



Country / City Carahue, Araucanía, Chile

University / School Landscape and Sustainability Observatory, Diego Portales University. OPS UDP.

Academic year 2019

Title of the project Riverside wetland deputation system

Authors Domingo Molina

TECHNICAL DOSSIER

Title of the project Riverside wetland depuration system
Authors Domingo Molina
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Written statement, short description of the project in English, no more than 250 words

The city of Carahue is located in southern Chile, in the Araucanía region. Currently it's inhabited by 25.000 persons and it has the highest rural population percentage of the region. Due to it foundation beside the biggest river of Araucanía (Imperial river), the city enjoys a particularly wet environment and very rich agriculture fields attracting a lot of birds and aquatics mammals. Despite that, Carahue's urban design doesn't integrate the surrounding natural landscape and does not take advantage of the riverside either. Further that, the whole area it's being contaminated by the invasive agriculture and forestry activities wich affect the Imperial river basin altering water quality and increasing ground erosion. The poor chilean forest monoculture and agroindustry public politics means for Carahue today the biggest threat.

Assuming that the currently chilean way of landscape management is not giving up on grow, the proposal's main intention for Carahue is to redress water pollution produced by local agroindustry. Therefor the project develops an technical wetland depuration system that besides ensuring water quality improvements also create a whole new habitat for wildlife and human recreation. The cleaning system includes a new way to travel along the riverside and wetlands, proposing new connections between urban and rural life. The whole project aims to resignify the leadership of natural systems we inhabit and how we are related with them.

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CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

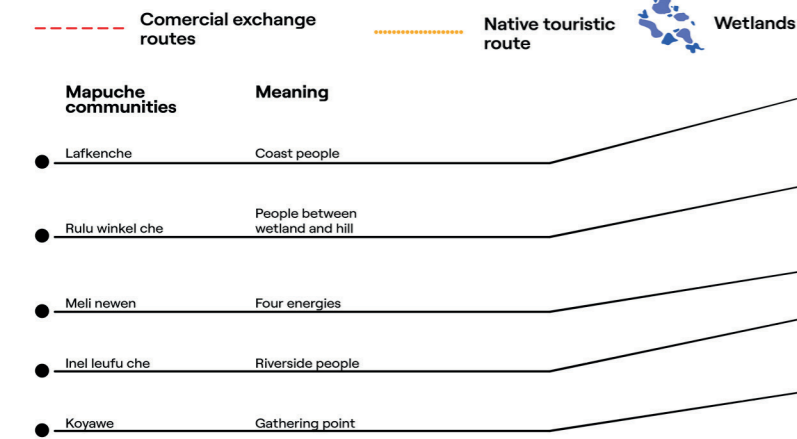
Barcelona September 2020
SCHOOL PRIZE

SISTEMA DE DEPURACIÓN DE HUMEDALES RIBEREÑOS / RIVERSIDE WETLAND DEPURATION SYSTEM

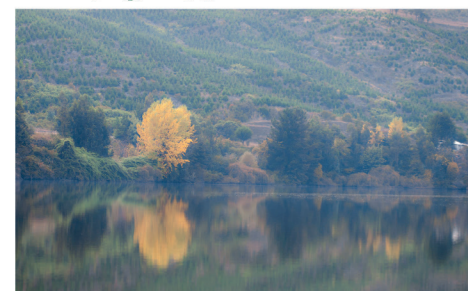
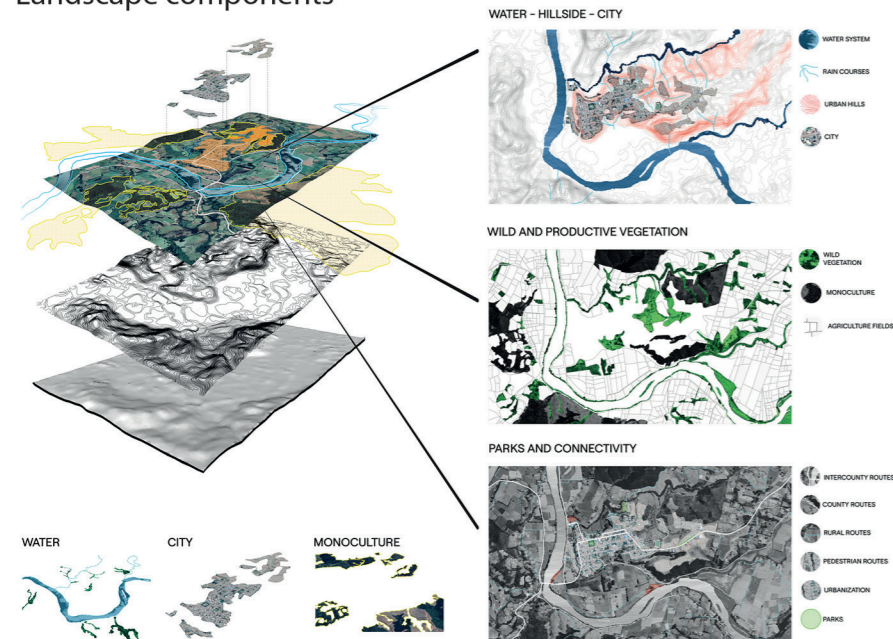


