

Metropolitan Parks of Porto

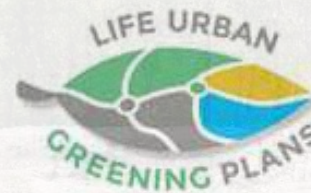
a green infraestructure for citizenship

LIFE URBAN GREENING PLANS

Periurban Parks Symposium, 7 - 9 June 2022
Parque Florestal Monsanto - Lisbon



XSCAPES



The Life UrbanGreeningPlans project has received funding from the LIFE Programme of the European Union.

REDE DE PARQUES METROPOLITANOS NA GRANDE ÁREA METROPOLITANA DO PORTO

RELATÓRIO FINAL | FEVEREIRO DE 2009



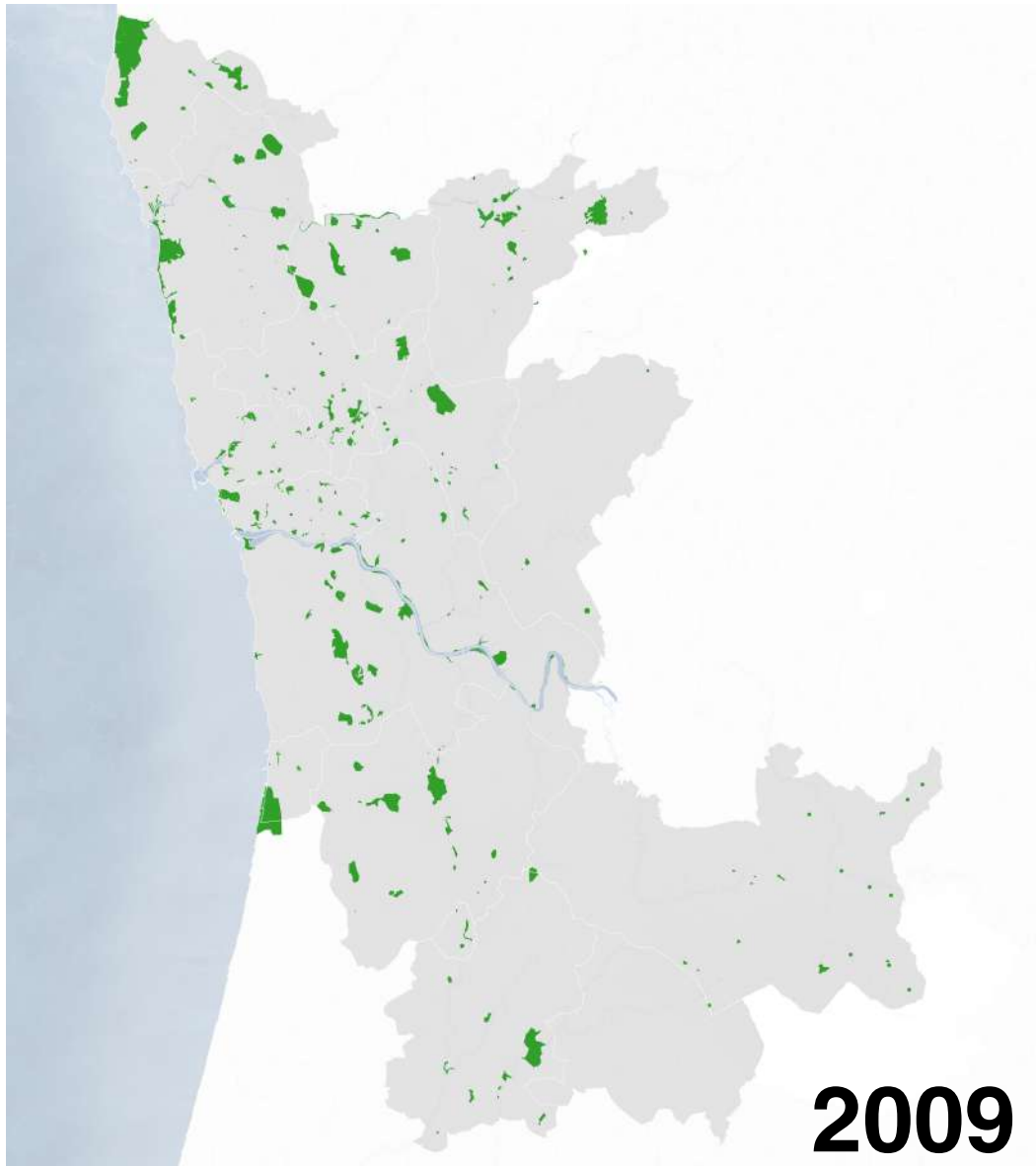
2007-2009

In **2009**, the Porto Metropolitan Area (**AMP**) and the Research Center for Biodiversity and Genetic Resources (**CIBIO/University of Porto**), in a study coordinated by Landscape Architect Teresa Andresen, defined the **Network of Metropolitan Parks in the Greater Metropolitan Area of Porto**.

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166 existing sites
 + **60**
 potential sites

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Metropolitan destinations

places of worship/pilgrimage, urban green spaces, historic/cultural/archaeological sites, nature and/or educational areas.



Existing sites



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11 METROPOLITAN PARKS WHERE IDENTIFIED

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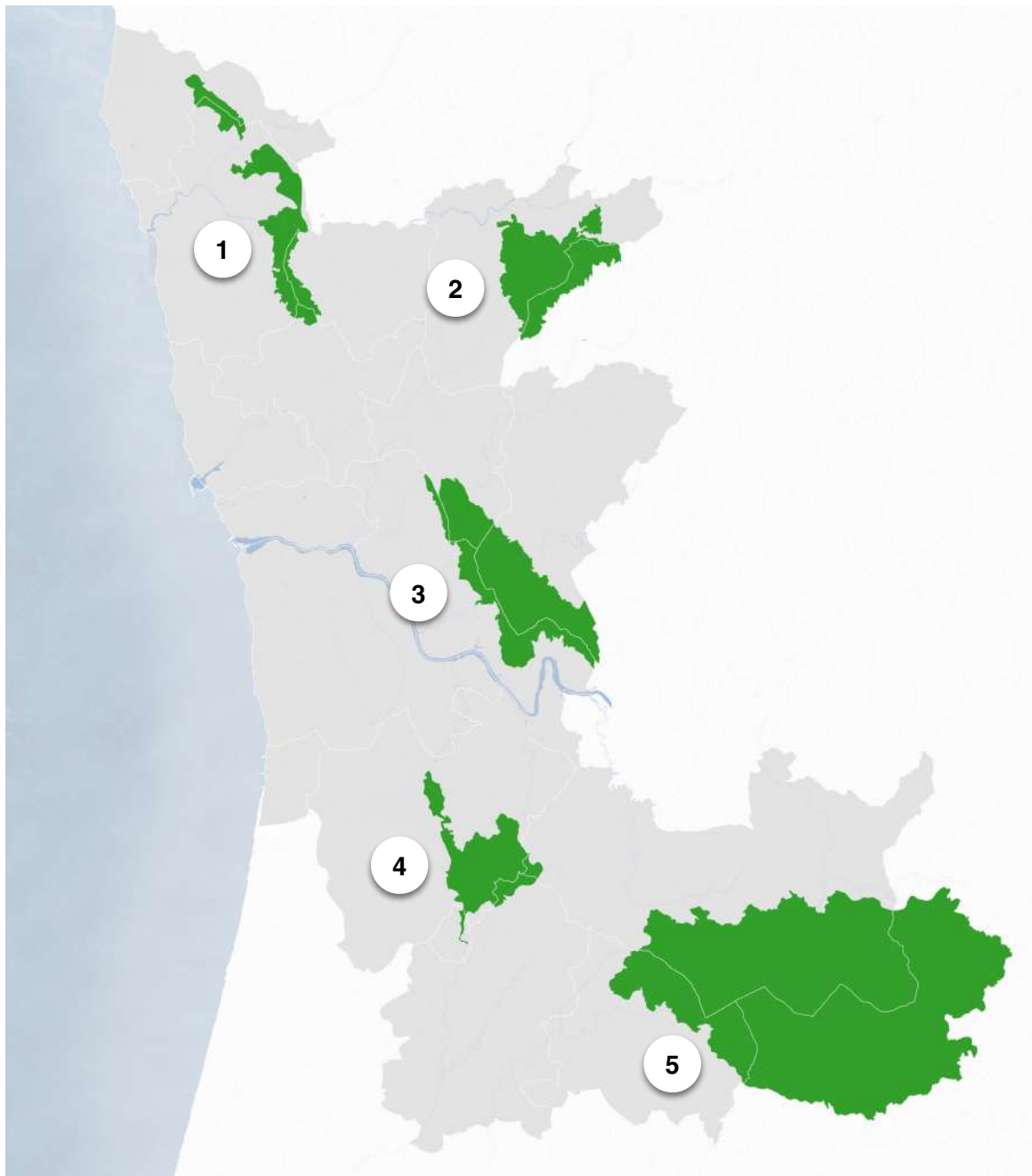
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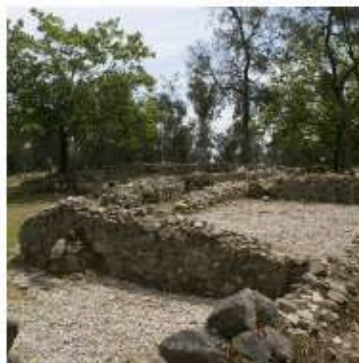
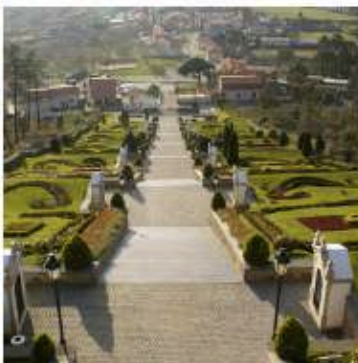
5 MOUNTAINS

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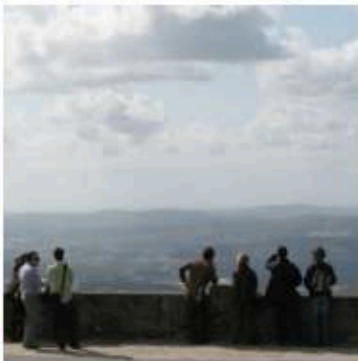
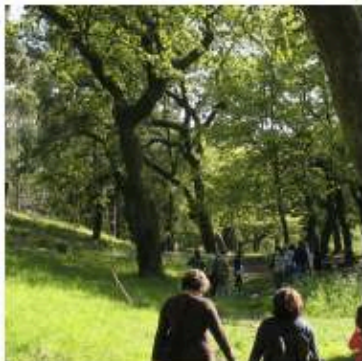
- 1- Parque das **Brisas** 2- Parque de **Monte Córdova** 3- Parque das **Serras do Porto**
4- Parque de **Montalto** 5- Parque da **Freita**



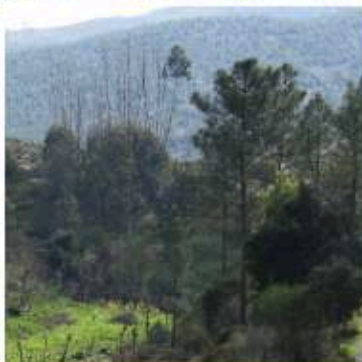
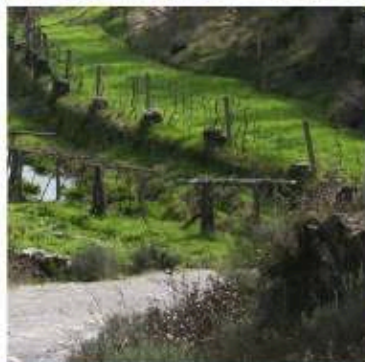
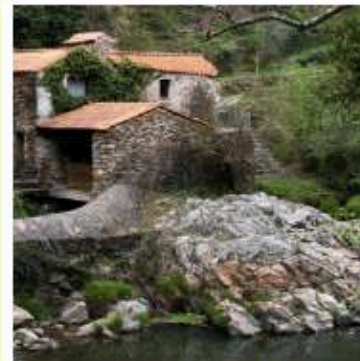
Parque das Brisas



Parque de Monte Cordova



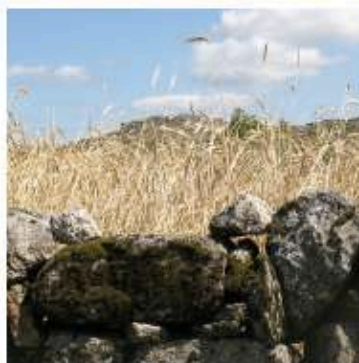
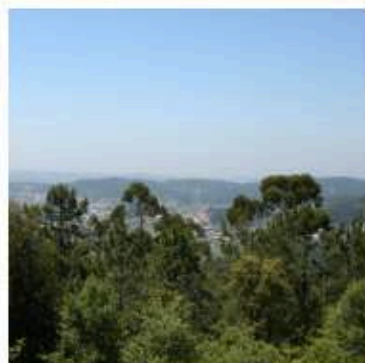
Parque do Salto



Parque de Montalto



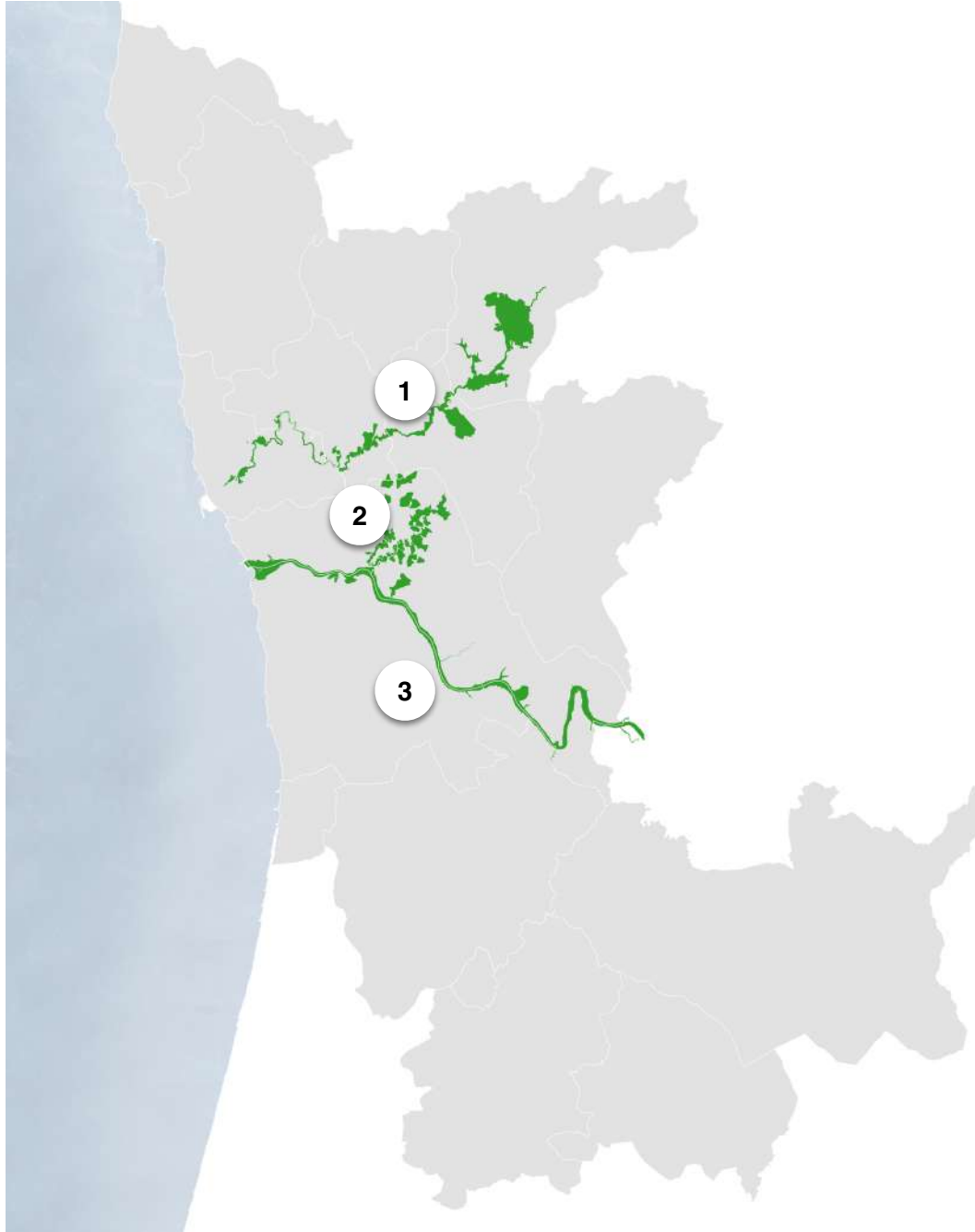
Parque da Freita



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3 VALLEYS

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- 1- Parque do **Leça** 2- Parque do **Tinto e Torto** 3- Parque do **Douro**



