



*belini*

# LIFE Platform meeting FOCUS ON WATER RESILIENCE STRATEGY

LIFE Strategic Integrated Projects implementing River  
Basin Management Plans practices

Day 1.

Workshop B

**QUANTITATIVE WATER MANAGEMENT**

**Carolina García Suikkanen**

Head of the Technical Services,  
River Ebro Water Authority

14-15 October 2025

Brussels

This meeting is  
organised by



# PROJECT TITLE: LIFE EBRO RESILIENCE STRATEGY: FLOOD RISK MANAGEMENT THROUGH GREEN INFRASTRUCTURES AND ADAPTATION MEASURES



**RBMP TARGETED:** EBRO RBMP THIRD CYCLE (2021-2027)

## BENEFICIARIES:

- COORDINATING BENEFICIARY: TRAGSATEC
- 1 NATIONAL AUTHORITY (CHE- MITECO)
- 3 REGIONAL GOVERNMENTS (LA RIOJA, NAVARRA, ARAGÓN)
- 1 PUBLIC COMPANY (TRAGSA)

**TOTAL BUDGET:** € 13,310,350

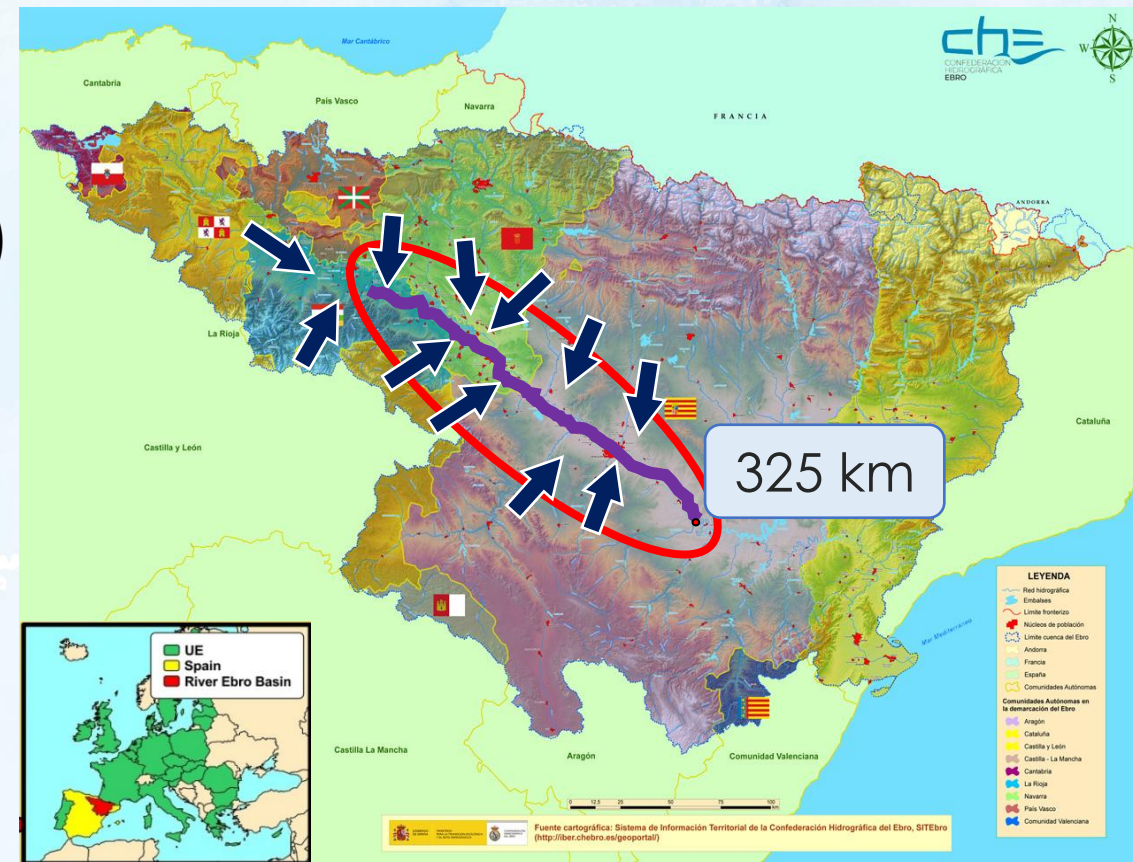
**START AND END DATES:** 01/09/2021 TO 31/08/2027

## PRESENTED BY:

CAROLINA GARCÍA SUIKKANEN

TECHNICIAN, CONFEDERACIÓN HIDROGRÁFICA DEL EBRO

[cgarcia@chebro.es](mailto:cgarcia@chebro.es)





## Objective

To make the middle course of the Ebro River more resilient to floods, through **two interventions (demo and pilot)** for flood management, and with the **engagement of local communities**. The project will be carried out in **three Ebro Basin regions**, and will **empower municipalities and people in Flood Risk Management (FRM)** and decision-making during flood events, thus raising the **awareness and acceptance of society in emergency events**.

# LIFE EBRO RESILIENCE P1 PROJECT

EBRO  
RESILIENCE



EBRO  
RESILIENCE P1

## Main expected results:

### IMPROVEMENTS AGAINST FLOOD RISK

**1800 m** levees removed  
**4000 m** levees set back  
**800 ha** improved against floods

### IMPROVEMENTS IN ECOLOGICAL STATUS

**15%** increase in riparian habitats  
**60 ha** land river space recovered  
**20 ha** river forests incorporated  
**2 ha** alien species eliminated  
**2 meanders** reconnected  
**2 high water channels** created  
**1 km** branch of river reconnected

### ECONOMIC EFFICIENCY

**50%** saving in damages

### SOCIAL ENGAGEMENT

Capacitation in flood risk management: **22,873 inhabitants**

Participation/Information actions: **18 workshops**

Training actions: **16 campaigns**

Decision making: **5 co-creation groups** with stakeholders

Diffusion: **1 website, 4 RRSS, 1 quarterly newsletter**

Replication: **1 replication plan** (4 networking)

[cgarcia@chebro.es](mailto:cgarcia@chebro.es)



GOBIERNO DE NAVARRA



GOBIERNO DE ARAGON



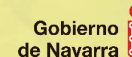
GOBIERNO DE LAS ILAS BALEARES



GOBIERNO DE CANTABRIA



GOBIERNO DE CASTILLA Y LEÓN



Gobierno de Navarra



Nafarroako Gobernua



orekan



Tragsa



Tragsatec



GOBIERNO DE NAVARRA



GOBIERNO DE ARAGON



GOBIERNO DE LAS ILAS BALEARES



GOBIERNO DE CANTABRIA



GOBIERNO DE CASTILLA Y LEÓN



# LIFE EBRO RESILIENCE P1 PROJECT

EBRO  
RESILIENCE



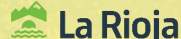
EBRO  
RESILIENCE  
P1



[cgarcia@chebro.es](mailto:cgarcia@chebro.es)



