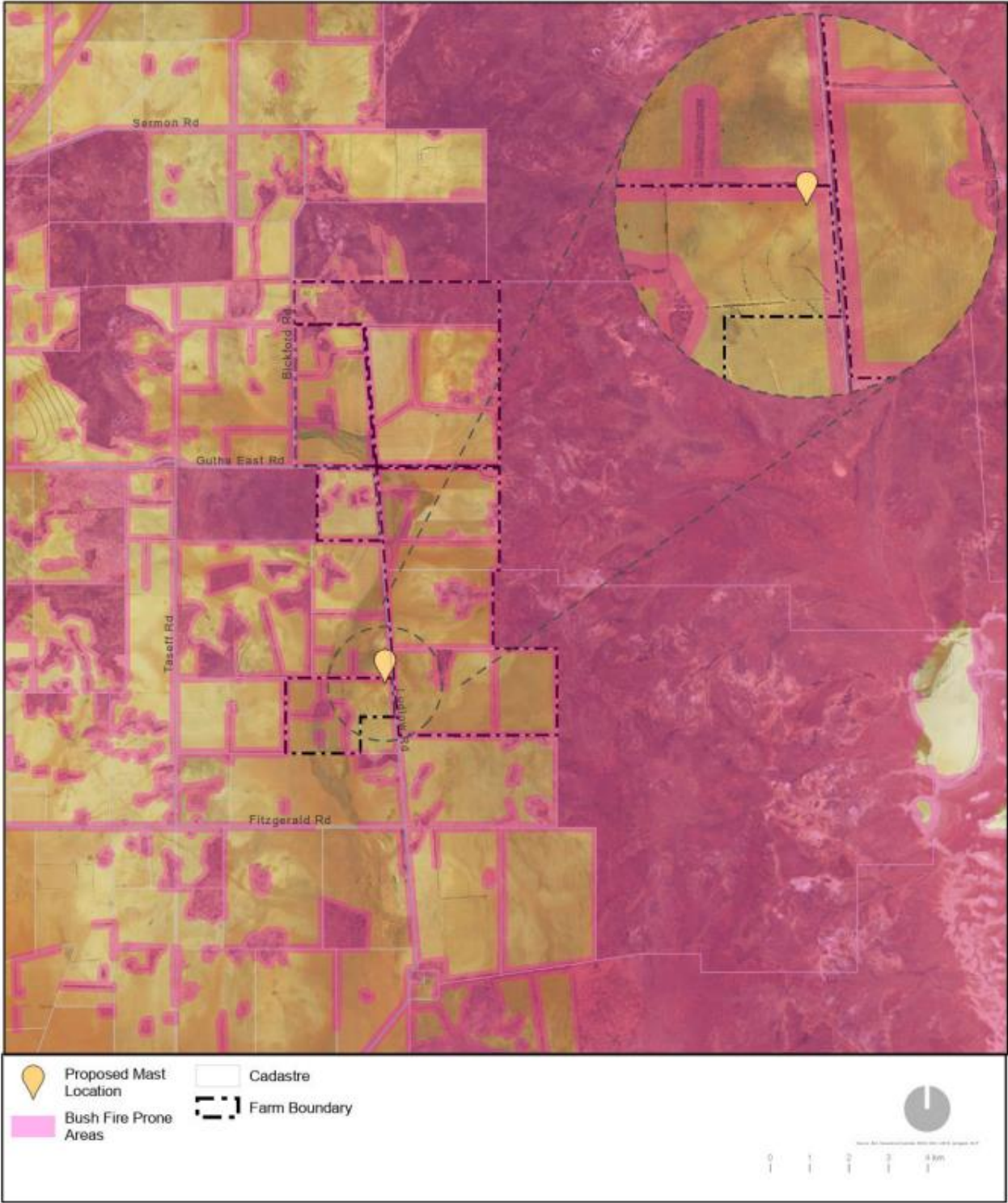


Figure 5 Bushfire Prone Areas



3. Development Description

The proposed met mast is essentially a guyed radio mast structure containing meteorological measuring equipment. The mast is secured by concrete foundations and tethered to the ground by a series of guy anchors. In total, each mast arm contains 13 guy wires with a maximum span of 110m. The area required for the met mast is approximately 0.038km².

The met mast measures weather data independently and following construction subsequent activity on the site should be minimal. The composition of the met mast is made up two main elements; the main mast structure and mast ancillaries which support the measurement of wind data, and are described below:

3.1 Met Mast Structure

The met mast structure is summarised below:

- Approximately 151m in height above the natural ground level;
- Anchored by three (3) mast arms, oriented north or 0 degrees, south-west or 120 degrees and south-east or 240 degrees;
- Tethered by nine (9) anchor footings (concrete foundations) with a total of 39 guy wires;
- Each guy anchor is secured by fencing measuring 1.83m in height and 2.1m in width;
- Secured by a mast base (concrete foundations);
- The met mast base is secured by fencing measuring 1.83m in height and 2.1m in width, with anti-climbing equipment located directly above;
- The met mast includes one (1) lightning rod; and
- Constructed from various grades of steel.

3.2 Mast Ancillaries

In addition to the main structure, the met mast will include the following equipment:

- 11 anemometers;
- Four (4) wind vanes;
- Seven (7) junction boxes;
- Two (2) aviation lights;
- Two (2) temperature and humidity measuring equipment;
- Two (2) solar panels;
- One (1) Anti-climb equipment;
- One (1) AV1 distribution cabinet;
- Campbell Scientific Data Logger; and

- One (1) pressure sensor.

4. Planning Assessment

An assessment of the proposal against the applicable planning framework has been undertaken below:

4.1 Planning and Development (Local Planning Schemes) Regulations 2015

Clause 72 of the deemed provisions provides the Shire with the ability to grant an approval subject to a condition limiting its term.

Pursuant to Clause 67(2) of the deemed provisions, in considering an application for temporary development approval, the Shire is to have due regard to the following matters set out in Table 1 below.

Table 1 - Assessment of Clause 67(2) of the deemed provisions

Provision	Assessment
The aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area	Satisfies Refer to the assessment of LPS3 (Table 2).
The requirements of orderly and proper planning including any proposed local planning scheme or amendment to this Scheme that has been advertised under the Planning and Development (Local Planning Schemes) Regulations 2015 or any other proposed planning instrument that the local government is seriously considering adopting or approving	Satisfies The proposed met mast is not only contemplated by LPS3, the objectives seek renewable energy facilities on Rural zoned land. The temporary structure could potentially facilitate further development of the site, without impacting the ongoing operations of the existing broadacre farm and is not of a scale that would be highly visible from adjoining properties or the street. On that basis, the proposal has considerable merit and is consistent with the principles of orderly and planning.
Any approved State planning policy	Satisfies The site is designated as Bushfire Prone under State Planning Policy 3.7, however, as the structure is not permanent and does not result in the intensification of either employment or residents, requiring the proposal to comply with the provisions of SPP3.7 would be onerous and on that basis warrants a departure from the provisions of SPP3.7.
Any local planning policy for the Scheme area	Satisfies The proposal will be advertised in accordance with LPP – Consultation for Town Planning Proposals.
The compatibility of the development with its setting, including – a) the compatibility of the development with the desired future character of its setting; and	Satisfies In this instance, the desired future character of the area is articulated by the Scheme objectives. Refer to the assessment of LPS3 in Table 2 and Clause 67(2)(b) above.

b) the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development	
<p>The amenity of the locality including the following:</p> <ul style="list-style-type: none"> i. environmental impacts of the development; ii. the character of the locality; and iii. social impacts of the development 	<p>Satisfies</p> <p>Based on the desktop analysis, the proposal is to be located on land that is not subject to environmental constraints and will not impact the local flora, fauna or cultural significance.</p> <p>With an overall height of 151m, the structure is tall relative to surrounding development. However, the narrow, open and temporary structure by itself will not cause adverse amenity or social impacts.</p>
The likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource	<p>Satisfies</p> <p>As noted above, there are no ecological resources that are adversely impacted by the temporary met mast.</p>
The suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk	Each of the potential sites is relatively flat and located outside of flood zones and are capable and suitable for a structure of this scale and nature.
<p>The adequacy of:</p> <ul style="list-style-type: none"> i. the proposed means of access to and egress from the site; and ii. arrangements for the loading, unloading, manoeuvring and parking of vehicles. 	<p>Satisfies</p> <p>The proposed met mast will be accessed via Ludlow Road. Should this access point need to be bituminised and formalised, we request this be implemented as a condition of Development Approval.</p>
The impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals	<p>Satisfies</p> <p>The impact of the proposal is limited to the site and is temporary. While tall, the met mast will not impact the local community due to the scale of the subject site and the distances between the proposed location and neighbouring properties.</p>

4.2 Shire of Morawa Local Planning Scheme No. 3

The proposal falls within the definition of a 'Renewable Energy Facility', defined by the Scheme as:

means premises used to generate energy by a renewable resource and includes any building or other structure used in, or in connection with, the generation of energy by a renewable resource. It does not include renewable energy electricity generation where the energy produced principally supplies a domestic and/or business premises and any on selling to the grid is secondary.

The subject site is zoned 'Rural' under the Shire's Local Planning Scheme No. 3 (LPS3). Pursuant to Table 3 – Zoning Table, the proposal is classified as an 'A' use which means that the use is not permitted unless the Shire has exercised its discretion by granting development approval after giving notice in accordance with clause 64 of the Deemed Provisions.

An assessment of the proposed Renewable Energy Facility against relevant scheme provisions is set out in Table 2 below:

Table 2 Assessment of LPS1

Scheme Provision	Assessment
Provide for the maintenance or enhancement of specific local character	Complies The proposed temporary met mast is minimally designed and will not be visually obtrusive due to the scale of the subject site and distance between the proposed location and neighbouring properties. Further, the Met Mast's temporary nature ensures the proposal will not detract from the local character of the area.
It does not include renewable energy electricity generation where the energy produced principally supplies a domestic and/or business premises and any on selling to the grid is secondary.	Complies The proposal is related to the future generation of renewable energy, but will not produce the renewable energy itself.
To maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies, to protect sensitive areas especially the natural valley and watercourse systems from damage.	Complies The proposed development will not impact upon the natural valley and watercourse systems of the site, or pollute or in other ways damage the surrounding natural environment.
To provide for the operation and development of existing, future and potential rural land uses by limiting the introduction of sensitive land uses in the Rural zone.	Complies The proposed development is not considered a sensitive land use, and will not be impacted by, or impact upon, operations occurring due to the rural land use on the subject site.
To provide for a range of non-rural land uses where they have demonstrated benefit and are compatible with surrounding rural uses.	Complies The proposal is a non-rural use of the land that will have a demonstrated long term community benefit by identifying the potential for the use of the site for renewable energy generation. The proposed use is compatible with rural land use and can co-exist with the use on site.

4.3 Shire of Morawa Local Planning Strategy

The proposed met mast is consistent with the aims of the *Shire of Morawa - Local Planning Strategy* (the Strategy) as it proposes to diversify the local economy with a resilient and innovative renewable energy proposal. The proposal is also consistent with the Strategy's goal to protect and enhance the natural environment, as the development proposes no impact on the natural environment of the area.

4.4 State Planning Policy 3.7 – Planning in Bushfire Prone Areas

Although the subject site is registered as bushfire prone, in accordance with policy measure 2.6 of the *Guidelines for Planning in Bushfire Prone Areas* the proposal warrants a departure from the provisions of *State Planning Policy 3.7 – Planning in Bushfire Prone Areas* (SPP3.7) and should be exempted as it does not:

- add additional employees, visitors or residents to the site; or

- involve the occupation of employees onsite for more than three hours at a time for multiple periods per week

The proposal does not increase the level of threat of bushfire beyond that of any existing structure on the subject site and should therefore be exempt from SPP3.7.

4.5 Position Statement: Renewable Energy Facilities 2020

The Department of Planning, Lands and Heritage (DPLH) on behalf of the Western Australian Planning Commission (WAPC) prepared *Position Statement: Renewable energy facilities 2020* (PS 2020) to help local governments plan for and decision makers determine applications for renewable energy facilities in a consistent manner to reach the State's sustainability targets. Given that the met mast is merely a preliminary step to determine whether a potential future wind farm is viable, PS 2020 is not directly applicable. Notwithstanding an assessment of its broad considerations are assessed below in Table 3.

Table 3 Assessment of relevant considerations and objectives of PS 2020

PS 2020 Consideration	Assessment
Stakeholder and community consultation	Satisfies. Community consultation of the proposal is required, the extent of which will be determined by the Shire.
Environmental impact	Satisfies Prior to the application being lodged, an environmental assessment was undertaken of the site. There are no identified environmental constraints that would prevent the met mast from being constructed. The site reflects PS 2020 in so far as the met mast will be located on existing agricultural land, meaning no further clearing of native vegetation
Visual and landscape impact	The visual impact of the temporary structure is minimal, given its isolated location. The form of the met mast is not bulky, being little more than a narrow, hollow structure. The adverse impact on visual amenity would therefore be minimal. It is also reiterated that this development proposal is for a temporary period and will be removed from the site upon the approval term concluding.
Noise	The noise emitted by the anemometers are minimal and will not pose any noise or operational issues to the closest residents which are, located well beyond the minimum distance cited by PS 2020.
Heritage	The client is in consultation with the Yamatji Southern Regional Corporation to ensure potential risks to Aboriginal heritage are adequately managed.
Public and aviation safety	The Met Mast will be constructed to withstand the prevailing climate conditions of the area, which obviously include high winds. Each of the potential locations on the subject site on private land, notwithstanding, fencing and security measures detailed in the Development Description section

	<p>of this report are proposed to prevent public access to the structure.</p> <p>element submitted the proposal to both CASA and Air Services Australia prior to lodgement. No advice has been received to date.</p> <p>The mast has been designed to CASA requirements including painted banding, active lighting and marker balls on guy wires.</p>
Construction Impact	<p>It is anticipated that a construction management plan will form a condition of any future approval of the development. A CMP will outline how the met mast will be constructed and maintained inclusive of access and a decommission program.</p>

4.6 Orderly and Proper Planning

The proposed met mast is not only contemplated by LPS3, the objectives seek renewable energy facilities on land zoned for agriculture.

The temporary structure could potentially facilitate further development of the site, without impacting the ongoing operations of the existing broadacre farm and is not of a scale that would be highly visible from adjoining properties or street.

On that basis, the proposal has considerable merit and is consistent with the principles of orderly and planning.

5. Conclusion

This application seeks the Shire's support for the construction of a temporary met mast (renewable energy facility) to provide invaluable data on wind movements in the area and will contribute to advancement in the study of wind as a potential source of renewable energy. The met mast is the first step of many, before a wind farm can be considered viable in this location.

Following assessment, the temporary met mast is consistent with the applicable planning framework, and has minimal impact on the local character, amenity and environment.

In light of the above, we respectfully request that the Shire approve the development and grant a temporary approval for a period of five (5) years subject to additional appropriate conditions.

