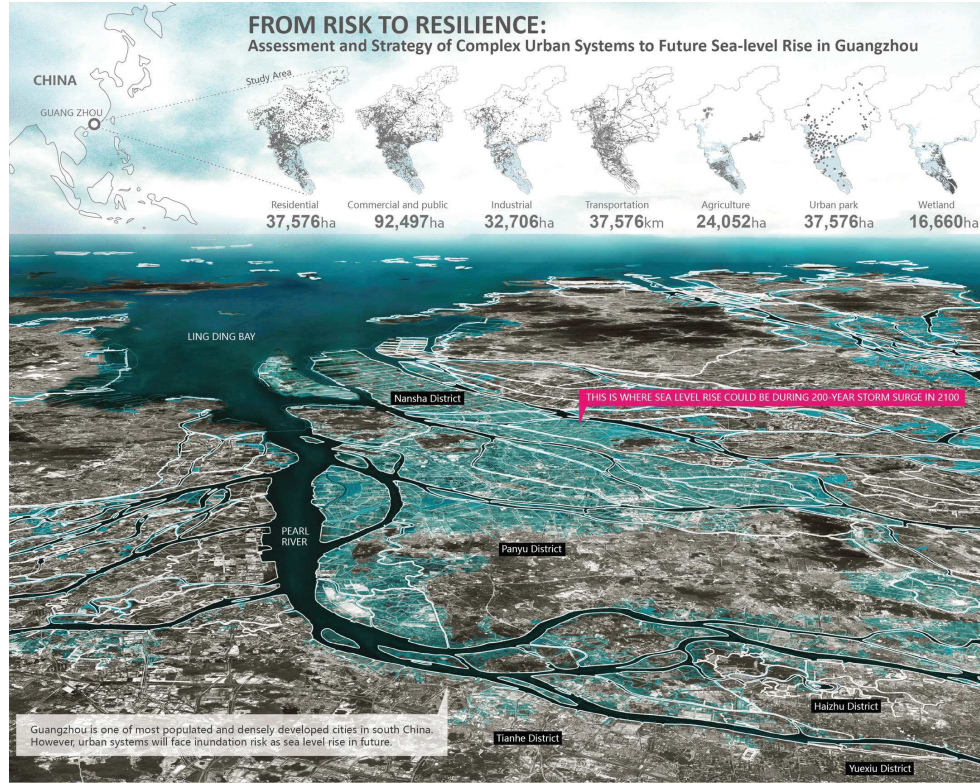
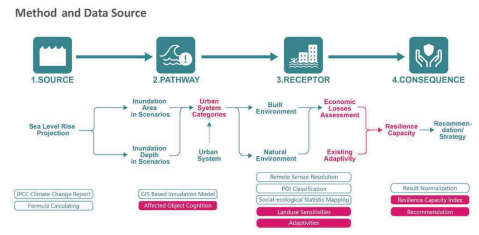
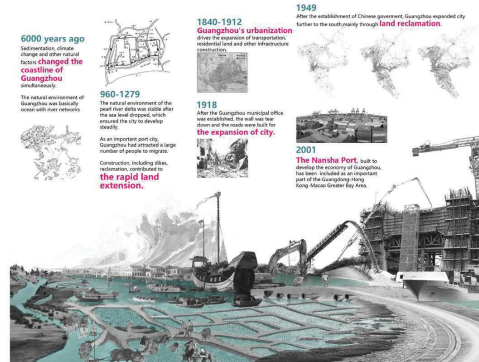
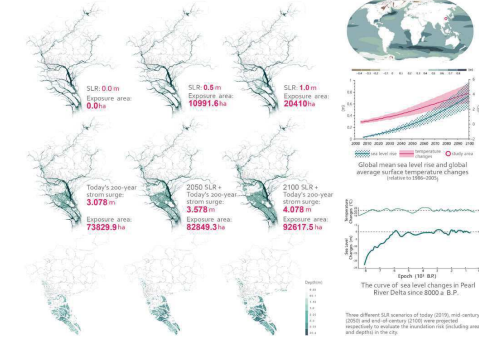


AWARD OF EXCELLENCE



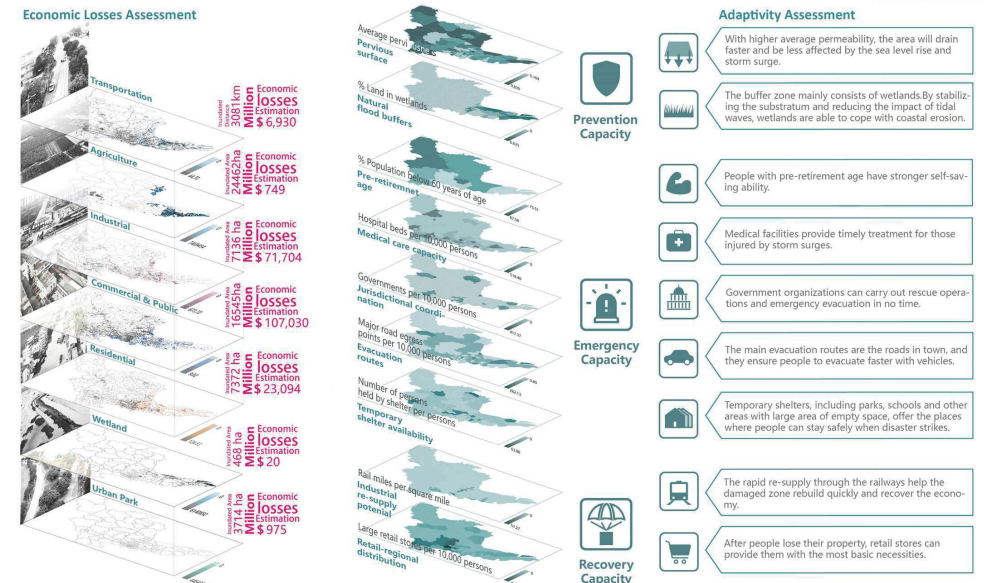
Projection of Sea Level Rise



BASIC DATA	SOURCE	PROCESSING	RESEARCH DATA
1. SLRm DEM	EARTHDATA of NASA	Sea level rise projection GIS-based Raster Interpolation Model	Inundation areas Inundation depth
2. LandUse-S	Geospatial Data Cloud site	Recognition of landscape of water, dry soil, vegetation and natural	Landuse
3. POIs (point of interest)	ChinaDCl	Classification of developed areas	Landuse
4. Transportation mode	OpenStreetMap	Conversion to vector in GIS	Landuse
5. Socio-economic statistics	2016 Yearbooks Guangzhou Statistics Bureau	Reasonable generalization GIS-based data spatial management	Assessment index

A conceptual resilience assessment framework of Source-Pathway-Receptor-Consequence (SPRC) was proposed in the study to assess urban natural and built environment systems.

