

A NATURAL CONNECTION

ANNUAL REPORT 2016/2017

NATIONAL PARKS

A Natural Connection

Human beings have an innate affinity for nature. Even as modernity and urbanisation become the predominant influences in our lives, we still find ourselves turning to nature to enhance our physical and mental well-being. We find respite and rejuvenation in nature and continue to be enchanted and enthralled by the biodiversity in our midst. There is a word for this. It is “biophilia” — the love of living things that leads us on a constant quest for “A Natural Connection”.

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CHAIRMAN'S MESSAGE



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Even in an urban environment, it is possible to nurture a personal connection with nature.

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As Singapore's lead agency for greening our streetscapes, developing our parks and conserving our biodiversity, the National Parks Board (NParks) has successfully woven nature into our urban environment. This year, we planted more than 52,000 trees and introduced 22 new species, earning Singapore the accolade of being the world's greenest city, ahead of Sydney, Geneva, Vancouver and Frankfurt. Under the Nature Conservation Masterplan, we identified terrestrial and marine native flora and fauna for species recovery efforts, including the critically-endangered Raffles' Banded Langur and four *Hanguana* species native to Singapore.

Our City in a Garden is proof that even in an urban environment, it is possible to nurture a personal connection with nature. At NParks, we are motivated to create multiple opportunities for Singaporeans to experience nature's beauty and to learn about the diversity of our natural heritage.

The Learning Forest in the Singapore Botanic Gardens is an example of our commitment to balance conservation with education. Opened in March 2017 at the Gardens' Tyersall-Gallop Core, visitors can now explore formerly dense forest via boardwalks and elevated walkways, observing the restored wetlands and mature trees of the century-old forest.

Beyond the Botanic Gardens, NParks' stewardship of over 350 parks and gardens allows all Singaporeans to enjoy the restorative benefits of nature close to home. In the west, we are developing Jurong Lake Gardens and our Coastal Adventure Corridor will link park connectors so that cyclists, walkers and runners may seamlessly enjoy the variety of habitats and recreational choices along our eastern coastline.

By fostering a love of nature through daily experience, we cultivate an appreciation for all that is alive and vital. Today, many Singaporeans across all age groups are participating in nature-based activities, from gardening to conservation surveying. We also welcome community leadership. This year, Friends of Chestnut Nature Park, Friends of Park Connector Network and Friends of Sungei Buloh Wetland Reserve joined the Friends of Ubin Network to help us improve the way in which we can better shape the future of these parks and gardens.

We were recognised as the world's greenest city because a third of our urban areas is covered by greenery. At NParks, we also want all Singaporeans to enjoy nature. This vision of a City in a Garden is a continuous work in progress, and we thank you for your continual support towards this aim.



MRS CHRISTINA ONG
Chairman, National Parks Board

MEMBERS OF THE BOARD

AS OF 1 OCTOBER 2017



MRS CHRISTINA ONG
Chairman

Mrs Christina Ong is founder, owner and managing director of the COMO Group, which comprises luxury fashion retail company Club 21, hospitality company COMO Hotels and Resorts, wellness brand COMO Shambhala, and philanthropic grantmaker COMO Foundation.

In 1995, Mrs Ong was awarded the Cavaliere del Lavoro and received the Italian Fashion Hall of Fame Award for her accomplishments, leadership and contributions to the fashion world.



MRS KOH-LIM WEN GIN
Board Member

Mrs Koh-Lim was 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 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 Director of Keppel Land Limited, Board Member of Sentosa Development Corporation, Chairman of Sentosa Cove Resort Management Ltd and Senior Advisor to private firms. In 2009, Mrs Koh-Lim was conferred the Meritorious Service Award by the Government of Singapore.



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. She has previously worked in strategic planning, urban planning policies and heritage conservation. Her current research focuses on urban sustainability, and its nexus with development, economic growth and city culture. She supports various regional and international organisations in their work on sustainable urban development, including the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), APEC and World Bank.



SEAH KIAN PENG
Board Member

Member of Parliament for the Marine Parade GRC, Mr Seah is also Chief Executive Officer 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 Consumers Goods Forum, 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.



ANDREAS SOHMEN-PAO
Board Member

Mr Sohmen-Pao is Chairman of BW Group Limited, BW LPG Limited, BW Offshore Limited and Singapore Maritime Foundation. He is also a non-executive director of Singapore Symphonia Company Ltd. Mr Sohmen-Pao was previously Chief Executive Officer of BW Group. He has also served as a non-executive director of Hongkong Shanghai Banking Corporation, the Maritime and Port Authority of Singapore, Sport 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 Editor-in-Chief of The Straits Times and English/Malay/Tamil Media Group of Singapore Press Holdings (SPH). He has been with SPH since 1990. 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. He is currently a board member of National Heritage Board, SPH (Overseas) Ltd, SPH (America) Ltd, The Straits Times Press Ltd, and is Chairman of the board for The Straits Times School Pocket Money Fund.



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 cover 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 Gallery Singapore and National Heritage Board. 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 was formerly Group General Manager, Chief Executive Officer of The Hongkong and Shanghai Banking Corporation Limited (HSBC), Singapore. A member of HSBC's Asian Executive Committee, Mr Harvey-Samuel was directly responsible for all HSBC operations based in Singapore. He continues to serve HSBC as a non-executive Director, and is also currently a member of the Advisory Board of the National Youth Achievement Award Council and National Arts Council, as well as the boards of Surbana Jurong Private Limited and Jurong Town Corporation.



GEORGE HUANG
Board Member

Mr Huang is Managing Director of Amoy Canning Corporation (S) Ltd, a pioneer in the food processing industry in Asia. An active leader and contributor in business and the community, he serves on the boards and committees of various organisations including Singapore Manufacturing Federation, Singapore Business Advisors & Consultants Council and Consumers Association of Singapore. He was also formerly the Honorary Consul General of the Federal Democratic Republic of Ethiopia to Singapore.



MS JAMIE ANG
Board Member

Ms Ang currently heads the Fiscal Policy Directorate in the Ministry of Finance, where she oversees overall fiscal planning and the development of budget policies for ministries as well as strategic planning and economic analysis for the finance ministry. Prior to this, she served as Director for Land and Infrastructure Programmes as well as Director for Social Programmes in the ministry. She has also served in the Ministry of National Development and 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 legislation 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 01 OCTOBER 2017

LEFT TO RIGHT

NG CHEOW KHENG
GROUP DIRECTOR, HORTICULTURE & COMMUNITY GARDENING

DR KIAT W TAN
ADVISOR TO NPARKS

KENNETH ER
CHIEF EXECUTIVE OFFICER

DR LEONG CHEE CHIEW
DEPUTY CHIEF EXECUTIVE OFFICER, PROFESSIONAL DEVELOPMENT & SERVICES CLUSTER, EXECUTIVE DIRECTOR, NATIONAL PARKS, GARDENS & NATURE RESERVES CLUSTER AND COMMISSIONER OF PARKS & RECREATION

MS LEE PIN PIN
GROUP DIRECTOR, COMMUNICATIONS & COMMUNITY ENGAGEMENT



LEFT TO RIGHT

TEVA RAJ
SENIOR DIRECTOR, MUNICIPAL LANDSCAPES

CHUAH HOCK SEONG
GROUP DIRECTOR, PARKS 2 AND ASSOCIATE DIRECTOR, CENTRE FOR URBAN GREENERY AND ECOLOGY (CUGE)

TAN CHONG LEE
ASSISTANT CHIEF EXECUTIVE OFFICER, CORPORATE DEVELOPMENT & SERVICES CLUSTER

YEO MENG TONG
SENIOR DIRECTOR, DESIGN RESEARCH & DEVELOPMENT AND ASSOCIATE DIRECTOR, CUGE

OH CHEOW SHENG
GROUP DIRECTOR, STREETSCAPE

MS TAN LAI KHENG
SENIOR DIRECTOR, LIFESTYLE BUSINESS

The Management Team photos were taken at the Learning Forest, Singapore Botanic Gardens

LEFT TO RIGHT

LIM LIANG JIM
GROUP DIRECTOR, NATIONAL BIODIVERSITY CENTRE

DAMIAN TANG
SENIOR DIRECTOR, DESIGN

KONG YIT SAN
ASSISTANT CHIEF EXECUTIVE OFFICER, PARK MANAGEMENT & LIFESTYLE CLUSTER

DR LENA CHAN
SENIOR DIRECTOR, INTERNATIONAL BIODIVERSITY CONSERVATION

BIN HEE JUM
GROUP DIRECTOR, FINANCE & PROCUREMENT

DR ADRIAN LOO
ACTING GROUP DIRECTOR, CONSERVATION



LEFT TO RIGHT

RYAN LEE
ACTING GROUP DIRECTOR, CORPORATE STRATEGY & PLANNING AND CO-ORDINATING DIRECTOR, SINGAPORE BOTANIC GARDENS OPERATIONS

FRANCIS LIM
GROUP DIRECTOR, CORPORATE SERVICES

MS ANG WEI PING
ACTING GROUP DIRECTOR, POLICY & PLANNING

SIM CHENG HAI
GROUP DIRECTOR, INDUSTRY/CUGE

WONG TUAN WAH
GROUP DIRECTOR, FORT CANNING PARK & ISTANA AND SENIOR CURATOR, ISTANA

DR NIGEL TAYLOR
GROUP DIRECTOR, SINGAPORE BOTANIC GARDENS

CHIA SENG JIANG
GROUP DIRECTOR, PARKS 1

Not in picture: Ms Kartini Omar, Group Director, Parks Development and Group Director, Jurong Lake Gardens

ORGANISATION STRUCTURE

AS OF 01 OCTOBER 2017

Kenneth Er
CHIEF EXECUTIVE OFFICER

Tan Choon Lin
DIRECTOR
Internal Audit*

Dr Kiat W Tan
ADVISOR TO NPARKS

Tan Chong Lee
ASSISTANT CHIEF EXECUTIVE OFFICER
Corporate Development & Services Cluster

- **Ms Lee Pin Pin (Concurrently as QSM)** — GROUP DIRECTOR Communications & Community Engagement
- **Francis Lim** — GROUP DIRECTOR Corporate Services
- **Ryan Lee** — ACTING GROUP DIRECTOR Corporate Strategy & Planning
- **Bin Hee Jum** — GROUP DIRECTOR Finance & Procurement

- **Ms Tracy Won** — DIRECTOR Communications
- **Lew Chee Keong** — DIRECTOR Facilities Management
- **Ms Shirley Ling** — DIRECTOR Corporate Policy & Planning
- **Ms Lim Bee Peng** — DIRECTOR Finance
- **Ms Ng Li-San** — DIRECTOR Communications
- **Ms Chang Siau Hoon** — DIRECTOR Human Resource
- **Joseph Chua** — DIRECTOR Risk Management
- **Ms Nah Bee Luan** — DIRECTOR Procurement
- **Ms Gina Leong** — DIRECTOR Communications & Community Engagement
- **Foong Chee Leong** — DIRECTOR IT
- **Ms Ng Hui Bing** — DIRECTOR Community Engagement
- **Ms Elaine Phua** — DIRECTOR Legal Services & Prosecution and Board Secretary
- **Ms Jacqueline Teo** — DIRECTOR Garden City Fund
- **Mrs Tan-Yan Oi Chee** — DIRECTOR Office Administration

Dr Leong Chee Chiew (Commissioner of Parks & Recreation)
DEPUTY CHIEF EXECUTIVE OFFICER
Professional Development & Services Cluster

- **Ng Cheow Kheng** — GROUP DIRECTOR Horticulture & Community Gardening
- **Sim Cheng Hai** — GROUP DIRECTOR Industry/CUGE
- **Dr Lena Chan** — SENIOR DIRECTOR International Biodiversity Conservation
- **Teva Raj** — SENIOR DIRECTOR Municipal Landscapes
- **Lim Liang Jim** — GROUP DIRECTOR National Biodiversity Centre
- **Ms Ang Wei Ping** — ACTING GROUP DIRECTOR Policy & Planning
- **Oh Cheow Sheng** — GROUP DIRECTOR Streetscape
- **Ms M Pungkothai Kay** — DIRECTOR Community-in-Bloom & Skyrise Greenery
- **Chuah Hock Seong** — ASSOCIATE DIRECTOR CUGE (Concurrently CEO, Singapore Garden City Pte Ltd)
- **Ms Wendy Yap** — DIRECTOR International Biodiversity Conservation
- **Johnny Go** — DIRECTOR Municipal Landscapes
- **Dr Thereis Choo** — DIRECTOR Terrestrial
- **Jeff Seow** — DIRECTOR Parks & Trees Regulatory
- **Chan Chung Leong** — DIRECTOR Streetscape (East)
- **Ms Lilian Kwok** — DIRECTOR Nursery & Horticulture Outreach
- **Yeo Meng Tong** — ASSOCIATE DIRECTOR CUGE
- **Dr Davison Geoffrey William Hamilton** — DIRECTOR Terrestrial
- **Vacant** — DIRECTOR Park Planning
- **Tee Swee Ping** — DIRECTOR Streetscape (West)
- **Mohamad Azmi Bin Shahbudin** — DIRECTOR HortPark
- **Chong Whye Keet** — DIRECTOR CUGE (Industry Development)
- **Ms Linda Goh** — DIRECTOR Biodiversity Information & Policy
- **Abdul Hamid bin Mohd** — DIRECTOR Landscaping & Arboriculture
- **Shamril bin Jamil** — DIRECTOR CUGE (Manpower Development)
- **Dr Karenne Tun** — DIRECTOR Coastal & Marine
- **Dr Benjamin Lee** — DIRECTOR CUGE Research

Kong Yit San
ASSISTANT CHIEF EXECUTIVE OFFICER
Park Management & Lifestyle Cluster

- **Damian Tang** — SENIOR DIRECTOR Design
- **Yeo Meng Tong** — SENIOR DIRECTOR Design Research & Development
- **Chia Seng Jiang** — GROUP DIRECTOR Parks 1
- **Chuah Hock Seong** — GROUP DIRECTOR Parks 2
- **Ms Kartini Omar** — GROUP DIRECTOR Parks Development
- **Ms Tan Lai Kheng** — SENIOR DIRECTOR Lifestyle Business
- **Ms Kalthom Binte Abd Latiff** — DIRECTOR Arts & Heritage Parks
- **Tay Boon Sin** — DIRECTOR Community Parks
- **Ms Ang Chiean Hong** — DIRECTOR Development Management 1
- **Ms Wendy Seah** — DIRECTOR Programming & Events
- **Ms Wee Khee Li** — DIRECTOR Coastal Parks
- **Ling Han** — DIRECTOR Riverine Parks
- **Ms G Kannagi** — DIRECTOR Development Management 2
- **Yee Chung Yao** — DIRECTOR Park Connector Network

Dr Leong Chee Chiew
EXECUTIVE DIRECTOR
National Parks, Gardens & Nature Reserves Cluster

- **Dr Adrian Loo** — ACTING GROUP DIRECTOR Conservation
- **Wong Tuan Wah** — GROUP DIRECTOR Fort Canning Park & Istana
- **Ms Kartini Omar** — GROUP DIRECTOR Jurong Lake Gardens
- **Dr Nigel Taylor** — GROUP DIRECTOR Singapore Botanic Gardens
- **Ms Sharon Chan** — DIRECTOR Central Nature Reserve
- **Koh Poo Kiong** — DIRECTOR Fort Canning Park
- **Richard Pang** — DIRECTOR Jurong Lake Gardens Development
- **Ms Terri Oh** — DIRECTOR Education
- **Robert Teo** — DIRECTOR Pulau Ubin
- **Wong Tuan Wah** — SENIOR CURATOR Istana
- **Koh Soon Kiong** — DIRECTOR Jurong Lake Gardens Operations
- **Dennis Lim** — DIRECTOR Festival, Events & Exhibitions
- **How Choon Beng** — DIRECTOR Sungei Buloh
- **Vacant** — CURATOR Istana
- **Dr David Middleton** — CO-ORDINATING DIRECTOR Research & Conservation and Keeper of Herbarium
- **Ms Ng Yuin-Mae** — DIRECTOR Singapore Botanic Gardens Development
- **Ms Tan Siew Tin** — DIRECTOR Singapore Botanic Gardens Facilities
- **Ryan Lee** — CO-ORDINATING DIRECTOR Singapore Botanic Gardens Operations
- **Wayne Teo** — DIRECTOR Visitor Management & Security

* Internal Audit reports functionally to the Audit Committee



BUILDING THE NATURAL CONNECTION

NPARKS REMAINS COMMITTED TO INTEGRATING GREENERY INTO OUR BUILT INFRASTRUCTURE AND ENHANCING NATURE SO THAT IT BECOMES PART OF OUR URBAN LANDSCAPE. THIS GIVES RESIDENTS MORE OPPORTUNITIES TO CONNECT WITH, AND TO NURTURE THEIR LOVE FOR, NATURE.



The Learning Forest is located in the new Tyersall-Gallop Core of the Singapore Botanic Gardens, and is designed to integrate with the existing 6-hectare Rain Forest to form an enlarged forest habitat.

Nurturing biophilia in the city

The Learning Forest, an extensive restoration project of the lowland forest and wetland habitats that used to surround the Singapore Botanic Gardens, was opened by Prime Minister Lee Hsien Loong on 31 March 2017.

Among the highlights of the 10-hectare forest is the Keppel Discovery Wetlands, the first project in Southeast Asia to recreate a freshwater swamp forest. The wetlands features a carefully curated plant collection of over 300 species found in various habitats such as the orchid island, pulai marsh and a variety of riverine vegetation belt types. These are connected by trails and boardwalks that bring visitors right to the water's edge and up close to the rich biodiversity.

Another interesting feature is the SPH Walk of Giants, an elevated boardwalk in the forest which showcases a collection of "giant" trees. Most of these can, in time, grow up to at least 60 m or about 20 storeys high, allowing visitors to immerse themselves in nature amidst the tree canopies.

The Learning Forest was designed to integrate with the Gardens' existing 6-hectare Rain Forest to form an enlarged forest habitat that will help strengthen the conservation of native flora and fauna. It forms a buffer against urban developments surrounding Singapore's first UNESCO World Heritage site, and serves as an important reference for ongoing research into restoration ecology in the region. Its opening also marked the establishment of the Tyersall-Gallop core, the Gardens' fourth core in addition to the Tanglin heritage core, the Central tourist core, and the Bukit Timah core which forms the educational and discovery zone.



Visitors can learn more about the freshwater forest wetland ecosystems at the 1.8-hectare Keppel Discovery Wetlands.



Minister for National Development and Second Minister for Finance Lawrence Wong, Prime Minister Lee Hsien Loong, staff of Singapore Botanic Gardens and NParks CEO Kenneth Er walking amongst a collection of some of the tallest tree species in Southeast Asia at the SPH Walk of Giants.

Garden within the Gardens

The Heritage Garden, which highlights the social history of the Singapore Botanic Gardens as well as its pivotal role in Singapore's greening journey, was opened on 28 May 2016. The new garden overlooks Swan Lake and is located on the same lawn where Singapore's first "Aneka Ragam Ra'ayat" or People's Variety Show took place in 1959. It showcases more than 80 different plants representing the various types introduced to Singapore through our Garden City campaign.

The opening of the Heritage Garden marked the start of the Singapore Botanic Gardens Heritage Week – a new annual event featuring a series of performances and activities for park visitors to enjoy and celebrate the Gardens' rich heritage.

The Singapore Botanic Gardens is also embarking on a 10-year project to research and publish a comprehensive "Flora of Singapore" which will catalogue and describe about 3,000 native and naturalised plant species found in Singapore.



The Heritage Garden, set within the Singapore Botanic Gardens, is a place to gather and admire nature, particularly the fragrant and colourful plantings that were introduced to Singapore through the Garden City campaign.

Jurong Lake Gardens takes shape

Jurong Lake Gardens, which comprises the Chinese and Japanese Gardens and the former Jurong Lake Park, is taking shape. The design consultancy tender for the Chinese and Japanese Gardens was awarded in October 2016, even whilst the former Jurong Lake Park in the west was being developed. Public engagement sessions such as exhibitions and townhalls were held to gather feedback on the winning team's proposal. The public also had the opportunity to provide suggestions online.

