# 2017 - 2020





**Channel Payments for Ecosystem Services** 

European Regional Development Fund

# CHANNEL PAYMENTS FOR ECOSYSTEM SERVICES

Aim: Improve water quality by implementing sustainable Payments for Ecosystem Services across 6 pilot case study catchments in England and in France.



# **THE PROJECT**

Launched in November 2017, the European Channel Payments for Ecosystem Services (CPES) project is a collaborative project managed within the Interreg VA France (Channel) England programme. It has a €4 million budget, co-financed by the European Regional Development Fund (€2.8 million), and runs for a 45 month period (2017-2020).

Fourteen partners are working towards a common goal: to improve water quality of lakes, rivers and groundwaters, by implementing sustainable payments for ecosystem services (PES) schemes in six case-study catchments in Southern England and Northern France. The emphasis of the schemes will be to encourage farmers to adopt practices that are more sympathetic to catchment water quality..

Among the innovative financial mechanisms, payments for ecosystem services (PES) are voluntary approaches in which the beneficiaries of ecosystem services pay land managers to change practices. Previous projects have demonstrated the viability of PES to reduce diffuse pollution from agriculture but have not tested their environmental effectiveness and their financial sustainability at a larger scale.

Our partners have proven experience in identifying and implementing measures for changing agricultural practices in favour of water quality. However, the current mechanisms, such as agri-environment schemes, seem to face certain difficulties in achieving water quality objectives (low incentives, complex administrative and financial management, etc.). This explains the partners' interest in innovative schemes and their commitment to Interreg cooperation.

The Interreg project offers a unique experimental framework to test the construction and implementation of PES schemes. The ultimate goal of the CPES project is to demonstrate that PES is a cost-effective tool for solving diffuse pollution problems. It also examines the consistency of PES schemes with the range of environmental policies and regulations currently in place, as well as their legal viability and monitoring and control mechanisms.

The diversity of issues and contexts accross the case-studies is one of the strengths of the CPES project, which will allow replicability to other catchment areas, thanks to the construction of a toolbox made available to all stakeholders concerned with water quality.

# THE SIX CASE-STUDIES

Six catchment areas take part in the CPES project.

#### ENGLAND

- 1. Roadford Lake and Salcombe-Kingsbridge estuary, Slapton & Gara Devon
- 2. South Downs groundwater Hampshire & West Sussex
- 3. Western Rother catchment West Sussex

#### FRANCE

- 4. Tremblay-Omonville catchment Normandy
- 5. Springs of la Vigne Normandy & Centre
- 6. Lac au Duc and river Yvel catchment Brittany

UNITED-KINGDOM



## Roadford lake Devon, England

#### In a nutshell

Lake area: **2.95km<sup>2</sup>** - Part of Strategic Drinking Water Supply Network

River Wolf: 22.4 linear kms Catchment area: 39.3 km<sup>2</sup> 127 agricultural holdings (78% of the catchment surface) Rural catchment

#### In a nutshell

Total catchment area: 134.8 km<sup>2</sup> 49 km of coastlines More than 20 000 inhabitants One town and numerous villages

- River Gara: 15 linear kms Catchment: 32.27 km<sup>2</sup>
- Slapton stream: 8.4 linear km Catchment: 14 km²
- 155 holdings (Gara & Slapton)

Problem: Algal blooms Sources: Elevated nutrients (phosphates and nitrogen) from agricultural land use, soil loss, sewage treatment works and private septic tanks

**Impacts:** Drinking water, industry, agriculture, fisheries, tourism & recreation, biodiversity

# Salcombe-Kingsbridge Estuary, Slapton & Gara catchments

Service and

**Devon, England** 

Roadford Lake forms part of the Drinking Water Supply and its rural catchment is predominantly agricultural. Alternative mechanisms are sought to balance land use and water quality protection here, whilst inviting broader investment interests and utilising & incorporating natural processes.

