



*International
Office
for Water*



Protection of drinking water catchments

Fight against diffuse
pollutions

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- 2017 : Setting up of a Ressource Centre by the French Agency for Biodiversity
 - As part of this Resource Centre, the International Office for Water puts on line a web portal – May 2017
- For the stakeholders involved in all water catchment areas issues.
- Encourages the stakeholders networking
 - Centralizes and disseminates some resources (data, documentation, training, success stories...)




<https://aires-captages.fr/>



AIRES D'ALIMENTATION DE CAPTAGES : RESSOURCES
TECHNIQUES ET RÉSEAUX D'ACTEURS

Connexion Contact Glossaire

Rechercher 



- Creation of specific sheet describing each **drinking water safeguard zones (DWSZ)** in France
 - From external databases
 - Directly entered by some of the portal's users
- This web portal is linked :
 - To other websites in order to make the selection of useful documentation easier or training sessions
- This web portal will disseminate work carried out by the Ressource center and by numerous partners of this project (Research institution, French Ministry (agriculture, environment), local networks...).

Some illustrations from French Web Portal



AILLEURS SUR LE WEB

News

Captages protégés, eau potable préservée !

www.eau-rhin-meuse.fr - 28/08/2017

Protection des ressources en eau potable, vers une coopération renforcée entre les acteurs

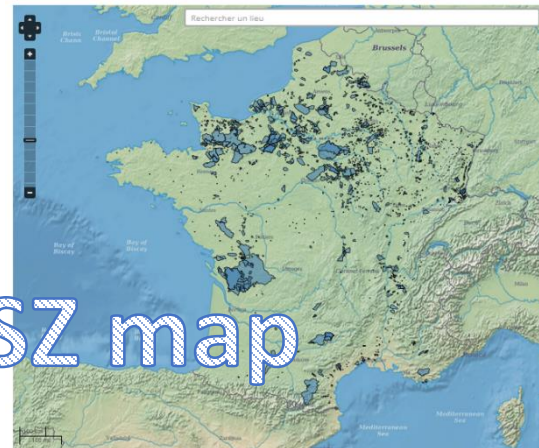
www.actions-territoires.irstea.fr - 28/08/2017

Les captages d'eau protégés à Corcieux

www.vosgesmatin.fr - 24/08/2017

[Retrouver toutes les actualités](#)

DWSZ map



FORMATIONS - PROCHAINES SESSIONS

11 SEP. Pilotage de projet : l'organisation, la planification, l'animation

Organisé par CNFPT à Bordeaux (33)

13 SEP. Faciliter les projets communs multi-acteurs

Organisé par Résolia à Paris

Training courses

OFFRES D'EMPLOI

Type d'annonce	Organisme	Annonce	Lieu
Offre d'emploi	Syndicat Mixte Garrigues Campagne	Poste d'animateur : démarche de protection des captages prioritaires Garrigues basses - Bérange Déposée le 08/09/2017 - CDD -1 an	Castelnau le Lez (34170)
Offre d'emploi	Montpellier Méditerranée Métropole	Animateur de la démarche de protection ds captages d'eau du Flès Déposée le 08/09/2017 - Cadre d'emplois des Ingénieurs Territoriaux - Catégorie A	Montpellier

[Consulter toutes les offres d'emploi](#)

Jobs opportunities

Events

AGENDA

- 20 SEP. - Préserver les captages des pollutions diffuses : enjeux, acteurs et outils - Gray (70)
- 03 OCT. Association Rivière Rhône Alpes Auvergne : Réunion du réseau animateurs agri-phyto-captages - Biol (38)
- 18 OCT. PROTECTION DES CAPTAGES : Comment faire émerger et animer des initiatives agricoles ? - Beaune (21)
- 19 OCT. Journée de l'OIEau : protection des aires d'alimentation de captage, lutte contre les pollutions diffuses - Paris
- 21 NOV. Atelier national APCA/FP2E : quelles démarches innovantes et transversales pour la protection des captages ? - Paris

[Consulter les autres événements](#)

