PILBARA REGION
REGIONAL CONSERVATION PLAN

GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

For more information contact:
Department of Biodiversity, Conservation and Attractions
Locked Bag 104
Bentley Delivery Centre WA 6983
Phone: (08) 9219 9000
Email: enquiries@dbca.wa.gov.au
Website: www.dbca.wa.gov.au

Version 1.0, December 2025

This document may be updated periodically. Please note the version number and date on this page and/or visit the department's website to access the latest version dbca.wa.gov.au.

The recommended reference for this publication is:
Department of Biodiversity, Conservation and Attractions, 2025, *Regional Conservation Plan – Pilbara Region*, Department of Biodiversity, Conservation and Attractions, Perth.

Cover:
View from Mount Herbert of hummock grassland of *Triodia* species, Millstream National Park. *Photo – Scott Godley, DBCA*
Northern quoll (*Dasyurus hallucatus*). *Photo – Babs and Bert Wells*

Contents

Tables

Figures

1 Introduction

Each of the nine Parks and Wildlife Service regions identified and prioritised conservation actions through structured decision-support processes undertaken between 2021 and 2023. Information about how the plans were developed is outlined in the *Regional conservation planning approach,* which should be read in conjunction with this plan.

2 Regional context

The Pilbara Region covers an area of 59 million hectares from Pardoo in the north-west, Lake McLeod and Red Bluff in the south-west and east, to the Northern Territory border. The Pilbara Region has many inshore and offshore islands along its coastline including the Dampier Archipelago, Lowendal Islands, Montebello Islands, Barrow Island and numerous smaller islands.

The Pilbara Region is characterised by a remote and arid environment with episodic and unpredictable rainfall that has extensive hummock grasslands of *Triodia* sp. with scattered shrubs or mallee. Other major vegetation types include the salt lakes and pans dominated by *Tecticornia* sp, mangroves along the coastline, banded mulga communities and waterways dominated by larger corymbia, eucalypt and coolibah trees over mixed sedges.

A rich diversity of fauna inhabit the Pilbara Region including many endemic reptiles, iconic vertebrates, more than 1000 species of stygofauna and troglofauna, a high diversity of endemic aquatic invertebrates and unique fish.

The Pilbara Region will focus on maintaining, and where feasible enhancing, ecosystem composition, structure and function within the reserve system to improve outcomes for biodiversity values.

Terrestrial reserves across the Pilbara Region are suitable and large enough to undertake meaningful ecosystem management at landscape scales. In contrast, most of the island nature reserves are small and best managed collectively to maintain species habitat, particularly seabird, shorebird and marine turtle nesting beaches. This whole-of-landscape approach is a cost-effective means of delivering multiple benefits.

Major threatening processes across the Pilbara Region include introduced species, inappropriate fire regimes, pastoral land uses, habitat loss through resource and land development, increased water abstraction and climate change. However, the extent of these impacts and underlying biodiversity values remain poorly understood.

It is important to encourage coordinated and complementary management of all functional lands, waters and ecological connections to maximise the conservation of biodiversity across the Pilbara Region. There is a continued emphasis on building community awareness and understanding of biodiversity and conservation to gain long-term support and change in behaviour.

As of 1 December 2025, 10 joint management arrangements are in place, including for Purungunya National Park (Nyamal), Fortescue Marsh Nature Reserve (Karlka Nyiyaparli), Murujuga National Park (Murujuga), and seven parks jointly managed with Nganhurra Thanardi Garrbu Aboriginal Corporation.

Joint management arrangements will continue to support integration of Traditional Owner participation and knowledge into reserve management.

An overview of the Pilbara Region is provided in Table 1 and Figure 1.

Table 1 Overview of the conservation assets of the Pilbara Region (December 2025).

Region	Pilbara		
Interim Biogeographic Regionalisation of Australia (IBRA) regions	Carnarvon sub-regions (CAR01, CAR02), Dampierland sub-region (DAL02), Gascoyne sub-regions (GAS01, GAS02, GAS03), Gibson Desert sub-regions (GID01, GID02), Great Sandy Desert sub-regions (GSD01, GSD02), Little Sandy Desert sub-regions (LSD01, LSD0) and Pilbara sub-regions (PIL01, PIL02, PIL03, PIL04).		
Integrated Marine and Coastal Regionalisation of Australia (IMCRA) regions	Eighty Mile Beach, Pilbara (nearshore), Pilbara (offshore), North West Shelf and Ningaloo.		
Landscape description	The Pilbara Region extends across the Pilbara bioregion and portions of the Carnarvon, Gascoyne, Little Sandy Desert, Great Sandy Desert and Gibson Desert bioregions. The diverse landscape changes from the flat and undulating sandstones, hummock grasslands and scattered trees overlying paleo drainage systems of the desert area, includes the tablelands and granitic plains of the Chichester ranges and banded iron formations in the Hamersley ranges and the islands, alluvial plains and tidal flats of the coastal areas.		
Department-managed land	**Tenure classification**	**No.**	**Area (ha)**
	Legislated lands and waters		
	National park	8	2,651,223
	Conservation park	6	333,770
	Nature reserve	36	473,351
	Section 5(1)(g) reserve	2	4859
	Section 5(1)(h) reserve	21	47,409
	Marine park	6	380,638
	Marine management area	2	141,537
	Marine reserve - *Land Administration Act 1997*	1	559
	Total	**82**	**4,033,346**
	Department interest in lands and waters		
	Unallocated Crown land - Department interest	41	574,835
	Total	**41**	**574,835**
	Total area of all lands and waters encompassed by the region (and portion managed by the department)		**58,213,973 (7%)**
Remnant vegetation	Approximately 99.8% of the total area of land encompassed by the region includes remnant vegetation, with approximately 7.3% of this remnant vegetation occurring on department-managed land.		
Threatened[1] and Priority[2] fauna species	Extinct (10), critically endangered (16), endangered (21), vulnerable (40), conservation dependent (2), migratory (82), other specially protected (1), Priority 1 (20), Priority 2 (9), Priority 3 (5), Priority 4 (22)		
Threatened and Priority flora species	Extinct (0), critically endangered (0), endangered (4), vulnerable (1), Priority 1 (91), Priority 2 (39), Priority 3 (123), Priority 4 (13)		
Threatened and Priority ecological communities	Collapsed (0), critically endangered (3), endangered (0), vulnerable (1), Priority 1 (21), Priority 2 (1), Priority 3 (25), Priority 4 (3).		
Wetlands	Wetlands of International Importance under the Ramsar Convention (1), Wetlands of National Importance (16)		

[1] Threatened species and ecological communities listed under the *Biodiversity Conservation Act 2016* (BC Act).
[2] Priority species and ecological community lists are maintained by the department; Priority is not a listing category under the BC Act.

