





Annual Report 2016-17

Kings Park at Heart



Botanic Gardens and Parks Authority

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Botanic Gardens and Parks Authority 2016-2017 Annual Report

This Annual Report has been produced in accordance with the Public Sector Annual Reporting Framework, Treasury Instruction 903 and other relevant reporting obligations.

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This report has been produced in electronic format and is available to download from BGPA's website. The report has been prepared in accordance with the appropriate accessibility requirements however, the Financial Statements and Key Performance Indicators sections of this report contain tables that are not accessible. Please contact BGPA if further assistance is required. Text only copies are available in large print on request. For hearing and/or speech impaired access, contact the National Relay Service TTY 133 677.

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Statement of Compliance

Hon Stephen Dawson MLC Minister for Environment

In accordance with Section 63 of the Financial Management Act 2006, we hereby submit for your information and presentation to Parliament, the Annual Report of the Botanic Gardens and Parks Authority for the financial year ended 30 June 2017.

The Annual Report has been prepared in accordance with the provisions of the *Financial Management Act 2006*.

Richard Simpson

Chair

Botanic Gardens and Parks Authority

Board of Management

24 August 2017

Grant Robinson Deputy Chair

Botanic Gardens and Parks Authority

Board of Management

24 August 2017



"Here, within easy reach of the habitations of men, is a temple not built with hands, an august and splendid open-air cathedral, a sanctuary for all who weary of the grime and noise of the city where they can find rest and refreshment of spirit...and a vantage point from which some of the most magnificent views in the whole world can be obtained."

West Australian, 8 January 1934 (referring to Kings Park)

Chairman's Message

It is with both great pleasure and pride that the Botanic Gardens and Parks Authority (BGPA) maintains its very strong track record for the delivery of high quality and consistent services to the community of Western Australia. With combined visitation of over 6.3 million and a 98-100% visitor satisfaction rating, the many local, interstate and international visitors who enjoy visits to Kings Park and Botanic Garden and Bold Park continue to spread the word and build the well-earned reputation of these very special places.

This Annual Report provides summarised information about activities, outcomes, performance measures and overall results for the 2016-17 reporting year. It was a year of outstanding achievement due to the contributions of employees, volunteers, students and supporters of BGPA. Both



BGPA Board Chair Richard Simpson (right) with Minister for Environment, Stephen Dawson (left) and Pippa Moodie, President of the Friends of Kings Park (middle) receiving the Lotterywest grant for the 2017 Kings Park Festival.

Kings Park and Bold Park are irreplaceable community assets, sustained and enhanced through the collaborative efforts of many people. Kings Park and Botanic Garden is proudly recognised as one of the world's leading botanic gardens.

BGPA's provision of world recognised activities and events has continued over the past year despite the challenging times currently being experienced in the Western Australian economy, with ongoing, exceptional work in all areas of conservation, horticulture, scientific research and visitor services. In addition to the excellence in ongoing delivery of all core services, there were a number of particularly notable achievements:

- Detailed planning was undertaken for the second stage of the Rio Tinto Naturescape Kings Park facility, and works commenced on site in March 2017. The facility was closed during the construction phase, and Kings Park Education delivered its renowned programs to many thousands of students using temporary locations within the Western Australian Botanic Garden. The site will reopen in late 2017 and Kings Park Education programs will again be operating from the refurbished and enhanced Rio Tinto Naturescape Kings Park from the commencement of the 2018 school year.
- BGPA worked closely with the Friends of Kings Park in securing a \$2.4 million grant from
 Lotterywest for construction of a dedicated Kings Park Volunteer Hub to facilitate more
 community involvement through enhanced volunteer facilities, which will be fully operational
 from 2019-20. The Kings Park Guides were named as finalists in the 2017 Western Australian
 Heritage Awards. The dedication of our growing band of volunteers is very much appreciated
 and underscores the community's support of Kings Park and Bold Park.
- Kings Park Science demonstrated its continuing ability to attract funding and contribute to innovative and essential research to protect and conserve our unique biodiversity. The media coverage during National Science Week in August 2016 highlighted the varied collaborative work between Kings Park scientists, universities and industry groups on issues such as restoration ecology with a focus on native grasses and seeds. Kings Park scientists, the University of WA (UWA) and BHP Billiton Iron Ore together published nine peer reviewed research papers in one month alone, highlighting targeted methods for more effective mine site restoration. Kings Park Science's collaborative achievements were further recognised when the 2016 WA Innovator of the Year Emerging Innovation award was presented to Kings Park scientists working with UWA on a seed flamer that improves success rates in large scale restoration.

World Biodiversity Day was celebrated in May 2017 with the launch of the benchmark guide 'Banksia woodlands: A restoration guide for the Swan Coastal Plain', a practical guide based on 22 years of collaborative research between Hanson Construction Materials (formerly Rocla Quarry Products) and Kings Park Science.

- The Bold Park Management Plan 2016 2021 was finalised following an extensive period of review and community consultation, and released in November 2016.
- The full range of the **Kings Park and Botanic Garden Management Plan 2014 2019** strategies continued to be implemented effectively within available resources. Outcomes and performance measures for both Bold Park and Kings Park and Botanic Garden are detailed in this Annual Report and these reflect very positively on BGPA.

Reflective of this ongoing high level of achievement, BGPA enjoys strong support from the community and its sponsors.

The Board of Management is sincerely appreciative of the continued efforts and contributions of the highly competent and dedicated staff team and the many valued and enthusiastic volunteers ably led by Acting CEO Marcelle Broderick and the Executive team.

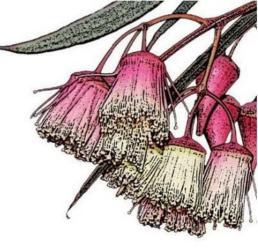
On behalf of the Board, I offer our appreciation to the Minister for Environment, Hon Stephen Dawson MLC, and his team for their support for BGPA and its many local, national and international activities. I sincerely thank my fellow Board members for another tremendous year that delivered internationally recognised services and outcomes in accordance with *the Botanic Gardens and Parks Authority Act 1998*.

Richard Simpson Chairman Botanic Gardens and Parks Authority Board of Management

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Agency Overview



A Visionary

"This tree is planted upon land reserved by the Crown for the use of the inhabitants of Perth, ...and those who come to Perth and to the colony.

This piece of land – a beautiful piece of land I think we may call it – a thousand acres in extent, has been reserved by the Crown for the use and recreation and enjoyment of the people of the city of Perth.

...I hope that we shall be able to make the Perth Park, or whatever name it may hereafter obtain, a very different place from what it is at present. ...and when we have the road from the top of Malcolm Street to the Fremantle Road beyond Crawley, we shall be able to give the citizens of Perth and the people of the colony one of the most beautiful drives in all Australia."

Sir John Forrest, 1895



Extract from the speech of Sir John Forrest, Premier of Western Australia, when planting the first tree in Perth Park (known today as Kings Park and Botanic Garden) on 9 August 1895.

Photo of tree planting ceremony from BGPA Archives.

The Year in Review: Highlights 2016-17

Volunteers

Volunteers working in Bold Park and Kings Park and Botanic Garden combined to contribute over 38,000 hours of dedicated service, which is the equivalent in hours alone of 19 full time staff members. The combined contributions of these amazing volunteers cannot be adequately quantified in hours or money, as their continued involvement in Bold Park and Kings Park and Botanic Garden is invaluable and demonstrates the community's care and support for these treasured places.

Millions of smiles: Visitor Services and Community Engagement and Education

Kings Park welcomed 6.3 million visitors and sustained a very high 98% visitor satisfaction rating and Bold Park achieved 100% visitor satisfaction rating in the past year.

In addition to pristine presentation of parklands and opportunities to get back to nature in the extensive, managed urban bushlands, a myriad of different activities are offered as part of a wide range of high quality visitor services and engagement opportunities. These include signage and interpretation, cleaning and maintenance, provision of information and communications in a range of different mediums including a comprehensive and continually updated website and social media posts.



Millions of smiles: visitors enjoying a family picnic in Kings Park.

Kings Park is a centre of excellence for educational opportunities, including those offered to 29,892 people who participated in Kings Park Education programs, with more than 800 bookings, showing continuing demand for Western Australian curriculum-linked science, environmental and Aboriginal cultural heritage programs.

BGPA also supported ongoing education through the Horticultural Trainee program and the Science Summer Scholarships program; the latter jointly supported by the Friends of Kings Park, in addition to professional development for volunteers, staff and guided walks for visitors with special interests.

Community events, facilities and access

Kings Park continued to be a focus for many important community gatherings and cultural events. An estimated 530,000 people attended the September 2016 'Floral Fantasy' Kings Park Festival, 83,000 people attended concerts and cinema over the summer events season, 30,000 people celebrated Australia Day in Kings Park, 110,000 participated in the Perth International Arts Festival spectacular opening event 'Boorna Waanginy: The Trees Speak', and 40,000 attended the 2017 Anzac Day Dawn Service in the State War Memorial precinct. Many thousands more participated in family events, tours, guided walks, sporting events, environmental education forums, booked functions and memorial services.



Visitors enjoy a concert in the Western Australian Botanic Garden during the summer events season.

Community access was enhanced with the improved traffic flow arrangements on Fraser Avenue, including removal of parking on the avenue and alternative parking available in immediately adjacent areas. Improvements to visitor amenities for safety and access were made with various path works and facilities upgrades throughout Kings Park and Bold Park, including refurbishment of the Acacia and Botanic Garden Toilets.

The BGPA Disability Access and Inclusion Plan was fully reviewed and positive outcomes achieved. A significant improvement was agreed with joint funding from the Disability Services Commission and BGPA for a 'Changing Place' facility, to be built in 2018 as part of a refurbishment of the existing Kulbardi Toilets in Saw Avenue.

Cultural Heritage

Conserving and promoting cultural heritage is a key function and underpins much of the planning and operations of the organisation. Specific highlights of the past year include the development of guidelines for appropriate acknowledgement of Aboriginal custodians of the land at BGPA events, updated Kings Park Education Aboriginal programs for students, and installation of new signage at the front entry to Kings Park acknowledging 'Kaarta Koomba' as one of the Nyoongar names for the land. BGPA implements reviews and updates its comprehensive Reconciliation Action Plan annually.



Aboriginal performers during the Indigenous Veterans Commemoration Service in May 2017.

BGPA consults with the Whadjuk Working Party as required, and proudly provides ongoing support to the

Aboriginal Art Gallery, Indigenous Heritage Tours Kings Park and Aboriginal Production and Promotions in their cultural services offered to visitors. The opening event of the 2017 Perth International Arts Festival showcased the essential and enduring importance of Kings Park's Aboriginal, environmental and contemporary cultural values.

The centrality of Kings Park in Western Australia's cultural heritage is highlighted through the continued Aboriginal connections to the land; the regular dedication services by the Kings Park Honour Avenues Group; the many commemorative services in the State War Memorial and at other memorials in Kings Park; and the wide range of community events such as Anzac Day Dawn Service, Islamic events including Eid al-Fitr and Eid al-Adha, weddings and other gatherings. It is a significant place for ceremony and reflection for Nyoongar and non-Aboriginal people alike.

Conservation and Research

Conservation work is fundamental to the long-term management of Kings Park and Bold Park. During flora survey work in Bold Park, a new endemic species was found in Bold Park, taking the number of native species there to 311. BGPA planted an additional 16,000 plants in Bold Park bushland restoration sites and an additional 14,000 plants in Kings Park bushland restoration areas. BGPA nursery facilities grew 12,600 plants for bushland restoration in both parks and another 15,000 plants were grown for plant displays in the Western Australian Botanic Garden and elsewhere in Kings Park.



The Kings Park Nursery produced thousands of plants for display in the Botanic Gardens and for bushland restoration.

Seed collecting underpins much of this activity, with 37 days of field work producing 121 collections of seed. Arboriculture excellence was achieved through ongoing tree works, both for tree health and visitor safety. A seed trait symposium was hosted by BGPA in October 2016 and in November 2016, the WA Innovator of the Year Emerging Innovation 2016 award was presented jointly to Kings Park scientists and UWA engineers who invented a seed flamer that improves success rates in large-scale restoration.

Kings Park Science research outcomes continued to showcase the importance of collaborative targeted research for Western Australia's biodiversity outcomes. The Kings Park Science team attracted significant recognition and funding from research bodies and industry groups, with funding contributing to innovative research that will help conserve WA's unique biodiversity. National Science Week in August 2016 highlighted the cooperative endeavours of Kings Park scientists, universities and industry groups on issues such as restoration ecology, genetics and seed biology. Researchers from the Restoration Seedbank Initiative including Kings Park scientists, UWA and BHP Billiton Iron Ore, published nine research papers in the peer reviewed Restoration Ecology journal in August 2016, with the intended outcome being more effective mine site restoration. World Biodiversity Day was celebrated in May 2017 with the launch of 'Banksia woodlands: A restoration guide for the Swan Coastal Plain', a practical guide based on more than two decades of collaborative research involving Kings Park Science and Hanson Construction Materials. High numbers of professional presentations and peer reviewed publications by Kings Park Science staff and associates reflect the high quality, innovative research consistently undertaken.

Renowned conservationist Dr Jane Goodall visited Kings Park in June 2017 and was impressed with the range of conservation and educational activities within BGPA. She planted a rare and endangered tree within the Saw Avenue area, and was very complimentary about Kings Park's achievements in the science and conservation area.

Recognition of the Western Australian Botanic Garden

The 2015 50th anniversary of the Western Australian Botanic Garden was continued into 2016-17, with the September 2016 installation of the entry artwork 'Symbiotica' by artists Paul Johnson and Gail Mason. This was further enhanced with the final elements to mark the 50th anniversary, with the words "Western Australian Botanic Garden" installed in February 2017 in individual letters at the main entry point. These enhancements allow visitors a visible point of reference for their visit to the Botanic Garden precinct within Kings Park and provide further recognition of the Botanic Garden and its continuing contributions as an essential cultural and scientific asset for the state.



The stunning new entry artwork for the Western Australian Botanic Garden.

Planning

Regular planning and review are part of the management model underpinning the success of Kings Park and Botanic Garden and Bold Park, with five-year management plans guiding developments and service delivery.

The Bold Park Management Plan 2016 – 2021 was finalised following an extensive period of review and community consultation and released in November 2016. Implementation of the agreed strategies within Bold Park is ongoing within available resources.

The full range of the Kings Park and Botanic Garden Management Plan 2014 – 2019 strategies continued to be effectively and efficiently implemented within available resources. An accidental fire within the Kings Park Depot in February 2017 destroyed three work sheds, and planning commenced to replace these essential facilities.

Volunteers were directly involved in the development of the concept design for the Friends of Kings Park and Lotterywest funded Volunteer Hub and this concept design was approved by the Board in June 2017. Detailed design will be undertaken in late 2017, and the facility will be built in 2018.

Consultation with key stakeholders and review of the past five years of operations laid the foundation for the detailed planning and design of stage two of Rio Tinto Naturescape Kings Park, the highly successful environmental education facility designed to connect children with nature. Construction commenced in March 2017 and the facility will reopen to the community in late 2017.

I take this opportunity to sincerely thank the Minister, Board, staff, volunteers, sponsors and supporters of BGPA who collectively contribute to the delivery of the many and varied outcomes delivered in Bold Park, Kings Park and Botanic Garden, and in contributing to the protection of biodiversity in Western Australia.

I commend this Annual Report to you.

Marcelle Broderick
A/Chief Executive Officer

"Kings Park is the most beautiful, interesting, surprise-around-every-corner park I have ever seen. I would live there if they would let me."

Bill Bryson, travel writer.

The Botanic Gardens and Parks Authority

BGPA is responsible for the care, control and management of Bold Park and Kings Park, including the Western Australian Botanic Garden.

The functions that underpin the management of these parks are prescribed in the *Botanic Gardens* and *Parks Authority Act 1998* and include the provision of recreational and tourism services and facilities; conservation of natural landscapes and cultural heritage; plant management and display; biodiversity management; research and educational programs.

Vision, Mission and Values

Bold Park and Kings Park and Botanic Garden are very special places highly valued by the community. BGPA has a vital role in ensuring the management of these lands and strives to ensure the conservation of native biological diversity and cultural heritage icons of Bold Park and Kings Park and Botanic Garden, while providing for the diverse range of visitor interests.

Vision

To create and provide world-recognised botanic gardens and parks and to inspire the conservation of biological diversity.

Mission

To conserve and enhance Kings Park and Botanic Garden and Bold Park with the community, and to conserve biological diversity generally.

Values

• Working with people, visitors, lands and our diverse heritage with respect. Respect Respecting Aboriginal cultural heritage. Providing a safe and equitable work and visitor environment. Building and retaining an effective community of staff, volunteers, supporters and stakeholders. Inclusiveness Welcoming and facilitating effective communication. Fostering existing strategic alliances for mutual benefit. Excellence • Achieving excellence through continuous innovation and improvement. Achieving balance between business activities, cultural and natural heritage values. Recognising the importance of biological diversity and its conservation. Sustainability Implementing sound responsible environmental practices. Achieving value for money through sound management and seeking funding improvements. Ensuring transparent and responsible governance. Ensuring sound decision making for the care, control and management of the **Accountability** designated lands in alignment with endorsed Management Plans and these values.

Operational Structure

Enabling and Administered Legislation

BGPA is constituted under the *Botanic Gardens and Parks Authority Act 1998* for the care, control and management of Kings Park and Botanic Garden (Reserve A1720 except Perth Lots 64 and 65) and Bold Park (Reserve A45409).

BGPA was established under Part 2, Section 4 of the *Botanic Gardens and Parks Authority Act* 1998, and is responsible for administering the *Botanic Gardens and Parks Regulations* 1999, created under the provisions of Part 8 of the Act.

A review of the Regulations was undertaken in conjunction with the Parliamentary Counsel's Office and modified to ensure more contemporary wording, removal of outdated information and updated penalties for breaches. The revised Regulations were published in the WA Government Gazette on 9 September 2016, and took effect from 10 September 2016.

Responsible Minister

The statutory responsibility for BGPA is vested with the Minister for Environment. During the year Hon Albert Jacob MLA served as the Minister for Environment; Heritage from July 2016 to March 2017. Hon Stephen Dawson MLC is the current Minister for Environment; Disability Services, appointed on 17 March 2017.

Board of Management

The Board of Management is the governing body of BGPA and comprises up to eight members appointed by the Minister for Environment. The term of one member, Mr Hamish Jolly, expired in May 2017 and Ms Jacqui Freeman will not seek to renew her term when it expires early in July 2017. During May and June 2017, expressions of interest were sought for new members. Applicants will be selected and appointed by the Minister for Environment.

The Board meets formally on a bi-monthly basis to consider issues of a strategic and policy nature and met on six occasions this period. During the year the Board comprised the following members:

Mr Richard Simpson Chairman

Attended 6 of 6 Meetings

Mr Simpson was appointed to the Board as the Chairman in 2002 and is also Chair of the Audit Committee. Mr Simpson has significant commercial and management experience in the financial services sector and almost 30 years experience in providing investment banking advice to a range of corporate and government clients in Australia and internationally. He has worked in investment banks in London, Sydney, Melbourne and Perth. Mr Simpson was Chairman and Managing Director of Hartleys Limited from 2003 to 2008 and Head of Corporate Finance from 2002 to 2009. He remains a Director of Hartleys Limited. Mr Simpson has also been appointed as an independent member of the State Emergency Management Committee. Mr Simpson was formally reappointed to the Board in December 2014 until 31 December 2017.

Mr Grant Robinson Deputy Chairman

Attended 4 of 6 Meetings

Mr Robinson has been a Board member since 2006 and is a partner at KPMG, with a focus on audit and assurance services. He has experience in a broad range of industry sectors, both listed and non-listed entities including not-for-profit and Government agencies. Mr Robinson is a Board member of the Perth International Arts Festival. Mr Robinson is also member of the Audit Committee and was appointed Deputy Chairman of the Board in January 2013. In 2015, Mr Robinson was reappointed to the Board for a three-year term until 5 July 2018.

Mr Tom Baddeley

Attended 5 of 6 Meetings

Mr Baddeley was appointed to the Board in 2010 and is Manager, Government and Community Relations, WA and NT, at Australian energy company, Santos. He was previously Director WA of the Australian Petroleum Production and Exploration Association. Mr Baddeley was previously WA Director of the Committee for Economic Development of Australia and was a solicitor before moving into journalism. Mr Baddeley was reappointed to the Board in 2015 for a three-year term until 5 May 2018.

Mr Tony Brooks

Attended 5 of 6 Meetings

Mr Brooks has significant senior management experience in both the Property and Advertising sectors in Australia and around the world, where, over the past 25 years, he has been based in cities such as New York, Boston, Auckland, Melbourne and now Perth. Tony is Founder and Chief Executive Officer of Perth based commercial property firm - Altegra Property Group. Mr Brooks has also recently been appointed to the Board at Parkerville Children and Youth Care (Inc.) and is a member of the Property Council of Australia. Mr Brooks was appointed to the Board in October 2014 for a three-year term to expire 5 October 2017.

Ms Jacqui Freeman

Attended 6 of 6 Meetings

Ms Freeman (Purvis) has extensive experience in environmental consultancy and has worked and volunteered within the community in bushcare and environmental education for more than 20 years. She is currently managing the parks and reserves teams within the City of Albany and also assists with promoting bushcare within the Albany community. Ms Freeman was reappointed in 2015 for a further two-year term which will end on 5 July 2017.

Ms Nyomi Horgan

Attended 6 of 6 Meetings

Ms Horgan holds a Bachelor of Commerce from Curtin University of Technology majoring in Marketing and Management. She is currently Strategy Manager at Bankwest and has an extensive background in marketing, communications and management positions. As a former International Rose of Tralee, she maintains a connection to her Irish heritage by undertaking various advocacy roles for the Irish Consulate in Perth, and volunteering for the International Rose of Tralee Festival as well as the local Perth Rose Centre. Ms Horgan was appointed for a three-year term from 1 January 2016 to 31 December 2018.

Mr Hamish Jolly Attended 4 of 5 Meeting:

Mr Jolly was appointed to the Board in 2010. He is a Chartered Accountant and Member of the Australian Institute of Company Directors with a diverse career in commerce, finance, technology innovation and environment. Mr Jolly is Research Director for the Australian Institute of Marine Science North West Australia Program, he is a Director of Dunbar Harper Pty Ltd and Biogass Renewables Pty Ltd and has more than 25 years experience in executive leadership of diverse corporate, banking, international development and consulting businesses. Mr Jolly also assisted BGPA as a member of the Audit Committee. Mr Jolly was reappointed to the Board in 2015, for a two-year term which ended on 5 May 2017.

Mr Brian Piesse Attended 3 of 6 Meetings

Mr Piesse is a graduate in agriculture from the Muresk Institute with more than 20 years global executive management, marketing and business development experience in agriculture and related industries. He is currently the Managing Director and owner of a private company and holds positions on advisory boards, including the South West Development Commission, Edith Cowan University Council, Western Dairy and Deputy Chair of the South West Catchments Council. Mr Piesse was reappointed for a two-year term from 1 January 2016 to 31 December 2017

Board remuneration is reported in the Government Policy Requirements section of this report.

Audit Committee

The Audit Committee met quarterly to assist BGPA in its responsibilities in financial management, compliance and corporate governance. The Audit Committee is comprised of representatives of the Board of Management, BGPA's internal auditors, 2020 Global, and the Office of the Auditor General. BGPA works with the Audit Committee to ensure compliance and 'best practice' in all areas including financial management, human resources, corporate governance and risk management, and actively aims for full implementation of all agreed actions in relation to audit findings.

Senior Officers

Mark Webb

BSc. Agric (Hons), Post Grad. Cert. Cross-Sector Partnerships Chief Executive Officer

Mark Webb was appointed Chief Executive Officer of the Botanic Gardens and Parks Authority on 23 November 2004. Mr Webb joined BGPA in October 1998 as Director, Living Collections. He has extensive experience in horticultural research, public and private sector management and business. He is a member of the International Society for Horticultural Science and sits on a number of local, national and international committees and boards. In March 2016, Mr Webb was appointed to the role of Acting Director General at the Department of Agriculture and Food for 12 months. Early 2017 this acting role was extended to 30 June 2017. Ms Marcelle Broderick was appointed Acting Chief Executive Officer during this time.

Marcelle Broderick

BSw, MSW (Policy and Administration), Grad. Cert. Public Sector Management Acting Chief Executive Officer and Director, Business and Visitor Services

Marcelle Broderick has worked with BGPA since 1998 and is responsible for the visitor services functions, volunteers, education, events, online and corporate communications and Aspects of Kings Park gallery shop. The Directorate led by Ms Broderick is also responsible for all internal business and corporate services, governance, planning and reporting, and external business development, including partnerships, agreements, leases and licences. Prior to 1998, Ms Broderick worked in a number of private and public sector organisations with varied responsibilities including corporate services, social research, community development, employee support and organisational change.

Lesley Hammersley B (App. Sci) Env. Hort. **Director, Horticulture and Conservation**

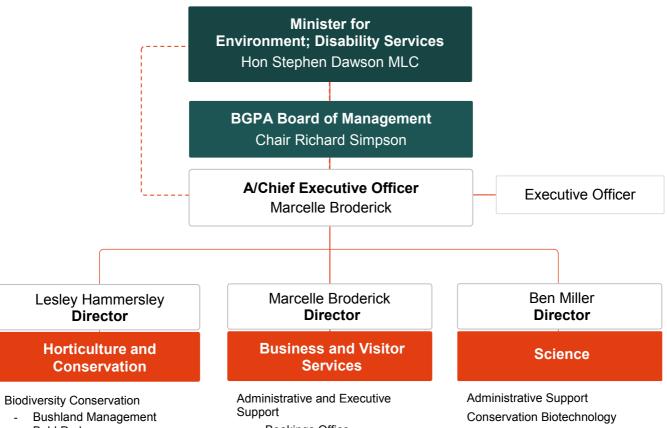
Lesley Hammersley joined BGPA in December 2000 as Manager Biodiversity Conservation and was formally appointed as Director Horticulture and Conservation in October 2010, after fulfilling the role in an acting capacity for the previous 14 months. Ms Hammersley is responsible for all onground activities in Kings Park and Botanic Garden and Bold Park including bushland conservation and management, all horticultural activities, cultural heritage, asset and infrastructure management and the management of capital works projects and other developments. Prior to joining BGPA, Ms Hammersley had many years experience managing a botanic garden and involvement with plant nurseries and landscape development in private enterprise.

Dr Ben Miller PhD Director, Science

Ben Miller was appointed as the Director, Science in July 2015. He obtained his PhD in 2004 from the University of Melbourne and joined BGPA in 2007 as a research scientist investigating the conservation and restoration needs of rare plant species. He subsequently assisted in developing Kings Park's ecosystem restoration program, set up the fire ecology program and advised on conservation and restoration strategy in the Middle East. His expertise is in the areas of restoration, plant and community ecology, specifically as they inform management of ecosystems, such as through fire and weed management.

Organisation Structure

(as at 30 June 2017)



- **Bold Park**
- Visitor Services Bold Park
- **Bushland Management** Kings Park

Horticulture

- Arboriculture
- Grounds and Infrastructure
- Horticultural Displays
- Herbarium
- Nursery
- Western Australian Seed **Technology Centre**

Plant Development

Technical Services

- Administration and Technical Support
- **Contracts and Assets**
- Horticultural Development
- Information Services

- **Bookings Office**
- Reception
- **Records Management**

Aspects of Kings Park

Finance

Human Resources

Online Communications

Visitor Services and Community Engagement

- Communications
- **Events**
- Kings Park Education
- Park Management Team
- Volunteers

Conservation Genetics

Fire Ecology

Restoration Ecology and Ecophysiology

Seed Science and

Restoration Seedbanking

Threatened Species and Orchid Conservation

Performance Management Framework

Outcome-based Management Framework

BGPA has aligned its activities and outcomes with the relevant goal and strategic outcomes of the State Government. This is achieved through the delivery of key services with desired outcomes for the benefit of BGPA and Western Australians in general.

The BGPA Strategic Plan 2014-2019 is a comprehensive five-year plan which underlies all operational planning to ensure that BGPA is working towards the desired outcomes which support the functions as described by *the Botanic Gardens and Parks Authority Act 1998* and the State Government's goals.

These are divided into the two key services which form the foundation of BGPA's 2016-17 core business. Service delivery is measured through BGPA's Key Performance Indicators.



Changes to Outcome-based Management Framework

As a result of the Machinery of Government amalgamation process formally commencing from 1 July 2017, changes are anticipated to BGPA's Outcome-based Management Framework from 2017-18 onwards, including revised services and indicators as part of combined Department of Biodiversity, Conservation and Attractions Outcome-based Management Framework.

Shared Responsibility with Other Agencies

BGPA did not formally share any responsibilities with other agencies in 2016-17.

Agency Performance

Evening, Kings Park

Talking while running,
joggers drop fragments of plot;
a husband, job, daughter,
the struggle, the boss, the lover;
"you my best friends,
huffing these steeping paths
sweating for me."

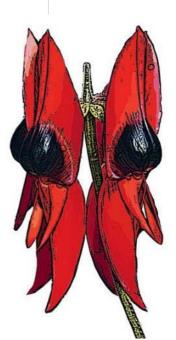
And the cyclists, talking while riding; about races won and lost and the various moving parts of a bicycle while they spin across the city skyline.

Cockatoos and parrots raze the air cracking open the hearts of flowers; the river below so huge and tremulous, clouds seem to break inside it.

Through darkening tuart trees
I hear the spin of tyres,
cutting up the park
mapping it with light.

Nandi Chinna Kings Park Writer-in-Residence 2016

This is one of a series of 'Poems in the Park' written or selected by 2016 Kings Park writer-in-residence Nandi Chinna. The poems formed a feature exhibition of the 2016 Kings Park Festival.



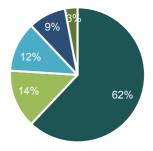
Performance Summary

Summary of Financial Performance

Income

BGPA received 62% of operating income from the State Government by way of consolidated fund appropriation. BGPA generated the balance of revenue (38%) through own source activities.

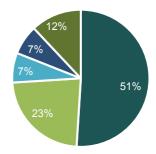
Income source	
State Government	62%
Fee-for-service and sponsorships	14%
Aspects of Kings Park gallery shop	12%
User fees and charges	9%
Other	3%



Expenditure

BGPA's expenditure is summarised into broad categories:

Expenditure	
Employee benefits	51%
Supplies and services	23%
Depreciation and ammortisation	7%
Cost of sales	7%
Other expenses	12%



Financial Targets: Actual performance compared to budget targets

The total and net cost of services was lower than forecast primarily due to less than expected supplies and services expense. This also contributed to the net increase in cash held. Total equity was less than expected due a change in the revaluation surplus relating to buildings. The approved salary level was lower than the target for this year primarily due to unfilled vacancies. Further explanations are contained in note 37 'Explanatory Statement' to the financial statements.

Financial Targets: Actual Performance Compared to Budget Targets

	2016-17 Target (\$)	2016-17 Actual (\$)	Status
Total cost of services	22,793,000	22,650,206	\checkmark
Net cost of services	14,428,000	13,813,189	✓
Total equity	64,320,000	63,026,402	×
Net increase/(decrease) in cash held	(380,000)	(139,092)	✓
Approved salary	10,911,000	10,417,000	✓

	2016-17 Agreed Limit \$	2016-17 Actual \$	Status
Agreed working cash limit (at Budget)	1,191,000	1,191,000	_
Agreed working cash limit (at Actual)	1,191,000	1,191,000	_
Legend: Target met - Target exceede	d ✓ Target not met	x	

For detailed information on BGPA's financial performance, refer to the <u>Financial Statements</u> section of this report.

Key Performance Indicators

Actual performance compared to budget targets

BGPA measures the success of its service delivery through effectiveness and efficiency indicators, in accordance with annual targets. A full explanation of the results of BGPAs performance including analysis against previous year's results is detailed in the Key Performance Indicators section of this report.

Outcome 1: Awareness and appreciation of recreation and tourist resources and cultural heritage for visitors' enjoyment.

	2016-17 Target	2016-17 Actual	Status
The level of visitor satisfaction with Kings Park and Botanic Garden facilities and the Western Australian Botanic Garden.	99%	98%	x
The level of visitor satisfaction with Bold Park and facilities.	98%	100%	✓
The percentage change in the number of cultural events held at Kings Park and Botanic Garden compared to previous years.	(2)%	3.9%	√
The percentage change in the number attending customer awareness and education forums held at Kings Park and Botanic Garden compared to previous years.	(25)%	(16.3)%	√

Service 1: Customer Service and Cultural Heritage

	2016-17 Target	2016-17 Actual	Status
Average cost per visitor to Kings Park and Botanic Garden.	\$1.81	\$1.78	√
Average cost per attendee at cultural events held in Kings Park and Botanic Garden.	\$0.18	\$0.15	✓
Average cost per attendee at education forums held at Kings Park and Botanic Garden.	\$13.94	\$7.66	✓
Response times for public information requests (within 28 days).	95%	100%	✓
Percentage change in number of visitors to Reabold Hill compared to previous years.	1%	16.7%	✓

Legend: Target met − Target exceeded ✓ Target not met ×

Outcome 2: Conservation and enhancement of Western Australian bushland and other flora.

	2016-17 Target	2016-17 Actual	Status
Percentage of Declared Rare Flora (DRF) species in living collections in Kings Park and Botanic Garden, compared to the known number of DRF species in Western Australia.	59%	58%	×
Percentage of accessions in botanical displays in Kings Park and Botanic Garden.	35%	32%	×
Percentage of accessions lost in Kings Park and Botanic Garden.	4%	6%	×
The presence of 15 nominated perennially evident native plant species, which are the most vulnerable taxa within each Kings Park and Bold Park bushland.	100%	100%	_
Number of common native plant species in Bold Park in areas with high levels of management compared to areas with low levels of management.	1.4	1.4	_
Weed cover in high intensity management areas compared to low intensity management areas in Bold Park.	0.4	0.5	×
Number of representative native plant taxa in Kings Park bushland.	325	325	_
Number of representative native plant taxa in Bold Park bushland.	310	311	√

Service 2: Biodiversity Conservation and Scientific Research

	2016-17 Target	2016-17 Actual	Status
Average cost of representative native plant taxa in Kings Park bushland.	\$3,939	\$4,059	×
Average cost of representative native plant taxa in Bold Park bushland.	\$4,720	\$5,159	×
Average cost per research grant project administered.	\$14,752	\$13,205	\checkmark
Percentage change in number of refereed scientific publications published per CF position compared to previous years.	0%	(31%)	×

Legend: Target met − Target exceeded ✓ Target not met ×

Report on Operations

BGPA's report on operations provides a snapshot of the many activities and achievements during this year.

Planning and Development

Bold Park Management Plan 2016-2021

The <u>Bold Park Management Plan 2016 – 2021</u> was formally endorsed by the Minister for Environment on 9 September 2016 following a two-month public consultation period and a minor review of the content to reflect public submissions.

Proposed Banksia Farm Land Reservation Transfer - Bold Park

A Supreme Court Order in September 2012 ruled that the state of Western Australia would vest Lot 87 land in Mount Claremont known as Banksia Farm with BGPA to be managed as part of the Bold Park A Class Reserve 45409. Lot 87 comprises 2.85 hectares of degraded remnant bushland, located at the corner of Whitney Crescent and Rochdale Road in Mt Claremont. The Trust Deed for this land requires that it be retained in perpetuity for public recreation. The land transfer was progressed by the Department of Lands, including preparation of a Deposited Plan and discussions around an easement being included over a Water Corporation sewer line. This requires resolution prior to the final land transfer.

Kings Park and Botanic Garden Management Plan 2014-2019

Good progress was made in many of the 42 priority strategies listed in the <u>Kings Park and Botanic Garden Management Plan 2014 – 2019</u>, now three years since its release in 2014. Of the 18 strategies that are not considered as ongoing activities, five have been completed, three have not commenced and one is under external control. The remainder have been progressed with information provided elsewhere on their status.

Rio Tinto Naturescape Kings Park – Stage Two

Planning for the <u>second stage of development of Rio Tinto Naturescape Kings Park</u>, made possible through the generous sponsorship support of Rio Tinto, was completed in late 2016 with the final design endorsed and the release of the construction tender in December 2016. The construction contract was awarded to MG Group in February 2017, at which time the site was closed to the public and education programs relocated elsewhere in Kings Park and Botanic Garden. Works on site have progressed according to schedule, with construction expected to be completed by early October 2017. Following this, BGPA will implement planting and other soft landscaping, install new signs as required and prepare the site for opening in late 2017.

Kings Park Volunteer Hub

The Friends of Kings Park secured \$2.4 million through a Lotterywest grant in July 2016 to construct new facilities for hands-on and other volunteers engaged in activities in Kings Park. This is an approved strategy in the Kings Park and Botanic Garden Management Plan 2014-2019 and has the working title of the Kings Park Volunteer Hub.

A project control group was formed to oversee the project development, and includes representatives from the Friends of Kings Park and BGPA. A Bushfire Management Plan was finalised for the development given its location within a designated bushfire prone area, and a concept design was endorsed by the Board in June 2017. Consultation with the local Aboriginal group, the Whadjuk Working Party, resulted in notification in June 2017 of their formal support for the project to proceed.

Western Australian Botanic Garden Entry



The new sculpture 'Symbiotica' was inspired by the relationship of plants and insects.

A spectacular new sculpture, 'Symbiotica', was installed in the Western Australian Botanic Garden in July 2016, making an eye-catching statement and framing the main entry to this living museum of plants. Symbiotica was inspired by the relationships between plants and insects, and was created by Queensland artists Artventure. Fabricated from brushed aluminium with highlights of copper and dichroic glass, the sculpture's large arching panels incorporate laser cut patterns that represent the seeds of 11 endemic WA plant species, complementing the surrounding plantings of the weeping Silver Princess (*Eucalyptus caesia*) trees.

A further addition was the installation of the Western Australian Botanic Garden name in February 2017. Formed in brushed aluminium letters, 600mm high and arranged in a semi-circle on a low granite plinth, the name completes the garden entrance and provides a perfect setting for visitor photographs. This grand entry statement and naming reflects the significance of the state's Botanic Garden to the community as a cultural, scientific and educational resource, clearly designating the garden's primary entry point more than 50 years since its official opening.

Proposed Link Bridge Perth Children's Hospital to Kings Park

The Princess Margaret Hospital Foundation (now named Perth Children's Hospital Foundation) initiated this project several years ago to provide safe access for future hospital patients and their families to visit Kings Park as a relief from the hospital environment. It is an endorsed strategy in the Kings Park and Botanic Garden Management Plan 2014 – 2019 and the bridge design has been endorsed by the Board subject to resolution of associated issues and link path upgrades. The tendered works did not proceed as intended during 2016-2017 due to budget constraints and a desire to focus on the hospital completion as the first priority.

Stakeholder Liaison

Kings Park and Botanic Garden was officially included within the Local Government boundary of the City of Perth from 1 July 2016, with the introduction of the *City of Perth Act 2016*. There was an increase in the initiation of consultation from representatives from the City of Perth during the year on a range of planning matters that related to the boundary interface between the two organisations. With Kings Park and Botanic Garden located within a local government boundary, the application process for BGPA planning and building approvals changed, with a requirement to lodge such applications with the City of Perth.

BGPA engaged with representatives from Main Roads WA to discuss the development of a practical technical manual to document best practice in planning and establishing native flora landscapes in Perth. In addition, extensive advice was provided on plant selection, preparation and maintenance regimes for ten road development sites in the metropolitan area.

Consultation also occurred with a range of external organisations seeking advice on the use and management of WA flora including with the Friends of Geraldton Gardens, who aim to establish a native Botanic Garden in Geraldton and the Ngarluma Yindjibarndi Foundation regarding a concept plan for a Botanic Garden in Roebourne.

Staff at Bold Park engaged in consultation with stakeholders including surrounding land managers on boundary management issues, fire management and local plant selection for landscaping and fire preparedness. Consultation also occurred on the development of regional interpretive walk trails involving Bold Park and with the Department of Water regarding a groundwater modelling project involving Bold Park and Kings Park.

Consultation with the Department of Education (DoE) regarding a proposed new secondary college to be built on the site of the former City Beach High School continued, and included an intensive flora survey by Bold Park staff to inform the location of a proposed new access road. In March 2017, the DoE advised the project was on hold following consideration by the newly elected State Government.

