

Engaging on climate change adaptation in the Meuse River Basin

Jean-Noël PANSERA, Secretariat of the
International Meuse Commission

EUROPEAN RIVER SYMPOSIUM

26 – 27 May 2021

Session 3 – Sharing Basins, sharing destinies:
International River Commissions



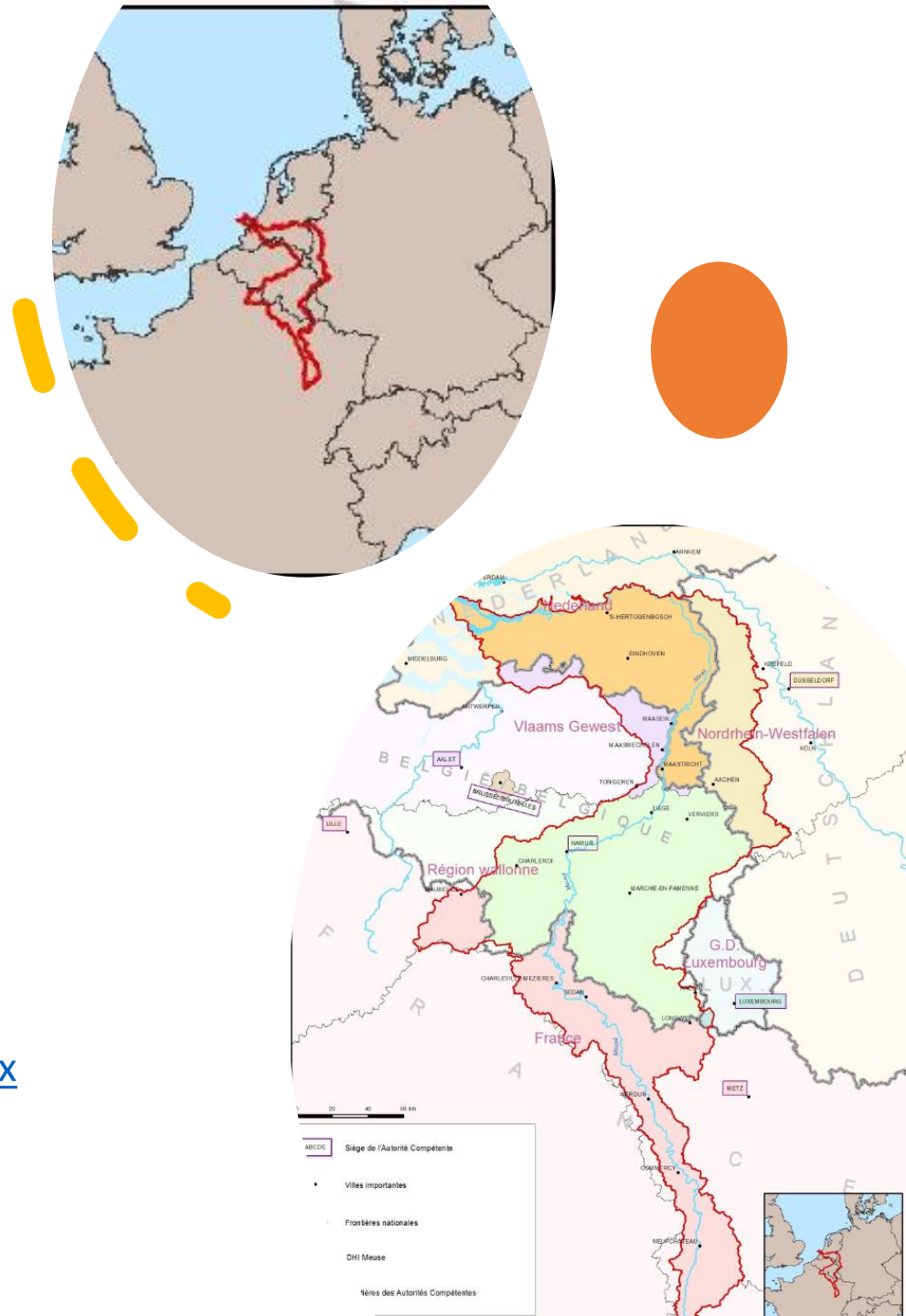
International Association
of Water Service Companies
in the Danube River
Catchment Area



Presentation of the International Meuse Commission

- 35 000 km² - 905 km
- Pluvial regime
- about 9 Million inhabitants
- **International Meuse Agreement - Ghent 3 Dec. 2002** - International Meuse Commission (FR, BE, NL, LU, DE)
- 5 countries / 8 delegations (3 Regions for Belgium)
- Main water uses: drinking water, agriculture, inland navigation...