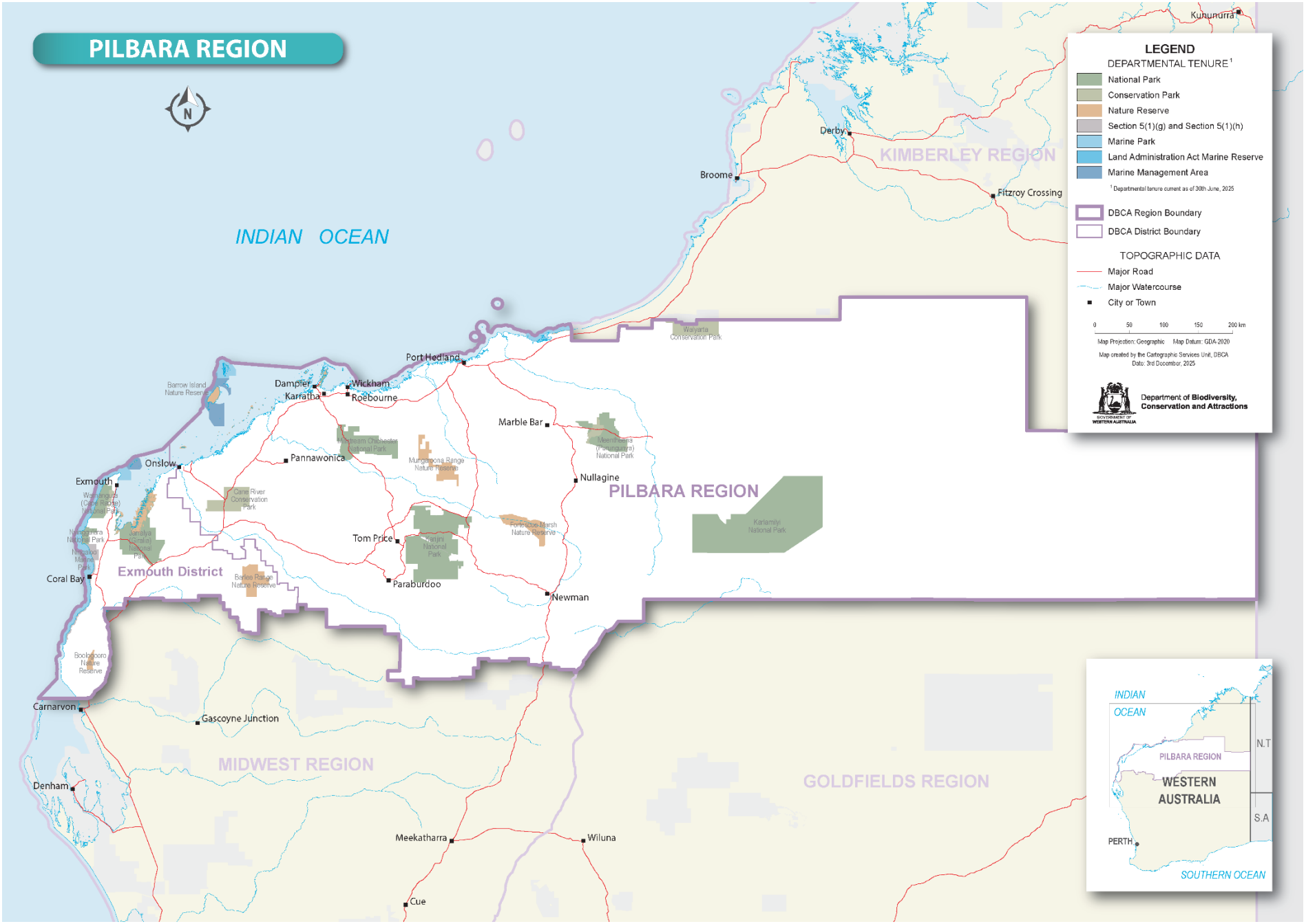

Figure 1 Pilbara Region department-managed land and waters (December 2025).

3 Identification of priority reserves and landscapes

To determine priorities for landscape-scale threat mitigation, the Pilbara Region applied the following approach to identifying priority reserves and landscapes when undertaking the Landscape action prioritisation process, in accordance with the *Regional conservation planning approach*.

3.1.1 Identification of priority landscapes

The Pilbara Region incorporates whole or parts of 16 Interim Biogeographic Regionalisation of Australia (IBRA) sub-regions (PIL1 Chichester, PIL2 Fortescue Plains, PIL3 Hamersley, PIL4 Roebourne, CAR1 Cape Range, CAR2 Wooramel, GAS1 Ashburton, GAS2 Carnegie, GAS3 Augustus, LSD1 Rudall, LSD2 Trainor, GSD1 McLarty, GSD2 Mackay and DL2 Pindanland, GID1 Lateritic Plain, GID2 Dune Field).

The IBRA sub-regions or unique management units (comprising several IBRA sub-regions with similar characteristics) were used as the basis for identification and analysis of landscape-related issues. In the Pilbara Region, threatening processes were found to associate well with IBRA sub-regions. A variety of tools and reference material, including the WA Biodiversity Audit, statutory management plans, recovery plans, threat abatement plans and threatened species and ecological community lists were used for this analysis and to determine outputs.

3.1.2 Categorisation of land into management units

Land management units are areas of land that can be managed in a similar way because of a combination of conservation features or threat profiles. Lands managed by the department within the Pilbara Region were rationalised into 58 land management units. Some comparable land management units were combined to maximise conservation returns at least possible cost.

3.1.3 Identify priority management units

To identify management units of highest priority to focus resources and effort, the Pilbara Region used spatial prioritisation assessment of known conservation values. The region applied a basic geographic information system (GIS) analysis using departmental corporate datasets to determine the relative value of each management unit. The assessment considered representativeness, diversity and rarity of land system, species and vegetation types, threatening processes, joint management arrangements and tenure security. Through this assessment, the Pilbara Region identified 20 priority reserves or landscapes.

The Pilbara Region's priority management units are listed in Appendix 1.

4 Regional conservation actions

The conservation actions identified and prioritised through the regional conservation planning process are organised into the following sections:

1) Highest priority actions assessed through the prioritisation processes (as described in the *Regional conservation planning approach*) are outlined in section 5.

   These actions will be implemented by regional staff as the highest priority, focused on those actions that are on, or benefit, department-managed land[3,4] and/or involve addressing key information requirements for the management of threatened and Priority species and ecological communities both on and off department-managed land[5].

2) Actions identified through the regional conservation planning process that are not the highest priority are outlined in section 6.

   These actions will be considered in works programming as opportunities arise. They include:

   a) Actions to be led by the region that went through the benefit-cost analysis (for Landscape and Targeted actions) and the risk assessment and value of information analysis process (for Learn actions) and were assessed to not be in the highest priority category.

   b) Actions with a benefit-cost score of zero[6] or less were excluded from prioritisation category allocation, as they have been estimated to deliver no value or may be detrimental based on the information available during the regional conservation planning process. These actions are included for regions to consider should prioritisation process factors change over time (for example new information that improves feasibility or certainty).

---

[3] **Department-managed land** includes lands and waters managed under the Parks and Wildlife Service's legislation (the *Conservation and Land Management Act 1984* and *Swan and Canning Rivers Management Act 2006*). It also applies to 1) those lands for which the department under a Memorandum of Understanding (MOU) with the Department of Planning, Lands and Heritage, manages pest animals, weeds and fire on unallocated Crown land (UCL) and unmanaged reserves (UMR) outside the metropolitan area, regional centres and townsites (2004), where resources are available and subject to native title considerations; and 2) Crown lands where the department has a management interest (for example UCL lands that were purchased or identified with the aim of adding them to the formal conservation estate but remain under the management of the *Land Administration Act 1997*).