The 90-hectare Jurong Lake Gardens is envisioned to be Singapore's new national gardens in the heartlands, giving residents in the west a large green space to relax, enjoy recreational activities or immerse themselves in nature. The masterplan for the Gardens, which revolves around themes such as nature, play, sustainability, science and the community, was conceptualised based on earlier public feedback and will be refined further with the ideas gathered from these various platforms.





New vistas at East Coast Park

Visitors to the much-loved East Coast Park can now enjoy more open spaces with vistas of the sea at the newly-upgraded Marine Cove.

Marine Cove was redeveloped based on a lifestyle concept focused on providing more recreation and dining options for families. New features include improved connectivity with neighbouring facilities and enhanced family-friendly amenities. A highlight is the large colourful children's playground with play equipment catering to various age groups as well as inclusive elements to encourage children of different abilities to play together.

More inclusive playgrounds

Children of different abilities now have more places to play in while enjoying our parks. Besides the children's playground at East Coast Park, two other inclusive playgrounds were opened in the past year at West Coast Park and Pasir Ris Park, in collaboration with the National Council of Social Service. These playgrounds feature equipment specially designed to support a range of motions such as spinning, rocking and swinging to improve muscle control. Together with the inclusive playground at Bishan-Ang Mo Kio Park which was opened in 2015, NParks has completed four such facilities to date.

NParks also launched Therapeutic Garden @ HortPark, Singapore's first therapeutic garden in a public park, in May 2016. The garden was developed in consultation with the National University Health System (NUHS), based on best practices and evidence-based design principles relating to therapy for improving mental well-being.

Research has shown the positive effects of spending time amidst greenery and creating a bond with nature. NParks will also develop a set of guidelines and design principles for therapeutic gardens, and partner other public agencies to develop such gardens in their premises.



(TOP LEFT) The public gave their feedback on what they would like to see for the Chinese and Japanese Gardens during a series of public engagement and townhall sessions held from November 2016 to February 2017.
(TOP RIGHT) Visitors to the Therapeutic Garden @ HortPark can participate in activities that are meant to stimulate their senses and encourage better motor and hand-eye coordination.
(LEFT) The 3,500-sqm children's playground at Marine Cove in East Coast Park has play equipment such as swings, a rope bridge, and a three-storey play tower, suitable for children aged two to 12 years old.



(TOP) The beautiful pink flowers of the Trumpet Tree (*Tabebuia rosea*) retain their colour for a few days after they fall, forming a beautiful carpet of flowers around the tree.
(BOTTOM LEFT) Trellis plantings along the covered linkway next to Paya Lebar MRT station green up concrete urban spaces, enhancing commuters' travelling experience.
(BOTTOM RIGHT) The *Bougainvillea* 'Thimma' brightens up our streets, enhancing Singapore's reputation as a City in a Garden.

Vibrant streetscapes

To further strengthen natural connections in the urban context, NParks enhanced 14 more roads by intensifying the planting of trees and shrubs. More than 52,000 trees were planted and 22 new species introduced in the past year. In all, more than 1,000 roads have been rejuvenated to date.

As part of the centralisation of greenery management, NParks has taken over the maintenance of more than 500,000 trees from fellow agencies.

Singapore's natural heritage was further enriched by the endorsement of 12 new Heritage Trees during the year in review.

To create opportunities for residents to interact with nature during the daily experience of going to work or to school, NParks has planted foliage in many concrete urban spaces. Some 12 MRT stations such as Khatib, Lavender and Jurong East were greened up in FY 16 and trellis plantings were implemented along eight stretches of covered linkways in Ang Mo Kio, King Albert Park, Mountbatten, Paya Lebar, Stadium Boulevard, Tampines, Yew Tee and Yio Chu Kang.

NParks also transformed a stretch of concrete pathway linking Ang Mo Kio MRT station to Bishan-Ang Mo Kio Park into a 1-km linear walking and cycling park lined with shrubs, butterfly-attracting plants and a large outdoor terrarium that is a microcosm of a rainforest environment.







(TOP) An artist's impression shows the inclined gardens that span the first to the sixth storeys of Oasis Terraces in Punggol. This project by the Housing Development Board received an Outstanding Award under the LEAF certification.
(BOTTOM) Residents can enjoy the beautiful rooftop garden at Leng Kee Community Club. It was one of multiple projects that received support from the Skyrise Greenery Incentive Scheme.

Greening upwards

Singapore's skyrise greenery footprint grew by 8.5 hectares in 2016, bringing the total coverage to 80.5 hectares. New housing estates such as Punggol Waterway and Dawson have incorporated green roofs and vertical greenery into their construction while private developments such as Oasia Hotel Downtown have found ways to add greenery innovatively. Projects including Unity Primary School and Leng Kee Community Club received support from the Skyrise Greenery Incentive Scheme.

Twelve developments were also certified under the Landscape Excellence Assessment Framework (LEAF), a certification scheme to recognise development projects that demonstrate innovative design and implementation of greenery, high-quality landscapes and biodiversity enhancement. These developments, which enable users to benefit from more intimate connections with nature, included Ng Teng Fong General Hospital and Jurong Community Hospital, SAFRA Punggol and the Oasis Terraces neighbourhood centre. This brought the total number of LEAF-certified developments in Singapore to 42.





(LEFT) When the Coastal Adventure Corridor is completed, residents in housing estates in the north and northeast of Singapore can hike or cycle to the downtown area, enjoying beautiful scenic views, like this in Pasir Ris, along the way.
(TOP) An artist's impression of Rower's Bay at Lower Seletar Reservoir Park, part of the Coastal Adventure Corridor, which will have amenities like look-out points and shelters for visitors.

Connecting communities with nature

SENGKANG — **PASIR RIS** — **EAST COAST PARK**

LOWER SELETAR RESERVOIR PARK — **PUNGGOL** — **CHANGI** — **GARDENS BY THE BAY EAST**









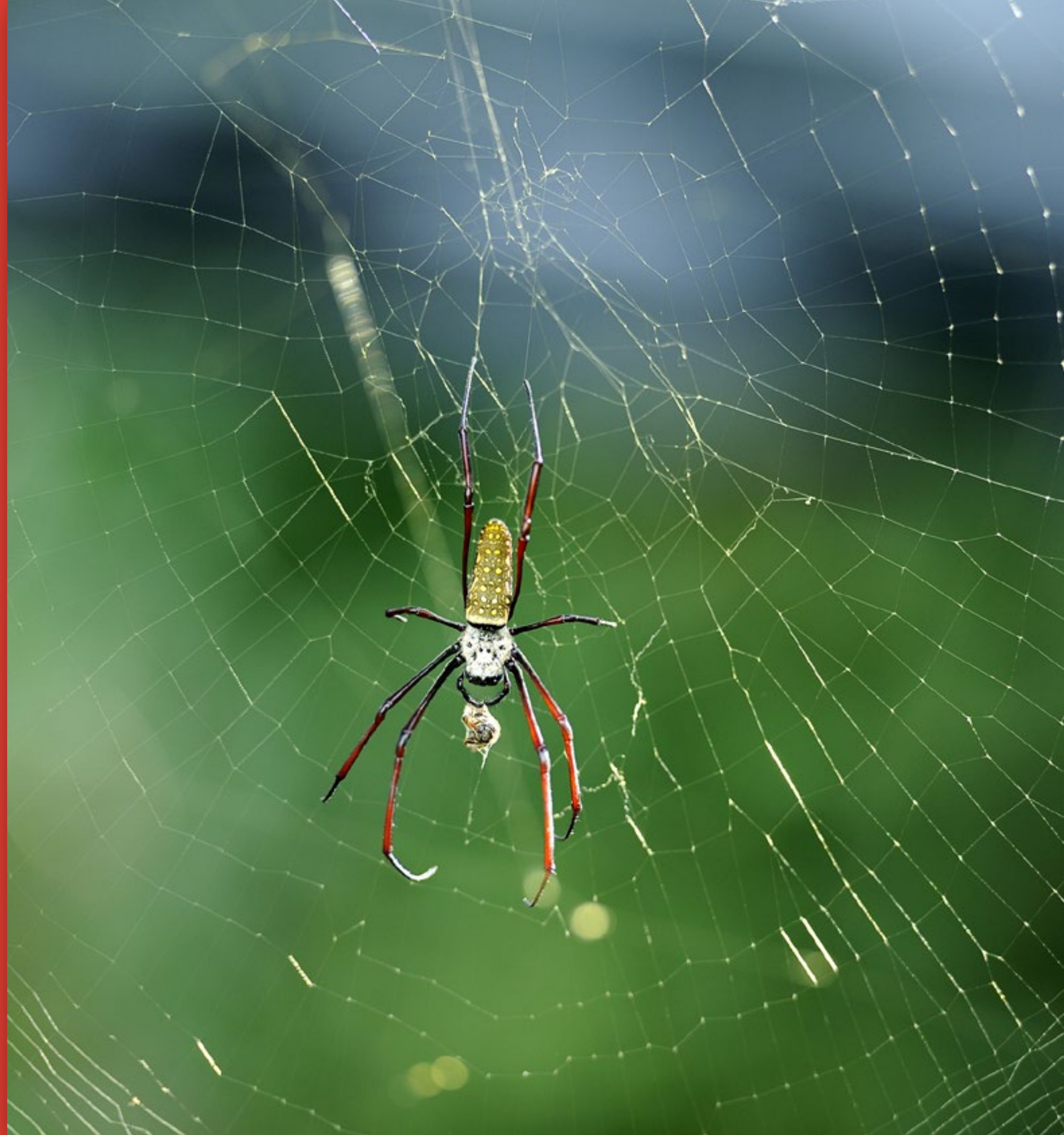
Work on the Coastal Adventure Corridor, part of the Round Island Route (RIR), started in end 2016. The RIR is a continuous 150-km park connector that goes around Singapore, complementing existing park connectors and connecting natural, cultural, historical, and recreational sites as well as communities.

The Coastal Adventure Corridor will be the first of three RIR corridors to be developed. It functions as an ecological connector, serving the highly-populated towns of Sengkang, Punggol and Pasir Ris. When completed, residents will be able to walk, hike or cycle from Lower Seletar Reservoir Park along the coasts of Punggol, Pasir Ris, Changi and East Coast Park to Gardens by the Bay, linking housing estates to the downtown area.

Nature lovers can also look forward to special features such as a man-made island with wetland plantings for otters to build their holts at Sengkang Riverside Park. For all park connector users, these experiences provide beautiful perspectives of both our built and natural landscapes, demonstrating that not only is nature alive in our city, it is also dynamic and thriving.

CONSERVING THE NATURAL CONNECTION

WE EXPERIENCE NATURE IN DIFFERENT WAYS – WE SEE IT, SMELL IT, HEAR IT AND FEEL IT. OUR INNATE CONNECTION WITH NATURE LEADS US TO APPRECIATE BIODIVERSITY AND FUELS NPARKS' COMMITMENT TO CONSERVE SINGAPORE'S NATURAL LEGACY FOR FUTURE GENERATIONS TO ENJOY.



Strengthening the foundations for biophilia

The restoration and sensitive enhancement of Bukit Timah Nature Reserve, which reopened in October 2016 after a two-year closure, is one example of NParks' commitment to strengthening our connection with nature.

Enhancements to protect the Reserve's biodiversity included enrichment planting to enhance the forest habitat, as well as the installation of raised boardwalks at several sections to minimise human impact while offering visitors the experience of being enveloped by one of the last vestiges of Singapore's primary tropical rainforests.

An interim report on a comprehensive two-year biodiversity survey for the Reserve, supported by HSBC through the Garden City Fund, noted that several rare flora and fauna species, some previously thought to be extinct, have been rediscovered. Examples include the Malayan Porcupine (*Hystrix brachyura*) and Slender Walking Catfish (*Clarias nieuhofii*). Researchers have also discovered more than five potentially new species of spiders as well as a new record of a climbing plant from the Aroid family.





(LEFT) An upgraded Visitor Centre was part of the restoration works completed at Bukit Timah Nature Reserve. Visitors can find out more about the importance of the Reserve's ongoing conservation efforts through displays and interactive screens at the Centre.
(TOP) The Slender Walking Catfish has strong pectoral fins that enable it to "walk" between the forest streams of the Bukit Timah Nature Reserve during dry periods.
(BOTTOM) Prior to its closure, Bukit Timah Nature Reserve received more than 400,000 visitors yearly. To encourage visitors to keep to designated trails, railings were installed besides these trails to minimise trampling which can result in soil erosion and gully formation.



Creating green buffers

Another key strategy under the Nature Conservation Masterplan is to strengthen the protection of the Nature Reserves through a network of buffers in the form of nature parks.

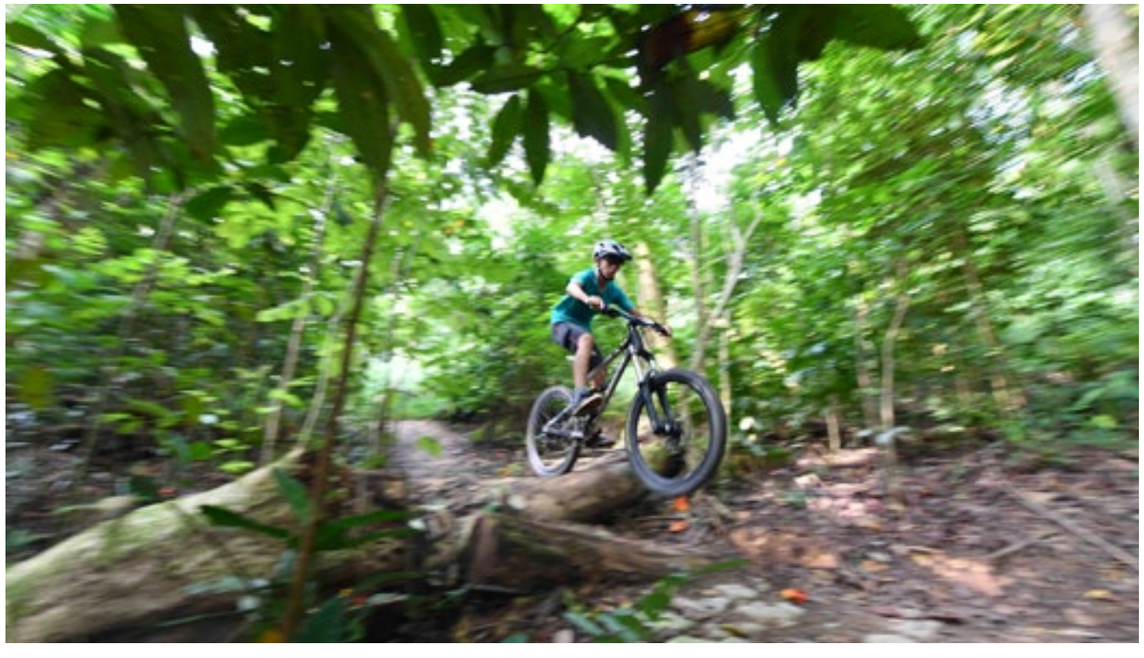
In February 2017, NParks opened the 64-hectare Chestnut Nature Park (North). Combined with the southern portion which was opened in April 2016, the completed Chestnut Nature Park, which buffers the Central Catchment Nature Reserve, is Singapore's largest nature park to date. It covers a total of 81 hectares and has 8.2 km of biking trails and 5.6 km of hiking trails, giving visitors more options to enjoy recreational activities amidst verdant greenery without impacting the Nature Reserve.

Extending the buffer for the Central Catchment Nature Reserve improves the ecological network for biodiversity. As part of habitat enhancement efforts, Friends of Chestnut Nature Park members planted 50 native trees at the park in January 2017.

NParks has also announced plans for the upcoming Thomson Nature Park, which will be located between Old Upper Thomson Road and Upper Thomson Road. The 50-hectare site is largely forested and home to many rare and locally endangered animals.



(TOP) NParks Chairman Mrs Christina Ong, then Minister in the Prime Minister's Office and the Second Minister in the Ministry of Home Affairs & National Development Desmond Lee and Minister for Foreign Affairs Dr Vivian Balakrishnan planted trees during the opening of Chestnut Nature Park (North), enhancing the green buffer around the Central Catchment Nature Reserve.
(BOTTOM) Visitors to Chestnut Nature Park can hike or take to its mountain biking trails. At 8.2 km long, the biking trails comprise of varying levels of difficulty, ideal for beginners to advanced bikers.



Partnering the international community on conservation

NParks plays an active role in facilitating international partnerships in biodiversity conservation. In January 2017, it organised and hosted two back-to-back events on the conservation of migratory birds.

The East Asian-Australasian Flyway Partnership's (EAAFP) 9th Meeting of Partners was attended by a record 130 participants from some 20 countries including China, Russia and the United States.

The East-Asian Australasian Flyway extends from within the Arctic Circle, southwards through East and Southeast Asia, to Australia and New Zealand, and supports over 50 million migratory birds. Singapore was a founding partner of the EAAFP, formed to provide a flyway-wide platform for international cooperation to protect migratory waterbirds, their habitats and the livelihoods of people dependent upon them.

Prior to the EAAFP Meeting of Partners, the Arctic Migratory Birds Initiative (AMBI) Workshop was held at Sungei Buloh Wetland Reserve. The workshop, which attracted 96 participants from 25 countries, identified priorities and actions for the conservation of Arctic-breeding migratory birds that use the East-Asian Australasian Flyway, particularly in Southeast Asia. It was organised by the Arctic Council's biodiversity working group – Conservation of Arctic Flora and Fauna – in collaboration with NParks and the Ministry of Foreign Affairs, with the support of the Royal Norwegian Embassy (Singapore).

In mid-February, NParks hosted the ASEAN-Republic of Korea Forest Cooperation (AFoCo) Workshop on Urban Forestry and Biodiversity Conservation. The three-day workshop helped officials in the forest sector build up their capacity while facilitating information sharing of the experience gained amongst ASEAN countries including from Singapore's implementation of urban forestry and biodiversity conservation projects.





Sungei Buloh Wetland Reserve hosted the East Asian-Australasian Flyway Partnership's Meeting of Partners and the Arctic Migratory Birds Initiative this past year. These events bring international partners together to discuss issues about the conservation of migratory birds such as the (LEFT) Pacific Golden Plover (*Pluvialis fulva*) and (ABOVE) Whimbrel (*Numenius phaeopus*).





(TOP LEFT) NParks partnered with students from Ngee Ann Polytechnic to complete habitat enhancement works at the Sensory Trail Ponds on Pulau Ubin. Students helped to design and implement the planting plan for fauna such as waterhens, crakes, herons, dragonflies and damselflies.
(TOP RIGHT) Visitors learnt about what they can do to help biodiversity conservation on the island during events such as Ubin Day 2016, which was part of a month-long series of events called Pesta Ubin.
(BOTTOM) House 363B has been carefully refurbished and conserved as a model of a Chinese kampung house. Built in the 1970s, the house features specially-curated memorabilia to give visitors a peek into life on the island in the 1970s.



Conserving Ubin for future generations

NParks has been designated the central managing agency for Pulau Ubin, overseeing the maintenance of most aspects of Ubin, including its infrastructure and public amenities, in addition to the current responsibilities of maintaining the greenery on the island.

NParks seeks to create a seamless and more enjoyable experience for all visitors, giving everyone different opportunities to enjoy Ubin's rustic character. Together with members from the Friends of Ubin Network (FUN), it established a new fruit tree arboretum and conserved a Chinese kampung house, both of which have been included as highlights of a new Rustic Reflections Tour.

In other conservation efforts on the island, NParks worked with Ngee Ann Polytechnic students to complete habitat enhancement works at the Sensory Trail Ponds and announced that it will begin physical works for shoreline restoration at Noordin Beach in 2017.







A variety of terrestrial and marine native flora and fauna including the Sunda Pangolin, Neptune's Cup Sponge and the Singapore Ginger, has been identified for species recovery efforts. This will span the next two to 10 years and is implemented to safeguard against the extinction of rare and endangered native species.