Economic Losses & Adaptivity Assessment and Resilience Assessment



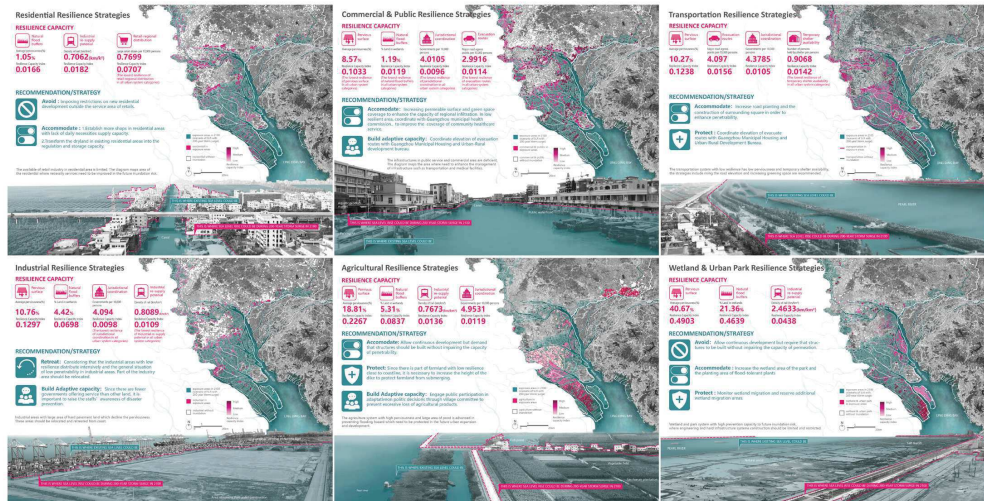
Resilience Capacity Assessment

Resilience Capacity Assessment	Prevention capacity	Emergency capacity	Recovery capacity
Resilience Capacity Index of Residential	0.1926	0.0118	0.0162
Resilience Capacity Index of Government & Public	0.1031	0.0119	0.0113
Resilience Capacity Index of Agriculture	0.2267	0.0317	0.0119
Resilience Capacity Index of Industrial	0.1707	0.0098	0.0154
Resilience Capacity Index of Transportation	0.1233	0.0388	0.0156
Resilience Capacity Index of Urban Park	0.4503	0.1275	0.0105
Resilience Capacity Index of Wetland	0.3354	0.0170	0.0170

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Resilience Capacity Index of Wetland	0.3354	0.0170	0.0170

Resilience assessment of the city by 2100 SLR with 200-year storm surge scenario based on foundation risk and existing adaptivity capacity. The result is a reference for the reconstruction strategy for urban system.



Yanoda Ecotourism Zone

— Reclaiming Paradise

Background

In the midst of China's rush to urbanize, conventional development practices can be harsh on people as well as the natural and cultural character of the land. Local farmers may be relocated without asking for their input to make way for expensive housing and large hotels. The land they once earned their living on replaced by identical luxury vacation villas, shopping complexes, and theme parks. Yanoda Ecotourism Zone rejects that model in favor of a progressive blend of ideas that directly involves the local people in an ecologically and culturally sustainable planning project.

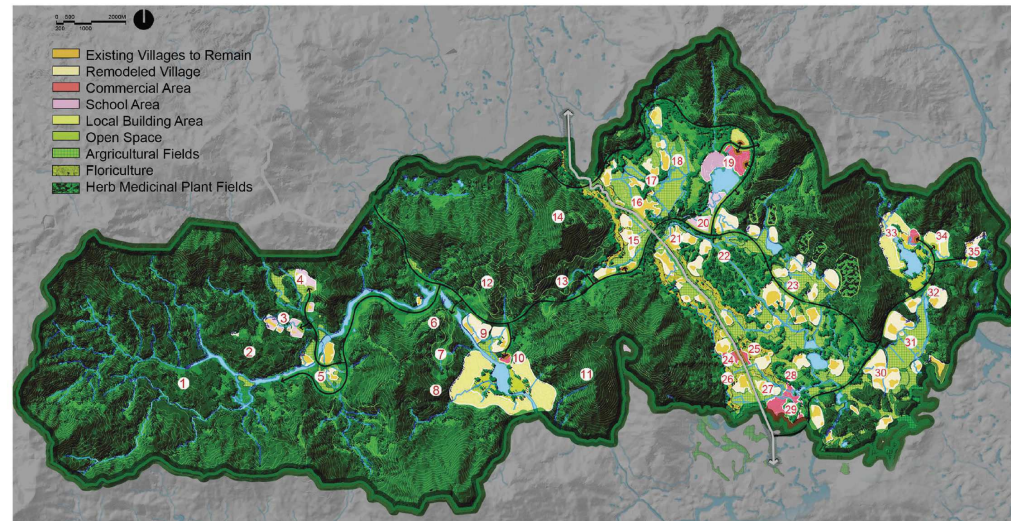
The landscape architects in collaboration with the clients initiated a strategy to engage residents and government officials in conserving most of subtropical lands to forever protect scenic vistas, water quality, farmland, wildlife, clean air and recreational opportunities of the subtropical land and mountain while offering devised solutions to the surrounding residents to improving their hospitality eco-tourist income and local economic. Guiding the vision of land and rejecting uncontrolled sprawl, the plan leveraged unique planning methods and limited development strategies to achieve what had been previously considered impossible in the area: Creating a practical and sustainable masterplan as well as a design guideline for the region based on a thorough site analysis as well as public involvement.



The Yanoda Ecotourism Zone is located in Baoting and Sanya counties in Hainan Province, China. The study area covers 40,525 acres just 19 miles north of Sanya City, a popular tourist destination. The land is rich in natural resources with mountains covered in tropical rain forests, hot springs, and waterfalls. The design team created a master plan as well as a design guideline for the region based on a thorough site analysis as well as public involvement.



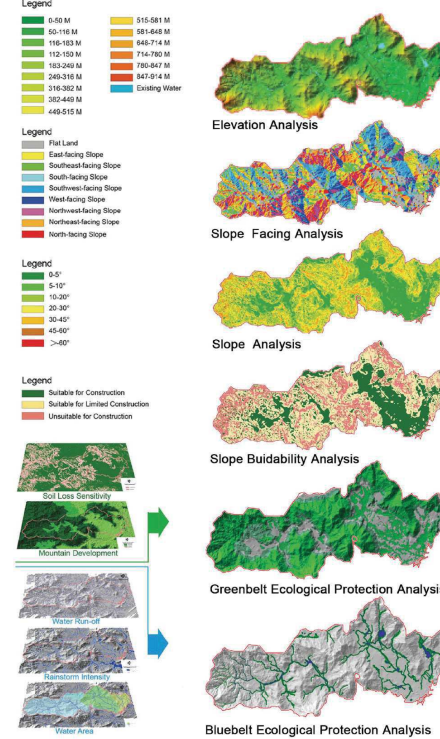
■ Baoting County has been home to the Li ethnic minority for thousands of years. Their culture flourished during the Tang, Yuan and Ming dynasties



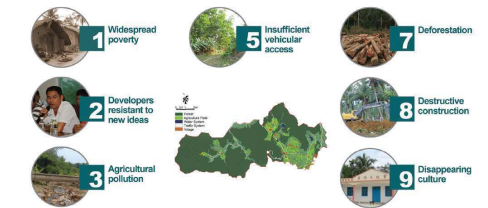
- 1 Rainforest Research Base
- 2 Rainforest Nature Walk
- 3 Rainforest Preservation Center
- 4 Endangered Species Museum
- 5 Nan Rainforest Campground
- 6 Resensvit Training
- 7 Spring Valley Fitness Trail
- 8 Rock Climbing Area
- 9 Spring Valley Sports Village
- 10 Beishan Fields Sports Park
- 11 Paragliding Takeoff Point
- 12 Horse Riding Trails
- 13 Mountain Bike Circuit
- 14 Area Overlook and Summit Trail
- 15 Rice Valley Agricultural Center
- 16 Produce Market
- 17 Community Gardens
- 18 Fruit Orchards
- 19 Medical Research Village
- 20 Educational Center
- 21 Educational Village
- 22 Rice Valley Arboretum
- 23 Job Training center
- 24 Li Minority Plaza and Amphitheater
- 25 Li Minority Cultural Center
- 26 Nanling Forest Park
- 27 Zaijin Village Center
- 28 Tea Garden
- 29 Li Minority Cultural Village
- 30 Rice Farming Villages
- 31 Rice Fields
- 32 TCM Plantation and Hot Spring Center
- 33 Nan Health and Wellness Village
- 34 Traditional Medicine and Health Center
- 35 Relaxing Spa Retreat