WA flora to feature in the Eden Project



Two BGPA staff members travelled to the United Kingdom in March 2017 to assist with the establishment of a permanent Western Australian flora display in the Mediterranean Biome at the Eden Project in Cornwall. Gardens displayed plants from the Kwongan and Jarrah Forest vegetation communities as well as a colourful display bed, and were enhanced with Aboriginal artwork by Nyoongar artist Richard Walley. The new garden was officially opened by the Australian High Commissioner to the UK in May 2017, and Kings Park and Botanic Garden is acknowledged on interpretive signs accompanying the garden displays.

Sponsorships and Partnerships

BGPA benefits from a number of significant sponsorships and partnerships and including the generous ongoing support of the Friends of Kings Park. Sponsorships and industry partnerships, in place with BGPA's science and plant breeding program, provide tangible benefits for visitors, the community, and the environment and contribute to the ongoing management of Kings Park and Botanic Garden and Bold Park.

BHP Billiton

BHP Billiton currently has a \$5 million project with Kings Park Science (2013-2017) to investigate the science of creating effective restoration in the Pilbara region. The Restoration Seedbank project will run for five years with three senior scientists and research associates working on key aspects of seed banking, native seed farming, effective broadcast seeding technologies and approaches to optimise native soils for regeneration of bushland habitats. This program has developed with a new funding agreement supported by BHP, together with Rio Tinto and the Federal government, to explore technologies for delivery of seed to restoration sites, commencing mid-2017, and employing an additional research scientist over four years.

The Friends of Kings Park and Lotterywest

The Friends of Kings Park continue to provide a vital source of funding and support for special projects in Kings Park and Botanic Garden. In the 2016-

> 17 year, it was announced that the Friends and Lotterywest would fund a \$2.4 million dedicated volunteer facility in the park. A further \$100,000 was provided by the Friends of Kings Park and Lotterywest for the 2016 Kings Park Festival. On 7 June 2017, it was announced that the Friends and Lotterywest would again

contribute \$100,000 to the 2017 Kings Park Festival.

In addition, the Friends have funded BGPA's Summer Scholarship program (\$10,000) for aspiring science students and the development of a new toddler's program (\$30,000) for pre-school aged children in Rio Tinto Naturescape Kings Park. The Friends have generously committed to fund the Summer Scholarships again in 2017-18 and an initiative to digitise a number of historical materials

as part of the 'Kings Park at Heart' social history project.

The Friends of Kinas Park have contributed more than \$2.6 million to Kings Park projects and events over the past vear.

Rio Tinto

The \$3 million second stage development of Rio Tinto Naturescape Kings Park is fully funded by naming partner Rio Tinto, as part of the 12-year partnership which began in 2008. Over the life of this partnership agreement, Rio Tinto will commit approximately \$9 million in capital and operational funding.

Stage two designs were publicly announced in January 2017 and construction is on track for completion in late 2017. New elements and enhanced amenities will keep Rio Tinto Naturescape Kings Park at the forefront of the nature play and hands-on learning movement in WA. More information about the stage two development is in the Planning and Development section of this report.

Synergy

After comprehensive consideration and discussion between Synergy and BGPA, it was mutually agreed that the naming rights arrangement would conclude on 30 June 2017 after a 15-year sponsorship. BGPA greatly appreciates Synergy's (and previously Western Power's) consistent support over this extended period. During the life of the sponsorship, there were an estimated 18 million visits to Synergy Parkland, making it one of the most popular community spaces in Perth.

A review will be undertaken in 2017-18 to consider the future resourcing of this important precinct. In the interim, this precinct will be renamed 'May Drive Parkland' from 1 July 2017.

Variety WA

Successful negotiations between BGPA and Variety WA – the Children's Charity mean Variety will continue its valuable support of Variety Place and Variety Pavilion for a third five-year term from late 2017. Variety WA has supported significant development of this area within the Saw Avenue Picnic and Play Area over the past decade, delivering a truly beautiful and accessible community space to the people of Western Australia.

Visitor Services and Community Engagement

Bold Park Visitor Snapshot



250,000 visitors to Bold Park

The number of vehicles to Reabold Hill increased by

16%





71% of visitors came to bushwalk

92% of visitors were regular return visitors

First time visitors 8%

Less than monthly

Once per month 18%

20%

Frequency of visitation

30%

40%

31% of visitors walked their dog



321 visitors took a guided walk

Once per week or more

64%

10%



76 group bookings were held in the Tamala room and the bushland.

50%

60%

70%

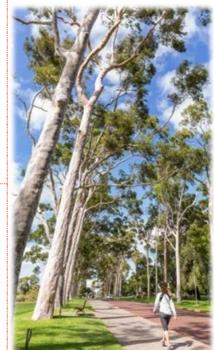


Kings Park Visitor Snapshot

6.3 million visitors to Kings Park and Botanic Garden

The number of visitors increased by

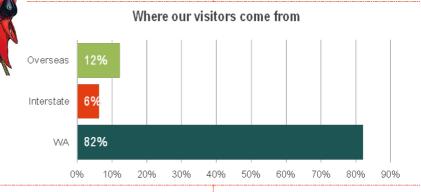
12.5%



98% Visitor Satisfaction

51% of visitors said they most enjoyed the views, the beauty of the park and the gardens

82% of visitors came from Western Australia





77% of visitors arrived by car

58% of visitors attended a family outing

21% were visiting with a friend relative or colleague

On average, visitors stayed for

2 hours

530,000 visitors to the Kings Park Festival
110,000 visitors to the PIAF opening event
40,000 visitors to the Anzac Day Dawn Service
62,000 visitors to weddings and social functions
84,000 visitors to concerts, cinema and theatre
30,000 attended education programs



8,870 visitors took a guided walk

Visitation

Bold Park

Bold Park visitation is estimated at 250,000 over the past year. Bold Park is accessible from three main car parking areas and from numerous pedestrian access points that have variable use by the local community.

The number of vehicles accessing Reabold Hill via Scenic Drive increased by 16% in 2016-17. Pedestrian access to Reabold Hill via the boardwalk increased slightly with almost 51,000 visitors recorded. Pedestrian access to Zamia Trail from the Reabold Hill Carpark had almost 66,000 visitors. These increases are generally consistent with the recorded increase in vehicle access to Reabold Hill.

Kings Park and Botanic Garden

Kings Park and Botanic Garden recorded 6.3 million visitors 2016-17, an increase of 12.5% compared with the previous year. Visitor numbers are calculated on pedestrian visitation together with car count data collated at the park's entry points.

The world-wide release of the location-based augmented reality game 'Pokémon Go' on 6 July 2016, resulted in large concentrated numbers of visitors to the main visitor precincts of Kings Park particularly during July to September 2016.

The opening event of the 2017 Perth International Arts Festival was held in Kings Park and Botanic Garden from 10-12 February 2017. <u>Boorna Waanginy: The Trees Speak</u> was a stunning display of light and sound that attracted an estimated 110,000 visitors over the three nights.

The mostly fine weather of the spring and summer months mean that these are the most highly visited times in Kings Park. School holidays and traditionally busy days including New Year's Day, Valentine's Day, Mother's Day, Father's Day, Eid-al-Fitr and Eid-al-Adha, Christmas and Boxing Days also remain very popular for visits to the park.

The Kings Park Festival in September attracted an estimated 530,000 visitors. Almost 30,000 students, educators and carers attended the wide range of programs run by the Kings Park Education team. The Summer Events program continued to be well attended with more than 83,000 attendees to the concert, cinema and children's theatre events. Australia Day attracted approximately 30,000 and Anzac Day attracted about 40,000 visitors.

A number of major community sporting events are held in, or pass through, Kings Park and Botanic Garden, attracting more than 10,000 participants and spectators. More than 60,000 visitors attended weddings, social, corporate, community and cultural functions and events held throughout the year.

Further details can be found in the <u>Events</u>, <u>Bookings</u> and <u>Kings Park Education</u> sections of this report.

Visitor Liaison

BGPA employees consistently respond to many daily enquiries from the general community on a diverse range of subjects including plant identification and plant information, comments and questions about activities, payments and a host of general visitor enquiries. BGPA reception service provides daily visitor/customer liaison in person, over the phone or by email on a range of services such as events, functions and general enquiries, complaints and communications. The Western Australian Ecology Centre in Bold Park remained open by appointment only.

BGPA's Park Management Officers (PMOs) in Kings Park and Botanic Garden and the Community Liaison Officer (CLO) in Bold Park play an essential role in all visitor liaison, providing front-line customer service to visitors. The PMOs maintain daily contact with the Kings Park Volunteer Guides through the Visitor Information Centre and regular interactions with all lease operators. Part of both the PMO and CLO role is to ensure visitors adhere to the *Botanic Gardens and Parks Regulations 1999*, ensuring the safety and enjoyment of facilities for all visitors and the protection of Bold Park's and Kings Park's built and natural assets.

The Visitor Information Centre in Kings Park and Botanic Garden is open seven days a week (except Christmas Day). It is run by the Kings Park Volunteer Guides, and provides BGPA maps and brochures to visitors. The Guides share information on the services, botany and history of Kings Park and Botanic Garden through the Centre and the free daily guided walks. The Kings Park Guides directly assisted 52,894 visitors through the Visitor Information Centre, and a further 8,870 through their guided walks.

BGPA continued to provide support for the guided walks program conducted by volunteers from the Friends of Bold Park, with promotional articles provided to the local paper and assistance with further education activities through the year. Staff also led walks for booked groups to promote awareness and appreciation of biodiversity and its conservation, cultural heritage and best practice bushland management and restoration.

Visitor Feedback

Visitor feedback plays an important role in general management and planning for both parks. Visitors and the community are able to provide feedback through a variety of mechanisms including direct communications, complaints and feedback, visitor surveys and through open public submissions periods, such as for the Draft Bold Park Management Plan 2016-2021. Annual visitor surveys are conducted in both Bold Park and Kings Park and Botanic Garden to assess visitor satisfaction with services, facilities and the overall visitor experience.

Bold Park Visitor Survey

A survey of visitors to Bold Park was conducted to record their level of satisfaction with various aspects of park management, understand the demographics of visitors and to seek feedback on any desired improvements. Overall satisfaction was recorded at 100%.

Bushland experience and park cleanliness were the highest ranked individual elements, followed closely by the condition of trails. Fifteen per cent of visitors indicted they would like to see improved signage in the park, from including distances marked on directional signs, to improved wayfinding and additional interpretation of plants and the bushland generally. Most of those surveyed were regular return visitors with 64% visiting once per week or more. Half of all visitors were aged 50 years or over and 66% were female.

Kings Park and Botanic Garden Visitor Survey

A survey of visitors to Kings Park and Botanic Garden shows that respondents' impressions were very positive with 98% stating that they were either satisfied or very satisfied with their visit to Kings Park. When asked what had motivated visitors to come to Kings Park and Botanic Garden, 58% were attending a family outing and 21% were visiting with a friend, relative or colleague. The amount of time visitors spent in Kings Park varied from 30 minutes to 12 hours, 44% spent one to two hours and 26% spent three to four hours. The median length of visit was two hours.

The highlights expressed by visitors were the views, the beauty of the park, gardens and facilities for children, such as Rio Tinto Naturescape Kings Park and play areas. Parking is the least favourite aspect rated by 12% of respondents and topped the list of suggested improvements. 77% of visitors surveyed indicated they had arrived by car. This is reflective of the high level of private vehicle use in the metropolitan area generally and that 78% of visitors to Kings Park are local residents. Intrastate visitors represented 4%, 6% were interstate visitors and 12% were from overseas. This data is consistent with previous visitor surveys.

The majority (65%) of survey respondents were female, which is consistent with data from previous years. Survey respondents represented a diverse age range, the 35-44 age group represented 28% with the 25-34 age group making up 22%.

Complaints Management

Complaints, comments and suggestions from visitors and stakeholders are recorded and considered in the monitoring, management and improvement of visitor services and park management. In addition to the many telephone and email enquiries received daily, 99 formal communications were recorded this year. There are also many hundreds of comments recorded annually in the Visitor Information Centre Visitor Book and the vast majority of these were complimentary. Combining the formal and informal communications and comments received, there were a total of 82 complaints, 34 comments and/or suggestions and 443 compliments. Where a direct response was required, 100% of complaints and comments received a response within 28 days.

Communications

The Communications team provided a clear and positive voice for Kings Park and Bold Park, for their dedicated people and leading projects in 2016-17. BGPA's stories, achievements and projects were communicated to demonstrate their meaning and impact on the wider community and the environment. The Communications team provides support for all areas of BGPA, including marketing support for Aspects of Kings Park gallery shop.

There were more than 5,000 mentions of Kings Park and Bold Park in the media during the year, equating to a value of around \$7 million and a total audience of 90 million views (not including social media).

Online communications

BGPA continued to engage the wider community using targeted online communication techniques during 2016-17. The online team regularly liaised with internal and external stakeholders to ensure that publicly available information relating to BGPA and its designated lands remained accurate and timely.

BGPA Website

The BGPA website (<u>bgpa.wa.gov.au</u>) serves as the primary online tool to communicate information on BGPA's services, functions and activities. Website traffic for the 2016-17 financial year increased 4.4% over the previous year and included over 450,000 sessions from over 330,000 users across 1.2 million pageviews. Over 70% of traffic came from new website visitors. Site-wide updates were made on a frequent basis to text, images and documents.

Aspects of Kings Park Website

A major achievement year was an upgrade to the Aspects of Kings Park website (www.aspectsofkingpark.com.au) and content management system. Previously providing a modest online shopping facility, the new website provides the opportunity for increased exposure and a showcase for the extensive range of in-store and online products. A growing number of customer accounts were created, orders increased by 27% and online sales increased by 34%.

Social media

BGPA's social media presence has grown substantially and is used to distribute information, build support and create interest around projects and events in the community. With over 1,400 page views to the <u>content stream</u>, over 50% of visitors clicked through to the external links provided. At 30 June 2017, the Kings Park and Botanic Garden Facebook page had over 16,500 followers. A new Aspects of Kings Park Facebook page was launched in June 2017. The Aspects of Kings Park Instagram account has more than doubled on the past year to over 1,200 followers. During the year, 18 videos that feature on the Kings Park and Botanic Garden YouTube channel received over 20,000 views.

Events

2016 Kings Park Festival

The 2016 Kings Park Festival celebrated 'Floral Fantasy' throughout the month of September, showcasing amazing wildflower displays in the Western Australian Botanic Garden. The 2016 Kings Park Festival's success was made possible by the financial support received from Lotterywest in a grant to the Friends of Kings Park. An estimated 530,000 people visited Kings Park and Botanic Garden during the September Festival.

The program of free family-friendly events, guided walks and talks, exhibitions, school events and other activities provided excellent opportunities for the community to celebrate and learn about Western Australia's unquie environment and the role we all play in conserving it. The 2016 Kings Park Festival exhibitions included 'The Future Keepers', a macro photography exhibition which focused on the seeds of Western Australian wildflowers, and 'Map My Story' which allowed members of public to share in writing, a special experience or memory they had in Kings Park.

Kings Park Education again hosted the popular 'Kulunga Katitjin Festival' with leading Indigenous and environmental educators providing interactive stations including a range of hands-on activities, performances and displays. More than 2,100 primary school students participated in the event.

Planning for the 2017 Kings Park Festival, which will have the theme of 'Where the Wildflowers Are', is well underway. Again the support of the Friends of Kings Park and Lotterywest is fundamental to this special annual event. BGPA and over half a million festival visitors are very appreciative of this ongoing support.

Summer Events

The 2016-17 Summer Events series once again included nine concerts, outdoor theatre and outdoor cinema. The program of events attracted 84,000 visitors to Kings Park and Botanic Garden between November 2016 and April 2017. The Summer Events program is supported by BGPA's horticultural and grounds staff to ensure a high standard of safety and presentation for all visitors.

2017 PIAF Opening Event – Boorna Waanginy: The Trees Speak



Around 110,000 visitors flocked to Kings Park over three week nights for the February 2017 opening of the 2017 Perth International Arts Festival (PIAF) and experienced an audio-visual feast of Nyoongar culture and Western Australian biodiversity. 'Boorna Waanginy: The Trees Speak' was a visually mesmerising event explored the inter-connectedness of all life, and highlighted the beauty and fragility of WA's south-west, from bushfires and rainstorms to flocks of birds, frolicking fish, playful animals and blooming wildflowers. The show used spectacular 3D projection techniques, animation, sound and lighting effects to create the walk-through narrative, which the PIAF team developed to highlight Nyoongar stories, Western science and traditional Indigenous relationships to Country. More than a dozen BGPA staff invested over 200 hours in the planning and preparation for the event and played an integral role in ensuring the event was safe and enjoyed by all.























Community, Cultural and Sporting Events

Local community, cultural and sporting events continue to attract visitors to Kings Park and Botanic Garden. These events require support from BGPA staff members who manage road closures and traffic management.

The annual Australia Day Skyworks over the Swan River draws spectator crowds of approximately 30,000 people to Kings Park and Botanic Garden throughout the day on 26 January. BGPA and the RSLWA worked closely together to present the 2017 Anzac Day Dawn Service at the State War Memorial on 25 April 2017. Attendance was estimated at around 40,000 people. In addition, a number of other small to medium sized community, cultural and sporting events were held in Kings Park throughout the year.

The annual 'Chevron City to Surf for Activ' running event, held in August 2016, attracted over 40,000 participants and spectators across the entire route between Perth City and City Beach, including Kings Park and Botanic Garden and Bold Park. The 'HBF Run for a Reason' half marathon event, held in May 2017, came through Kings Park and Botanic Garden, attracting around 4,000 participants in Kings Park.

Group Bookings

BGPA manages bookings for private, corporate and community functions and events at the many venues throughout Bold Park and Kings Park and Botanic Garden, excluding the leased cafes, restaurant and function premises.

The Tamala Room in the Western Australian Ecology Centre had 43 bookings by regular volunteer community groups. There were 33 bookings for events in Bold Park bushland. Bookings in Kings Park and Botanic Garden remained consistent, with more than 62,000 visitors attending 1,182 bookings.

Volunteering

Volunteers contribute their time, expertise and passion, and BGPA achieves its outstanding results in part through staff and volunteers working closely on collective goals. BGPA staff are strong advocates of volunteering and BGPA's organisational culture ensures volunteers are actively welcomed.

BGPA has five dedicated volunteer groups who support the core activities of Bold Park and Kings Park and Botanic Garden. The combined total of 525 active members of the Volunteer Master Gardeners, Kings Park Volunteer Guides, Friends of Kings Park, Honour Avenues Group and Friends of Bold Park all contribute to ongoing park management and essential visitor services in various ways.

Together, BGPA's volunteers contribute many thousands of recorded and unrecorded hours of work. During the year, 967 active volunteers contributed 38,000 hours of service, with recorded hours being the equivalent total of 19 full time employees.

BGPA held the annual Volunteers' Appreciation event at Mt Eliza House in December 2016 to recognise the outstanding contributions of the more than 500 regular and corporate volunteers. Two special 'thank you' volunteer events were held during May 2017 with funding provided by Volunteering WA and Lotterywest to celebrate 2017 National Volunteer Week.

New and Once-off Volunteers

Each volunteer group has been at wait list status since February 2016, with new enquiries received for volunteering opportunities at about 30 a month. During the year, new volunteer opportunities arose with the Friends of Kings Park and the Kings Park Guides.

The Kings Park Guides offered a training course for interested potential Guides for which there were 398 enquiries, 60 interviews and 32 places offered. Twenty four new Kings Park Guides graduated from the training course in June 2017. In total, 82 new volunteers were inducted in 2016-17. In addition, there was 442 volunteers from corporate and community groups involved in various projects and events including.

Volunteer Highlights

Along with the ongoing activities of each of the groups, this year the focus has been on the development of the new Volunteer Hub and the refurbishment of the Lodge to provide office accommodation and communal space for the volunteer group committees within Kings Park. Other highlights this year include:

<u>The Friends of Bold Park Bushland</u> will celebrate their 30th anniversary in October 2017 and planning is underway to celebrate this milestone. The Friends' guided walks program, now in its sixth year, remained popular with 26 walks for 321 participants throughout the year. School holiday night stalks proved popular with many local children attending.

<u>The Friends of Kings Park</u> is the largest of the volunteer groups with eight carer's groups and a total of 277 active volunteers. The Friends' were awarded a significant grant from Lotterywest for the new Volunteer Hub to enable seven-days a week operation for more hands on volunteer roles. Representatives from each of the Kings Park volunteer groups are involved in the planning for the new facility. The Friends of Kings Park were also successful in their application to Lotterywest for grants to support the 2016 and 2017 Kings Park Festivals.

The Kings Park Volunteer Guides conducted an intensive 14 week training course for new Guides over a 14 week period, with 24 new Guides graduating. Interviews have commenced for a planned 2018 training course. In January 2017, the Guides were announced as finalists for the 2017 WA Heritage Awards in two categories 'Heritage Tourism Product' and 'Contribution by a Community-based Organisation', recognising the dedication and incredible contributions of the Guides to Kings Park visitors.

The Volunteer Master Gardeners will celebrate 20 years of offering gardening advice for native plants and assisting BGPA's Science team, in October 2017. Currently there are 37 Volunteer Master Gardeners who volunteered over 4,300 hours and handled 2,500 enquiries with the Garden Advisory Service. The Volunteer Master Gardeners continue to host the regular 'Dig it with Coffee' sessions and along with a Kings Park horticulturist, provide free native gardening advice and insight into the Backyard Botanicals Garden.

The Honour Avenues Group are 15 dedicated and hard working people who look after over 1,700 honour avenue plaques, dedicated to Western Australian men and women who have lost their lives in conflicts overseas. Requests from families for new plaques remains strong, with about 50 plaques dedicated over four services throughout the year.

Read more about the activities of each the volunteer groups in Appendix 1.

Play and Discovery spaces

The innovative play and discovery spaces in Kings Park and Botanic Garden remain very popular destinations for visitors with sustained high levels of visitation throughout the year. They offer a diverse range of design elements that cater for all ages and abilities. To ensure high standards of public safety and presentation, trained staff conduct inspections and undertake maintenance works. The children's toilets and several popular play elements were renovated in the Lotterywest Family Area delivering improved amenity.

Rio Tinto Naturescape Kings Park was closed to the public in February 2017 to enable planned construction works for the second stage development of this site. It will reopen in late 2017. The Saw Avenue Picnic Area incorporating the Variety Place adventure play area offers an experience for children seeking a more challenging experience, with its extensive rope climbing, balancing and rock scrambling options and accompanying picnic facilities.

In Synergy Parkland, maintenance of timber play elements was ongoing and the timber boardwalk was renovated. Some minor improvements occurred at the Bovell Kiosk and the Zamia Café toilets. A new fibre optic service was installed in the area where Moonlight Cinema operates in summer.

Parkland and Turf

Visitors flocked to Kings Park in their thousands in mid-July 2016 with the release of a new 'Pokémon Go' mobile application that required gamers to capture virtual characters, located through the park by the game administrators, in order to move through the game levels. This concentration of pedestrian visitors had considerable impact on the turf along both sides of Fraser Avenue and in the State War Memorial precinct, to the extent that visitors were excluded from large areas for a period to avoid irreparable damage to the turf. A substantial increase in littering coincided with the high concentration of game players, which required significant staff time to maintain presentation standards.

Turf repairs were implemented in other areas on an ongoing basis, including following the Summer Events season. An ongoing audit of irrigation valve boxes continued with repair or replacement as required.

An outbreak of the turf pest Ground Pearl was identified by external contractors in the grass courts at the Royal Kings Park Tennis Club causing some concern that the pest could readily spread into Kings Park turf areas managed by BGPA. BGPA liaised with Next Generation Kings Park and the Royal Kings Park Tennis Club personnel and their external turf management contractors in the development of management actions to reduce the threat of spread of this pest.

Visitors continued to provide positive feedback about the immaculate presentation of the lawns throughout Kings Park and Botanic Garden. The program of regular mowing and consistent attention to fertilising, aerating, de-thatching and top dressing by the Turf team enabled high standards of turf presentation throughout the year.

Aspects of Kings Park Gallery Shop

Aspects of Kings Park operates seven days a week and showcases Western Australian's finest collection of local and interstate art, design and superbly made crafts. All profits from Aspects are directly reinvested into Kings Park and Botanic Garden and Bold Park. In 2016-17 these sales contributed 12% of BGPA's total gross revenue. Aspects of Kings Park is committed to giving Western Australians and tourists alike the best shopping and customer service experience possible. Aspects provides a unique environment, a space that inspires people to appreciate and value the process, skill, time and heart that goes into the art and design of items in the gallery and in the presentation and care of Kings Park itself.

Commercial Operations

A range of private commercial businesses operate in Kings Park and Botanic Garden under formal agreements with BGPA. These businesses provide both an important revenue stream for BGPA's ongoing operations and highly valued services to meet various visitor demands.

Three cafes operate within Kings Park and Botanic Garden: Stickybeaks Café, Zamia Café and The Botanical Café in the Fraser's complex which also includes Fraser's Restaurant, Fraser's Kiosk, Fraser's Function Room and the State Reception Centre Kings Park.

The Royal Kings Park Tennis Club, incorporating Next Generation Kings Park, continued operations including provision of fitness and tennis facilities for members. A significant issue of maintenance of the heritage assets onsite is under negotiation and will be resolved in 2017-18.

The Perth Explorer bus (previously called City Sightseeing) service provides a regular ticketed bus tour of Kings Park and Botanic Garden. The Indigenous Heritage Tours, Aboriginal Productions and Promotions and the Aboriginal Art Gallery provide visitors with insights into Aboriginal culture and in the case of the Gallery, the opportunity to purchase Aboriginal artworks.

Spinway WA provide a bicycle hire kiosk with an onsite automated credit card payment system. Commercial operations providing events for visitors in the past year include Mellen Events (concerts), Moonlight Cinema (outdoor films) and Prompt Corner (children's theatre).

"It is the one thing of which we all agree to be proud, the one possession that we all regard as a great asset. Yet one wonders whether it is as fully appreciated today as it will say, one hundred years hence, when these eleven hundred acres of peace and woodland beauty will be in the heart of a great, crowded, noisy city."

West Australian, 24 October 1922 (referring to Kings Park)

Education and Interpretation

Kings Park Education

Kings Park Education provides high quality nature-based education programs to Western Australian school children and tertiary students. During 2016-17, there were 826 bookings with 29,892 school students and their accompanying adults who participated in Kings Park Education programs, special events such as the Kulunga Katitjin Festival, booked self-guided school visits, teacher professional development sessions, TAFE and university students involved in Kings Park Education supported programs and people participating in school holiday programs.

November 2016 marked five years since Kings Park Education began operations from the newly opened Rio Tinto Naturescape Kings Park. A review of the education programs, and the venue and facilities for school groups identified successes and highlighted the areas for improvement. In response, the stage two development will provide new sheltered teaching spaces to cater for increased demand and improved drop-off, path layout and morning tea and lunch areas.

Kings Park Education continued to service schools after Rio Tinto Naturescape Kings Park was closed for the construction period and programs were adjusted so that they could be delivered in other areas of Kings Park. Seven new programs were created for 2017 and teacher resource packs were updated to extend learning activities for the classroom. Teachers continued to provide extremely positive feedback on the Kings Park Education programs with over 95% of teachers rating the program content and teaching quality to be either to be excellent or good.

The Kings Park Education program relies on support from a team of Education volunteers to assist with the movement of school groups, education lessons, resource preparation, administration and activities.

Aboriginal Cultural Education Programs

BGPA recognises and respects the significance of Kings Park to Nyoongar people, and provides a range of educational experiences for school and tertiary students to learn about Nyoongar history, values and cultural heritage. The Nyoongar Boodja six seasons program was held in July 2016, in Makuru season, and in October 2016 during Kambarang season. The Makuru program had almost 400 students learning about the Nyoongar use of fire, tool making and spear throwing from Aboriginal presenters. The Nyoongar Boodja Kambarang program had 458 students learning traditional music, dance and fishing practices with Aboriginal presenters. Kings Park Education's Aboriginal programs continue to be the most popular for school groups.

"Excellent presentation. The children were totally engaged in the program and they learnt many interesting things about Australia's Indigenous culture. Thank you so much to all the Aboriginal presenters." Teacher, Year 2

Special Education Events

The September 2016 Kulunga Katitjin Festival was held in the Western Australian Botanic Garden with a record 2,477 students participating. Total attendance for the day was estimated to be between 3,500 – 4,000 people. Feedback indicated that teachers, students and volunteers thoroughly enjoyed the festival atmosphere and the range of interactive activities with particular highlights being the Aboriginal music and dance, Birds of Prey display, boomerang throwing and craft activities.

The special end of year Big Day Out 'The Race to Save Kings Park' was held in December 2016 in Rio Tinto Naturescape Kings Park. In this problem solving challenge 839 students ran, made mini rafts, got wet, dug in mud and had a great day working in teams to 'help save Kings Park from the cheeky Real Estate agent, Basil the Fox'.























Informal Education Activities in Rio Tinto Naturescape Kings Park

Total visitation to Rio Tinto Naturescape Kings Park for 1 July 2016 to 31 January 2017 was 42,509, noting the site was closed between 1 February and 30 June 2017. Approximately 74% of visitation occurs during school holiday periods and on weekends. School groups make up the remaining 26% of visitors.

Nature Activity Officers support the Kings Park Education program by providing assistance to schools visiting Rio Tinto Naturescape Kings Park which offers numerous ways for students to engage with nature through unstructured self-guided play, facilitated nature-play and directed learning. The Nature Activity Officers facilitate nature-play and self-directed learning with activity booklets, scavenger hunts and interpretative signage. An estimated that 3,500 children participated in at least one or more of these activities.

Teacher Professional Development

A total of 150 teachers and child care educators participated in 16 free professional development sessions for student safety and planning reasons. Kings Park Education requires that at least one teacher from each school group planning an excursion attends an introductory session prior to their first visit to Rio Tinto Naturscape Kings Park.

Horticultural and Scientific Training Programs

BGPA is a leading training provider for horticulturalists and undergraduate and post-graduate conservation research students.

Horticultural Training Programs

Formal horticultural training programs have been operating in Kings Park and Botanic Garden for 49 years, initially covering Horticulture only but later also including specific studies in Arboriculture, Conservation and Land Management and Turf Management. The program incorporates substantial on the job training and one day per week of formal education in a tertiary institution, with trainees employed on a fixed term contract basis. Eight trainees completed their studies in this program in 2016 and the remaining three trainees carried over their studies into 2017. Eight new trainees were recruited to commence in January 2017.

Post-graduate research training



Six students participated in the 2016 Summer Scholarships program

BGPA has an ongoing commitment to training and mentoring scientists to address Western Australia's conservation needs. Twenty-two PhD, four Masters and seven Honours students were directly supported in BGPA's laboratories. Over the past year, five PhD students commenced their thesis studies at BGPA, a further three completed their studies and two were awarded their degrees. With support from the Friends of Kings Park Fund, six three-month Summer Scholarships were offered in 2016-17 for post-graduate research in native plant conservation biology, fire ecology and restoration ecology.

Maps, Brochures and Publications

A suite of brochures, maps and other publications are produced by BGPA to support the services, facilities and activities of Bold Park and Kings Park and Botanic Garden. While hard copy versions are printed for onsite visitors, all information is available on the BGPA website for online visitors and those preferring to access information on mobile devices. In 2016-17 many of the existing visitor maps and brochures were updated and a range of information was produced to promote BGPA activities.

Signage

The use of signs in Kings Park and Bold Park is an important way to communicate a range of information to visitors, including wayfinding and place naming, interpretation about park history, natural and cultural heritage, key conservation messages, and regulatory information. All signs conform to BGPA's style manual to ensure consistent presentation of information and signs standards.

In Bold Park, boundary and interpretative signage was improved. In Kings Park and Botanic Garden, four new entry signs were developed and installed at the main entry to Kings Park, with further interpretive signs in development for placement along Fraser Avenue. Additional directional, informative and regulatory signs were updated throughout Kings Park to assist with visitor orientation and experience.

Directional signage in Kings Park bushland was reviewed in line with changes to the Road Traffic Code 2000 regarding cycling. The billboards located on the Kings Park boundaries were used to communicate a range of key messages.

The 2016 Kings Park Festival featured an exhibition titled 'The Future Keepers'. These information panels pictorially told the story of some of WA floral species' seeds and the leading Kings Park conservation science.

Cultural Heritage

Aboriginal Heritage

A key function under the *Botanic Gardens and Parks Authority Act 1998* is the conservation, promotion and enhancement of Aboriginal cultural heritage within Kings Park and Bold Park. BGPA is committed to the celebration and respect of Aboriginal culture and Aboriginal connections to its designated lands and continued to make good progress against targets set in its Reconciliation Action Plan 2013-2018 (RAP).

One of the highlights was the hosting of the 'Boorna Waanginy: The Trees Speak', which showcased Nyoongar stories and Western Australia's biodiversity. Another highlight was the installation of large new place name banners at the Fraser Avenue entry to Kings Park and Botanic Garden, displaying Aboriginal artwork and featuring the Nyoongar place name, Kaarta Koomba. BGPA recognised Reconciliation Week in 2017 through Reconciliation Week email signatures for staff, banners and a news item on the website and Nyoongar themes on the Facebook page.

BGPA continued to promote Nyoongar culture through signage, interpretive walk trails, artwork, use of Nyoongar names on plant labels and the production of information brochures for Kings Park and Bold Park. A Nyoongar Aboriginal Education Officer was engaged and Aboriginal music, dance, craft and boomerang throwing were once again key components of the annual Kulunga Katitjin Festival in September 2016. A number of Kings Park Education programs covering traditional ways of life and values of Aboriginal people continued to be popular with visiting schools, meeting the Australian curriculum's Aboriginal Cultural Heritage outcomes.

BGPA representatives attended a meeting of the Whadjuk Working Party to seek their support for a new project in Kings Park to be built on the edge of a Registered Aboriginal Site. The Kings Park Volunteer Hub project gained the support of the Whadjuk Working Party members.

Two external Aboriginal businesses licensed to conduct commercial Aboriginal cultural activities in Kings Park, continued to operate throughout the year and the Aboriginal Art Gallery offered visitors unique insights into Aboriginal culture and opportunities to purchase Aboriginal art.

Boer War Memorial Upgrade

Restoration of the first war memorial erected in Kings Park, the Boer War (South African) Memorial, was completed in July 2016. This was the most significant upgrade to this memorial and its surrounding gardens since its installation over a century ago.

Preservation Works

Some significant maintenance and restoration works were undertaken at The Lodge, located at the Fraser Avenue entry to Kings Park which houses Kings Park's volunteer groups' offices. The long-term staff tenant vacated Subiaco Lodge at Saw Avenue in May 2017, paving the way for the next stage of restoration works to this building. These works will be documented in 2017 for implementation in 2018.



The Boer war memorial was upgraded during the year and features some new plants relocated from the WA Botanic Garden.

Renovation to the flooring in the Water Garden Pavilion and the Marlee Pavilion were completed, along with the replacement of timbers on the adjacent bridge. Replacement of cladding at the Jarrah Toilets and timbers on the boardwalk at Reabold Hill in Bold Park were completed along with partial replacement of timbers in the Banksia Seat in the Botanic Garden.

A minor refurbishment at the Fire Fighters' Memorial was completed prior to the annual commemorative service held in May 2017.

Biodiversity Conservation and Ecological Restoration

Western Australian Botanic Garden

The <u>Western Australian Botanic Garden</u> is primarily dedicated to the conservation, cultivation, display and interpretation of the state's native flora and is developed and maintained by the Horticultural Displays team. Approximately 3,000 taxa of native plants are on display, promoting community appreciation and understanding of the flora and the importance of its conservation in the wild. Planting is undertaken each year to revitalise the garden displays and increase diversity.

The most substantial change in the Botanic Garden during the year was the removal of the South African flora collection from the garden beds adjacent to the Botanic Terraces and Pavilion, transplanting the most significant specimens to a new garden in parkland surrounding the Boer War Memorial near the Fraser Avenue entry.

South African tree change



A very large South African Coral Tree (*Erythrina lysistemon*),considered out of place in the Botanic Garden entry precinct opposite the John Forrest Statue, was transplanted to the Fraser Lawns east of Fraser Avenue. This opened the view line from the statue to the river and enabled further planting of Western Australian desert flora in its place.

The <u>Conservation Garden</u>, which displays a selection of threatened and endangered native flora, was revitalised with infill planting of 500 plants representing 45 threatened native species. This garden is particularly important as it displays plants that are seldom seen growing in the wild and promotes protection of the natural environment.

A high profile garden bed off Forrest Drive near the vehicle set down area was completely refurbished including old soil replaced with new, installation of sub-surface trickle irrigation, and a range of Kangaroo Paws (*Anigozanthos*) and Wax flowers (*Chamelaucium*) planted to establish a new display. The Wishing Well located off Fraser Avenue also had its surrounding garden soil replaced followed by a semi-formal planting of 300 Western Australian plants, with species chosen to reflect a cottage garden theme.

In an ongoing program to improve water use efficiency and deliver improved watering systems to enhance plant growth, overhead sprinklers were replaced with sub-surface trickle irrigation in just over one hectare of garden beds throughout the Botanic Garden. The intention is to convert all overhead watering systems to sub-surface trickle irrigation in garden beds over time, to minimise waste and conserve water.

Nursery

The Kings Park Nursery is integral to the extensive plant displays in Kings Park and Botanic Garden and the Kings Park and Bold Park bushland restoration programs, through the supply of good quality plants for use in these areas. It forms a critical link between the field collection program and the displays in the Botanic Garden, and plays a key role in the ongoing BGPA conservation and research programs, growing a diverse range of Western Australian plants, many of which have not previously been cultivated or available for horticultural use.

The nursery team had another productive year growing over 15,000 plants for use in horticultural displays and 2,000 summer annuals for display purposes throughout the park. A further 10,000 potted winter annuals have been grown for use in the 2017 Kings Park Festival displays during September. Over 2,500 cuttings of *Tetratheca erubescens* were propagated to assist with a project closely linked to Kings Park Science activities.

The number of local native plants grown for bushland restoration was similar to the previous year with about 5,100 produced for Kings Park bushland and 7,500 produced for restoration in Bold Park bushland. The nursery also produced more than 375 advanced trees for arboricultural planting.

As in previous years, the nursery continued to provide support for the Department of Parks and Wildlife conservation programs related to rare or critically endangered flora. A total of 1,630 plants of critically endangered species were grown for Parks and Wildlife translocation projects.

Western Australian Seed Technology Centre

Seed collection from native plants growing throughout Western Australia continued to support specific seed conservation programs and provide propagation material to enable enhancement of the living collections and plant displays in the Western Australian Botanic Garden and parklands of Kings Park. The collection program also provides seed resources for plant development programs and contributes to the conservation collection of native seed stored in Western Australian Seed Technology Centre to help safeguard these native species from future extinction.

Funding through the Australian Seed Bank Partnership (ASBP) and the Millennium Seed Bank Project (MSB) in the United Kingdom continued for collections within two programs as in previous years: the Global Trees Program and the 1.000

Species Fieldwork Fund. All collections must be new collections to the

MSB to meet the project requirements and contribute to the MSB global goal to secure 25% of the world's wild plant species in an ex-situ seed storage facility by the year 2020. Targets are becoming increasingly more difficult to achieve due to the number of species already represented at the MSB, and only the more elusive species remaining uncollected.

BGPA delivered collections for 25 tree species as identified in the partnership agreement for Global Trees and a further 12 collections of endemic shrub species for the Fieldwork Fund. These collections were duplicated for storage in the UK and in the Seed Technology Centre at Kings Park. This was the third year of the four-year Global Trees Project, the fourth year of the 1,000 Species Fieldwork Fund and the sixteenth year of BGPA's partnership with the MSB. Funding for the next two collecting seasons was identified through the ASBP and the MSB.

A complete audit and inventory of all seed accessions held at Kings Park was finalised in 2016. Almost 10,000 collections were counted and weighed in the newly completed controlled environment drying room, with their details checked and updated in the horticultural database, prior to lodging in the new freezer vault for storage. The new seed storage facility is accredited to international standards and provides storage capacity for future decades.

