



广州市国土空间生态修复总体规划 (2021-2035年)

Overall plan for ecological restoration of land and space in Guangzhou (2021-2035)

“1+2+4+1” 的成果体系

"1 + 2 + 4 + 1" achievement system

1套总体规划成果作为总体纲领

<p>规划文本&图集</p> <p>广州市国土空间生态修复总体规划 (2021-2035年) 文本-图集</p>	<p>规划研究报告</p> <p>广州市国土空间生态修复总体规划 (2021-2035年) 研究报告</p>
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4个专题研究成果形成立体支撑

<p>国土空间生态要素分析与识别专题</p> <p>广州市国土空间生态修复总体规划 (2021-2035年) 国土空间生态要素分析与识别专题研究</p>	<p>区域生态安全格局与生态系统健康循环专题</p> <p>广州市国土空间生态修复总体规划 (2021-2035年) 区域生态安全格局与生态系统健康循环专题研究</p>
<p>生态资源本底评估专题</p> <p>广州市国土空间生态修复总体规划 (2021-2035年) 生态资源本底评估专题研究</p>	<p>资源环境承载能力与生态敏感性基础评价</p> <p>广州市国土空间生态修复总体规划 (2021-2035年) 资源环境承载能力与生态敏感性基础评价研究</p>

2个实施配套指引细化行动指南

<p>分区修复指引</p> <p>广州市国土空间生态修复总体规划 (2021-2035年) 分区修复指引</p>	<p>系统工程修复实施指引</p> <p>广州市国土空间生态修复总体规划 (2021-2035年) 系统工程修复实施指引</p>
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项目背景

Background

2021年联合国生物多样性大会上，中国提出“秉持生态文明理念、共同构建地球生命共同体”方案。

广州位于山海过渡地带，拥有山林、河湖、湿地、海洋等多样化的自然资源，是2200万市民与各种动植物和谐共栖的家園。

为实现人与自然和谐共生、构建超大城市生态修复治理体系，广州市率先开展国土空间生态修复总体规划编制工作。

At the 2021 UN Biodiversity Conference, China put forward the plan of "adhering to the concept of ecological civilization and jointly building a community of life on earth".

Guangzhou is located in the transition zone between mountains and seas. It has diversified resources such as mountains, forests, rivers and lakes, wetlands and oceans.

As a home for 22 million citizens to live in harmony with various animals and plants. Guangzhou has taken the lead in formulating Territory Ecological Restoration Planning.

广州，地处岭南地区三江交汇的陆海过渡地带

<h4>山林丘陵</h4> <p>占全市90%以上的山地空间，植被丰富，是维护城市生态环境安全的重要生态屏障和水源涵养区</p>
<h4>河网平原</h4> <p>东、西、北三江汇合之地，河网水系发达，是城镇建设和农业生产集中区</p>
<h4>滨海湿地</h4> <p>珠江入海口海岸带的重要组成部分</p>

广州市 7434km²

顶层 设计

人与自然和谐共生的修复路径

Restoration Path Of Harmonious Coexistence Between Man And Nature

建设部门协同平台。汇集320余项部门数据、10类专项调查数据、12类开源数据，搭建生态修复一张图空间数据平台，统筹市辖区、镇街、村社空间生态资源，构建集评估、监控、反馈于一体的管控体系。

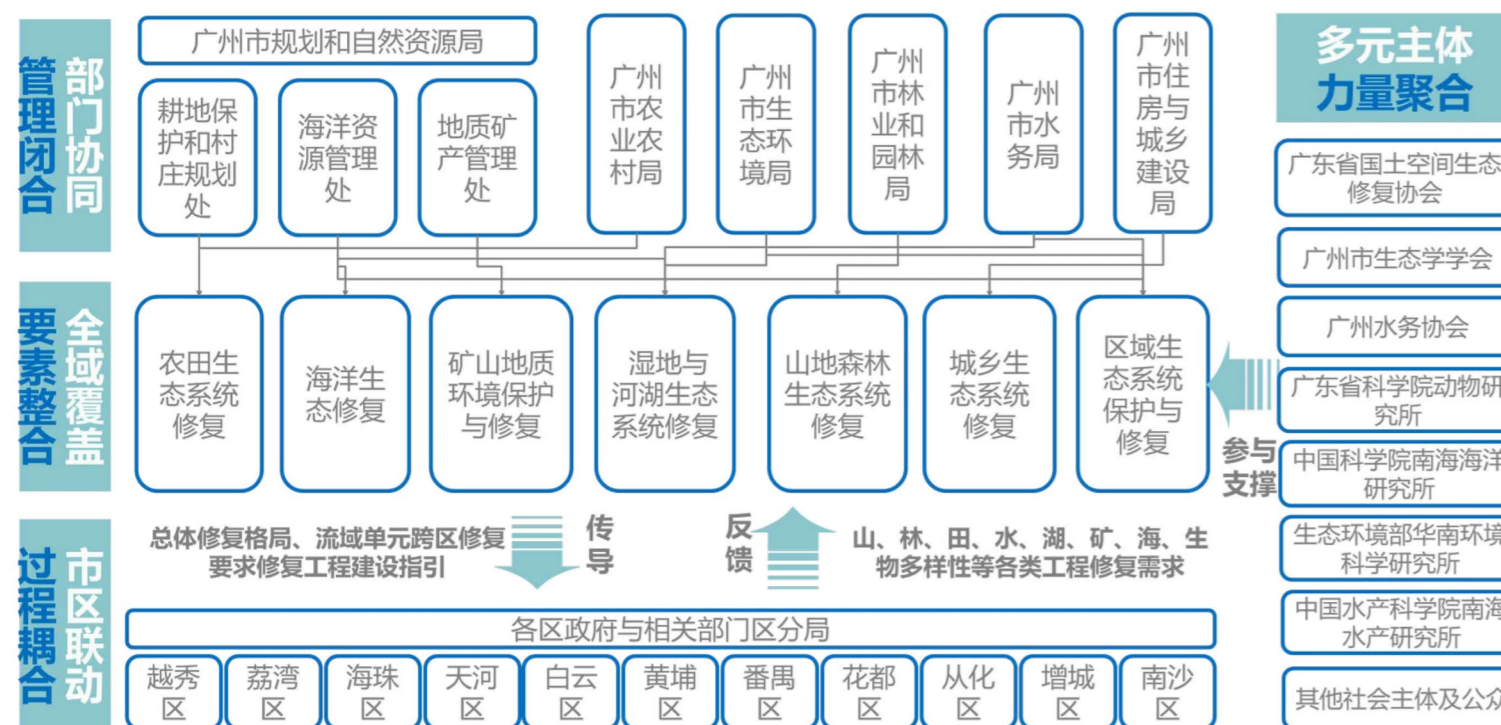
建立省市区联动、多部门协同、多主体参与的工作机制。组织召开25次部门联席会议、推动开展各类高端修复论坛。

Construction department collaboration platform. Collect more than 320 departmental data, 10 types of special investigation data and 12 types of open source data, build a map spatial data platform for ecological restoration, coordinate the spatial ecological resources of municipal districts, towns, streets and villages, and build a management and control system integrating evaluation, monitoring and feedback.

Establish a working mechanism of provincial and urban linkage, multi-department coordination and multi-body participation. Organize and hold 25 joint departmental meetings and promote various high-end repair forums.