[4] Actions off, but that will benefit, department-managed land were assessed through the Landscape and Targeted action prioritisation processes. These include actions that:

- are on lands adjacent to department-managed land (for example neighbouring properties, buffers)
- are undertaken in partnership with joint management partners (including potential joint management partners) off department-managed land (relationship building)
- incorporate multiple tenure types, including department-managed land.

[5] Learn actions undertaken by regions on non-department-managed land were included in the Learn action prioritisation process, even if they may not directly benefit department-managed land. This is because information about threatened and Priority species and communities is essential to inform their status, and subsequent management actions either on department-managed land or for the department to encourage actions on other lands.

[6] Zero was defined as 0.0000000001.

c) *Landscape and Targeted actions identified through the action development processes that are off, and do not directly benefit, department-managed land, and/or that rely on third parties for implementation where all costs are not incurred by the region.

   These were not assessed through the prioritisation processes. This is because the primary focus of regions is to implement actions on, or that benefit the lands for which they have a management responsibility, and/or because the benefit-cost analysis could not be accurately applied due to cost and feasibility uncertainty (as these were outside the region's control). These actions include liaison and advocacy, land acquisition and transfer, and education and awareness.

d) *Proposed/new translocation and germplasm collection and storage actions.

   These actions were considered through the Targeted action screening and action development processes but were not included in the regional conservation prioritisation processes, as these actions are dependent on approval processes and considerations at a state-wide level led by other areas of the department.

An asterisk (*) denotes the action types that have not been through the regional conservation planning prioritisation processes.

3) Learn actions that were beyond the region's capacity and/or expertise to address are outlined in section 7.

   The region will pursue collaboration opportunities to address these information requirements as they arise with other business areas of the department and/or external parties.

Conservation actions to be led by the region have been assigned to the relevant overarching biodiversity conservation strategy as outlined in the department's Biodiversity Conservation Framework. Multiple other business areas of the department contribute to achieving these overarching strategies. Therefore, the region may not deliver actions aligned to all the overarching strategies, and regional conservation plans do not reflect all the conservation activities implemented by other business areas of the department.

Many actions identified through the regional conservation planning process align with multiple overarching strategies, therefore they were assigned based on the nature of the action (what the action is focused on doing) rather than the objective (what the action is focused on achieving).

Action numbers
The action number in square brackets is a unique code for specific actions that may be grouped in a summarised format in this plan. The action number can be used to reference the detailed information documented through the prioritisation process for that action within the supporting datasets. The letters of the action number denote the prioritisation process (LA = Landscape action, LE = Learn action and TA = Targeted action). For Learn and Targeted actions, letters also denote the threatened or Priority biodiversity asset type (EC = ecological community, FA = fauna and FL = flora). The numbers are random (they do not relate to their priority).

5 Highest priority actions assessed through prioritisation processes

FAUNA

- Develop and implement a broadscale long-term monitoring program to investigate current populations of spectacled hare-wallaby (*Lagorchestes conspicillatus leichardti*). Utilise findings to review the listing of the species, in collaboration with the Kimberley Region [LE-FA-003].

FLORA

- Monitor *Acacia bromilowiana* populations in Karijini National Park [LE-FL-002].
- Implement post-fire monitoring of *Goodenia hartiana* populations in the Western Desert in collaboration with Martu Traditional Owners to determine fire response [LE-FL-007].
- Utilise a drone to survey *Pilbara trudgenii* populations in Karijini National Park to determine extent and explore potential implications of burning [LE-FL-010].
- Review flora species listed in the Threatened and Priority Flora Database (TPFL) and/or Western Australian Herbarium records without an assigned 'TPFL population number' at the time of the flora screening process, to determine survey, monitoring or other actions required.

ECOLOGICAL COMMUNITIES

- Undertake trials of prescribed burns in areas with and without *Cenchrus ciliaris* to inform development of a fire management plan for the Burrup Peninsula rock pile communities [LE-EC-001].

FIRE REGIMES

- Identify and map priority vegetation communities, including spinifex for Cane River Conservation Park [LA-011], Jarralya National Park [LA-037], Karijini National Park [LA-045], Karlamilyi National Park [LA-047], Purungunya Conservation Estate [LA-050] and Millstream Chichester National Park [LA-052]. Use this information to provide input into the prescribed burning program using spatial analysis to identify fire-sensitive

communities and spinifex more than 12 years of age in order to maintain an appropriate diversity of age class and patch size.

- Implement fire management strategies that reduce the likelihood of large hot summer bushfires and creates a diverse fire mosaic to create and protect black-flanked rock-wallaby (*Petrogale lateralis lateralis*) habitat on reserve in Karlamilyi National Park [TA-FA-382].

PEST ANIMALS

- Supplement the existing feral cat control program at Cape Range, Nyinggulara National Park and eastern Cape Range conservation reserve (including Department of Defence land) [LA-013].
- Based on monitoring and on-ground patrols, implement a control program targeting large feral herbivores at Barlee Range Nature Reserve, Fortescue Marsh Nature Reserve, Karlamilyi National Park, Millstream Chichester National Park, Karijini National Park and Purungunya Conservation Estate as required. Liaise with neighbours to remove straying cattle and undertake targeted boundary fencing (and/or maintenance program) if required to prevent straying stock [LA-085].
- Implement a feral cat and fox control program at the Fortescue Marsh Nature Reserve [LA-030].
- Initiate baseline surveys for monitoring introduced predators at Millstream Chichester National Park. Implement introduced predator control as required, in consultation with Traditional Owners [LA-056].
- Review, refine and implement introduced predator monitoring at Durba Hills and Kaalpi for black-flanked rock-wallaby (*Petrogale lateralis lateralis*) [LE-FA-006].

WEEDS

- Map and quantify infestations, determine impacts and implement targeted, prioritised control programs for identified priority weeds at Purungunya Conservation Estate and Jarralya National Park [LA-038].
- Implement a targeted control program for *Aerva javanica* and restrict vehicle access through the construction of a boardwalk to protect occurrences ConzincBay01a and Conzinc01 of the Coastal dune native tussock grassland dominated by *Whiteochloa airoides* ecological community at Murujuga National Park [TA-EC-070].

FAUNA

- Liaise with the Exmouth and Gnaraloo communities and develop an education program to raise awareness of the impact of self-guided visitation on nesting loggerhead sea turtle *(Caretta caretta)* [TA-FA-165].

6 Actions identified through the regional conservation planning process that are not the highest priority

**Land acquisition and transfer actions*

- Liaise with Traditional Owners to investigate opportunities protect greater bilby (*Macrotis lagotis*) [TA-FA-181] and great desert skink (*Liopholis kintorei*) [TA-FA-183] populations.
- Liaise with Traditional Owners to investigate opportunities to protect Lake Disappointment dragon (*Ctenophorus nguyarna*) [TA-FA-171] and Lake Disappointment gecko (*Diplodactylus fulleri*) [TA-FA-172] in the Goldfields and Pilbara regions.
- Investigate the potential acquisition or co-management of the coastal zone of Mundabullangana pastoral lease to manage habitat of flatback turtle (*Natator depressus*) [TA-FA-156].