- ① Nanshan Rainforest Research Zone
- ② Beishan Wilderness Activity Zone
- ③ Rain Forest Health & Relaxation Zone
- ④ Rice Valley Tourism Village Zone

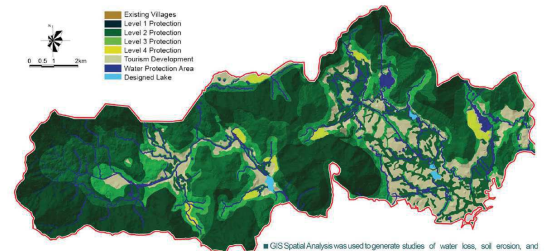
Analysis - Topographic & Environmental



Challenges & Opportunities



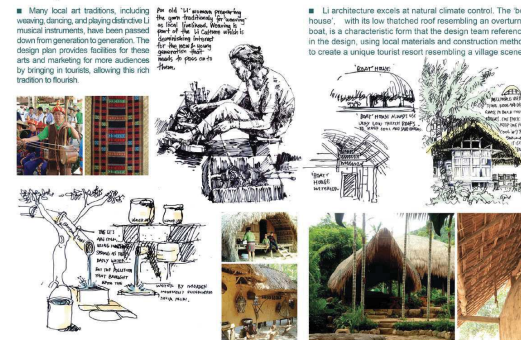
Many challenges were identified: unregulated fertilizer and pesticide use polluted drinking water; absence of summer rain water storage system; rapid depletion of forest resources by unsanctioned tree farms; lack of proper sewage system leading to unsanitary living conditions.



Ecological Protection System

Numerous site visits were made to collect and analyze data using GIS tools. The information gave the team thorough understanding of the topographic conditions, native and invasive vegetation types, rivers, streams and watersheds throughout the area.

Analysis - Culture & Architecture

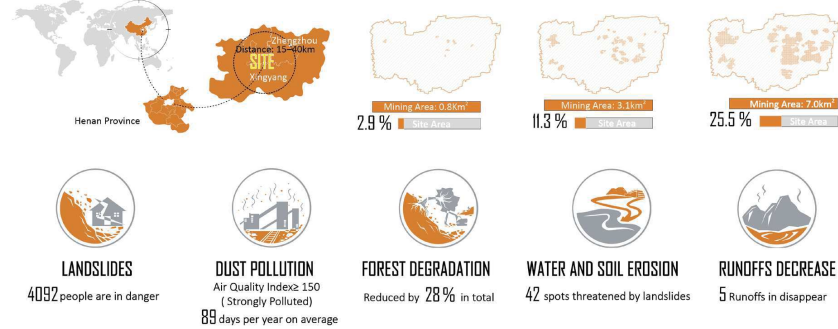


Programming

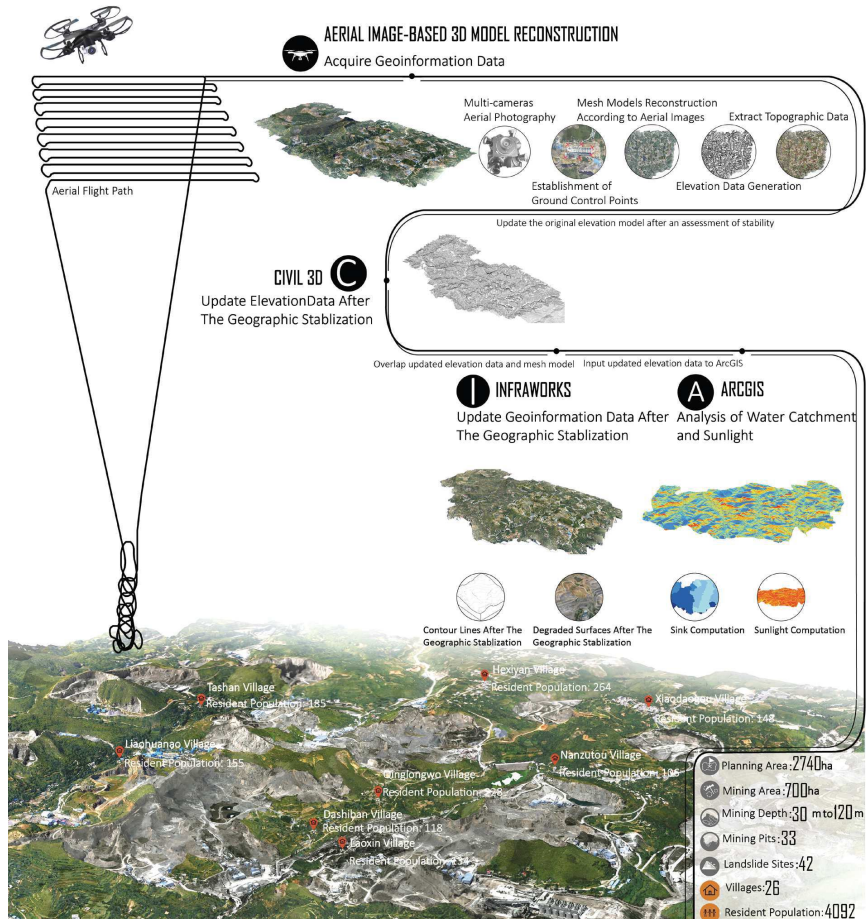


Accelerated Scar Healing by Nature——Restoration Quarries in Xingyang

SITE OVERVIEW



REMEDIATION TECHNOLOGY



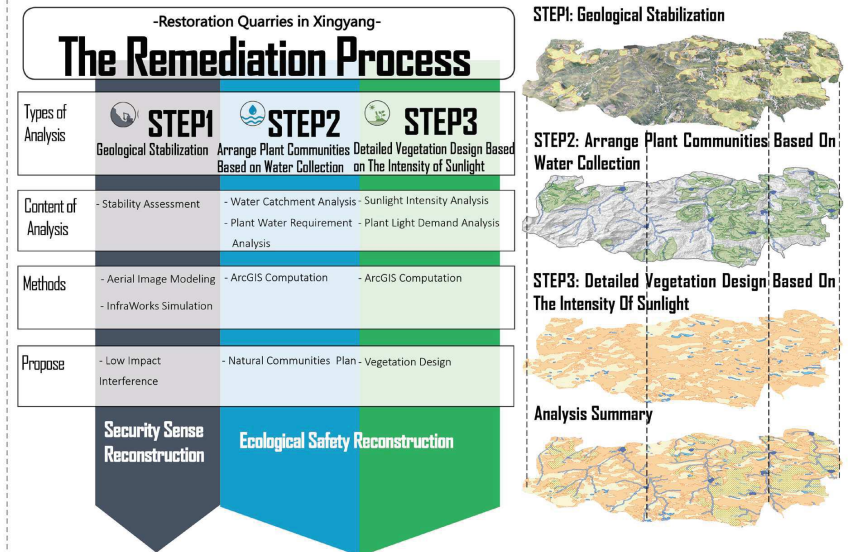
Project Statement

Background
Barbaric quarrying and exploitation caused extremely serious consequences. Thirty-three wounds with a total area of 700 hectares and a depth of 120m deepest were formed on the site. 28% of forest land was degraded. Forty-two landslide surfaces were formed. Five runoffs disappeared. Collapses and landslides constantly threaten the lives of 4,092 residents. On average, 89 days of dust pollution every year seriously affects the health of residents. This has aroused public indignation among the residents. Actions must be taken to heal the wounds of the earth. At the same time, we must save the nature in the form of nature with minimal intervention.