Spearheading Singapore's nature conservation strategy

Biodiversity is thriving in Singapore, and conserving this rich legacy is vital to strengthening our connection with nature.

Under the Nature Conservation Masterplan, NParks identified 46 species of terrestrial and marine native flora and fauna for species recovery efforts. The announcement was made during the annual Festival of Biodiversity which was held at the Singapore Botanic Gardens in September 2016, in collaboration with 31 partner organisations from the Biodiversity Roundtable.

Examples of terrestrial fauna on the species recovery list include the critically-endangered Raffles' Banded Langur (*Presbytis femoralis femoralis*), a subspecies of the Banded Leaf Monkey that can only be found in Singapore and southern Peninsular Malaysia; and the Sunda Pangolin (*Manis javanica*) or scaly anteater, a solitary mammal found in Singapore's nature reserves and forested areas.

Amongst the flora on the list are the Singapore Ginger (*Zingiber singapurense*), a critically endangered and endemic ginger which was first collected by NParks staff in the Central Catchment Nature Reserve in 2012, and four *Hanguana* species which are native to Singapore. Of these, two (*Hanguana rubinea* and *Hanguana triangulata*) are new to science and endemic to Singapore.

Marine species recovery projects include the reintroduction of the Giant Clam (*Tridacna gigas*) and Neptune's Cup Sponge (*Cliona patera*) and plans for the setting up of Singapore's first turtle hatchery, which will provide a dedicated in situ facility to receive, nurture and hatch rescued turtle eggs to increase survival rates.



The Festival of Biodiversity 2016 was a good opportunity for youths to learn more about our native species and the on-going recovery efforts to conserve our rare flora and fauna.

Joining hands in species recovery

The Ubin community has been active in reforestation and species recovery efforts on the island. As part of the International Day for Biological Diversity in May 2016, Friends of Ubin Network (FUN) members planted mangrove saplings at the Ubin Living Lab's new mangrove arboretum to help reforest the island's mangroves.

In other projects, some 60 students from ITE College East and Republic Polytechnic partnered NParks in bird and bat species recovery efforts. Thirty bat boxes were installed across Pulau Ubin for insectivorous bats to roost.

NParks has also installed two holts to monitor and study otter behaviour as part of species recovery efforts for the Oriental Small-clawed Otter (*Aonyx cinerea*), and reintroduced some 800 orchids from 15 distinct species across the island under the NParks Orchid Conservation Programme.

These initiatives help strengthen the visitors' natural connection to the island by giving them the opportunity to discover its flora and fauna as part of their Ubin experience.

In other biodiversity updates, 157 fauna species have been recorded at Coney Island Park since its opening in October 2015. These include about 80 bird species, 25 butterfly species and more than 35 intertidal species including the endangered Coastal Horseshoe Crab and carpet anemones. Of these fauna species, 53 are considered locally threatened.



Families came together on the International Day for Biological Diversity to do their part for reforestation, planting mangrove saplings at the mangrove arboretum on Pulau Ubin.



An artist's impression of the boardwalk that will be sensitively established on Big Sister's Island. Set against the backdrop of the sea, visitors can take in scenic views of the coastline and spot biodiversity.

Sustaining marine biodiversity

Sisters' Islands Marine Park covers some 40 hectares around Big Sister's Island and Small Sister's Island, and along the western reefs of St John's Island and Pulau Tekukor.

Under the Marine Conservation Action Plan, a coral nursery has been set up at the Marine Park to harbour all 255 species of hard corals recorded in Singapore, and new Reef Enhancement Units (REU) have been installed to nurture and propagate locally rare species of corals collected from Singapore's waters. They join the nine existing REUs sponsored by the Hongkong and Shanghai Banking Corporation Limited as part of "Plant-A-Coral, Seed-A-Reef", a new community outreach initiative managed by the Garden City Fund, that was announced in May 2016.

As part of new conservation, research, outreach and educational plans, Big Sister's Island will feature a boardwalk, intertidal pools and a floating pontoon, offering the public more opportunities for close-up encounters with marine and terrestrial biodiversity. Small Sister's Island will serve as a dedicated site for marine conservation research with facilities to promote species recovery and habitat enhancement.



Big Sister's Island will serve the Sisters' Islands Marine Park's objectives of conservation, outreach and education. Visitors will have the chance to observe marine life such as (TOP) hard corals and (BOTTOM) sea fans.







Students at the 12-hour BioBlitz@Kent Ridge Park helped to conduct nature surveys, including identifying and counting butterflies such as the Common Tiger (*Danaus genutia*).

Engaging the public in citizen science

Everyone can contribute towards building a biophilic city. This past year, some 1,000 volunteers participated in NParks' Community in Nature (CIN) citizen science programmes.

A total of 154 bird species were spotted by citizen scientists during three Garden Bird Watch sessions in 61 parks and nature areas, and 77 species of butterflies were spotted during two Butterfly Watch sessions which covered 45 parks and nature areas.

In December 2016, members of the public joined naturalists and researchers for Pulau Ubin's first BioBlitz, helping with 30 nature surveys over 24 hours. Following this, a 12-hour BioBlitz@Kent Ridge Park was held in March 2017, with some 30 researchers and 150 volunteers helping to document 235 species of flora and fauna. The data gleaned from such BioBlitzes inform habitat enhancement efforts and lay the groundwork for more comprehensive biodiversity surveys.

In other outreach initiatives, NParks staff, volunteers and students carried out a record 1,884 surveys in May 2016 as part of "Operation No Release" to educate the public on the negative impact of animal release. NParks also introduced a new year-long "Families for Nature" initiative in September 2016 to encourage families to participate in nature-related activities.





Participants of the Garden Bird Watch learnt that sharp eyes are essential but a pair of binoculars can also help when trying to identify birds like the nationally critically-endangered Grey-headed Fish Eagle (*Ichthyophaga ichthyaetus*).

SHARING THE NATURAL CONNECTION

A SHARED LOVE FOR NATURE IS A POWERFUL FORCE THAT BRINGS COMMUNITIES TOGETHER, STRENGTHENS BONDS AND CREATES A SENSE OF OWNERSHIP OF SINGAPORE'S GREEN SPACES.

Celebrating a record turnout

The Singapore Garden Festival 2016 marked its sixth edition with the largest turnout ever, attracting some 400,000 visitors. Held in July, the festival was spread across 9.7 hectares at Gardens by the Bay. Visitors were treated to 72 displays across competitive and non-competitive categories such as Landscape and Fantasy Gardens, Floral Windows to the World, Balcony Gardens, the Gardeners' Cup, World of Terrariums and the Landscape Design Challenge for students.

In April, during the lead-up to the festival, the organisers unveiled the world's largest floral chandelier which measured 17 m by 10 m and was made from over 60,000 flowers. An island-wide "Adopt-A-Plant" initiative was also launched as a way to bring an element of the natural world into indoor spaces and to encourage a love for gardening amongst Singaporeans.

Recognising the volunteers' role

In a special NParks Volunteers Appreciation ceremony at the Singapore Garden Festival, 17 members of the community were recognised for their 10 or 15 years of volunteering and presented with long service awards.

A thriving biophilic city presents many opportunities for its residents to become involved with ecological restoration and conservation efforts. NParks has more than 1,500 active volunteers who serve at least 12 hours a year. Since April 2016, volunteers have been participating in Intertidal Watch quantitative surveys which were first opened to the public early in the year. Volunteer groups also help with horticulture maintenance works at Fort Canning Park and Bishan-Ang Mo Kio Park. There has also been strong support from corporate volunteers including staff from Ascendas-Singbridge Gives Foundation, Keppel Corporation and HSBC.

The Singapore Garden Festival delighted some 400,000 visitors during its eight-day run at Gardens by the Bay.



Cultivating a love for gardening

In the past year, NParks created more than 80 new Community in Bloom (CIB) gardens, bringing the total number of community gardens to more than 1,000. More than 160 gardening groups have also been established under the CIB Indoor Gardening initiative.

In June 2016, a record 436 community gardens participated in the biennial CIB Awards which recognises excellence in gardening efforts by community groups in public and private housing estates, educational institutions and organisations. This was 93 gardens more than the number that participated in 2014, reflecting the positive response from residents towards community gardening, and how more people have become engaged with, and care for, the nature around them.

In other gardening initiatives, CIB, together with Tampines Central Community Club, launched the Tampines Central Garden Trail in May 2016. Guided tours were also introduced in Bukit Panjang.

In another boost for the gardening community, NParks started its first allotment gardening scheme at HortPark in July 2016, where plots are available for rent to individuals and non-commercial gardeners.



(TOP) There are now more than 1,000 community gardens dotted across Singapore. The Community in Bloom gardening movement helps foster a community spirit and brings residents together to make Singapore our garden. (BOTTOM) Mascots Benny Bee, Gary Grasshopper and Lindy Ladybug brought added cheer to the Singapore Garden Festival 2016, the largest to date. At 9.7 hectares, it was almost double the size of the 5-hectare showground in 2014.





(TOP) Minister for National Development and Second Minister for Finance Lawrence Wong demonstrated his musical prowess when he took to the stage during a Concert Series in the Park – Rockestra® performance.
(MIDDLE) Visitors to our parks can immerse themselves in nature, joining a walk to observe flora and fauna, and learning how they can help conserve our biodiversity.
(BOTTOM) With about 3,500 events held in our parks and gardens this past year, there was something for everyone to enjoy.



Creating buzz in the parks

Our parks and gardens are not just places to enjoy nature; these public spaces are also great for spending time with friends and family. In the year in review, the calendar was packed with about 3,500 events, reaching out to people with diverse interests, from music lovers to foodies and art aficionados.

One of NParks' signature events was the Concert Series in the Park – Rockestra®, which was held in locations such as Bishan-Ang Mo Kio Park, Empress Place, Choa Chu Kang Park and Jurong Lake Gardens. The concerts drew residents from all over the island, who were able to enjoy good entertainment and socialise in our many green spaces. NParks also partnered the People's Association to launch the Music in the Park series at Bishan-Ang Mo Kio Park in September.

Other events which were held at the parks included Artists' Night Out at Dhoby Ghaut Green and Heritage Walk at Fort Canning Park, which were held in conjunction with the Singapore Night Festival in August 2016. Fort Canning Park also hosted Weekends in the Park in March 2017, where park visitors sampled tasty treats during an educational gastronomic trail walk, viewed cooking demonstrations using spices and went on themed tours. Such activities gave them the opportunity to learn more about the heritage of the Park and engage with nature.

In November 2016, NParks jointly organised the Clean & Green Singapore Carnival together with the National Environment Agency, PUB and Community Development Council. The annual environmental awareness event, which helps foster a culture of caring about nature, was held opposite Khatib MRT station.

Strengthening online connections

NParks stepped up online engagement efforts, reaching out to over 83,000 and 15,000 fans on its Facebook and Instagram pages respectively. It also used 360-degree photos and Facebook Live as new ways to engage with the community and encourage them to care more about the greenery and biodiversity around them.



Deputy Prime Minister and Coordinating Minister of Economic and Social Policies Tharman Shanmugaratnam led the way in planting a tree during the annual Clean & Green Singapore event.



Creating interest in biodiversity

NParks reached out to educators and students through various programmes during the year to cultivate a love for nature amongst young Singaporeans. Under its Biodiversity Week for Schools in May 2016, a variety of activities were carried out across 288 schools, reaching out to over 17,000 students.

Some 53 schools participated in Green Wave in May 2016, as part of a worldwide biodiversity campaign, planting locally important trees to contribute to a figurative "green wave" that rippled across the globe. Other activities for students included the workshop Playtime with Kaya the Otter; My Week with Nature: The Five-Day Challenge; and the SGBioAtlas Challenge photography competition.

Engaging pre-schoolers

To promote parks as outdoor learning gardens and introduce the very young to our rich biodiversity, NParks worked with centres such as PCF Sparkletots Preschool and School4kids Preschool to develop programmes which were held at the Balam Park Connector and Woodlands Waterfront Park respectively. Sungei Buloh Wetland Reserve also hosted more than 130 pre-schoolers for its Kinder-Garden guided walk which is specially tailored for children.

Construction has begun on Singapore's first childcare centre in a park. The Skool4kidz Campus@Sengkang Park will have learning spaces integrated with nature, and its students can enjoy fresh fruits and vegetables harvested from the centre's community gardening plot. NParks will lend its expertise to incorporate information on Singapore's biodiversity into the learning materials while CIB volunteers will help maintain the garden.

Over 1,800 pre-school children and teachers from 300 centres had the opportunity to learn about the different flora and fauna in the parks when they took part in the Early Childhood Development Agency's Start Small Dream Big 2016 project held at Bishan-Ang Mo Kio Park in April 2016. NParks also reached out to more than 4,000 pre-school educators at the Early Childhood Conference 2016 to showcase the range of educational resources developed specially for pre-schoolers.







(TOP) Students helped to contribute to a "green wave" that spans the globe by planting trees within their school's compound. This campaign was one way to encourage greater interest in biodiversity among youths.
(MIDDLE) Using an activity book, Playtime with Kaya the Otter, children from the PCF Sparkletots Preschool learnt about the different natural habitats found in our parks that are conducive for wildlife like waterhens, kingfishers and otters.
(BOTTOM) NParks participates in events like the Early Childhood Development Agency's Start Small Dream Big project, as they are good platforms to nurture a love for our local flora and fauna among the very young.



(TOP LEFT) Organisations, community groups and students, like these from Nanyang Polytechnic, celebrated the launch of the "Give to the Gardens" programme by decorating trees for the Trees of the World event at the Singapore Botanic Gardens.
(TOP RIGHT) Check that your equipment is in good condition and wear protective gear like a helmet – these are just two simple ways to ensure you have a safe journey while travelling on the Park Connector Network.

Seeding biophilia in our schools

Multiple programmes were held to help seed biophilia amongst primary and secondary school students. These included nature introductory sessions at Tampines Eco Green; horticulture activities at Bishan-Ang Mo Kio Park; and a full-day camp conducted at Dairy Farm Nature Park.

About 1,000 students from seven schools offering the Gifted Education Programme participated in a walk to various green spaces including the Singapore Botanic Gardens, Sungei Buloh Wetland Reserve and HortPark. In addition, some 12,000 students from 20 schools viewed a play entitled Secrets of the Swamp, that introduced them to the importance of biodiversity and conservation.

Four primary schools also took part in the Native Plant Conservation Programme in October 2016, enhancing their school grounds with native plants. This not only helped to raise awareness of Singapore's botanical heritage among students, but was also a good opportunity for youths to immerse themselves in nature.

In other outreach initiatives, NParks collaborated with students from Temasek Polytechnic to recycle tree logs from Bedok Reservoir Park and Coney Island Park into furniture, and worked with volunteers from Nanyang Polytechnic to enhance the Nature Ways at Tampines Eco Green. Some 50 ITE College East students also helped with community planting at the Simei Park Connector in October.



New community involvement programme

A new community involvement programme known as "Give To The Gardens" was launched in November 2016 to enable members of the public to contribute towards the research, outreach and educational purposes of the Singapore Botanic Gardens. About 40 long-time supporters and partners of the Gardens have pledged more than $60,000 to seed the programme.

This programme was announced at the Trees of the World, a month-long year-end light-up event in the Gardens.

Promoting safe cycling

Friends of the Park Connector Network (PCN) took part in bi-monthly Discovering Singapore Rides across the island. Members were also more than ready to get involved in maintaining the PCN, rolling up their sleeves to help carry out activities such as surface painting works as part of PCN Appreciation Day 2016, held in September and November at Punggol Promenade and Simei Park Connector respectively.

Other activities which took place at the PCN included two runs of the OCBC-NParks Ride Safe Programme, at the North Eastern Riverine Loop in October 2016 and at the Western Adventure Loop in March 2017.

NParks also collaborated with Siling Primary School, ITE College East and the Singapore Sports School to carry out community planting activities along the park connectors.







The Friends of the Park community can initiate ideas for projects such as cycling and jogging etiquette along the Park Connector Network, the upkeep of our green spaces, as well as the conservation of the wildlife in our nature reserves.

Building communities through a shared connection with nature

A common connection with nature has brought Singaporeans from all walks of life together in a ground-led initiative to promote stewardship and responsible use of our parks.

Building on the success of the Friends of Ubin Network, the Friends of the Parks community grew this past year, to include the Friends of Park Connector Network, Friends of Sungei Buloh Wetland Reserve and Friends of Chestnut Nature Park.

These three new communities were launched in April 2016. They can initiate ideas related to conservation, horticulture, events and amenities within the parks, and can organise and participate in activities to maintain the cleanliness of the parks and the upkeep of their amenities.

Mr Han Jok Kwang, a chief information officer who chairs the Friends of Park Connector Network community, recognises the role nature plays in offering respite and therapeutic benefits to the soul. It is important for everyone to demonstrate respect and consideration when using our common spaces, we said "To cultivate this, we must 'walk the talk' through exemplary conduct and the sharing of good practices."

Sharing these sentiments, artist and Chairman of Friends of Sungei Buloh Wetland Reserve, Mr Tham Pui San, said "We seek to strengthen our bond with nature by focusing our efforts on increasing awareness of the Reserve. This helps to arouse interest in others and increase their awareness of the biodiversity in our natural heritage, its fragility and the need for conservation efforts."

Chairman of Friends of Chestnut Nature Park, university lecturer Mr N. Sivasothi, said that as Singapore society matures, he is happy that the Friends of the Park platform is providing an opportunity for citizens to engage and contribute to spaces they care about.

He added, "Chestnut Nature Park is an invaluable buffer to the biodiversity in our core nature reserves and ecologists in the community are responding by initiating habitat enhancement and biodiversity monitoring programmes.

As a recreational space, forest lovers, mountain bikers, hikers and naturalists are also enjoying the new space for their pursuits and are exploring how they can introduce others to the joys of their individual interests.

Friends of the Park gives diverse groups the opportunity to initiate activities, gradually learn about and appreciate other interests, and sow the seeds of a community of users. That kampung spirit we yearn for, can and will return to spaces like these."

Each Friends of the Park community will be headed by a team of up to 10 members representing different user groups. In addition to existing NParks volunteers, stakeholders such as hikers, bikers, exercise groups, tenants, nature photographers, researchers and regular users of the park will be invited to join the communities.

Since the end of the reporting year, three more Friends of the Parks communities have been introduced: Friends of Marine Park Community, chaired by Mr Stephen Beng; Friends of Bukit Timah Nature Reserve, chaired by Mr Joseph Koh; and Friends of Bishan-Ang Mo Kio Park, chaired by Mr Tian How Ming.

GARDEN CITY FUND

Charity Registration Number/Unique Entity Number: T02CC1634C
Charity Registration Date: 19 November 2002
IPC Number: IPC000104
Auditor: Ernst & Young LLP

The Garden City Fund (GCF) is a registered charity and an Institute of Public Character (IPC), with its registered address at National Parks Board, Singapore Botanic Gardens, 1 Cluny Road, Singapore 259569.

The GCF seeks to enhance the enjoyment of our City in a Garden by working with corporations and individuals to support the development of amenities and special features in Singapore's green spaces; community activities and programmes that promote awareness, research and education in nature and conservation; and citizen involvement to encourage greater ownership of our City in a Garden.

The Board of NParks serves as the trustee of the GCF and has appointed the GCF Management Committee to plan, develop, promote and manage the GCF in accordance with its Trust Deed.

The Management Committee comprises mainly non-executive members except for the GCF Secretary Dr Leong Chee Chiew, who is also the Deputy Chief Executive Officer, Professional Development & Services Cluster at NParks; Executive Director, National Parks, Gardens & Nature Reserves Cluster; and the Commissioner of Parks & Recreation.

Between 1 April 2016 and 31 March 2017, the total amount of cash donation income through the GCF was about $4.8 million.