Carahue county

Carahue was founded as a river city on the banks of the Imperial River. This is located on the hill to protect itself from the overflows of the river. The city maintained a fluvial behavior with the river for many years, but unfortunately the climatic change and the contamination of the hydrological system made the river currently not navigable by ships. Carahue is a good example of how the contamination of the water system can affect the urban relationship that a city has with its river.



Landscape components



Imperial river and monoculture



Imperial river riparian vegetation



Imperial river, Carahue and monoculture



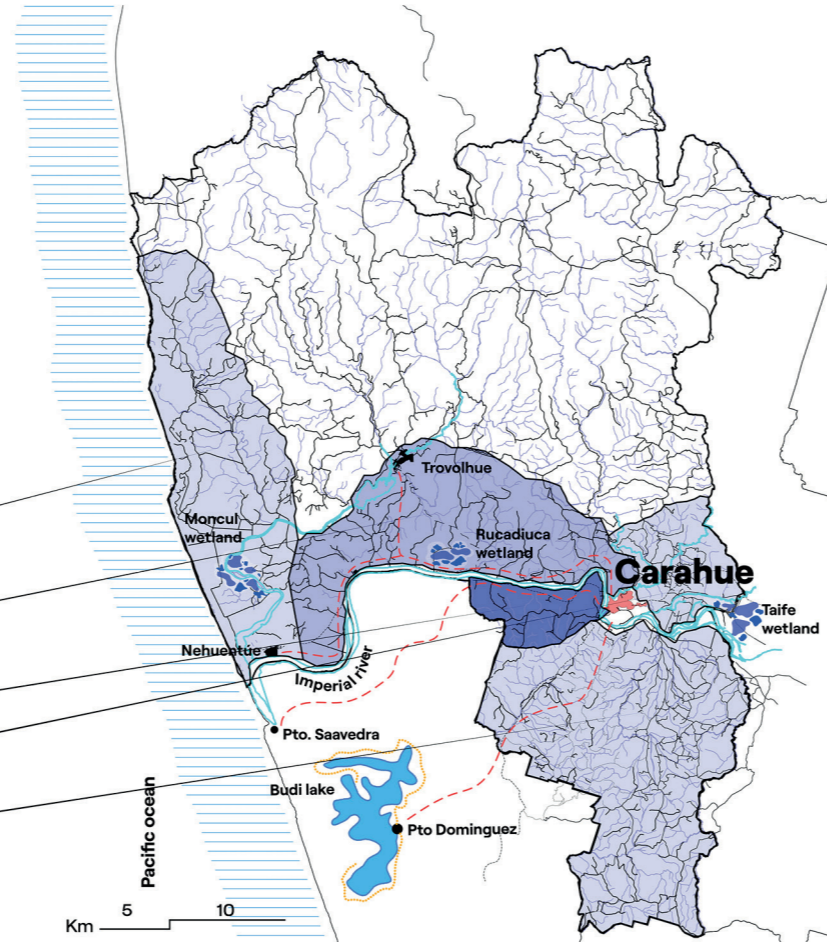
Imperial river taken from Carahue



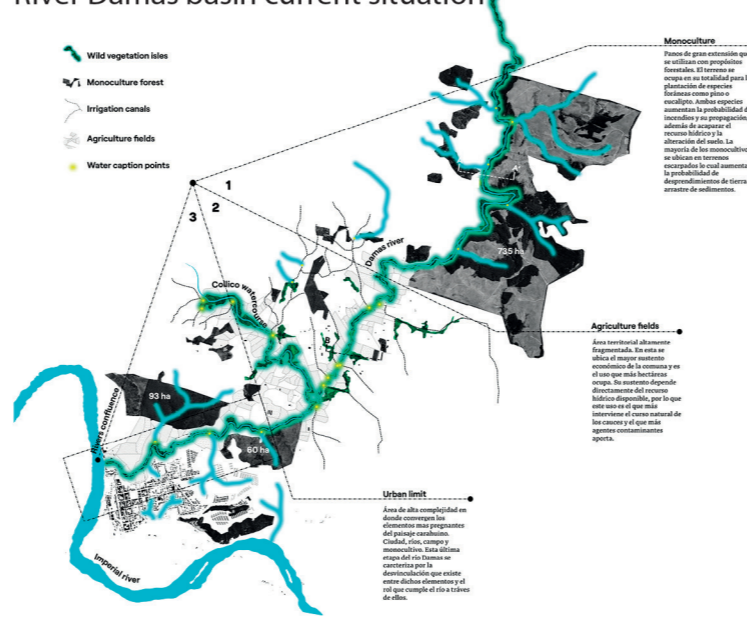
Damas river taken from Carahue



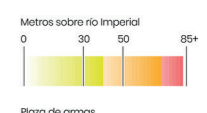
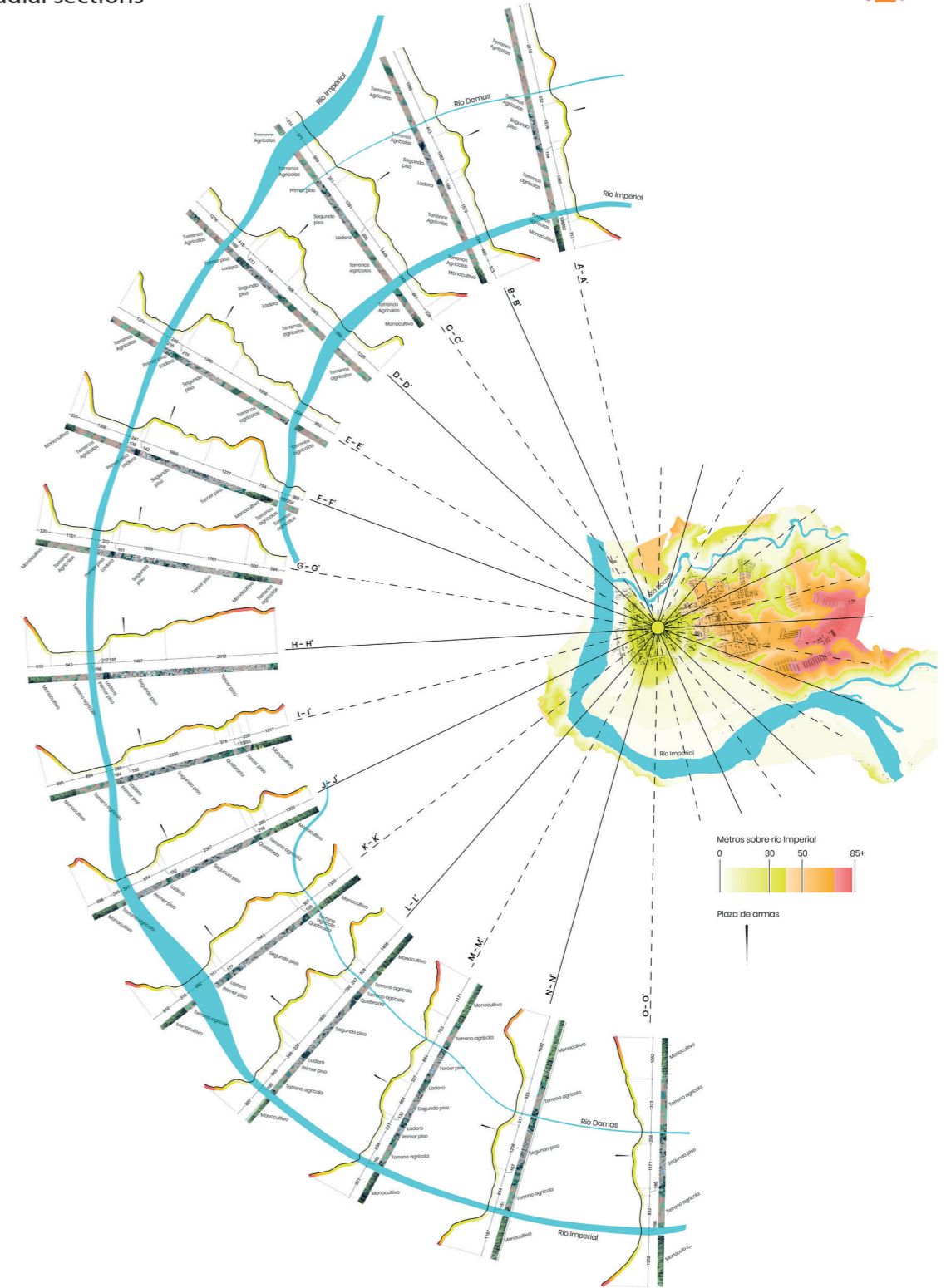
Bridge, Imperial river and Carahue