市区联动、多部门协同、多主体参与

Urban linkage, multi sectoral collaboration and multi-body participation

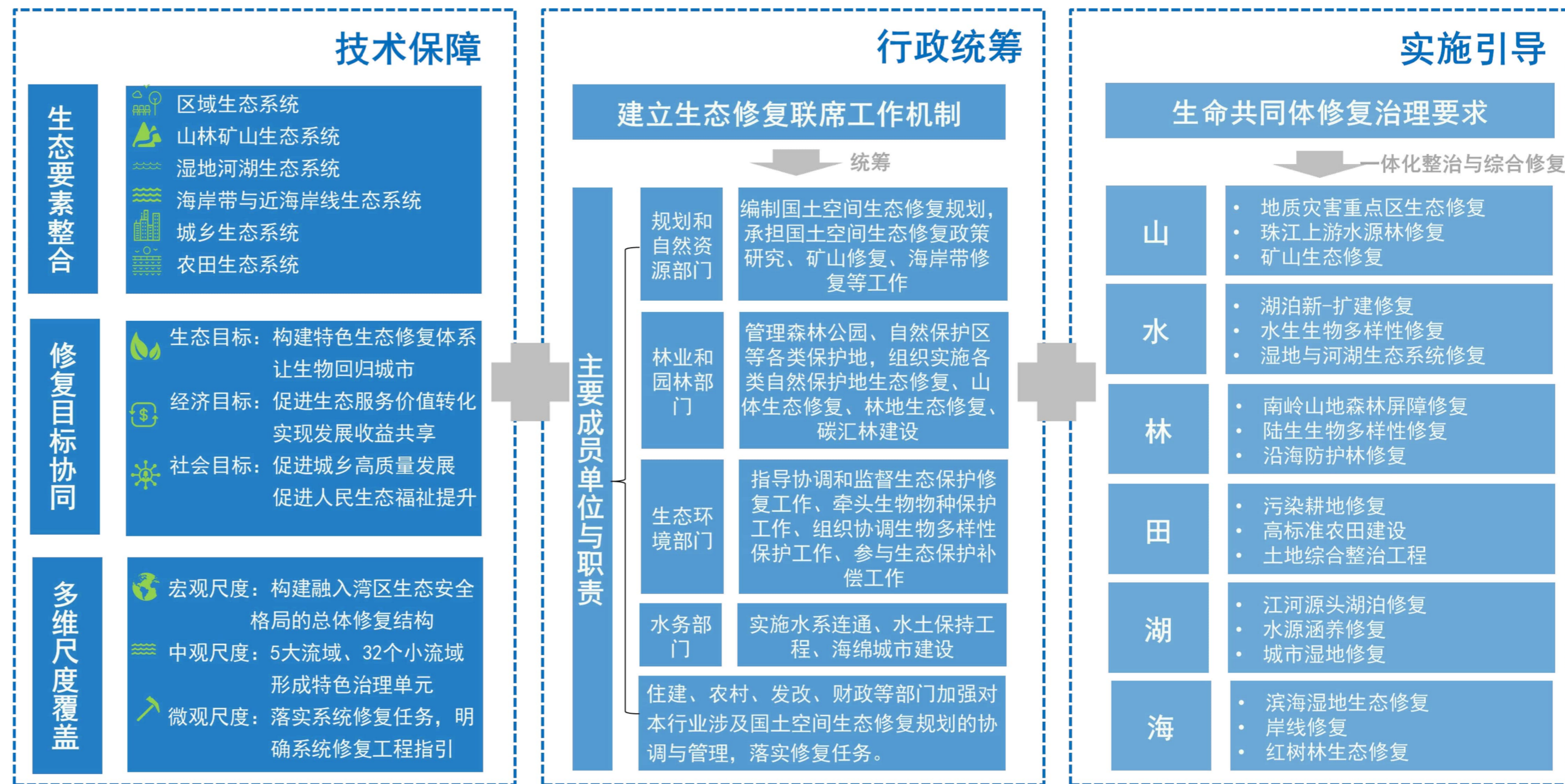


组织召开联系会议，推动开展高端论坛



“技术—行政—实施”三位一体的生态修复框架

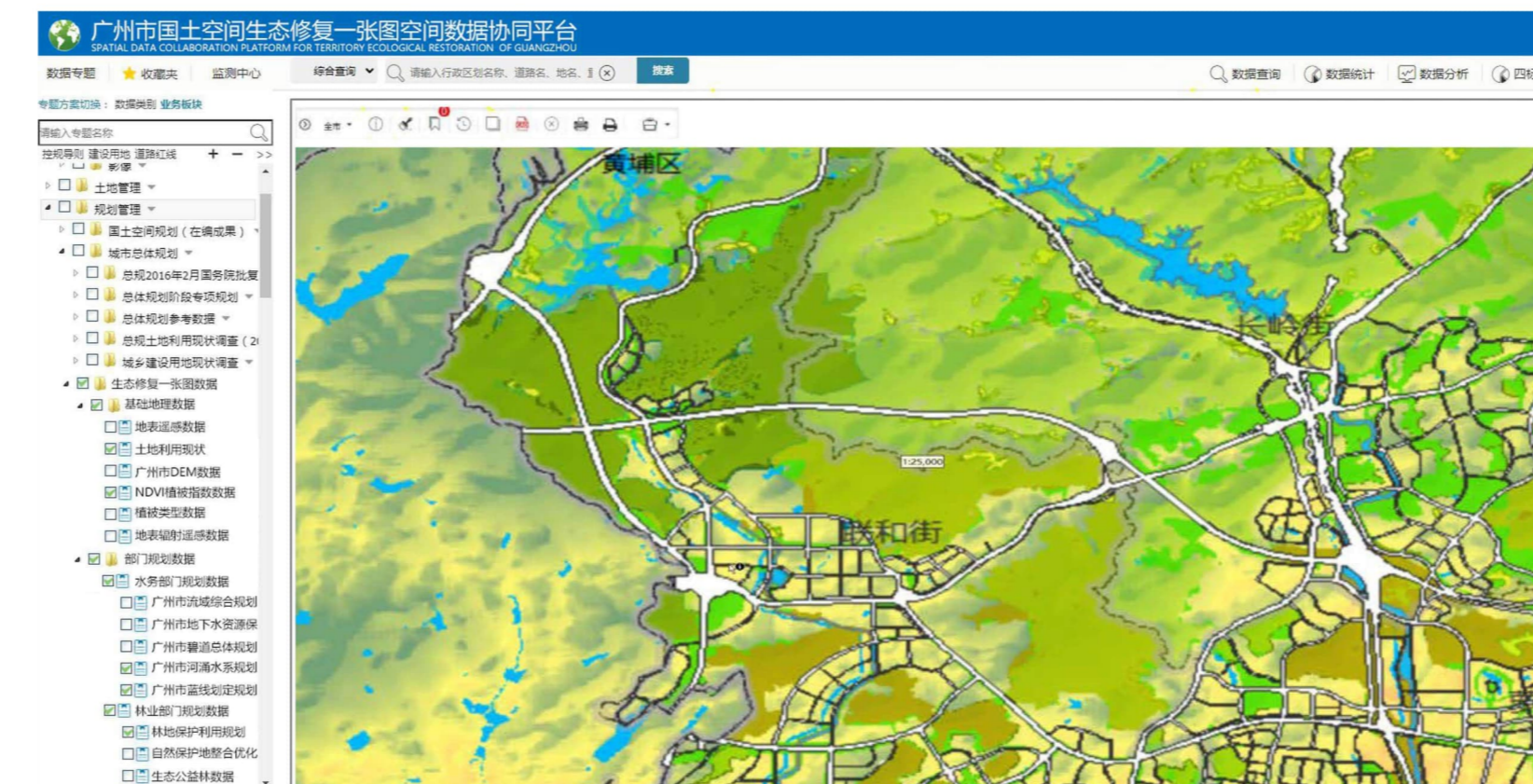
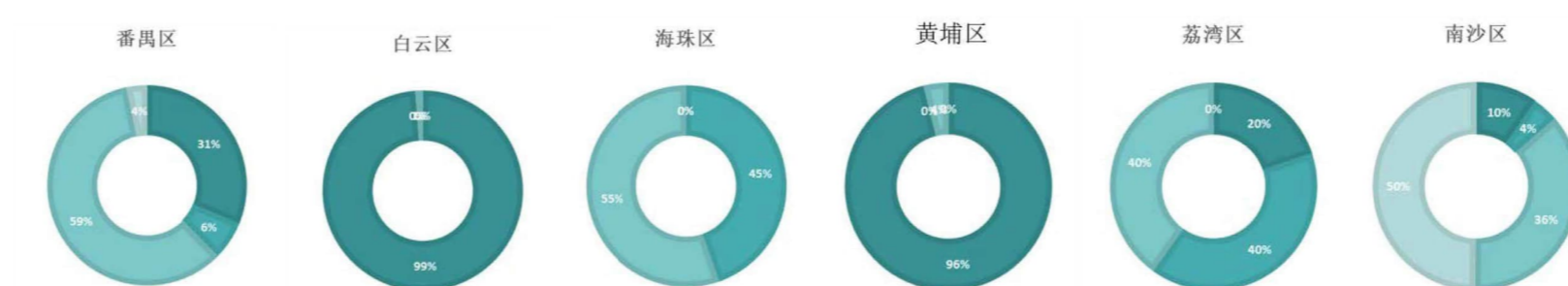
"Technology—administration--implementation" Trinity ecological restoration framework