Gobierno de Navarra





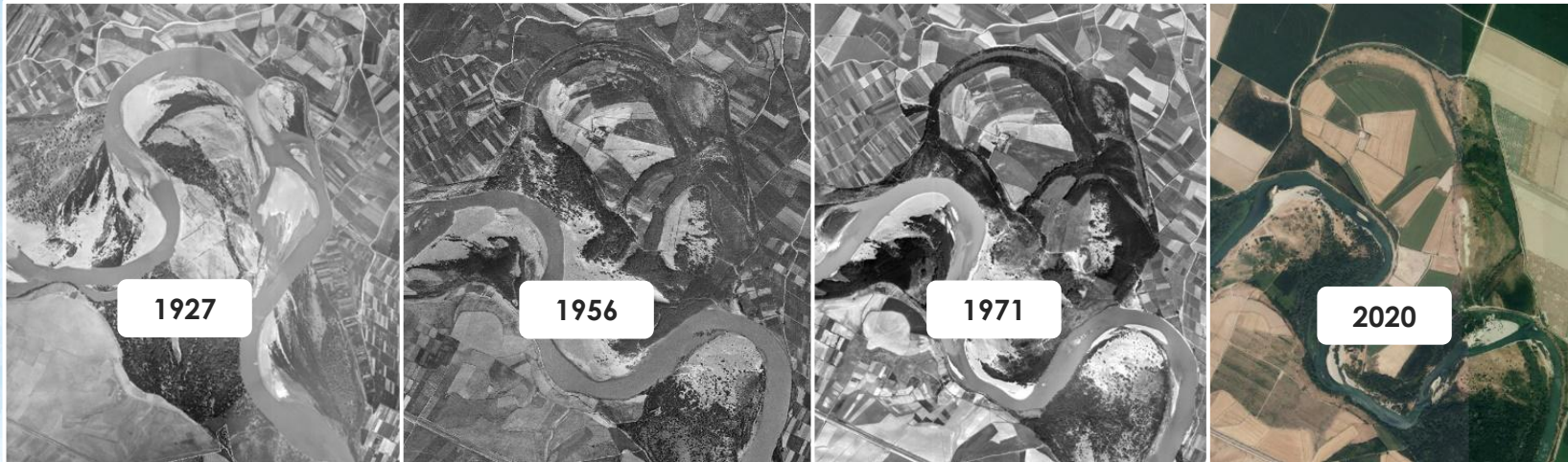
# LIFE EBRO RESILIENCE P1 PROJECT

EBRO  
RESILIENCE

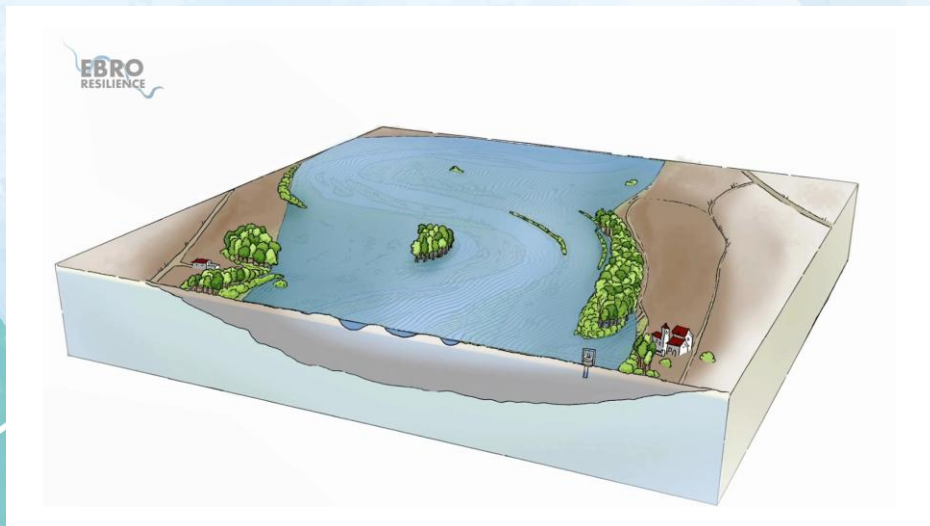


EBRO  
RESILIENCE  
P1

## Why is this happening?



River basin regulation  
Loss of river space  
**-50% in 100 years**



**555 km of levees on 325 km of riverbed**  
Occupation of space by **vulnerable** uses



[cgarcia@chebro.es](mailto:cgarcia@chebro.es)



Gobierno  
de Navarra



Nafarroako  
Gobernua

GOBIERNO  
DE ARAGON

Instituto Aragonés del  
AGUA

La Rioja

orekan  
Gestión Ambiental de Navarra

Tragsa  
Grupo Tragsa

Tragsatec  
Grupo Tragsa



# LIFE EBRO RESILIENCE P1 PROJECT

EBRO  
RESILIENCE



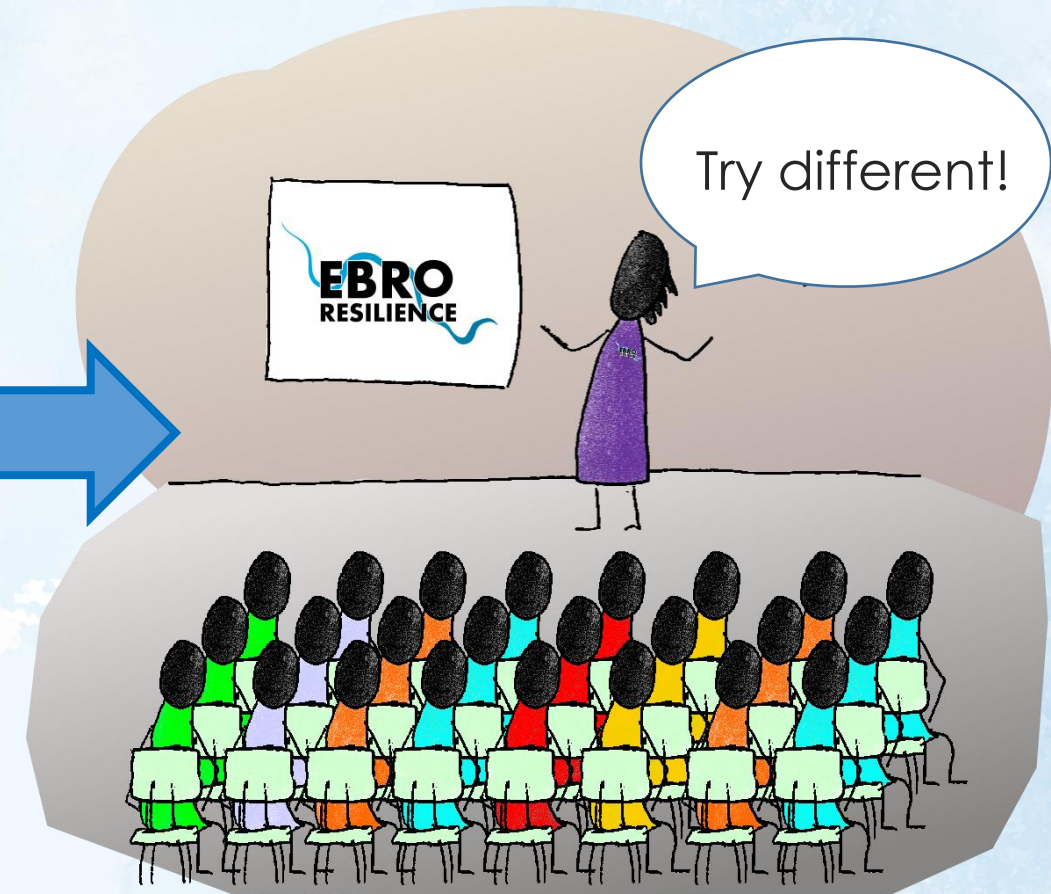
EBRO  
RESILIENCE  
P1

## Change the model

Where is the river?

Try different!

EBRO  
RESILIENCE



cgarcia@chebro.es



GOBIERNO  
DE ARAGON

Instituto Aragonés del  
AGUA

La Rioja

Gobierno  
de Navarra



Nafarroako  
Gobernua

orekan  
Gestión Ambiental de Navarra

Tragsa  
Grupo Tragsa

Tragsatec  
Grupo Tragsa

# LIFE EBRO RESILIENCE P1 PROJECT

EBRO  
RESILIENCE



EBRO  
RESILIENCE  
P1

Public participation

Water Framework  
Directive 2000



**EBRO  
RESILIENCE**



Floods Directive 2007

Administrations coordination

[cgarcia@chebro.es](mailto:cgarcia@chebro.es)



