SCIENCE AND CONSERVATION DIVISION

STRATEGIC PLAN 2014-17

Department of
Parks and Wildlife

WHO WE ARE

The Department of Parks and Wildlife's Science and Conservation Division was formed in October 2013 following an amalgamation of the then Nature Conservation and Science Divisions. The Division is structured around three conservation branches and six science programs.

Species and Communities Branch – coordinates the listing, management and recovery of threatened species and ecological communities; provides policy, strategic and technical advice on threatened species and ecological communities; operates programs for the promotion of conservation on land not managed by the Department; supports the Animal Ethics Committee; and coordinates fauna translocations.

Environmental Management Branch – provides advice on development proposals and existing activities affecting Parks and Wildlife managed land and water, and threatened or significant species and ecological communities; advises on rehabilitation and closure of disturbed areas on department-managed lands, waters and other means of mitigating environmental impacts of development proposals; coordinates planning and management of Ramsar wetlands; provides advice and support for management of wetlands.

Nature Protection Branch – administers wildlife licences and permits and enforces the *Wildlife Conservation Act 1950* and Regulations; administers wildlife utilisation industries to ensure the sustainable use of wildlife; and responds to wildlife conflict and emergencies.

All science programs – ensure that research and monitoring outcomes are communicated widely and translated into management actions.

Animal Science Program – researches the biology, ecology and genetics of animals and monitors their health; researches the impact of introduced predators and other threats on wildlife and develops appropriate control techniques; and carries out translocations of threatened animals.

Plant Science and Herbarium Program – maintains and curates the Western Australian Herbarium plant collection; discovers, names and describes plant, algae and fungi species; researches biology, ecology and genetics of plants; surveys new and current rare and threatened plant populations; researches and stores seeds of threatened plants; researches and manages the impacts of threatening processes; and carries out translocations of threatened plants.

Biogeography Program – undertakes biological surveys to determine the diversity and distribution of plant and animal species and communities; researches patterns in species composition and distribution in relation to environmental gradients at the local and regional scale; identifies areas of high conservation significance based on species occurrences; and identifies gaps in the conservation reserve system based on community patterns.

Ecosystem Science Program – monitors the condition of ecosystems and communities; researches and develops systems for using fire to maintain and enhance biodiversity across landscapes; researches and predicts the ecological effects of landscape scale processes; develops methods to restore degraded landscapes; monitors the impact of timber harvesting and management practices on forest ecosystems.

Wetland Conservation Program – researches the animals, plants and ecology of wetlands; researches hydrological and physico-chemical processes; conducts biological inventories; maps, classifies and assesses wetlands; and investigates how aquatic ecosystems respond to threats and management practices.

Marine Science Program – conducts or facilitates research on the distribution and diversity of WA's marine biodiversity, and the processes that influence these patterns; monitors threatened marine fauna and marine parks and reserves to measure their condition relative to pressures and management actions.

