



# LIVING — WITH — NATURE



ANNUAL REPORT  
2014/2015





**MAKING** Singapore our City in a Garden is an ongoing effort that is built on the support and love for nature amongst the community, as well as the collective talents of the industry.

From conducting surveys to exploring innovative methods such as structural cells for improved tree growth and stability, NParks is harnessing science and technology in order to advance our capabilities in greening and conservation management.

At the same time, the community continues to lend invaluable support and contributions to NParks' efforts, to help build a sustainable living environment for Singaporeans to appreciate and enjoy for generations to come.



# CHAIRMAN'S MESSAGE

*On our nation's 50th birthday, we honour our past and build for the future through research, development and conservation.*



In our Jubilee year, we had much to celebrate. NParks has made significant advances in science, development and public education, capped by the Singapore Botanic Gardens being inscribed as a UNESCO World Heritage Site. For this and the many other achievements detailed in this report, I would like to recognise the hard work and commitment of the many who make our City in a Garden a reality.

Our founding Prime Minister Mr Lee Kuan Yew believed in the power of nature's greenery to lift our spirits. Generations of NParks staff, students, partners and volunteers share his enduring vision. This year, Singaporeans from over 850 community gardens and 31 schools took part in our Community in Bloom and Community in Nature programmes. We also planted a record 38,000 trees, introducing over 40 new tree species, and completing over 40 kilometres of park connectors across the island.

With these efforts, we weave greenery throughout our changing urban environment. Necessarily, we adapt how we care for our trees, in step with our country's development needs. Where we used to plant trees directly in the ground for our streetscapes, for example, we now use load-bearing structural cells to maintain rooting and breathing space under roads and pavements. This enables us to nurture healthy trees with robust root systems, even in built-up areas.

Planning, planting and pruning, however, are only part of NParks' work. Our mission is also to protect our natural heritage. To this end, we conduct comprehensive biodiversity surveys at our nature reserves, discovering three endemic plant species and four new plant species this year. Our Citizen Science programme engages the community in data collection island-wide, helping us better map and track our biodiversity.

We launched Springleaf Nature Park last year as a green buffer to the Central Catchment Nature Reserve. Chestnut and Windsor Nature Parks are also in the works. These Nature Parks will give Singaporeans more green spaces for nature-related activities, while preserving the ecosystems of the Reserve.

This year, we expanded our remit from caring for our terrestrial flora and fauna to protecting our native marine life as well. Working with community conservation groups and academic partners, we opened our first Marine Park on Sisters' Islands. The Sisters' Islands Marine Park will be a base for outreach, education, conservation and further scientific research in this important biodiversity site of seagrass beds, coral reefs and sandy shores.

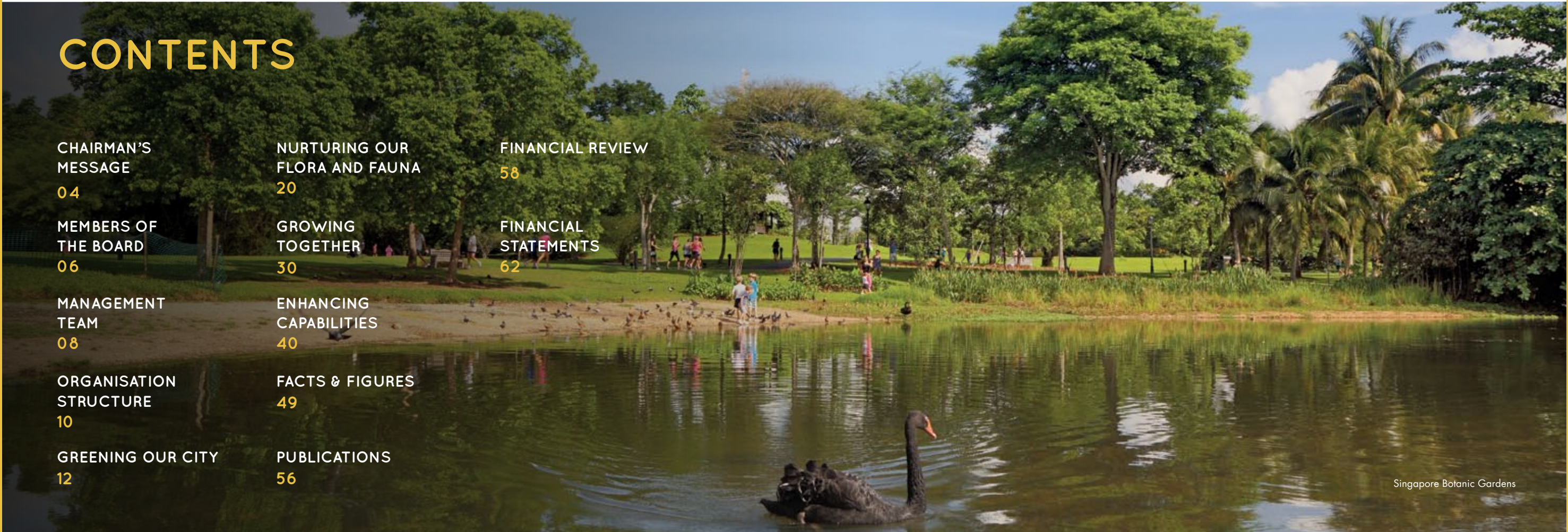
As NParks' scope of work evolves with the needs of our nation, widespread support from the government, the private sector and the public is more important than ever. I would like to thank the board, management and all employees of NParks, individual donors, corporate sponsors and our dedicated volunteers for their support over the past year. Together, we are able to fulfil our statutory function as well as our shared vision of a thriving City in a Garden for generations to come.



**Mrs Christina Ong**  
Chairman  
National Parks Board

## CONTENTS

CHAIRMAN'S MESSAGE	NURTURING OUR FLORA AND FAUNA	FINANCIAL REVIEW
04	20	58
MEMBERS OF THE BOARD	GROWING TOGETHER	FINANCIAL STATEMENTS
06	30	62
MANAGEMENT TEAM	ENHANCING CAPABILITIES	
08	40	
ORGANISATION STRUCTURE	FACTS & FIGURES	
10	49	
GREENING OUR CITY	PUBLICATIONS	
12	56	



Singapore Botanic Gardens



# MEMBERS OF THE BOARD

## AS OF SEPTEMBER 2015



**MRS CHRISTINA ONG**  
CHAIRMAN

Mrs Ong is Managing Director of Club 21 Pte Ltd, a lifestyle retailer with more than 400 stores worldwide. A leading fashion entrepreneur, Mrs Ong is a recipient of The Italian Fashion Hall of Fame Award 1995 and the Italian Award of Cavaliere De Lavo. Mrs Ong is also a noted luxury hotelier, managing a stable of niche properties under the COMO Hotels & Resorts (Asia) Pte Ltd brand.



**MRS DEBORAH ONG**  
DEPUTY CHAIRMAN  
(TILL AUGUST 2015)

Mrs Ong is a partner at PricewaterhouseCoopers Singapore. She has more than 20 years of public accounting experience, providing audit and advisory services to a wide range of clients. Besides leading a portfolio of the firm's largest clients, Mrs Ong has been appointed as the firm's Risk & Quality Leader. She was previously the firm's Human Capital Leader.

she played a key role in the strategic planning and design of Singapore's city and urban landscape, and the conservation of Singapore's built heritage. She is currently Independent Director of Keppel Land Limited, Board Member of Sentosa Development Corporation, Chairman of Sentosa Cove Resort Management Ltd and Senior Advisor to several private firms. In 2009, Mrs Koh-Lim was conferred the Meritorious Service Award by the Government of Singapore.

densification, liveability and well-being and their links to sustainability benchmarking and assessment. Together with her research team, she has been investigating planning strategies for sustainable growth, particularly for the dense cities in the developing countries of Asia. She is a part-time consultant with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

concurrently the Director of the Social Sector Planning Unit. Mr Ngiam has also served in the Ministry of Home Affairs and the Ministry of Education.



**SEAH KIAN PENG**  
BOARD MEMBER

Deputy Speaker of Parliament and a Member of Parliament for the Marine Parade GRC, Mr Seah is also the Chief Executive Officer (Singapore) of NTUC Fairprice Co-operative Limited. Mr Seah has worked in both the public and private sectors, and serves in various public and community organisations. He is on the board of International Co-operative Alliance, Singapore Centre for Social Enterprises, Centre for Fathering and Singapore Olympic Foundation. He is a Fellow of the Singapore Institute of Directors and Chartered Institute of Marketing. He also chairs the Harvard Business School Club of Singapore and the Marine Parade Leadership Foundation.



**NGIAM SHIH CHUN**  
BOARD MEMBER  
(TILL AUGUST 2015)

Mr Ngiam is the Deputy Secretary for Industry in the Ministry of Trade and Industry, where he oversees policies to develop Singapore's economy. He was formerly the Special Assistant to Emeritus Senior Minister in the Prime Minister's Office. Prior to that, he was the Director of Community Relations and Engagement at the Ministry of Community Development, Youth and Sports where he promoted community bonding and racial and religious harmony, and helped to develop volunteerism and philanthropy. He was also



**DR MALONE-LEE LAI CHOO**  
BOARD MEMBER

Dr Malone-Lee is Director of the Centre for Sustainable Asian Cities, School of Design and Environment at the National University of Singapore (NUS). Prior to joining NUS, Dr Malone-Lee worked in the areas of strategic planning, urban planning policies and heritage conservation. Her current research interests lie in urban sustainability, particularly on its nexus with development, economic growth and city culture. Her more recent research projects have focused on issues of city



**MRS KOH-LIM WEN GIN**  
BOARD MEMBER

Mrs Koh-Lim was the Chief Planner and Deputy Chief Executive of the Urban Redevelopment Authority (URA) from 2001 to 2008. Her career with URA spanned over three decades, during which



**ANDREAS SOHMEN-PAO**  
BOARD MEMBER

Mr Sohmen-Pao is Chairman of BW Group Limited, BW LPG Limited and BW Offshore Limited. He is also a non-executive director of the Singapore Maritime Foundation and Sport Singapore, and a member of the Singapore Symphony Orchestra Council. Mr Sohmen-Pao previously worked for Goldman Sachs International in London. He has served as a non-executive director of the Maritime and Port Authority of Singapore and The Esplanade Co Ltd amongst others. Mr Sohmen-Pao holds an honours degree (BA Hons) from Oxford University and an MBA from Harvard Business School.



**WARREN FERNANDEZ**  
BOARD MEMBER

Mr Fernandez is the Editor of The Straits Times. He has been with the Singapore Press Holdings for almost two decades, during which he served in many roles including political correspondent, news editor, deputy political editor, foreign editor and deputy editor. Mr Fernandez graduated with First Class Honours from Oxford University, where he read Philosophy, Politics and Economics, and also has a Master's Degree in Public Administration from Harvard University's John F. Kennedy School of Government. He has served on a number

of public committees such as the Remaking Singapore Committee, the Singapore 21 Committee, Compass, and the Cost Review Committee and used to sit on the boards of the Civil Service College and National Environment Agency. Currently, he is a board member of the National Heritage Board, SGCarMart, Sphere Exhibits Pte Ltd, SPH (Overseas) Ltd and The Straits Times Press Ltd.



**DR SURIANI SURATMAN**  
BOARD MEMBER

Dr Suriani is Senior Lecturer at the Department of Malay Studies, National University of Singapore. She is trained as a social anthropologist. Her teaching and research covers areas on Malay culture and society. She has conducted research in Singapore, Malaysia and the Philippines. She is currently Deputy Chairman of the Malay Heritage Foundation Board of Directors. She is also a board member of The National Art Gallery, Singapore. In addition, Dr Suriani is a potter and has done commissioned creative pieces for Temasek Holdings, The Sentosa Resort and Spa, National Heritage Board, Patron of the Year Award and Singapore International Foundation.



**GUY HARVEY-SAMUEL**  
BOARD MEMBER

Mr Harvey-Samuel is Group General Manager,

Chief Executive Officer of Singapore, The Hongkong and Shanghai Banking Corporation Limited (HBAP). A Permanent Resident of Singapore, Mr Harvey-Samuel is a member of HBAP's Executive Committee and has direct responsibility for all HSBC operations based in Singapore. He is also a member of the Advisory Board of the National Youth Achievement Award Council and sits on the National Arts Council Advisory Board, the Jurong Town Corporation Board and Surbana Jurong Private Limited Board.



**GEORGE HUANG**  
BOARD MEMBER

Mr Huang is Managing Director of Amoy Canning Corporation (S) Ltd, a pioneer in the food processing industry, since 1999. He serves on the boards and committees of various organisations including Singapore Manufacturing Federation, Consumers Association of Singapore and Singapore Environment Council. He is also the Honorary Consul General of the Federal Democratic Republic of Ethiopia to Singapore.



**MS JAMIE ANG**  
BOARD MEMBER

Ms Ang is the Director for Fiscal Policy in the Ministry for Finance, where she oversees overall fiscal

planning, budget policy, strategic planning and economic analysis. She also served as Director for Land and Infrastructure Programmes as well as Director for Social Programmes in the ministry since Feb 2014. Prior to this, she was Director for Research and Strategy Management and Deputy Director for Housing at the Ministry of National Development. Ms Ang has also served in the Manpower Planning and Strategy Division as well as Healthcare Financing Division in the Ministry of Health.



**KENNETH ER**  
BOARD MEMBER AND  
CHIEF EXECUTIVE  
OFFICER, NATIONAL  
PARKS BOARD

Mr Er began his career in National Parks Board (NParks) and has been involved in the planning, implementation and management of parks and streetscapes in the city. In 2003, he was seconded to the Ministry of National Development, where he oversaw policies and was actively involved in the review of legislations pertaining to parks and greenery infrastructure, agri-veterinary issues, and building and construction. Mr Er was subsequently appointed General Manager at Gardens by the Bay, where he played a pivotal role in developing the Gardens from concept to form. He was also concurrently Assistant Chief Executive Officer (Corporate Development & Services) at NParks. He was appointed Chief Operating Officer of Gardens by the Bay in 2012. Mr Er is presently the Chief Executive Officer of NParks.



# MANAGEMENT TEAM

## AS OF SEPTEMBER 2015



TOP PICTURE / SINGAPORE QUARRY  
Left to right

- KENNETH ER** Chief Executive Officer
- LEE PIN PIN** Director, Communications & Community Engagement
- OH CHEOW SHENG** Director, Streetscape
- DR KIAT TAN** Advisor to NParks
- DR LEONG CHEE CHIEW** Deputy Chief Executive Officer, Professional Development & Services Cluster and Commissioner of Parks & Recreation

BOTTOM PICTURE / HINDHEDE NATURE PARK  
Left to right

- FRANCIS LIM** Director, Corporate Services
- NG CHEOW KHENG** Director, Horticulture & Community Gardening
- TEVA RAJ** Director, Municipal Landscapes
- DAMIAN TANG** Director, Design
- MS KARTINI OMAR** Senior Director, Parks Division 2



TOP PICTURE / BUKIT TIMAH NATURE RESERVE  
Left to right

- DR LENA CHAN** Director, National Biodiversity Centre
- LIM LIANG JIM** Director, Corporate Strategy & Planning & Industry/CUGE
- CHIA SENG JIANG** Director, Parks Division 1
- KONG YIT SAN** Assistant Chief Executive Officer, Park Management & Lifestyle Cluster
- WONG TUAN WAH** Director, Conservation

BOTTOM PICTURE / DAIRY FARM QUARRY  
Left to right

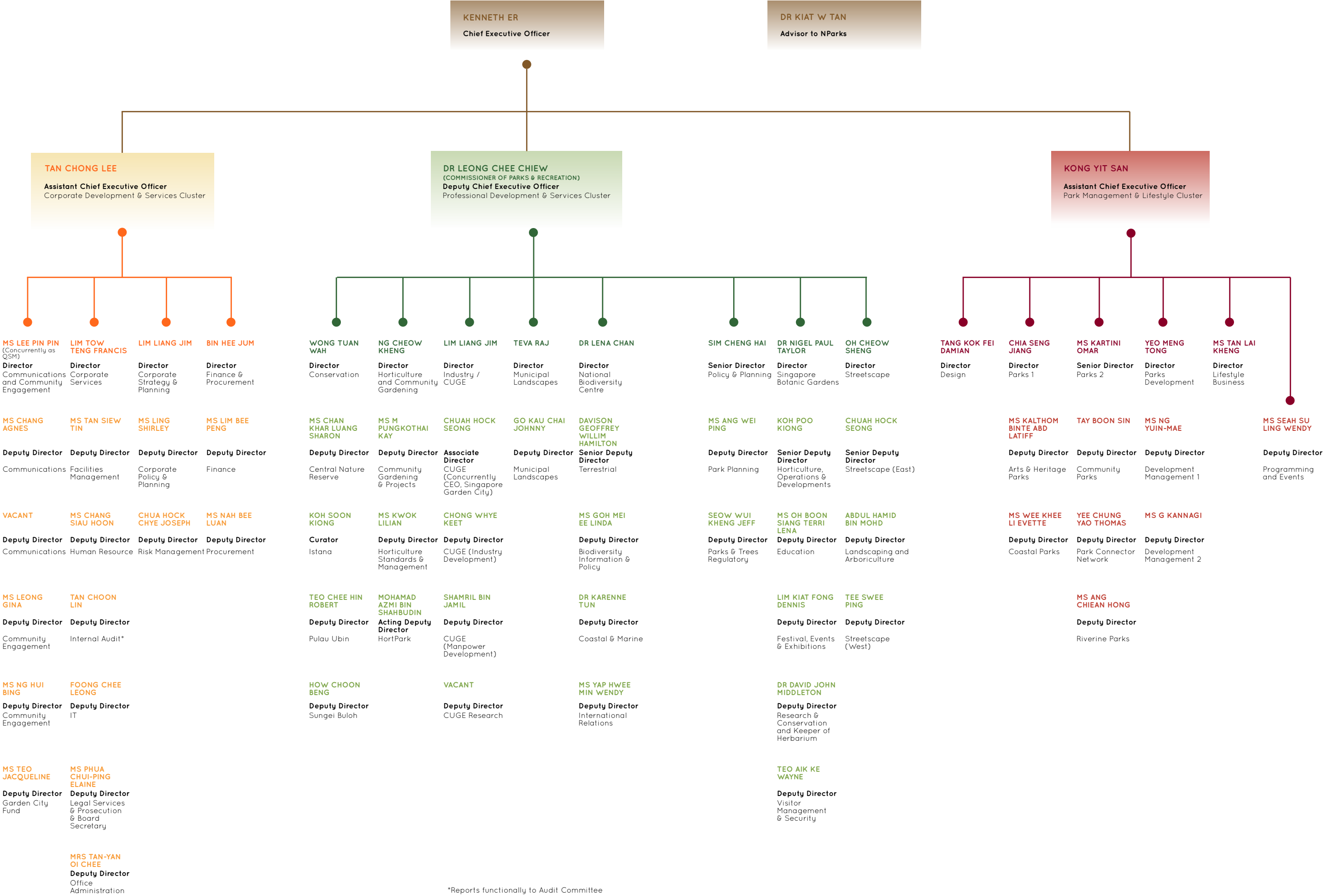
- MS TAN LAI KHENG** Director, Lifestyle Business
- BIN HEE JUM** Director, Finance & Procurement
- YEO MENG TONG** Director, Parks Development
- DR NIGEL TAYLOR** Director, Singapore Botanic Gardens
- TAN CHONG LEE** Assistant Chief Executive Officer, Corporate Development & Services Cluster
- SIM CHENG HAI** Senior Director, Policy & Planning





# ORGANISATION STRUCTURE

## AS OF SEPTEMBER 2015







# GREENING

## OUR CITY

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This past year, NParks continued to work with partners and the community to further integrate nature as part of the make-up of our city – from our parks, gardens and nature reserves to our urban spaces and the streets connecting them. This was backed by substantial scientific research, studies and innovation to enhance NParks’ greening efforts and further the evolution of our City in a Garden.



NParks' commitment to excellence is exemplified in our quest to develop world-class gardens that not only play an important role as botanical institutions, but are also valued spaces where all Singaporeans and visitors can relax and enjoy.

Supporting a Landmark Bid

For the year in review, NParks engaged stakeholders and other community groups to support Singapore Botanic Garden's United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site bid by sharing thoughts, wishes and memories in pledge books throughout the Gardens.

In September 2014, NParks supported the visit of the technical assessor from the International Council on Monuments and Sites (ICOMOS), as part of the bid to inscribe the Gardens as Singapore's first UNESCO World Heritage Site. ICOMOS has been appointed by the World Heritage Committee to provide expert evaluations of properties, which are proposed for inscription. The Gardens had submitted its nomination dossier to the Committee in January 2014, detailing its historical, economical and cultural significance, together with a site management plan that outlined how the Gardens would be conserved in the future.

