



# RISE-IN

RESILIENT INVESTMENT FOR  
SUSTAINABLE ENVIRONMENTS



Funded by  
the European Union

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# PÓVOA DE VARZIM- PORTUGAL



HORIZON-MISS-2024-CLIMA-01-06

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CENTRO  
DO CLIMA  
PÓVOA DE VARZIM



Póvoa de Varzim  
CÂMARA MUNICIPAL

# Póvoa de Varzim



Póvoa de Varzim is located in the far northwest of the Douro Litoral region, about 30 km north of Porto, the district capital. The municipality of Póvoa de Varzim, in the Porto district, occupies an area of approximately 82.81 km<sup>2</sup> and has about 64,320 inhabitants. The population density is 782 inhabitants per km<sup>2</sup>. The main economic activities include tourism, the food sector (namely fishing and agriculture), and commerce.

## Main economic activities:

**Tourism:** Póvoa de Varzim is an important seaside resort and receives many tourists.

**Food sector:** Fishing and agriculture are important economic activities, with emphasis on milk production, horticulture and the fish processing industry.

**Commerce and services:** Póvoa de Varzim has a diversified economy, with a strong presence of commerce and services.



# DEMO CITY POVOA DE VARZIM



This map allows us to identify, in a general way, the activities that take place in flood-prone areas and/or areas indirectly affected by them.

The impact that floods have on the economy and tourism is almost direct, particularly on food production.

All of these activities take place in the intervention area, or in areas impacted by floods.

The floods have a direct impact on agriculture and tourism in a more immediate way.



Walkways in nature



Estela fair



Greenhouse farming



"Masseira"



Fishing boats



Golf Course



Grilled sardines



Restaurant in Estela Golf

With the areas that become flooded, these activities are unable to produce, and restaurants and tourism.

They are left without raw materials, such as the vegetables that accompany the fish.