通过系统平台统筹各层次空间生态资源

Coordinate the spatial ecological resources at all levels

各区生态空间占比



生态修复一张图空间数据协同平台

Build a collaborative platform for ecological restoration



广州市陆海生态全要素“一张图”



多维评估

优化生态安全格局, 守护人与动植物的共同家园

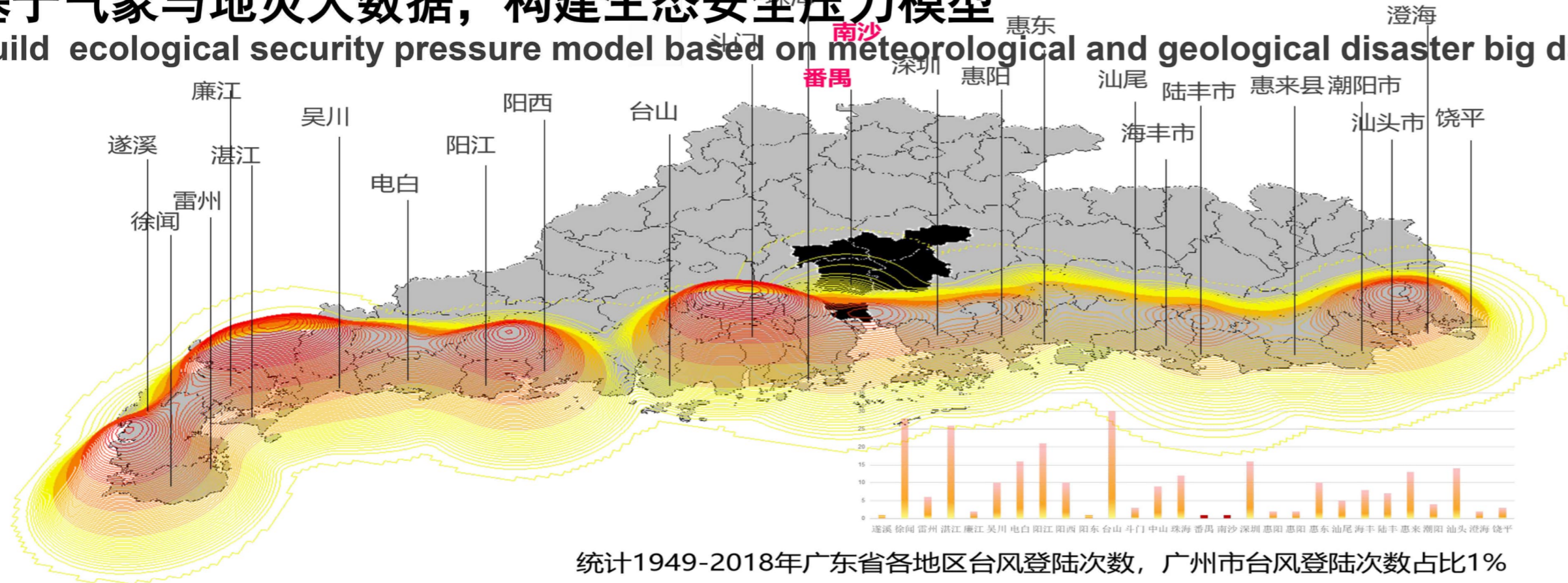
Optimize the ecological security pattern in multiple dimensions and protect the home of people, animals and plants.

梳理历史地图与地理文献资料, 分析广州成陆地质过程, 识别生境差异化特征。构建生态安全压力模型和开展生态恢复力评估。评估水鸟栖息地生态功能, 评估旗舰物种活动范围, 修复鱼类洄游生态圈。评估街头访谈、社交软件打卡等多元数据, 修复形成生态、文化、景观、游憩多功能复合的城乡生态空间。

Combing historical maps and geographical documents, analyzing the geological process of land formation in Guangzhou and identifying the characteristics of habitat differentiation. Build an ecological security pressure model and carry out ecological resilience assessment. Evaluating multiple data such as street interviews and social software punch in to repair and form a multi-functional urban and rural ecological space with ecology, culture, landscape and recreation.