The Singapore Botanic Gardens was successfully inscribed as a UNESCO World Heritage Site on 4 July 2015.



An official from ICOMOS, the expert body mandated to advise the World Heritage Committee, visited the Singapore Botanic Gardens in September 2014 for an on-site inspection and assessment of its management and protection of its heritage assets.

Using Science and Technology to Conserve Our Heritage Trees

Through the use of science and technology, NParks continues to demonstrate its commitment to conserve and raise awareness of our natural heritage. In an initiative to conserve the iconic 170-year-old Tembusu tree at the Singapore Botanic Gardens, arborists, engineers and other experts from NParks and ST Kinetics developed the world's first dynamic support system to prop up the Heritage Tree's lateral limb without compromising movement and growth.

The support system provides an environment for the Tembusu tree's lateral limb to sway naturally under wind while supporting it at the same time.

To highlight the importance of trees as part of Singapore's heritage, a book titled "Tall Tales: Singapore Botanic Gardens Heritage Trees Trail Guide" was produced, featuring 29 Heritage Trees in the Gardens. Sponsored by Mrs Kirtida Mekani, an NParks Community in Bloom ambassador and Garden City Fund Management Committee member, the book is used regularly by nature guides and teachers leading tours and learning journeys in the Gardens.



Visitors showed their support for the Gardens' UNESCO bid by penning their thoughts in pledge books.



(Top) President Tony Tan launched the world's first dynamic support system, which helps to prop up the limb of the Heritage Tembusu tree in the Gardens.



(Left) Sembcorp Industries Group President & CEO Tang Kin Fei, Minister of State for National Development Desmond Lee and NParks CEO Kenneth Er looking at exhibits explaining the enhancement works in the National Orchid Garden.

Enhancing the Gardens Experience

As part of efforts to share the Gardens' heritage with the public and boost visitor experience, several enhancement works for the National Orchid Garden are planned to start in 2016. The improved facilities will advance horticultural work at the Cool House, the Yuen Peng McNeice Bromeliad Collection enclosure and the Tan Hoon Siang Mist House, enabling researchers to grow a wider variety and range of rare orchids that are not found in our tropical climate. This will strengthen conservation efforts and better facilitate documentation and research. Visitors can also view and appreciate the beauty of orchids and plants up close with

an additional level at the Cool House, and observe back-of-house operations via a new viewing deck overlooking the nursery.

The enhancements of the Cool House (which will be renamed The Sembcorp Cool House), Yuen Peng McNeice Bromeliad Collection enclosure and the Mist House are sponsored by Sembcorp Industries, the family of the late Lady Yuen Peng McNeice, and an anonymous donor.



Zingiber singapurens, a small but resilient species with orange-red bracts and almost white flowers, is endemic to Singapore. This rare ginger, previously unknown to science, was discovered in our forests and officially published in "The Gardens' Bulletin Singapore" in November 2014.



David Lim, 70

Manager at National Orchid Garden

Singapore Botanic Gardens

Meet David Lim, the man behind the *Aranda* Lee Kuan Yew orchid created to honour Singapore's founding Prime Minister, the late Lee Kuan Yew.

Creating this hybrid orchid was a delicate process requiring the understanding of plant genealogy, years of patience and not to mention, a bit of luck! David carefully selected two parent plants for the hybrid based on factors such as colour, size, resistance to disease, ease of growth and capacity for bearing flowers. Typically, the size and shape of a hybrid orchid's flowers are determined by its mother, while characteristics such as the flower's colours come from the father.

In this case, David decided on an *Arachnis hookeriana*, a native orchid species, and a *Vanda* Golden Moon, a Hawaiian hybrid that shares some parentage with the *Vanda* Kwa Geok Choo, named after Mr Lee Kuan Yew's wife who passed away in 2010.

The *Aranda* Lee Kuan Yew orchid took four years to produce, although the process can take anywhere between two to six years from the day the hybrid orchid's parents are crossed to when it first starts flowering.

David's contributions mark how horticultural and scientific efforts are bringing us closer to realising our City in a Garden vision and helping the love for nature to blossom.

**"The best part of my job is creating something new and seeing it in bloom."**



An artist's impression of the community gardens in Jurong Lake Gardens

**Growing Our Green Spaces in the Heartland – A New National Garden**

In continuing efforts to create a quality living environment through our green spaces, a new national garden will be developed in the Jurong Lake District. Plans are underway to enhance Jurong Lake Gardens, which will comprise Jurong Lake Gardens West, Jurong Lake Gardens Central and Jurong Lake Gardens East. First announced by Prime Minister Lee Hsien Loong at the 2014 National Day Rally, the 90-hectare national garden will be designed sensitively to preserve the area's tranquility. Community gardeners from all over Singapore will work with local landscape designers and industry partners to create display gardens of high horticultural standards at Jurong Lake Gardens.

To encourage community participation to shape the design of the new Gardens together, a series of roving exhibitions was organised in 2015 to gather feedback from the public. The first phase of development, Jurong Lake Gardens West, is expected to complete in 2017.

**Bringing the Enjoyment of Nature to New Heights**

In other ongoing initiatives with community partners, NParks has collaborated with Singapore Press Holdings (SPH) to develop the SPH Walk of Giants at the Singapore Botanic Gardens' new

Learning Forest. One of several thematic walks planned for the forest, the elevated boardwalk will be built to allow visitors to observe the flora and fauna at the forest floor, mid-forest and canopy levels. Two Sepetir trees were planted on-site by SPH chairman Dr Lee Boon Yang and NParks staff to mark the start of development for the 9.8-hectare Learning Forest, which will be completed in 2016.



An artist's impression of the SPH Walk of Giants in the Learning Forest, which offers opportunities for the public to learn about the majestic trees in Singapore and the region.





Developers at SOLARIS demonstrated their ability to integrate and sustain green habitats together with urban infrastructure through a 1.5km-long landscaped ramp that spirals around the building from the rooftop to the ground level, and integrates with the adjacent One-north Park.

*To encourage community partners to embrace greenery in our urban spaces, NParks has taken steps to work with partners to integrate greenery into residential, commercial and even educational developments, connect people with nature and provide a sustainable urban living environment.*

### Taking Nature To a New Level Through LEAF and SGIS

NParks continues to work with industry partners and the community to sustain our green cover by using innovative landscape designs and incorporating diverse forms of greenery within various developments.

The Landscape Excellence Assessment Framework (LEAF) was launched in 2013 to recognise developments for greenery excellence in Singapore. In the year in review, 12 new and existing developments have been recognised for outstanding achievements in design incorporating greenery. These included seven condominiums, three HDB developments, one office building and for the first time ever, an educational institution. Currently, 23 new and existing developments have received LEAF certification.

A new "Outstanding Project" category has also been added to recognise developments that have raised the bar in greening excellence. The Adana @Thomson condominium, SOLARIS and Tree House condominium were the first to receive this honour.

Under NParks' Skyrise Greenery Incentive Scheme (SGIS), Singapore's Skyrise Greenery footprint was increased by 4.4 hectares to a total of 65 hectares, with the Singapore Institute of Technology at

Temasek Polytechnic, Daikin Building, Shaw Centre, Chua Chu Kang Community Club and Northbrooks Secondary School being a few highlights. These buildings made use of innovative landscaping with carefully selected plants, and supporting systems that enabled rooftop gardening and vertical greenery.

Our city's Skyrise Greenery projects have also gained international recognition. For instance, the Ocean Financial Centre and Tree House condominium were recognised by Guinness World Records in September 2013 and April 2014 for having the world's largest vertical garden at 2,125 and 2,289 square metres respectively.

**Vertical and rooftop greenery mitigates the effect of "Urban Heat Island" (UHI) by shading the otherwise exposed heat-absorbing surfaces of buildings and other man-made structures. It cools down the surrounding ambient temperatures and helps improve air quality by absorbing airborne pollutants.**

*By developing our parks into attractive leisure destinations and beautifying our streetscapes, NParks is helping the love of nature take root, and engaging and inspiring the community to be part of our City in a Garden vision.*

### Giving Park-Goers More To Look Forward To

To improve accessibility and enliven our city's green spaces, NParks upgraded amenities at East Coast Park's Parkland Green. Park-goers are now treated to a variety of dining and recreation options. A one-hectare open lawn offers visitors an unobstructed sea view, open spaces and more opportunities to enjoy outdoor activities such as picnics and kite-flying.

### Connecting People To Nature

NParks ramped up its Park Connector Network with the completion of Springleaf Park Connector and Pelton Canal Park Connector. This brings the total network of park connectors to 270km, as of end-March 2015. Existing park connectors were also enhanced. These included Tampines, Geylang, Ulu Pandan and Siglap Park Connectors, where amenities such as cantilevered decks, shelters and benches were installed.

Nearly 23 kilometres of Nature Ways were also completed, including Bishan Nature Way, Kallang Nature Way and Halus Nature Way. This marks a total of over 60km of Nature Ways, creating pathways for targeted native birds and butterflies throughout the island. The latest Nature Way was the 5.3-kilometre Jurong Spring Nature Way, which runs from Pioneer Road North to Jurong Lake Park and connects the

Western Catchment Area to the upcoming Jurong Lake Gardens. Over 30 species of flora were planted along the Nature Way, which is expected to attract birds and butterflies.

**Nature Ways are designed to replicate the natural structure of forested vegetation and incorporate four layers: canopy layer with rainforest trees, mid-canopy layer with existing roadside trees, understorey layer with smaller fruit-bearing trees, and undergrowth layer comprising flowering shrubs. They transform our streetscape greenery into linear gardens for all to enjoy.**

Under the Streetscape Greenery Master Plan, NParks has stepped up its tree planting efforts to achieve 96% of the targeted 1,029 roads by end of March 2015. Some 38,000 trees were planted, including 2,100 transplanted in the year in review. Conscious efforts have also been made by NParks to plant and grow species native to Southeast Asia, to ensure a sustainable landscape environment. More than 40 new species native to the region have been introduced to our roads, parks and gardens.

Enhancing our green infrastructure is a significant undertaking comprising establishing world-class gardens, rejuvenating urban parks, enlivening streetscapes, and optimising urban spaces for greenery and recreation. Through collaboration and with the aid of science and research, our city is poised to foster a rich biodiversity, enriching our living environment within the urban landscape.



Nestled in Parkland Green (East Coast Park) is a lush green lawn for those seeking to relax and enjoy the sea breeze.





# NURTURING

## OUR FLORA AND FAUNA

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Enhancing our green infrastructure has helped shape an environment that is home to various species of flora and fauna. Using a science-based approach, NParks continues to enhance, restore and create habitats, and conduct research surveys, all part of efforts to safeguard and enrich our biodiversity for generations to enjoy.



Advancing Research Efforts

As part of a systematic long-term management plan of Bukit Timah Nature Reserve, NParks has embarked on a two-year comprehensive biodiversity survey to better understand the conservation status and distribution of plants and animals.

The survey is undertaken by NParks staff, scientists and experts who also worked on the last comprehensive survey, conducted between 1993 and 1997. The findings will build on previous research and survey results to help NParks continue to sensitively manage the Reserve.

Restoring Our Nature Reserves

Due to erosion of slopes and trails and damage to the trees at

the Bukit Timah Nature Reserve, NParks began pre-emptive slope stabilisation works, enrichment plantings and trail repairs to restore the Reserve and ensure public safety. A 1.3-kilometre raised boardwalk will be installed sensitively, enabling visitors to enjoy nature and minimising the impact to the forest floor. The 20-year-old visitor centre at the foot of the Reserve is also being upgraded. This includes revamping the exhibition area, which showcases habitats and conservation measures at the Reserve, expanding the function rooms for educational workshops, talks, and outreach activities, and adding new amenities.

These enhancement works are expected to complete in 2016. During the restoration period, the public can still access the main trail leading to the summit of the hill during the weekends.

Showcasing Our Flora and Fauna

To create awareness of Singapore’s wildlife, a coffee table book “Rainforest in a City” was published by NParks. This was authored by Dr Chua Ee Kiam, an NParks volunteer and avid nature writer and photographer.

Launched in February 2015, the 200-page book highlights the natural heritage of the Bukit Timah Nature Reserve and Central Catchment Nature Reserve, offering an in-depth look into the habitats, and featuring a collection of photographs captured by Dr Chua and other photographers and contributors. “Rainforest in a City” won the prestigious Bronze medal in the 2015 Independent Publisher Book Awards – Environment/ Ecology/Nature category.

Protecting the Reserve With Green Buffers

Springleaf Nature Park was launched on 1 November 2014, the first of four new nature parks serving as green buffers to the Central Catchment Nature Reserve. Naturally and historically significant, the 6-hectare site was formerly part of the Chan Chu Kang village, named after the headman Chan Ah Lak who acquired the land for cultivation.

The other nature parks being developed around the Central Catchment Nature Reserve as buffers include Chestnut Nature Park, Thomson Nature Park and Windsor Nature Park. These parks

are alternative recreational venues, easing visitorship pressure on our nature reserves. To date, reforestation works have commenced at the 80-hectare Chestnut Nature Park and the 75-hectare Windsor Nature Park.

The development of nature parks, which serve as green buffers for the nature reserves and provide alternative spots for recreation, is part of a holistic approach to protect and conserve Singapore’s biodiversity.



(Top right)  
The Singapore Kopsia (*Kopsia singapurensis*), found in our nature reserves, is native to Singapore and bears the same colours as our national flag, earning it its name.

(Left)  
The Bukit Timah Nature Reserve is home to more than 840 flowering plants and over 500 species of animals including rare and native species such as the Seraya (*Shorea curtisii*) (top) and the Malay Horned Frog (*Megophrys nasuta*) (bottom).



(Right)  
Springleaf Nature Park is one of four new nature parks to buffer the Central Catchment Nature Reserve.

(Bottom)  
Rich in biodiversity, Springleaf Nature Park serves as an important habitat for over 80 species of birds, such as the Long-tailed Parakeet (*Psittacula longicauda*).







The Kingfisher Pod at the new Sungei Buloh Wetland Reserve Extension offers a breathtaking view of the coast and enables visitors to spot birds roosting on treetops.



Prime Minister Lee Hsien Loong visited Pulau Ubin to launch Ubin Day 2014. In his speech, he encouraged all to continue giving ideas on how to make Ubin a part of Singapore's shared heritage and memories.

## Caring For Our Wetlands

A new 31-hectare extension to the Sungei Buloh Wetland Reserve was opened in December 2014, providing new opportunities for outdoor recreational and educational activities. A new visitor centre facilitates programmes that encourage bio-learning and enrich visitors' experiences. In addition, six new guided walks are being offered to the public on Saturdays.

The extension marks the completion of phase two of the Sungei Buloh Wetland Reserve masterplan, which aims to preserve Sungei Buloh as a living wetland and tranquil sanctuary for wildlife such as crabs and mudskippers.

NParks has begun the next phase of works under the masterplan to sensitively enhance the Kranji Marshes and the western end of the Reserve, where Cashin House is situated, so as to attract more biodiversity, foster nature appreciation and conduct education and outreach activities.



Minister of State for National Development Desmond Lim (second from left) admiring the pebble works of art done by Tham Pui San (second from right), a long-serving volunteer with the Sungei Buloh Wetland Reserve during the launch of the Reserve's extension.

## Celebrating Biodiversity Efforts

NParks' conservation efforts would not be possible without the support of the community. In an annual event held to celebrate the community's efforts in conserving Singapore's natural heritage, the third Festival of Biodiversity gathered 37 partners comprising nature groups, research bodies and corporate organisations to raise awareness of our local biodiversity. Attracting over 20,000 visitors, the two-day event at VivoCity in July 2014 featured nature-related craft workshops and exhibits showcasing Singapore's flora and fauna, and provided a platform for the public to contribute ideas on enhancing Pulau Ubin's natural environment. Festival of Biodiversity 2014 was sponsored by Sembcorp Industries, with the generous support of VivoCity, Toshiba and IKEA.

## Conserving Ubin For Future Generations

Through wide-ranging public discussions and brainstorming workshops, over 4,000 ideas were received from the public on how to preserve Pulau Ubin's natural heritage.

One of these ideas was the launch of Ubin Day on 30 November 2014, spearheaded and organised by the community and supported by NParks to celebrate the unique charms of the island. Several new initiatives in consultation with the community were announced, including shoreline protection and restoration, species recovery, habitat enhancement, a new centre for education and field studies, nature-based recreation, and education and outreach. These initiatives would help ensure that the island's rustic charm, natural environment, and rich biodiversity and heritage can continue to be enjoyed by future generations of Singaporeans.



## Unveiling Singapore's First Marine Park

During the year in review, Singapore's first marine park, Sisters' Islands Marine Park, was unveiled. The marine park spans approximately 40 hectares around Sisters' Islands and along the western reefs of St. John's Island and Pulau Tekukor.

Through the use of agent-based modelling, a predictive numerical modelling tool, models were developed to predict the movement and settlement of coral propagules. The research outcomes helped to validate the suitability of Sisters' Islands as a marine park, which has diverse habitats including coral reefs, sandy shores and seagrass meadows. The marine park serves as a platform for outreach, education, conservation and research activities related to our native marine biodiversity.

Guided walks have been rolled out on Big Sister's Island, which allow participants to get up close with marine life. Other upcoming activities include workshops, seminars, camps and talks at the outreach and education centre at St. John's Island. Schools have also been invited to be part of monitoring programmes and contribute to marine biodiversity research.

(Right)  
The Sisters' Islands Marine Park offers Singaporeans a first-hand experience of the rich natural heritage which is submerged most of the time.

## USING AGENT-BASED MODELLING (ABM) TO VALIDATE THE MARINE PARK'S LOCATION



NParks adopts a holistic approach to managing the coastal and marine environment, based on sound inter-disciplinary science. This requires an understanding of how changes in habitat quality may affect the population growth or decline of organisms. Predictive modelling tools are used to complement field research and investigations so that connectivity patterns, which are otherwise difficult to visualise, can be understood.

In collaboration with DHI Water & Environment (S) Pte Ltd, NParks has developed the probabilistic Agent-Based Model (ABM) for coral larvae dispersal. The first of its kind to be developed for use in the study of corals in the region, this modelling package supports a framework that allows simulation of coral larvae dispersal patterns, their mortality rate, habitat quality and settlement success, based on varying hydrodynamics and water quality conditions, including water temperature, suspended sediments and flow velocities.

This research also validates the suitability of the Sisters' Islands as the location for developing Singapore's first marine park. Looking at how coral larvae from local reefs were dispersed and settled, the model indicated that the Sisters' Islands were a good source of reefs that could populate other reefs areas in Singapore. Thus, by designating the Sisters' Islands as a marine park, it can be further enriched as a nursery by relocating corals from other areas.



## Dr Karenne Tun, 45

## Deputy Director, Coastal & Marine

## National Biodiversity Centre

Our City in a Garden vision is not just about enhancing the greenery of our landscapes but also caring for the blue waters of our marine realm.

Dr Tun and her team are dedicated to conserving and managing the habitats and biodiversity of our coastal and marine (C&M) environment, using science and technology to strengthen their capabilities.

They oversee the management of the recently launched Sisters' Islands Marine Park, which includes agency consultation, contract management, day-to-day operations, research and conservation project implementation, networking with stakeholders and survey and monitoring activities.

Managing C&M habitats and biodiversity effectively requires sound understanding of their biology and ecology, and their responses to the various stressors that impact them, reinforced by a strong scientific foundation. For example, the team conducts ecological surveys that help formulate effective, targeted management recommendations and activities to safeguard critical or sensitive habitats and biodiversity. The team also leverages new tools and technologies that help expand their reach and understanding such as agent-based modelling, environmental DNA (eDNA) and remotely operated instruments.

The team brings together diverse expertise, from biologists and ecologists focusing on coral reefs, mangroves, intertidal areas and mudflats, to ecological data managers, geographic information system (GIS) practitioners and C&M policy experts.

***"Healthy oceans support a healthy earth, and by doing our part to keep Singapore's blue heart clean and vibrant, we add to the City in a Garden vision by promoting the essence of sustainable living."***



### Taking Stock of Singapore's Marine Life with the Comprehensive Marine Biodiversity Survey

Scientific research and surveys continue to play a key role in furthering Singapore's efforts in marine conservation. Since the five-year Comprehensive Marine Biodiversity Survey (CMBS) was launched in 2010, some 880 surveys have been conducted at 311 sites in mudflats, seabeds and reef habitats. More than 60,000 specimens have been collected, of which, 100 species have been identified as possibly new to science. Some 480 volunteers have been part of the five-year survey journey, contributing in photography, outdoor field sampling and collection, specimen processing, database support as well as organising outreach programmes. CMBS sponsors include Asia Pacific Breweries, HSBC, Keppel Care Foundation, Shell companies in Singapore and The Air Liquide Group.



Singapore's waters are home to many marine organisms such as the Three-striped flatworm (*Pseudoceros tristriatus*) and the Neptune's Cup sponge (*Cliona patera*).