In South Devon, numerous tourism businesses trade off its rural and coastal natural assets; others impact on the rivers and estuary such as the agricultural sector, sewage company and private sewage from residents. This area has a high interest for achieving clean water but potentially low ability to pay. PES development will look at suitable scales and locations of solutions to motivate payments from businesses with a high dependency on the natural environment, and those impacted by the degradation of water quality and quantity.

Partners : Westcountry Rivers Trust

### WANT TO KNOW MORE ABOUT THE PROJECT, ITS CASE STUDIES AND PARTNERS AND READ THE NEWS?

Scan the QR Code with your phone camera to reach Interreg CPES website !





#### In a nutshell

650 000 inhabitants supplied PW's supply zone area: 868 km²

South Downs Farmers Group: 20 farmers Area: 17,308 ha

## South Downs groundwater Hamphire & West Sussex, England

Portsmouth Water has 11 supply areas for drinking water; the most pressing area is the Eastergate group of abstraction boreholes. Among multiple stakeholders, the principal sellers of the PES scheme are farmers and principal buyer is Portsmouth Water.

The project builds on the company's existing catchment management programme, the Downs & Harbours Clean Water Partnership which began in 2008 and the South Downs Farmers Group. Wishing to operate a more cost effective approach over end-of-pipe treatment and to help farmers to maintain their incomes, they are trialling cover cropping and the use of trees and forestry to reduce nitrate losses.

**Partners** : Portsmouth Water, South Downs National Park Authority, University of Chichester, Environment Agency

### Western Rother catchment West Sussex, England

Soil erosion within the catchment can be observed during periods of high rainfall. The Hardham river abstraction point is located upstream of a gauging weir and sediment accumulates here, forming an island. During periods of low flows this can make it difficult to abstract water from the river river and the sediment also brings pesticides and phosphates.

All of the water quality issues within the Western Rother catchment are inter-linked and connected to local geology, soil health and land management. Southern Water are working with farmers in the catchment through the Rother Valley Farmers Group to share best practice and learning in order to improve water and soil quality.

**Partners** : Southern Water, South Downs National Park Authority, University of Chichester, Environment Agency

**Problem:** Punctual exceed of the legal nitrate 50mg/l drinking water allowance, algal blooms **Sources:** Nitrates from agriculture, sewage treatment works, landfill, private septic tanks, percolating through the soil strata and direct movements via karstic features **Impacts:** Drinking water,

estuaries' ecosystems

#### In a nutshell

155 000 inhabitants 140 linear km of rivers Catchment area: 36 029 ha

Rother Valley Farmers' Group: 32 farmers Cluster's farms area: 8 667 ha

**Problem:** Punctual exceed of pollutants drinking water allowances

**Sources:** Sediment, pesticides, phosphate from agriculture and sewage treatment works

**Impacts:** Drinking water, agriculture



## Tremblay-Omonville catchment Normandy, France

Through the catchment management approach, the SERPN water company wishes to work on a long-term strategy to improve the quality of the raw water in its catchment areas. Since 2011, an action program has been set up with farmers to address the nitrate issue. With the implementation of an innovative aid scheme, the SERPN

wants to mobilize a high number of farmers to cover a larger area of their catchment areas. The idea is to make farmers actors in the production of quality water without imposing the means.

**Partners** : Syndicat d'Eau du Roumois et du Plateau de Neubourg, Sara Hernandez Consulting, Seine-Normandy Water Agency

#### In a nutshell

#### 16 towns

6 960 inhabitants 125 agricultural holdings 50 farmers in catchment approaches Total area: 6 200 ha Agricultural area: 95%

**Problem:** Risk to exceed of nitrates drinking water allowances

**Sources:** Nitrates from agriculture percolating through the chalk

**Impacts:** Drinking water, agriculture

#### In a nutshell

40 towns 316 agricultural holdings 100 farmers who contracted an AEM at least once Total area: 37 550 ha Agricultural area: 60%

## Springs of la Vigne catchment Normandy & Centre, France

As part of the Eau de Paris resource protection strategy that combines agricultural actions and land-use planning, they have offered financial support to farmers since 2008, through Agro-Environment Measures (AEM) and support for organic farming.

