

# CONVIVE LIFE Project

## *Layman Report*

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Integration of human activities in the  
conservation objectives of the Natura 2000  
Network in the littoral of Cantabria

With the contribution of the LIFE programme  
of the European Union





The  
**LIFE**  
programme

the  
**CONVIVE LIFE**  
Project

This is an EU financial instrument created in 1992, the current objective of which is to contribute to the sustainable development and the attainment of the objectives and goals of the Europe 2020 Strategy, as well as the relevant strategies and plans of the European Union in environmental and climate- related matters. It has been allocated a budget of 3.4 billion euros.

<https://ec.europa.eu/easme/en/life>

The project entitled “Integration of human activities in the conservation objectives of the Natura 2000 Network in the littoral of Cantabria: CONVIVE LIFE” is a European project 60% co-financed by the European Commission through the LIFE programme, which has been allocated a total budget of 1,325,680 euros.

This project, carried out during the 2015-2020 period, has been developed by 6 beneficiary partners: Regional Ministry of Rural Affairs, Fisheries and Food of the Government of Cantabria, Arnüero City Council, Constructora de Obras Públicas San Emeterio, S.A. (COPSESA), SEO Birdlife, Aves Cantábricas S.L. and Fundación Instituto de Hidráulica Ambiental de Cantabria (IHCantabria).

The  
**CONVIVE LIFE**  
Objectives

- 1

Restoration of the favorable status of the habitats
- 2

Promotion of sustainability
- 3

Promotion of a participative approach
- 4

Reduction of direct pressures
- 5

Improvement of the conservation status of bird life

Areas of action in  
Cantabria (Spain)

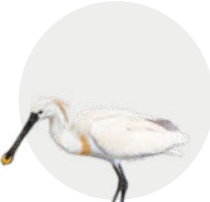


*The Council Directive 92 /43 /EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora defines the various types of natural habitats of community interest as the terrestrial or aquatic areas whether entirely natural or semi-natural that:*

- / Are in danger of disappearance in their natural range
- / Have a small natural range
- / Present outstanding examples of one or various biogeographical areas of the European Union.

Main restored  
habitats

- Habitat 1330**  
Atlantic salt meadows
- Habitat 1420**  
Mediterranean and thermo-Atlantic halophile scrubs
- Habitat 1150**  
Coastal lagoons



**COMMON SPOONBILL**  
*Platalea leucorodia*



**THE PURPLE HERON**  
*Ardea purpurea*



**THE PIED AVOCET**  
*Recurvirostra avosetta*



**THE LITTLE BITTERN**  
*Ixobrychus minutus*

Species for which actions  
have been taken

*The EU Directive also defines species of community interest as the flora or fauna species that are:*

- / Endangered
- / Vulnerable
- / Rare
- / Endemic (belong to a specific geographical area)





# Coexistence

The CONVIVE LIFE project seeks COEXISTENCE between human activities and the conservation of estuarine ecosystems through the search for solutions agreed with the main actors in the territory (e.g. municipalities)