River Damas basin current situation



Radial sections



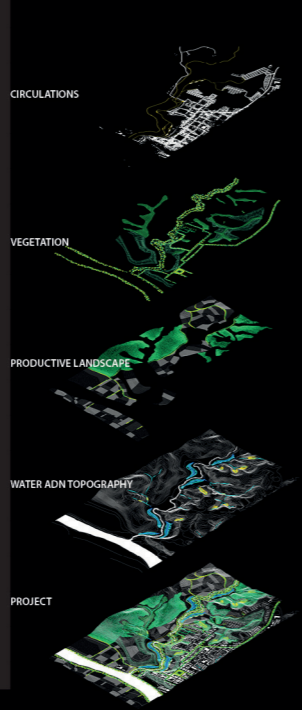
SISTEMA DE DEPURACIÓN DE HUMEDALES RIBEREÑOS / RIVERSIDE WETLAND DEPURATION SYSTEM



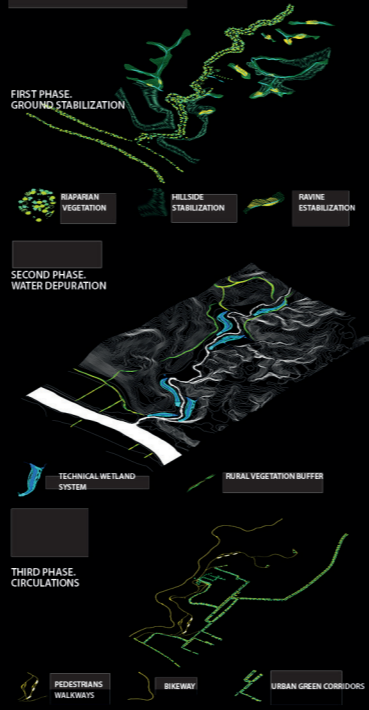
River Damas Basin Master Plan



Project layers



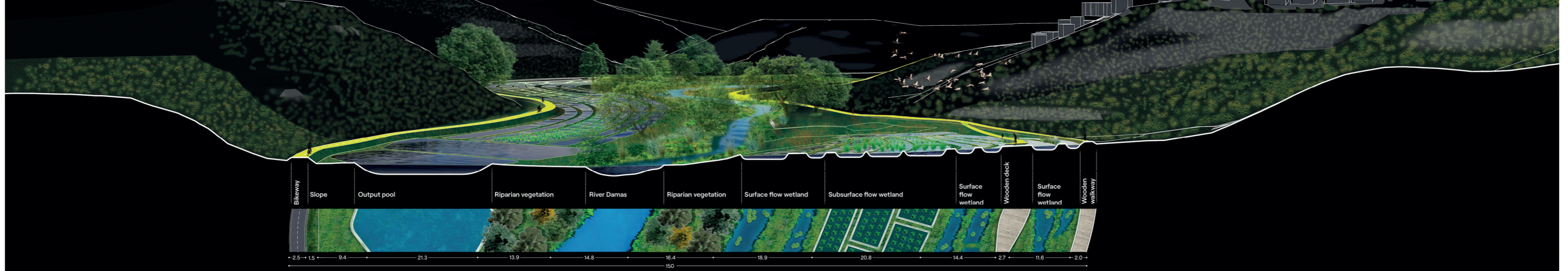
Phases and temporality



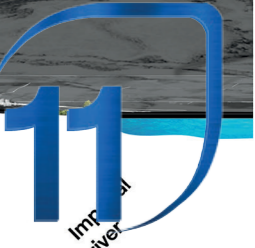
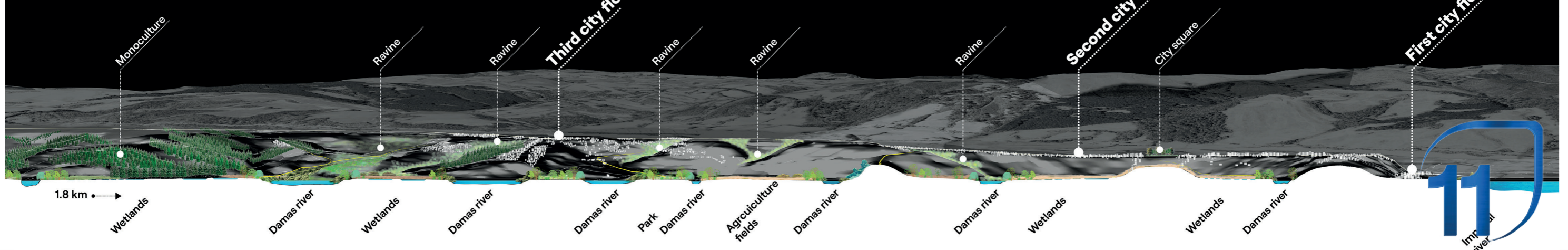
Damas River Master plan. Combined wetland depuration system



Transversal section A - A'



Longitudinal section B - B'



SISTEMA DE DEPURACIÓN DE HUMEDALES RIBEREÑOS / RIVERSIDE WETLAND DEPURATION SYSTEM



Wooden walkways over wetlands



Wooden walkways over wetlands



Wetlands overlook



Wooden walkways and greenhouses