The members of the seventh GCF Management Committee appointed from 1 November 2014 to 31 October 2016 are:

Chairman: Professor Leo Tan Wee Hin
Treasurer: Mr Vincent Lien Jown Jing
Secretary: Dr Leong Chee Chiew
Members: Mr Tan Khin Nguan, Mrs Fu E-Len, Mr Goh Kong Aik, Mrs Kirtida Mekani, Dr Malone-Lee Lai Choo

The members of the eighth GCF Management Committee appointed from 1 November 2016 to 31 October 2018 are:

Chairman: Professor Leo Tan Wee Hin
Treasurer: Mr Goh Kong Aik
Secretary: Dr Leong Chee Chiew
Members: Mr Tan Khin Nguan, Mrs Fu E-Len, Mrs Kirtida Mekani, Dr Malone-Lee Lai Choo, Mr Daren Shiau, Mr Vincent Lien Jown Jing

As part of the GCF Accountability and Governance Framework, any member of the Board, Committee or Sub-committee has to give prior written disclosure of any actual or potential conflict of interest for any transaction or project in connection with the GCF, and will not be able to participate or cast a vote in the transaction/project.

GARDEN CITY FUND



The year-end light-up at the Singapore Botanic Gardens celebrated the launch of the "Give To The Gardens" programme.



Volunteers from corporate partners helping to plant trees during the opening of the Learning Forest in the Singapore Botanic Gardens.

Biodiversity and conservation

NParks' biodiversity and conservation efforts continued to receive strong support from corporates and individuals. The Hongkong and Shanghai Banking Corporation Limited supported the Turtle Hatchery at Sisters' Islands Marine Park and the Nature Gallery at Pulau Ubin under a long-term partnership with NParks, and in addition, contributed $180,000 to the new community outreach initiative, "Plant-A-Coral, Seed-A-Reef Programme". About $16,000 for the programme was also received from other corporations and individuals.

At the new Learning Forest at Singapore Botanic Gardens, Keppel committed $2.08 million towards the Keppel Discovery Wetlands whilst SPH donated $1.2 million towards the SPH Walk of Giants.

Corporates and individuals also stepped forward to support greening programmes in primary, secondary and tertiary schools to promote biodiversity. This included sponsorship as well as volunteering time and effort for these programmes.

Park activities and programmes

The 2016 Singapore Garden Festival was the largest edition of the event to date, attracting some 400,000 visitors. Its success was due in large part to the support of corporates and individuals who collectively donated $1.9 million towards the event.

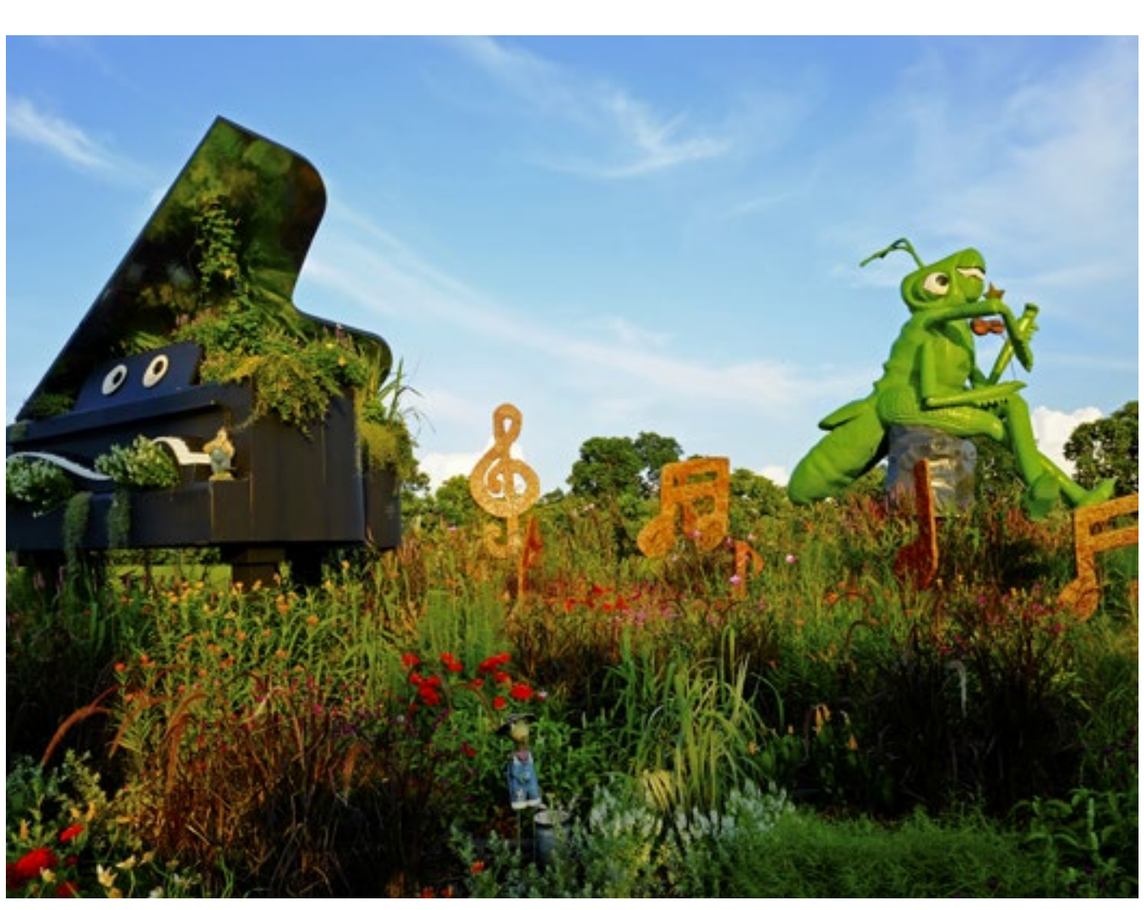
About 40 long-time supporters and partners of the Singapore Botanic Gardens also pledged more than $60,000 to seed "Give To The Gardens", a new community involvement programme aimed at garnering support for the Gardens.

In support of other key activities in our parks and green spaces, Temasek and Ascendas Land (Singapore) Pte Ltd have committed their support towards the Concert Series in the Park – Rockestra®, while Woh Hup (Private) Limited donated $500,000 towards the development of, and programmes for a Therapeutic Garden at Bishan-Ang Mo Kio Park.

Habitat enhancement

The GCF's Plant-A-Tree (PAT) programme continued to garner strong support with over 32,000 trees pledged by more than 600 corporations and some 2,600 individuals since the programme's inception in 2007. To celebrate Earth Day on 23 April 2016, about 100 individuals came together to plant 80 trees at Bedok Town Park and Kallang Riverside Park.

In conjunction with World Habitat Day in October, 52 UPS staff came together to plant 100 native trees at Chestnut Nature Park. Other organisations that came forward to support the PAT programme included Nanyang Girls' High School, Ikea Singapore, and Shimano (Singapore) Pte Ltd, among others. In addition to tree planting, organisations like MSIG Insurance and Ricoh also contributed to greenery enhancement projects that benefit our City in a Garden.



Singapore Garden Festival 2016

GARDEN CITY FUND DONORS' ACKNOWLEDGEMENT (FY 2016)

We acknowledge and thank the following donors who have generously supported our City in a Garden efforts, including those who wish to remain anonymous.

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George Huang Chang Yi
Gwee Ai Hwa
Huang Hua Feng
Indigo Lifestyle Pte Ltd
Infineon Technologies Asia Pacific Pte Ltd
Ino Arts & Communications Pte Ltd
Jabil Circuit Singapore Pte Ltd
'K' Line Ship Management (S) Pte Ltd
Kang Wen Ling
Karen Singarayar
Kayakasia Paddlesports Pte Ltd
Kion Engineering Pte Ltd
Ko Chuan Aun
Konica Minolta Business Solutions Asia Pte Ltd
Lam Soon Singapore Pte Ltd
Lee Siam Buay
Leo Tan Wee Hin
Lim Siang Hoe Benny
Maersk Singapore Pte Ltd
Marianne Marais
Mildred Tan
Mozat Pte Ltd
MSIG Insurance (Singapore) Pte Ltd
My English Pte Ltd
Nur Khairiana Binte Mohamad Malek
Photographic Society of Singapore
Rin Nan Lun
Ryno Oppermann
Sembcorp Gas Pte Ltd
Shell Companies in Singapore
Shimizu Corporation
Siemens Pte Ltd
Singapore Precision Industries Pte Ltd
Sumitomo Mitsui Banking Corporation Singapore Branch
Sumitomo Rubber Asia (Tyre) Pte Ltd
Super Coffee Corporation Pte Ltd
Syngenta Asia Pacific Pte Ltd
Toshiba Asia Pacific Pte Ltd
Tuas Power Generation Pte Ltd
Veerasingam Prem Kumar
Win Win Food Singapore Pte Ltd
Wong Wai Keong
Ying Lei Wong

Donations listed above are of a minimum amount of $1,000. We thank all other individuals and organisations who have given to the charity.

ENHANCING THE NATURAL CONNECTION

THE LANDSCAPE INDUSTRY PLAYS A KEY ROLE IN ENHANCING SINGAPORE'S GREEN SPACES AND CREATING A CITY IN A GARDEN WHERE CITIZENS CAN FORGE A STRONG CONNECTION WITH NATURE.



Advancing the landscape sector

Since the launch of the Landscape Productivity Roadmap in 2011, labour productivity of the landscape industry has improved with a compounded annual growth rate of 2.6% over the last five years. This past year, the Roadmap received a second tranche of $5.6 million, to further boost the landscape industry.

One way this is being achieved is through the Landscape Productivity Grant which incentivises companies to embark on mechanisation efforts. Since the Grant was approved in 2013, about $3.4 million has been disbursed to 54 companies to help them defray the cost of acquiring machines to alleviate the labour shortage.

Another significant move aimed at upgrading the skills in the landscape sector was the implementation of the Landscape Progressive Wage Model (PWM) in June 2016. Skill levels of landscape workers have since been raised in tandem with salary increases. To engage employers and ensure its smooth implementation, the Centre for Urban Greenery and Ecology (CUGE) organised two forums on the PWM.

NParks and CUGE, together with the Employment and Employability Institute and the Workplace Safety and Health Council, supported Green Thumbs 2016, held on 24 September 2016 at Bishan-Ang Mo Kio Park. Organised by the Landscape Industry Association of Singapore (LIAS), the event celebrated the development journey of the landscape industry and included games, workshops and a tree climbing competition.

To interest youths in the opportunities offered by the industry, the inaugural Landscape Design Challenge was held during the Singapore Garden Festival for tertiary students. The Challenge provided a platform for the students to showcase their landscaping skills and knowledge. They had to create their own landscape designs, select their own plant nurseries to purchase materials from, and come up with a maintenance regime and budget, as part of the judging assessment.





(LEFT) Children's Chillout Garden by ITE College East won the Gold award in the Landscape Design Challenge at the Singapore Garden Festival 2016. To add vibrancy to the display, the team used a diversity of plants such as the Bird's Nest Fern and brightly coloured Heliconias.
(BOTTOM) The Landscape Design Challenge offered participants a glimpse into the landscape industry as they raced to create a garden with a limited budget and within a fixed timeframe.





Skills upgrading

In the past year, CUGE offered more than 5,000 Workforce Skills Qualifications (WSQ) training places and over 2,500 non-WSQ training places to drive skills upgrading across the landscape industry. It held a series of workshops and seminars related to horticulture, landscaping, arboriculture, therapeutic horticulture and urban ecology.

Under its International Programme on Singapore Greenery Planning and Management, CUGE hosted overseas study visit groups from Cambodia, Ethiopia, India, Indonesia, Japan, Malaysia, South Korea, Vietnam and the People's Republic of China. The guests were keen to learn from Singapore's experience in planning and designing a dense living environment while still retaining much greenery and nature.

(TOP) Working in pairs, participants of the Developing Goals and Activities for Horticultural Therapy programme imagined that they were either visually or physically impaired, and had to pot a plant from a given tray of materials. This activity required participants to rely more on their sense of touch or smell to correctly identify the materials needed for the task.
(LEFT) Participants attending the WSQ Higher Certificate in Landscape Operations (Arboriculture) course learned how to operate a chainsaw safely, to perform cuts on fallen timber on the ground.
(BOTTOM) HortPark Manager Benjamin Ang (centre) sharing with Indonesian delegates on the selection of plants for an edible garden. This was part of a two-day Landscape Planting and Maintenance workshop that covered the fundamentals of design and their application in gardening.



Welcoming a new Research Fellow

CUGE welcomed Ms Elizabeth Diehl as a Research Fellow for 10 months starting January 2017. Ms Diehl is the Director of Therapeutic Horticulture at Wilmot Gardens at the University of Florida. During her fellowship term, she will work with the CUGE research team to develop a programme for the research study "Effects of Horticultural Therapy on Elderly with Mild Cognitive Impairment". The study will be conducted at the Therapeutic Garden @ HortPark. She also spoke on Therapeutic Horticulture Programming for Groups with Special Needs at the CUGE Professional Speaker Series in January.

Strengthening in-house capabilities

During the year in review, NParks offered three undergraduate scholarships, four overseas Merit Award sponsorships and three postgraduate scholarships to staff and external candidates. To further develop talent, a second batch of students was enrolled in the Institute of Technical Education under the NParks-LIAS-ITE Scholarship, and three Lee Botany and Biodiversity scholars started their year-long Masters course at the Royal Botanic Gardens in Kew in September.

Two more NParks officers completed their attachment under NParks' overseas exchange programmes. To date, NParks has placed 10 officers for professional exchange programmes under Memorandums of Understanding with Royal Botanic Garden Edinburgh; Royal Botanic Gardens Victoria; Parks Victoria, Melbourne; Royal Botanic Gardens, Kew; Longwood Gardens; and Prospect Park, Brooklyn. These programmes provide valuable professional exchange opportunities for staff.

In other initiatives aimed at strengthening in-house knowledge and capabilities, workshops and plant introduction trips were organised by NParks' Hort Champs. Participants picked up useful tips such as how to distinguish between similar-looking plants, and how to grow uncommon fragrant plants, boosting their knowledge and honing their capabilities in building a biophilic city.

NParks staff also turned up in strength for the 24th to 27th instalments of the quarterly Hort Colloquiums, indicating a healthy interest in picking up new knowledge. These sessions provided updates on new NParks development projects and initiatives, Singapore's flora and fauna, conservation efforts and urban greening initiatives.

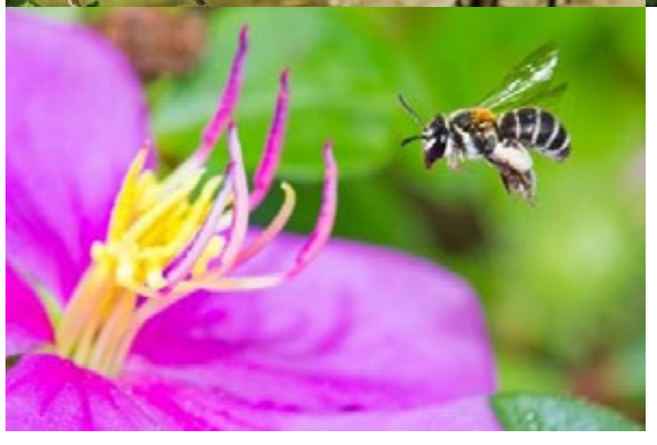






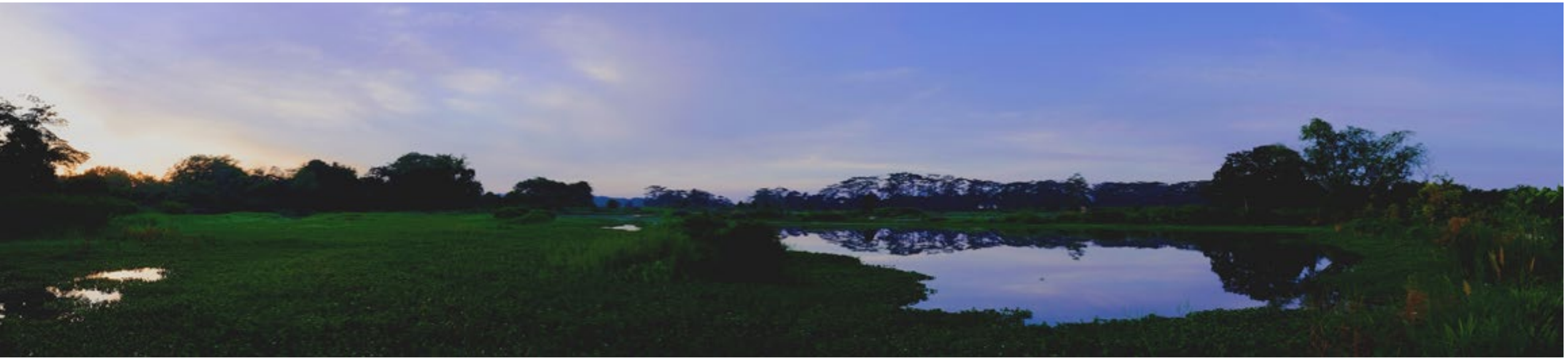






(TOP) Community in Bloom Senior Manager Maxel Ng using plants to conduct a lesson about the human senses for local primary school students at the Royal Botanic Garden Edinburgh in the United Kingdom.
(TOP RIGHT) Fort Canning Park Senior Manager Cheryl Kong pruning and removing dead bamboo shoots from a shrub bed at the Royal Botanic Gardens Victoria. This was part of her daily maintenance duties, which also included planting, mulching, weeding and plant labelling.
(RIGHT) Hort Champs participate in horticultural workshops and field trips useful to their work and find the time to share their knowledge with other staff or visitors. This helps to enhance knowledge and encourage exchange of ideas within the organisation.

Did you know that bees form the highest percentage of pollinating insects in our parks? Or that the Collared Kingfisher (*Todiramphus chloris*) is one of the top 10 most recorded birds in Singapore? And if you like to create a sensory garden, how about growing the Almond Bush (*Aloysia virgata*) which produces numerous white, scented flowers that will stimulate your sense of smell? These were just some of the insights gleaned by participants of the quarterly Hort Colloquiums.



Awards

At the Building and Construction Authority Awards 2016, NParks received the Green Mark Champion Award in recognition of its achievements in environmental sustainability. NParks was also involved in the planning, design and development of Platinum Award projects including Gardens by the Bay (Bay South), Gardens By The Bay (Special Project), CDL Green Gallery @ Singapore Botanic Gardens Heritage Museum, Coney Island Park and Kranji Marshes.

The quality of NParks' staff and projects continued to impress at the Public Service Awards. The Oil Spill Risk Mapping Tool was awarded the PS21 ExCEL Merit Award while Ms Nur Azura bte Mis Jony, Visitor Services Assistant at the Singapore Botanic Gardens, was recognised for her outstanding customer service with the PS21 Star Service Award 2016.





(TOP AND MIDDLE) Kranji Marshes and the CDL Green Gallery @ Singapore Botanic Gardens Heritage Museum were two projects recognised for environmental sustainability at the Building and Construction Authority Awards 2016, receiving a Platinum Award each.
(RIGHT) Armed with a big smile and friendly disposition, Visitor Services Assistant at the Singapore Botanic Gardens, Ms Nur Azura bte Mis Jony is a deserving recipient of the PS21 Star Service Awards 2016.



As part of the NParks' Kindness Committee, staff volunteer their time to help to plant and maintain the gardens of the Handicaps Welfare Association in Whampoa.

Supporting the community

Outside of work hours, staff made time to give back to the community. NParks' Kindness Committee supported the Handicaps Welfare Association in its Wheel, Walk or Jog 2016 event in April through the sale of potted plants. NParks staff also supported "Operation We Clean Up!" organised by the Public Health Council. Spread over eight sessions, our volunteers worked with active agers and students at six parks to keep the environment clean, so that the whole community can enjoy the greenery and discover the biodiversity present in these green spaces.

Annual staff conference

NParks' Staff Conference 2016 was held on 21 April 2016 at the Singapore Expo and was attended by some 800 officers from across the various divisions. The theme for the conference was "The Future of Greening Singapore" and speakers shared plans for enhancing Singapore's reputation as a City in a Garden.

The NParks Greenery Excellence Awards were presented at the conference, recognising operational colleagues for delivering excellence in greenery in 11 categories such as Best Expressway, Best Park, Best Park Connector and Best Private Estate, as well as a new Best Community in Bloom Garden category.