Appendix 1 – Certificate of Title

WESTERN



AUSTRALIA

TITLE NUMBER

Volume

Folio

105

86A

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts
REGISTRAR OF TITLES



LAND DESCRIPTION:

LOT 8558 ON DEPOSITED PLAN 152118

REGISTERED PROPRIETOR: (FIRST SCHEDULE)

JOHN PETER FLANNAGAN
IN 1/2 SHARE
MARK ANDREW FLANNAGAN
IN 1/2 SHARE
BOTH OF PO BOX 32 MULLEWA WA 6630
AS TENANTS IN COMMON

(T P502498) REGISTERED 31/3/2023

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS: (SECOND SCHEDULE)

1. P573963 MORTGAGE TO NATIONAL AUSTRALIA BANK LTD REGISTERED 2/6/2023.
2. P728073 CAVEAT BY BP LOW CARBON AUSTRALIA PTY LTD LODGED 2/10/2023.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

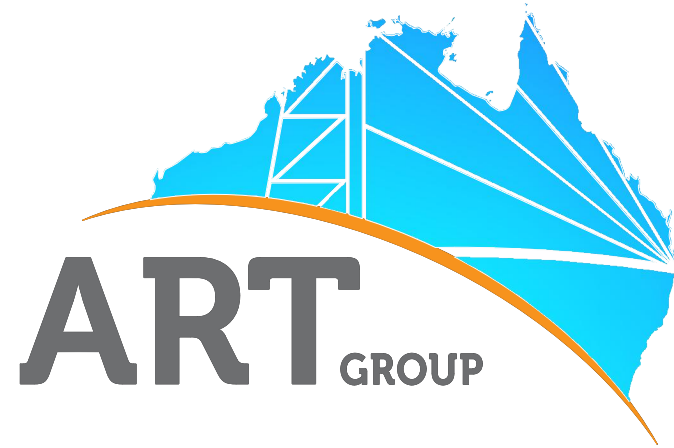
STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 105-86A (8558/DP152118)
PREVIOUS TITLE: 1126-731
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AUTHORITY: SHIRE OF MORAWA



Appendix 2 – Development Plans



CLIENT:

BP AUSTRALIA PTY LTD

SITE:

PINTHARUKA 2, WA

MAST NAME:

GERI MAST 05 PK 2

COORDINATES:

UTM S 50 J: 423263.977, 6788159.414

dd.ddddd°: -29.032483, 116.211922

DESCRIPTION:

150m (NOM.) TEMPORARY GL55-36 GUYED LATTICE MAST

WIND REGION:

A0

TERRAIN CATEGORY:

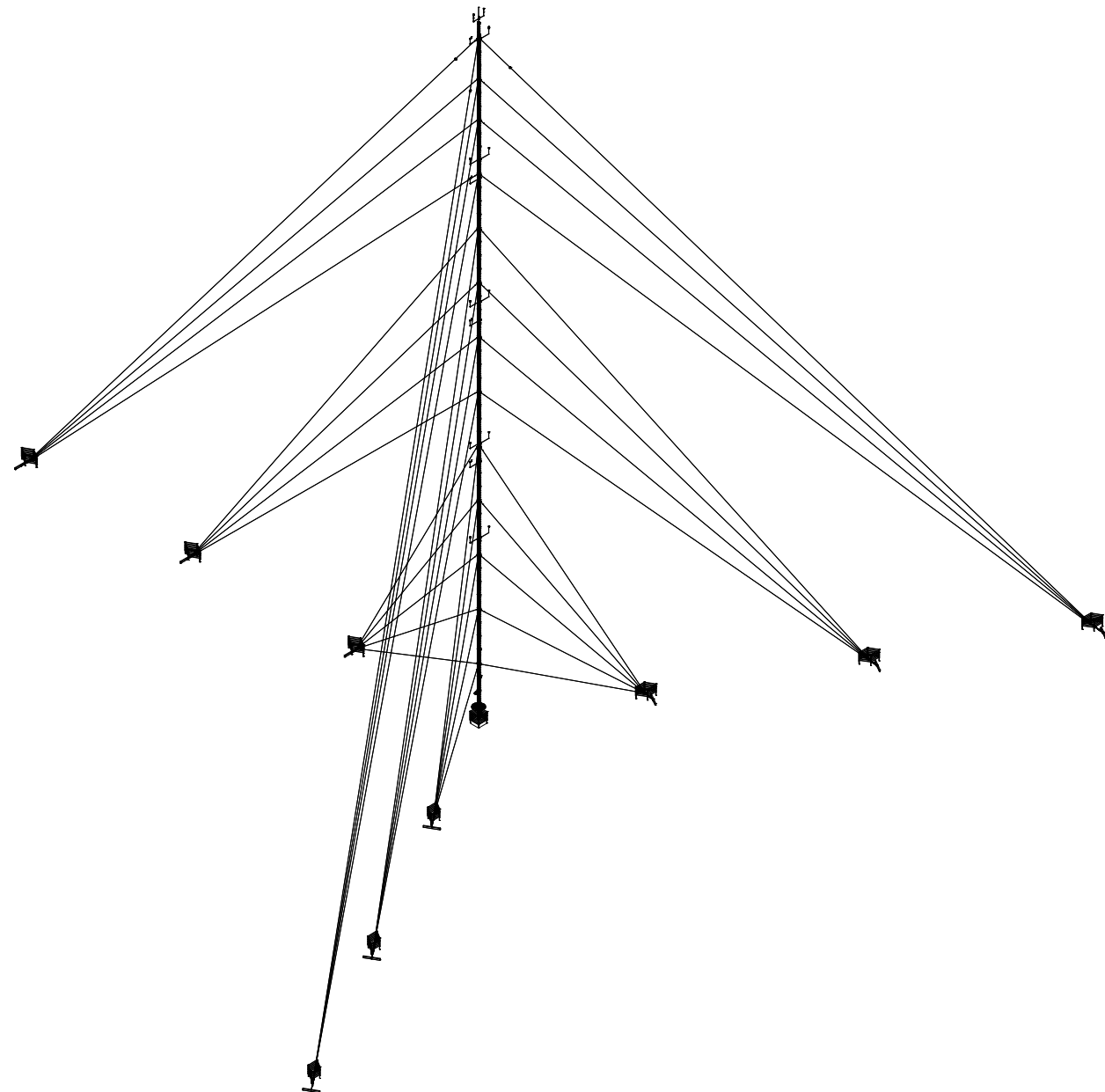
2

STRUCTURAL IMPORTANCE:

LEVEL 1

AS3995-1994 & AS1170.2:2021

DRAWING REGISTER	
SHEET TITLE	SHEET No.
TITLE SHEET & DRAWING REGISTER	1/9
GENERAL NOTES	2/9
MAST PLAN	3/9
MAST ELEVATION	4/9
MAST ANCILLARY DETAILS	5/9
MAST FOOTING DETAILS - CAST IN-SITU	6/9
EARTHING DETAILS	7/9
FENCING DETAILS	8/9
FALL ARREST DETAILS	9/9



1

S-01

ISOMETRIC VIEW

NOTES

02

UPDATED COORDINATES

22/05/24

01

REVISED LOCATION

13/05/24

00


ISSUED FOR CONSTRUCTION

21/03/24

REV

DESCRIPTION

DATE




119-125 QUARRY ROAD
MURWILLUMBAH, 2484, NSW
(02) 6672 6200
admin@artowers.com.au
australianradiotowers.com

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© 2023-2024

CLIENT



PROJECT

BP AUSTRALIA PTY LTD
PINTHARUKA 2, WA
GERI MAST 05 PK 2 150M(NOM.) MET MAST
TEMPORARY DEPLOYMENT

SHEET TITLE


TITLE SHEET & DRAWING REGISTER

STATUS

FOR CONSTRUCTION

SCALE PLOTTED AT A3
N.T.S.

THIRD ANGLE
PROJECTION



DRAWN
CG

CHECKED
HY

APPROVED
AT

CO-ORDINATED
AT

DRAWING NUMBER
ART-230252-DRG-0006

SHEET
1 / 9

ISSUE
02

GENERAL NOTES		GUY ANCHOR COMPACTION SPECIFICATIONS		<div>MAST DESIGN LOADS</div> <table><tr><th colspan="2">WIND PARAMETERS (AS1170.2:2021)</th></tr><tr><td>WIND REGION</td><td>A0</td></tr><tr><td>TERRAIN CATEGORY</td><td>2</td></tr><tr><td>IMPORTANCE LEVEL (AS1170.0:2011)</td><td>1</td></tr><tr><td>TOPOGRAPHIC MULTIPLIER Mt</td><td>1.000</td></tr><tr><td>DIRECTIONAL MULTIPLIER Md</td><td>1</td></tr><tr><td>CLIMATE CHANGE MULTIPLIER Mc</td><td>1</td></tr><tr><td>REGIONAL WIND SPEED Vr (m/s) (1)</td><td>38</td></tr><tr><td>SERVICE WIND Vs (m/s) (2)</td><td>27</td></tr><tr><td>DEPLOYMENT TYPE (3)</td><td>TEMPORARY</td></tr><tr><td>STRUCTURE SERVICE LIFE (4)</td><td>5 YEARS</td></tr><tr><th colspan="2">MAST STEELWORK INFORMATION</th></tr><tr><td>MAST HUB HEIGHT</td><td>150110</td></tr><tr><td>MAST HEIGHT</td><td>147806</td></tr><tr><td>STANDARD MAST SECTION HEIGHT (GL55)</td><td>2880</td></tr><tr><td>MAST BASE HEIGHT (GL55)</td><td>465</td></tr><tr><td>MAST BASE RL.</td><td>100</td></tr><tr><th colspan="2">MAST FOOTING & SOIL PROPERTIES</th></tr><tr><td>SOIL ALLOWABLE BEARING CAPACITY (kPa) (5)</td><td>100 kPa</td></tr><tr><td>DENSITY OF SOIL (kN/m³)</td><td>17 kN/m³</td></tr><tr><td>INTERNAL ANGLE OF FRICTION (DEGREES°)</td><td>30°</td></tr><tr><td>MAST FOUNDATION</td><td>CONCRETE IN SITU</td></tr><tr><td>FOUNDATION DIMENSIONS (WxLxD)</td><td>1800x1800x700</td></tr><tr><td colspan="2">NOTES: (Δ)</td></tr><tr><td colspan="2">1. REGIONAL WIND SPEED FOR AS1170.2:2021 CALCULATIONS OF WIND PRESSURE DETERMINED VIA AS1170.0:2011 ANNEX F TAKING INTO ACCOUNT THE DESIGN WORKING LIFE OF THE DEPLOYMENT TYPE AND ANNUAL PROBABILITY OF WIND EVENT EXCEEDANCE IN ACCORDANCE WITH THE IMPORTANCE LEVEL. THE DESIGN WORKING LIFE IS CONSIDERED AS 5 YEARS FOR TEMPORARY MASTS AND 25 YEARS FOR PERMANENT MASTS.</td></tr><tr><td colspan="2">2. SERVICE WIND SPEED BASED ON CRITERION OF SERVICEABILITY OF COMMUNICATION LATTICE TOWERS WHICH TAKES INTO CONSIDERATION OUTAGES IN BROADCASTING OR LOSS OF SIGNAL IN MICROWAVE RADIO LINKS. A 27 m/s WIND SPEED IS THE REFERENCE SPEED ANNOTATED IN AS3995-1994 ANNEX A AND OTHER INTERNATIONAL STANDARDS THAT REGULATES THIS TYPE OF STRUCTURAL DESIGN.</td></tr><tr><td colspan="2">3. AS DEFINED IN THE PROJECT SCOPE OF WORKS.</td></tr><tr><td colspan="2">4. MINIMUM SERVICE LIFE EXPECTED FOR STEEL MEMBERS, PROTECTIVE COATINGS AND CONCRETE ELEMENTS WITHOUT COMPROMISED TO STRUCTURAL INTEGRITY WITH STANDARD LEVEL OF MAINTENANCE.</td></tr><tr><td colspan="2">5. THE ULTIMATE SOIL CAPACITY IS TAKEN AS AT LEAST 1.5 TIMES THE REFERRED ALLOWABLE CAPACITY.</td></tr><tr><td colspan="2">* MAINTENANCE LOAD CONSIDERED AS 2 PERSONNEL AT A TIME OR EQUIVALENT.</td></tr></table>		WIND PARAMETERS (AS1170.2:2021)		WIND REGION	A0	TERRAIN CATEGORY	2	IMPORTANCE LEVEL (AS1170.0:2011)	1	TOPOGRAPHIC MULTIPLIER Mt	1.000	DIRECTIONAL MULTIPLIER Md	1	CLIMATE CHANGE MULTIPLIER Mc	1	REGIONAL WIND SPEED Vr (m/s) (1)	38	SERVICE WIND Vs (m/s) (2)	27	DEPLOYMENT TYPE (3)	TEMPORARY	STRUCTURE SERVICE LIFE (4)	5 YEARS	MAST STEELWORK INFORMATION		MAST HUB HEIGHT	150110	MAST HEIGHT	147806	STANDARD MAST SECTION HEIGHT (GL55)	2880	MAST BASE HEIGHT (GL55)	465	MAST BASE RL.	100	MAST FOOTING & SOIL PROPERTIES		SOIL ALLOWABLE BEARING CAPACITY (kPa) (5)	100 kPa	DENSITY OF SOIL (kN/m³)	17 kN/m³	INTERNAL ANGLE OF FRICTION (DEGREES°)	30°	MAST FOUNDATION	CONCRETE IN SITU	FOUNDATION DIMENSIONS (WxLxD)	1800x1800x700	NOTES: (Δ)		1. REGIONAL WIND SPEED FOR AS1170.2:2021 CALCULATIONS OF WIND PRESSURE DETERMINED VIA AS1170.0:2011 ANNEX F TAKING INTO ACCOUNT THE DESIGN WORKING LIFE OF THE DEPLOYMENT TYPE AND ANNUAL PROBABILITY OF WIND EVENT EXCEEDANCE IN ACCORDANCE WITH THE IMPORTANCE LEVEL. THE DESIGN WORKING LIFE IS CONSIDERED AS 5 YEARS FOR TEMPORARY MASTS AND 25 YEARS FOR PERMANENT MASTS.		2. SERVICE WIND SPEED BASED ON CRITERION OF SERVICEABILITY OF COMMUNICATION LATTICE TOWERS WHICH TAKES INTO CONSIDERATION OUTAGES IN BROADCASTING OR LOSS OF SIGNAL IN MICROWAVE RADIO LINKS. A 27 m/s WIND SPEED IS THE REFERENCE SPEED ANNOTATED IN AS3995-1994 ANNEX A AND OTHER INTERNATIONAL STANDARDS THAT REGULATES THIS TYPE OF STRUCTURAL DESIGN.		3. AS DEFINED IN THE PROJECT SCOPE OF WORKS.		4. MINIMUM SERVICE LIFE EXPECTED FOR STEEL MEMBERS, PROTECTIVE COATINGS AND CONCRETE ELEMENTS WITHOUT COMPROMISED TO STRUCTURAL INTEGRITY WITH STANDARD LEVEL OF MAINTENANCE.		5. THE ULTIMATE SOIL CAPACITY IS TAKEN AS AT LEAST 1.5 TIMES THE REFERRED ALLOWABLE CAPACITY.		* MAINTENANCE LOAD CONSIDERED AS 2 PERSONNEL AT A TIME OR EQUIVALENT.	
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<div><div></div><div>119-125 QUARRY ROAD MURWILLUMBAH, 2484, NSW (02) 6672 6200 admin@artowers.com.au australianradiotowers.com</div><div><small>THIS DOCUMENT AND ALL INTELLECTUAL PROPERTY ASSOCIATED ARE PROPERTY OF ART GROUP. INFORMATION CONTAINED IS STRICTLY CONFIDENTIAL TO COMPANIES WITHIN ART GROUP. ANY REQUEST TO COPY OR CIRCULATE THIS DOCUMENT REQUIRES PRIOR WRITTEN APPROVAL FROM ART GROUP.</small> <small>© 2021 ART GROUP PTY LTD AND ITS LICENSORS.</small></div><div>© 2023-2024</div></div>																																																																	
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1.	ALL MAST STEELWORK COMPONENTS, ASSEMBLIES AND PARTS CALLED OUT ON DETAILS, SECTIONS AND BILL OF MATERIALS ARE THE PROPRIETARY PRODUCTS OF ART GROUP UNLESS NOTED OTHERWISE (U.N.O). COMPLETE DETAILS AND INFORMATION OF ART GROUP PRODUCTS SHOWN ON PRODUCTION SHOP DRAWINGS.
2.	ALL DIMENSIONS TO BE CHECKED ON-SITE PRIOR TO CONSTRUCTION.
3.	ALL DIMENSIONS SHOWN ARE IN MILLIMETERS U.N.O.
4.	DO NOT GET DIMENSIONS BY SCALING DRAWINGS.
5.	ALL WORKMANSHIP PREFORMED AND MATERIALS USED SHALL BE AS PER THE CURRENT AUSTRALIAN STANDARDS, THE BY-LAWS, AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.
6.	ALL BOLTS ARE GRADE 8.8 STRUCTURAL ASSEMBLIES SUPPLIED WITH NUT AND WASHER U.N.O.
7.	ALL BOLTS TO BE SNUG TIGHTENED U.N.O.
8.	MAINTAIN STABLE CONDITIONS OF STRUCTURE DURING CONSTRUCTION AND DO NOT OVER STRESS ANY PART DURING CONSTRUCTION.
9.	PROVIDE "HELICOIL GRIP": OR "FAN WRAP" AT TERMINATION OF ALL GUY WIRES.
10.	INSTALL LAD-SAF FALL ARREST SYSTEM AS PER MANUFACTURES SPECIFICATIONS.

LOCATION

- THE MAST LOCATION AND PROXIMITY TO PUBLIC ROADS, BUILDINGS AND OTHER INFRASTRUCTURE IS THE RESPONSIBILITY OF THE CLIENT AND RELEVANT LOCAL COUNCIL, STATE AND FEDERAL AUTHORITIES. UNLESS OTHERWISE STATED, ART IS NOT RESPONSIBLE FOR THE FINAL LOCATION IN REGARD TO COMPLIANCE WITH RELEVANT LOCAL COUNCIL, STATE AND FEDERAL AUTHORITIES.