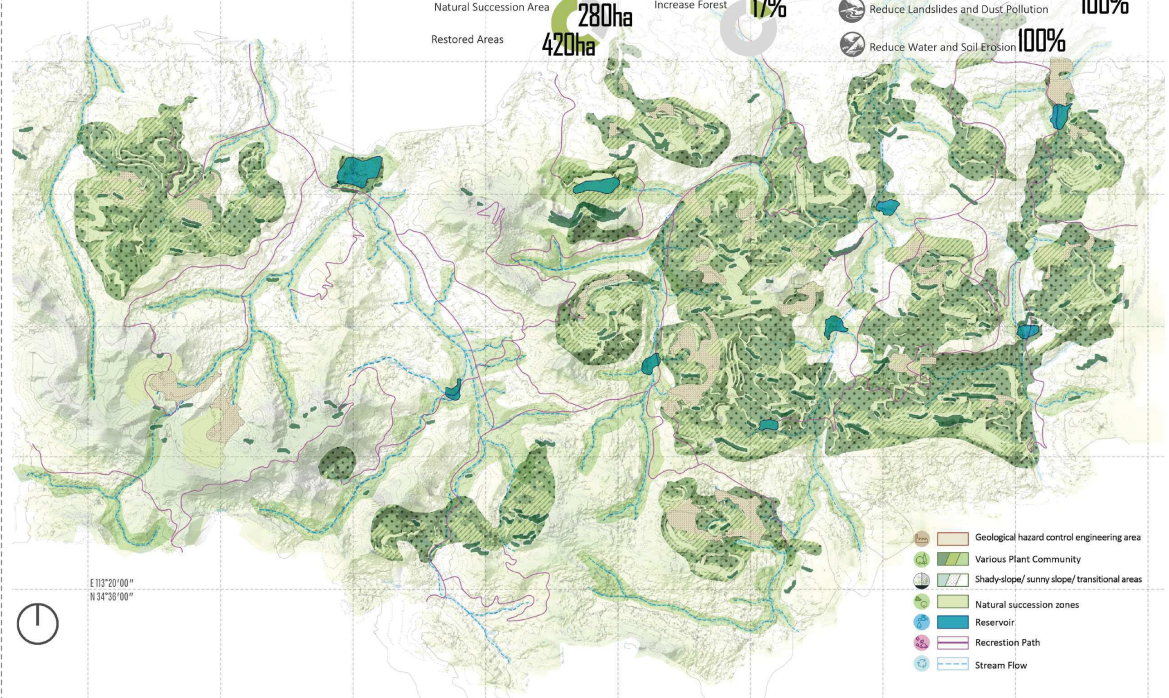
Design Strategy
The landscape architects, together with geotechnical engineers and soil & water conservation experts, set a clear goal and steps. The goal is to accelerate the process of natural restoration through scientific and accurate simulation and heal the wounds of the site. The solution is divided into four steps.

(1) Cooperates with geotechnical engineers to eliminate potential geological safety hazards; (2) cooperates with soil & water conservation experts to restore the area of natural vegetation as large as possible by using natural catchment; (3) selects adaptive plant species according to different illumination, and restores the original plant community as much as possible; (4) delimits forbidden areas for residents. To achieve the goal of scientific and accurate simulation innovatively integrate different software tools. A 3D model with an accuracy of 0.1M is built by photogrammetry. The model is imported into AIM (Autodesk Infraworks Modeling), then the geological stability assessment results are imported to form the geographic information after being treated. ArcGIS is used to simulate the catchment and illumination, which is used to determine the area of restored green space. Then we select local plant species through the light conditions determine. Finally, a scientific restoration plan is formed.

SOLUTION



MASTER PLAN





"Participation of the communities are the selling of sustainable design and future"

create a beach recreation area for the community economy along the Chao Samran beach.

Had chao samran Community park @ Phetchaburi

Designs :

Design concept: to create a beach recreation area for the community economy along the Chao Samran beach. Design Goal: to create Community Park that is able to generate revenue, provide a cultural space and rest areas for the people in the community and tourists. It also provides the exercise area for people in the community.

Design Process: the aim of the project was to promote the sense of ownership of dwellers and target groups in developing a supportive environment for physical activities, to take part in the management of the proposed facilities and to stimulate people motivations in conserving Thai traditional plays and sports. The participatory design process starts from the field survey to explore the project area and arrange an open stage, brainstorming to determine activities and programs for design needs. After that, the designer brought back the results from the first open stage to the community and arranged the open forum again. Both workshops were arranged for the discuss activities aimed to exchange various ideas such as the presentation of the goals and values of the project, the exhibition illustrated the perspectives of renovation, Sub-group activities & discussions, and also including reflections in the big stage. As a result, designers are aware of a variety and useful activities such as exercise, leisure, trade, youth activities, and social activities. It identifies the location of the activities and also the issues and concerns of the community. The aforementioned participatory processes created unity and strength in the community, therefore, the design of the Chao Samran beach's Sports Court is truly community-based. In addition, the engagement process does not end with the design process. It also provides opportunities for the community to participate in activities during construction such as painting and drawing playground, building brick walls and planting trees. This is also a need of the community that has been designed together. And in the future when the project is completed, this participatory process will also lead to feelings of love, cherish and shared ownership to this area. From our initiation of the processes, the general public shows more interest to participate their comments, for the conclusion, Chao Samran Beach Project is a project that everyone in the community will be involved in since the design process, participating in the construction process and also be a user and maintainer. It, thus, is a valuable project and truly worth to the community.

Keywords:

participatory process, supportive environment for physical activity, healthy space, environmental design for health promotion, action research, community design, ownership feeling, Social Flexible Space, Commercial sharing space

Participation of function



Pilot project: Community to help build a playground

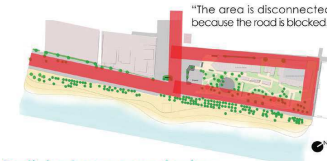


Preserve All Existing Trees

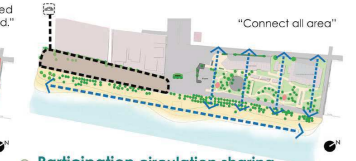


Borassus flabellifer 4 Nos.	Cerbera odollam 15 Nos.	Cocos nucifera 1 Nos.	Calophyllum inophyllum 6 Nos.	Azadirachta indica 1 Nos.
Terminalia catappa 2 Nos.	Casuarina equisetifolia 139 Nos.	Plumeria 5 Nos.	Terminalia ivorensis 12 Nos.	Roystonea regia 2 Nos.
Casia fistula 1 Nos.	Ficus benjamina 1 Nos.	Swietenia macrophylla 1 Nos.	Ficus religiosa L. 2 Nos.	Artocarpus heterophyllus 1 Nos.

