Protection of drinking water sources against diffuse pollution in France

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Context: Water Framework Directive

- Article 7.3 of the WFD: all water bodies where water is used for human consumption are protected areas.
 Member States have to implement all measures necessary to protect these drinking water sources and to achieve the environmental objectives under Article 4.
- Measures established for the protection of drinking water sources consist of a combination of:
 - ✓ general measures which are implemented in the whole territory of a Member State and
 - ✓ tailored measures within drinking water safeguard zones (DWSZ)

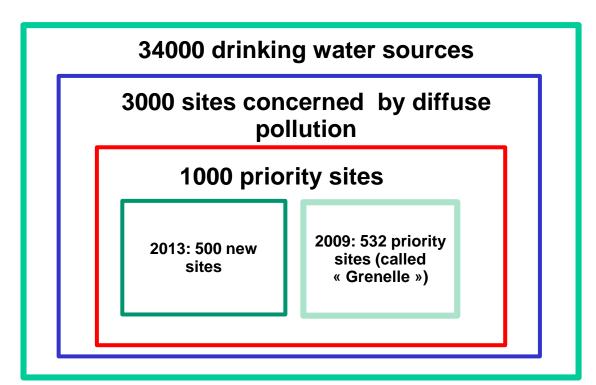


Context: Water Framework Directive

- A DWSZ is a practical mean of focusing protection measures for the abstraction of water for human consumption. Such measures can cover all sectors and human activities exhibiting potential pressures on surface water and groundwater quality and quantity
- The most commonly applied measures within DWSZ are restrictions, prohibitions and control of activities, licensing of activities, monitoring of water quality and quantity and the monitoring of licenses



Drinking water and diffuse pollution: the issue in France



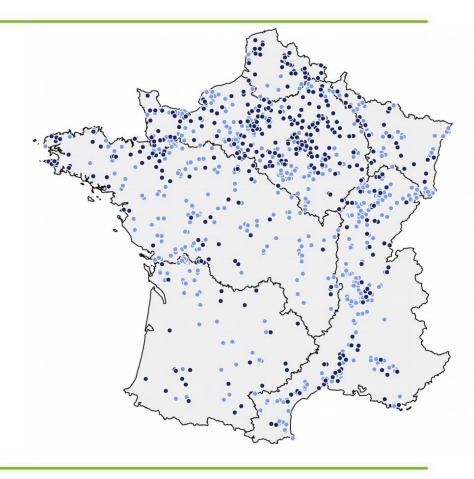
- A worrying situation:
 Diffuse pollution (nitrate and pesticides)
 damages badly water quality
- Difficulty to engage actions to improve or preserve water quality

^{*}Source: http://www.deb.developpement-durable.gouv.fr/telechargements/ouvrages_grenelles.php



- The assumption in France:
 Preserving our water quality ->
 Better to prevent pollution rather than using a treatment process.
- Selection criterions:
 - Contamination nature and extent
- Ressource importance (supplied population,...)
 - Action opportinuty

- New priority drinking water sources (2013)
- First priority drinking water sources (2009)





Main characteristics:

- Firstly, implementation of a **voluntary** water cathment protection plan; plan becomes **compulsory in a second time** (optionnal regulation tool)
- Local administration in collaboration with local stakeholders manage building and implementation of this protection plan (best practices, mitigation measures...)
- Circulars and guides explain the global methodology (diagnosis, building, implementation, monitoring and evaluation)

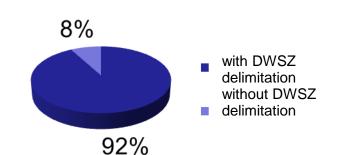
Source: from ministry of environment



500 first drinking water sources

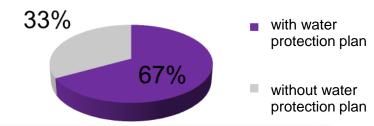
Mixed Assessment:

- Some success stories (around 40 examples)
- while 3000 thousands abstraction points have been closed between 1994 and 2013



Explanation:

- Lack of expertise from local adminstrators which are in charge (agronomy, hydrology, facilitation...)
- Lack of political support
- Some financial, technical and juridic tools are unsuitable



Source: from ministry of environment



Perspectives:

- About the existing tools and their objectives: best diffusion and communication
- About local stakeholders: Need of formation and networking
 - → Creation of a national resource center (1st january 2017)
- At the beginning of the process: farmers must be involved
- Give more latitude to local organisations, local stakeholders
 - → to chose measures included in the protection plan
 - → with the only condition: effectiveness

Source: from ministry of environment



A new resource center for a better protection of DWSZ

Origins:

- Ministry for agriculture et ministry for environment decision: support local government in the implementation of DWSZ protection plan
- Feasibility study realized in 2014 by INRA in collaboration with ONEMA (AFB since 2017)

Objectives:

- A Science-Policy interface in support of the implementation of water cathments protection plan
- Encourages the stakeholders networking
- Highlights training possibilities
- Highlights and analyses regional and local actions and initiatives on this subject

A new resource center for a better protection of DWSZ

Methodology:

- Facilitation of stakeholders networking (needs centralization, coordination, diffusion of actualities,...);
- Technical support (technical events, feedbacks from stakeholders and training);
- Production and diffusion of technical ressources (informations, methodologies, scientifical tools, references, guides,...).

For:

- Local and public stakeholders
- Private stakeholders
- Water basin agency
- Scientists
- Regional administration



Created by Made



A new resource center for a better protection of DWSZ

Production examples:

- The International Office for Water puts on line a web portal: https://aires-captages.fr/page/le-centre-de-ressources-afb
- Meetings and technical events: organization or involvement



→ Stakeholders networking to identify main keys to success



- → Presentation of most recent research results
- Scientifics tools production and conception(ex: guides for diagnosis phases)
- Feedbacks centralization and diffusion



Web portal



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Networking

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