/ Social awareness

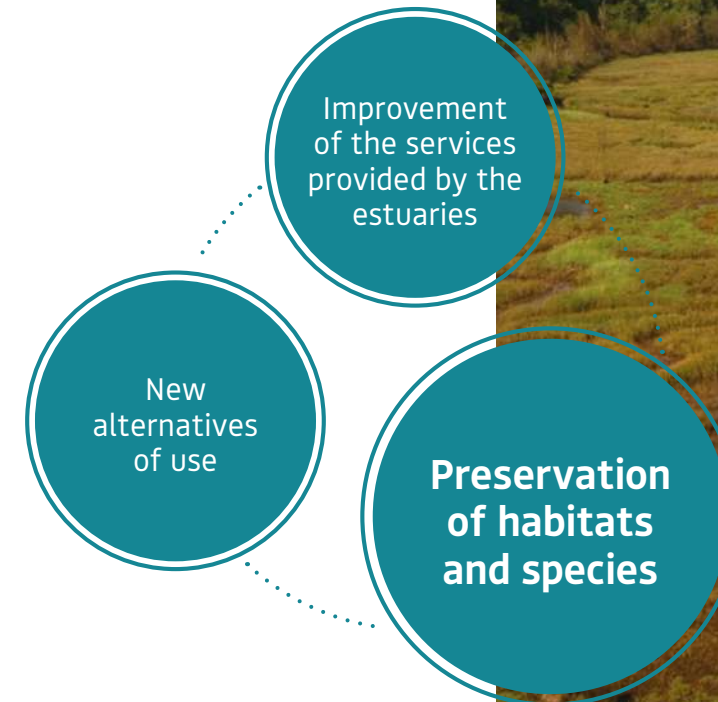
/ Sustainable management

/ Economic activity



## Restoration actions

- 1** / Removal of dams
- 2** / Removal of invasive alien species



- 3** / Improvement of water quality
- 4** / Algae control





Control of invasive alien species

# Baccharis halimifolia

(groundsel-bush)