EARTHING

- UNLESS OTHERWISE SPECIFIED ART IS NOT RESPONSIBLE FOR THE SITE EARTHING SYSTEM COMPLIANCE TO AS/NZS 1768-2021 CI 3.5.3 (EARTHING RESISTANCE RECOMMENDED VALUES) AS WELL AS THE PROVISION OF GEOTECHNICAL AND SOIL RESISTIVITY SURVEY DATA.
- THE METAL GUY WIRES ARE CONSIDERED ADEQUATELY EARTHED AS THEY ARE ATTACHED TO BURIED STEEL ANCHOR RODS SET IN EARTH (REFER TO AS/NZS 1768-2021 Appendix I.5.1)
- THE TOWER METALLIC STRUCTURE IS CONSIDERED A NATURAL DOWN CONDUCTOR AND REQUIRES NO ADDITIONAL DOWNCONDUCTOR (REFER TO AS/NZS 1768-2021 CI 3.3.3)

STEEL ERECTION

- MAST INSTALLATION DESIGNED FOR DERRICK-POLE OR CRANE ERECTION.
- FOR CRANE LIFTS ASSEMBLED SECTIONS MUST NOT EXCEED 40m IN A SINGLE LIFT UNLESS TWO CRANES ARE USED IN A DUAL LIFT CONFIGURATION.
- FOR DERRICK-POLE LIFTS ONLY ONE SECTION AT A TIME TO BE RAISED WITH DERRICK-POLE.

FOOTINGS & FOUNDATIONS

- REMOVE ALL TOPSOIL AND UPPER STRATA CONTAINING ORGANIC MATTER FOR ALL FOOTINGS.
- IF MATERIAL ON-SITE IS NOT SUITABLE FOR STANDARD COMPACTION SPECIFICATION, THEN IMPORTED FILL OR BACKFILL SHALL CONSIST OF APPROVED MATERIAL INSTALLED AS PER COMPACTION SPECIFICATIONS.
- GROUND COLLAPSE CONTROL MEASURES SHALL BE USED WHERE GROUND COLLAPSE MAY OCCUR BY APPLYING EITHER SHORING, BENCHING AND OR BATTERING. LOCAL WHS CODE OF PRACTICE SHALL BE ADHERED TO.
- FOR LOCAL SOIL CONDITIONS REFER TO FLOW CONSULTING ENGINEERS GEOTECHICAL REPORT NUMBER 24FCE1028 ISSUED ON 28/03/2024

MAST GUY WIRE SPECIFICATIONS

GUY WIRES: AS APPLICABLE

- Ø8.25 (7/2.75) G1320
TENSILE STRENGTH 1320 MPa
PRE-TENSION 3.5 kN

- Ø10 (19/2.00) G1320
TENSILE STRENGTH 1320 MPa
PRE-TENSION 5 kN

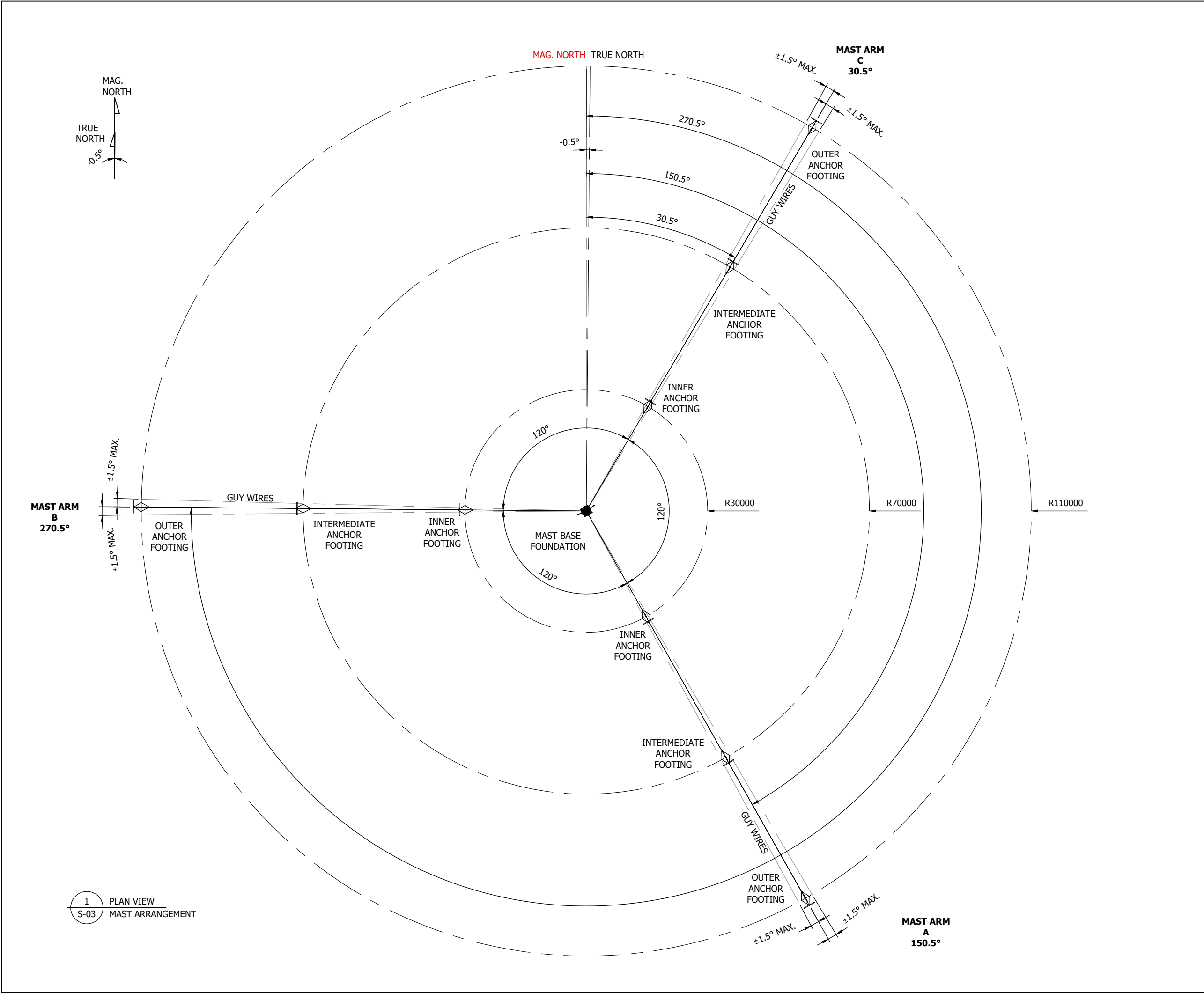
- THE LEVEL OF TOLERANCE OF GUY ANCHOR FOOTINGS MAY VARY (HIGHER/LOWER) WITHOUT ENGINEERING REVIEW MAINTAINING NOMINATED GUY ANCHOR ANGLES AS SPECIFIED BY THE STRUCTURAL ENGINEER.
INNER FOOTING: 3.0m
INTERMEDIATE FOOTING: 6.0m
OUTER FOOTING: 6.0m
- EXCAVATE ANCHOR PIT AND INSTALL STEEL ANCHOR BEAM, ANCHOR ROD AND ATTACHMENTS AS SPECIFIED IN DETAILS AND INFORMATION PROVIDED ON STRUCTURAL DRAWINGS.
- CLAYS OR SILTS (BASED ON $\phi=20^{\circ}$ AND $C_u=20kPa$) OR COMPACTABLE SANDS (BASED ON $\phi=32^{\circ}$ MIN.) CAN BE USED AS FILL MATERIAL. MINIMUM SOIL PROPERTIES ARE AS STATED ABOVE UNLESS A GEOTECHNICAL REPORT IS PROVIDED IN WHICH CASE SPECIFIC SELECT FILL PARTICLES SIZE AND SHAPE IS TO SUIT COMPACTED LAYER THICKNESS AS PER THE GEOTECHNICAL REPORT SPECIFICATIONS.
- ACHIEVE ADEQUATE COMPACTION BY PROVIDING A COMPACTED DENSITY EQUAL TO A CONTROLLED FILL CLASSIFICATION AS DEFINED IN AS2870. PLACE FILL IN LAYERS NO GREATER THAN 150mm WHEN COMPACTED. ACHIEVE REQUIRED COMPACTION BY MECHANICAL TAMPING SUCH AS COMPACTION BY RODDING, VIBRATING PLATE, SMOOTH DRUM ROLLER ATTACHED TO A BACKHOE/EXCAVATOR, OR WALK BEHIND WHACKER PACKER.
- ANGLE OF ANCHOR ROD SHOWN ON GUY ANCHOR FOOTING SCHEDULE REFERS TO PRETENSION FORCE BEING APPLIED TO GUY-WIRES AND RE-COMPACTION OF LOOSE SOIL FOLLOWING PRETENSION.

CONCRETE

- ALL WORKMANSHIP PREFORMED AND MATERIALS USED ARE AS PER AS3600.
- PLACE CONCRETE WITH COMPRESSIVE STRENGTH F'C 32MPa AS DEFINED IN AS1379.
- MAST BASE FOUNDATION: CONCRETE COVER OF 75mm MIN. TOP, BOTTOM AND SIDES.
- GUY ANCHOR FOUNDATION: MIN. 50mm CONCRETE COVER AROUND THE STEEL ANCHOR BEAM; FOR TOTAL CONCRETE DEPTH REFER TO GUY ANCHOR FOOTING SCHEDULE.
- NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS MADE IN CONCRETE MEMBERS WITHOUT THE WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
- REINFORCEMENT SYMBOLS:
N - GRADE 500 NORMAL DUCTILITY DEFORMED BAR. THE NUMBER FOLLOWING THESE SYMBOLS INDICATES BAR DIAMETER IN MILLIMETRES U.N.O.
REINFORCEMENT TO COMPLY WITH AS4671.

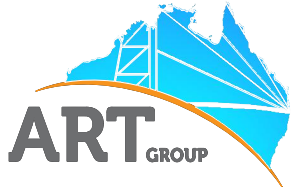
STEEL WORK

- ALL WORKMANSHIP PREFORMED AND MATERIALS USED ARE AS PER AS4100 AND AS1554. EXCEPTION MAY BE PERMITTED ONLY WDIM HERE AS VARIED BY APPROVED CONTRACT DOCUMENTS.
- UNLESS NOTED OTHERWISE, THE FOLLOWING STEEL GRADES YEILD STRENGTH APPLY TO MAST SECTIONS:
MAST CORD (LEGS) 500 MPa
MAST WEBBING 300 MPa
PLATES 250 MPa
- WELDED CONNECTIONS BETWEEN STRUCTURAL MEMBERS ARE 6mm CONTINUOUS FILLET WELD (OR SIZE EQUIVALENT TO THE MINIMUM THICKNESS OF CONNECTION MEMBERS IF LESS THAN 6mm) U.N.O. WELDED CONNECTIONS BETWEEN LATTICE & CHORDS ARE 6mm MIN. COMPLETE M AND INCOMPLETE PENETRATION BUTT WELDS CLASS SP U.N.O.
- BOLT TYPES AND DESIGNATIONS WHERE USED ARE AS FOLLOWS:
4.6/S COMMERCIAL BOLTS TO AS1111 SNUG TIGHTENED 8.8/S HIGH STRENGTH STRUCTURAL ASSEMBLY (BOLTS, NUTS AND HARDENED WASHERS) TO AS1252 SNUG TIGHTENED ONLY FOR ALL MAST SECTIONS U.N.O.
- M16 HIGH STRENGTH (8.8/S) BOLTS USED TYPICALLY IN ALL CONNECTIONS U.N.O. NOTWITHSTANDING THIS, NO STEEL-TO-STEEL CONNECTIONS ASSEMBLED WITH LESS THAN 2/ M16 (8.8/S) BOLTS U.N.O. U-BOLTS (4.6/S) USED FOR ANCILLARIES INSTALLATION U.N.O.
- BOLT HOLES IN STEEL-TO-STEEL AND STEEL-TO-CONCRETE CONNECTIONS WITH BOLT DIAMETER +2mm AND +3mm RESPECTIVELY. BASE PLATES MUST HAVE A BOLT DIAMETER +6mm U.N.O.
- ALL NUTS, BOLTS AND WASHERS ARE GALVANIZED U.N.O.
- WELD MATERIAL REQUIRES A NOMINAL TENSILE STRENGTH OF 490MPa AS PER AS4100 AMENDMENT 1, 2012, TABLE 9.7.3.10(1).
- ALL WELDS REQUIRE CATEGORY SP AS PER AS1554 PART 1 U.N.O. PART 3 U.N.O.
- PROTECTIVE SURFACE TREATMENT APPLIED TO STRUCTURAL STEELWORK AS FOLLOWS:
GENERAL MAST FINISH:
HOT-DIP GALVANIZE "HDG600" (AS2312) (AVERAGE 90 MICRON).
GUY ANCHOR BEAMS & ANCHOR RODS FINISH:
HOT-DIP GALVANIZE "HDG600" (AS2312) (AVERAGE 90 MICRON).
BLACK STEEL MAY BE USED WHERE ANCHOR BEAM IS ENCASED IN CONCRETE.



NOTES


02	UPDATED COORDINATES	22/05/24
01	REVISED LOCATION	13/05/24
00	ISSUED FOR CONSTRUCTION	21/03/24
REV	DESCRIPTION	DATE



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PROJECT

BP AUSTRALIA PTY LTD
PINTHARUKA 2, WA
GERI MAST 05 PK 2 150M(NOM.) MET MAST
TEMPORARY DEPLOYMENT

SHEET TITLE

MAST PLAN

STATUS

FOR CONSTRUCTION

SCALE PLOTTED AT A3
1:875

THIRD ANGLE
PROJECTION

DRAWN
CG

CHECKED
HY

APPROVED
AT

CO-ORDINATED
AT

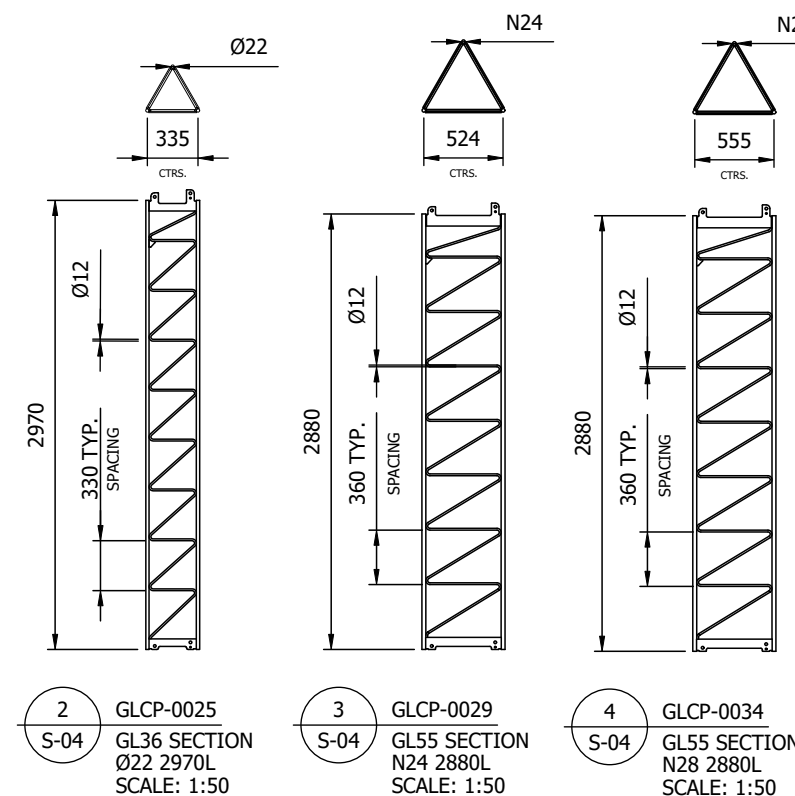
DRAWING NUMBER
ART-230252-DRG-0006

SHEET
3 / 9

ISSUE
02

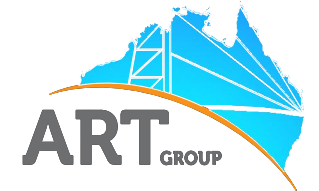


GUY WIRE SCHEDULE (RIGGING EQUIPMENT TO AS 1138. AS 2319. AS 2714. AS 2759. AS 4991.)										
MARK	DESCRIPTION	HEIGHT	LENGTH	RADIUS	SIZE	PRE-TENSION	BOW & 'D' SHACKLE GALV. (GRADE S)	TURNBUCKLE GALV. (GRADE P)	FAN-WRAP GALV. (GRADE GFG 083)	THIMBLE GALV. (GRADE 3025)
GW-1	GUY WIRE 1 - Ø8.25 (7/2.75) G1320	11820	38000	30000	Ø8.25	3.5kN	19mm	5/8"	8.25mm	11mm
GW-2	GUY WIRE 2 - Ø8.25 (7/2.75) G1320	23340	44000							
GW-3	GUY WIRE 3 - Ø8.25 (7/2.75) G1320	34860	51000							
GW-4	GUY WIRE 4 - Ø8.25 (7/2.75) G1320	46380	61000							
GW-5	GUY WIRE 5 - Ø8.25 (7/2.75) G1320	57900	71000							
GW-6	GUY WIRE 6 - Ø10 (19/2.00) G1320	69420	104000	70000	Ø10	5kN	16mm	7/8"	10mm	14mm
GW-7	GUY WIRE 7 - Ø10 (19/2.00) G1320	80940	113000							
GW-8	GUY WIRE 8 - Ø10 (19/2.00) G1320	92460	121000							
GW-9	GUY WIRE 9 - Ø10 (19/2.00) G1320	103980	131000							
GW-10	GUY WIRE 10 - Ø10 (19/2.00) G1320	115500	166000	110000	Ø10	5kN	16mm	7/8"	10mm	14mm
GW-11	GUY WIRE 11 - Ø10 (19/2.00) G1320	127020	174000							
GW-12	GUY WIRE 12 - Ø10 (19/2.00) G1320	135660	181000							
GW-13	GUY WIRE 13 - Ø10 (19/2.00) G1320	144300	188000							