FACTS & FIGURES FY 2016

National Day Awards

MERITORIOUS SERVICE MEDAL
Professor Leo Tan
Chairman, Garden City Fund
Advisor, Lee Kong Chian Natural History Museum
Director of Special Projects, Faculty of Science,
National University of Singapore

PUBLIC SERVICE STAR
(DISTINGUISHED FRIENDS OF SINGAPORE)
Junichi Inada

PUBLIC ADMINISTRATION MEDAL (SILVER)
Kenneth Er
Chief Executive Officer

Ms Kartini Omar
Group Director
Parks Development and Jurong Lake Gardens

PUBLIC ADMINISTRATION MEDAL (BRONZE)
Ms Ng Yuin-Mae
Director
Singapore Botanic Gardens Development

Ms Lilian Kwok
Director
Nursery & Horticulture Outreach

COMMENDATION MEDAL
Mrs Ng-Yang Cheng Noi
Deputy Director (Horticulture)
Singapore Botanic Gardens

EFFICIENCY MEDAL
Ms Sim Bee Lan
Manager (Parks)
Parks 1

Panneer Selvam s/o Thangaveloo
Senior Officer (Horticulture)
Istana, Conservation

Ms Bhavani d/o Subramaniam
Senior Executive (Accounts)
Finance & Procurement



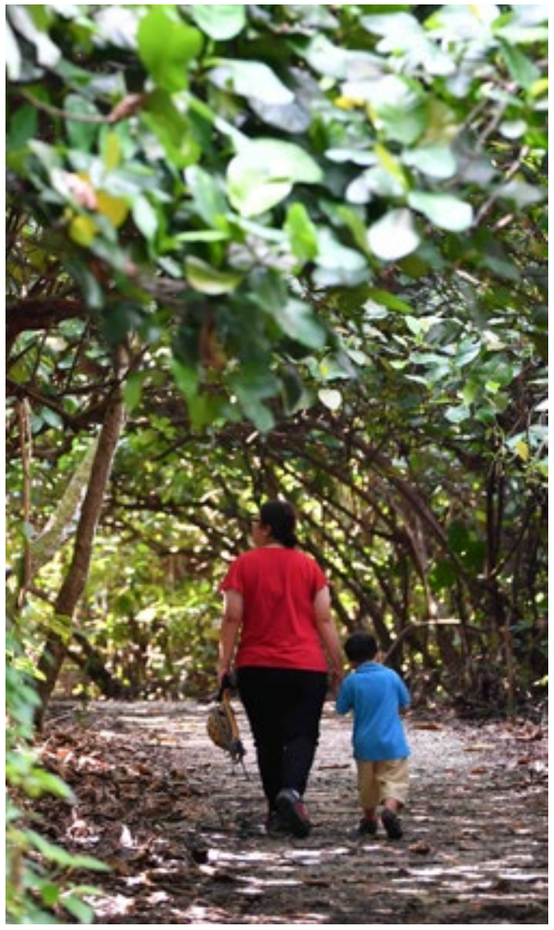
Big Sister's Island

Long Service Medals

Ms G Kannagi
Director (Development Management 2)
Parks Development

Dr Yam Tim Wing
Principal Researcher (Conservation &
Molecular Biology)
Singapore Botanic Gardens

Mohammad Roslee bin Ali
Senior Officer (Parks)
Parks 1



Chestnut Nature Park

Awards and Accolades

EXCELLENT SERVICE AWARD 2016
Attractions
(6 Star, 3 Gold, 4 Silver)

Public Service
(7 Silver)

PS21 Star Service Award 2016
(Ms Nur Azura Bte Mis Jony)

PS21 ExCEL AWARDS 2016
PS21 ExCEL Merit Award
(Oil Spill Risk Mapping Tool)

MND FAMILY MINISTER'S AWARD (TEAM) 2016
Achieving UNESCO World Heritage Status for the Singapore Botanic Gardens

Completion of 300th km of Park Connector Network

MUNICIPAL SERVICES AWARDS 2016
Team Category
(First Responder Protocol-Connectivity Related Infrastructure)
(Provision of footpath at Dunbar Walk)
(Replacement of derelict East Coast Parkway railings)
(Resolution of disamenities at Jalan Batai)
(Management of crows and egrets at Maju Avenue)
(Production of Municipal Reference Guide)

2017 NS MARK (GOLD) AWARD BY MINDEF

COMMUNITY CHEST SHARE SILVER AWARD 2016

SINGAPORE HEALTH AWARD (PLATINUM) 2014
(Valid for four years)

FACTS & FIGURES FY 2016

Regional Parks Maintained by NParks

	Area (ha)		Area (ha)
Admiralty Park	25.67	Lower Seletar Reservoir Park	4.30
Ang Mo Kio Town Garden East	4.88	MacRitchie Reservoir Park	12.00
Ang Mo Kio Town Garden West	20.63	Mount Faber Park	58.80
Bedok Reservoir Park	42.39	My Waterway @ Punggol (formerly Punggol Waterway Park)	12.30
Bedok Town Park	11.30	one-north Park	8.95
Bishan-Ang Mo Kio Park	62.00	Pasir Ris Park	73.39
Bukit Batok Nature Park	35.74	Pasir Ris Town Park	12.36
Bukit Batok Town Park – Little Guilin	42.16	Pearl's Hill City Park	8.50
Bukit Timah Nature Reserve	162.64	Pulau Ubin Recreation Area	692.13
Central Catchment Recreation Area	455.00	Punggol Park	16.66
Changi Beach Park (including Changi Point Promenade)	28.52	Rifle Range Nature Park	65.28
Chestnut Nature Park	81.00	Sembawang Park	15.58
Choa Chu Kang Park	11.81	Sengkang Riverside Park	20.70
Clementi Woods Park	11.48	Singapore Botanic Gardens	82.00
Coney Island Park	50.00	Sisters' Islands Marine Park	47.68
Dairy Farm Nature Park	63.00	Springleaf Nature Park	6.00
East Coast Park	242.42	Sun Plaza Park	9.60
Esplanade Park	2.40	Sungei Buloh Wetland Reserve	193.31
Fort Canning Park	18.04	Tampines Eco Green	36.61
Hindhede Nature Park	9.50	Telok Blangah Hill Park	36.88
Hong Lim Park	1.28	Tiong Bahru Park	3.33
HortPark	24.57	Toa Payoh Town Park	4.91
Istana Park	1.29	Upper Peirce Reservoir Park	4.00
Jurong Central Park	7.98	Upper Seletar Reservoir Park	15.00
Jurong Lake Gardens West and Jurong Lake Gardens Central	84.69	War Memorial Park	1.74
Kallang Riverside Park	5.16	West Coast Park	50.00
Kent Ridge Park	48.40	Windsor Nature Park	75.00
Kranji Marshes	56.29	Woodlands Town Garden	10.94
Kranji Reservoir Park	3.78	Woodlands Waterfront Park	11.22
Labrador Park and Nature Reserve	25.88	Yishun Park	13.22
Lower Peirce Reservoir Park	10.00	Zhenghua Nature Park	17.30
Total			**3,269.59***

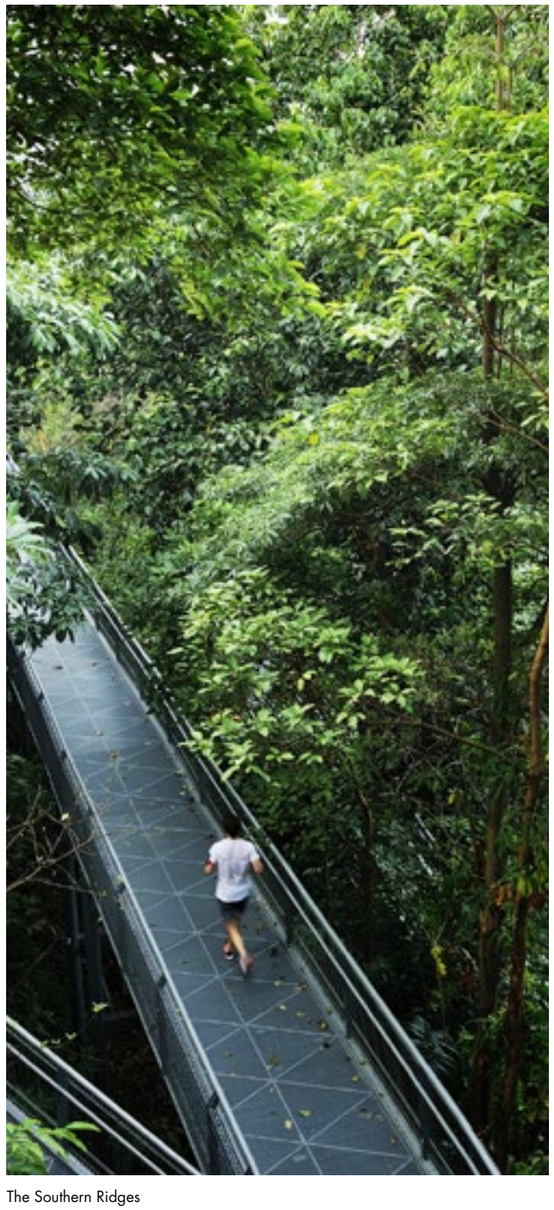
* subject to rounding adjustments

Total Number of Parks

Regional Parks	62
Neighbourhood Parks	307
Park Connectors**	74
Total	**443**

Total Area Maintained

	Area (ha)
Parks, playgrounds, open spaces, fitness corners and park connectors***	2,792
Nature reserves	3,347
Istana and Parliament House grounds	42
Roadside greenery	2,928
Vacant state land	268
State land taken over from Mar 2017****	6,185
Government premises	8
Total	**15,570**



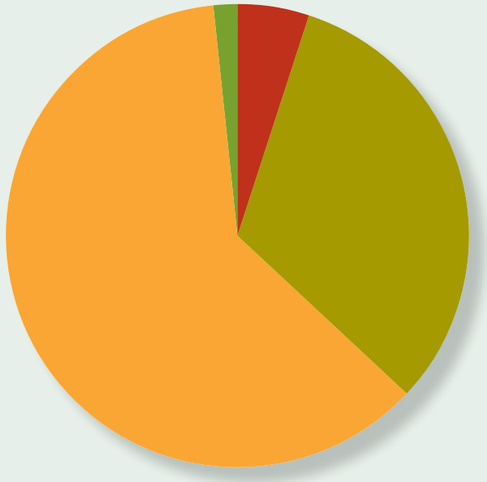
The Southern Ridges

** Total mileage of the park connectors maintained is 306 km as of 31 March 2017.
*** Excludes Bukit Timah Nature Reserve, Central Catchment Nature Reserve, Sungei Buloh Wetland Reserve and Labrador Nature Reserve which have been computed under "Nature reserves"
**** Greenery on vacant land taken over from agencies

FACTS & FIGURES FY 2016

CUGE Training Programmes

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



INTERNATIONAL BRIEFINGS/ OVERSEAS EXECUTIVE PROGRAMMES
500

SHORT COURSES, SEMINARS, WORKSHOPS & PROFESSIONAL SPEAKER SERIES
3,113

WSQ COURSES
5,949

CERTIFICATION PROGRAMMES
160

TOTAL NUMBER OF TRAINING PLACES
9,722

Workforce Skills Qualification (WSQ) Courses

WSQ Certificate in Landscape Operations

WSQ Higher Certificate in Landscape Operations (Arboriculture)

WSQ Advanced Certificate in Landscape Supervision (Arboriculture)

WSQ Advanced Certificate in Landscape Supervision (Landscape Design and Construction)

WSQ Advanced Certificate in Landscape Supervision (Nursery)

WSQ Advanced Certificate in Landscape Supervision (Parks, Reserves and Gardens)

WSQ Advanced Certificate in Landscape Supervision (Turf, Sports Grounds and Greens)

WSQ Diploma in Landscape Management (Arboriculture)

WSQ Diploma in Landscape Management (Landscape Design and Construction)

WSQ Diploma in Landscape Management (Nursery)

WSQ Diploma in Landscape Management (Parks, Reserves and Gardens)

WSQ Diploma in Landscape Management (Turf, Sports Grounds and Greens)

WSQ in Nature Interpretation

Professional Certification Programmes

ISA Certified Arborist Preparatory Programme

Certified Park Manager Programme

Certified Playground Safety Inspector Programme

Certified Practising Horticulturist Programme

ISA Tree Risk Assessment Qualification

Seminars / Professional Speaker Series / Workshops

Regional Arboriculture Seminar

Basic Safety for Landscape Maintenance

Basic Palm Identification and Horticulture Workshop

CUGE Professional Speaker Series

CUGE Research Seminar

Community Gardening Training Series

Develop a Risk Management Implementation Plan (bizSafe Level 2)

Design of Therapeutic Gardens – Dementia Specific Aged Care

Edible Landscaping – Creating Landscapes with Edible Plant Species

Ecology of Singapore Termites

Guidelines on Weed Management

Habitat Enhancement Workshop

Habitat Enhancement Seminar

Horticulture Therapy Seminar

Horticulture Standards for NParks Staff

Horticulture Therapy Programs for Elderly

IML-Resi PD Series Certification Workshop

IML-Resi MD300 Certification Workshop

Identification of Fleshy Fungi

Introduction to Horticulture Therapy & Therapeutic Gardens Design

Landscape Safety Orientation Course

Land Surveying Appreciation Workshop

Managing Irrigation Systems for Skyrise Greenery

Managing Trees within the Planning Process

NParks Legislation & Enforcement Management Course

Plant Epidemiology – Who Killed My Plant?

Plant Epidemiology – Fungal Diseases in the Tropical Gardens

Plant Diversity and Nomenclature – Part I, II, III, IV, V, VI, VII

Playground Maintenance Technician Course

Skyrise Greenery Module 2 – Design for Safety on Rooftop Greenery

Sustainable / Organic Gardening in Permaculture

Themed Gardens: Attracting Birds to Gardens

Themed Gardens: Butterfly Gardens

Themed Gardens: Fragrant Gardens

Tree Assessment for Planning

Tree Decay – The Fundamentals

Tree Decay – Host-Fungus Interactions

Tree Inspection (Level 1)

Tree Inspection (Level 2)

Tree Inspection – Failure Documentation & Analysis

Tree Transplanting (Level 1)

Trees & Construction – The Arboriculture Impact

Urban Ecology Strategies for Co-Existence with Bees

Understanding Winds in Urban and Rooftop Settings

Turfing Know How – *Axonopus compressus*

International Briefings and Overseas Executive Programmes

CUGE Overseas Executive Programme on Greenery Planning & Management

Briefings for Overseas Delegates

CORPORATE GOVERNANCE FY 2016

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 backgrounds, 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; and
- Approve NParks' tenders (as members of the relevant Tender 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, and also reviews the effectiveness of internal audit. The Operations Risk Committee provides strategic oversight on NParks' operations risk management framework and conducts reviews of NParks' operations risks. The Operations Risk Committee also oversees the implementation of risk mitigation plans, policies and practices. The Garden City Fund Management Committee plans, develops, promotes and manages the Garden City Fund in accordance with 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 provides the Board members adequate information during Board meetings and on an ongoing basis. The Board also has direct and independent access to the Management Team if further information and explanation are required.

Accountability and Audit

The Board's accounts are audited by the Auditor-General or such other auditor who may be appointed annually by the Minister in consultation with the Auditor-General. The auditor engaged for the financial year which ended on 31 March 2017 was Ernst & Young LLP. The audited financial statements and the auditor's report were submitted to the Board and the Ministry of National Development, and 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), Statutory Board 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; and
- A risk management framework which ensures close monitoring with proper mitigating measures for all identified high risk areas.



Windsor Nature Park

PUBLICATIONS

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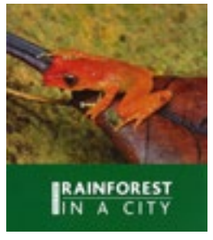

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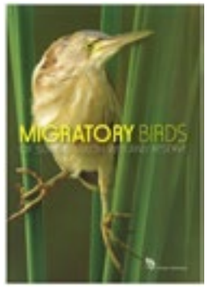

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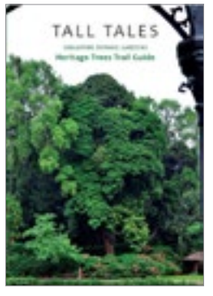

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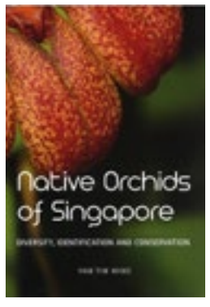

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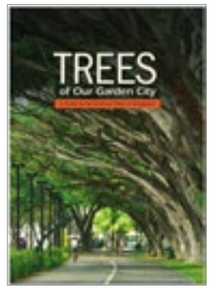

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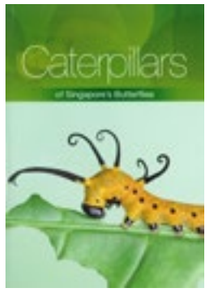

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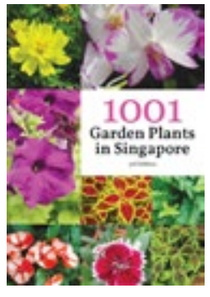

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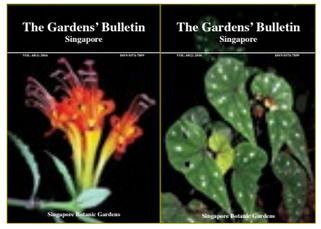

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Books

1. **Singapore Garden Photographer of the Year**

   Singapore Garden Photographer of the Year won the Grand Award in the 2016 APEX Awards for Publication Excellence under the category of One-of-a-Kind Publication – Green.

2. **Rainforest in a City**
   By Chua Ee Kiam

   Rainforest in a City won the Bronze medal in the 2015 Independent Publisher Book Awards under the category of Environment/ Ecology/Nature, and the Silver award in the 2015 Nautilus Book Awards under the category of Ecology/Environment.

3. **Footprints on an Island – Rediscovering Pulau Ubin**
   By Chua Ee Kiam, Choo Mui Eng and Wong Tuan Wah

   Footprints on an Island - Rediscovering Pulau Ubin won the Nautilus 2016 Silver Award in the Multicultural & Indigenous category.

4. **Gingers of Cambodia, Laos & Vietnam**
   By Jana Leong-Škorničková and Mark Newman

5. **A Walk Through History – A Guide to the Singapore Botanic Gardens**
   By Nigel Taylor and Ada Davis

6. **Migratory Birds of Sungei Buloh Wetland Reserve**
   By James Gan, Mendis Tan and David Li

7. **My Green Space: Indoor Gardening Made Simple**
   By Lily Chen, Ng Shan Jun, Ang Wee Foong, et al.

8. **A Guide to the 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

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    By Marc Cremades and Ng Soon Chye

19. **Our Fragile Rainforest**
    By Dr Leong Tzi Ming and James Gan

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20. **The Gardens' Bulletin Singapore, May 2016 & November 2016**

Periodicals

21. **Gardenwise, August 2016 & February 2017**

22. **CITIGREEN, issue 12 - City Habitats**
    CITIGREEN, issue 13 - Exploring Connections

    The CUGE publication CITYGREEN won the APEX Awards for Publication Excellence in 2015, 2014, 2013 and 2012.

These publications are available for sale at the Gardens Shops at the Singapore Botanic Gardens and the online shop www.botanicgardensshop.sg. Visit www.sbg.org.sg for more information.

