



FACTSHEET: UPDATES ON CITY IN NATURE EFFORTS

In 2020, the Ministry of National Development (MND) announced that the National Parks Board (NParks) would work with the community to transform Singapore into a City in Nature, with the objective of ensuring that Singaporeans continue to enjoy a high-quality living environment in the face of continued urbanisation and climate change. MND and NParks established a new planning and development paradigm that will conserve and extend Singapore's natural capital island-wide. To achieve this, NParks is implementing four key strategies: (i) expanding the nature park network; (ii) intensifying nature in gardens and parks; (iii) restoring nature into the urban landscape; and (iv) strengthening connectivity between green spaces. NParks is partnering the community to realise the City in Nature vision by inspiring and bringing Singaporeans together to be stewards for nature, such as through the OneMillionTrees movement and NParks' biodiversity conservation initiatives.

The City in Nature vision is also one of the five pillars under the Singapore Green Plan 2030, a whole-of-nation sustainable development agenda that was launched in February 2021. Through our City in Nature efforts, we aim to create a green, liveable, and sustainable home for all Singaporeans.

Progress Made in 2022

The National Parks Board (NParks) has made good progress in our efforts to transform Singapore into a City in Nature. *Please see [Annex A](#) for more information on the overall City in Nature vision that was announced at MND's 2020 Committee of Supply debate, and [Annex B](#) for a summary of key progress updates to the City in Nature targets.*

In 2022, as part of NParks' efforts to conserve and extend our natural capital island-wide, we opened the Rifle Range Nature Park, which completes the Central Nature Park Network around Bukit Timah Nature Reserve. NParks will continue to establish additional green spaces, with six more nature parks targeted to be opened



progressively from now until 2030. In addition, as part of our efforts under the Nature Conservation Masterplan, we are conserving more native plant and animal species. Today, species recovery plans are being implemented for over 120 plant and animal species. Over 30 hectares of forest, coastal and marine habitats have also been restored and enhanced. To provide more conducive habitats for our native biodiversity to thrive, NParks will increase our target to restore and enhance forest, marine, and coastal habitats from 30 hectares to 80 hectares by 2030. This will be achieved by intensifying the planting of native species and encouraging the establishment of native animal populations. For example, at Jurong Lake Gardens, NParks will establish riverine and rainforest habitats that are thriving with native freshwater swamp plant species, such as Gelam and Terentang trees. Such habitats are also frequented by native species such as the White-collared Kingfisher, a charismatic bird with an attractive blue plumage.

As part of the Long-Term Plan Review, NParks also completed the Ecological Profiling Exercise (EPE) in 2022. Under the EPE, we studied the ecological profile of green spaces across Singapore, allowing us to better understand their role in ecological connectivity. The EPE was carried out with a Scientific Advisory Panel, which consists of academics and experts from the nature community. It supports NParks' science-based approach towards nature conservation, focusing on the ecological connectivity of various sites, as well as the conservation of ecologically sensitive areas amidst development. Findings from the EPE were used to identify ecological corridors and plan Nature Park Networks and Nature Corridors, which were shared publicly in the Urban Redevelopment Authority (URA)'s Long-Term Plan public exhibition in 2022.

In June 2022, NParks also announced that the new Khatib Nature Corridor will be established, based on the EPE findings. Comprising forested sites at Springleaf, Tagore, Miltonia Close, and along Lower Seletar Reservoir, as well as the existing Springleaf Nature Park, the new Nature Corridor enhances ecological connectivity between the Central Catchment Nature Reserve and the upcoming Khatib Bongsu



Nature Park. In addition, three new parks will be safeguarded along Khatib Nature Corridor to serve as buffer and stepping-stone habitats.

NParks' efforts to transform Singapore into a City in Nature are strongly supported by the active participation of the community. For example, more than 500,000 trees have been planted under the OneMillionTrees movement since its launch in 2020, involving efforts from around 75,000 members of the community. As this year marks 60 years of greening Singapore since our first nationwide tree-planting campaign in 1963, NParks will be creating opportunities for the public to commemorate this milestone, such as more tree planting sessions.

