

Proposal on Planning and Construction of Country Parks

GREENVIEW Landscape Design Limited. Chief Designer, Yang Wang

2016/09/06

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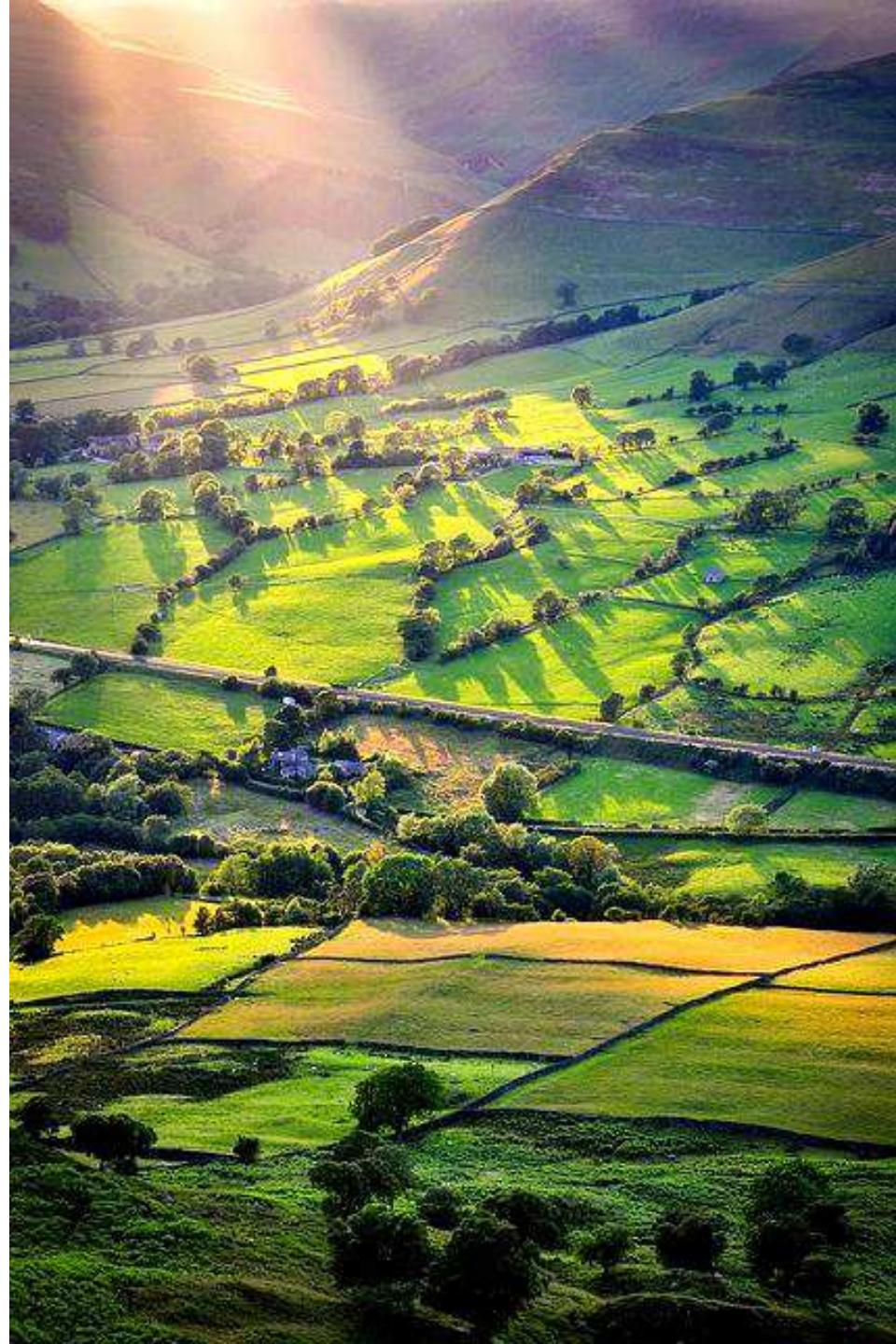
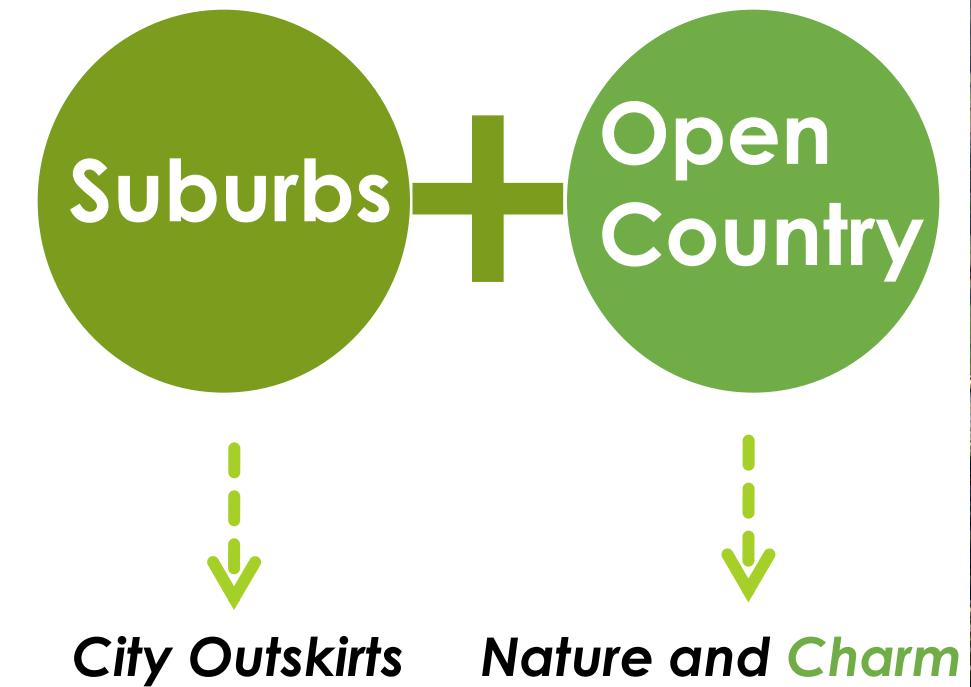
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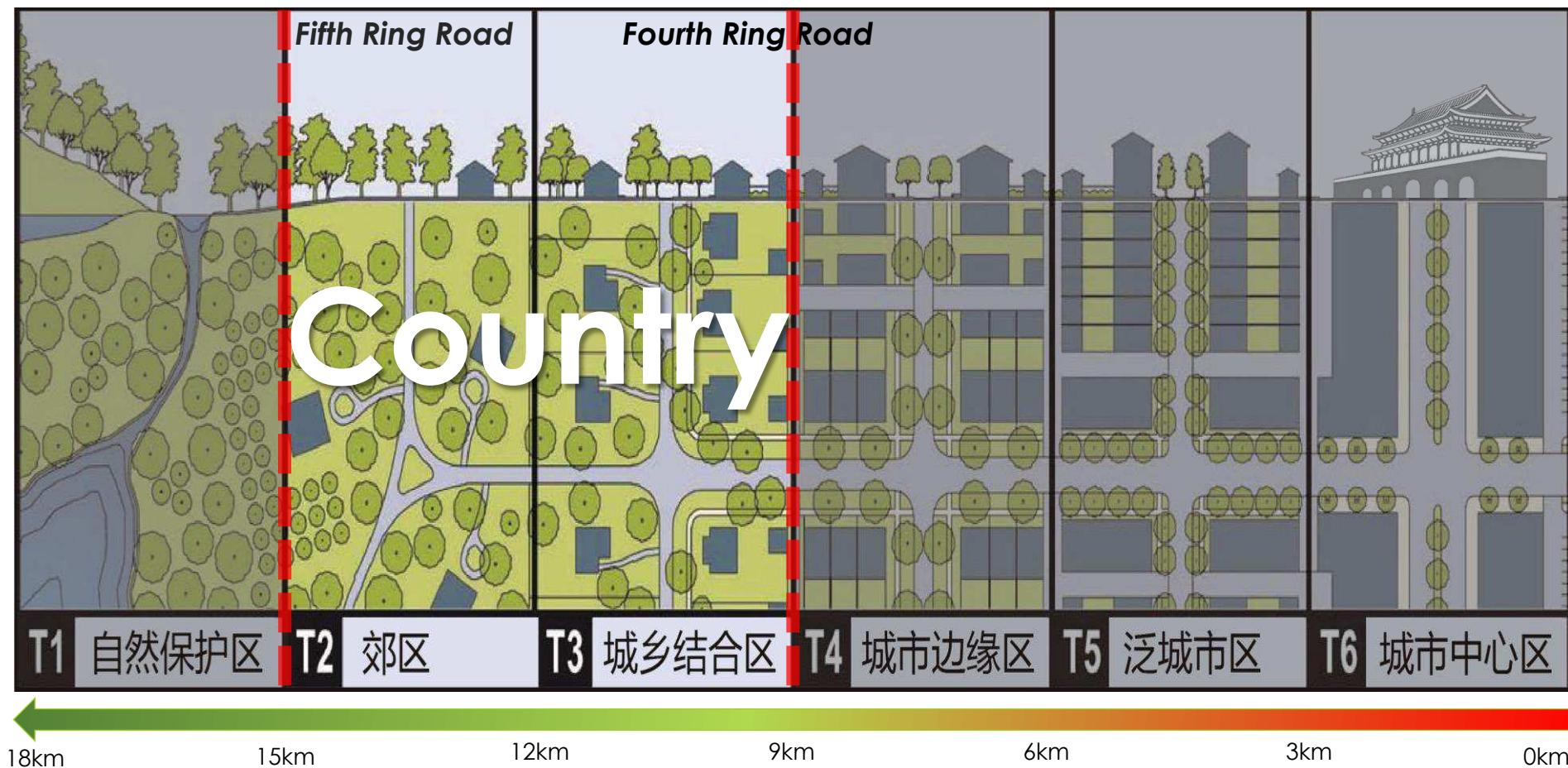
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PART ONE
Interpretation of the Project

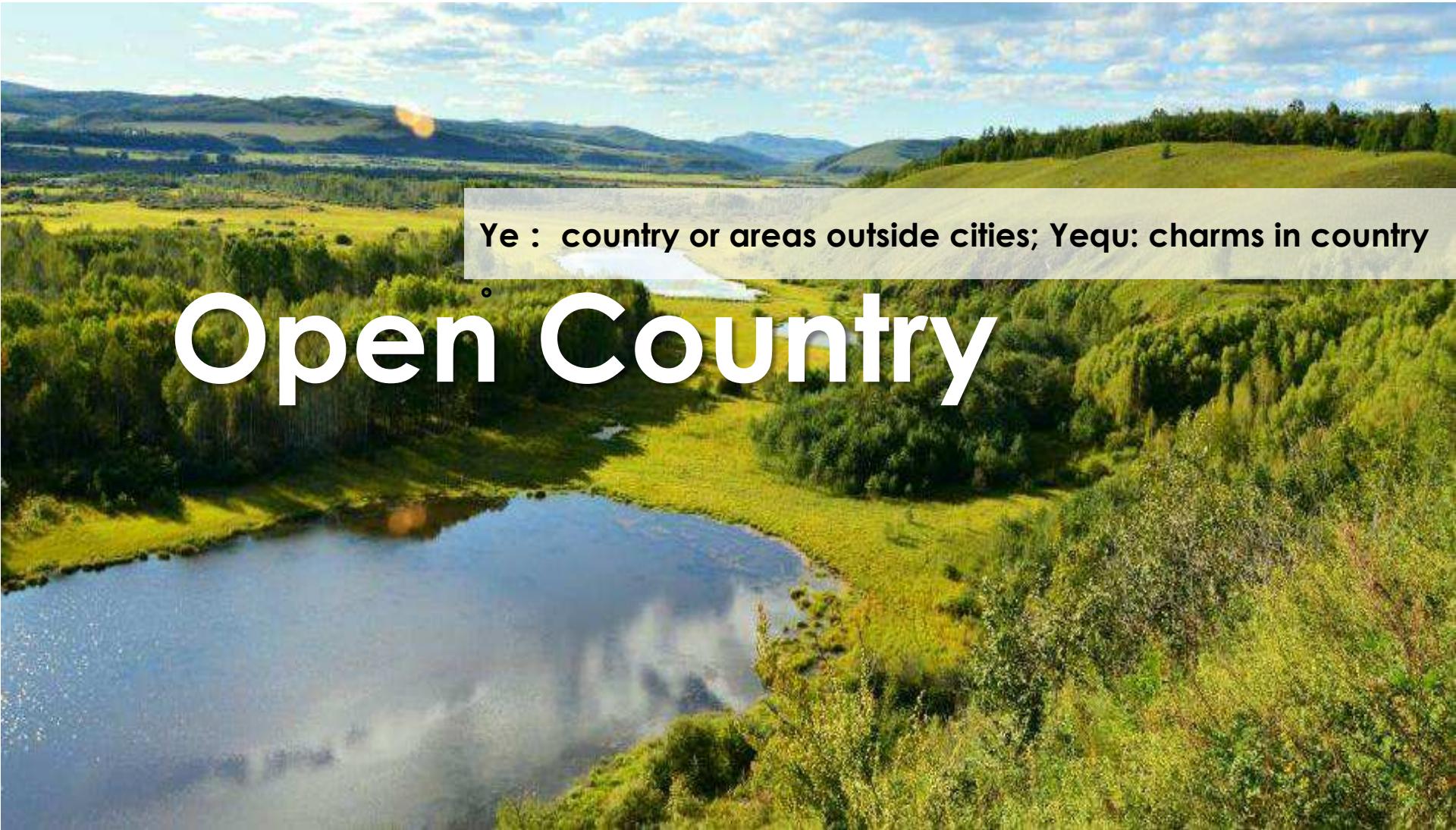
What are Country Parks ?



Suburbs Definition



Jiao (Suburbs) : As interpreted by Cihai (Ocean of Words – largest dictionary of Chinese), Jiao refers to the outskirts of a city, illustrated by the metric system of the Zhou Dynasty (3,000 years ago) where the area within 15km is “Near suburbs”, 50km “Far Suburbs”. Jiao universally refers to all areas near the city proper in later dynasties.

A wide-angle photograph of a rural landscape. In the foreground, a calm river flows from the bottom left towards the center. The banks of the river are covered with lush green grass and small bushes. Beyond the river, there are rolling green hills and mountains in the distance. The sky is filled with white and gray clouds, with a bright sun visible on the horizon.

Ye : country or areas outside cities; Yequ: charms in country

Open Country



Country Parks lie in near suburbs of the city proper, which are green areas characterized by natural landscape and charm.



