



Country / City  
University / School  
Academic year  
Title of the project  
Authors

Master Thesis / **CLIMATE CHANGE AND URBAN RESILIENCE. A new park along the final part of the Aniene River in Rome**

Italy  
Politecnico di Torino  
2016 - 2017  
Marco Nelli





# PERFORMATIVE NATURE

Barcelona International Landscape Architecture Biennial

September 2018 **Barcelona**

SCHOOL PRIZE

X International Landscape Architecture Biennial

**Máster d'Arquitectura del Paisatge -DUOT - UPC**

ETSAB- Escola Tècnica Superior

d'Arquitectura de Barcelona

Avenida Diagonal, 649 piso 5

08028 Barcelona-Spain

## TECHNICAL DOSSIER

Title of the project	<b>CLIMATE CHANGE AND URBAN RESILIENCE</b> <b>A new park along the final part of the Aniene River in Rome</b>
Authors	Marco Nelli
Title of the course	Master Thesis
Academic year	2016 - 2017
Teaching Staff	Supervisor: Bianca Maria Rinaldi / Second supervisor: Federica Larcher
Department/Section/Program of belonging	Inter-University Master in Green Areas and Landscape Design Politecnico di Torino, Università degli Studi di Genova, Università degli Studi di Torino, Università degli Studi di Milano
University/School	Politecnico di Torino

Written statement, short description of the project in English, no more than 250 words

The park project, which is the subject of my master thesis, investigates the **environmental risks mitigation** and **climate changes adaptation**. In particular, it refers to danger situations both in urban and extra urban areas, due to the problems connected to flood risk and extreme weather events.

The area I have considered is the Natural Reserve of Aniene Valley and the stretch of the river that crosses the city of Rome, between the GRA and its confluence with the Tiber River. This is a notoriously area prone to repeated and increasingly frequent flooding. The project purpose is to develop a capable system to provide the whole area a better place to live in, in order to make possible the use of the resource water, without neglecting safety in case of extreme natural events. That's why the recovery of ecological quality and the upgrading of urban, extra-urban and rural areas near the river, represent useful planning opportunities to create new spaces, capable to provide both renewed recreational and regenerated ecosystem functions.

The design proposal aims to put into effects the teachings for an innovative and sustainable park design that turns out to be resilient to climate changes. The particular design solutions introduced are also intended to reconcile the relationship between river and city, where the winning idea has been to consider natural events no more problematic but as an opportunity for new experience sources.

For further information

**Máster d'Arquitectura del Paisatge -DUOT - UPC**

T: + 34 93 401 64 11 / +34 93 552 0842

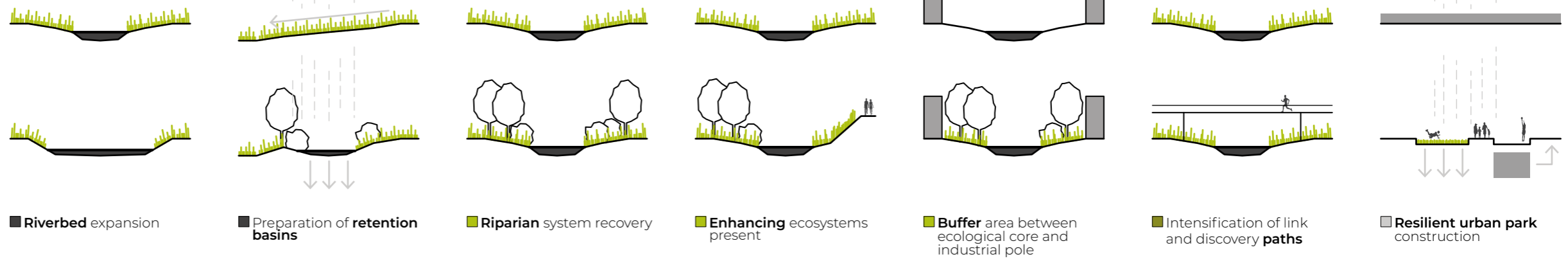
Contact via email at: [biennial.paisatge@upc.edu](mailto:biennial.paisatge@upc.edu)