LANDSCAPES

- Implement a visitor management program for Cape Range and extensions (including Department of Defence land) [LA-020], Nyinggulu Coastal Reserves [LA-065] and the Pilbara Inshore Islands (north and south) [LA-072, LA-077].
- For the Dampier Archipelago Reserve system, implement a public education campaign to encourage appropriate recreation behaviour to minimise biodiversity impacts [LA-026].
- At Jurabi and Bundegi Coastal Parks, implement visitor management and public education regarding weeds, inappropriate wildlife interactions, campfires and turtle research [LA-041].

- Implement public education and compliance patrols at Montebello Islands Conservation Park to encourage appropriate recreation activities and behaviours [LA-061].
- At Murujuga National Park, develop awareness and educate the Karratha local community, especially via four-wheel drive clubs, with signage and education about cultural values, coastal ecosystems and biodiversity values as part of road and park upgrades. Restrict access to areas of significance [LA-063].

FAUNA

- Establish a monitoring program for the naturally occurring population of golden bandicoot (*Isoodon auratus barrowensis*) on Barrow Island and translocated population at Doole Island [LE-FA-002].
- Undertake targeted surveys for ghost bat (*Macroderma gigas*) at Karijini National Park, Millstream Chichester National Park, Mungaroona Nature Reserve and Purungunya Conservation Estate outside of their breeding season (October to December) [LE-FA-004].
- Support Traditional Owners in the technical aspects of prescribed burning adjacent to greater bilby (*Macrotis lagotis*) colonies to prevent large scale bushfires impacting on known populations [TA-FA-180].
- Implement a monitoring program for Barrow Island white-winged fairy-wren (*Malurus leucopterus edouardi*) to obtain presence and absence data. Implement full surveys in areas of presence to determine abundance and to inform targeted management actions [LE-FA-005].
- Develop and implement a monitoring program for Shark Bay mouse, Djoongari (*Pseudomys fieldi*) at North West Island [LE-FA-007].
- Manage visitor access including the use of license conditions on the Inshore Pilbara Islands and Dampier Archipelago to protect wedge-tailed shearwater (*Ardenna pacifica*) colonies [TA-FA-204].
- Evaluate the need for and implement appropriate techniques to create new breeding sites for fairy tern (*Sternula nereis nereis*) where deemed necessary to maintain viable breeding sites [TA-FA-346].
- Continue and expand trial seasonal installation of road safety barriers to block off ‘cliffs’ in the Jurabi Coastal Park during the green sea turtle (*Chelonia mydas*) breeding season [TA-FA-386].
- Liaise with industry to obtain the results of their subterranean and short-range endemic monitoring plans for Barrow Island draculoides (*Draculoides bramstokeri*) [LE-FA-001].

Liaison actions

- Monitor quarantine actions and procedures implemented by industry to reduce the possibility of introducing invasive species to Barrow Island Nature Reserve. Continue to liaise with industry regarding biosecurity measures and managing possible non-indigenous species, including recommendations for improvements to current procedures [LA-006].
- Install signage and fencing and/or have seasonal beach closures to control visitor access (vehicles, dogs) at key defendable breeding sites for fairy tern (*Sternula nereis nereis*) in their breeding season across the Midwest, Pilbara, South West, Swan and Warren regions [TA-FA-223].
- Liaise with tour operators to collaboratively monitor and manage potential impacts on whale shark (*Rhincodon typus*) [TA-FA-166].
- Liaise with industry to minimise potential water quality impacts to Barrow cave gudgeon (*Milyeringa justitia*) [TA-FA-195] and blind cave eel (*Ophisternon candidum*) [TA-FA-201] associated with operations at Barrow Island. Obtain and review monitoring reports to determine the effectiveness and inform further liaison.

Proposed/new translocations

- At Montebello Islands Conservation Park [LA-059], Whitmore, Roberts and Doole islands, and Sandalwood Landing Nature Reserve [LA-081], identify populations of reintroduced animals under 1000 individuals and plan a translocation to increase genetic diversity if required.

FLORA

- Survey for additional *Acacia aphanoclada* populations in conjunction with Aboriginal groups on secure tenure [LE-FL-001].
- Monitor known populations of *Comesperma sabulosum* and survey for additional populations in areas of suitable habitat in collaboration with Martu Traditional Owners [LE-FL-003].
- Monitor all known populations of *Dampiera atriplicina* and determine threats in collaboration with the Goldfields Region and Martu Traditional Owners [LE-FL-004].
- Monitor *Eremophila capricornica* population/s with Martu Traditional Owners post-fire to determine fire response [LE-FL-005].
- Monitor known and survey for additional populations of *Eremophila rigida* populations in consultation with Karlka Nyiyaparli Aboriginal Corporation [LE-FL-006].
- Survey *Goodenia hartiana* populations to determine current threatening processes [LE-FL-008].
- Utilise a drone to survey *Goodenia hartiana* populations in Karlamilyi National Park in order to determine extent and explore potential implications of burning [LE-FL-009].
- Monitor *Scaevola* sp. Hamersley Range basalts (S. van Leeuwen 3675) to determine extent and current threatening processes [LE-FL-011].

ECOLOGICAL COMMUNITIES

- Liaise with pastoralists to survey for additional occurrences of the Roebourne Plains coastal grasslands with gilgai microrelief on cracking clays (Roebourne Plains gilgai grasslands) ecological community [LE-EC-004].
- Liaise with industry to access monitoring data to assess the condition of the Themeda grasslands on cracking clays (Hamersley Station, Pilbara) ecological community. Utilise remote sensing techniques to determine the impact of cattle on the community over time [LE-EC-005].

ENVIRONMENTAL IMPACT ASSESSMENT AND ADVICE

- Ensure the inclusion of monitoring requirements for green sawfish (*Pristis zijsron*) in development management plans on the Pilbara coastline to ensure continued monitoring of the species [LE-FA-008].

**Liaison actions*

- Contribute to the environmental impact assessment process to minimise the impact of resource and land development on Lake Disappointment dragon (*Ctenophorus nguyarna*) [TA-FA-458] and Lake Disappointment gecko (*Diplodactylus fulleri*) [TA-FA-209] in the Goldfields and Pilbara regions.
- Liaise with industry to investigate the three-dimensional habitat of subterranean fauna *Draculoides mesozeirus, Paradraculoides anachoretus* [TA-FA-013]*, Paradraculoides bythius* [TA-FA-014]*, Paradraculoides gnophicola* [TA-FA-015] and *Paradraculoides kryptus* [TA-FA-016] in active mining zones and consider the species in regard to rehabilitation of mine pits and the potential threats of overburden, sedimentation and altered hydrology.

FIRE REGIMES

- Identify and map priority vegetation communities for the landscapes listed below, including spinifex. Input this information into the prescribed burning program using spatial analysis to identify fire-sensitive communities and spinifex more than 12 years of age to maintain an appropriate diversity of age class and patch size.
  - Barlee Range Nature Reserve [LA-002]
  - Barrow Island Nature Reserve [LA-008]
  - Cape Range and extensions (including Department of Defence land) [LA-015]
  - Fortescue Marsh Nature Reserve [LA-031]
  - Nyinggulu coastal reserve [LA-070].