Egrets belong to the same family of birds as herons, and are mainly white. Volunteers and members of the public play a significant role in contributing to research data, which enables NParks to better understand the heron population in Singapore.

### Making Discoveries with Citizen Science

The locations of the bi-annual Heron Watch survey nearly doubled this past year, with 150 volunteers, including students and experienced and novice bird-watchers, taking part across over 70 locations.

With strong participation from the community, the Citizen Science project builds on past research by gaining a better understanding of the herons' population numbers, distribution and feeding and roosting habits. Initiated by

**Citizen Science encourages stewardship of nature among Singaporeans, while collecting information that helps to develop long-term conservation management strategies.**

NParks volunteer Wang Luan Keng, the survey helps guide the management of Singapore's habitats to protect our flora and fauna.



Volunteers helped to sort out marine animals from among sediments collected from the seabed on board a research vessel as part of the Comprehensive Marine Biodiversity Survey.

### Fostering International Partnerships in Biodiversity Conservation

NParks is committed to working with the international community to champion biodiversity conservation efforts. In line with this aim, NParks conducted the ASEAN Workshop on Singapore Index from 10 to 12 June 2014 and attended the 12th Meeting of the Conference of Parties (COP) to the Convention on Biological Diversity from 6 to 17 October 2014 in Korea to promote the awareness of the Singapore Index on Cities' Biodiversity (SI) to ASEAN cities. The SI is a self-assessment tool for cities to benchmark and monitor the progress of their biodiversity conservation efforts against their own baselines.

NParks also participated in the 15th Informal ASEAN Ministerial Meeting on the Environment and Related Meetings, the 29th International Coral Reef Initiative General Meeting, the 67th Session of the Marine Environmental Protection Committee of the International Maritime Organisation and the 9th Ad Hoc Open-ended Informal Working Group by the Ministry of Foreign Affairs.

In addition, NParks co-hosted the first Symposium on Intertidal Conservation in Southeast Asia, aimed at raising awareness and sharing strategies on the conservation of intertidal areas in the region. Conducted on 12 and 13 June 2014 at the Sungei Buloh Wetland Reserve, the symposium was attended by over 60 government representatives, site managers and thought leaders from 11 countries. Topics

covered included benefits and threats to intertidal areas, climate change, tourism, land use, site management, policy approaches, and best practices.

From enhancing, restoring and creating habitats for our flora and fauna to making discoveries with Citizen Science, enriching Singapore's biodiversity makes up an important part of NParks' City in a Garden vision. Many of these initiatives involve collaboration with members of the public, demonstrating our relentless pursuit to continuously engage and inspire the community.





# GROWING TOGETHER

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NParks heads various initiatives aimed at promoting a love for nature and encouraging the community to play an active role in building our City in a Garden, from cultivating ambassadors to conducting outreach programmes and establishing corporate partnerships.



## Fostering Appreciation for Biodiversity in the Next Generation

Among NParks' community engagement programmes for the young was the production of a new interactive skit titled "Secrets of the Swamp". Based on a book by local author Neil Humphreys, the play sought to raise awareness of Singapore's biodiversity among primary school children. Over the past financial year, the skit was performed during assembly periods to 19 primary schools and reached out to more than 17,000 students.

NParks also tied up with the Singapore Scouts Association to develop a new badge programme promoting local biodiversity among young scouts, and enabling them to learn more about the birds and trees found here.

More than 600 students and some 30 teachers from 40 schools participated in NParks' Community in Nature (CIN) school programmes including the "Greening Schools for Biodiversity" initiative, Nature Ways Monitoring and Marine Eco-toxicity Biomonitoring Programmes. Besides equipping students with a better understanding of nature in Singapore, these activities also provide them with opportunities to care for the environment.

In other ongoing school-related activities, more than 500 Primary 5 pupils from the Gifted Education Programme in nine schools visited parks and nature reserves in May 2014 as part of the annual Learning Journey organised by NParks and Ministry of Education, which began in 2011.

### CITIZEN SCIENCE - GREENING SCHOOLS FOR BIODIVERSITY



Commonwealth Secondary School students used Google Maps to obtain an aerial map of their school grounds and assess how green their school was.

Lianhua Primary School pupils conducted the baseline biodiversity audit in their school by taking photographs of the flora and fauna in their eco-garden.

Greening Schools for Biodiversity is a Citizen Science initiative by NParks to attract more biodiversity in primary and secondary schools, and junior colleges. Participating schools first audit how green their schools are, after which they formulate and implement a plan to enhance their school grounds for biodiversity.

The pilot phase of the programme saw a total of 18 schools enhancing their school grounds with butterfly- and bird-attracting plants, guided by results from their baseline biodiversity audits. Subsequent monitoring after the greening effort showed a general increase in the number of species. For instance, NUS High School and Yuvabharathi International School recorded at least eight more butterfly species visiting their school.

In addition to bringing more biodiversity into schools, Greening Schools for Biodiversity also encourages appreciation of nature and biodiversity, and participation in caring for the environment.



The "Secrets of the Swamp" skit portrays how Singapore would be like without lush greenery and diverse animal life. More than 17,000 primary school pupils have seen the play during assembly periods since it made its rounds in July 2014.



The Nature Keeper Programme, one of NParks' educational initiatives which started in 2010, aims to nurture the appreciation of Singapore's forests among primary school children.

Under NParks' Every Child A Seed programme, over 45,000 Primary Three pupils from more than 190 primary schools, including five Special Education schools, received seed-planting kits between June and July 2014. The initiative, supported by the Garden City Fund and started in 2013, aims to inculcate an appreciation of greenery among the young.

NParks' outreach programmes extended to Hwa Chong Institution, Nanyang Technological University and National University of Singapore, engaging 1,200 secondary and tertiary students and staff with quizzes and discussions on Singapore's biodiversity and conservation efforts.

The Temasek Polytechnic Open House on 8 and 9 January 2015 enabled NParks to reach out to over 1,500 visitors including students, members of the public, and even visiting Laotian ministers and delegates. The event featured presentations on NParks' biodiversity conservation efforts, a collection of photographs from the NParks Facebook "Singapore Blooms" campaign and plant starter kit giveaways to encourage students to get into the gardening spirit.

To cultivate ownership of nature among youths, NParks

collaborated with Simei Institute of Technical Education to provide students with an opportunity for hands-on learning. Together with teachers and the principal, 50 students who majored in Landscaping Services planted 44 *Michelia alba* trees along the Simei Park Connector, enhancing its greenery and shade.

Two hundred and fifty-four schools across Singapore took part in Green Wave on 22 May 2014, a global biodiversity campaign initiated by the United Nations Environment Programme (UNEP). Participating for the sixth time since Green Wave was first mooted, NParks provided schools either with a tree to plant within their compound or mulch to care for trees planted during previous Green Waves, and encouraged schools to organise tree appreciation activities.

### Strengthening our Educator Outreach

To foster appreciation for our flora and fauna, NParks began work on preschool resource materials that highlight Singapore's biodiversity, nature areas and greening journey. These will benefit over 1,800 preschools for use as teaching aids. In addition, NParks also conducted a series of talks

and workshops for over 1,000 preschool educators in February and March 2014 to share with them about Singapore's greening journey and the biodiversity found on our island.

Through participation in events such as the Ministry of Education (MOE)'s Teachers' Conference 2014, MOE Racial Harmony Forum Exhibition and Social Studies Sharing Session, NParks reached out to more than 3,200 educators who went away with a deeper understanding of our City in a Garden vision. They also learnt more about NParks' various online teaching resources.

### Engaging the Community in Nature

In other outreach activities, NParks continued to encourage participation from the park community so that they share in the city's greening journey. Under the Many Hands for a Greener City activity, the community planted shade-loving plants underneath the MRT viaduct along Tampines Park Connector.

Earth Day was an opportunity for NParks to reach out to park visitors through various activities including the "Leaf & Let Live" community event at Bishan-Ang Mo Kio Park, Ambassadors for Nature, a new service learning outreach initiative with the Jane Goodall Institute (Singapore), Art in Nature sessions at Dairy Farm Nature Park, an education and outreach booth on Pulau Ubin's natural heritage at Shuqun Secondary School and Propagules Planting & Coastal Clean Up with Timberland Singapore at Sungei Buloh Wetland Reserve.



# Noel Thomas, 33

## Conservation Manager

### Pulau Ubin

Pulau Ubin is known for its rich natural heritage, and officers like conservation manager Noel Thomas play an important role in caring for the unique biodiversity of the island.

He coordinates species recovery and habitat enhancement projects on Pulau Ubin, including monitoring animals such as bats and otters. When monitoring a certain bat species, he would survey all their known roosts, take note of their movements between roosts, and the roost make-up, and look out for nursing infants to better understand the bats' breeding habits.

Noel cites snakes as his favourite group of animals and considers working close to nature and wildlife as the best part of his job. Experienced in herpetology, which refers to the study of reptiles and amphibians, he and his team conduct various reptile and amphibian surveys on the island. These surveys are mostly conducted at night by walking through a forest transect and spotting animals such as snakes, lizards and frogs with a headlamp. When an animal is found, species information and location is collected. Depending on the rarity of the species, additional data such as length and sex may be recorded as well. This data contributes to biodiversity research, which informs and guides NParks' conservation management strategies.

With continued scientific study and research, we can sustain nature spots like Pulau Ubin and achieve our City in a Garden vision.

***"As we continue our tireless efforts to green up urban Singapore, we are also building our knowledge of the animals that live in our forests and waters."***



### Courting Shutterbugs

A year-long national photo competition beginning September 2014 was held to create greater appreciation and awareness of our parks and gardens through the lens of the community. As part of celebrations for Singapore's 50th birthday, the Singapore Garden Photographer of the Year Photo Competition was organised in partnership with Garden City Fund and the Photographic Society of Singapore, with the generous support of presenting sponsor, City Developments Limited, and sponsors, Nikon and Singapore Press Holdings. Various nature walks in Pulau Ubin, Fort Canning Park and Sungei Buloh Wetland Reserve led by photography experts were concurrently organised to provide enthusiasts with valuable pointers on how to take good nature shots.



NParks' Concert Series in the Park is a series of six free outdoor concerts organised at various parks around Singapore to celebrate the nation's jubilee in 2015.

### Connecting with the Public

Over 15,000 people attended the first of NParks' Concert Series in the Park at Bishan-Ang Mo Kio Park on 14 March 2015. This was the first in a series of six free outdoor concerts held in parks in conjunction with SG50 celebrations. The concert featured performances by local talents such as Kit Chan, Suhaimi Yusof and Olivia Ong, and various student and community groups, and other activities such as a kite display and a carnival.

Other activities that NParks organised and supported to continually inject vibrancy into the parks and gardens included the ongoing Gardeners' Day Out programme at HortPark to spread the love of gardening, a Cycle-In Movie at Sengkang Riverside

Park, quarterly Artists' Night Out at Dhoby Ghaut Green, the MSF Families for Life Monthly Celebrations in the parks and NAC-ExxonMobil Concert in the Park series at the Singapore Botanic Gardens.

In conjunction with the Clean and Green Singapore (CGS) 2015 campaign, NParks launched a

new public guided tour of the Pasir Panjang Nursery on 15 November 2014, offering a rare glimpse into its behind-the-scenes work. Housing over 3,000 species of flora, many of which are native to Singapore, the nursery supplies almost 200,000 plants a year for greening Singapore's roads and parks.

**The Pasir Panjang Nursery is a key facility for test-bedding and nurturing plant materials for Singapore's greening efforts. Seeds and saplings of native plants are collected from our forests and parks, and grown at the nursery until they are ready to be planted islandwide. The public tour is a way of inspiring the community to continue the shared responsibility of carrying on Singapore's greening journey.**





Deputy Prime Ministers Tharman Shanmugaratnam and Teo Chee Hean were among Singapore leaders who planted in various parks and constituencies during the Clean and Green Singapore campaign, a tradition celebrated annually.

### Nurturing a Blossoming Gardening Community

The Community in Bloom (CIB) programme continued to receive widespread support, providing opportunities for the community to participate in Singapore's greening efforts. At the biennial CIB Awards 2014, a new Diamond Award was launched and presented to gardens with three prior consecutive Platinum Awards, demonstrating consistently outstanding quality, community involvement, environmentally friendly practices and biodiversity. Created in conjunction with the CIB Awards' 10th Anniversary, the Diamond Award was conferred upon 15 community gardens out of a record 343 participants in 2014.



A Diamond Award recipient, the Woodlands Zone 2 RC Community Garden has a team of 20 gardeners from different ethnic groups, who grow vegetables, medicinal herbs and ornamentals.



The CIB garden at Yu Neng Primary School achieved the Environment and Biodiversity Award. The school collaborates with a corporate company for the supply of coffee powder, which teachers and students compost into fertiliser. The coffee compost is then packed and distributed for use in nearby CIB gardens.

Seven new CIB ambassadors were appointed, bringing NParks' Community in Bloom volunteer numbers to over 3,000 active gardeners with 42 CIB ambassadors, who play an important role in fostering the love for gardening and facilitating gardening-based initiatives among the community.

With the support of our corporate partners, community gardens are being developed at voluntary welfare organisations (VWOs), enabling residents to enjoy the benefits of nature. The beneficiaries include Grace Orchard School, sponsored by Sumitomo Corporation Asia & Oceania Pte Ltd; Community Rehabilitation Centre, sponsored by Syngenta Asia Pacific Pte Ltd; Handicap Welfare Association, sponsored by Singapore Oxygen Air Liquide Private Limited; and Metta Day Rehabilitation Centre for the Elderly, sponsored by Mizuho Bank, Ltd.

In all, NParks added 120 new community gardens this year, bringing the total to more than 850 community gardens island-wide.

To further promote the notion that everyone can garden, a new CIB Indoor Gardening initiative was launched. The programme aims to bring the benefits of gardening indoors and provides information such as how to grow plants, types of plants suitable for indoor environments and how to display them attractively. ST Kinetics successfully piloted the programme in its premises by decking the walls with customised wall-mounted planters, creating a greener office environment.

### Showcasing Gardening Excellence

The fifth biennial Singapore Garden Festival took place between 16 and 24 August 2014, hosting over 300,000 visitors. The festival was held indoors and outdoors for the first time in Gardens by the Bay, and featured over 50 displays and more than 250,000 plants. Visitors were treated to 2.2 hectares of gardens and floral exhibits, horticultural structures stretching to a record 10-metre height, and award-winning landscape designer Jun-ichi Inada's Orchid Extravaganza.

Prior to the festival, a highlight that took place was the week-long "Share a Plant" initiative, which encouraged the appreciation of plants and gardening. Over 100 community gardeners, students, parents and teachers worked together to pot the plants. Some 5,000 plants were potted and distributed across five parks and gardens.

The Singapore Garden Festival continued to earn international recognition, becoming Asia's first event to receive the prestigious "Achievement of the Year" award from the Canadian International Garden Tourism Awards Committee in October 2014.

(Right) Minister for National Development Khaw Boon Wan, with NParks Advisor Dr Kiat Tan, admiring a miniature garden at Singapore Garden Festival 2014 (bottom). The Miniature Garden display was a new feature at the festival, highlighting six intricately designed gardens that used popular fiction as inspiration.



### Appreciating and Growing Our Volunteers

NParks Volunteer Appreciation Day on 6 December 2014 served to highlight and recognise the contributions of NParks volunteers. Long service awards were presented to 14 volunteers for service ranging from 10 to 15 years. NParks has a current pool of 1,200 to 1,500 active volunteers, who help to lead educational and outreach activities, conduct guided tours and participate in conservation programmes.



Eric Ong, 34

Assistant Director

Streetscape

Caring for trees is more than just a job for Eric Ong. With his team of 12 streetscape officers, he oversees the care of trees in the eastern part of Singapore. A typical work day consists of conducting checks to assess the trees' health and stability, check for defects and prescribe follow-up action where needed.

As there are around 1.5 million roadside trees in Singapore, every tree is tagged and has an ID number. Arborists, or tree doctors, like Eric conduct visual tree inspections, which involve checking for symptoms of disease or defects at the tree's base, trunk and canopy.

They use equipment to aid their work such as mallets to check for hollowness in the tree, metal probes to assess the depth of any cavities, and secateurs, a type of shears used in the formative pruning of young trees and for snipping away watershoots sprouting around the tree base. In some cases, advanced tree diagnostic instruments such as the sonic tomograph and resistograph may be used to help detect internal defects and changes in wood density.

Tree doctors may also prescribe measures such as corrective pruning, installing tree support systems or soil amelioration techniques including mulching, fertilisation, and improving aeration and drainage.

Arborists play an important role in maintaining our lush greenery, which is essential to the long-term sustainability of our City in a Garden. "The work and efforts that arborists undertake help to maintain the pleasant green environment that makes Singapore highly liveable," Eric relates.

***"It's rewarding to know that we're not only improving the quality of life and liveability for people in Singapore, but also doing our part for the environment."***

## Harnessing Social Media

With online campaigns such as "Singapore Blooms", NParks expanded its online reach, increasing fans of its Facebook page to more than 46,000 as of 31 March 2015. The Singapore Botanic Gardens Facebook page also attracted more than 28,000 fans. The NParks corporate website was also revamped to improve its usability and engage visitors more effectively.

To broaden its online engagement, NParks co-organised the 9th Worldwide InstaMeet (WWIM) at Fort Canning Park on 17 May 2014 with InstaSg and ExploreSingapore, a day when users worldwide capture and share photo-worthy moments. Some 100 Instagrammers were introduced to the park's historical and natural heritage and challenged to take creative shots of its landmarks.

## Forging Corporate Partnerships

NParks continued to forge partnerships with organisations so that they could play a role in Singapore's greening

journey. In the year under review, various companies including Clarins, Lintec Singapore Pte Ltd, Panasonic Asia Pacific, UPS and Shimizu Corporation and their partners participated in the Garden City Fund's Plant-A-Tree Programme. Their staff came together to plant trees at parks and gardens including Ang Mo Kio Town Garden West, One-north Park and Bedok Reservoir Park.

The creation of a Banana Trail with Ricoh Asia Pacific and Ricoh Singapore marked another corporate partnership that engaged the community and promoted biodiversity. On 11 October 2014, over 300 staff and family members from Ricoh, their clients and CHIJ Our Lady Queen of Peace students established a new Banana Trail at Fort Canning Park's Spice Garden by planting more than 60 saplings of nine different species of edible bananas.

Over 360 organisations, several of which are recurring partners, have participated in the Plant-A-Tree Programme since its inception in 2007. The programme has reached out to over 29,000 individuals and achieved planting of some 17,000 trees in our city.

In other corporate partnerships, Lianhe Zaobao held the annual Zaobao Song Nuan charity event at Bishan-Ang Mo Kio Park on 6 September 2014. Twenty volunteers led 100 participants on a guided tour of Pond Gardens. Students and parents from Pathlight School and Society of the Physically Disabled were invited to draw scenes of the park, and guests were treated to student performances.

Toyota Tsusho Asia Pacific sponsored educational signs at four Nature Ways (Kheam Hock, Tampines, Yishun-Mandai and Admiralty), offering the public an opportunity to appreciate the plants, birds and butterflies sighted along these nature corridors. Staff from the company also planted shrubs along Tampines Nature Way.

In appreciation of the contributions by corporations to the building of our City in a Garden, NParks, through the Garden City Fund, dedicated three Heritage Trees in the Singapore Botanic Gardens to City Developments Limited, Sembcorp Industries Ltd and Singapore Press Holdings Ltd.

In addition to engaging and inspiring communities as part of our City in a Garden vision, NParks endeavours to cultivate talent so that our landscape and horticulture industry is well-equipped for Singapore's greening journey.



A photo of Sembawang Park by Soh Kian Beng  
The NParks' online campaign "Singapore Blooms" received overwhelming support from Facebook fans since it started in 2014.





# ENHANCING

## CAPABILITIES

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At the heart of NParks' efforts are people, and it is through enhancing competencies that the landscape and horticulture industry can continue to grow. NParks is committed to this by regularly conducting industry development and in-house training programmes, and organising enriching and productive activities that our staff can be a part of.

NParks' efforts to enhance industry capabilities work hand-in-hand with the use of science and technology to sustain greening efforts and build our City in a Garden.



### Grooming Industry Talent

Over the years, efforts have been made to build up knowledge for industry leadership and management, raise levels of mechanisation and innovation, and introduce best practices in sustainable and productive maintenance and manpower development. NParks has been working together with the Landscape Industry Association of Singapore (LIAS) and ITE College East to further build up the industry's talent pool. The NParks-LIAS-ITE Scholarship Award was first announced in September 2013 and the first batch of scholars was selected in June 2014. Nine students enrolled in ITE's Nitec in Facility

Technology (Landscaping Services) were offered joint scholarships by the Garden City Fund and LIAS member companies.