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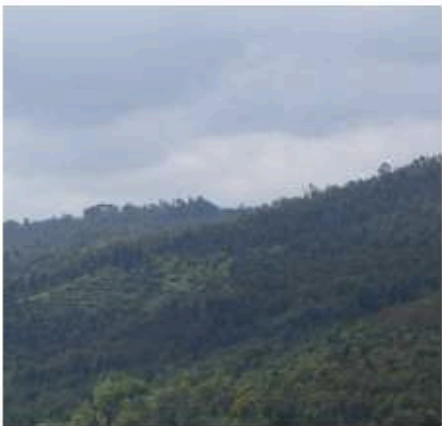
Parque do Leça



Parque do Tinto Torto



Parque do Douro

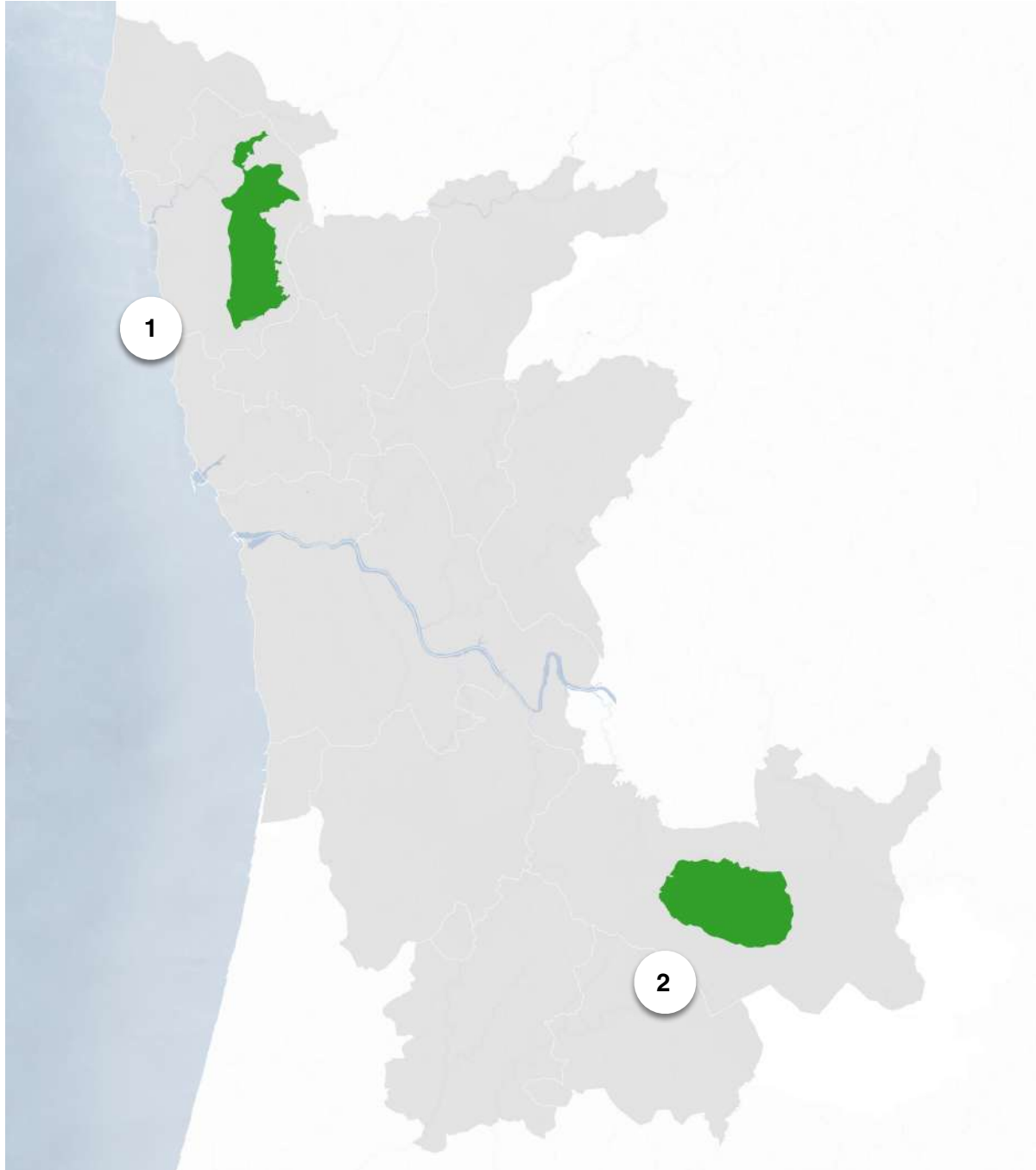


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1- Paisagem Cultural de **Vila do Conde**

2- Paisagem Cultural do **Vale do Arda**

2

CULTURAL LANDSCAPES

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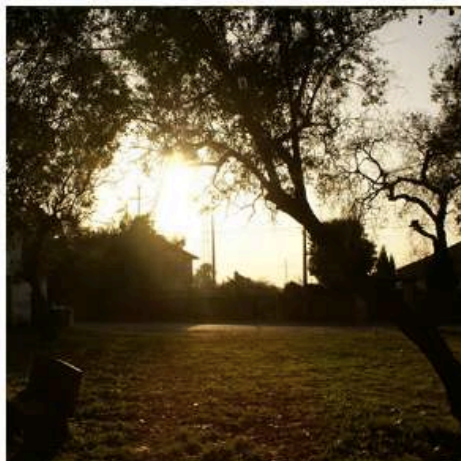


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Paisagem Cultural
de Vila do Conde



Paisagem Cultural
do Vale do Arda



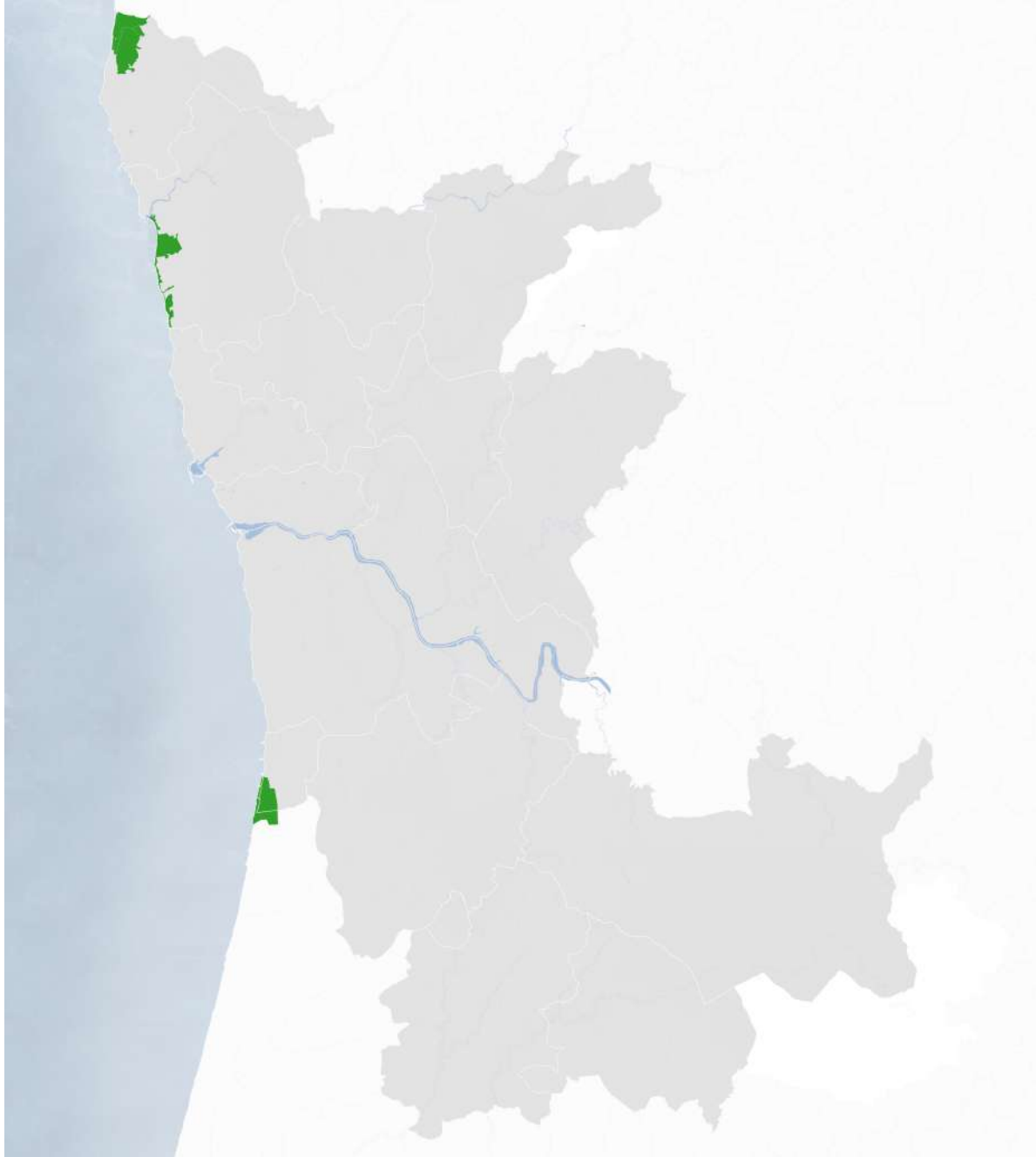
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1 COASTAL LANDSCAPE

Parque do **Mar**

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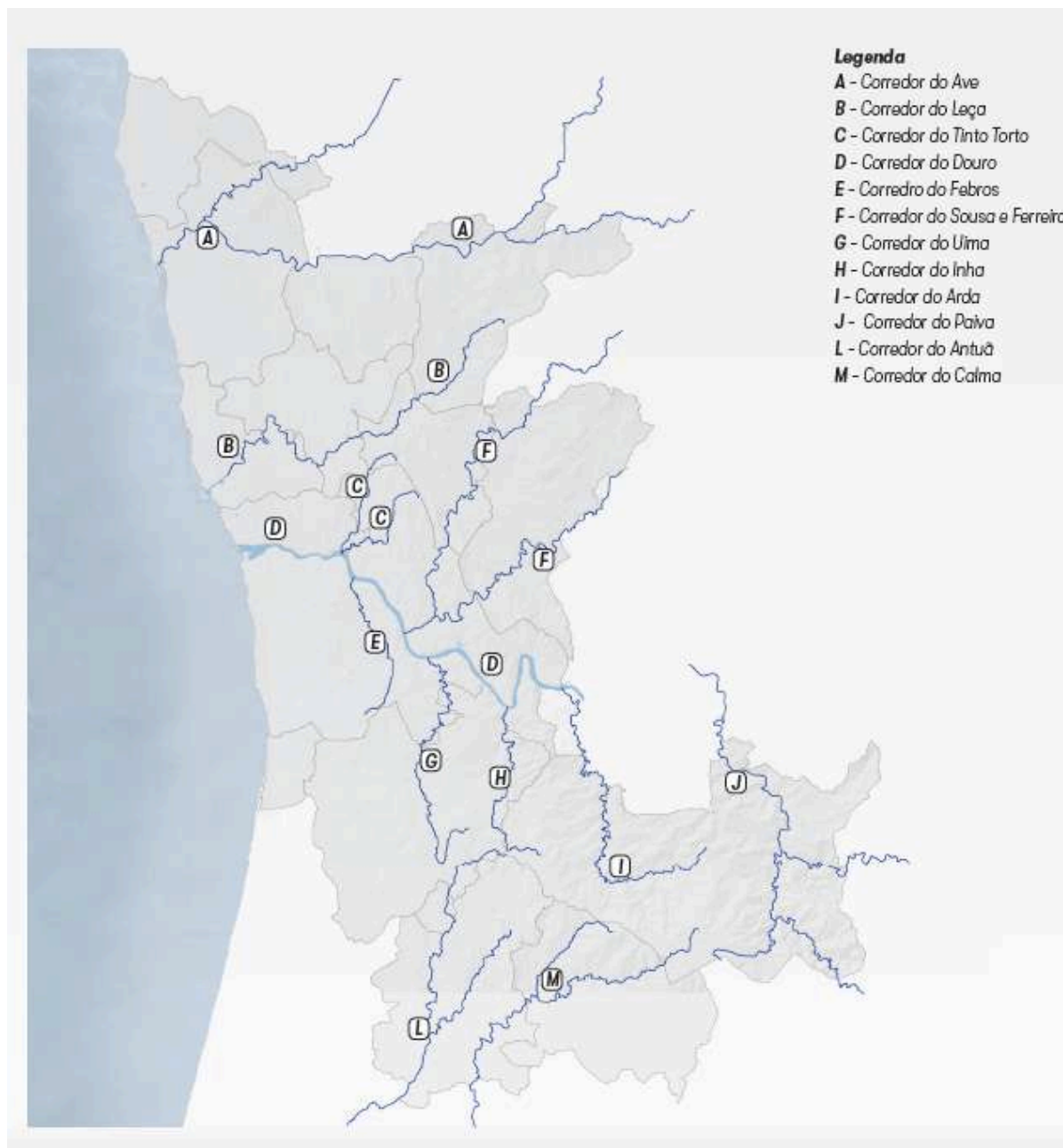
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12 RIVER CORRIDORS

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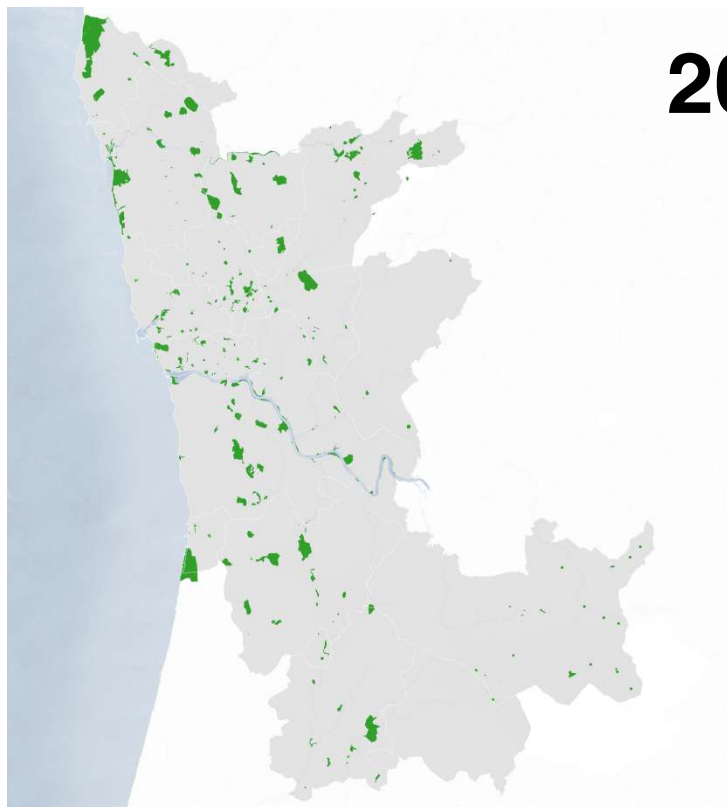


<http://sitos.amp.pt>

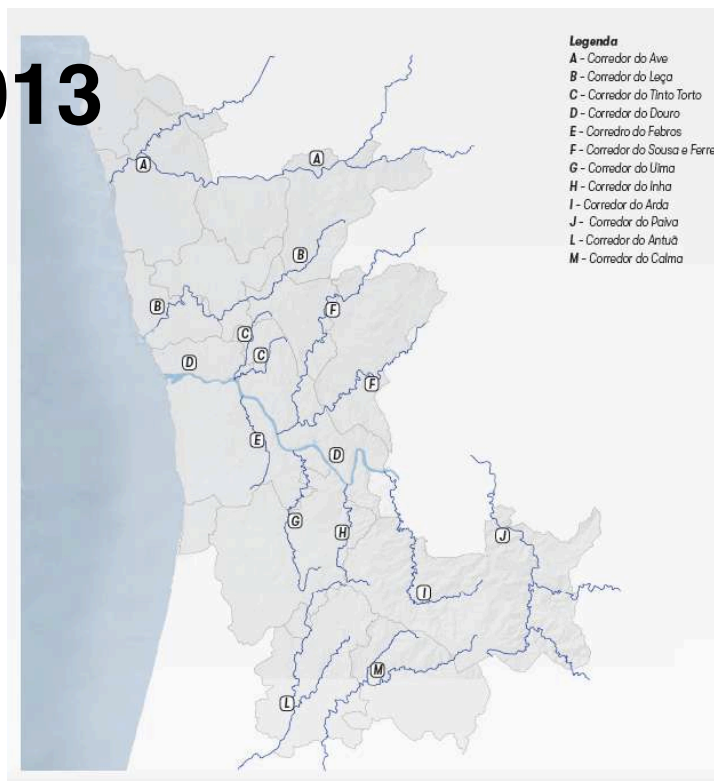


<http://rios.amp.pt>

AMP Website
for Sites and Rivers
created in
2013



2013



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2017

A new project for mobility, cohesion and territorial identity, environmental enhancement and nature tourism in the Metropolitan Area.