<http://www.meuse-maas.be/Accords.aspx>



From Floods...

Important floods in 1993 and 1995
100 year return period



Source: L1.nl



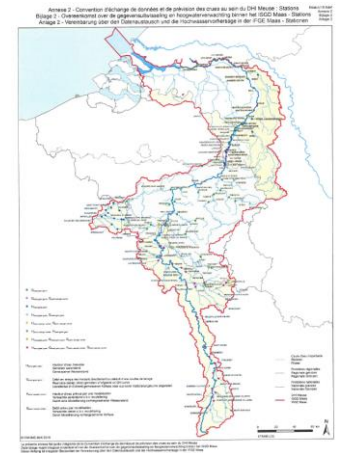
Source: ANP



Source: rws.nl

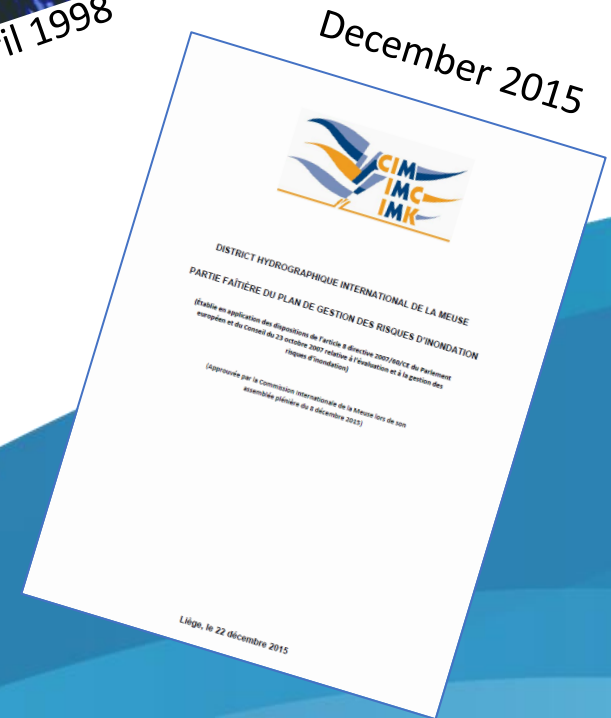


April 1998

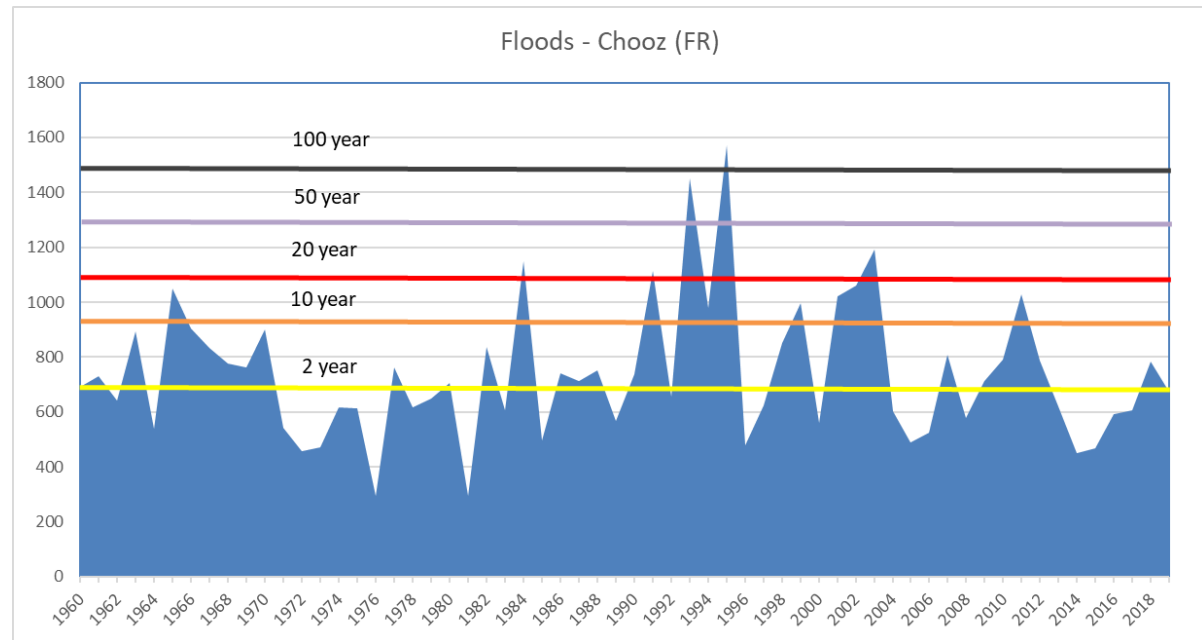


Data Exchange and
Flood Forecasting
Agreement - 2017

December 2015



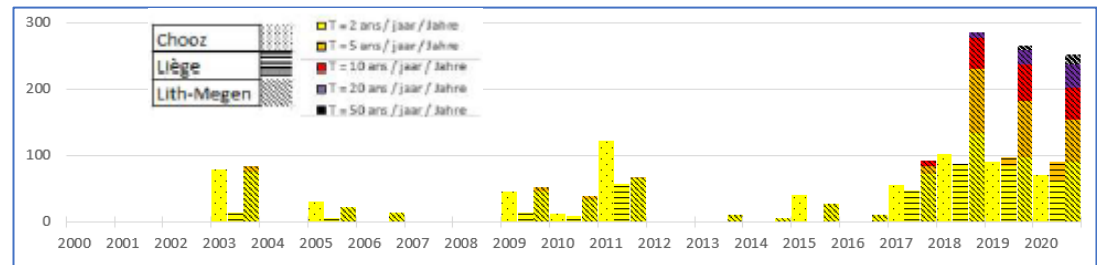
From Floods...



...to Droughts



Station étudiée en :	Rivière	Station hydrométrique de référence	semaine 31 m³/s	semaine 32 m³/s	semaine 33 m³/s	semaine 34 m³/s
France	Mouzon	Villers (08)	0,07	0,06	0,06	0,05
France	Val de	Soulsoise (08)	0,25	0,23	0,19	0,16
France	Meuse	Châlons (55)	0,05	0,63	0,54	0,51
France	Meuse	Saint-Mihiel (55)	2,7	2,4	2,1	2,0
France	Meuse	Stenay (55)	7,35	6,95	5,12	4,90
France	Chiers	Montigny/Chiers (54)	1,53	1,39	1,12	1,03
Wallonie	Chiers	Torgny	3,23	3,99	3,62	3,61
France	Chiers	Chauvency-le-Château (55)	8,0	7,5	7,1	6,0