- Install strategic fire breaks at the Dampier Archipelago Reserve system on Dolphin Island [LA-023] and the Montebello Islands Conservation Park across the whole of larger islands (Trimouille, Hermite and North West islands) [LA-057] to minimise bushfire impact.
- Identify, map and prioritise fire sensitive vegetation communities at Fortescue Marsh Nature Reserve to inform the prescribed burning program [LA-032].
- At Karijini National Park, identify Priority Ecological Communities that occur on escarpments above 1000m. Define exclusion areas and liaise with fire personnel to avoid inclusion of identified fire sensitive relicts in fire treatment area [LA-043].
- Implement mild intensity prescribed burns in the Millstream Chichester National Park delta [LA-055].
- Provide input into the prescribed burning program at Nyinggulu coastal reserves using spatial analysis of spinifex age class to maintain an appropriate diversity of age class and patch size [LA-070].
- Implement fire management strategies on department-managed land and unallocated Crown land that seek to create a fire mosaic that retains 20 per cent of spinifex older than 15 years to maintain sufficient habitat for Yellabinna grasswren (*Amytornis whitei whitei*) [TA-FA-108] and sandhill rufous grasswren (*Amytornis whitei oweni*) [TA-FA-109].
- Implement fire management strategies across all occurrences of the Coolibah - Lignum Flats sub type community that utilises low intensity burning conditions after good winter rainfall, seeking to burn a maximum 15 per cent of the community. Consider an ecological study post-fire to determine the response of the community to the fire strategy to inform further burn management [TA-EC-067].

PEST ANIMALS

- Conduct baseline surveys and implement long-term monitoring programs at Barlee Range Nature Reserve [LA-003] and Jarralya National Park [LA-035] and Purungunya Conservation Estate [LA-051] for introduced predators and key prey (for example small vertebrates, shorebirds) to build long term datasets to inform management decisions in partnership with Traditional Owners. Implement control regimes targeting feral cats and foxes using lessons learnt from other Pilbara programs. Incorporate the use of new technologies as they become available.
- Initiate baseline surveys for monitoring introduced predators at Cane River Conservation Park and Karijini National Park. Implement introduced predator control as required, in consultation with Traditional Owners [LA-046].
- Implement an introduced predator management program targeting foxes on Dolphin Island [LA-025].
- Implement an introduced predator and weed incursion program for Jurabi and Bundegi Coastal Park [LA-039].
- Supplement the existing feral cat control program at Murujuga National Park [LA-064].

- Implement a feral animal control program at the Nyinggulu Coastal Reserve for introduced predators (foxes and cats) and herbivores (rabbits and goats) along the coast. Ensure good neighbour works are continued in relation to wild dog risk management [LA-066].
- Construct and maintain reserve perimeter fencing to prevent straying stock impacting natural values at Jarralya National Park and Purungunya Conservation Estate [LA-036].
- Maintain the fence protecting the Yady-Jagga Yadyugga Claypans from donkeys and straying stock [LA-001].
- Implement a feral horse and cattle control program across the Coolibah - Lignum Flats, sub type 2 ecological community [TA-EC-066].
- Implement a donkey control program at Duck Creek (Palm Spring) to conserve occurrence PSW009A of the Riparian flora and plant communities of springs and river pools with high water permanence of the ecological community [TA-EC-073].
- Reduce the number of feral goats and rabbits at Cape Range and extensions (including Department of Defence land) through targeted control measures [LA-017].
- Implement a rabbit control program and associated monitoring at Cape Range and extensions (including Department of Defence land) [LA-022], Fortescue Marsh Nature Reserve [LA-034] and Jurabi and Bundegi Coastal Parks [LA-042], to reduce the impact on native vegetation.
- At Thevenard Island (Pilbara inshore islands north), implement a control program targeting non-indigenous species including the removal and captive breeding of Lakeland Downs short-tailed mouse (*Leggadina lakedownensis*) and reintroduction once non-indigenous species are eradicated [LA-075].
- Implement an eradication program for non-indigenous species on West Doole Island to protect the translocated population of golden bandicoot (*Isoodon auratus barrowensis*) [TA-FA-123].
- At Bedout Island Nature Reserve [LA-010] and Montebello Islands Conservation Park [LA-060], implement surveillance programs to detect incursions of non-indigenous species and implement control programs when required.
- Map and quantify infestations of non-indigenous species at the Dampier Archipelago Reserve system, determine impacts and implement a targeted control program [LA-027].

WEEDS

- At Cape Range and extensions (including Department of Defence land), map *Cenchrus ciliaris*, quantify infestations and impacts, and implement targeted control program post-fire events [LA-019].
- Map, quantify infestations and impacts, and implement targeted control programs for *Cenchrus ciliaris* and *Aerva javanica* occurring on inshore islands at the Dampier Archipelago Reserve system [LA-024] and Montebello Islands Conservation Park [LA-058]. Implement an education program targeting shack owners to assist in identifying

passiflora and cactus infestations. Implement immediate and follow-up control of passiflora infestations.

- Map and quantify infestations, determine impacts and implement targeted, prioritised control programs for identified priority weeds at Fortescue Marsh Nature Reserve [LA-033] and Nyiggulu Coastal Reserves [LA-069].
- Map, quantify infestations and impacts, and implement targeted control program for mesquite and *Parkinsonia aculeata* at the former Karratha pastoral lease [LA-028].
- Quantify and map weed infestations and implement targeted control program for identified priority weeds and develop a weed management program for Millstream Chichester National Park [LA-054].
- Implement weed management at areas on Hermite Island for *Cenchrus ciliaris* and *Aerva javanica* based on known areas and weed mapping and monitor outcomes to create more suitable habitat for Barrow Island white-winged fairy-wren (*Malurus leucopterus edouardi*) [TA-FA-031].
- Implement a weed control program at the occurrence of the Coastal dune native tussock grassland dominated by *Whiteochloa airoides* at Tent Island and South Muiron Island by mapping the distribution of *Cenchrus ciliaris* [TA-EC-065] and *Aerva javanica* [TA-EC-156b] and then applying weed control.
- Implement a weed control program at the occurrence of the Coastal dune native tussock grassland dominated by *Whiteochloa airoides* at South Muiron Island by mapping the distribution of *Cenchrus ciliaris* and then applying weed control [TA-EC-157].
- Undertake targeted mapping of the Coastal dune native tussock grassland dominated by *Whiteochloa airoides* ecological community in conjunction with *Cenchrus ciliaris* mapping. Use findings to inform the listing of the community and to initiate priority weed management actions to protect the community [LE-EC-002].
- Implement weed control for *Prosopis* species and *Parkinsonia aculeata* at six occurrences of the Horseflat land system of the Roebourne plains that encompass former Karratha and former Mardie pastoral leases (hof721, hof763, hof798, hof831, hof848 and hof853). Undertake prescribed burns near the Maitland River to control *Parkinsonia aculeata* seedlings (hof721, hof763) [TA-EC-069].

FAUNA

- Develop a community education program for the Pilbara Inshore Islands to manage access and quarantine measures for Doole Island to protect the translocated population of golden bandicoot (*Isoodon auratus barrowensis*) [TA-FA-116].

- Support Traditional Owners in the technical aspects of prescribed burning adjacent to great desert skink (*Liopholis kintorei*) colonies in the Pilbara, Kimberley and Goldfields regions to prevent large scale bushfires impacting on known populations [TA-FA-400].

*Education and awareness

- Implement an education campaign regarding the potential impacts of vessel strike on dugong (*Dugong dugon*) and expand current works across the Exmouth Gulf and Karratha area through targeted signage and brochures [TA-FA-162].