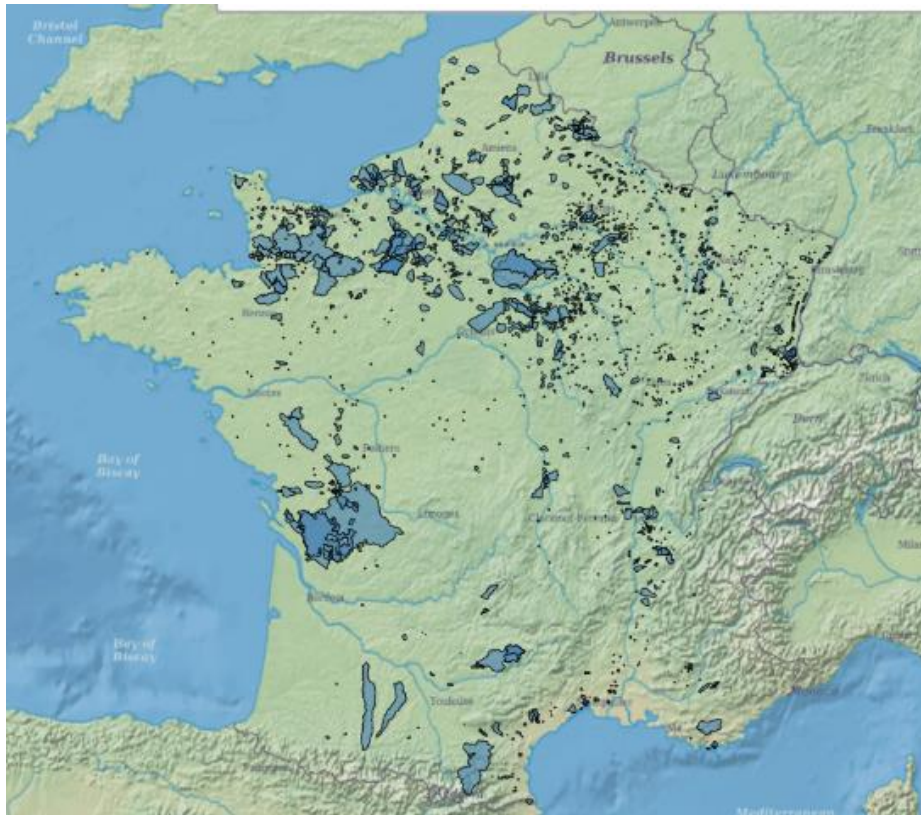


DWSZ : French Web Portal



Aires
d'alimentation
de captages

- In France, Web Portal, allow an individual monitoring of each DWSZ



Caractéristiques

Démarche de protection

Territoire

Ouvrages et points d'eau

Documents

Administration

AAC PRIORITAIRE SDAGE 2010-2015: Oui

AAC PRIORITAIRE SDAGE 2016-2021:

AAC AYANT UN OU PLUSIEURS OUVRAGE(S) "GRENELLE": Oui

AAC AYANT UN OU PLUSIEURS OUVRAGE(S) "CONFÉRENCE ENVIRONNEMENTALE": Information non renseignée

ORIGINE DE LA RESSOURCE EN EAU: Eaux superficielles

PROBLÉMATIQUE(S) RENCONTRÉE(S): Nitrates
Pesticides

Géographie de l'AAC

SUPERFICIE: 72317.6ha

BASSIN: ADOUR-GARONNE

SAGE:

RÉGION (2016): OCCITANIE

RÉGION: MIDI-PYRENEES

DÉPARTEMENT: HAUTES-PYRENEES
TARN-ET-GARONNE
HAUTE-GARONNE
GERS

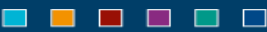
COMMUNES DANS LE PÉRIMÈTRE:

NOM DE LA COMMUNE	CODE INSEE
MAUBEC 82106	82106
ARDIZAS 32007	32007
ESTRAMIAC 32129	32129
TOUGET 32448	32448



Why a survey on drinking water protected areas ?

Why a presentation in Euro-INBO?



- Euro-INBO : A place for sharing and have discussion on water catchment problems
 - protection of water resources → protection of drinking water intakes
- With global warming, water is more and more precious
 - Important to protect and to improve quality of drinking water resources
- On the french web Portal : a lot of french success stories (>40) and it is important to have European success stories :
 - Are problems similar outside of France ?
 - What are the solutions ? Innovative solutions ? Difficulties ?
- Share success stories → will help to preserve valuable water resources



Why a survey on drinking water protected areas? Why a presentation in Euro-RIOB ?