Wallonie	Semois	Membré	1,68	1,74	1,53	1,10
France	Semois	Houdain (08)	1,9	0,7	1,4	1,2
France	Meuse	Chooz (08)	26,91	25,02	23,19	21,59
Wallonie	Lesne	Gendron	1,56	1,39	1,27	1,00
Wallonie	Sambre	Namur	5,63	4,60	4,21	4,63
Wallonie	Meuse	Amay	43,39	38,44	36,84	30,60
Wallonie	Ourthe	Tabreux	2,20	2,10	1,79	1,51
Wallonie	Meuse	Liège (station calculée) ¹	50,48	45,30	43,02	34,80
Wallonie	Meuse	Monsin (station calculée) ²	56	55	45	52
Pays-Bas	Meuse	St. Pieter	39	39	31	37
Pays-Bas	Meuse	Borgharen-dorp ³	17	20	15	20
Pays-Bas	Roer	Roermond	9	9	8	13
Pays-Bas	Meuse	Liège boven	41	36	23	29



Low-water notice since 2017

...to Droughts

Plan of approach for the management of exceptional low water events in the Meuse catchment area – 2020



Plan d'approche pour la gestion des étiages exceptionnels dans le bassin versant de la Meuse

Décembre 2020

3 questions:

- What is an exceptional low-water event in the Meuse basin?
- What are their concrete consequences?
- How can we deal with such a situation?