GOBIERNO  
DE ARAGON

Instituto Aragonés del  
AGUA

La Rioja

Gobierno  
de Navarra

Nafarroako  
Gobernua

orekan  
Gestión Ambiental de Navarra

Tragsa

Tragsatec

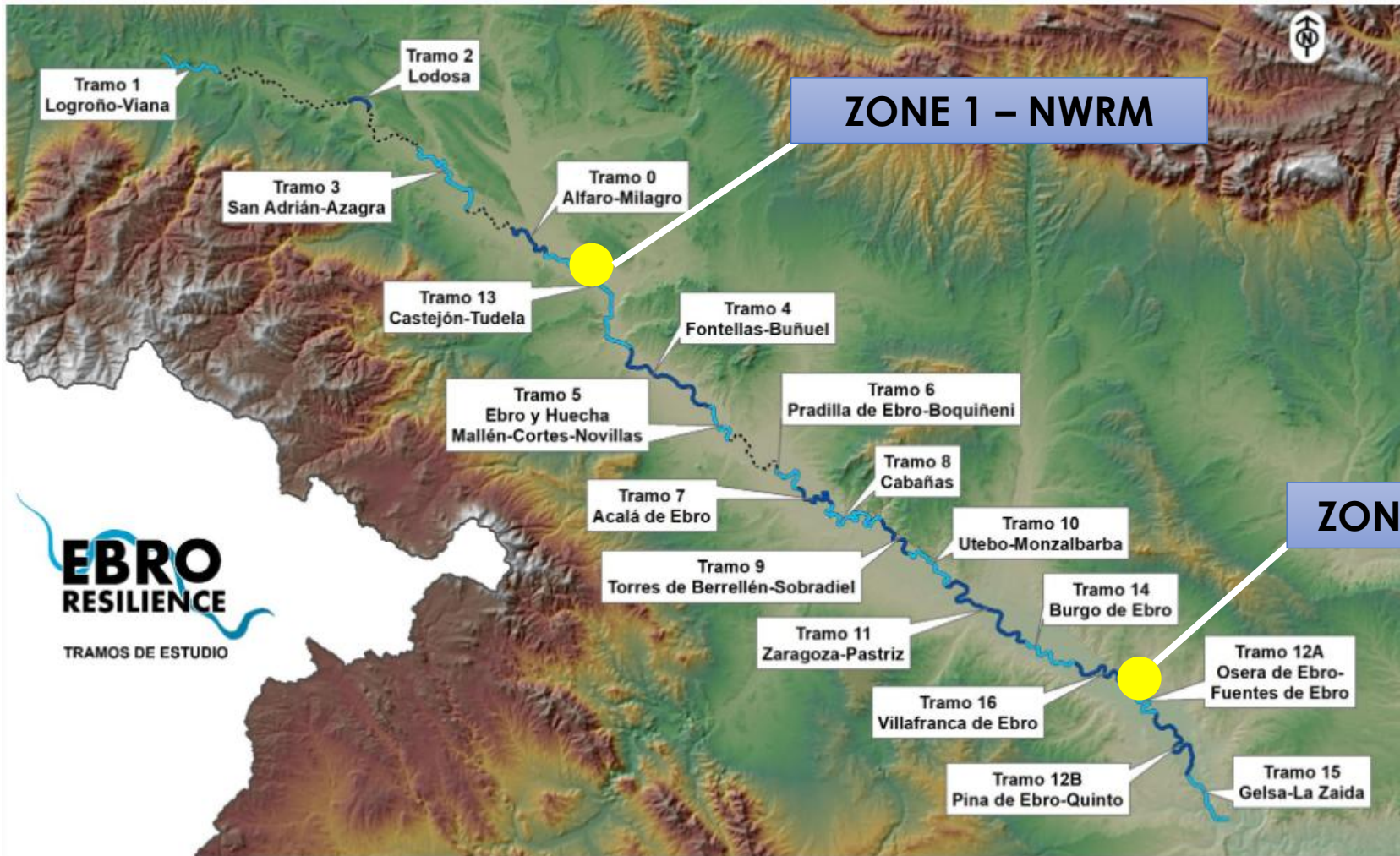


# LIFE EBRO RESILIENCE P1 PROJECT

EBRO  
RESILIENCE

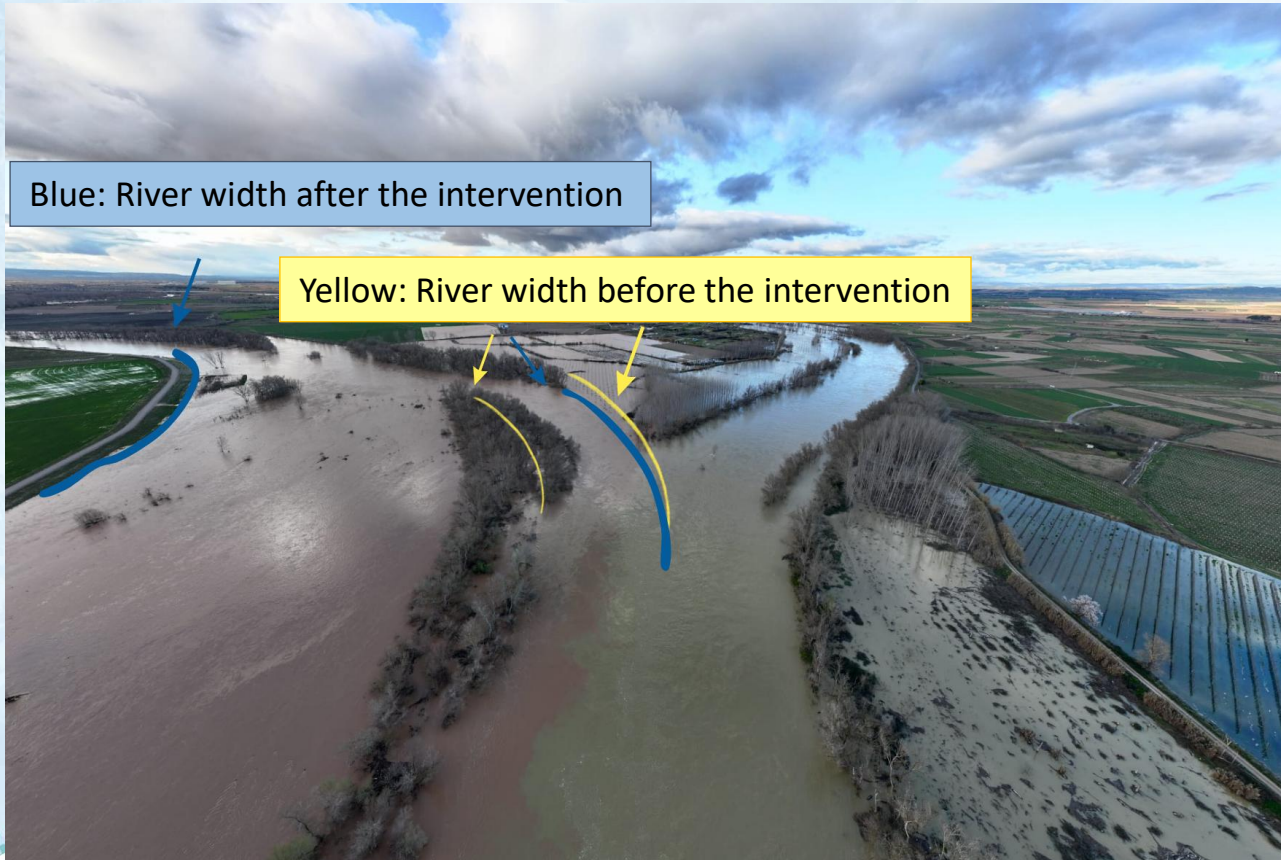


EBRO  
RESILIENCE  
P1





## NATURAL WATER RETENTION MEASURES



## EBRO RESILIENCE STRATEGY – ZONE 1

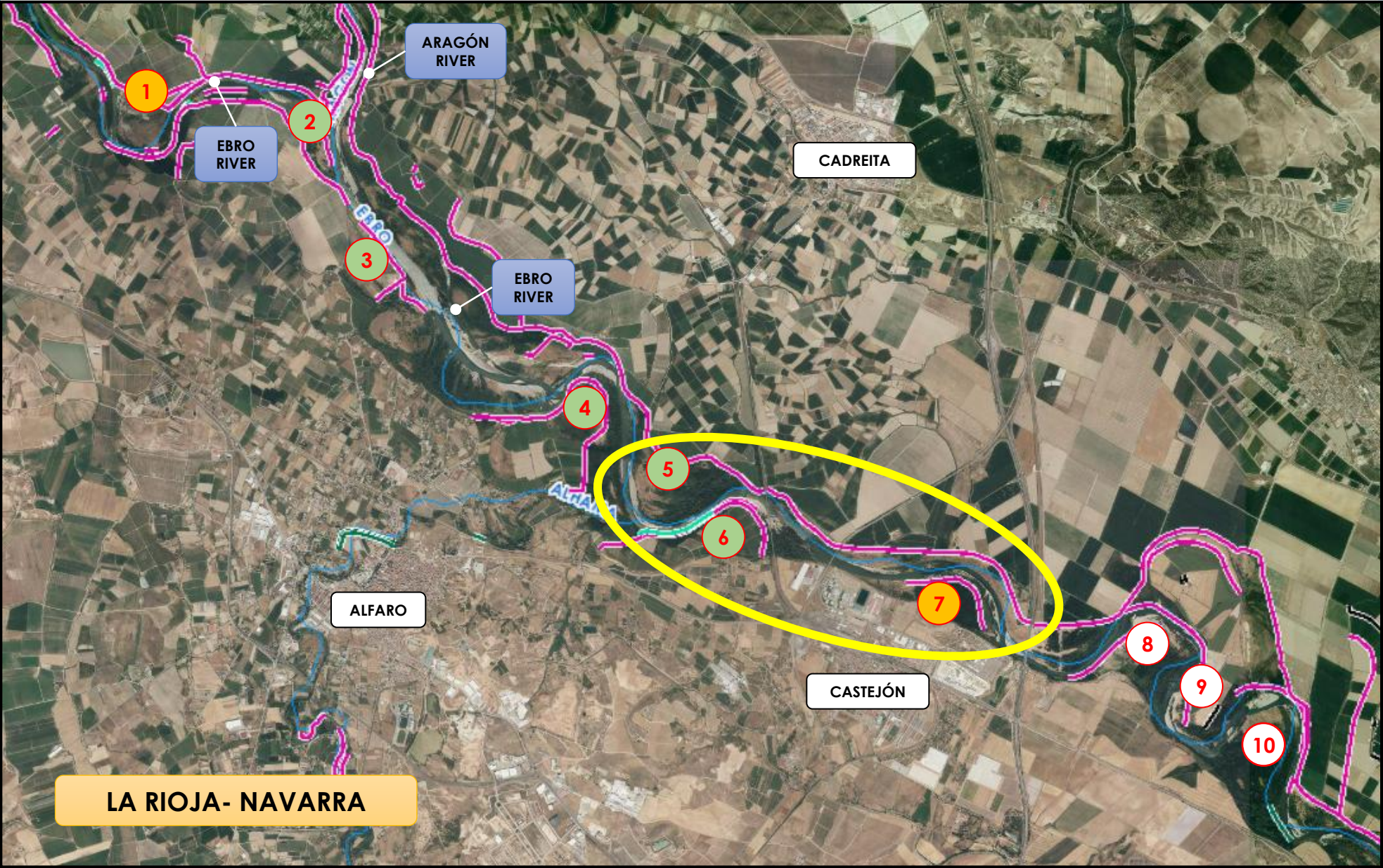
**Flood Plain Recovery**

**Meander Reconnection**

**Secondary River Courses Recovery**