- The International Office for Water put on line a survey before summer
 - 1) We will present you first results
 - 2) We will be asking you for :
 - Discussions on this subject (how is drinking water protected in your country ?)
 - Helping us to disseminate this survey (for having new success stories)

<http://enquetes.oieau.fr/index.php/897587?lang=en>.



Survey on protection of water catchment areas in Europe (1)



→ *More precisely : drinking water protected areas*



SURVEY ON PROTECTION OF WATER CATCHMENT AREAS IN EUROPE

Description of the operation

- Title
- Summary of drinking water catchment protection
- Funding

Description of the territory + problematic

- Area (forest, urban area, main crops...)
- Number of farmers
- Main water pollutants
- Population served

Enseignements

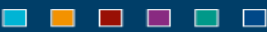
- Main results
- Lessons and perspectives
- Obstacles and difficulties

Stakeholders

- Technical partners
- Financial Partners
- ...



Survey on protection of water catchment areas in Europe (2)



- Some additional questions :
 - Water monitoring
 - Contacts
 - Pictures/documentation
 - History of the operation
 - ...

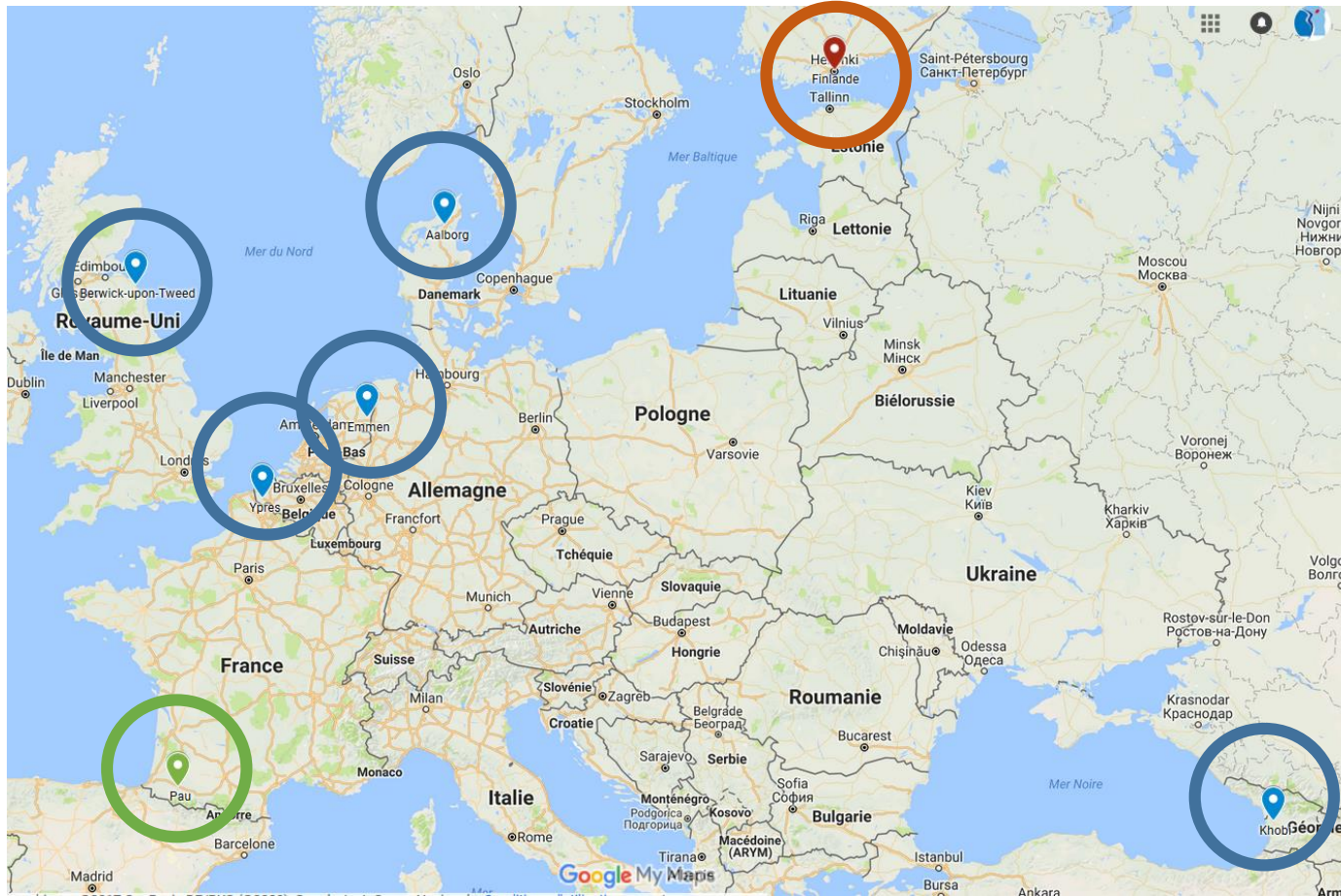
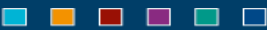
The purpose of the subject :