*Liaison actions

- Develop and implement a feral cat and fox control program with industry in areas of recent sightings (2020) of spectacled hare-wallaby (*Lagorchestes conspicillatus leichardti* [TA-FA-133].
- Liaise with industry, pastoralists, Traditional Owner groups and neighbours across the Pilbara region regarding the impact of barbed wire fencing on ghost bat (*Macroderma gigas*) and encourage alternatives in known ghost bat habitat [TA-FA-245, TA-FA-457].
- Develop a feral cat and fox control program in collaboration with Martu Traditional Owners for black-flanked rock-wallaby (*Petrogale lateralis lateralis*) conservation in the Parnngurr area [TA-FA-136].
- Consider opportunities to prevent light pollution along Jurabi Coast, including from carparks, and manage camping at key nesting beaches on islands, particularly Muiron Islands and Serrurier Islands, during breeding season for green sea turtle (*Chelonia mydas*) [TA-FA-169].
- Liaise with the local government authority to retain Nevin's three-toed slider (*Lerista nevinae*) habitat by preventing the use of timber in the Cleverville area for firewood [TA-FA-177].
- Liaise with Department of Defence to install signage advising that swimming in water around Bundera sinkhole is prohibited to mitigate visitor impacts on blind gudgeon (*Milyeringa veritas*) [TA-FA-087] and blind cave eel (*Ophisternon candidum*) [TA-FA-089]. Circulate education material around Exmouth town centre regarding the presence of these species in Bundera sinkhole and the risks posed by swimming and introduced species such as guppies.

ECOLOGICAL COMMUNITIES

- Liaise with the Department of Defence and the Department of Water and Environmental Regulation to manage access to the Cape Range remipede community (Bundera sinkhole) ecological community in addition to checking and repairing signage and bollards [TA-EC-063].
- Continue to work with neighbouring pastoralists to control grazing by maintaining fences and mustering stock at six occurrences of the Horseflat land system of the Roebourne plains ecological community that encompass ex-Karratha and ex-Mardie stations (hof721, hof763, hof798, hof831, hof848 and hof853) [TA-EC-160].

- Liaise with industry to obtain survey data and mapping outputs for the Horseflat Land System ecological community. Utilise data to prioritise a Threatened Ecological Community listing for the Horseflat Land System [LE-EC-003].
- In consultation with Nyiyaparli Traditional Owners and industry, fence occurrences SandDunes01 and SandDunes02 of the Vegetation of sand dunes of the Hamersley Range/Fortescue Valley ecological community to exclude cattle and ensure they are removed from highly disturbed areas [TA-EC-074].
- In consultation with Nyiyaparli Traditional Owners, control *Cenchrus ciliaris* across occurrences SandDunes01 and SandDunes02 of the Vegetation of sand dunes of the Hamersley Range/Fortescue Valley ecological community to prevent declines in floristic values in response to weed mapping across the ecological community, which utilises watering points and cattle routes to identify where *Cenchrus ciliaris* may be dispersing [TA-EC-075].

LANDSCAPES

**Liaison actions*

- In collaboration with industry, add or maintain existing fire breaks on Barrow Island Nature Reserve and develop a fire management plan [LA-007].
- Lead and support the Cape Range Karst Advisory Committee in developing and implementing priority actions to protect and monitor karst values. Implement a visitor management program to deter interactions with fauna values. Engage with experts and other land managers of neighbouring tenure for landscape scale outcomes [LA-016].
- Collaborate with stakeholders to review and consider access arrangements for the Farquar section of the Ningaloo Coastal Reserve, ensuring alignment with conservation and community priorities [LA-014].
- In liaison with land managers and other stakeholders, map and quantify infestations and impacts, and implement a targeted control program for *Cenchrus ciliaris*, *Aerva javanica* and other identified priority weeds occurring on Pilbara inshore islands (north [LA-073] and south [LA-078]).

7 Learn action collaboration opportunities

FAUNA

Mammals

- Continue to implement statewide monitoring programs to determine the distribution and population trends of northern quoll (*Dasyurus hallucatus*) at a species level. Liaise with Traditional Owners regarding the development and implementation of the monitoring program.
- Undertake population viability analysis to assess the need for genetic supplementation of the Hermite and Doole islands translocated populations of golden bandicoot (*Isoodon*

auratus barrowensis) and assessment of their suitability as future source populations for translocation.

- Investigate genetic differences between island spectacled hare-wallaby *Lagorchestes conspicillatus conspicillatu*s populations and mainland spectacled hare-wallaby (*Lagorchestes conspicillatus leichardti*) populations to ensure genetic diversity is maximised when implementing future conservation actions.
- Liaise with industry partners to demonstrate the effectiveness of deterrent measures in fences to avoid ghost bat (*Macroderma gigas*) collisions.
- Liaise with Martu partners including Kanyirninpa Jukurrpa to investigate the genetic differences in known desert populations of black-flanked rock-wallaby (*Petrogale lateralis lateralis*).
- Refine and implement the monitoring of desert black-flanked rock-wallaby (*Petrogale lateralis lateralis*) populations to determine accurate population estimate.
- Establish a long-term monitoring program to determine a baseline and subsequent change in the distribution and abundance of northern brushtail possum (*Trichosurus vulpecula arnhemensis*, Kimberley) across its known range in the Pilbara. Determine the likely drivers of detectable change including fire, predation and loss of habitat and how these threats interact.
- Undertake genetic analysis utilising existing collected samples of northern brushtail possum (*Trichosurus vulpecula arnhemensis*) to improve knowledge of species distribution.

Birds

- Implement a research project to identify areas of old spinifex habitat across the sandhill rufous grasswren (*Amytornis whitei oweni*) habitat range in collaboration with landholders and Traditional Owners and determine appropriate fire regimes to maintain habitat.
- Implement a survey for Yellabinna grasswren (*Amytornis whitei whitei*) populations as there are no recent observations.
- Assess the impacts of recreation on colonies of wedge-tailed shearwater (*Ardenna pacifica*) on the conservation estate to inform management actions.
- Determine priority red knot (*Calidris canutus*) habitat areas to inform the protection of specific areas and guide survey and monitoring programs.
- Collaborate with BirdLife Australia to continue critical seasonal survey work and share data outcomes to understand spatial and temporal movements of red knot (*Calidris canutus*).
- Map current nesting sites of eastern osprey (*Pandion cristatus*) and ensure data is added to the corporate dataset.
- Implement a monitoring plan to identify night parrot (*Pezoporus occidentalis*) presence to inform input into environmental impact assessment and land use planning.

- Liaise with joint management partners to conduct surveys of night parrot (*Pezoporus occidentalis*) to increase knowledge of absence/presence.
- Develop and implement research projects to investigate the response of night parrot (*Pezoporus occidentalis*) to prescribed burning and bushfire to inform future prescribed burning and introduced predator control programs.
- Undertake detailed survey and monitoring work on Australian painted snipe (*Rostratula australis*) to identify priority areas for management action.
- Survey for additional fairy tern (*Sternula nereis nereis*) nesting populations on islands and the mainland further north from known locations.
- When monitoring fairy tern (*Sternula nereis nereis*) populations, expand capacity to include research surrounding the interactions between the terns and trophic cascades and how to respond adaptively to their impacts.
- Review the requirements for breeding birds and support the regular banding of fairy tern (*Sternula nereis nereis*) at each breeding site to monitor movement and dispersal of individuals between populations and sites.
- Establish efficient and effective information sharing pathways across the regions for fairy tern (*Sternula nereis nereis*).