A network of **Connectors**

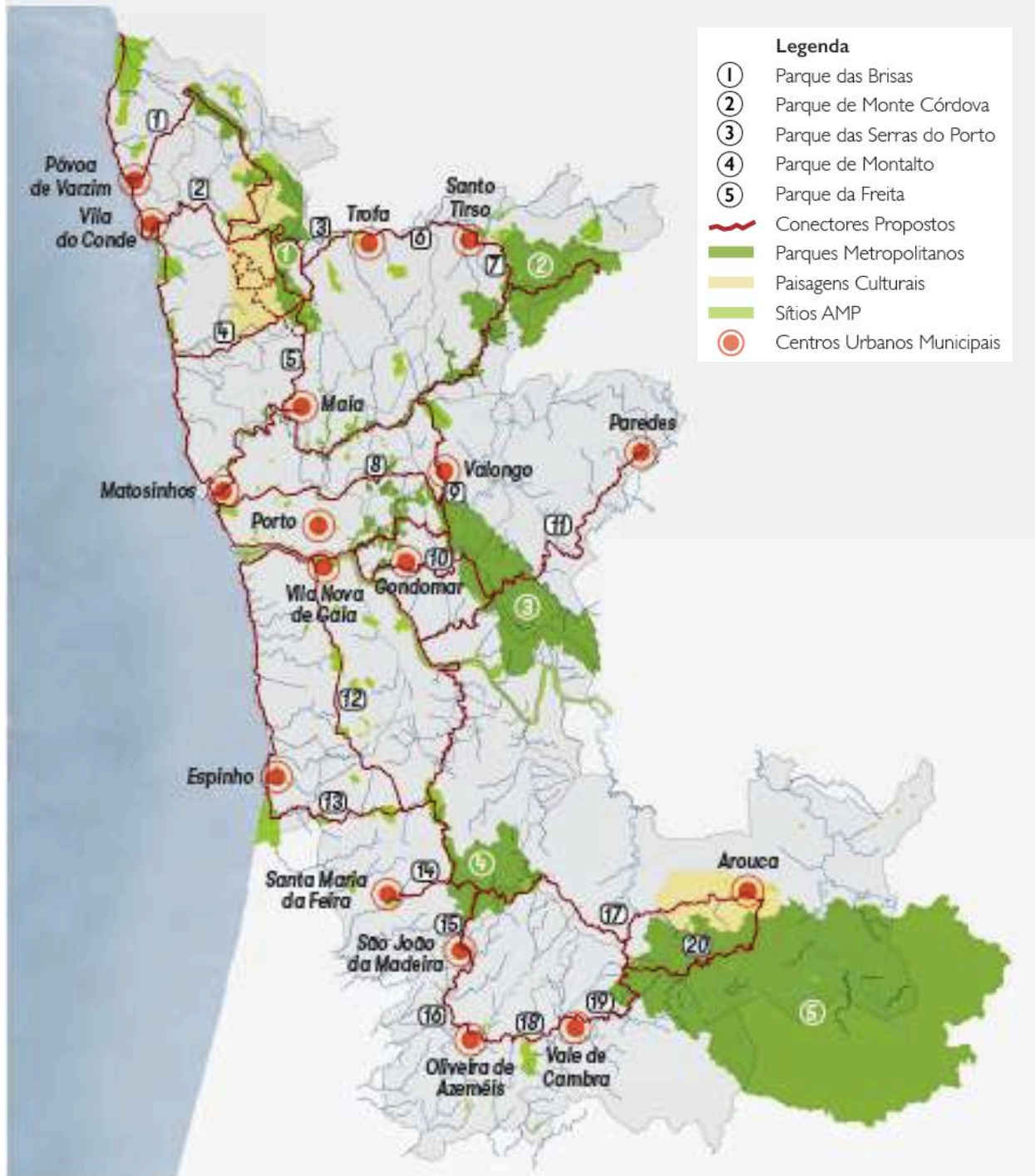
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- Legenda**
- ① Parque das Brisas
 - ② Parque de Monte Córdova
 - ③ Parque das Serras do Porto
 - ④ Parque de Montalto
 - ⑤ Parque da Freita
 - Conectores Propostos
 - Parques Metropolitanos
 - Paisagens Culturais
 - Sítios AMP
 - Centros Urbanos Municipais

- Centros Urbanos
- Conectores Metropolitanos

A network of Connectors AMP

Accessibility and mobility between:

11 Parks
and
17 main urban centers

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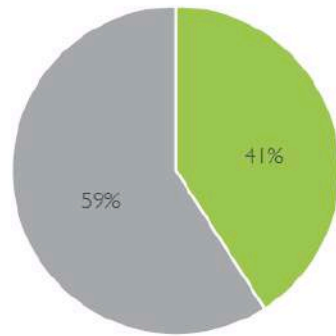


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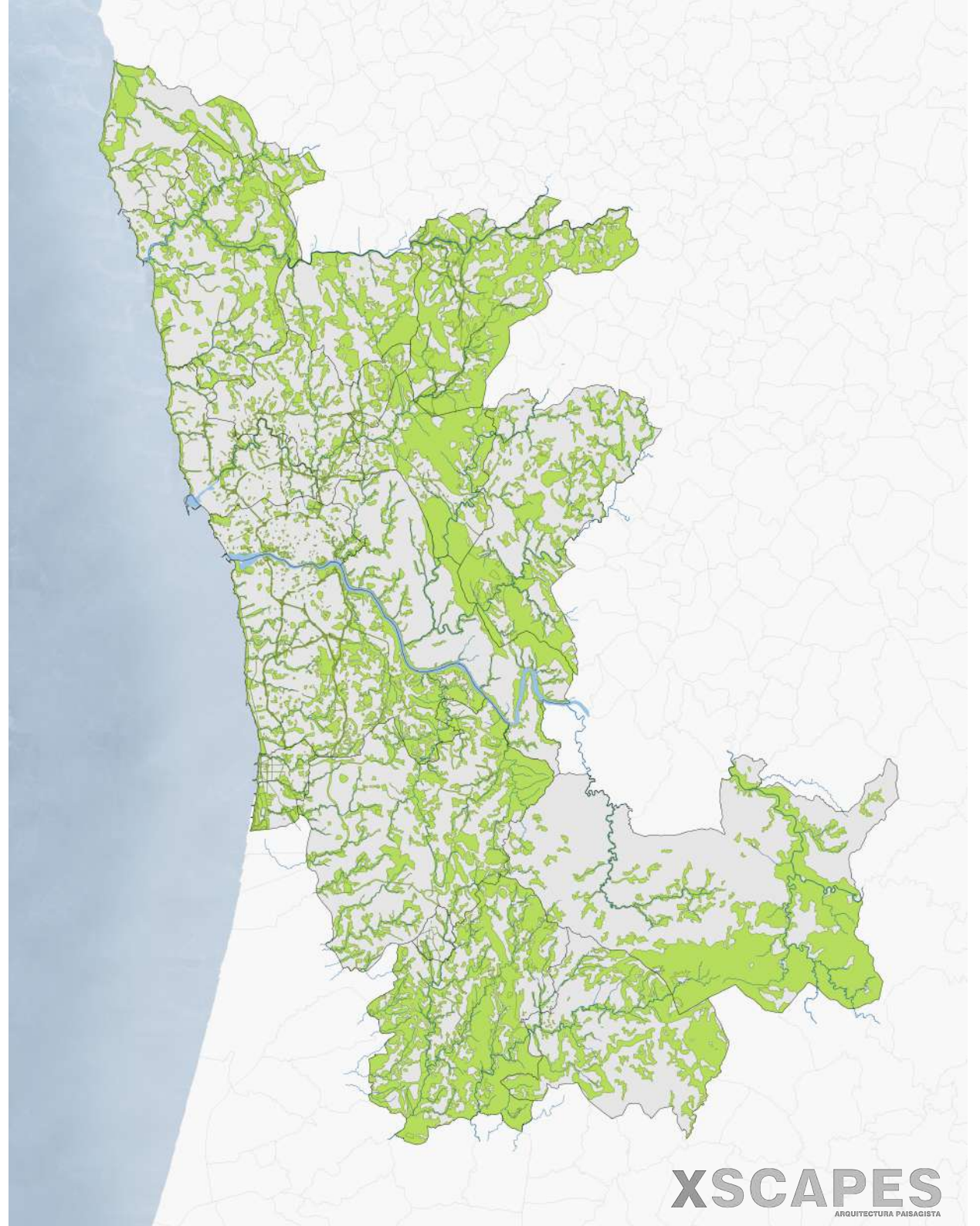
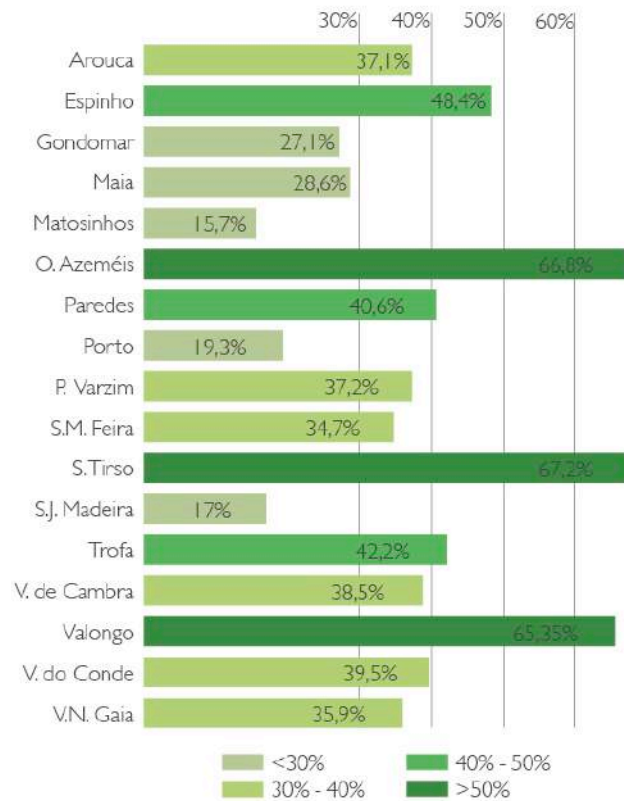


XSCAPES
ARQUITECTURA PAISAGISTA

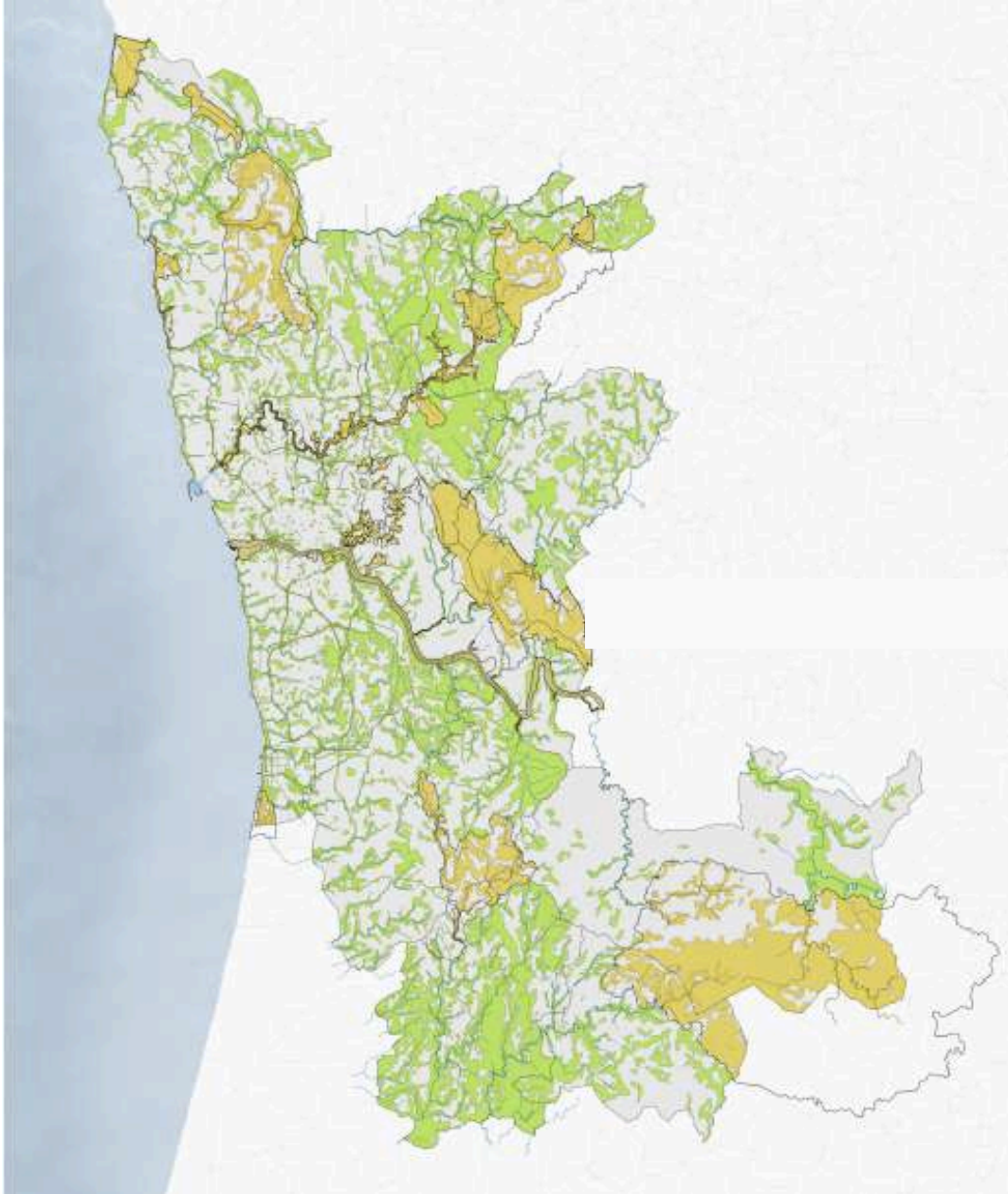
Ecological structure Porto Metropolitan Area



● Estrutura Ecológica ● Outras áreas



Ecological Structure and Metropolitan Parks



in average more than 60% of the park's area is integrated in Metropolitan Ecological Structure

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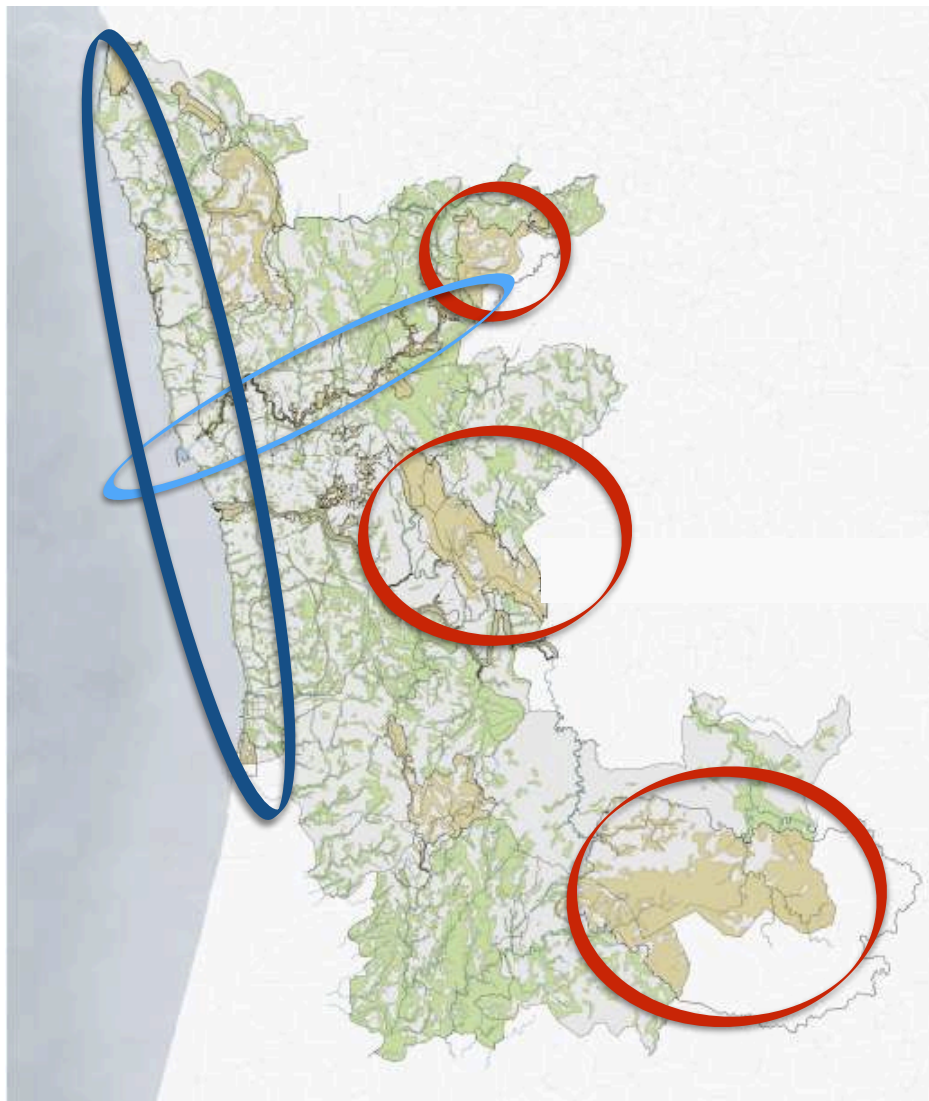