A significant setback to the collection program occurred in October 2016 when a vehicle tyre blowout while travelling on the open road resulted in an accident that resulted in the collecting caravan and purpose-fitted four-wheel drive vehicle being irretrievably damaged. No one was injured and a new vehicle and caravan have been ordered for delivery prior to the next collecting

season.

Herbarium

Kings Park and Botanic Garden maintains a small reference Herbarium for plant identification purposes, which primarily contains herbarium specimens for plants that have been collected throughout the state and are held within the living collections. BGPA's Herbarium Botanist, who identifies the plant specimens, processes them for long-term storage and maintains records in the BGPA horticultural database, curates this Herbarium collection.

During the year, a total of 37 days were spent in the field with collecting trips yielding 121 collections of seed. which were subsequently processed, documented and placed in storage for future use and conservation.

The Herbarium Botanist identified and processed 159 plant specimens collected from throughout Western Australia and a further 58 specimens collected for the Millennium Seed Bank in the United Kingdom as a contribution to funded seed collection projects. In addition, the Herbarium Botanist played a key role in providing plant identification services within BGPA. The Horticultural Displays, WA Seed Technology Centre, Arboriculture and the Nursery teams all made use of the Botanist's skills for plant identification, along with regular checking of botanical plant labels throughout the gardens for accuracy.

Keeping abreast of plant systematic publications and updating taxonomic name changes for plants recorded in the horticultural database and in the Herbarium collections continued. The database is an important resource for BGPA and accuracy of names is critical. Training of Horticultural staff and trainees in basic taxonomy was also undertaken during the year.

Arboriculture

The Arbor team comprises three qualified Arborists and one trainee who work together and with a pre-qualified panel of external contractors to manage the trees in Kings Park and Bold Park for their ongoing conservation and amenity value. Despite being short staffed for several months, the team achieved some significant results during the year.

Tree surgery was carried out on several hundred trees throughout Kings Park including 235 Honour Avenue trees along Lovekin Drive in May and June 2017, and numerous Lemon Scented Gums lining Fraser Avenue in preparation for the anticipated visitation for the Perth International Arts Festival event. The Arbor team assisted with installations in trees along the Long Vista in the Botanic Garden, which were the focus of conservation messages during the event.

With the ongoing decline of trees in the Honour Avenues caused by drought years as well as natural senescence, there were some significant tree removals during the year. This included 39 dead or dying *Eucalyptus botryoides* along May Drive, a number of which were excavated for recycling and use in the second stage development of Rio Tinto Naturescape Kings Park as 'upside down trees'. A further 50 dead or seriously defective trees were removed from other Honour Avenues and parkland areas, with some of the timber to be recycled as log seating in Naturescape. The tree planting program continued to replace dead and declining trees throughout Kings Park.

Dr Goodall tree planting





One significant planting was undertaken by Dr Jane Goodall, renowned Primatologist and environmental advocate, during a rare visit to Perth in June 2017. Dr Goodall planted a specimen of *Eucalyptus x mundijongensis*, a rare Eucalypt hybrid known to occur naturally in only two locations around Perth. The seed was collected in collaboration with the Department of Parks and Wildlife Threatened Seed Centre staff and grown in the Kings Park Nursery. This hybrid had never been planted in Kings Park before and it now has four additional specimens planted in the same precinct.

Field trials to investigate the cause and possible remedies for Chlorotic Decline Syndrome causing yellowing and decline of parkland trees in turf areas continued, with a range of treatments implemented to selected Jarrah and Marri trees. Soil and stem injections as well as drenching and canopy spraying were implemented, with outcomes monitored and recorded. A proposed trial to lower the pH of irrigation water as a mitigation strategy to arrest the decline was documented for further consideration.

In striving to achieve BGPA's annual goal of zero green waste, approximately 1,500 cubic meters of green waste was processed for conversion to composted mulch on site in Kings Park. BGPA hosted the UK based Quantified Tree Risk Assessment training course in Kings Park.

Plant Development

The <u>Plant Development</u> team has continued with its internationally recognised breeding programs in Australian plants. The team has been particularly successful in the last financial year in securing new partnerships within the nursery industry locally, nationally and internationally for a range of genera including *Chamelaucium*, *Boronia*, *Grevillea*, and *Leptospermum*. Contracts have also been renewed for existing partnerships in *Anigozanthos* and *Corymbia*. These partnerships provide funding support for the breeding programs in addition to royalty returns on sales of plants developed through those programs.

More than 10,000 crosses were made across selected genera during the reporting period and over 40 high value ornamental hybrids lines were sent to commercial partners to begin testing, to determine their suitability for commercial production and marketing.

Several new plant hybrids bred by the Kings Park team were commercially released during the year. *Chamelaucium* 'Morning Delight,' an early flowering hybrid waxflower was released commercially through BGPA's commercial partner Helix Pty Ltd. Two *Scaevola* hybrids, 'Midnight' and 'Moonlight' were released through BGPA's commercial partner Ramm Botanicals Pty Ltd. A new *Grevillea* hybrid, 'Outback Sunrise', was released through BGPA's commercial partner Benara Nurseries.

The commercial success of the commemorative plant for the Anzac Centenary the 'RSL Spirit of Anzac Grevillea' was reflected through sales of 18,000 plants Australia wide. Following the international release of the Kings Park-bred hybrid *Scaevola aemula* 'Blue Print' in 2009 and other *Scaevola* hybrids since, 3.3 million plants of these hybrids have been sold globally. All these plants display the BGPA logo on the label, promoting the plant development work in Kings Park around the world.



Grevillea Outback Sunrise



Scaevola Midnight

A Plant Development glasshouse was refurbished to replace the brick benches with new metal frames to improve air circulation, install new irrigation, and brick paving to improve drainage.

International Projects

From time to time, BGPA undertakes fee-for-service projects with governments and NGOs around the world, most recently in the Kingdom of Saudi Arabia working with the <u>Arrivadh Development Authority (ADA)</u>. These projects enhance BGPA's international reputation and generate revenue to support Kings Park and Bold Park operations.

In Saudi Arabia, BGPA gave advice on the establishment and equipment of a seed centre for the conservation of Saudi Arabian native species in Riyadh, as well as high-level restoration and conservation strategy at the national level. This advice followed the completion of BGPA's work with ADA on Strategy and Implementation plans for an integrated program to deliver a biodiversity conservation reserve network, sustainable rangeland management, ecosystem restoration, urban conservation planning, and environment awareness, training and education.

Bold Park Bushland

Activities to support biodiversity conservation and ecological restoration are a high priority in the Bold Park bushland to ensure the environmental, educational and landscape values of this significant remnant of coastal bushland continue to be conserved for future generations to enjoy and appreciate. Weed control in priority locations, seed collection, planting of local native species and ongoing monitoring are key management activities, informed by the outcomes of scientific research.

Almost 16,000 native plants representing 40 species were planted in priority restoration sites during winter, which included two planting mornings with Friends of Bold Park volunteers planting 1,600 plants. Seed from 92 Bold Park species was collected during late spring and summer, including seven species listed as vulnerable in Bold Park. All collections were cleaned, recorded in the database and stored.

With the new freezer and drying room facilities in the Biodiversity Conservation Centre in Kings Park becoming available for use during the season, a complete stocktake of seed from Bold Park and Kings Park bushlands stored in chest freezers was undertaken in early 2017. This included an audit of 3,000 collections to verify quantities and update information in the database, prior to transfer into the new storage facility.

Weed control activities continued in restoration precincts along with control of known populations of highly invasive species across the whole park. Over 65 hectares were targeted for Veld Grass (*Ehrharta calycina*) control, 29 hectares for Rose Pelargonium (*Pelargonium capitatum*) control and over 17 hectares for Bridal Creeper (*Asparagus asparagoides*) control. In addition, a program of weed control was implemented in the research burn site in accordance with the experimental design for the project. Annual monitoring in performance indicator plots in August 2016 showed an increase in overall weed cover from the previous year, most likely due to the consistent autumn and winter rainfall in Perth enhancing weed growth.

Flora surveys and monitoring are important to maintain accurate records of species presence and location so that trends showing decline of species can be detected and management adjusted accordingly to arrest the decline. Equally, species population growth can be recorded, confirming the success of management programs. Populations of the 15 most vulnerable species were closely monitored to determine population stability, with all populations remaining stable. A new population of *Astroloma microcalyx* was found close to an existing population and a new individual of *Conospermum triplinervium* was found at the Balga Walk fire site.

A new species was recorded in Bold Park during an intensive flora survey on limestone heath south of the former City Beach High School. The species, *Austrostipa mundula*, is listed as Priority Three by the Department of Parks and Wildlife, indicating the importance of its ongoing protection in Bold Park. Following confirmation of its identification by the State Herbarium, it was adopted as a new species record for Bold Park. Other data from this survey included over 70 species being recorded across a total of 1,660 quadrats, including two priority species and 14 species that are uncommon in Bold Park. Another grass species, *Austrostipa compressa*, was found during monitoring of the research burn site. There is no previous record of this species in Bold Park and further investigation is being progressed.

A fungi survey conducted in Bold Park in 2016 recorded a total of 144 fungi, bringing the number of possible species to 512. Of these, 216 have confirmed identification to species level and around 46 collections were new records for Bold Park. Fungi surveys have been conducted in Bold Park over almost 20 years, making this one of the most consistently surveyed bushlands for fungi in Western Australia.

Bold Park was selected for several external research projects ranging from long term studies of vertebrate fauna and the introduced snail *Theba pisana*, to shorter term projects related to flora survey and the impacts of honey bees on native bee populations. The long-term bird-banding project continued.

Other fauna monitoring included the use of 12 cameras during spring to collect data on the frequency of fauna sightings and help identify possible changes in population size over time.

The identification of the declared pest, European House Borer, by Department of Agriculture staff during a routine inspection of the pine plantation in 2016, led to the preparation of a management plan to control its spread, endorsed by the Department. The pest was located in dead timber, both standing and fallen, through the presence of borer holes in the wood. Its control is regulated in Perth as it can present a threat to the building industry and cause structural damage to buildings. All identified logs were chipped to particle sizes smaller than 100mm, as the pest cannot persist in fragments of that size. A total of 13 logs were managed in this manner with the resulting wood chip material remaining on site. Removal of 220 additional trees in the plantation, either dead or exhibiting substantial dead material, is underway in accordance with the approved management plan.

Bold Park also participated in rabbit control measures as one of 1,000 release sites for a new strain of Rabbit Haemorrhagic Disease, Calici Virus RHDV K5.

Kings Park Bushland

As in Bold Park, activities to promote the ongoing conservation of native biodiversity in the Kings Park bushland continued, including ecological restoration, research, surveys and monitoring and control of introduced pest animals.

Following annual review of the five-year Restoration Plan, over 14,000 local native plants representing 60 species were planted across 26 restoration sites in Kings Park bushland. Key sites included the Nature Trail, Thomas Street and the Mt Eliza Escarpment restoration sites affected by wildfire in 2009. The planting program was supported by seed collecting activities, with seed collected from over 75 species, including one of the species listed as vulnerable. An additional four vulnerable species propagated from cuttings were incorporated into restoration plantings and a survey of vulnerable species recorded all 15 species as present.

Weed control also continued with over 20 highly invasive weed species controlled at more than 350 known sites. This included control of *Euphorbia terracina*, *Watsonia meriana* and some Weeds of National Significance such as *Lantana camara* and *Asparagus* species. In addition, 95 hectares were targeted for Veld Grass (*Ehrharta calycina*) control, which is more than one third of the total area of bushland in Kings Park.

A new hierarchy and map of the plant communities in Kings Park Bushland were devised following comprehensive data analysis of the plateau vegetation surveyed in the last ten years, along with the findings of a range of past floristic surveys of the Swan Coastal Plain, Kings Park plateau and the Mt Eliza escarpment. The hierarchy recognises two main plant communities, four vegetation types and ten sub-vegetation types. The revised Kings Park Bushland Vegetation Map is based on comprehensive data analysis and ground-truthing, and improves the delineation of plant communities for management.

The program of fungi surveys continued on a small scale during 2016, building on data from regular surveys since 2009. Surveys conducted in the winter of 2016 identified 159 different fungi, of which 24% are considered new records for Kings Park. The total confirmed species recorded since 2009 is 213, with 265 species recorded overall from pre 2009 data and all but two species considered indigenous. One species identified, *Inocybe emergens*, was not previously known to occur in the Perth region, and three species of Birds Nest Fungi were identified in 2016. Another fungi survey is planned for winter 2017.

The two volunteer Bushland Carer groups continued to attend regular working sessions in the park with an increase in numbers of volunteers attending each session observed though the year. Activities included planting, weeding and seed collection.

A program of fauna monitoring using 11 motion sensor cameras to record the presence of small to medium sized fauna to assist with management. Quenda continued to occur in areas where they have not previously been recorded. Ongoing monitoring of new sites was followed up with the motion cameras to confirm the presence of Quenda in these locations. Some Quenda have been recorded using rabbit warrens, which has restricted fumigation of warrens to protect the native species. Camera monitoring of warrens has aided this process with fumigation only occurring where no Quenda activity is observed. Warren fumigation during the year appears to have helped to keep rabbit numbers low. There were no nuisance foxes reported around visitors at the State War Memorial in the past year, possibly due to the success of removal programs the previous year.

Several external research projects were commenced including investigations into Kangaroo Paw pollination, urbanisation impacts on native pollinator networks, honey bees and native bee pollination, genealogical testing of Banksia seed and an assessment of direct ground water recharge. In addition, BGPA's fire ecology research that commenced in 2014 continued, with assistance provided for weed control and monitoring in the research burn site. Assistance was also provided with the implementation of several very small fires at the irrigation pond enclosure to measure fire temperatures experienced by soil stored seed in different fuel load conditions. Further information on the fire ecology research is available elsewhere in this report.

Preparation of a Bushland Conservation Plan to consolidate existing information relevant to Kings Park bushland and guide bushland management operations commenced, with a draft plan outline noted by the Board in June 2017. This plan will deliver an improved approach to adaptive biodiversity management, integrated with community engagement, passive recreation and risk management, building upon the information documented in the inaugural Kings Park Bushland Management Plan 1995. The plan will have a 20-year term and will be regularly reviewed to incorporate new information from research and monitoring activities.

A new adaptive management framework, underpinned by current research, has been devised which identifies a long-term vision and goals for the bushland, with management success measured by dynamic biodiversity targets. This framework will be incorporated into the Bushland Conservation Plan.

As part of the planning process, an electronic library for the bushland has been collated and a resource inventory is in progress. This involves consolidation of past and present regional and local factors that define and affect the bushland, updated species lists, and a summary of the management practices, science and monitoring outcomes to date. The Bushland Conservation Plan is scheduled for completion by mid-2018.

Fire Research

Kings Park's <u>Fire Research program</u> focuses on research to understand the interactions between fire management and biodiversity in Perth's urban bushlands. Two postgraduate students are undertaking PhD research in the program. Their work is progressing with intriguing findings in (for example) the fire response for the widespread woodland shrub 'parrot bush' (*Banksia sessilis*), and new techniques in the measurement of soil temperatures during fires. A newly re-appointed post-doctoral research position completes the Kings Park team, which is augmented through close collaboration with researchers as Murdoch University. This position was vacant for most of the year.

Research assessing the impacts of burning at varying fire intervals on the population response of Banksia woodland plant species commenced in winter 2016. This study is a collaboration between BGPA, the Department of Parks and Wildlife, and Murdoch University. The first year field season involved detailed survey of six sites associated with planned burns that were subsequently implemented by Parks and Wildlife. This program, with further pre- and post-fire surveys commencing in spring 2017, is funded for a further five years

Monitoring of recovery following experimental fires implemented in Kings Park, Bold Park and Jandakot Regional Park in 2015 and 2016 continued in 2016-17. This project aims to assess the effects of different management approaches on biodiversity protection, weed cover and fire risk (fuel loads). The study design includes combinations of either short or medium fire interval or fire exclusion crossed with the presence or absence of weed management. Discussions with other land managers in the Perth region continue with the aim of expanding this long-term study to additional sites, with three local councils expected to join in 2017-18 or soon afterwards. Initial results emphasise the significant role of fire in enhancing the spread of weeds in banksia woodlands, the negative impacts of their increase and the effectiveness and importance of following up fire with weed management in urban Banksia woodland remnants.

Restoration Ecology and Ecophysiology

Restoration ecology provides knowledge to rebuild and replenish the natural capital of degraded landscapes and is supported by restoration ecophysiology that uses the plant's perception of the environment to increase our understanding of the environmental factors regulating plant function. Focusing on interactions of Australian native plants with their environments, particularly those altered by humans as well as by changing climates, BGPA has become a research provider and leader in the science of ecosystem restoration including leading developments in understanding:

- Seedling recruitment bottlenecks and plant survival.
- Plant responses to environmental and management changes, particularly post mining and urban bushland systems.
- The use of reconstructed soils as growth media in restoration.
- Rigorous baseline and monitoring approaches to assess restoration progress.
- Delivering integrated, cost-effective and scalable solutions in restoration.
- Advice to inform policy and management approaches.

Research focused on Kings Park throughout 2016-17 has continued in the areas of tree decline in both bushland (Banksia mortality) and parkland (Jarrah chlorotic decline) areas. Banksia mortality patterns are currently being linked with plant ecophysiological traits of various over-storey species in response to drought and temperature (heat waves) from the leaf to whole tree level. Chlorotic decline of Jarrah trees in Kings Park continues to be investigated by understanding the role that soil applications of micronutrient solutions has on leaf and tree physiology in response to alkaline environments and temperature stresses.

A new guide for Banksia restoration



A 20-year research partnership with Hanson Construction Materials (formerly Rocla Quarry Products) has produced a new guide 'Banksia Woodlands: A restoration guide for the Swan Coastal Plain'. The new guide was launched on 22 May 2017 by the Minister for Environment, the Hon Stephen Dawson MLC.

Left to right: WA Biodiversity Science Institute CEO Peter Zurzolo, Vern Newton from Hanson Construction Materials, Minister Dawson and BGPA's Director, Science Ben Miller



Complementing the research delivered to the managed lands of Kings Park and Bold Park, BGPA also develops restoration solutions across most major Western Australia biomes. In 2016-17, BGPA had significant restoration programs in partnership with the mining sector in the Great Sandy Desert, Pilbara, Mid West, and Swan Coastal Plain.

These programs resulted in the following specific outcomes in 2016-17:

Within Managed Lands

- Understanding the risk of hydraulic failure in Banksia species compared to other native tree species in Kings Park.
- Monitoring soil hydrology at plant, plot and whole of park scale to decipher the role of soil water in driving drought-induced mortality in Kings Park.
- Broader scale program implementation and consolidation of findings of Jarrah decline research program within Kings Park to reverse the effects of chlorotic decline syndrome.

External Projects

- A synthesis of the 20-year Kings Park and Hanson (formerly Rocla Quarry Products) research partnership within Banksia Woodland Restoration targeted at practitioners.
- Completion of a research translocation on the threatened species Androcalva perlaria in collaboration with Grange Resources.
- Completion of a successful five-year collaborative project with Sinosteel Midwest Corporation to provide the science to underpin the restoration a Threatened Ecological Community SMC.
- Completion of a phase one of a collaborative project with Karara Mining Limited understanding restoration issues for dry-stack tailings associated with magnetite extraction.
- Continuation of a five year collaborative project with Cliffs Natural Resources to provide the Science to underpin the translocation of *Ricinocarpos brevis* (Declared Rare Flora) by understanding environmental drivers (soil, climate) on rare species translocation success in post-mining Banded Iron Formation restoration.
- Continuation of collaborative industry projects with Sinosteel Midwest Corporation, Karara Mining Limited, Hanson Construction Materials, Cliffs Natural Resources, within the ARC funded Industry Training and Transformation Centre (renamed in 2016 as the Centre for Minesite Restoration with collaborative research organisations, Curtin University and the University of Western Australia.
- Continuation of a collaborative research project with Metals X Limited to understand the limitations of various mine waste substrates to support vegetation restoration at its Nifty copper operations in the Great Sandy Desert.
- Continuation of a major ARC funded research program 'Eco-engineering soil from mine tailings for native plant rehabilitation'. This program focuses on nutritional responses of semi-arid zone species to novel growth substrates and novel ways to remake soil substrates using soil microbes to drive soil pedogenesis.
- Initiation of a small project with South 32 and UWA examining the hydrological attributes of post-mining soil profiles.
- Initiation of a small project with Mineral Resources examining the potential impacts of dust deposition on the leaves of five threatened plant species.

Conservation Biotechnology

Ongoing <u>research programs</u> continued during the 2016-17 year with in-vitro culture (micropropagation) and cryopreservation with threatened or priority plant species. Species new to the ex-situ conservation program include:

- Eucalyptus argutifolia (Threatened) this species is found exclusively on limestone hills north of Perth (Nowergup). Shoot material has been collected for tissue culture propagation with some progress so far in establishing culture lines of three individual plants impacted by limestone quarrying.
- Lasiopetalum sp. Mt Caroline shoot material from the last known plant of this species has been successfully established in tissue culture and multiple shoots produced. Research aimed at inducing roots and enabling transfer to soil remain to be completed in 2017-18.

In-vitro research continues with other Declared Rare Flora species including *Acacia subflexuosa* ssp *capillata* (Fabaceae), *Conospermum galeatum* (Proteaceae), *Acacia leptoneura* (Fabaceae), *Eremophila virens*, (Scrophulariaceae), *Banksia montana* (Proteaceae), and threatened *Eucalyptus* spp.

Cryobanking research with threatened species continued during 2016-17 with seven rare species including: *Conospermum galeatum, Styphelia longissima* (prev. *Leucopogon* sp *ciliate* Eneabba), *Eremophila virens, Banksia serratuloides* ssp *perissa, Eucalyptus dolorosa and Lasiopetalum* sp. Mt Caroline.

A recently obtained ARC Linkage project (LP160101496) will see an expansion of the cryogenic research undertaken at BGPA with partners Curtin University, Royal Botanic Gardens and Domain Trust – Mt Annan Botanic Garden, RMIT University, Australian Nuclear Science and Technology Organisation, with partner investigators from the USDA and University of South Dakota.

Research continues with post-graduate study programs on propagation of threatened flora for post-mining restoration, collaborative studies on flora from other Australian states and collaborative projects on micropropagation/cryopreservation with the Department of Parks and Wildlife for critically endangered species including *Banksia montana* and *Eucalyptus phylacis*.

Founder populations of translocated Declared Rare Flora species continue to be monitored e.g. *Eremophila resinosa*, and long-term seed burial experiments are continuing with *Symonanthus bancroftii* and *Grevillea scapigera*.

This resulted in the following specific outcomes in 2016-17:

- Micropropagation of clonal lines of critically endangered species (Eucalyptus argutifolia and Lasiopetalum sp Mt Caroline) for ex-situ conservation and future restoration purposes.
- The discovery that ability of shoot material to maintain a strong reducing redox environment at critical stages in cryostorage improves shoot tip cryopreservation of native plants, with subsequent publication (Funnekotter et al., in review).
- The development of a new simplified method for cryopresevation and publication of a journal article (Funnekotter et al., 2017).
- The investigation of micropropagation and cryostorage enables ex-situ conservation of a threatened orchid species with publication of a journal paper (Bustam et al., 2016).
- Contribution to a paper on providing a science framework of science necessary for restoration of biodiverse, sustainable and resilient ecosystems (Miller et al., 2016).

Rare and Threatened Species and Orchid Conservation

Research on threatened species conservation aims to improve our understanding of various factors (environmental/ecological) affecting threatened species. With 424 taxa listed as threatened in WA (Department of Parks and Wildlife - March 2017), new information is urgently needed to support timely in-situ and ex-situ conservation actions for species most at risk. BGPA Science research streams supporting conservation of rare and threatened plant taxa include: seed biology and ecology, plant biotechnology, population genetics, pollination biology, ecophysiology, and restoration ecology. A number of research programs on saving threatened species involve collaborative projects with Parks and Wildlife and in some cases, industry partners, particularly those involving translocations of Declared Rare Flora.

Monitoring of two experimental translocation trials undertaken on <u>Androcalva perlaria</u>, which were set up in 2012 and 2014, was last undertaken in July 2016. Survival for the 2012 translocation had not changed since it was previously assessed in January 2016 and was still 22%. Plants had, however, grown considerably since they were previously assessed. In comparison, survival for the 2014 translocation has been far higher and when assessed in July 2016 some treatments still had 100% survival after two years in-situ growth. Altogether, 158 living plants of *A. perlaria* were recorded at the different translocation sites when assessed in July 2016. Many of these plants have also been observed to flower and fruit. A PhD program focusing on this species supported by the University of Western Australia is also ongoing which is investigating the breeding system, flowering biology, seed dispersal and seed biology of this species. This PhD program is due to be completed in the near future.

Research into the integrated conservation of *Ricinocarpos brevis* continues into its fourth year, supported by Cliffs Resources and in partnership with UWA. Results from the 2016 translocation of plants as part of this research program has found that cutting-derived plants have poorer survival (88%) and growth than seedlings (94%). In addition, shade cloth guards also appeared to be beneficial for both cutting and seedling derived plants with these plants achieving the best rates of growth out of all the treatments assessed. For translocated plants from the 2015 trial, the age of the greenstock (older), time of planting (earlier in the season), soil moisture availability and rainfall contributed to the high survival which is currently at greater than 80%, despite the lower than average winter rainfall. A total of 185 living plants of *R. brevis* were recorded in December 2016 from recent translocation trials. Other work completed recently on *R. brevis* has focused on aspects of seed biology, physical characteristics and reproductive capacity of adult plants, pollination biology, co-occurring ant communities and insect pollinators. Work to determine the likely age of plants of differing sizes based on dendrochronology, radiocarbon dating and dendrochemical analysis, was sponsored by the Australian Institute of Nuclear Science and Engineering through a small research grant.

In March 2016, a total of 92 plants of the threatened species <u>Symonanthus bancroftii</u> were still viable over two translocation sites. A long-term seed burial experiment is still underway with *S. bancroftii* to assess persistence of the soil seed bank to assist with current and future conservation with this species.

A small seed assessment program was undertaken on the threatened plant species <u>Tetratheca paynterae ssp. paynterae</u> with support from Cliffs Resources to identify a high quality and readily germinable batch of seeds to support future in-situ translocation trials on this species. Germination greater than 60% has been achieved in one batch, an outcome which will support future translocation work tentatively planned over the next one to two years for this species.

Preliminary work assessing the availability and viability of seed and cutting material from threatened plant species *Tetratheca erubescens* commenced in 2016, with support from Cliffs. This project is expected to develop into a larger translocation research project commencing in mid 2017.

Two PhD students, one research associate based at the Australian National University and a fractional post-doctoral research scientist contributed to BGPA's orchid research program. Conservation programs continued, with ongoing storage of orchid seed and associated fungal symbiont partners stored in secure collections, as well as through the orchid collection, which includes a number of species significant for conservation programs. Most importantly, a collection of endangered *Caladenia leucochila* plants being established for translocation. Research focused on pollination syndromes for *Diuris* and *Caladenia* species and on optimising long-term cryostorage of orchid seed in liquid nitrogen.

Seed Science and Restoration Seedbanking

BGPA's <u>seed science programs</u> encompass fundamental and applied research on the physiology and ecology of seed germination, dormancy and longevity. The development of seed technologies to improve plant propagation, conservation, and landscape restoration is a major emphasis of the research.

The Restoration Seedbank Initiative (RSB), a five-year, \$5 million research partnership between BGPA, BHP Billiton Iron Ore, and The University of Western Australia (UWA) has continued into the fourth year. Over the past year, research has included a number of field trials in a purpose-built rainout shelter in the Pilbara to develop seed enhancement treatments that increase seedling establishment, and to examine the evolution of microbial activity in mine-waste substrates, including the role of plant-soil feedbacks in mixed plant communities during the early establishment phase. Two new PhD student projects have commenced in 2017 examining soil amendments to enhance seedling establishment in mine waste substrates, and the engineering of mechanised seeding techniques applicable to the rocky slopes common to rehabilitation areas on mine sites.

Research under a recently awarded Australian Research Council Linkage Grant in partnership with UWA and Curtin University to develop the novel field of seed energetics commenced in August 2016. The project is examining the relationship between seed metabolic activity and seed longevity, dormancy, and germination. The first phase of the research has focused on method development and data handling and analysis and measurements of the basal metabolic rate of more than 60 species. Additional experiments are modelling seed storage life in relation to basal metabolic rate, as well examining the utility of the Q2 to predict optimal seed enhancement techniques, particularly seed priming techniques that improve seed germination and seedling vigour for restoration.

In April 2017 BGPA was awarded \$1.314 million in new funding to progress ecological engineering solutions for mine-site restoration. The new 4-year project will focus on advancing seed enhancement technologies, along with developing engineering solutions required to improve precision-delivery of native seeds in adverse rocky, uneven and sloped landforms. The project is a partnership with the UWA School of Biological Sciences and the Faculty of Engineering, Computing, and Mathematics, BHP, Rio Tinto, Greening Australia, the University of California Davis, Brigham Young University, and the University of Nevada Las Vegas.

A highlight of the past year was the hosting by BGPA of an <u>international workshop on seed functional traits</u>. In partnership with CSIRO, and the Australian National Botanic Gardens, Canberra. The workshop was specifically focused on seed traits – the morphological, physiological, and biochemical features that influence how they function and behave in the environment. The Workshop opened Monday 3 October with a public symposium attended by over 80 people, and for the next 4 days over 30 scientists and post-graduate students from as far afield as Brazil, UK, USA, Indonesia, Canada, and the Czech Republic worked on creating the first-ever global standards for describing, measuring, analysing and recording information about seeds for a worldwide database.

Work in this area resulted in the following key outcomes in 2016-17:

- Descriptions of contrasting phenological patterns including peak flowering and seed production amongst 19 plants native to the Pilbara, detailing the two distinct seed collection seasons amongst plants of different life forms.
- Characterisation of the seedling survival of 21 arid zone plant species in different soil substrates (topsoil and mine waste), showing that seedlings are more sensitive to drought conditions in waste material, due to the lower water retention capacity of the waste.
- Progress in the development of novel high-throughput methods to assess seed longevity in storage for diverse wild plant species.

 Publication of a key review paper analysing the science and industry of seed coating and its contribution to seed establishment and plant performance, especially for ecological restoration

Top prize at the 2016 WA Innovator of the Year awards



Research under the RSB and in collaboration with UWA's School of Mechanical and Chemical Engineering won a top prize at the 2016 WA Innovator of the Year awards for the design and construction of a 'seed flamer' that greatly improves seed handling for large-scale restoration. The seed flamer won the Mitsubishi Corporation Emerging Innovation Category.

"But of course we are pleased that

Conservation Genetics

The <u>Conservation Genetics</u> team undertakes innovative genetics research underpinning the conservation and restoration of Western Australia's unique biodiversity. This is achieved through the application of modern molecular techniques and field-based experiments to address the key research areas of conservation genetics, restoration genetics, molecular systematics, DNA barcoding, and the assessment of key population genetic processes such as mating and dispersal of pollen and seed.

the potential for innovation to contribute to improved ecological restoration and land management had been recognised more broadly by others" Dr Dave Merrit, Kings Park scientist.

what we viewed as a successful collaboration...had not only addressed an important practical

problem in seed handling, but that

In 2016-17 these research programs have resulted in:

- A quantitative assessment of the potential genetic impact of proposed mining activities on threatened plant species.
- An assessment of seed sourcing strategies for ecological restoration under current and future climates through large-scale field-based provenance trials.
- An understanding of the extent and significance of negative genetic effects following the mixing of seed source provenances for ecological restoration.
- A detailed understanding of the importance of nectar-feeding birds as pollinators for eucalypts, banksias, kangaroo paws and catspaws.
- An ecological genetic assessment confirming restitution of reproductive functionality and delivery of pollinator services in restored populations of banksias pollinated by vertebrates.
- An assessment of range-wide genetic diversity and its spatial structure, mating systems, long-distance seed dispersal, and movement ecology in seagrass (Posidonia).
- A redefinition of biologically significant units in spinifex (Triodia spp.) for improved ecological restoration in arid Australia.
- Development and release of a <u>new app (SpiKey)</u> for identification of spinifex in the Pilbara.
- Assessment of the conservation and restoration implications of DNA ploidy variation in sedges and grasses.
- The measuring and managing of genetic erosion in the recovery of the critically endangered species through translocation.
- The ecological genetic assessment of restoration success of the Gondwanalink project.
- Assessment of soil microbial diversity trajectories following post-impact rehabilitation using high-throughput DNA barcoding methods.
- A contribution to a major review of the genetic diversity and structure of the Australian flora.

More information about BGPA's research programs is available on the website - http://www.bgpa.wa.gov.au/about-us/conservation/research. A comprehensive list of Kings Park Science's publications, research projects, scientists and students for 2016-17 are included in Appendix 3 of this report.

Risk Management

Fire Management

A structural fire occurred in the Kings Park Depot on 23 February 2017 causing irreparable damage to several workshop sheds and their contents. The cause of the blaze was accidental, most likely due to an electrical issue. There were some issues for firefighters gaining access to the site due to electronically controlled gates, prompting review and reissue of access cards to relevant brigades for future access. The estimated cost of damage was approximately \$300,000, with demolition and reconstruction required for current building code compliance.

There were no bushfires in Bold Park for the period. One small bushfire occurred in Kings Park bushland in December that burnt approximately 500m² opposite the Balga Carpark off Forrest Drive.

Six very small (6m²) experimental fires were conducted on cleared land in Kings Park during May and June as part of the Kings Park <u>Fire Research program</u> documented elsewhere in this report. Using contrived and measured fuel loads and optic fibre technology to measure temperatures, this research will advance understanding of temperatures experienced by canopy and soil stored seed during fires in a variety of fuel loads.

BGPA continued to place a high priority on fire preparedness and management activities with the aim of reducing bushfire related risks impacting on the bushlands and their immediate surrounds at Kings Park and Bold Park and ensuring a high level of fire preparedness. All preparedness tasks were completed on schedule, including contributions to emergency response plans for major events in Kings Park, such as Australia Day, the Perth International Arts Festival opening event and Anzac Day.

All bushfire management, park closure and evacuation plans were updated prior to the commencement of the fire season along with maps for each park. In house refresher training was conducted for over 40 staff who volunteer as fire officers as required, of which nine are designated Fire Management Officers. These staff act as liaison officers in the event of bushfire in Kings Park or Bold Park and maintain a 24/7 emergency contact pager in rotation for the period November to May each year.

There were only two Total Fire Ban days during the 2016-17 season, one of which required closure of the bushlands and Rio Tinto Naturescape Kings Park sites in accordance with the Park Closure Plan, and as the other day was associated with a high fire danger rating, bushland closure was not required. There were two days of very high fire danger that required closure of the Naturescape site to the public. This was far fewer than the previous year and therefore there was less interruption to visitor access.

Liaison with representatives from the Department of Fire and Emergency Services (DFES) continued for review of response plans, to conduct training and discuss fire management strategies. A Memorandum of Understanding between BGPA and DFES for bushfire preparedness and response was revised and signed by both parties. BGPA also liaised with Wollaston College on fire management strategies and with the Department of Defence on fire management at Campbell Barracks. Input was provided to the City of Perth draft Bushfire Risk Management Plan and staff attended several City of Perth risk management workshops to assist with review of the city's risks. BGPA has a representative on each of the Local Emergency Management Committees for the City of Perth (Kings Park) and the Western and Central district (Bold Park), with regular attendance and participation in quarterly meetings.

Tree Risk Management

BGPA continued to assign a high priority to the management of trees and treatment of risks associated with tree or branch failure, to enhance visitor safety in the parks. BGPA implemented tree inspections and associated works in accordance with its tree management policy and other relevant guidelines during the year to maintain high standards of public safety and tree health and vigour. Measurement of a small number of identified leaning Sugar Gums on Lovekin Drive continued with no significant change recorded. There were no significant incidents resulting in injury or property damage from tree or branch failure.

The use of Quantified Tree Risk Assessment (QTRA) as the annual formal tree risk inspection and assessment process continued. BGPA now has 682 individual trees recorded in BGPA's database for ongoing inspections. Each of these trees has an accession number fixed to it and used as a unique identifier in the database, where all activity related to that tree is documented. These trees were GPS located and will continue to have information recorded and stored as future works or inspections are completed.

In Kings Park, 18 trees were assessed through QTRA with a risk of harm that exceeded the tolerable limit in the policy, 15 of which were in the Kings Park bushland precinct. Immediate action was taken to mitigate the risk, after which the trees were reassessed and found to have risk levels in the tolerable range. In Bold Park bushland there were five trees assessed as having an unacceptable level of risk with works undertaken to reduce those risks to within the tolerable range. A further nine trees were identified with a risk of harm at the higher end of the tolerable range, and were scheduled for risk mitigation works to reduce the risk to as low as reasonably practicable.

BGPA continued to improve its system of mapping and reporting of tree risks and their management and all QTRA data from contractors and BGPA assessments was standardised for recording in a data management system. This revised system improves the capacity for report generation and ongoing recording of tree management works to feed into future assessments. BGPA sometimes uses stem fall arrest systems in well-established but ageing trees to prolong their life and maintain high levels of public safety. Eleven significant trees with stem fall arrest systems were formally inspected twice during the year, with adjustments made as required to manage the systems to achieve desired outcomes.

BGPA maintained its system of monitoring stem failures using tree incident report forms with all data entered into the database. There were 247 stem failures reported that were greater than 50mm diameter in Kings Park and Bold Park combined, 81% of which failed during wind speeds greater than 30 kph. The largest limb that failed was 550mm in diameter and fell from an *Erythrina sykesii* in the Mounts Bay Gardens area without incident. There were 15 complete tree failures during the year, including a very old Peppermint with a 1.5-metre trunk diameter that failed in the Water Garden precinct of the Botanic Garden following a significant rainfall period.

Kings Park Escarpment

BGPA has been actively managing the Mount Eliza Escarpment geotechnical stability for more than 25 years. During that time, extensive expert reports have been commissioned, including Quantified Risk Assessments, to determine the level of risk of landslide and rockfall and identify remediation strategies to mitigate the risks. Regular geotechnical monitoring of the slope is an ongoing risk management requirement.

Contracted geotechnical engineers conducted three formal geotechnical inspections on the escarpment with written reports on outcomes provided to BGPA. No major concerns were identified but some minor remediation works were recommended and implemented. This included the installation of 30 metres of slope retention walling at the toe of a mobile section of slope and repair of a section of 12kJ rock catch fencing adjacent to Mounts Bay Road that was damaged by vehicle impact.

To address an erosion issue caused by water runoff during heavy rainfall through the Botanic Garden and onto the slope, a low, stormwater retention wall was installed at the critical location along Law Walk to capture concentrated flows when the drainage system becomes overloaded. Some additional remedial work was implemented on Botanic Garden pathways to slow the water runoff and redirect it into garden beds.

A total of eight inspections along the escarpment were implemented by trained BGPA staff following rainfall events of 20mm or more during the preceding 24 hour period, with temporary gate closures in higher risk areas also implemented at the time. No issues of concern were identified during these inspections. Similar inspections were conducted on a lesser limestone slope in Bold Park on Oceanic Drive with no issues of concern identified.

Water Management

Water conservation remained as a high priority for BGPA with careful planning and maintenance of turf and the living collections in place. Groundwater use for irrigation was monitored on a monthly basis to ensure water usage was within the licensed allocation of 580,700kL annually. Total groundwater use during the 2016-17 year was recorded at 515,088kL, which was well within the licensed allocation. Monitoring of groundwater levels and quality was undertaken in accordance with BGPA's Groundwater Licence and Operating Strategy, and the process of installing daily automatic measurement of groundwater levels continued.

Bore KP9 was decommissioned following failure of the bore shaft, with no requirement to replace it due to adequate capacity of other bores on the site. A contract was let for the installation of a replacement for another bore, KP8 at Saw Avenue, which was decommissioned in May 2017. The new bore was nearing completion in June 2017. Ongoing risk management strategies included the replacement of isolation valves throughout Kings Park, and the replacement of a large number of irrigation solenoids. A new scheme water booster pump was assembled and installed at the Kings Park depot to improve water pressure in the Nursery and Depot.