# DEMO CITY POVOA DE VARZIM



PROJECT DEVELOPMENT

SITE ANALYSIS



© Inês Ferreira



© Ana Margarida Medeiros

AREA DIRECTLY AFFECTED BY FLOODS IN THE PARISH OF ESTELA

# DEMO CITY POVOA DE VARZIM



PROJECT DEVELOPMENT

SITE ANALYSIS



AREA DIRECTLY AFFECTED BY FLOODS IN ESTELA



# DEMO CITY POVOA DE VARZIM



PROJECT DEVELOPMENT

SITE ANALYSIS

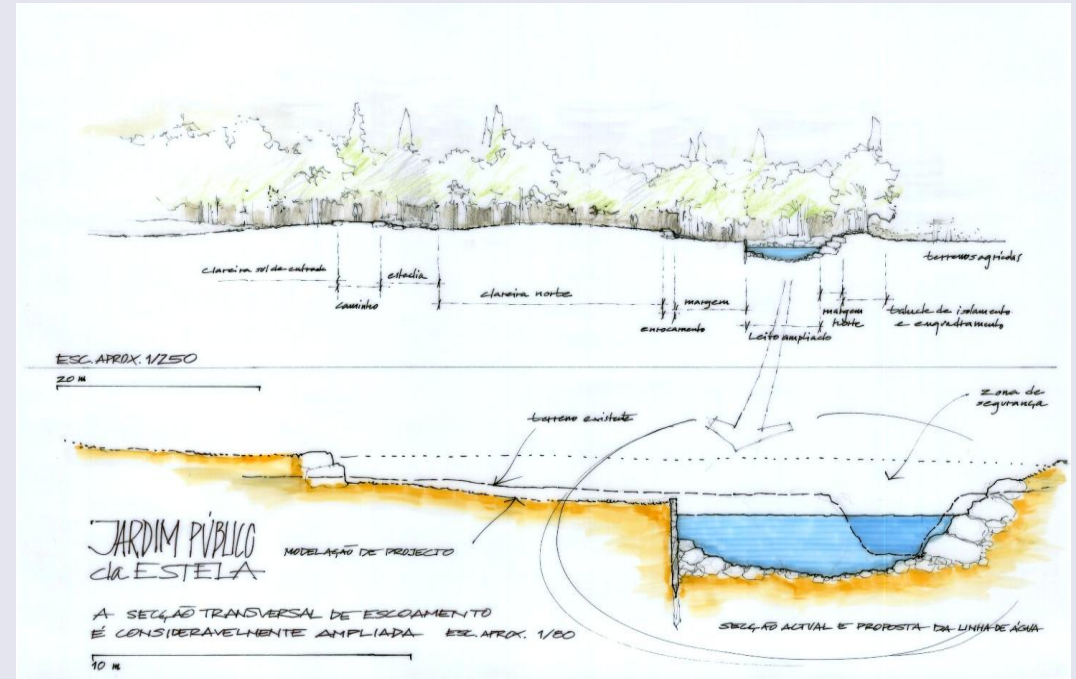


AREA DIRECTLY AFFECTED BY THE FLOODING IN THE ESTELA PLAYGROUND PARK

# DEMO CITY POVOA DE VARZIM

PROJECT DEVELOPMENT

SITE ANALYSIS

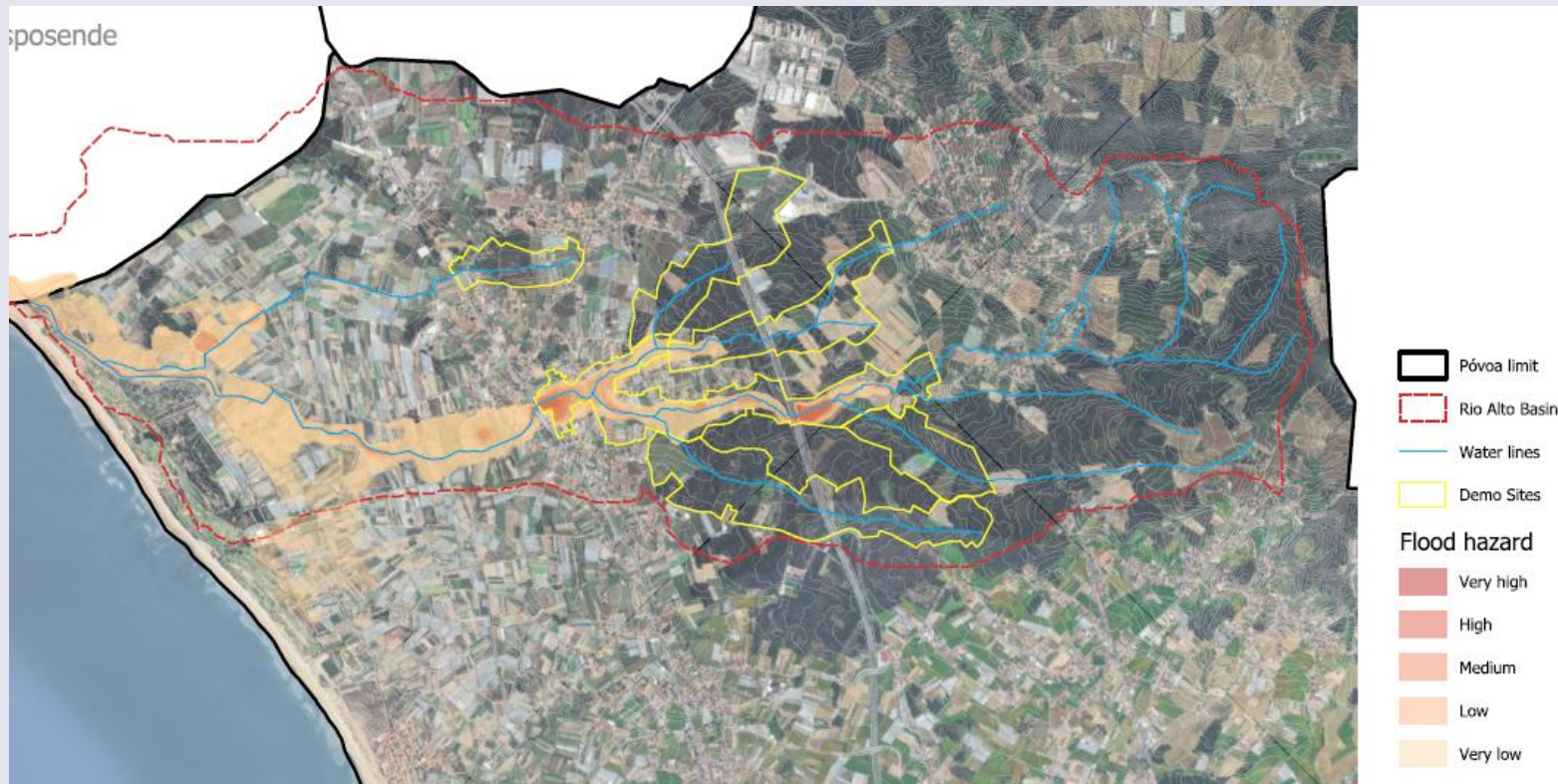


The first intervention in Estela Park to try to mitigate the effects of the floods