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5 Metropolitan Parks under way

Monte Córdova, Leça, Serras do Porto, Serra da Freita/Montanhas Mágicas e Mar



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SUSTAINABLE DEVELOPMENT GOALS



Ensure healthy lives and promote well-being for all at all ages



Make cities and human settlements inclusive, safe, resilient and sustainable



Take urgent action to combat climate change and its impacts



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



National Strategy for Nature Conservation and Biodiversity 2030

+

EU Green Deal

+

EU Digital Transition

+

New Bauhaus

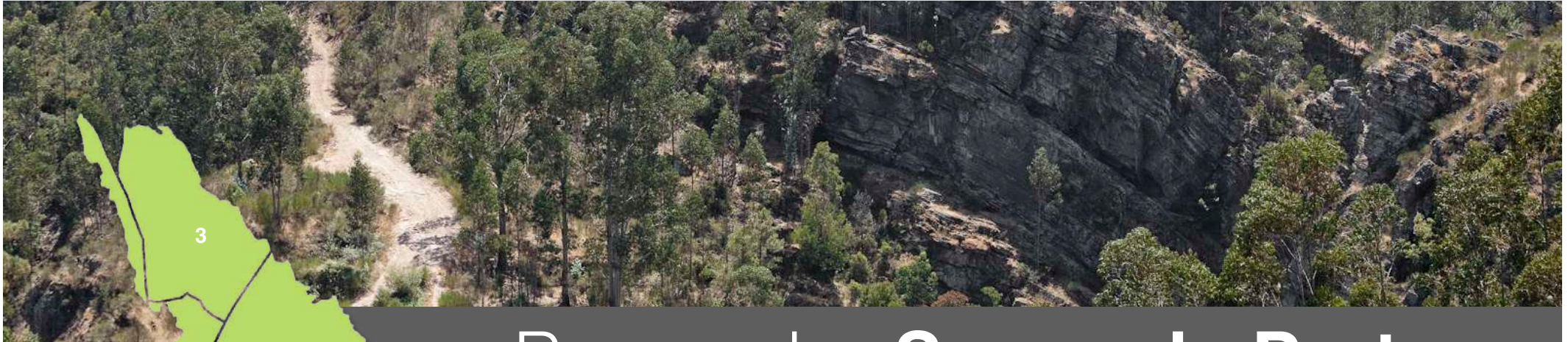
+

Europarc Federation

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Senhora do Salto - Paredes



Parque das Serras do Porto

REGIONAL PROTECTED LANDSCAPE

Gondomar - 1
Paredes - 2
Valongo - 3



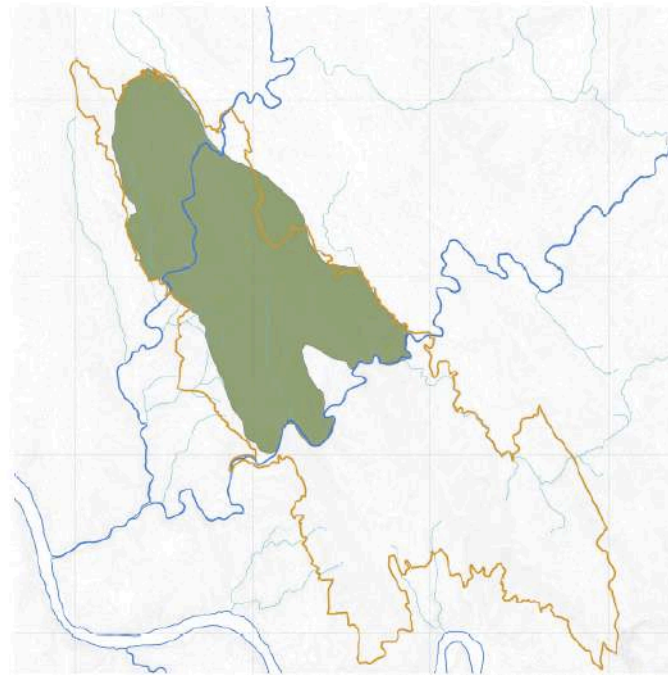
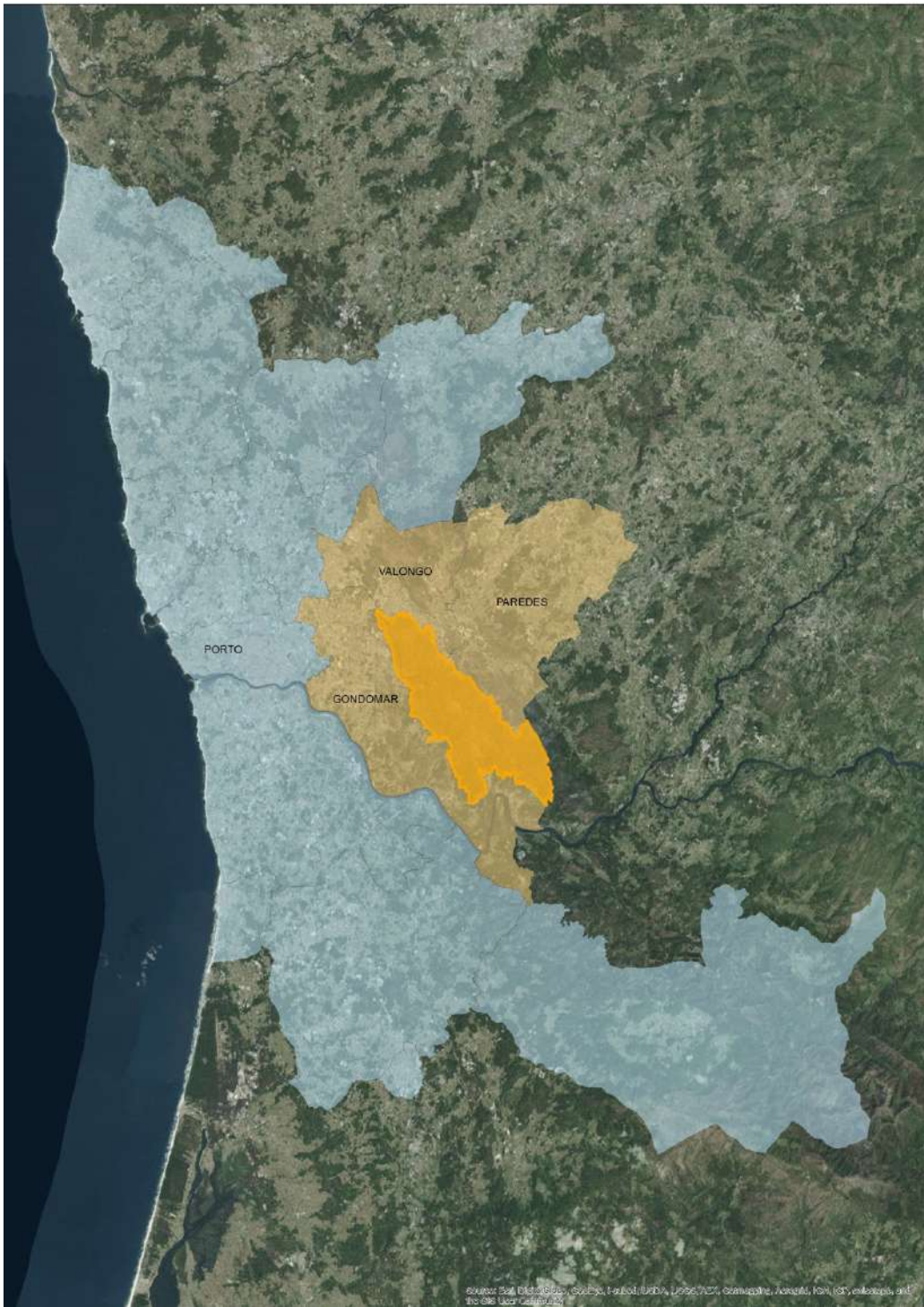


Fig.3 - Identificação do Sítio VALONGO (PTCON0024), REDE NATURA 2000

NATURA 2000 SITE PTCO0024, Valongo

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MOUNTAINS: SANTA JUSTA, PIAS, CASTIÇAL, FLORES, SANTA IRIA E BANJAS

RIVERS: FERREIRA E SOUSA



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Some key dates...

- Deed of incorporation of the association (Gondomar, Paredes e Valongo), 18 april 2016
- The major objective of the association is the creation and management of the regional protected landscape, **Parque das Serras do Porto**
- **The governing bodies:** General Assembly, Executive Board, Fiscal Council and Advisory Council



CREATION OF THE REGIONAL PROTECTED LANDSCAPE

Notice nº 7409-C/2016, 9 june 2016

- Proposal of the Park management regulation
- Proposal of Definition of the Park boundaries

Public discussion, 27 june to 5 august 2016

Serras do Porto classified as Regional Protected Landscape
Aviso n.º 2682/2017, 15 march 2017



THE MANAGEMENT PLAN



PRINCIPLES

participative – involving owners and stakeholders,

collaborative – translated into a set of commitment and partnership agreements for shared management and

adaptive – flexibly guiding the identification of threats and opportunities facing the evolution of the park

PRELIMINARY STUDIES 2017

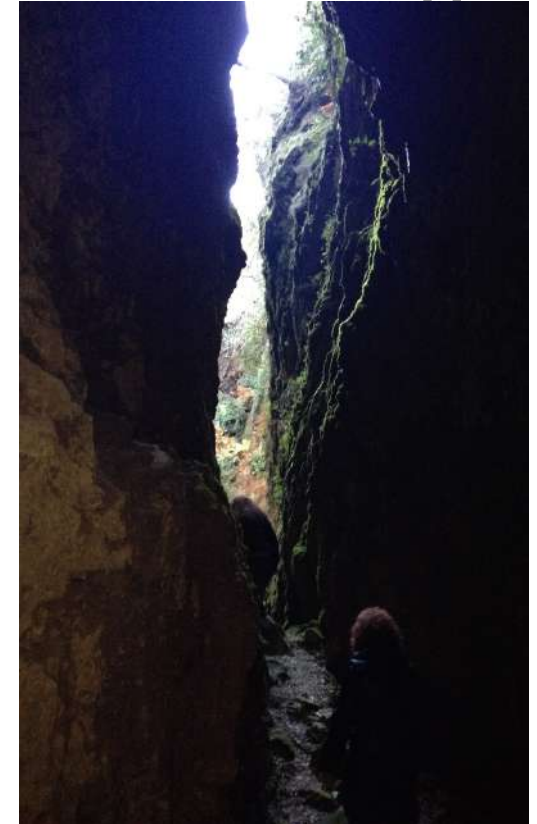


THE NATURAL AND CULTURAL VALUES OF THE PARK

- the geodiversity
- the biodiversity
- Cultural heritage: 6000 years of human presence
- Distribution and location of values

PRELIMINARY STUDIES

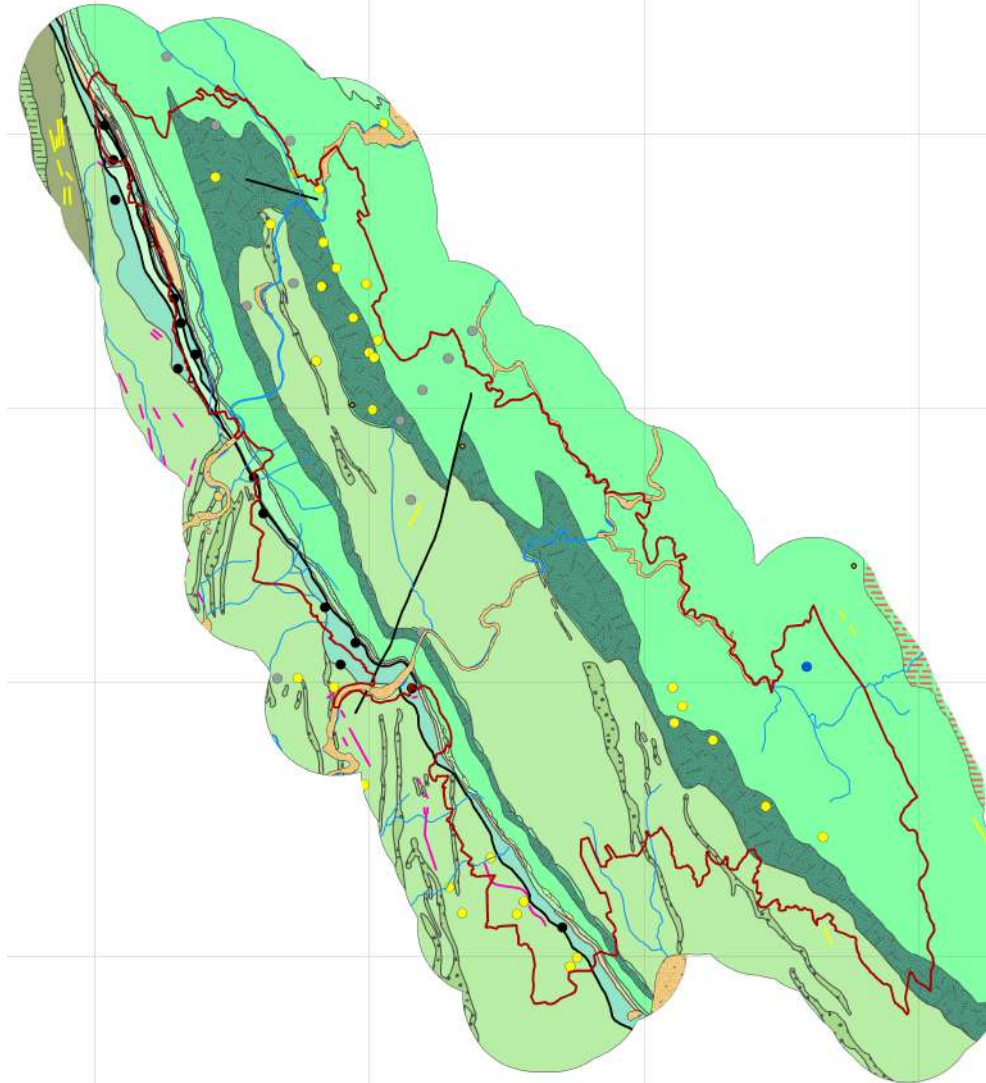
- geological time anchored in hundreds of millions of years and
- the time of man with 6000 years of building a distinct landscape.



PRELIMINARY STUDIES

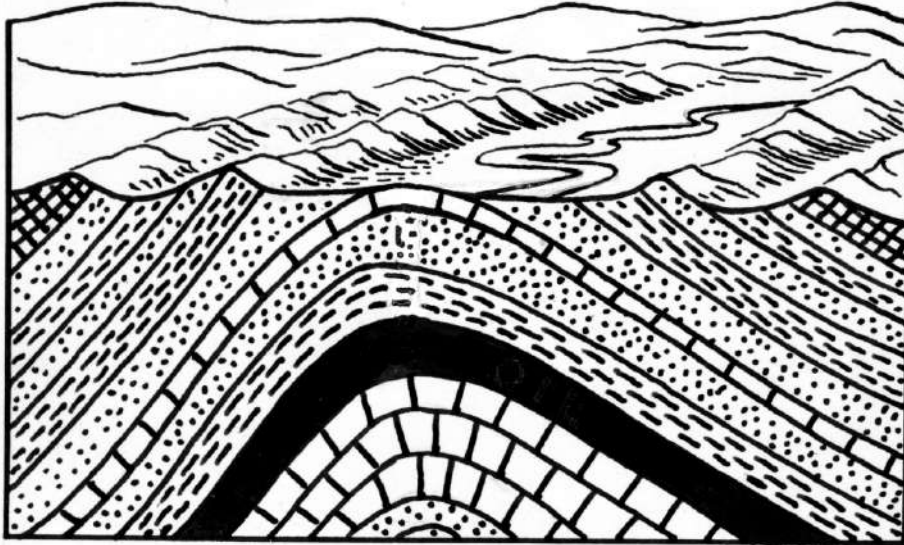
GEODIVERSITY

- The Valongo Anticline:
geological megastructure
constituted as an
asymmetrical fold subject to
millions of years of erosive
agents action
- The Valongo Anticline:
approximately three
hundred million years of
Earth's history beginning
about six hundred million
years ago.