The first batch of scholars successfully completed their one-month Industrial Attachment (IA) with their respective sponsoring companies in December 2014, benefiting from the close mentorship of industry experts. By the end of the scholarship, students gained invaluable practical knowledge through a total of 32 weeks of IA, opening doors to full-time employment after graduation. Their career pathway will lead them to become supervisors or team managers.

As part of NParks' two-year Landscape Apprenticeship Programme (LAP), an initiative started in 2012, six apprentices were carefully selected and successfully placed in five landscaping companies in the year in review. The LAP aims to train a new generation of highly skilled landscape specialists and project managers through on-the-job training and formal classroom lessons under the Workforce Skills Qualifications (WSQ) Landscape Framework and also provides opportunities for those with no horticultural background to pursue their passion for plants.



Apprentices under the Landscape Apprenticeship Programme are trained to use various mechanised equipment, such as the chainsaw, for landscaping work.

### Advancing Skills Through Training

NParks' training arm, the Centre for Urban Greenery and Ecology or CUGE in short, continued its commitment to broaden and deepen the skills and knowledge base of the landscape industry. Over the reporting period, its training programmes reached out to more than 4,000 participants, who took part in CUGE's WSQ modules, short courses, workshops and seminars, including the ISA Certified Arborist Programme and the Urban Parks Seminar.

Other courses included the "Rooftop Tree Planting & General Maintenance of Rooftop Greenery" workshop, part of the Skyrise Greenery Guidelines Series, on 12 June 2014, and the "Environment-Friendly Management Practices for Green Spaces in Singapore" seminar on 15 September 2014.

One of the hands-on courses launched by CUGE was the "Climb and Branch Walk Difficult Trees" class from 4 to 6 August 2014. Led by Mr Andy Neverman, a leading arborist from New Zealand, it was an enjoyable and fruitful experience for participants, who learnt how to use climbing lines and harnesses to safely climb and branch walk difficult trees.

The "School of Life" exhibition by SPH, held at Suntec City Convention Centre from 7 to 9 November 2014, attracted more than 60,000



CUGE regularly works with regional specialists to conduct courses, such as "Climb and Branch Walk Difficult Trees" to develop and upgrade skills in the landscape industry.

visitors and served as a platform for CUGE to raise awareness of training and career opportunities in the landscape industry.

The latest CUGE Research Seminar saw a record turnout since its inauguration in 2009. Themed "Urban Resilience", the seminar was conducted on 19 November and attracted 157 participants, including professionals from government agencies, academia, landscape architects, engineers, arborists and horticulturists.



(Top)  
Apart from organising its own career fairs, CUGE also participates in industry events, such as SPH's "School of Life" exhibition, to provide training and career advisory services in the landscape industry.

(Bottom)  
The effects of soil moisture on tree stability were showcased at the CUGE Research Seminar.





Researchers and workers preparing biochar treatment for experimenting purposes

**CUGE Research's work builds on decades of research by NParks, that develops solutions to address Singapore's urban challenges.**

**Fostering Ideas, Spearheading Innovation**

Besides training, CUGE is also at the forefront of research efforts to build up knowledge and standards on the greening and ecology of cities.

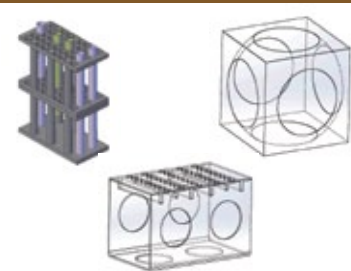
For the past few years, CUGE has been researching and experimenting with the use of structural soil and structural cells under paved roads to address challenges posed by limited rooting space for tree growth. This year, CUGE has begun to work on in-house designed cells that suit location conditions. Field trials of these cells are currently being conducted along Bukit Timah Road.

Plans are in the pipeline to expand on this concept through the design, development, and test bedding of subterranean (concealed) tree pits as a solution towards sustainable urban greening.

Expanding its repertoire of tools to nourish urban soil, CUGE has also embarked on the research of biochar (charcoal) as a soil conditioner that has the potential to simultaneously capture and store atmospheric carbon. This not only enhances urban tree growth but also contributes to efforts to combat climate change.

CUGE also spearheaded the development of the NParks Research Masterplan (2014), which serves as a blueprint for undertaking strategic research over the next decade. Building on years of research undertaken by NParks to address national urban challenges, this holistic plan is a focused roadmap which will boost the organisation's capabilities through integration among research, operations and policy, the use of sophisticated tools and technology, as well as the expansion of key research areas.

**STRUCTURAL CELLS FOR STRONGER ROOT GROWTH**



Variety of structural cells designed and developed by NParks

In a highly urbanised environment, there may be limited space on-site for trees, especially older ones that need more rooting space.

To enable large trees to develop in an urbanised area where rooting space is limited, NParks has developed innovative polypropylene structural cells, which are modular suspended pavement systems installed under roads and paved surfaces to allow for greater rooting and breathing space. The structural cells also have the bearing capacity to hold heavy structures.

Structural cells pave the way for a fundamental shift from the current industry norm. Previously, the industry norm for tree planting was to install a contiguous area of soil to grow trees and sustain loads. The heavy weight of the load on the soil resulted in a highly compacted soil environment impenetrable to tree roots.

With structural cells, the load is sustained by the cell, resulting in an improvement of the soil conditions (i.e. low compacted soil and enhanced drainage) which are essential to the growth of healthy roots. NParks had started off working with trademarked products and thereafter, designed and developed several variants of structural cells of our own to suit a variety of local urban conditions.

Structural cells are currently being installed for a new row of trees along Queen Elizabeth Walk as part of the Jubilee Walk. The structural cells will help ensure that the trees continue to thrive in an urban environment, even when they are old.

**Dr Genevieve Ow, 36**

**Senior Researcher (Arboriculture)**

**Centre for Urban Greenery & Ecology**



Balancing greening efforts with urban growth is no easy task, as Dr Ow explains. "Trees are healthiest when they are planted in uncompacted soil because this allows water, air and nutrients to reach their roots. However, an urban environment requires hard surfaces to support people and vehicles, and hard surfaces naturally compact soil."

Through research and development, the idea of structural cells is being explored as a possible solution. Drawing on various disciplines such as engineering, geology and plant science, it involves using rigid frames to support hard surfaces such as parking lots, roads or footpaths. The frames keep soil loose and help provide trees with a soil environment that largely mimics the natural environment. They allow roots to extend beyond limited planting spaces, exploring the spaces beneath pavements and improving tree growth and stability.

Dr Ow believes that with continued research and development, we can continue to develop novel ways to sustain greening efforts in our City in a Garden.

**"It's my hope that these research outcomes will take root as best practices in greening within an urban environment."**





Shanny Tan and Nanthini d/o Elamgovan, who are part of the NParks' parks management team, worked in Prospect Park in the United States for nine months as part of NParks' overseas exchange programme.

### Broadening Staff's Horizons

NParks remains committed to investing in staff training to build up in-house expertise. Two officers completed their attachment to Prospect Park in the United States, as part of NParks' overseas exchange programme, and another officer was on professional attachment to a private organisation involved in parks and streetscape maintenance in New Zealand. NParks also signed a Memorandum of Understanding with the Royal Botanic Garden Edinburgh in the United Kingdom

and will be identifying suitable officers for the professional exchange programme.

On-going knowledge-sharing sessions were also organised so that staff continue to develop the expertise and skills needed in their work. On 19 January 2015, CUGE and the National Biodiversity Centre introduced the new Habitat Enhancement Seminar for NParks staff to gain a better understanding of how to manage an urban habitat enhancement project. Featuring a series of talks from expert speakers, the seminar was attended by nearly 130 NParks

staff from various divisions. This will be followed by a new series of workshops focusing on specific sites for habitat enhancement projects.

### Fielding Talent for Tomorrow

Opportunities continue to abound for those keen to pursue careers in NParks. The NParks Cadetship Programme exposes tertiary students in relevant fields to practical working experience in NParks, allowing them to make more informed career choices. Ten students from Singapore Polytechnic's Diploma in Landscape Architecture course and four from Ngee Ann Polytechnic's Diploma in Landscape Design and Horticulture course graduated from the programme in the past year.

In 2014, NParks awarded a total of five Undergraduate Scholarships, three Overseas Merit Awards and three postgraduate scholarships among its staff.



NParks Kindness Day provides opportunities for staff to volunteer their time and contribute to the community.



The NParks Sports Carnival is a regular event organised to promote bonding and healthy living among staff.

### Inspiring Joy and Kindness Within the Community

Besides developing its own staff, NParks also strongly believes in giving back to the community. The third annual NParks Kindness Day was held on 16 December 2014. More than 100 children from childcare centres and homes under the care of The Salvation Army were guided through various activities in our parks and gardens such as Kitchen Garden and Mangrove Guided Tour (Pasir Ris Park), Ecolife Tour (Bishan-Ang Mo Kio Park) and Storytime with Sara and Garden Tour (Jacob Ballas Children's Garden). The children were also treated to lunch and Christmas presents contributed by NParks staff.

NParks staff shared the joy of gardening and nature appreciation by donating Singapore Garden Festival 2014 tickets to beneficiaries of various volunteer welfare organisations including The Salvation Army, Woodlands Social Centre and St Hilda's Community Services.

NParks also promoted bonding

and healthy living among staff at the NParks Sports Carnival on 26 February 2015 at East Coast Park. It was an enjoyable day of games and activities such as captain's ball, tug-of-war, beach volleyball, pushball, sandcastle building, tree-climbing and more.

### Achieving New Levels of Excellence

NParks' culture of collaboration and teamwork received affirmation when its "50 Years of Greening Singapore" and "Skyrise Greenery Initiative" projects were given the Minister's Award (Team) 2014 for their efforts. The award recognises team-based contributions and represents the highest accolade given by the Ministry of National Development (MND) to outstanding teams among MND agencies.

NParks' Nature Ways project also won the Most Innovative Project Nominee Award at the PS21 ExCEL (Public Service 21 Excellence through Continuous Enterprise and Learning) event, held at Nanyang Polytechnic from 28 to 30 October 2014.

Notably for CUGE, the centre received the APEX 2014 Award of Excellence in the category "One-of-a-Kind Green Publications" for its work on CITYGREEN, a bi-annual publication on urban greenery and ecology.

These achievements are a testament to the dedication, passion and high standards NParks brings in our greening journey.

Enhancing our green infrastructure and competencies. Engaging communities. Enriching our biodiversity. These efforts work in tandem to shape a Singapore where we all come together to build a City in a Garden that will thrive and flourish for years to come.





Fort Canning Park

# FACTS & FIGURES FY 2014

## NATIONAL DAY AWARDS

### PUBLIC ADMINISTRATION MEDAL (SILVER)

**Ms Lee Pin Pin,**  
Director, Communications &  
Community Engagement

### PUBLIC ADMINISTRATION MEDAL (BRONZE)

**Ms Kalthom Binte Abd Latiff,**  
Deputy Director  
(Arts & Heritage Parks), Parks 1

### COMMENDATION MEDAL

1. **Ms Norzehan Binte Ahmad,**  
Assistant Director (Parks),  
Parks 1
2. **Thomas Yee Chung Yao,**  
Deputy Director  
(Park Connector Network),  
Parks 2

### EFFICIENCY MEDAL

1. **Khamsani Bin Mohd Yasir,**  
Senior Executive  
(Parks & Trees Regulatory),  
Policy & Planning
2. **Ms Woh Siew Choo,**  
Manager (Streetscape),  
Streetscape

## LONG SERVICE MEDALS

1. **Saifuddin Bin Suran,**  
Officer/ Biodiversity (Terrestrial),  
National Biodiversity Centre
2. **Ms Waheeda Binte Abdul Rahim,**  
Assistant Director (Parks), Parks 2

## AWARDS AND ACCOLADES

### Excellent Service Award 2014

- Attractions (3 Star, 4 Gold, 1 Silver)
- Public Service (2 Gold, 6 Silver)

### Excellence in Public Service Awards 2014

- PS21 Star Service Awards

### PS21 ExCEL Awards 2014

- Most Innovative Project/Policy Award (Nominee)

### MND Family Minister's Award (Team) 2014



Upper Peirce Reservoir Park



FACTS & FIGURES  
FY 2014

Regional Parks maintained by NParks	Area (ha)
Admiralty Park	25.67
Ang Mo Kio Town Garden East	4.89
Ang Mo Kio Town Garden West	20.63
Bedok Reservoir Park	42.39
Bedok Town Park	12.43
Bishan-Ang Mo Kio Park	62.00
Bukit Batok Nature Park	35.74
Bukit Batok Town Park – Little Guilin	42.16
Bukit Timah Nature Reserve	162.64
Central Catchment Nature Reserve	455.00
Changi Beach Park	28.52
Choa Chu Kang Park	11.81
Clementi Woods Park	11.50
Coney Island Park	46.64
Dairy Farm Nature Park	75.32
East Coast Park	218.31
Esplanade Park	2.40
Fort Canning Park	19.74
Hindhede Nature Park	9.00
Hong Lim Park	1.26
HortPark	23.92
Istana Park	1.30
Jurong Central Park	7.98
Kallang Riverside Park	6.23
Kent Ridge Park	47.86
Labrador Nature Reserve (Labrador Park and Nature Reserve)	25.88
Lower Peirce Reservoir Park	10.00
Lower Seletar Reservoir Park	4.30
MacRitchie Reservoir Park	12.00
Marina Promenade	15.10
Mount Faber Park	56.44
One-north Park	3.39
Pasir Ris Park	73.02
Pasir Ris Town Park	12.76
Pearl's Hill City Park	8.50
Pulau Ubin Recreation Area	649.94
Punggol Park	16.30
Punggol Waterway Park	12.30
Rifle Range	65.28
Sembawang Park	15.57
Sengkang Riverside Park	20.70
Singapore Botanic Gardens	60.93
Springleaf Nature Park	10.78



Forest Walk at the Southern Ridges

Regional Parks maintained by NParks	Area (ha)
Sungei Buloh Wetland Reserve (includes Kranji Nature Trail and Kranji Reservoir Park)	202.70
Sun Plaza Park	9.60
Tampines Eco Green	36.61
Telok Blangah Hill Park	34.19
Tiong Bahru Park	3.33
Toa Payoh Town Park	4.91
Upper Peirce Reservoir Park	4.00
Upper Seletar Reservoir Park	15.00
War Memorial Park	1.64
West Coast Park	50.00
Windsor Interim Green	60.00
Woodlands Town Garden	10.94
Woodlands Waterfront Park	11.22
Yishun Park	13.22
Zhenghua Park	13.50
<b>Total</b>	<b>2,919.39</b>

Total Number of Parks	
Regional parks	58
Neighbourhood parks	263
Park connectors*	66
<b>Total</b>	<b>387</b>

Total Area Maintained	Area (ha)
Parks, playgrounds, open spaces, fitness corners and park connectors**	2,376
Nature reserves	3,375
Istana and Parliament House grounds	42
Roadside greenery	2,554
Vacant state land	1,348
Government premises	9
<b>Total</b>	<b>9,704</b>

\* Total mileage of the park connectors maintained is 270 kilometres as of 31 March 2015.  
\*\*Excludes Bukit Timah Nature Reserve, Central Catchment Nature Reserve, Sungei Buloh Wetland Reserve and 10 hectares from Labrador Nature Reserve which have been computed under "Nature reserves".



FACTS & FIGURES  
FY 2014

CUGE Training Programmes

The Centre for Urban Greenery and Ecology (CUGE) was established by NParks as a regional centre of excellence to advance urban and green living environment, and a one-stop training and knowledge hub in urban greenery and ecology.



Workforce Skills Qualifications (WSQ) Courses

- WSQ Certificate in Landscape Operations
- WSQ Certificate in Basic Nature Interpretation
- WSQ Higher Certificate in Landscape Operations (Arboriculture)
- WSQ Advanced Certificate in Landscape Supervision (Arboriculture)
- WSQ Advanced Certificate in Landscape Supervision (Parks, Reserves and Gardens)
- WSQ Advanced Certificate in Landscape Supervision (Landscape Design & Construction)
- WSQ Advanced Certificate in Landscape Supervision (Turf, Sports Ground and Greens)
- WSQ Advanced Certificate in Landscape Supervision (Nursery)
- WSQ Diploma in Landscape Management (Parks, Reserves and Gardens)
- WSQ Diploma in Landscape Management (Arboriculture)

Professional Certification Programmes

- Certified ISA Arborist Programme
- Certified Arborist Municipal Specialist Programme
- Certified Park Manager Programme
- Certified Playground Safety Inspector Programme
- Certified Practising Horticulturist Programme
- ISA Tree Risk Assessment Qualification

Seminars / Professional Speaker Series / Workshops

- Basic Tree Identification Course – Fabaceae
- Basic Tree Identification Course – Dipterocarpaceae & Meliaceae
- Basic Landscape & Productive Maintenance Course
- Biochar – An Effective Soil Amendment for Urban Soil and Tree Growth
- Climb and Branch Walk Difficult Trees
- CUGE Research Seminar
- CUGE Parks Seminar
- Contract Interpretation Course
- Edible Landscaping – Creating Landscapes with Edible Plant Species
- Habitat Enhancement Seminar
- Introduction to Common Road Reserve Trees
- Ins & Outs of Research Proposal Writing
- Landscape Safety Orientation Course
- Landscape Design Guidelines for Productive Maintenance & Sustainability
- Maintain Water Sensitive Urban Landscaping
- NParks Legislation & Enforcement Management Course
- Occupational First Aid

- Plant Diversity and Nomenclature – Part I, II, III, IV
- Plant Health and Pest Management
- PLA Masterclass: Play for All Ages
- Presentation Essential for Green Space Managers
- Professional Speaker Series: Toronto’s Tree Protection By-Laws
- Professional Speaker Series: Epiphytes and Mistletoes of Singapore
- Professional Speaker Series: Application of Mixed Waste Organic Outputs to Soils: Waste Disposal, Soil Improvement and Carbon Storage
- Science & Symptoms of Quality Turf
- Skyrise Greenery Guidelines Series – Rooftop Tree Planting & General Maintenance of Rooftop Greenery
- Trees & Greenery of Development within the City in a Garden
- Tree Failure Profile for Common Wayside Trees in Singapore
- Urban Biodiversity and Conservation
- International Briefings and Overseas Executive Programmes
- CUGE Overseas Executive Programme on Greenery Planning & Management
- Briefings for Overseas Delegates



East Coast Park



GARDEN CITY FUND DONORS’ ACKNOWLEDGEMENT  
FY 2014

\$1 million and above

City Developments Ltd  
Sembcorp Industries Ltd

\$100,000 and above

Clarins Pte Ltd  
In Vitro Pte Ltd  
Rosslyn Leong Sou Fong  
Singapore Press Holdings Ltd  
Syngenta Asia Pacific Pte Ltd  
The Hongkong and Shanghai Banking Corporation Limited

Below \$100,000

Abshah Bte Abd Rahman  
Advance Sports Technologies Pte Ltd  
Agility Fairs & Events Logistics Pte Ltd  
Alvin Nicholas Nathan  
AMK Veterinary Surgery (2009) Pte Ltd  
APP Engineering Pte Ltd  
Ashiro-Rindo Development Ltd  
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Bazaars Inc  
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Bunge Agribusiness Singapore Pte Ltd  
Bureau Veritas Marine Singapore Pte Ltd  
BW Maritime Pte Ltd  
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Gabriel Nguyen

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Lee Foundation  
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Looi Gertrude Mary  
L’Oreal (S) Pte Ltd  
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Luxe Professional Pte Ltd  
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Maran Chakrapani  
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Royal Bank Of Canada  
Satay By The Bay Pte Ltd  
SATO Asia Pacific Pte Ltd  
SATS Ltd  
Shell Eastern Trading Pte Ltd  
Shimano (Singapore) Pte Ltd  
Shimizu Corporation  
Siemens Pte Ltd  
Simple Solution Systems Pte Ltd  
Simply Green  
Singapore Green Building Council  
Singapore Oxygen Air Liquide Private Limited  
Singapore Press Holdings Foundation Limited  
Singapore Telecommunications Limited  
Singapore Tourism Board  
Singapura Finance Ltd  
Staff of Mizuho Bank, Ltd.  
Stargood Construction Pte Ltd  
STMicroelectronics Pte Ltd  
Sumitomo Corporation Asia & Oceania Pte Ltd  
Sumitomo Rubber Asia (Tyre) Pte Ltd  
Super Coffee Corporation Pte Ltd  
Tan Wee Hin Leo  
Teekay Marine (Singapore) Pte Ltd  
Teng Poh Hoon June  
The Bank Of Tokyo-Mitsubishi UFJ Ltd  
Singapore Branch  
The Norinchukin Bank  
Toh Chin Leong Construction Pte Ltd  
Tokio Marine Life Insurance Singapore Ltd  
Toshiba Singapore Pte Ltd  
Toyake Kaki Co. Ltd  
Toyota Tsusho Asia Pacific Pte Ltd  
TPP Pte Ltd  
Tropic Planners & Landscape Pte Ltd  
TTJ Design & Engineering Pte Ltd  
United Parcel Service Singapore Pte Ltd  
Wheelock Properties (Singapore) Limited  
Wine Culture Pte Ltd  
Woh Hup (Private) Limited

Donations listed above are of a minimum amount of \$1,000.