Reptiles

- Conduct small vertebrate monitoring including targeted searches to inform any small mammal translocations to the Montebello Islands and reduce threats to Hermite Island worm-lizard (*Aprasia rostrata*).
- Increase survey effort to quantify the abundance and habitat use of Lake Disappointment dragon (*Ctenophorus nguyarna*) and Lake Disappointment gecko (*Diplodactylus fulleri*).
- Develop and implement a monitoring plan that includes new survey methods that utilise artificial structures to determine the status and abundance of Nevin's three-toed slider (*Lerista nevinae*) and Gnaraloo mulch-slider (*Lerista haroldi*) and inform the preparation of a habitat description for *Lerista haroldi*.
- Liaise with Traditional Owners regarding the conservation of great desert skink (*Liopholis kintorei*) and the sharing of knowledge regarding population dynamics and species management.

Fish

- Determine aquifer ecosystems with suitable habitat for subterranean aquatic fauna including blind gudgeon (*Milyeringa veritas*) and Barrow cave gudgeon (*Milyeringa justitia*) and develop eDNA sampling methods for future repeat monitoring.
- Liaise with industry and consultants to consolidate survey efforts and to conduct monitoring of aquatic subterranean fauna including Barrow cave gudgeon (*Milyeringa justitia*) on Barrow Island to determine population status.

- Determine aquifer ecosystems with suitable habitat for subterranean aquatic fauna including blind cave eel (*Ophisternon candidum*) and develop eDNA sampling methods for future repeat monitoring.

Invertebrates

- Undertake phylogenetic studies of the south population and karst system population of *Bamazomus subsolanus* to resolve taxonomic issues and integrate into land use planning and environmental impact assessment processes.
- Implement a monitoring plan for *Bamazomus vespertinus.*
- Liaise with industry to implement a research project, potentially in collaboration with Western Australian Museum, to survey and address knowledge gaps for *Bogidomma australis*.
- Monitor populations of *Draculoides brooksi* at Cameron's Cave and the Exmouth limestone quarry.
- Monitor populations of *Draculoides julianneae* at Cave 215 and Cave C15.
- In collaboration with Western Australian Museum, survey to address knowledge gaps for *Liagoceradocus branchialis* and *Liagoceradocus subthalassicus.*
- Develop and implement a research project aimed at addressing knowledge gaps for *Nedsia s*pecies across the Pilbara Region.
- Develop and implement a research project aimed at addressing knowledge gaps for *Stygiocaris lancifera* and *Stygiocaris stylifera* species across the Pilbara Region.
- Resurvey connectivity of aquifer ecosystems where known populations of *Stygiochiropus isolatus* occur. Utilise monitoring data to provide better input in land use planning processes associated with bore field development in cave systems.
- Undertake research into the hydrology and connectivity of aquifer ecosystems in the Cape Range karst system to inform management of subterranean fauna including *Stygiochiropus isolatus.*
- Undertake phylogenetic studies of the south population and karst system population of *Stygiochiropus isolatus.*
- Survey to address knowledge gaps for *Welesina kornickeri.*

Marine[7]

- Develop and implement a triage system to direct where and when management actions need to occur based on a centralised database for reporting adverse incidents for marine turtles and mammals (for example marine debris, vessel strikes, deaths, strandings).

[7] The ‘marine’ grouping includes marine mammals, marine reptiles and marine fish, including sharks and rays.

- Establish monitoring systems to investigate habitat use and the impacts from vessel strike, seismic activity and marine debris on blue whale (*Balaenoptera musculus*).
- Undertake population trend analysis for all whale species including blue whale (*Balaenoptera musculus*), southern right whale (*Eubalaena australis*) and humpback whale (*Megaptera novaeangliae*) to determine a trajectory of recovery.
- Target research towards understanding the influence climate change has on dugong (*Dugong dugon*).
- Develop a standardised monitoring program to identify breeding habitat and range extensions of southern right whale (*Eubalaena australis*).
- Monitor humpback whale (*Megaptera novaeangliae*) abundance, distribution and patterns of habitat use to quantify the impact of nature-based tourism.
- Establish a long-term monitoring plan for the Australian humpback dolphin (*Sousa sahulensis*) to address knowledge gaps regarding abundance.
- Survey and monitor short-nosed sea snake (*Aipysurus aoraefrontalis*) and leaf-scaled sea snake (*Aipysurus. Foliosquama*) to gather information on abundance, trajectory, biology and habitat.
- Undertake combined monitoring of sea temperatures, nest temperature data and loggerhead sea turtle (*Caretta caretta*) abundance and distribution to inform management actions.
- Implement a trial to determine appropriate methods to control ghost crabs to protect loggerhead sea turtle (*Caretta caretta*) hatchlings at Ningaloo and Gnaraloo nesting beaches. Monitor the effectiveness of this action to inform further ghost crab control.
- Engage with stakeholders to explore appropriate steps to manage light pollution and its potential impacts on green sea turtle (*Chelonia mydas*) hatchlings.
- Through statewide stakeholder liaison, apply information sharing and learnings from the Rosemary Island hawskbill sea turtle (*Eretmochelys imbricata*) population to inform further management and conservation of the species at a regional scale and consider expanding the monitoring program for Rosemary Island to account for spatial-temporal processes.
- Liaise with and work alongside the Rottnest Island Authority and tour operators to manage grey nurse shark (*Carcharias taurus*) and create a photo database for conservation to gain a broader understanding of the species. Survey for the impact of human disturbance on the sharks and establish an industry wide code of conduct for interactions with shark species.
- Liaise with Department of Primary Industries and Regional Development to address knowledge gaps within DBCA databases and to be involved in the management of great white shark (*Carcharodon carcharias*).
- Investigate plastic pollution in Ningaloo Marine Park and the impact on whale shark (*Rhincodon typus*).

- Consider whale shark (*Rhincodon typus*) monitoring requirements to inform management measures.

Introduced species

- Partner with research institutions to explore alternative cane toad mitigation and management strategies, including conditioned taste aversion and waterless barriers.
- Investigate the potential for cane toad establishment in the Pilbara region through eDNA analysis and explore associated management strategies.

FLORA

- Review fire history to determine fire response of *Acacia aphanoclada*.
- Liaise with industry partners regarding monitoring of *Aluta quadrata* populations to interrogate potential declines, in alignment with the approved offset program developed in conjunction with Botanical Gardens and Parks Authority.
- Investigate the taxonomy of *Eremophila capricornia*.
- Liaise with relevant stakeholders to monitor known populations of *Euphorbia clementii* to determine population status.
- Monitor all known *Fimbristylis sieberiana* populations in the Pilbara Region to determine status and assess threats.
- Investigate the taxonomic differences between *Goodenia lyrata* and *Goodenia modesta*.
- Investigate the taxonomy of *Indigofera gilesii*.
- Liaise with industry to access *Indigofera ixocarpa* monitoring data and implement surveys to address knowledge gaps.
- Review the taxonomy of *Olearia mucronata*.
- Monitor all known *Owenia acidula* populations in the Pilbara Region to determine status and to assess threats.
- Liaise with industry to access *Pilbara trudgenii* monitoring data and implement surveys to address knowledge gaps.
- Survey *Pilbara trudgenii* populations to determine fire response.
- Liaise with industry to access *Ptilotus trichocephalus* monitoring data and implement surveys to address knowledge gaps.
- Investigate the taxonomy of *Rhagodia* sp. Hamersley (M. Trudgen 17794) and variant collections from the Fortescue IBRA sub-region to distinguish species from *Rhagodia eremaea*.
- Develop and implement a research project aimed at modelling the likelihood and severity of inundation of *Spinifex longifolia* vegetation on the Montebello Islands under various climate change scenarios.

