



STUDY VISIT

Blue-green infrastructures (storm water garden & rainwater ponds) in San Javier and Storm tank in the city of Torre-Pacheco.

Manuel Boluda
Technician General Directorate of Water

CONTEXT OF THE AREA



- Touristic municipalities surrounding Salty Lagoon called Mar Menor:
 - Distance <3 km (Salt containt of 55 g/l and 4-6° of T° > Mediterranean sea) → Unique ecosystem but also very vulnerable.
- High pressure of the touristic sector and agricultural activity
- Catchment Area weakly defined: Heavy rains can modify the overflow direction.
- Water table very superficial and with saltwater marine intrussion.

CONTEXT OF THE AREA

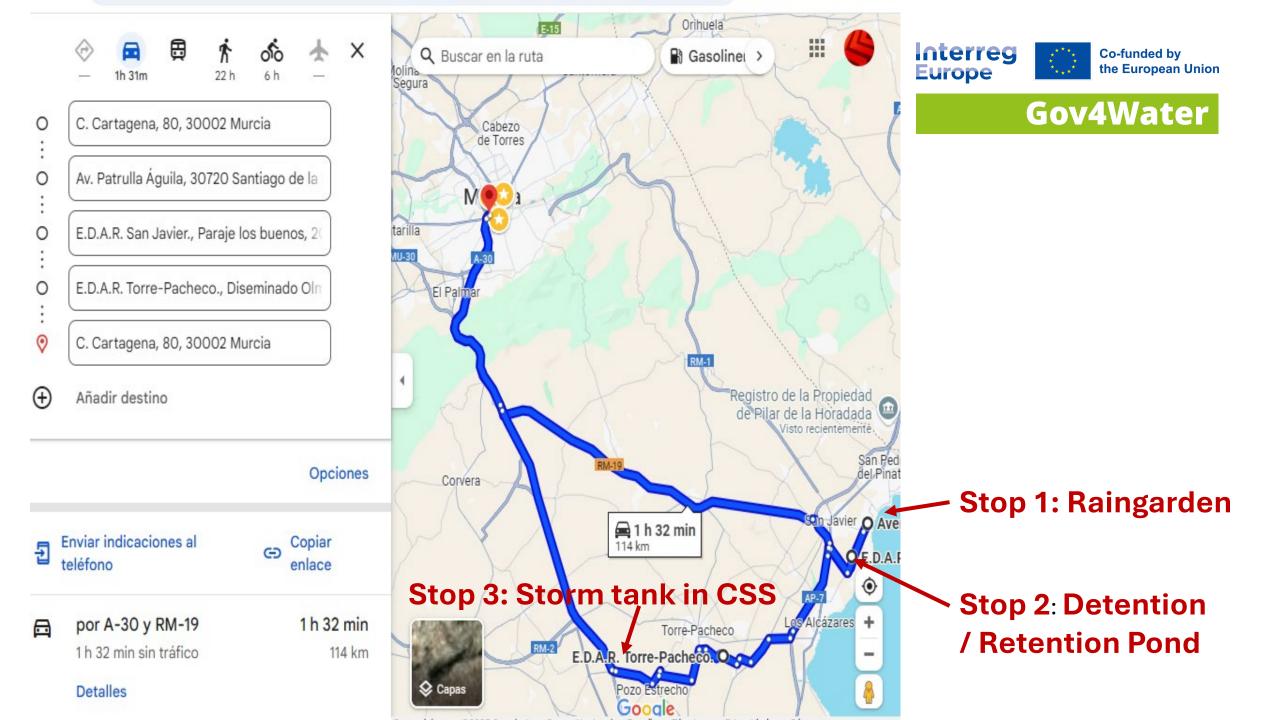


Main goals

- Avoid 1st flush flow reaches vulnerable water bodies.
- To reduce overflow.

Features

- They're complementary → Overflow reduction → close to the beginning of the catchment basin.
- High effectiveness reducing 1st flush flow pollution



CONTENT OF THE VISIT



Separative networks

- 1st Stop —>San Javier → Raingarden that only collects rainwater.
 - Reduction the visual impact of the facilities and social perception
 - Maintenance of these facilities
- 2nd Stop → San Javier WWTP → Detention/Retention catchment basin
 - Triple function:
 - 1) Reduce overflow
 - 2) Improvement of the WWTP management
 - 3) Utilization for agricultural purposes.

CONTENT OF THE VISIT



Combine Sewer System (CSS) or Unitary networks

- 3rd Stop → Torre-Pacheco → Storm Tank in 2 steps:
 - 1. Pre- tank with autocleaning
 - 2. Pond to save water before entrance to the WWTP
- Goals of the facility:
 - Avoid discharges of the flow excess without any treatment to the Mar Menor
 - — ↓ maintenance costs

CONTENT OF THE VISIT



On the spot, we deal with several related issues of the facilities for example:

- Social rejection of some facilities based on citizens experience in the area.
- Management of superficial water table and salty.
- SuDS are a key point for building Water Resilience but their difficulties to implement in older cities





Thank you!