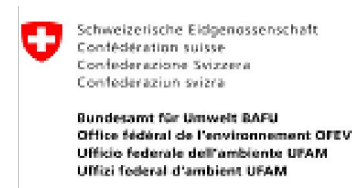




Drought Management in the Meuse Basin

Jean-Noël PANSERA
International Meuse Commission



International Meuse Agreement

3 December 2002



International Meuse
Commission
(FR, BE, NL, LU, DE)

Article 2

Objectives of the agreement

“The Contracting Parties (...) shall, above all, cooperate (...) in consulting each other and then coordinating preventive and protective measures against floods (...) to reduce the impact of floods and droughts”

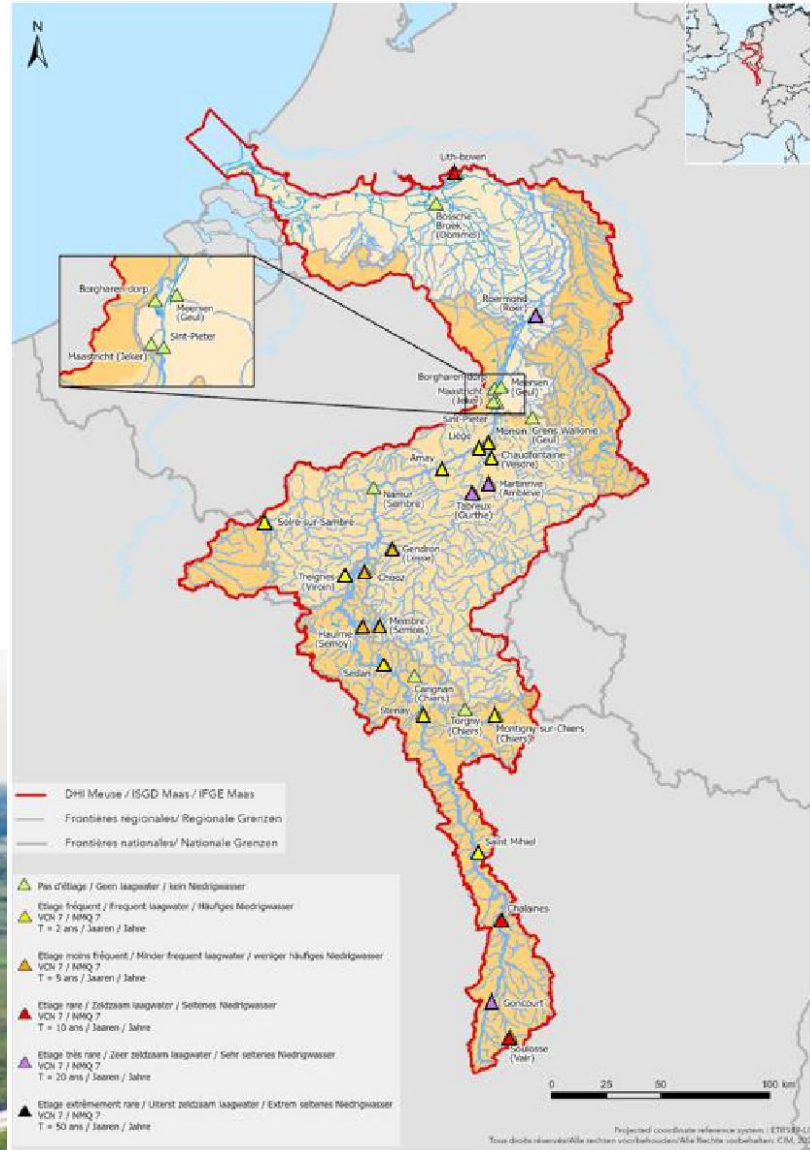
Article 4

Functions of the Commission

“Furthermore, the Commission shall have the following functions:
(...) the preparation of opinions or recommendations on the reduction of the impact of droughts, including preventive measures”