Preventions of Expansion

Preventions of expansion by forming a complete ecological control chain to curb chaotic urban expansion and stabilize urban function structure.



Satisfaction of Needs

Satisfaction of needs by providing citizens with natural open space for recreations.



Protection of the Environment

Protection of the environment by preserving natural resources and slowing down the damage of urban development on nature.

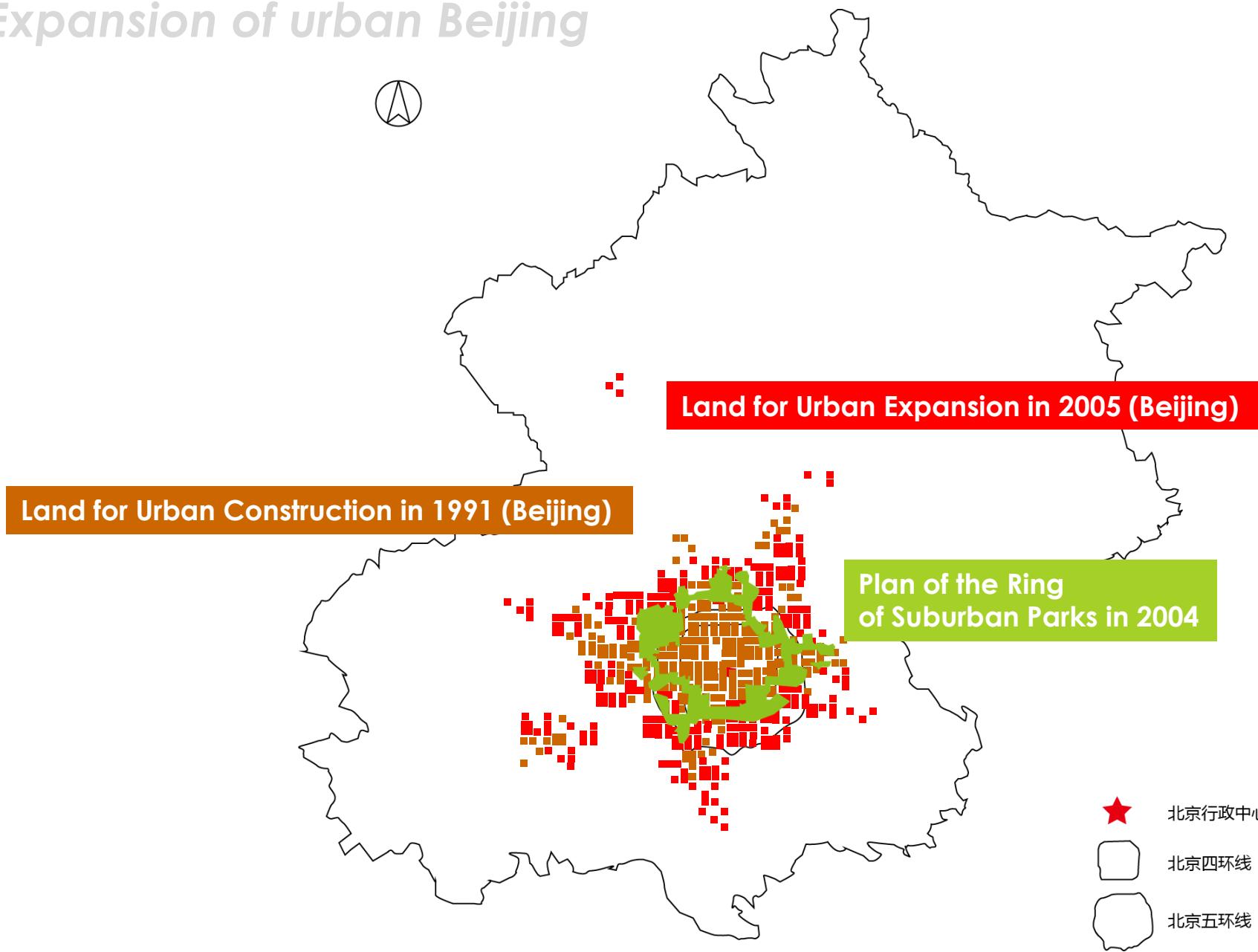


Ecological Pattern

Ecological pattern is a crucial structural part to maintain urban development and build up urban ecological.



Expansion of urban Beijing



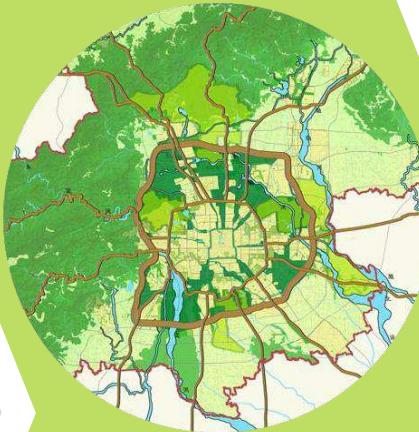
Development of Country Parks (Beijing)



Country Parks 1.0

Construction of the first batch of country parks of Beijing, axes of history and development.

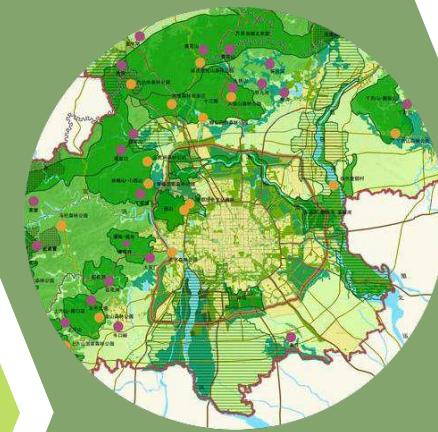
2000-2003



Country Parks 2.0

Country parks, based on the green belts formed during the 2008 Olympics, are to be redeveloped into a ring of parks.

2004-2015



Country Parks 3.0

With expansion of urban Beijing, country parks have been integrated with holistic urban development by playing the role of urban parks.

2016

Why?

Why does Beijing need Suburban Parks?

Urban Expansion

The city proper, with a high density of population, lacks natural open space and needs more green space that can be provided in suburban areas.



Urban Flood

Areas within the Fifth Ring lies in the area of heavy precipitation, where rainwater accumulates and surface runoff is severely polluted, causing damage on houses and public transport. Long-time inundation also harms animals and plants.

Haze Disaster



*In 2012, 7 million people died of diseases related to air pollution.
Air pollution claims economic losses equaling 1.2% of China's GDP.*



Aeolian Disaster



Beijing lies in the lower wind outlet of the Inner Mongolian Plateau and Loess Plateau, incurring a fall of 300,000 tons of sand and dust in peak season, which impacts transport safety, reduces crop yield and damages respiratory health.

Heat Island Effect

Easily causes severe air pollution, increasing patients with cardiovascular and respiratory diseases, while impacting air humidity, cloud cover and rainfall.



Summary



What functions of the Country Parks in Beijing possess?

PART TWO Project Scope



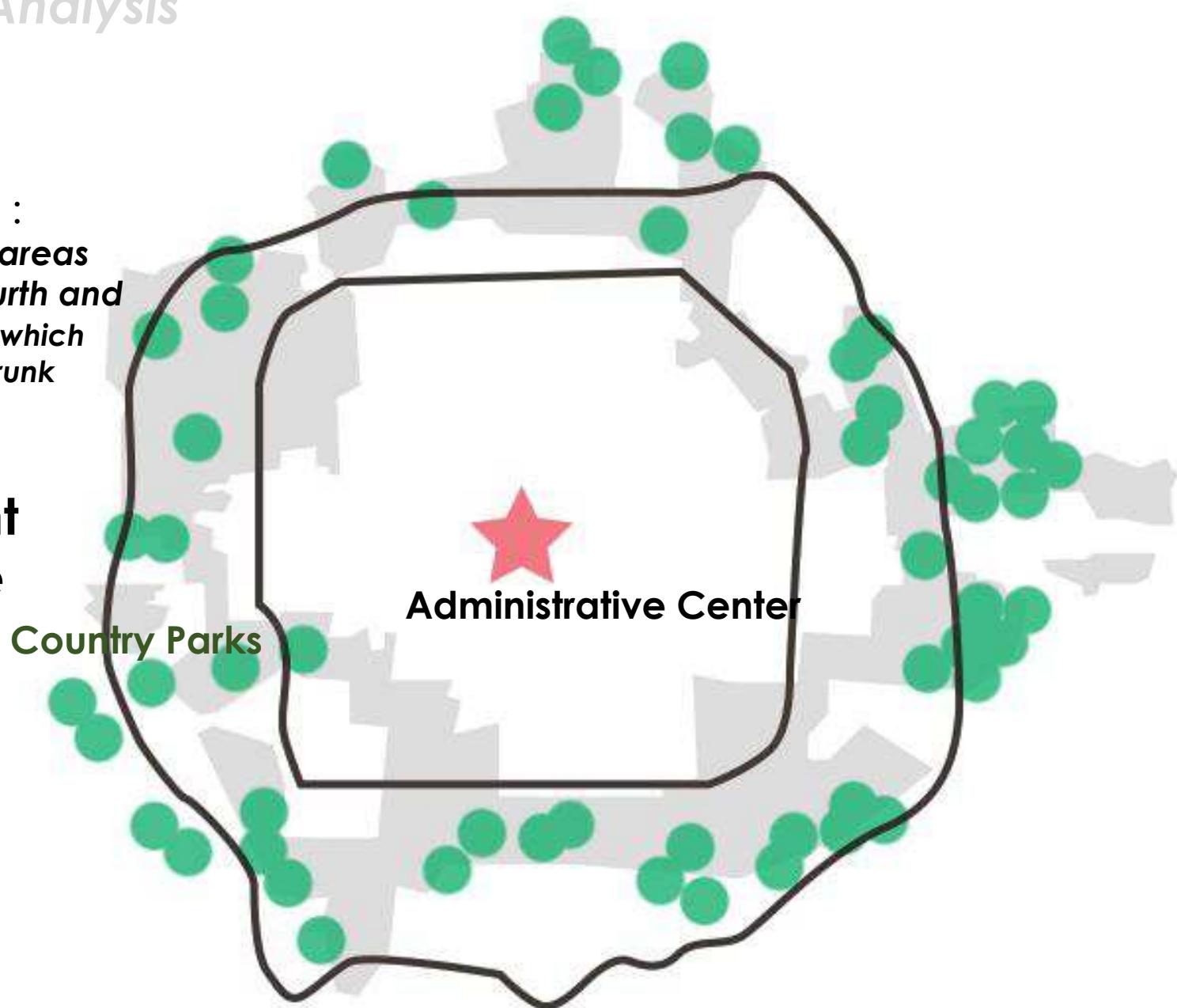
Country Parks :

Distribute within areas between the Fourth and Fifth Ring, 80% of which are in 1km along trunk transport lines.