# DEMO CITY POVOA DE VARZIM

PROJECT DEVELOPMENT

SITE ANALYSIS

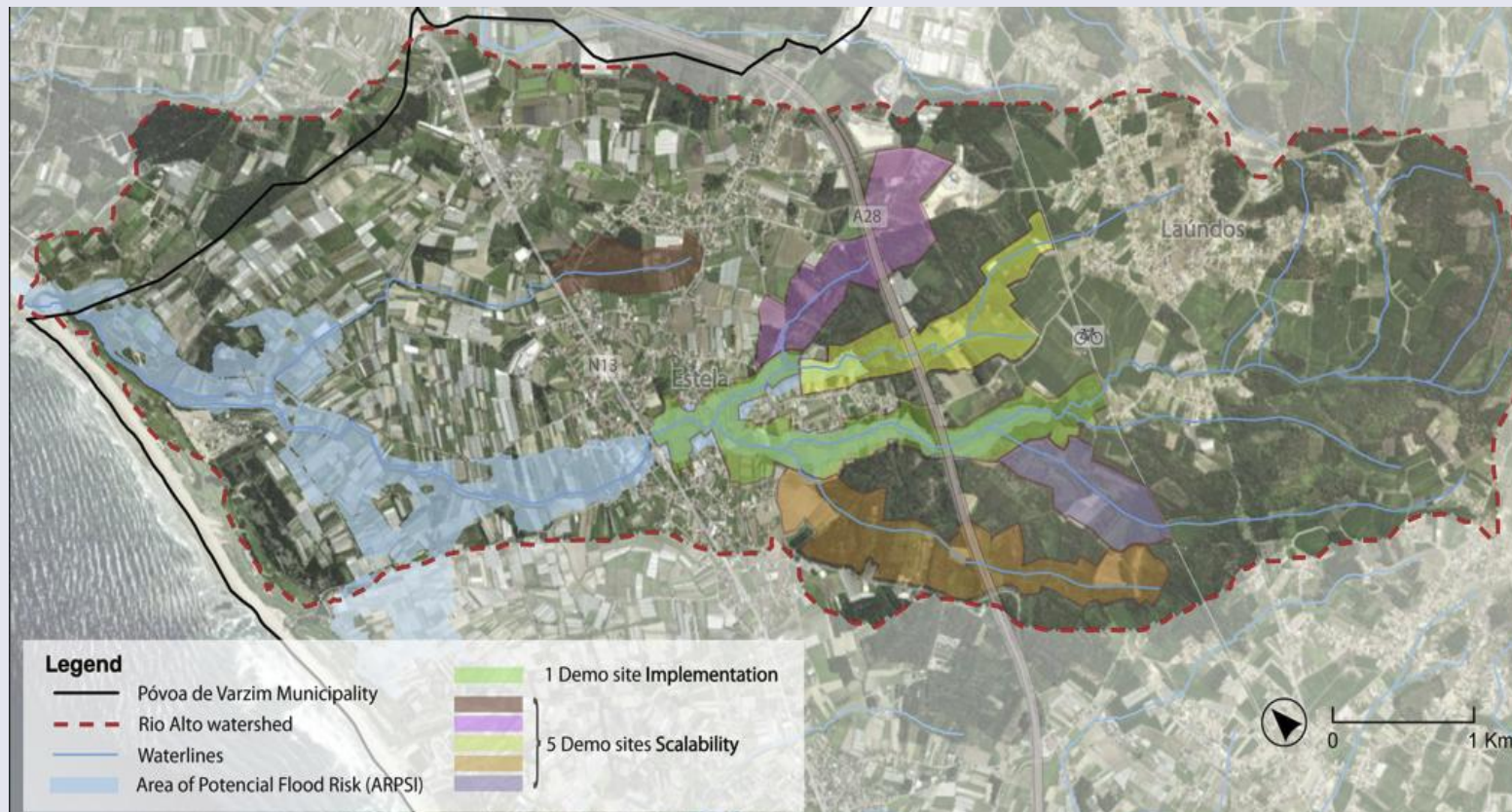


This map is based on the hydrological study carried out by the municipality of Póvoa de Varzim, within the scope of the revision of its PDM - Municipal Master Plan, a land use planning instrument, which clearly shows us the flood-prone areas with the highest risk that are presumed to require greater intervention.

# DEMO CITY POVOA DE VARZIM

PROJECT DEVELOPMENT

SITE ANALYSIS