- NOTES
1. REFER TO GENERAL NOTES (SHEET 2) FOR MAST SPECIFICATIONS AND ART PROPRIETARY PRODUCT DISCLOSURE.
 2. REFER TO MAST ANCILLARY DETAILS (SHEET 5) FOR ANCILLARY DETAILS AND INFORMATION.
 3. REFER TO MAST FOOTING DETAILS (SHEET 6) FOR FOOTING DETAILS AND INFORMATION.
 4. GW-5, GW-8.; FROM THE CENTER OF THE INSTRUMENT TO GUY WIRE, CLEARANCES ARE:
GW-5, 1220mm
GW-8, 955mm

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PROJECT	BP AUSTRALIA PTY LTD PINTHARUKA 2, WA GERI MAST 05 PK 2 150M(NOM.) MET MAST TEMPORARY DEPLOYMENT
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SHEET TITLE
MAST ELEVATION

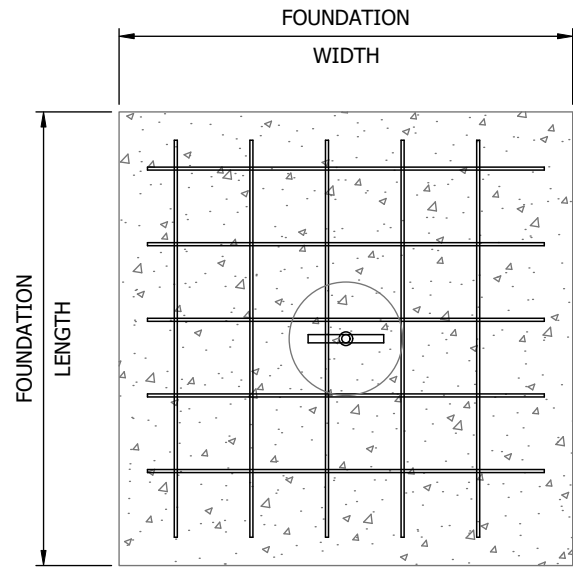
STATUS	FOR CONSTRUCTION
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SCALE PLOTTED AT A3 1:500	THIRD ANGLE PROJECTION	
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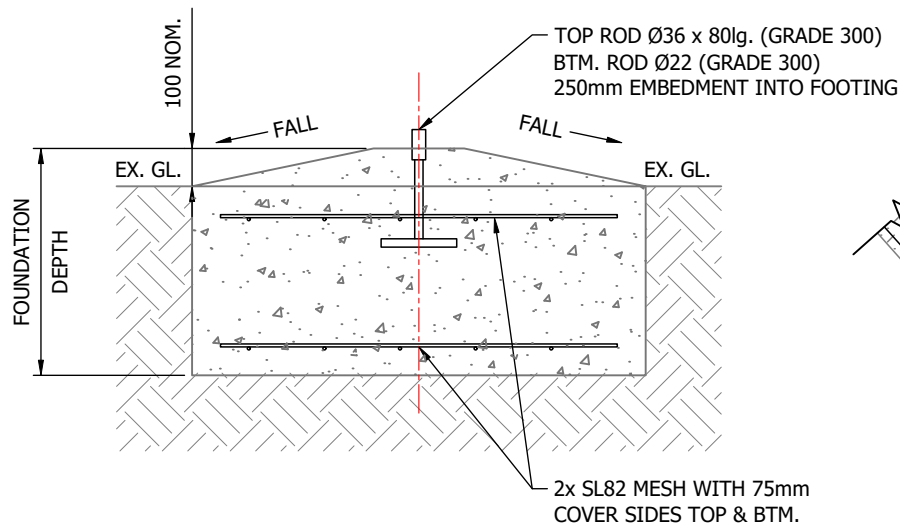
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DRAWING NUMBER	SHEET	ISSUE
ART-230252-DRG-0006	4 / 9	02

MAST BASE FOUNDATION			
WIDTH	LENGTH	DEPTH	VOL. OF CONCRETE
1600	1600	700	1.792m³

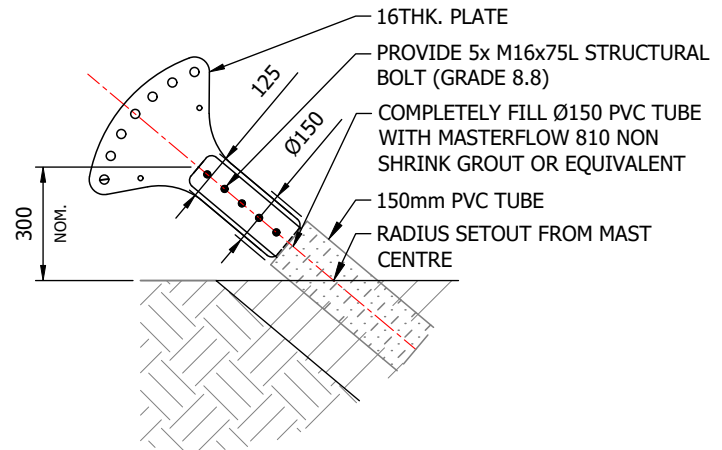


1 PLAN VIEW
S-06 CONCRETE IN-SITU MAST BASE
STEEL IS SHOWN FOR CLARITY
TYPICAL DETAIL

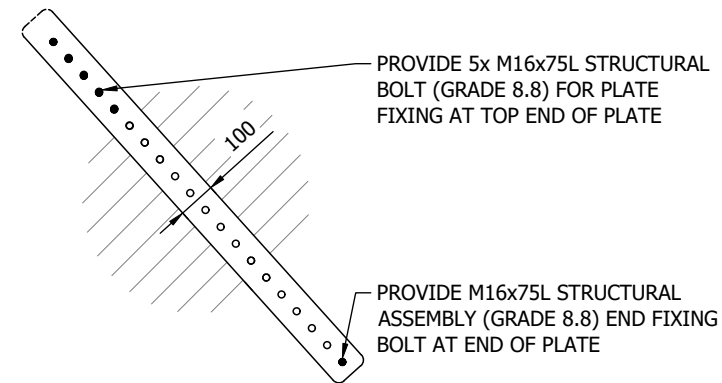


2 ELEVATION VIEW
S-06 CONCRETE IN-SITU MAST BASE
STEEL IS SHOWN FOR CLARITY
TYPICAL DETAIL

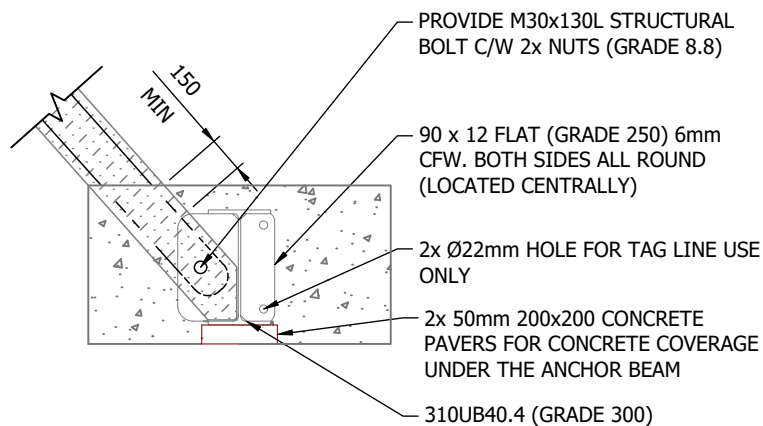
GUY ANCHOR FOOTING SCHEDULE																
FOOTING	RADIUS	No. GUYS	EXCAV. WIDTH	EXCAV. LENGTH	EXCAV. DEPTH	ANCHOR BEAM	CONC. DEPTH	CONC. VOL. PER ANCHOR	ANGLE	DIM A	DIM B	DIM C	GROUT WEIGHT (kg)	PIPE LENGTH	ANCHOR HEAD	
INNER	30000	5	800	3400	1800	3000	400	1.088m³	48°	1526	400	2600	64	2300	7 HOLE	
INTERMEDIATE	70000	4	800	3400	1800	3000	400	1.088m³	49°	1512	400	2600	64	2300	7 HOLE	
OUTER	110000	4	800	3400	1800	3000	400	1.088m³	47°	1609	400	2660	88	3200	7 HOLE	



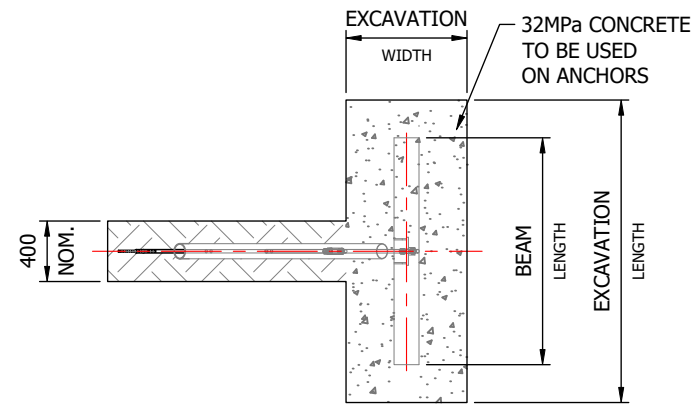
A DETAIL VIEW
S-06 ANCHOR HEAD ASSEMBLY
TYPICAL DETAIL



B DETAIL VIEW
S-06 ANCHOR ROD CONNECTION
PVC TUBE & EARTH NOT SHOWN FOR CLARITY
TYPICAL DETAIL

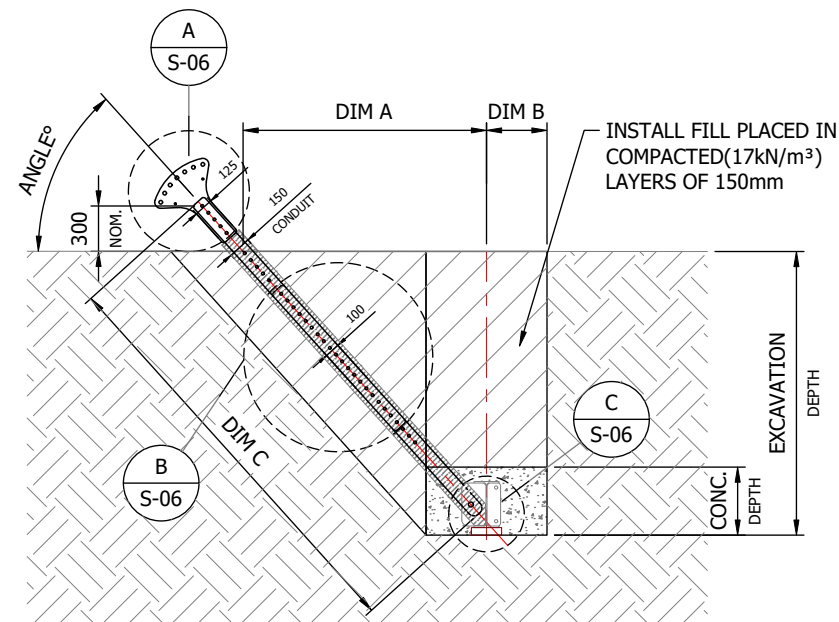


C DETAIL VIEW
S-06 ANCHOR BEAM ASSEMBLY
TYPICAL DETAIL



3 PLAN VIEW
S-06 GUY ANCHOR FOOTING
TYPICAL DETAIL

ANCHOR PLATE SCHEDULE (SEE NOTE 3)		
FOOTING	ANCHOR ARM BASE	ANCHOR BOLTED ARM CENTER
INNER	ANPA-0045_01	ANPA-0060_00
INTERMEDIATE	ANPA-0045_01	ANPA-0060_00
OUTER	ANPA-0045_01	ANPA-0060_00



4 ELEVATION VIEW
S-06 GUY ANCHOR FOOTING
ANCHOR ASSEMBLY SHOWN FOR CLARITY
TYPICAL DETAIL

- NOTES
- REFER TO GENERAL NOTES (SHEET 2) GUY ANCHOR CONCRETE & COMPACTION SPECIFICATIONS.
 - IN ORDER TO MEET REQUIRED DEPTH, INNER ANCHORS NEED CUSTOM ADJUSTABLE ANCHOR ARMS (SEE ANCHOR PLATE SCHEDULE TABLE)
 - DO NOT USE MORE THAN TWO ANCHOR PLATES PER ANCHOR. IF IN DOUBT CONSULT WITH ART ENGINEERING.

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PROJECT
BP AUSTRALIA PTY LTD
PINTHARUKA 2, WA
GERI MAST 05 PK 2 150M(NOM.) MET MAST
TEMPORARY DEPLOYMENT

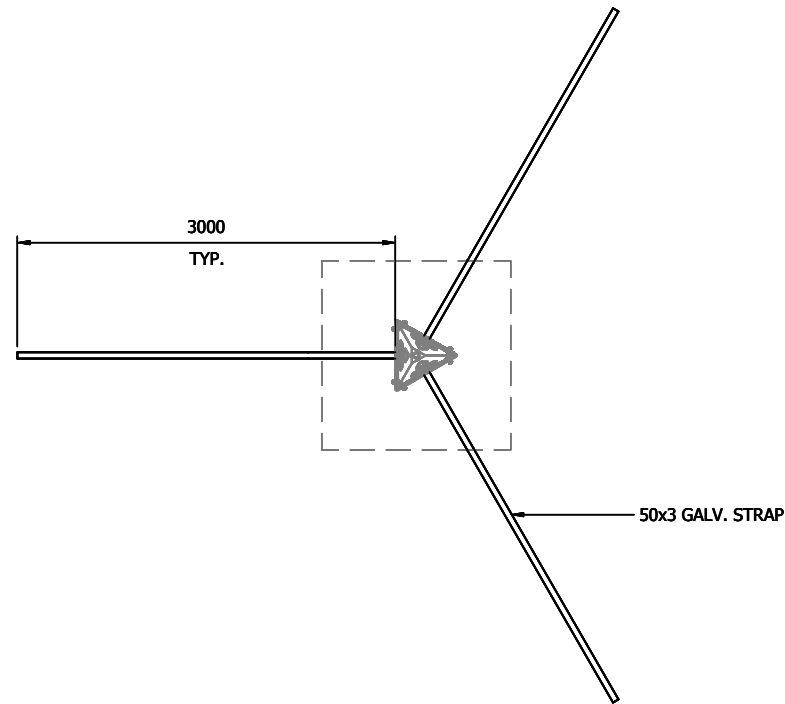
SHEET TITLE
MAST FOOTING DETAILS - CAST IN-SITU