To increase the dynamics of engagement in sustainable agricultural practices, Eau de Paris is building an innovative support system for farmers who act for the protection of water resources.

**Partners** : Eau de Paris, Sara Hernandez Consulting, Seine-Normandy Water Agency

**Problem:** Regular exceedence of the legal nitrate 50mg/l drinking water allowance

**Sources:** Nitrates from agriculture, sewage treatment works, landfill, private septic tanks, percolating through the soil strata and direct movements via karstic features

Impacts: Drinking water

### Lac au Duc and river Yvel-Hyvet catchment Brittany, France

Grand Bassin de l'Oust (GBO) have offered financial support, in particular via Agro-Environment Measures (MAE), to farmers since 1991. Financial support is aimed at reducing the input of phosphorus from agriculture in the catchment to the lake.

The GBO and its scientific partners are building a system combining a more precise diagnosis of phosphorus emissions and innovative, better-targeted financial tools to accelerate the recovery of the lake's water quality.

**Partners** : Syndicat Mixte du Grand Bassin de l'Oust, University de Rennes 1, CNRS, INRA, Sara Hernandez Consulting

#### In a nutshell

21 300 inhabitants 382 agricultural holdings (2014) Total area: 37 328 ha Agricultural area: 60% 380 linear km of rivers Lake area: 250 ha

Problem: Eutrophication and toxic algal blooms
Sources: Phosphate from agriculture (main), sewage and close sources (second)
Impacts: Drinking water

abstraction, tourism (bathing, nautical activities, angling), agriculture

# **14 PARTNERS**

#### University of Chichester Lead partner - Responsible for Management

Bognor Regis, West Sussex, UK www.chi.ac.uk

#### Syndicat Mixte du Grand Bassin de l'Oust

Responsible for Project Communication

Ploërmel, Bretagne, FR www.grandbassindeloust.fr

#### South Downs National Park Authority

Midhurst, West Sussex, UK www.southdowns.gov.uk





#### **Portsmouth Water**

Havant, Hampshire, UK www.portsmouthwater.co.uk





#### Westcountry Rivers Trust Responsible for PES Implementation

Stoke Climsland, Cornwall, UK wrt.org.uk





# French National Center for Scientific Research

Rennes, Bretagne, FR www.portsmouthwater.co.uk



#### **French National Institute** for Agricultural Research

Rennes, Bretagne, FR www inra fr



UNIVERSITÉ DE

RFNN



#### Sara Hernandez Consulting

Responsible for Policy Framework

Paris, Île de France, FR www.sarahernandezconsulting. com

#### Syndicat d'Eau du Roumois et du Plateau de Neubourg

Le Thuit de l'Oison, Normandie, FR www.serpn.com

#### Southern Water

Worthing, West Sussex, UK www.southernwater.co.uk

**University of Rennes 1** 

Rennes, Bretagne, FR

www.univ-rennes1.fr

#### **Environment Agency**

Worthing, West Sussex, UK https://www.gov.uk/ea



Agency

Southern

Environment



#### Eau de Paris

Paris, Île de France, FR www.eaudeparis.fr



#### **Seine Normandy Water** Agency

Nanterre, Île de France, FR www.eau-seine-normandie.fr

# Interreg EUROPEAN UNION France ( Channel ) England



## **Channel Payments for Ecosystem Services**

**European Regional Development Fund** 

# **STAY IN TOUCH WITH THE PROJECT!**

Register to our newsletter via website and follow us on social media



www.cpes-interreg.eu



**@ Interreg Channel Payments** for Ecosystem Services