Joint Low-water Notice Since 2015



CIM-Avis d'étiage Meuse

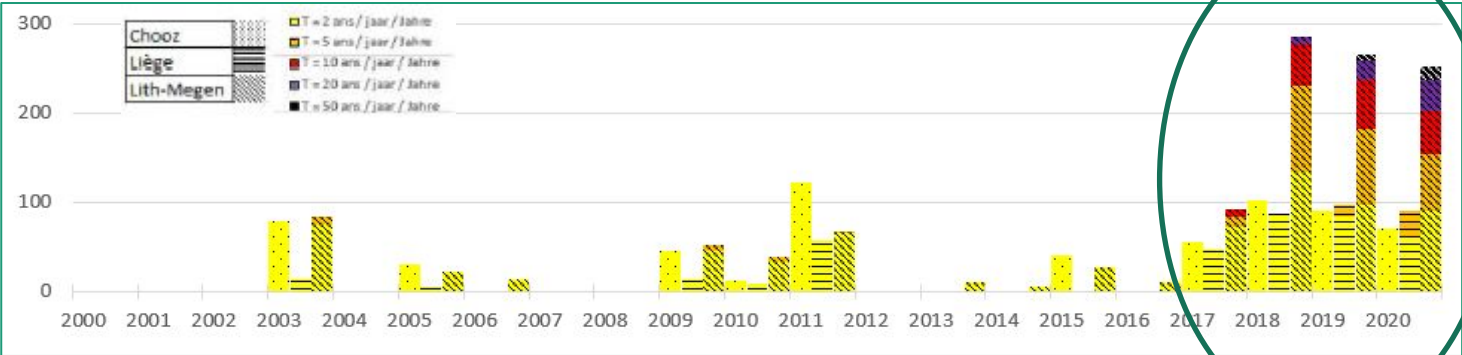


Station située en :	Rivière	Station hydrométrique de référence	Pas d'étiage	Etiage fréquent	Etiage moins fréquent	Etiage rare	Etiage très rare	Etiage extrêmement rare	semaine 28	semaine 29	semaine 30	semaine 31
			T < 2 ans	T = 2 ans	T = 5 ans	T = 10 ans	T = 20 ans	T = 50 ans	m3/s	m3/s	m3/s	m3/s
France	Meuse	Goncourt (52)	> 0,067	0,067	0,036	0,026	0,020	0,014	0,08	0,04	0,02	0,01
France	Vair	Soulosse (88)	> 0,365	0,365	0,264	0,223	0,194	0,166	0,39	0,21	0,22	0,22
France	Meuse	Chalaines (55)	> 1,52	1,52	1,03	0,838	0,707	0,584	1,36	0,96	0,77	0,63
France	Meuse	Saint Mihiel (55)	> 2,64	2,64	1,90	1,60	1,38	1,18	3,10	2,38	2,48	2,35
France	Meuse	Stenay (55)	> 7,86	7,86	5,71	4,83	4,21	3,60	9,42	7,83	6,14	5,99
France	Chiers	Montigny/ Chiers (54)	> 1,25	1,25	1,02	0,92	0,85	0,77	1,11	1,06	1,14	1,16