The boundary of the Alto River watershed corresponds to the one delineated by the red dashed line in the image. The blue area represents a potential flood zone identified by the Portuguese Environment Agency. These areas correspond to the Areas of Potential Significant Flood Risk (ARPSI), defined under the framework of the EU Floods Directive (Directive 2007/60/EC).

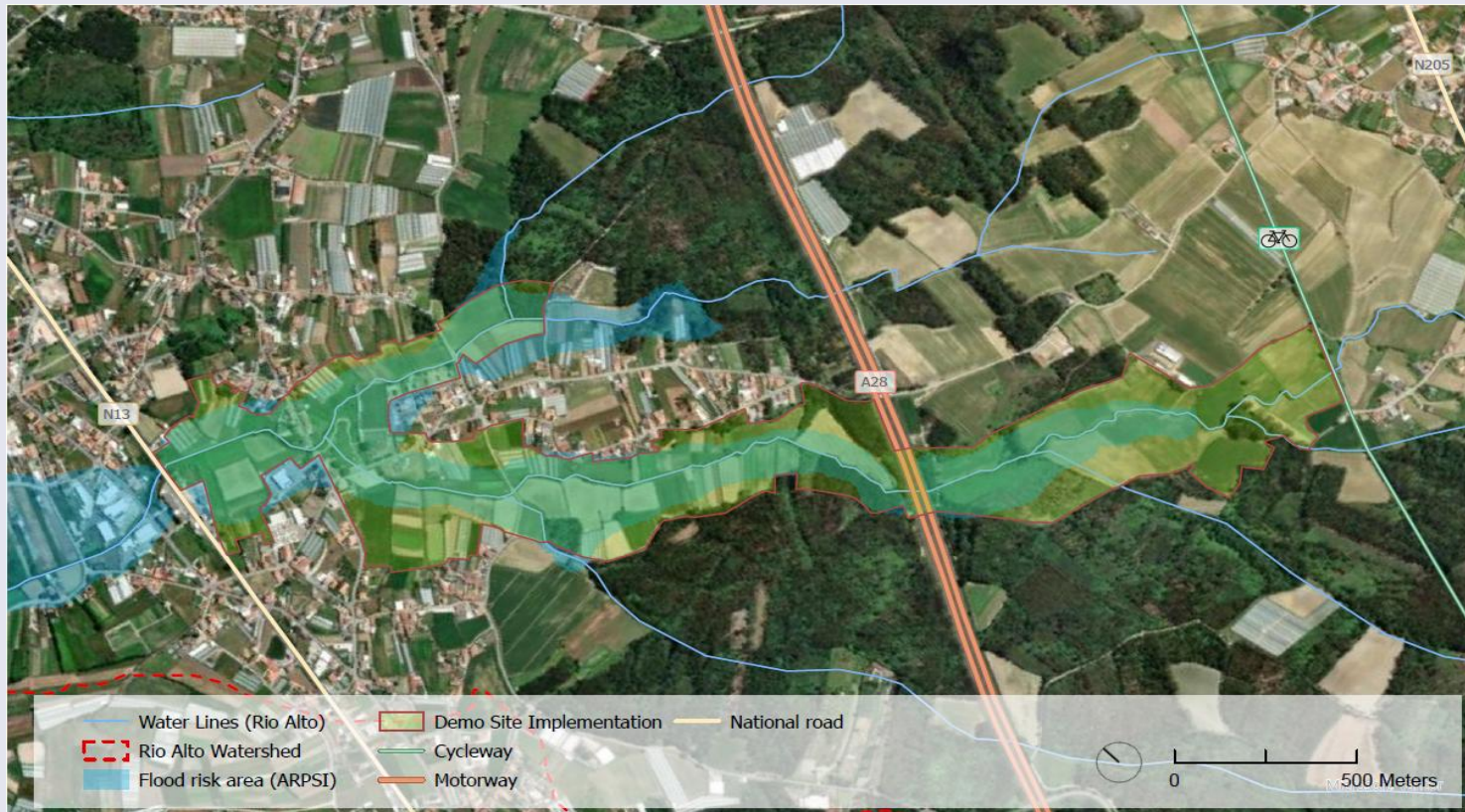
We also see clearly defined the area for implementing demonstration sites, one, and also the possibilities for the five scalability of demonstration sites.