Department of Parks and Wildlife

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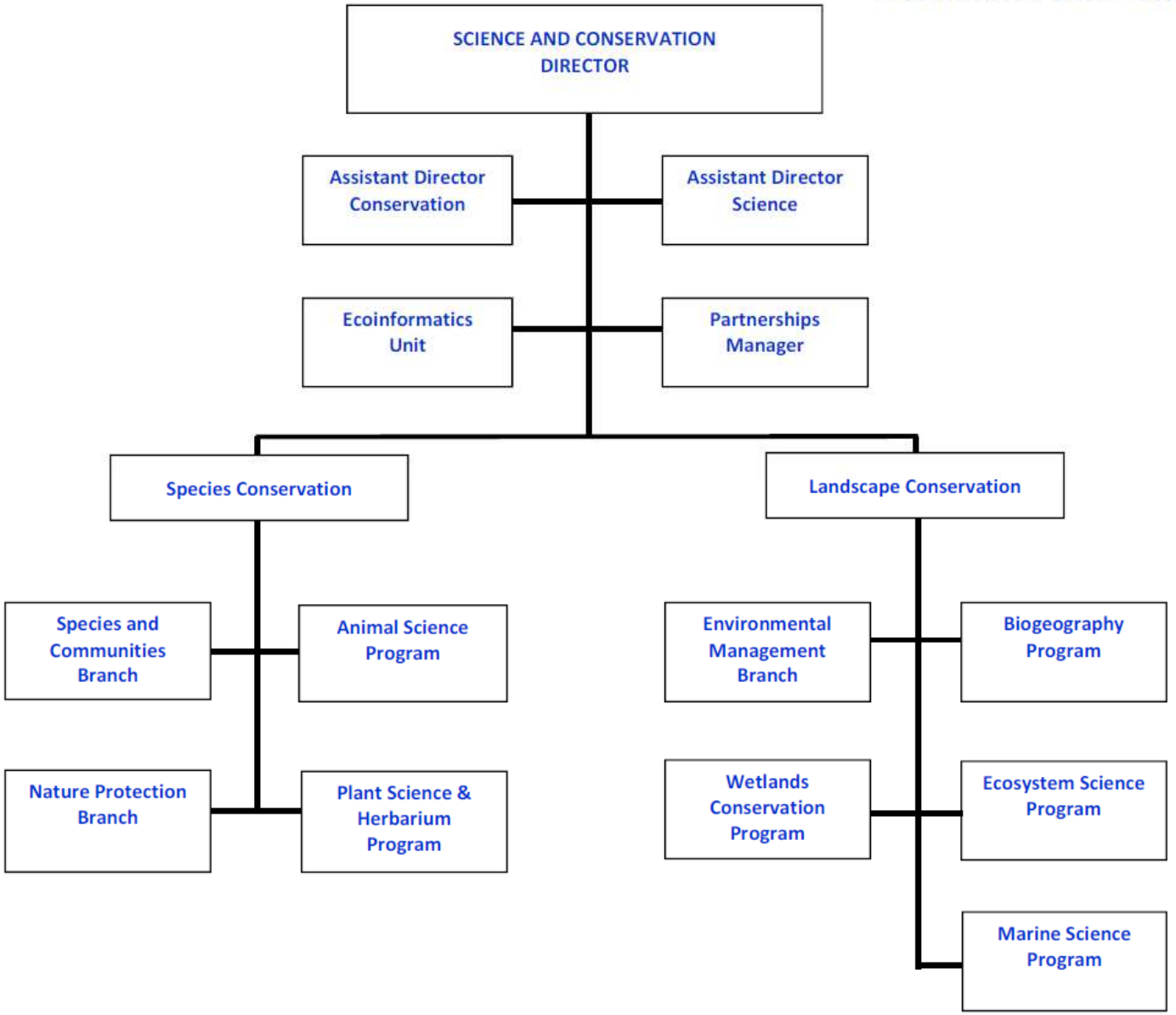
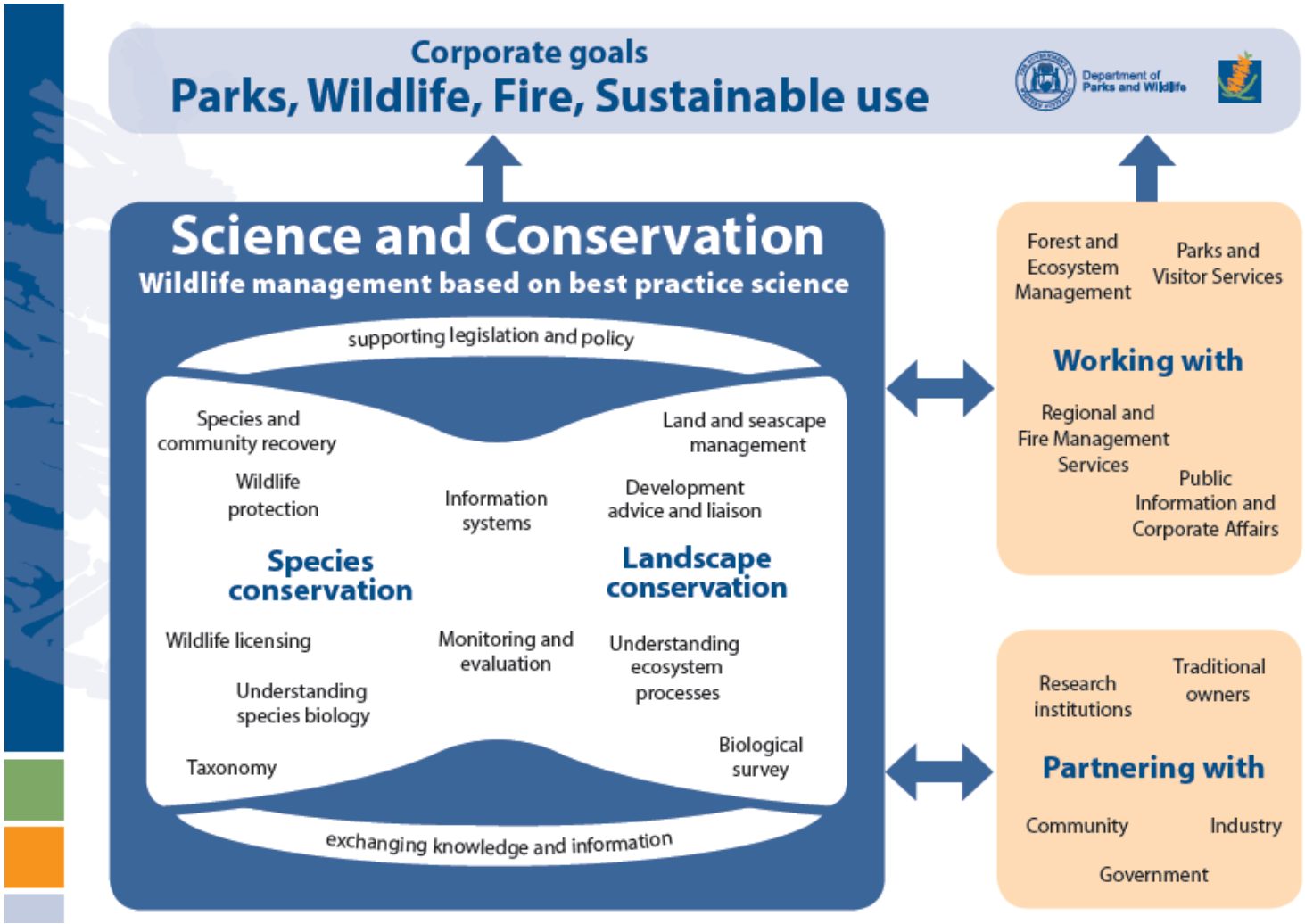