THE GEODIVERSITY

Anticline



Salto Canyon



Trilobite fossil

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THE BIODIVERSITY

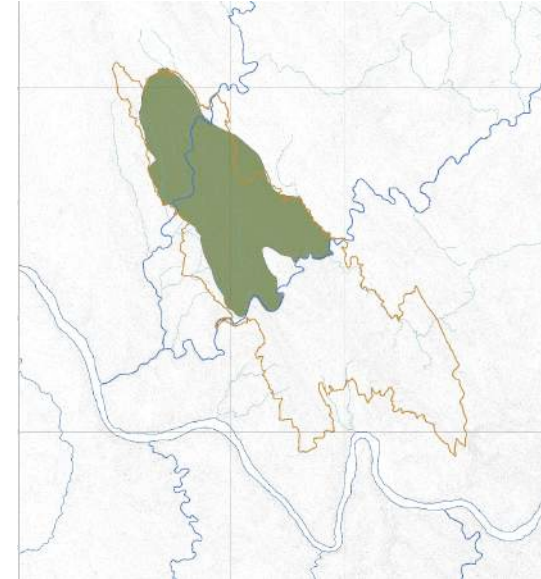
The areas of greatest value for conservation:

- the valleys of the rivers Ferreira and Sousa.
- microbiotopes, in mining caves/*fojos* or *banjas*
- the small water lines
- European dry heathlands habitat

In the fauna, 42 species with conservation status are listed.

The particular case of the salamander (*Chioglossa lusitanica*)

VALONGO SITE- Natura 2000



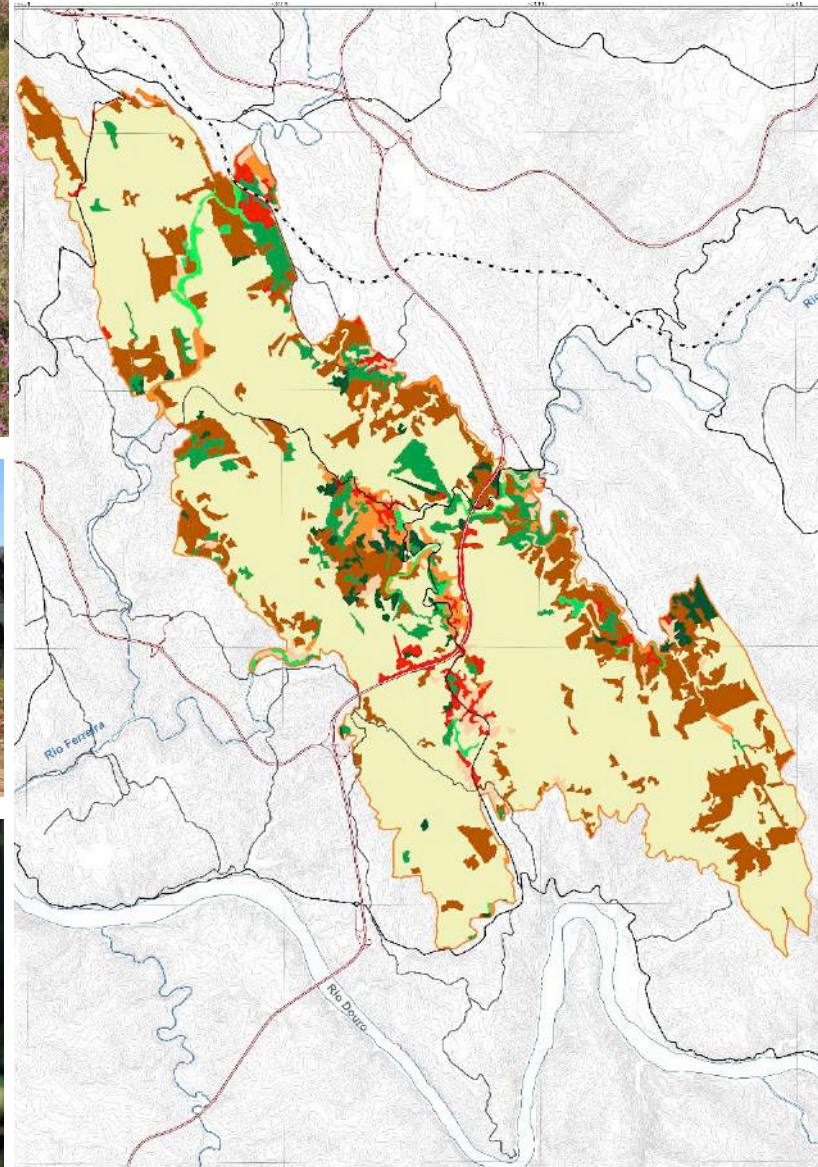
The Invasive Species problem



THE BIODIVERSITY



BIOTOPES / MICRO BIOTOPES



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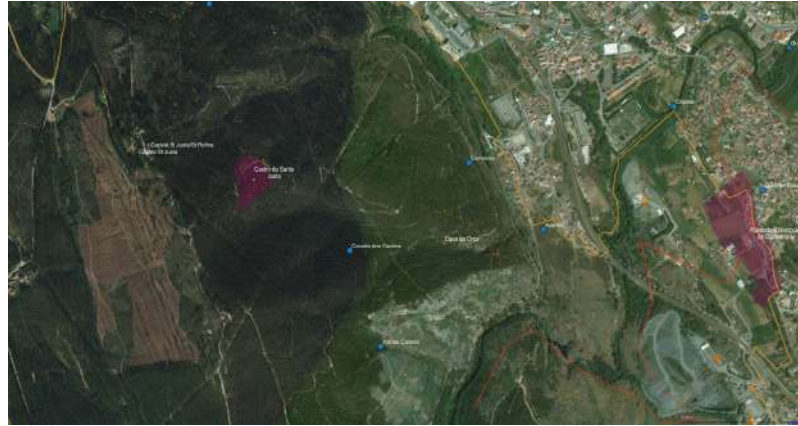
Very ancient testimony of human presence, since 6 000 years ago

Mamoã de Brandiãõ



Ancient settlements

Santa Justa, Couce, Pias, Santa Iria



THE ROMANS AND GOLD MINING

The PARK reveals itself as an immense technological complex dating back about 2000 years, where we find evidence of the presence of the Romans and, very particularly, of an extensive and intensive mining and expressive diversity of ways of exploiting gold.

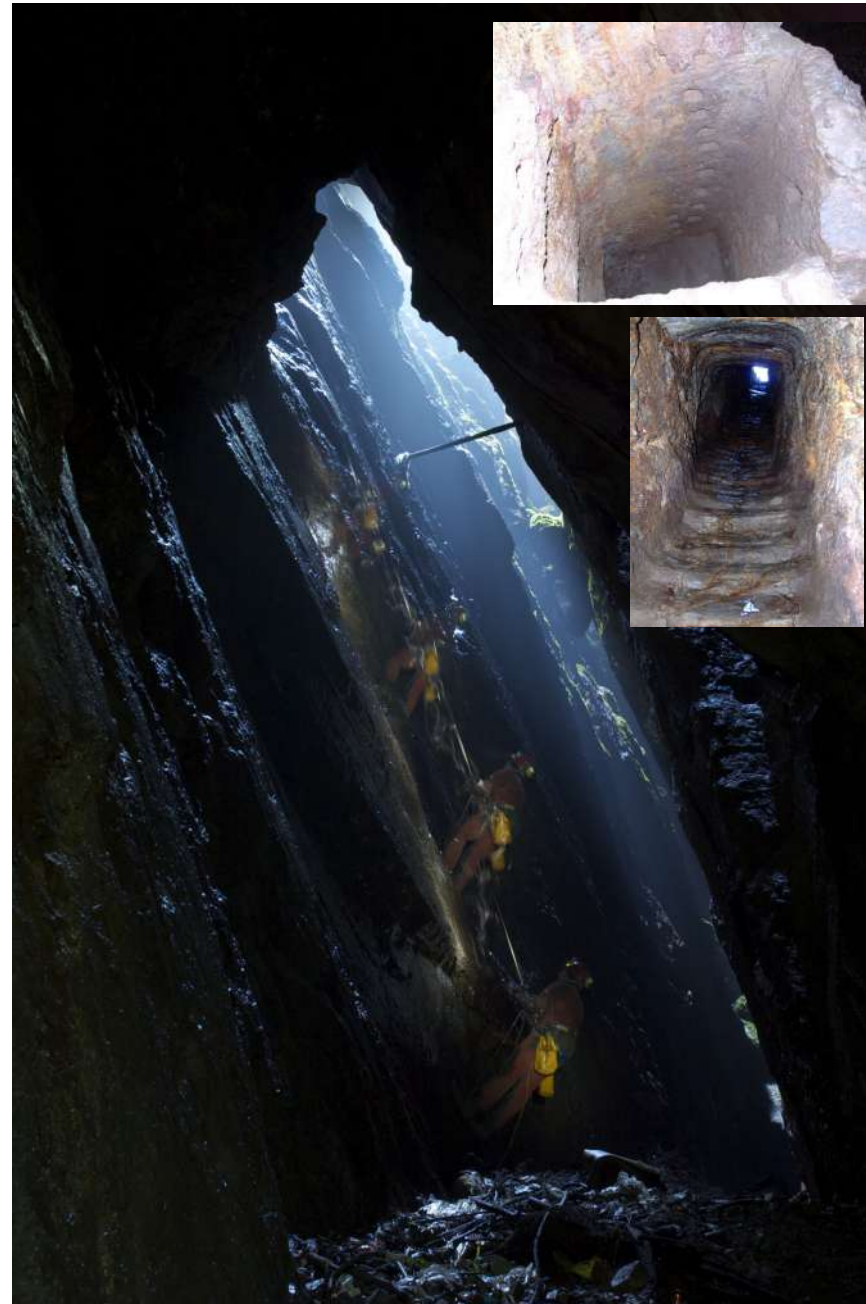


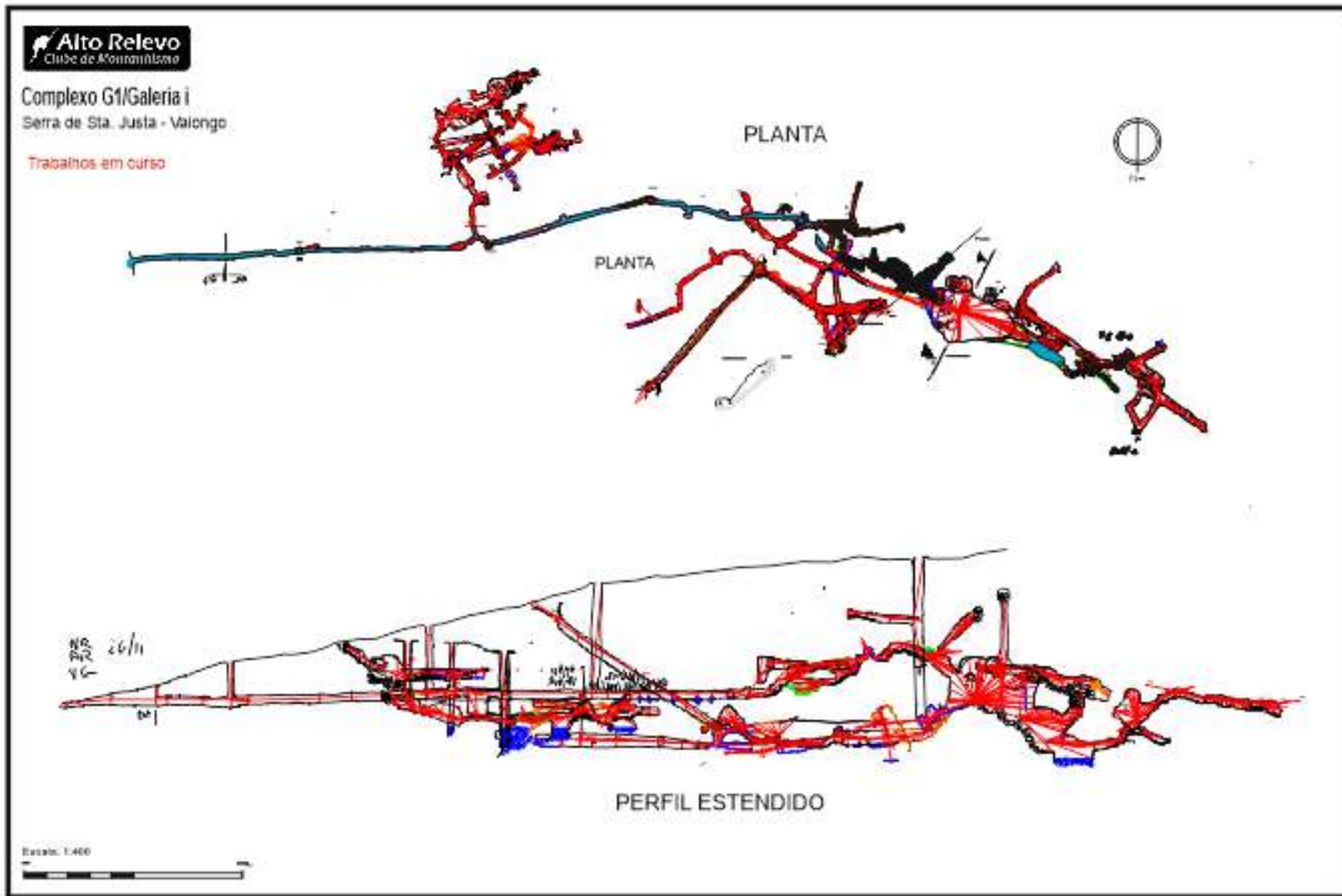
THE ROMANS AND GOLD MINING

Roman mining manifests itself:

- in the exploration of primary
- in depth through the presence of extensive caves, galleries and wells, considered today the largest underground gold exploration of the Roman Empire.
- open pit through extensive cuts that resulted from a fracturing process of quartzite formations of secondary gold-rich folds

in the exploration of the secondary
alluvium and mainly in colluvium





more than 15 Km of underground galleries are mapped so far.

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Open pit mining



Hydraulic structures



Aqueduct



Water reservoirs

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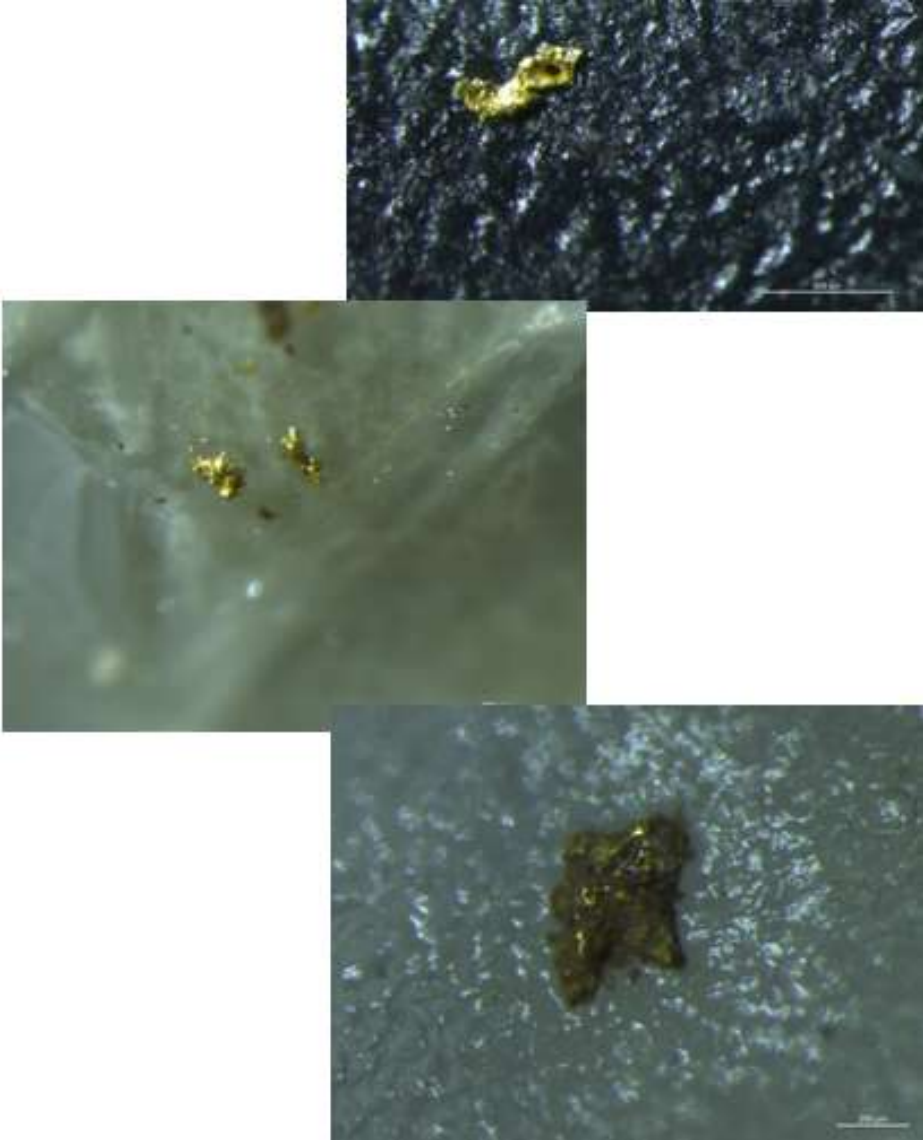
Secondary mining