Recovery of estuarine areas invaded by the Baccharis bush original from America

## Total area removed (7,5 ha)

Tina Menor

4 ha

Ría del Capitán

1,3 ha

Joyel

0,06 ha

Victoria

2,1 ha

## Baccharis cover area (ha)

Tina Menor

8,97 / 6,32

Ría del Capitán

2,67 / 1,39

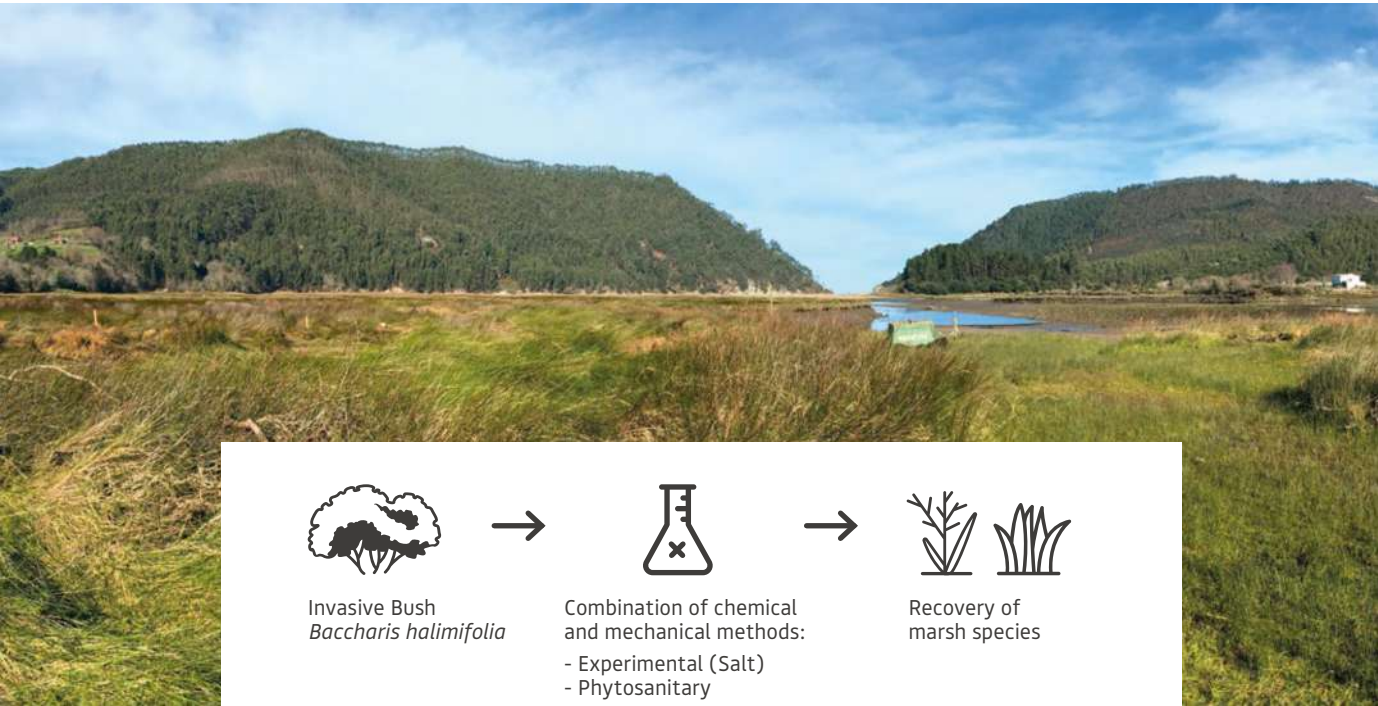
Joyel

0,39 / 0,88

Victoria

9,97 / 3,17

\*Before / after



Control of

# algae proliferation

Removal of algae proliferation in the Santa Olaja mill lagoon (Joyel)

9 removal campaigns



Tons removed

143 tons (*Ulva* sp. and *Rhizoclonium* sp.)

Circular economy

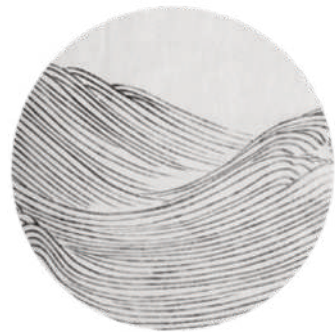
Reuse of 50% of the removed material

/ Before



/ After





# Restoration of the tidal dynamics

Recovery of estuarine areas gained to the sea and confined due to the presence of dams

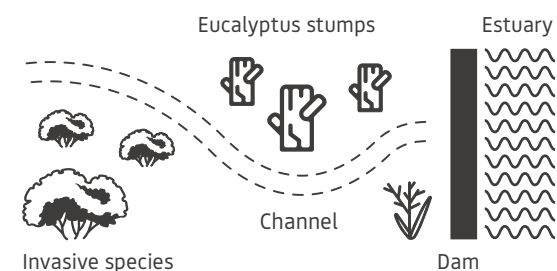
## Capitan Ria Oyambre

Partial removal of the dam, leaving a pathway at low tide.

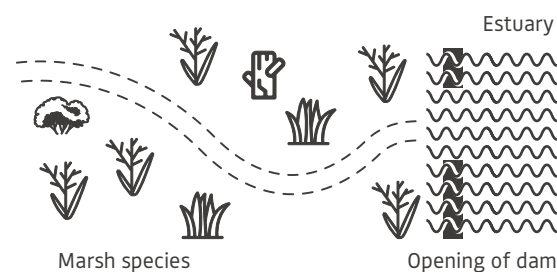
No. of entities enquired: 5  
Dissemination events: 1 (Valdáliga)

### Main outcomes

- Improvement of water renovation and quality
- Increase of salinity
- Changes in the saltmarsh communities
- Reduction of 1.3 ha of *Baccharis*
- Changes in geomorphology



Partial removal of dam



## Santa Olaja mill pond in Joyel

Opening of the cutwaters, installation of 2 new flapgates and sustainable management of the gates.