Water Quality in Paperbark Creek within Rio Tinto Naturescape Kings Park was monitored on a weekly basis up until the temporary closure of the site in February 2017. Test results indicated there were no concerns with water quality in Paperbark Creek and no closures of the water bodies were required. The Naturescape Water Quality Management Plan was revised to include new developments under construction as well as testing of additional water quality parameters in accordance with Department of Health recommendations.

Asset Upgrades and Management

BGPA relies on asset replacement funding to support infrastructure maintenance as well as upgrades to equipment and facilities, ensuring high levels of public safety, asset protection and presentation standards. During the year, a flow cytometer was purchased for use in science and plant development, four electric vehicles were replaced like for like, an additional electric vehicle was added to the fleet, and one of the out-front ride on mowers was replaced. This forms part of a rolling replacement program for mowers to minimise down time for repairs and enable almost continuous daily use of these mowers.

A road accident resulted in substantial damage to the 30 year old field caravan that was beyond repair. An internal refurbishment of the Acacia Toilets at Wadjuk Carpark was completed in June 2017. The Botanic Garden Toilets were also upgraded as part of the same contract.

A contract was awarded in June 2017 for the replacement of glass in four of the Kings Park Nursery glasshouses with a horticulturally rated acrylic material to improve safety for those working in the glasshouses and provide improved weatherproofing.

Information Services Management

The retirement of the Information Services Manager in November 2016 and subsequent recruitment processes resulted in a reduced staff presence until new staff commenced in April 2017. Full migration to the newly established server room in the Biodiversity Conservation Centre was achieved in August 2016, after which the decision was made to move to a virtualised server environment. It provides increased service availability through redundancy and improved provision for business continuity. The power supply to the back-up server room in the Kings Park Administration building was reconfigured to connect it to a separate supply. This enables completely separate operation in the event of an incident affecting the Biodiversity Conservation Centre building.

The Machinery of Government amalgamation process announced on 28 April 2017 prompted the migration of email services from BGPA's existing Microsoft Exchange server to the Microsoft Office 365 service. Office 365 provides improved availability and more advanced protection from spam and malicious content than previously available. The migration signalled a change to administration of email services from the new Department of Biodiversity, Conservation and Attractions Office of Information Management based in Kensington. The change required significant input from BGPA.

Access Upgrades

In July 2017, BGPA implemented changes as part of long-term traffic management strategy identified in the Kings Park and Botanic Garden Management Plan 2014-2019. Parking and stopping along Fraser Avenue was removed to improve pedestrian and driver safety and also to enhance the beauty of this iconic avenue. The Transperth bus stops along Fraser Avenue remain in place, giving direct access to the Fraser Avenue visitor precinct.

Works to improve the entry road and bitumen carpark at Lotterywest Family Area were completed. Minor improvements were made to the main roads through Kings Park to seal the many cracks in the bitumen surface that have developed over time.



The majestic Fraser Avenue

A range of pedestrian path upgrades were also completed to replace ageing and damaged path sections, relay paths where tree roots had created potential trip hazards, and replace paving slabs with in-situ concrete. A new pedestrian path link was created on the western side of Jorang Grove to provide safer access between the entry to the Royal Kings Park Tennis Club/Next Generation Club and the existing path that runs parallel to Kings Park Road. An existing pedestrian path from Fraser Avenue through to Bellevue Terrace was removed and replaced with a wider path to enable shared use by pedestrians and cyclists, as this had proven to be a popular shortcut for cyclists from Kings Park through to Mount Street.

Risk Management Reporting

The Risk Register is BGPA's recording and reporting mechanism for its risk management activity across all work areas. There are currently 138 risks which are individually assessed according to the monitoring and review schedule. Each risk is evaluated and risk mitigation strategies are assessed. The Risk Register is aligned with BGPA's strategic audit plan. A formal review of audit interaction was conducted in April 2017 by internal auditors 2020 Global. The review found that each of the risks had been aligned to an appropriate internal audit and would be captured in internal audit planning.

Six monthly reports on risk management activity are provided to BGPA's Audit Committee and the Board of Management. The annual review of BGPA's Risk Management Policy was undertaken with minor changes to reflect the introduction of the 'traffic light' colour system within the Register and reporting. BGPA's Audit Committee and Board of Management endorsed the revised policy in February 2017.

Significant Issues and Trends

Kununurra

The longest trip reached the top From Kings Park and Mt Eliza To the Kimberley and the Ord River Sayonara Kununurra Farewell to the squawking bats Now for the big run back Bringing the seeds home to the bank And the old caravan to rest again But there is a lot to be done ahead Another assistant many days begin Collections will be made stories told This was not for the faint hearted The Kimberley gold the boabs now stowed Let's return with a dash of gusto And ride the state on the long run Back to the southwest, back to the Swan

> Luke Sweedman BGPA Seed Collector

This is one of a series of 'Poems in the Park' written or selected by 2016 Kings Park writer in residence Nandi Chinna. The poems formed a feature exhibition of the 2016 Kings Park Festival.



Looking Forward: Current and Emerging Issues

Services, Facilities and Infrastructure

Kings Park and Botanic Garden remains one of the state's single most visited tourist destinations. BGPA receives many proposals for new businesses, events and tourism oriented ventures as Kings Park and Botanic Garden is identified as a highly desirable location due to its visitation, location, exposure and reputation. All proposals are reviewed in line with the Board approved policy on New Businesses and Events.

High levels of visitation continue to apply pressure on existing operations and infrastructure, requiring ongoing review and upgrades to maintain essential facilities such as toilets, barbeques, paths and pavilions. The cost for appropriate maintenance of these community facilities continues to rise. Traffic and parking management requirements have likewise increased with high visitation and subsequent congestion especially on event days, peak season in spring and summer and on weekends.

Upgrades to public amenities are essential to meet community demand. An upgrade to the Fraser Lawn Toilets to improve the facilities and provide dedicated universal access facilities will proceed in the latter half of 2017. Construction is expected to be completed by the end of 2017 and is funded through the asset replacement program.

With partial funding support of \$100,000 from the Disability Services Commission, a new "Changing Place" facility will be constructed in Kings Park in 2017-18. This facility, to be built in the Saw Avenue Picnic Area as an extension to the existing Kulbardi Toilets, will provide a private bathroom facility to support the personal needs of people with disabilities, such as an adult change table and a hoist to aid lifting.

Rio Tinto Naturescape Kings Park - Stage Two

Construction of the <u>second stage of development of Rio Tinto Naturescape Kings Park</u> commenced in 2016-17 and will be completed in late 2017. The site will remain closed to the public until works are completed with an official launch of the new development likely to occur in November or December 2017. The very popular Kings Park Education programs for students will again be delivered in this facility from 2018 onwards, after they were temporarily relocated to other areas of Kings Park during the construction phase.

Kings Park Volunteer Hub

Planning for a new building to provide facilities for hands-on volunteers in Kings Park will continue in 2017-18 following approval of the concept design by the BGPA Board. With the working title of the 'Kings Park Volunteer Hub', this new development is funded by the Friends of Kings Park through a grant from Lotterywest for \$2.4 million. BGPA is providing support for the project planning stage and will fund and co-ordinate all related works, estimated at \$0.5 million.

Detailed design and documentation will progress during the latter half of 2017 and construction is expected to commence in 2018 for anticipated completion by late 2018. The Volunteer Hub will be constructed in a section of the Eucalyptus Carpark off Lovekin Drive, adjacent to the existing Botanic Garden depot building. The Eucalyptus Carpark will be reconfigured to accommodate additional parking and remove the existing split in levels to improve accessibility.

May Circle Upgrade

The planned upgrade of May Circle in Kings Park will continue during 2017 to provide an appropriate gathering space for the Honour Avenues plaque dedication ceremonies, incorporate interpretation of the historic Gallipoli landing and mark the centenary of the inaugural plaque dedication service in 2019.

Upgrade of the bitumen areas commenced in June 2017, with planning for and construction of landscape works to follow. All works will be completed by mid 2018. BGPA is working closely with the Honour Avenues Group to progress planning for the landscape works and the project is being funded through a three way partnership between BGPA (\$280,000), the Friends of Kings Park (\$100,000) and the RSLWA (\$120,000).

Research and Development

BGPA's research programs are unique among botanic gardens globally for their focus and output. Scientific research underpins BGPA's conservation programs, the management and restoration of its designated lands, and assists in regional biodiversity and restoration projects. This research is funded through a combination of state government appropriation, research grants and fee-for-service arrangements. Kings Park Science has been consistently successful at leveraging government financial support with external funding sources to resource conservation and restoration research projects at a 1:3–1:4 ratio. Changes in the structure of government agencies, diversification and strategic changes in key federal research funding sources, and exposure to variation in economic conditions, particularly in the mining industry, all influence the success and efficiency of this model.

BGPA's restoration research continues to develop new approaches and technologies applicable to the bushlands in Kings Park and Bold Park including the development of understanding of risks of varying weed and fire management approaches to fuel load, weed cover and native plant conservation.

BGPA continues to lead collaborative research in innovative restoration technologies to improve rehabilitation outcomes for the WA resources sector and urban bushland conservation. This work spans important areas such as plant taxonomy, fire ecology, seed science, conservation genetics, restoration ecophysiology and pollination biology.

Five years of funding for Industrial Transformation Training Centre (ITTC), awarded by the Australian Research Council will enter its second year in 2017-18. The ITTC was renamed the 'Centre for Mine-Site Restoration' in 2016 and is administered by Curtin University in collaboration with BGPA, the University of Western Australia and seven industry partners.

BGPA's recent history of publishing landmark documents that summarise many years of research effort, such as the Pilbara Seed Atlas, and the Banksia Woodlands restoration guide is expected to continue with a series of works constituting a major review and summary of knowledge on Banded Iron formation community ecology, evolution and restoration expected in 2017-18.

Recent funding success will see Kings Park Science programs expanding in four areas:

- 1. Engineering solutions for ecological restoration: developing technologies for improving the precision, scale and effectiveness of seed delivery on rocky and steep sites.
- 2. Biotechnology research to enable improved conservation capacity for seeds of rainforest and mangrove communities.
- 3. Development of pragmatic but effective completion criteria and policy frameworks for ecosystem restoration.
- 4. Translocation research for conservation of threatened plant species from extreme (cliff face) habitats.

Machinery of Government – Department Amalgamation and Budget Issues

A major announcement by Government on 28 April 2017 required a series of state public sector organisational changes to be implemented from 1 July 2017. This includes a requirement for amalgamation of BGPA and two other statutory authorities, the Zoological Parks Authority and the Rottnest Island Authority, into the new Department of Biodiversity, Conservation and Attractions, which was formed when the former Department of Parks and Wildlife was redesignated. Planning immediately commenced to consider the impact of this organisational change on BGPA and its structure, functions, service delivery and resources. This major organisational change coincides with a period of significant fiscal restraint within the State Government and the wider state economy.

Securing and maintaining sponsorship is another challenge in the current economic circumstances, however opportunities are being pursued with regard to the potential extension of existing sponsorship arrangements and establishment of new relationships.

BGPA is conscious of the challenges ahead in maintaining Bold Park and Kings Park and Botanic Garden at the currently high standards of presentation, visitor safety and asset protection. The Executive will continue to work with the Board and the wider department and with Government to stabilise an agreed level of funding and commensurate service delivery.

Disclosures and Compliance

Kings Park Baptism

Within seconds of tumbling out of the car I was on the log.

My brother and the other kids urged me on. I edged up the hump, limbs not knowing whether to climb or slither, brain unable to help.

The next thing I knew I was bottom down in the cold pond. Wet through.

The grown-ups hadn't even finished unloading the car.

We'd only been in the country a week.

Not long after we had our first trip into the city at night.

"Look at the ship! Look at the Ship!"

Then the tall ship changed a liner.

"There's another one!"

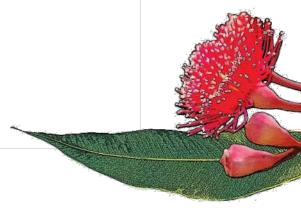
Other glamourous lights and days followed; weddings, birthdays, business functions. Feeling overdressed and under confident, heels on grass, too cold, too hot, exposed.

Grinning and faking it. Barefoot in the grass concerts, films and tour guiding a better fit underfoot. Walking and writing nicer still.

But most of all I smile and remember those evenings, parked with a 'friend.' City lights running like watercolours through the steaming windows. The crackle of burger wrappers accompanied by the latest cassette. Juice and crumbs the first embrace.

Then we'd stay a while..... and enjoy the view?

Louise Ainsworth
Kings Park Creative Writing Group



This is one of a series of 'Poems in the Park' written or selected by 2016 Kings Park writer in residence Nandi Chinna. The poems formed a feature exhibition of the 2016 Kings Park Festival.

Independent Audit Opinion



INDEPENDENT AUDITOR'S REPORT

To the Parliament of Western Australia

BOTANIC GARDENS AND PARKS AUTHORITY

Report on the Financial Statements

Opinion

I have audited the financial statements of the Botanic Gardens and Parks Authority which comprise the Statement of Financial Position as at 30 June 2017, the Statement of Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows for the year then ended, and Notes comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the financial statements are based on proper accounts and present fairly, in all material respects, the operating results and cash flows of the Botanic Gardens and Parks Authority for the year ended 30 June 2017 and the financial position at the end of that period. They are in accordance with Australian Accounting Standards, the *Financial Management Act 2006* and the Treasurer's Instructions.

Basis for Opinion

I conducted my audit in accordance with the Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Authority in accordance with the *Auditor General Act 2006* and the relevant ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to my audit of the financial statements. I have also fulfilled my other ethical responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Responsibility of the Board for the Financial Statements

The Board is responsible for keeping proper accounts, and the preparation and fair presentation of the financial statements in accordance with Australian Accounting Standards, the *Financial Management Act 2006* and the Treasurer's Instructions, and for such internal control as the Board determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board is responsible for assessing the agency's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Western Australian Government has made policy or funding decisions affecting the continued existence of the Authority.

Auditor's Responsibility for the Audit of the Financial Statements

As required by the *Auditor General Act 2006*, my responsibility is to express an opinion on the financial statements. The objectives of my audit are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

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As part of an audit in accordance with Australian Auditing Standards, I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether
 due to fraud or error, design and perform audit procedures responsive to those risks, and
 obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion.
 The risk of not detecting a material misstatement resulting from fraud is higher than for one
 resulting from error, as fraud may involve collusion, forgery, intentional omissions,
 misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of expressing
 an opinion on the effectiveness of the agency's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board.
- Conclude on the appropriateness of the Board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the agency's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Report on Controls

Opinion

I have undertaken a reasonable assurance engagement on the design and implementation of controls exercised by the Botanic Gardens and Parks Authority. The controls exercised by the Authority are those policies and procedures established by the Board to ensure that the receipt, expenditure and investment of money, the acquisition and disposal of property, and the incurring of liabilities have been in accordance with legislative provisions (the overall control objectives).

My opinion has been formed on the basis of the matters outlined in this report.

In my opinion, in all material respects, the controls exercised by the Botanic Gardens and Parks Authority are sufficiently adequate to provide reasonable assurance that the receipt, expenditure and investment of money, the acquisition and disposal of property and the incurring of liabilities have been in accordance with legislative provisions during the year ended 30 June 2017.

The Board's Responsibilities

The Board is responsible for designing, implementing and maintaining controls to ensure that the receipt, expenditure and investment of money, the acquisition and disposal of property, and the incurring of liabilities are in accordance with the *Financial Management Act 2006*, the Treasurer's Instructions and other relevant written law.

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Auditor General's Responsibilities

As required by the *Auditor General Act 2006*, my responsibility as an assurance practitioner is to express an opinion on the suitability of the design of the controls to achieve the overall control objectives and the implementation of the controls as designed. I conducted my engagement in accordance with Standard on Assurance Engagements ASAE 3150 *Assurance Engagements on Controls* issued by the Australian Auditing and Assurance Standards Board. That standard requires that I comply with relevant ethical requirements and plan and perform my procedures to obtain reasonable assurance about whether, in all material respects, the controls are suitably designed to achieve the overall control objectives and the controls, necessary to achieve the overall control objectives, were implemented as designed.

An assurance engagement to report on the design and implementation of controls involves performing procedures to obtain evidence about the suitability of the design of controls to achieve the overall control objectives and the implementation of those controls. The procedures selected depend on my judgement, including the assessment of the risks that controls are not suitably designed or implemented as designed. My procedures included testing the implementation of those controls that I consider necessary to achieve the overall control objectives.

I believe that the evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Limitations of Controls

Because of the inherent limitations of any internal control structure it is possible that, even if the controls are suitably designed and implemented as designed, once the controls are in operation, the overall control objectives may not be achieved so that fraud, error, or noncompliance with laws and regulations may occur and not be detected. Any projection of the outcome of the evaluation of the suitability of the design of controls to future periods is subject to the risk that the controls may become unsuitable because of changes in conditions.

Report on the Key Performance Indicators

Opinion

I have undertaken a reasonable assurance engagement on the key performance indicators of the Botanic Gardens and Parks Authority for the year ended 30 June 2017. The key performance indicators are the key effectiveness indicators and the key efficiency indicators that provide performance information about achieving outcomes and delivering services.

In my opinion, in all material respects, the key performance indicators of the Botanic Gardens and Parks Authority are relevant and appropriate to assist users to assess the Authority's performance and fairly represent indicated performance for the year ended 30 June 2017.

The Board's Responsibility for the Key Performance Indicators

The Board is responsible for the preparation and fair presentation of the key performance indicators in accordance with the *Financial Management Act 2006* and the Treasurer's Instructions and for such internal control as the Board determines necessary to enable the preparation of key performance indicators that are free from material misstatement, whether due to fraud or error.

In preparing the key performance indicators, the Board is responsible for identifying key performance indicators that are relevant and appropriate having regard to their purpose in accordance with Treasurer's Instruction 904 Key Performance Indicators.

Auditor General's Responsibility

As required by the Auditor General Act 2006, my responsibility as an assurance practitioner is to express an opinion on the key performance indicators. The objectives of my engagement are to obtain reasonable assurance about whether the key performance indicators are relevant and appropriate to assist users to assess the agency's performance and whether the key performance indicators are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion.

Page 3 of 4

I conducted my engagement in accordance with Standard on Assurance Engagements ASAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information issued by the Australian Auditing and Assurance Standards Board. That standard requires that I comply with relevant ethical requirements relating to assurance engagements.

An assurance engagement involves performing procedures to obtain evidence about the amounts and disclosures in the key performance indicators. It also involves evaluating the relevance and appropriateness of the key performance indicators against the criteria and guidance in Treasurer's Instruction 904 for measuring the extent of outcome achievement and the efficiency of service delivery. The procedures selected depend on my judgement, including the assessment of the risks of material misstatement of the key performance indicators. In making these risk assessments I obtain an understanding of internal control relevant to the engagement in order to design procedures that are appropriate in the circumstances.

I believe that the evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

My Independence and Quality Control Relating to the Reports on Controls and Key Performance Indicators

I have complied with the independence requirements of the Auditor General Act 2006 and the relevant ethical requirements relating to assurance engagements. In accordance with ASQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, and Other Assurance Engagements, the Office of the Auditor General maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Matters Relating to the Electronic Publication of the Audited Financial Statements and Key Performance Indicators

This auditor's report relates to the financial statements and key performance indicators of the Botanic Gardens and Parks Authority for the year ended 30 June 2017 included on the Authority's website. The Authority's management is responsible for the integrity of the Authority's website. This audit does not provide assurance on the integrity of the Authority's website. The auditor's report refers only to the financial statements and key performance indicators described above. It does not provide an opinion on any other information which may have been hyperlinked to/from these financial statements or key performance indicators. If users of the financial statements and key performance indicators are concerned with the inherent risks arising from publication on a website, they are advised to refer to the hard copy of the audited financial statements and key performance indicators to confirm the information contained in this website version of the financial statements and key performance indicators.

DON CUNNINGHAME

ACTING DEPUTY AUDITOR GENERAL

Delegate of the Auditor General for Western Australia

Perth, Western Australia

3c August 2017

Financial Statements for the year ended 30 June 2017

Certification of the Financial Statements

The accompanying financial statements of the Botanic Gardens and Parks Authority have been prepared in compliance with the provisions of the *Financial Management Act 2006* from proper accounts and records to present fairly the financial transactions for the financial year ended 30 June 2017 and the financial position as at 30 June 2017.

At the date of signing we are not aware of any circumstances which would render the particulars included in the financial statements misleading or inaccurate.

Richard Simpson

Chair

Botanic Gardens and Parks Authority

Board of Management

24 August 2017

Grant Robinson

Deputy Chair

Botanic Gardens and Parks Authority

Board of Management

24 August 2017

lan Biddle Chief Financial Officer Botanic Gardens and Parks Authority 24 August

Statement of Comprehensive Income For the year ended 30 June 2017

	Note	2017 \$	2016 \$
COST OF SERVICES			
Expenses			
Employee benefits expense	5	11,485,256	11,268,947
Supplies and services	7	5,288,284	5,368,186
Depreciation and amortisation expense Cost of Sales	8 12	1,596,438 1,561,239	1,514,973 1,415,075
Loss on disposal of non-current assets	16	54,197	45,560
Other expenses	9	2,664,792	2,806,662
Total cost of services	J	22,650,206	22,419,403
		,_,	, ,
Income			
Revenue	11	2 420 200	2 222 267
User charges and fees Sales	11 12	2,120,380 2,791,874	2,332,267 2,570,082
Commonwealth grants and contributions	13	45,000	65,000
Interest revenue	14	144,747	156,191
Fee for service, subsidies and sponsorships	15	3,264,493	2,301,988
Other revenue	15	470,523	549,497
Total Revenue		8,837,017	7,975,025
Gains		, ,	
Gain on disposal of non-current assets	16	-	
Total Gains		-	
Total income other than income from State Government		8,837,017	7,975,025
NET COST OF SERVICES		13,813,189	14,444,378
Income from State Government	17		
Service appropriation		14,543,000	14,672,000
Services received free of charge		27,337	13,920
Total income from State Government		14,570,337	14,685,920
SURPLUS/(DEFICIT) FOR THE PERIOD		757,148	241,542
OTHER COMPREHENSIVE INCOME			
Items not reclassified subsequently to profit or loss	31	(1 005 446)	10,820
Changes in asset revaluation surplus Total other comprehensive income	31	(1,905,446) (1,905,446)	10,820
Total other comprehensive income		(1,305,446)	10,020
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD		(1,148,298)	252,362

See also Note 41 'Schedule of Income and Expenses by Service'.

The Statement of Comprehensive Income should be read in conjunction with the accompanying notes.

Statement of Financial Position

As at 30 June 2017

	Note	\$	\$
ASSETS			
Current Assets			
Cash and cash equivalents	32	6,389,166	7,421,079
• • • • • • • • • • • • • • • • • • •	18,32	3,069,762	2,176,941
Inventories	19	642,299	614,526
Receivables and other assets	20	2,029,715	2,374,672
Amounts receivable for services	21	1,000,000	1,000,000
Total Current Assets	_	13,130,942	13,587,218
Non-Current Assets			
Amounts receivable for services	21	6,467,000	5,997,000
Property, plant and equipment	22	49,660,035	51,392,617
Infrastructure	25	773,025	796,450
Intangible Assets	26	56,480	, -
Total Non-Current Assets		56,956,540	58,186,067
TOTAL ASSETS		70,087,482	71,773,285
LIABILITIES			
Current Liabilities	00	4 005 000	4 000 400
Payables	28	1,265,868	1,063,406
Provisions Other current liabilities	29 30	1,860,683	1,905,511
Total Current Liabilities	30	3,429,585	4,234,813 7,203,730
Total Current Liabilities	-	6,556,136	7,203,730
Non-Current Liabilities			
Provisions	29	504,944	394,855
Total Non-Current Liabilities		504,944	394,855
TOTAL LIABILITIES		7,061,080	7,598,585
NET ASSETS		63,026,402	64,174,700
	Ī		
EQUITY	31		
Contributed equity		30,365,000	30,365,000
Reserves		19,713,540	21,618,986
Accumulated surplus/(deficit)	_	12,947,862	12,190,714
TOTAL EQUITY	=	63,026,402	64,174,700

The Statement of Financial Position should be read in conjunction with the accompanying notes.

Statement of Changes in Equity For the year ended 30 June 2017

	Note	Contributed equity	Reserves \$	Accumulated surplus/ (deficit)	Total equity
Balance at 1 July 2015 Changes in accounting policy or correction of prior period errors	31	30,365,000	21,608,166	11,949,172 -	63,922,338
Restated balance at 1 July 2015 Surplus/(deficit) Other Comprehensive Income	-	30,365,000	21,608,166 - 10,820	11,949,172 241,542 -	63,922,338 241,542 10,820
Total comprehensive income for the period Transactions with owners in their	-	-	10,820	241,542	252,362
capacity as owners: Capital appropriations Other contributions by owners Distributions to owners		- -	- -	- -	- -
Total Balance at 30 June 2016		30,365,000	21,618,986	12,190,714	64,174,700
Dalance at 30 June 2010	-	30,303,000	21,010,300	12,130,714	04,174,700
Balance at 1 July 2016 Surplus/(Deficit) Other Comprehensive		30,365,000	21,618,986 - (1,905,446)	12,190,714 757,148 -	64,174,700 757,148 (1,905,446)
Income Total comprehensive income for the period	-	-	(1,905,446)	757,148	(1,148,298)
Transactions with owners in their capacity as owners: Capital appropriations Other contributions by owners		- -	- -	- -	- -
Distributions to owners Total	-				
Balance at 30 June 2017	=	30,365,000	19,713,540	12,947,862	63,026,402

The Statement of Changes in Equity should be read in conjunction with the accompanying notes.

Statement of Cash Flows

For the year ended 30 June 2017

	Note	2017 \$	2016 \$
CASH FLOWS FROM STATE GOVERNMENT Service appropriation		12,813,000	12,950,000
Salaries and Allowances Act 1975 Capital appropriation		260,000	252,000
Holding account drawdowns		1,000,000	1,000,000
Net cash provided by State Government		14,073,000	14,202,000
Utilised as follows: CASH FLOWS FROM OPERATING ACTIVITIES Payments			
Employee benefits		(11,402,593)	(11,472,247)
Supplies and services Cost of sales		(6,307,485) (1,589,012)	
GST payments on purchases		(1,117,514)	•
GST payments to taxation authority		(88,091)	(60,569)
Other payments		(2,155,637)	(1,565,227)
Receipts		0.704.074	0.050.070
Sales of goods and services User charges and fees		2,791,874 2,097,710	2,358,372 2,336,677
Commonwealth grants and contributions		45,000	65,000
Fee for service, subsidies and sponsorships		3,264,493	2,301,988
Interest received		144,747	156,191
GST receipts on sales GST receipts from taxation authority		1,307,268 214,830	1,210,599 242,995
Other receipts		399,923	549,497
Net cash provided by/(used in) operating activities	32	(12,394,487)	(11,907,912)
CASH FLOWS FROM INVESTING ACTIVITIES Payments			
Purchase of non-current assets Receipts		(1,835,674)	(1,573,080)
Proceeds from sale of non-current assets		18,069	57,821
Net cash provided by/(used in) investing activities		(1,817,605)	(1,515,259)
Net increase/(decrease) in cash and cash equivalents		(139,092)	778,829
Cash and cash equivalents at the beginning of the period	00	9,598,020	8,819,191
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	32	9,458,928	9,598,020
	;		

The Statement of Cash Flows should be read in conjunction with the accompanying notes.

Notes to the Financial Statements

For the year ended 30 June 2017

Note 1. Australian Accounting Standards

General

The Botanic Gardens and Parks Authority's (BGPA) financial statements for the year ended 30 June 2017 have been prepared in accordance with Australian Accounting Standards. The term 'Australian Accounting Standards' includes Standards and Interpretations issued by the Australian Accounting Standards Board (AASB).

The BGPA has adopted any applicable new and revised Australian Accounting Standards from their operative dates.

Early adoption of standards

The BGPA cannot early adopt an Australian Accounting Standard unless specifically permitted by TI 1101 *Application of Australian Accounting Standards and Other Pronouncements*. There has been no early adoption of any other Australian Accounting Standards that have been issued or amended (but are not operative) by the BGPA for the annual reporting period ended 30 June 2017.

Note 2. Summary of significant accounting policies

(a) General statement

The BGPA is a not-for-profit reporting entity that prepares general purpose financial statements in accordance with Australian Accounting Standards, the Framework, Statements of Accounting Concepts and other authoritative pronouncements of the AASB as applied by the Treasurer's Instructions. Several of these are modified by the Treasurer's Instructions to vary application, disclosure, format and wording.

The *Financial Management Act 2006* and the Treasurer's Instructions impose legislative provisions that govern the preparation of financial statements and take precedence over Australian Accounting Standards, the Framework, Statements of Accounting Concepts and other authoritative pronouncements of the AASB.

Where modification is required and has had a material or significant financial effect upon the reported results, details of that modification and the resulting financial effect are disclosed in the notes to the financial statements.

(b) Basis of preparation

The financial statements have been prepared on the accrual basis of accounting using the historical cost convention, except for land, buildings and infrastructure which have been measured at fair value.

The accounting policies adopted in the preparation of the financial statements have been consistently applied throughout all periods presented unless otherwise stated.

The financial statements are presented in Australian dollars and all values are rounded to the nearest dollar.

Note 3 'Key sources of estimation uncertainty' discloses key assumptions made concerning the future and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

(c) Reporting entity

The reporting entity comprises the BGPA.

(d) Contributed equity

AASB Interpretation 1038 Contributions by Owners Made to Wholly-Owned Public Sector Entities requires transfers in the nature of equity contributions, other than a result of a restructure of administrative arrangements, to be designated by the Government (the owner) as contributions by owners (at the time of, or prior to transfer) before such transfers can be recognised as equity contributions. Capital appropriations have been designated as contributions by owners by TI 955 Contributions by Owners made to Wholly Owned Public Sector Entities and have been credited directly to Contributed equity.

The transfer of net assets to/from other agencies, other than as a result of a restructure of administrative arrangements, are designated as contributions by owners where the transfers are non-discretionary and non-reciprocal. See also Note 31 'Equity'.

(e) Income

Revenue recognition

Revenue is recognised and measured at the fair value of consideration received or receivable. Revenue is recognised for the major business activities as follows:

Sale of goods

Revenue is recognised from the sale of goods and disposal of other assets when the significant risks and rewards of ownership transfer to the purchaser and can be measured reliably.

Provision of services

Revenue is recognised by reference to the stage of completion of the transaction.

Interest

Revenue is recognised as the interest accrues.

Service appropriations

Service appropriations are recognised as revenues at fair value in the period in which the BGPA gains control of the appropriated funds. The BGPA gains control of appropriated funds at the time those funds are deposited to the bank account or credited to the 'Amounts receivable for services' (holding account) held at Treasury. See also Note 17 'Income from State Government'.

Grants, donations, gifts and other non-reciprocal contributions

Revenue is recognised at fair value when the BGPA obtains control over the assets comprising the contributions, usually when cash is received.

Other non-reciprocal contributions that are not contributions by owners are recognised at their fair value. Contributions of services are only recognised when a fair value can be reliably determined and the services would be purchased if not donated.

Gains

Realised and unrealised gains are usually recognised on a net basis. These include gains arising on the disposal of non-current assets and some revaluations of non-current assets.

(f) Property, plant and equipment and infrastructure

Capitalisation/expensing of assets

Items of property, plant and equipment and infrastructure costing \$5,000 or more are recognised as assets and the cost of utilising assets is expensed (depreciated) over their useful lives. Items of property, plant and equipment and infrastructure costing less than \$5,000 are immediately expensed direct to the Statement of Comprehensive Income (other than where they form part of a group of similar items which are significant in total).

Initial recognition and measurement

Property, plant and equipment, computers and software are initially recognised at cost.

For items of plant and equipment acquired at no cost or for nominal cost, the cost is their fair value at the date of acquisition.

Subsequent measurement

Subsequent to initial recognition as an asset, the revaluation model is used for the measurement of land, buildings and infrastructure and historical cost for all other property, plant and equipment. Land, buildings and infrastructure are carried at fair value less accumulated depreciation (buildings and infrastructure only) and accumulated impairment losses. All other items of property, plant and equipment are stated at historical cost less accumulated depreciation and accumulated impairment losses.

Where market-based evidence is available, the fair value of land and buildings is determined on the basis of current market buying values determined by reference to recent market transactions. When buildings are revalued by reference to recent market transactions, the accumulated depreciation is eliminated against the gross carrying amount of the asset and the net amount restated to the revalued amount.

In the absence of market-based evidence, fair value of land and buildings is determined on the basis of existing use. This normally applies where buildings are specialised or where land use is restricted. Fair value for existing use buildings is determined by reference to the cost of replacing the remaining future economic benefits embodied in the asset, i.e. the depreciated replacement cost. Where the fair value of buildings is determined on the depreciated replacement cost basis, the gross carrying amount and the accumulated depreciation are restated proportionately. Fair value for restricted use land is determined by comparison with market evidence for land with similar approximate utility (high restricted use land) or market value of comparable unrestricted land (low restricted use land).

Land and buildings are independently valued annually by the Western Australian Land Information Authority (Valuation Services) and recognised annually to ensure that the carrying amount does not differ materially from the asset's fair value at the end of the reporting period.

Fair value of monuments and specified items has been determined by reference to the depreciated replacement cost (existing use basis) as the assets are specialised and no market-based evidence of value is available. Independent valuations are obtained every three to five years.

Fair value of infrastructure has been determined by reference to the depreciated replacement cost (existing use basis) as the assets are specialised and no market-based evidence of value is available. Land under infrastructure is included in land reported under Note 22 'Property, plant and equipment' at fair value. Independent valuations are obtained every three to five years for infrastructure.

When infrastructure is revalued, the accumulated depreciation is restated proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount.

The most significant assumptions and judgements in estimating fair value are made in assessing whether to apply the existing use basis to assets and in determining estimated economic life. Professional judgement by the valuer is required where the evidence does not provide a clear distinction between market type assets and existing use assets.

See also Note 22 'Property, plant and equipment' and also Note 25 'Infrastructure' for further information on revaluations.

Derecognition

Upon disposal or derecognition of an item of property, plant and equipment and infrastructure, any revaluation surplus relating to that asset is retained in the asset revaluation surplus.

Asset Revaluation Surplus

The asset revaluation surplus is used to record increments and decrements on the revaluation of non-current assets as described in Note 22 'Property, plant and equipment'.

Depreciation

All non-current assets having a limited useful life are systematically depreciated over their estimated useful lives in a manner which reflects the consumption of their future economic benefits.

Depreciation is calculated using the straight line method, using rates that are reviewed annually. Estimated useful lives for each class of depreciable asset are:

Buildings 13 to 59 years
Plant and equipment 5 to 10 years
Software^(a) 5 years
Motor Vehicles 7 years
Special Items 40 years
Infrastructure 40 years

(a) Software that is integral to the operation of related hardware.

Works of art controlled by the BGPA are classified as property, plant and equipment. These are anticipated to have indefinite useful lives. Their service potential has not, in any material sense, been consumed during the reporting period and consequently no depreciation has been recognised.

Land is not depreciated.

(g) Intangible assets

Capitalisation/expensing of assets

Acquisitions of intangible assets costing \$5,000 or more and internally generated intangible assets costing \$50,000 or more are capitalised. The cost of utilising the assets is expensed (amortised) over their useful life. Costs incurred below these thresholds are immediately expensed directly to the Statement of Comprehensive Income.

Intangible assets are initially recognised at cost. For assets acquired at no cost or for nominal cost, the cost is their fair value at the date of acquisition.

The cost model is applied for subsequent measurement requiring the asset to be carried at cost less any accumulated amortisation and accumulated impairment losses.

Amortisation for intangible assets with finite useful lives is calculated for the period of the expected benefit (estimated useful life which is reviewed annually) on the straight line basis. All intangible assets controlled by the BGPA have a finite useful life and zero residual value.

Licences

Licences have a finite useful life and are carried at cost less accumulated amortisation and accumulated impairment losses.

Development costs

Research costs are expensed as incurred. Development costs incurred for an individual project are carried forward when the future economic benefits can reasonably be regarded as assured and the total project costs are likely to exceed \$50,000. Other development costs are expensed as incurred.

Computer software

Software that is an integral part of the related hardware is recognised as property, plant and equipment. Software that is not an integral part of the related hardware is recognised as an intangible asset. Software costing less than \$5,000 is expensed in the year of acquisition.

Website costs

Website costs are charged as expenses when they are incurred unless they relate to the acquisition or development of an asset when they may be capitalised and amortised. Generally, costs in relation to feasibility studies during the planning phase of a website, and ongoing costs of maintenance during the operating phase are expensed. Costs incurred in building or enhancing a website that can be reliably measured, are capitalised to the extent that they represent probable future economic benefits.

(h) Impairment of assets

Property, plant and equipment, infrastructure and intangible assets are tested for any indication of impairment at the end of each reporting period. Where there is an indication of impairment, the recoverable amount is estimated. Where the recoverable amount is less than the carrying amount, the asset is considered impaired and is written down to the recoverable amount and an impairment loss is recognised. Where an asset measured at cost is written down to recoverable amount, an impairment loss is recognised in profit or loss. Where a previously revalued asset is written down to recoverable amount, the loss is recognised as a revaluation decrement in other comprehensive income. As the BGPA is a not-for-profit entity, unless a specialised asset has been identified as a surplus asset, the recoverable amount is the higher of an asset's fair value less costs to sell and depreciated replacement cost.

The risk of impairment is generally limited to circumstances where an asset's depreciation is materially understated, where the replacement cost is falling or where there is a significant change in useful life. Each relevant class of assets is reviewed annually to verify that the accumulated depreciation/amortisation reflects the level of consumption or expiration of the asset's future economic benefits and to evaluate any impairment risk from falling replacement costs.

Intangible assets with an indefinite useful life and intangible assets not yet available for use are tested for impairment at the end of each reporting period irrespective of whether there is any indication of impairment.

The recoverable amount of assets identified as surplus assets is the higher of fair value less costs to sell and the present value of future cash flows expected to be derived from the asset. Surplus assets carried at fair value have no risk of material impairment where fair value is determined by reference to market-based evidence. Where fair value is determined by reference to depreciated replacement cost, surplus assets are at risk of impairment and the recoverable amount is measured. Surplus assets at cost are tested for indications of impairment at the end of each reporting period. See also Note 2(p) 'Receivables' and Note 20 'Receivables and other assets' for impairment of receivables.

(i) Non-current assets (or disposal groups) classified as held for sale

Non-current assets (or disposal groups) held for sale are recognised at the lower of carrying amount and fair value less costs to sell, and are disclosed separately from other assets in the Statement of Financial Position. Assets classified as held for sale are not depreciated or amortised.

(j) Leases

The BGPA enters into commercial operating leases for specified business premises located in Kings Park and Botanic Gardens and Bold Park. The BGPA acts as Lessor and revenue is recognised as income as per the terms and conditions of the lease agreement. See Note 22 'Property, plant and equipment'.

The BGPA holds operating leases for motor vehicles. Lease payments are expensed on a straight line basis over the lease term as this represents the pattern of benefits derived from the leased motor vehicles. See also Note 34 'Commitments'.

The BGPA does not hold any finance leases.

(k) Financial instruments

In addition to cash, the BGPA has two categories of financial instrument:

- · Loans and receivables; and
- Financial liabilities measured at amortised cost.

Financial instruments have been disaggregated into the following classes:

- Financial Assets
 - Cash and cash equivalents
 - Restricted cash and cash equivalents
 - Receivables
 - Amounts receivable for services
- Financial Liabilities
 - Payables

Initial recognition and measurement of financial instruments is at fair value which normally equates to the transaction cost or the face value. Subsequent measurement is at amortised cost using the effective interest method.

The fair value of short-term receivables and payables is the transaction cost or the face value because there is no interest rate applicable and subsequent measurement is not required as the effect of discounting is not material.

(I) Cash and cash equivalents

For the purpose of the Statement of Cash Flows, cash and cash equivalent (and restricted cash and cash equivalent) assets comprise cash on hand.

(m) Accrued salaries

Accrued salaries (see Note 28 'Payables') represent the amount due to staff but unpaid at the end of the reporting period. Accrued salaries are settled within a fortnight of the reporting period. The BGPA considers the carrying amount of accrued salaries to be equivalent to its fair value.