Plan of approach for exceptional low-water events

December 2020

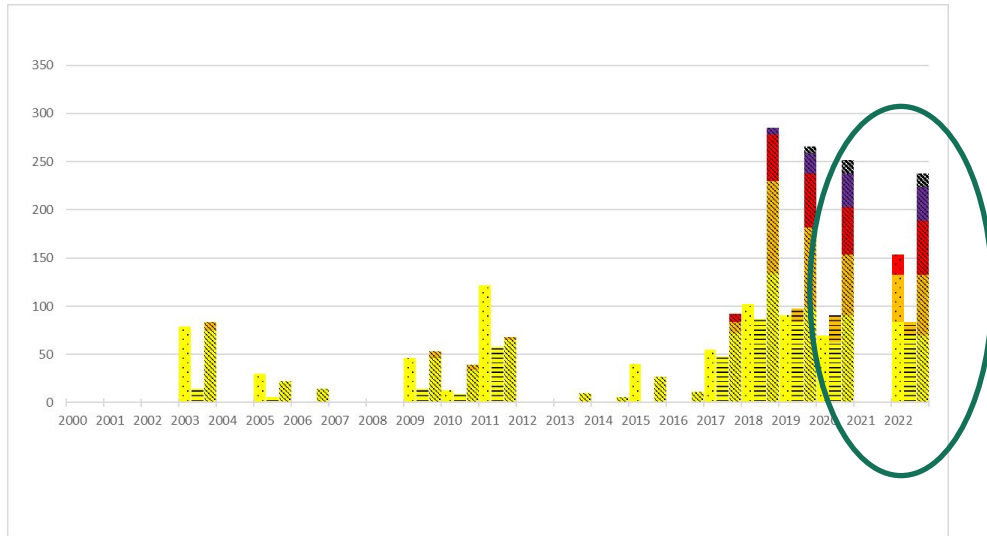


Plan of approach for exceptional low water events in the Meuse basin

December 2020



Lessons learned from the drought 2022

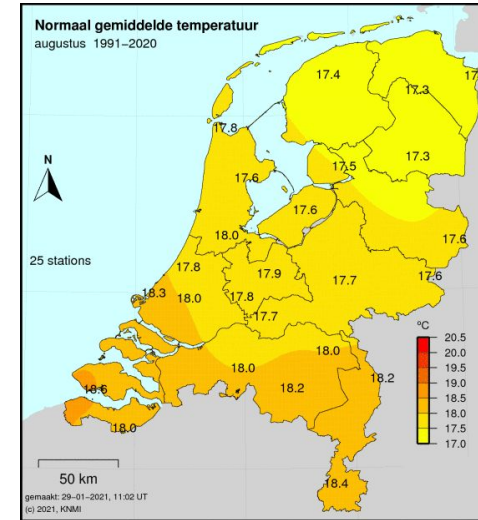
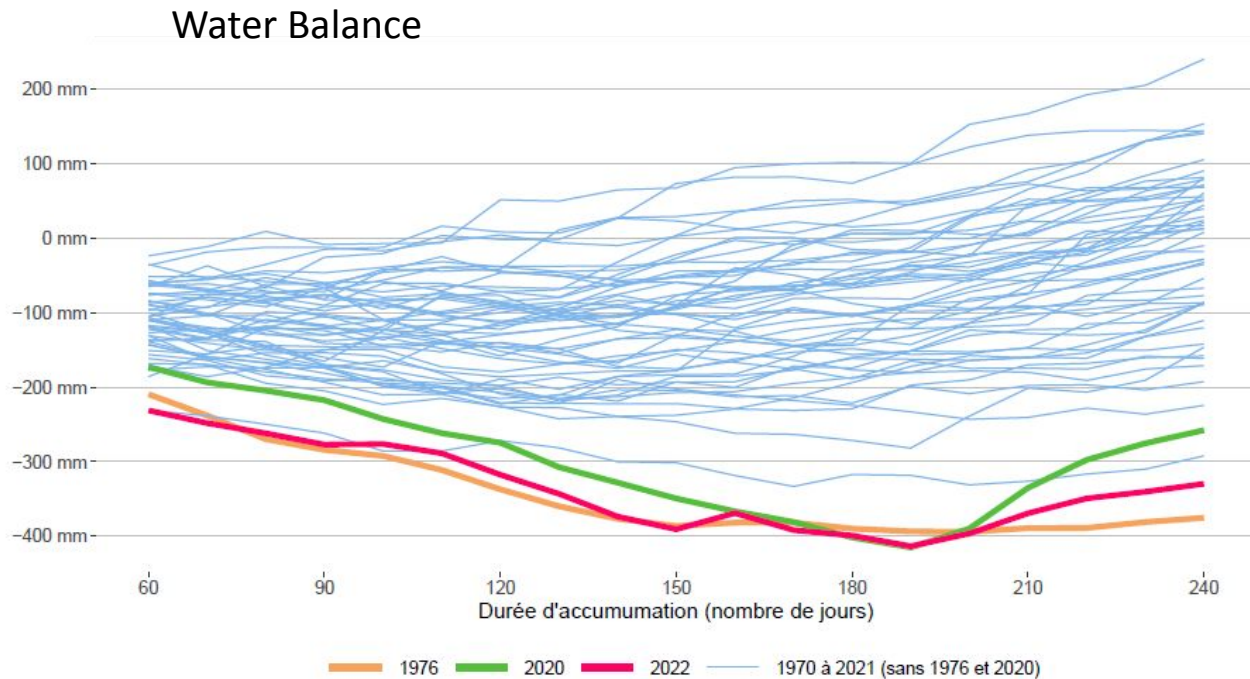