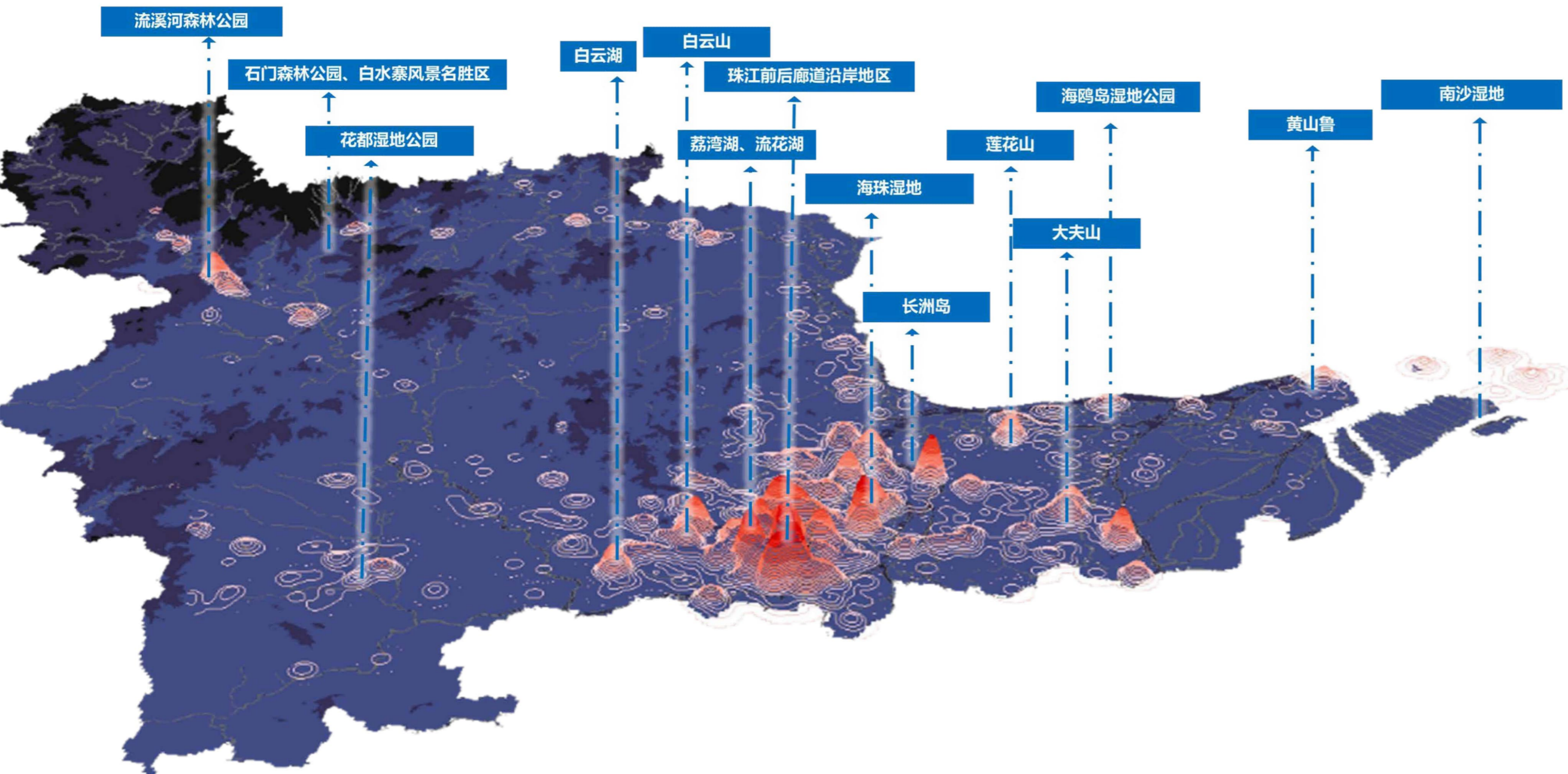
基于气象与地灾大数据, 构建生态安全压力模型

Build ecological security pressure model based on meteorological and geological disaster big data



