

International cooperation on operational management of water resources integrated river basin level

Illustrated by two case studies :
EPTB Durance and Loire

ANEB

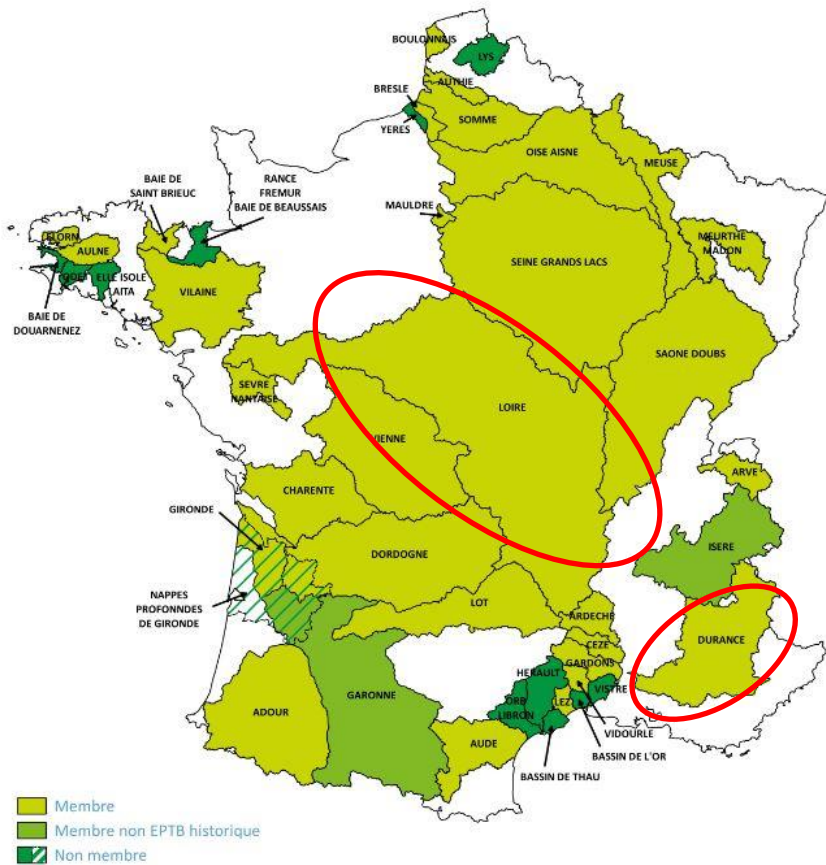
National Association of River Basin Elected Representatives
Caroline JOIGNEAU GUESNON / Yann EGLIN

EPTB DURANCE

Territorial Public Basin Establishment of DURANCE
Sandrine DHENAIN

EPTB LOIRE

Territorial Public Basin Establishment of LOIRE
Maxime LE SOMMER



River basin scale is the key to integrate water management issues in all components of local policies and water use :

hazard prevention, agriculture, urban planning, **recreational activities**, **biodiversity preservation**...



We carry principles of **integrated management** and **territorial solidarity**. These principles will be enhanced as we undergo climate change.



River basin scale
+
Integrated water management
+
Territorial solidarity
=
A key to confront climate changes ?

Several EPTB (territorial public basin entities) have been involved in international cooperation projects with others territories, characterized by different contexts (geographic, hydrologic, policies) to benefit from each other's perspective and experience.

2 examples of cooperation projects with different goals and approaches are presented. They all provide rich insights regarding the benefits of getting engaged in such projects.