NParks has also completed a series of webinars and workshops under the City in Nature Conversations initiative, as part of the Singapore Green Plan Pillar-Specific Conversations. The webinar series was completed in June 2022, while the third and final workshop was held in January 2023, where members of the community provided updates on the ground-up projects they initiated through the workshop series.



ANNEX A: SINGAPORE'S CITY IN NATURE VISION

Singapore's Greening Journey

At the start of Singapore's greening journey, the aim was to green the island as quickly as possible, to provide shade and access to green spaces for all. Our greening strategy then evolved to provide colour and vibrancy through the planting of flowering trees and shrubs. Parks were linked via the Park Connector Network and developments were encouraged to incorporate skyrise greenery. In recent years, NParks has also adopted biophilic designs in restoring habitats and has been engaging the community on our greening efforts.

Safeguarding Core Green Spaces

Singapore takes a long-term view towards land-use planning, with stewardship and sustainability as core principles. NParks adopts a science-based approach to identify core biodiversity areas and surrounding buffers to be retained for future generations. NParks' Nature Conservation Masterplan sets out strategies to safeguard these green spaces. In 2022, as part of the Long-Term Plan Review, NParks completed the Ecological Profiling Exercise (EPE) to study the ecological profile of green spaces across Singapore, and to better understand their role in ecological connectivity. The EPE was carried out with a Scientific Advisory Panel, which consists of academics and experts from the nature community. It supports NParks' science-based approach towards nature conservation, focusing on the ecological connectivity of various sites, as well as the approach to conserve ecologically sensitive areas amidst development.



Climate Change

Climate change is a growing existential threat. It brings extreme weather conditions, higher urban temperatures, and increased risks of localised flooding events. This, coupled with the fact that Singapore needs to develop sustainably to satisfy both the needs of today and the possibilities and challenges of tomorrow, means we must develop our city in a way that continues to provide a high-quality living environment for all Singaporeans, while ensuring that Singapore remains a distinctive global city that is highly liveable and sustainable.

Transforming into a City in Nature

To transform Singapore into a City in Nature, we are conserving and extending Singapore's natural capital island-wide, through the following four key strategies:

1. Expanding the Nature Park Network
2. Intensifying nature in gardens and parks
3. Restoring nature into the urban landscape
4. Strengthening connectivity between Singapore's green spaces

1. Expanding the Nature Park Network

Singapore's four nature reserves (Bukit Timah, Central Catchment, Labrador, and Sungei Buloh Wetland Reserve) safeguard primary and secondary rainforests and are core habitats for native biodiversity. As core components of Singapore's natural capital, they are also primary providers of ecosystem services such as clean air and water.

To safeguard our nature reserves as well as extend our natural capital, NParks has converted forested areas surrounding the nature reserves into nature parks. These nature parks serve as complementary habitats and buffers to protect the nature reserves against the impact of urbanisation and human activities. They also provide expanded habitats for Singapore's native flora and fauna to thrive beyond the nature



reserves. These are part of efforts to identify core areas of ecological significance and their surrounding buffers, and retain them for future generations. Nature parks create more opportunities for Singaporeans to enjoy nature-based activities such as hiking, mountain biking and bird watching, with minimal disturbance to the nature reserves. In November 2022, NParks opened the 66 ha Rifle Range Nature Park, which completes the Central Nature Park Network around Bukit Timah Nature Reserve, reducing visitorship pressure on Bukit Timah Nature Reserve.

Target: NParks will continue to grow the Nature Park Network and aims to add another 200 hectares of nature parks by 2030 (from 2020 baseline).

2. Intensifying nature in gardens and parks

NParks is intensifying nature in our gardens and parks. These efforts will dovetail with NParks' plans to develop more green spaces and redevelop existing ones, thus expanding our natural capital, and allowing Singaporeans to benefit from greater access to nature and its associated benefits to health and well-being.

Target: NParks will develop more than 130 hectares of new parks and enhance about 170 hectares of existing gardens and parks with lush vegetation and natural landscapes by 2026.