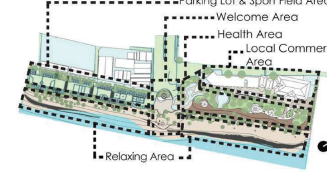
Existing Layout



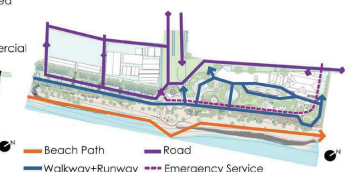
Participation surrounding sharing



Participatory space sharing



Participation circulation sharing

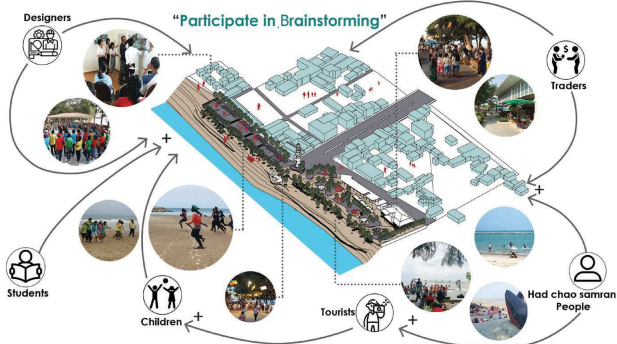


Characteristics

- Seaside plant
- Good near the seaside, wind-tolerant
- Good at water edges, flood-tolerant
- Casuarina equisetifolia use as wind break
- Good in low-maintenance areas
- Handsome crown and leaves, good as shady tree.

Existing Tree

Casuarina equisetifolia 139 Nos.	Cocos nucifera 1 Nos.
Borassus flabellifer 4 Nos.	Cassia fistula 1 Nos.
Ficus religiosa 2 Nos.	Ficus religiosa L. 2 Nos.
Calophyllum inophyllum 6 Nos.	Artocarpus heterophyllus 1 Nos.
Cerbera odollam 15 Nos.	Other trees 15 Nos.
Terminalia catappa 2 Nos.	Total 208 Nos.
Terminalia ivorensis 12 Nos.	
Plumeria 5 Nos.	
Artocarpus heterophyllus 1 Nos.	
Roystonea regia 2 Nos.	



HEALTHY CITY

有机健康城

TO LIVE LONG AND PROSPER WITH NATURE

Location: Chengdu, Sichuan Province, China
Size: 10.3 sq kilometer

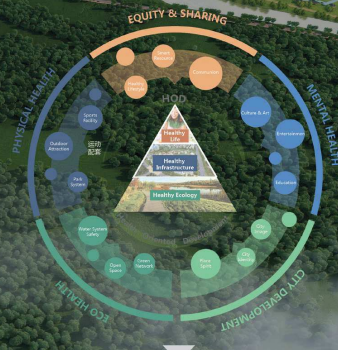
IFFLA AAPME Awards: 2019
Award Category - Unbuild



VISION

Our vision is to create a healthy city that can be experienced, allowing all habitats to live in a comfortable and delightful environment, to share sufficient and easily accessible resources, to maintain physical and mental pleasure, and to live long and prosper.

Landscape Planning Template
Five Healthy City Objectives
Eight Approaches



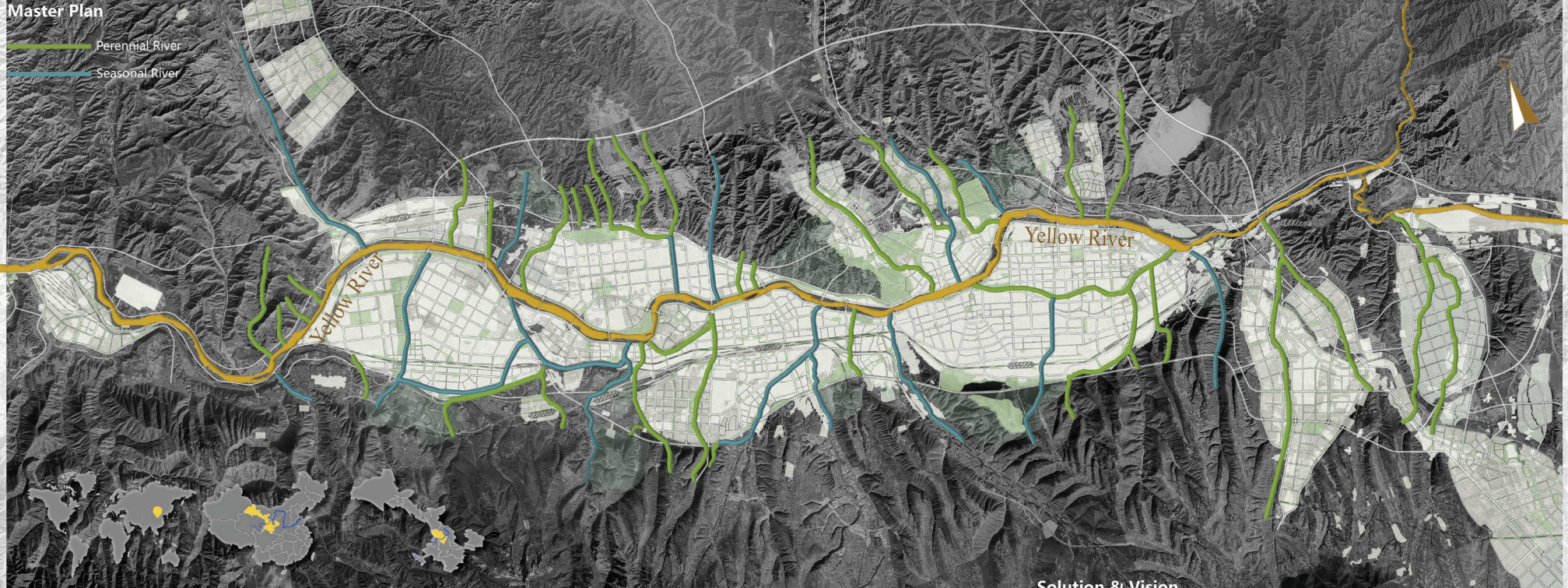
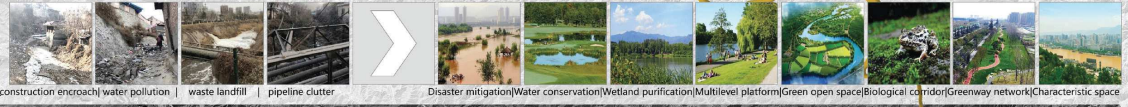
HOD - Health Oriented Development Model
A practical template of landscape planning that form a planning mode which is oriented to a healthy ecological environment and supported by healthy infrastructure.

- Ecological Improvement** To preserve and redevelop existing water systems and green spaces for a complete local ecological network.
- Urban Development** To create identifiable local image and place spirit
- Resource Efficiency** To provide and distribute accessible, adequate, and shared urban resources
- Mental Enrichment** To deploy abundant cultural and artistic places, and to launch various recreational activities.
- Physical Health** To create sufficient quality outdoor activities and encourage a green and organic lifestyle.