We express our sincere gratitude to those listed here and all those who prefer to remain anonymous.



The Garden City Fund was set up in 2002 to encourage the community to express their personal stake in sustaining our City in a Garden. While the government will continue to fund the basic green infrastructure, the Fund works in partnership with individuals and corporations to supplement the growth of our City in a Garden through conservation efforts, research, outreach and educational programmes.

For more information, please visit [www.gardencityfund.org](http://www.gardencityfund.org).

CORPORATE GOVERNANCE  
FY 2014

Board Members

NParks is overseen by a Board comprising 11 members. The current Chairman is Mrs Christina Ong.

All the Board members are non-executive members, except the Chief Executive Officer, Mr Kenneth Er. The Board derives its strength from the extensive and complementary background, qualifications and experience of its members.

The Board’s key responsibilities are to:

- Endorse broad directions, policies and strategies relating to NParks’ achievement of its vision, mission and objectives, and performance of its functions
- Oversee NParks’ operating and financial performance taking into account NParks’ budget, expenditure, assets, transactions and projects
- Provide guidance on matters relating to NParks’ parks and infrastructure development programmes
- Approve NParks’ tenders (as members of the relevant Tenders Boards)

The Board has established the following committees to assist it in carrying out its duties:

- Human Resource and Compensation Committee;
- Audit Committee;
- Operations Risk Committee; and
- Garden City Fund Management Committee.

The Human Resource and Compensation Committee’s role is to review key human resource policies and provide strategic oversight of related risks. The Audit Committee ensures a high standard of corporate governance through independent reviews of internal controls, financial reporting processes and financial risks. In addition, the Audit Committee reviews the audited financial statements, as well as the audit plans and observations of external and internal auditors. The Operations Risk Committee provides strategic oversight on NParks’ operations risk management framework, including review of NParks’ operations risks. The Garden City Fund Management Committee plans, develops, promotes and manages the Garden City Fund in accordance to its Trust Deed.

Board’s Conduct of its Affairs

The Board meets four times a year and as and when necessary to address any significant matters that may arise. To enable the Board to fulfil its responsibilities, the Management Team strives to provide the Board members with adequate information during Board meetings and on an ongoing basis. The Board also has direct and independent access to the Management Team for further information and explanation, if necessary.

Accountability and Audit

The Board’s accounts are audited by the Auditor General or such other auditor may be appointed annually by the Minister in consultation with the Auditor-General. The auditor engaged for financial year ended 31 March 2015 was Deloitte & Touche. The auditor’s findings in the course of the annual financial audit are submitted to the Board and also reported to the Ministry of National Development. The audited financial statements and the auditor’s report are also presented to Parliament.

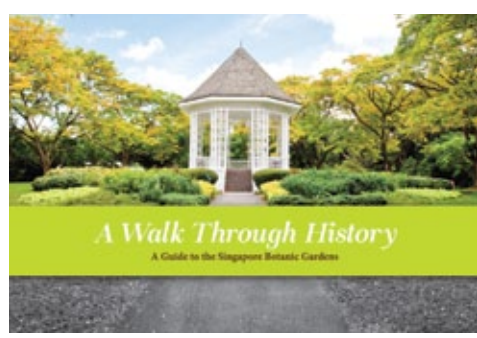
Internal Control Framework

NParks’ internal control system ensures that assets are safeguarded, proper accounting records are maintained, and financial information is reliable. The overall control framework includes:

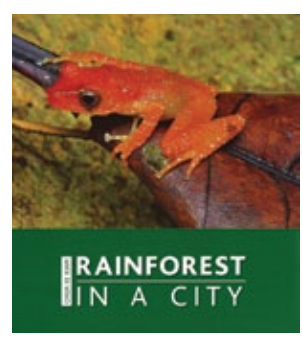
- An organisation structure with clearly defined authority and delegation limits and reporting mechanisms to higher levels of management and to the Board;
- An annual budgeting and quarterly financial reporting system for all operating units that enables progress against annual plans and objectives to be monitored;
- Compliance with the provisions of the National Parks Board Act, Chapter 198A, Singapore Financial Reporting Standards, Government Instruction Manuals, Finance and PSD Circulars and Minutes for policies and procedures related to operations, human resource management and financial controls and regulations;
- A risk management framework which ensures close monitoring with proper mitigating measures for all identified high risk areas.



PUBLICATIONS



01



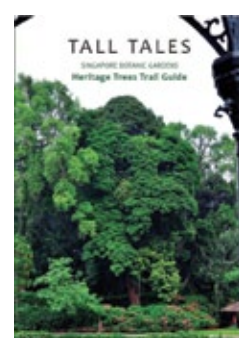
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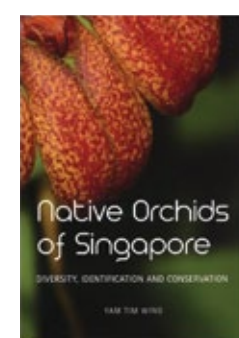
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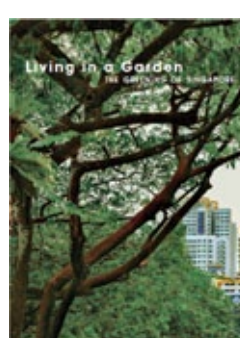
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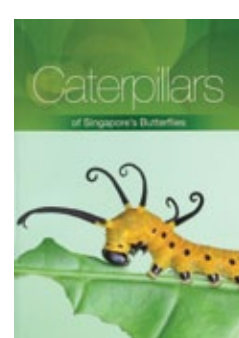
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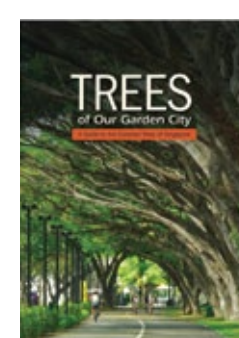
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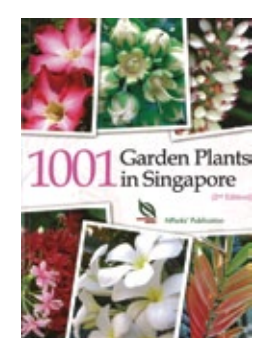
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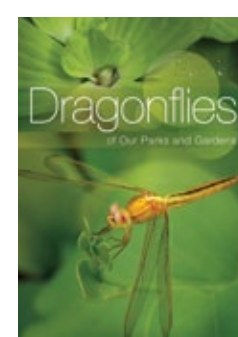
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BOOKS

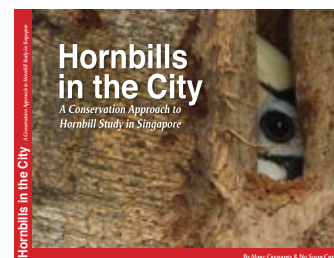
1. **A Walk Through History – A Guide to the Singapore Botanic Gardens**  
By Nigel Taylor and Ada Davis
2. **Rainforest in a City**  
By Chua Ee Kiam
3. **My Green Space: Indoor Gardening Made Simple**  
By Lily Chen, Ng Shan Jun, Ang Wee Foong, et al.
4. **A Guide to Common Epiphytes and Mistletoes of Singapore**  
By Jean W.H. Yong, James Wang Wei, Joanne Y.T. Khew, Sheue Chiou Rong and Wong Wei San
5. **Tall Tales: Singapore Botanic Gardens Heritage Trees Trail Guide**  
By Shee Zhi Qiang, Ang Xing Qi, Lahiru Wijedasa and Nigel Taylor (Singapore Botanic Gardens)
6. **Native Orchids of Singapore – Diversity, Identification and Conservation**  
By Yam Tim Wing
7. **Secrets of the Swamp**  
By Neil Humphreys and illustrated by Cheng Puay Koon
8. **Living in a Garden – The Greening of Singapore**  
By Timothy Auger
9. **Caterpillars of Singapore's Butterflies**  
By Horace Tan and Khew Sin Khoon
10. **Trees of Our Garden City**  
Edited by Tee Swee Ping
11. **1001 Garden Plants in Singapore**  
By Boo Chih Min, Kartini Omar-Hor and Ou-Yang Chow Lin
12. **Migratory Birds of Sungei Buloh Wetland Reserve**  
By James Gan, Mendis Tan and David Li
13. **Dragonflies of Our Parks and Gardens**  
By Robin Ngiam
14. **Hornbills in the City – A Conservation Approach to Hornbill Study in Singapore**  
By Marc Cremades and Ng Soon Chye
15. **Our Fragile Rainforest**  
By Leong Tzi Ming and James Gan



12



13



14



15



16



17



18



19



20



21

JOURNALS

16. **The Gardens' Bulletin Singapore**  
July 2014 & November 2014

CUGE STANDARDS

17. **CS E10:2014**  
– Guidelines on Design Loads for Skyrise Greenery
18. **CS E11:2014**  
– Guidelines on Design for Safety of Skyrise Greenery



The CUGE publication CITYGREEN won the APEX Awards for Publication Excellence in 2014, 2013 and 2012.

These publications are available for sale at the Gardens Shops at the Singapore Botanic Gardens. Visit [botanicgardensshop.sg](http://botanicgardensshop.sg) and [www.sbg.org.sg](http://www.sbg.org.sg) for more information.

PERIODICALS

19. **Gardenwise**, August 2014 & February 2015
20. **CITYGREEN** issue 9 – Nature & Health in Cities
21. **CITYGREEN** issue 10 – Resilience in Cities

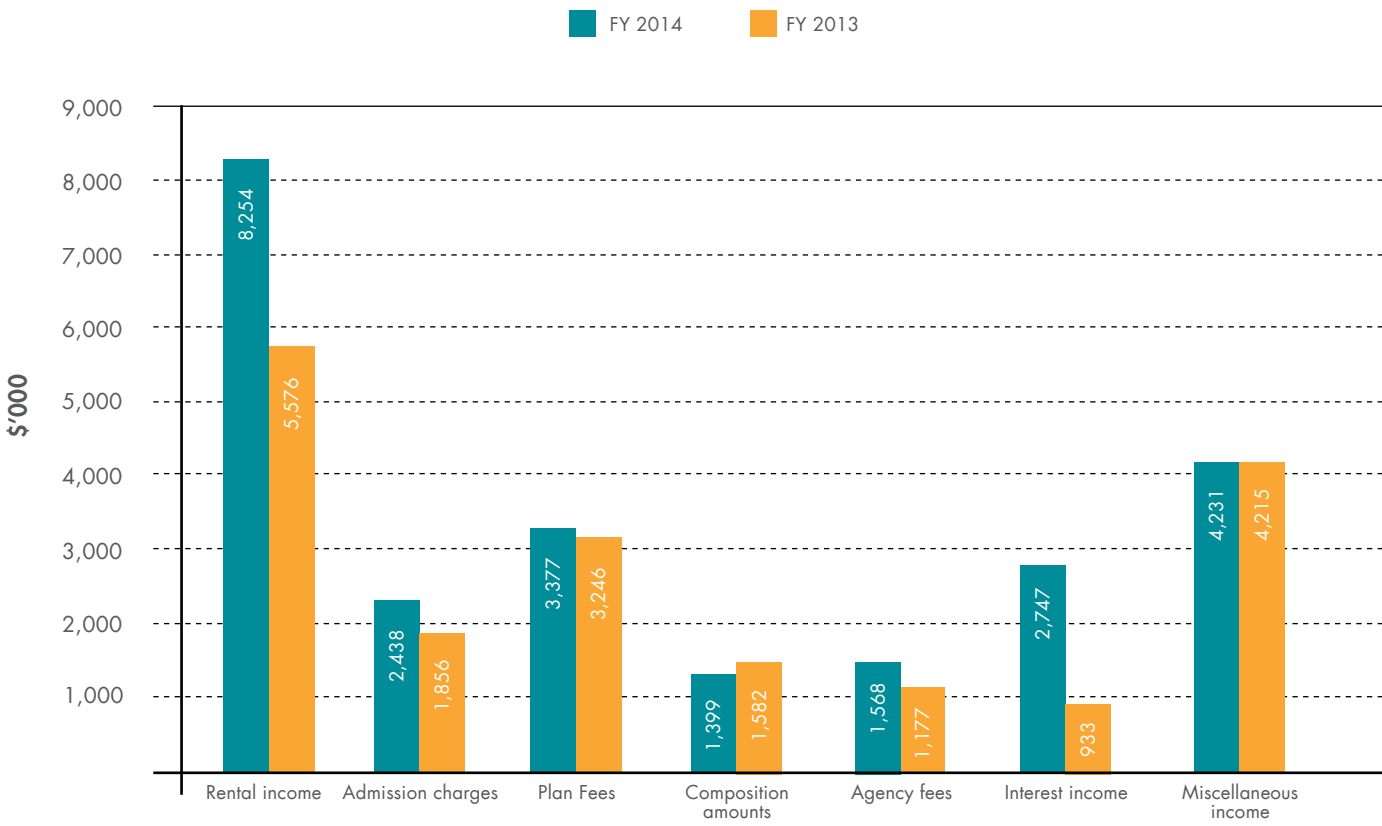


FINANCIAL REVIEW

INCOME

The Board’s income comprised mainly rental income from souvenir kiosks and food & beverage outlets in Singapore Botanic Gardens and Fort Canning Park. The income for the year was \$24.0 million. The 29% increase from last year’s income was mainly due to the increase in rental income, interest income and admission charges.

Income for FY 2014 & FY 2013

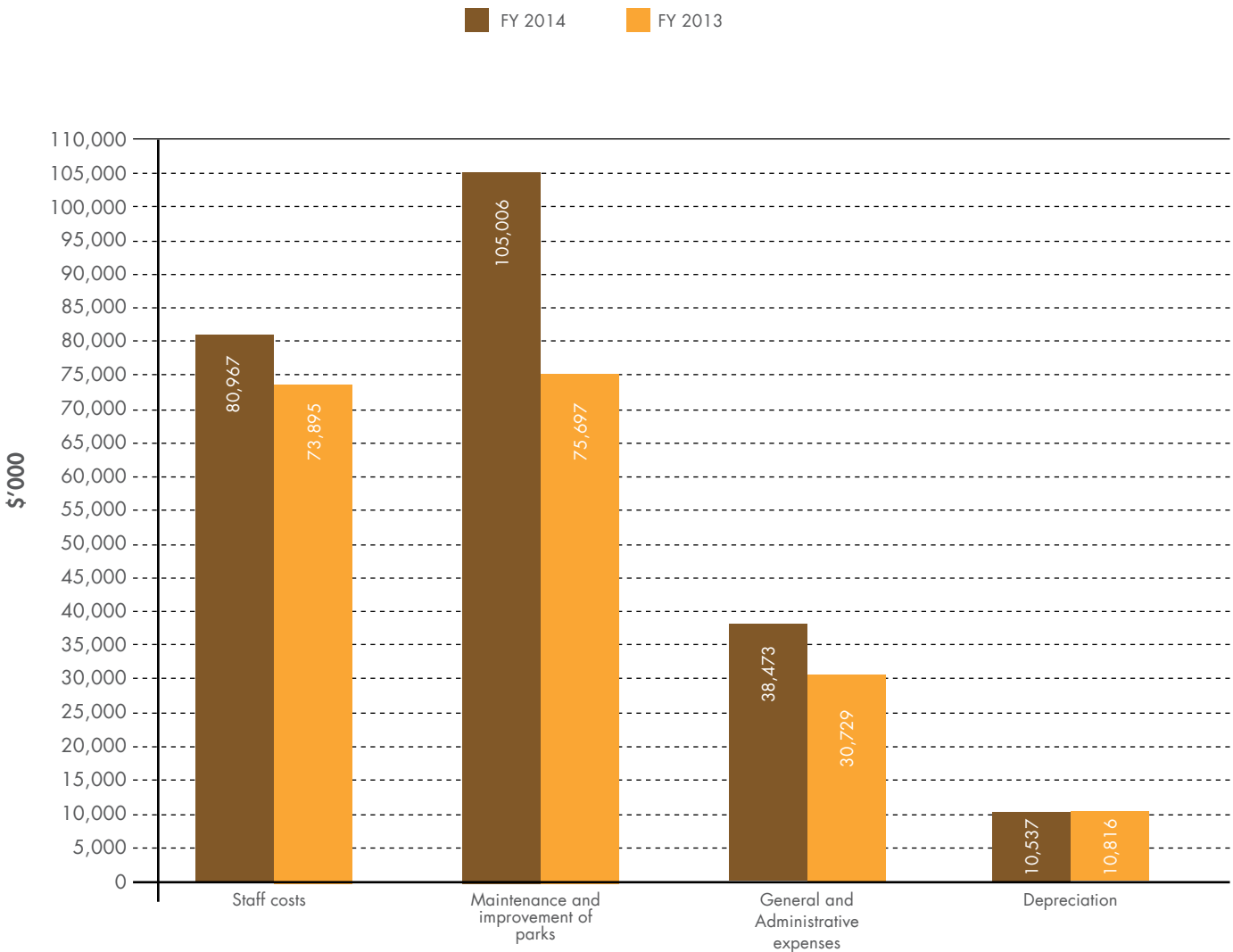


Income	FY 2014	FY 2013	Increase/(Decrease)	
	\$ '000	\$ '000	\$ '000	% Change
Rental income	8,254	5,576	2,678	48
Admission charges	2,438	1,856	582	31
Plan Fees	3,377	3,246	131	4
Composition amounts	1,399	1,582	(183)	(12)
Agency fees	1,568	1,177	391	33
Interest income	2,747	933	1,814	194
Miscellaneous income	4,231	4,215	16	1
	24,014	18,585	5,429	29

OPERATING EXPENDITURE

The Board’s expenditure for the year was \$235.0 million. The 23% increase from last year’s expenditure was mainly due to an increase in maintenance and improvements of parks as well as an increase in general and administrative expenses and staff costs.

Operating Expenditure for FY 2014 & FY 2013



Income	FY 2014	FY 2013	Increase/(Decrease)	
	\$ '000	\$ '000	\$ '000	% Change
Staff costs	80,967	73,895	7,072	10
Maintenance and improvement of parks	105,006	75,697	29,309	39
General and Administrative expenses	38,473	30,729	7,744	25
Depreciation	10,537	10,816	(279)	(3)
	234,983	191,137	43,846	23

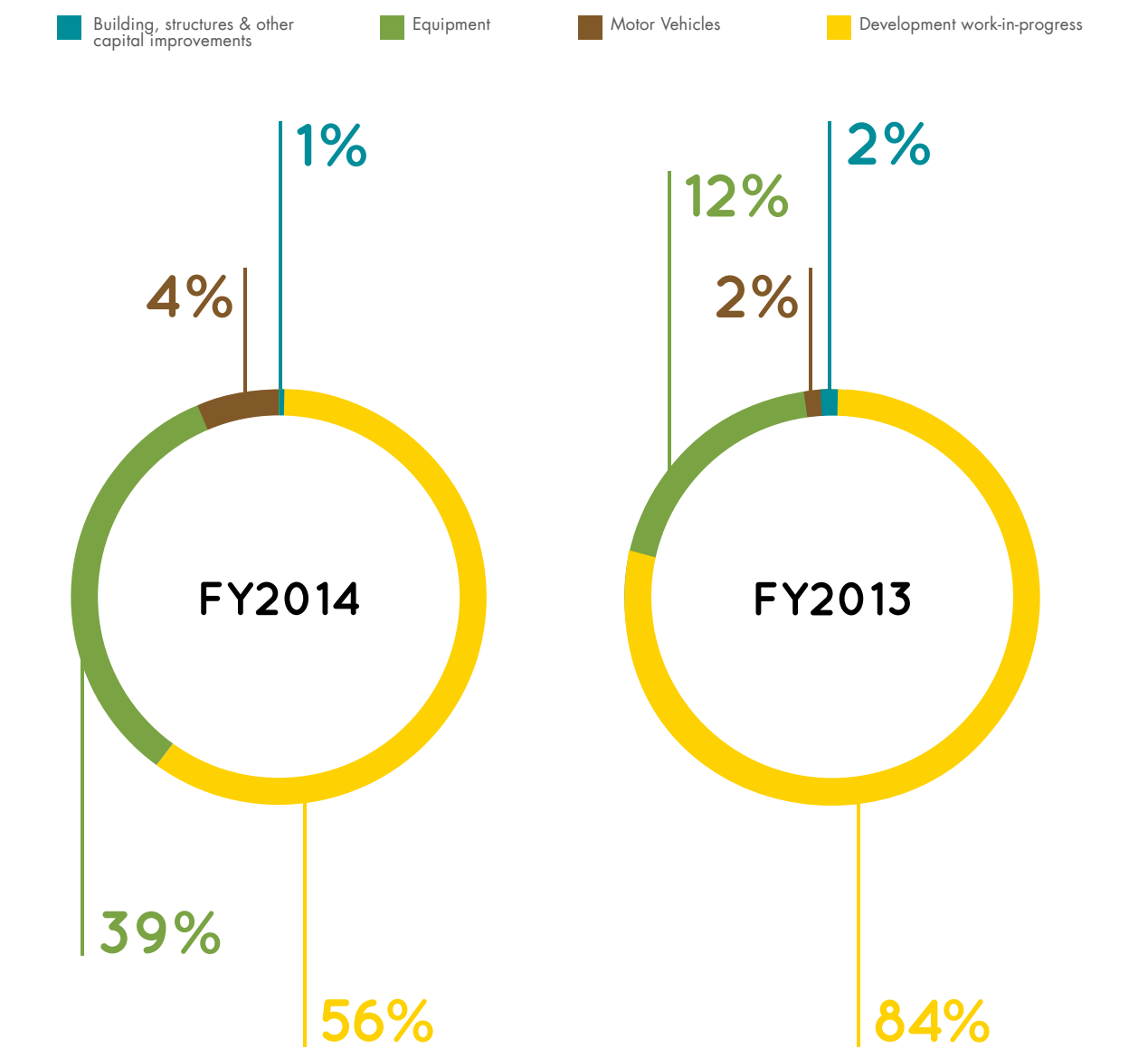


FINANCIAL REVIEW

CAPITAL EXPENDITURE

The Board’s capital expenditure for the year was \$7.9 million. The increase in capital expenditure was mainly due to additions in office and electrical equipment.