- Survey for additional *Stackhousia clementii* populations in the Pilbara Region.
- Monitor all known *Stackhousia clementii* populations in the Pilbara Region to determine status and assess threats.
- Survey existing populations and for additional *Terminalia supranitifolia* populations on the Burrup Peninsula in conjunction with ranger groups.

ECOLOGICAL COMMUNITIES

- Undertake a condition survey program for land systems and communities in the Pilbara including the Barrabiddy, Bibbigunna, Brockman iron cracking clays, Diorite, Fortescue Marsh, Wona, Frederick, Gregory, Horseflat, Jingle, Kanjenjie, Kumina, Marloo, Narbung, Peedawarra, Scoop, Mosquito, Tanpool and Yarcowie.
- Continue to monitor and assess the impacts that changed overland flow has on the Brockman iron cracking clay communities of the Hamersley Range, Wona land system and West Angelas cracking-clays.
- Utilise monitoring information from industry partners and the department to understand how revegetation post-mining is impacting on the Brockman iron cracking clay communities of the Hamersley Range, West Angelas and Wona land systems.
- Undertake targeted surveys of the Burrup Peninsula rock pile communities to clarify the description, map the extent and to inform a monitoring program in consultation with the department's Species and Communities Program.
- Develop and implement a research program to determine the hydrological impacts of increased water extraction on the Camerons Cave troglobitic community and engage with relevant stakeholders through the Cape Range Karst Advisory Committee to guide research and management.
- In collaboration with the Western Australian Museum, develop a monitoring technique and management plan for Cape Range remipede community (Bundera Sinkhole) to address knowledge gaps regarding current and future altered hydrological impacts.
- Undertake vegetation surveys across current tenure to determine if there are further occurrences of the Coastal dune native tussock grassland dominated by *Whiteochloa airoides.* Ensure findings are recorded in the ecological community database.
- Liaise with industry partners that monitor occurrences of Coolibah - Lignum Flats, sub type 2 using remote sensing to determine whether there has been a discernible change in vegetation condition.
- Liaise with industry partners regarding the sharing of monitoring data relevant to occurrences of the Coolibah - Lignum Flats, sub type 3. Utilise data to inform the conservation of the community.
- Develop and implement a research program to address knowledge gaps regarding current and future threats, including altered hydrological impacts, and develop and implement a methodology to monitor the health of subterranean communities including:
    - Ethel Gorge aquifer stygobiont community

    - Stygofaunal communities of the Western Fortescue Plains freshwater aquifer, including Western Fortescue Plains, Bungaroo, Robe Valley and the pisolitic hills.
- Establish and implement a monitoring plan for Fortescue Marsh (Marsh Land System).
- Develop a Ramsar Ecological Character Description for Fortescue Marsh.
- Map the four plant assemblages of the Wona land system to better understand the distribution of the subtypes within the Wona land system.
- Collate data and develop a strategy for monitoring the Riparian flora and plant communities of springs and river pools with high water permanence of the Pilbara region ecological community, exploring methods such as remote sensing.
- In collaboration with Martu Traditional Owners, survey and conduct a condition assessment of the Rudall River riparian vegetation community to determine the suitability of its current listing. Develop and implement a monitoring and management plan in collaboration with Martu Traditional Owners.
- Liaise with pastoralists to undertake vegetation condition surveys across the Roebourne Plains coastal grasslands with gilgai microrelief on cracking clays (Roebourne Plains gilgai grasslands).
- In collaboration with industry partners, visit the Sand sheet vegetation (Robe Valley) community and assess its status (such as through vegetation mapping) to inform what is required to manage the site.
- Monitor the Stony chenopod association of the Roebourne Plains area to assess the impact of uncontrolled vehicle access on the community. Utilise findings to inform future management.
- Map suspected small patches of the Stony chenopod association of the Roebourne Plains area to determine whether they can be considered part of the ecological community.
- Map the Mosquito Land System extent utilising drones to determine whether the southern and northern occurrences are the same land system type to inform management and impact assessment processes.
- Map the stygofauna communities of the Western Fortescue Plains freshwater aquifer to determine the community's distribution and the influence of hydrological impacts.
- Survey sites in the Fortescue Valley Sand Dunes community that have not had condition assessments in the past five years.
- Liaise with industry partners to assess the condition of the Weeli Wolli Spring community and undertake long-term monitoring system to assess the impact of mining.

Appendix 1: Priority management units identified through the prioritisation process for landscape scale threat mitigation actions for priority reserves and landscapes

Table 2 Pilbara Regions priority management units.

Priority reserve or landscape	Component reserves	Responsibility	Area (ha)
Barlee Range Nature Reserve	R 26808	Exmouth District	105,009
Barrow Island Nature Reserve	R 11648	Pilbara Region	25,218
Bedout Island Nature Reserve	R 33811	Pilbara Region	41
Cane River Conservation Park	R 46122	Pilbara Region	147,912
Cape Range and extensions (including Department of Defence land)	R27288, R53914, R 54561	Exmouth District	77,067
Dampier Archipelago Reserve system	R 36907, R 36909, R 36910, R 36913, R 36915	Pilbara Region	13,938
Former Karratha pastoral lease		Pilbara Region	16,910
Fortescue Marsh Nature Reserve	R 54512, R 54642	Pilbara Region	115,600
Jarralya National Park	R 54557	Exmouth District	232,490
Bundegi and Jurabi Coastal Parks	R 40729, R40728	Exmouth District	1,658
Karijini National Park	R 30028	Pilbara Region	624,334
Karlamilyi National Park	R 34607	Pilbara Region	1,283,729
Purungunya Conservation Estate	R 54522, R 54523	Pilbara Region	212,698
Millstream Chichester National Park	R 30071	Pilbara Region	238,228
Montebello Islands Conservation Park	R 42196, R 42917	Pilbara Region	3,549
Murujuga National Park	2803/672, 2803/673, 2803/674, 2970/398	Pilbara Region	4,917
Nyinggulu coastal reserves	R 53686	Exmouth District	10,692
Pilbara inshore islands north	R 40323, R 44666, R 33831, R 40322, R 34560, R 29011, R 33902, R 31775, R 44668, R 42757, R 44671, R 33834, R 33174, R 42752	Pilbara Region	8,474
Pilbara inshore islands south	R 42760, R 33216, R 54558, R 42759, R 42758, R 42761, R 42756, R 42762	Exmouth District	3,491
Whitmore, Roberts, Doole Islands and Sandalwood Landing Nature Reserve	R 42755	Exmouth District	570

GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

2025_300 0625 XX