基于人类活动大数据进行生态服务功能评估

Ecological service function evaluation based on human activity big data

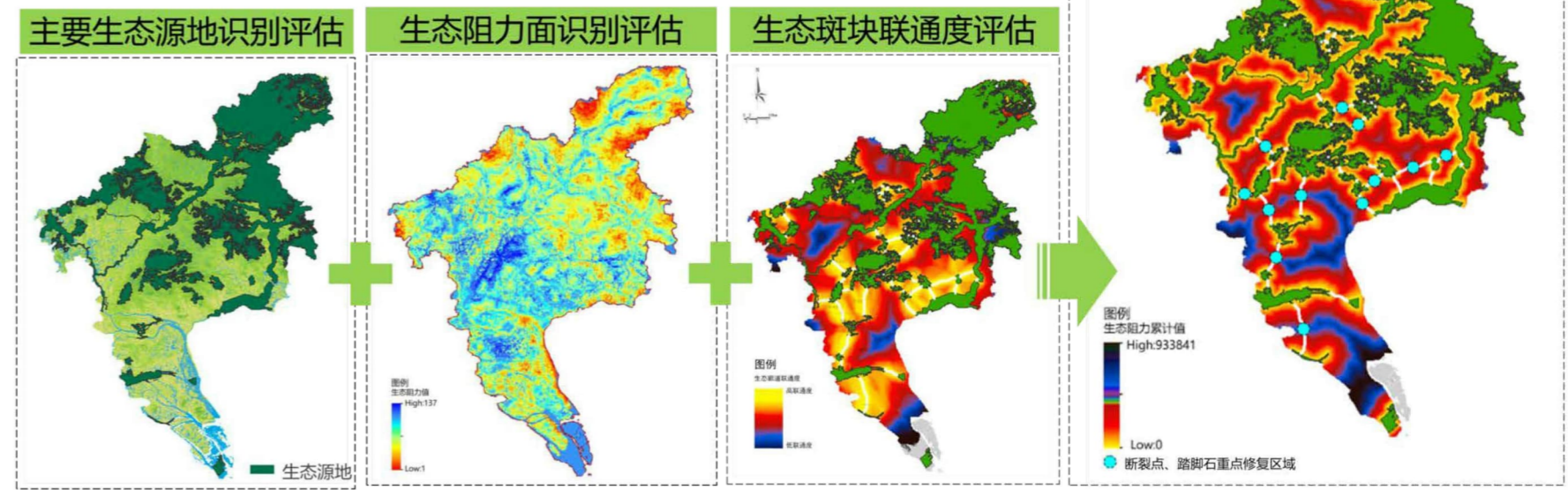


开展全域统筹的生态安全格局评估

Carry out an overall assessment of the ecological security pattern

- 基于“生态源地—阻力面—生态廊道”的生态安全格局评估
- 识别12个廊道断裂点与踏脚石重点修复区域

生态斑块联通路径断裂点与踏脚石重点修复区域分布图

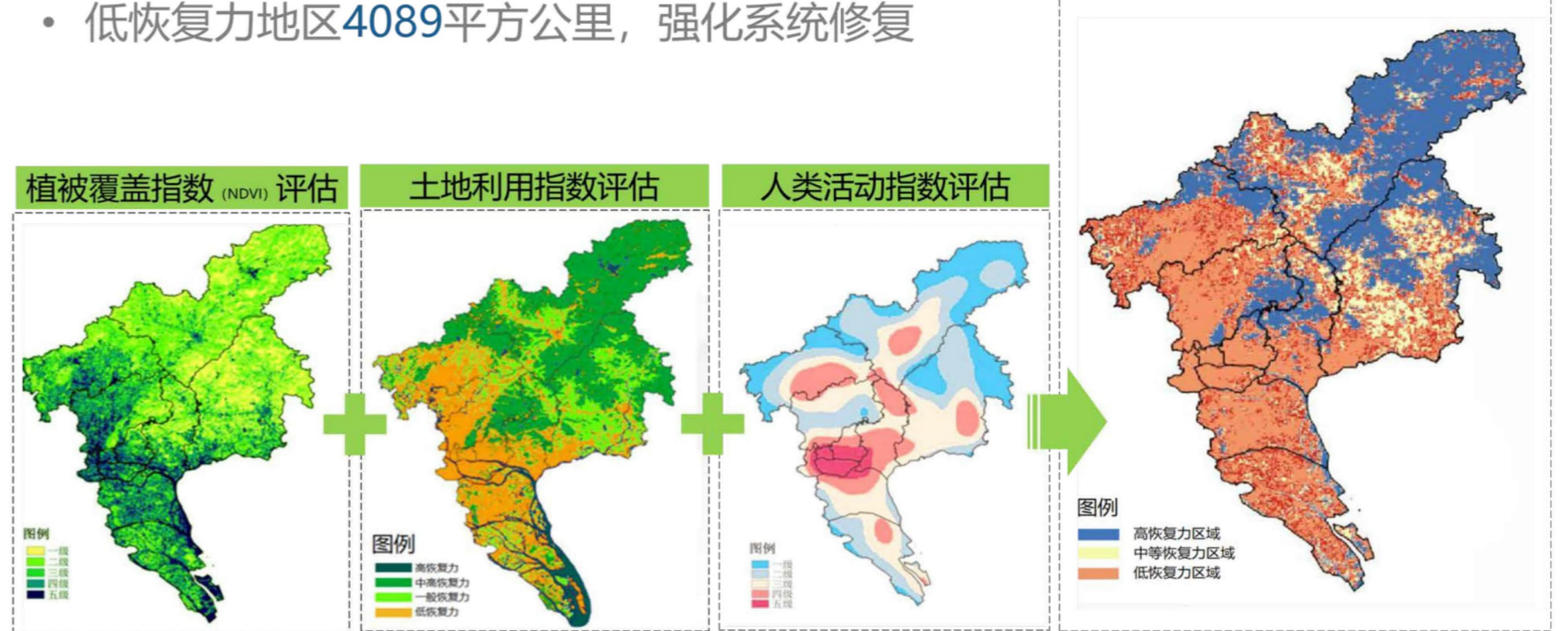


开展韧性优先的生态恢复力评估

Carry out resilience first ecological resilience assessment

- 高恢复力地区2304平方公里, 强化重点保育
- 低恢复力地区4089平方公里, 强化系统修复

生态恢复力重点修复区域分布图

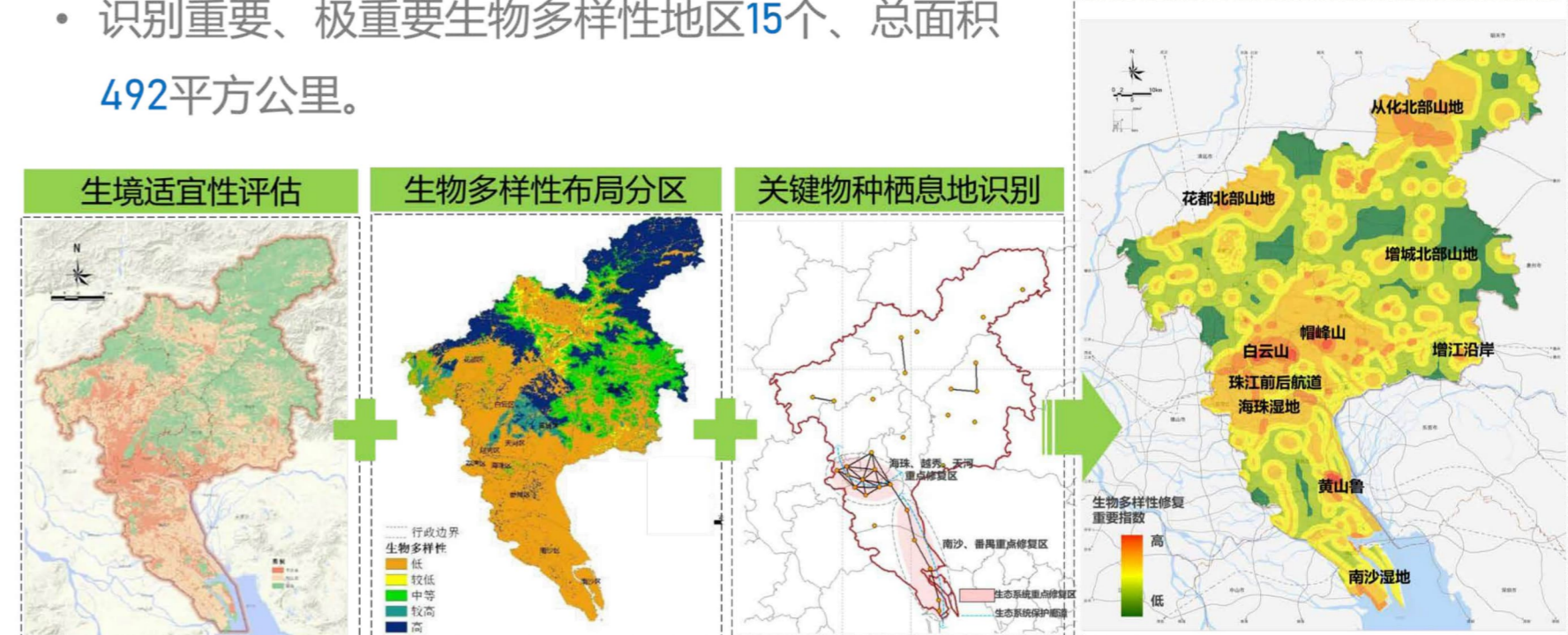


开展生境覆盖的生物多样性修复评估

Carry out Biodiversity Restoration assessment of habitat cover

- 面向水陆空关键物种的生物多样性评估
- 识别重要、极重要生物多样性地区15个、总面积492平方公里。

生物多样性重点修复区域分布图

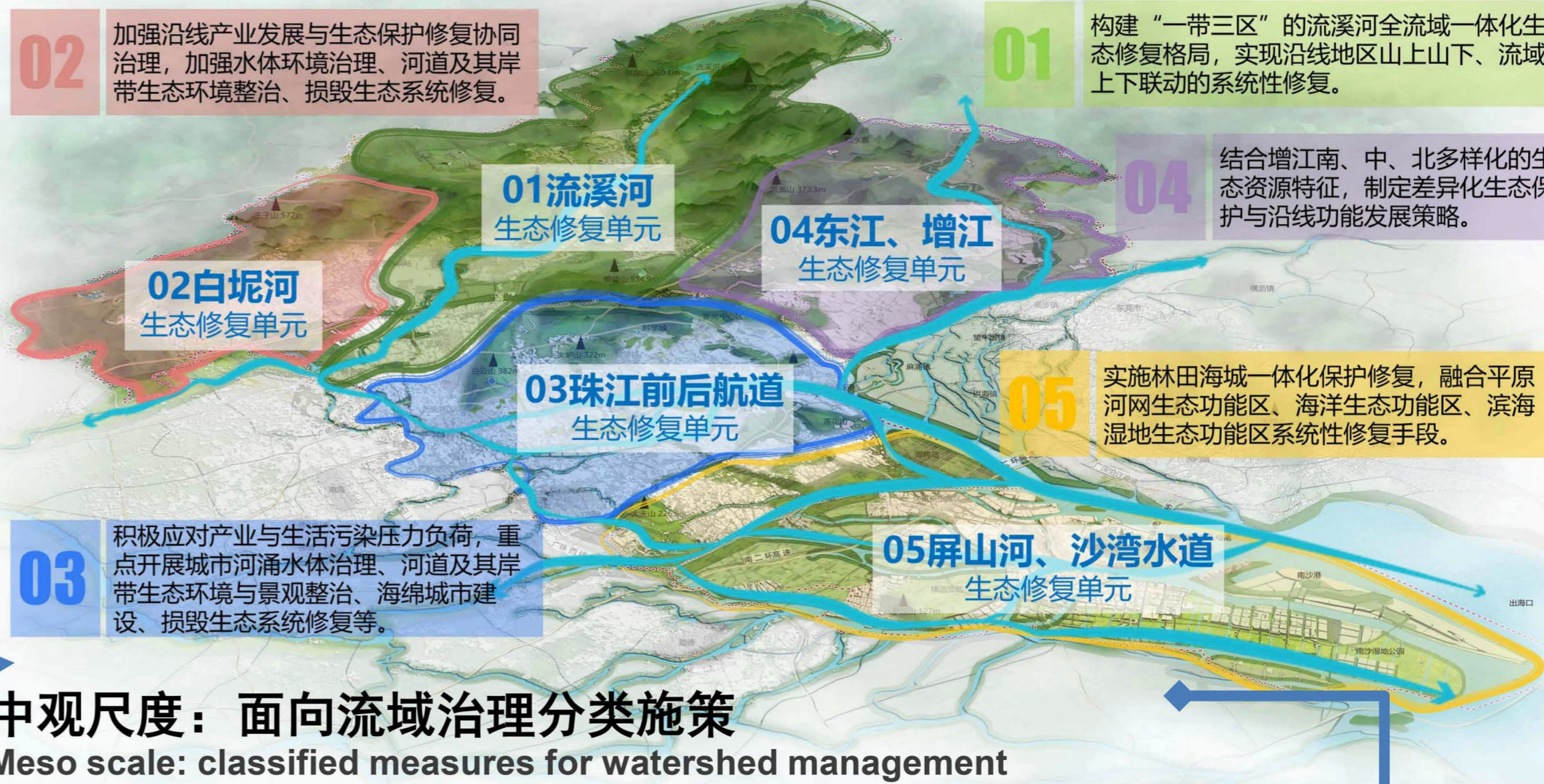


多层传导 构建多层次传导、多尺度修复的规划方法

Build a planning method of multi-level conduction and multi-scale repair

区域层面融入广东省生态格局，落实粤港澳大湾区12项重大修复工程。市域层面契合北部山城、中部水城、南部陆海的差异化特色，形成“八廊、九片、六节点”的生态管控格局。单元层面，统筹山水林田湖草子系统修复工程，形成面向差异化治理需求的多尺度修复方案。项目层面，部署青山、碧水、蓝湾、锦田等六项行动计划、23类重点修复工程，涵盖110处山林湿地、127公里岸线、54个江心岛洲等特色生态资源。