(n) Amounts receivable for services (holding account)

The BGPA receives income from the State Government partly in cash and partly as an asset (holding account receivable). The holding account receivable balance, resulting from service appropriation funding is accessible on the emergence of the cash funding requirement to cover leave entitlements and asset replacement. See also Note 17 'Income from State Government' and Note 21 'Amounts receivable for services' (holding account).

(o) Inventories

Inventories are measured at the lower of cost and net realisable value. Costs are assigned by the method most appropriate to each particular class of inventory, with the majority being valued on a first in, first out basis.

Inventories not held for resale are measured at cost unless they are no longer required, in which case they are valued at net realisable value. See also Note 19 'Inventories'.

(p) Receivables

Receivables are recognised at original invoice amount less an allowance for any uncollectible amounts (i.e. impairment). The collectability of receivables is reviewed on an ongoing basis and any receivables identified as uncollectible are written off against the allowance account. The allowance for uncollectible amounts (doubtful debts) is raised when there is objective evidence that the BGPA will not be able to collect the debts. The carrying amount is equivalent to fair value as it is due for settlement within 30 days. See also Note 2(k) 'Financial instruments' and Note 20 'Receivables and other assets'.

(q) Payables

Payables are recognised at the amounts payable when the BGPA becomes obliged to make future payments as a result of a purchase of assets or services. The carrying amount is equivalent to fair value, as settlement is generally within 30 days. See also Note 2(k) 'Financial instruments' and Note 28 'Payables'.

(r) Provisions

Provisions are liabilities of uncertain timing or amount and are recognised where there is a present legal or constructive obligation as a result of a past event and when the outflow of resources embodying economic benefits is probable and a reliable estimate can be made of the amount of the obligation. Provisions are reviewed at the end of each reporting period. See also Note 29 'Provisions'.

Provisions - employee benefits

All annual leave and long service leave provisions are in respect of employees' services up to the end of the reporting period.

Annual leave

Annual leave is not expected to be settled wholly within 12 months after the end of the reporting period and is therefore considered to be 'other long term employee benefits'. The annual leave liability is recognised and measured at the present value of amounts expected to be paid when the liabilities are settled using the remuneration rate expected to apply at the time of settlement.

When assessing expected future payments consideration is given to expected future wage and salary levels including non salary components such as employer superannuation contributions, as well as the experience of employee departures and periods of service. The expected future payments are discounted using market yields at the end of the reporting period on national government bonds with terms to maturity that match, as closely as possible, the estimated future cash outflows.

The provision for annual leave is classified as a current liability as the BGPA does not have an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

Long service leave

Long service leave is not expected to be settled wholly within 12 months after the end of the reporting period and is therefore recognised and measured at the present value of amounts expected to be paid when the liabilities are settled using the remuneration rate expected to apply at the time of settlement.

When assessing expected future payments consideration is given to expected future wage and salary levels including non salary components such as employer superannuation contributions, as well as the experience of employee departures and periods of service. The expected future payments are discounted using market yields at the end of the reporting period on national government bonds with terms to maturity that match, as closely as possible, the estimated future cash outflows.

Unconditional long service leave provisions are classified as current liabilities as the BGPA does not have an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period. Pre-conditional and conditional long service leave provisions are classified as non-current liabilities because the BGPA has an unconditional right to defer the settlement of the liability until the employee has completed the requisite years of service.

See also Note 5 'Employee benefits expense' and Note 29 'Provisions'.

Purchased leave

The provision for purchased leave relates to Public Service employees who have entered into an agreement to self-fund up to an additional 10 weeks leave per calendar year. The provision recognises the value of salary set aside for employees and is measured at the undiscounted amounts expected to be paid when the liabilities are settled. This liability is measured on the same basis as annual leave. See also Note 5 'Employee benefits expense' and note 29 'Provisions'.

Superannuation

The Government Employees Superannuation Board (GESB) and other fund providers administer public sector superannuation arrangements in Western Australia in accordance with legislative requirements. Eligibility criteria for membership in particular schemes for public sector employees vary according to commencement and implementation dates.

Eligible employees contribute to the Pension Scheme, a defined benefit pension scheme closed to new members since 1987, or the Gold State Superannuation Scheme (GSS), a defined benefit lump sum scheme closed to new members since 1995.

Employees commencing employment prior to 16 April 2007 who were not members of either the Pension Scheme or the GSS became non contributory members of the West State Superannuation Scheme (WSS). Employees commencing employment on or after 16 April 2007 became members of the GESB Super Scheme (GESBS). From 30 March 2012, existing members of the WSS or GESBS and new employees have been able to choose their preferred superannuation fund provider. The BGPA makes contributions to GESB or other funds on behalf of employees in compliance with the *Commonwealth Government's Superannuation Guarantee* (*Administration*) *Act 1992*. Contributions to these accumulation schemes extinguish the BGPA's liability for superannuation charges in respect of employees who are not members of the Pension Scheme or GSS.

The GSS is a defined benefit scheme for the purposes of employees and whole-of-government reporting. However, it is a defined contribution plan for BGPA purposes because the concurrent contributions (defined contributions) made by the BGPA to GESB extinguishes the BGPA's obligations to the related superannuation liability.

The BGPA has no liabilities under the Pension Scheme or the GSS. The liabilities for the unfunded Pension Scheme and the unfunded GSS transfer benefits attributable to members who transferred from the Pension Scheme, are assumed by the Treasurer. All other GSS obligations are funded by concurrent contributions made by the BGPA to the GESB.

The GESB makes all benefit payments in respect of the Pension Scheme and GSS, and is recouped from the Treasurer for the employer's share. See Note 2(s) 'Superannuation expense'.

Provisions - other

Employment on-costs

Employment on-costs, including workers' compensation insurance, are not employee benefits and are recognised separately as liabilities and expenses when the employment to which they relate has occurred. Employment on-costs are included as part of 'Other expenses' and are not included as part of the BGPA's 'Employee benefits expense'. The related liability is included in 'Employment on-costs provision'. See also Note 9 'Other expenses' and Note 29 'Provisions'.

(s) Superannuation expense

Superannuation expense is recognised in the Statement of Comprehensive Income and comprises employer contributions paid to the GSS (concurrent contributions), WSS, the GESBS, and other superannuation funds.

(t) Assets and services received free of charge or for nominal cost

Assets or services received free of charge or for nominal cost, that the BGPA would otherwise purchase if not donated, are recognised as income at the fair value of the assets or services where they can be reliably measured. A corresponding expense is recognised for services received. Receipts of assets are recognised in the Statement of Financial Position.

Assets or services received from other State Government agencies are separately disclosed under Income from State Government in the Statement of Comprehensive Income.

(u) Comparative figures

Comparative figures are, where appropriate, reclassified to be comparable with the figures presented in the current reporting period.

Note 3. Key Sources of estimation uncertainty

Key estimates and assumptions concerning the future are based on historical experience and various other factors that have a significant risk of causing material adjustment to the carrying amount of assets and liabilities within the next reporting period.

Long service leave

Several estimations and assumptions used in calculating the BGPA's long service leave provision include expected future salary rates, salary inflation, discount rates, employee retention rates and expected future payments. Changes in these estimations and assumptions may impact on the carrying amount of the long service leave provision.

PricewaterhouseCoopers were engaged by the BGPA to calculate the leave provisions based on a shorthand method applying the Department of Treasury issued discount rates and other factors as published in the Accounting Policy Guideline 3 dated 30 June 2017.

Note 4. Disclosure of changes in accounting policy and estimates

Initial application of an Australian Accounting Standard

The BGPA has applied the following Australian Accounting Standards effective for annual reporting periods beginning on or after 1 July 2016 that impacted on the BGPA.

AASB 1057	Application of Australian Accounting Standards	
	This standard lists the application paragraphs for each other Standard (and Interpretation), grouped where they are the same. There is no financial impact.	
AASB 2014-3	Amendments to Australian Accounting Standards – Accounting for Acquisitions of Interests in Joint Operations [AASB 1 and 11]	
	The BGPA establishes Joint Operations in pursuit of its objectives and does not routinely acquire interests in Joint Operations. Therefore, there is no financial impact on application of the Standard.	
AASB 2014-4	Amendments to Australian Accounting Standards – Clarification of Acceptable Methods of Depreciation and Amortisation [AASB 116 and 138]	
	The adoption of this Standard has no financial impact for the BGPA as depreciation and amortisation is not determined by reference to revenue generation, but by reference to consumption of future economic benefits.	
AASB 2014-9	Amendments to Australian Accounting Standards – Equity Method in Separate Financial Statements [AASB 1, 127 and 128]	
	This Standard amends AASB 127, and consequently amends AASB 1 and AASB 128, to allow entities to use the equity method of accounting for investments in subsidiaries, joint ventures and associates in their separate financial statements. As the BGPA has no joint ventures and associates, the application of the Standard has no financial impact.	
AASB 2015-1	Amendments to Australian Accounting Standards – Annual Improvements to Australian Accounting Standards 2012-2014 Cycle [AASB 1, 2, 3, 5, 7, 11, 110, 119, 121, 133, 134, 137 and 140]	
	These amendments arise from the issuance of International Financial Reporting Standard Annual Improvements to IFRSs 2012-2014 Cycle in September 2014, and editorial corrections. The BGPA has determined that the application of the Standard has no financial impact.	
AASB 2015-2	Amendments to Australian Accounting Standards – Disclosure Initiative: Amendments to AASB 101 [AASB 7, 101, 134 and 1049]	
	This Standard amends AASB 101 to provide clarification regarding the disclosure requirements in AASB 101. Specifically, the Standard proposes narrow-focus amendments to address some of the concerns expressed about existing presentation and disclosure requirements and to ensure entities are able to use judgement when applying a Standard in determining what information to disclose in their financial statements. There is no financial	

impact.

AASB 2015-6 Amendments to Australian Accounting Standards – Extending Related Party Disclosures to Not-for-Profit Public Sector entities [AASB 10, 124, and 1049]

The amendments extend the scope of AASB 124 to include application by not-for-profit public sector entities. Implementation guidance is included to assist application of the Standard by not-for-profit public sector entities. There is no financial impact.

AASB 2015-10 Amendments to Australian Accounting Standards – Effective Date of Amendments to AASB 10 and 128

This Standard defers the mandatory effective date (application date) of amendments to AASB 10 and 128 that were originally made in AASB 2014-10 so that the amendments are required to be applied for annual reporting periods beginning on or after 1 January 2018 instead of 1 January 2016. There is no financial impact.

Voluntary changes in accounting policy

There have been no voluntary changes in accounting policy.

Future impact of Australian Accounting Standards not yet operative

The BGPA cannot early adopt an Australian Accounting Standard unless specifically permitted by TI 1101 *Application of Australian Accounting Standards and Other Pronouncements* or by an exemption from TI 1101. By virtue of a limited exemption, the BGPA has early adopted AASB 2015-7 *Amendments to Australian Accounting Standards – Fair Value Disclosures of Not-for-Profit Public Sector Entities*. Where applicable, the BGPA plans to apply the following Australian Accounting Standards from their application date.

		Operative for reporting periods beginning on/after
AASB 9	Financial Instruments	1 Jan 2018
	This Standard supersedes AASB 139 Financial Instruments: Recognition and Measurement, introducing a number of changes to accounting treatments. The mandatory application date of this Standard is currently 1 January 2018 after being amended by AASB 2012-6, AASB 2013-9 and AASB 2014-1 Amendments to Australian Accounting Standards. The BGPA has not yet determined the application or the potential impact of the Standard.	
AASB 15	Revenue from Contracts with Customers	1 Jan 2019
	This Standard establishes the principles that the BGPA shall apply to report useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer.	

The BGPA's income is principally derived from appropriations which will be measured under AASB 1058 Income of Not-for-Profit Entities and will be unaffected by this change. However, the BGPA has not yet determined the potential impact of the Standard on 'User charges and fees' and 'Sales' revenues. In broad terms, it is anticipated that the terms and conditions attached to these revenues will defer revenue recognition until the BGPA has discharged its performance obligations.

AASB 16 Leases 1 Jan 2019

This Standard introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. Whilst the impact of AASB 16 has not yet been quantified, the BGPA currently has operating lease commitments for \$13,680,231. The worth of non-cancellable operating leases which the BGPA anticipates most of this amount will be brought onto the statement of financial position, excepting amounts pertinent to short-term or low-value leases. Interest and amortisation expense will increase and rental expense will decrease.

AASB 1058 Income of Not-for-Profit Entities

1 Jan 2019

This Standard clarifies and simplifies the income recognition requirements that apply to not-for-profit (NFP) entities, more closely reflecting the economic reality of NFP entity transactions that are not contracts with customers. Timing of income recognition is dependent on whether such a transaction gives rise to a liability, or a performance obligation (a promise to transfer a good or service), or, an obligation to acquire an asset. The BGPA has not yet determined the application or the potential impact of the Standard.

AASB 2010-7

Amendments to Australian Accounting Standards arising from AASB 9 (December 2010) [AASB 1, 3, 4, 5, 7, 101, 102, 108, 112, 118, 120, 121, 127, 128, 131, 132, 136, 137, 139, 1023 and 1038 and Int 2, 5, 10, 12, 19, and 127]

1 Jan 2018

This Standard makes consequential amendments to other Australian Accounting Standards and Interpretations as a result of issuing AASB 9 in December 2010. The mandatory application date of this Standard has been amended by AASB 2012-6 and AASB 2014-1 to 1 January 2018. The BGPA has not yet determined the application or the potential impact of the Standard.

AASB 2014-1 Amendments to Australian Accounting Standards

1 Jan 2018

Part E of this Standard makes amendments to AASB 9 and consequential amendments to other Standards. It has not yet been assessed by the BGPA to determine the application or potential impact of the Standard.

		Operative for reporting periods beginning on/after
AASB 2014-5	Amendments to Australian Accounting Standards arising from AASB 15	1 Jan 2018
	This Standard gives effect to the consequential amendments to Australian Accounting Standards (including interpretations) arising from the issuance of AASB 15. The BGPA has not yet determined the application or the potential impact of the Standard.	
AASB 2014-7	Amendments to Australian Accounting Standards arising from AASB 9 (December 2014)	1 Jan 2018
	This Standard gives effect to the consequential amendments to Australian Accounting Standards (including Interpretations) arising from the issuance of AASB 9 (December 2014). The BGPA has not yet determined the application or the potential impact of the Standard.	
AASB 2014-10	Amendments to Australian Accounting Standards - Sale or Contribution of Assets between an Investor and its Associate or Joint Venture [AASB 10 and 128]	1 Jan 2018
	This Standard amends AASB 10 and AASB 128 to address an inconsistency between the requirements in AASB 10 and those in AASB 128 (August 2011), in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The mandatory effective date (application date) for the Standard has been deferred to 1 January 2018 by AASB 2015-10. The BGPA has determined that the Standard has no financial impact.	
AASB 2015-8	Amendments to Australian Accounting Standards - Effective Date of AASB 15 This Standard amends the mandatory effective date (application date) of AASB 15 Revenue from Contracts with Customers so that AASB 15 is required to be applied for annual reporting periods beginning on or after 1 January 2018 instead of 1 January 2017. For Not-for-Profit entities, the mandatory effective date has subsequently been amended to 1 January 2019 by AASB 2016-7. The BGPA has not yet determined the application or the potential impact of AASB 15.	1 Jan 2019
AASB 2016-2	Amendments to Australian Accounting Standards - Disclosure Initiative: Amendments to AASB 107	1 Jan 2017
	This Standard amends AASB 107 Statement of Cash Flows (August 2015) to require disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes. There is no financial impact.	

		Operative for reporting periods beginning on/after
AASB 2016-3	Amendments to Australian Accounting Standards - Clarifications to AASB 15	1 Jan 2018
	This Standard clarifies identifying performance obligations, principal versus agent considerations, timing of recognising revenue from granting a licence, and, provides further transitional provisions to AASB 15. The BGPA has not yet determined the application or the potential impact.	
AASB 2016-4	Amendments to Australian Accounting Standards – Recoverable Amount of Non-Cash-Generating Specialised Assets of Not-for-Profit Entities	1 Jan 2017
	This Standard clarifies that the recoverable amount of primarily non-cash-generating assets of not-for-profit entities, which are typically specialised in nature and held for continuing use of their service capacity, is expected to be materially the same as fair value determined under AASB 13 Fair Value Measurement. The BGPA has not yet determined the application or the potential impact.	
AASB 2016-7	Amendments to Australian Accounting Standards – Deferral of AASB 15 for Non-for-Profit Entities	1 Jan 2017
	This Standard amends the mandatory effective date (application date) of AASB 15 and defers the consequential amendments that were originally set out in AASB 2014-5 <i>Amendements to Australian Accounting Standards</i> arising from AASB 15 for not-for-profit entities to annual reporting periods beginning on or after 1 January 2019, instead of 1 January 2018. There is no financial impact.	
AASB 2016-8	Amendments to Australian Accounting Standards – Australian Implementation Guidance for Not-for-Profit Entities	1 Jan 2019
	This Standard inserts Australian requirements and authoritative implementation guidance for not-for-profit entities into AASB 9 and AASB 15. This guidance assists not-for-profit entities in applying those Standards to particular transactions and other events. There is no financial impact.	
AASB 2017-2	Amendments to Australian Accounting Standards – Further Annual Improvements 2014-16 Cycle	1 Jan 2017
	This Standard clarifies the scope of AASB 12 by specifying that the disclosure requirements apply to an entity's interests in other entities that are classified as held for sale, held for distribution to owners in their capacity as owners or discontinued operations in accordance with AASB 5. There is no financial impact.	

Note 5. Employee benefits expense

Wages and salaries^(a)
Superannuation - defined contribution plans^(b)
Superannuation - defined benefit plans^(c)

2017	2016
\$	\$
10,532,769	10,290,792
830,777	813,846
121,710	164,309
11,485,256	11,268,947

- (a) Includes the value of the fringe benefit to the employee plus the fringe benefits tax component, leave entitlements including superannuation contribution component.
- (b) Defined contribution plans include West State, Gold State, GESBS and other eligible funds.
- (c) Includes a superannuation contribution component (Note 29 'Provisions').

Employment on-costs expenses, such as workers' compensation insurance are included at Note 9 'Other Expenses'.

Employment on-costs liability is included in Note 29 'Provisions'.

Note 6. Compensation of Key Management Personnel

The BGPA has determined that key management personnel include Ministers, board members and senior officers of the Authority. However, the BGPA is not obligated to compensate Ministers and therefore disclosures in relation to Ministers' compensation may be found in the *Annual Report on State Finances*:

Compensation of members of the accountable authority
Compensation Band (\$)

0 - 10,000	
10,001 - 20,000	

Short term employee benefits
Post employment benefits
Other long term benefits
Termination benefits
Total compensation of the members of the

Total compensation	of the members	of the BGPA:
--------------------	----------------	--------------

Compensation of senior officers Compensation Band (\$)

200,001 – 230,000	
230,001 – 260,000	
260,001 – 290,000	
290,001 – 310,000	
310,001 – 340,000	

Short term employee benefits
Post employment benefits
Other long term benefits
Termination benefits

Total compensation of senior officers:

46,953	58,867
-	-
-	-
4,073	5,107
42,880	53,760
\$	\$
1	2
	_

2017

6

2016

7

2017	2016
-	2
2	2
1	-
-	-
-	-

, and the second se	à
579,447	682,929
74,541	126,546
104,756	141,234
-	-
758,744	950,710

Note 7. Supplies and services

Communications
Consultants and contractors
Consumables
Travel
Other^(a)

2017	2016
\$	\$
115,595	127,636
2,898,862	2,834,277
1,279,945	1,164,204
42,984	76,289
950,898	1,165,780
5,288,284	5,368,186

(a) Includes board remuneration fees, insurance, lease, hire and grants and subsidies.

Note 8. Depreciation and amortisation expense

Depreciation	201 <i>7</i> \$	2016 \$
Plant, equipment and vehicles (includes monuments)	987,993	1,065,093
Buildings	570,900	426,455
Infrastructure	23,425	23,425
Total depreciation	1,582,318	1,514,973
Amortisation		
Software	14,120	_
Total amortisation	14,120	-
Total depreciation and amortisation	1,596,438	1,514,973

Note 9. Other expenses

Purchase of property, plant and equipment
Building and infrastructure maintenance
Equipment repairs and maintenance
Employment on-costs ^(a)
Fee for service ^(b)
Write-offs and inventory adjustments ^(c)
Other(d)

2017	2016
\$	\$
120,161	316,908
1,499,012	1,693,800
800,559	619,714
427,314	400,965
(252,844)	(334,754)
15,829	13,632
54,761	96,397
2,664,792	2,806,662

- (a) Includes workers' compensation insurance and other employment on-costs. The on-costs liability associated with the recognition of annual and long service leave liabilities are included at Note 29 'Provisions'. Superannuation contributions accrued as part of the provision for leave are employee benefits and are not included in employment on-costs. See Note 5 'Employee benefits expense'.
- (b) There is a credit this year as the Fee for Service Liability has decreased in Other Liabilities. Refer to Note 30 'Other liabilities'.
- (c) Write-offs and inventory adjustments for damaged stock. See also Note 40 'Supplementary financial information'.
- (d) Includes audit fees which are usually for the final audit fee for the previous year's audit and any interim audit fee (if any) for the current year's audit. See also Note 39 'Remuneration of auditor'.

Note 10. Related Party Transactions

The BGPA is a wholly owned and controlled entity of the State of Western Australia. In conducting its activities, the BGPA is required to pay various taxes and levies based on the standard terms and conditions that apply to all tax and levy payers to the State and entities related to State.

Related parties of the BGPA include:

- all Ministers and their close family members, and their controlled or jointly controlled entities,
- all senior officers and their close family members, and their controlled or jointly controlled entities.
- other departments and public sector entities, including related bodies included in the whole
 of government consolidated financial statements,
- associates and joint ventures that are included in the whole of government consolidated financial statements, and
- the Government Employees Superannuation Board (GESB).

Significant transactions with government related entities

Significant transactions include:

- service appropriations (Note 17),
- services received free of charge from the State Solicitor's Office (Note 17), and
- superannuation payments to GESB (Note 5).

Material transactions with related parties

BGPA had no material related party transaction with Ministers/senior officers or their close family members or their controlled (or jointly controlled) entities for disclosure.

Note 11. User charges and fees

Rent and licence fees Functions and events Fines and infringements

2017 \$	2016 \$
919,594	909,172
1,098,144	1,365,624
102,642	57,471
2,120,380	2,332,267

Note 12. Trading profit

Sales Cost of Sales: Opening inventory Purchases

Closing inventory Cost of Goods Sold

Trading Profit

See also Note 2(o) 'Inventories' and Note 19 'Inventories'.

2016 \$
2,570,082
(613,804)
(1,415,797)
(2,029,601)
614,526
(1,415,075)
1,155,007

Note 13. Commonwealth grants and contributions

Recurrent

2017	2016
\$	\$
45,000	65,000
45,000	65,000

Note 14. Interest revenue

Interest revenue(a)

2017	2016
\$	\$
144,747	156,191
144,747	156,191

(a) Interest is earnt on cash held at the Commonwealth Bank of Australia.

Note 15. Fee for service, subsidies, sponsorships and other revenue

	2017	2016
	\$	\$
Fee for service, subsidies and sponsorships		
Fee for service and subsidies	1,275,678	1,215,697
Sponsorships	1,988,815	1,086,291
	3,264,493	2,301,988
Other Revenue		
Recoups	283,582	517,204
Other ^(a)	186,941	32,293
	470,523	549,497

(a) Includes donations, FBT received, royalties and sundry revenue

Note 16. Net gain/(loss) on disposal of non-current assets

	2017 \$	2016 \$
Net proceeds from the disposal of non-current assets Plant, equipment and vehicles	(54,197)	(45,560)
Carrying amount of non-current assets disposed		
Land	-	-
Buildings	-	-
Plant, equipment and vehicles	-	-
Net gain/(loss)	(54,197)	(45,560)

See also Note 2(i) 'Non-current assets (or disposal groups) classified as held for sale' and Note 22 'Property, plant and equipment'.

Note 17. Income from State Government

Appropriation received during the period: Service appropriations^(a)

Services received free of charge from other State Government agencies during the period:^(b)
Department of Health
State Solicitor's Office

2017 \$	2016 \$
14,543,000	14,672,000
14,543,000	14,672,000
_	7,500
27,337	6,420
27,337	13,920
14,570,337	14,685,920

- (a) Service appropriations fund the net cost of services delivered. Appropriation revenue comprises a cash component and a receivable (asset). The receivable (holding account) comprises the budgeted depreciation expense for the year and any agreed increase in leave liability during the year.
- (b) Assets or services received free of charge or for nominal cost are recognised as revenue (and assets or expenses) equivalent to the fair value of the assets and/or the fair value of those services that can be reliably determined and which would have been purchased if not donated.

Note 18. Restricted cash and cash equivalents

Current Fee for service^(a)

Sponsorship Paid Parental

2017	2016
\$	\$
1,800,288	1,974,755
1,269,339	201,660
135	526
3,069,762	2,176,941

(a) Unspent funds are committed to scientific research projects.

Note 19. Inventories

Current

Inventories held for resale

2017 \$	2016 \$
642,299	614,526
642,299	614,526

See also Note 2(o) 'Inventories' and Note 12 'Trading profit'.

Note 20. Receivables and other assets

	2017 \$	2016 \$
Current		
Receivables	1,827,610	2,231,654
Infringements	56,934	34,264
Allowance for impairment of receivables	-	-
Accrued revenue	51,297	138,457
Prepayments	10,808	22,341
GST receivable	83,066	(52,044)
	2,029,715	2,374,672
Reconciliation of changes in the allowance for impairment of		
receivables:		
Balance at start of period	-	200
Doubtful debts expense	-	(200)
Amounts written off during the period	-	
Balance at end of period	-	-

The BGPA does not hold any collateral or other credit enhancements as security for receivables. See also Note 2(p) 'Receivables', Note 38 'Financial instruments'.

Note 21. Amounts receivable for services (Holding Account)

	2017	2010
	\$	\$
Current	1,000,000	1,000,000
Non-current	6,467,000	5,997,000
	7,467,000	6,997,000

Represents the non-cash component of service appropriations. It is restricted in that it can only be used for asset replacement or payment of leave liability.

See also Note 2(n) 'Amounts receivable for services (holding account)'.

Note 22. Property, plant and equipment

	2017 \$	2016 \$
Land		
At fair value ^(a)	15,410,000	15,410,000
Accumulated impairment losses	-	
	15,410,000	15,410,000
Buildings and residences		
At fair value ^(a)	22,900,591	24,918,586
Accumulated depreciation	(4,016,558)	(3,558,207)
Accumulated impairment losses	-	
	18,884,033	21,360,379
Assets under construction		
Construction costs	1,514,508	28,637
	1,514,508	28,637
Plant, equipment and vehicles		
At cost	9,999,285	10,092,974
Accumulated depreciation	(8,118,285)	(7,864,118)
Accumulated impairment losses	-	
	1,881,000	2,228,856
Special items		
At cost	3,945,698	3,945,698
Accumulated depreciation	(1,330,995)	(1,231,328)
Accumulated impairment losses	-	-
	2,614,703	2,714,369
Monuments and specified items		
At fair value	17,938,060	17,938,060
Accumulated depreciation	(8,582,269)	(8,287,684)
Accumulated impairment losses	-	
	9,355,791	9,650,376
	49,660,035	51,392,617

⁽a) Land and buildings were revalued as at 1 July 2016 by the Western Australian Land Information Authority (Valuation Services). The valuations were performed during the year ended 30 June 2017 and recognised at 30 June 2017. In undertaking the revaluation, fair value was determined on the basis of existing use. Please refer Note 2(f) 'Property, plant and equipment and infrastructure' for basis of valuation.

Note 22. Property, plant and equipment (continued)

Reconciliations of the carrying amounts of property, plant, equipment at the beginning and end of the reporting period are set out in the table below:

	Land	Buildings and residences	Assets under construction	Plant, equipment and vehicles	Special Items	Monuments and specified items	Total
2017	\$	\$	\$	\$	\$	\$	\$
Carrying amount at start of year	15,410,000	21,360,379	28,637	2,228,856	2,714,369	9,650,376	51,392,617
Additions	-	-	1,517,523	318,151	-	-	1,835,674
Transfers	-	-	(31,652)	-	-	-	(31,652)
Other disposals	-	-	-	(411,840)	-	-	(411,840)
Revaluation Increments/(decrements)	-	(1,905,446)	-	-	-	-	(1,905,446)
Depreciation expense	-	(570,900)	-	(593,742)	(99,666)	(294,585)	(1,558,893)
Depreciation written back on disposal				339,575		-	339,575
Carrying amount at end of period	15,410,000	18,884,033	1,514,508	1,881,000	2,614,703	9,355,791	49,660,035
2016							
Carrying amount at start of year	15,400,000	17,260,350	3,958,994	2,706,573	2,814,035	9,944,961	52,084,913
Additions	-	4,525,664	1,276,124	296,957	-	-	6,098,745
Transfers	-	-	(5,206,481)	-	-	-	(5,206,481)
Other disposals	-	-	-	(229,230)	-	-	(229,230)
Revaluation Increments/(decrements)	10,000	820	-	-	-	-	10,820
Depreciation expense	-	(426,455)	-	(670,842)	(99,666)	(294,585)	(1,491,548)
Depreciation written back on disposal	-	-	-	125,398	-	-	125,398
Carrying amount at end of period	15,410,000	21,360,379	28,637	2,228,856	2,714,369	9,650,376	51,392,617

Information on fair value measurements is provided in Note 23.

Note 23. Fair value measurements

Assets measured at fair value: 2017	Level 1 \$	Level 2 \$	Level 3	Fair Value At end of period \$
Land (Note 22)	-	-	15,410,000	15,410,000
Buildings and residences (Note 22)	-	-	18,884,033	18,884,033
Monuments and specified items (Note 22)	-	-	9,355,791	9,355,791
Infrastructure (Note 25)		-	773,025	773,025
	-	-	44,422,849	44,422,849

Assets measured at fair value: 2016	Level 1	Level 2	Level 3	Fair Value At end of period \$
Land (Note 22)	-	-	15,410,000	15,410,000
Buildings and residences (Note 22)	-	-	21,360,379	21,360,379
Monuments and specified items (Note 22)	-	-	9,650,376	9,650,376
Infrastructure (Note 25)	-	-	796,450	796,450
	-	-	47,217,205	47,217,205

There were no transfers between Levels 1, 2 or 3 during the period.

Note 23. Fair value measurements (continued)

Fair value measurements using significant unobservable inputs (Level 3)

			Monuments and specified	
2017	Land \$	residences \$	items \$	Infrastructure \$
Fair Value at start of period Additions	15,410,000	21,360,379	9,650,376	796,450 -
Revaluation increments/(decrements) recognised in Profit or Loss	-	-	-	-
Revaluation increments/(decrements) recognised in Other Comprehensive Income Transfers (from/(to) Level 2)	-	(1,905,446)	-	-
Disposals	-	- (EZO 000)	- (204 E9E)	- (22.425)
Depreciation Expense Fair Value at end of period	15,410,000	(570,900) 18,884,033	(294,585) 9,355,791	(23,425) 773,025
Total gains or losses for the period included in profit or loss, under 'Other Gains'	-	-	-	-

2016	Land \$	Buildings and residences \$	Monuments and specified items \$	Infrastructure \$
Fair Value at start of period ^(a)	15,400,000	17,260,350	9,944,961	819,875
Additions	-	4,525,664	-	-
Revaluation increments/(decrements)				
recognised in Profit or Loss	-	-	-	-
Revaluation increments/(decrements)				
recognised in Other Comprehensive Income	10,000	820	-	-
Transfers (from/(to) Level 2)	-	-	-	-
Disposals	-	-	-	-
Depreciation Expense	-	(426,455)	(294,585)	(23,425)
Fair Value at end of period	15,410,000	21,360,379	9,650,376	796,450
Total gains or losses for the period included in profit or loss, under 'Other Gains'	_	_	_	_

⁽a) Prior year figures for Monuments and specified items have been restated to capture assets that are measured at fair value only.

Note 23. Fair value measurements (continued)

Valuation processes

There were no changes in valuation techniques during the period.

Transfers in and out of a fair value level are recognised on the date of the event or change in circumstances that caused the transfer. Transfers are generally limited to assets newly classified as non-current assets held for sale as Treasurer's Instructions require valuations of land, buildings and infrastructure to be categorised within Level 3 where the valuations will utilise significant Level 3 inputs on a recurring basis.

Land (Level 3 fair values)

Fair value for restricted use land is based on market value, by either using market evidence or sales of comparable land that is unrestricted less restoration costs to return the site to a vacant and marketable condition (low restricted use land), or, comparison with market evidence for land with low level utility (high restricted use land).

Buildings and infrastructure (Level 3 fair values)

Fair value for existing use specialised buildings and infrastructure assets is determined by reference to the cost of replacing the remaining future economic benefits embodied in the asset, i.e. the depreciated replacement cost. Depreciated replacement cost is the current replacement cost of an asset less accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired economic benefit, or obsolescence, and optimisation (where applicable) of the asset. Current replacement cost is generally determined by reference to the market observable replacement cost of a substitute asset of comparable utility and the gross project size specifications.

Basis of Valuation

In the absence of market-based evidence, due to the specialised nature of some non-financial assets, these assets are valued at Level 3 of the fair value hierarchy on an existing use basis. The existing use basis recognises that restrictions or limitations have been placed on their use and disposal when they are not determined to be surplus to requirements. These restrictions are imposed by virtue of the assets being held to deliver a specific community service and the BGPA's enabling legislation.

Information about significant unobservable inputs (Level 3) in fair value measurements

Description	Fair value 2017 \$	Fair value 2016 \$	Valuation technique(s)	Unobservable inputs
Land	15,410,000	15,410,000	Current Use	Restricted use of land
Buildings and	18,884,033	04 000 070	Depreciated Replacement	Consumed economic benefit/obsolescence of asset
residences	10,004,033	21,360,379	Cost	Historical cost per square metre floor area (m²)
Monuments and specified	9,355,791	9,650,376	Depreciated Replacement	Consumed economic benefit/obsolescence of asset
items	3,333,731	3,000,070	Cost	Historical cost per item
Infrastructure	773,025	796,450	Depreciated Replacement	Consumed economic benefit/obsolescence of asset
dot.aotaro		. 00, 100	Cost	Historical cost per item

Reconciliations of the opening and closing balances are provided in Notes 22 and 25.

Note 24. Operating lease receivable

The BGPA leases buildings to commercial tenants for retail purposes under operating leases of varying terms and duration. Details of the minimum lease payments receivable are detailed below.

	2017 \$	2016 \$
Future minimum lease payments under non-cancellable operating leases in the aggregate:		
Within 1 year Later than 1 year and not later than 5 years Later than 5 years	1,027,854 3,702,993 8,949,384 13,680,231	1,036,766 4,940,131 10,960,428 16,937,325

Operating leases fall into two categories; those based on a percentage of gross turnover and fixed leases with either scheduled increases or decreases based on annual CPI increases. There is one significant operating lease which expires in 2036.

These commitments are all exclusive of GST.

Note 25. Infrastructure

	201 <i>7</i> \$	2016 \$
At cost (initial)	937,000	937,000
Accumulated depreciation	(163,975)	(140,550)
	773,025	796,450
Reconciliation:		_
Carrying amount at start of period	796,450	819,875
Additions	-	-
Impairment losses	-	-
Depreciation expense	(23,425)	(23,425)
Carrying amount at end of period	773,025	796,450

See also Note 2(f) 'Property, plant and equipment and infrastructure'.

Note 26. Intangible assets

	201 <i>7</i> \$	2016 \$
Computer software		
At cost	70,600	-
Accumulated amortisation	(14,120)	
Accumulated impairment losses	-	
	56,480	
B W. et		
Reconciliation	-	-
Computer software		
Carrying amount at start of period	-	-
Additions	70,600	-
Amortisation expense	(14,120)	
Carrying amount at end of period	56,480	

Note 27. Impairment of assets

There was no indications of impairment to property and plant and equipment, or infrastructure at 30 June 2017.

The BGPA held no goodwill or intangible assets with an indefinite useful life during the reporting period. At the end of the reporting period there were no intangible assets not yet available for use.

All surplus assets at 30 June 2017 have either been classified as assets held for sale or written-off.

Note 28. Payables

Current \$ \$ Accounts payable 856,761 802,270 Accrued expenses 366,363 235,795 Accrued salaries 42,744 25,341 Total current 1,265,868 1,063,406

2017

2017

2016

2016

See also Note 2(q) 'Payables' and Note 38 'Financial Instruments'

Note 29. Provisions

	2017	2016
Current	—	\$_
Employee benefits provision:	704 440	754 470
Annual leave ^(a)	794,448	754,178
Long service leave(b)	1,029,674	1,079,764
Purchased leave ^{(a)(b)}	4,640	39,656
	1,828,762	1,873,598
Other provisions:		
Employment on-costs ^(c)	31,921	31,913
	31,921	31,913
	1,860,683	1,905,511
Non-current		
Employee benefits provision:		
Long service leave ^(b)	482,068	384,788
Purchased leave ^(b)	14,303	3,494
	496,371	388,282
Other provisions:		
Employment on-costs ^(c)	8,573	6,573
	8,573	6,573
	504,944	394,855

(a) Annual leave liabilities have been classified as current as there is no unconditional right to defer settlement for at least 12 months after the end of the reporting period. Assessments indicate that actual settlement of the liabilities will occur as follows:

Note 29. Provisions (continued)

Within 12 months of the end of the reporting period More than 12 months after the end of the reporting period

2017	2016
\$	\$
610,949	536,451
188,139	223,365
799,088	759,816

(b) Long service leave liabilities have been classified as current where there is no unconditional right to defer settlement for at least 12 months after the end of the reporting period. Assessments indicate that actual settlement of the liabilities will occur as follows:

Within 12 months of the end of the reporting period More than 12 months after the end of the reporting period

2017	2016
\$	\$
459,914	443,836
1,066,131	1,058,229
1,526,045	1,502,065

(c) The settlement of annual and long service leave liabilities gives rise to the payment of employment on-costs including workers' compensation insurance. The provision is the present value of expected future payments.

The associated expense, apart from the unwinding of the discount (finance cost), is disclosed in Note 9 'Other expenses'.

Movements in other provisions

Movements in each class of provisions during the period, other than employee benefits, are set out below:

Employment on-cost provision

Carrying amount at start of year Additional provisions recognised Reduction in provision

Carrying amount at end of year

\$	2016 \$
38,486	37,474
2,008	1,012
-	-
40,494	38,486

Note 30. Other liabilities

Current

Unearned revenue Fee for service Other (bonds/retentions/suspense)

Total current

See also Note 2(q) 'Payables' and Note 38 'Financial instruments'.

2017	2016
\$	\$
1,352,865	1,979,024
1,802,953	2,098,700
273,767	157,089
3,429,585	4,234,813

Note 31. Equity

The Western Australian Government holds the equity interest in the BGPA on behalf of the community. Equity represents the residual interest in the net assets of the BGPA. The asset revaluation surplus represents that portion of equity resulting from the revaluation of non-current assets.

Contributed equity

Balance at start of the period

Contributions by owners (a)
Capital appropriation
Total contributions by owners
Balance at end of period

2017 \$	2016 \$
30,365,000	30,365,000
-	-
-	-
30,365,000	30,365,000

(a) TI 955 Contributions by Owners Made to Wholly Owned Public Sector Entities designates capital appropriations as contributions by owners in accordance with AASB Interpretation 1038 Contributions by Owners Made to Wholly-Owned Public Sector Entities.