# ZONE 1: NATURAL WATER RETENTION MEASURES





## ZONA 1 MEANDRO DEL SOTO DE ALFARO (ALFARO-LA RIOJA)

EBRO  
RESILIENCE

Life  
P1

Life

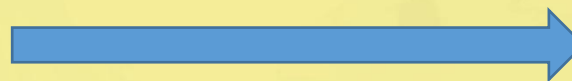
NATURA 2000

EBRO  
RESILIENCE

Life  
P1



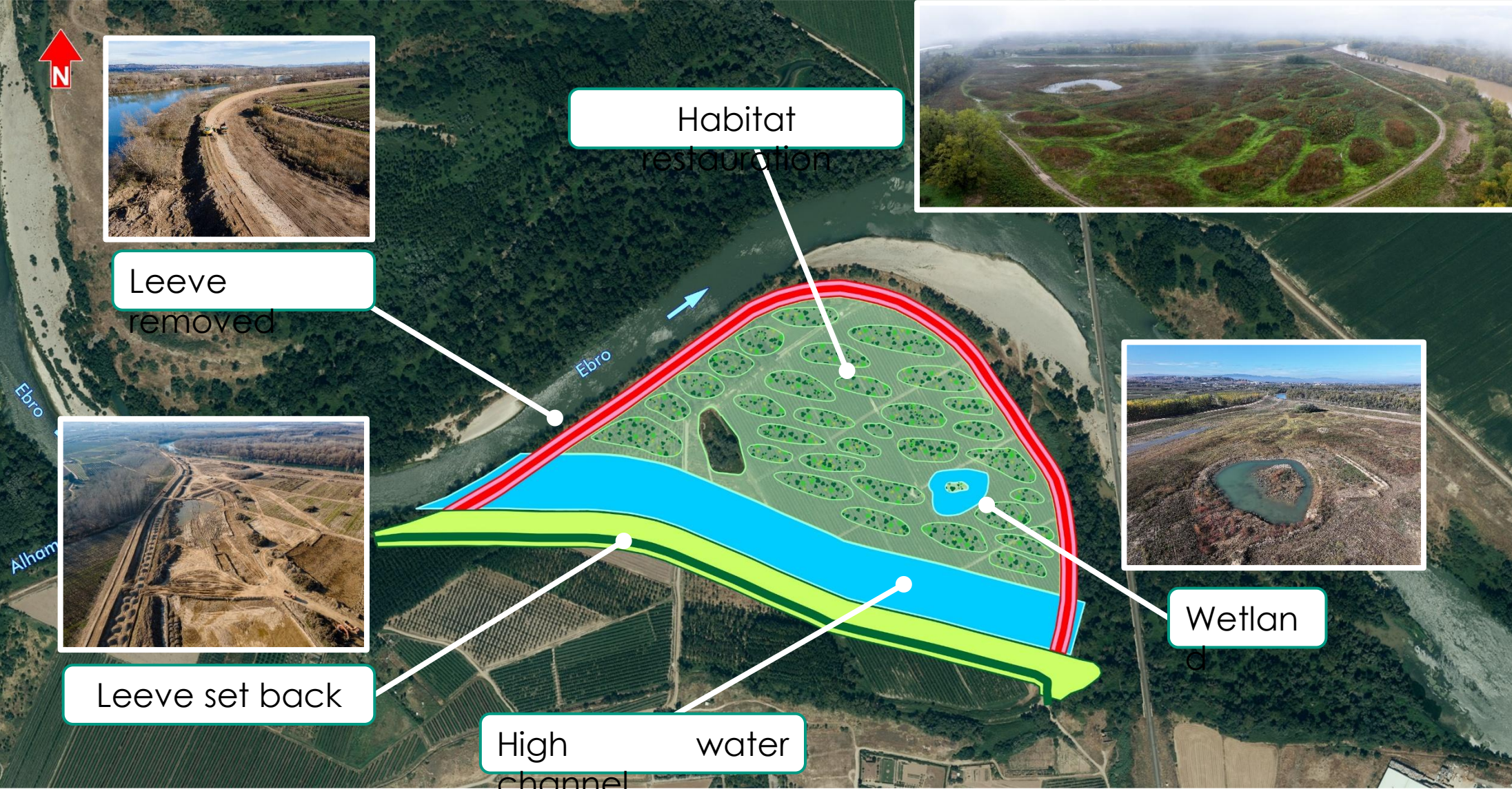
Aprox. 1.200 m<sup>3</sup>/s



Aprox. 300 m<sup>3</sup>/s



# ZONA 1 MEANDRO DE LA ROZA (ALFARO-LA RIOJA)





# ZONE 1 MEANDRO DE LA ROZA (ALFARO-LA RIOJA)

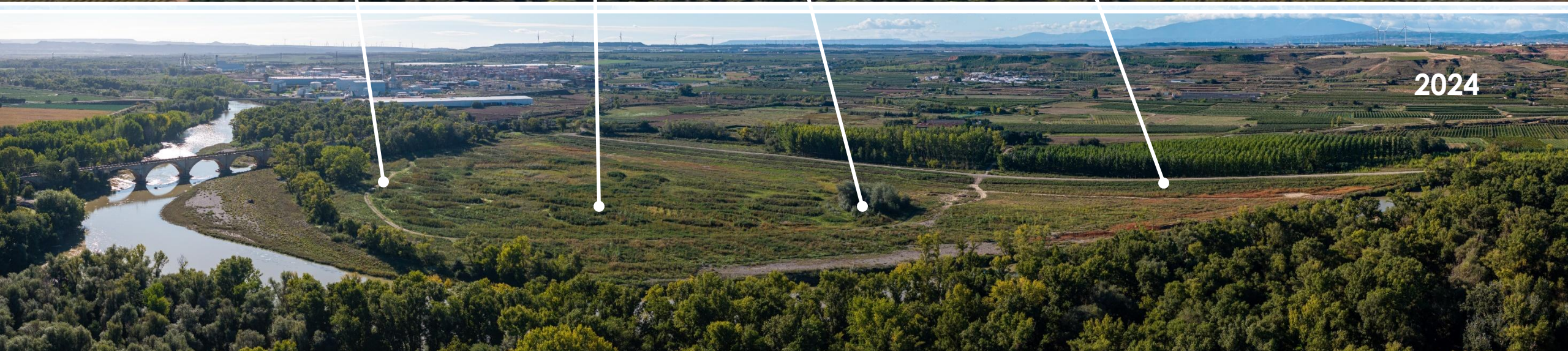
EBRO  
RESILIENCE



EBRO  
RESILIENCE  
P1



2020



2024