STATUS
FOR CONSTRUCTION

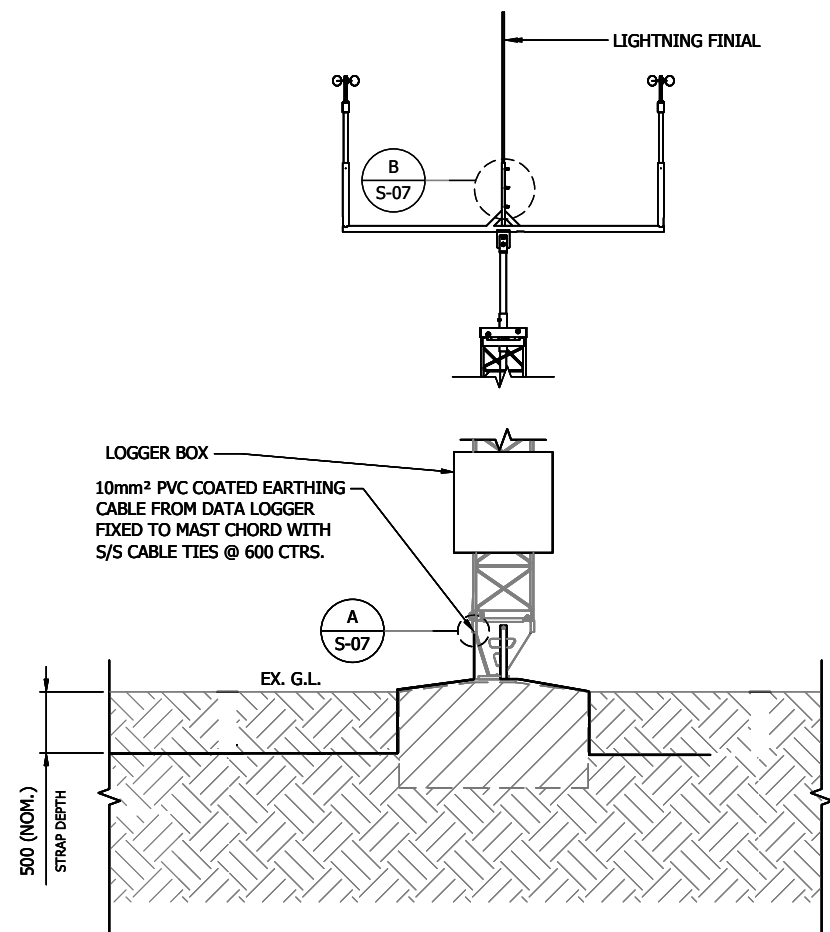
SCALE PLOTTED AT A3
N.T.S. THIRD ANGLE
PROJECTION

DRAWN
CG CHECKED
HY APPROVED
AT CO-ORDINATED
AT

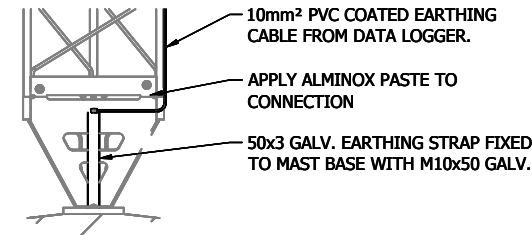
DRAWING NUMBER
ART-230252-DRG-0006 SHEET
6 / 9 ISSUE
02



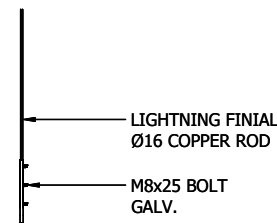
1 PLAN VIEW
S-07 MAST BASE
TYPICAL DETAIL



2 SECTION VIEW
S-07 MAST BASE
TYPICAL DETAIL



A DETAIL VIEW
S-07 MAST BASE
EARTHING CONNECTION
TYPICAL DETAIL



B DETAIL VIEW
S-07 GOAL POST / LIGHTNING FINIAL
TYPICAL DETAIL

NOTES

1. REFER TO GENERAL NOTES (SHEET 2) FOR EARTHING SPECIFICATIONS.

REV	DESCRIPTION	DATE
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PINTHARUKA 2, WA
GERI MAST 05 PK 2 150M(NOM.) MET MAST
TEMPORARY DEPLOYMENT

SHEET TITLE
EARTHING DETAILS

STATUS
FOR CONSTRUCTION

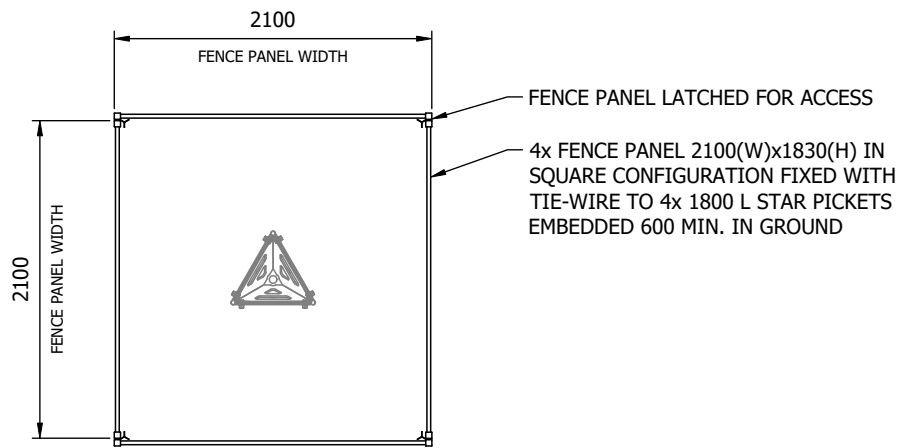
SCALE PLOTTED AT A3
N.T.S.

THIRD ANGLE
PROJECTION

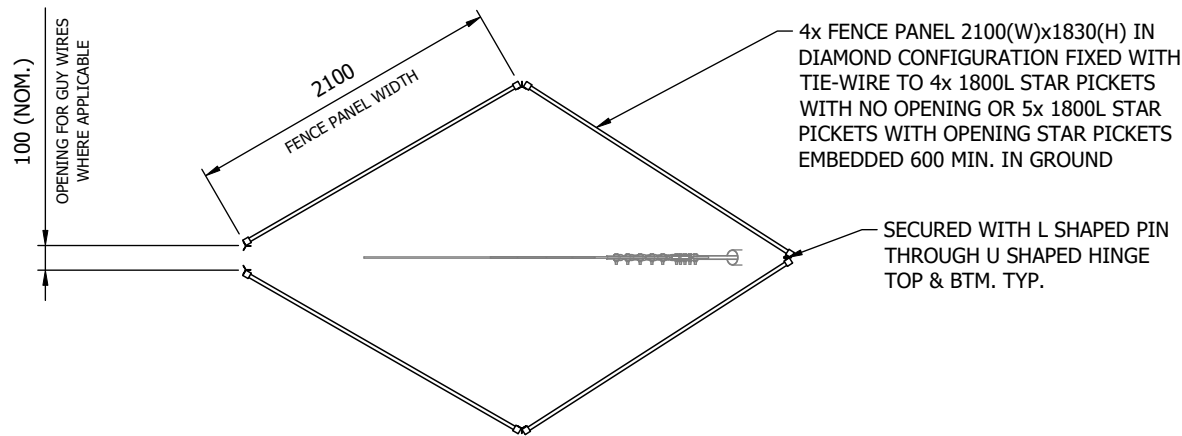
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DRAWING NUMBER ART-230252-DRG-0006	SHEET 7 / 9	ISSUE 02
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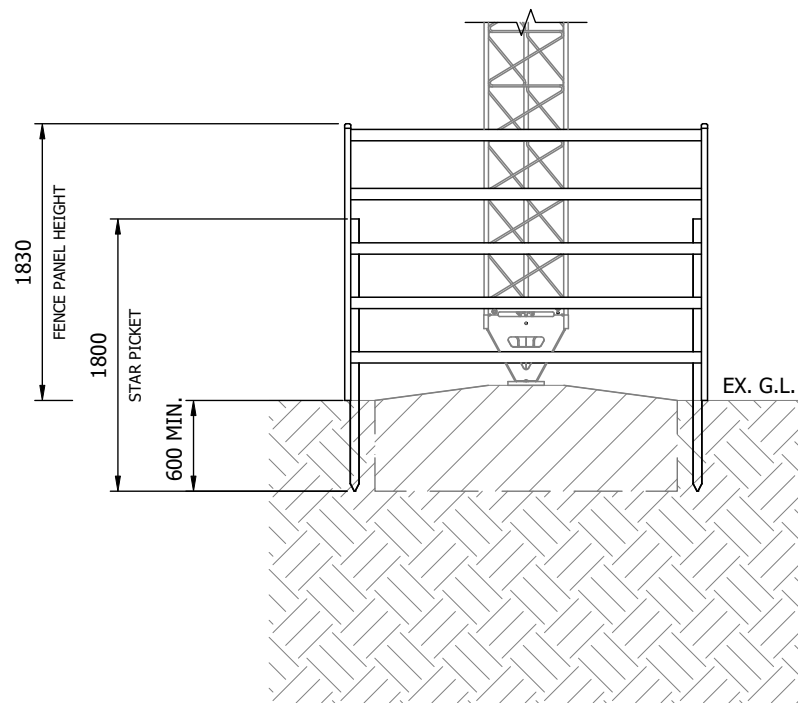
- NOTES:**
- 1. POSITION STAR PICKETS BEHIND FENCE PANELS.
 - 2. NO SHARP EDGES ON THE OUTSIDE OF FENCE PANELS.
 - 3. INNER ANCHOR - 4 PANELS & 5 STAR PICKETS (OPENING).
 - 4. OTHER ANCHOR(S) - 4 PANELS & 4 STAR PICKETS.
 - 5. FOOTINGS SHOWN FOR INDICATIVE PURPOSE ONLY REFER TO MAST FOOTING AND FOUNDATION DETAILS (SHEET 6).



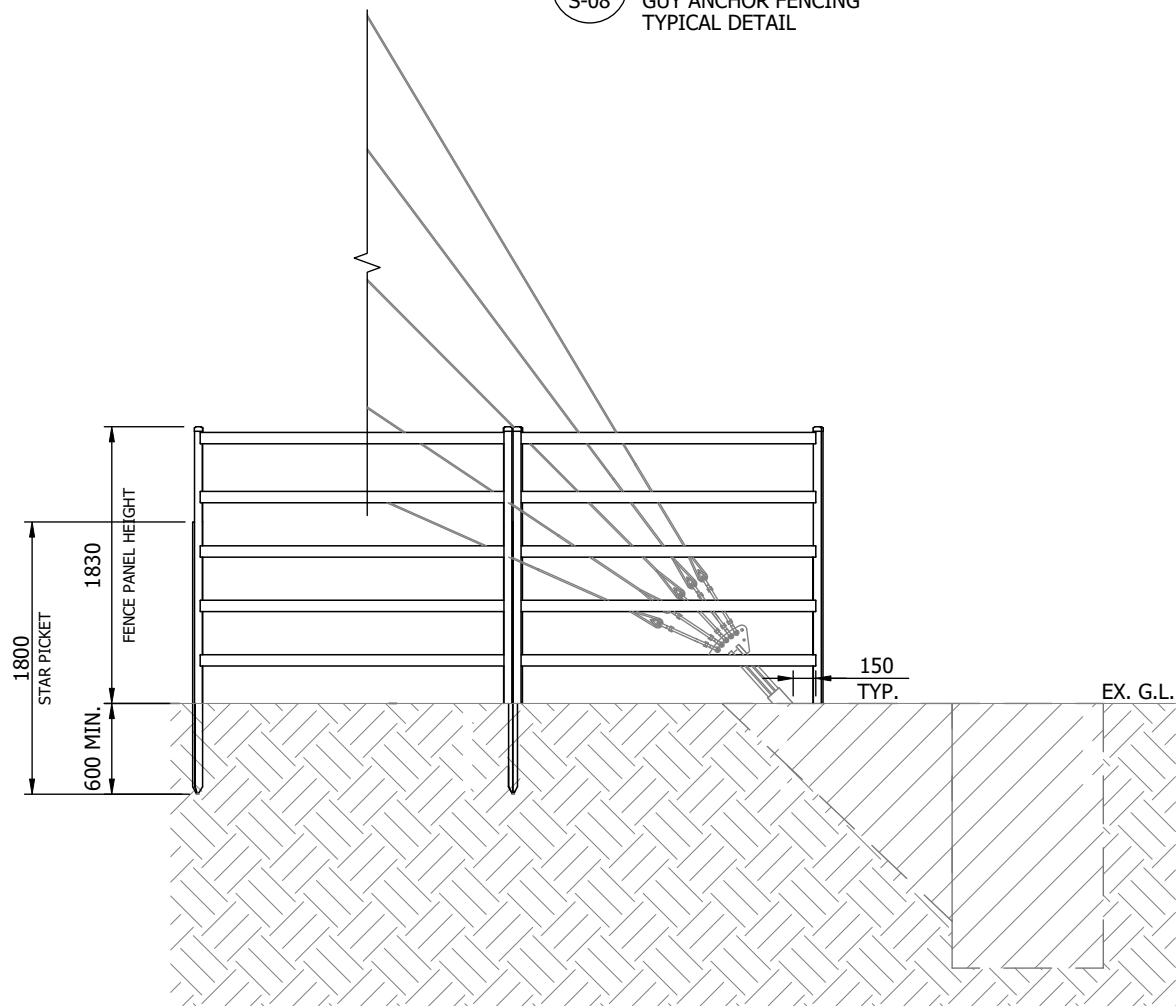
1 PLAN VIEW
S-08 MAST BASE FENCING
TYPICAL DETAIL



3 PLAN VIEW
S-08 GUY ANCHOR FENCING
TYPICAL DETAIL



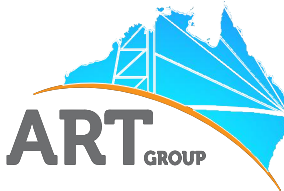
2 SECTION VIEW
S-08 MAST BASE FENCING
TYPICAL DETAIL



4 SECTION VIEW
S-08 GUY ANCHOR FENCING
TYPICAL DETAIL

NOTES

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PROJECT
BP AUSTRALIA PTY LTD
PINTHARUKA 2, WA
GERI MAST 05 PK 2 150M(NOM.) MET MAST
TEMPORARY DEPLOYMENT

SHEET TITLE
FENCING DETAILS

STATUS
FOR CONSTRUCTION

SCALE PLOTTED AT A3
N.T.S. THIRD ANGLE
PROJECTION

DRAWN CG	CHECKED HY	APPROVED AT	CO-ORDINATED AT
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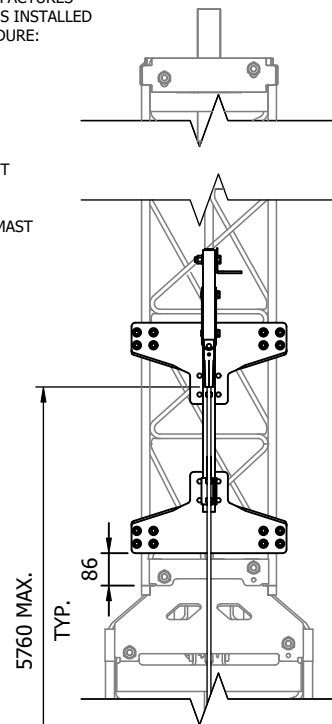
DRAWING NUMBER ART-230252-DRG-0006	SHEET 8 / 9	ISSUE 02
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LAD-SAF FALL ARREST SYSTEM INSTALLATION NOTES:

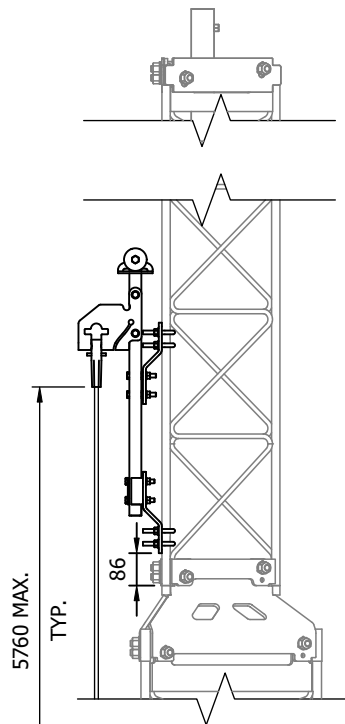
INSTALL LAD-SAF FALL ARREST SYSTEM AS PER MANUFACTURES SPECIFICATIONS. GENERALLY, THE LAD-SAF SYSTEM IS INSTALLED FROM THE TOP DOWN WITH THE FOLLOWING PROCEDURE:

1. INSTALL THE TOP BRACKETS
2. INSTALL THE TOP COMPONENT TO BRACKETS
3. INSTALL THE CABLE TO THE TOP COMPONENT
4. INSTALL THE CABLE GUIDES
5. INSTALL THE BOTTOM BRACKET
6. INSTALL THE BOTTOM COMPONENT TO BRACKET
7. TENSION THE CABLE
8. INSPECT THE INSTALLATION
9. INSTALL THE i-SAFE RFID TAG AT BOTTOM OF MAST