- 1** Water Revitalization
- 2** Forest Conservation
- 3** Ecosystem Establishment
- 4** City Image Portraying
- 5** Low-Carbon Traveling
- 6** Smartness & Sharing
- 7** Culture and Art
- 8** Physical Well-Being

From Negative to Positive

-Ecological Restoration Planning for Lanzhou River System



The gullies are perennially drought, and rainfall is concentrated in summer which triggers flooding

52% DROUGHT
Annual mean precipitation accounts for 52% of national average
329mm

66% FLOOD
Summer rainfall accounts for 66% of the annual rainfall
217mm

Some gullies are occupied by buildings, which endanger the safety of residents

12 buildings encroach on gullies

Urban expanded to riverside

Seasonal flood & Perennial drought

River Gully Crises

Negative space

25 km² water pollution

48 km² waste landfill

35 km pipeline clutter

Sewage discharge, waste landfill, messy pipelines, gullies have become negative space

Mix-used Space

Solution & Vision

STEP1 Return space to gullies, ensure flood safety

Demolish illegal construction

Remove waste

Bury pipeline

STEP2 Renovate environment, play ecological role

LID store rainwater

Local vegetation for water and soil conservation

Biological corridor

STEP3 Mix-used vitality space for residents

Multi-level landscape platform

Flood Line

Green space

Green way

Positive Space

Improved living environment, the space people proud of

Highway Transformation

Putting the Landscape First to Create a New Highway that Combines Safety, Humanism, and Ecology
Hualien-Taitung Valley Freeway (Taiwan Provincial Highway No. 9) Master Plan



Road Planning of Provincial Highway No.9

Landscape roadway planning, apart from considering the overall visual experience of passers-by, should not only encompass all users, including pedestrians and vehicles, based on human-centered design principles but also carefully responding to the context of the local communities and the surrounding ecological environment.

In Taiwan, conventional highway design tends to largely center on transportation functions, which results in oversimplified design process that reduces design into a process carrying out run-of-the-mill road section designs. This project broke with tradition by putting the landscape planning and design first and foremost, no longer treating it as supplementary in this process. In addition, the design approach focuses on four elements: safety, landscape, humanism, and ecology. In the planning process, the public participation mechanism was in place to encourage citizens to take part in the decision-making so the design solutions can take into account both environmental and social needs, which resulted in proposals that respond to the various local areas: the populated area, the scenic area, and the ecological area.

CREATE SUITABLE SOLUTIONS RESPONDING TO VARIOUS ROAD CHARACTERISTICS



The Populated Area

- Slow Living in The Populated Area
- Create More Pedestrian-Oriented Slow-Paced Space
- Through public participation to consensus plan



The Scenic Area

- Preserve Roadside Trees in Good Condition
- Designate Fast Lane & Slow Lane
- Increase Speed Limit in Premises of Safety
- Integrate the Vacant Areas



The Ecological Area

- Prevent Road Kill
- Build Wildlife Passage
- Avoid Large Excavation During Construction

Gray Infrastructure

TRADITIONAL HIGHWAY

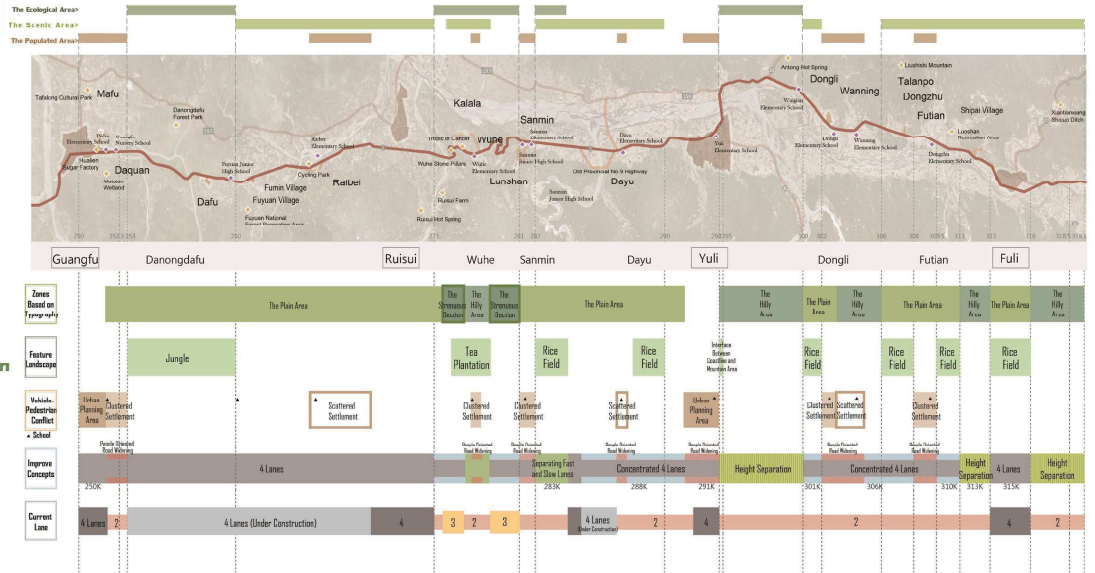
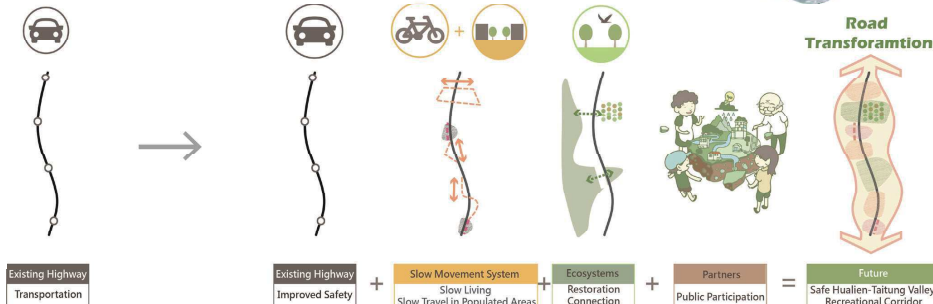
- Efficient Movement at Long-Distance Transportation
- Humanism and Ecology are Secondary
- Single Run-of-mill Road Section and Design Speed
- The Public Are Only Notified After Final Decision

Green Infrastructure

THE PROPOSED SAFETY LANDSCAPE BOULEVARD

- Combines Aspects of Transportation, Everyday Life and Sightseeing
- Human-Centered Design, Safety and Ecological Friendliness Are Primary Focus
- Adaptive Design speed and Road Sections Responding to Local Conditions
- The Public Are Involved in Decision Making

Road Transformation



1. Based on the design principle of "trees first, then road", depends on the existing condition to apply either the methods of "Separate Fast and Slow Lanes" or "Concentrate the Four Lanes" in order to keep as many roadside trees as possible.
2. The elevation change in hilly sections is dramatic, therefore differentiate the high and low elevations to avoid potential large excavation.
3. The Populated Area: People-oriented Road Walking.