Frequent low-water level T > 2 ans	Less frequent low-water level T > 5 ans	Rare low-water level T > 10 ans	Very rare low-water level T > 20 ans	Extremely rare low-water level T > 50 ans
---------------------------------------	--	------------------------------------	---	--

Data from 1960 to 2018

...to Droughts

3 questions:

- What is an exceptional low-water event in the Meuse basin?
- What are their concrete consequences?
- How can we deal with such a situation?

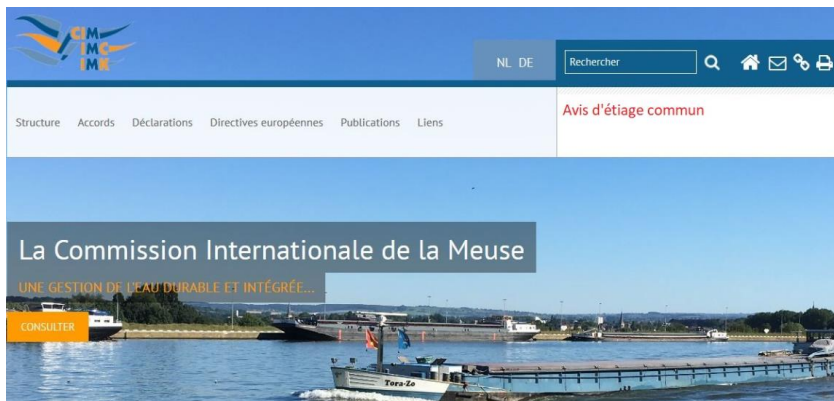
+ Potential effects of climate change on the evolution of low water flows



...to Droughts

3 questions:

- What is an exceptional low-water event in the Meuse basin?
- What are their concrete consequences?
- How can we deal with such a situation?



Challenges for the IMC

- Frozen contributions since 2010
- Limited human resources
- Coordination between states facing very different problems, with different ambitions
- Working programme limited to the Commission's mandate

High density (467 inhab./km²)
Economic activities
Drinking water from the river
Man-made river (canals)



Low density (75 inhab./km²)
Few activities
Drinking water from groundwater
Natural river, lower flow

2009-2013

Challenges for the IMC

- Collaboration with other actors

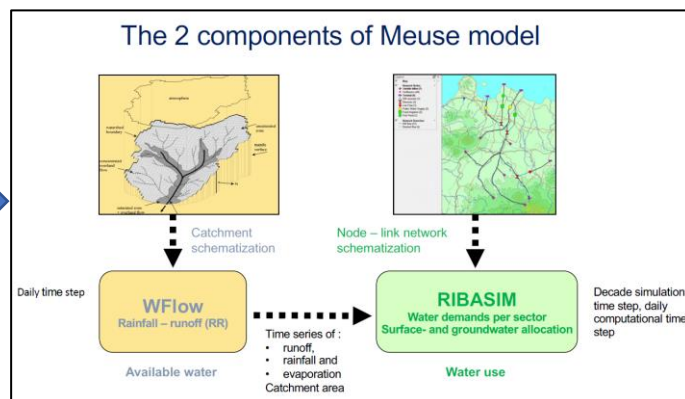
MOSAN
Initiative for CC action

2020-2024

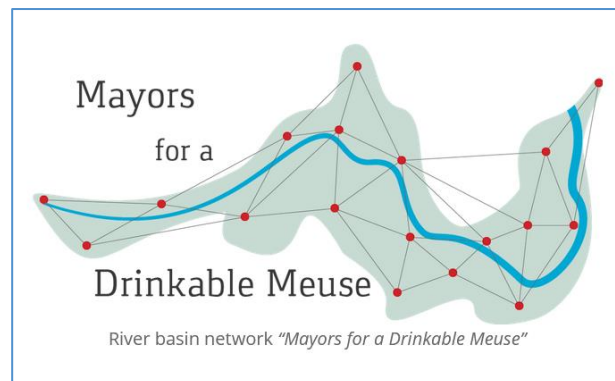
- Creation of an observatory (I)
- Development of a global study regarding the impact of climate change on water uses including environmental needs (II)
- Building of a political network regarding climate change adaptation in the region (III).



2020-2021



2020-...



The background of the slide features a white central area with blue wavy, overlapping shapes at the top and bottom, resembling stylized water or hills.

Thank you for your attention