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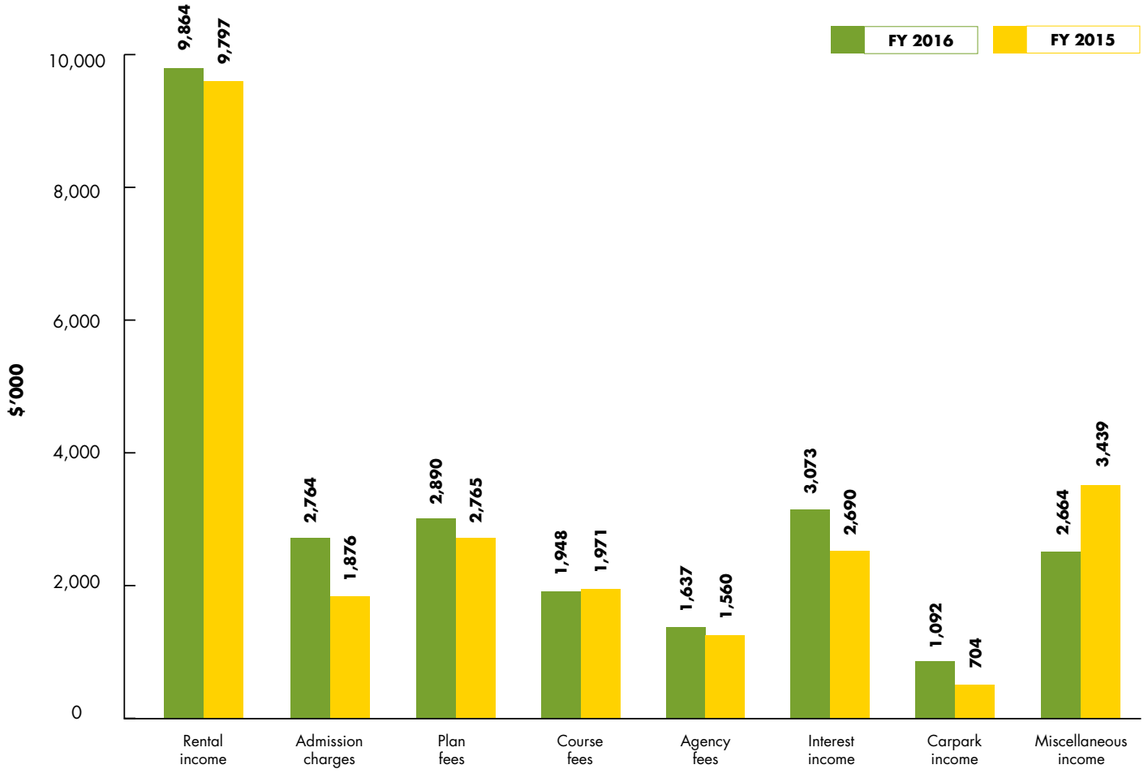
FINANCIAL REVIEW

Income

The Group'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 $25.9 million, a marginal increase of 5% from $24.8 million in FY2015.

INCOME FOR FY 2016 & FY 2015

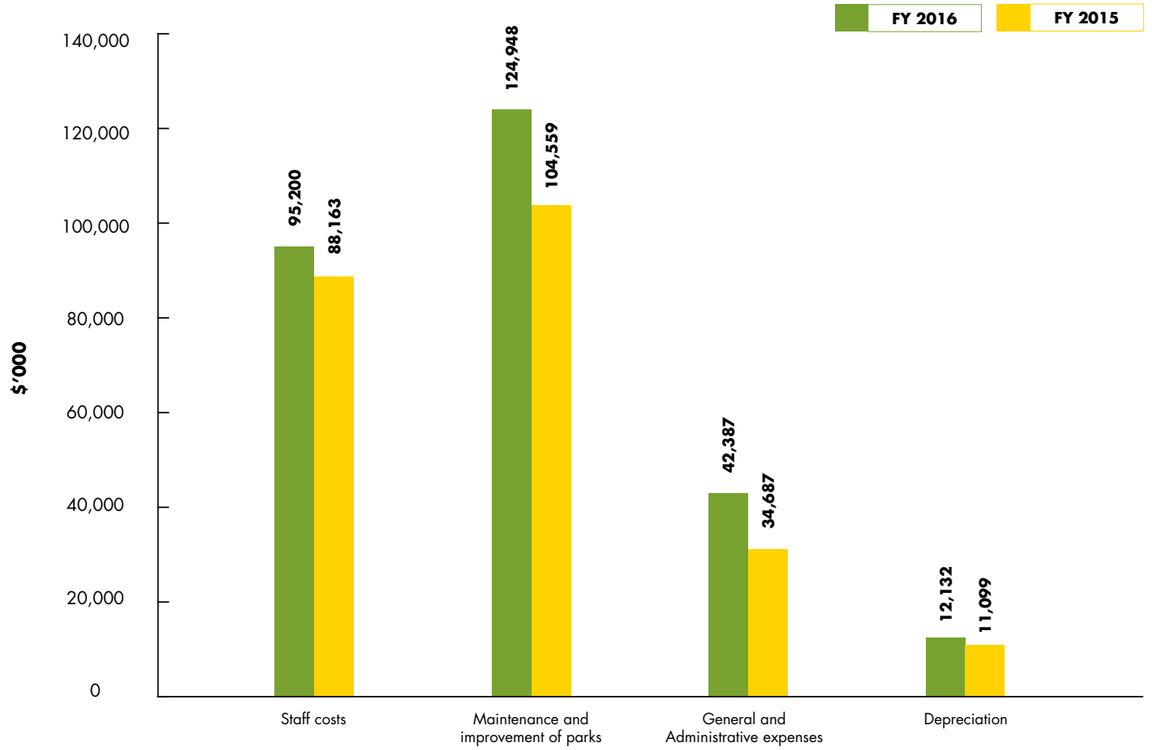


Income	FY 2016 $'000	FY 2015 $'000	Increase/(Decrease) $'000	% Change
Rental income	9,864	9,797	67	1
Admission charges	2,764	1,876	888	47
Plan fees	2,890	2,765	125	5
Course fees	1,948	1,971	(23)	(1)
Agency fees	1,637	1,560	77	5
Interest income	3,073	2,690	383	14
Carpark income	1,092	704	388	55
Miscellaneous income	2,664	3,439	(775)	(23)
	25,932	24,802	1,130	5

Operating Expenditure

The Group's operating expenditure for the year was $274.7 million. The 15% increase from last year's expenditure was mainly due to an increase in maintenance and improvement of parks as well as an increase in general and administrative expenses and staff costs.

OPERATING EXPENDITURE FOR FY 2016 & FY 2015

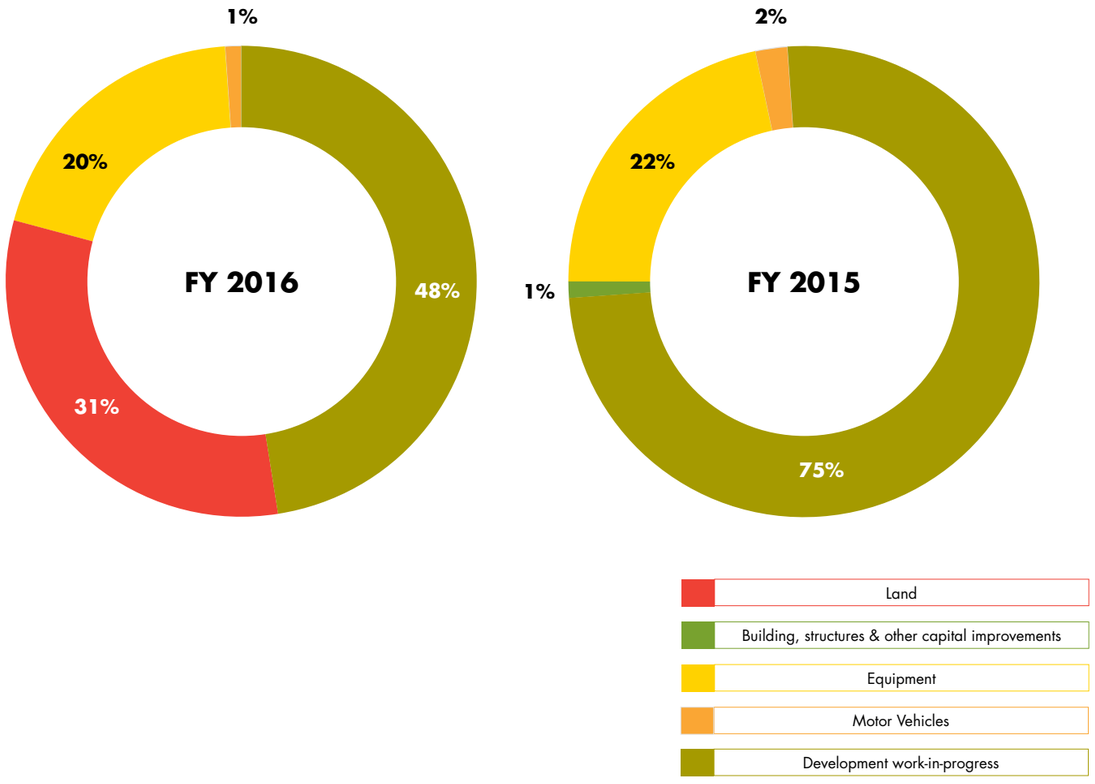


Operating Expenditure	FY 2016 $'000	FY 2015 $'000	Increase/(Decrease) $'000	% Change
Staff costs	95,200	88,163	7,037	8
Maintenance and improvement of parks	124,948	104,559	20,389	19
General and Administrative expenses	42,387	34,687	7,700	22
Depreciation	12,132	11,099	1,033	9
	274,667	238,508	36,159	15

Capital Expenditure

The Group's capital expenditure for the year was $12.5 million. The increase in capital expenditure was mainly due to a differential premium paid for land.

CAPITAL EXPENDITURE FOR FY 2016 & FY 2015

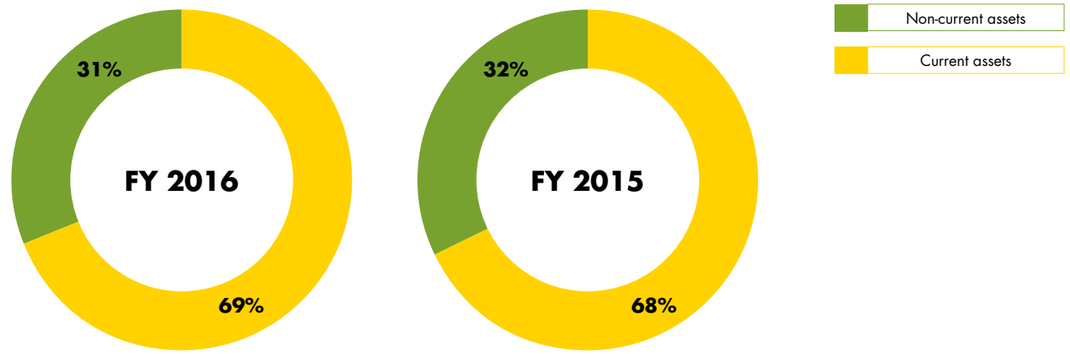


Capital Expenditure	FY 2016 $'000	FY 2015 $'000	Increase/(Decrease) $'000	Increase/(Decrease) % Change
Land	3,957	-	3,957	100
Building, structures & other capital improvements	-	3	(3)	(100)
Equipment	2,487	2,366	121	5
Motor vehicles	37	232	(195)	(84)
Development work-in-progress	6,066	8,050	(1,984)	(25)
	12,547	10,651	1,896	18

Financial Position

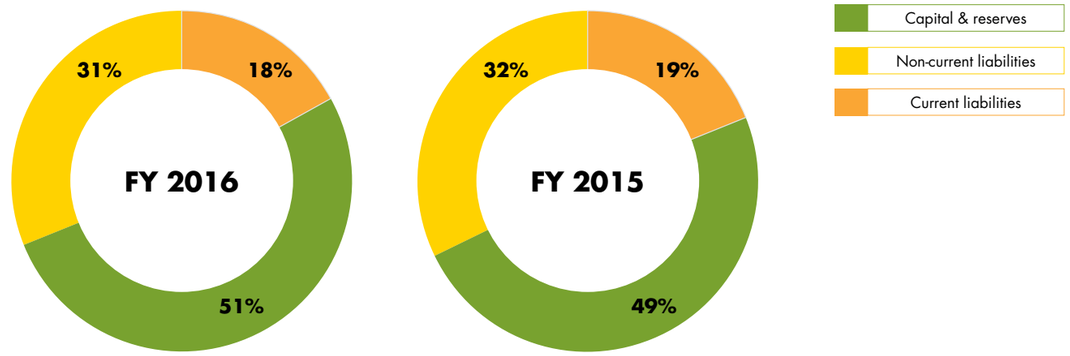
As at 31 March 2017, the Group's total assets stood at $375 milion, an increase of 1% over last year. Non-current assets and current assets represent 31% and 69% of total assets respectively. Non-current assets consisted mainly of leasehold land and buildings and structures at Singapore Botanic Gardens and Fort Canning Park. Capital and reserve stood at $191.4 million, while current and non-current liabilities stood at $68.2 million and $115.4 million respectively.

TOTAL ASSETS



Total Assets	FY 2016 $'000	FY 2015 $'000	Increase/(Decrease) $'000	Increase/(Decrease) % Change
Non-current assets	117,137	117,145	(8)	(<1)
Current assets	257,843	253,790	4,053	2
	374,980	370,935	4,045	1

TOTAL LIABILITIES & EQUITY



Total Liabilities & Equity	FY 2016 $'000	FY 2015 $'000	Increase/(Decrease) $'000	Increase/(Decrease) % Change
Capital & reserves	191,436	180,734	10,702	6
Non-current liabilities	115,393	120,256	(4,863)	(4)
Current liabilities	68,151	69,945	(1,794)	(3)
	374,980	370,935	4,045	1

FINANCIAL STATEMENTS

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STATEMENT BY NATIONAL PARKS BOARD

In our opinion,

(a) the accompanying financial statements of National Parks Board ("NParks") and its subsidiary (the "Group"), 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 financial position of the Group and NParks as at 31 March 2017, and the financial performance, 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
19 July 2017

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF NATIONAL PARKS BOARD

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinion

We have audited the financial statements of National Parks Board ("NParks") and its subsidiary (collectively, the "Group"), which comprise the statement of financial position of the Group and NParks as at 31 March 2017, statements of comprehensive income, statements of changes in equity of the Group and NParks and the consolidated cash flow statement of the Group for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements of the Group, the statement of financial position, statement of comprehensive income and the statement of changes in equity of the NParks 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 in Singapore ("SB-FRS") so as to present fairly, in all material respects, the state of affairs of the Group and NParks as at 31 March 2017 and the results and changes in equity of Group and NParks and cash flows of the Group for the year ended on that date.

Basis for Opinion

We conducted our audit in accordance with Singapore Standards on Auditing ("SSAs"). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report. We are independent of the Group in accordance with the Accounting and Corporate Regulatory Authority ("ACRA") Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities ("ACRA Code") together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other matter

The financial statements of NParks for the year ended 31 March 2016, were audited by another auditor who expressed an unmodified opinion on those statements on 20 July 2016.

Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report and the statement by the members of the Board, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management for the financial statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Act and SB-FRS, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

A statutory board is constituted based on its Act and its dissolution requires Parliament's approval. In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless there is intention to wind up the Group or for the Group to cease operations.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF NATIONAL PARKS BOARD

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS *(cont'd)*

Auditor's responsibilities for the audit of the financial statements (cont'd)

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Opinion

In our opinion:

(a) the receipts, expenditure, investments of moneys and the acquisition and disposal of assets by the Board during the year are, in all material respects, in accordance with the provisions of the Act.

(b) proper accounting and other records have been kept, including records of all assets of the Board whether purchased, donated or otherwise.

Basis for opinion

We concluded our audit in accordance with SSAs. Our responsibilities under those standards are further described in the *Auditors' responsibilities for the compliance audit* section of our report. We are independent of the Board in accordance with the ACRA Code together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on management's compliance.

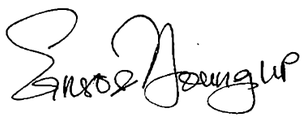
Responsibilities of management for compliance with legal and regulatory requirements

Management is responsible for ensuring that the receipts, expenditure, investments 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.

Auditor's responsibilities for compliance audit

Our responsibility is to express an opinion on management's compliance based on our audit of the financial statements. We planned and performed the compliance audit to obtain reasonable assurance about whether the receipts, expenditure, investments 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 control relevant to the receipts, expenditure, investments 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 control. Because of the inherent limitations in any accounting and internal control system, non-compliances may nevertheless occur and not be detected.



Ernst & Young LLP
Public Accountants and Chartered Accountants
Singapore

19 July 2017

STATEMENT OF FINANCIAL POSITION

AS AT 31 MARCH 2017

	Note	Group		NParks	
		2016/2017	2015/2016	2016/2017	2015/2016
		$	$	$	$
ASSETS					
Current assets					
Cash and cash equivalents	6	243,191,909	224,983,250	242,959,956	224,841,446
Trade receivables	7	2,778,841	5,656,544	2,778,841	5,611,737
Other receivables	8	11,872,628	23,150,504	11,890,238	23,179,015
Total current assets		257,843,378	253,790,298	257,629,035	253,632,198
Non-current assets					
Trade receivables	7	1,176,000	1,344,000	1,176,000	1,344,000
Property, plant and equipment	10	115,961,229	115,801,074	115,961,229	115,801,074
Investments in a subsidiary	9	–	–	2	2
Total non-current assets		117,137,229	117,145,074	117,137,231	117,145,076
Total assets		374,980,607	370,935,372	374,766,266	370,777,274
LIABILITY AND EQUITY					
Current liabilities					
Trade and other payables	12	54,922,379	53,648,878	54,914,771	53,637,884
Provision for pension costs	13	120,000	2,025,697	120,000	2,025,697
Government grants received in advance	11	8,025,598	8,525,377	8,025,598	8,525,377
Deferred revenue	14	2,460,082	2,951,458	2,451,390	2,951,458
Contribution to consolidated fund	15	2,623,341	2,793,718	2,623,341	2,793,718
Total current liabilities		68,151,400	69,945,128	68,135,100	69,934,134
Non-current liabilities					
Deferred capital grants	16	109,408,827	114,035,038	109,408,827	114,035,038
Deferred revenue	14	2,664,478	2,952,512	2,664,478	2,952,512
Provision for pension costs	13	3,319,672	3,268,675	3,319,672	3,268,675
Total non-current liabilities		115,392,977	120,256,225	115,392,977	120,256,225
Capital and other funds					
Capital account	17	4,528,275	4,528,275	4,528,275	4,528,275
Share capital	18	1,032,800	191,000	1,032,800	191,000
Accumulated surplus		135,294,568	123,729,704	135,096,527	123,582,600
Sinking fund	19	50,580,587	52,285,040	50,580,587	52,285,040
Total capital and other funds		191,436,230	180,734,019	191,238,189	180,586,915
Total liabilities and equity		374,980,607	370,935,372	374,766,266	370,777,274
Net assets of Garden City Fund	20	11,982,668	14,438,466	11,982,668	14,438,466
Net assets/(liabilities) of National Productivity Fund	21	382,766	(142,634)	382,766	(142,634)

The accompanying notes form an integral part of the financial statements.

STATEMENT OF COMPREHENSIVE INCOME

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

	Note	Group		NParks	
		2016/2017	2015/2016	2016/2017	2015/2016
		$	$ Reclassified	$	$ Reclassified
Income or expenditure					
Operating income					
Rental income		9,863,972	9,797,345	9,863,972	9,797,345
Admission charges		2,764,409	1,876,407	2,764,409	1,876,407
Plan fees		2,889,900	2,764,502	2,889,900	2,764,502
Course fees		1,948,133	1,970,857	1,948,133	1,970,857
Agency fees		1,636,666	1,560,338	1,636,666	1,560,338
Interest income		3,072,604	2,689,831	3,072,604	2,689,831
Carpark income		1,092,352	704,322	1,092,352	704,322
Miscellaneous income	22	2,664,401	3,438,632	2,598,696	3,393,674
		25,932,437	24,802,234	25,866,732	24,757,276
Operating expenditure					
Staff costs	23	(95,199,601)	(88,162,637)	(95,199,601)	(88,162,637)
Maintenance of parks		(124,947,560)	(104,559,268)	(124,947,560)	(104,559,268)
General and administrative expenses		(42,387,365)	(34,687,264)	(42,372,597)	(34,655,633)
Depreciation of property, plant and equipment	10	(12,132,038)	(11,098,870)	(12,132,038)	(11,098,870)
		(274,666,564)	(238,508,039)	(274,651,796)	(238,476,408)
Deficit from operations	24	(248,734,127)	(213,705,805)	(248,785,064)	(213,719,132)
Government operating grants	11	248,495,313	211,141,338	248,495,313	211,141,338
Other government grants	11	3,855,111	7,885,988	3,855,111	7,885,988
Deferred capital grants amortised	16	11,866,060	11,125,439	11,866,060	11,125,439
		264,216,484	230,152,765	264,216,484	230,152,765
Surplus before contribution to consolidated fund		15,482,357	16,446,960	15,431,420	16,433,633
Contribution to consolidated fund	15	(2,623,341)	(2,793,718)	(2,623,341)	(2,793,718)
Surplus after contribution to consolidated fund		12,859,016	13,653,242	12,808,079	13,639,915
Other comprehensive income					
Items that will not be reclassified subsequently to profit or loss					
Remeasurement of defined benefit obligation	13	–	340,604	–	340,604
Total comprehensive income for the year		12,859,016	13,993,846	12,808,079	13,980,519

The accompanying notes form an integral part of the financial statements.