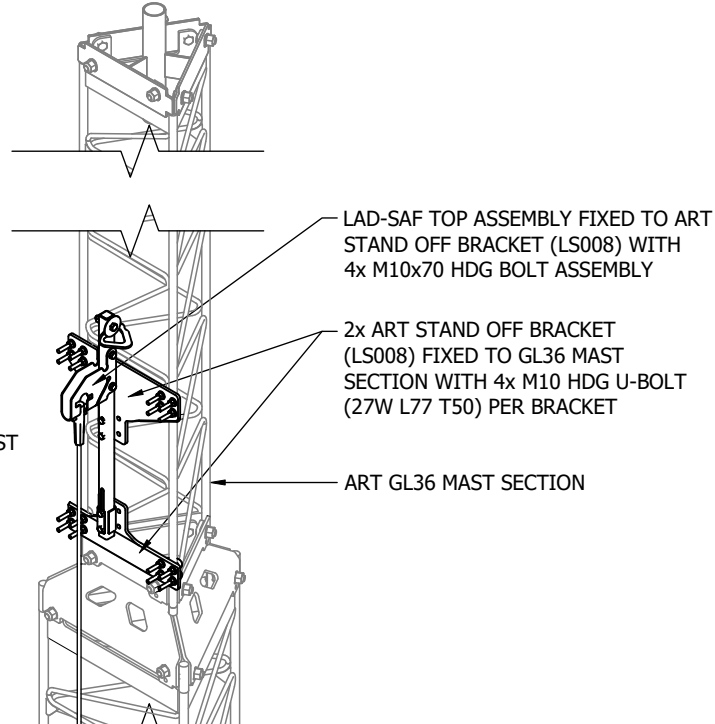
1 FRONT VIEW
S-09 LAD-SAF FALL ARREST
TOP ASSEMBLY
GL55/36 MAST
TYPICAL DETAIL



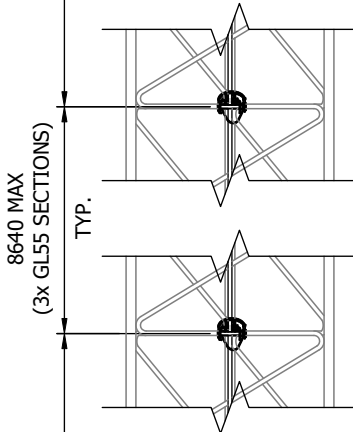
4 SIDE VIEW
S-09 LAD-SAF FALL ARREST
TOP ASSEMBLY
GL55/36 MAST
TYPICAL DETAIL



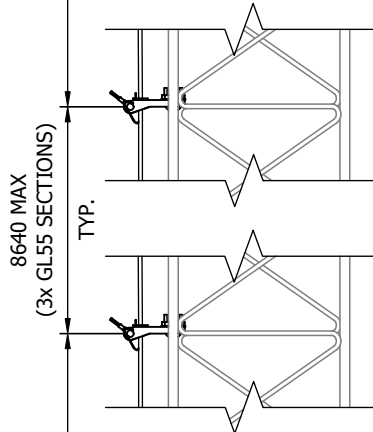
7 ISOMETRIC VIEW
S-09 LAD-SAF FALL ARREST
TOP ASSEMBLY
GL55/36 MAST
TYPICAL DETAIL



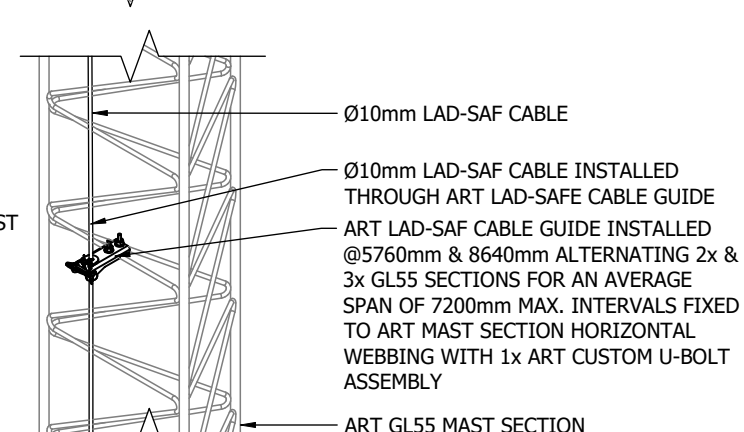
2 FRONT VIEW
S-09 LAD-SAF FALL ARREST
CABLE GUIDE
GL55/36 MAST
TYPICAL DETAIL



5 SIDE VIEW
S-09 LAD-SAF FALL ARREST
CABLE GUIDE
GL55/36 MAST
TYPICAL DETAIL

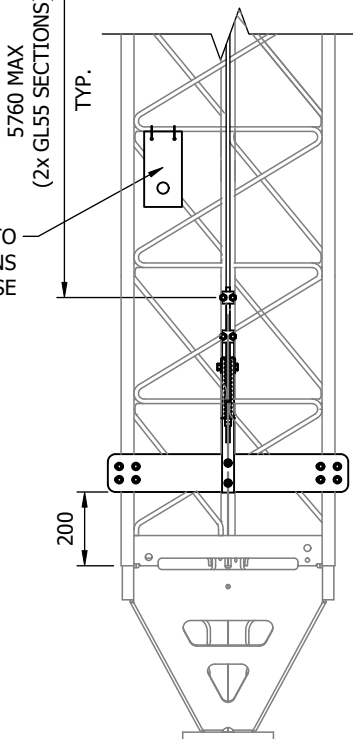


8 ISOMETRIC VIEW
S-09 LAD-SAF FALL ARREST
CABLE GUIDE
GL55/36 MAST
TYPICAL DETAIL

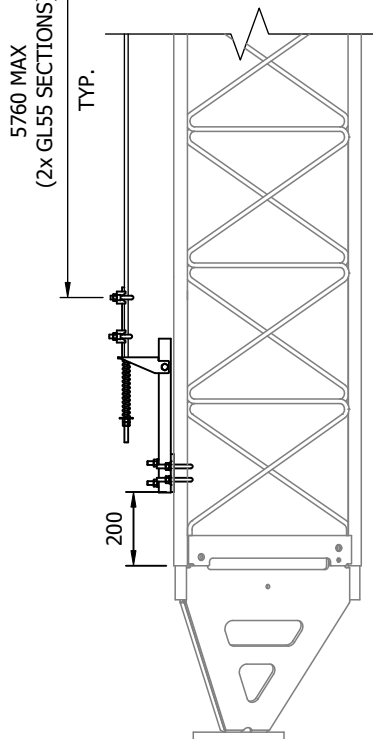


i-SAFE RFID TAG REFER TO
MANUFACTURES SPECIFICATIONS
FOR INSTALLATION AND USE

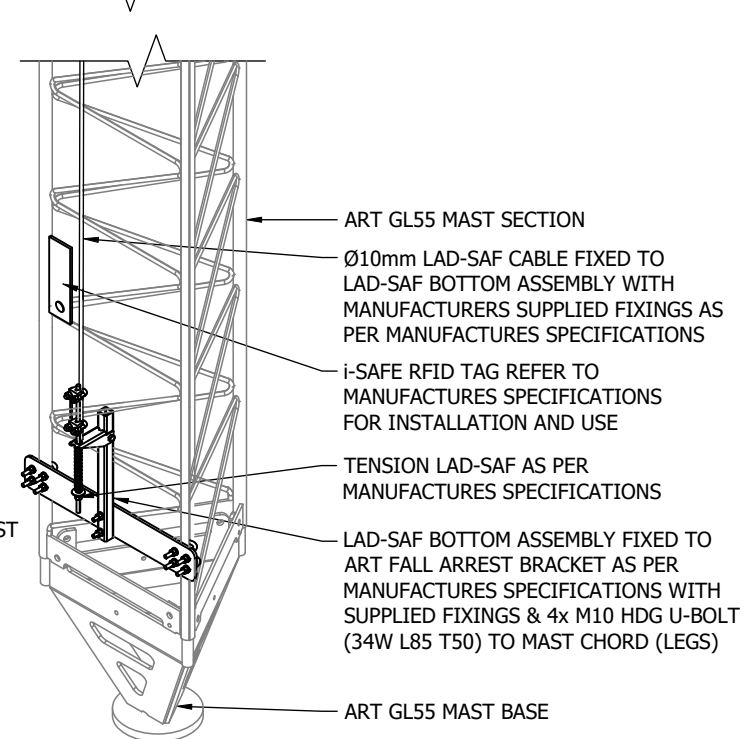
3 FRONT VIEW
S-09 LAD-SAF FALL ARREST
BOTTOM ASSEMBLY
GL55/36 MAST
TYPICAL DETAIL



6 SIDE VIEW
S-09 LAD-SAF FALL ARREST
BOTTOM ASSEMBLY
GL55/36 MAST
TYPICAL DETAIL



9 ISOMETRIC VIEW
S-09 LAD-SAF FALL ARREST
BOTTOM ASSEMBLY
GL55/36 MAST
TYPICAL DETAIL



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GERI MAST 05 PK 2 150M(NOM.) MET MAST
TEMPORARY DEPLOYMENT

SHEET TITLE
FALL ARREST DETAILS

STATUS
FOR CONSTRUCTION

SCALE PLOTTED AT A3
N.T.S. THIRD ANGLE
PROJECTION

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DRAWING NUMBER ART-230252-DRG-0006	SHEET 9 / 9	ISSUE 02
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Shire of Morawa – Lot 9705 Morawa – Yalgoo Road, Pintharuka
Schedule of Submissions

Number & Date	Submitter	Nature of Submission	Shire Response	Proposed Modifications
1 (15.07.2024) Via Email	Airservices Australia	<p>The met mast will not affect any air route LSALT.</p> <p>We have assessed the proposed activity to the above specified height for any impacts to Airservices Precision/Non-Precision Navigation Aids, Anemometers, HF/VHF/UHF Communications, A-SMGCS, Radar, PRM, ADS-B, WAM or Satellite/Links and have no objections to it proceeding.</p> <p>There are no additional instructions or concerns from our ATC.</p> <p>In summary The proposed activity does not impact Airservices operations or facilities at Morawa aerodrome.</p>	Note submission	No modifications proposed because of this submission.
2 (15.04.2024) Via Email	Civil Aviation Safety Authority	<p>CASA is not aware of any certified aerodrome's within 15km of the proposed meteorological mast site for which there could be an Obstacle Limitation Surface (OLS) that would require protection.</p> <p>CASA is also unaware of any unregulated aerodrome such as an Aeroplane Landing Area (ALA) which is not published in the Aeronautical Information Publications (AIP) being within 2.5km of the proposed meteorological mast sites.</p> <p>The proposed wind measurement mast will be approximately 151 metres above ground level (AGL), CASA recommends the installation of a low intensity steady hazard/warning obstacle light in considering other users of the airspace, particularly low-level agricultural aircraft, rescue aircraft and other flying activities in the area.</p> <p>CASA recommends that all permanent obstacles 100m or more above ground level or that penetrate the obstacle limitation surface are reported to the Aeronautical Information Service (AIS) provider, Airservices Australia</p>	<p>Note Submission</p> <p>Refer application to Airservices Australia.</p>	Condition application for installation of a low intensity steady hazard/warning obstacle light.

Ordinary Council Meeting 15 August 2024

Attachment 1- 12.1a Minutes of WALGA State Council Meeting, 10 July 2024

Item 12.1- July 2024 Minutes of WALGA State Council Meeting

State Council Summary Minutes 10 July 2024

Ordinary meeting no. 3 of 2024 of the Western Australian Local Government Association State Council held at ONE70, LV1, 170 Railway Parade, West Leederville at 4:15pm.

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1 OPENING, ATTENDANCE AND APOLOGIES

1.1 OPENING

The Chair declared the meeting open at 4:16pm.

1.2 ATTENDANCE

Members	WALGA President - Chair WALGA Deputy President Central Metropolitan Zone Avon-Midland Country Zone Central Country Zone Central Metropolitan Zone East Metropolitan Zone East Metropolitan Zone Gascoyne Country Zone Goldfields Esperance Country Zone Great Eastern Country Zone Great Southern Country Zone Kimberley Country Zone Murchison Country Zone North Metropolitan Zone North Metropolitan Zone North Metropolitan Zone Northern Country Zone Peel Country Zone Pilbara Country Zone South East Metropolitan Zone South East Metropolitan Zone South Metropolitan Zone South Metropolitan Zone South West Country Zone	President Cr Karen Chappel AM JP Cr Paul Kelly President Cr Tracy Lefroy (Deputy) President Cr Phillip Blight Cr Helen Sadler Cr Aaron Bowman JP President Paige McNeil President Eddie Smith President Cr Laurene Bonza Cr Stephen Strange Cr Scott Crosby President Chris Mitchell JP President Cr Les Price Cr Michael Dudek Cr Lewis Hutton Cr Bronwyn Smith President Cr Liz Sudlow (Deputy) President Cr Mike Walmsley (Deputy) Cr Wendy McWhirter-Brooks Mayor Patrick Hall Mayor Terresa Lynes Cr Cliff Collinson (Deputy) Cr Karen Wheatland President Julia Meldrum (Deputy)
Ex Officio	Local Government Professionals WA President	Mr Anthony Vuleta
Secretariat	Chief Executive Officer Executive Director Member Services Executive Manager Infrastructure Executive Manager Policy Executive Manager Advocacy Chief Financial Officer Manager Media and Communications Manager Governance and Procurement Manager Association and Corporate Governance Senior Advisor Financial Planning and Analysis	Mr Nick Sloan Mr Tony Brown Mr Ian Duncan Ms Nicole Matthews Ms Rachel Horton Mr Rick Murray Mr Simon Beaumont Mr James McGovern Ms Kathy Robertson Mr Al Singh

Policy Manager, Planning and
Building
Acting Policy Manager, Community
Executive Officer Governance

Mr Chris Hossen
Ms Hannah Godsave
Ms Meghan Dwyer

1.3 APOLOGIES

Members	Avon-Midland Country Zone Northern Country Zone Peel Country Zone South Metropolitan Zone South Metropolitan Zone South West Country Zone	President Chris Antonio President Cr Kirrilee Warr Mayor Rhys Williams Mayor Logan Howlett JP Cr Barry Winmar President Cr Tony Dean
Ex Officio	The Rt. Hon. Lord Mayor – City of Perth	Lord Mayor Basil Zempilas

2 ACKNOWLEDGEMENT OF COUNTRY

WALGA acknowledges the continuing connection of Aboriginal people to Country, culture and community. We embrace the vast Aboriginal cultural diversity throughout Western Australia, including Boorloo (Perth), on the land of the Whadjuk Noongar People, where WALGA is located and we acknowledge and pay respect to Elders past and present.

WALGA is committed to supporting the efforts of WA Local Governments to foster respectful partnerships and strengthen relationships with local Aboriginal communities.

3 ANNOUNCEMENTS

Nil

4 MINUTES

4.1 MINUTES OF THE STATE COUNCIL MEETING HELD 1 MAY 2024

WALGA RECOMMENDATION

Moved: President Cr Phillip Blight
Seconded: President Paige McNeil

That the Minutes of the WALGA State Council meeting held on [1 May 2024](#) be confirmed as a true and correct record of proceedings.

RESOLUTION 042.3/2024

CARRIED

4.1.1 BUSINESS ARISING FROM THE MINUTES OF THE STATE COUNCIL MEETING HELD 1 MAY 2024

Nil

4.2 FLYING MINUTE - SUBMISSION ON EMERGENCY MANAGEMENT SECTOR ADAPTATION PLAN

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland

Seconded: Cr Helen Sadler

That the [Flying Minute - Submission on Emergency Management Sector Adaptation Plan](#) be confirmed as a true and correct record of proceedings.

RESOLUTION 043.3/2024

CARRIED

4.2.1 BUSINESS ARISING FROM THE FLYING MINUTE- SUBMISSION ON EMERGENCY MANAGEMENT SECTOR ADAPTATION PLAN

Nil

4.3 FLYING MINUTE - STATE WAGE CASE SUBMISSION

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland

Seconded: Cr Helen Sadler

That the [Flying Minute - State Wage Case Submission](#) be confirmed as a true and correct record of proceedings.

RESOLUTION 043.3/2024

CARRIED

4.3.1 BUSINESS ARISING FROM THE FLYING MINUTE- STATE WAGE CASE SUBMISSION

Nil

4.4 FLYING MINUTE - LOCAL GOVERNMENT SUSTAINABILITY INQUIRY

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: Cr Helen Sadler

That the [Flying Minute - Local Government Sustainability Inquiry](#) be confirmed as a true and correct record of proceedings.

RESOLUTION 043.3/2024

CARRIED

4.4.1 BUSINESS ARISING FROM THE FLYING MINUTE- LOCAL GOVERNMENT SUSTAINABILITY INQUIRY

Nil

4.5 FLYING MINUTE - STANDARDISED MEETING PROCEDURES SUBMISSION

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: Cr Helen Sadler

That the [Flying Minute - Standardised Meeting Procedures Submission](#) be confirmed as a true and correct record of proceedings.

RESOLUTION 043.3/2024

CARRIED

4.5.1 BUSINESS ARISING FROM THE FLYING MINUTE- STANDARDISED MEETING PROCEDURES SUBMISSION

Nil

5 DECLARATIONS OF INTEREST

Pursuant to our Code of Conduct, State Councillors must declare to the Chair any potential conflict of interest they have in a matter before State Council as soon as they become aware of it.