When SMAVD - EPTB Durance gets involved in an international cooperation project:

Improvement of the living conditions of Palestinian farmers and integrated management of water resources in Hebron Governorate

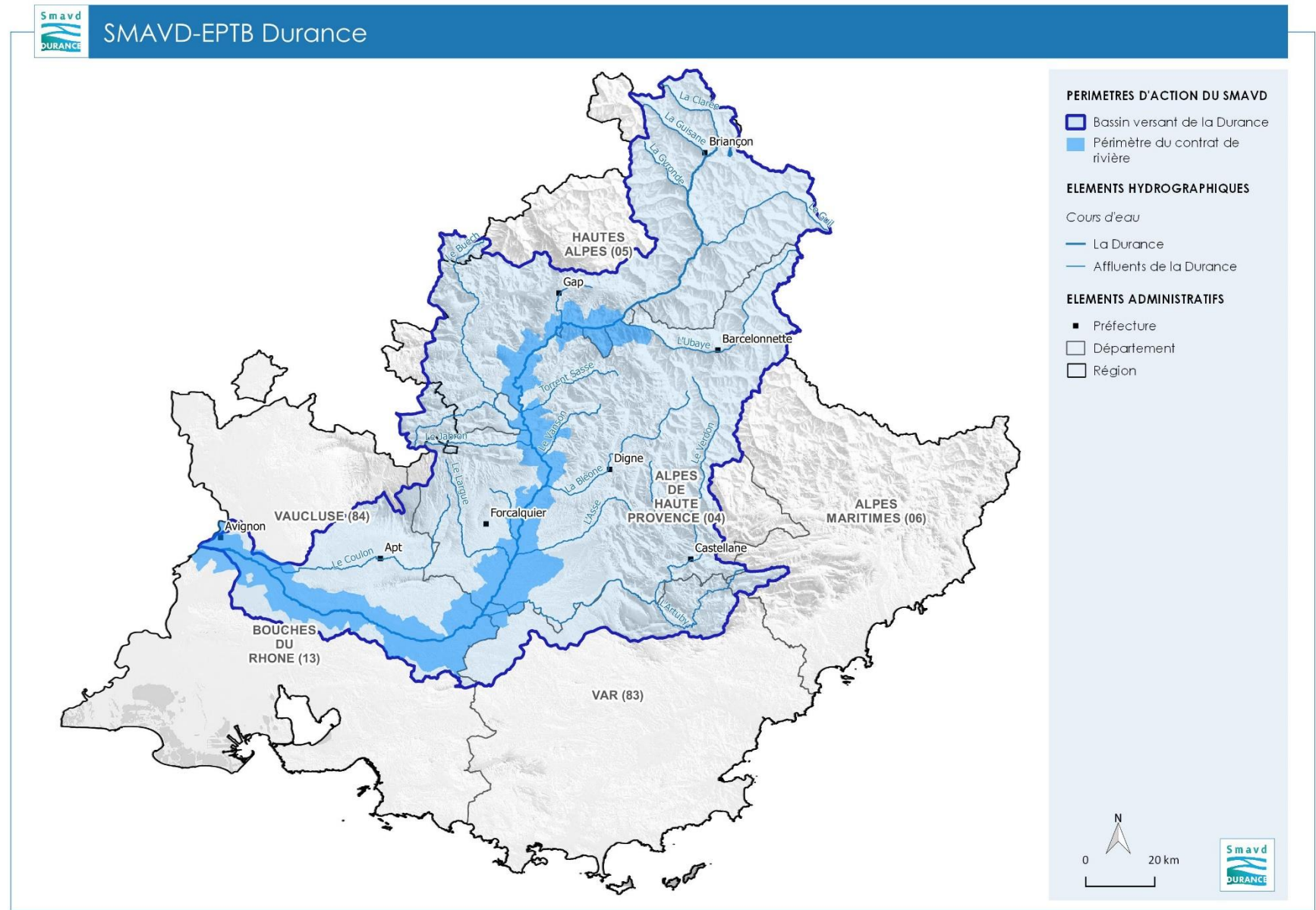
SMAVD- EPTB : a territorial public basin entity

Expertise in:

- Flood mitigation
- Eco-morphology
- Integrated water resources management

The Durance water basin:

- 14 000 km²
- More than 450 municipalities
- More than 700 000 inhabitants



Main characteristics

A braided river, of major environmental interest

A Mediterranean context

A river characterized by floods and droughts



IDRiM Nice 2019

Durance water basin characterised by:

- Hydro-electric infrastructure
- A network of water infrastructures

70% of the resources transferred outside the water-basin

- 80 000 ha agricultural lands irrigated
- 3 millions inhabitants (total)
- Many uses: hydroelectricity, industries, agriculture, tourism, services



- Climate change will reduce water availability, more severe low-water level
- A strategic plan to anticipate water scarcity, to preserve our infrastructures and to adapt to climate change
- Creation of a water committee at water-basin scale

In West Bank – General context

- 1995 Oslo Agreement
- Rural populations face land and water resources access restrictions.
- In the last few years: due to political context, restricted sources of water available for small farmers
- Impacts of climate change: an important decrease in rainfall observed
 - **Agriculture is more and more difficult, whereas many Palestinians rely mainly on agriculture for income.**
 - **In a context of water scarcity, integrated water management is a priority**

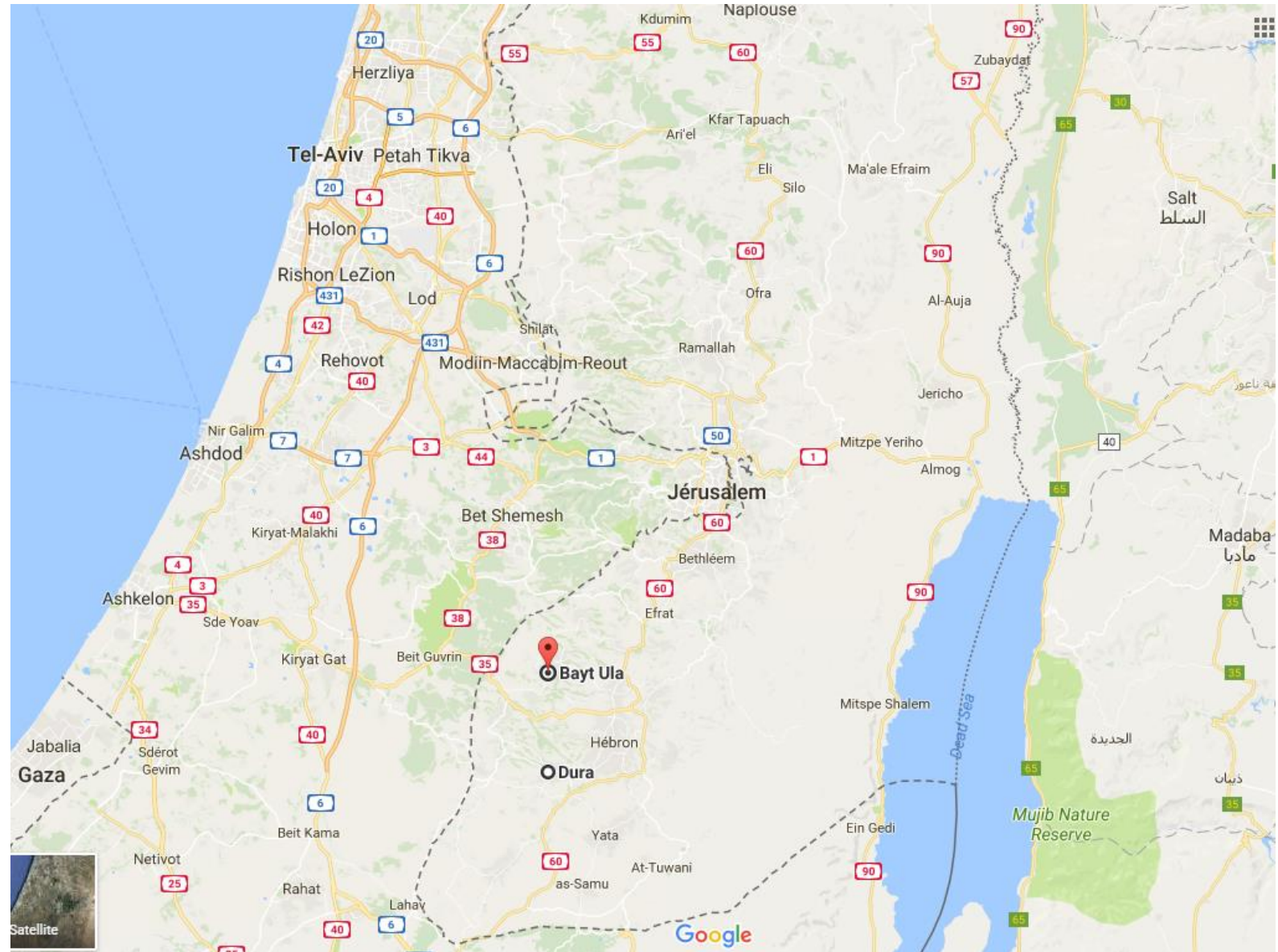
THE PROJECT

Hebron governorate

2 municipalities:

- Dura
- Beit Ula

2 small water-basins



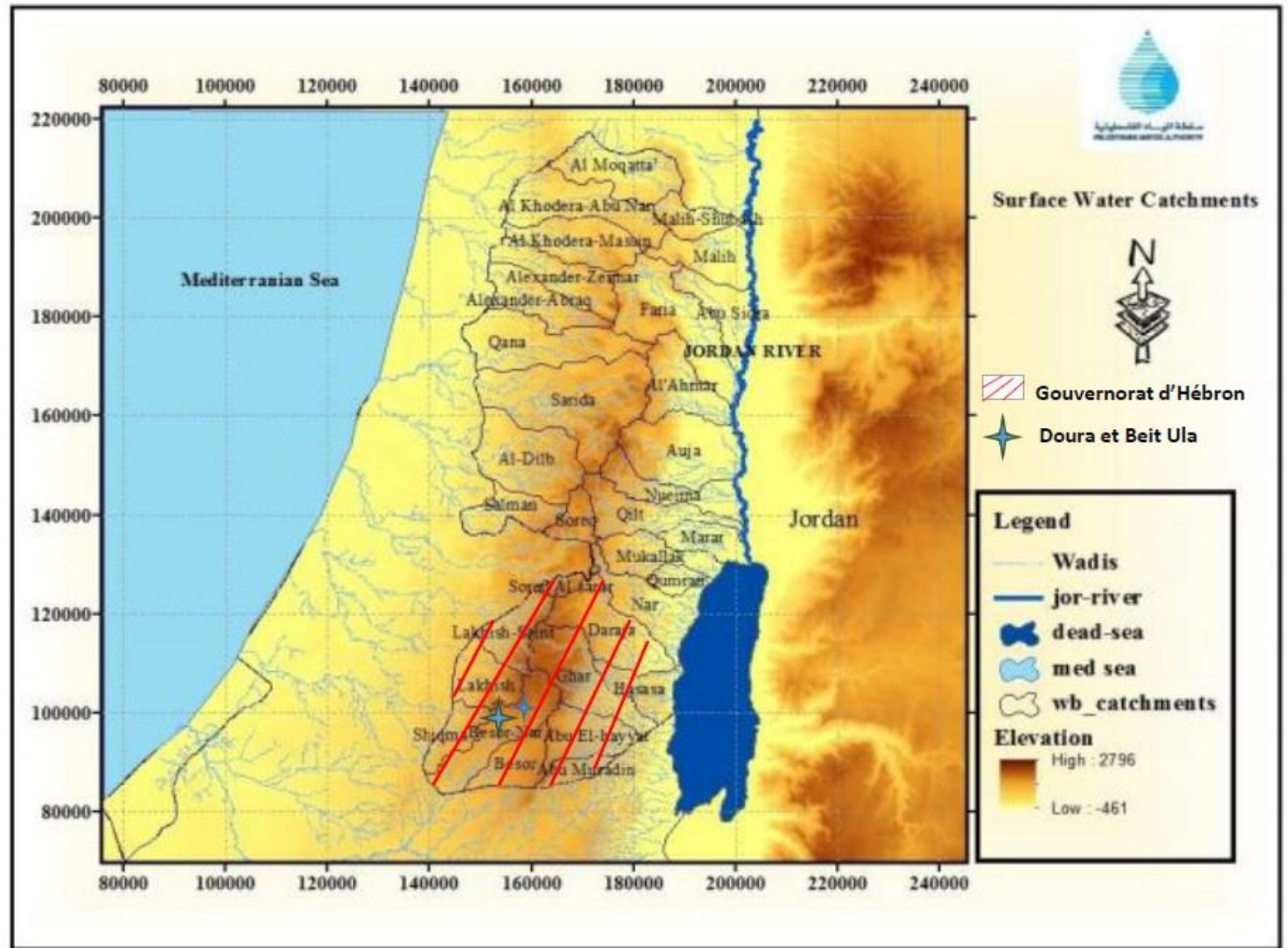
THE PROJECT

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PARTNERS OF THE PROJECT

- Municipality of Les Mées
- Région Sud
- Experts Solidaires, French NGO
- SMAVD-EPTB Durance
- Palestinian NGO « Union of Agricultural Workers Committees » (UAWC)

FINANCED BY Region Sud, Agence de l'Eau Rhône Méditerranée et Corse and Agence Française de Développement

Objectives of the project

- To facilitate the abstraction of surface water, **to facilitate re-injection** in the sub-catchment to maintain and increase water level, to build **storage systems such as cisterns**
- To support local stakeholders in implementing Integrated Water Resources Management in the two catchment areas of Dura and Beït Ula
- To improve the management of water for agriculture.

Activities implemented

- Diagnosis of groundwater resources supplying the wells of the Municipality of Dura and study of the feasibility of a catchment recharge scenario.
- Building rainfall-harvesting cisterns for agricultural irrigation
- Re-inforcing farmers' capacities to use irrigation water-saving techniques
- Diagnosis of governance, to create water users committees at municipality level, and to settle a participatory monitoring process

- SMAVD-EPTB Durance expertise in the project
 - Methodological support in hydrology and resources management
 - Analysis of the governance system
 - Stake-holders consultation and participatory monitoring process
- SMAVD-EPTB wants to gather experiences in adaptation strategies to climate change