WHAT WE DO

Science and Conservation Division works to integrate conservation actions and scientific knowledge to deliver the corporate goals and strategic directions of the Department of Parks and Wildlife, at both species/communities and landscape/seascape scale.

Our branches and science programs work across multiple areas, although some are focussed more on species and communities while others focus on landscapes or seascapes.

Divisional staff work with other Parks and Wildlife divisions and partner with research institutions, Aboriginal traditional owners, local and State Government, the community and industry.



VISION

Western Australia's natural assets are conserved and valued by all.

PURPOSE

Deliver the Department's programs that relate to biodiversity conservation and provide a scientific basis for wildlife management, fire management, forest management, parks management and sustainable use.

OUR VALUES

Science and Conservation Division embraces the Department's values of being open, accountable, creative, responsive, innovative, outcome-focussed and collaborative and always acting with the highest integrity.

OUR STRATEGIC PRIORITIES

2014-17

The Science and Conservation Division will contribute to delivery of the corporate goals through the following strategic priorities.

PARKS

We will provide knowledge of our State's biodiversity to ensure our natural heritage is protected, valued and appreciated and to guide acquisition and management of our parks and reserves. We will provide knowledge to support informative and appealing interpretation for park visitors.

WILDLIFE

We will work to ensure our threatened plants, animals and communities are conserved, protected and recovered by focussing science and conservation programs to deliver on-ground conservation outcomes. We will provide the scientific basis for effective landscape-scale restoration and reintroduction programs and mitigate threats from feral animals, disease and weeds. We will document our rich biological diversity and ensure information is available to the community.

FIRE

Wildlife and land management outcomes will be enhanced by continual improvement of the prescribed burning program and use of fire to support conservation of species and communities based on best practice science.

MANAGED USE

We will work with the community to ensure Western Australia derives the greatest benefit from the lands and waters we manage, consistent with conserving the State's unique plants, animals and landscapes. We will provide objective and informative advice to decision-makers on conservation values and mechanisms for their protection.

PEOPLE

We will engage with the community and Aboriginal people to ensure that Western Australians can contribute to conservation and appreciate the State's unique biodiversity. We will provide opportunities for the community to engage in conservation through volunteering, citizen science programs, and off reserve conservation programs.




PARKS

Establish and effectively manage the State's national parks, marine parks, State forest and other reserves, to conserve wildlife and for people's enjoyment.

WHAT	HOW	OUTCOME
Comprehensive, adequate and representative terrestrial and marine conservation reserve system	Undertake biological surveys and/or use existing survey data to: • Identify key gaps in the reserve system • Support land acquisition through knowledge of conservation values • Support development of new marine and terrestrial parks and reserves through knowledge of conservation values • Facilitate joint management with Aboriginal traditional owners	• Improved protection of key and representative elements of the State's land, waters and wildlife
Park management	• Deliver and/or support the marine monitoring program in the State's marine parks and reserves • Provide information and advice for effective maintenance, protection and management of park biodiversity values • Communicate monitoring knowledge to marine park managers	• Effective management of parks is demonstrated, and adjusted if necessary
Interpretive information in parks	• Contribute high quality information for interpretation in parks	• Accurate, useful and interesting information provided to park visitors
Eco-tourism	• Provide advice and assistance for management of commercial tour operators conducting wildlife interaction tours	• Tourism industry does not compromise conservation values
Visitor risk management	• Assist in managing visitors attending wildlife strandings and develop remote monitoring technology to assess visitor risk	• Visitors enjoy wildlife interactions safely




WILDLIFE

Conserve and manage the State's native plants and animals and achieve habitat, ecosystem and landscape-scale conservation and protection based on best-practice science.

WHAT	HOW	OUTCOME
Strategic fauna and flora conservation programs	• Develop Fauna Conservation Strategy • Develop Flora Conservation Strategy	• Strategic direction for effective, targeted plant and animal conservation
Integrated science and conservation	• Ensure that science programs address the gaps in knowledge and reflect the applied nature of advice required by the Department to deliver effective conservation, protection and management of flora, fauna, ecological communities and conservation reserves • Ensure specialist information systems are developed and maintained to support scientific information	• Key gaps in biodiversity knowledge are addressed by research and the information is used to improve conservation management. • Scientific information is integrated, preserved and consistently managed
Documenting our animals, plants, fungi and algae	• Manage and curate the Western Australian Herbarium, to improve representation of rare and poorly known plants and of the conservation estate, and conduct and support taxonomic research on WA plants, algae and fungi • Assist the WA Museum and other research institutions with research into faunal taxonomy, particularly in poorly known groups and taxa of conservation concern • Ensure taxonomic information systems are maintained	• Improved knowledge of WA's animals, plants, fungi and algae species contributes to their conservation. • Online availability of authoritative taxonomic information of Western Australian biodiversity



