MILESTONES, GROUNDWATER USER INVOLVEMENTS AND ENGAGEMENTS IN DOÑANA
LOCATION

At the mouth of the Guadalquivir River is the Doñana National Park (World Heritage Site)
ORIGIN OF CONFLICT

- Territory with excellent conservation until the middle of the 20th century because it was poor soil for agriculture and noble estates (grazing, hunting, forestry).
- Three public initiatives start at the same time with conflicting interests:
  - **July 1969**, the urbanisation of Matalascañas is declared a Centre of National Tourist Interest.
  - **October 1969**, Doñana National Park is created.
  - **1971**, the transformation of 24,500 hectares into groundwater irrigation is declared to be of national interest.
    - **Almonte Marismas Plan**
CONFLICT

• Since 1990, the development of soft fruit agriculture in greenhouses has been very strong.
• Beach tourism continues to develop
• In 1994, it was declared a UNESCO World Heritage Site.
MILESTONES FOR GROUNDWATER USER INVOLVEMENT AND ENGAGEMENT


It differentiates the irrigated area and farmers into three groups:
1.- authorised (SAR)
2.- illegal
3.- legalisation (SAR)

<table>
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<tr>
<th>Year</th>
<th>Season</th>
<th>Surface (ha)</th>
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2.- Transfer 19,99 hm3 Tinto, Odiel, Piedras (2018)

It will allow us to increase the substitution of groundwater for transfer waters
3.- Risk of not achieving good quantitative and qualitative status of the water bodies La Rocina, Almonte and Marismas December 2019

Establishment of a groundwater body user community improves groundwater management.

Each year, the volume of water available from the aquifer is agreed with the users.
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Groundwater abstraction monitoring website
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## CONCLUSION

1. To achieve user engagement and participation, it is necessary to have a management plan that differentiates between legal and illegal users.

2. Substitution of groundwater by surface water accelerates the aquifer recovery process.

3. Access to aquifer data, promote user participation and engagement

4. The constitution of the groundwater users' community improves aquifer management.