Therapeutic landscapes

NParks is incorporating more therapeutic landscapes in gardens and parks. NParks has developed Therapeutic Gardens specially designed and programmed for seniors. It is also developing more garden typologies to cater to diverse health conditions such as attention deficit hyperactivity disorder (ADHD), dementia, stroke, heart, and mood disorders.

Target: There will be 30 Therapeutic Gardens in parks across Singapore to meet different needs by 2030.



Furthermore, NParks is facilitating Therapeutic Horticulture programmes in community spaces to promote better physical and mental health of seniors. Singapore's network of nature playgardens will also be expanded, enabling children to play outdoors in specially curated nature play areas, and enjoy the benefits of connecting with nature.

Nature-based Solutions

NParks is working with PUB to naturalise waterways and waterbodies in gardens and parks. Where feasible, concrete canals will be transformed into natural rivers, and reservoirs will serve as natural lakes that function as floodplains to protect nearby homes and properties from flooding while supporting rich biodiversity. This has been implemented successfully at Bishan-Ang Mo Kio Park and Lakeside Garden at Jurong Lake Gardens.

To enhance Singapore's coastal protection measures, NParks is restoring mangroves in parks along Singapore's coasts, such as Kranji Coastal Nature Park, and has embarked on a mangrove restoration project at Sungei Durian in Pulau Ubin, where we aim to naturally restore around 8,000 mangrove plants over time. These mangroves will function in tandem with hard engineering solutions to mitigate the effects of erosion brought about by storm surges and rising sea levels. NParks will continue to incorporate nature-based solutions in its coastal and riverine parks, to help protect Singapore against sea-level rise and inland flooding.



Species recovery and habitat restoration

NParks will conserve more native plant and animal species as well. By restoring existing ecological habitats for wildlife, we will strengthen the conservation of our endangered and rare species, and provide Singaporeans with greater access to and a more immersive experience in nature. Singapore is home to a wide range of biodiversity despite being highly urbanised. Ongoing habitat restoration and species recovery efforts have enabled Singaporeans to encounter and enjoy once-rare species, such as the Singapore Kopsia and Tiger Orchid in our gardens, parks, and streetscapes. Birds and butterflies like the Oriental Pied Hornbill and Common Birdwing can now be seen around the city. Today, species recovery plans are being implemented for over 120 plant and animal species in around 70 parks and gardens, and over 30 ha of forest, coastal and marine habitats have been restored and enhanced.

Target: By 2030, NParks will implement species recovery plans for 100 plant and 60 animal species and restore ecological habitats in at least 50% of NParks' gardens, parks, and streetscapes. We will also increase our target to restore and enhance forest, coastal, and marine habitats to 80 ha, up from 30 ha.

3. Restoring nature into the urban landscape

Nature will be restored into the built environment, and greenery will be brought closer to Singaporeans' everyday lives. This will cool the urban environment and bring the therapeutic effects of greenery directly to homes and workplaces.

To do so, NParks will increase the implementation of skyrise greenery in Singapore's buildings and infrastructure. Skyrise greenery, such as vertical green walls, green roofs, and rooftop gardens, enables developers and building owners to implement more greenery within Singapore's limited space. This will cool buildings and make them more comfortable to live, work and play in, while further beautifying our city and



advancing Singapore's status as a world leader in vertical greening. To date, approximately 155 ha of skyrise greenery has been implemented.

Target: NParks aims to have 200 hectares of skyrise greenery by 2030.

NParks will also focus on greening Singapore's industrial estates, which are currently among the hotter areas in Singapore as there is less greenery there. This intensified greenery will cool the industrial estates, help to improve air quality, and beautify these areas.

Target: NParks is working with various stakeholders to plant at least 170,000 more trees in industrial estates by 2030 (from 2020 baseline).

4. Strengthening connectivity between Singapore's green spaces

To sustain a healthy natural ecosystem, NParks will continue building its network of ecological corridors, to connect the habitats in nature reserves and nature parks to those in gardens and parks. These corridors, or Nature Ways, are planted with native trees and plants to mimic the multi-tiered structure of forests. These efforts will help to keep Singapore's streets cool and comfortable for pedestrians. Nature Ways can be further integrated with pedestrian and cycling paths to form lush and natural park connectors that connect green spaces.

