



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Département fédéral de l'environnement,
des transports, de l'énergie et de la communication DETEC

Office fédéral de l'environnement OFEV
Division

Swiss National Action Plan for the Restoration of the River Doubs

**36^{ème} Session of the standing committee of Bern Convention
Strasbourg, 15-18th novembre 2016**

Photo: Aquarius



Background

- 2013:
 - December : Recommandation n°169
- 2014:
 - October : First draft of the National Action Plan for the conservation of the apron (*Zingel asper*)
 - November : consultation of the federal office of energy and cantons
- 2015:
 - February : presentation to the NGOs
 - February - april : consultation of the NGOs
 - Autumn : second consultation of the authorities
- End of 2015 : publication



Aims and Characteristics

Swiss National Action Plan

→ Response of the Swiss Confederation and cantons NE and JU to the 14 points of the recommendation No 169 (Bern Convention)

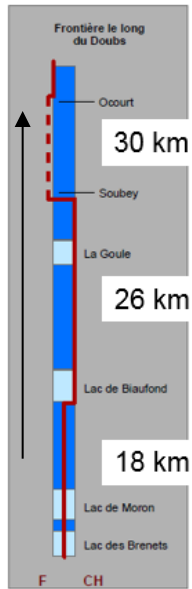
Main Objectives

- To restore the functions of the Doubs ecosystems (frontiers and Jura) and to conserve the typical biocenosis of the Doubs and its tributaries
- Long term conservation of the apron