Convenient Accessible

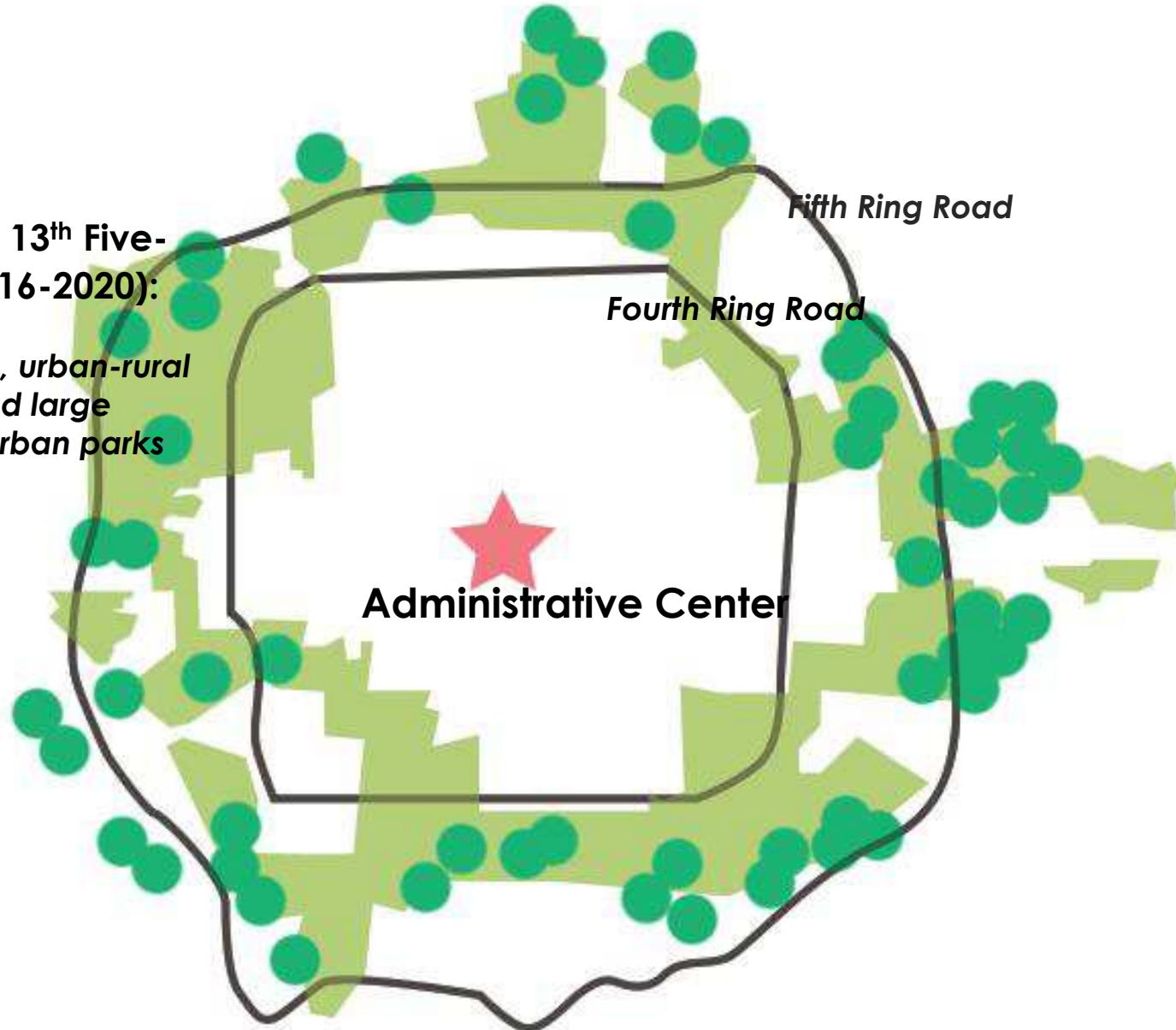
Country Parks

Administrative Center

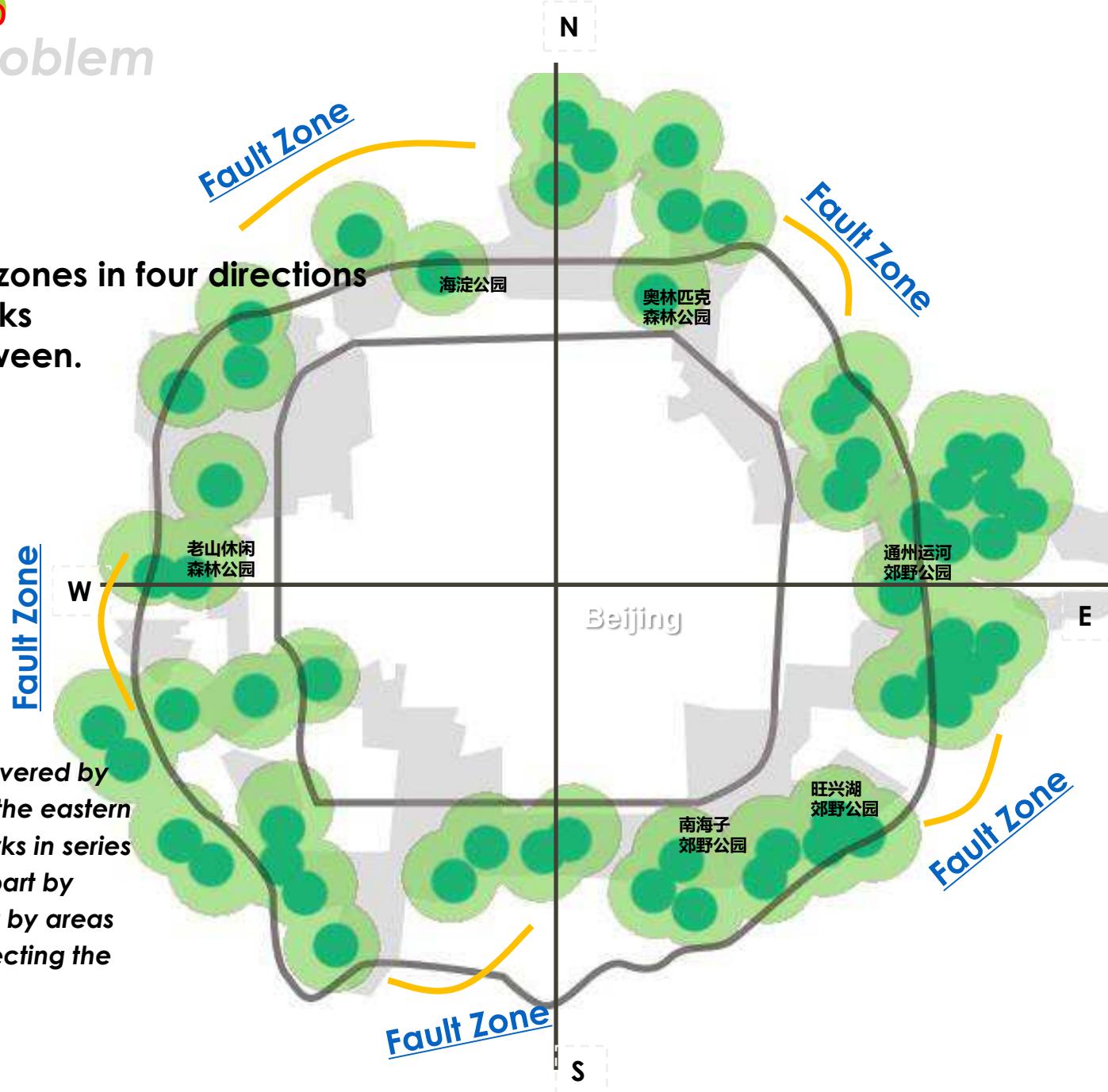


Opportunities from the 13th Five-year Plan of China (2016-2020):

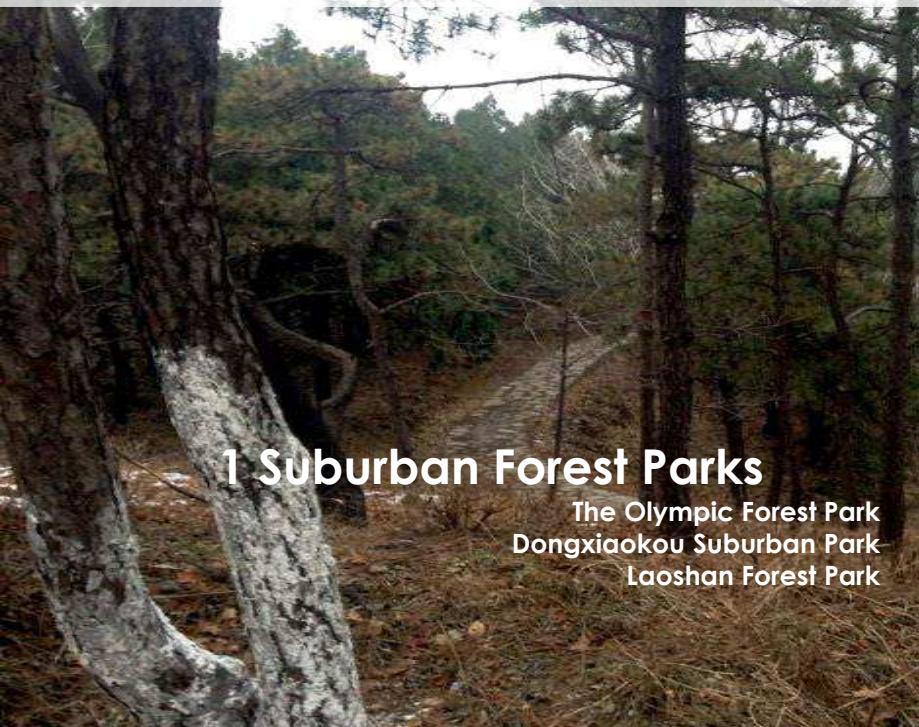
Based on mountain areas, urban-rural fringe zone plantation, and large areas of such areas, suburban parks are to be built.



In relatively inclusive zones in four directions to form a circle of parks with breakings in between.



- The north park is to be covered by the Olympic Forest Park, the eastern part by concentrated parks in series to form zones, the south part by wetland, the western part by areas of recreation while connecting the northeastern part.



1 Suburban Forest Parks

The Olympic Forest Park
Dongxiaokou Suburban Park
Laoshan Forest Park



3 Suburban Recreation Parks

Haidian Suburban Park
Hongbo Suburban Park
Huangcaowan Suburban Park



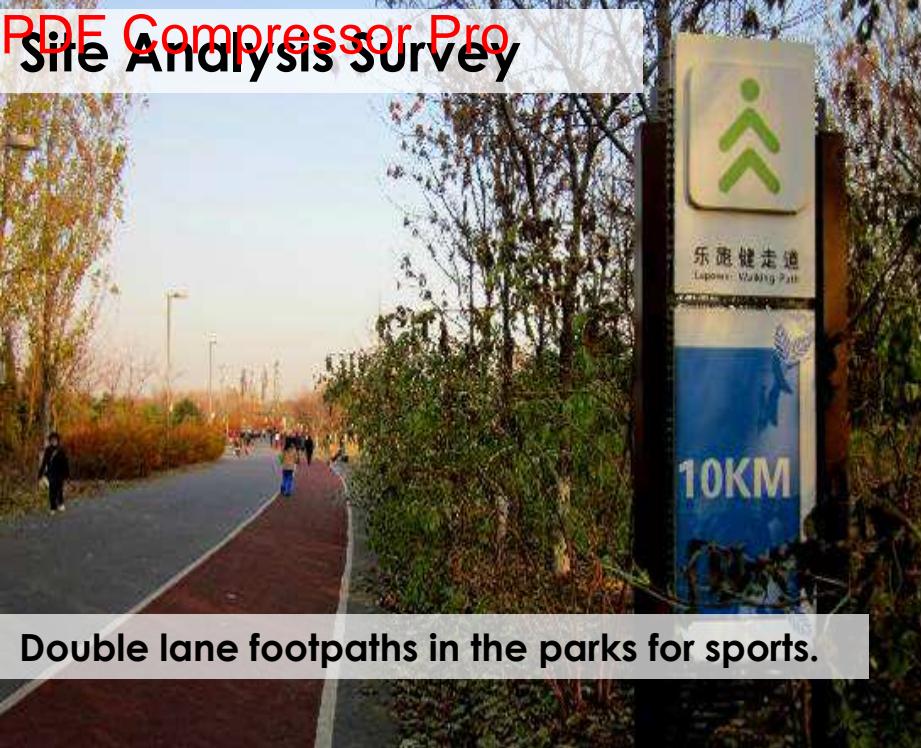
2 Suburban Wetland Parks

Nanhaizi Suburban Park
Xingwang Lake Suburban Park
Tongzhou Canal Suburban Park



4 Suburban Sports Parks

Warrior Camp Suburban Park
Quinghe Suburban Park
International Corporate Culture Park



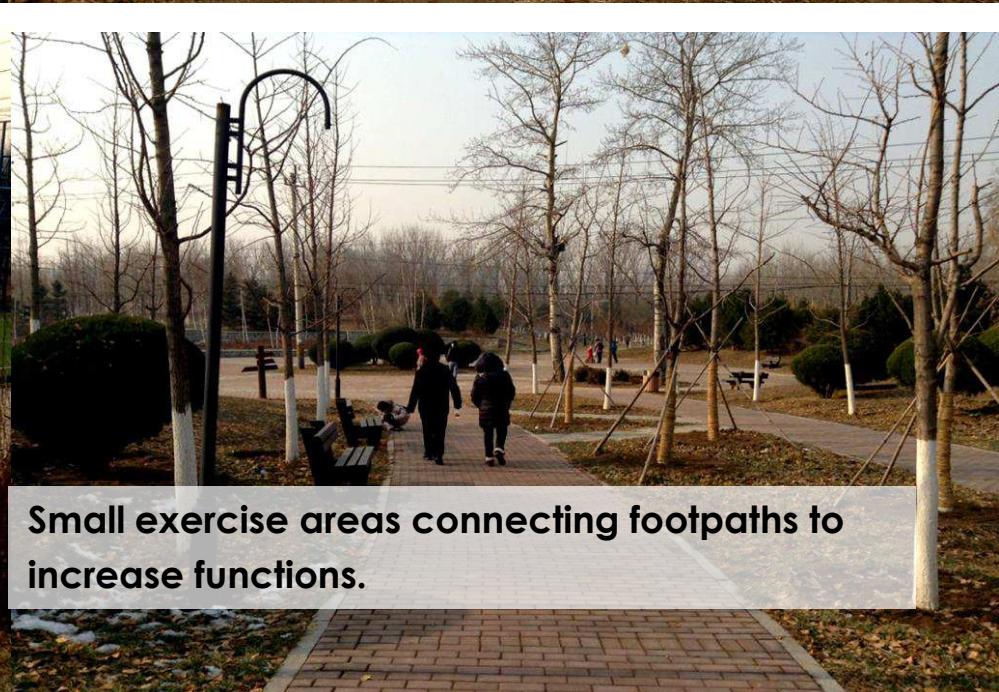
Double lane footpaths in the parks for sports.



Pavilions and fitness facilities for recreation and exercises.



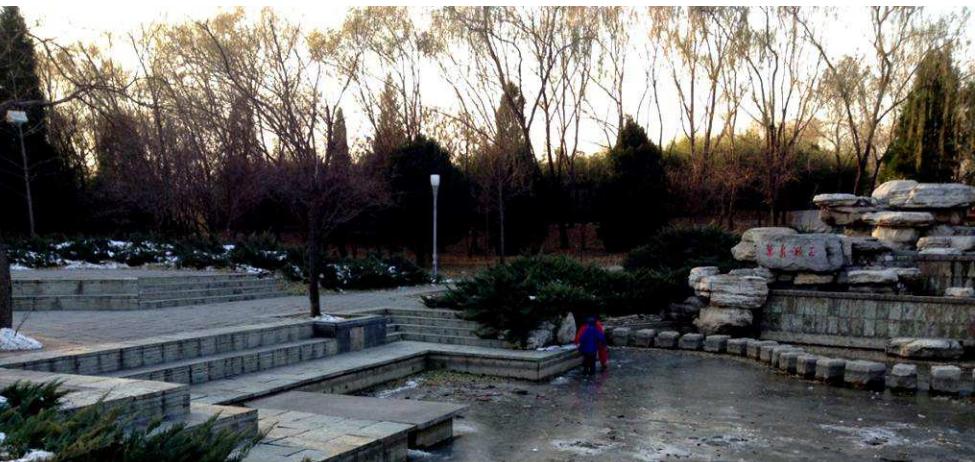
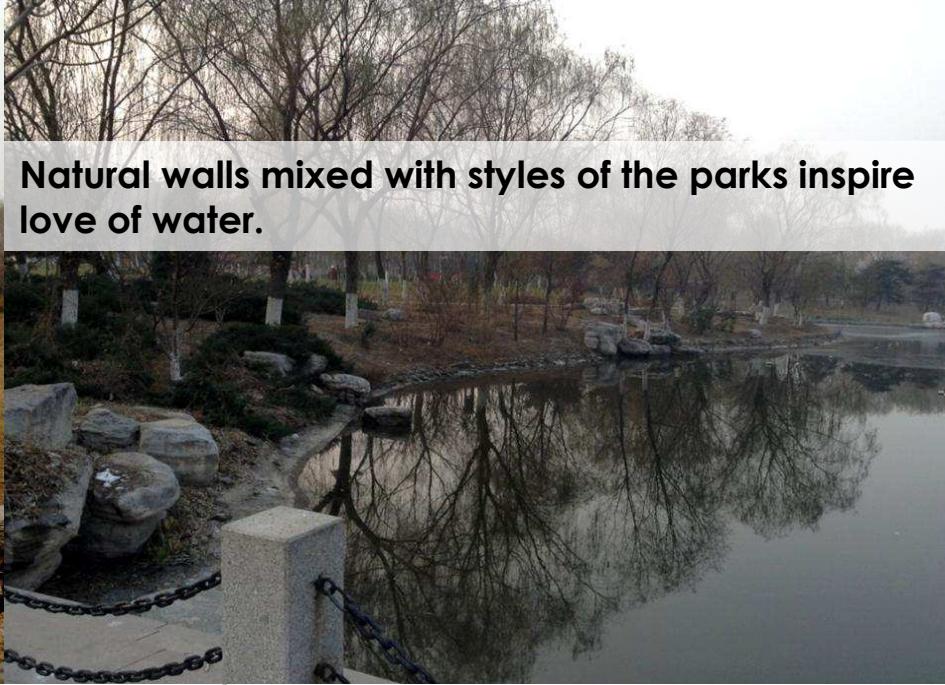
Sports fields for specific purposes.