Reserves

Balance at start of period Net revaluation increments/(decrements):

Land

Buildings and Residences

Balance at end of period

Accumulated surplus/(deficit)

Total Equity at end of period

Balance at start of the period Result for the period Income and expense recognised directly in equity Balance at end of the year

Ψ	Ψ
21,618,986	21,608,166
- (1,905,446)	10,000 820
19,713,540	21,618,986

2017

2017

\$	\$
12,190,714 757,148	11,949,172 241,542
12,947,862	12,190,714
63,026,402	64,174,700

Note 32. Notes to the Statement of Cash Flows

Reconciliation of cash

Cash at the end of the financial year as shown in the Statement of Cash Flows is reconciled to the related items in the Statement of Financial Position as follows:

Cash and cash equivalents
Restricted cash and cash equivalents (Note 18 'Restricted cash and cash equivalents')

2017	2016
\$	\$
6,389,166	7,421,079
3,069,762	2,176,941
9,458,928	9,598,020

Reconciliation of net cost of services to net cash flows provided by/(used in) operating activities

activities	0045	0040
	2017	2016
Net cost of services	(12 012 100)	(14 444 279)
Net cost of services	(13,813,189)	(14,444,378)
Non-cash items		
Depreciation expense (Note 8 'Depreciation expense')	1,596,438	1,514,973
Services received free of charge (Note 17 'Income from State		
Government')	27,337	13,920
Net (gain)/loss on sale of property plant and equipment (Note 16		
'Net gain/(loss) on disposal of non-current assets')	54,197	45,560
Write offs and inventory adjustments	31,652	680,816
Adjustments for other non-cash items	(31,000)	-
(Increase)/decrease in assets		
Current receivables ^(a)	444,348	(246,627)
Current inventories	(27,773)	(722)
	(=:,::=)	(- ==)
Increase/(decrease) in liabilities		
Current payables ^(a)	185,637	(40,085)
Current provisions	(44,828)	192,686
Other current liabilities	(805,227)	444,038
Non-current provisions	110,089	(99,410)
Net GST receipts/(payments) ^(b)	316,494	10,626
Change in GST in receivables/payables ^(c)	(438,662)	20,691
Net cash provided by/(used in) operating activities	(12,394,487)	(11,907,912)

- (a) Note that the Australian Taxation Office (ATO) receivable/payable in respect of GST and the receivable/payable in respect of the sale/purchase of non-current assets are not included in these items as they do not form part of the reconciling items.
- (b) This is the net GST paid/received i.e. cash transactions.
- (c) This reverses out the GST in receivables and payables.

Note 33. Services provided free of charge

During the year no services were provided to other agencies free of charge for functions outside the normal operations of the BGPA.

Note 34. Commitments

The commitments below are exclusive of GST.

The commune its below are exclusive of GST.		
Capital expenditure commitments	2017 \$	2016 \$
Capital expenditure commitments, being contracted capital expenditure additional to the amounts reported in the financial statements, are payable as follows:		
Within 1 year	2,000,000	1,525,000
Later than 1 year and not later than 5 years Later than 5 years	3,000,000	3,000,000
·	5,000,000	4,525,000
The capital commitments include amounts for:		
Asset replacement	4,000,000	4,525,000
•	4,000,000	4,525,000
Vehicle lease commitments	2017	2016
	\$	\$
Commitments in relation to vehicle leases contracted for at the end of the reporting period but not recognised in the financial statements are payable as follows:		
Within 1 year	93,917	89,478
Later than 1 year and not later than 5 years	95,477	87,003
Later than 5 years	, -	, -
•	189,394	176,481
Representing:	·	•
Non-cancellable operating leases	189,394	176,481

Note 35. Contingent liabilities and contingent assets

The BGPA has no contingent liabilities or contingent assets.

Note 36. Events occurring after the end of the reporting period

A major announcement by Government on 28 April 2017 required a series of state public sector organisational changes to be implemented from 1 July 2017. This included a requirement for amalgamation of the BGPA, two other statutory authorities and the Department of Parks and Wildlife into the new Department of Biodiversity, Conservation and Attractions. While BGPA is now part of the department, the BGPA has retained its status as an authority. There is no financial impact.

189,394

176,481

Note 37. Explanatory Statement

Significant variances between estimates and actual results for 2017 and between the actual results for 2017 and 2016 are shown below. Significant variations are considered to be those greater than 5% and \$450,000.

Significant variances between estimated and actual results for 2017.

	2017 Estimate \$	2017 Actual \$	Variance \$
Expenses Supplies and Services	6,511,000	5,288,284	(1,222,716)
Income Fee for service, subsidies and sponsorship	3,860,000	3,264,493	(595,507)
Payments GST payments on purchases Other payments	505,000 2,851,000	1,117,513 1,729,400	612,513 (1,121,600)
Receipts GST receipts on sales	165,000	1,307,268	1,142,268

Supplies and Services

Most planned projects occurred as per estimates but some were not completed during the period and some were capitalised instead of expensed.

Fee for service, subsidies and sponsorship

Sponsorship revenue was received in accordance with estimates but Fee for service revenue was below that forecast, due to factors beyond the control of the BGPA.

GST payments on purchases

An underestimate in the forecast was made for this category, with some GST payment forecasts included in Other payments. There was no significant variance in the actual result.

Other payments

An overestimate in the forecast was made in this category, by inclusion of GST payment estimates. There was no significant variance in the actual result.

GST receipt on sales

An underestimate in the forecast was made for this category due to non-inclusion of GST receipt forecasts that were classified elsewhere. There was no significant variance in the actual result.

Significant variances between actual result for 2017 and 2016

	2017 \$	2016 \$	Variance \$
Income Fee for service, subsidies and sponsorships	3,264,493	2,301,988	962,505
r ce for service, subsidies and sponsorships	0,204,400	2,001,000	302,300

Fee for service, subsidies and sponsorships

Greater sponsorship revenue was received, in accordance with estimates, compared with the previous period.

Note 38. Financial instruments

(a) Financial risk management objectives and policies

Financial instruments held by the BGPA are cash and cash equivalents, restricted cash and cash equivalents, receivables and payables. The BGPA has limited exposure to financial risks. The BGPA's overall risk management program focuses on managing the risks identified below.

Credit risk

Credit risk arises when there is the possibility of the BGPA's receivables defaulting on their contractual obligations resulting in financial loss to the BGPA.

The maximum exposure to credit risk at the end of the reporting period in relation to each class of recognised financial assets is the gross carrying amount of those assets inclusive of any allowance for impairment as shown in the table at Note 37(c) 'Financial instrument disclosures' and Note 20 'Receivables and other assets'.

Credit risk associated with the BGPA's financial assets is minimal because the main receivable is the amounts receivable for services (holding account). For receivables other than government, the BGPA trades only with recognised, creditworthy third parties. The BGPA has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history. In addition, receivable balances are monitored on an ongoing basis with the result that the BGPA's exposure to bad debts is minimal. At the end of the reporting period there were no significant concentrations of credit risk.

Liquidity risk

Liquidity risk arises when the BGPA is unable to meet its financial obligations as they fall due. The BGPA is exposed to liquidity risk through its trading in the normal course of business. The BGPA has appropriate procedures to manage cash flows including drawdowns of appropriations by monitoring forecast cash flows to ensure that sufficient funds are available to meet its commitments.

Market risk

Market risk is the risk that changes in market prices such as foreign exchange rates and interest rates will affect the BGPA's income or the value of its holdings of financial instruments. The BGPA does not trade in foreign currency and is not materially exposed to other price risks. The BGPA has limited exposure to interest rate risk because it has no borrowings.

(b) Categories of financial instruments

The carrying amounts of each of the following categories of financial assets and financial liabilities at the end of the reporting period are:

	2017 \$	2016 \$
Financial assets		
Cash and cash equivalents	6,389,166	7,421,079
Restricted cash and cash equivalents	3,069,762	2,176,941
Receivables ^(a)	1,946,649	2,426,716
Amounts receivable for services	7,467,000	6,997,000
Financial liabilities		
Financial liabilities measured at amortised cost		
Payables ^(a)	1,265,868	1,063,406

(a) The amount of receivables and payables excludes GST recoverable from or payable to the ATO (statutory receivable).

Note 38. Financial instruments (continued)

(c) Financial instrument disclosures

Credit risk

The following table discloses the BGPA's maximum exposure to credit risk and the ageing analysis of financial assets. The BGPA's maximum exposure to credit risk at the end of the reporting period is the carrying amount of financial assets as shown below. The table discloses the ageing of financial assets that are past due but not impaired and impaired financial assets. The table is based on information provided to senior management of the BGPA.

The BGPA does not hold any collateral as security or other credit enhancements relating to the financial assets it holds.

Ageing analysis of financial assets

	Past due but not impaired							
2017	Carrying Amount \$	Not past due and not impaired \$	up to 1 month	1-3 months	3 months to 1 year \$	1-5 years \$	More than 5 years \$	Impaired financial assets \$
Cash and cash equivalents Restricted cash and cash	6,389,166	6,389,166	-	-	-	-	-	-
equivalents	3,069,762	3,069,762	-	-	-	-	-	-
Receivables ^(a)	1,946,649	1,795,125	98,040	6,500	19,306	18,471	9,207	-
Amounts receivable for services	7,467,000 18,872,577	7,467,000 18,721,053	98,040	6,500	19,306	18,471	9,207	-
2016								
Cash and cash equivalents Restricted cash and cash	7,421,079	7,421,079	-	-	-	-	-	-
equivalents	2,176,941	2,176,941	-	-	-	-	-	-
Receivables ^(a)	2,426,716	2,392,453	3,800	5,241	11,152	9,330	4,740	-
Amounts receivable for services	6,997,000	6,997,000	-	-	-	-	-	<u>-</u>
	19,021,736	18,987,473	3,800	5,241	11,152	9,330	4,740	-

⁽a) The amount of receivables excludes the GST recoverable from the ATO (statutory receivable)

Note 38. Financial instruments (continued)

Liquidity risk and interest rate exposure

The following table details the BGPA's interest rate exposure and the contractual maturity analysis of financial assets and financial liabilities. The maturity analysis section includes interest and principal cash flows. The interest rate exposure section analyses only the carrying amounts of each item.

Interest rate exposure and maturity analysis of financial assets and liabilities

	Interest rate exposure						Maturity date				
_2017	Weighted Average Effective Interest Rate %	Carrying Amount \$	Fixed interest rate \$	Variable interest rate \$	Non- interest bearing \$	Nominal Amount \$	Up to 1 month \$	1-3 months \$	3 months to 1 year \$	1-5 years \$	More than 5 years \$
Financial Assets											
Cash and cash	1.49%	6,389,166	-	6,389,166	-	6,389,166	6,389,166	-	-	-	-
equivalents Restricted cash and											
cash equivalents	1.49%	3,069,762	_	3,069,762	-	3,069,762	3,069,762	_	_	-	_
Receivables ^(a) Amounts receivable		1,946,649	-	-	1,946,649	1,946,649	1,946,649	-	-	-	-
for services		7,467,000	-	-	7,467,000	7,467,000	50,000	250,000	700,000	-	6,467,000
		18,872,577	-	9,458,928	9,413,649	18,872,577	11,455,577	250,000	700,000	-	6,467,000
Financial Liabilities											
Payables		1,265,868	-	-	1,265,868	1,265,868	1,265,868	-	-	-	-
		1,265,868	-	-	1,265,868	1,265,868	1,265,868	-	-	-	-

⁽a) The amount of receivables excludes the GST recoverable from the ATO (statutory receivable).

Note 38. Financial instruments (continued)

Liquidity risk and interest rate exposure continued

Interest rate exposure and maturity analysis of financial assets and liabilities

Maturity date Interest rate exposure Weighted **Average** Effective Variable Non-**Fixed** Carrying Up to 1 1-3 3 months More than Interest interest interest interest Nominal Rate **Amount** rate rate bearing **Amount** month months to 1 year 1-5 years 5 vears 2016 % \$ \$ \$ \$ **Financial Assets** - 7,421,079 7,421,079 7,421,079 Cash and cash 1.65% 7.421.079 equivalents Restricted cash and cash equivalents 1.65% 2.176.941 2,176,941 2,176,941 2,176,941 2,426,716 2,426,716 2,426,716 Receivables^(a) 2,426,716 Amounts receivable 6,997,000 for services 6,997,000 6,997,000 50,000 250,000 700,000 5,997,000 9,423,716 19,021,736 12,074,736 19.021.736 9.598.020 250.000 700.000 5,997,000 **Financial Liabilities** Payables 1,063,406 1,063,406 1,063,406 1,063,406 1,063,406 1,063,406 1,063,406 1,063,406

⁽a) The amount of receivables excludes the GST recoverable from the ATO (statutory receivable).

Note 38. Financial Instruments (continued)

Interest rate sensitivity analysis

The following table represents a summary of the interest rate sensitivity of the BGPA's financial assets and liabilities at the end of the reporting period on the surplus for the period and equity for a 0.5% change in interest rates. It is assumed that the change in interest rates is held constant throughout the reporting period.

	0	-50 basis points		+50 basis points	
2017	Carrying amount \$	Surplus \$	Equity e	Surplus ¢	Equity
	Į	Ą	Ą	Ą	Ą
Financial assets					
Cash and cash equivalents	6,389,166	(31,946)	(31,946)	31,946	31,946
Restricted cash and cash equivalents	3,069,762	(15,349)	(15,349)	15,349	15,349
Total Increase/(Decrease)		(47,295)	(47,295)	47,295	47,295

	Correina	-50 basis points		+50 basis points	
2016	Carrying amount \$	Surplus \$	Equity \$	Surplus \$	Equity \$
Financial assets	•	•	Ψ	•	Y
Cash and cash equivalents	7,421,079	(37,105)	(37,105)	37,105	37,105
Restricted cash and cash equivalents	2,176,941	(10,885)	(10,885)	10,885	10,885
Total Increase/(Decrease)		(47,990)	(47,990)	47,990	47,990

Fair Values

All financial assets and liabilities recognised in the Statement of Financial Position, whether they are carried at cost or fair value, are recognised at amounts that represent a reasonable approximation of fair value unless otherwise stated in the applicable notes.

Note 39. Remuneration of auditor

Remuneration paid or payable to the Auditor General in respect of the audit for the current financial year is as follows:

	2017	2010
	\$	\$
Auditing of accounts, financial statements and		
performance indicators	31,400	30,900
	31,400	30,900

Note 40. Supplementary financial information

	\$	2016 \$
Write-offs		
Write –offs and inventory adjustment	15,829	13,632
Recovery from insurance claims on inventory damages	(3,838)	(1,056)
	11,991	12,576

Note 41. Schedule of income and expense by service

	Service 1		Service 2			
	Customer Service and Cultural Heritage		Biodiversity C and Scientifi		Total	
	2017	2016	2017	2016	2017	2016
COST OF SERVICES	*	\$	\$	\$	\$	\$
Expenses						
Employee benefits expense	4,899,728	4,820,293	6,585,528	6,448,654	11,485,256	11,268,947
Supplies and services	3,212,065	2,617,691	2,076,219	2,750,495	5,288,284	5,368,186
Depreciation expense	1,036,526	757,487	559,912	757,486	1,596,438	1,514,973
Cost of Sales	1,560,283	1,413,798	956	1,277	1,561,239	1,415,075
Loss on disposal of non-current assets	26,078	16,698	28,119	28,862	54,197	45,560
Other expenses	1,465,920	1,706,792	1,198,872	1,099,870	2,664,792	2,806,662
Total cost of services	12,200,600	11,332,759	10,449,606	11,086,644	22,650,206	22,419,403
Income						
User charges and fees	2,053,697	2,256,732	66,683	75,535	2,120,380	2,332,267
Sales	2,785,694	2,567,943	6,180	2,139	2,791,874	2,570,082
Commonwealth grants and contributions	-	-	45,000	65,000	45,000	65,000
Interest revenue	94,086	101,524	50,661	54,667	144,747	156,191
Gain on disposal of non-current assets	-	-	-	-	-	-
Fee for service, subsidies and sponsorships	1,127,237	621,171	2,137,256	1,680,817	3,264,493	2,301,988
Other revenue	181,063	254,869	289,460	294,628	470,523	549,497
Total income other than income from State Government	6,241,777	5,802,239	2,595,240	2,172,786	8,837,017	7,975,025
NET COST OF SERVICES	5,958,823	5,530,520	7,854,366	8,913,858	13,813,189	14,444,378
Income from State Government						
Service Appropriation	6,291,150	6,345,707	8,251,850	8,326,293	14,543,000	14,672,000
Services received free of charge	12,302	6,264	15,035	7,656	27,337	13,920
Total income from State Government	6,303,452	6,351,971	8,266,885	8,333,949	14,570,337	14,685,920
SURPLUS/(DEFICIT) FOR THE PERIOD	344,629	821,451	412,519	(579,909)	757,148	241,542

The Schedule of Income and Expenses by Service should be read in conjunction with the accompanying notes. Refer to the Key Performance Indicators for more detailed analysis.

Key Performance Indicators for the year ended 30 June 2017

Certification of the Key Performance Indicators

We hereby certify that the key performance indicators are based on proper records, are relevant and appropriate for assisting users to assess the Botanic Gardens and Parks Authority's performance, and fairly represent the performance of the Botanic Gardens and Parks Authority for the financial year ended 30 June 2017.

Richard Simpson

Chair

Botanic Gardens and Parks Authority

Board of Management

24 August 2017

Grant Robinson Deputy Chair

Botanic Gardens and Parks Authority

fred Robinson

Board of Management

24 August 2017

Key Performance Indicators

For the year ended 30 June 2017

Relationship to Government Goals

Broad, high level Government goals are supported at agency level by more specific desired outcomes. BGPA delivers services to achieve these desired outcomes, which ultimately contribute to meeting the higher level government goals. The following table illustrates the relationship between BGPA level desired outcomes and the most appropriate Government goal.



Outcome 1

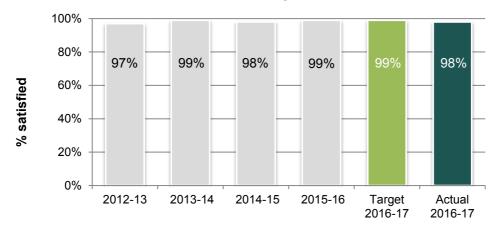
This outcome of awareness and appreciation of recreation and tourist resources, and cultural heritage for visitors' enjoyment is achieved through improving and promoting education and recreation in the designated lands; providing safe, accessible and well maintained facilities; providing and promoting cultural experiences and events and by actively seeking to improve and provide additional visitor services and facilities.

Key Effectiveness Indicators

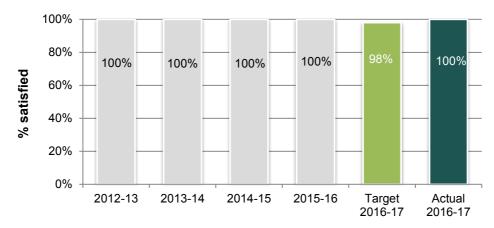
1.1 The level of visitor satisfaction with Kings Park and Botanic Garden and Bold Park.

This key indicator measures the level of satisfaction visitors have with the extent to which recreational, tourist and bushland resources have been conserved, enhanced and promoted and the impact of these activities on visitor enjoyment.

Overall satisfaction with Kings Park and Botanic Garden



Overall satisfaction with Bold Park



Total annual visitation for 2016-17 to Kings Park and Botanic Garden is based primarily on vehicle counts at various entrances and is estimated to be 6.3 million visitors. Total annual visitation to Bold Park is difficult to estimate due to multiple entrances for pedestrians and vehicles. Changes in level of visitation to Bold Park are based on vehicle counts of 81,764 at Reabold Hill, where a vehicle counter is in place.

Visitor surveys were conducted from February 2017 to May 2017 in Kings Park and Botanic Garden in several locations: Rio Tinto Naturescape, Fraser Avenue Precinct, Lotterywest Family Area, Synergy Parkland, Saw Avenue Playground and the Botanic Garden, and during May 2017 in Bold Park. A total of 677 responses were received, providing a margin of error of 4% at a 95% level of confidence.

The percentage of overall visitor satisfaction in Kings Park and Botanic Garden was 98%. The percentage of overall visitor satisfaction in Bold Park was 100%, which is the same as the previous year and 2% above the target figure for 2016-17.

1.2 The percentage change in the number of cultural events held at Kings Park and Botanic Garden compared to previous years.

Cultural events are defined as memorial, military commemorative ceremonies and other community organised events. These include the Anzac Day Dawn Service, summer events such as classical and contemporary music concerts, and community events such as the Kings Park Festival.

Reporting Year	No. of Cultural Events	Target Percentage (%) Change	Actual Percentage (%) Change	Notes
2016-17	267	(2)	3.9	1
2015-16	257	(5)	(1.5)	
2014-15	261	6	(5.8)	
2013-14	277	0	0.4	
2012-13	276	0	(1.4)	

Notes:

1. In any given period, a number of events can be reliably forecast to occur e.g. Anzac Day, but community events or concerts cannot be precisely calculated. The variance between the 2016-17 target and 2016-17 actual is primarily due to additional screenings taking place at Moonlight cinema that were not forecast. The target of 247, which was lower than the previous period actual result, was derived from the expectation that there would be less events occurring in conjunction with the Kings Park Festival. This did not eventuate, the number of events occurring being the same as the previous period.

1.3 The percentage change in the number of people attending customer awareness and education forums held at Kings Park and Botanic Garden compared to previous years.

This indicator is derived from total numbers attending customer awareness forums, education programs and free guided walks.

Reporting Year	No. Attending Customer Awareness and Education Forums	Target Percentage (%) Change	Actual Percentage (%) Change	Notes
2016-17	82,714	(25)	(16.3)	1
2015-16	98,867	3	(1.3)	
2014-15	100,205	12	(10.7)	
2013-14	112,233	4	9.3	
2012-13	102,725	0	21.1	

Notes:

 The actual number of customer awareness forums, education programs and free guided walks decreased in 2016-17 compared with the previous period, in line with forecasts. This was due to the planned closure of Rio Tinto Naturescape Kings Park for stage two works, resulting in less education forums being delivered.

Service 1 – Customer Service and Cultural Heritage

To measure the success of Service 1, BGPA uses the data collected from annual visitor surveys as demonstrated in Indicator 1.1 above; the overall number of visitors promoting and enhancing customer awareness by providing education forums; by conserving, promoting and developing cultural heritage including Indigenous, colonial and contemporary heritage; and by staging events and displays on designated lands.

Key Efficiency Indicators

	Actual 2012- 13	Actual 2013- 14	Actual 2014- 15	Actual 2015- 16	Target 2016- 17	Actual 2016- 17	Notes
Average cost per visitor to Kings Park and Botanic Garden	\$1.71	\$2.02	\$1.83	\$1.91	\$1.81	\$1.78	1
Average cost per attendee at cultural events held in Kings Park and Botanic Garden	\$0.12	\$0.12	\$0.17	\$0.21	\$0.18	\$0.15	2
Average cost per attendee at education forums held in Kings Park and Botanic Garden	\$3.80	\$4.18	\$4.23	\$4.43	\$13.94	\$7.66	3
Response times for public information requests	95% Within 28 days	100% within 28 days	4				
Percentage change in number of visitors to Reabold Hill compared to previous year	15.8%	9.3%	(3.2%)	0.7%	1.0%	16.7%	5

Notes:

- 1. The average cost per visitor fluctuates from year to year, but none of the variances in the five periods reported are considered significant. The 2016-17 result reflects a level of visitation 12.5% higher than forecast, at 6.3 million compared with 5.6 million for the previous period, which is considered significant. However, with costs also greater than forecast by 10.7%, the resultant average cost per visitor is not materially different from target or long term trend.
- 2. The average cost per attendee at cultural events is lower than forecast by 16.7%. This is primarily due to higher than expected attendance, however, the variance is not considered significant in terms of providing meaningful insight, or requiring further action. A one-off event held in conjunction with the Perth International Arts Festival (PIAF), with an attendance of 110,000 over three days, increased the cultural events attendance total significantly. If normalised to account for this, the indicator would be \$0.17 instead of \$0.15, a variance of 5.6% from the target. The nature of events however, is that while attendance numbers for ongoing events can be forecast with reasonable certainty, the number or type of additional one-off events cannot be predicted, hence normalisation is not applied to attendance. In addition to the variance from target, the 2016-17 result is also significantly lower than the 2015-16 result. This was primarily due to the same reason, the PIAF event increasing attendance to that beyond average.
- 3. The 2016-17 target was incorrect, with a more recent review of the same information and assumptions determining that \$7.01 more accurately represents the forecast for this indicator. The initial calculation was intended to reflect the closure for part of the period of Rio Tinto Naturescape Kings Park, a site where a number of education forums occur. The result, however, was a material understatement of the expected attendance, resulting in a subsequent increase in the average cost. If compared with the revised target, the actual result of \$7.66 represents a variance of 9.3%. The closure of Rio Tinto Naturescape Kings Park did have an impact on education activities, with a 40.5% reduction in school holiday program attendance reflecting the biggest single factor, but most other forums were not materially affected. The 2016-17 result also represents an increase on an average of all the previous periods, due to the revised assumptions more accurately capturing all costs associated with the events.
- 4. All enquiries and requests are dealt with as promptly as possible however, the nature of some requests, and the time and complexity required to address them, does not always permit a 100% response rate to be achieved within the timeframe. For 2016-17, 88 communications received during the period required a direct response, with all receiving a response within 28 days
- 5. The number of visitors to Reabold Hill is measured by the number of vehicles recorded on the access road. This typically includes insignificant variances from year to year, however, this year recorded a 16.7% increase over the previous year. This may be partially explained by new equipment installation in August 2016 with greater sensitivity to smaller vehicles and cyclists than the previous counter, therefore recording more accurately. In addition, Bold Park has been promoted through free guided walks, regular articles in local media and in other publications, which may have increased visitor numbers. Figures for July to October 2016 were incomplete due to faulty equipment and therefore estimated based on daily averages from 2015 and 2016 where available.

Outcome 2

This outcome of conservation and enhancement of Western Australia's bushland and other flora is achieved through the development and management of the scientific collections, the display of Western Australian and other flora; promoting the use of Western Australian flora for horticulture, conservation and education; and continually undertaking and promoting scientific research into Western Australian flora for biodiversity conservation and restoration.

The effectiveness of ex-situ species conservation and botanic research is assessed through the success in collecting and maintaining living collections of indigenous plants for research, display, public education and restoration.

Key Effectiveness Indicators

2.1 Percentage of Declared Rare Flora (DRF) species in living collections in Kings Park and Botanic Garden, compared to the known number of DRF species in Western Australia.

This key indicator measures the effectiveness over time of the DRF collections maintenance program, bearing in mind that the number and range of plants gazetted as DRF varies from year to year and is outside the control of the BGPA, and most DRF species are made available through the Department of Parks and Wildlife rather than through the BGPA collecting program.

Reporting Year	No. of DRF Species in Living Collections	Total DRF Species Gazetted	Target %	Actual %
2016-17	246	424	59	58
2015-16	247	425	59	58
2014-15	248	422	61	59
2013-14	244	415	62	59
2012-13	252	413	62	61

Total DRF species gazetted is a number derived from the list of species in the *Wildlife Conservation (Rare Flora) Notice 2016* published in the Government Gazette on 6 January 2017 by the Minister for Environment under section 23F(2) of the *Wildlife Conservation Act 1950*.

The total number of DRF held in the BGPA's conservation collection decreased by one species to 246, and the same decrease was reflected in the total number of DRF species gazetted. The number of DRF in the BGPA's living collections represents 58% of the total DRF listed for the State, which is 1% below the target but equal to the percentage recorded for 2015-2016.

Collection of DRF species from the wild is the primary responsibility of the Department of Parks and Wildlife, with whom the BGPA liaises closely to assist with collections from remote areas as opportunities arise. The BGPA therefore has a limited capacity to increase its DRF collections unless plants from germination testing are provided by Parks and Wildlife to be maintained in the Kings Park nursery or planted in the Western Australian Botanic Garden, or collections are made during infrequent remote area field trips.

2.2 Percentage of accessions in botanical displays in Kings Park and Botanic Garden.

This indicator is a measure of horticultural and management skills in maintaining the living collection of plants and increasing the diversity of plants on public display.

Reporting Year	No. of Accessions in Botanical Display	Total No. of Accessions Alive	Target %	Actual %
2016-17	7,152	22,061	35	32
2015-16	7,332	21,535	35	34
2014-15	7,179	21,005	35	34
2013-14	7,038	20,604	37	34
2012-13	7,008	20,932	38	33

An accession is a collection of material that can be propagated from an individual plant - be it flowers, foliage, seeds, shoots, roots or the whole plant. The number of accessions on botanical display is the number growing in the Western Australian Botanic Garden, Synergy Parkland, Lotterywest Family Area and Fraser Avenue precinct garden beds.

This measure is calculated by the number of accessions in botanical displays in Kings Park and Botanic Garden divided by the total number of accessions alive in living collections. There was a decrease of 180 accessions in the number of accessions on display compared with the previous year, but also an increase of 526 total accessions alive. This contributed to the decrease in the indicator by 2% from the previous year at 32%, which was 3% below the target. In addition, the dry weather in May 2017 delayed planting by six weeks, resulting in more planting post 30 June than in normal years and therefore not recorded in 2016-17.

2.3 Percentage of accessions lost in Kings Park and Botanic Garden.

This is a measure of horticultural and management skills in maintaining the living collections of plants, where a lower percentage represents an improvement.

Reporting Year	No. of Accessions Lost	Total No. of Accessions Alive	Target %	Actual %
2016-17	1,262	22,061	4	6
2015-16	819	21,535	4	4
2014-15	485	21,005	4	2
2013-14	1,261	20,604	4	6
2012-13	699	20,932	5	3

The loss of accessions in 2016-17 represented 6% of the total collection, which was 2% higher than the target figure and 2% higher than the previous year.

It should be noted that there will always be losses of accessions caused by natural attrition; the replacement of ageing plants with new plantings to maintain optimum display; and loss of seed viability over time. The BGPA has procedures in place to ensure that, while specific accessions may be lost, the taxa are still retained in the living collections.

A stocktake against database records of the seed stored in chest freezers previously was commenced as the seed lots were transferred into the new seedbank facility. This process identified errors in the data that have accumulated over the past 20 years, updating the records to a higher level of accuracy. Further stocktaking will occur in the 2017-18 year to complete the process. It is not feasible to stocktake to this level more frequently due to the staff resources required to complete the process, however, more restricted access to the collections and protocols now in place will contribute to more accurate record keeping on an ongoing basis in the future.

2.4 The presence of 15 nominated perennially evident native plant species, which are the most vulnerable taxa within each of Kings Park and Bold Park bushland.

This indicator measures the BGPA's effectiveness in conserving a range of native plants in Kings Park and Bold Park bushland that have been selected and documented as the most vulnerable taxa in each Park.

Reporting Year	Target %	Actual %
2016-17	100	100
2015-16	100	100
2014-15	100	100
2013-14	100	100
2012-13	100	100

The top 15 most vulnerable species are determined in each park through primary and secondary selection criteria. Primary criteria include species listed in the State Priority Flora list; or taxa that are rare, have limited distribution in the park or are known to be declining in the park. Secondary criteria include the species' reproductive method; occurrence in vulnerable habitats or sites at risk; or publicly important iconic species.

The indicator is measured by an annual survey of the presence or absence of 15 nominated perennially evident native plant species in each park, which are the most vulnerable taxa within each of Kings Park bushland and Bold Park. Results of the survey in Bold Park during 2016-17 recorded 100% presence of the nominated 15 species.

A similar survey conducted in Kings Park bushland also recorded 100% presence of the nominated 15 species.

2.5 Number of common native plant species in Bold Park in areas with high levels of management compared to areas with low levels of management.

This indicator measures the BGPA's effectiveness in restoring areas of degraded bushland in Bold Park. It is derived by annually surveying 15 nominated common native plant species within representative quadrats for two dominant community types, to compare their presence in both low management zones and high management zones.

	Actual 2012-13	Actual 2013-14	Actual 2014-15	Actual 2015-16	Target 2016-17	Actual 2016-17
Average number of common species present in high management zones	5.6	5.5	5.7	5.8	5.8	5.7
Average number of common species present in low management zones	4.0	3.9	4.0	4.0	4.0	4.0
Indicator value	1.4	1.4	1.4	1.4	1.4	1.4

High management zones are degraded areas that are prioritised for ecological restoration activities, some of which are in progress and others have not yet commenced. Low management zones are areas in which there are no active restoration activities at this time.

The dominant community types in Bold Park are Banksia woodland and heath over sand. Ten quadrats for each community type in both high and low management zones have been established (total of 40 quadrats), and the number of common species present in each quadrat recorded annually with figures averaged to give a single figure for each management regime.

The indicator is calculated by dividing the average number of common species present in high management zones by the average number of common species present in low management zones, as determined through annual monitoring of representative quadrants within each zone. Where the indicator is a figure greater than one, this indicates a higher number of common species in the high management areas.

This indicator is expected to slowly increase over the medium to long term and then stabilise once the broad restoration objectives of ecological stability and resilience are attained. New plantings are not scored as present until they have been established for a minimum of 30 months, due to high mortality rates during the establishment period.

The indicator has remained the same as the previous year and is equal to the target set for 2016-17. The average number of common species remained static in the high management plots with a very minor decrease in the heath community that was not significant enough to change the indicator value. The low management plot species numbers also remained static. It should be noted that recording for bushland indicators is done at the optimum time of late August each year, and therefore the results are impacted by seasonal conditions through the previous financial year.

2.6 Weed cover in high intensity management areas compared to low intensity management areas in Bold Park.

This indicator measures the BGPA's effectiveness in bushland restoration. It is derived by annually recording percentage weed cover within two dominant community types and comparing results for both low management zones and high management zones. High management zones are degraded areas prioritised for ecological restoration activities, some of which are in progress. Low management zones are those areas not being actively restored at this time.

	Actual 2012-13	Actual 2013-14	Actual 2014-15	Actual 2015-16	Target 2016-17	Actual 2016-17
Average percentage weed cover in high management zones	16.3%	18.2%	42.5%	11.2%	14.0	18.9
Average percentage weed cover in low management zones	34.8%	36.9%	59.7%	28.0%	32.0	35.5
Indicator value	0.46	0.49	0.71	0.4	0.4	0.5

The dominant community types in Bold Park are Banksia woodland and heath over sand. Forty quadrants for each community type in both high and low management zones have been established (total of 160) and percentage weed cover recorded in each.

The indicator is calculated by dividing the average percentage weed cover in high management zones by the average percentage weed cover in low management zones. A figure less than 1 indicates a lower average percentage weed cover in the high management areas. The indicator is expected to decrease over time and then stabilise once the broad restoration objectives of ecological stability and resilience are attained.

An increase in weed cover was expected in 2016-2017 compared with the 2015-2016 figure, as rainfall in the previous year had been unusually low and significantly reduced the growth of annual weeds. In the 2016-2017 year, higher autumn rainfall in 2016 enhanced the growth of annual weeds in both high and low management plots (measured in August 2016), but marginally more in the high management plots. The value of this indicator increased by 0.1 compared with the previous year's figure and although marginally higher than the target figure, the increase is not significant.

2.7 Number of representative native plant taxa in Kings Park bushland.

This indicator is measured by an annual survey of the presence or absence of 15 nominated perennially evident native plant species, which are the most vulnerable taxa within Kings Park bushland.

Reporting Year	Target	No. of Native Plant Taxa Recorded
2016-17	325	325
2015-16	325	325
2014-15	325	325
2013-14	325	325
2012-13	324	325

The continued presence of these native plant species in Kings Park bushland provides an appropriate scientific measure of overall taxa present. It is not practical or feasible to annually survey all native plant taxa in all lands managed.

As the presence of all 15 of the most vulnerable species was confirmed during monitoring, the total number of native plant taxa in Kings Park bushland remained at 325, equal to the target.

2.8 Number of representative native plant taxa in Bold Park bushland.

This indicator is measured by an annual survey of the presence or absence of 15 nominated perennially evident native plant species, which are the most vulnerable taxa within Bold Park.

Reporting Year	Target	No. of Native Plant Taxa Recorded
2016-17	310	311
2015-16	310	310
2014-15	310	310
2013-14	310	310
2012-13	310	310

The continued presence of these native plant species in Bold Park provides an appropriate scientific measure of overall taxa present. The total number may vary from time to time as a result of the discovery of new species, verification of plant records or as a result of genetic analysis of provenance, which may show that some species considered native were in fact early introductions to the park from nearby areas.

The number of native plant taxa recorded increased by one species due to the discovery of a new species record for Bold Park during a detailed flora survey of an area north of Oceanic Drive. This survey was initiated to determine the potential impact of a proposed new access into the Department of Education land to the north from Oceanic Drive. The species was verified by the State Herbarium and has been added to the total native species list for Bold Park. All 15 of the nominated most vulnerable species were surveyed and recorded as present.

Service 2 – Biodiversity Conservation and Scientific Research

To measure the success of Service 2, BGPA uses the data in indicators 2.1 to 2.8 above and through demonstrating leadership in urban bushland management, especially for Perth and regional communities; horticultural services including developing new plants; and undertaking and promoting leading-edge science and interpretation pertinent to integrated conservation of flora for present and future generations.

Key Efficiency Indicators

	Actual 2012-13	Actual 2013-14	Actual 2014-15	Actual 2015-16	Target 2016-17	Actual 2016-17	Notes
Average cost of representative native plant taxa in Kings Park bushland.	\$3,179	\$3,882	\$4,885	\$4,073	\$3,939	\$4,059	
Average cost of representative native plant taxa in Bold Park bushland.	\$5,039	\$4,684	\$5,897	\$4,117	\$4,720	\$5,159	1
Average cost per research fee for service project administered.	\$17,950	\$14,400	\$18,823	\$19,057	\$14,752	\$13,205	2
Percentage change in number of refereed scientific publications published per Consolidated Fund position compared to previous year.	42%	(15%)	2.5%	82%	0%	-31%	3

Notes:

- 1. The indicator is based on two variables, the number of native plant taxa, and the total costs associated with Bold Park bushland. As the number of native plant taxa has remained constant at either 310 or 311 for the past 5 periods, the variances are all due to the expenditure occurring in the respective periods. The 2016-17 actual is greater than forecast due to some small one-off expenditure items not being forecast, with the greater variance compared with previous period actual being the result of 2015-16 expenditure being significantly lower than average. The 2016-17 result is not considered to be of concern.
- 2. The variance between the 2016-17 actual result and the 2016-17 target is due to reduced expenditure amongst existing projects, together with the reduced size of new projects relative to estimates. The variances in the current and previous periods are also significant, these exist because the nature of the indicator does not take into account the timing of project milestones across financial periods, or the stage of activity that any given project is at. Both of these variables impact upon average costs in any given year. While a higher or lower figure does not necessarily indicate any increase or decrease in efficiency however, the longer term trend is informative regarding average project size.
- 3. The fluctuation in the number of refereed scientific publications published per government funded position is a reflection of the stage and complexity of research projects in any given year. The number of positions from one period to the next does not vary significantly, typically less than 0.5FTE, however, the number of publications in any given year can increase or decrease considerably due to timing. The number of publications can be reasonably estimated, but the timing is difficult to forecast as the resultant publication of original research findings can take up to 18 months to be 'in print' from the date of manuscript submission. With this level of uncertainty in the estimation process acknowledged, and demonstrated by past variances, the 2016-17 result is not considered a matter for concern. The actual number of refereed scientific publications for 2016-17 was 51.

Disclosures

Other Financial Disclosures

Pricing Policies and Services

BGPA charges for goods and services on a full or partial cost recovery basis and in accordance with penalties applied under the *Botanic Gardens and Parks Regulations 1999*, which was revised during the 2015-16 year and took effect on 10 September 2016. Fees and charges are reviewed annually or as required in accordance with Treasurer's Instruction 810.

Entry to and parking in Kings Park and Botanic Garden and Bold Park is free of charge. Some services, such as the Kings Park Education programs and special education events, incur a charge to assist in cost recovery. Entry fees or ticket costs of events such as the outdoor cinema and concerts in Kings Park are determined by the event organiser.

Fees for venue hire and for booked activities are applied according to the type of function and the location or venue requested. Fees are reviewed from time to time and are approved by state government. Fees, application forms, conditions of use are available on the BGPA website.

Capital Works

Capital project incomplete

Rio Tinto Naturescape Kings Park Stage Two

In 2017-18, the second stage of Rio Tinto Naturescape Kings Park will be completed. The stage two funding of \$3m from Rio Tinto was secured in the 2009 sponsorship contract. Stage two will expand this nature based discovery and educational resource, which opened in 2011 after an initial investment of \$8.5m from a range of partners. The estimated remaining cost at 30 June 2017 to complete the project is \$2.3m.

Capital projects completed

No capital projects were completed during 2016-17.