Locatie: Maas bij Borgharen
Foto: Ger Hermans (Provincie Limburg)



Lessons learned from the drought 2022

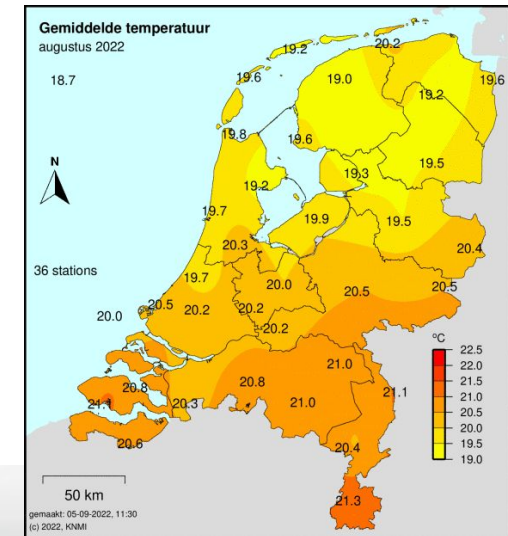
Weather



Average temperature
in August 1991-2020

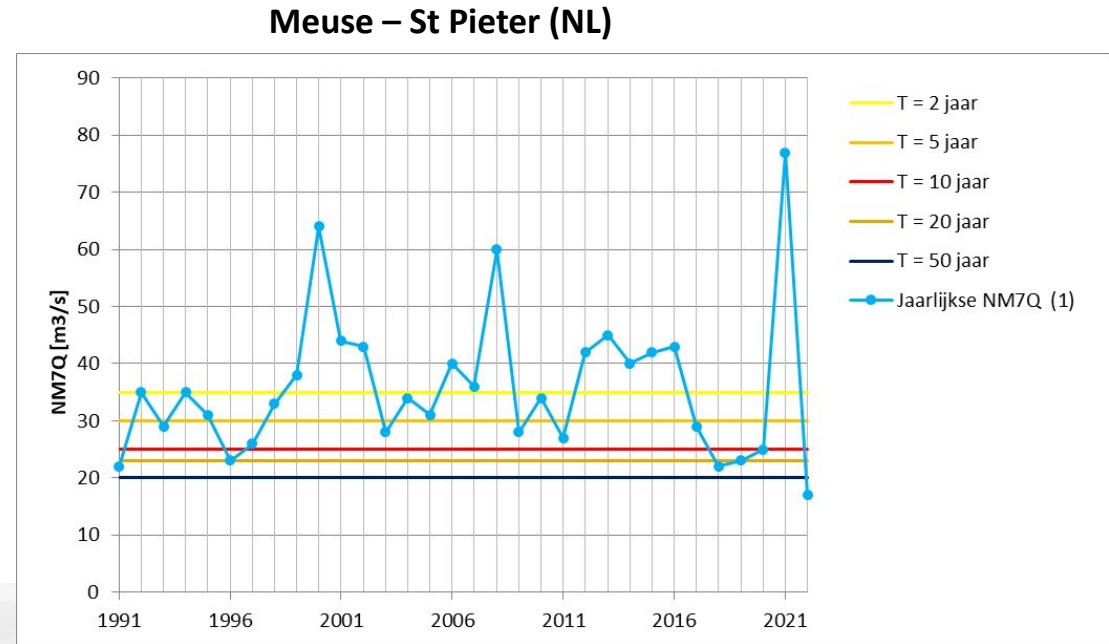
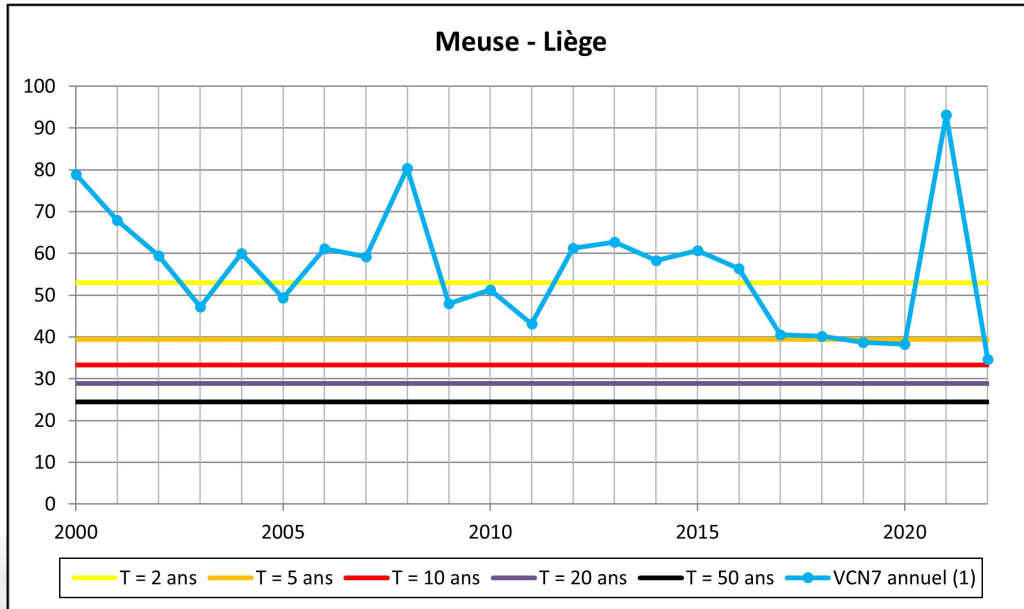
+2,5 °C

Temperature in August
2022



Lessons learned from the drought 2022

Hydrology



Lessons learned from the drought 2022

Consequences

Restriction of consumption of water in Belgium and Netherlands

Navigation restrictions (grouping of vessels, waiting times, pumping at locks, etc.)