Small exercise areas connecting footpaths to increase functions.

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Dry wetland dotted with pavilions against a broad horizon.



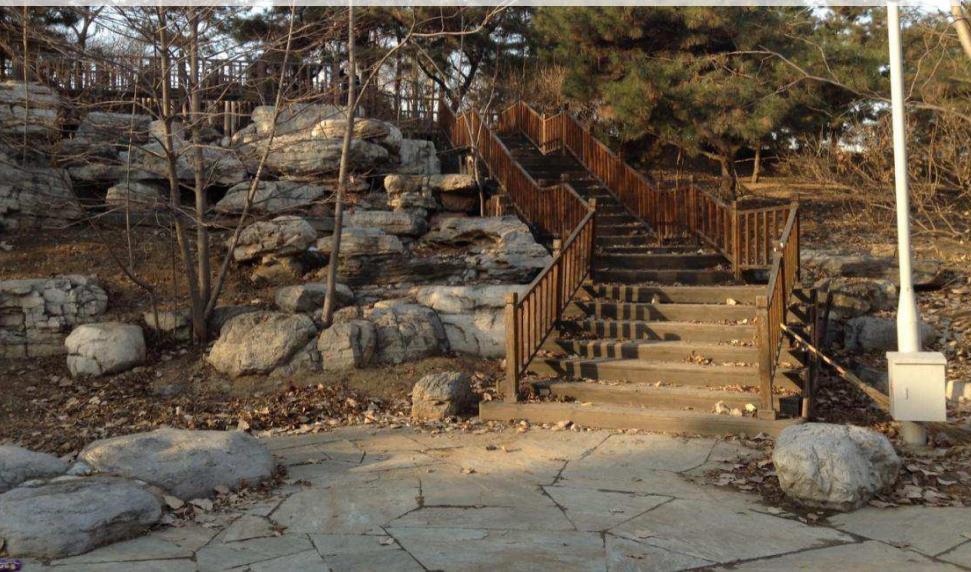
Waterscape mixed with hard platforms provides beauty to recreation areas.



Protruding platforms are reserved in intervals for access to water.



Plank roads following the terrain add fun.



Small theaters stage various shows.



Water systems protect original constructions by limiting travelers' access.



Floor inscriptions in matrix showcase field history.

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Original mountain-water scenery is reserved to enrich natural landscape.



Multi-element view at the entry and paths inside parks welcome and lead people.



Trees and shrubs are planted together to beautify river-side paths.



Woodland is covered with fallen leaves.



我们老两口总来这儿，这可大了，就是座椅有点破，也没人管。



叔叔、阿姨，你们总来这森林公园吗，感觉怎么样？

Conclusion from questionnaires:

1. Parks lack proper maintenance and management and updated facilities.

2. Road signs are few, misleading people.



人老了更得出来多转转，但不敢走太远，没个指示牌啥的，怕走丢了。



大爷，大娘，这大冷天还出来逛公园啊？

Old facilities are out of maintenance and management.



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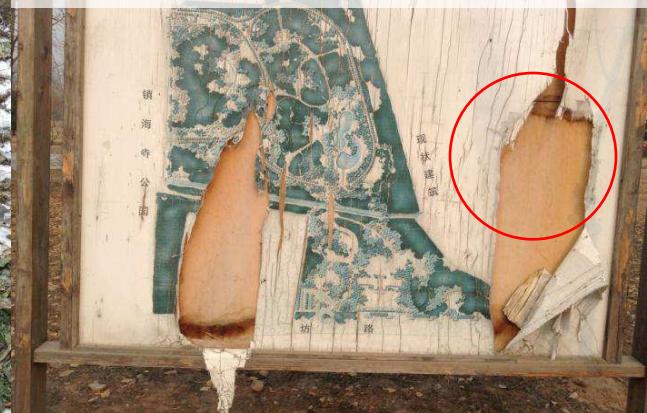
Road signs are not clear.



Road signs are damaged.



Park master plan are damaged.



Road signs are inconsistent in style with the whole landscape.



Road signs spoil beauty of the whole landscape.

是呀，带着我大孙子，这里边能锻炼锻炼，但是好玩的地方不多，我大孙子总让我带他去别的游乐园玩。



问题：张大爷，您总来这公园啊？公园看着还挺大的。

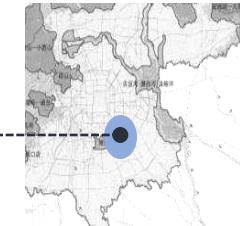


Summary of Questionnaires :

3. Functional space is monotonous and lacks.

4. Dried trunk streams through parks undermine landscape; and banks are built rigidly.

夏天还行，一到冬天就干了，还让栏杆挡上了，就能在岸边看一看。



问题：Hi，你们好，你们觉得这个河怎么样？



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Stream dry without forming appealing view.



Guardrails affect appeal of water-side space.



Banks are built rigidly.

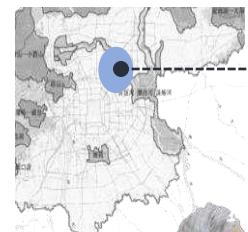


Functional space is rigid and lifeless.

Summary of Questionnaires :

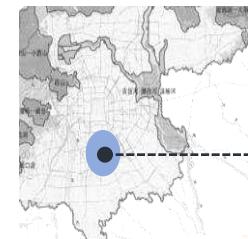
5. Boundaries of parks are obscure to outsiders.

6. Parks are not publically known due to poor publicity.



挺好呀，就是这个门修的不太好，只有我们这些老人知道这有个公园。

问题：李大娘你们觉着这公园怎么样？



知道啊，那个公园可大了春天还可以看花海，但是它不怎么对外宣传，去的人不怎么多。

问题：刘阿姨，你知道这附近有个公园吗？

Boundaries of parks are obscure to outsiders.



Entries of parks are blocked by car parks.



Entries of parks are not properly designed.



Park boundaries are frivolously built.



现状调研-问题整理

Summary of Questionnaires :
7. No specific views for autumn and winter.

一般公园不都这样吗，跳个广场舞啥的，没什么特别的。



李阿姨，您觉得这公园怎么样？



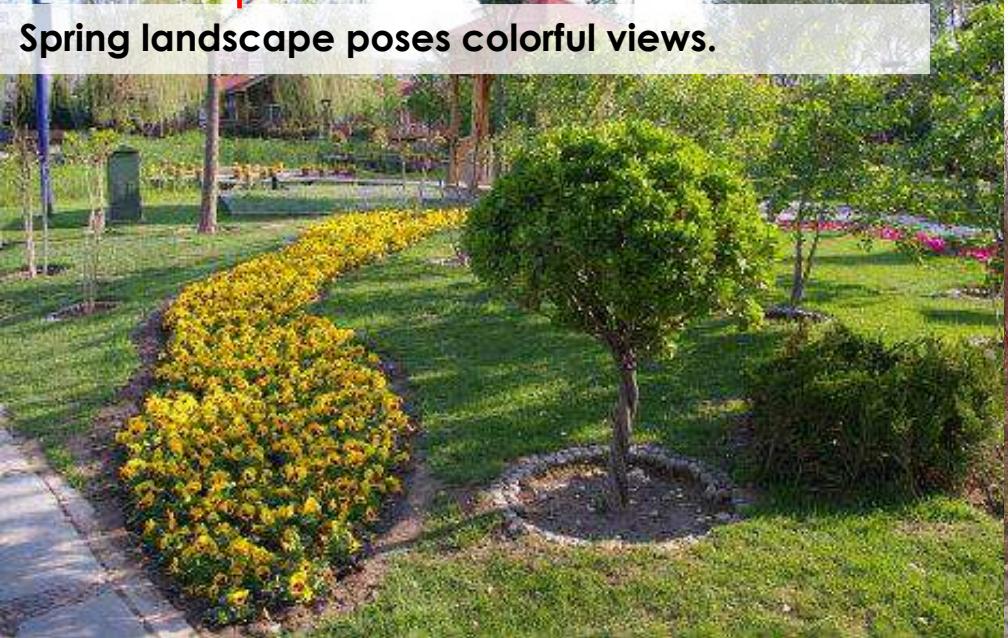
这旺兴湖公园不错，但一到秋天冬天就没什么玩的了。



蔡叔叔，您觉得这公园怎么样？



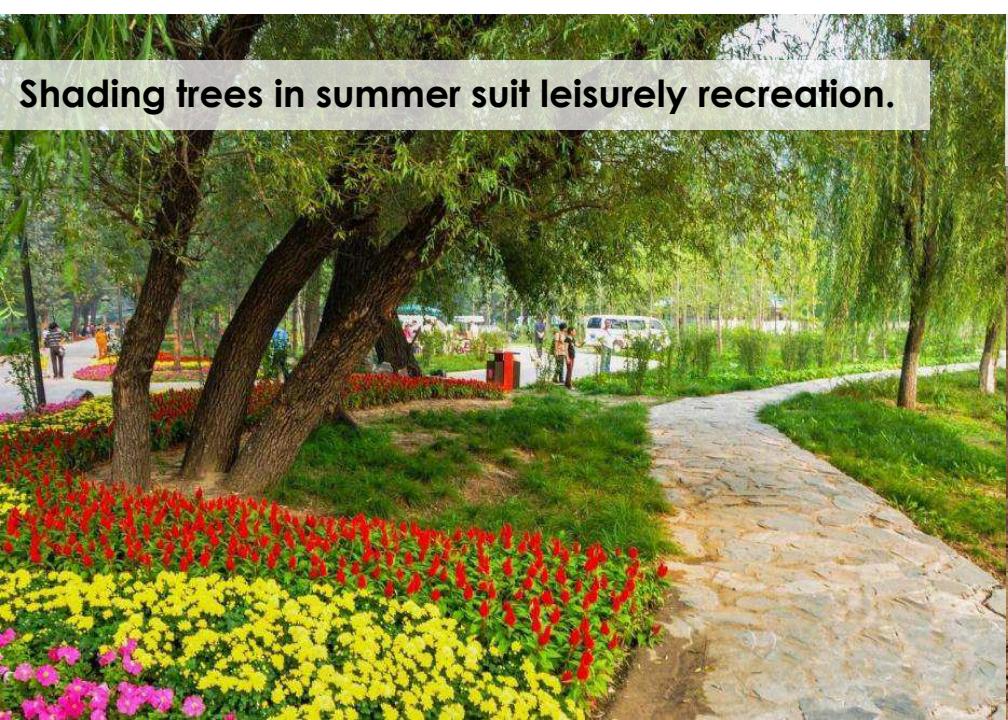
Spring landscape poses colorful views.



A lack of colorful trees in autumn undermines the view.



Shading trees in summer suit leisurely recreation.



Absence of evergreen trees and design of functional space in winter.





Absence of management

Huge demand

Great potential

Uniformity of functions

Incomplete systems

Summary

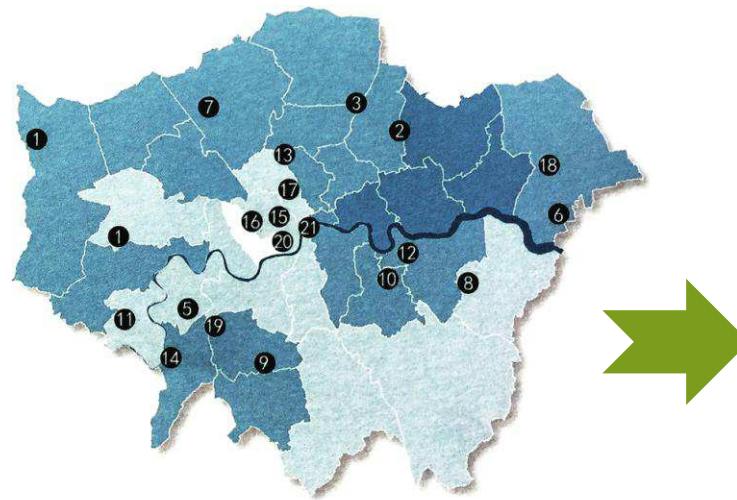
Country Parks, due to specific terrain, undergo various problems. While such parks are shaping, details of a single theme of a certain park remains to be tackled in order to satisfy the needs of citizens.

2

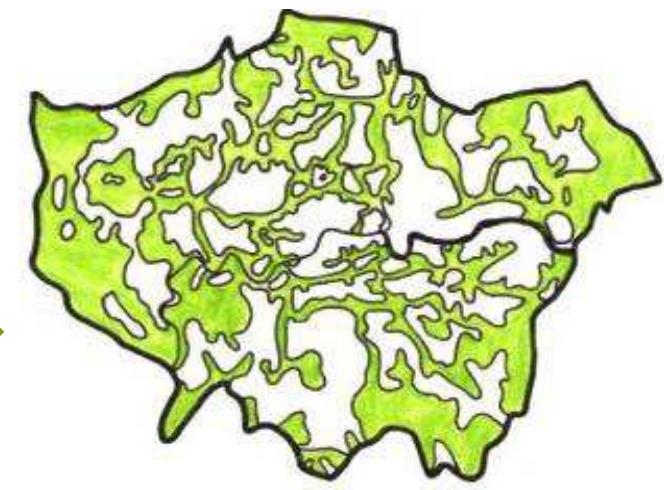
PART TWO
Case Study

How Do Other Countries/Regions Build Their **Country Parks?**

- | | |
|----------|-------------|
| ① 科恩谷 | ② 埃平森林 |
| ③ 利亚河谷 | ④ 奥斯特里 |
| ⑤ 里士满公园 | ⑥ 伦敦河畔保育公园 |
| ⑦ 北部地区 | ⑧ 东南绿化链 |
| ⑨ 旺德尔谷 | ⑩ 布莱克希思 |
| ⑪ 布希公园 | ⑫ 格林威治公园 |
| ⑬ 汉普斯特希思 | ⑭ 汉普敦司法之家公园 |
| ⑮ 海德公园 | ⑯ 肯辛顿公园 |
| ⑰ 摄政王公园 | ⑲ 泰晤士切斯社区森林 |
| ⑲ 温布尔登公地 | ⑳ 格林公园 |
| ㉑ 圣詹姆斯公园 | |