INTER-BASIN EXCHANGES AND COOPERATIONS OF ETABLISSEMENT PUBLIC LOIRE



ETABLISSEMENT PUBLIC LOIRE IN BRIEF

- **The Loire river basin authority:** a tool of local authorities for the sustainable development of the river basin (Loire and its tributaries)
- **For more than 35 years,** it has been contributing to the coherence of actions performed over the entire river basin
- **As project manager of interregional operations carried out at river basin scale, its innovative actions are dedicated to:**
 - managing the water resources of the Naussac and Villerest dams (ensuring both minimum flowrates and flood reduction),
 - preventing and reducing flood risks,
 - integrating water and territorial management,
 - stimulating research, development and innovation



INTER-BASIN EXCHANGES AND COOPERATIONS OF ETABLISSEMENT PUBLIC LOIRE

Convinced of the fruitful nature of inter-basin exchanges and cooperations, particularly european cooperation, Etablissement public Loire has been developing for several years now different types of exchanges

- Case study as part of an International Organisation programme
- Participation in european cooperation projects
- Memorandum of understanding about cooperation between the regional agency of the Elbe Community in Saxony-Anhalt and the Loire river basin Authority
- Technical exchanges with stakeholders in the Ebro basin



CASE STUDY AS PART OF AN INTERNATIONAL ORGANISATION PROGRAMME



- In 2010, the OECD carried out a case study on the strategy and measures to reduce vulnerability to flooding in the Loire basin, in particular economic activities.