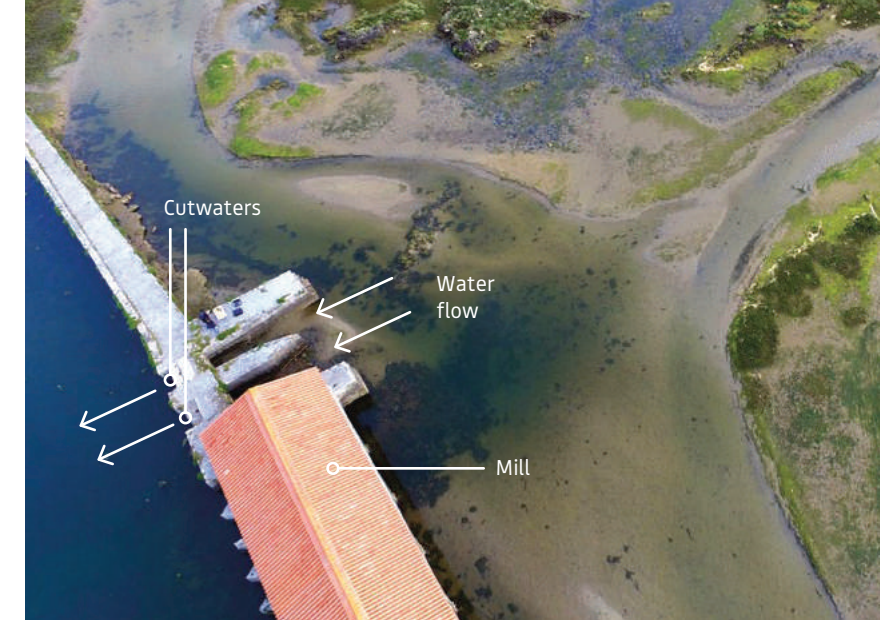
No. of entities enquired: 6  
Dissemination events: 1 (Arnuero)

### Issues

- Cutwaters totally walled
- Water stagnation
- Water inlet restriction
- Green algae proliferation

### Main outcomes

- Improved water renovation
- Reduction of algae proliferation
- 100% of mill visits
- Improvement in the social perception of the state of the lagoon



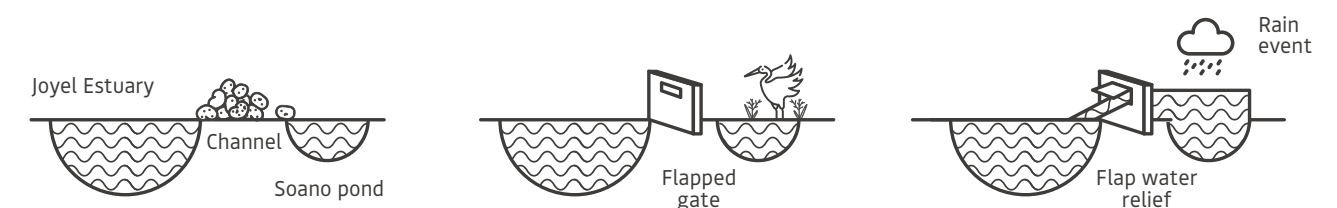
## Joyel channel

Cleaning of the channel and fitting of a flapped gate.

No. of entities enquired: 6  
Dissemination events: 1 (Arnuero)

### Main outcomes

- Stabilisation of the water layer
- Increase of salinity







## Improvement of the water quality through **Nature - based solutions (NBS)**

Experimental treatment for the improvement of water quality in estuarine areas near sources of spillage.

No. of entities enquired: 3

Dissemination events: 1 (Valdáliga)

### *Tina Menor fish farm*

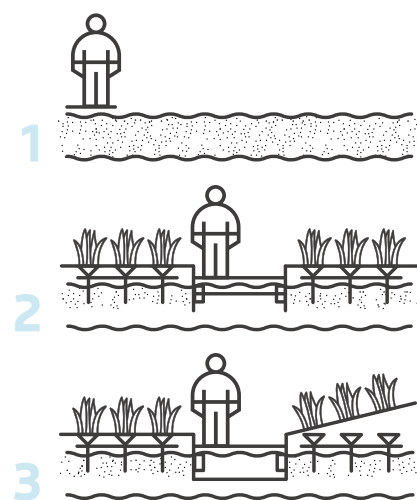
Experimental green filter system

#### *Species used*

- *Juncus maritimus*
- *Halimione portulacoides*

#### *Size of filter*

- 132 sq. metres of green filter
- Over 600 transplanted *Juncus* and *Halimione* plants



Green filter

#### *Main outcomes*

- > 30% reduction of suspended solids
- > 40% average reduction of phosphates
- > 40% average reduction of inorganic nitrogen



## Restoration of **goods and ecosystem services**

The greater the biodiversity, the more varied the ecosystem services favouring the stability in the ecosystem.