21 country parks



Ecological systems in megacities

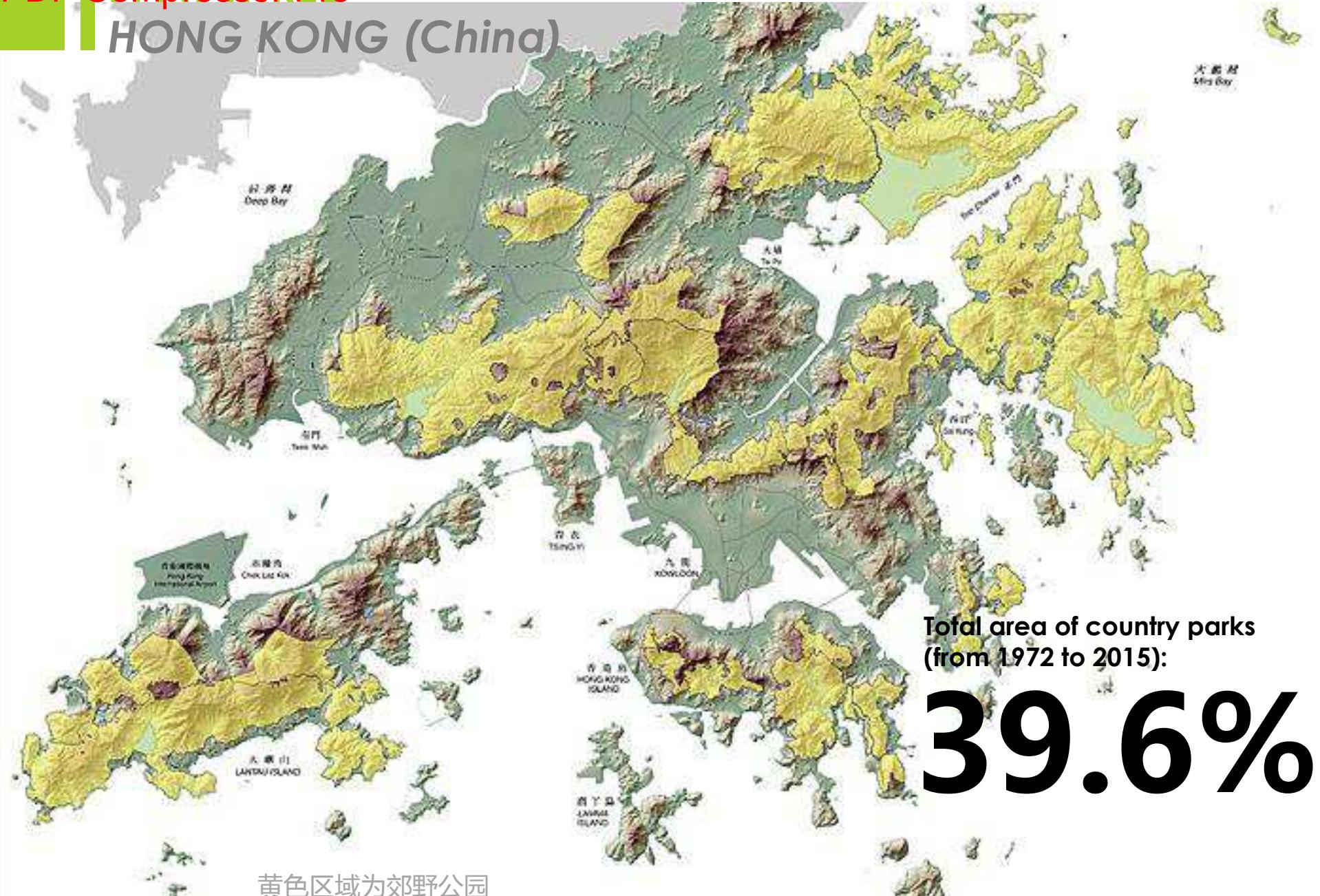
Parks surrounding London merge with the city proper, connecting doorsteps to parks.



Moor Country Park

Access connected to trains inside.

HONG KONG (China)



PART THREE

HONG KONG (China)



Tai Mo Shan Country Park

A tourist center is set up, with protection as the core aided by education.

SHANGHAI (China)



Round-the-city green belts and eco-corridors.



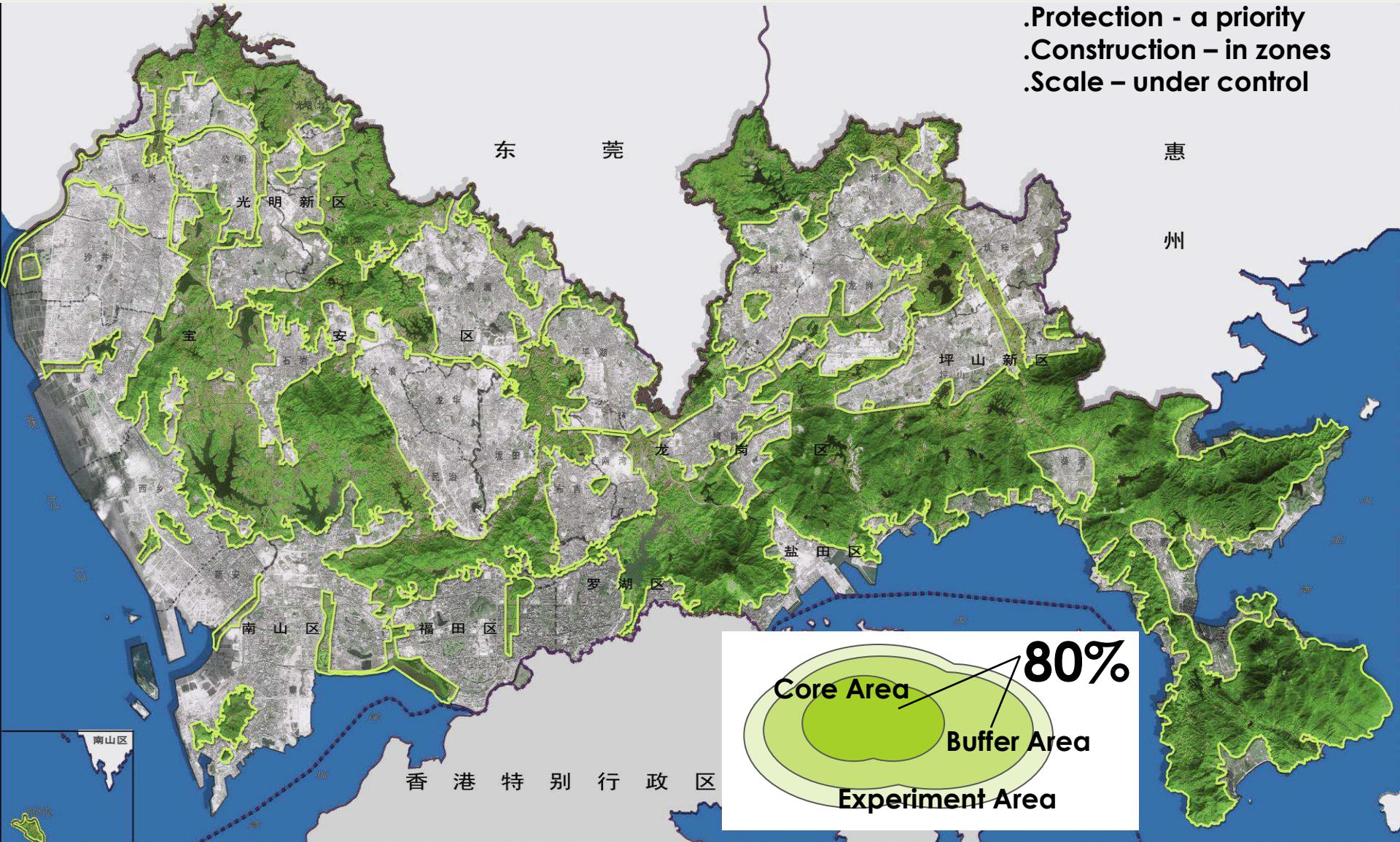
8 country parks form a green belt.

Songnan Country Park in Shanghai



Eco-protection combines agro-forest to build a tourist system.

SHENZHEN (China)



Areas planned for park construction in 2003.

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One of the 8 views in Shenzhen, praised as “Emerald Layers”.



Yangtai Shan Country Park

3

PART THREE
Concept Idea

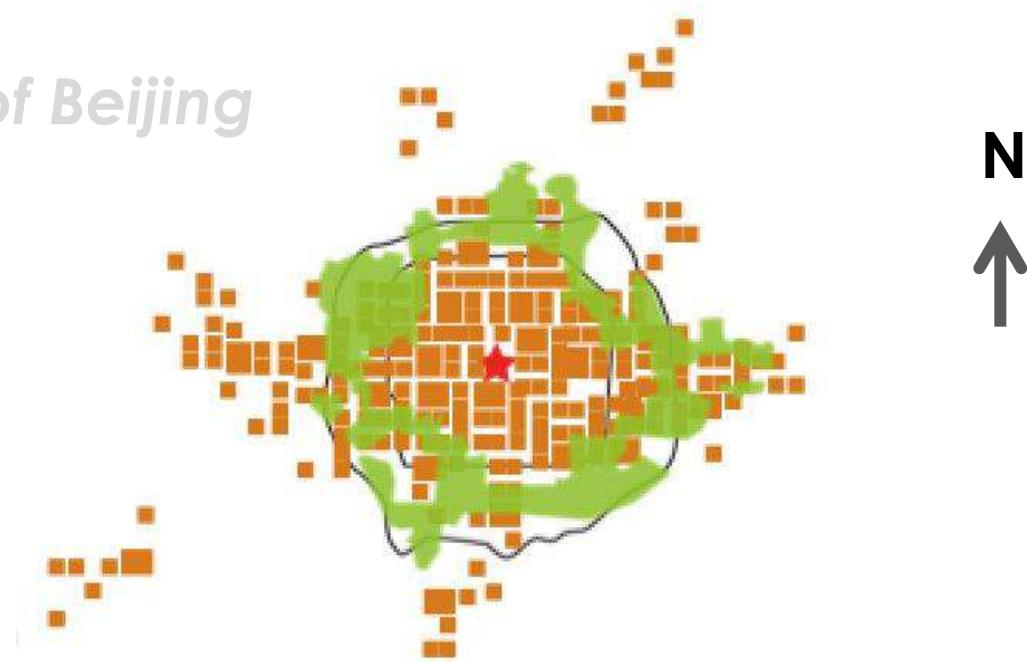
What Concept Conforms to Country Parks in Beijing ?

Urbanization causes congestion.



Urban Expansion of Beijing

City proper in 1994:



City proper in 2005:



Functions of country parks change with expansion.

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Backyard Gardens



雨水花园

社区往来通道

水上活动

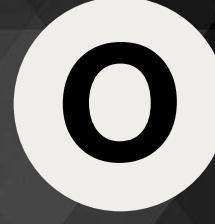
本土艺术细节

慢跑道

新增林地

1.实施策略
Proposal

2.设计意向
Purpose

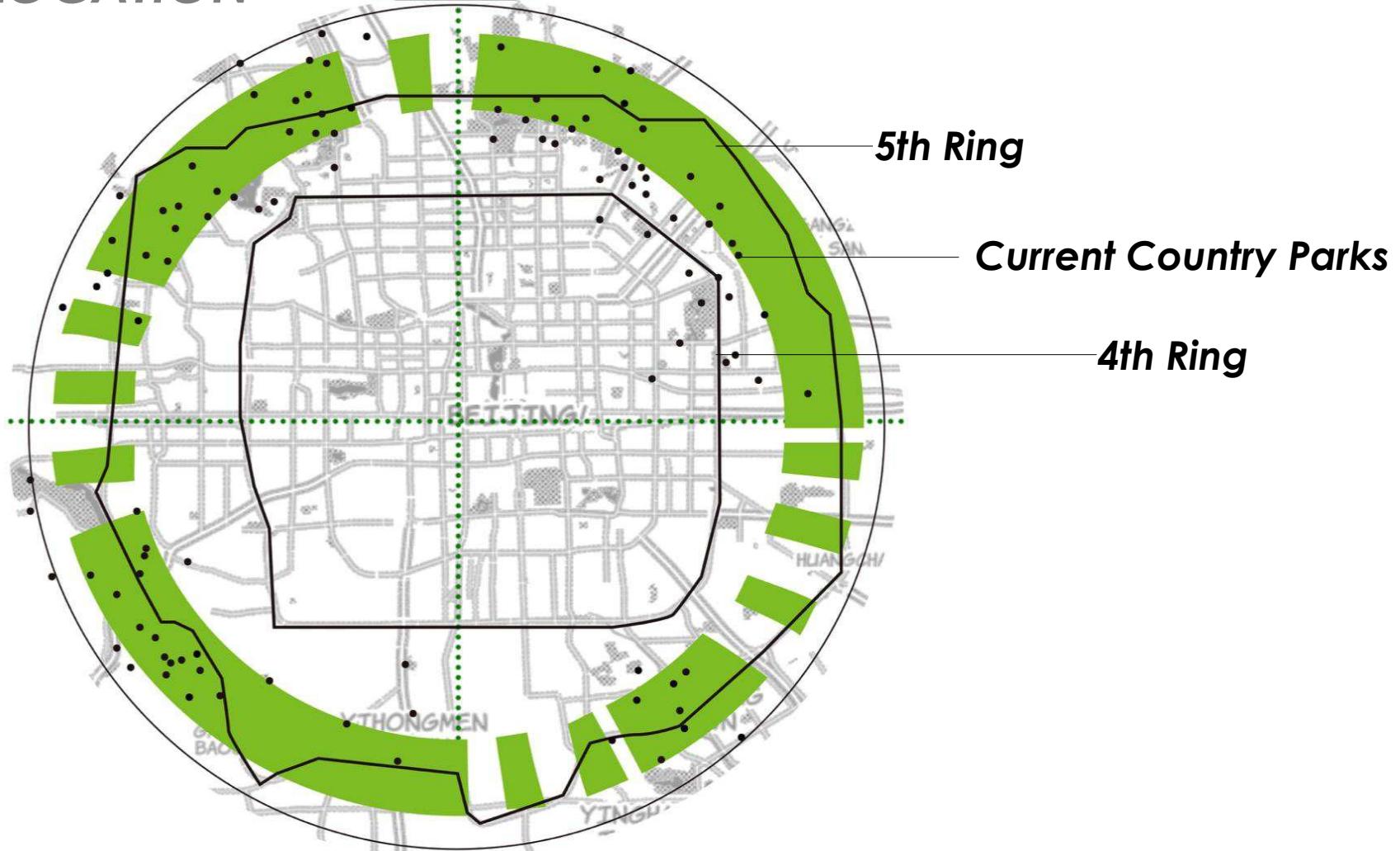


LOCATION
选址

DESIGN
设计

OPERATION
运营

Location of Country Parks in Beijing



Compared to other countries' country parks that really lie in the "country", current parks in Beijing are actually close to the city proper and some are within or overlap with it, hence the name "**city-side parks**" is more suitable. These parks are not forming connected green belts, with obvious breakings. The status quo calls for plan of a network of green roads to diminish such breakings.