Consult the web page <http://landscape.coac.net/>

**IMPACT RISKS FOR SOCIETY**

- Population under risk **17'749 ab**
- Urbanized surface under risk **726'909 mq**
- Economic activities under risk **1'332'091 mq**
- Schools under risk **7**
- Productive settlements under risk **280'765 mq**

**PROJECT INTERVENTIONS**

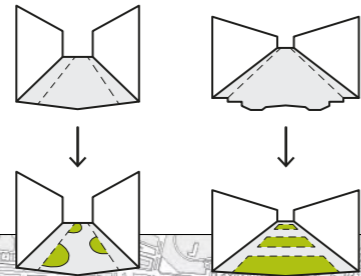


**PROJECT DESIGN STRATEGY**

Manage future risks and build resilience

**Blue-Green Infrastructure**  
Multifunctional physical network that develops various city functions

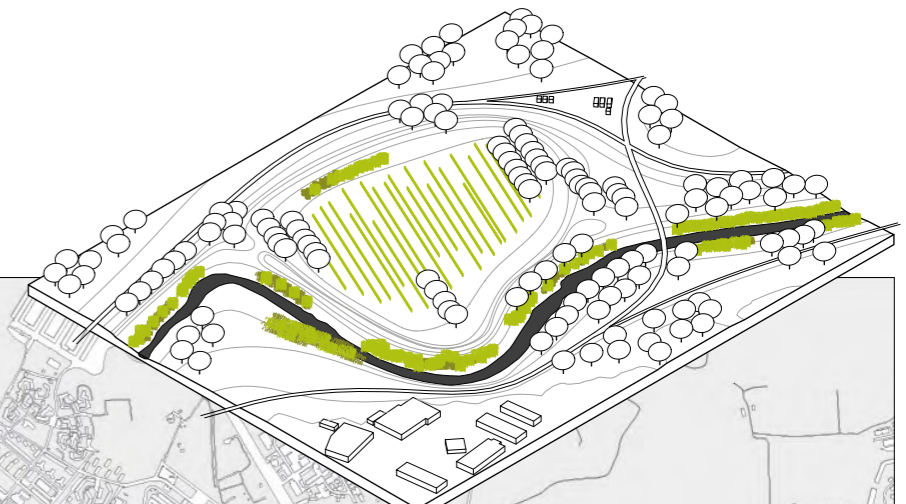
**Interventions in the urban fabric**  
Solutions that combine the runoff reduction by the creation of functional green spaces



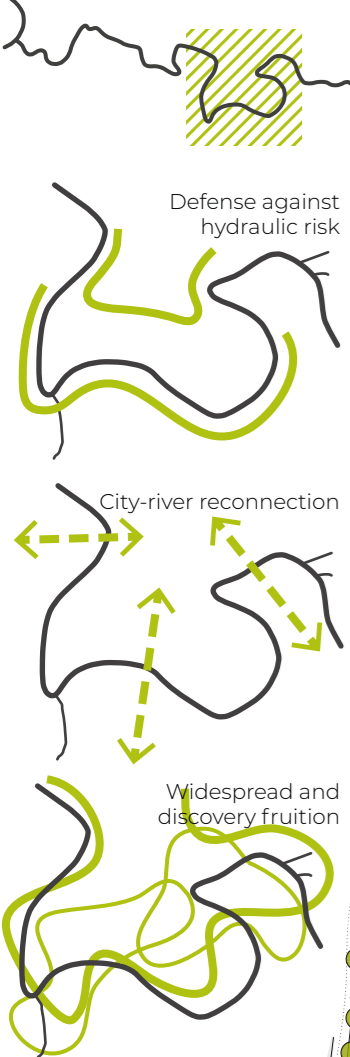
**Confluence with the Tiber River**  
Enlargement of riverbed and predisposition of an area for the flooding of the Tiber



**Experimentation basin**  
Modeling existing escarpment and setting up of a new river expansion area



**SITE PLAN** ①



- 1 Info points
- 2 River terraces
- 3 Belvedere towers
- 4 View points
- 5 Platforms
- 6 Receptive points
- 7 Playgrounds
- 8 Events area
- 9 Market
- 10 Recreational areas
- 11 Vegetable gardens
- 12 Cultivated fields
- 13 U-Pick area
- 14 Greenhouses
- 15 Water retention areas
- 16 Water garden
- 17 Pedestrian walkways



SECTIONS