# ZONE 1 MEANDRO DE LA ROZA (ALFARO-LA RIOJA)

**EBRO**  
RESILIENCE



**EBRO**  
RESILIENCE  
P1

February 2024



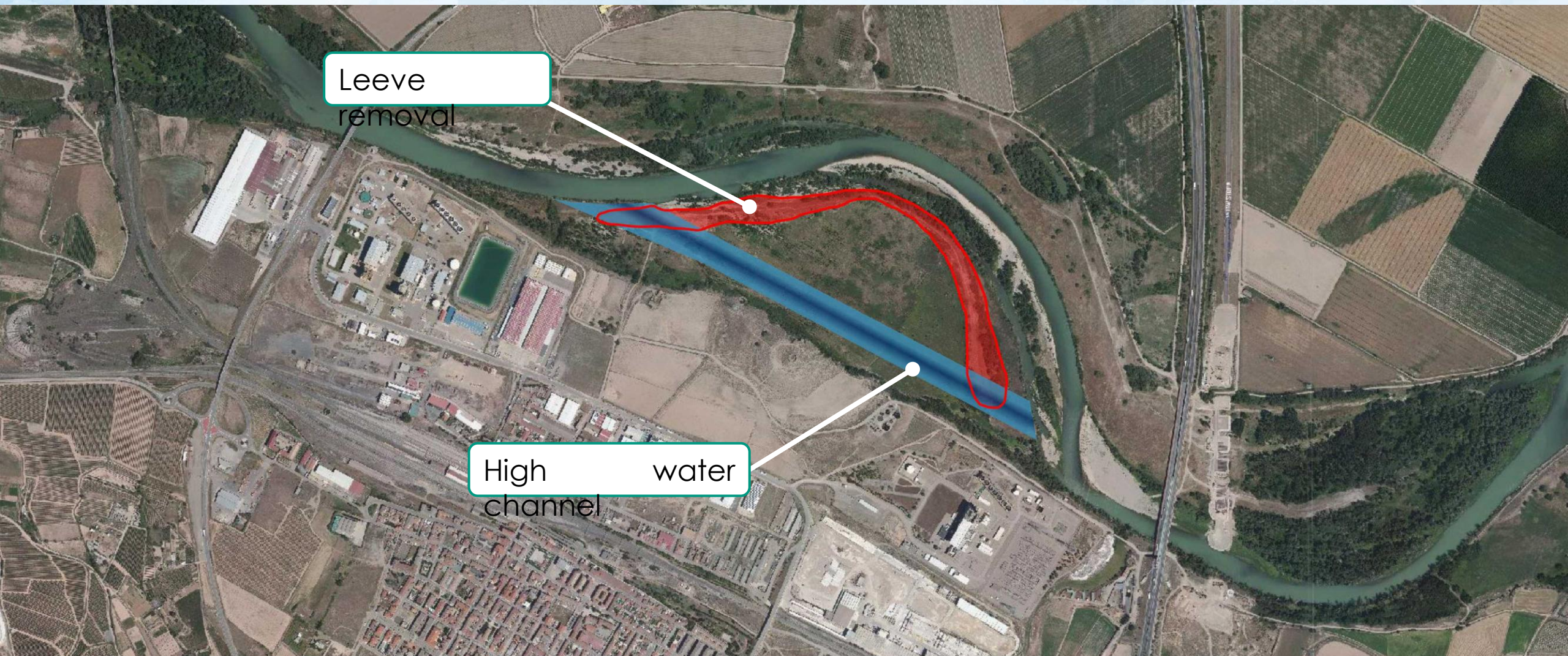


# ZONE 1 MEANDRO DE EL SEÑORÍO (CASTEJÓN-NAVARRA)

EBRO  
RESILIENCE



EBRO  
RESILIENCE



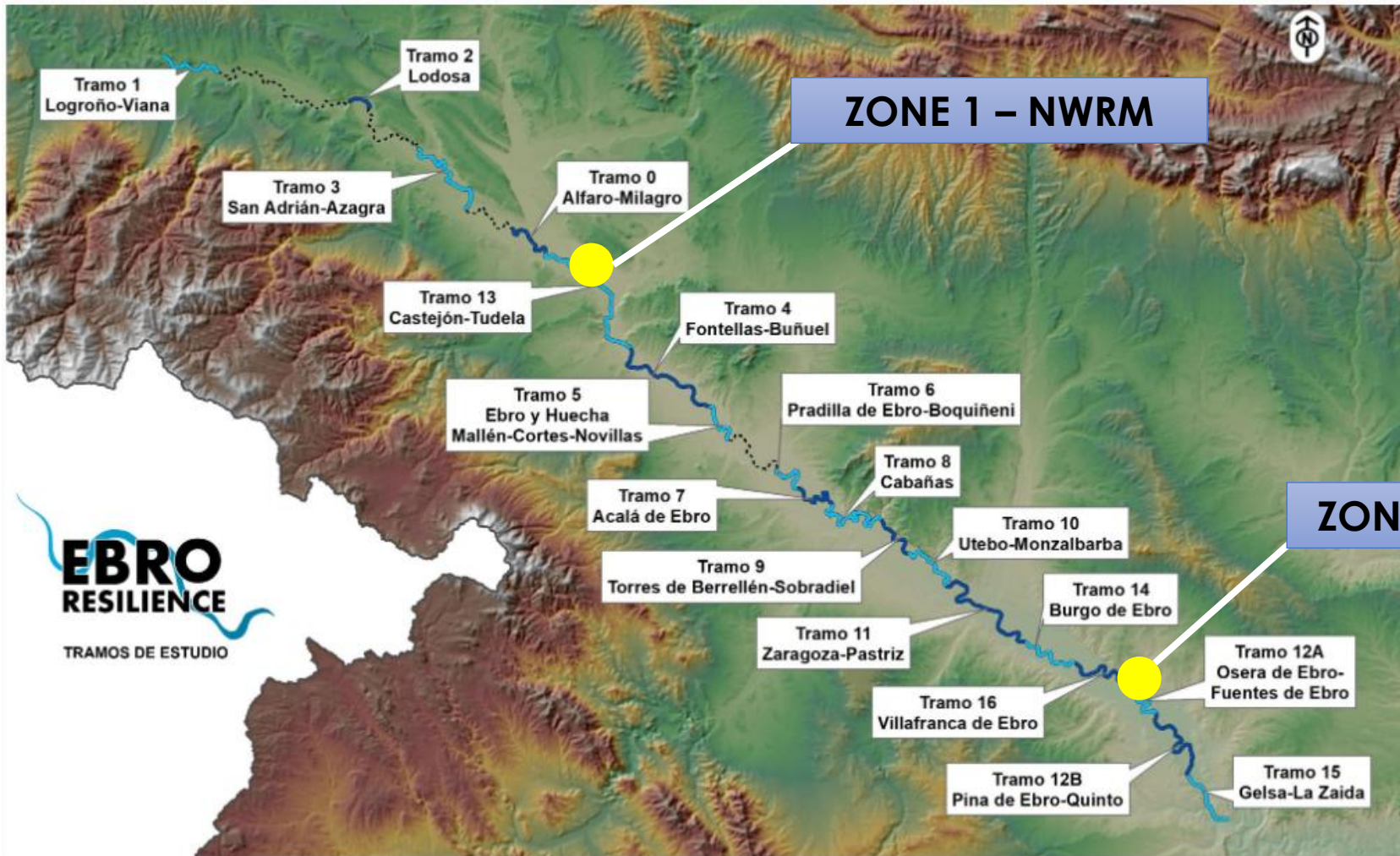


# LIFE EBRO RESILIENCE P1 PROJECT

**EBRO**  
RESILIENCE **P1**



**EBRO**  
RESILIENCE **P1**





Fight water with water:

BUFFER ZONE FOR LATERAL FLOWS

CROPS FLOOD DAMAGES

Loss of soil

Leeve damage

Infrastructural damage  
(irrigation system, paths...)