Target: In the medium term, NParks aims to have 300km of Nature Ways by 2030. In the long term, NParks aspires to make every road a Nature Way.



Nature Corridors

NParks is also establishing Nature Corridors, which are identified pathways that provide important ecological connections between areas rich in biodiversity, such as the Nature Reserves. To date, NParks has announced four Nature Corridors:

1. Lornie Nature Corridor, which links the Central Catchment Nature Reserve to the Singapore Botanic Gardens.
2. Bukit Batok Nature Corridor, which will provide ecological connectivity between Bukit Timah Nature Reserve and the forested areas within Tengah Town.
3. Clementi Nature Corridor, which will strengthen the ecological connectivity between Bukit Timah Nature Reserve and the Southern Ridges.
4. Khatib Nature Corridor, which enhances ecological connectivity between Central Catchment Nature Reserve and the upcoming Khatib Bongsu Nature Park.

Park Connector Network

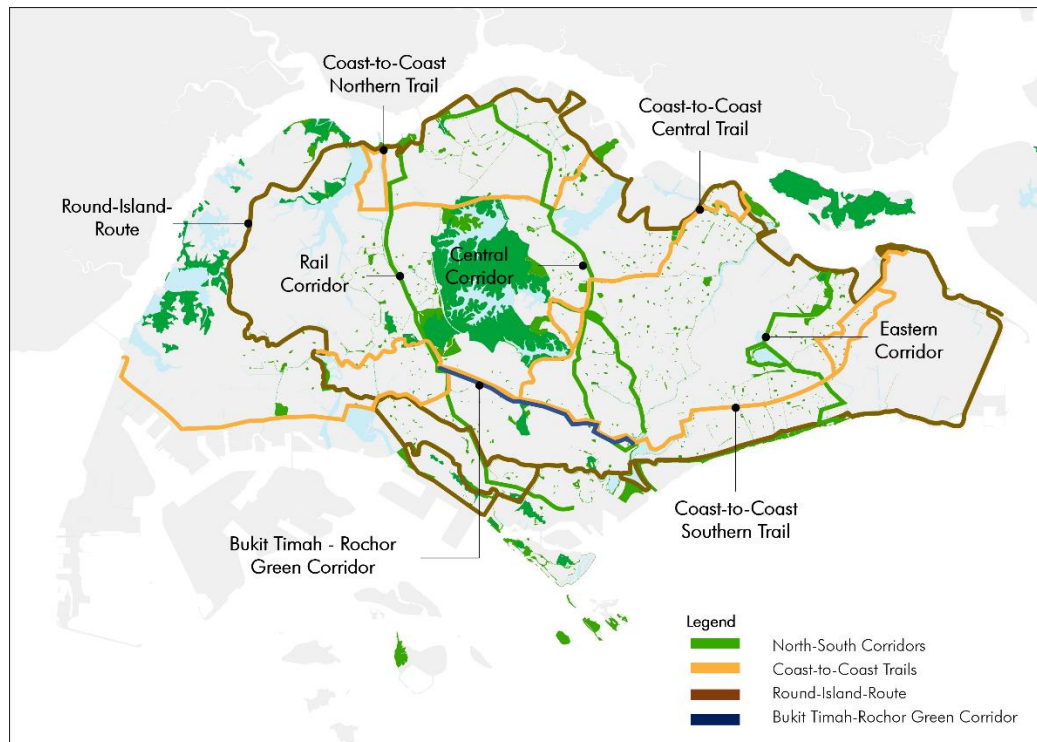
In tandem, NParks will continue to expand the Park Connector Network to ensure that more communities can access nature easily.

Target: Singapore will have 500km of park connectors by 2030. With this, all households will be within a 10-minute walk from a park.

To complement the Park Connector Network, NParks is also establishing several island-wide recreational routes, which comprise multiple park connectors and trails. These island-wide recreational routes will provide opportunities for Singaporeans to walk or cycle in natural spaces for longer distances. When fully completed, they will enable Singaporeans to explore our parks and nature areas along 360km of trails island-wide. These island-wide routes (Fig. 1) will also help to enhance ecological

connectivity between our natural habitats, strengthening Singapore's ecological resilience.