- Not Statistics
- Success stories of concrete actions on drinking water protection

Share success stories between European actors



First results of the project



Local projects







General policy of the country

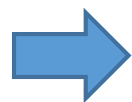


French local project (Web Portal)



First results of the project

- WATERPROTECT Bollaertbeek 
- Till Fell Sandstone Groundwater Body 
- Drinkwater protection file Valtherbos/Noordbargeres 
- The Drastrup project 
- Global situation in Finland 
- Reducing the pollution of the Black Sea 
- Bordes' DWSZ : a priority water intakes 



Focus on 3 countries and comparison with French success stories



Belgium Waterprotect project



Population served
35.000



400 farmers

Water
Pollutants
Pesticides



Territory : Mix of urbanised area (villages) and agriculture (81% of the area); agriculture is mainly arable land (maize, potatoes, cereals) and grassland,

- The Bollaertbeek feeds the drinking water supply for the city of Ieper (Ypres) but has **high loads of pesticides** during spring and summer to be used for drinking water production.
- In the WATERPROTECT project, farmers, drinking water company, environmental administration and farmers' advisory centre are brought together in a **multi-actor approach**
 - To discuss the problem
 - To develop a targeted monitoring approach
 - To select suitable best management practices and mitigation measures
 - To get these implemented in the catchment developing new water governance approaches.
- A software tool is developed to visualise the concentrations and risk zones in the area and help in making decisions on new measures.



Till Fell Sandstone Groundwater Body



Population served
25.000



25 farmers

Water
Pollutants

Nitrates
in groundwater



- The Environment Agency and Northumbrian Water are working in partnership to **identify the sources of nitrate contamination** to the Till Fell Sandstone **groundwater body**,
- Currently nitrate concentrations in the recharge area of the aquifer exceed the drinking water supply. This puts public water supply abstractions at risk - concentrations of nitrate at the public water supply boreholes are **currently below the drinking water standard**.
- We are working together **to reduce the infiltration of N** from **agricultural practices** on this highly vulnerable aquifer.



Drinkwater protection file Valtherbos/Noordbargeres



Population served
175 000



20-30 farmers

Water
Pollutants

Pesticides, nitrates,
heavy metals



Territory : a sandy area with short travel times from the surface towards the drinking water wells. Recharge area 10% urban, 25% forest, 65% Agricultural use (mainly arable: potatoes, sugarbeets, cereals)

- The Drinking Water Protection File (DWPF) identifies **necessary measures** needed per water abstraction site.
- The Protection File is part of the Dutch national EU-WFD implementation strategy, intended to improve **the protection level of groundwater resources**.
- One of the DWPF is the file for the abstraction in the city of Emmen, named Valtherbos/Noordbargeres.