LOCATION PURPOSES



Eco-
restoration

Wetland
preservation

Redevelopment
of old sites

LOCATION PURPOSES

**Scenic areas, forest parks
and agro-forest areas**

Eco- restoration

- Micro-climate regulation
- Protection of bio-diversity
- Desertification control
- Soil restoration



LOCATION PURPOSES

Wetland Preservation

- Rainwater recycling
- Connection to urban waterways
- Human interaction with water



LOCATION PURPOSES

Redevelopment of old sites

- Material recycling
- Preservation of valuable remains
- Urban green space connects green belts



Redevelopment of green space, old factories and polluted areas.

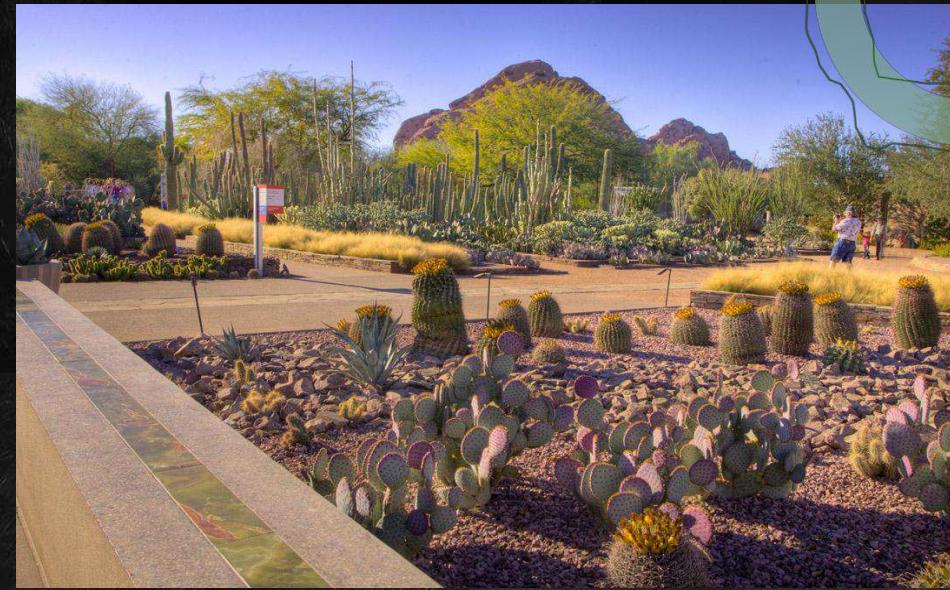
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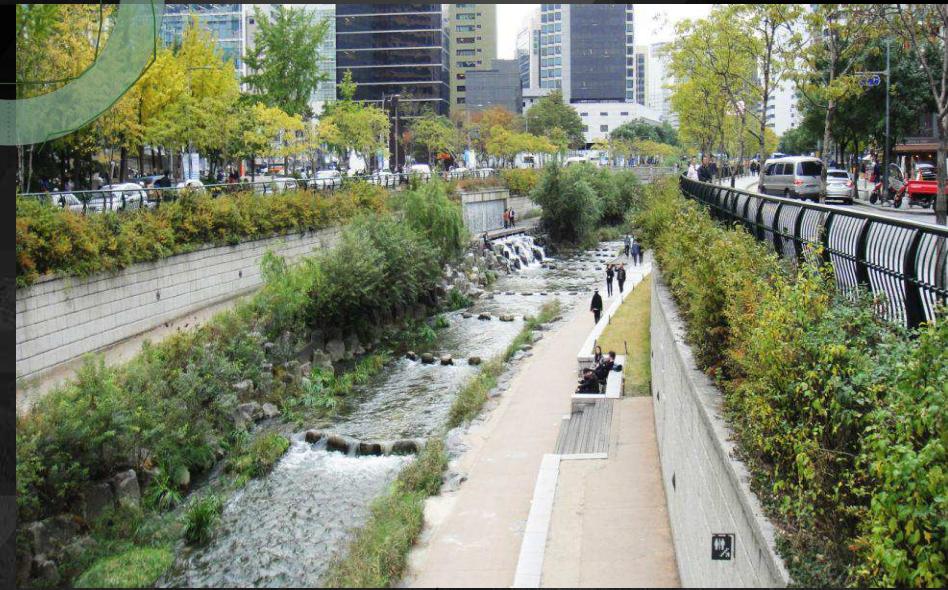
Space in various styles



Green life



Colorful experience

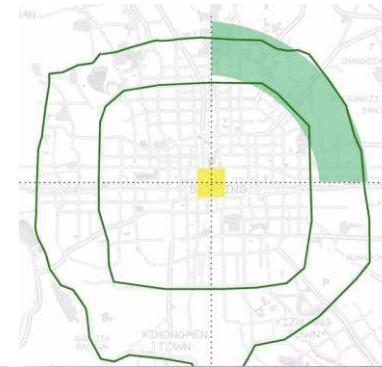


Access to water

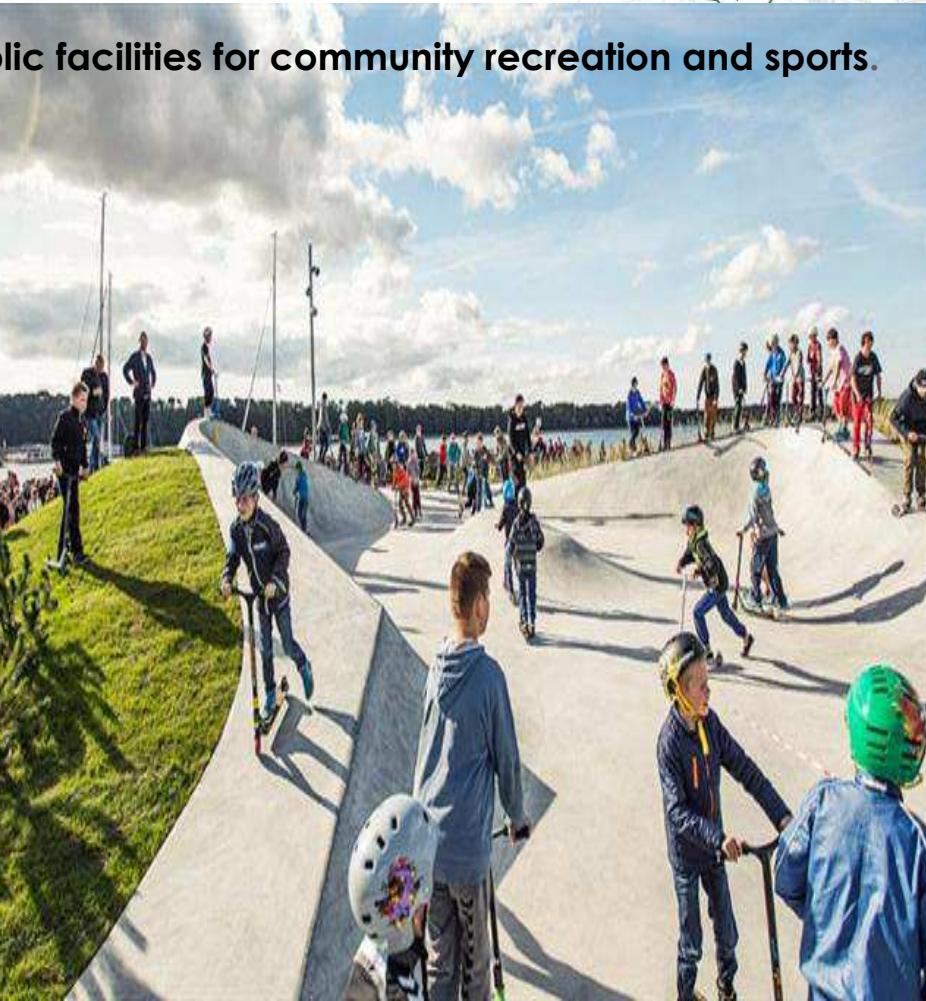
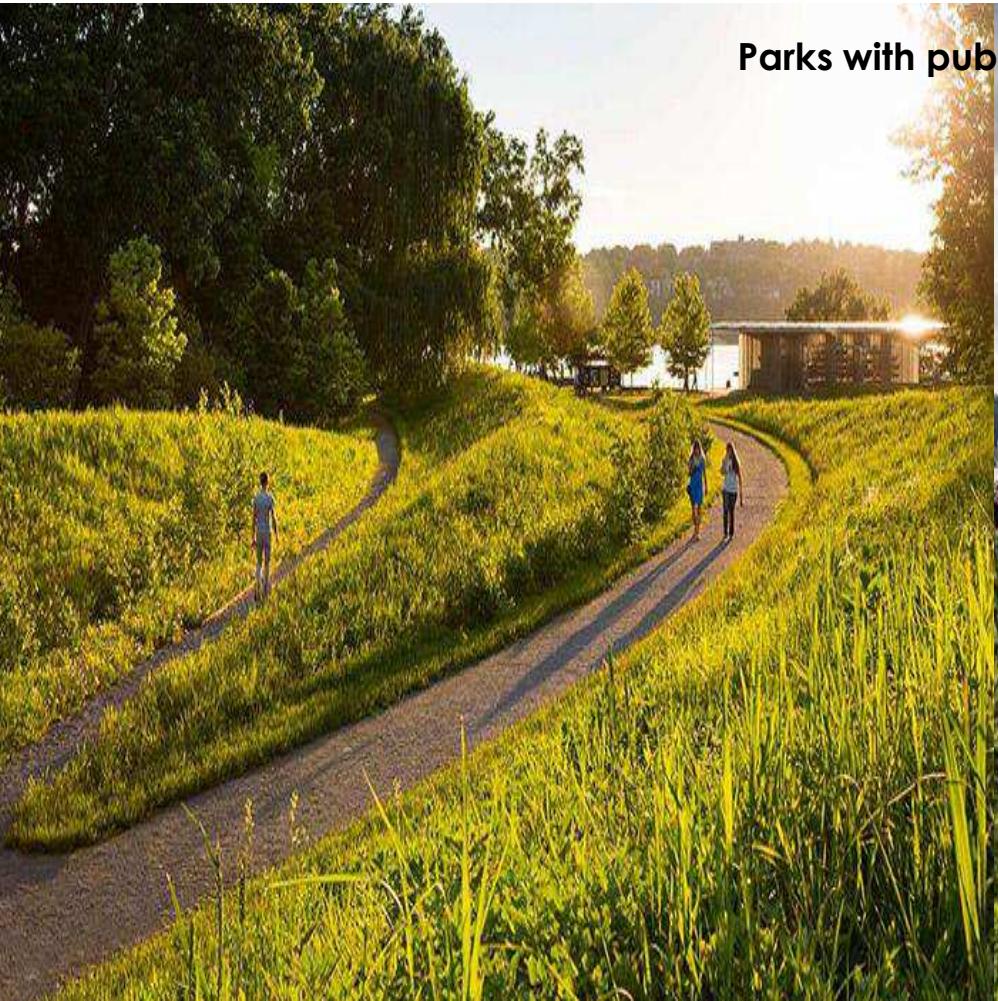


LOCATION: northern area

GREEN LIFE

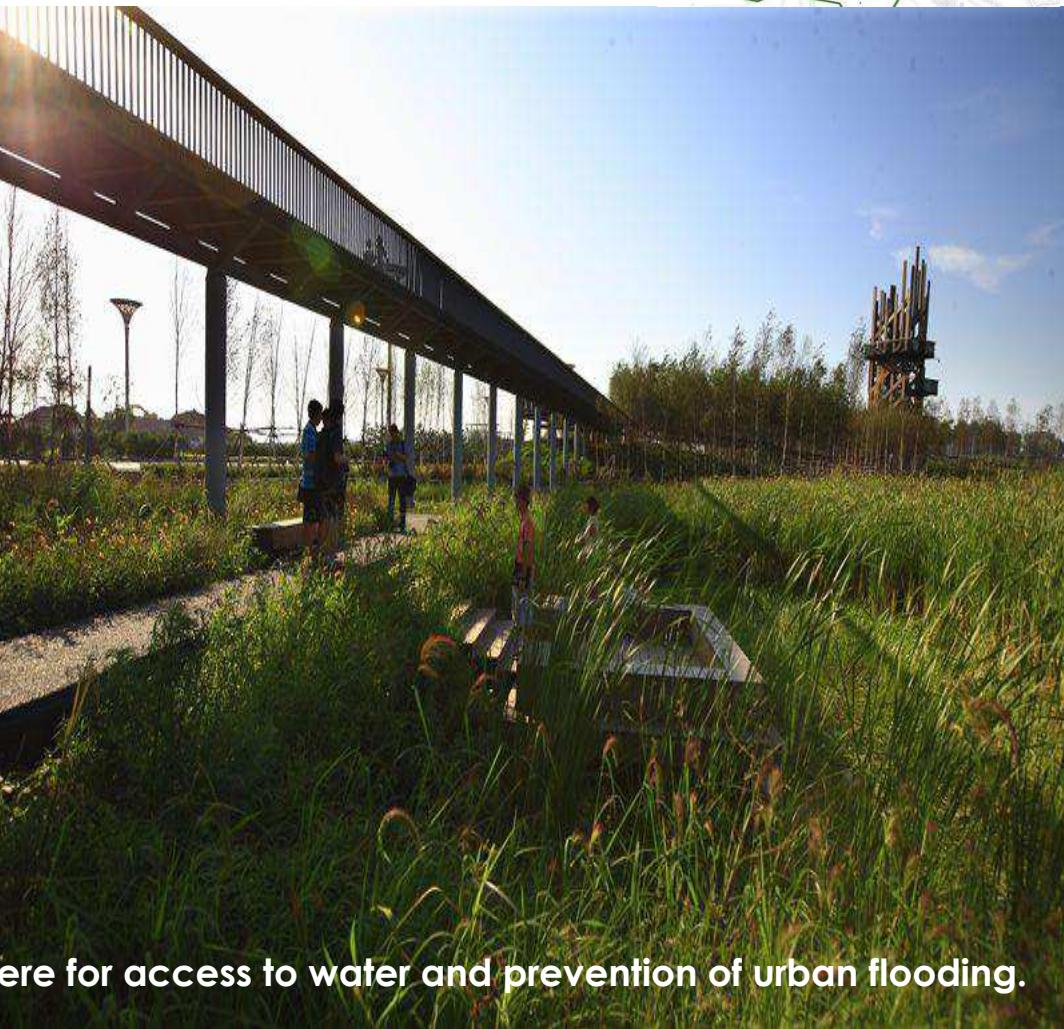
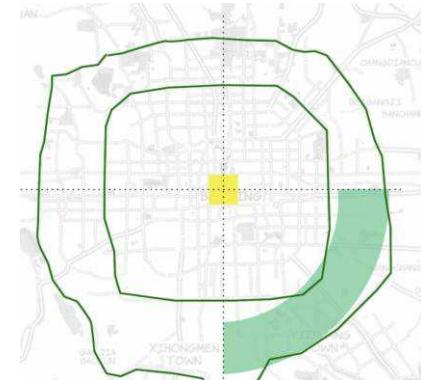
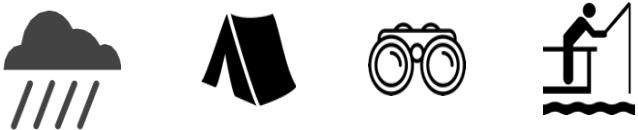


Parks with public facilities for community recreation and sports.