Carte restrictions + surveillance communes

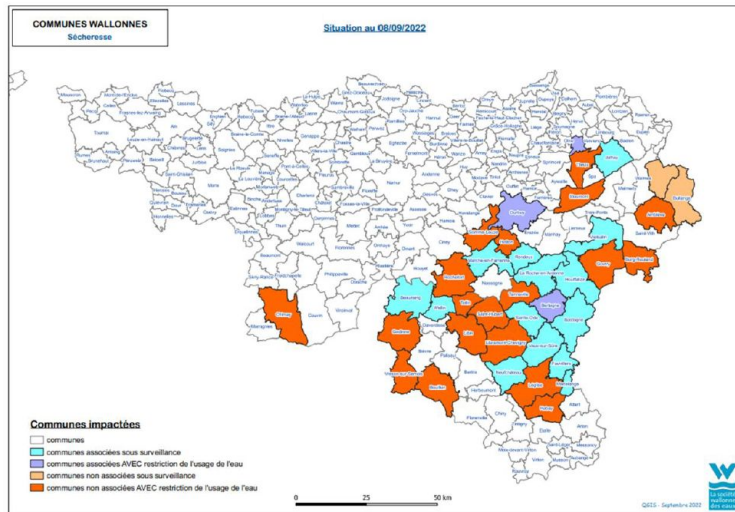
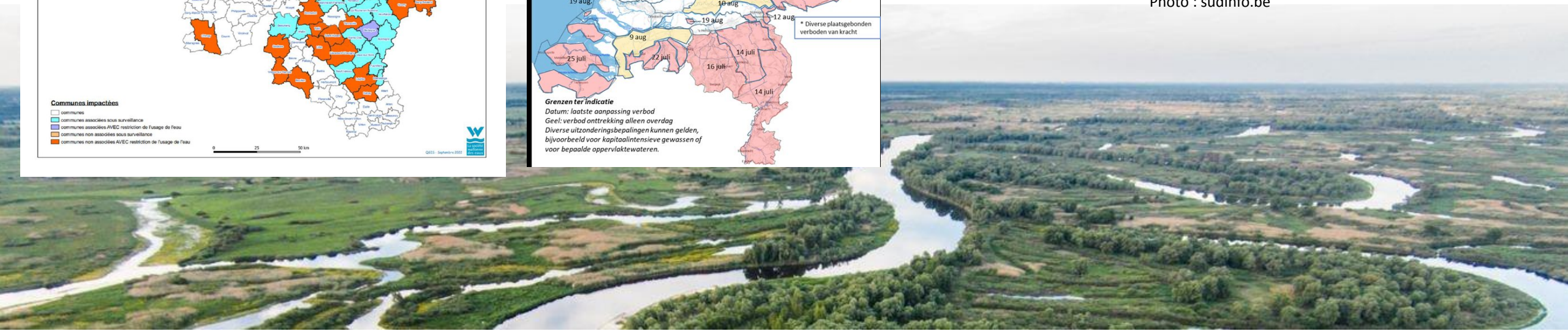


Photo : sudinfo.be



Lessons learned from the drought 2022

Consequences

Prohibition of swimming (cyanobacteria), fishing or leisure activities (kayaking)

Ban on withdrawal of surface water and groundwater for irrigation



No
Swimming



Download from
Dreamstime.com
ID 30317147
Kasper Nyman | Dreamstime.com



Photo : waterportaal.be

Fish mortality



<https://www.groen.be/droogte-vissterfte-2022>

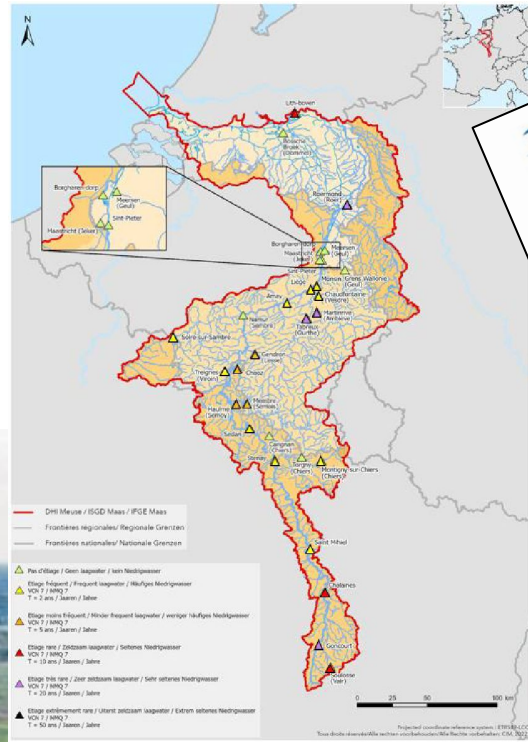


Challenges for the IMC

Update of the plan of approach for exceptional low water events

Extension of the joint low-water monitoring network to tributaries

Lessons learned reports



Field visits



Plan of approach for exceptional low water events in the Meuse basin

December 2020



Thank you

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