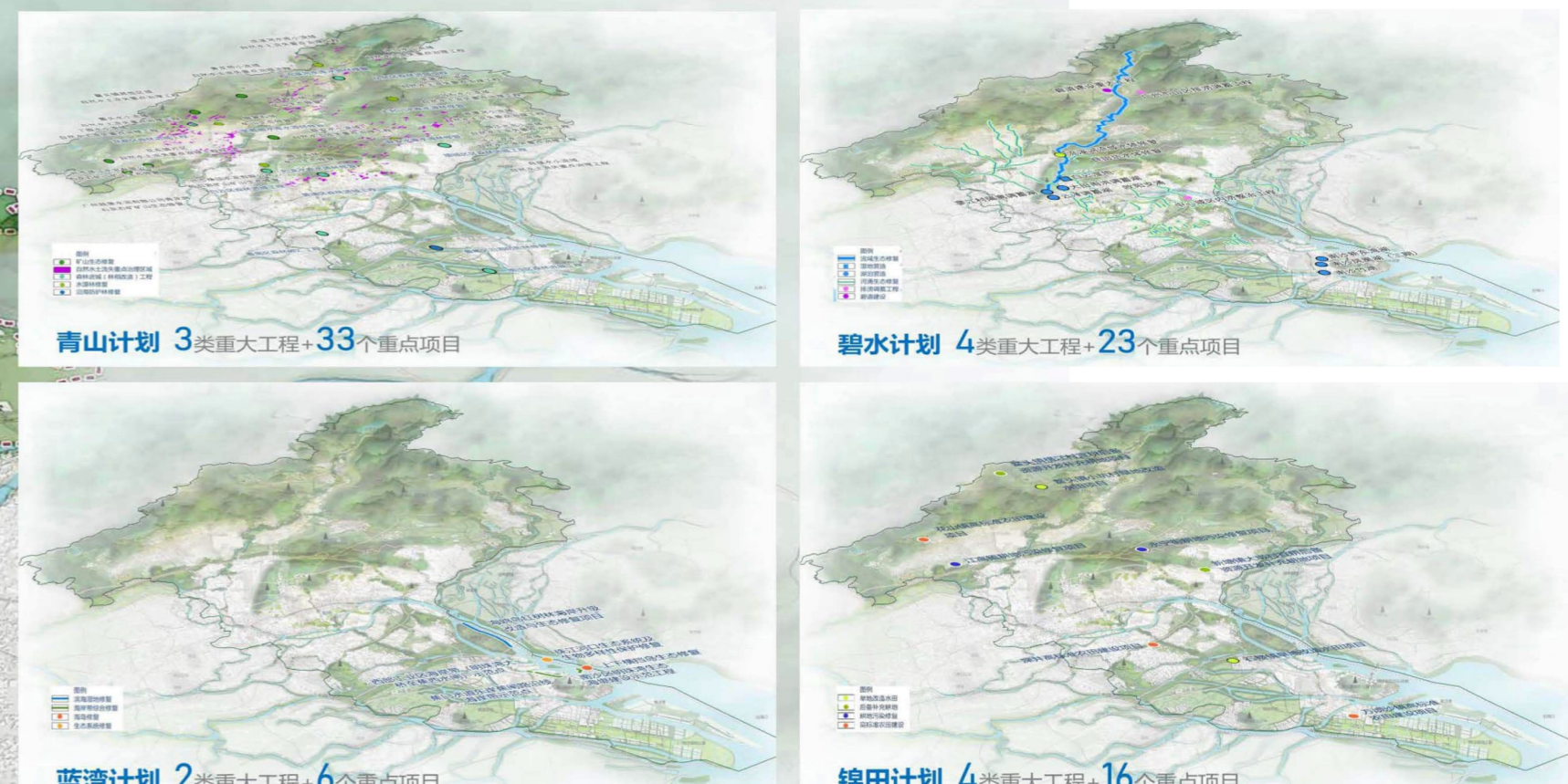
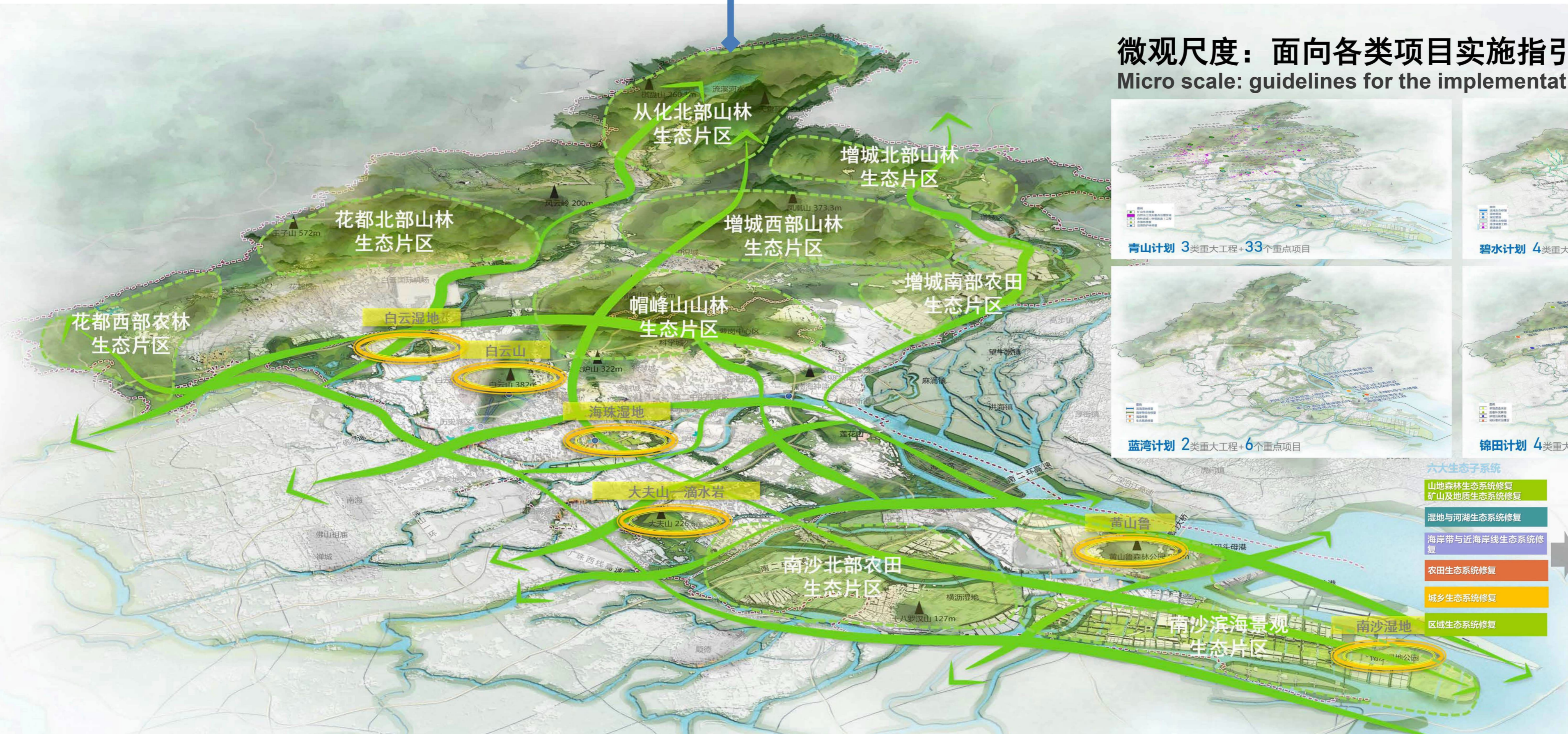
At the regional level, integrate into the ecological pattern of Guangdong Province and implement 12 major restoration projects in Guangdong, Hong Kong and Macao Bay area. The city level is in line with the differentiated characteristics of mountain cities in the north, water cities in the middle and land and sea in the south, forming an ecological control pattern of "eight corridors, nine areas and six nodes". At the unit level, coordinate the restoration project of landscape, forest, field, lake and grass subsystem, and form a multi-scale restoration scheme for differentiated governance needs. At the project level, six action plans including Castle Peak, clear water, blue bay and Jintian and 23 types of key restoration projects are deployed, covering 110 mountain forests and wetlands, 127 kilometers of coastline, 54 river islands and other characteristic ecological resources..