LOCATION: southeastern area

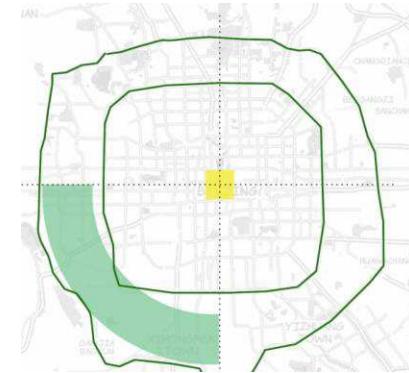
Access to Water



Parks with wetland islands & forest atmosphere for access to water and prevention of urban flooding.

LOCATION: southwestern area

Colorful Experience

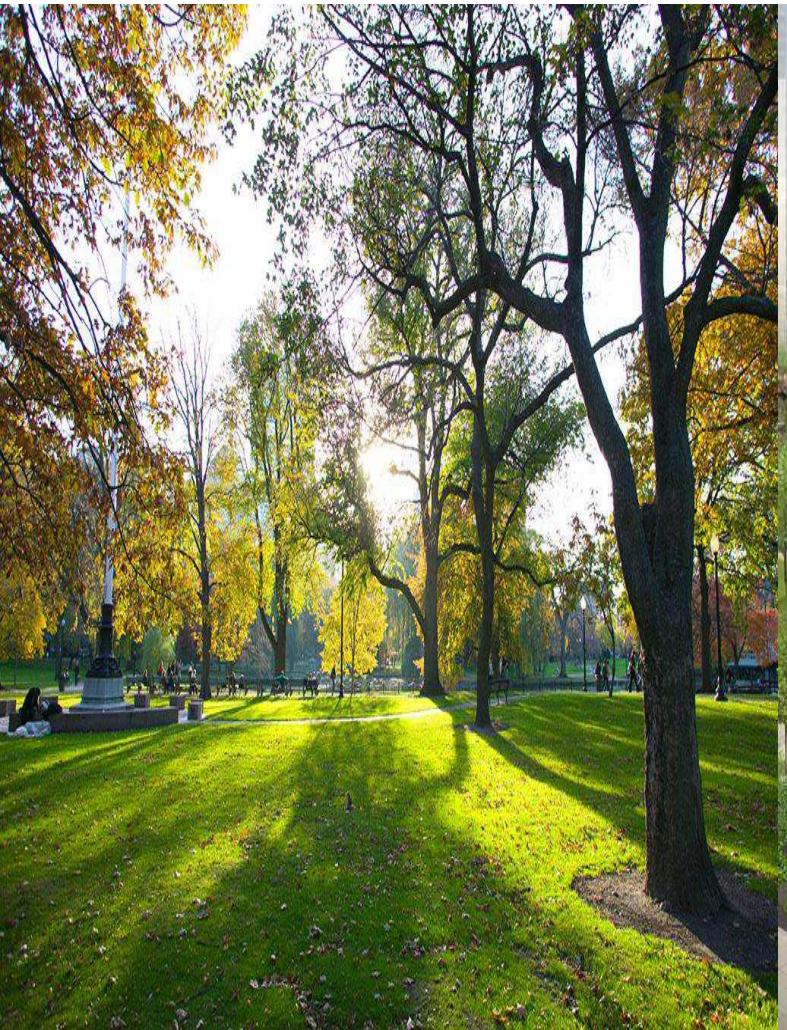


Parks with unique and appealing gardening architecture & artistic memorial buildings and flora.

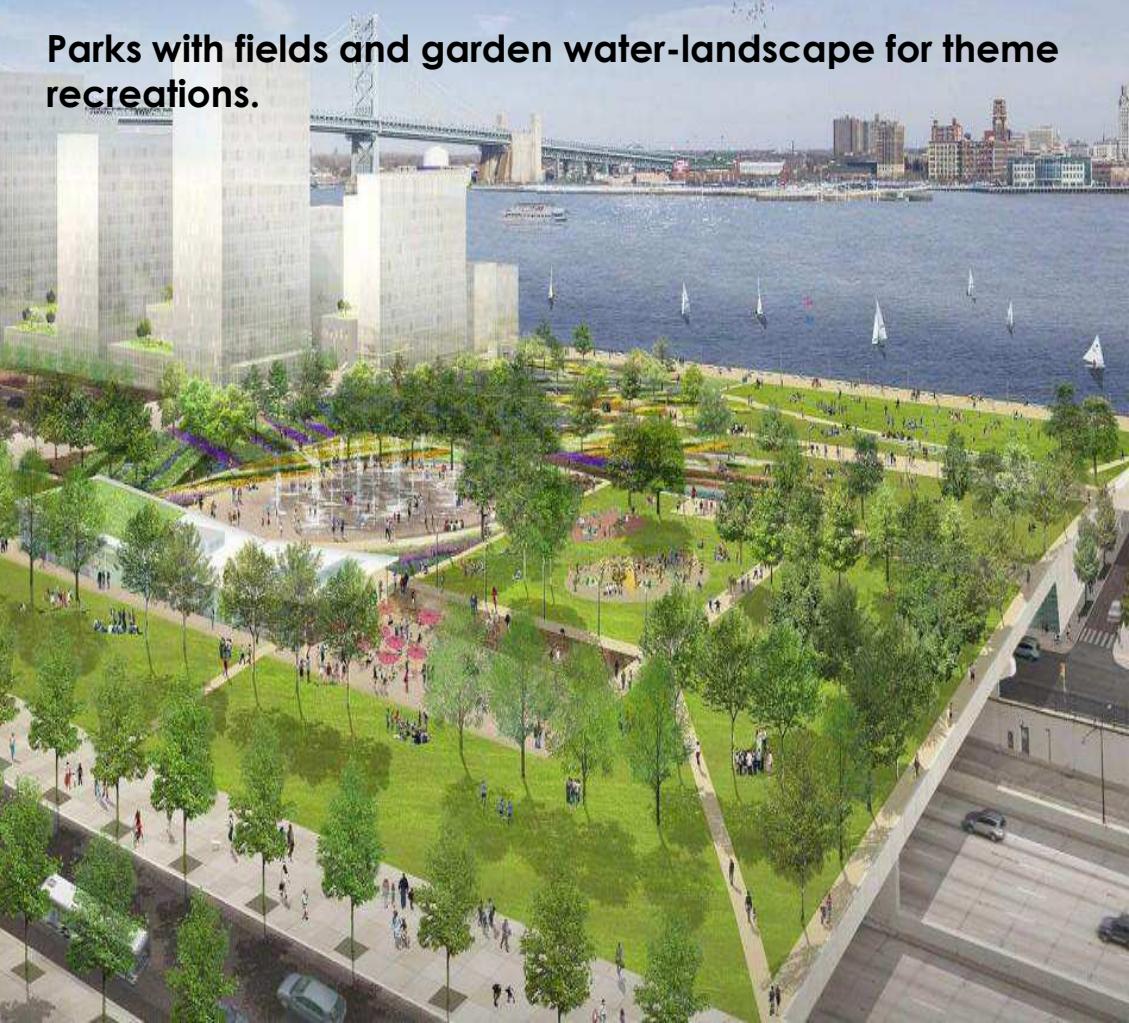


LOCATION: northwestern area

Space in various styles



Parks with fields and garden water-landscape for theme recreations.



Design Methods

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Resource Recycling and Soil Restoration



Recycling of Local Material



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Recycling of
Original industrial Remains
& Restoration of Plants



**Recycling of
Original Industrial
Remains &
Restoration of
Plants**

Recycling of Original Industrial Remains & Restoration of Plants



Ecological Strategy

Rainwater Gardens and
Arboretaums



Ecological Strategy:

water-accessing design



The Australian Garden

Ecological Strategy:

Cascade Water Purification

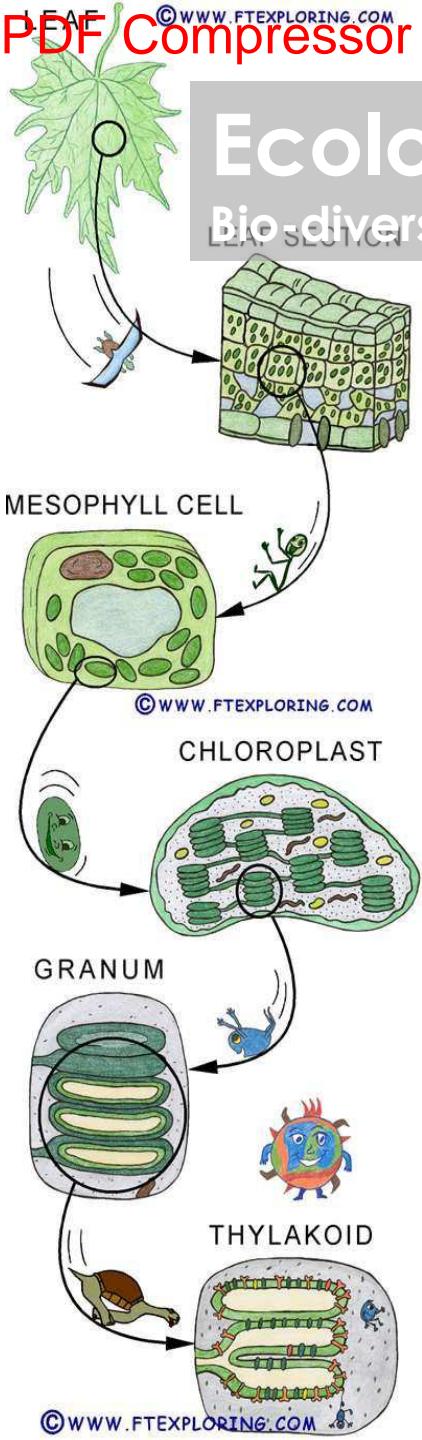


The Australian Garden

Ecological Strategy:

Solar-power





Ecological Strategy:

Bio-diversity and Recycling

Producers

(green plants and other organisms with photosynthesis)



Service Facilities:

Mini stage shows



Service Facilities:

Touring car camps



Service Facilities:

Recreation Facilities with Signs



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Material Strategy:

New Technology and Material



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Material Strategy:

Local stones



The Australian Garden

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Material Strategy:

Breakstone and Sand



Operation of the Country Parks

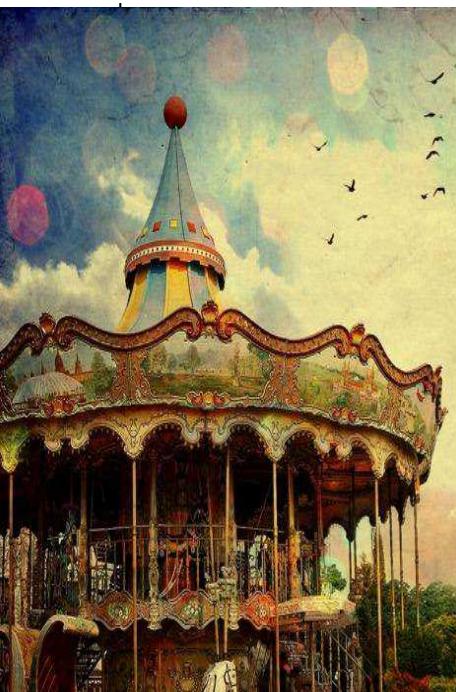
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Operation

- PPP Mode
- Progressive development, land exchange, transfer
- Low-cost management



Funfairs



Shops



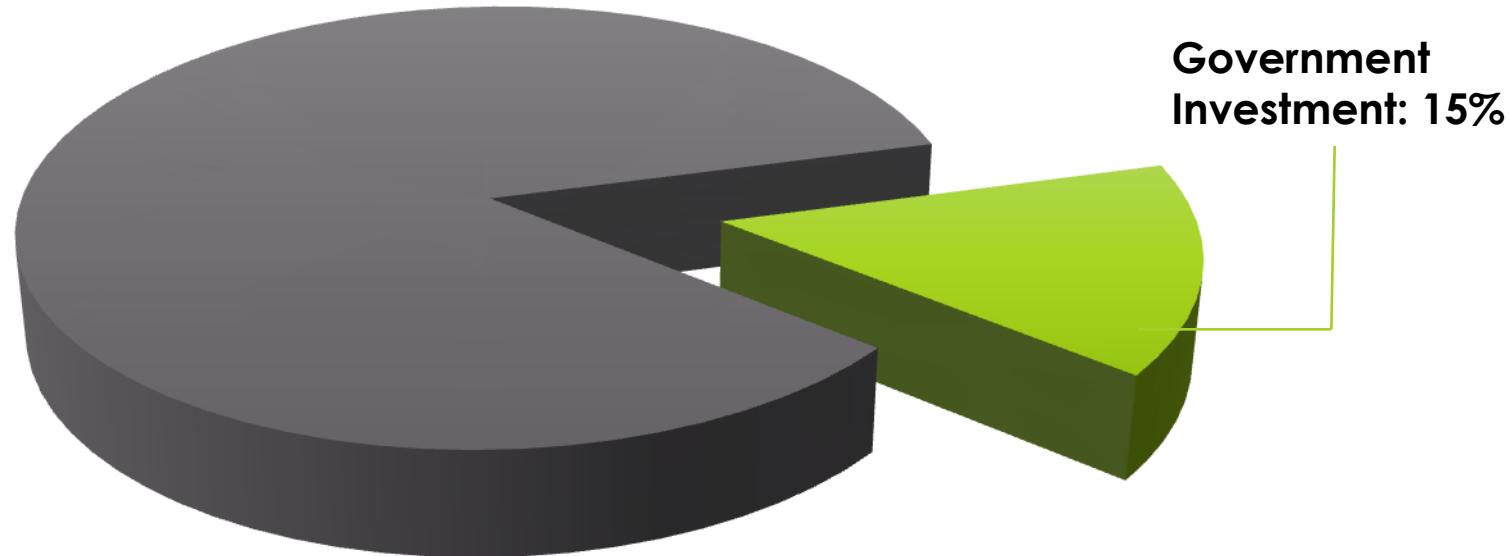
Coffee Shops



Plant Nurseries



Investment-Operation Mode of Country Parks of Shanghai



- \$ 15 billion is expected to be invested in completing the country park system.