STATEMENTS OF CHANGES IN EQUITY

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

Group	Capital account $	Share capital $	Accumulated surplus $	Sinking fund $	Total $
At 1 April 2015	4,528,275	1,000	112,238,816	50,236,231	167,004,322
Total comprehensive income for the year					
Surplus for the year	–	–	13,653,242	–	13,653,242
Other comprehensive income for the year	–	–	340,604	–	340,604
Total	–	–	13,993,846	–	13,993,846
Transactions with owners, recognised directly in equity					
Equity injection (Note 18)	–	190,000	–	–	190,000
Transfer from accumulated surplus to sinking fund (Note 19)	–	–	(2,048,809)	2,048,809	–
Funding for government projects (Note 25)	–	–	(454,149)	–	(454,149)
Total	–	190,000	(2,502,958)	2,048,809	(264,149)
At 31 March 2016 and 1 April 2016	4,528,275	191,000	123,729,704	52,285,040	180,734,019
Total comprehensive income for the year					
Surplus for the year	–	–	12,859,016	–	12,859,016
Other comprehensive income for the year	–	–	–	–	–
Total	–	–	12,859,016	–	12,859,016
Transactions with owners, recognised directly in equity					
Equity injection (Note 18)	–	841,800	–	–	841,800
Transfer from sinking fund to accumulated surplus (Note 19)	–	–	1,704,453	(1,704,453)	–
Funding for government projects (Note 25)	–	–	(2,998,605)	–	(2,998,605)
Total	–	841,800	(1,294,152)	(1,704,453)	(2,156,805)
At 31 March 2017	4,528,275	1,032,800	135,294,568	50,580,587	191,436,230

The accompanying notes form an integral part of the financial statements.

STATEMENTS OF CHANGES IN EQUITY

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

NParks	Capital account $	Share capital $	Accumulated surplus $	Sinking fund $	Total $
At 1 April 2015	4,528,275	1,000	112,105,039	50,236,231	166,870,545
Total comprehensive income for the year					
Surplus for the year	–	–	13,639,915	–	13,639,915
Other comprehensive income for the year	–	–	340,604	–	340,604
Total	–	–	13,980,519	–	13,980,519
Transactions with owners, recognised directly in equity					
Equity injection (Note 18)	–	190,000	–	–	190,000
Transfer from accumulated surplus to sinking fund (Note 19)	–	–	(2,048,809)	2,048,809	–
Funding for government projects (Note 25)	–	–	(454,149)	–	(454,149)
Total	–	190,000	(2,502,958)	2,048,809	(264,149)
At 31 March 2016 and 1 April 2016	4,528,275	191,000	123,582,600	52,285,040	180,586,915
Total comprehensive income for the year					
Surplus for the year	–	–	12,808,079	–	12,808,079
Other comprehensive income for the year	–	–	–	–	–
Total	–	–	12,808,079	–	12,808,079
Transactions with owners, recognised directly in equity					
Equity injection (Note 18)	–	841,800	–	–	841,800
Transfer from sinking fund to accumulated surplus (Note 19)	–	–	1,704,453	(1,704,453)	–
Funding for government projects (Note 25)	–	–	(2,998,605)	–	(2,998,605)
Total	–	841,800	(1,294,152)	(1,704,453)	(2,156,805)
At 31 March 2017	4,528,275	1,032,800	135,096,527	50,580,587	191,238,189

The accompanying notes form an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

	Note	2016/2017 $	2015/2016 $
Operating activities			
Deficit from operations		(248,734,127)	(213,705,805)
Adjustments for:			
Depreciation of property, plant and equipment	10	12,132,038	11,098,870
Loss on disposal of property, plant and equipment	24	154,746	29,220
Provision for pension costs	13	156,350	151,902
Amortisation of lease premium received in advance		(83,333)	(83,333)
Interest income		(3,072,604)	(2,689,831)
Operating cash flow before movement in working capital		(239,446,930)	(205,198,977)
Trade and other receivables		3,564,255	(2,027,664)
Trade and other payables		903,938	1,108,479
Deferred revenue		(696,077)	158,814
Payment for pension costs	13	(2,011,050)	(95,000)
Amounts due from MND		12,741,525	(2,578,869)
Amounts due from Garden City Fund		(1,634,477)	(105,420)
Cash used in operating activities		(226,578,816)	(208,738,637)
Contribution to Consolidated Fund paid		(2,793,718)	(2,339,014)
Net cash flows used in operating activities		(229,372,534)	(211,077,651)
Investing activities			
Proceeds from disposal of property, plant and equipment		100,000	31,744
Purchase of property, plant and equipment		(12,546,939)	(10,651,375)
Interest received		3,120,902	1,851,369
Net cash flows used in investing activities		(9,326,037)	(8,768,262)
Financing activities			
Grants received (less payment on behalf)	11	259,074,945	238,013,519
Grants receivable	11	–	63,128
Unutilised grants returned	11	(10,910)	(1,430,640)
Equity injection	18	841,800	190,000
Funding for government projects	25	(2,998,605)	(454,149)
Net cash flows from financing activities		256,907,230	236,381,858
Net increase in cash and cash equivalents		18,208,659	16,535,945
Cash and cash equivalents at beginning of the year		224,983,250	208,447,305
Cash and cash equivalents at end of the year (Note 6)		243,191,909	224,983,250

The accompanying notes form an integral part of the financial statements.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

2.1 *Basis of accounting*

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 SB-FRS, including Interpretation of SB-FRS ("INT SB-FRS") and SB-FRS Guidance Notes.

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

2.2 *Adoption of new and revised standards*

On 1 April 2016, the Group adopted all the new and revised SB-FRSs and 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 results or position of the Group and NParks.

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 below will have no material impact on the financial statements of the Group and NParks in the period of their initial adoption except for SB-FRS 109, SB-FRS 115 and SB-FRS 116.

Description	Effective for annual periods beginning on or after
SB-FRS 109 *Financial Instruments*	1 January 2018
SB-FRS 115 *Revenue from Contracts with Customers*	1 January 2018
SB-FRS 1001 *Accounting and Disclosure for Non-Exchange Revenue*	1 January 2018
SB-FRS 116 *Leases*	1 January 2019
Amendments to SB-FRS 110 & SB-FRS 28 *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*	To be determined

The nature of the impending changes in accounting policy on adoption of SB-FRS 116 are described below.

SB-FRS 116 *Leases*

SB-FRS 116 requires lessees to recognize most leases on balance sheets to reflect the rights to use the leased assets and the associated obligations for the lease payments as well as the corresponding interest expense and depreciation charges. The standard includes two recognition exemption for lessees – leases of 'low value' assets and short-term leases. The new standard is effective for annual periods beginning on or after 1 January 2019.

The Group is currently assessing the impact of the new standard and plans to adopt the new standard on the required effective date.

2.3 *Basis of consolidation and subsidiary*

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.

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

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 comprehensive income from the date NParks gains control until the date when NParks ceases to control the subsidiary.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(cont'd)*

2.3 *Basis of consolidation and subsidiary (cont'd)*

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. The financial statements of the subsidiary used in the preparation of the consolidated financial statements are prepared for the same reporting date as NParks.

All intra-group balances, income and expenses resulting from intra-group transactions and dividends are eliminated in full.

2.4 *Financial instruments*

Financial assets and financial liabilities are recognised on the statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets

All financial assets are recognised initially measured at fair value plus directly attributable transaction costs.

Non-derivative financial assets with fixed or determinable payments that are not quoted in an active market are classified as "loans and receivables". Loans and receivables (including trade and other receivables, cash at bank and deposits with AGD) are subsequently 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. Gains or losses are recognised in income or expenditure when the loans and receivables are de-recognised or impaired, and through the amortisation process.

Impairment of financial assets

Financial assets are assessed at each reporting period whether there is indications for impairment. 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.

If there is objective evidence that an impairment loss on financial assets which 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 to the income or expenditure. 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.

De-recognition of financial assets

The Group de-recognises 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. On de-recognition of a financial asset in its entirety, the difference between the carrying amount and the sum of the consideration received and any cumulative gain or loss that had been recognised in other comprehensive income is recognised in income or expenditure.

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 direct issue costs.

Pursuant to the Finance Circular Minute ("FCM") No. 26/2008 on Capital Management Framework ("CMF"), equity injection from the Government is recorded as share capital.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(cont'd)*

2.4 *Financial instruments (cont'd)*

Financial liabilities and equity instruments *(cont'd)*

Financial liabilities

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

De-recognition of financial liabilities

The Group de-recognised financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire. When an existing financial liability is discharged by another from the same lender on substantially different terms, or the terms of an existing liability are original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognised in income or expenditure.

2.5 *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 as an expense over the lease term on the same basis as the lease income. The accounting policy of rental income is set out in Note 2.11.

The Group as lessee

Rentals payable under operating leases are charged to income or expenditure 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.

2.6 *Property, plant and equipment*

All items of property, plant and equipment are initially recorded at cost. Subsequent to recognition, property, plant and equipment are measured at cost less accumulated depreciation and any accumulated impairment losses.

Depreciation is computed on a straight-line basis over the estimated useful lives of the assets as follows:

Leasehold land	–	Over the lease periods of 87 to 99 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.

The carrying amount of property, plants and equipment are reviewed for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable.

The estimated useful lives, residual values and depreciation method 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 de-recognised upon disposal or when no future economic benefits are expected from its use or disposal. The gain or loss arising on disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amounts of the asset and is recognised in income or expenditure.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(cont'd)*

2.7 *Impairment of non-financial assets*

At the end of each reporting period, the Group assesses whether there is any indication that an assets may be impaired. If any of such indication exists, or when an annual impairment testing for an asset is required, the Group makes an estimate of an assets recoverable amount.

An asset's recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs of disposal and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or cash-generating unit exceeds its recoverable amount, the asset is considered impaired and is written down 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.

2.8 *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. If it is no longer probable that an outflow of economic resources will be required to settle the obligation, the provision is reversed. If the effect of the time value of money is material provisions and discounted using a current pre-tax rate that reflects, where appropriate, the risk specific to the liability when discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

2.9 *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 expenditure 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.

2.10 *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.

2.11 *Revenue recognition*

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured. Revenue is measured at the fair value of consideration received or receivable.

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.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(cont'd)*

2.11 *Revenue recognition (cont'd)*

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.

Course Fees

Course fees are recognised over the duration of the course.

Carpark Income

Carpark income is recognised when transacted.

Miscellaneous income

Miscellaneous income comprising income derived from consultancy fees, sale of publications, souvenirs and orchid plantlets, 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.

2.12 *Retirement benefits costs*

Payments to defined contribution 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 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. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are categorised as follows:

- Service cost (including current and past service cost);
- Net interest expense or income; and
- Remeasurement.

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.

2.13 *Employee leave entitlement*

Employee entitlements to annual leave are recognised when they are accrued 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.

2.14 *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 and 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.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES *(cont'd)*

2.15 Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and deposits placed with the Accountant-General's Department ("AGD") that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value.

2.16 Deferred revenue

Income from rental and lease premium received in advance are stated at initial amount less accumulated amortisation. Amortisation is calculated on a straight-line basis to reduce the initial amount over the lease term and is recognised in income or expenditure.

Income from plan fees received in advance is stated at initial amount collected and is recognised in income or expenditure over the period in which services are completed.

2.17 Contingencies

A contingent liability is:

(a) a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group; or

(b) a present obligation that arises from past events but is not recognised because:

(i) It is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or

(ii) The amount of the obligation cannot be measured with sufficient reliability.

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group.

Contingent liabilities and assets are not recognised on the balance sheet of the Group, except for contingent liabilities assumed in a business combination that are present obligations and which the fair values can be reliably determined.

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 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 99 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 deteriorates, actual write-offs would be higher than estimated.

The carrying amount of the trade receivables for the Group and NParks as at 31 March 2017 are $3,954,841 (2015/2016: $7,000,544) and $3,954,841 (2015/2016: $6,955,737) respectively.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY *(cont'd)*

Key sources of estimation uncertainty *(cont'd)*

Provision 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 2016 in accordance with SB-FRS 19 *Employee Benefits*.

The assumptions which have the most significant effect on the results of the valuation are those relating to discount rate, future salary increase rate and post-retirement mortality. 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. Further details about the assumptions used are provided in Note 13.

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	
	2016/2017	2015/2016	2016/2017	2015/2016
	$	$	$	$
Financial assets – loans and receivables				
Cash and cash equivalents (Note 6)	243,191,909	224,983,250	242,959,956	224,841,446
Trade receivables (Note 7)	3,954,841	7,000,544	3,954,841	6,955,737
Other receivables (Note 8)	8,779,793	19,357,108	8,797,403	19,386,969
	255,926,543	251,340,902	255,712,200	251,184,152
Financial liabilities at amortised cost				
Trade and other payables (Note 12)	54,922,379	53,648,878	54,914,771	53,637,884
Contribution to consolidated fund (Note 15)	2,623,341	2,793,718	2,623,341	2,793,718
Provision for pension costs (Note 13)	3,439,672	5,294,372	3,439,672	5,294,372
	60,985,392	61,736,968	60,977,784	61,725,974

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.

There is no transfers between level 1, 2 and 3 of the fair value hierarchy during the financial year.

(i) Fair value of financial assets and financial liabilities that are not carried at fair value and whose carrying amounts are reasonable approximation of fair value

The carrying amounts of cash and cash equivalents, receivables, payables, approximate their respective fair values due to the relatively short-term maturity of these financial instruments.

The carrying amount of long-term trade receivable approximate fair value as the interest rates is at the current market level.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

4. FINANCIAL INSTRUMENTS, FINANCIAL RISKS AND CAPITAL RISKS MANAGEMENT *(cont'd)*

(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.

(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.

Analysis of financial instruments by remaining contractual maturities

The table below summarises the maturity profile of the Group's and NPark's financial assets and liabilities at the end of the reporting period based on contractual undiscounted repayment obligations.

	2016/2017 $			
Group	Less than one year	One to five years	Over five years	Total
Financial assets:				
Cash and cash equivalents	243,191,909	–	–	243,191,909
Trade receivables	2,778,841	1,039,000	359,880	4,177,721
Other receivables	8,779,793	–	–	8,779,793
Total undiscounted financial assets	254,750,543	1,039,000	359,880	256,149,423
Financial liabilities:				
Trade and other payables	*54,922,379*	–	–	*54,922,379*
Contribution to consolidated fund	2,623,341	–	–	2,623,341
Provision for pension costs	120,000	3,319,672	–	3,439,672
Total undiscounted financial liabilities	*57,665,720*	3,319,672	–	60,985,392
Total net undiscounted financial assets/(liabilities)	197,084,823	(2,280,672)	359,880	195,164,031

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

4. FINANCIAL INSTRUMENTS, FINANCIAL RISKS AND CAPITAL RISKS MANAGEMENT *(cont'd)*

(b) Financial risk management policies and objectives *(cont'd)*

(iii) Liquidity risk management *(cont'd)*

Analysis of financial instruments by remaining contractual maturities (cont'd)

	2015/2016 $			
Group	Less than one year	One to five years	Over five years	Total
Financial assets:				
Cash and cash equivalents	224,983,250	–	–	224,983,250
Trade receivables	5,656,544	1,078,800	551,760	7,287,104
Other receivables	19,357,108	–	–	19,357,108
Total undiscounted financial assets	249,996,902	1,078,800	551,760	251,627,462
Financial liabilities:				
Trade and other payables	53,648,878	–	–	53,648,878
Contribution to consolidated fund	2,793,718	–	–	2,793,718
Provision for pension costs	2,025,697	3,268,675	–	5,294,372
Total undiscounted financial liabilities	58,468,293	3,268,675	–	61,736,968
Total net undiscounted financial assets/ (liabilities)	191,528,609	(2,189,875)	551,760	189,890,494

	2016/2017 $			
NParks	Less than one year	One to five years	Over five years	Total
Financial assets:				
Cash and cash equivalents	242,959,956	–	–	242,959,956
Trade receivables	2,778,841	1,039,000	359,880	4,177,721
Other receivables	8,797,403	–	–	8,797,403
Total undiscounted financial assets	254,536,200	1,039,000	359,880	255,935,080
Financial liabilities:				
Trade and other payables	54,914,771	–	–	54,914,771
Contribution to consolidated fund	2,623,341	–	–	2,623,341
Provision for pension costs	120,000	3,319,672	–	3,439,672
Total undiscounted financial liabilities	57,658,112	3,319,672	–	60,977,784
Total net undiscounted financial assets/ (liabilities)	196,878,088	(2,280,672)	359,880	194,957,296

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

4. FINANCIAL INSTRUMENTS, FINANCIAL RISKS AND CAPITAL RISKS MANAGEMENT *(cont'd)*

(b) Financial risk management policies and objectives *(cont'd)*

(iii) Liquidity risk management *(cont'd)*

Analysis of financial instruments by remaining contractual maturities (cont'd)

	2015/2016 $			
NParks	Less than one year	One to five years	Over five years	Total
Financial assets:				
Cash and cash equivalents	224,841,446	–	–	224,841,446
Trade receivables	5,611,737	1,078,800	551,760	7,242,297
Other receivables	19,386,969	–	–	19,386,969
Total undiscounted financial assets	249,840,152	1,078,800	551,760	251,470,712
Financial liabilities:				
Trade and other payables	53,637,884	–	–	53,637,884
Contribution to consolidated fund	2,793,718	–	–	2,793,718
Provision for pension costs	2,025,697	3,268,675	–	5,294,372
Total undiscounted financial liabilities	58,457,299	3,268,675	–	61,725,974
Total net undiscounted financial assets/ (liabilities)	191,382,853	(2,189,875)	551,760	189,744,738

(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.

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	
	2016/2017 $	2015/2016 $
MND		
Revenue collected on behalf	33,151,811	29,390,341
Development expenditure paid on behalf		
– Gardens by the Bay	13,325,925	5,075,680
– Other state projects	88,361,011	85,363,804
Other Ministries and Statutory Boards		
Expenses paid on behalf of other statutory boards	16,964,767	14,403,268
Garden City Fund		
Expenses paid on behalf	3,279,990	383,020
Gardens by the Bay		
Expenses paid on behalf	337,475	264,762

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

5. RELATED PARTY TRANSACTIONS *(cont'd)*

	Group and NParks	
	2016/2017 $	2015/2016 $
Compensation of key management personnel		
The remuneration of key management personnel during the financial year were as follows:		
Salaries and other short-term employee benefits	1,805,151	1,680,725
Post-employment benefits	60,870	57,495

6. CASH AND CASH EQUIVALENTS

	Group		NParks	
	2016/2017 $	2015/2016 $	2016/2017 $	2015/2016 $
Cash at bank	231,953	145,271	–	3,467
Deposits with AGD[i]	242,959,956	224,837,979	242,959,956	224,837,979
	243,191,909	224,983,250	242,959,956	224,841,446

[i] 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 1.37% (2015/2016: 1.26%) per annum.