Crops lost

Recovery time

CAUSES OF FLOOD DAMAGES

Water speed

Water speed

Water speed

Water speed, flood level,  
flooding time (damm effect)

Flooding time (damm effect)

EFFECTS

AVOIDED

AVOIDED

AVOIDED

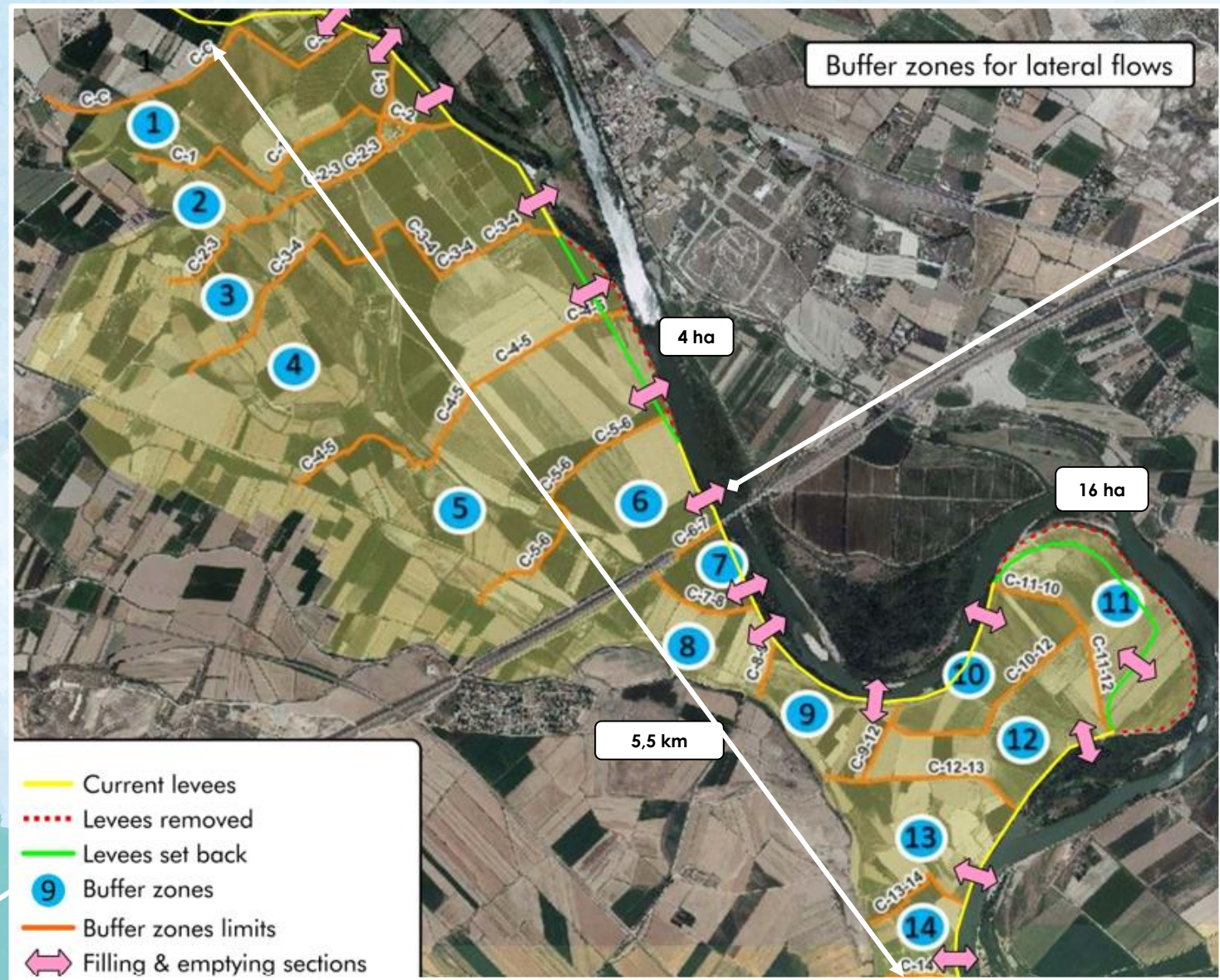
REDUCED/EQUAL

REDUCED





# ZONE 2 ADAPTATION (OSERA DE EBRO Y FUENTES DE EBRO-ZARAGOZA)





# LIFE EBRO RESILIENCE P1 PROJECT



## Stakeholders and public involvement

- 3 Working groups.
- 6 Co-creation groups.
- 1 Group to manage conflicts.
- 18 Participation actions.
- 16 Capacity building with local population.



[cgarcia@chebro.es](mailto:cgarcia@chebro.es)



Gobierno  
de Navarra

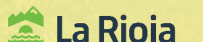
Nafarroako  
Gobernua



orekan  
Gestión Ambiental de Navarra



Tragsa  
Unico Riego



Tragsatec  
Unico Riego

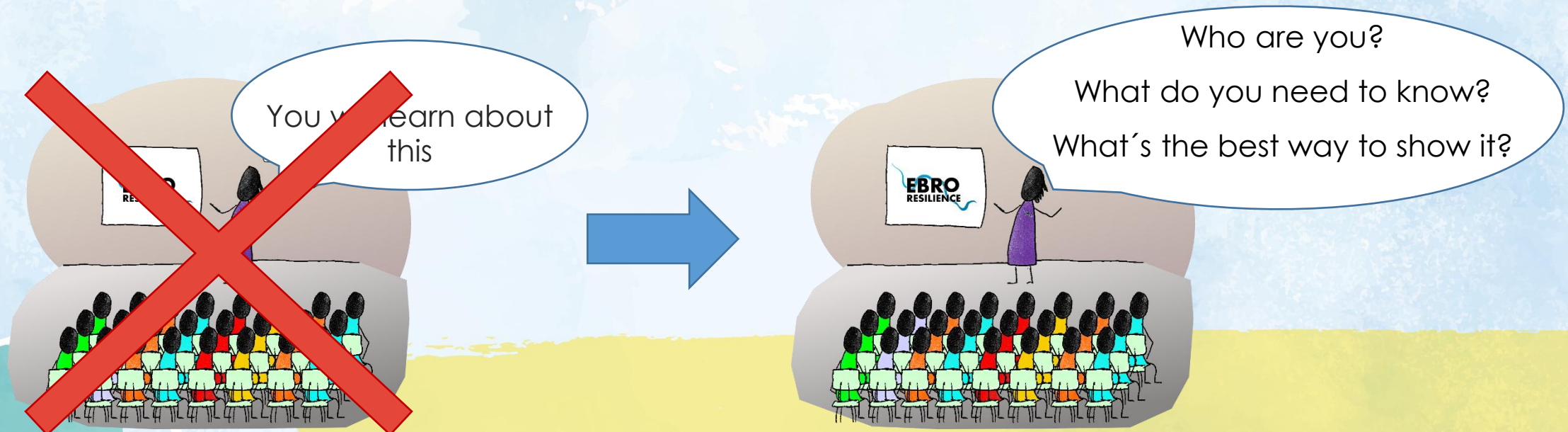


## Stakeholders and public involvement

**Participation Plan:** diagnoses the initial situation and proposes specific measures in each section.

**Training Plan:** divided by sectors (local administration, education, agriculture and livestock, environmentalism and communication).

