AGUA DE PRATA - Adaptation and Watering in Green Urban Areas facing Climatic Heat Waves, Drought and Extreme Storms

ACRONYM: LIFE AGUA DE PRATA

PROJECT LOCATION: Évora, Portugal

BUDGET INFO:

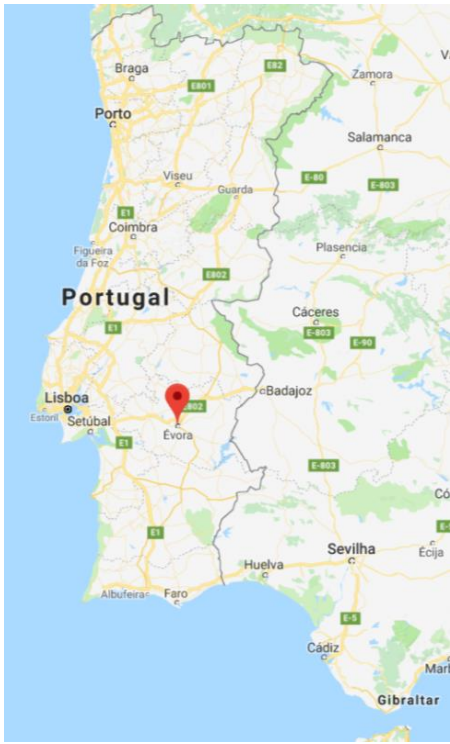
Total amount: 1.354.352 €

EC Co-funding: 60%

DURATION: Start: 01/07/18 - End: 31/12/22

PROJECT'S IMPLEMENTOR:

Coordinating Beneficiary: Municipality of Évora



Context:

yearly precipitation lowering

increase of extreme precipitation events

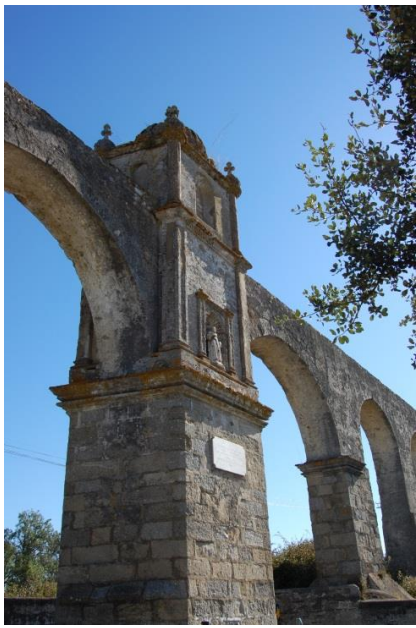
increase of temperature (average and heat waves)

more frequent/intense droughts

green spaces supplied with treated water (increasingly scarce)

OBJECTIVES & SCOPE:

- **Shift the water supply for irrigation to untreated water,** reusing original underground springs and historical aqueduct;
- Promoting **adaptation works that harmonize the use of the aqueduct for a pilot distribution system**;
- Promoting **structural adaptation of green urban areas to face heat waves and extreme precipitation** (with nature based solutions), as well as **additional water-efficient use and energy saving solutions**.

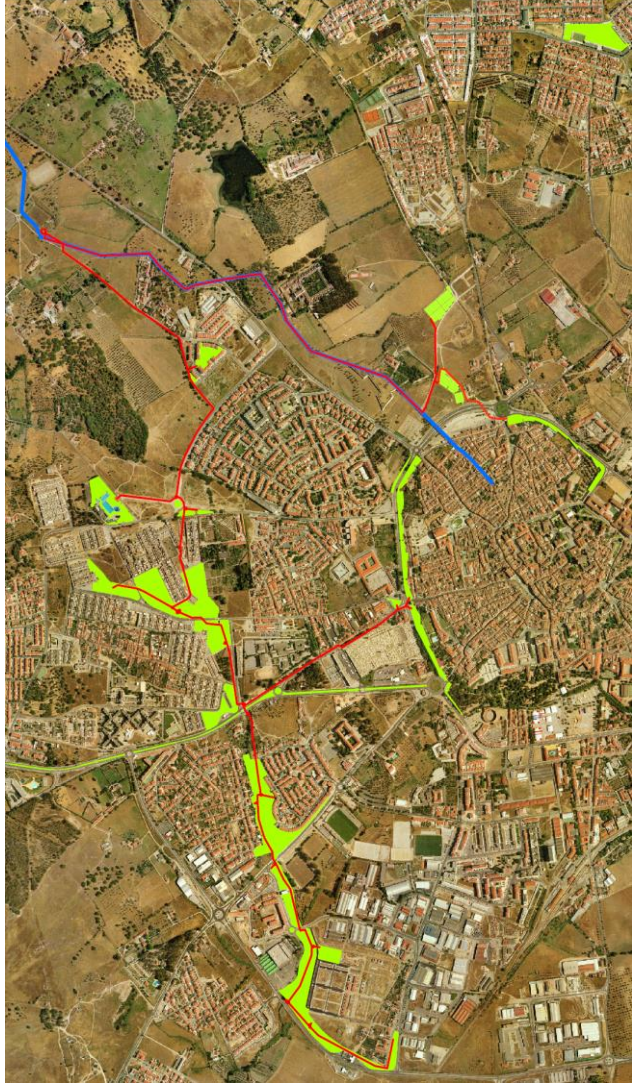


Aqueduto da Água de Prata (silver water)

Nacional Monument

EXPECTED IMPACTS:

	How Much?
• **spare treated water** and reduce shortage threats to human consumption	120.000 m3/yr
• **reduce energy consumption** (on water pumping - 50% of the city green areas supplied by gravitational head)	2,16 tons/yr CO2 emissions
• **improve shadowing and microclimatic conditions** of urban green areas to face heat waves	10.100 m2
• **improve resilience to flooding**, encompassing 45% of city's green urban areas	187.517 m2
• **increase resilience/protection of stream margins** to extreme precipitation events	1.800 m urban stream
• additional **reduction of water consumption for irrigation by water-efficiency measures**	30.000 m3/yr
• **replications of the project works** during and after the project's lifetime	1 local 2 national 1 EU level



Green areas covered by the project and untreated water grid for irrigation

POLICY IMPLICATIONS

Concerning:

- Coping **climate change adaptation needs** with **historical heritage conservation and (re)use**

  → - **a problem faced by most EU historical cities**

- Contributes to the **Water Framework Directive objectives**

  → - **water management at urban level**

- Contributes to the **EU biodiversity strategy**

  → - **nature based solutions**
  - **increase of urban biodiversity through ecosystem based approaches**

- Contributes to the **Floods Directive**

  → - **flood prevention in urban areas**

REPLICATION AND TRANSFER:

Expecting to:

Local Level

Replicate **similar solutions to other similar areas in the city**
(still during the project lifetime and with no extra costs)

Regional level

through institutional cooperation, **foresee identical solutions on the intermunicipal adaptation plan that CIMAC is developing**
(involving all the municipalities of the Alentejo Central NUT III).

National and International level

ensure a wider scope of replication and transfer, we will use our networking contacts:

- **Covenant of Mayors** (about 7000 EU municipalities engaged);
- **UNESCO classified world heritage** and the **World Monument Fund**;
- **ClimAdaPT** (26 national municipalities engaged)