PARTICIPATION IN EUROPEAN COOPERATION PROJECTS



- Etablissement public Loire has thus participated in the [European Interreg IIIB project “Freude am Fluss – mieux vivre au bord du fleuve”](#), centred on the Rhine, Loire and Meuse rivers.



POINT DE VUE EXTÉRIEUR SUR LA GESTION
DES INONDATIONS EN LOIRE MOYENNE



Rapport réalisé par WL I Delft Hydraulics
pour le compte de l'Etablissement Public Loire
Aix 2004

- The focus of the project was flood management and sustainable development along dike-protected rivers. Since June 2003 to December 2008, a group of partners that combines the social, natural and technical sciences, scientific experts and public authorities from Germany, Netherlands and France have worked together. In the framework of the Freude am Fluss project, Etablissement Public Loire has organised an appraisal visit, called “Intervision Loire 2004”, with the Dutch and German partners concerning the flood risk reduction strategy implemented in the Middle Loire.

MEMORANDUM OF UNDERSTANDING ABOUT COOPERATION BETWEEN THE REGIONAL AGENCY OF THE ELBE COMMUNITY IN SAXONY-ANHALT AND THE LOIRE RIVER BASIN AUTHORITY



- For many years, Etablissement public Loire has developed privileged contacts with the stakeholders of the Elbe basin. In connection with the cooperation agreement between the Centre-Val de Loire Region and the German Land of Saxony-Anhalt.
- Etablissement public Loire maintains close exchanges with this Land, which was heavily impacted by the historical floods of the Elbe in 2013. More generally, the latter seems to be able to constitute the link with the diversity of actors in the Elbe basin.
- Thus, the signing on 23 March 2017 of the Memorandum of understanding between the Saxony-Anhalt Regional Agency for Flood Prevention and Water Management and Etablissement public Loire opens the way for enhanced exchanges in the field of integrated management of the Elbe and Loire river basins, in particular on policies and measures for adaptation to climate change, as well as the development and deepening of cooperation in the framework of the implementation of the Floods Directive, in particular on the issue of reducing the vulnerability of the rich cultural heritage in these two territories.

TECHNICAL EXCHANGES WITH STAKEHOLDERS IN THE EBRO BASIN



- Within the framework of researchers-managers meetings that Etablissement public Loire organises each year, privileged contacts have also been developed with stakeholders in the Ebro basin (in Spain), in particular in a context of integration of the impacts of climate change, on the drought / low-flow management aspect.



www.eptb-loire.fr

ROUND TABLE

Motivations / motivations

Pouvez-vous nous dire quelles seraient les principales raisons incitant à mettre en place une coopération sur des projets liés à la gestion intégrée de l'eau mais aussi les points de vigilance à avoir ?

From your perspective, what is the main motivation for initiating cooperation on integrated water management projects?

What would be the vigilant points ?

Freins et facteurs de réussite - obstacles and success factors

Quels sont les freins et les facteurs de réussite dans l'implication d'une structure de type EPTB dans un projet de coopération internationale ?

Quels conseils donneriez-vous à d'autres établissements qui se lanceraient dans ce type de démarche ?

What are the obstacles and success factors in the involvement of an EPTB-type structure in an international cooperation project?

What advice would you give to other institutions that would engage in this type of approach?

Enseignements / lessons

Quels enseignements tirez-vous de ces coopérations sur les questions liées à la gouvernance de tels projets ?

What lessons can be learned about governance of such projects?

Regard sur la France / perception of French situation

Avec l'expérience de ces coopérations, comment percevez-vous aujourd'hui notre situation française, face aux changements climatiques et aux risques inhérents ?

What is your perception of French situation facing Climate Change and inherent risks?

Pérennisation / sustainability

Comment inscrire cette coopération dans la durée?

How make this cooperation last in time?