Figure 1: Map of recreational connectivity showing island-wide routes



Community Stewardship and Engagement

Transforming into a City in Nature will require a whole-of-Government effort. This is being infused into planning and development systems. However, the Government's efforts alone will not be sufficient. The success of Singapore as a City in Nature will be underpinned by the active support and participation of Singaporeans. Communities, schools, and individuals can all become stewards of greenery and biodiversity.

The City in Nature vision provides a platform to forge closer bonds between Singaporeans and strengthen Singaporeans' sense of ownership of the environment. NParks reaches out to communities, schools, and individuals to encourage them to



become stewards of greenery and biodiversity by increasing opportunities for co-creation and partnership. With the support of volunteers and corporate partners, NParks hopes to galvanise constructive community action towards caring for Singapore's living environment.

Target: NParks is looking to grow its volunteer base to 70,000 by 2030.

OneMillionTrees movement

NParks is also **partnering the community to plant one million additional trees island-wide between 2020 and 2030**, including along our streetscapes, at industrial estates, gardens, parks and park connectors, nature reserves, and nature parks. In addition to the tree-planting and habitat enhancement works under this movement, NParks will also be involving the community in the propagation and nurturing of plants that will be planted as part of the movement. In 2020, NParks announced that it will be setting up a network of community nurseries across Singapore. At these nurseries, the community can learn and assist in the processes of seed collection, plant propagation and cultivation, as well as nursery management. More experienced participants will be able to trial techniques for the cultivation of different plant species and help produce a more resilient plant stock that will have a higher chance of survival from the seedling stage in the nursery to the final stage of being planted in the green spaces around Singapore. Students, volunteers, nature group members and interested members of the public can take part in this programme.

ANNEX B: PROGRESS OF KEY CITY IN NATURE TARGETS

S/N	Key Strategies	(Year to Achieve) Targets	Key Progress (as of 31 Dec 2022, unless otherwise stated)
1	Expanding the Nature Park Network	(2030) Have an additional 200 ha of new nature parks (from 2020 baseline)	Rifle Range Nature Park (66 ha) was opened in Nov 2022. Several new nature parks such as Lim Chu Kang Nature Park, Mandai Mangrove and Mudflat Nature Park, and Khatib Bongsu Nature Park are currently being planned and developed.
2	Intensifying nature in gardens and parks	(2026) Develop over 130 ha of new parks, and enhance around 170 ha of existing parks with more lush vegetation and natural landscapes	Efforts to develop and enhance parks are ongoing. These include new parks at Cambridge Road and Punggol, as well as the rejuvenation of Mount Faber Park.
		(2030) Restore and enhance 80 ha of forest, coastal, and marine habitats [revised target]	Over 30 ha of forest, coastal, and marine habitats have been restored.
		(2030) Implement species recovery plans for 100 plant species and 60 animal species	Species recovery plans are being implemented for over 120 plant and animal species.
		(2030) Have 30 Therapeutic Gardens in parks across Singapore by 2030	There are 10 Therapeutic Gardens in Singapore (as of 28 Feb 2023).
3	Restoring nature into the urban landscape	(2030) Have 200 ha of skyrise greenery	Approximately 155 ha of skyrise greenery has been implemented across Singapore.
		(2030) Plant at least 170,000 more trees in industrial estates (from 2020 baseline)	Over 90,000 trees have been planted in industrial estates.
4	Strengthening connectivity between Singapore's green spaces	(2030) Have 500 km of park connectors	There are currently over 375 km of park connectors.
		(2030) Every household will be within 10-minute walk from a park	Over 9 in 10 households are within a 10-minute walk from a park.



		(2030) Have 300 km of Nature Ways	Approximately 185 km of Nature Ways have been implemented.
		(2030) Plant 1 million more trees across Singapore	Since the launch of the OneMillionTrees movement, more than 500,000 trees have been planted across Singapore, involving around 75,000 members of the community (as of 28 Feb 2023).