SHANGHAI

- Developments are done progressively and completed in stages.
- Land originally for crops and forestry are reclaimed as country parks.



PPP Model

Financing

By building public space, Zukoti Square developers were granted a 20% discount of floor area ratio.



Zukoti Square in Downtown, Manhattan.

PPP Model

Operation: Rent

The Hudson River Park (New York) rents 34 docks to individuals who pay \$ 6.5m (in rent) and \$ 8m berth fee.



Hudson River Port

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Operation

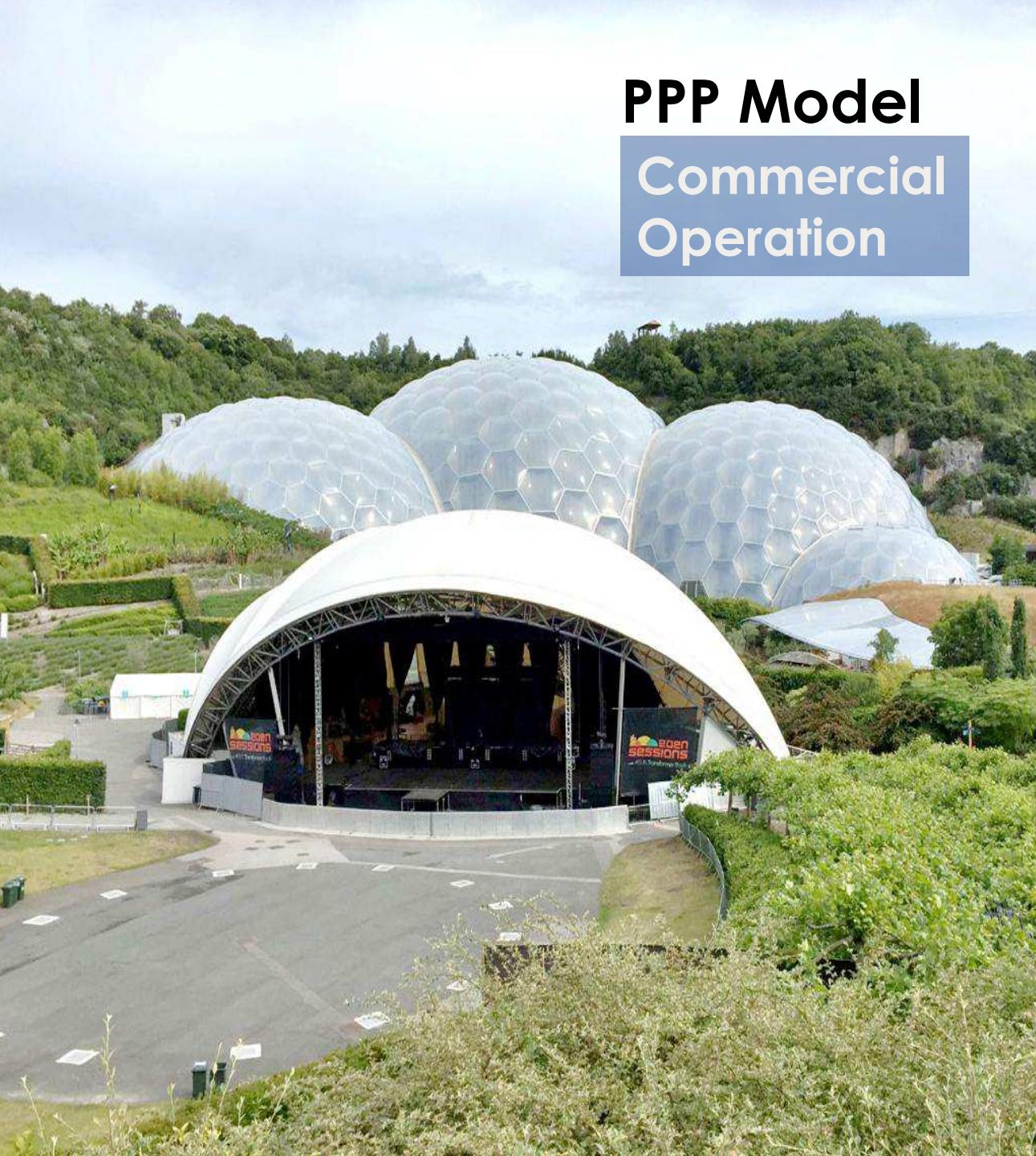


Sites for weddings



Paragliding

PPP Model
Commercial
Operation



Management

Nearby residents or volunteers are hired in management; adjacent schools are invited in activities.



Current job vacancies



Voluntary internships



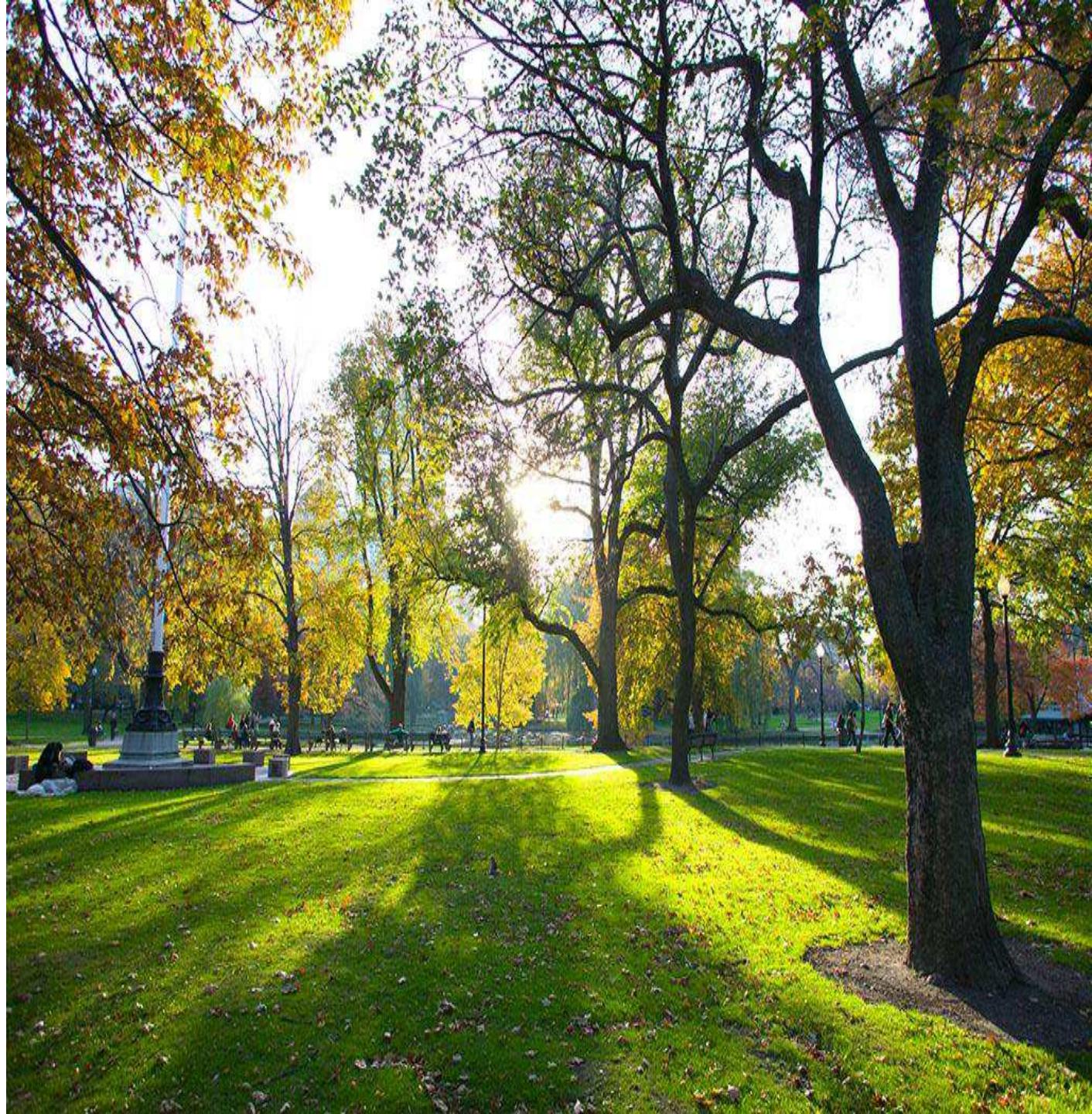
Meet the team



Apprenticeships at Eden

Summary

- 1.**Establishing a brand for country parks.
- 2.**Adopting incentives to encourage all parks to involve in changes.
- 3.**Develop a set of minimum standards suitable for all country parks.



4

PART FOUR
Specific Suggestions

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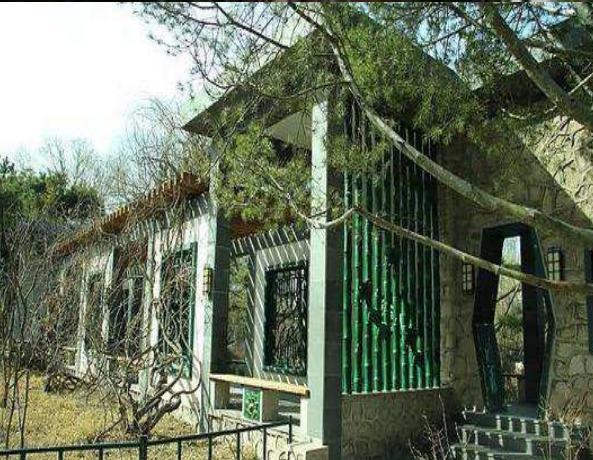
Rain Gardens



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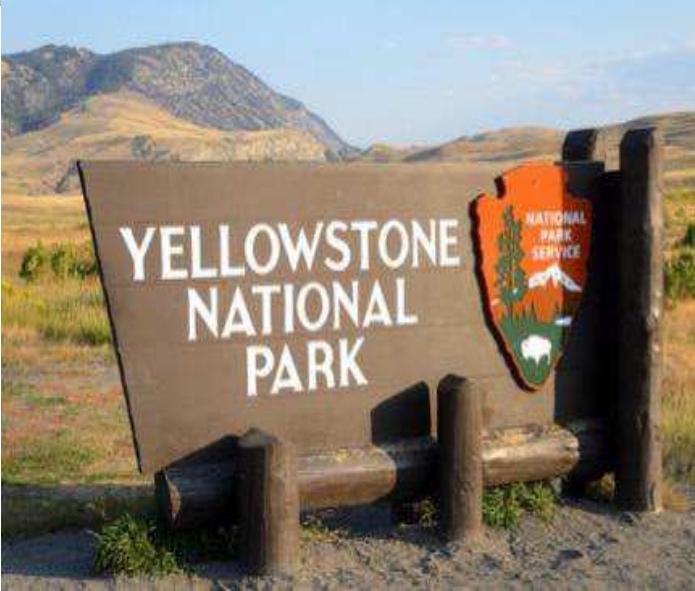
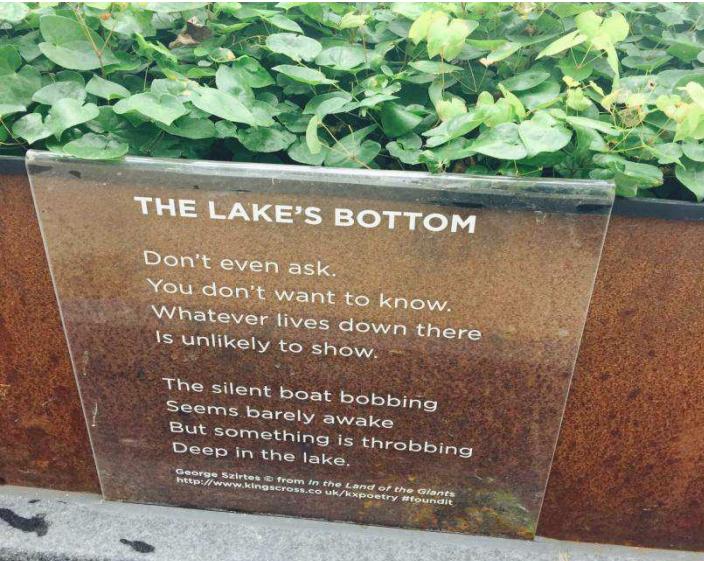
PART FOUR

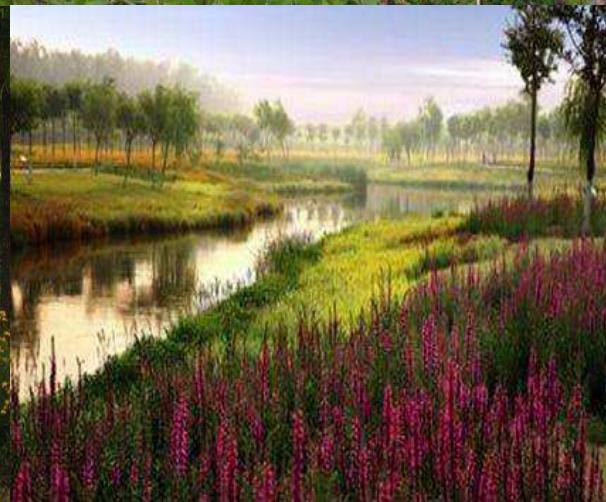
Recreation Items



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PART FOUR Signs

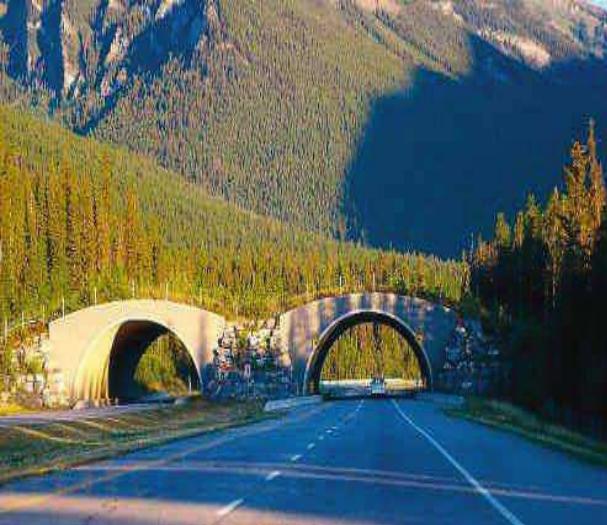






PART FOUR

Ecological Corridors



Thanks for Prof. Chris Enright Review.