BENEFITS

- 5,893,500 PEOPLE SERVED BY THE NEW "CENTRAL PARK"
- 90 KILOMETERS OF GREENWAY FOR A TOTAL OF 180 SCENIC MILES
- 742 HECTARES OF NEW GREEN SPACE
- 809 HECTARES OF WATER AREA INCREASED IN TOTAL

HUAN RIVER

- 38 SQUARE KILOMETERS AREA OF COMPREHENSIVE PLANNING
- 30 KILOMETERS OF RIVER ARE TAKEN INTO COMPREHENSIVE PLANNING

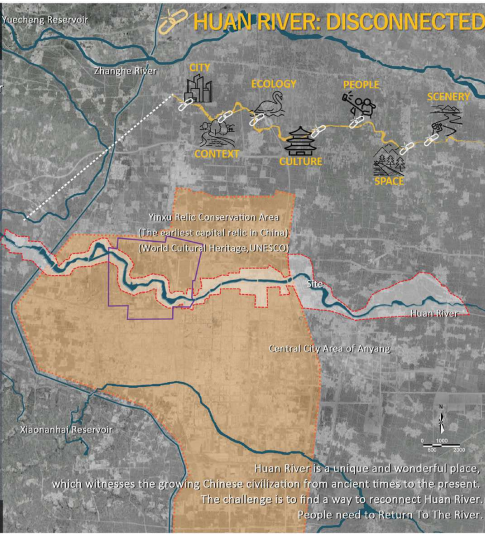
BACKGROUND

"MOTHER RIVER"

Cradle of Chinese Bronze Civilization

Relations between the City & River

City	River
Shang Dynasty (13th Century BC)	River of Civilization Natural Moat of Capital City, Daily Use
National Capital	
Qin Dynasty (2nd Century BC)	River of People Traffic and Daily Use
Commercial City	
Qing Dynasty (20th Century)	The Lost River Channel of Flood, Declining Space
City center transferred, with railway transportation replacing water carriage	
Now	



RETURN TO THE RIVER

OBJECTIVES & FRAMEWORK

Problems

- #### Flooding & Ecology
- Threats to the safety of urban and residents
 - Decreased ecological function of river
 - Deterioration of Environment
 - Decreased wetland function



Cultural Identity

- Lack of integration of natural and cultural resources
- Discontinuity of context
- Less concern to local characteristics



Local Life

- Low quantity and quality of riverfront green space
- Poor accessibility to the riverside
- Lack of recreation facilities
- Lack of riverside landscape



Strategies

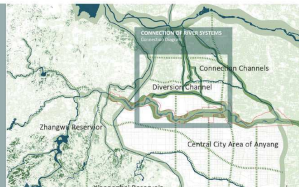
Disconnection of Urban Area and The Nature

- Flood Channel to Inner-City River
- Conservation Stewardship
- Eco-Land Adjustment & Habitat Creation
- Activation of Historic Space
- Riverfront Landscape Improvement
- Accessibility to The River
- Protection of Scenic View
- Return to The River

STRATEGIES

Flood Channel to Inner-City River: Reconnect City with River

The peripheral flood diversion channel and well-connected river system relieve flood pressure of Huan River, which makes Huan River more pleasant for people.

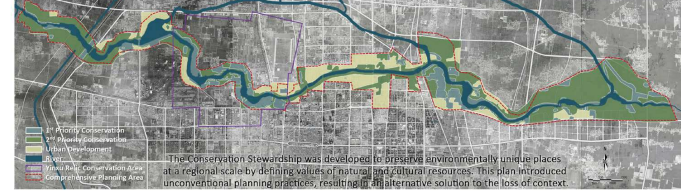


Conservation Stewardship: Reconnect Context with River

CONTEXT ANALYSIS: ASSESSING NATURAL AND CULTURAL RESOURCES



CONSERVATION STEWARDSHIP



City - River

Context - River

Ecology - River

Culture - River

People - River

Space - River

Scenery - River

Integrated implementation are taken to reconnect Huan River and to solve diverse problems, such as flood threat, lack of public space, etc.

PROJECT STATEMENT

Via ecological purification technology, the original ecological environment of karst wetland has been protected, which also reduces the interference of human activities to it.



PROTECT THE FLOWERS OF KARST WETLANDS
 PLANNING OF CHENGJIANG NATIONAL WETLAND ECOLOGICAL EXHIBITION AREA
 PROTECTION OF WETLAND WITH ECOLOGICAL METHODS

01

SITE INTRODUCTION

Rare Karst wetlands
 Chengjiang wetland park is located in the karst plain of the world's hoodoos in southern China. To protect the ecosystem of wetlands, the Chinese government has designated this area as a national wetland park to carry out scientific research and popular science exhibition activities.

Rare plant Ottelia Acuminata
 Marine cauliflower, living in wetland waters, is a rare and endangered aquatic vascular plant just in China. Its living environment requires high water quality, so it is also known as "environmental protection plant".

Biodiversity
 Wetland ecosystem is rich with high biodiversity. There are a variety of rare flora and fauna. Wetland underground river is rich, which forms sinkhole cave. Cave life of grass blossom jellyfish (Ctenophora), living can, requires the strict living environment. Based on the highest level of "extremely dangerous organism".

Chengjiang wetland park
Cave life
Planning Area
Ctenophora crenata
Birds
Aquatic animals

PROBLEM ANALYSIS

Water pollution
 The growing environment of Ottelia acuminata requires high water quality, at least meeting the Class II water quality standard. Water pollution would affect its biological self-reproduction.

Water area reduction
 Water area reduction has led to Ottelia acuminata's disappearance, jeopardizing the distribution and population.

Garbage dumping
 Garbage dumping has affected the growing environment of Ottelia acuminata.

Agricultural Pollution
Sanitary Sewage
Waterlevel Depression
Domestic Garbage

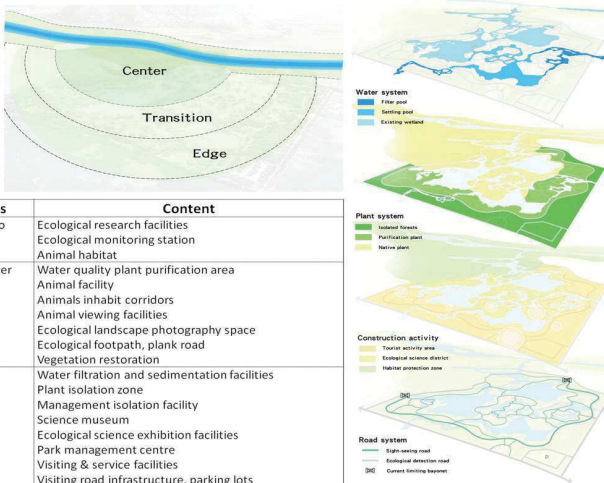
The dead Ottelia acuminata

The ecological environment of wetland is polluted by residents' life and agricultural production, and the living environment of Marine cauliflower is seriously threatened.

TECHNIQUES AND METHODS

It proposes a CTE layered protection mode to form an ecological display space with low interference to the original environment

CTE layered protection mode divides the park into regions according to ecological sensitivity. The designation of C-center area, namely the core area of original habitat protection; E-edge area, where to display activities by using edge area; The transition zone was established between zone C and zone E, namely the transition zone for ecological restoration. Planning sets the protection target for each area, controlling the number of visitors, and establishes the facilities allocation system for each area. All these measures have guiding significance to the planning of ecological park. The water purification system structure, plant protection structure, service building layout structure and road infrastructure structure are constructed on the basis of the zoning model defined by this protection mode. Which forms the ecological exhibition space and park layout with low interference to the original environment.