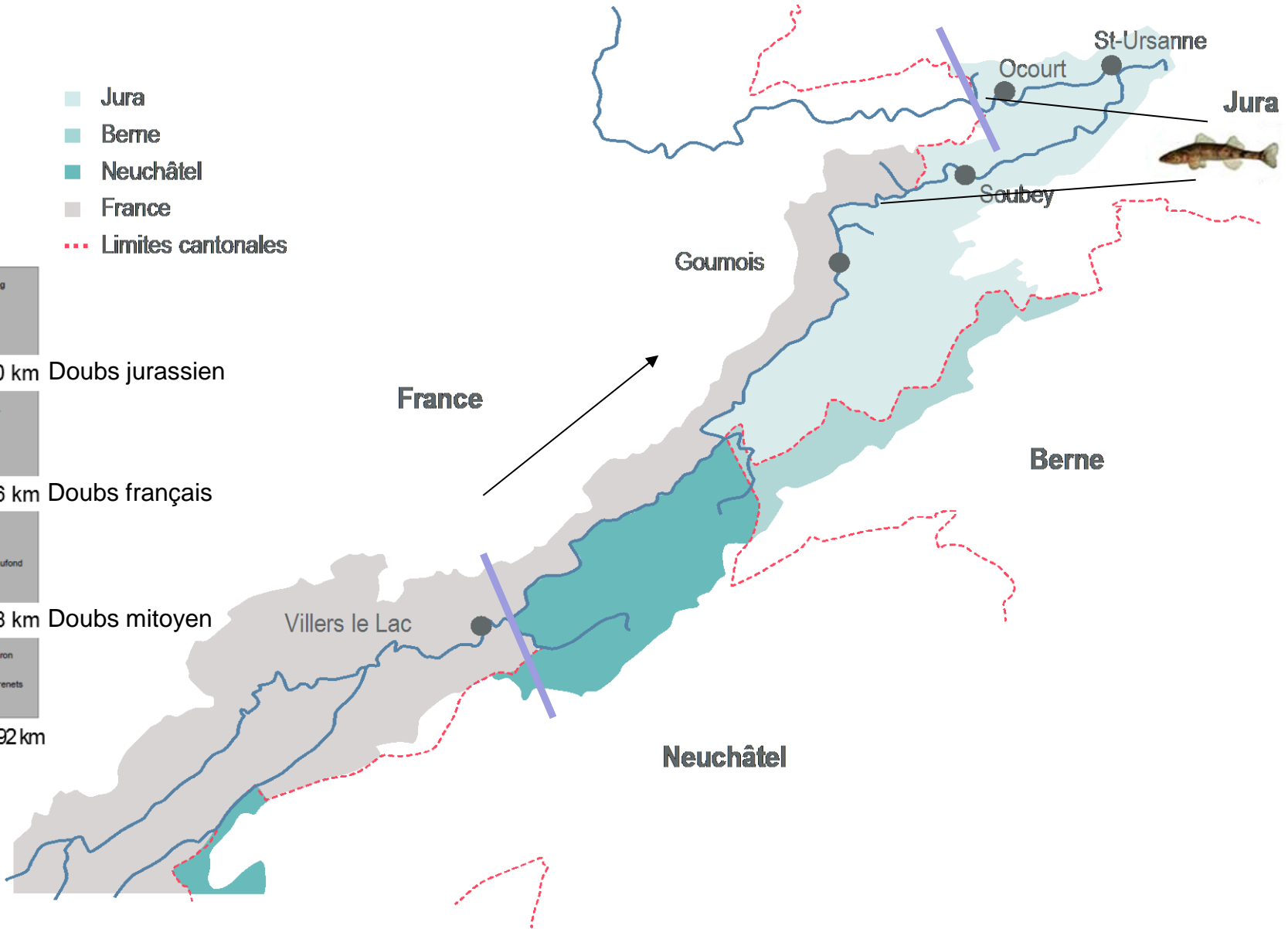
→ Global and pragmatic approaches



- Jura
- Berne
- Neuchâtel
- France
- Limites cantonales



Haut-Doubs: 92 km



International governance : border area

Binational Group flow-management

Participants CH

Exploitants
Cantons (NE, JU)
Confédération (OFEN, OFEV)

Autorité compétente CH
OFEN

MESURES

Binational Group water quality

Participants CH

Associations pêche
Parc Naturel Régional
Cantons (NE, JU)
Confédération (OFEV, OFAG)

Autorité compétente CH
OFEV

MESURES

"Fisheries" commission

Participants CH

Associations pêche
Cantons (NE, JU)
Confédération (OFEV)

Autorité compétente CH
OFEV

MESURES

National governance : Doubs Jura

Participants CH

Canton JU
Confédération (OFEV)