Employment and Development

Employment Profile

As of 30 June 2017, BGPA employed 160 people, equating to 123 full time equivalents (FTE). During the year, 16 employees (9.81% of the total workforce) resigned from BGPA (comparable to 15 resignations in 2015-16). BGPA completed 20 recruitment processes and engaged 21 new employees during 2016-17. BGPA remains supportive of flexible working arrangements that are suited to individual employees' needs, where this is practicable and meets the operational needs of the workplace. This includes some part time work arrangements, which is reflected in a higher headcount to FTE ratio.

There were a number of casuals employed in 2016-17, mostly employed for seasonal or fluctuating hours as required. Trainees are included in the total headcount however are not included in BGPA's FTE count.

BGPA Employment Profile as of 30 June 2017:

Employment Type	2015-16	2016-17
Permanent Full-time	75	74
Permanent Part-time	15	16
Fixed Term Full-time	17	23
Fixed Term Part-time	14	14
Casual	30	22
Trainees	11	11
Headcount Total	162	160
FTE Total	123	125

Figures are as reported in the June 2017 MOIR Report. Allowing for normal fluctuations throughout the reporting year, the average FTE is 132.

Industrial Relations

BGPA employees work under one of three Awards: The Government Officers Salaries, Allowances and Conditions Award 1989 (salaried employees); The Botanic Gardens and Parks Authority (Operations) General Agreement 2016 (horticultural and operations employees); or the Shop and Warehouse (Wholesale and Retail Establishments) Award 1977 (Aspects of Kings Park retail employees).

Workforce Planning

To assist in planning and recruitment for the future, BGPA is guided by its five-year Workforce Plan: Incorporating Equity and Diversity for the period 2016-2021, with annual reviews to ensure continued currency and relevance. A review was undertaken in 2016-17, resulting in a new five-year Workforce Plan to cover the period July 2017 to June 2022.

The implementation of the Workforce Plan in 2016-17 has resulted in:

- Ongoing sound recruitment and selection processes through training and best practice recruitment and selection techniques.
- Flexible work practices within operational requirements including flexible rosters, job share
 and flexi-time arrangements, which are both suited to individual employees' needs and
 meet the operational needs of the workplace.
- Improved employee access to personal payroll data through the improvements to BGPA's web-based payroll system Web Self Service.
- Further development of leadership and management competencies amongst employees through internal acting opportunities in leadership roles.
- Increased emphasis on the BGPA Code of Conduct with its inclusion in the induction process, ensuring that new employees fully understand the acceptable standards of behaviour from the beginning of their employment. Employees are also reminded of their rights and responsibilities at quarterly general staff meetings.
- Ongoing improvements to recruitment strategies to encourage all people, including those with a disability, Aboriginal Australians, young people and people from culturally and linguistically diverse backgrounds to apply for relevant vacant positions.

Employee Diversity Profile

BGPA strives to be an employer of choice and actively supports workplace diversity and equal employment opportunities. BGPA's Diversity Profile is summarised below:

Diversity Group	2015-16 %	2016-17 %
Women in SES	50	50
Women in Management Tier 1	100	100
Women in Management Tier 2	67	67
Women in Management Tier 3	40	35
Indigenous Australians	2	2
Employees from Culturally Diverse Background	9	10
Employees with Disabilities	1	1
Youth (under 25 years)	7	7

2016-17 Figures derived from BGPA Quarterly entity profile for March 2017.

Training and Development

BGPA is committed to supporting its employees through the provision of training and development opportunities. Formal training and informal on-the-job learning undertaken during the financial year was designed to enhance skills, raise awareness and reduce risks. Training included equipment use, injury management and occupational health and safety training. This is in addition to training and development opportunities identified through individual performance enhancement and training discussions between employees and their line supervisors.

Formal training for 2016-17

Training Focus	Number of attendees	BGPA Outcomes
Web Self Service	27	Improved employee understanding of the use of the online payroll system.
Chemical Shed Induction Course	8	Improved employee understanding of appropriate chemical handling and storage within the Chemical Shed in the new Depot area.
Chemical Handling Refresher	8	Improved understanding of appropriate chemical handling practices.
Manual Handling Refresher	15	Implementation of correct manual handling techniques to reduce risk of injury in the workplace.
Fire Warden Training	14	Fire Wardens understand their responsibilities and appropriate use of fire extinguishers.
Resuscitation Refresher Course	5	Employees are skilled in emergency resuscitation to support the purchase of new defibrillators.
First Aid Refresher	11	Education staff are fully certified to apply first aid.
Occupational Health and Safety White Card	1	Relevant employees have access onto building or construction sites in Kings Park or Bold Park.
Front-End Loader	3	Relevant employees are trained to correctly operate a Front End Loader.
Occupational Health and Safety Representative Training	3	New OHS Committee members have the required training to undertake tasks as an OHS representative.

Scholarships

Two scholarship opportunities are offered each year: the BGPA Chairman's Scholarship, offered to employees, and the Friends of Kings Park Vic Galea Scholarship, opened to both employees and students. Both BGPA and the Friends of Kings Park value and support the outstanding work undertaken by employees and students and these scholarships foster professional development.

Applications for the 2017-18 Scholarships opened in May 2017 and were awarded in June 2017. Science students Daniela Scaccabarozzi and Olga Kildisheva were awarded the Friends of Kings Park Vic Galea Scholarship. Daniela will present at the British Ecological Society Conference in Belgium and Olga will present at the Society for Ecological Restoration's global biennial conference in Brazil.

BGPA Communications Coordinator Rebecca Maddern was the recipient of the Chairman's scholarship and will attend the Collaboration for Impact conference in Canberra in July 2017.

Public Sector Commission Employee Perception Survey 2017

In February 2017, BGPA employees were invited to complete the Public Sector Commission Employee perception survey 2017. The survey was conducted from 23 February to 3 March 2017. The survey sought employee opinions and attitudes about their workplace.

BGPA scored 86 out of 100 on employee engagement (the highest across the agencies who participated in the survey). Employee engagement describes the level of emotional commitment an employee has towards the organisation in which they work. International research shows employees with higher engagement produce better services and outcomes. BGPA also recorded a 95% job satisfaction in comparison to 84% across the other agencies surveyed. This indicates that BGPA has a strong organisational culture and leadership that values its contributions from employees.

Occupational Safety, Health and Injury Management

BGPA is committed to providing a safe work environment for its employees, students, volunteers, contractors and visitors. The Occupational Health and Safety (OHS) Committee, the Chief Executive Officer and the management team work together to ensure that BGPA facilities, equipment and practices do not knowingly present a hazard to safety or health. BGPA provides active support to employees who may be ill or injured, with the aim of a safe and early return to meaningful work.

Workplace Safety, Health and Wellbeing

BGPA's OHS Policy and supporting procedures, assist employees in understanding and performing their obligations. All relevant documents are available on BGPA's intranet and form part of the induction process. Employees, students, volunteers and contractors are regularly made aware of their rights and obligations in fulfilling the requirements of the *Occupational Safety and Health Act 1984* and the importance of taking care for their own safety and that of other persons who may be affected by their acts. Employees who are responsible for the supervision of others are made aware of their responsibilities to protect the health and safety of the employees, students and volunteers under their direction.

The OHS Committee is comprised of employee elected representatives. The Committee addresses concerns about safety, implements improvements to workplace practices, ensures that BGPA meets all legislative obligations and complies with the WA State Government's Code of Practice: Occupational Safety and Health in the Western Australian Public Sector.

The OHS Committee is directly supported by the Corporate Executive team. The Human Resource Officer and one member of the Corporate Executive attends the Committee's meetings to ensure any issues of concern have a direct and immediate response and to ensure a close link with all training and communication mechanisms within BGPA. Committee minutes are provided for information to the various work teams and the Corporate Executive.

The Committee meets on a monthly basis and reviews all OHS matters, including monthly workplace safety inspections, the reporting procedures for accidents, incidents and hazards. In summary, BGPA has:

- Continued to monitor the workplace accident and incidents to identify trends and to report to Corporate Executive and staff.
- Undertaken monthly workplace safety inspections in each work area, currently including 20 specific areas identified within Kings Park and Botanic Garden and Bold Park.
- Conducted safety awareness campaigns through posters and information placed in highly visible areas in all BGPA workplace buildings.
- Completed an external safety review into fire control and evacuation procedures for all BGPA workplace buildings.
- Offered BGPA employees free influenza vaccinations.
- Made BGPA employees aware of free, confidential support services available through the Employee Assistance Program.
- Provided various training opportunities for improved awareness of correct operating procedures and workplace safety.
- Provided regular OHS updates to all staff for information and reminders at the quarterly staff meetings.

BGPA's OHS policies and procedures are directly linked to the BGPA Risk Register as reporting and control mechanisms for reducing the risk of injury of employees, students, volunteers and visitors. All risks and controls are regularly reviewed and assessed.

Injury Management and Workers' Compensation

In accordance with the *Workers' Compensation and Injury Management Act 1981*, BGPA is committed to providing injury management support to all employees who sustain a work related injury or illness, with the aim of safe, early return to meaningful work. BGPA has implemented an injury management system to tailor return to work programs for injured employees, in consultation with treating medical practitioners.

There were six Workers' Compensation claims during the year. As of 30 June 2017, only one employee had not returned to full duties following a workplace injury.

BGPA's performance against OHS and injury management targets is demonstrated in the table below:

Occupational Safety and Health and Injury Management Targets

	Actual F	Results ⁽¹⁾	Results against Target	
Indicator	Results in 2014-15	Results in 2016-17	Target 2016-17	Comment on Results
Number of fatalities	0	0	0	Target achieved
Lost time injury and/or disease incidence rate ^(2a)	2.3%	3.2%	0% or 10% reduction	Target not achieved. There were three workers compensation claims where the employees missed one or more days off due their injuries.
Lost time injury and/or disease severity rate (2b)	33%	0%	0% or 10% reduction	Target Achieved
Percentage of injured workers returned to work: (i) within 13 weeks (ii) Within 26 weeks	67% 100%	100% 100%	100% 100%	Targets Achieved
Percentage of managers trained in occupational safety, health and injury management responsibilities.	100%	100%	100%	Target Achieved

Notes:

- 1. This indicator examines a three-year trend, as such results are reported for the current year (2016-17) and the reporting year two years prior (2014-15).
- 2. a) The lost time injury and/or diseases (LTI/Ds) incidence rate is a measure of incidences where one day/shift or more was lost from work.
 - b) The lost time injury and/or diseases (LTI/Ds) severity rate is a measure of the severity of incidences where 60 days or more (actual or estimated) is lost from work.

Each rate is calculated as follows:

Unauthorised Use of Credit Cards

Relevant BGPA employees are authorised and issued with corporate credit cards if their job functions require usage of this facility. Despite each cardholder being regularly reminded of their obligations under BGPA's credit card policy, two employees inadvertently used their corporate credit card for private purchases being; food and domestic power bill. The matter was not referred for disciplinary action as the Chief Finance Officer noted prompt advice and settlement of the personal use amount, and that the nature of the expenditure was immaterial and characteristic of an honest mistake.

Total Amount Expended and Period Outstanding

Period Amount Outstanding	Total 2016-17
Aggregate amount of personal use expenditure for the reporting period	\$209.00
Aggregate amount of personal use expenditure settled within 5 working days	\$209.00
Aggregate amount of personal use expenditure settled after 5 working days	-
Aggregate amount of personal use expenditure outstanding at balance date	_

Governance Disclosures

Ministerial Directives

BGPA was not subject to any Ministerial Directives in 2016-17.

Other Legal Requirements

Advertising

In accordance with section 175ZE of the *Electoral Act 1907*, BGPA reports advertising expenditure for the financial year ended 30 June 2017 below:

Advertising expenditure 2015-16

Advertising Medium by Category	Expenditure	Total
Advertising Agencies		3,742.50
RoRo Graphic Design	3,480.00	
Tangelo Creative	262.50	
Market Research Organisations		15,181.00
Isentia (1)	15,181.00	
Polling Organisations		15,948.00
Pink Lake Analytics (2)	15,948.00	
Direct Mail Organisations		315.14
The Poster Girls	315.14	
Media Advertising Organisations		31,711.57
Adcorp	6,591.18	
Ecological Society Australia	36.36	
Environmental Jobs Network	500.00	
Optimum Media Decisions	23,518.58	
State Law Publisher	64.45	
WA News	1,000.00	
Total Expenditure		66,898.21

Notes:

- 1. This expenditure is for BGPA's media monitoring of all mentions of BGPA, Kings Park and Botanic Garden and Bold Park in all mediums.
- 2. This expenditure is for annual visitor satisfaction surveys.

Compliance with Public Sector Standards and Ethical Codes

BGPA's Code of Conduct, the WA Public Sector Code of Ethics and the Public Sector Standards are available to all employees on the BGPA Intranet and form part of BGPA's induction program. Employees are reminded of their responsibilities under the Code of Conduct through quarterly staff meetings and as part of BGPA's employee performance review process. The Code of Conduct is also incorporated into workforce initiatives outlined in BGPA's Workforce Plan: Incorporating Equity and Diversity 2016-2021.

The Code of Conduct is based on the values of BGPA and promotes behaviours that reflect a strong commitment to maintaining integrity, accountability and ethical decision making. The Code of Conduct applies to all managers, employees and students engaging in any research or work experience under the auspices of BGPA, and all contractors and consultants working on behalf of BGPA. In February 2017, the Code of Conduct, the Accountable and Ethical Decision Making Presentation and Secondary Employment administrative instruction were reviewed and updated to ensure continued compliance with Public Sector guidelines.

During 2016-17:

- There were no breaches of BGPA's Code of Conduct in 2016-17.
- There were no breaches of the WA Public Sector Code of Ethics in 2016-17.

There was one submitted breach claim made under the Public Sector Standards with the claimant initially arguing that there was a breach under the Recruitment Standard. The claim was promptly investigated by the Acting Director Business and Visitor Services, who concluded that the recruitment process was conducted in full compliance with the Public Sector Standards and within BGPA's recruitment guidelines. The claim was withdrawn after the applicant received feedback on their application and correspondence on the appropriate process undertaken from the Acting Director Business and Visitor Services.

Disability Access and Inclusion

BGPA's Disability Access and Inclusion Plan (DAIP) 2012-2017 outlines the ways in which BGPA aims to ensure that people with disability have access to BGPA facilities, services, events and information. Planning and consultation has commenced for the development of a new DAIP for the next five-year period.

BGPA's strategies address the seven outcomes required under the *Disability Services Act 1993* (amended 2004). Three strategies were not fully achieved during the period. In one case, this was due to a service no longer being offered by BGPA and therefore not subject to the identified strategy. Two identified strategies are in progress.



BGPA actively ensures appropriate access for people with disabilities.

Outcomes	Number of strategies planned	Number of strategies completed (includes ongoing strategies)
Outcome 1	18	17
Outcome 2	27	27
Outcome 3	14	14
Outcome 4	6	5
Outcome 5	3	3
Outcome 6	8	8
Outcome 7	5	4

The following initiatives were undertaken in 2016-17:

Outcome 1: People with disabilities have the same opportunities as other people to access the services of, and any events organised by BGPA.

- Areas were set aside at major events for chairs, deck chairs, wheelchairs and space for people to assist those with disabilities, as well as additional ACROD parking bays provided.
- On Australia Day, additional ACROD parking was made available in Wadjuk Carpark.
- On Anzac Day, BGPA, in collaboration with the Returned and Service's League WA
 Branch, actively informed participants of set-down and parking for people with disabilities.
 Additional ACROD parking was made available in the Wadjuk Carpark.
- Volunteers were kept up to date with BGPA's DAIP through their newsletters. The Kings Park Volunteer Guides, who deal with visitors face to face and via phone, were given appropriate training opportunities and information.

- Extra ACROD car bays were reserved in Wadjuk Carpark on busy days during the annual Kings Park Festival.
- Education programs and special events were run throughout the year for students with a range of disabilities, intellectual and physical.

Outcome 2: People with disabilities have the same opportunities as other people to access the buildings and other facilities.

- Planning has commenced for construction of a Changing Places facility in Kings Park in 2017-18. The facility will be located within the Saw Avenue Picnic Area, which incorporates Variety Place, a play and discovery area designed to meet the needs of children of different abilities.
- The new entry to the WA Botanic Garden allows for universal access to the State's Botanic Garden, with good sightlines and large lettering to assist with clear wayfinding.
- Lotterywest funding has been secured by the Friends of Kings Park to build a purpose-built volunteer hub for BGPA's many volunteers, with ACROD parking to increase around this new, accessible facility.

Outcome 3: People with disabilities receive information in a format that will enable them to access the information, as readily as other people are able to access it.

- BGPA documents, such as Annual Reports and the Disability Access and Inclusion Plan, were available electronically and in hard copy as well as alternative formats (such as large font) on request.
- Electronic versions of documents were created to meet maximum accessibility requirements and be responsive to assistive technology.
- Recorded event information was available on BGPA's main telephone line.
- A monthly e-newsletter was produced and sent to all subscribers, advising of news, events and activities in Kings Park and Botanic Garden and Bold Park.
- Kings Park Education provided a range of learning opportunities to meet the needs of all students. It accommodated special needs students with suitable programs, such as the popular Child verses Wild and Nyoongar Boodja programs and works with teachers to assist with full integration of students.
- The Volunteer Kings Park Guides provided free Guided Walks by Request, tailored to suit people with special needs. A wheelchair remains available to visitors who may need it during their visit to the Park.
- BGPA's website meets Web Content Accessibility Guidelines and is responsive to assistive technology.
- More information and better use of photographs and video footage has been included to deliver key messages in a variety of mediums.

Outcome 4: People with disabilities receive the same level and quality of service as other people.

- The Kings Park Volunteer Guides who staff the Visitor Information Centre prepared for a new Guide intake in February 2017. A new training committee was formed and the Course was successfully completed, with 24 new Guides trained to provide outstanding customer service to the thousands of visitors who visit the Visitor Information Centre for assistance, join a free guided walk, or telephone to make an enquiry. Tailor made walks on request are offered for people with special needs.
- In order to promote limited ability access initiatives, volunteer group newsletters regularly reminded members of improvements to the existing toilet blocks for better accessibility; existing and new paths and facilities that have been built for people with limited mobility.

- Kings Park Education has serviced students with special needs in a variety of locations in Kings Park.
- A photoshoot was arranged with a group of regular café users who have disabilities, to include these images on BGPA's website and in publications.

Outcome 5: People with disabilities have the same opportunities as other people to make complaints.

- BGPA's communications process remains available to all members of the community and can be accessed via the website, the enquiries email address, through the Visitor Information Centre or by contacting the main reception service.
- Visitor surveys are conducted annually. In 2016-17 surveys were conducted in Bold Park and in the main visitor precincts of Kings Park and Botanic Garden. Both surveys achieved very high satisfaction ratings with 100% for Bold Park and 98% for Kings Park.

Outcome 6: People with disabilities have the same opportunities as other people to participate in any public consultation.

- Public consultation and decision-making opportunities were provided through public consultation processes for reviews of key management plans or changes proposed on BGPA designated lands.
- People with a range of disability, and several carers, together with representatives from various disability organisations, were invited to a workshop held at Zamia Café and in the surrounding parkland to discuss the new DAIP, with valuable feedback received.
- A group of regular Kings Park visitors was interviewed and consulted regarding suggested improvements to access. The group made valuable suggestions to improve the car park at May Drive Parkland for better accessibility. All were very complimentary of Kings Park and the overall access and inclusion.

Outcome 7: People with disabilities have the same opportunities for employment.

- BGPA's Workforce Plan 2012-2017 incorporates appropriate equity and diversity planning.
- BGPA provides employment, some work experience placements and volunteering opportunities for people with disability.
- BGPA contracts a company whose cleaners have disability, through Intework, to clean the offices in Kings Park, as well as the Visitor Information Centre, all of which are accessible.
- Volunteers with disability, including hearing and mobility limitations, were welcomed.
- BGPA's recruitment process is based on merit based selection and jobs are advertised in alternative formats, via BGPA and government websites and in print media. Interviews are conducted in an accessible location.

Records Management

Recordkeeping Plan 2015-2020

BGPA's Recordkeeping Plan 2015 - 2020 identifies the strategies and a process by which BGPA complies with the legislative requirements of the *State Records Act 2000* to create, maintain, protect, and control and dispose of records in an efficient and effective manner and reflects current agency practices.

Records Management System

In December 2016, BGPA completed an upgrade of its Recordkeeping software from Total Records and Information Management system 7.3 (TRIM) to Content Manager 9.0. The upgrade was required as the existing recordkeeping system was no longer supported.

Retention and Disposal

A review of inactive records is conducted annually to determine appropriate archiving or disposal of records in accordance with the schedule in the Recordkeeping Plan.

The records team identified and archived 337 records and 246 publications and reports from the main file depository and library. Annual archiving of finance, human resources and bookings files has been completed.

Induction and Training

The Records Training and Induction Manual (RTIM) assists both new and existing employees with their recordkeeping responsibilities. A copy of the RTIM is available on the BGPA intranet. The RTIM was reviewed, during this process it was identified that updates were required, which were completed in January 2017.

Managers are currently responsible for identifying and implementing the required level of recordkeeping training for their staff members. Employees' roles and responsibilities in relation to recordkeeping practices are included in the induction package provided to all new employees and one-on-one records management training is provided. As part of the record keeping system upgrade additional one-on-one training was provided to all staff who requested it.

Training continues for existing BGPA employees as required with supporting information on recordkeeping practices and procedures available on the intranet. Training sessions are customised to help relevant employees manage BGPA records determined by the employee's position. An annual reminder of recordkeeping training programs available and the importance of appropriate recordkeeping is included in staff meetings.

Quarterly email reminders are sent to employees advising them of their record keeping responsibilities, and the return of files to the records registry is requested if they are no longer required, or confirmation that files are being retained. Employees are also asked to include file number or relevant title on documents to ensure it is indexed to the preferred file.

BGPA's Exit Interview Form includes a requirement for all registered files and documents to be returned to the Records Area, or advice of new location.

The Records Management Coordinator also completed Record Management Administrator Essential training and the Records Management Officer completed the HP Records Manager Advanced User training which directly related to the upgraded software.

Evaluation

Evaluation of recordkeeping practices is ongoing through the annual review of the Records Management Policy and Procedures Manual. An annual internal customer satisfaction survey was conducted in March 2017 to establish the level of satisfaction and possible areas for improvement of record management practices. The outcome of the survey in 2017 demonstrated that that an increased percentage of respondents were "very satisfied" or "satisfied" with recordkeeping practices compared with results from previous years.

In 2017 BGPA also conducted a review of the efficiency and effectiveness of the recordkeeping training program, all respondents were very satisfied. BGPA has tailored training to an individual's position and provides refresher training when requested. BGPA will continue to monitor the efficiency and effectiveness of its recordkeeping training program and a further formal review will be carried out in two years.

Freedom of Information

BGPA did not receive any Freedom of Information applications during this reporting period.

BGPA's Information Statement is available on its website. It is reviewed annually and a copy provided to the Office of the Information Commissioner.

Government Policy Requirements

Substantive Equity

BGPA is not required to report on this issue as it is represented at portfolio level in the Strategic Management Council and does not have any obligations under the substantive equality framework.

BGPA is committed to the principals of Substantive Equality and aims to promote the objectives of the framework through its organisational policies and procedures including though not limited to:

- Workforce Plan (including Equity and Diversity) 2016-2021
- Disability Access and Inclusion Plan 2012-2017
- Reconciliation Action Plan 2013-2018

Government Building Training Policy

BGPA has a commitment to the Government Building Training Policy, there were no buildings tendered after 1 July 2015 that had a labour greater than \$2 million.

Board and Committee Remuneration

BGPA's Board of Management met on six occasions this period. The Board is comprised of up to eight members. One change in membership occurred this period with Hamish Jolly's term ending in May 2017. More information about the members of the Board are provided in this report under BGPA's Operational Structure.

Position	Name	Type of remuneration	Period of membership	Gross/actual remuneration 2015-16
Chair	Richard Simpson	Sessional	December 2002 to December 2017 Current term commenced December 2014	\$12,800.04
Deputy Chair	Grant Robinson	Sessional	January 2006 to July 2018 Current term commenced July 2015	\$5,120.04
Member	Tom Baddeley	Sessional	April 2010 to May 2018 Current term commenced April 2015	\$5,120.04
Member	Tony Brooks	Sessional	October 2014 to October 2017	\$5,120.04
Member	Jacqui Freeman (Purvis)	Sessional	July 2012 to July 2017 Current term commenced July 2015 and will not be renewed.	⁽¹⁾ \$0.00
Member	Nyomi Horgan	Sessional	Commenced January 2016 to December 2018	\$5,120.04
Member	Hamish Jolly	Sessional	April 2010 to May 2017 Last term commenced April 2015 and was not renewed.	\$4,480.03
Member	Brian Piesse	Sessional	January 2013 to December 2017 Current term commenced January 2016	\$5,120.04

^{1.} Jacqui Freeman (Purvis) was ineligible for remuneration in accordance with Premier's Circular 2010/02 State Government Boards and Committees.

Appendices

Wattle puff-balls blowing, Golden lamps are glowing, All the world is showing The Emblem flower. In the springtide's mazes Burly banksia's blazes, While red-gum lazes (until his Hour)...

Where young spring has passed her,
Where young spring has cast her,
Faster & yet faster
Did winter fly.
Fairy rivals trapped her,
Mortal rivals capped her,
Flower arms enwrapped her,
And frost winds die.
All the wan grey deadlands,
Mount Eliza's headlands,
Flower prankt birds carolling the sky.

May Kidson, 1917 Western Australian and acclaimed war poet

This is one of a series of 'Poems in the Park' written or selected by 2016 Kings Park writer in residence Nandi Chinna. The poems formed a feature exhibition of the 2016 Kings Park Festival.



Appendix 1 – Volunteer Group Reports

BGPA is very fortunate to retain a large number of highly skilled and dedicated volunteers. The high quality of efficient services offered to the community in these special places are enhanced greatly by the commitment and skills of these extraordinary volunteers.

The Friends of Kings Park worked closely with BGPA in applying for funding for a dedicated Kings Park Volunteer Hub to facilitate more community involvement. Lotterywest announced the Friends of Kings Park's success with a \$2.4 million grant for the new facility, to be built in the Eucalyptus Carpark and fully operational from 2019-20. The Friends of Kings Park also attracted generous grants from Lotterywest to support the 2016 and 2017 Kings Park Festivals.

The Kings Park Guides were again recognised for their outstanding contributions, being named as finalists in the 2017 WA Heritage Awards in two categories. They trained a new group of Guides with an intensive course delivered by both Guides and staff, over 14 weeks. The 24 new Guides graduated with flying colours in June 2017.

The Friends of Bold Park provided sustained contributions throughout the year as they have done for the past three decades. They will celebrate their 30th anniversary with a BGPA supported Bold Park Open Day in October 2017, a testament to their outstanding work and long-term commitment to Bold Park.

The Volunteer Master Gardeners, who celebrate their 20th anniversary in October 2017, further refined the way they deliver accurate and timely advice on growing native plants in urban settings, and demand for their service continues to grow, as demonstrated by the popularity of the public 'Dig it with Coffee' sessions held by the Volunteer Master Gardeners working with BGPA horticulturists. The Volunteer Master Gardeners maintain the delightful Bush Garden near the Biodiversity Conservation Centre in Kings Park, showcasing water-wise gardening with local bushland plants.

The Honour Avenues Group continued the solemn tradition commenced in August 1919, conducting their moving plaque dedication services in May Circle. These quarterly services are each attended by hundreds of descendants of service men and women who died overseas in various conflicts. The May Circle precinct will be upgraded in 2017-18 with joint funding from BGPA, the Friends of Kings Park and the RSLWA Branch.

Read more about the activities of each of the volunteer groups in this section.





BGPA staff worked with volunteers to plant new garden beds at the front of the newly renovated Lodge, where the volunteer groups have office accommodation for their committees.

Friends of Bold Park Bushland

This year marks the 30th anniversary of the Friends of Bold Park Bushland, which was formed in April 1987 to prevent the park from being developed for housing, as much of it could have been, based on its zoning for this purpose. At that time, only Reabold Hill and its immediate surrounds were protected as Class A status parkland. To celebrate the anniversary the executive committee began working with staff and students of Edith Cowan University to develop an exhibit and associated publication on Bold Park, including the Friends history. The exhibit and publication will be part of a celebratory Open Day to be held at the WA Ecology Centre in Bold Park in October 2017.



The Friends of Bold Park Guides share with visitors their knowledge of flora and fauna of the Bold Park bushland.

As well as preparing for this event, the executive committee has undertaken our usual activities: production of newsletters; communication with members and the public; liaison with the WA Naturalists Club, Wildflower Society and BirdLife; providing BGPA with feedback on its planning and management activities in the park; and maintaining our office, located at Perry House.

This year has also seen a revamp of our newsletter and logo, with a special logo for our 30th anniversary, as well as the creation of a Facebook page.

Guided Walks Program

Our guided walks program began over six years ago. Three morning walks were held each month, with more in spring and none in November or December. In summer we held two sunset walks each month.

Our team of eight trained Volunteer Guides generally started their walks from the Tuart Car Park and took their walkers up to Reabold Hill and back, although the walks with larger numbers, those in spring and summer, began at the Ecology Centre where there is a larger car park. Last August we also provided walks along Balga Trail off Rochdale Road, to view the natural regeneration in the area that was burnt in a bushfire in March 2012. Other walks used Camel Lake Trail, where walkers observed the woodland and wetland vegetation, and fungi, along this more sheltered route.

Twenty-six walks were provided between July 2016 and June 2017, with a total of 321 walkers attending. The April and October school holiday Night Stalk walks for families, actively supported by the Town of Cambridge, were the most popular, with a large proportion of local children attending. The summer sunset walks remained popular.

Most people found out about the walks from monthly articles published by the local 'Post' newspaper, and from BGPA's website, as well as by word-of-mouth, as our friendly and knowledgeable guides have a good reputation.

Bushcare Activities

Working closely with Bold Park staff, our bushcare efforts were focused in the Eastern Gateway site, just inside the Tuart Carpark entrance on Perry Lakes Drive. We have been active in this highly-visible park entrance area for over 20 years.

Eleven weeding sessions were held throughout last winter and spring, with a team of 13 Friends who worked two mornings per month, concentrating on removing Euphorbia and Pelargonium from the site.

Last winter 1,600 seedlings were planted by 12 members of the Friends and BGPA staff. We recorded the survival rates for the plantings, meeting at the end of the season to scrutinise individual sites. Two seed collecting sessions were held in summer. Seed was collected from *Eucalyptus petrensis*, Fremantle Mallee (*Eucalyptus foecunda*), One Sided Bottlebrush (*Calothamnus quadrifidus*) and Dwarf Sheoak (*Allocasuarina humilis*). The seeds will be grown to provide plants for future use in the park.

Adopt-a-Highway Program

We have continued with the Adopt-a-Highway program. A small but keen group met quarterly to collect rubbish from the highly-visible West Coast Highway frontage of the park, assisted by BGPA staff who provide safe conditions and collect the bags. About 50 large bags of rubbish were collected during the year. This valuable activity helps to keep this prominent edge of the park looking cared for.

Bird-banding Program



A beautfil Square-tailed Kite. Photo B Knott.

Since 1989 dedicated ornithologists have been studying the bird populations of Bold Park. This has involved capturing birds in mist nets, taking their measurements, applying leg bands, and then releasing them, a process which does not harm the birds.

Some species, such as white-cheeked honeyeaters and silvereyes, have had red bands placed on their legs, making them easy to spot later without being captured. The project is run by volunteers who have training in this area, and who have permission to undertake the banding.

Thanks

Thanks are due to all our active members – those on the Executive Committee, bushcare team, highway rubbish pickup team, guides and bird banding team. Thanks to all BGPA staff who have assisted us in the past year, especially to Melissa Mykytiuk, Veronica Newbury and Larr Rose, and to the Friends of Kings Park, which has provided volunteers to help with some our administration tasks. Thanks to all who have worked so hard over the past year to support the continued protection of Bold Park as a fantastic conservation and recreation resource.

Stephanie Clegg Friends of Bold Park Bushland (Inc)

Friends of Kings Park

The Friends of Kings Park was established as a support organisation for Kings Park in 1993. Our core activities are providing volunteer support, fundraising and education.

Volunteer Support

The Friends have established a number of subgroups to support the different volunteering opportunities available. Each group is made up of dedicated members who contribute an astonishing number of hours:

 The Bushland Carers care for the most important bushland in Perth, work with experts and learn about the fascinating world of Australian bush restoration and conservation. During the year, 58 volunts



Friends of Kings Park with the Minister for Environment, the Hon Stephen Dawson following presentation of a Lotterywest grant for the 2017 Kings Park Festival.

- conservation. During the year, 58 volunteers undertook 997 hours of volunteering.
- The Botanic Garden Carers focus on the Botanic Garden assisting Kings Park horticulturalists to maintain the diverse range of native plants from around Western Australia. This group of 37 volunteers undertook 1,573 hours of volunteering.
- The Growing Friends are keen and aspiring gardeners who assist with propagating and growing Western Australian native plants for Friends of Kings Park quarterly plant sales. This dedicated team of 41 volunteers undertook 5,963 hours of volunteering.
- The Office Carers assist in the Friends office to provide essential administrative support.
 The Office Carers are a vital part of the Friends team, offering support with tasks such as mail outs and data entry. Twelve volunteers undertook 238 hours of volunteering.
- The Orchid and Carnivorous Carers assist the science staff in the conservation of Western Australian terrestrial orchids and carnivorous plants. Four volunteers undertook 112 hours of volunteering in this unique field.
- Two dedicated members volunteered 549 hours in support to the science team for research projects and administration.
- Whilst strolling in Kings Park, the Climate Watch group of volunteers help track the behaviour of specific species and their response to climate change. There are 22 volunteers who undertook 57 hours of volunteering.
- Rio Tinto Naturescapers encourage visitors, especially children, to have fun, explore and learn about the bush in Rio Tinto Naturescape Kings Park. There were 16 Naturescapers who undertook 549 hours of volunteering between July 2016 until the end of January 2017 when Naturescape was to commence stage two works.
- One-off events, such as the Skyshow and Friends plant sales, involved176 volunteers who contributed 926 hours.

Together these volunteers have worked an amazing 10,978 hours during this financial year ensuring Kings Park is the best kept park in the world! I cannot thank volunteers enough for their support in rain and sunshine.

Scholarships

Each year the Tom Alford, Mary Rose Patterson and Vic Galea scholarships are offered to members, volunteers and staff.

The Tom Alford scholarship was awarded to Lester Zani on behalf of the Grafting Group of the Growing Friends, who invited Victorian based Phil Vaughn to Perth to share grafting techniques with volunteers and BGPA staff.

Alison Smith, a Kings Park horticulturalist, was awarded the Vic Galea scholarship to travel and undertake training at the Eden project in Cornwall, England.

Grants

The Friends received a \$1,000 grant from Volunteering WA to celebrate National Volunteer Week. A special morning tea was organised on 9 May to say 'thank you' to volunteers of BGPA's five dedicated volunteer groups: the Kings Park Volunteer Master Gardeners, the Kings Park Volunteer Guides, the Honour Avenues Group, the Friends of Bold Park and the Friends of Kings Park.

For the sixth consecutive year, Lotterywest supported the 2016 Kings Park Festival with a grant of \$100,000 to the Friends. In June this year, the Friends announced that Lotterywest had agreed to provide \$100,000 for the 2017 Kings Park Festival.

As mentioned in the previous Annual Report, Lotterywest agreed to a grant of \$2,400,000 for the construction of the Volunteer Hub, a new home for volunteers working within the park. Construction will start in 2018 with practical completion by the end of 2018.

Support

The Friends contributed \$20,000 to BGPA's Bushland Adventures for Young Children and their Carers in Rio Tinto Naturescape Kings Park project. This is a structured program to introduce young children (between 3 and 5) and their carers, to the plants and animals of Kings Park bushland through a series of stories.

The Friends also agreed to contribute \$100,000 from its operating funds towards the refurbishment of the May Circle Memorial Space Enhancement project. The RSLWA will contribute \$120,000 with BGPA funding \$180,000.

The Friends of Kings Park Fund

The Friends of Kings Park Fund was created to provide a pool of funds to provide grants for environmental research and other projects that support the conservation of WA's unique flora.

Digby Growns, Kings Park's Senior Plant Breeder and leader of the Plant Development Team, received funding of \$60,000 over a period of three years. The first part of the grant was to determine if *Hemigenia tichbonii* could be cultivated and released as a focus plant for Australian Wildlife Conservancy. The two colour forms were successfully propagated and are now undergoing trials to determine whether they can be cultivated under commercial nursery conditions.

The second part of the grant was to develop a red flowered form of *Anigozanthos mangelesii*. Seed has been harvested and will be sown this season with the expectation that a high percentage of the plants will be red-flowered.

The first year of the Kings Park Summer Scholarship program was a great success with six talented undergraduate students examining a diverse range of research topics. \$10,000 per annum over four years has been committed to this program.



The Friends of Kings Park Fund contributed to a Kings Park Plant Development project with Hemigenia tichbonii.

People and Plants Magazine and Calendar

My thanks to the editor, Tony Scalzo, editorial assistant, Chris Olney and Designer, Ji Min for their hard work in creating this quarterly iconic magazine for the Friends. Each publication surpasses the previous edition!

Thank you to our office administrator, Helena Waldmann, and Rosalie Tanner and Ji Min of Ro Ro Graphic Design for producing such a beautiful annual calendar. Proceeds from the sale of the calendar have been a great fundraiser for the Friends.

Management Committee

The following new members were welcomed onto the Management Committee at our Annual General Meeting last October: Nicole Parks, Guy Chandler, Charlotte Roigt and Ruth Robertson. The golden 'oldies' Bob Bunney and myself changed places with me becoming the first female President, Liz Millward as Treasurer with committee members Kim Smith and Alex Hew.

A Special General Meeting was held in May when the new Constitution was adopted to bring it into line with the provisions of the new *Associations Incorporation Act 2015*. Our Constitution has been sent to the Commissioner for final approval.

Throughout the year the Communications sub-committee provided an interesting and varied program of events from talks and walks to hands on experiences. I cannot thank Sue Elliott, Kim Smith, Nicole Parks, Kate Biondo, Alex Hew, Ai Chen Lee and Guy Chandler enough for their support.

The Nursery sub-committee has been kept busy overseeing the smooth running of the plant sales and propagation programme. This year approximately 26,000 plants were sold raising over \$124,000. Thank you to Tony Scalzo, Lynda Woodhams, Ruth Robertson, Charlotte Roigt, Malcolm Mintz and Lester Zani.

A special thank you to Bob and Liz for their support and guidance throughout the year and to Helena Waldmann, our office administrator.

Corporate members

My thanks for the continued support to Kings Park of our Jarrah Corporate members: Minderoo, Rio Tinto, Lotterywest and the Water Corporation and a warm welcome to our newest member, Quest West Perth; to our Banksia corporate member, Picton Press and our Kangaroo Paw corporate members: Opulent Journeys and ASA Cultural Tours.

A very special thank you to Marcelle Broderick, A/CEO and BGPA staff for the support they provide to the Friends and volunteer groups.

And finally thank you to our members who contribute in so many ways and without whom we would not be able to support Kings Park to the extent we do.

Pippa Moodie President

Kings Park Volunteer Guides

We've had two highlights this year. The first was the completion of an entry statement for the Kings Park Botanical Garden. This follows the completion of many amazing artworks during 2015.for the 50th Anniversary of the Botanic Garden but the entry statement didn't quite make it. However, it was well worth waiting for, as we now have aluminium and copper archways and a three metre name very clearly delineating the entry,

The second highlight was at the opening of the 2016 Perth International Arts Festival in February. In cooperation with the Kings Park staff, volunteers and local Aboriginals, PIAF put on an amazing light



A Kings Park Guide taking visitors on a guided walk.

show called 'Boorna Waanginy: The Trees Speak' over three consecutive nights. An estimated 110,000 people visited the Park over that time and the Guides were proud to be involved.

Whilst the number of Guides reduced to 112 during the year, we started a new Training Course in March 2017 and now have 24 newly trained Guides added to our ranks. They are initially 'on probation' but, we fully expect, will become full Guides from early September, giving us a total complement of 136.