Capital Expenditure for FY 2014 & FY 2013

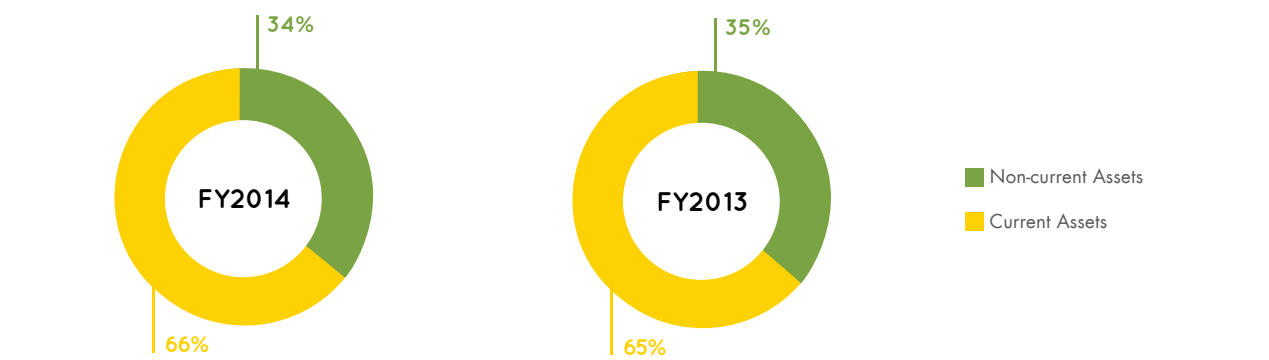


Capital Expenditure	FY 2014 \$ '000	FY 2013 \$ '000	Increase/(Decrease) \$ '000	% Change
Building, structures & other capital improvements	11	84	(73)	(87)
Equipment	3,075	609	2,466	405
Motor Vehicles	332	89	243	273
Development work-in-progress	4,511	4,260	251	6
	7,929	5,042	2,887	57

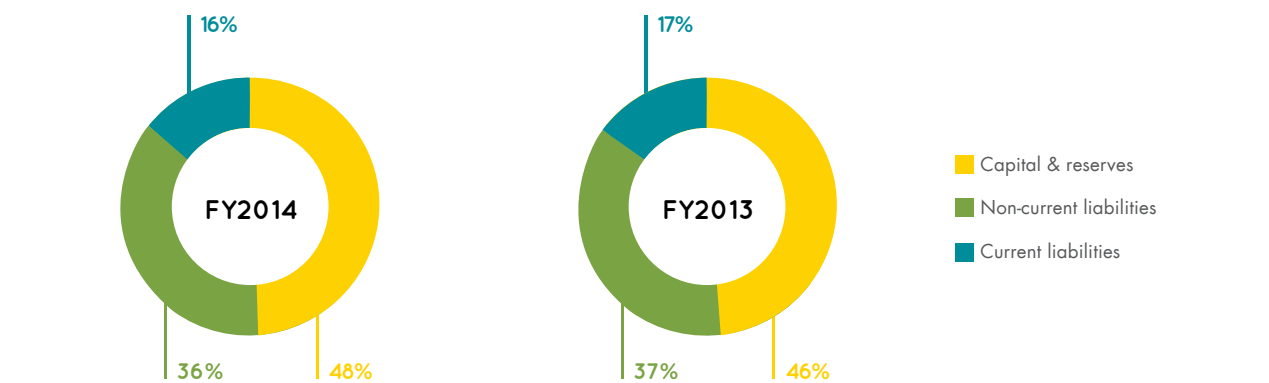
FINANCIAL POSITION

As at 31 March 2015, the Board’s total assets stood at \$349.0 million, an increase of 3% over last year. Non-current assets and current assets represent 34% and 66% of total assets respectively. Non-current assets consisted mainly of leasehold land and buildings and structures at Singapore Botanic Gardens and Fort Canning Park. Capital and reserves stood at \$166.9 million, while current and non-current liabilities stood at \$56.9 million and \$125.3 million respectively.

Total Assets



Total Liabilities & Equity



Assets	FY 2014 \$ '000	FY 2013 \$ '000	Increase/(Decrease) \$ '000	% Change
Non-current Assets	117,822	118,933	(1,111)	(1)
Current Assets	231,179	219,742	11,437	5
	349,001	338,675	10,326	3

Equity & Liabilities	FY 2014 \$ '000	FY 2013 \$ '000	Increase/(Decrease) \$ '000	% Change
Capital & reserves	166,871	155,549	11,322	7
Non-current liabilities	125,277	126,054	(777)	(1)
Current liabilities	56,853	57,072	(219)	(1)
	349,001	338,675	10,326	3



FINANCIAL STATEMENTS

Contents

Statement by National Parks Board	63
Independent auditors’ report	64 - 65
Statements of financial position	66
Statements of income or expenditure and other comprehensive income	67
Statements of changes in equity	68
Consolidated statement of cash flows	69
Notes to consolidated financial statements	70 - 88

NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
STATEMENT BY NATIONAL PARKS BOARD

In our opinion,

- (a) The accompanying financial statements of National Parks Board (“NParks”) and its subsidiary (the “Group”), set out on pages 66 to 88 are properly drawn up in accordance with the provisions of the National Parks Board Act, Chapter 198A (the “Act”) and Statutory Board Financial Reporting Standards (“SB-FRS”) so as to present fairly, in all material respects, the state of affairs of the Group and NParks as at 31 March 2015, and of the results, changes in equity of the Group and NParks and cash flows of the Group for the financial year ended on that date;
- (b) proper accounting and other records have been kept, including records of all assets of NParks whether purchased, donated or otherwise; and
- (c) the receipt, expenditure, investments of moneys and the acquisition and disposal of assets by NParks during the financial year have been in accordance with the provisions of the Act.

On behalf of the National Parks Board and its subsidiary



Christina Ong  
Chairman



Kenneth Er Boon Hwee  
Chief Executive Officer

Singapore  
22 July 2015



INDEPENDENT AUDITORS’ REPORT TO THE MEMBERS OF THE BOARD OF NATIONAL PARKS BOARD

Report on the Financial Statements

We have audited the accompanying financial statements of National Parks Board (“NParks”) and its subsidiary (the “Group”) which comprise the statements of financial position of the Group and NParks as at 31 March 2015, the statements of income or expenditure and other comprehensive income and statements of changes in equity of the Group and NParks and the consolidated statement of cash flows of the Group for the year then ended, and a summary of significant accounting policies and other explanatory information, as set out on pages 66 to 88.

Management’s Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the provisions of the National Parks Board Act, Chapter 198A (the “Act”) and Singapore Financial Reporting Standards (“SB-FRS”), and for such internal controls as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors’ Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Singapore Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal controls relevant to the entity’s preparation and fair presentation of the financial statements 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 entity’s internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements of the Group and the statement of financial position, statement of changes in equity and statement of income or expenditure and other comprehensive income of NParks are properly drawn up in accordance with the provisions of the Act and SB-FRS so as to present fairly, in all material respects, the state of affairs of the Group and NParks as at 31 March 2015, and the results and changes in equity of the Group and NParks, and cash flows of the Group for the year ended on that date.

Report on Other Legal and Regulatory Requirements

Management’s Responsibility for Compliance with Legal and Regulatory Requirements

Management is responsible for ensuring that the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Act. This responsibility includes implementing accounting and internal controls as management determines are necessary to enable compliance with the provisions of the Act.

Auditors’ Responsibility

Our responsibility is to express an opinion on management’s compliance based on our audit of the financial statements. We conducted our audit in accordance with Singapore Standards on Auditing. We planned and performed the compliance audit to obtain reasonable assurance about whether the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Act.

Our compliance audit includes obtaining an understanding of the internal controls relevant to the receipts, expenditure, investment of moneys and the acquisition and disposal of assets; and assessing the risks of material misstatement of the financial statements from non-compliance, if any, but not for the purpose of expressing an opinion on the effectiveness of the entity’s internal controls. Because of the inherent limitations in any accounting and internal control system, non-compliances may nevertheless occur and not be detected. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on management’s compliance.

INDEPENDENT AUDITORS’ REPORT TO THE MEMBERS OF THE BOARD OF NATIONAL PARKS BOARD

Opinion

In our opinion:

- a) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by NParks during the year are, in all material respects, in accordance with the provisions of the Act; and
- b) proper accounting and other records have been kept, including records of all assets of NParks whether purchased, donated or otherwise.

*Delaith + Touche LLP*

Public Accountants and  
Chartered Accountants  
Singapore

22 July 2015



## NATIONAL PARKS BOARD AND ITS SUBSIDIARY STATEMENT OF FINANCIAL POSITION

As at 31 March 2015

	Note	2014/2015 Group \$	2013/2014 Group \$	2014/2015 NParks \$	2013/2014 NParks \$
<b>ASSETS</b>					
<b>Current assets</b>					
Cash and cash equivalents	6	208,447,305	209,350,640	208,309,037	209,105,567
Trade receivables	7	3,878,787	2,526,375	3,878,685	2,526,243
Other receivables	8	18,741,635	8,106,873	18,741,385	8,105,273
Government grants receivable	11	249,942	-	249,942	-
Inventories		-	5,035	-	5,035
Total current assets		231,317,669	219,988,923	231,179,049	219,742,118
<b>Non-current assets</b>					
Trade receivables	7	1,512,000	1,680,000	1,512,000	1,680,000
Property, plant and equipment	10	116,309,533	117,253,352	116,309,533	117,253,352
Investments in subsidiary	9	-	-	2	2
Total non-current assets		117,821,533	118,933,352	117,821,535	118,933,354
<b>Total assets</b>		<b>349,139,202</b>	<b>338,922,275</b>	<b>349,000,584</b>	<b>338,675,472</b>
<b>LIABILITIES AND EQUITY</b>					
<b>Current liabilities</b>					
Trade and other payables	12	52,079,779	39,557,901	52,074,938	39,552,221
Provision for pension costs	13	90,000	582,300	90,000	582,300
Government grants received in advance	11	-	10,893,775	-	10,893,775
Deferred revenue	14	2,348,744	1,425,729	2,348,744	1,425,729
Contribution to consolidated fund	15	2,339,014	4,618,390	2,339,014	4,618,390
Total current liabilities		56,857,537	57,078,095	56,852,696	57,072,415
<b>Non-current liabilities</b>					
Deferred capital grants	16	116,309,524	117,253,342	116,309,524	117,253,342
Deferred revenue	14	3,479,745	3,388,218	3,479,745	3,388,218
Provision for pension costs	13	5,488,074	5,412,679	5,488,074	5,412,679
Total non-current liabilities		125,277,343	126,054,239	125,277,343	126,054,239
<b>Capital and other funds</b>					
Capital account	17	4,528,275	4,528,275	4,528,275	4,528,275
Share capital	18	1,000	1,000	1,000	1,000
Accumulated surplus		112,238,816	103,443,434	112,105,039	103,202,311
Sinking fund	19	50,236,231	47,817,232	50,236,231	47,817,232
Total capital and other funds		167,004,322	155,789,941	166,870,545	155,548,818
<b>Total liabilities and equity</b>		<b>349,139,202</b>	<b>338,922,275</b>	<b>349,000,584</b>	<b>338,675,472</b>
<b>Net Assets of Garden City Fund</b>	<b>20</b>	<b>11,819,548</b>	<b>11,790,533</b>	<b>11,819,548</b>	<b>11,790,533</b>
<b>Net Assets of National Productivity Fund</b>	<b>21</b>	<b>1,934,686</b>	<b>3,515,761</b>	<b>1,934,686</b>	<b>3,515,761</b>

The accompanying notes form an integral part of these consolidated financial statements.

## NATIONAL PARKS BOARD AND ITS SUBSIDIARY STATEMENT OF INCOME OR EXPENDITURE AND OTHER COMPREHENSIVE INCOME

Year ended 31 March 2015

	Note	2014/2015 Group \$	2013/2014 Group \$	2014/2015 NParks \$	2013/2014 NParks \$
<b>Operating income</b>					
Rental income		8,253,999	5,575,853	8,253,999	5,575,853
Admission charges		2,437,997	1,855,520	2,437,997	1,855,520
Plan fees		3,376,500	3,245,600	3,376,500	3,245,600
Composition amounts		1,399,475	1,582,240	1,399,475	1,582,240
Agency fees		1,568,254	1,177,062	1,568,254	1,177,062
Interest income		2,746,766	933,272	2,746,766	933,272
Miscellaneous income	22	4,232,506	4,220,778	4,230,637	4,214,778
		24,015,497	18,590,325	24,013,628	18,584,325
<b>Operating expenditure</b>					
Staff costs	23	(80,966,572)	(73,895,286)	(80,966,572)	(73,895,286)
Maintenance and improvements of parks		(105,005,501)	(75,697,279)	(105,005,501)	(75,697,279)
General and administrative expenses		(38,481,912)	(30,737,664)	(38,472,697)	(30,728,762)
Depreciation of property, plant and equipment	10	(10,537,283)	(10,815,517)	(10,537,283)	(10,815,517)
		(234,991,268)	(191,145,746)	(234,982,053)	(191,136,844)
<b>Deficit from operations</b>	<b>24</b>	<b>(210,975,771)</b>	<b>(172,555,421)</b>	<b>(210,968,425)</b>	<b>(172,552,519)</b>
Government operating grants	11	212,052,245	185,080,617	212,052,245	185,080,617
Other government grants	11	2,029,827	3,382,034	2,029,827	3,382,034
Deferred capital grants amortised	16	10,545,261	11,256,869	10,545,261	11,256,869
		224,627,333	199,719,520	224,627,333	199,719,520
<b>Non-operating income</b>					
Dividend income		-	-	100,000	-
<b>Surplus before contribution to consolidated fund</b>		<b>13,651,562</b>	<b>27,164,099</b>	<b>13,758,908</b>	<b>27,167,001</b>
Contribution to consolidated fund	15	(2,339,014)	(4,652,390)	(2,339,014)	(4,652,390)
<b>Surplus after contribution to consolidated fund, representing total comprehensive income for the year</b>		<b>11,312,548</b>	<b>22,511,709</b>	<b>11,419,894</b>	<b>22,514,611</b>

The accompanying notes form an integral part of these consolidated financial statements.



NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
STATEMENT OF CHANGES IN EQUITY  
Year ended 31 March 2015

	Capital account \$	Share capital \$	Accumulated surplus \$	Sinking fund \$	Total \$
<b>Group</b>					
At 1 April 2013	4,528,275	1,000	92,037,239	40,787,041	137,353,555
Surplus for the year, representing total comprehensive income for the year	-	-	22,511,709	-	22,511,709
<b>Transactions with owners, recognised directly in equity</b>					
Transfer from accumulated surplus to sinking fund (Note 19)	-	-	(7,030,191)	7,030,191	-
Dividend (Note 25)	-	-	(949,000)	-	(949,000)
Funding for government project (Note 26)	-	-	(3,126,323)	-	(3,126,323)
Total	-	-	(11,105,514)	7,030,191	(4,075,323)
At 31 March 2014	4,528,275	1,000	103,443,434	47,817,232	155,789,941
Surplus for the year, representing total comprehensive income for the year	-	-	11,312,548	-	11,312,548
<b>Transactions with owners, recognised directly in equity</b>					
Transfer from accumulated surplus to sinking fund (Note 19)	-	-	(2,418,999)	2,418,999	-
Funding for government project (Note 26)	-	-	(98,167)	-	(98,167)
Total	-	-	(2,517,166)	2,418,999	(98,167)
At 31 March 2015	4,528,275	1,000	112,238,816	50,236,231	167,004,322
<b>NParks</b>					
At 1 April 2013	4,528,275	1,000	91,793,214	40,787,041	137,109,530
Surplus for the year, representing total comprehensive income for the year	-	-	22,514,611	-	22,514,611
<b>Transactions with owners, recognised directly in equity</b>					
Transfer from accumulated surplus to sinking fund (Note 19)	-	-	(7,030,191)	7,030,191	-
Dividend (Note 25)	-	-	(949,000)	-	(949,000)
Funding for government project (Note 26)	-	-	(3,126,323)	-	(3,126,323)
Total	-	-	(11,105,514)	7,030,191	(4,075,323)
At 31 March 2014	4,528,275	1,000	103,202,311	47,817,232	155,548,818
Surplus for the year, representing total comprehensive income for the year	-	-	11,419,894	-	11,419,894
<b>Transactions with owners, recognised directly in equity</b>					
Transfer from accumulated surplus to sinking fund (Note 19)	-	-	(2,418,999)	2,418,999	-
Funding for government project (Note 26)	-	-	(98,167)	-	(98,167)
Total	-	-	(2,517,166)	2,418,999	(98,167)
At 31 March 2015	4,528,275	1,000	112,105,039	50,236,231	166,870,545

The accompanying notes form an integral part of these consolidated financial statements.

NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
CONSOLIDATED STATEMENT OF CASH FLOWS  
Year ended 31 March 2015

	Note	2014/2015 \$	2013/2014 \$
<b>Operating activities</b>			
Deficit from operations		(210,975,771)	(172,555,421)
Adjustments for:			
Depreciation of property, plant and equipment	10	10,537,283	10,815,517
Loss on disposal of property, plant and equipment	24	531	115,278
Provision for pension costs	13	165,307	185,681
Amortisation of lease premium received in advance		(83,333)	(83,333)
Interest income		(2,746,766)	(933,272)
Operating cash flow before movement in working capital		(203,102,749)	(162,455,550)
Inventories		5,035	12,560
Trade and other receivables		311,445	9,135,016
Trade and other payables		12,757,725	3,013,811
Deferred revenue		1,097,875	13,924
Payment for pension costs	13	(582,212)	(837,709)
Amounts due from MND		(11,714,615)	8,613,653
Amounts due from Garden City Fund		31,819	(53,618)
Cash used in operating activities		(201,195,677)	(142,557,913)
Contribution to Consolidated Fund paid		(4,618,390)	(2,892,382)
Net Cash flows used in operating activities		(205,814,067)	(145,450,295)
<b>Investing activities</b>			
Proceeds from disposal of property, plant and equipment		7,448	1,013
Purchase of property, plant and equipment		(7,928,809)	(5,041,661)
Interest received		2,085,291	937,761
Net cash used in investing activities		(5,836,070)	(4,102,887)
<b>Financing activities</b>			
Grants received (less payment on behalf)	11	202,630,677	195,509,170
Grants receivables	11	8,687,760	-
Unutilised grants returned	11	(473,468)	(525,362)
Dividends paid	25	-	(949,000)
Funding for government projects	26	(98,167)	(3,126,323)
Net cash from financing activities		210,746,802	190,908,485
Net (decrease) increase in cash and cash equivalents		(903,335)	41,355,303
Cash and cash equivalents at beginning of the year		209,350,640	167,995,337
<b>Cash and cash equivalents at end of the year (Note 6)</b>		<b>208,447,305</b>	<b>209,350,640</b>

The accompanying notes form part of these consolidated financial statements



NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

1 General

National Parks Board ("NParks") is a statutory board under the Ministry of National Development ("MND") established under the National Parks Board Act (Chapter 198A).