Autorité compétente
Canton JU

MESURES

PLAN D'ACTION NATIONAL

MESURES

Groupe binational
gestion des débits

MESURES

Groupe binational
qualité

MESURES

Commission pêche

MESURES

Doubs jurassien

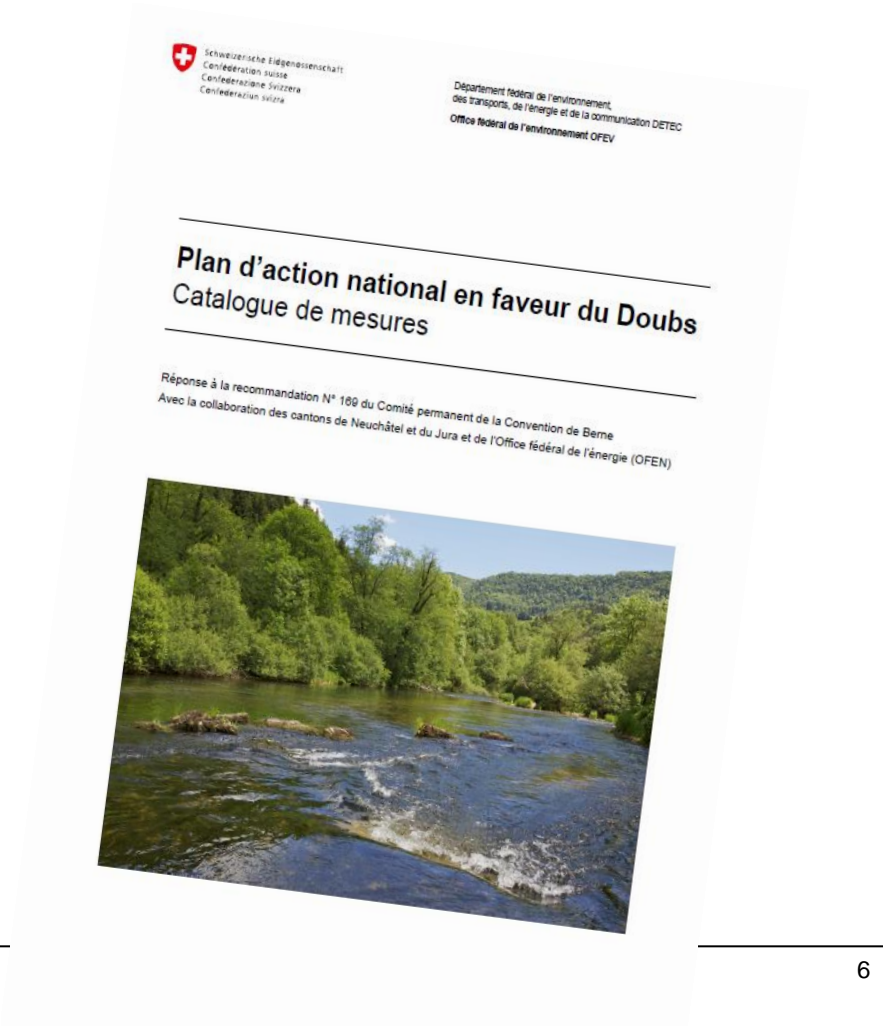
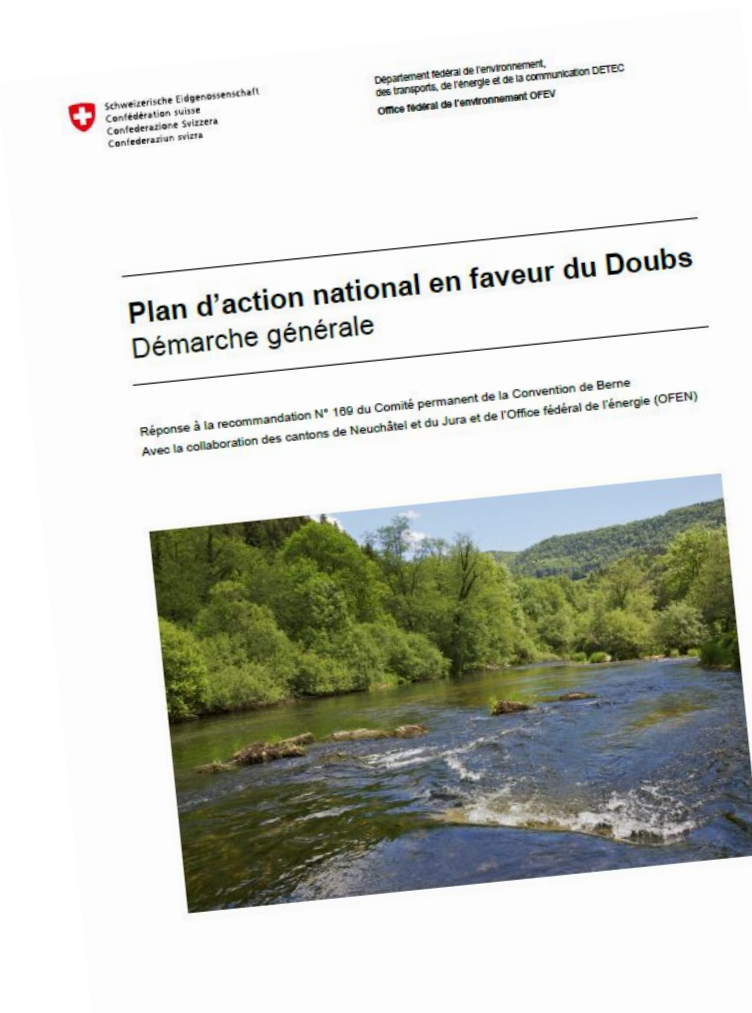
**GROUPE
D'ACCOMPAGNEMENT**



General Device

→ One Action Plan = Two Documents

<http://www.bafu.admin.ch/publikationen/publikation/01826/index.html?lang=fr>





Plan d'action national en faveur du Doubs

Démarche générale

Réponse à la recommandation N° 189 du Comité permanent de la Convention de Berne
Avec la collaboration des cantons de Neuchâtel et du Jura et de l'Office fédéral de l'énergie (OFEN)