宏观尺度：面向生态格局整体优化
Macro scale: facing the overall optimization of ecological pattern

中观尺度：面向流域治理分类施策
Meso scale: classified measures for watershed management

微观尺度：面向各类项目实施指引
Micro scale: guidelines for the implementation of various projects



六大生态子系统	六项行动计划	23类生态修复工程
山地森林生态系统修复	1 青山计划	3类工程
矿山及地质生态系统修复	2 绿水计划	4类工程
湿地与河湖生态系统修复	3 蓝湾计划	2类工程
海岸带与近海岸线生态系统修复	4 锦田计划	4类工程
农田生态系统修复	5 筑境计划	4类工程
城乡生态系统修复	6 一体化修复生物多样性保护	6类工程
区域生态系统修复		

“九片、八廊、六节点”的生态空间格局

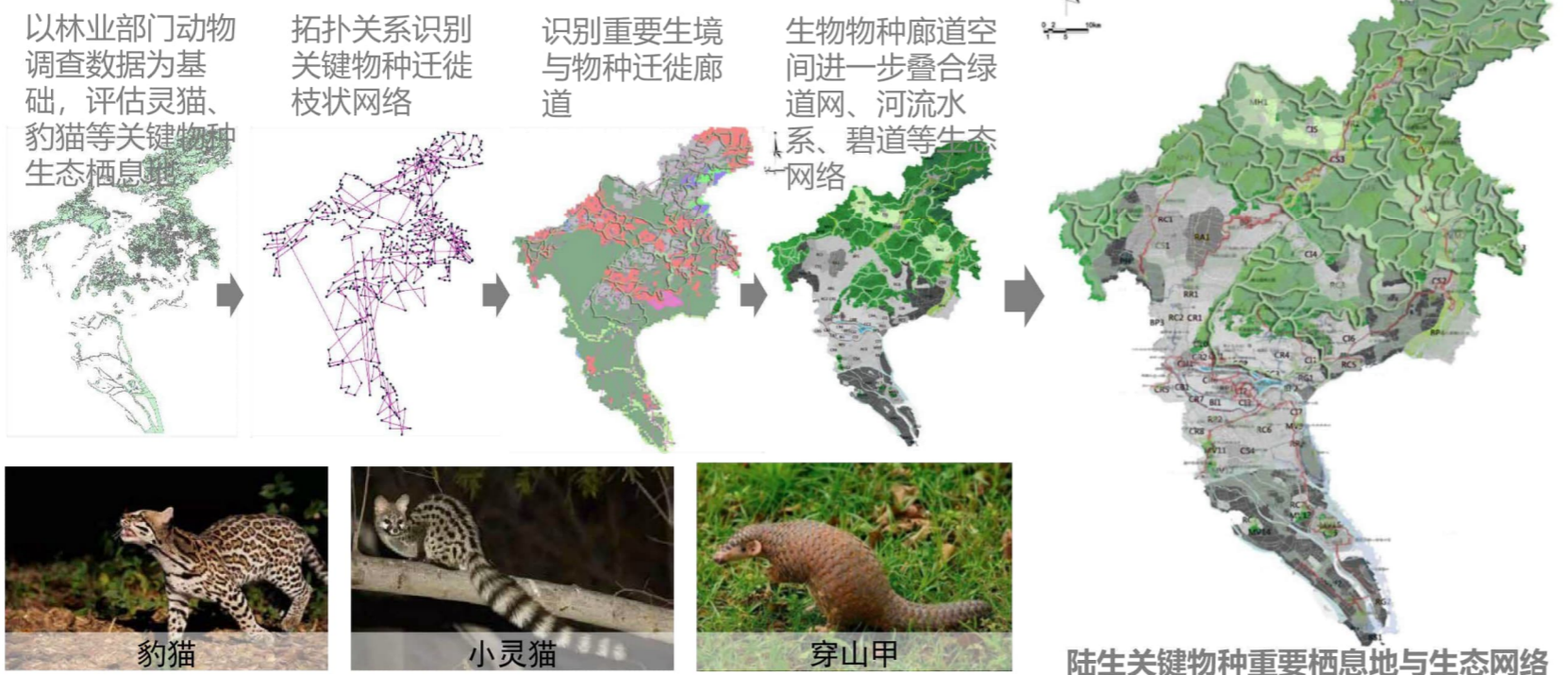
构建四大特色生境修复模式

Constructing four characteristic habitat restoration models



评估关键物种栖息地与生态网络健康水平

Assess the health level of habitat and ecological network of key species.



修复12条水鸟迁徙廊道

Restoration of 12 waterfowl migration corridors

结合南部感潮水网、中部湿地沙洲和鸟类食源性喜好进行修复。



结合“踏脚石”修复12处生态廊道断裂点

Repair 12 ecological corridor fracture points in combination with "stepping stone"