Slag - washed ground leftovers

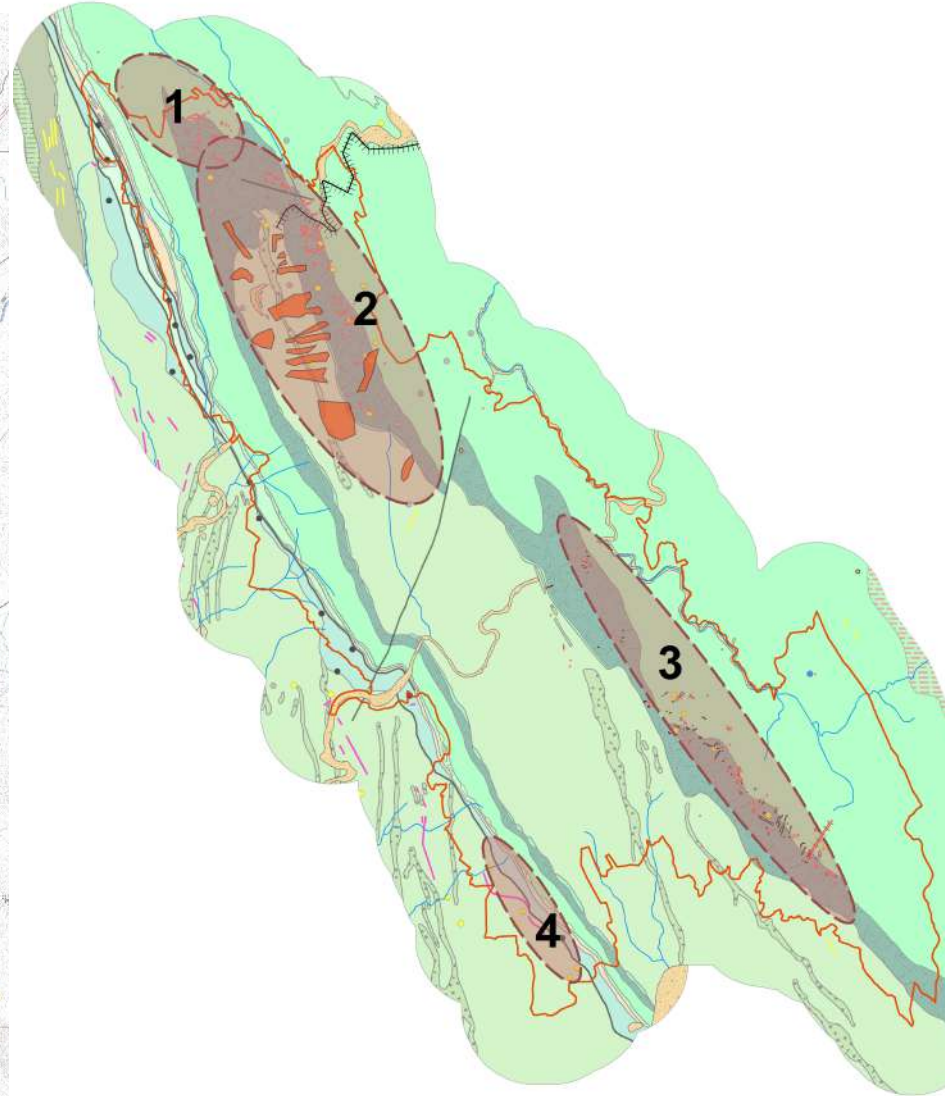
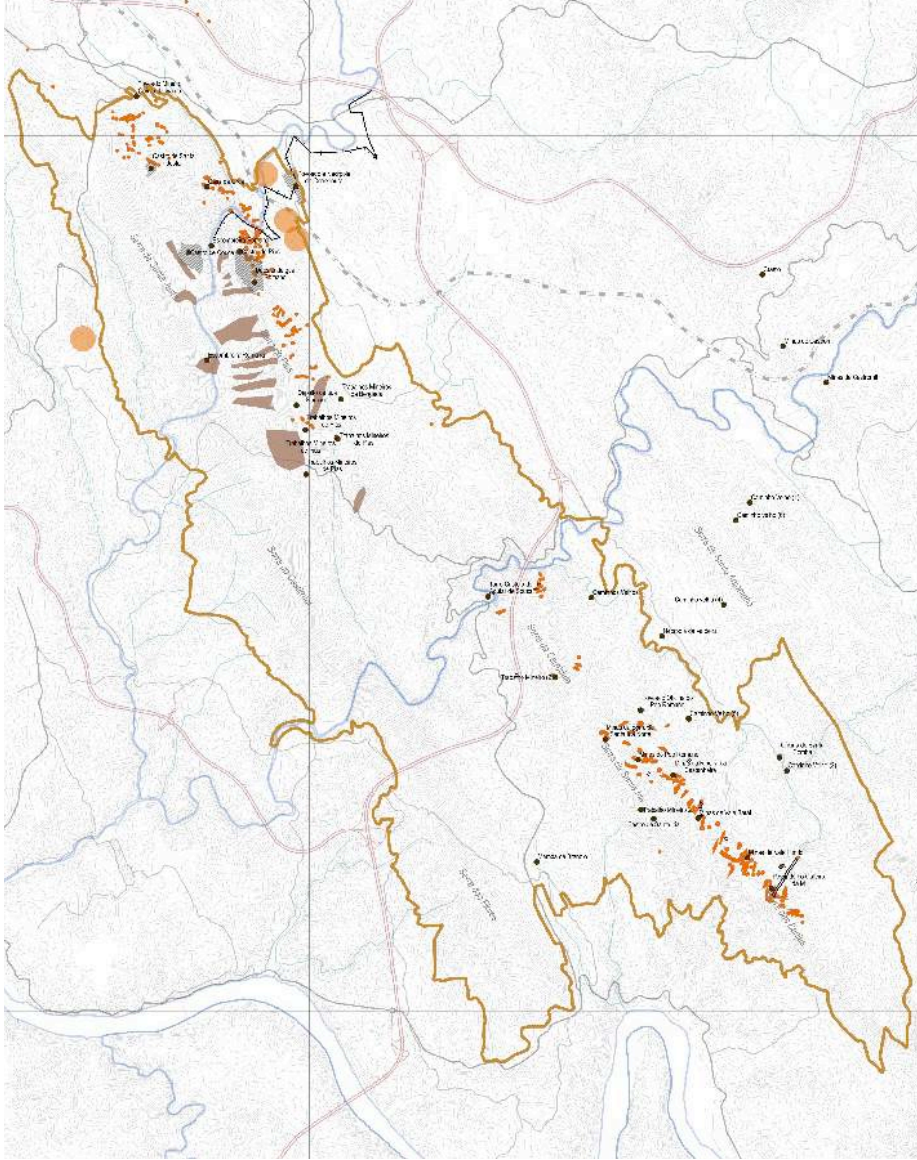


Secondary mining

In the river, in the alluvium...



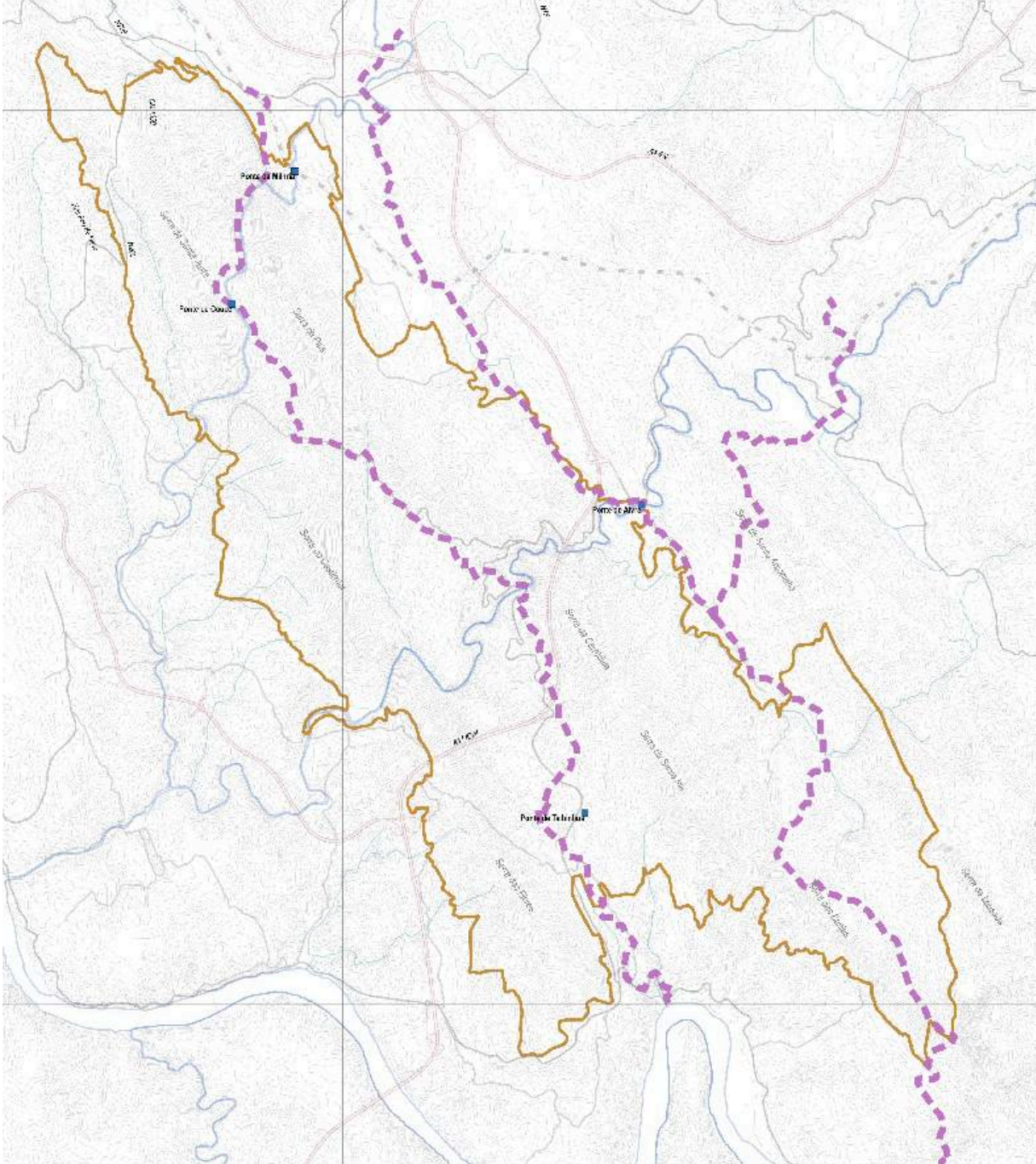
ROMAN MINING IN PSEP



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The ROMAN/MEDIEVAL corridors



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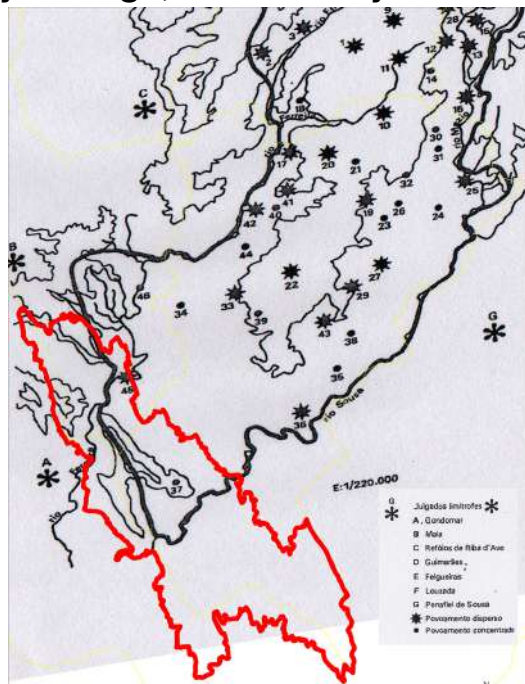
The Life Urban Greening Plans project has received funding from the LIFE Programme of the European Union.



THE AGUIAR CASTLE, THE COUNTY OF AGUIAR DE SOUSA, THE PRESENCE OF THE ROYAL PATRONAGE



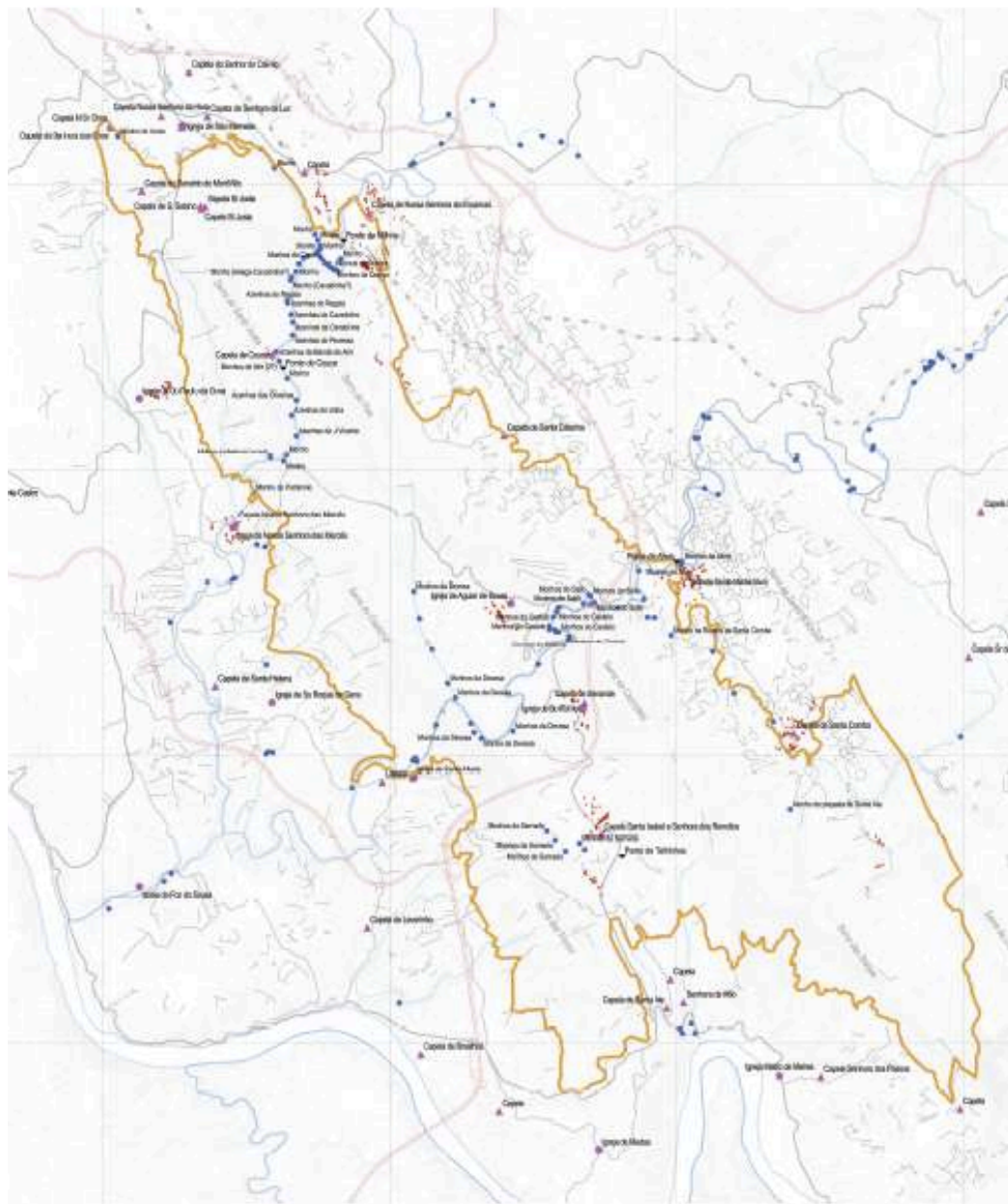
Castle 1 000 years ago, 10th century



County 700 years ago, 13th century



THE WATER MILLS



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THE SHRINES



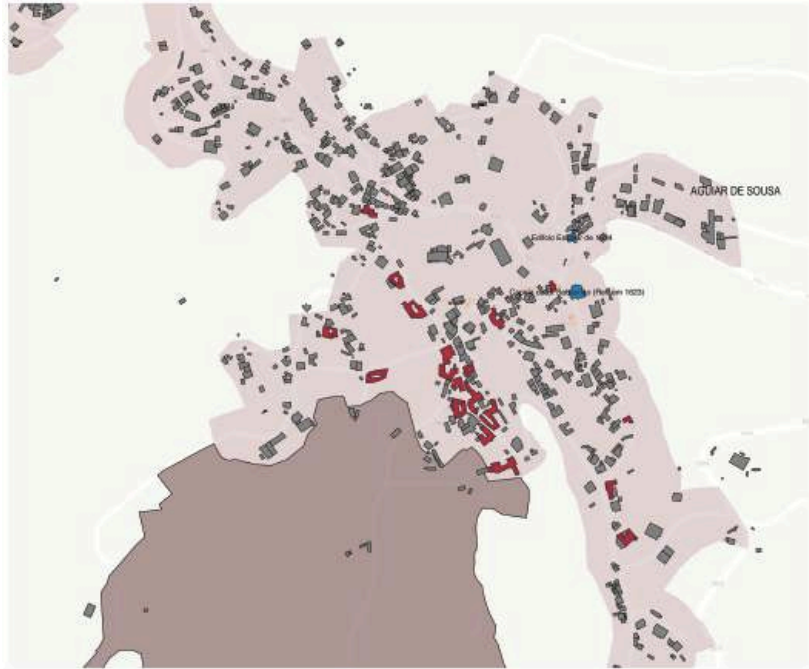
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Rural Settlements