# DEMO CITY POVOA DE VARZIM



PROJECT DEVELOPMENT

SITE ANALYSIS

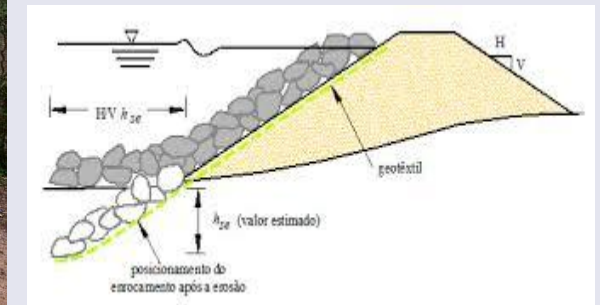


During this phase of more in-depth site reconnaissance, and with the data obtained to date, it was possible to identify potential intervention sites. The green area is the intervention area considered by the technical team.

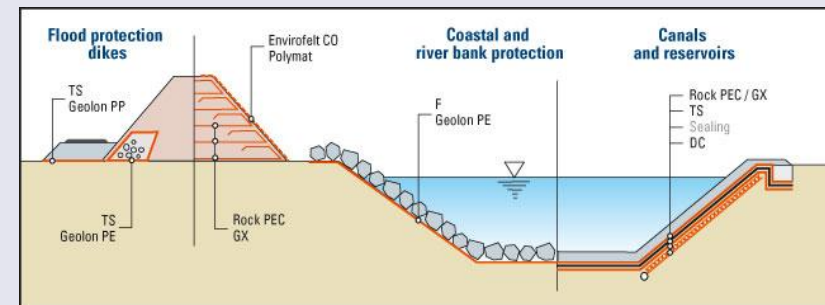
# DEMO CITY POVOA DE VARZIM

## MAIN OBJECTIVES OF THE PROJECT

- Evaluate a set of climate-resilient solutions (CRS), including ecosystem-based and non-biological approaches, as well as physical measures to minimize the impact of extreme events;
- Implement co-creation and participation processes with local stakeholders, including investors and companies, in designing the most appropriate solutions for the Rio Alto test site;
- Develop and implement a climate risk assessment model that promotes local adaptation to reduce uncertainty regarding the risks associated with extreme events;



Water retention bay



# CONCLUSION



In conclusion, we can say that we are working on the models for recognize the intervention area using available economic and demographic data so far, in order to promote an valid identification of the intervention site is as accurate as possible, as well as the best possible solution to implement.

This work involves all of our partners and is always aimed at fulfilling the clear measures and objectives of the RISE IN project



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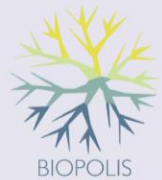


CENTRO  
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# RISE-IN CONSORTIUM



# FOLLOW OUR JOURNEY



**in**  
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# ACKNOWLEDGEMENT



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