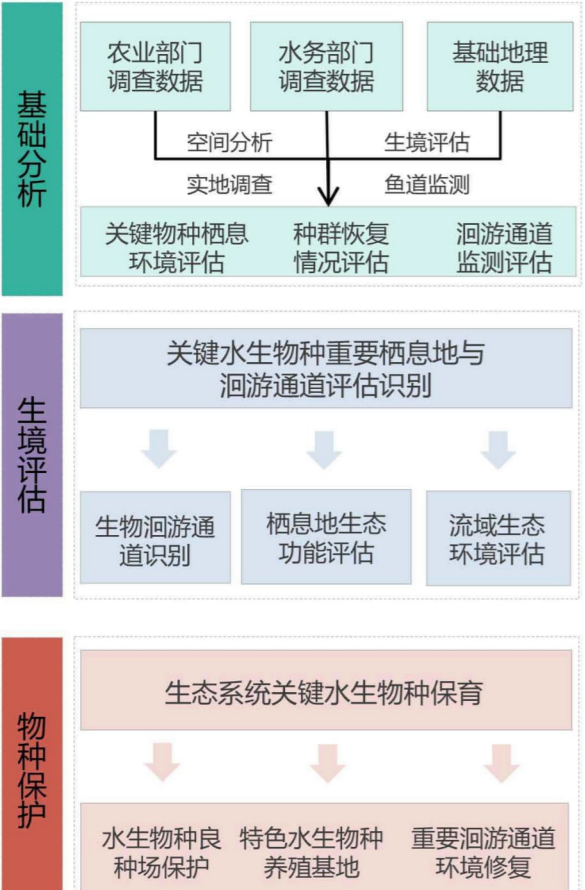
光倒刺鲃（野生鲟鱼）



唐鱼



桃花水母



修复鱼类洄游生态圈

Restoration of fish migratory ecosystem

以野生鲟鱼、桃花水母等水生动物栖息地评估为基础，通过16道闸坝改造。





山水
共融

实施成效

IMPLEMENTATION EFFECTIVENESS

助力发声，全方位展示生态修复样板

Fully display the ecological restoration model

助力广州作为中国第一个城市在联合国发布可持续发展报告，以海珠湖、白云山生态修复为案例，分享广州生态修复经验；引导开展“世界地球日”主题系列活动。

Help Guangzhou, as the first city in China, release the sustainable development report at the United Nations and share Guangzhou's experience in ecological restoration by taking the ecological restoration of Haizhu lake and Baiyun Mountain as examples. Guide a series of activities on the theme of "World Earth Day".

海珠湿地生物多样性生态修复

Ecological restoration of biodiversity in Haizhu wetland

鸭洞河沿线生态修复

Ecological restoration along Yadong River

流溪河源头保护修复

Protection and restoration of the source of Liuxi River

实施引导，全面提升湾区生态服务能力

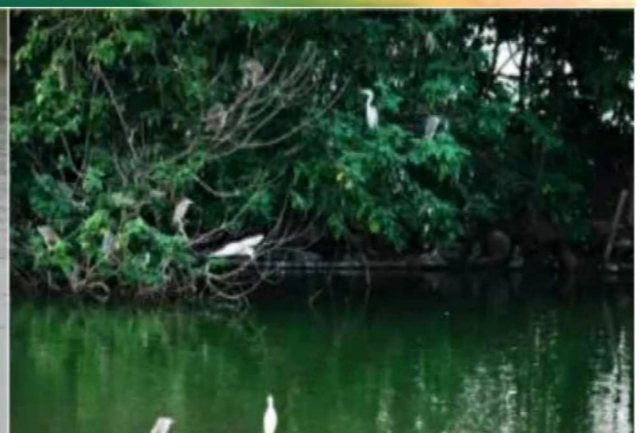
Comprehensively improve the ecological service capacity of the Greater Bay Area

指导全市开展湿地、河湖、海岸带、山林等三十余项生态修复工程。修复总面积56平方千米，让已消失60年的“水质风向标”飞瀑草、“鸟中大熊猫”黑脸琵鹭等指向性物种再现广州，重现城央鱼鸟成群的壮丽景象。

Guided the completion of more than 30 ecological restoration projects, with a total area of 56 square kilometers. Rare species like waterfall grass and "giant panda among birds" black-faced Spoonbill reappear in Guangzhou and reproduce the magnificent scene of flocks of fish and birds in the center of the city.

流溪河水库生态修复

Ecological restoration of Liuxihe Reservoir



悬浮式湿地栈道
Suspended wetland plank road

水鸟栖息浮排
Waterfowl Habitat floating raft

隐蔽式观鸟平台
Concealed bird watching platform

海珠湿地生物多样性修复等4项工程入选广东省生态修复十大范例

Haizhu Wetland Biodiversity Restoration and other four projects were selected as the top ten examples of ecological restoration in Guangdong Province



18千米岸线修复

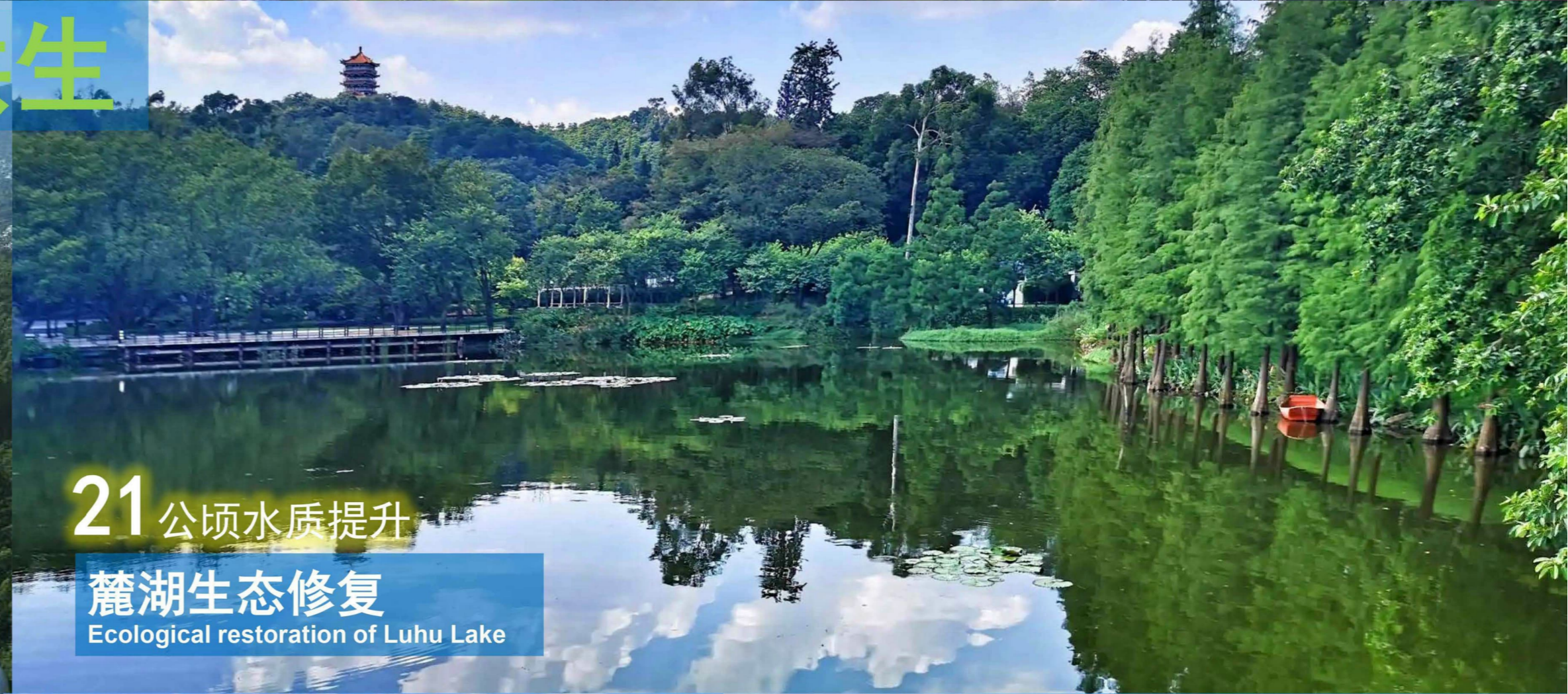
蕉门河生态修复
Ecological restoration of Jiaomen River

水城
共生



32公顷开采面积

顺兴石场生态修复
Ecological restoration of Shunxing quarry



21公顷水质提升

麓湖生态修复
Ecological restoration of Luh Lake



修复6大类生态系统 30项生态修复工程 8.4万亩修复面积
Repair 30 ecological restoration projects in 6 categories of ecosystems, with a restoration area of 84000 mu



珠江岸线生态修复
Ecological restoration of Pearl River coastline



河涌生态修复
River ecological restoration