The Board has its registered office at Singapore Botanic Gardens, 1 Cluny Road, Singapore 259569.

The primary activities of NParks are to develop, manage and promote the National Parks and Nature Reserves as valuable reserves for recreation, conservation, research and education and to develop, upgrade, manage and maintain the public parks, open spaces on behalf of the Government.

There has been no significant changes in the nature of these activities during the financial year.

The principal activities of the subsidiary are described in Note 9 to the financial statements.

The financial statements of NParks for the financial year ended 31 March 2015 were authorised for issue by members of the Board on 22 July 2015.

2 Summary of Significant Accounting Policies

**BASIS OF ACCOUNTING AND ADOPTION OF NEW AND REVISED STANDARDS** - The financial statements have been prepared in accordance with the historical cost basis, except as disclosed in the accounting policies below, and are drawn up in accordance with the provisions of the Act, and Statutory Board Financial Reporting Standards ("SB-FRS"), including INT SB-FRS and Guidance Notes.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability which market participants would take into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of SB-FRS 102 *Share-based Payment*, leasing transactions that are within the scope of SB-FRS 17 *Leases*, and measurements that have some similarities to fair value but are not fair value, such as net realisable value in SB-FRS 2 *Inventories* or value in use in SB-FRS 36 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

**ADOPTION OF NEW AND REVISED STANDARDS** - On 1 April 2014, the Group adopted all the new and revised SB-FRSs and Interpretations of SB-FRS ("INT SB-FRS") and SB-FRS Guidance Notes that are effective from that date and are relevant to its operations. The adoption of these new/revised SB-FRSs, INT SB-FRSs and SB-FRS Guidance Notes does not result in changes to the Group's accounting policies and has no material effect on the amounts reported for the current or prior years.

At the date of authorisation of these financial statements, the following new/revised SB-FRSs, INT SB-FRS and Amendments to SB-FRS that are relevant to the Group and NParks were issued but not effective:

- Improvements to Financial Reporting Standards (January and February 2014)

Management has considered and is of the view that the adoption of the SB-FRSs, INT SB-FRSs and Amendments to SB-FRSs that were issued as at the date of authorisation of these financial statements but not effective until future periods will have no material impact on the financial statements of the Group and NParks in the period of their initial adoption.

**BASIS OF CONSOLIDATION** - The consolidated financial statements incorporate the financial statements of NParks and entities (including special purpose entities) controlled by NParks (its subsidiary). Control is achieved when NParks:

- Has power over the investee;
- Is exposed, or has rights, to variable returns from its involvement with the investee; and
- Has the ability to use its power to affect its returns.

NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

NParks reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Consolidation of a subsidiary begins when NParks obtains control over the subsidiary and ceases when NParks loses control of the subsidiary. Specifically, income and expense of a subsidiary acquired or disposed of during the year are included in the consolidated statement of income or expenditure and other comprehensive income from the date NParks gains control until the date when NParks ceases to control the subsidiary.

Where necessary, adjustments are made to the financial statements of the subsidiary to bring its accounting policies into line with the Group's accounting policies.

In NParks's financial statements, investment in subsidiary is carried at cost less any impairment in net recoverable value that has been recognised in income or expenditure.

**FINANCIAL INSTRUMENTS** - Financial assets and financial liabilities are recognised on the Group's statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial instrument and of allocating interest income or expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments (including all fees paid or received that form an integral part of the effective interest rate, transaction costs and other premium or discounts) through the expected life of the financial instrument, or where appropriate, a shorter period. Income and expenses are recognised on an effective interest basis for debt instruments.

**Financial assets**

All financial assets are recognised and de-recognised on a trade date basis where the purchase or sale of an investment is under a contract whose terms require delivery of the investment within the timeframe established by the market concerned, and are initially measured at fair value plus transaction costs.

Loans and receivables

Trade and other receivables are measured at amortised cost using the effective interest method less impairment. Interest is recognised by applying the effective interest method, except for short-term receivables when the effect of discounting is immaterial.

Impairment of financial assets

Financial assets, other than those at fair value through income or expenditure, are assessed for indicators of impairment at the end of each reporting period. Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the financial assets have been impacted.

For financial assets carried at amortised cost, the amount of the impairment is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate.

For financial assets that are carried at cost, the amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables where the carrying amount is reduced through the use of an allowance account. When a trade receivable is uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognised in income or expenditure.

For financial assets measured at amortised cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed through income or expenditure to the extent that the carrying amount of the financial asset at the date the impairment is reversed does not exceed what the amortised cost would have been had the impairment not been recognised.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.



NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

Financial liabilities and equity instruments

Classification as debt or equity

Financial liabilities and equity instruments issued by the Group are classified according to the substance of the contractual arrangements entered into and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Equity instruments are recorded at the proceeds received, net of significant direct issue costs.

Financial liabilities

Trade and other payables are initially measured at fair value, net of transaction costs, and are subsequently measured amortised cost, using the effective interest method, with interest expense recognised on an effective yield basis.

Derecognition of financial liabilities

The Group recognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire.

**LEASES** - Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

The Group as lessor

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease unless another systematic basis is more representative of the time pattern in which use benefit derived from the leased asset is diminished. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

The Group as lessee

Rentals payable under operating leases are charged to income or expense on a straight-line basis over the term of the relevant lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are recognised as an expense in the period in which they are incurred.

In the event that lease incentives are received to enter into operating leases, such incentives are recognised as a liability. The aggregate benefit of incentives is recognised as a reduction of rental expense on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

**INVENTORIES** - Inventories are stated at the lower of cost and net realisable value. The cost of inventories is based on the first-in first-out method, and includes expenditure incurred in acquiring the inventories. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

**PROPERTY, PLANT AND EQUIPMENT** - Property, plant and equipment are stated at cost less accumulated depreciation and any accumulated impairment losses.

Depreciation is charged so as to write off the cost of property, plant and equipment over their estimated useful lives, using the straight-line method on the following bases:

Leasehold land	- Over the lease periods of 87 to 93 years
Buildings, structures, capital and other improvements	- 20 years
Office equipment, furniture and fittings	- 5 to 10 years
Laboratory and gardening equipment	- 7 years
Motor vehicles	- 8 to 10 years

Construction-in-progress included in property, plant and equipment is not depreciated as these assets are not available for use. These are carried at cost, less any recognised impairment loss. Depreciation of these assets, on the same basis as other assets, commences when the assets are ready for their intended use.

The estimated useful lives, residual values and depreciation method of property, plant and equipment are reviewed at the end of each reporting period with the effect of any changes in estimates accounted for on a prospective basis.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset is included in the income or expense in the year the asset is derecognised.

NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

**IMPAIRMENT OF TANGIBLE AND INTANGIBLE ASSETS** - At the end of each reporting period, the Group reviews the carrying amounts of its assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessment of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately as an expense.

Where an impairment loss subsequently reversed, the carrying amount of the asset (cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately as income.

**PROVISIONS** - Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

**GOVERNMENT GRANTS** - Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and the grants will be received. Government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred capital grant in the statement of financial position and transferred to income or expenditure on a systematic and rational basis over the useful lives of the related assets. This treatment also applies to assets transferred from other government organisations and other donated assets.

Other government grants are recognised as income over the periods necessary to match them with the costs for which they are intended to compensate, on a systematic basis. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in income or expenses in the period in which they become receivable.

The value of land at the Singapore Botanic Gardens and the Fort Canning Park that vested in NParks when it was established in June 1990 was taken to the deferred capital grants account. The value of all other assets net of liabilities transferred from the former Parks and Recreation Department of Ministry of National Development (PRD) to NParks in June 1990 and July 1996 amounting to \$4,528,275 was taken to the capital account.

**TRUST AND AGENCY FUNDS** - Trust and agency funds are set up to account for funds held in trust where NParks is not the owner and beneficiary of the funds received from the Government and other organisations. The receipts and expenditure in respect of agency funds are taken directly to the funds accounts and the net assets relating to the funds are shown as a separate line item in the statement of financial position. Trust and agency funds are accounted for on the accrual basis.

NParks administers the funds on behalf of the holders of these funds. Upon dissolution of these funds, the remaining moneys in these funds shall be returned to the owners of the funds.

**REVENUE RECOGNITION** - Revenue is recognised to the extent that it is probable that the economic benefits will flow to NParks and the revenue can be reliably measured.

Rental income

Rental income receivable under operating leases is recognised in surplus or deficit on a straight-line basis over the term of the lease. Lease incentives granted are recognised as an integral part of the total rental income, over the term of the lease.

Admission charges

Admission charges are recognised upon the sale of admission tickets to visitors.

Composition amounts

Composition amounts are recognised on the issuance of the notice of offence to offenders.



NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

Agency fees

Where it is probable that the economic benefits will flow to the Group and the revenue and costs, if applicable, can be reliably measured, agency fees are recognised over the period in which the services are completed.

Plan fees

Plan fees are recognised over the period in which services are completed

Interest income

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

Dividend income

Dividend income from investments is recognised when the shareholders’ rights to receive payment have been established.

Miscellaneous income

Miscellaneous income comprising income derived from consultancy fees, sale of publications, souvenirs and orchid plantlets, course fees, and park usage and barbeque permit fees are recognised in the period in which they are earned. Liquidated damages are recognised as income when the right to claim such liquidated damages from contractors are established. Compensation collected from contractors whose work resulted in damage to trees and plants are recognised upon issuance of the notice of offence.

**RETIREMENT BENEFITS COSTS** - Payments to defined contribution retirement benefit plans are charged as an expense when employees have rendered the services entitling them to the contributions. Payments made to state-managed retirement benefit schemes, such as the Singapore Central Provident Fund, are dealt with as payments to defined contribution plans where the Group’s obligations under the plans are equivalent to those arising in a defined contribution retirement benefit plan.

Defined benefit retirement obligations due to pensionable officers are recognised in the statement of financial position in accordance with the Pensions Act (Cap. 225, 2004 Revised Edition). Provision for pension costs for eligible retired employees is estimated by management based on the most recent valuation performed once every three years by professional actuaries. For pension costs, the cost of providing benefits is determined using the projected unit credit method. Remeasurement, comprising actuarial gains and losses is reflected immediately in the statement of financial position with a charge or credit recognised in other comprehensive income in the period in which they occur.

Remeasurement recognised in other comprehensive income is reflected immediately in accumulated surplus and will not be reclassified to income or expenditure. For all active members of the scheme, the “projected accrual benefit” is based on the scheme’s accrual formula and upon service as of the valuation date, but using the employee’s scheme salary, projected to the age at which the employee is assumed to leave active service. For inactive members, it is the total benefit. The defined benefit obligation/project benefit obligation/plan liability is the discounted present value of the “projected accrued benefits”. The service cost is the corresponding value of benefits earned by active members over the year as a result of one more year of service.

**EMPLOYEE LEAVE ENTITLEMENT** - Employee entitlements to annual leave are recognised when they accrue to employees. A provision is made for the estimated liability for annual leave as a result of services rendered by employees up to the end of the reporting period.

**CONTRIBUTION TO CONSOLIDATED FUND** - Under Section 13(1)(e) and the First Schedule of the Singapore Income Tax Act, Chapter 134, the income of the Group is exempt from income tax.

In lieu of income tax, NParks is required to make contribution to the Government Consolidated Fund in accordance with the Statutory Corporations (Contributions to Consolidated Fund) Act, Chapter 319A. The provision is based on the guidelines specified by the Ministry of Finance. It is computed based on the net surplus of the Group for each of the financial year at the prevailing corporate tax rate for the Year of Assessment. Contribution to consolidated fund is provided for on an accrual basis.

**CASH AND CASH EQUIVALENTS IN THE STATEMENT OF CASH FLOWS** - Cash and cash equivalents in the statement of cash flows comprise cash at bank and demand deposits that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value.

3 Critical Accounting Judgements and Key Sources of Estimation Uncertainty

In the application of the Group’s accounting policies, which are described in Note 2, management is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in

NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The Group did not make any material judgements that have significant effect on the amounts recognised in the financial statements.

Key sources of estimation uncertainty

The key assumptions 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, are discussed below:

Depreciation of and impairment loss on property, plant and equipment

The cost of property, plant and equipment are depreciated on a straight-line basis over their useful lives. The Group estimates the useful lives of these property, plant and equipment to be within 5 to 93 years, based on the estimated useful lives of the assets. The carrying amounts are disclosed in Note 10 of the financial statements. Changes in the expected level of usage, technological developments and economic conditions could impact the economic useful lives and the residual values of these assets, therefore future depreciation charges could be revised.

Impairment losses would be made for property, plant and equipment whenever there is objective evidence that the assets are impaired. The required level of impairment losses to be made is estimated by reference to the estimated value in use or price quotations from independent third parties.

Impairment loss on trade receivables

The Group evaluates whether there is any objective evidence that trade receivables are impaired and determines the amount of impairment loss as a result of the inability of the debtors to make required payments. The Group bases the estimates on the ageing of the trade receivables balance, credit-worthiness of the debtors and historical write-off experience. If the financial conditions of the debtors were to deteriorate, actual write-offs would be higher than estimated.

Valuation of defined benefits obligations

The Group and the Singapore Government jointly finance the payment of gratuity, pension or allowance to pensionable officers at their retirement. The split of pension costs is determined based on the accumulated pensionable emoluments earned by the pensionable employee while in government services as compared with the employee’s service with the Group up to retirement.

The valuation of the defined benefits obligations is determined using the projected unit credit method. The most recent full actuarial valuation of the defined benefits obligations was carried out as at 31 March 2013.

The assumptions which have the most significant effect on the results of the valuation are those relating to discount rate, future salary increase rate, pre-retirement mortality and historical average annual salary increase rate. The assumptions used by the actuary are the best estimates chosen from a range of possible actuarial assumptions, which due to the timescale covered, may not necessary borne out in practice. The present value of the liabilities is derived from cash flows projections over long periods and is inherently uncertain.

4 Financial Instruments, Financial Risks and Capital Risks Management

(a) Categories of financial instruments

The following table sets out the financial instruments as at the end of the reporting period:

	Group		NParks	
	2014/2015	2013/2014	2014/2015	2013/2014
	\$	\$	\$	\$
<b>Financial assets</b>				
Loans and receivables (including cash and cash equivalent)	229,939,749	217,777,367	229,801,129	217,531,912
<b>Financial liabilities at amortised cost</b>	59,996,867	50,171,270	59,992,026	50,165,590

(b) Financial risk management policies and objectives

The Group is exposed to financial risk arising from its operations which include interest rate risk, credit risk and liquidity risk. The Group has written policies and guidelines, which set out its general risk management framework as discussed below.

There has been no change to the Group’s exposure to these financial risks or the manner in which it manages and measures the risk.



# NATIONAL PARKS BOARD AND ITS SUBSIDIARY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31 March 2015

(i) Interest rate risk management

The Group's exposure to changes in interest rates relates primarily to fixed deposits and non-current trade receivables. Surplus funds in NParks are placed with Accountant-General's Department ("AGD") as disclosed in Note 6. Other than funds placed with AGD and non-current trade receivable with fixed interest rate as disclosed in Note 7, there are no other significant interest-bearing assets or interest-bearing liabilities as at the end of the reporting period.

Interest rate sensitivity analysis has not been presented as management does not expect any reasonable possible changes in interest rates to have a significant impact on the Group's operations and cash flows.

(ii) Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group.

Credit risks, or the risk of counterparties defaulting, are controlled by the application of regular monitoring procedures. Except for receivables due from MND and other government agencies, there is no significant concentration of credit risk. The extent of the Group's credit exposure is represented by the aggregate balance of financial assets at the end of each reporting period.

(iii) Liquidity risk management

Liquidity risk arises in the general funding of the Group's operating activities. It includes the risks of not being able to fund operating activities in a timely manner. To manage liquidity risk, the Group places majority of its surplus funds with the Accountant-General's Department which are readily available where required.

(iv) Fair values of financial assets and financial liabilities

The carrying amounts of financial assets and financial liabilities as reported in the financial statements approximate their respective fair values due to the relatively short-term maturity of these financial instruments.

(c) Capital risk management policies and objectives

The Group manages its capital to ensure that it will be able to continue as a going concern while fulfilling its objective as a statutory board.

The capital structure of the Group consists of accumulated surplus, capital account, sinking fund and share capital. The overall strategy of the Group remains unchanged from the previous financial year.

# NATIONAL PARKS BOARD AND ITS SUBSIDIARY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31 March 2015

## 5 Related Party Transactions

Some of the Group's transactions and arrangements are with related parties and the effect of these on the basis determined between the parties is reflected in these financial statements. The balances are unsecured, interest-free and repayable on demand unless otherwise stated.

The Group and NParks entered into the following significant transactions with its parent Ministry, MND, and other related parties during the year:

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
<b>MND</b>		
Services and expenses paid	906,100	861,938
Revenue collected on behalf	24,375,392	27,480,811
Development expenditure paid on behalf		
- Gardens by the Bay	2,962,542	8,384,387
- Other state projects	50,215,174	52,242,148
Grants received/receivable		
- Operating grant	216,205,716	192,273,355
- Development grant	44,717,220	62,152,249
- Other grant	486,736	-
<b>Other Ministries and Statutory Boards</b>		
Services and expenses paid to other statutory boards	8,547,039	12,666,401
Transfer of IT computer equipment from other statutory board	672,634	-
Expenses paid on behalf of other statutory boards	12,999,682	9,808,237
Computer and IT related expenses	3,328,251	4,364,677
Minimum lease receipts under operating leases recognised as an income (Note 27)	921,226	-
Minimum lease payments under operating leases recognised as an expense (Note 27)	1,221,871	1,943,567
Grants received/receivable	3,759,115	1,710,101
<b>Garden City Fund</b>		
Purchase of publications/souvenirs	88,883	112,937
Transfer of donated gallery from Garden City Fund	1,000,000	-
Expenses paid on behalf	188,148	269,959
<b>Gardens by the Bay</b>		
Services and expenses paid	2,235,340	-
Expenses paid on behalf	1,603,252	5,582,421

Compensation of key management personnel

The remuneration of key management personnel during the financial year were as follows:

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Short-term employee benefits	1,646,011	1,443,651



# NATIONAL PARKS BOARD AND ITS SUBSIDIARY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31 March 2015

## 6 Cash and Cash Equivalents

	Group		NParks	
	2014/2015	2013/2014	2014/2015	2013/2014
	\$	\$	\$	\$
Cash at bank	215,846	417,373	77,578	172,300
Deposits with AGD <sup>(i)</sup>	208,231,459	208,933,267	208,231,459	208,933,267
	208,447,305	209,350,640	208,309,037	209,105,567

<sup>(i)</sup> With effect from financial year 2009/2010, Statutory Boards were to participate in the Centralised Liquidity Management by the Accountant General's Department ("AGD") under AGD Circular 4/2009. Deposits are centrally managed by AGD, available to the statutory board upon request and earns interest at the average rate of 0.85% (2013/2014 : 0.62%) per annum.

## 7 Trade Receivables

	Group		NParks	
	2014/2015	2013/2014	2014/2015	2013/2014
	\$	\$	\$	\$
Not past due and not impaired	3,593,572	2,374,239	3,593,470	2,374,107
Past due but not impaired (i):	1,797,215	1,832,136	1,797,215	1,832,136
< 1 month	175,369	111,200	175,369	111,200
1 month to 4 months	72,707	39,227	72,707	39,227
> 4 months	1,549,139	1,681,709	1,549,139	1,681,709
Impaired receivables	2,071,494	2,315,135	2,071,494	2,315,135
Less: Allowance for impairment	(2,071,494)	(2,315,135)	(2,071,494)	(2,315,135)
Total	5,390,787	4,206,375	5,390,685	4,206,243
Represented by:				
Current portion	3,878,787	2,526,375	3,878,685	2,526,243
Non-current portion	1,512,000	1,680,000	1,512,000	1,680,000
Total	5,390,787	4,206,375	5,390,685	4,206,243

The credit period on rendering of services is 30 days (2013/2014 : 30 days). Other than non-current receivables which interest is charged at 2%, no interest is charged on the trade receivables and no collateral is held by the Group over the trade receivables.

<sup>(i)</sup> No allowance has been made on these receivables as management believes that there has not been significant change in credit quality and the amounts are still considered recoverable.

Majority of the Group's receivables that are neither past due nor impaired are creditworthy counterparties with good track record of credit history. Except for the non-current trade receivables, there are no customers who represent more than 5% of the total balance of trade receivables.

In determining the recoverability of a receivable the Group considers any change in the credit quality of the receivable from the date credit was initially granted up to the reporting date. Credit risk is limited due to management's on-going evaluation of the creditworthiness of the Group's customers and that majority of the Group's trade receivables are within their expected cash collection cycle.