### *Improvement of the ecosystem services*

#### Supply service



Food

#### Regulation and maintenance service



Waste  
processing



Coastal  
protection



Erosion  
control



Habitat  
protection



Plague  
control



Soil  
formation



Water  
condition



Weather  
regulation

#### Cultural services



Spiritual  
and religious  
values



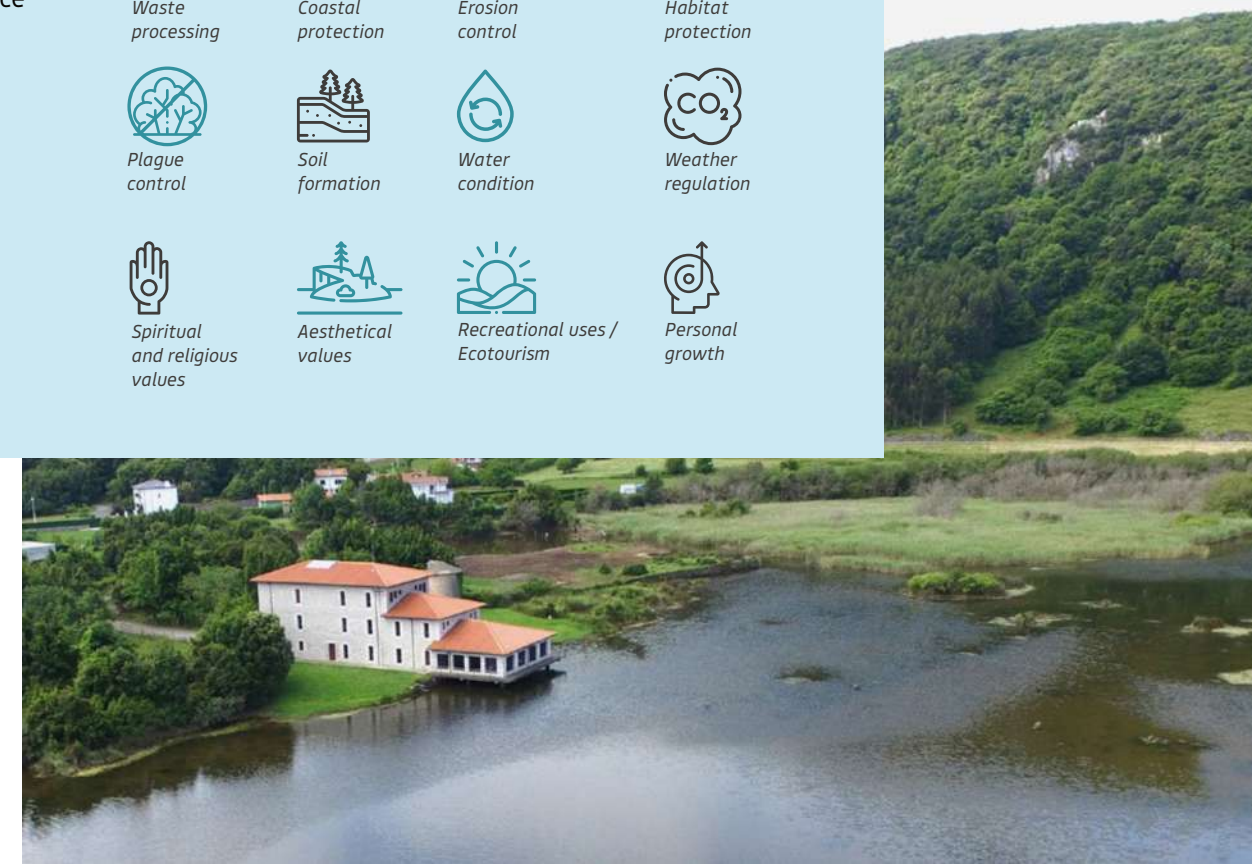
Aesthetical  
values



Recreational uses /  
Ecotourism



Personal  
growth










Attained

# objectives

	Tina Menor	Oyambre	Joyel	Victoria
 <i>Habitat 1150</i>	N/A	N/A	Improvement of conservation status	N/A
 <i>Habitat 1330</i>	Improvement of conservation status	Improvement of conservation status	N/A	Improvement of conservation status
 <i>Habitat 1420</i>	Improvement of conservation status	Improvement of conservation status	Improvement of conservation status	N/A
 <i>Baccharis</i>	30% reduction	50% reduction	N/A	68% reduction
 <i>Connectivity</i>	N/A	Restoration of connectivity	Improvement of connectivity	N/A
 <i>Bird species</i>	Lagoons management plan – Sonrionansa S.L.	N/A	Lagoons management plan – Natural Park	Lagoons management plan – Natural Park







Promotion of the

# participative approach

to optimise restoration activities

## Social awareness



### 12 CO-EDUCA workshops

Training people in the value of estuaries and the importance of sustainable management

- 253 school students
- 21 teachers

### 2 CONVIVE NATURA events

Raising consciousness on the sustainable management of estuaries

- 37 attendees
- 2 towns