General Approach

- legal context
- implementation strategy
- current situation
- pressure on natural environments

- 6 areas of action
 - Hydrological Regime
 - Physico-chemical Water Quality
 - Ecomorphology, Connectivity of the aquatic Habitats
 - Natural Habitats, Connectivity and Species
 - Research and Monitoring
 - Communication

Plan d'action national en faveur du Doubs

Catalogue de mesures

Réponse à la recommandation N° 169 du Comité permanent de la Convention de Berne
Avec la collaboration des cantons de Neuchâtel et du Jura et de l'Office fédéral de l'énergie (OFEN)



Catalog with the list of measures for each strategical axis

- Objective
- Description
- Point of the recommandation no 169 concerned
- Swiss entity responsable
- Partners involved in the implementation
- Financement
- Milestones and deadline
- Indicator



List of Measures (Catalog)

At the moment: 22 measures divided into 6 different strategical axis:

100 Hydrological Regime

→ 2 measures

200 Physico-chemical Water Quality

→ 4 «packages» of measures

300 Ecomorphology, Connectivity of the aquatic Habitats

→ 5 measures

400 Natural Habitats, Connectivity and Species

→ 3 measures

500 Research and Monitoring

→ 3 measures

600 Communication

→ 5 measures



100 Hydrological Regime

101: New «*Water Reglement*» regulating three hydroelectric plants

→ Hydropeaking

→ Residuel waters between the plants

→ Monitoring (temperature, discharge, stranding, spawning of trout and grayling, electric fishing)

102: Additional measures

→ Necessity of further adaptations



200 Physico-chemical Water Quality (4)

- 201:** Improvements of different sewage treatment plants in NE and JU
→ Technical adaptations of different wastewater treatment plants
→ Equipment for a micropollutant treatment stage
- 202:** Improvements of the connecting systems of wastewater in NE and JU
→ Planification plan and connecting systems
- 203:** Assessment of the flux of pollutants in the River Doubs
→ Modelling
→ Identifying priorities
- 204:** Permanent survey of the water quality
→ Continuous analysis of water quality (pH, temperature, conductivity, turbidity, N, oxygen) in Ocourt

300 Ecomorphology, Connectivity of the aquatic Habitats (5)

301: Enough space for the river

→ Setting up of a specific group to determine the necessary space (2016)

302: Restoration of 5 tributaries of the Doubs

→ Resoration of 5 tributaries realized in 2015

→ Restoration of an additional tributary in 2016

303-304-305: Restoration of the fish migration at three obstacles

→ Moulin Grillon: analysis of variants, realisation planned in 2017

→ Bellefontaine and Ocourt: priority identified, solution still to be found (end of 2016)

400 Natural Habitats, Connectivity and Species (3)

401: Emerald management plan «*Clos du Doubs*»

→ Setting up of a specific structure by canton of JU

→ Working group: principles of the management plan

402: Management plan for three alluvial zones of national importance

→ Alluvial zone «*La Lomenne*»: validation of management plan 2016, implementation in 2017

→ Alluvial zones «*Clairbief*» and «*La Réchesse*»: validation of the management plan 2017, implementation in 2018

403: Base for the implementation of an ecological infrastructure

→ Launching of a pilot-projet for the period 2016-2020



500 Research and Monitoring (3)

501: Monitoring of the apron

→ Continuation of the program launched in 2000

502: Genetical analysis of the apron

→ Investigations done

→ Genetic specificity of the Doubs population

503: eDNA apron

→ Analysis of feasibility



600 Communication (5)

601: Setting up of an advising board involving the NGO and Parc

→ First session: March, 24th 2016

→ Second session: November, 24th 2016

602: Documentation about the apron

→ DVD and CD available (public, school, exhibition,)

603: Communication and sensibilisation by the local population

→ Flyer on the «Réserve cantonale du Doubs» (2016)

→ Program and measures to be defined (2017) by the Parc

604: Preventive measures to assure good health of the aquatic fauna

→ Flyer available

605: Action plan tourism and nature

→ Launching of project for the period 2016-2020