Over the last twelve months, the Guides have spent 8,043 hours engaging with 61,764 visitors to Kings Park, both in the VIC (52,894) and on guided walks (8,870). In addition Guides have given over 12,020 hours on extra duties, making a total of 20,063 volunteer hours. This includes Committee meetings and the accompanying work involved in running the Guides. Examples are:

- Compiling rosters for duties
- Organising ongoing education and refresher walks for Guides
- Organising and assessing Guides' performances to maintain standards
- Managing the VIC and liaising with the Park Management Officers as necessary
- Publishing the monthly Guides newsletter, which is also sent interstate & overseas
- Coordinating the Guides' lending library, reference books and files
- Arranging floral displays of seasonal native flowers for the Visitor Information Centre
- Planning and delivering the 2017 Guides Training Course
- Mentoring new Guides from the 2017 Training Course
- Planning for the 2019 Australasian Botanic Guides Conference

Committee

The committee meets 11 times a year, before the monthly general meeting. Each member has several areas of responsibility and some represent sub-committees.

Kings Park Guides Committee 2016-17			
President	Tony Lightman		
Vice President	Chris Olney		
Secretary	Robyn Cooper (until AGM), Robyn Bowler (from AGM)		
Treasurer	Ian Wildy		
Committee Members:	Carol Newton-Smith		
	Susan Clarke		
	Jeremy Hall (until AGM)		
	Chris Rowley (until AGM)		
	Rachel Craven		
	Barbara Pelly, ex-officio		

Visitor Information Centre

The Kings Park Visitor Information Centre is open daily (except Christmas Day) from 9.30 am to 4 pm. Two Guides are on duty for each of the two shifts covering the opening hours.

The display areas allow visitors to view large posters and photographs of features of the park and to browse a range of maps and brochures. There is also a video display of park scenes, a display of botanical items of interest and at least two large flower arrangements displaying flowers currently blooming in the park, and arranged by a roster of Guides.

A regular update of important notifications regarding the park is provided by the Park Management Officers, who visit twice daily to liaise and collect lost property.

The lightweight folding wheelchair purchased by the Guides for free use by visitors continues to be a great help to visitors and was used 70 times during the year.

A daily record is kept of visitor contacts. The statistics for the year show a total of 52,894 contacts and phone calls compared with 51,870 in 2015-16. Of the VIC enquiries 11,469 were locals; 16,070 from Eastern States; and 25,355 from overseas.

Visitors have been very generous this year with the voluntary donation box in the VIC yielding \$4,569.35 this year, as against \$3,459.50 last year. All donations are provided to BGPA for the benefit of Kings Park and Botanic Garden.

Free Guided Walks

We offer free guided walks every day at 10am, noon and 2 pm. The regular walks offered are the Botanic Garden Walk and the Past and Present Walk, focusing on the historic Fraser Avenue area. Other walks vary according to the time of year. Walks into the bushland start in winter and the Nature Trail is a focus during the annual Kings Park Festival.

Guides also undertake Walks by Request for groups of larger than 10 or groups with special interests. BGPA makes a small per capita charge for these walks.

The three free walks a day during the festival are increasingly popular with 2,144 visitors participating in the September walks in 2016 (2,241 in 2015). Guides also assist park horticulturalists when they deliver special walks as part of the festival. In 2016, Guides supported horticultural walks in Japanese, Hindi and Mandarin conducted by park staff fluent in these languages.

During this year 8,870 visitors went on Guided walks, compared with 9,186 in 2015-16

Health and Safety

The Guides cooperate closely with BGPA staff, who have the statutory duty of ensuring that health and safety requirements are met. Guides are mindful of visitor safety when walking and advise them of possible risks at the start of walks. Guides carry either a two-way radio or mobile phone with them on walks.

Afternoon guided walks may be cancelled by BGPA on days which are rated 'Very High Fire Danger' or have other adverse weather warnings issued by the Bureau of Meteorology. This information is posted on the BGPA website. If conditions are judged pleasant and safe, however, the Guides on duty may choose to do the noon and 2 pm walks, at their discretion. On extremely hot days, or fire warning days, Guides have the option to offer shorter walks restricted to shady areas.

Further Education

All Guides are expected to keep their knowledge and skills up to date, and know the latest relevant information about the park and the flora. To this end, we use a group email notification so that important information can be circulated rapidly.

Every month the Park Management Officers produce briefing notes which Guides need to read at the start of each duty.

We also have 10 general meetings which Guides are strongly encouraged to attend. Talks are presented by guest speakers or Guides who have particular expertise. Speakers this year included Dr Sue Graham-Taylor, who gave us a fascinating overview of Kings Park's history from the beginning, including the role of an Inspector of Nuisances, who was appointed to 'trace foul smells and their sources"! Another stand out was Patrick Courtney, BGPA Manager of Horticultural Development, who regaled us with his favourite project – the relocation of Giga Jumulu, a 700 year old boab, on a 3,200km journey from the Kimberley to Kings Park, where it now thrives. We are grateful to BGPA staff, fellow Guides and experts from beyond the park who give freely of their time and knowledge.

A week after each meeting a walk is held to follow up the topic and improve Guides' knowledge of different areas. A summary of the walk and talk is published in the monthly newsletter and mailed to all Guides, Associate Guides and relevant BGPA staff. The high quality newsletter also includes other information and photographs of interest to Guides.

Evaluation

The compulsory programme for the evaluation of Guides has continued to ensure that the standard of our performance matches the expectations of BGPA and visitors.

The Team to Evaluate Guides (TEG) is a group of elected experienced Guides, who give voluntary time to observe and assess the work of their peers, in the Information Centre and on walks. The assessor then gives confidential feedback, usually over a cup of coffee, and may also offer guidance and support and listen to any problems or suggestions the Guide may want to put forward. The current Team is nearing the end of its two-year cycle.

The Comments Book entries written by visitors in the VIC reflect their reaction to the beauty of the park, and often compliment the Guides who lead the walks and offer assistance.

Uniforms

As much of our time is spent outdoors, our uniform shirts have long sleeves and we are encouraged to wear the wide-brimmed hats provided and wear sunscreen. This is an important example to the public. BGPA provides sunscreen in the VIC for use of Guides and visitors.

Guides are provided with a green uniform shirt with the BGPA logo fully visible, a hat and a bag as well as a personal name badge. This uniform gives conformity to the professional appearance of the Guides and allows them to be easily recognisable on duty.

The Lodge

The Lodge at the Fraser Avenue entry to the park continues to be used by all the volunteer groups. The Guides have their own office with computer and printer, and part of a storage area, as well as access to a central area with photocopier, library and a meeting room. Having all the volunteer groups in the same building encourages friendly interaction and cooperation. Help from the Friends of Kings Park staff is freely given and much appreciated.

Acknowledgements

The Guides sincerely thank our current acting CEO, Marcelle Broderick, who is also Director, Business and Visitor Services; Lesley Hammersley, Director, Horticulture and Conservation; and Dr Ben Miller, Director Science for their ongoing support and encouragement. Grady Brand and his horticultural team are always readily available for advice and help. Our substantive CEO, Mark Webb, is currently Acting Director General, Department of Agriculture and Food.

We are grateful to all members of the Visitor Services Team led by Jacqui Kennedy, who have provided effective liaison between the BGPA Management and the Guides. We also thank the Administrative Assistants and the Park Management Officers who assist in our day to day guiding work. Extra special thanks are due to BGPA's Volunteer Coordinator, Larr Rose who works consistently to support us, particularly in recruiting new Guides, facilitating the training program and preparing and submitting submissions for Volunteers Awards. How she does it all in just three days a week is beyond belief but she does, so many thanks Larr!

Tony Lightman
President, Kings Park Volunteer Guides

Kings Park Volunteer Master Gardeners

Public interest in the cultivation and care of native plants seems to be on the rise, providing the 37 active volunteer master gardeners (VMGs) and their 21 associates with a lively and stimulating year. All have been trained and tested by BGPA staff and are committed to maintaining its reputation for excellence in science. The volunteer gardeners keep abreast of developments in botanical science through attending lectures at monthly meetings and occasionally elsewhere. This year we contributed 3,895 hours to various duties and projects.

Home Gardening Advice

Members of the public have the opportunity to have their questions answered through the provision of the Gardening Advisory Service on Tuesdays and Thursdays and alternative Fridays. This year, the GAS desk dealt with 2,110 enquiries, either by telephone or email. Fortunately, the VMGs are close to the senior science staff and can access them readily for help with unusual or difficult questions. Comprehensive Plant Notes to assist home gardeners, provided by the VMGs, are available through the BGPA website.



Master Gardeners in the bush garden. The Yellow Autumn Lily was removed, under supervision, form a site where it was endangered.

Another useful opportunity to ask questions is provided by the 'Dig it with Coffee' sessions, held at the Zamia Cafe on the first Wednesday of the month. This is a popular event, often booked out, especially during the festival when it might attract twice as many attendees as during the year.

People of all ages and walks of life attend to hear a talk from a park horticulturalist, supported by two of the VMGs. The question and answer session after the talk is brisk and lively and often people ask if they can come again. The VMGs are often able to help the horticulturist from their own training and experience. The meeting ends with a walk around the Backyard Botanical Gardens which enables people to see which plants are flowering or looking particularly good at that time of the year. Visitors find this useful.

Bush Garden

The VMGs maintain the Bush Garden, which lies just outside the Biodiversity and Conservation Centre, as an example of what can be done without watering or fertiliser, merely pruning, weeding, tidying and removal of rubbish. Some additional planting was carried out during the year using species local to Kings Park.

Projects

VMGs are involved in a widespread range of projects, where assistance is required by technical staff and post graduate students. In the laboratories, it might be anything from x-raying seeds to check for viability and predation or washing and drying test tubes. On-going projects include soil pH measurements within the park and the preparation of a new illustrated book tracing the development of a seed to a Banksia woodland plant. A lot of weeding was done, including using tweezers to remove invading weeds from the pots of native orchids.

Acknowledgment

The VMGs appreciate the ongoing support from the directors and staff at every level of BGPA. We feel privileged to serve this popular and worthwhile enterprise.

Richard Harris President, Kings Park Volunteer Master Gardeners

Honour Avenues Group

One Story in One Thousand

He was a country boy, raised in Kalgoorlie where he lived with his mother, father and young brother. When the depression struck, his father, employed by the local co-operative, was let go because of falling gold prices and store revenue.

The family decided to move to Wiluna where there was work to be had on the local mine processing sulphur. The two boys were born ten years apart and the eldest, reaching high school age, had to be sent to Perth to live with his grandparents to finish his education and it was here that he joined the Mines Department as junior clerk on obtaining his junior Certificate.



A British Beaufighter as was flown by Flight Sergeant Manners. Photo Courtesy of RAAF.

FS Manners plaque in Kings Park.

At the outbreak of World War II in 1939 he joined the royal Australian Air force Reserve, being too young to volunteer for the permanent force.

As soon as his qualifying birthday came around he begged his father to sign the papers that would permit him to join the Royal Australian Airforce and go overseas. His father signed, but could not help commenting "I feel like I am signing your death warrant".

Training at RAAF Base Pearce followed and he was accepted as AIRCREW and began his pilot's course culminating in the presentation of his wings.

Then, it was England and further training on various types of British aircraft culminating in an attachment to 46 Beaufighter Squadron RAF in Cyprus. He was the only Australian in the Squadron.

On 31 August 1943, loaded with cannon and machine gun ammunition plus full tanks of fuel, he took his Beaufighter off and headed out to sea. Suddenly one engine cut out and as he circled to land back at the airfield, the second motor stopped. There was nothing he could do and the aircraft crashed into the mountain ranges ringing the base. Flight Sergeant Alexander Edward Manners remains were buried in Military Cemetery, Nicosia, located on the now Green Peace Line between Turkey and Greece in Nicosia. He had just turned 21 years of age. His plaque is in Marri Walk.

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These are many stories such as this in the Honour Avenues of Kings Park, encompassing all arms of the service, in all the wars in which Western Australians have fought up until the time when the Australian Government began returning the bodies of our war dead from overseas.

Within this Park of Peace there are 1,713 plaques beneath the trees of the Honour Avenues, marking the sacrifice made by Western Australians. It is to these Avenues that next-of-kin and relatives travel to lay flowers on the anniversary of their loved ones death or birthday.

They are cared for by 16 volunteers of the Highgate RSL Sub Branch's Honour Avenue Group, who process the requests for a plaque submitted by relatives, and attend to their manufacture and placement within the Park.

The Group care for the upkeep of all plaques, posts and unit identification plates which involved over 2,181 hours work by the volunteers this year. The Kings Park staff plant and care for the trees and grounds and a workshop has been provided by BGPA for volunteers' use. Without the enthusiastic assistance of BGPA staff we would be unable to operate and for that we thank them, as do the families of Western Australian Servicemen and women who lay overseas.



Members of the Honour Avenues Group who care for the plaques in Kings Park's Honour Avenues. Photo D Nicholson.

The number of plaques grow at about 50 per annum and are dedicated at four ceremonies held in May Circle each year, following on from the first which was held in 1919. Today you can access the details all of the plaques in the three Honour Avenues through the Honour Avenues section of BGPA's website.

The care of these plaques in not only a duty, handed down to us by the RSLWA, but an honour. An honour to remember fellow servicemen and women who did not come home.

It is also a duty to care for each plaque that represents a serviceman or woman of this State who went forward to protect it and to the families who will forever grieve over their great loss.

Lest we forget.

Norman G Manners Chairman, RSL Honour Avenues Group

Appendix 2 – Publications

BGPA creates and contributes to, many publications throughout the year. All BGPA annual reports, management plans, strategic publications, legal statements, and brochures are available to download from the website or in hard copy from the front reception offices in Kings Park and Botanic Garden and Bold Park. Information brochures are also available from the Kings Park Visitor Information Centre.

In addition, a range of botanical, gardening, historical, cultural and children's books are available for sale at Aspects of Kings Park including the following BGPA published books:

- A Joy Forever The Story of Kings Park and Botanic Garden
- Australian Native Plants The Kings Park Experience (August 2013)
- Australian Seeds (currently out of print)
- Avenues of Honour (Kings Park Honour Avenues Groups)
- Banksia Woodlands A Restoration Guide for the Swan Coastal Plain (2017)
- Chunyart and the Cheeky Parrot (2013)
- For People and Plants (the monthly Friends of Kings Park Magazine)
- Friends of Kings Park Calendar (annually)
- Kings Park and Botanic Garden: Western Australia (Souvenir Book Third Edition 2015)
- Kings Park's Special Trees
- Memorials and Memories
- Perth Plants: a field guide to the bushland and coastal flora of Kings Park and Bold Park, Perth, Western Australia (Second Edition 2016).
- Pilbara Seed Atlas and Field Guide Plant Restoration in Australia's Arid Northwest (2016)

For People and Plants – Friends of Kings Park Member Magazine

BGPA staff and students regularly contributed articles to the quarterly (seasonal) Friends of Kings Park member magazine 'For People and Plants'.

For People and Plants Issue 94, Winter 2016

- Snottygobble reveals its secrets, K Chia, pp 30-33.
- Artwork to frame Botanic Garden Entry, L Hammersley, p 3.
- Common Western Australian orchid thrives on unique partnership, W Lim, pp 26-29.
- Why art? R Maddern, pp 6-9.

For People and Plants Issue 95, Spring 2016

- A flower worth celebrating: *Thinicola incana*, G Brand, pp 26-27
- The Kimberley waterlily hunters, E Dalziell, pp 34-37.
- Rain the key for survival of arid ecosystems, W Lewandrowski, pp 31-33.
- Blooming fantastic: Tales from the people's park, A Staffa, J Kennedy and D Simpson, pp 5-7.
- Research helps manage fire in Perth's Banksia woodlands, R Tangney, R Miller, A O'Donnell and B Miller pp 28-30.

For People and Plants Issue 96, Summer 2016-17

- Quenda quandary, R Glowacki, pp 24-25.
- Rio Tinto Naturescape Kings Park set to reach new heights, L Hammersley, pp 10-12.
- Magnificent misfit moves house, L Hammersley, p 17.
- A new plan for Bold Park, C McChesney, pp 118-119.
- Practical advice for plant restoration in Australia's arid regions, D Merritt and T Erickson, pp 24-25.
- Remote cameras reveal pollination secrets, DG Roberts and SL Krauss, pp 26-30.
- The Future Keepers unlocking the secrets of seeds, D Simpson, pp 8-9.
- A Floral Fantasy, A Staffa, R Maddern and D Simpson, pp 3-7.
- Woodland restoration faces a weedy problem, K Stanbury, pp 31-33.
- Quantified Tree Risk Assessment A balanced approach to managing risks from trees, J Thomas, pp 13-16.

For People and Plants Issue 97, Autumn 2017

- Hunting the enigmatic spinifex, B Anderson, pp 25-28.
- Kings Park traineeship inspires urban investigation, E Barnie, pp 21-23
- More wet feet and muddy hands in Kings Park, R Maddern and A Staffa pp 4-5.
- Confessions of Kings Park office worker: Things I learnt from our first writer in residence, R Maddern, pp 12-15.
- Seeds in the spotlight at Kings Park, D Merrit and B Miller, p 31.
- New book a guide to restoring Perth's iconic banksia woodlands, D Rokich and J Stevens, pp 32-33.
- Surprises in store from Kings Park Education in 2017, A Staffa and C Vaughan pp 6-8.
- Seed coating technology helps meet restoration challenge, M Starcevich and S Turner, pp 29-30.

Appendix 3 – Kings Park Science Research Highlights

Scientific Journals and Papers

Books

- Pereira P, Brevik E, Muñoz-Rojas M, Miller B (2017) *Soil mapping and process modelling for sustainable land use management.* Elsevier, Amsterdam.
- Barrett RL, Pin Tay E (2016) *Perth Plants: A Field Guide to the Bushland and Coastal Flora of Kings Park and Bold Park.* CSIRO Publishing.
- Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) (2016) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain*. UWA Press.

Book Chapters

- Abd-Elmabod SK, Jordán A, Fleskens L, Phillips JD, Muñoz-Rojas M *et al.* (2017) Modelling agricultural suitability along soil transects under current conditions and improved scenario of soil factors. *In:* Pereira *et al.* (eds) *Soil mapping and process modelling for sustainable land use management.* Elsevier, Amsterdam.
- Brevik E, Pereira P, Muñoz-Rojas M *et al.* (2017) Soil mapping and process modelling: Past, present and future. *In:* Pereira *et al.* (eds) Soil mapping and process modelling for sustainable land use management. Elsevier, Amsterdam.
- Krauss SL (2016) Seed sourcing. *In:* Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain*. UWA Press. pp. 117-145.
- McChesney CJ (2016) An adaptive restoration framework for the *Banksia* woodlands of Kings Park and Bold Park. *In:* Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain.* UWA Press. pp. 225-289.
- Merritt DJ, Turner SR (2016) Seed storage and seed germination. *In:* Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain.* UWA Press. pp. 149-159.
- Miller BP, Stevens JC, Rokich DP (2016) Defining targets and deriving criteria for restoration success. *In:* Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain.* UWA Press. pp. 61-79.
- Muñoz-Rojas M, Pereira P, Brevik E, Cerda A, Jordan A (2017) Soil mapping and processes models applied to modern challenges. *In:* Pereira *et al.* (eds) *Soil mapping and process modelling for sustainable land use management.* Elsevier, Amsterdam.
- Oyonarte C, Muñoz M, Barroso FG, Durante P, Muñoz-Rojas M (2016) Usos del territorio. *In:* Oyonarte *et al.* (eds) *Sierra de Gádor, patrimonio Natural e infraestructura verde de Almería.* Fundación Patrimonio Natural, Biodiversidad y Cambio Global. Almería. pp. 235-260.
- Oyonarte C, Muñoz M, Delgado G, Muñoz-Rojas M (2016) El paisaje edafico. *In:* Oyonarte *et al.* (eds) *Sierra de Gádor, patrimonio Natural e infraestructura verde de Almería.* Fundación Patrimonio Natural, Biodiversidad y Cambio Global. Almería. pp. 235-260.
- Pereira P, Brevik E, Muñoz-Rojas M *et al.* (2017) Soil mapping and processes modelling for sustainable land management. *In*: Pereira *et al.* (eds) *Soil mapping and process modelling for sustainable land use management*. Elsevier, Amsterdam.
- Rodrigo FS, Oyonarte C, Muñoz-Rojas M (2016) El clima. *In:* Oyonarte *et al.* (eds) *Sierra de Gádor, patrimonio Natural e infraestructura verde de Almería.* Fundación Patrimonio Natural, Biodiversidad y Cambio Global. Almería. pp. 235-260.

- Rokich DP (2016) Seedling production and planting. *In*: Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain*. UWA Press. pp. 183-190.
- Rokich DP (2016) Soil profile reconstruction. *In:* Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain.* UWA Press. pp. 83-90.
- Rokich DP, Newton VJ (2016) Weed management. *In:* Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain.* UWA Press. pp. 191-201.
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- Rokich DP, Woodall GS, Stevens JC, Dixon KW (2016) Direct seeding. *In:* Stevens JC, Rokich DP, Newton VJ, Barrett RL, Dixon KW (eds) *Banksia Woodlands: A restoration guide for the Swan Coastal Plain.* UWA Press. pp. 163-179

Refereed Articles

- Alanís N, Hernández-Madrigal VM, Cerdà A, Muñoz-Rojas M, Zavala LM, Jordán A (2017) Spatial Gradients of Intensity and Persistence of Soil Water Repellency Under Different Forest Types in Central Mexico. *Land Degradation and Development* 28: 317–327.
- Anaya-Romero M, Muñoz-Rojas M, Ibáñez B, Marañón T (2016) Evaluation of forest ecosystem services in Mediterranean areas. A regional case study in South Spain. *Ecosystem Services* 20: 82-90.
- Anderson BM, Thiele KR, Krauss SL, Barrett MD (2017) Genotyping-by-Sequencing in a Species Complex of Australian Hummock Grasses (*Triodia*): Methodological Insights and Phylogenetic Resolution. *PLoS ONE* 12(1): e0171053. DOI:10.1371/journal.pone.0171053.
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- Ayton S, Tomlinson S, Phillips RD, Dixon KW, Withers PC (2016) Phenophysiological variation of a bee that regulates hive humidity, but not hive temperature. *Journal of Experimental Biology* 219: 1552-1562.
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- Barrett MD (2017) Three new species of *Asparagales* from the Kimberley region of Western Australia. *Telopea*.
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- Beckett CTS, Glenn D, Bradley K, Guzzomi A, Merritt DJ, Fourie AB (2017) Compaction conditions greatly affect growth during early plant establishment. *Ecological Engineering* 106: 471-481.
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Mobile Applications

Barrett MD, Anderson BM and Thiele K (2017) SPIKEY: An interactive key to *Triodia* spinifex grasses of the Pilbara, Western Australia. Version 1. Identic Pty Ltd, Brisbane.

Scientific Research Projects

Externally Funded Research

- Hanson Construction Materials (project formerly with Rocla Quarry Products): Developing sustainable restoration of Banksia woodland communities disturbed through sand quarrying activities (2000-ongoing).
- 2. Department of Parks and Wildlife, Yilgarn District, Wheatbelt Region Rare Plant Translocations program for *Symonanthus bancroftii*.
- 3. Hanson Construction Materials (project formerly with Rocla Quarry Products): Understanding the ecophysiological reasons that underpin Banksia species establishment (2006-ongoing).
- 4. BHP Billiton: Investigation into the effect of topsoil stockpile age and depth on topsoil seed-bank and seedling recruitment (2010-ongoing).
- 5. Sinosteel Mid-West Corporation Ltd: Research underpinning threatened ecological community restoration (2012-2017).
- 6. Birla Nifty Copper Pty Ltd: Vegetation restoration project in the Great Sandy Desert (2012-ongoing).
- 7. BHP Billiton Iron Ore Pty Ltd: Pilbara Restoration Seedbank Initiative (with The University of Western Australia). (2013-2018).
- 8. Arriyadh Development Authority: Stage 2 Strategy Plan Preservation, rehabilitation and development of native plant cover in Arriyadh Province (2015-2016).
- 9. Arriyadh Development Authority: Developing vegetation restoration principles for global arid zones using a major program in Saudi Arabia (2012-2016).
- 10. Cliffs Asia Pacific Iron Ore Pty Ltd: *Ricinocarpos brevis* restoration research program (2013-2017).
- 11. Karara Mining Limited: Research plan of Karara-Mungada rehabilitation and rare species management (2014-2016).
- 12. Fortescue Metals Group: Development of a Framework DNA barcode dataset for Pilbara flora (2014-2015).
- 13. BHP Billiton: Development of Ecological Completion Criteria and Review of Rehabilitation Monitoring Procedures (2016-2017).
- 14. Cliffs Asia Pacific Iron Ore Pty Ltd: *Tetratheca erubescens* germination trials and restoration project (2016-ongoing).
- 15. Australian Flora Foundation: Germination of *Persoonia* species (2016-2019).
- 16. Rangelands NRM: Pilbara *Triodia* field guide app (2016-2017).
- 17. Roy Hill Iron Ore Pty. Ltd: Taxonomic Research to Formally name *Triodia* species Roy Hill (2017)

Nationally Competitive Projects

 Overcoming critical recruitment bottlenecks limiting seedling establishment in degraded seagrass ecosystems: a systems approach to restoration. ARC Linkage grant LP130100155 (2013-2016: total ARC funds \$335,772). Administering organisation: The University of Western Australia. Collaborative Partners: Botanic Gardens and Parks Authority; Curtin University, Cockburn Sound Management Council, BMTT Oceanica Pty Ltd; Mitsui Pty Ltd (trading as Shark Bay Resources Pty Ltd), and Virginia Institute of Marine Science.

- The chemical, molecular and evolutionary basis of key pollination transitions in Australian orchids and their conservation consequences. ARC Linkage grant LP130100162 (2013-2016: total ARC funds \$398,961). Administering organisation: Australian National University. Collaborative and other partners: Botanic Gardens and Parks Authority, The University of Western Australia, University of Michigan.
- Ecological and genetic connectivity in seagrasses: the role of sexual reproduction, dispersal and recruitment on meadow restoration. ARC Linkage grant LP130100918 (2013-2016: total ARC funds \$375,331). Administering organisation: The University of Western Australia. Partner Organisation: Botanic Gardens and Parks Authority.
- 4. The evolution and conservation consequences of promiscuity in plants pollinated by vertebrates. ARC Discovery Project DP140103357 (2014-2016: ARC funds \$935,000). Administering organisation: The University of Western Australia. Collaborative Partner: Botanic Gardens and Parks Authority.
- 5. Managing ecosystem change requires the integration of above and below ground hydrological processes at relevant scale. ARC Linkage Project LP140100736 (2014-2017: ARC funds \$300,000). Administering organisation: The University of Western Australia. Collaborative Partners: Botanic Gardens and Parks Authority, SpecTerra Services Pty Ltd.
- 6. Advancing cryobanking for propagation-recalcitrant and critically endangered plant species. ARC Linkage Project LP140100993 (2014-2017: total ARC funds \$450,000). Administering organisation: Curtin University of Technology. Collaborative Partners: Botanic Gardens and Parks Authority.
- 7. ARC Training Centre for Mining Restoration. ARC Industrial Transformation Training Centres IC150100041 (2015-2019/20) ARC funds \$5M). Administering organisation: Curtin University of Technology. Collaborative Partners: Botanic Gardens and Parks Authority, Society for Ecological Restoration (Australasia) Inc, Hanson Construction Materials, Cliffs Asia Pacific Iron Ore Management Pty Ltd., Sinosteel Midwest Corporation Limited, BHP Iron Ore Pty Ltd., Karara Mining Limited, Polaris Metals Pty Ltd.
- 8. Is restoration working? An ecological genetic assessment. ARC Linkage Project LP150100450 (2016-2018: ARC funds \$400,000). Administering organisation: The University of Western Australia. Collaborative Partners: Botanic Gardens and Parks Authority, Department of Parks and Wildlife, Gondwana Link Ltd.
- 9. Mine site rehabilitation through novel plant and microbe interactions. ARC Linkage Project LP150101111 (2016-2018: ARC funds \$355,000). Administering organisation: The University of Western Australia. Collaborative Partners: Botanic Gardens and Parks Authority, Curtin University.
- The Energetic Basis to Seed Longevity and Storage. ARC Linkage Project LP160100381 (2016-2018: ARC funds \$336,000). Administering organisation: Curtin University. Collaborative Partner: Botanic Gardens and Parks Authority,
- 11. Eco-Engineering Soil from Mine Tailings for Native Plant Rehabilitation. ARC Linkage Project LP160100598 (2016-2018: ARC funds \$590,000). Administering organisation: University of Queensland. Collaborative Partners: Botanic Gardens and Parks Authority and Karara Mining Limited.
- 12. Smoke-derived karrikins reveal a new pathway for plant development ARC Discovery Project DP160102888 (2016-2019: ARC funds \$516,300). Administering organisation: The University of Western Australia. Collaborative Partners Botanic Gardens and Parks Authority, University Pablo de Olavide.
- 13. Wicked Problems: Optimising Fire Management for a Resilient Future. ARC Linkage Project LP160100996 (2016-2020: ARC funds \$455,000). Administering organisation: Murdoch University. Collaborative Partners: Botanic Gardens and Parks Authority and Department of Parks and Wildlife.

- 14. Eco-engineering solutions to improve mine-site rehabilitation outcomes. Australian Department of Industry, Innovation and Science's Global Innovation Linkages Program (2017-2021, GIL funds \$974,652). Administering organisation: Botanic Gardens and Parks Authority. Collaborative partners: University of Western Australia, BHP Billiton Iron Ore, Rio Tinto Iron Ore, Greening Australia, Brigham Young University, University of Nevada, Natural Resource Conservation.
- 15. Advanced cryobanking for recalcitrant-seeded Australian rainforest plants. ARC Linkage Project LP160101496 (2017-2021: ARC funds \$592,514). Administering organisation: Curtin University of Technology. Collaborative Partners: Botanic Gardens and Parks Authority and The Royal Botanic Gardens and Domain Trust. Participating Organisations: RMIT University, University of Western Australia, Australian Nuclear Science and Technology Organisation, United States Department of Agriculture, University of South Dakota

Research Scientists and Students

Information regarding Kings Park's research scientists and students can be found by going to the Science section of the BGPA website. – https://www.bgpa.wa.gov.au/about-us/conservation/research/science-staff.

Externally Funded Research Scientists

Dr Janet Anthony is the genetics laboratory manager. She also undertakes short-term projects and assists with projects such as the genetic guidelines for the effective ecological restoration of seagrass meadows project.

Dr Matthew Barrett completed research on a four-year ARC funded project defining biologically significant units in spinifex (*Triodia* spp.) for improved ecological restoration in arid Australia (collaborative project with UWA). He also undertook short-term projects in the Kimberley.

Dr Russell Barrett (CSIRO/ANGB Research Associate) has continued his association with Kings Park science through activities such as publishing papers and co-editor on publications such as the *Banksia* Woodlands: A restoration guide for the Swan Coastal Plain.

Amber Bateman (UWA) assisted Dr Miriam Muñoz Rojas and the Restoration Seedbank team, commenced a PhD at Kings Park in 2017.

Christine Best (UWA) continues with the Restoration Seed Bank project as a research associate working on seed technologies for restoration.

Dr Lucy Commander continued research into seed enablement techniques of species in threatened ecological communities at Sinosteel Mid-West's mine sites.

Dr Adam Cross (Curtin) continues his association with Kings Park science as part of the Australian Research Council Industrial Transformation Training Centre for Mining Restoration funded project.

Dr Carole Elliott (UWA) is continuing her research on the ecology and translocation of the declared rare species *Ricinocarpos brevis* and *Tetratheca erubescens*.

Dr Emma Dalziell (Curtin) is undertaking research on an ARC funded project quantifying patterns of metabolic rate in Australian native seeds to improve understanding of seeds in natural and artificial seed banks.

Dr Todd Erickson (UWA) continues as a Project Manager with the Restoration Seed Bank Project, funded by BHP Billiton Iron Ore. Dr Erickson has been successful with a funding application for a new 4-year project at BGPA.

Dr Bryn Funnekotter (Curtin) continued research on an ARC funded project to advance cryobanking for propagation of recalcitrant and critically endangered plant species, and was part of a successful bid that continues this funding for a further 4 years.

Dr Peter Golos (UWA) continues research into experimental designs for restoration of a mine sites in the Great Sandy Desert, the restoration of threatened species communities occurring on banded iron formations at Sinosteel Mid-West's mine sites, in particular relating to the plant-soil interaction.

Dr Sonja Jakob assisted with research at the Sinosteel Midwest Corporation Limited and Karara Mining Limited mine sites.

Dr Wolfgang Lewandrowski assisted with research at Cliffs Natural Resources on the restoration of *Tetratheca erubescens* as well as work for Hansen Construction Materials and BHP undertaking data analysis related to mine site restoration.

Dr Miriam Muñoz Rojas (UWA)continues as a Research Assistant Professor with the Restoration Seed Bank Project as a soil scientist.

Dr Ryan Phillips (ANU/Latrobe Research Associate) continues his association with BGPA on a range of orchid conservation, pollination and evolution projects, based at The Australian National University.

Dr David Roberts (UWA) continues an ARC funded project to assess the conservation and evolution consequences of promiscuity in plants pollinated by vertebrates (collaborative UWA project).

Dr Liz Sinclair (UWA) completed an ARC funded project to develop genetic guidelines for the effective ecological restoration of seagrass meadows (collaborative UWA project).

David Symons (UWA) continues with the Restoration Seed Bank project as a research associate, assisting with seed technologies for restoration.

Dr Sean Tomlinson (Curtin) continues his association with Kings Park science researching rare and threatened species impacted by mining, as part of an Australian Research Council Centre for Mine Site Restoration

Dr Shane Turner (UWA)continues with the Restoration Seed Bank project as a Research Fellow, investigating the seed biology of native species for mine site rehabilitation.

Students

Sadichhya Adhikari (UWA) commenced her Masters project researching "Are different seed provenances equally resilient to climate change: a test with trigger plants?"

Benjamin Anderson (UWA) was awarded his PhD with his thesis investigating the diversity of the *Triodia basedowii* E.Pritz species complex and its implications for the evolution of the Australian arid zone biota. Ben won the Pauline Ladiges Prize for best oral presentation by a student at the Australian Systematic Botany Society Annual Conference in Canberra, for his talk "Using genotyping by sequencing to resolve evolutionary relationships in a species complex of Australian arid zone grasses (*Triodia*)".

Bronwyn Ayre (UWA) continues her PhD project "The consequences of pollination by birds for mating in kangaroo paws (*Anigozanthos*)".

Amber Bateman (UWA) commenced her PhD investigating arid zone soil health and functionality in mine site restoration.

Nicole Bezemer (UWA) continues her PhD project on Ecological and evolutionary consequences for plants pollinated by vertebrates.

Vanessa Brown (Curtin) commenced her Honours project researching how to protect seeds from pre-emergent herbicide with activated carbon pellets.

Sophie Cross (Curtin) commenced her PhD project on "Reptile behaviour and diversity as indicators for mine closure"

Erica David (UWA) continues her PhD researching implications for wind management in restoration ecology, linking ecosystem aerodynamics to physiological drivers in arid and semi-arid systems.

Rose Kerr (UWA) commenced her Honours project investigating biodegradable pot dynamics for use in restoration.

Tayla Kneller (Curtin) completed her Honours project 'Using mine substrates and plant-based amendments in biodiverse arid land restoration: effects on plant growth and soil functionality'.

Majda Suleiman Khalil (UWA) submitted her PhD thesis on restoration ecology of *Acacia pachyceras* in Kuwait.

Olga Kildisheva (UWA) continues her PhD research in to seed enablement.

Elvan Ling (UWA) completed his Masters project on designing, building, and testing a seed flaming unit to efficiently remove appendages from seeds to improve the ability to apply seed coatings.

Bennet Lovelady (UWA) completed his Honours project on designing, building, and testing a precision seed dehuller for extracting seeds from woody fruits to improve their germination.

Monte Masarei (UWA) has commenced his PhD and will be studying the design and engineering of mechanised seeding equipment to facilitate large-scale restoration.

Russell Miller (Murdoch) continues his PhD project "The impact of a changing climate, fire management, herbivory and weed abundance on the tolerable fire intervals of native *Banksia* woodland species".

Bahram Mirfakhraei (UWA) commenced his PhD project "A genecological assessment of seed sourcing for ecological restoration under current and future climates".

Alaa Shallal Nayyef (UWA) continues her PhD project "Conservation of arid plants through improved understanding of seed biology as a means of enhancing the functionality of botanic gardens".

Harrison Palmer (Curtin) commenced his PhD project researching the metabolic aspects of seed storage, with a particular focus upon rare species.

Simone Pedrini (Curtin) continues his PhD project researching optimum coatings for native seed to enhance germination at restoration sites.

Daniela Scaccabarozzi (Curtin University and the University of Naples Federico II, Italy) continues her PhD investigating pollination diversification in Australian donkey orchids, and potential mimicry with native Peas.

Laura Skates (UWA) continues her PhD project investigating "The ecological dependency of WA's carnivorous plants on insect prey through the use of isotopic discrimination".

John-Mark Sommerville (UWA) completed his Masters project on developing methods for precision pelleting of seeds.

Marlee Starcevich (UWA) completed her Honours researching the development of seed coating technologies for use in restoration.

Siobhan Sullivan (UWA) continues her PhD investigating plant physiological responses to substrate treatments in post-mining environments.

Lauren Svejcar (Murdoch) continues her PhD study on the role of positive plant interactions in *Banksia* woodland restoration.

Ryan Tangney (Curtin) continues his PhD research project "Variation of season and fire intensity leads to different seed fates in *Banksia* woodlands".

Sonan Tobgay (UWA) completed his Masters project on "Physical seed dormancy and the mechanisation of approaches to render seeds water permeable".

Tayla Van der Kroft (UWA) completed her Honours project on Pollination biology of the catspaw *Anigozanthos humilis*.

Mark Wallace (UWA) was awarded his PhD with his thesis entitled "Polyploidy and genetic diversity in the *Lepidosperma costale* species complex (Cyperaceae)"

Katie White (UWA) commenced her Honours project investigating the "limitations to invasion success: how is *Passiflora foetida* affected by climatic drivers, specifically temperature and moisture, during the germination to establishment phase?"

Susan Whiteley (UWA) continues her PhD project investigating *ex-situ* conservation of the declared rare flora *Androcalva perlaria*.

Bryony Wilkinson (UWA) continues her PhD project researching Jarrah tree decline in managed landscapes.

Summer Scholarships

These competitive scholarships are advertised in September each year to provide a bridge between undergraduate and postgraduate study at Kings Park. The following six students were given a 12 week placement:

- Sadichhya Adhikari (UWA) adaptive capacity of plants to respond to climate change.
- Vanessa Brown (Curtin University) active carbon coating of native seeds for protection from herbicides.
- Grace Huck (UWA) seed metabolism and dormancy.
- Rose Kerr (UWA) biodegradable seedling pots for ecological restoration.
- Kelly Lilburn (Curtin University) metabolics of seed longevity.
- Hannah Lloyd-Deely (UWA) optic-fibre temperature sensing to look at fire in Kings Park.

Visiting Scientists

Seed experts from around the world, including **John Dickie** (Royal Botanic Gardens Kew, UK), **Alessandra Fidelis** (Universidade Estadual Paulista, Brazil), **Borja Jiménez-Alfaro** (Masaryk University, Czech Republic), **Julie Larson** (University of Collarado, USA), **Peter Poschlod** (University of Regensburg, Germany), **Arne Saatkamp** (Aiz-Marseille Universite, France), **Fernando Silveira** (Universidade Federal de Minas Gerais, Brazil) and **Jeff Walck** (Middle Tennessee State University, USA) gathered at Kings Park for a week in October 2016 for a seed workshop.

Dr Betty Mauliya Bustam, a former Kings Park PhD student who now heads the Department of Biology at Universitas Syiah Kauala, Indonesia, visited Kings Park in September 2016 to undertake a short sabbatical project with Dr Eric Bunn.

Professor Albert Solé-Benet and **Dr Lourdes Luna Ramos** both from Arid Zone Research Institute, National Research Council of Spain, visited Kings Park in celebration of World Soils Day on the 5 December 2016. They gave seminars on Restoration of quarries under Mediterranean arid and semi-arid environments and Effects of restoration strategies (organic amendments and mulches) on soil properties and native vegetation.



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