Movement in the allowance for doubtful debts

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Balance at beginning of the year	2,315,135	2,390,533
Decrease in allowance recognised in income or expense	(243,641)	(75,398)
Balance at end of the year	2,071,494	2,315,135

# NATIONAL PARKS BOARD AND ITS SUBSIDIARY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31 March 2015

## 8 Other Receivables

	Group		NParks	
	2014/2015	2013/2014	2014/2015	2013/2014
	\$	\$	\$	\$
Other receivables				
- MND <sup>(i)</sup>	13,438,551	1,973,699	13,438,551	1,973,699
- Garden City Fund <sup>(ii)</sup>	20,832	38,735	20,832	38,735
- Gardens by the Bay <sup>(ii)</sup>	10,789	303,714	10,789	303,714
- Other receivables	558,171	753,825	558,171	753,825
Interest receivable	1,184,975	501,305	1,184,975	501,305
Prepayments	2,889,920	3,886,521	2,889,920	3,885,171
Deposits	638,397	649,074	638,147	648,824
	18,741,635	8,106,873	18,741,385	8,105,273

### Notes

<sup>(i)</sup> Receivables from Ministry of National Development comprise of mainly direct development and operating grants receivable by NParks. These amounts are unsecured and interest-free, and are repayable on demand.

<sup>(ii)</sup> Non-trade amounts due from Garden City Fund and Gardens by the Bay are unsecured and interest-free, and are repayable on demand.

## 9 Investment in Subsidiary

	2014/2015	2013/2014
	\$	\$
Unquoted equity investment, at cost	2	2

Details of the subsidiary are as follows:

Name of subsidiary	Principal activities	Place of incorporation and business	Equity interest held	
			2014/2015	2013/2014
			%	%
Singapore Garden City Pte. Ltd. <sup>(a)</sup>	Landscape planning, advisory services and business consulting services	Singapore	100	100

<sup>(a)</sup> Audited by RSM Chio Lim LLP.



# NATIONAL PARKS BOARD AND ITS SUBSIDIARY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 31 March 2015

## 10 Property, Plant and Equipment

	Leasehold land	Building, structures, capital and other improvements	Office equipment, furniture and fittings	Motor vehicles	Laboratory and gardening equipment	Construction- in-progress	Total
	\$	\$	\$	\$	\$	\$	\$
<b>Group and NParks</b>							
Cost:							
At 1 April 2013	61,501,429	150,262,470	30,918,573	1,828,724	1,162,162	694,898	246,368,256
Additions	-	84,143	583,830	89,400	24,510	4,259,778	5,041,661
Transfer	-	2,921,858	1,415,517	-	-	(4,337,375)	-
Disposal/Write-off	-	(5,088,815)	(1,305,710)	(106,501)	-	-	(6,501,026)
At 31 March 2014	61,501,429	148,179,656	31,612,210	1,811,623	1,186,672	617,301	244,908,891
Additions	-	1,011,122 <sup>(i)</sup>	3,592,851 <sup>(ii)</sup>	331,900	154,786	4,510,784	9,601,443
Transfer	-	450,975	3,094,949	-	-	(3,545,924)	-
Disposal/Write-off	-	-	(814,578)	(399,677)	(121,047)	-	(1,335,302)
At 31 March 2015	61,501,429	149,641,753	37,485,432	1,743,846	1,220,411	1,582,161	253,175,032
Accumulated depreciation:							
At 1 April 2013	11,317,503	86,326,506	23,553,235	1,285,859	741,654	-	123,224,757
Depreciation	731,695	6,916,140	2,922,403	153,662	91,617	-	10,815,517
Disposal/Write-off	-	(5,088,815)	(1,189,419)	(106,501)	-	-	(6,384,735)
At 31 March 2014	12,049,198	88,153,831	25,286,219	1,333,020	833,271	-	127,655,539
Depreciation	731,695	7,056,105	2,506,375	157,550	85,558	-	10,537,283
Disposal/Write-off	-	-	(806,599)	(399,677)	(121,047)	-	(1,327,323)
At 31 March 2015	12,780,893	95,209,936	26,985,995	1,090,893	797,782	-	136,865,499
Carrying amount:							
At 31 March 2015	48,720,536	54,431,817	10,499,437	652,953	422,629	1,582,161	116,309,533
At 31 March 2014	49,452,231	60,025,825	6,325,991	478,603	353,401	617,301	117,253,352

### Notes

<sup>(i)</sup> Additions to building structures, capital and other improvements includes a gallery amounting to \$1,000,000 (Note 5) transferred from the Garden City Fund.

<sup>(ii)</sup> Additions to office equipment, furniture and fittings includes IT computer equipment amounting to \$672,634 which has been transferred from another government agency.

# NATIONAL PARKS BOARD AND ITS SUBSIDIARY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 31 March 2015

## 11 Government Grants (Receivable) Received in Advance

	Operating grants <sup>(i)</sup>	Capital grants	Development grants <sup>(iii)</sup>	Other grants <sup>(ii)</sup>	Total
	\$	\$	\$	\$	\$
<b>Group and NParks</b>					
At 1 April 2013	5,970,713	386,425	3,330,596	47,118	9,734,852
Grants received during the financial year	192,273,355	1,383,000	60,769,249	1,710,101	256,135,705
Interest income earned	-	(1,175)	5,664	-	4,489
Transfer to development grant	(154,975)	-	154,975	-	-
Transfer to deferred capital grants (Note 16)	(4,048,320)	(1,265,684)	-	(52,719)	(5,366,723)
Unutilised grants returned	(253,351)	(272,011)	-	-	(525,362)
Payment on behalf	-	-	(60,626,535)	-	(60,626,535)
Transfer to statement of income or expenditure and other comprehensive income	(185,080,617)	-	-	(3,382,034)	(188,462,651)
At 31 March 2014	8,706,805	230,555	3,633,949	(1,677,534)	10,893,775
Grants received during the financial year	208,128,920	266,000	43,888,801	4,197,306	256,481,027
Grants receivables	8,076,796	-	562,419	48,545	8,687,760
Interest income earned	-	2,495	19,700	-	22,195
Transfer to deferred capital grants (Note 16)	(7,594,878)	(255,195)	(12,000)	(739,370)	(8,601,443)
Unutilised grants returned	(473,468)	-	-	-	(473,468)
Payment on behalf	-	-	(53,177,716)	-	(53,177,716)
Transfer to statement of income or expenditure and other comprehensive income	(212,052,245)	-	-	(2,029,827)	(214,082,072)
At 31 March 2015	4,791,930	243,855	(5,084,847)	(200,880)	(249,942)

### Notes

<sup>(i)</sup> Total operating grants received/receivable less transferred to deferred capital grants since establishment are \$2,246,469,806 (2013/2014 : \$2,037,858,968).

<sup>(ii)</sup> Other grants comprise grants received from other government agencies. During the year, IT computer equipment and the related capital grant of \$672,634 was transferred from another government agency to NParks.

<sup>(iii)</sup> Development grants received from MND for Gardens by the Bay and other development projects.

## 12 Trade and Other Payables

	Group		NParks	
	2014/2015	2013/2014	2014/2015	2013/2014
	\$	\$	\$	\$
Trade payables	11,705,882	5,994,513	11,701,041	5,988,833
Other payables				
- MND <sup>(i)</sup>	2,719,645	2,969,408	2,719,645	2,969,408
- Garden City Fund <sup>(ii)</sup>	25,360	11,444	25,360	11,444
- Others	13,343,997	8,711,710	13,343,997	8,711,710
GST payable	1,227,615	1,692,909	1,227,615	1,692,909
Rental and other deposits	7,339,863	6,871,108	7,339,863	6,871,108
Accrual expenses	15,717,417	13,306,809	15,717,417	13,306,809
	52,079,779	39,557,901	52,074,938	39,552,221

<sup>(i)</sup> Payables to Ministry of National Development comprise primarily state revenue collections received on behalf of the Ministry. The amounts are unsecured and interest-free, and are repayable on demand.

<sup>(ii)</sup> Non-trade amounts due to Garden City Fund were unsecured and interest-free.



# NATIONAL PARKS BOARD AND ITS SUBSIDIARY

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 31 March 2015

#### 13 Provision for Pension Costs

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
At beginning of the year	5,994,979	6,647,007
Provision for the year	165,307	185,681
Payments during the year	(582,212)	(837,709)
At end of the year	5,578,074	5,994,979
Represented by:		
Current portion	90,000	582,300
Non-current portion	5,488,074	5,412,679
	5,578,074	5,994,979

Amounts recognised in income or expenditure in respect of the defined benefit plan are as follows:

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Interest cost	47,500	49,900
Service cost	117,807	135,781
Total	165,307	185,681

The provision has been estimated by management based on the most recent valuation of the pension scheme performed by an independent firm of professional actuaries.

The principal assumptions used by the professional actuaries in determining the pension costs were as follows:

	2014/2015	2013/2014
Discount rate	0.8%	0.8%
Salary increase rate	3.0%	3.0%

Assumptions regarding future mortality are based on published statistics and mortality tables.

#### 14 Deferred Revenue

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Lease premium received in advance	1,465,278	1,548,611
Deferred rental income	3,192,000	1,680,000
Plan fees received in advance	1,001,300	1,214,700
Other income received in advance	169,911	370,636
	5,828,489	4,813,947
Represented by:		
Current portion	2,348,744	1,425,729
Non-current portion	3,479,745	3,388,218
	5,828,489	4,813,947

The lease premium received in advance represents the unamortised balances of lease premium received in advance from a tenant.

# NATIONAL PARKS BOARD AND ITS SUBSIDIARY

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 31 March 2015

#### 15 Contribution to Consolidated Fund

With effect from 1 April 2003, NParks is required to make contribution to the Government Consolidated Fund in accordance with the Statutory Corporations (Contributions to Consolidated Fund) Act, Chapter 319A. The provision is based on the guidelines specified by the Ministry of Finance. It is computed based on the net surplus of the Group for each of the financial year at the prevailing corporate tax rate for the Year of Assessment. Contribution to consolidated fund is provided for on an accrual basis.

#### 16 Deferred Capital Grants

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Balance at the beginning of the financial year	117,253,342	123,143,488
Amounts transferred from Government grants (Note 11)	8,601,443	5,366,723
Amounts transferred from Garden City Fund (Note 20)	1,000,000	-
	126,854,785	128,510,211
Less: Amortisation of Deferred Capital Grants	(10,545,261)	(11,256,869)
Balance at the end of the financial year	116,309,524	117,253,342
Total capital grants received (excluding grants-in-kind transferred from Garden City Fund) and utilised since establishment	231,223,430	222,621,987

#### 17 Capital Account

Capital account represents the value of assets net of liabilities (excluding the leasehold land acquired via Government capital grants) transferred from the former Parks and Recreation Department ("PRD") of MND when NParks was established in June 1990 and when PRD merged with NParks in July 1996.

#### 18 Share Capital

	2014/2015	2013/2014	2014/2015	2013/2014
	Number of shares		\$	\$
Issued and fully paid up:				
At beginning and end of year	1,000	1,000	1,000	1,000

Injection of capital is part of the Capital Management Framework for Statutory Boards under Finance Circular Minute M26/2008. The shares have been fully paid and are held by the Minister for Finance, a body corporate incorporated by the Minister for Finance (Incorporation) Act (Chapter 183). The holder of these shares, which has no par value, is entitled to receive dividends.

#### 19 Sinking Fund

The sinking fund is designated to fund the replacement and capital improvement of property, plant and equipment.



NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

20 Net Assets of Garden City Fund

NParks established the Garden City Fund ("GCF") on 1 July 2002 to enhance the enjoyment of the garden city in areas where there is no government funding. The Garden City Fund is managed, administered and controlled by the Garden City Fund Management Committee (the Committee), although NParks has the authority to remove any members from the Committee, and provide directions and guidelines on the conduct of meetings and other matters relating to the proceedings of the Committee.

The Garden City Fund comprises the Garden City Endowment Fund (GCEF) and the Garden City Non-Endowment Fund (GCNEF). The GCNEF comprises all moneys transferred from the specific funds of NParks upon the formation of the Garden City Fund on 1 July 2002 and all other contributions to the GCNEF.

The GCNEF and the income from the GCEF will be used to further the objectives of the Garden City Fund.

Upon dissolution of the Garden City Fund, the remaining moneys in the fund shall be donated to charitable organisations which have been designated as Institutions of a Public Character under the Income Tax Act (Chapter 134) and registered under the Charities Act (Chapter 37).

The following financial information represents GCNEF. There has been no contribution to the GCEF since establishment.

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Donations received	4,012,512	1,794,654
Sales of publications/souvenirs	105,409	134,242
Courses/tours fees	123,323	92,508
Interest income	34,120	27,504
Exchange gain	-	8,469
Other income	801	950
	4,276,165	2,058,327
Printing and stationery	43,815	92,819
Horticultural works	88,655	103,887
Publicity and outreach activities	2,558,877	389,629
Professional fees	281,424	289,194
Depreciation of plant and equipment	45,800	42,517
Loss on disposal of plant and equipment	-	683,333
Rental expenses	20,370	3,388
Enhancements of parks/facilities	27,375	109,966
Library operating expenses	64,095	61,512
Transfer of donated gallery	1,000,000	-
Exchange loss	2,019	-
Others	114,720	36,775
	4,247,150	1,813,020
Surplus for the year	29,015	245,307
Surplus for the year	29,015	245,307
Accumulated fund at beginning of the year	11,790,533	11,545,226
Accumulated fund at end of the year	11,819,548	11,790,533
Represented by:		
Current assets		
Cash and cash equivalents	15,207,566	11,566,058
Other receivables	86,873	24,569
	15,294,439	11,590,627

NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Non-current asset		
Plant and equipment	252,382	264,038
Current liabilities		
Trade payables	272,208	4,864
Other payables	78,538	59,268
Deferred donation income	3,376,527	-
	3,727,273	64,132
Net assets	11,819,548	11,790,533

21 Net Assets of National Productivity Fund

NParks also administers the following fund on behalf of the Productivity Fund Administration Board.

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Balance as at beginning of the year	3,515,761	3,892,006
Less: Expenditure	(1,581,075)	(376,245)
Staff related cost	(192,236)	(184,415)
Consultancy/Professional fees	-	(263)
General administration	(26,739)	(87,667)
Grant disbursement	(1,362,100)	(103,900)
Balance as at end of the year	1,934,686	3,515,761
Represented by:		
Cash and bank balances	2,048,396	3,552,126
Accruals	(113,710)	(36,365)
Net assets	1,934,686	3,515,761

22 Miscellaneous Income

	Group		NParks	
	2014/2015	2013/2014	2014/2015	2013/2014
	\$	\$	\$	\$
Liquidated damages	612,876	450,352	612,876	450,352
Course fees	1,597,781	1,785,407	1,597,781	1,785,407
Barbeque permit fees	428,562	426,968	428,562	426,968
Park usage fees	708,054	676,493	708,054	676,493
Consultancy fees	1,869	6,000	-	-
Tour fees	74,395	120,571	74,395	120,571
Events income	-	27,314	-	27,314
Merchandise	13,131	243,022	13,131	243,022
Publication and plant sales	267,193	225,428	267,193	225,428
Others	528,645	259,223	528,645	259,223
	4,232,506	4,220,778	4,230,637	4,214,778



## NATIONAL PARKS BOARD AND ITS SUBSIDIARY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31 March 2015

### 23 Staff Costs

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Wages and salaries	70,004,612	63,988,427
Contributions to defined contribution plans	9,633,968	8,647,104
Pension costs	165,307	185,681
Other staff benefits	1,162,685	1,074,074
	80,966,572	73,895,286

There are currently 6 (2013/2014 : 7) employees of NParks who are under pension schemes other than the Central Provident Fund (Note 13).

### 24 Deficit from Operations

The following items have been included in arriving at deficit from operations:

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Loss on disposal of property, plant and equipment	531	115,278

### 25 Dividends

During the financial year ended 31 March 2014, NParks paid total dividends of \$949,000 on the ordinary shares issued to the Minister for Finance in respect of the financial year ended 31 March 2013.

### 26 Funding for Government Project

During the financial year ended 31 March 2015, \$98,167 (2013/2014 : \$3,126,323) was incurred to fund the Eco-link project. This amount was recorded as a reduction in NParks' accumulated surplus during the financial year as this was a contribution to the government.

### 27 Operating Leases Arrangements

#### As lessee

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Minimum lease payments under operating lease included as an expense	1,221,871	1,943,567

The future aggregate minimum lease payments under non-cancellable operating leases contracted for at the reporting date but not recognised as liabilities as at 31 March 2015 with related parties are as follows:

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Within one year	1,204,327	1,180,349
In the second to fifth year inclusive	581,517	1,308,340
	1,785,844	2,488,689

## NATIONAL PARKS BOARD AND ITS SUBSIDIARY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

31 March 2015

#### As lessor

The Group rented out its properties under operating leases. Rental income earned during the year was \$8,253,999 (2013/2014 : \$5,575,853).

The future aggregate minimum lease receivables under non-cancellable operating leases contracted for at the reporting date but not recognised as at 31 March 2015 are as follows:

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Within one year	6,526,583	6,160,004
In the second to fifth years inclusive	20,126,211	21,604,263
After five years	36,240,000	39,440,000
	62,892,794	67,204,267

At the end of the reporting period, NParks has outstanding commitments under non-cancellable operating leases with related parties, which fall due as follows:

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Within one year	1,048,000	921,226
In the second to fifth year inclusive	4,192,000	4,192,000
After five years	3,013,000	4,061,000
	8,253,000	9,174,226

The above amounts exclude operating lease premium received in advance of \$1,465,278 (2013/2014 : \$1,548,611) (Note 14).

### 28 Capital Commitments

	Group and NParks	
	2014/2015	2013/2014
	\$	\$
Contracted but not provided for	273,437,522	227,776,425
Less: Development expenditure on behalf of government	(273,425,581)	(226,771,610)
	11,941	1,004,815
Authorised but not contracted for	314,080,632	352,358,762
Less: Development expenditure on behalf of government	(297,350,240)	(350,710,341)
	16,730,392	1,648,421
	16,742,333	2,653,236

NParks is the agent to develop, upgrade, manage and maintain the public parks on behalf of the government. Amount contracted but not provided for comprise mainly work relating to Garden by the Bay and amount authorised but not contracted for comprise mainly work relating to parks development and park connector network.



NATIONAL PARKS BOARD AND ITS SUBSIDIARY  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
31 March 2015

29   Contingent Liabilities

At the reporting date, there were the following contingent liabilities relating to various claims that have been made against the Group and NParks in respect of third parties damages. These claims have been referred to the insurers for their assessments.

	Group and NParks	
	<u>2014/2015</u>	<u>2013/2014</u>
	\$	\$
Claims not provided for	1,665,336	1,671,576



**Front Cover**

Aerial view of Central Catchment Nature Reserve

**Introduction**

Page 2

Bishan-Ang Mo Kio Park

**Management Team**

Page 8

Top photo – Singapore Quarry

Bottom photo – Hindhede Nature Park

Page 9

Top photo – Bukit Timah Nature Reserve

Bottom photo – Dairy Farm Quarry

**Chapter Dividers**

Page 12 – Greening Our City

View of the city from Pearl’s Hill City Park

Page 20 – Nurturing Our Flora and Fauna

Local volunteers and international experts contributing their time and expertise to deepen understanding of Singapore’s marine heritage through their support and participation in the Comprehensive Marine Biodiversity Survey (CMBS)

Page 30 – Growing Together

The community participating in Garden City Fund’s Plant-A-Tree Programme at Punggol Promenade

Page 40 – Enhancing Capabilities

A landscape worker participating in the Best Chainsaw Operator Championship, as part of Green Thumbs, an annual event by Landscape Industry Association Singapore (LIAS) and Centre for Urban Greenery and Ecology (CUGE) to celebrate the development journey of the landscape industry

**We thank staff and partners of NParks who contributed photos to this annual report:**

Ministry of National Development: front cover

Goh Teck Leong: page 2

Cheah Kin Wai: page 12

Dr Jana Leong-Škorníčková: page 15, photo of ginger (bottom)

Cheryl Chia: page 22, photo of Seraya (top left)

Dr Chua Ee Kiam: page 22, photo of Malayan Horned Frog (bottom left)

David Tan: page 23, photo of Long-tailed Parakeet (bottom)

Kenneth Er: page 24 (top left) and page 37 (bottom)

Neo Mei Lin: page 28, photo of Three-striped flatworm (top left)

Karenne Tun: page 28, photo of Neptune’s Cup sponge (top right)

Mendis Tan: page 28, photo of egrets (bottom)

Soh Kian Beng: page 38

Shawn Yeo: page 46

Yee Gin Pak: page 48

Tan Chee Hiang: page 49

Ong Guat Pheng Shirline: page 50, 51

Oei Geok Baw: inside back cover

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Designed by CREO ADWORLD



Bishan - Ang Mo Kio Park





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