- Mayor Patrick Hall declared an interest in Item 8.7 Selection Committee Minutes – 24 June 2024.
- President Paige McNeil declared an interest in Item 8.7 Selection Committee Minutes – 24 June 2024.

6 EX OFFICIO REPORTS

6.1 CITY OF PERTH REPORT

The Rt. Hon. Lord Mayor Basil Zempilas was an apology for the meeting.

6.2 LG PROFESSIONALS REPORT

Mr Anthony Vuleta, President, LG Professionals WA, provided a report to the meeting.

Mr Anthony Vuleta left the meeting and did not return.

7 EMERGING ISSUES

Notification of emerging issues must be provided to the Chair no later than 24 hours prior to the meeting.

7.1 OFFICE OF THE AUDITOR GENERAL INCREASED COSTS

Referred by Cr Phillip Blight, President Shire of Wagin, Central Country Zone

WALGA RECOMMENDATION

Moved: President Julia Meldrum
Seconded: President Chris Mitchell JP

That the Emerging Issue item on Office of the Auditor General increased costs be considered.

RESOLUTION 044.3/2024

CARRIED

WALGA RECOMMENDATION

Moved: President Cr Phillip Blight
Seconded: President Cr Les Price

That State Council:

- 1. Objects to the Office of the Auditor General's audit fees increases for the 2023-24 audits of accounts and annual financial report of Local Governments; and**
- 2. Requests the Legislative Council's Standing Committee on Estimates and Financial Operations to conduct an Inquiry into the OAG's performance of audits and increased audit fees to Local Governments.**

RESOLUTION 045.3/2024

CARRIED

8 MATTERS FOR DECISION

8.1 CARAVAN PARK AND CAMPING GROUNDS REGULATIONS

By Coralie Claudio, Senior Policy Advisor, Planning

WALGA RECOMMENDATION

Moved: President Julia Meldrum
Seconded: President Chris Mitchell JP

That State Council endorse a new Caravan Park and Camping Grounds Regulations Advocacy Position:

Part 2 of the *Caravan Parks and Camping Grounds Regulations 1997* should be amended to allow Local Governments to:

- 1. Consider camping on private property for a period of greater of three months.**
- 2. Establish policy to guide approvals beyond 3 months to ensure that camping is locally appropriate and provide for circumstances where caravans, predominantly in the form of tiny homes on wheels, can be occupied on a more permanent basis.**

RESOLUTION 046.3/2024

CARRIED

8.2 2024 AUDIT EXPERIENCE SURVEY RESULTS AND ADVOCACY POSITION

By Kathy Robertson, Manager Associate and Corporate Governance

RESOLUTION

Moved: President Cr Phillip Blight
Seconded: Cr Stephen Strange

That State Council:

- 1. Note the Audit Experience Survey Results Summary 2022-23; and**
- 2. Amend Advocacy Position 2.2.2 Local Government Audit Process to remove point 7 as it has been achieved.**

RESOLUTION 047.3/2024

CARRIED

MATTERS FOR CONSIDERATION BY STATE COUNCILLORS (UNDER SEPARATE COVER)

8.3 FINANCE AND SERVICES COMMITTEE MINUTES (INCORPORATING THE WALGA BUDGET 2024-25 AND WALGA RESERVES AMENDMENTS) – 19 JUNE 2024

By Tony Brown, Executive Director Member Services

Cr Helen Sadler left the meeting at 4:55pm.

Cr Helen Sadler returned to the meeting at 5:07pm.

WALGA RECOMMENDATION

Moved: President Chris Mitchell JP
Seconded: President Cr Laurene Bonza

That State Council:

- 1. Endorse the Minutes of the Finance and Services Committee meeting held on 19 June 2024.**
- 2. Endorse:**
 - a. the WALGA Budget 2024-25, being for the full year ending 30 June 2025,**
 - b. Renaming the Strategic Reserve as the Sector Strategic Reserve.**
 - c. Creation of a new Reserve called the Organisation Strategic Initiatives Reserve**
 - d. That each reserve is to be used for the purpose presented within this report.**
 - e. Establishing the Organisation Strategic Initiatives Reserve with \$600,000 from the 2023-24 Non-Grant Surplus, to be applied to funding Strategic Projects in the Budget 2024-25.****as recommended by the Finance and Services Committee.**

RESOLUTION 048.3/2024

CARRIED BY ABSOLUTE MAJORITY

8.4 USE OF THE ASSOCIATION'S COMMON SEAL

By Nick Sloan, Chief Executive Officer

WALGA RECOMMENDATION

Moved: President Cr Phillip Blight

Seconded: Cr Karen Wheatland

That State Council note, ratify and affirm the use of the Association's common seal for the following purposes:

Document	Document Description	Signatories	State Council prior approval
Transfer of Land (Form T1)	Sale of 4/10 share of 170 Railway Parade, West Leederville, by Qube Railway Parade Pty Ltd ("Qube") to Local Government House Trust. Required to facilitate the transfer of ownership.	WALGA in the capacity as Trustee for the Local Government House Trust, Karen Chappel President and Nick Sloan WALGA CEO	No
Bank Facility Agreement	Agreement with Commonwealth Bank of Australia ("CBA") (Lender) of \$32.4 million to assist with refinancing the existing facility jointly held by Qube and WALGA in the capacity as trustee for the Local Government House Trust and the acquisition of the 40% joint venture interest currently held by Qube in relation to 170 Railway Parade, West Leederville ("the Property").	WALGA in the capacity as Trustee for the Local Government House Trust, Karen Chappel President and Nick Sloan WALGA CEO	No
Mortgage Form	Mortgage over the Property in favour of the CBA.	WALGA in the capacity as Trustee for the Local Government House Trust, Karen Chappel President and Nick Sloan WALGA CEO	No

General Security Deed	Security provided by WALGA in the capacity as Trustee for the Local Government House Trust limited to the assets in connection to the Property (which are held in the Local Government House Trust).	WALGA in the capacity as Trustee for the Local Government House Trust, Karen Chappel President and Nick Sloan WALGA CEO	No
Power of Attorney	Appoint Richard Murray as an attorney with capacity to sign any documents necessary to complete the settlement if the WALGA President and/or CEO are not available while in Canberra around the day of settlement. Initiated as a contingency in the case of new or amended documents.	WALGA in its personal capacity and in its capacity as Trustee for the Local Government House, Karen Chappel, President and Nick Sloan WALGA CEO	No
Letter Agreement signed by parties to the Joint Venture.	Letter of agreement signed by WALGA and Qube Railway Parade Pty Ltd regarding the winding up of the joint venture and post-settlement bank account and tax arrangements.	WALGA in the capacity as Trustee for the Local Government House Trust, Karen Chappel President and Nick Sloan WALGA CEO	No
Replacement Agreement	Replacement Agreement in relation to the caveat previously lodged in favour of the Town of Cambridge.	WALGA in the capacity as Trustee for the Local Government House Trust, Karen Chappel President and Nick Sloan WALGA CEO	No
RESOLUTION 049.3/2024			CARRIED

8.5 WALGA'S EFFORTS TO BECOME AN EMPLOYER ORGANISATION

By Tony Brown, Executive Director Member Services

WALGA RECOMMENDATION

Moved: President Chris Mitchell JP

Seconded: Cr Aaron Bowman JP

That State Council note the actions taken in this report on WALGA's efforts to become an employer organisation under the *Industrial Relations Act 1979 (WA)*.

RESOLUTION 050.3/2024

CARRIED

8.6 APPOINTMENTS TO STATE COUNCIL POLICY TEAMS

By Tony Brown Executive Manager Member Services

WALGA RECOMMENDATION

Moved: President Paige McNeil

Seconded: Cr Wendy McWhirter-Brooks

That State Council:

- 1. Appoint Mayor Teresa Lynes, the State Council representative from the South East Metropolitan Zone to the Environment Policy Team, and**
- 2. Appoint Cr Aaron Bowman, the State Council representative from the East Metropolitan Zone to the People and Place Policy Team.**

RESOLUTION 051.3/2024

CARRIED

8.7 SELECTION COMMITTEE MINUTES - 24 JUNE 2024

By Chantelle O'Brien, Governance Support Officer

President Paige McNeil and Mayor Patrick Hall declared an interest in this item and left the meeting at 5:24pm.

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Cr Les Price

That State Council:

- 1. Note the resolutions contained in the 24 June 2024 Selection Committee Minutes; and**
- 2. Endorse the recommendations contained in the 24 June 2024 Selection Committee Minutes.**

RESOLUTION 052.3/2024

CARRIED

President Paige McNeil returned to the meeting at 5:25pm.

Mayor Patrick Hall returned to the meeting at 5:26pm.

8.8 HONOURS PANEL MEETING – 11 JUNE 2024

By Tony Brown, Executive Director Member Services

WALGA RECOMMENDATION

Moved: President Julia Meldrum
Seconded: President Cr Liz Sudlow

That State Council note the update on the Honours Program for 2024.

RESOLUTION 053.3/2024

CARRIED

8.9 LGIS FEES AND BOARD MINUTES – 24 MAY 2024

By Kirsty Martin, Manager Commercial Management

WALGA RECOMMENDATION

Moved: President Chris Mitchell JP

Seconded: President Julia Meldrum

That State Council:

1. Approve the annual LGISWA Scheme Management fee payable to JLT is increased by 3.9% for the 2024-25 year as recommended by the LGISWA Board.
2. Approve a 3.9% increase to the WALGA Trustee fee from the Scheme.
3. Note the minutes of the LGISWA Board meeting held on 24 May 2024 and that at this meeting the Board adopted the 2024-25 Scheme Budget that incorporates in-housing of Management Liability cover for Members.

RESOLUTION 054.3/2024

CARRIED

8.10 NORTH METROPOLITAN ZONE STATE COUNCILLOR ELECTION PROCESS

By Kathy Robertson, Manager Association and Corporate Governance

WALGA RECOMMENDATION

Moved: Cr Michael Dudek

Seconded: President Cr Phillip Blight

That State Council:

1. Note the decision of the North Metropolitan Zone to insert a clause in its Standing Orders pertaining to the election of its State Council representatives; and
2. Endorse the new State Councillor election process to apply to the North Metropolitan Zone, where the three North Metropolitan Zone State Councillor and Deputy State Councillor positions will be held equally by a Delegate from each of the three member Local Governments of the Zone, being City of Joondalup, City of Stirling and City of Wanneroo.

THE MOTION WAS PUT AND LOST

8.11 CEO PERFORMANCE REVIEW REPORT 2023-2024

All WALGA staff left the meeting at 5:39pm.

Mr Nick Sloan, WALGA CEO, returned to the meeting at 5:46pm.

WALGA RECOMMENDATION

Moved: President Eddie Smith
Seconded: President Julia Meldrum

That State Council:

- 1. Note the appraisal of Mr Nick Sloan, Chief Executive Officer has been completed for the period of July 2023 to June 2024.**
- 2. Endorse the findings of the 2023-24 Annual Performance Review Report as presented by Price Consulting and thank Mr Sloan for his efforts.**
- 3. Endorse the recommendations on Page 3 of the Summary Report to State Council on Employment Contract Terms.**
- 4. Endorse the proposed CEO's Performance Criteria for the 2023-2024 period, as per Attachment 1 within the Summary Report to State Council.**

RESOLUTION 055.3/2024

CARRIED UNANIMOUSLY

President Cr Karen Chappel AM JP congratulated the CEO on his Performance Review report.

All remaining WALGA staff returned to the meeting at 5:52pm.

9 POLICY TEAM AND COMMITTEE REPORTS

9.1 ENVIRONMENT POLICY TEAM REPORT

Presented by Policy Team Chair, Cr Les Price

WALGA RECOMMENDATION

Moved: President Cr Les Price
Seconded: Cr Karen Wheatland

That State Council note the matters considered by the Environment Policy Team at its meetings on 1 May and 29 May 2024.

RESOLUTION 056.3/2024

CARRIED

9.2 GOVERNANCE POLICY TEAM REPORT

Presented by Policy Team Chair, Mayor Patrick Hall

WALGA RECOMMENDATION

Moved: Mayor Patrick Hall
Seconded: President Paige McNeil

That State Council note the matters considered by the Governance Policy Team at its meetings on 1 May and 15 May 2024.

RESOLUTION 057.3/2024

CARRIED

President Paige McNeil left the meeting at 5:58pm and did not return.

9.3 INFRASTRUCTURE POLICY TEAM REPORT

Presented by Policy Team Chair, Cr Stephen Strange

WALGA RECOMMENDATION

Moved: Cr Stephen Strange
Seconded: Cr Karen Wheatland

That State Council note the matters considered by the Infrastructure Policy Team at its meeting on 1 May 2024.

RESOLUTION 058.3/2024

CARRIED

9.4 PEOPLE AND PLACE POLICY TEAM REPORT

Presented by Policy Team Chair, President Cr Phillip Blight

WALGA RECOMMENDATION

Moved: President Cr Phillip Blight
Seconded: President Cr Les Price

That State Council:

- 1. Note the matters considered by the People and Place Policy Team at its meeting on 30 April 2024.**
- 2. Determine to retire Advocacy Position 3.12.1 State Trail Bike Strategy.**

RESOLUTION 059.3/2024

CARRIED

Cr Michael Dudek and Cr Lewis Hutton left the meeting at 6:00pm and did not return.

9.5 MUNICIPAL WASTE ADVISORY COUNCIL (MWAC) REPORT

Presented by MWAC Deputy Chair, Cr Karen Wheatland

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Cr Phillip Blight

That State Council note the report from the Municipal Waste Advisory Council to the July 2024 meeting.

RESOLUTION 060.3/2024

CARRIED

10 MATTERS FOR NOTING / INFORMATION

10.1 2024-25 STATE AND FEDERAL BUDGET UPDATE

By Daniel Thomson, Manager Economics

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Julia Meldrum

That State Council note the update on the 2024-25 State and Federal Budgets.

RESOLUTION 061.3/2024

CARRIED

10.2 SUBMISSION TO THE COMMISSIONER FOR CHILDREN AND YOUNG PEOPLE WA PRIORITY AREA DISCUSSION PAPERS

By Hannah Godsave, Acting Manager, Community Policy

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Julia Meldrum

That State Council note the submission to the Commissioner for Children and Young People Priority Area Discussion Papers.

RESOLUTION 061.3/2024

CARRIED

10.3 PERTH AND PEEL URBAN GREENING STRATEGY

By Melanie Davies, Urban Forest Program Facilitator

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Julia Meldrum

That State Council note the submission on the Perth and Peel Urban Greening Strategy.

RESOLUTION 061.3/2024

CARRIED

10.4 POLYPHAGOUS SHOT-HOLE BORER UPDATE

By Melanie Davies, Urban Forest Program Facilitator

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Julia Meldrum

That State Council note the update on the Polyphagous shot-hole borer emergency and WALGA advocacy.

RESOLUTION 061.3/2024

CARRIED

10.5 FLYING MINUTE: SUBMISSION ON EMERGENCY MANAGEMENT SECTOR ADAPTATION PLAN

By Simone Ruane, Project Lead, Emergency Management

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Julia Meldrum

That State Council note the update on WALGA's submission on the Emergency Management Sector Adaptation Plan (EM-SAP) to the State Emergency Management Committee as endorsed by State Council via Flying Minute.

RESOLUTION 061.3/2024

CARRIED

10.6 FLYING MINUTE: STATE WAGE CASE SUBMISSION

By Tony Brown, Executive Director Member Services

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Julia Meldrum

That State Council note the WALGA 2024 State Wage Case submission to the Western Australian Industrial Relations Commission as endorsed by State Council via Flying Minute.

RESOLUTION 061.3/2024

CARRIED

10.7 FLYING MINUTE: SUBMISSION ON THE INQUIRY INTO LOCAL GOVERNMENT SUSTAINABILITY

By Daniel Thomson, Manager Economics

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Julia Meldrum

That State Council note the submission on the Inquiry into Local Government Sustainability to the House of Representatives Standing Committee on Regional Development, Infrastructure and Transport as endorsed by State Council via Flying Minute.

RESOLUTION 061.3/2024

CARRIED

10.8 FLYING MINUTE: STANDARDISED MEETING PROCEDURES SUBMISSION

By James McGovern, Manager Governance and Procurement

WALGA RECOMMENDATION

Moved: Cr Karen Wheatland
Seconded: President Julia Meldrum

That State Council note WALGA's submission on Standardised Meeting Procedures to the Department of Local Government, Sport and Cultural Industries as endorsed by State Council via Flying Minute.

RESOLUTION 061.3/2024

CARRIED

11 ORGANISATION REPORTS

11.1 KEY ACTIVITY REPORTS

11.1.1 REPORT ON KEY ACTIVITIES, ADVOCACY PORTFOLIO

By Rachel Horton, Executive Manager Advocacy

WALGA RECOMMENDATION

Moved: Cr Wendy McWhirter-Brooks
Seconded: Mayor Teresa Lynes

That State Council note the Key Activity Report from the Advocacy Portfolio to the July 2024 State Council meeting.