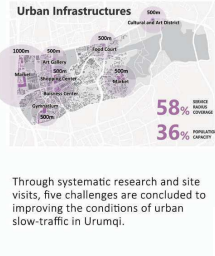
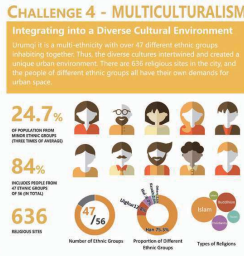
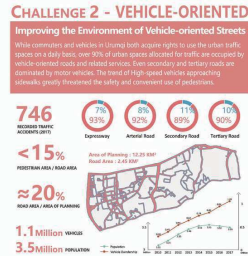
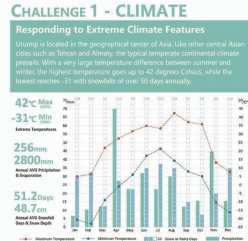
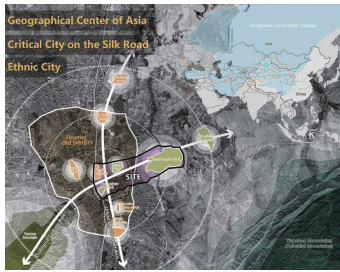


partition	target	activities	Content
C—center	To protect and restore the original ecosystem	Not allowed to enter	Ecological research facilities Ecological monitoring station Animal habitat
T-transition	Filtering disturbance factors of original ecological pollution (interference of water, soil, vegetation and species)	Limited to enter	Water quality plant purification area Animal facility Animals inhabit corridors Animal viewing facilities Ecological landscape photography space Ecological footpath, plank road Vegetation restoration
E—edge	Isolation of external disturbances (human activities, solid state pollution, noise, dust, etc.)	Active area	Water filtration and sedimentation facilities Plant isolation zone Management isolation facility Science museum Ecological science exhibition facilities Park management centre Visiting & service facilities Visiting road infrastructure, parking lots

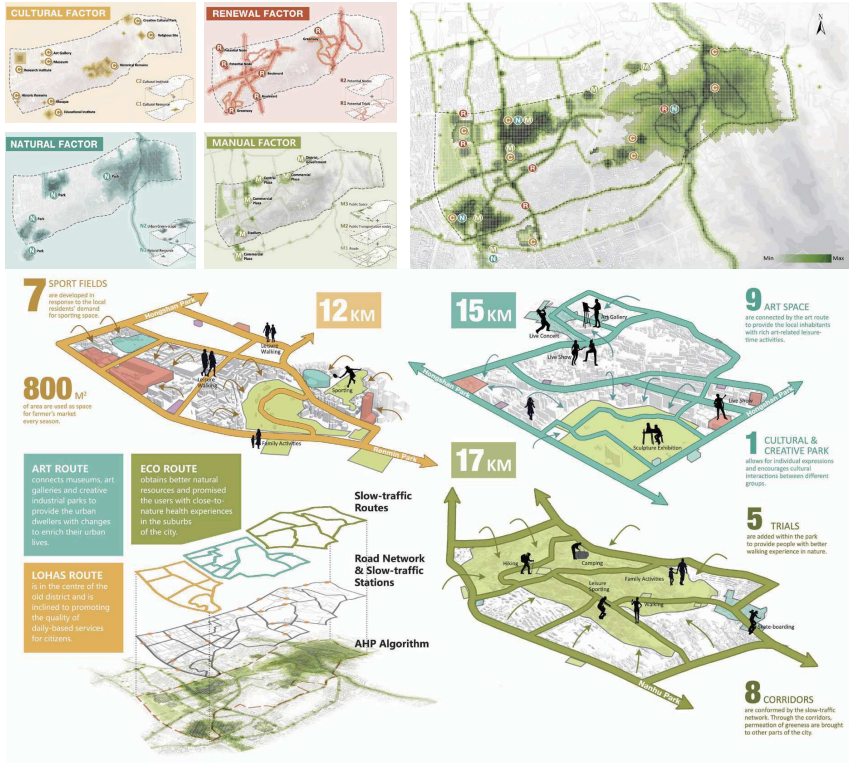
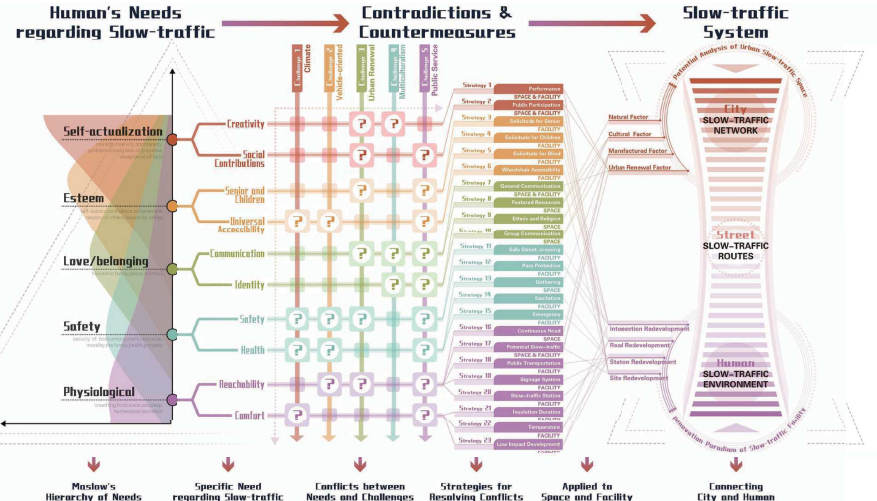
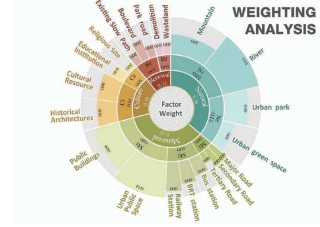


RECLAIMING A HUMANE STREET SYSTEM:

Planning of the Slow Traffic System under the Urban Renewal of Urumqi



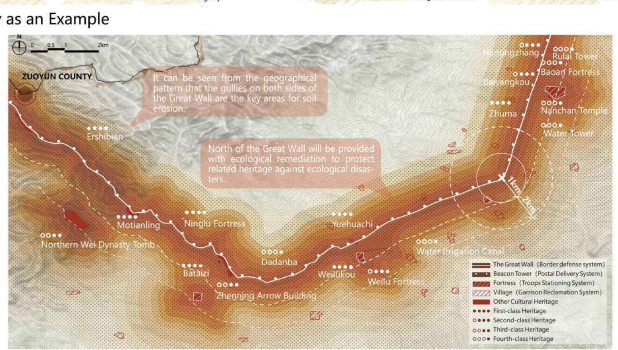
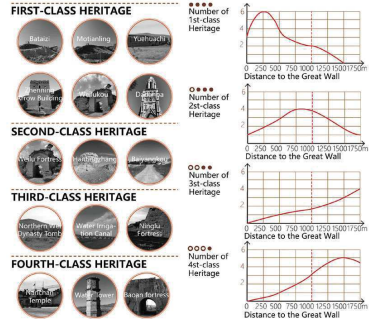
Through systematic research and site visits, five challenges are concluded to improving the conditions of urban slow-traffic in Urumqi.



Revitalizing the Great Wall - Datong Ancient Great Wall Cultural Heritage Corridor in Shanxi Province, China



Heritage Distribution—Zuoyun County as an Example



Spatial Pattern of the Great Wall

Based on the distribution and conservation status of the Great Wall and the five types of relics nearby, the planning has divided the spatial pattern for ancient Great Wall heritage protection into four levels, so as to realize the graded protection and development of the Great Wall heritage.