Carta CS.2 - Lugares - Aguiar



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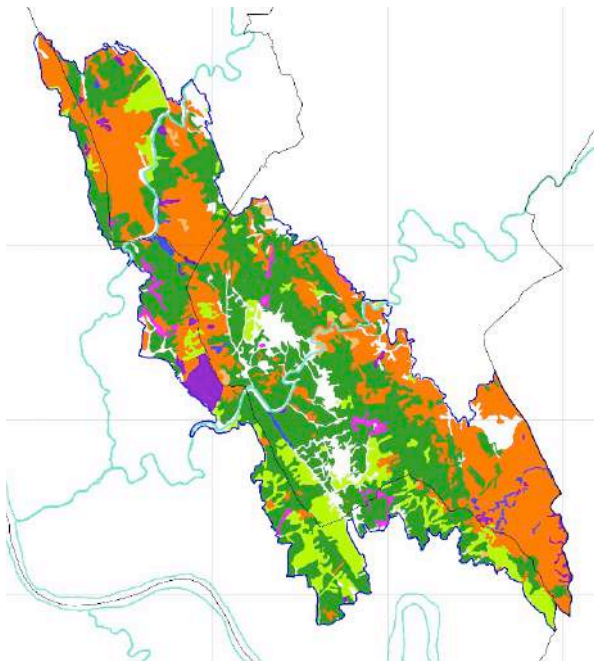


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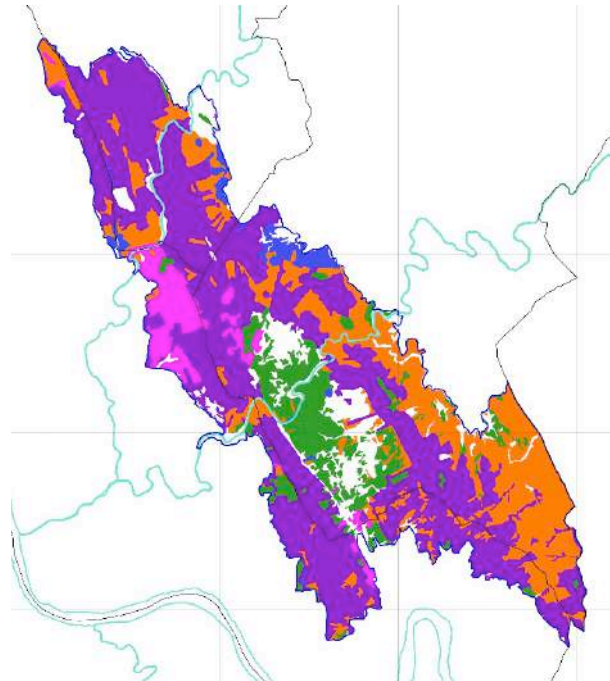
LAND USE

- in a **short period of 10 years**, between 1981 and 1990, resulting from the **replacement of pure maritime pine stands by pure eucalyptus stands**, progressively relegating extensive activities to a lesser extent, especially pastoralism, and the devaluation of the bush as a source of income.

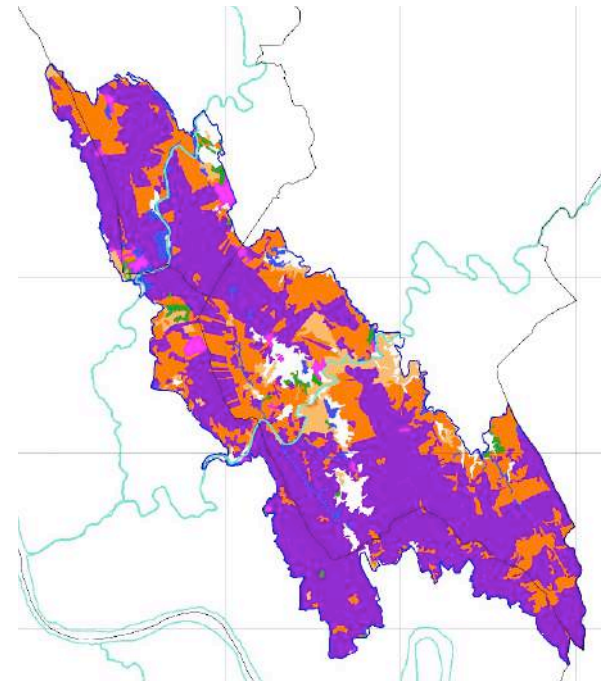
1981



1990

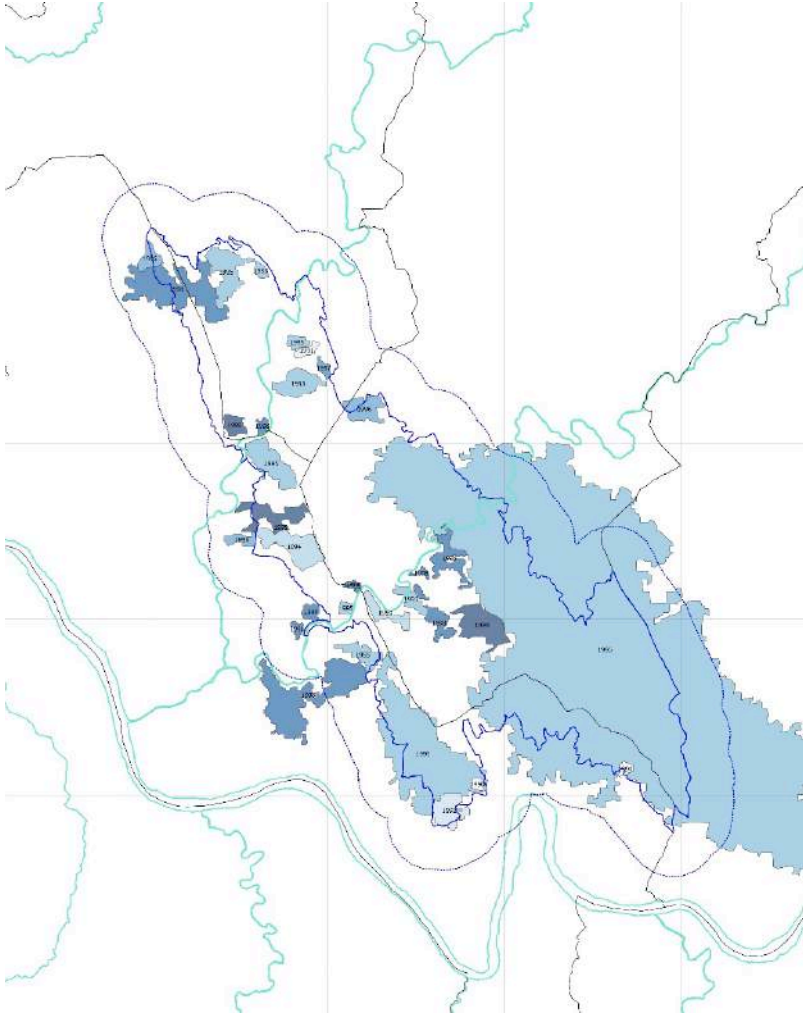


2014

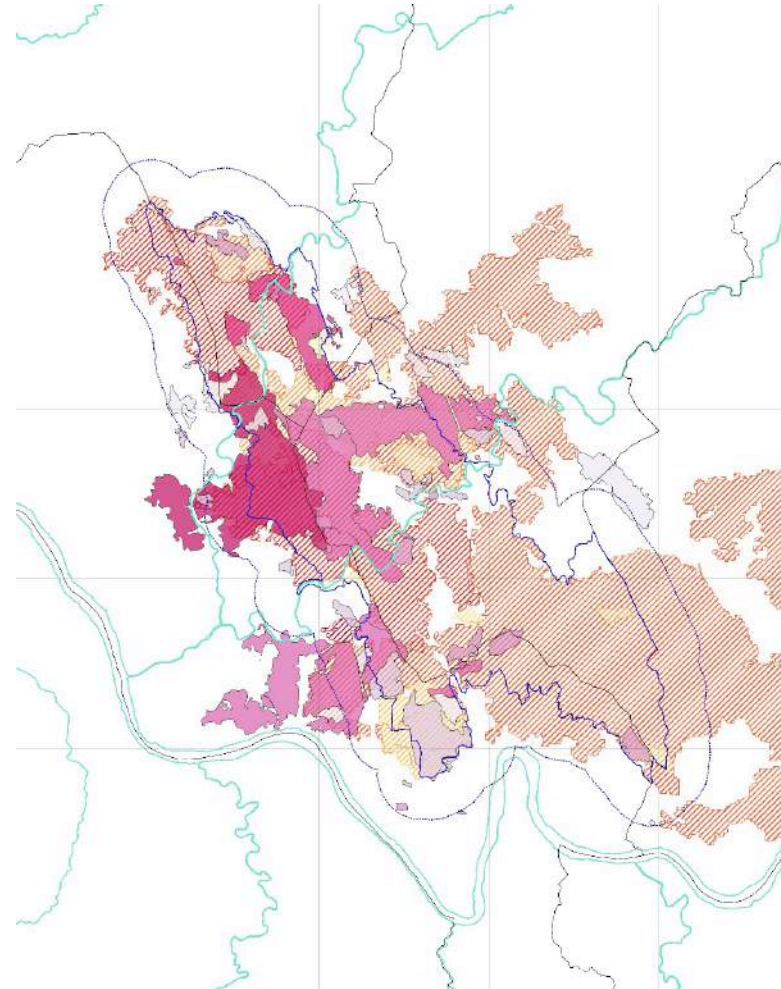


WILD FIRES

1990



2000-2016



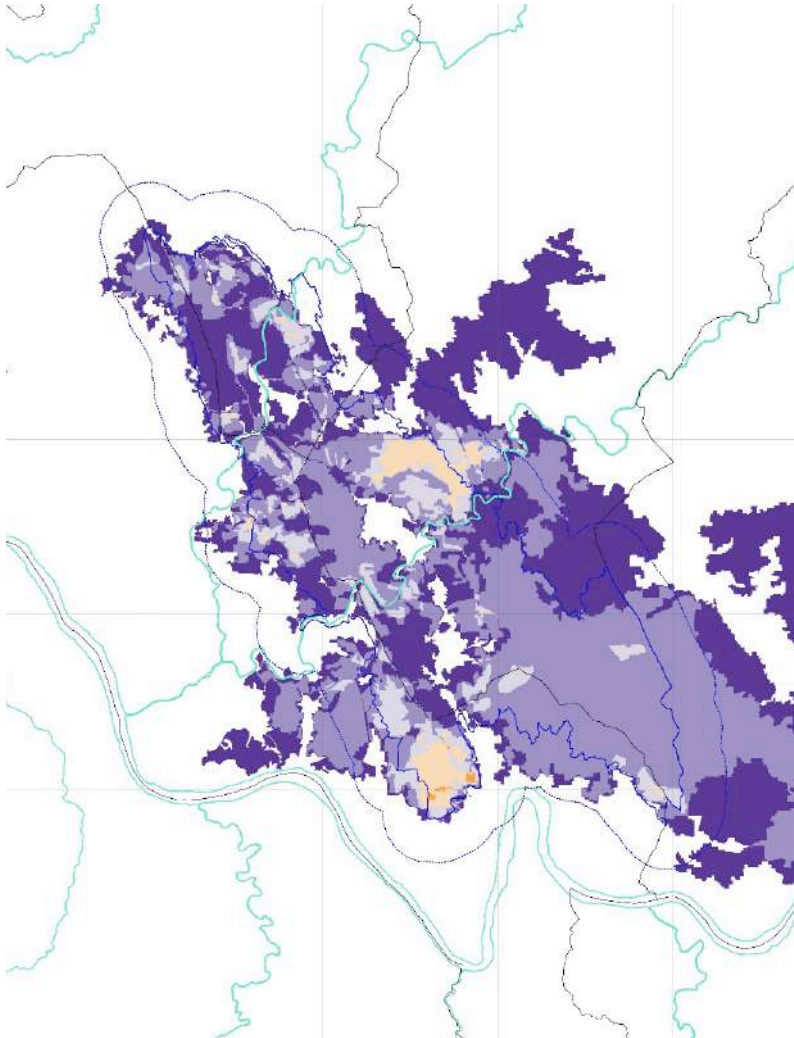
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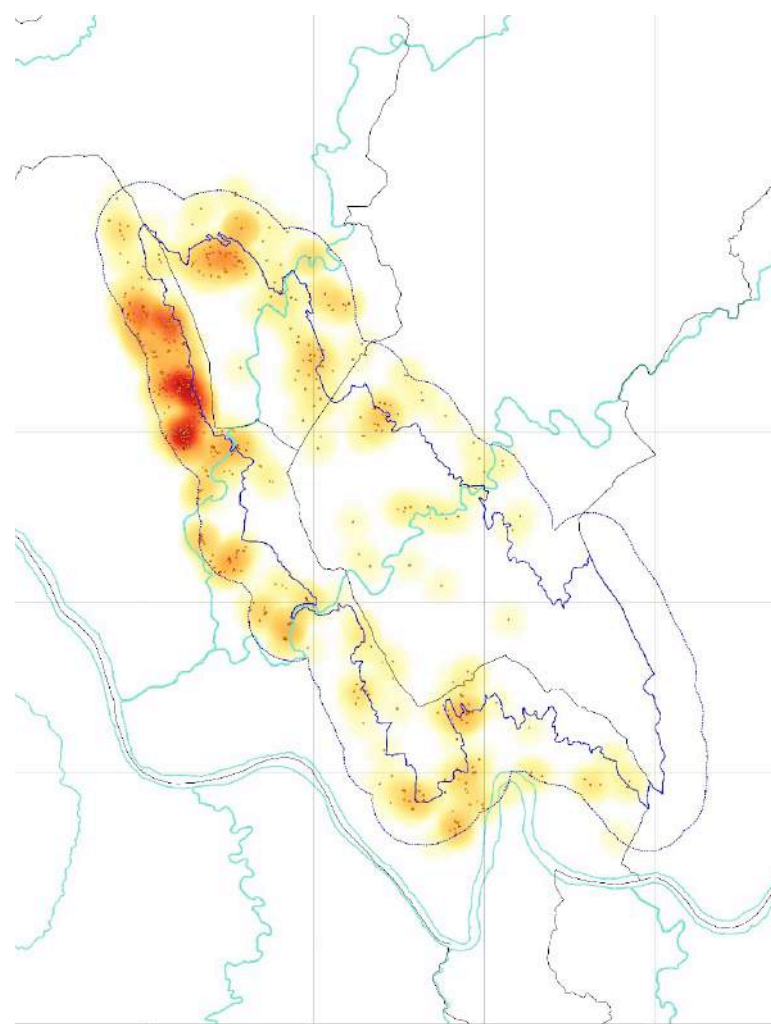
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RECURRENCE OF FIRE 1990-2016