**Communication Plan:** Using an appropriate channel for each target audience .



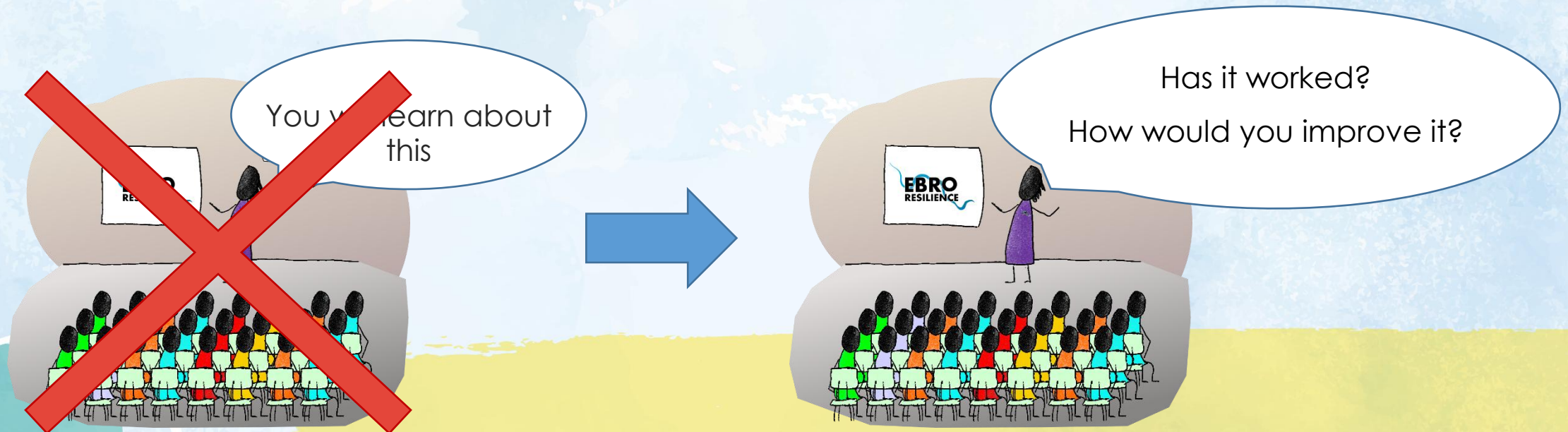


## Stakeholders and public involvement

**Participation Plan:** diagnoses the initial situation and proposes specific measures in each section.

**Training Plan:** divided by sectors (local administration, education, agriculture and livestock, environmentalism and communication).

**Communication Plan:** Using an appropriate channel for each target audience .





# LIFE EBRO RESILIENCE P1 PROJECT



## Stakeholders and public involvement

## Communication actions

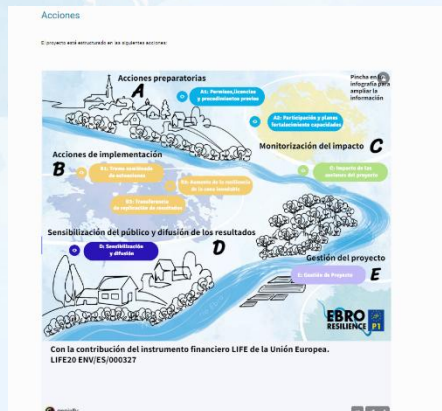
Channels used: all available social media



Updated website with attractive content.

Las 5 claves del proyecto son:

- 1** El cambio en la gestión de las inundaciones, estableciendo un nuevo modelo fluvial basado en la ADAPTACIÓN a la inundación y la CONSERVACIÓN de los ecosistemas fluviales.
- 2** La implicación de la población como eje transversal de las acciones y parte indisoluble de la gestión de las inundaciones, buscando lograr resultados más sólidos, mejorar el conocimiento y alcanzar alternativas más sostenibles, ambiental, social y económicamente.
- 3** La coordinación administrativa y cooperación institucional en los tramos de intervención, siendo sus socios el Ministerio para la Transición Ecológica y el Reto Demográfico (MITECO), a través de la empresa TRAGSA y su filial TRAGSATEC; Confederación Hidrográfica del Ebro; Gobierno de La Rioja; Gobierno de Navarra, a través de Gestión Ambiental de Navarra, SA (GAN-NIK), Gobierno de Aragón y el Instituto Aragonés del Agua.



cgarcia@chebro.es





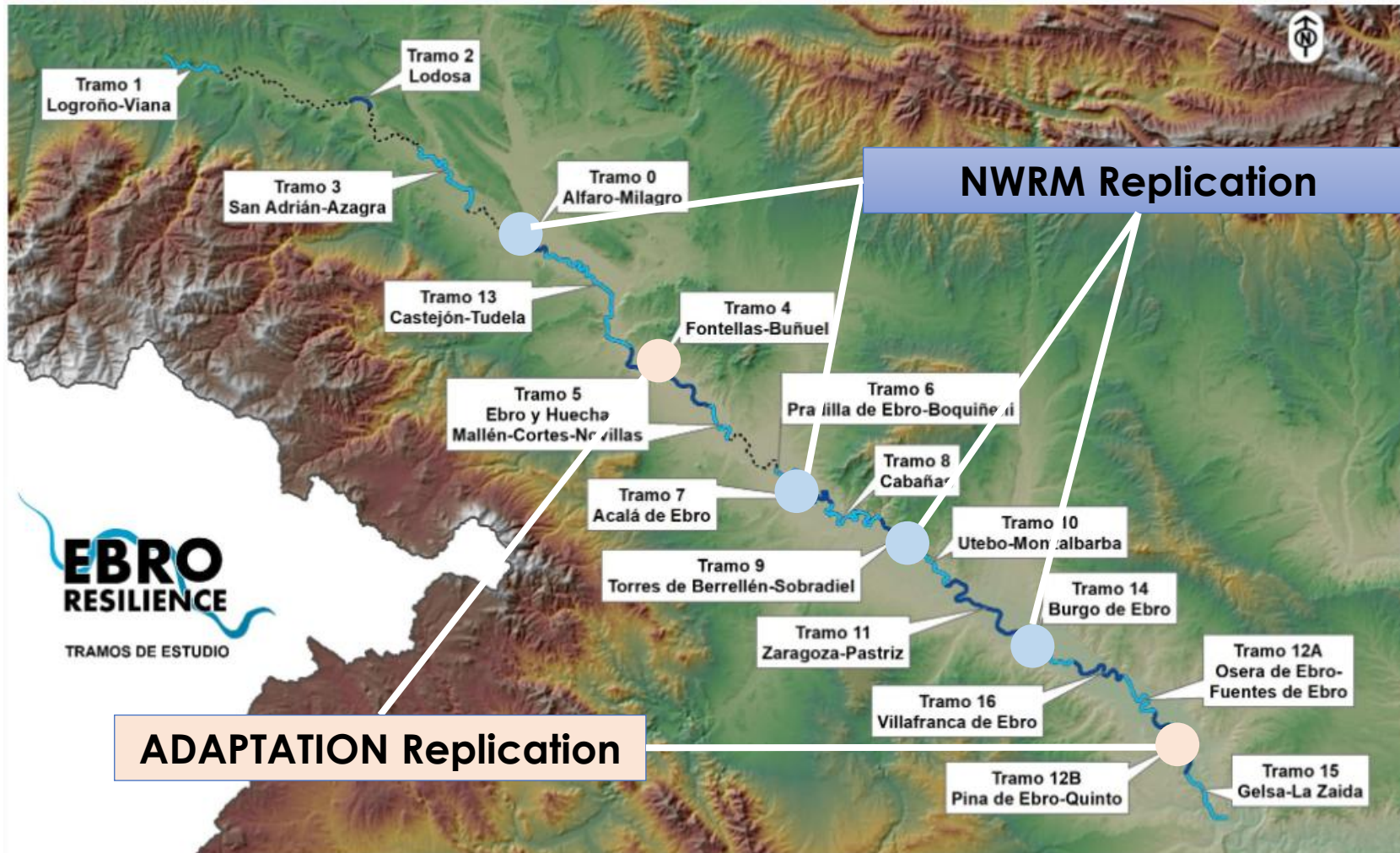
# LIFE EBRO RESILIENCE P1 PROJECT

EBRO  
RESILIENCE  
P1



EBRO  
RESILIENCE  
P1

## Work & impacts towards the next RBMP update





# LIFE EBRO RESILIENCE P1 PROJECT



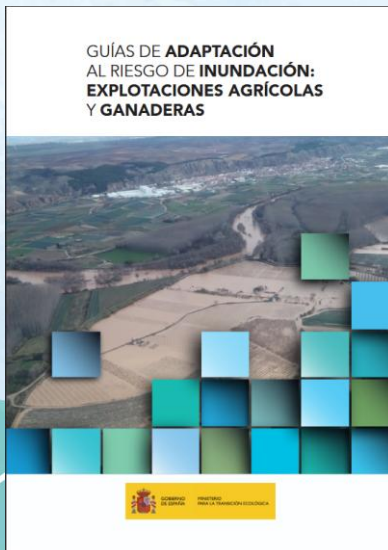
## Expected impact on local/regional/national/EC policies