RESOLUTION 062.3/2024

CARRIED

11.1.2 REPORT ON KEY ACTIVITIES, INFRASTRUCTURE PORTFOLIO

By Ian Duncan, Executive Manager Infrastructure

WALGA RECOMMENDATION

Moved: Cr Wendy McWhirter-Brooks
Seconded: Mayor Teresa Lynes

That State Council note the Key Activity Report from the Infrastructure Portfolio to the July 2024 State Council meeting.

RESOLUTION 062.3/2024

CARRIED

11.1.3 REPORT ON KEY ACTIVITIES, MEMBER SERVICES PORTFOLIO

By Tony Brown, Executive Director Member Services

WALGA RECOMMENDATION

Moved: Cr Wendy McWhirter-Brooks
Seconded: Mayor Teresa Lynes

That State Council note the Key Activity Report from the Member Services Portfolio to the July 2024 State Council meeting.

RESOLUTION 062.3/2024

CARRIED

11.1.4 REPORT ON KEY ACTIVITIES, POLICY PORTFOLIO

By Nicole Matthews, Executive Manager, Policy

WALGA RECOMMENDATION

Moved: Cr Wendy McWhirter-Brooks

Seconded: Mayor Terresa Lynes

That State Council note the Key Activity Report from the Policy Portfolio to the July 2024 State Council meeting.

RESOLUTION 062.3/2024

CARRIED

11.2 PRESIDENT'S REPORT

WALGA RECOMMENDATION

Moved: Cr Wendy McWhirter-Brooks

Seconded: Mayor Terresa Lynes

That the President's Report for July 2024 be received.

RESOLUTION 062.3/2024

CARRIED

11.3 CEO'S REPORT

WALGA RECOMMENDATION

Moved: Cr Wendy McWhirter-Brooks

Seconded: Mayor Terresa Lynes

That the CEO's Report for July 2024 be received.

RESOLUTION 062.3/2024

CARRIED

12 ADDITIONAL ZONE RESOLUTIONS

WALGA RECOMMENDATION

Moved: Cr Paul Kelly
Seconded: President Chris Mitchell JP

That the additional Zone Resolutions from the June 2024 round of Zone meetings as follows be referred to the appropriate portfolio for consideration and appropriate action.

RESOLUTION 063.3/2024

CARRIED

CENTRAL COUNTRY ZONE (Member Services Portfolio)

Country Local Government Fund (CLGF)

That the Central Country Zone requests WALGA to lobby and advocate to the State government, Treasurer, and Minister for Local Government to provide a program similar to the CLGF for Country Local Governments, with an allocation of \$8 million in the current and ongoing future Budgets.

EAST METROPOLITAN ZONE (Member Services Portfolio)

Advocacy for an Immediate Review of the *Cat Act 2011*

That the East Metropolitan Zone requests WALGA to continue to advocate for the State Government to support an immediate review of the *Cat Act 2011* and to develop a model Cat Local Law for use by Local Governments.

Note: The meeting requested that WALGA advocacy address the need for an immediate review of the Cat Act 2011 and clarify the view of the Joint Standing Committee on Delegated Legislation regarding the ability of a Local Law to refer to other Local Laws.

GASCOYNE COUNTRY ZONE (Policy Portfolio)

Grant Funding

That WALGA perform a review of the grant funding distribution mechanisms relative to needs and financial sustainability with a view to increase the distribution of funds to Regional Councils.

GASCOYNE COUNTRY ZONE (Member Services Portfolio)

Crown Land Management Order Administration Advocacy Position – Update

In respect to WALGA's advocacy on Crown Land Management Order Administration, the Gascoyne Zone recommend that the State Government should not seek to take Local Government generated leasing revenue on land under management by a Local Government.

GOLDFIELDS ESPERANCE COUNTRY ZONE (Policy Portfolio)

Native Title impacts for Regional Development

That the GVROC:

1. Note the update on discussions held between GEDC, WALGA, DPLH and DPIRD and with the GVROC Executive Officer and CEO for the Shire of Dundas on the option to hold a Goldfields Roundtable in July as a starting point for progressing the development a Framework that could be agreed and followed to assist with future project and proposal Native Title approvals, with the potential for more streamlined approvals, reducing costs and timeframes.
2. Support the concept of holding a Goldfields Roundtable facilitated through the GEDC and WALGA aligned to the next GVROC meeting to be held on 26 July 2024.

GREAT EASTERN COUNTRY ZONE (Policy Portfolio)

Housing Needs Within the Wheatbelt Region

The Great Eastern Country Zone request that WALGA lobby the State Government to fund the Wheatbelt Development Commission to conduct feasibility studies for programs (including Government Regional Officer Housing) to meet housing needs within the Wheatbelt region (including Great Eastern Country Zone Local Governments).

NORTH METROPOLITAN ZONE (Member Services Portfolio)

Office of the Auditor General – Audit Fees

That WALGA lobby the State Government to review the Local Government (Audit) Regulations 1996 to:

1. Limit the Audit Fee a local government can be charged to 0.15% of rates revenue for the year being audited;
2. Require the Office of the Auditor General to establish a local government audit section to ensure adequate resources are allocated to local government audits; and
3. Require the Office of the Auditor General to complete audits within eight weeks of the relevant financial reports being supplied to the Office of the Auditor General.

WALGA's Efforts to Become an Employer Organisation

That the item (WALGA's efforts to become an employer organisation) not be noted, and is instead held over until a full presentation of the item can be made to the North Metropolitan Zone by the CEO of WALGA or his representative.

and

That a review of Advocacy Position 2.8.3 be conducted by WALGA, and input sought from the various Zones on an updated Position.

PEEL COUNTRY ZONE (Member Services Portfolio)

WALGA's Efforts to Become an Employer Organisation

That the Peel Country Zone supports WALGA's efforts on this matter.

SOUTH METROPOLITAN ZONE (Policy Portfolio)

DAP Advocacy Position Request

That the South Metropolitan Zone requests that:

1. WALGA makes representations to the Department of Planning, Lands and Heritage (DPLH) to review the extension of time process to accommodate the ability for a Responsible Authority Report (RAR) to be presented to on Ordinary Meeting of the Council, in order for the Council to review, consider and submit an RAR, particularly where the consent of the applicant has been received.
2. That WALGA amends its Development Assessment Panel (DAP) Advocacy Position to take into consideration the above request.
3. If DPLH are not willing to permit extensions for an RAR to be presented to an Ordinary Meeting of the Council, then request DPLH to make the legislative amendments to formalise the practice as a matter of priority.

13 DATE OF NEXT MEETING

The next ordinary meeting of the WALGA State Council will be held in the Boardroom at WALGA, ONE70, LV1, 170 Railway Parade, West Leederville on 4 September 2024 commencing at 4:15pm.

14 CLOSURE

There being no further business the Chair declared the meeting closed at 6:04pm.

Ordinary Council Meeting 15 August 2024

***Attachment 1- 12.2a Minutes of Morawa Sinosteel
Future Fund Committee Meeting, 6
August 2024***

***Item 12.2- August 2024 Minutes of Morawa
Sinosteel Future Fund Committee***



MINUTES

MORAWA SINOSTEEL FUTURE FUND COMMITTEE MEETING

held on

Tuesday, 6 August 2024

at 5:30 pm



WESTERN AUSTRALIA'S
WILDFLOWER COUNTRY

DISCLAIMER

No responsibility whatsoever is implied or accepted by the Morawa Sinosteel Future Fund Committee for any act, omission, statement or intimation occurring during Committee Meetings. The Morawa Sinosteel Future Fund Committee disclaims any liability for any loss whatsoever and howsoever caused arising out of reliance by any person or legal entity on any such act, omission, and statement of intimation occurring during Committee Meetings.

Any person or legal entity that acts or fails to act in reliance upon any statement, act or omission occurring in a Committee Meeting does so at their own risk. The Morawa Sinosteel Future Fund Committee advises that any person or legal entity should only rely on formal confirmation or notification of Committee resolutions.

DISCLOSURE OF FINANCIAL/ IMPARTIALITY/ PROXIMITY INTERESTS*Local Government Act 1995 – Section 5.65, 5.70 and 5.71 Local**Government (Administration) Regulation 34C*

<i>This form is provided to enable members and officers to disclose an Interest in a matter in accordance with the regulations of Section 5.65, 5.70 and 5.71 of the Local Government Act and Local Government (Administration) Regulation 34C</i>			
Name of person declaring the interest			
Position			
Date of Meeting			
Type of Meeting (Please circle one)	Council Meeting/ Committee Meeting/ Special Council Meeting Workshop/ Public Agenda Briefing/ Confidential Briefing		
Interest Disclosed			
Item Number and Title			
Nature of Interest			
Type of Interest (please circle one)	Financial	Proximity	Impartiality
Interest Disclosed			
Item Number and Title			
Nature of Interest			
Type of Interest (please circle one)	Financial	Proximity	Impartiality
Interest Disclosed			
Item Number and Title			
Nature of Interest			
Type of Interest (please circle one)	Financial	Proximity	Impartiality

Signature: _____ **Date:** _____**Important Note:**

Should you declare a **Financial** or **Proximity** Interest, in accordance with the Act and Regulations noted above, you are required to leave the room while the item is being considered.

For an **Impartiality** Interest, you must state the following prior to the consideration of the item:

“With regard to agenda item (read item number and title), I disclose that I have an impartiality interest because (read your reason for interest). As a consequence, there may be a perception that my impartiality on the matter may be affected. I declare that I will consider this matter on its merits and vote accordingly.”

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Item 1 Opening of Meeting

The Chair declared the meeting open at 5:30pm.

Item 2 Acknowledgement of Traditional Owners and Dignitaries

The Chair acknowledges the traditional custodians, the Yamatji people, and recognises the contribution of Yamatji Elders past, present and future, in working together for the future of Morawa.

Item 3 Recording of Attendance**3.1 Attendance****Committee**

Chair

Deputy Chair

Community Member

Community Member

Chief Executive Officer

Councillor Karen Chappel

Councillor Ken Stokes

Jamie Appleton

Greg Jenkins

Scott Wildgoose

3.3 Apologies

Nil

3.4 Approved Leave of Absence

Nil

3.5 Disclosure of Interests

Nil

Item 4 Confirmation of Minutes of Previous Meeting

The Minutes of Morawa Sinosteel Future Fund Committee Meeting held on 26 April 2024 were provided under separate cover to all Committee members via the Shire of Morawa's website on 3 May 2024.

OFFICER'S RECOMMENDATION/COMMITTEE RESOLUTION**240801****Moved: Cr Stokes****Seconded: Mr Appleton**

1. That Morawa Sinosteel Future Fund Committee confirm that the Minutes of the Meeting held on 26 April 2024 are a true and correct record.

CARRIED BY SIMPLE MAJORITY 5/0

Item 5 Reports of Committee**5.1 Morawa Sinosteel Future Fund Grant Applications 2024**

Author: Governance and Executive Support Officer

Authorising Officer: Chief Executive Officer

Disclosure of Interest: The Author and Authorising Officer declare that they do not have any conflicts of interest in relation to this item.

OFFICER'S RECOMMENDATION

That with regard to the Morawa Sinosteel Future Fund Grant, the Committee:

1. Acknowledge and thank all applicants for their submissions.
2. Suspend Standing Orders to discuss the applications and determine funding allocations.

SIMPLE MAJORITY VOTE REQUIRED

Motion to Suspend Standing Orders

Moved: Mr Jenkins

Seconded: Mr Appleton

ACCEPTED 5/0

Standing Orders Suspended at 5:41pm

The Committee discussed the applications and determined funding allocations.

Motion to Resume Standing Orders

Moved: Cr Stokes

Seconded: Mr Jenkins

ACCEPTED 5/0

Standing Orders Resumed at 5:58pm**COMMITTEE RESOLUTION**

240802

Moved: Mr Appleton

Seconded: Mr Jenkins

That with regard to the Morawa Sinosteel Future Fund Grant, the Committee:

1. Support the Morawa Community Resource Centre Incorporated application with a grant amount of \$10,000.
2. Support the Morawa District High School P&C Association Inc. application with a grant amount of \$4,983.43.
3. Support the Morawa District Historical Society Inc application with a grant amount of \$3,360.
4. Support the Morawa Tourist Information Centre Inc application with a grant amount of \$4,656.
5. In principle, support the Morawa Tennis Club application.
 - 5.1. Request the Tennis Club submit a second quote for an independent writing consultant prior to the Committee giving formal support and allocating funding.
6. Does Not Support the Morawa Masonic Lodge application, however encourage the group to submit to a future Morawa Sinosteel Future Fund Grant funding round.

CARRIED BY SIMPLE MAJORITY 5/0

PURPOSE

Morawa Sinosteel Future Fund Committee to review and assess applications received for grant funding and to make a recommendation to Council.

DETAIL

The Shire of Morawa is trustee for the Morawa Sinosteel Future Fund Grant (MSFFG). The Morawa Future Fund Interest Reserve has been set up to receive 85% of annual interest earned on the principal sum held by the Shire.

The interest accrued in 2023/24 financial year was \$58,116, with 85% equalling \$49,398.60.

As the current round is the only funding round to be held within the 2024-25 financial year, the full amount of the 85% interest provision earned is available to the Committee for allocation, if required.

The funding round closed at 4pm on Friday, 12 July 2024. Six (6) applications were received on time totalling approximately \$40,000 in requested support. All six (6) applications were provided an additional week to submit additional requested information and supporting evidence.

A brief overview for each grant request is outlined below:

1. Morawa Community Resource Centre Incorporated

The Morawa CRC's project focuses on updating Christmas stock – tree and wreaths - to decorate the town throughout the holiday period. This purchase will enhance the annual Christmas Street event and decorate the town centre every December for years to come.

2. Morawa District High School P&C Association Inc.

The Morawa District High School P&C Association Incorporated has requested support to install a yarning circle in the school grounds. It is hoped the initiative will build stronger relationships, cultural understanding and provide a safe cultural space in the school community.

3. Morawa District Historical Society Inc

The Morawa District Historical Society Inc is requesting support to print, frame and hang black and white historical photos depicting people and events from the Morawa community. The display will preserve and promote local history for future generations and will be available for viewing by the general public – locals and tourists.

4. Morawa Masonic Lodge

The Morawa Masonic Lodge is looking to complete repair works of their building by way of effectively sealing doors and windows, in addition to the purchase of a projector to enable educational lectures to be held.

5. Morawa Tennis Club

The Morawa Tennis Club court surfaces are currently at end of life and require full reconstruction. The redevelopment project is estimated to cost \$575,000 and a Department of Local Government, Sports and Cultural Industries; Community, Sporting and Recreational Facilities Fund (CSRFF) grant is needed for this project. The Morawa Tennis Club is seeking support from the MSFFG to contribute to the independent writing consultant to develop a business case, facility assessment management plan, a lifecycle cost analysis and CSRFF application for the CSRFF grant.

6. Morawa Tourist Information Centre Inc

The Morawa Tourist Information Centre Inc is seeking support to produce an updated promotional video of Morawa's prime attractions. It is hoped the video will remind locals how great our area is and entice tourists to visit. The application also requests support for new shelving to be purchased and installed to enhance the new visitors' centre.

LEVEL OF SIGNIFICANCE

Medium – The grant application process is complete, and applicants are awaiting a decision from the committee.

CONSULTATION

Nil

LEGISLATION AND POLICY CONSIDERATIONS

Morawa Sinosteel Future Fund Deed of Agreement
Morawa Sinosteel Future Fund Terms of Engagement
Shire of Morawa Council Policy Manual

All Morawa Sinosteel Future Fund Grant applications requiring quotes for items or works must comply with the Shire of Morawa's Purchasing Policy.

The MSFFC has delegated authority to determine grant recipients without requiring a Council resolution.

FINANCIAL AND RESOURCES IMPLICATIONS

The Committee has the required funds in the interest reserve/grant account to cover the applications received.

RISK MANAGEMENT CONSIDERATIONS

Nil

CONCLUSION

The grants received reflect community needs across a wide range of domains.

ATTACHMENTS

Attachment 1 – 5.1a Morawa Community Resource Centre Incorporated Application
Attachment 2 – 5.1b Morawa District High School P&C Association Inc. Application
Attachment 3 – 5.1c Morawa District Historical Society Inc Application
Attachment 4 – 5.1d Morawa Masonic Lodge Application
Attachment 5 – 5.1e Morawa Tennis Club Application
Attachment 6 – 5.1f Morawa Tourist Information Centre Inc Application

Item 6 Closure

6.1 Closure

There being no further business, the Chair declared the meeting closed at 6:00pm.