Bordes' DWSZ : a priority water intakes



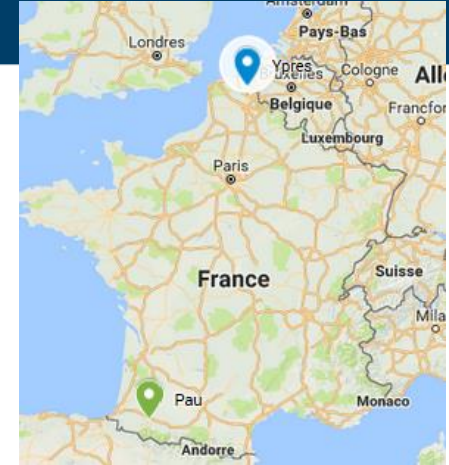
Population served
175 000



>80 farmers

Water
Pollutants

Pesticides, nitrates



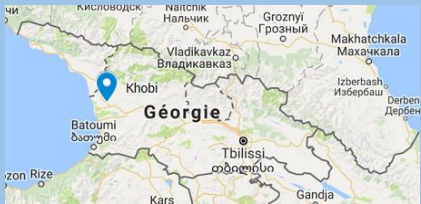
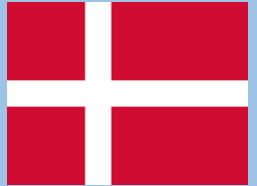
- Bordes' DWSZ belongs to different drinking water intakes close « gave de Pau ». These different drinking water intakes have problem of water. This territory has an important **agricultural activity** and a **lot of people live in these areas** (city of Pau, city of Lacq . . .). The action plan launched actions for all these people before DWSZ designation.
- Project is not finished, more and more **agricultural stakeholders** (agricultural cooperatives) are engaged



Other responses received :



- **Conversion of land use**, from intensive farming and active quarries to forrest, fallow and extensive grazing.



- Reducing the pollution of the Black Sea by introducing **sustainable wastewater and nutrient management** in Rural Georgian Communities



- Drinking water catchments are protected against diffuse pollution (and other risks) with **precise legislation**. Description of the legislation and description of **Groundwater protection plan** and **Water Safety Plans**



Stakeholders involved

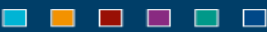
	Private company	Farmers	Agences	Research Center	Association	Public structure
Belgium	De Watergroep		VMM	Inagro*, ILVO, VITO		
United Kingdom	Northumbrian Water*		Environment Agency*	National Environmental Research (NERC)		
Netherlands	Drinkingwater company, Royal Haskoning, Watercompan y	Farmers, Agricultural organisation			Nature conservation organisations	Province Drenthe*, municipality Emmen
France		Chamber of Agriculture, farmers	Water Agence			Water Organisation*, municipality Pau

* : project leader

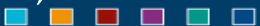
Description of concrete actions



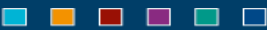
French actions : some examples of actions in protection area



- Property (land):
 - Parcels of land exchange between farmers (Organic farmers and intensive farmer)
- Agronomy :
 - Demonstration of mechanical weeding (decrease the use of pesticides)
- Agricultural sector :
 - Assist in the implementation of new markets for farmers (avoid monoculture)



Difficulties/Lessons



Difficulties

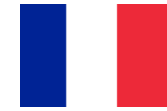


Explain why we have a problem with N

Lot of time :
Get stakeholders engaged
Bring partner in
Secure funding



Most measures are voluntary
Financement



Difficulties to determine exact geographic origin of pollutants

Diverse socio-economic contexts

Too soon



Too soon

Lessons

Important to speak with farmers and explain that they lost money

Cyclical evaluation is a major improvement

Individual support for farmers



Water quality monitoring

Main questions :

Where ?



Public water supplies



Soil water monitoring stations



Catchment outlet



Boreholes within the catchment



Drinking water production

When ?



2 weekly monitoring at 7 locations in the catchment

High-resolution monitoring at 1 location

How to improve the monitoring ?



Monitoring wells to investigate and follow the ground water plumes of pollution

Study started to a shallow early warning monitoring network, to be placed before 2020.



Conclusion



<http://enquetes.oieau.fr/index.php/897587?lang=en>

- Survey is still on line
- Success stories will be available on French Web Portal (aires-captages.fr)
- In France, Resource Center and web Portal web encourage : information exchange, data exchange , success stories exchange → to **protect water resources**
- At the European level, is it relevant to share success stories on **drinking water catchment protection** (fight against diffuse pollution) ?
- We would like to take advantage of your presence here today to have your opinion on protection of drinking water intakes in your country ?



• Do you know some similar success stories in your country ?



*What are the concrete actions in this success stories ?
Are they efficient ? Priorities for some DWSZ ?*

→ Drinking water protected areas (fight against diffuse pollution)



• **In your country, what are difficulties to the implementation of actions ?**

*What solutions do you have ?
Is there a political action ?*



•What is the perception of agricultural stakeholders ?

Are farmers involved from the beginning of the project ?



Many thanks for your help and your attention



- **Have you some contacts who could be interested in this survey ?**
(In the room you have a sheet)
(Your name, your contact ont this subject, e-mail, country, name of the success story)



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<http://enquetes.oieau.fr/index.php/897587?lang=en>