### Photography Contest

Defence and preservation of nature

- 91 photographs
- 6 exhibitions in 6 towns

## Social perception



### Local surveys

Evaluation of the socio-economic impacts of the project

## Knowledge exchange



### Networks

- Surveys on 39 sites in 7 countries
- 17 Natura 2000 sites visited (The Netherlands, Belgium, Portugal and Spain)
- 6 experience exchanges
- Contact with LIFE projects

### 1 COOPERA-NATURA event

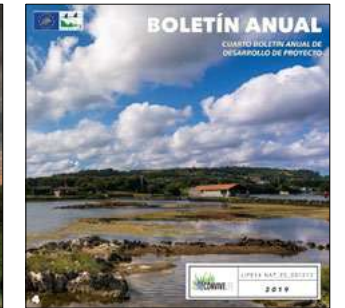
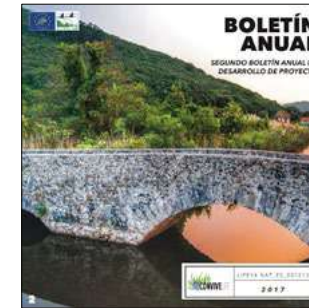
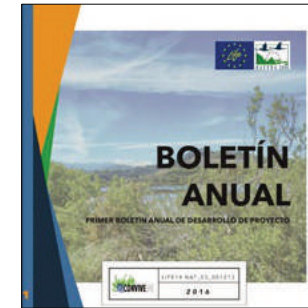
Raising awareness of the work carried out in the project and opening a discussion forum.

- 47 attendees
- 18 national bodies and non-Government organisations

# Project

dissemination

## Annual bulletins



## Web page and social media

### Twitter

#ConviveLIFE – Accumulated audience 96,000

### Web

www.convivelife.es – Accumulated audience 151,247 visits

## Event involvement

5 congresses/ national workshops  
5 congresses/ international workshops  
Network building with other countries

## Acknowledgements

Municipality of Valdáliga

Sonrionansa, S.L.

General Directorate of the Coast and the Sea (Government of Spain)


Board of Trustees of the Santoña, Victoria and Joyel Marshes Natural Park





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of the European Union



More information at:  
**[www.convivelife.es](http://www.convivelife.es)**  
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 [@convivelife](https://www.instagram.com/convivelife)