7. TRADE RECEIVABLES

	Group		NParks	
	2016/2017 $	2015/2016 $	2016/2017 $	2015/2016 $
Not past due and not impaired	2,473,134	5,198,218	2,473,134	5,153,411
Past due but not impaired[i]:	1,481,707	1,802,326	1,481,707	1,802,326
< 1 months	290,779	441,528	290,779	441,528
1 months to 4 months	11,450	16,798	11,450	16,798
> 4 months	1,179,478	1,344,000	1,179,478	1,344,000
Impaired receivables	1,610,000	1,840,000	1,610,000	1,840,000
Less: Allowance for impairment	(1,610,000)	(1,840,000)	(1,610,000)	(1,840,000)
Total	3,954,841	7,000,544	3,954,841	6,955,737
Represented by:				
Current portion	2,778,841	5,656,544	2,778,841	5,611,737
Non-current portion	1,176,000	1,344,000	1,176,000	1,344,000
Total	3,954,841	7,000,544	3,954,841	6,955,737

The credit period on rendering of services is 30 days (2015/2016: 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.

[i] 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.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

7. TRADE RECEIVABLES *(cont'd)*

Movement in the allowance for doubtful debts

	Group and NParks	
	2016/2017	2015/2016
	$	$
Balance at beginning of the year	1,840,000	2,071,494
Decrease in allowance recognised in income or expense	(230,000)	(231,494)
Balance at end of the year	1,610,000	1,840,000

8. OTHER RECEIVABLES

	Group		NParks	
	2016/2017	2015/2016	2016/2017	2015/2016
	$	$	$	$
Other receivables				
– MND[i]	4,113,996	16,452,353	4,113,996	16,452,353
– Garden City Fund[ii]	1,752,811	151,939	1,752,811	151,939
– Gardens by the Bay[ii]	92,457	3,637	92,457	3,637
– Other receivables	527,170	532,321	545,030	562,432
Interest receivable	2,009,189	2,031,028	2,009,189	2,031,028
Prepayments	3,092,835	3,793,396	3,092,835	3,792,046
Deposits	284,170	185,830	283,920	185,580
	11,872,628	23,150,504	11,890,238	23,179,015

[i] 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.

[ii] 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

	Group and NParks	
	2016/2017	2015/2016
	$	$
Unquoted equity investment, at cost	2	2

Details of the subsidiary at the end of the reporting period are as follows:

Name of subsidiary	Principal activities	Place of Incorporation and business	Proportion of ownership interest and voting power held 2016/2017 %	2015/2016 %
Singapore Garden City Pte. Ltd.[a]	Landscape planning, advisory services and business consulting services	Singapore	100	100

[a] Audited by Kong, Lim & Partners LLP.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

10. PROPERTY, PLANT AND EQUIPMENT

Group and NParks	Leasehold land $	Building, structures, capital and other improvements $	Office equipment, furniture and fittings $	Motor vehicles $	Laboratory and gardening equipment $	Construction-in-progress $	Total $
Cost							
At 1 April 2015	61,501,429	149,641,753	37,485,432	1,743,846	1,220,411	1,582,161	253,175,032
Additions	–	3,334	2,272,458	231,765	93,993	8,049,825	10,651,375
Transfer	–	2,769,760	4,326,808	–	–	(7,096,568)	–
Disposal	–	(129,930)	(439,347)	(470,545)	(32,951)	–	(1,072,773)
At 31 March 2016 and 1 April 2016	61,501,429	152,284,917	43,645,351	1,505,066	1,281,453	2,535,418	262,753,634
Additions	3,957,325	–	2,380,273	36,600	106,778	6,065,963	12,546,939
Transfer	–	2,206,993	4,086,506	–	58,711	(6,352,210)	–
Disposal	–	(1,087,500)	(333,654)	(137,441)	(6,500)	(55,717)	(1,620,812)
At 31 March 2017	65,458,754	153,404,410	49,778,476	1,404,225	1,440,442	2,193,454	273,679,761
Accumulated depreciation							
At 1 April 2015	12,780,893	95,209,936	26,985,995	1,090,893	797,782	–	136,865,499
Depreciation	731,695	6,832,513	3,296,877	139,304	98,481	–	11,098,870
Disposal	–	(110,112)	(412,704)	(457,507)	(31,486)	–	(1,011,809)
At 31 March 2016 and 1 April 2016	13,512,588	101,932,337	29,870,168	772,690	864,777	–	146,952,560
Depreciation	751,506	6,408,434	4,723,007	135,304	113,787	–	12,132,038
Disposal	–	(926,810)	(299,822)	(132,934)	(6,500)	–	(1,366,066)
At 31 March 2017	14,264,094	107,413,961	34,293,353	775,060	972,064	–	157,718,532
Carrying amount							
At 31 March 2016	47,988,841	50,352,580	13,775,183	732,376	416,676	2,535,418	115,801,074
At 31 March 2017	51,194,660	45,990,449	15,485,123	629,165	468,378	2,193,454	115,961,229

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

11. GOVERNMENT GRANTS RECEIVED IN ADVANCE (RECEIVABLE)

Group and NParks	Operating grants[i] $	Capital grants $	Development grants[ii] $	Other grants[iii] $	Total $
At 1 April 2015	4,791,930	243,855	(5,084,847)	(200,880)	(249,942)
Grants received during the financial year	224,454,238	244,000	97,333,955	6,420,809	328,453,002
Grants receivable	–	–	–	63,128	63,128
Interest income (charged) earned	–	(1,406)	8,997	–	7,591
Transfer to deferred capital grants (Note 16)	(8,024,197)	(288,595)	(70,060)	(468,101)	(8,850,953)
Unutilised grants returned	(1,259,634)	(171,006)	–	–	(1,430,640)
Payment on behalf	–	–	(90,439,483)	–	(90,439,483)
Transfer to statement of comprehensive income	(211,141,338)	–	–	(7,885,988)	(219,027,326)
At 31 March 2016	8,820,999	26,848	1,748,562	(2,071,032)	8,525,377
Grants received during the financial year	253,794,411	1,100,000	101,710,340	4,157,130	360,761,881
Interest income (charged) earned	–	4,753	21,706	–	26,459
Transfer to deferred capital grants (Note 16)	(5,972,939)	(612,045)	(262,865)	(392,000)	(7,239,849)
Unutilised grants returned	–	–	–	(10,910)	(10,910)
Payment on behalf	–	–	(101,686,936)	–	(101,686,936)
Transfer to statement of comprehensive income	(248,495,313)	–	–	(3,855,111)	(252,350,424)
At 31 March 2017	8,147,158	519,556	1,530,807	(2,171,923)	8,025,598

[i] Total operating grants received/receivable less transferred to deferred capital grants since establishment are $2,710,721,319 (2015/2016: $2,462,899,847).

[ii] Development grants received from MND for State projects running by NParks on behalf of MND.

[iii] Other grants comprise grants received from other government agencies.

12. TRADE AND OTHER PAYABLES

	Group		NParks	
	2016/2017 $	2015/2016 $	2016/2017 $	2015/2016 $
Trade payables	12,601,264	10,057,406	12,601,264	10,047,155
Other payables				
– MND[i]	3,557,746	3,154,578	3,557,746	3,154,578
– Garden City Fund[ii]	17,442	51,047	17,442	51,047
– Others	10,115,172	8,616,455	10,115,172	8,615,712
GST payable	2,690,481	2,522,362	2,688,373	2,522,362
Rental and other deposits	10,759,370	7,636,597	10,759,370	7,636,597
Accrual expenses	15,180,904	21,610,433	15,175,404	21,610,433
	54,922,379	53,648,878	54,914,771	53,637,884

[i] 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 in cash on demand.

[ii] Non-trade amounts due to Garden City Fund are unsecured and interest-free.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

13. PROVISION FOR PENSION COSTS

	Group and NParks	
	2016/2017 $	2015/2016 $
At beginning of the year	5,294,372	5,578,074
Provision for the year	156,350	151,902
Payments during the year	(2,011,050)	(95,000)
Remeasurement on defined benefit obligation:		
Actuarial gain arising from changes in financial assumptions	–	(339,094)
Actuarial gain arising from changes in experience adjustments	–	(1,510)
At end of the year	3,439,672	5,294,372
Represented by:		
Current portion	120,000	2,025,697
Non-current portion	3,319,672	3,268,675
	3,439,672	5,294,372

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

	Group and NParks	
	2016/2017 $	2015/2016 $
Interest cost	95,532	45,099
Service cost	60,818	106,803
Total	156,350	151,902

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:

	2016/2017 $	2015/2016 $
Discount rate	2.2%	2.2%
Salary increase rate	3.0%	3.0%

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

The sensitivity analysis below has been determined based on reasonably possible changes of each significant assumption on the defined benefit obligation as of the end of the reporting period, assuming if all other assumptions were held constant:

		Impact on provision for pension costs	
	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.25%	(47,413)	24,098
Salary increase rate	0.25%	1,324	(25,689)

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

14. DEFERRED REVENUE

	Group		NParks	
	2016/2017	2015/2016	2016/2017	2015/2016
	$	$	$	$
Lease premium received in advance	1,298,611	1,381,945	1,298,611	1,381,945
Deferred rental income	2,856,000	3,024,000	2,856,000	3,024,000
Plan fees received in advance	832,700	1,062,000	832,700	1,062,000
Other income received in advance	137,249	436,025	128,557	436,025
	5,124,560	5,903,970	5,115,868	5,903,970
Represented by:				
Current portion	2,460,082	2,951,458	2,451,390	2,951,458
Non-current portion	2,664,478	2,952,512	2,664,478	2,952,512
	5,124,560	5,903,970	5,115,868	5,903,970

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

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 NParks 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	
	2016/2017	2015/2016
	$	$
Balance at the beginning of the financial year	114,035,038	116,309,524
Amounts transferred from Government grants (Note 11)	7,239,849	8,850,953
	121,274,887	125,160,477
Less: Amortisation of Deferred Capital Grants	(11,866,060)	(11,125,439)
Balance at the end of the financial year	109,408,827	114,035,038
Total capital grants received (excluding grants-in-kind transferred from Garden City Fund) and utilised since establishment	247,314,232	240,074,383

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

	2016/2017	2015/2016	2016/2017	2015/2016
	Number of shares		$	$
Issued and fully paid up:				
At the beginning of the year	191,000	1,000	191,000	1,000
Equity injection[1]	841,800	190,000	841,800	190,000
At the end of the year	1,032,800	191,000	1,032,800	191,000

(i) 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.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

19. SINKING FUND

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

Movement between accumulated surplus and sinking fund when fund are received from MND and upon utilisation of fund approved by board.

20. NET ASSETS OF GARDEN CITY FUND

National Parks Board ("NParks") is the trustee of Garden City Fund ("GCF"). GCF is managed and administered by the Garden City Fund Management Committee, comprising staff from NParks and members of the public appointed by NParks, in accordance with the provisions of the Garden City Fund Trust Deed dated 10 March 2016 (the "Deed").

The GCF 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. There has been no contribution to the GCEF since establishment.

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

The objectives of GCF are exclusively to enhance the enjoyment of the Garden City, for amenities and special features at the national parks, nature reserves and green areas in Singapore and also for community activities and programmes that promote awareness of nature, art and culture, conservation, research and education and, through involving the citizens to enhance ownership of the Garden City, facilitating a sense of rootedness to the nation.

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).

GCF' accounts are prepared in accordance with Financial Reporting Standards in Singapore ("FRS").

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

	Group and NParks	
	2016/2017	2015/2016
	$	$
Income:		
Donations	4,199,701	5,733,217
Sales of publications/souvenirs/merchandise	79,998	97,408
Course/tour fees	127,986	137,423
Interest income	119,699	81,505
Exchange gain	2,126	2,201
Other income	17,667	14,133
	4,547,177	6,065,887
Amounts disbursed for:		
Costs of charitable activities:		
Conservation projects	97,285	226,567
Enhancements of parks, gardens and facilities	2,695,540	335,577
Outreach, education and research programmes	4,041,768	2,644,882
Publication	106,202	177,331
Depreciation	53,879	50,580
Loss on disposal of plant and equipment	–	10,875
Administrative costs	8,301	1,157
	7,002,975	3,446,969
(Deficit)/surplus for the year	(2,455,798)	2,618,918
(Deficit)/surplus for the year	(2,455,798)	2,618,918
Accumulated fund at beginning of the year	14,438,466	11,819,548
Accumulated fund at end of the year	11,982,668	14,438,466

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

20. NET ASSETS OF GARDEN CITY FUND *(cont'd)*

	Group and NParks	
	2016/2017	2015/2016
	$	$
Represented by:		
Current assets		
Cash and cash equivalents	25,956,998	21,594,895
Other receivables	47,556	184,349
	26,004,554	21,779,244
Non-current assets		
Plant and equipment	242,647	264,009
Current liabilities		
Trade payables	109,808	323,513
Other payables	1,827,189	183,398
Deferred donations	12,327,536	7,097,876
	14,264,533	7,604,787
Net assets	11,982,668	14,438,466

21. NET ASSETS/(LIABILITIES) OF NATIONAL PRODUCTIVITY FUND

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

	Group and NParks	
	2016/2017	2015/2016
	$	$
Grants received	1,729,617	–
Less: Expenditure	(1,204,217)	(1,388,993)
Staff related cost	(239,980)	(223,082)
General administration	(52,737)	(148,411)
Grant disbursement	(911,500)	(1,017,500)
Less: Return of funds	–	(688,327)
Surplus/(deficit) for the year	525,400	(2,077,320)
(Deficit)/accumulated fund at beginning of the year	(142,634)	1,934,686
Accumulated fund/(deficit) at end of the year	382,766	(142,634)
Represented by:		
Cash and bank balances	505,614	–
Accruals	(122,848)	(142,634)
Net assets/(liabilities)	382,766	(142,634)

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

22. MISCELLANEOUS INCOME

	Group		NParks	
	2016/2017	2015/2016	2016/2017	2015/2016
	$	$ Reclassified	$	$ Reclassified
Liquidated damages	312,954	965,290	312,954	965,290
Composition amount	34,628	248,484	34,628	248,484
Barbeque permit fees	392,834	456,600	392,834	456,600
Park usage fees	576,557	657,295	576,557	657,295
Consultancy fees	94,898	89,824	12,500	15,000
Tour fees	59,813	58,427	59,813	58,427
Events Income	287,742	–	287,742	–
Merchandise	65,034	17,070	65,034	17,070
Publication and plant sales	146,265	197,533	146,265	197,533
Others	693,676	748,109	710,369	777,975
	2,664,401	3,438,632	2,598,696	3,393,674

23. STAFF COSTS

	Group and NParks	
	2016/2017	2015/2016
	$	$
Wages and salaries	81,278,684	75,442,696
Contributions to defined contribution plans	12,409,082	11,396,856
Pension costs (Note 13)	156,350	151,902
Other staff benefits	1,355,485	1,171,183
	95,199,601	88,162,637

There are currently 3 (2015/2016: 6) employees of NParks who are eligible under this pension schemes other than the Central Provident Fund (Note 13).

24. DEFICIT FROM OPERATIONS

The following item has been included in arriving at deficit from operations:

	Group and NParks	
	2016/2017	2015/2016
	$	$
Loss on disposal of property, plant and equipment	154,746	29,220

25. FUNDING FOR GOVERNMENT PROJECTS

During the financial year ended 31 March 2017, $2,998,605 (2015/2016: $454,149) was incurred to fund the Kranji Marshes, Jacob Ballas Children Gardens Extension and Gallop House projects (2015/2016: Eco-link project, Jacob Ballas Children Gardens Extension and Gallop House projects). This amount was recorded as a reduction in NParks' accumulated surplus during the financial year as this was a contribution to the government.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

26. OPERATING LEASES ARRANGEMENTS

As lessee

	Group and NParks	
	2016/2017	2015/2016
	$	$
Minimum lease payments under operating lease included as an expense	2,748,213	2,940,945

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 2017 with related parties are as follows:

	Group and NParks	
	2016/2017	2015/2016
	$	$
Within one year	2,668,208	2,116,389
In the second to fifth year inclusive	413,000	1,853,208
	3,081,208	3,969,597

As lessor

The Group rented out its properties under operating leases. Rental income earned during the year was $9,863,972 (2015/2016: $9,797,345).

The future aggregate minimum lease receivables under non-cancellable operating leases contracted for at the reporting date but not recognised as at 31 March 2017 are as follows:

	Group and NParks	
	2016/2017	2015/2016
	$	$
Within one year	6,452,966	6,554,334
In the second to fifth year inclusive	15,826,203	16,961,102
After five years	30,480,000	33,360,000
	52,759,169	56,875,436

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	
	2016/2017	2015/2016
	$	$
Within one year	1,048,000	1,048,000
In the second to fifth year inclusive	4,192,000	4,192,000
After five years	917,000	1,965,000
	6,157,000	7,205,000

The above amounts exclude operating lease premium received in advance of $1,298,611 (2015/2016: $1,381,945) (Note 14).

NOTES TO THE FINANCIAL STATEMENTS
FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

27. CAPITAL COMMITMENTS

	Group and NParks	
	2016/2017	2015/2016
	$	$
Contracted but not provided for	163,768,807	237,811,709
Less: Development expenditure on behalf of government	(160,103,485)	(233,806,386)
	3,665,322	4,005,323
Authorised but not contracted for	508,064,955	487,622,586
Less: Development expenditure on behalf of government	(487,334,180)	(465,724,582)
	20,730,775	21,898,004
	24,396,097	25,903,327

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.

28. 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	
	2016/2017	2015/2016
	$	$
Claims not provided for	3,607,001	1,684,500

29. COMPARATIVE NOTES

The financial statements for the financial year ended 31 March 2016 were audited by another firm of Certified Public Accountants.

Certain reclassifications have been made to the previous year's financial statements to enhance comparability with the current year's financial statements. As a result, certain line items have been amended on the face of the consolidated statement of comprehensive income and the related notes to the financial statements as set out below:

	Group		NParks	
	As previously reported	As reclassified	As previously reported	As reclassified
	$	$	$	$
Composition amounts	248,483	–	248,483	–
Course fees	–	1,970,857	–	1,970,857
Carpark income	–	704,322	–	704,322
Miscellaneous income	5,865,328	3,438,632	5,820,370	3,393,674

30. AUTHORISATION OF FINANCIAL STATEMENTS FOR ISSUE

The financial statements for the financial year ended 31 March 2017 were authorised for issue by the members of the Group on 19 July 2017.

FRONT COVER

Bukit Timah Nature Reserve

INTRODUCTION

Page 2
Mangrove Forest in Pasir Ris Park

CHAPTER DIVIDERS

Page 12 – Building the Natural Connection
A beautiful 3 km river with lush banks of wildflowers meanders through Bishan-Ang Mo Kio Park.

Page 22 – Conserving the Natural Connection
The Batik Golden Web Spider (*Nephila antipodiana*) is commonly found in gardens and edges of mangrove swamps. This spider, a female, was shot at Telok Blangah Hill Park.

Page 32 – Sharing the Natural Connection
The Learning Forest in the Singapore Botanic Gardens is a good place to visit to immerse yourself in nature.

Page 46 – Enhancing the Natural Connection
Streetscape Senior Manager Ms Clarice Xue climbing a tree to inspect it up close and check on its health.

WE THANK STAFF AND PARTNERS OF NPARKS WHO KINDLY CONTRIBUTED PHOTOS TO THIS ANNUAL REPORT

Wang Hsin Pei: Page 18, photo of the pink carpet of the flowers of the Trumpet Tree

Andrew Tau: Page 18, photo of the *Bougainvillea* 'Thimma'

Housing Development Board: Page 19, photo of Oasis Terraces

David Li: Page 26, photos of the Pacific Golden Plover and Whimbrel

Norman Lim: Page 28, photo of the Sunda Pangolin

Francis Yap: Page 31, photos of the Grey-headed Fish Eagle

Zestin Soh: Page 51, photo of a bee species (*Lipotriches takauensis*)

Boo Chin Min: Page 51, photo of the Almond Bush

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NATIONAL PARKS BOARD
Singapore Botanic Gardens
1 Cluny Road
Singapore 259569
Tel (65) 6471 7808
Fax (65) 6472 3033
nparks_mailbox@nparks.gov.sg
www.nparks.gov.sg



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