WILDLIFE

WHAT	HOW	OUTCOME
Biological survey	• Undertake terrestrial and marine biological survey to systematically address gaps in knowledge and increase understanding of biodiversity to better inform conservation management • Develop a Western Australian biological survey database	• Improved knowledge of the plant and animal communities • Inventory data is effectively curated, managed, preserved and distributed
Current condition of WA's biodiversity	• Finalise the audit of the State's biodiversity and conservation (WA Biodiversity Audit II) • Maintain threatened species and ecological communities databases	• Wildlife and land management priorities are informed by information collected through the Audit
Conservation status of threatened species and ecological communities	• Continue to maintain, review and update, as necessary, the lists of threatened and priority species, and threatened and priority ecological communities • Write recovery plans for threatened species and communities	• Conservation status of threatened and priority plants, animals and ecological communities are recorded, and threats identified for management




WILDLIFE

WHAT	HOW	OUTCOME
Recovery of key animal species	• Establish a captive western ground parrot breeding facility in collaboration with Perth Zoo • Support recovery of critically endangered animals such as woylie and Gilbert's potoroo, and establish new wild populations as appropriate • Protect key animals through Operation Rangelands Restoration at Matuwa • Develop recovery programs for threatened animals and support recovery teams • Implement research projects to identify effective management actions for Pilbara threatened species • Research the population genetics, demography, physiology and reproductive biology of threatened fauna to improve management and conservation • Monitor marine species that are specially protected	• Improved conservation status of threatened animals • Conservation and management of threatened animals is based on scientific knowledge
Recovery of key plant species	• Develop recovery programs for threatened plants and support recovery teams • Translocate at least 45 critically endangered plant species to establish new populations in the wild or augment existing translocated populations • Bank seeds of 150 threatened plants in the Threatened Flora Seed Centre • Develop success criteria for plant translocations • Research the population genetics, demography, eco-physiology, reproductive biology, and disturbance ecology of threatened plants to improve management and conservation	• Improved conservation status of threatened plants • Conservation and management of threatened plants is based on scientific knowledge



WILDLIFE

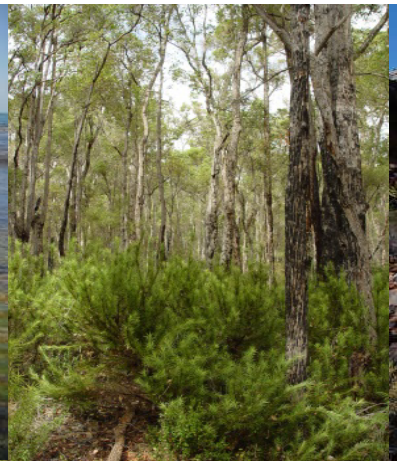
WHAT	HOW	OUTCOME
Understand and manage threats from pest animals	• Monitor management effectiveness in the Landscape Conservation Initiative • Undertake goat and cat eradication in the Dirk Hartog Island National Park Ecological Restoration Project • Investigate options for integrated fox and feral cat baiting • Support Western Shield through research and support the monitoring program • Develop techniques that reduce the risk of cane toads to native fauna • Develop a model for prioritising biosecurity actions on islands	• Retention and enhancement of high biodiversity values of the north Kimberley • Effective pest control regimes reduce threats to wildlife and enable restoration of animal populations • Protection of key island conservation reserves
Habitat restoration	• Provide key biological and hydrological information to restoration programs to improve ecosystem function of key conservation assets	• Improved ecosystem function in key conservation assets
Off reserve conservation through partnerships with the community	• Register properties with Land for Wildlife and provide assistance to landholders • Establish nature conservation covenants on private property	• Community is engaged in conserving and managing our native plants, animals and ecosystems
Understand management options to enhance biodiversity resilience in a changing climate	• Undertake research and identify external science that provides a basis for informed management of climate change impacts on biodiversity	• Improved knowledge on climate change adaptation strategies to enhance biodiversity resilience



FIRE

Manage lands under our care to protect communities, visitors and built and natural assets from bushfire damage, and also use planned fire to achieve other land, forest and wildlife management objectives.