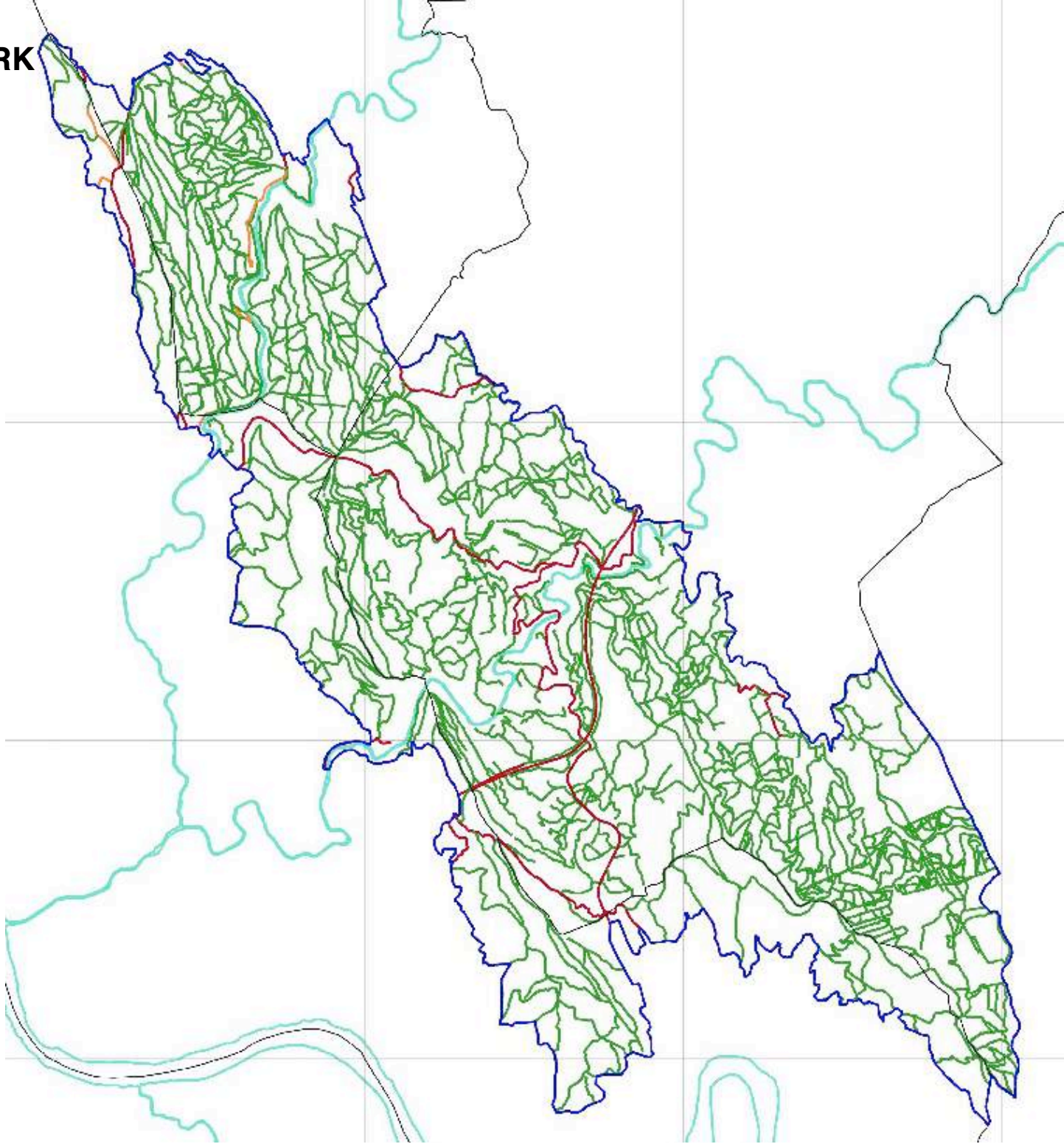


LOCATION AND DENSITY OF IGNITIONS



THE ROAD NETWORK

around 500 Km



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THE MANAGEMENT PLAN



PRINCIPLES

participative – involving owners and stakeholders,

collaborative – translated into a set of commitment and partnership agreements for shared management and

adaptive – flexibly guiding the identification of threats and opportunities facing the evolution of the park

OBJECTIVES OF THE MANAGEMENT PLAN

- Knowledge, conservation and valuation of cultural heritage;
- Knowledge, conservation and valuation of natural patrimony;
- Sustainable forest management: uses, resources and adaptation to climate change;
- Promotion of the park as a safe, qualified and recreational tourism destination.

MANAGEMENT STRATEGIES

1. Protection of the PSeP area against rural fires and reduction of fire risk;
2. Development of a strategy to combat invasive species;
3. Preparation of a mobility and transport plan;
4. Elaboration of a communication and animation plan;
5. Development of a security and monitoring strategy;

PARTICIPATIVE PROCESS

Meeting with the Park, 5th edition



SERRAS DO PORTO PARQUE DAS SERRAS DO PORTO PARQUE DAS SERRAS DO PORTO PARQUE



www.serrasdoporto.pt / www.facebook.com/serrasdoporto



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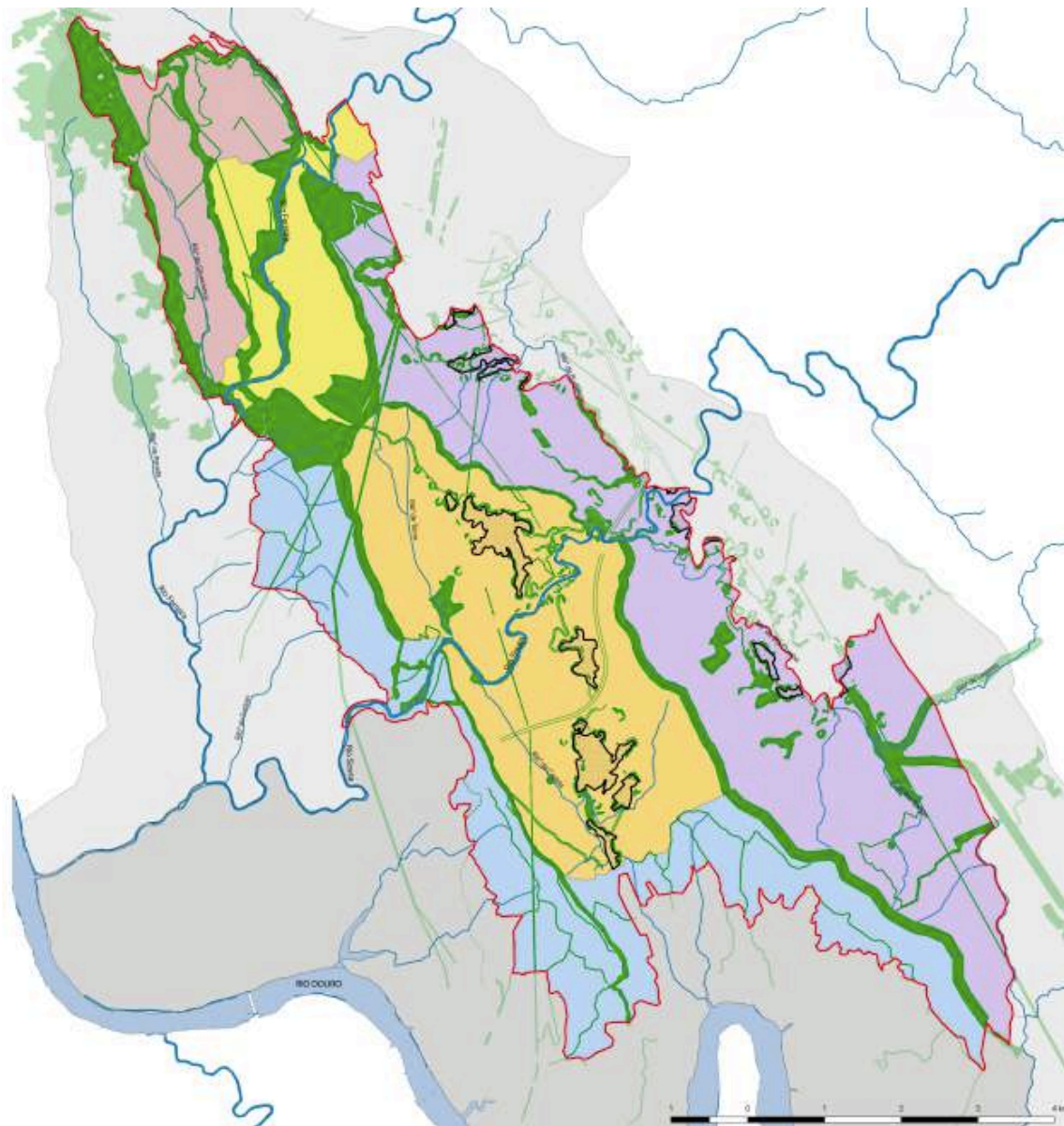


Partnerships

- The collaborative dimension translates into the signing and implementation of agreements established with the different stakeholders in the park: **School Club do PSeP, Health Club** a network of educators, teachers, doctors, social workers etc involved in the project
- an agreement with LIPOR (Metropolitan waste management Station), for the maintenance of conservation areas in the park and for the certification of a carbon credit for the PSeP.



Strategic Management - Forest














- Legenda**
-  *Limite Paisagem Protegida*
 -  *Perímetros urbanos*
 -  *Linhas de Água Principais*
 -  *Espaços Florestais Estratégicos*
- UGP - Unidades de Gestão de Paisagem**
-  *1. Encostas de Beloi à Azenha*
 -  *2. Vale de Couce*
 -  *3. Vale de Aguiar de Sousa*
 -  *4. Encostas da Moirama a Santa Comba*
 -  *5. Encostas do rio Douro*
 -  *Urbano 1*
 -  *Urbano 2*

Fig.21 - Distribuição dos Espaços Florestais Estratégicos nas Unidades de Gestão de Paisagem



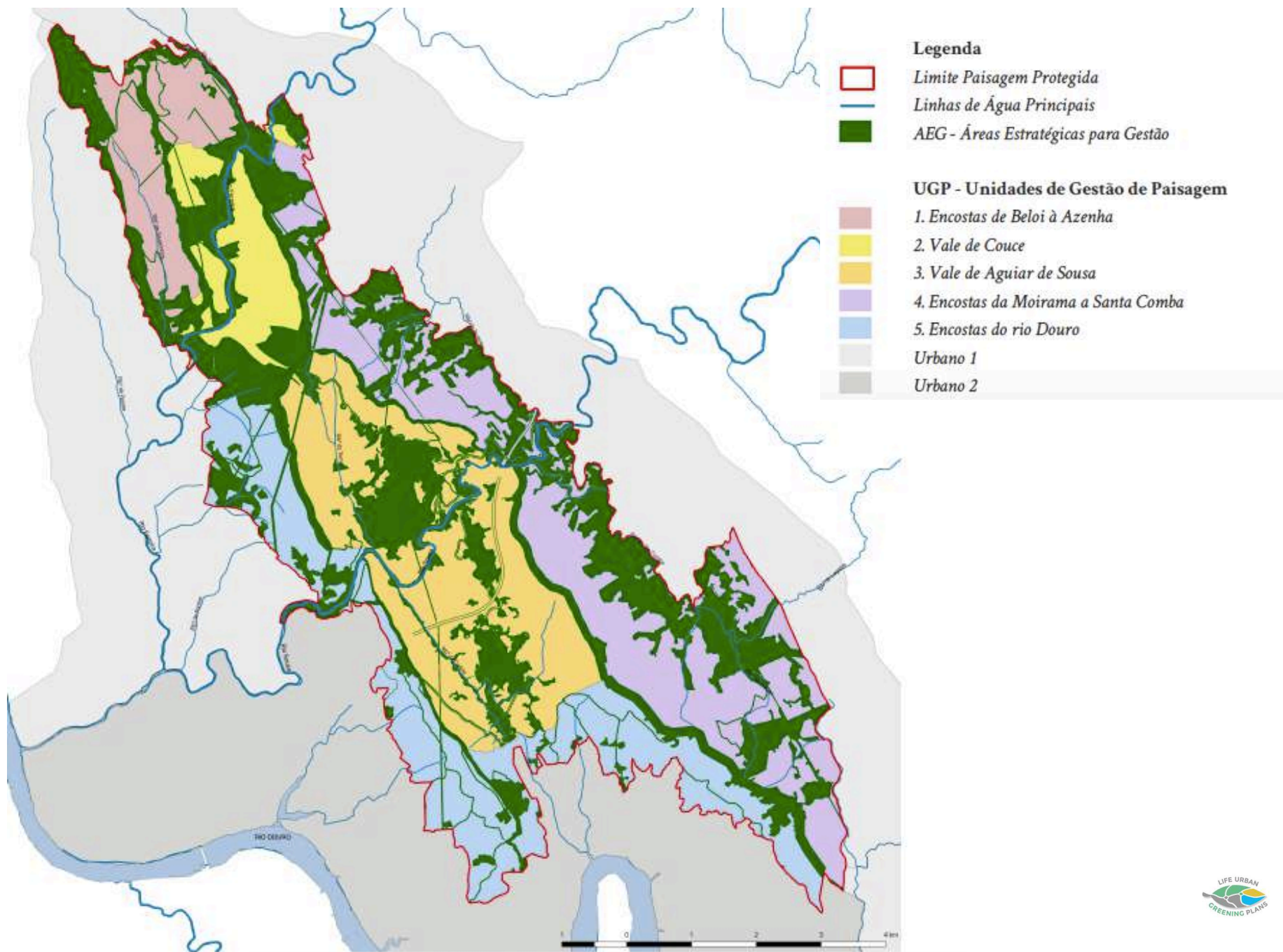


Fig.22 - Distribuição das Áreas Estratégicas para Gestão nas Unidades de Gestão de Paisagem



...2022



The Life UrbanGreeningPlans project has received funding from the LIFE Programme of the European Union.



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Updating Management plan 2022

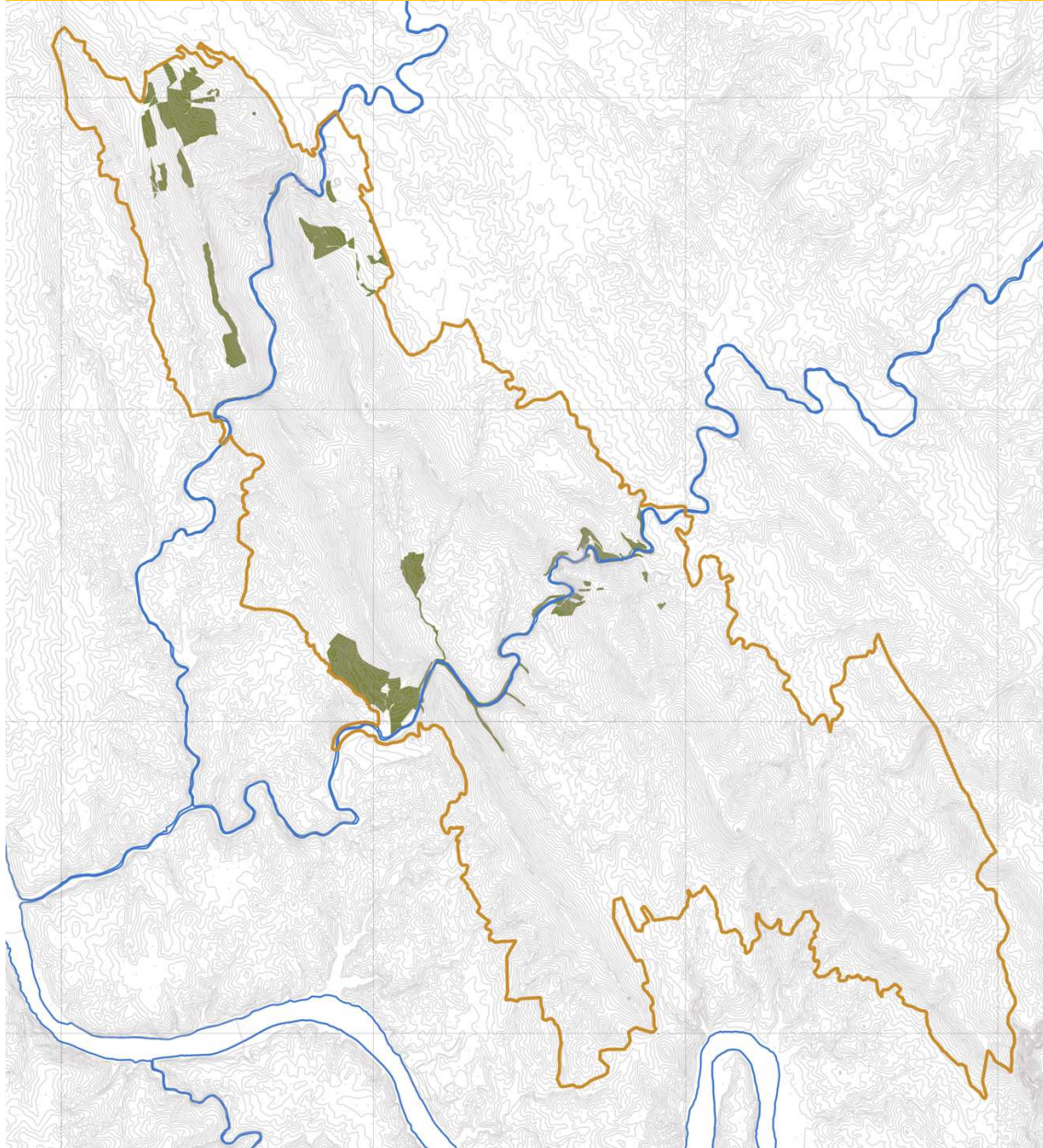


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Legenda

-  Limite da Área de Paisagem Protegida
-  Altimetria
-  Linhas de água principais
-  Áreas com intervenções em curso e potencia

223 ha
intervened in projects in
Parque das Serras do Porto
2018-2022

3,8% of protected area

113 ha
are in AEG - Strategic Areas for
Management
2018-2022



Thank you



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