Inter-administrative coordination facilitates the implementation of interventions aligned with the Estrategia Ebro Resilience objectives, including NBS, NWRM, Green Infrastructures

### Tercera convocatoria de subvenciones del Gobierno de Navarra para la adaptación al riesgo de inundación

© 28 julio, 2025



Núm. 81

Boletín Oficial de Aragón

02/05/2023



#### DEPARTAMENTO DE AGRICULTURA, GANADERÍA Y MEDIO AMBIENTE

**ORDEN AGM/530/2023, de 17 de abril, por la que se aprueba la convocatoria de subvenciones a entidades locales para la adquisición de parcelas afectadas por inundaciones dentro de la Estrategia Ebro Resilience y en el marco del Plan de Recuperación, Transformación y Resiliencia.**

El Reglamento (UE) 2021/241 del Parlamento Europeo y del Consejo de 12 de febrero de 2021, establece el Mecanismo de Recuperación y Resiliencia, que se configura como uno de los instrumentos financieros desarrollados en el marco del Next Generation EU, cuyo objetivo

BOR

BOLETÍN OFICIAL DE LA RIOJA

Núm.184

Viernes, 20 de septiembre de 2024

Página 16284

### III.Otras disposiciones y actos

#### CONSEJERÍA DE AGRICULTURA, GANADERÍA, MUNDO RURAL Y MEDIO AMBIENTE

*Resolución 362/2024, de 16 de septiembre, de la Dirección General de Calidad Ambiental, Cambio Climático y Agua, de concesión de subvenciones para actuaciones de adaptación al riesgo de inundación de las edificaciones, equipamientos e instalaciones o explotaciones existentes en los municipios riojanos del tramo medio de la cuenca del Río Ebro, dentro de la Estrategia Ebro Resilience y en el marco del Plan de Recuperación, Transformación y resiliencia, financiadas por la Unión Europea NextGenerationEU*

202409190109382

III.3387

cgarcia@chebro.es



Gobierno de Navarra



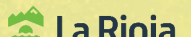
Nafarroako Gobernua



orekan  
Gestión Ambiental de Navarra



Tragsa



Tragsatec



# The Ebro Resilience Strategy and Flood Adaptation

## Challenges

**Land availability** in time: know the territory and its people, legal knowledge, negotiation skills, realistic timing, **don't lose the opportunity!**

**Social opposition** to the project: make the people be part of the project.

**Administrative processes**: realistic deadlines to avoid project implementation delay.

**Contingency plan** available



## Best practices and final comments

It is important to have a **multisector team** of professionals who **work in a coordinated manner**.

**Inter-administrative coordination** facilitates the implementation of interventions, both in terms of processing and social acceptance.

Carrying out a **diagnosis of the initial** situation allows us to design actions in a specific way.

**Negotiation skills** allow agreements to be reached even if they are not optimal

The **contents** of the social activities must be attractive to the public and specific for each sector.

Having clear **plans** is important for developing social actions.

Using an **appropriate channel for each target audience** increases the chances of success.

Patience and good sense of humour.

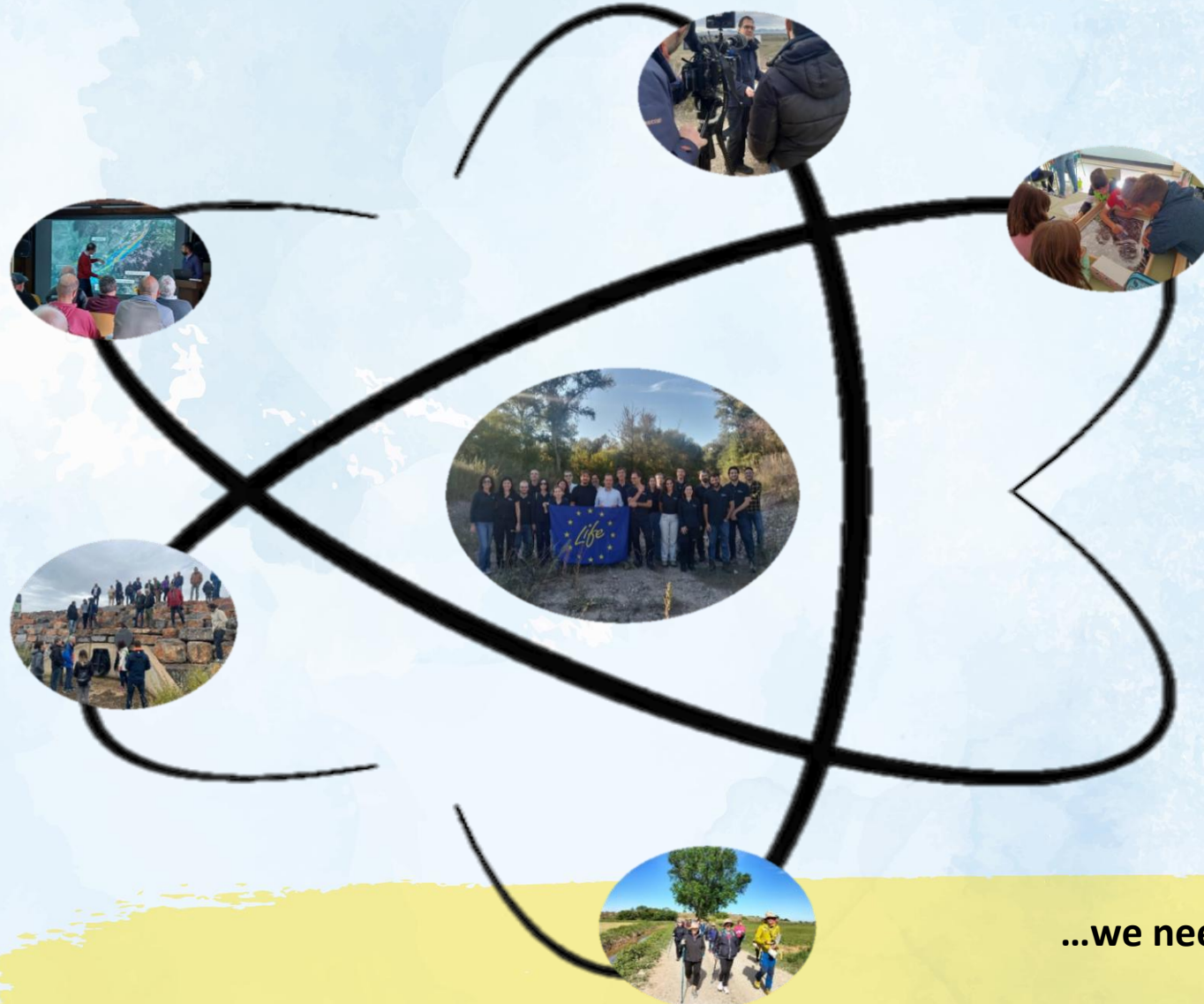


# LIFE EBRO RESILIENCE P1 PROJECT



## Best practices

We are not the center...



...we need to stay together



# THANK YOU!





CAUCE  
PRINCIPAL