WHAT	HOW	OUTCOME
Fire regimes that enhance biodiversity	• Research response of landscapes and species to fire and provide information for fire management • Research and develop systems for using fire to maintain and enhance biodiversity at a landscape scale and for the protection of threatened species • Monitor management effectiveness in the Landscape Conservation Initiative	• Fire management is based on scientific knowledge and enhances biodiversity conservation whilst ensuring our obligations to protect life, property and critical infrastructure
Implement recommendation 4 of the Keelty Report	• Undertake research program on fuel management and fire behaviour of coastal heath	• Improved fire management in coastal heath through more effective prediction of fire behaviour
Fire management strategy	• Provide a scientific basis for development of appropriate prescribed burning practices and targets	• Evaluation of fire management effectiveness is based on appropriate performance indicators
Fire in desert lands	• Undertake fire projects with traditional owners	• Traditional owners have capacity to manage fire on Country to achieve wildlife management objectives

MANAGED USE

Manage the State's plants and animals and the lands and waters under our care for tourism, water and wood production, and other approved uses.

WHAT	HOW	OUTCOME
Provisions of legislation for wildlife management	• Maintain an effective system for monitoring and administering compliance with legislation for wildlife management.	• Compliance activities result in reduced impacts on wildlife conservation issues from human activity
Development and conservation values	• Provide advice regarding conservation values, and potential development impacts and their management to industry and relevant agencies and decision-makers • Provide advice to development proponents on wildlife management	• Information on conservation values and potential impacts is provided to decision-makers
Compliance with the Wildlife Conservation Act	• Implement effective compliance actions	• Wildlife use is sustainable and appropriately managed
Use of wildlife and land/seascapes	• Licenses for commercial use of flora and fauna are issued efficiently • Licenses for the hobby keeping and pet trade in fauna are issued efficiently	• Wildlife use is sustainable and appropriately managed
Monitoring of forest ecosystems	• Implement FORESTCHECK monitoring • Undertake research and monitoring to support ecologically sustainable forest management	• Forest harvesting practices are sustainable and minimise impacts on forest ecosystems
Customary activities involving wildlife	• Understand the requirements for Aboriginal people to undertake customary activities involving wildlife	• Aboriginal people are able to undertake customary activities involving wildlife




PEOPLE

Inspire, engage, collaborate and work with people individually, in communities and in organisations.

WHAT	HOW	OUTCOME
Community engagement	• Engage the community and communicate the value of wildlife and its conservation requirements, and the positive contribution that wildlife makes to people's lives	• The community understands, is engaged in and supports biodiversity conservation
Conservation partnerships	• Engage with partners to ensure that conservation funding is targeted towards programs and actions that will provide high value conservation outcomes • Supervise and mentor emerging conservation scientists	• Conservation partnerships achieve targeted high priority outcomes
Joint management	• Partner with Traditional Owners in development of conservation actions and knowledge of Country	• Western and indigenous knowledge is used to manage Country
Volunteers	• Encourage and support volunteers to work with us in conservation actions, particularly in the Herbarium	• Volunteers contribute to conservation and science programs
Citizen science	• Identify and implement opportunities to engage the community in citizen science projects	• Interested members of the community engage in citizen science
Information accessibility	• Review and implement improvements to information management and communication systems, particularly NatureMap and the data discovery portal	• Information and data are managed and available for use through effective and efficient systems
Workplace safety	• Ensure all staff and volunteers engage in safe work practices and are adequately trained	• Improved staff health and wellbeing
Divisional function	• Enhance conservation and science business activities and customer service through effective administrative support and integrated divisional functions	• Conservation and science programs are supported by effective use of divisional resources in priority areas