

The new flood risk management plan of the international Rhine river basin district



Internationale
Kommission zum
Schutz des Rheins

Commission
Internationale
pour la Protection
du Rhin

Internationale
Commissie ter
Bescherming
van de Rijn

International
Commission
for the
Protection of
the Rhine

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Why manage flood on a transboundary level in the Rhine basin?



9 states

*Italy, Austria,
Liechtenstein,
Switzerland,
France,
Germany,
Belgium,
Luxemburg, the
Netherlands*

Inhabitants

58 Mio. (5,5 million
people in area with
flood depth > 2 m)

The Rhine river basin (extreme flood areas)



**Lower and Middle
Rhine** (*floods mainly
in winter/spring*)

**Upper, High and
Alpine Rhine**
(*floods mainly end of
the spring/summer*)

Man made flood risk increase: The lost of flood plains

1838



1872



1980



Upper Rhine

Impression of flood events



What has the ICPR done in the past?

Rhine Ministers' Conference

Jan. 1998 → **The Action Plan on Floods (1998-2020)**



4 ambitious objectives:

(1) Reduce flood damage risks by 25 % by 2020 -

(2) Reduction of flood levels by up to 70 cm by 2020 (V)

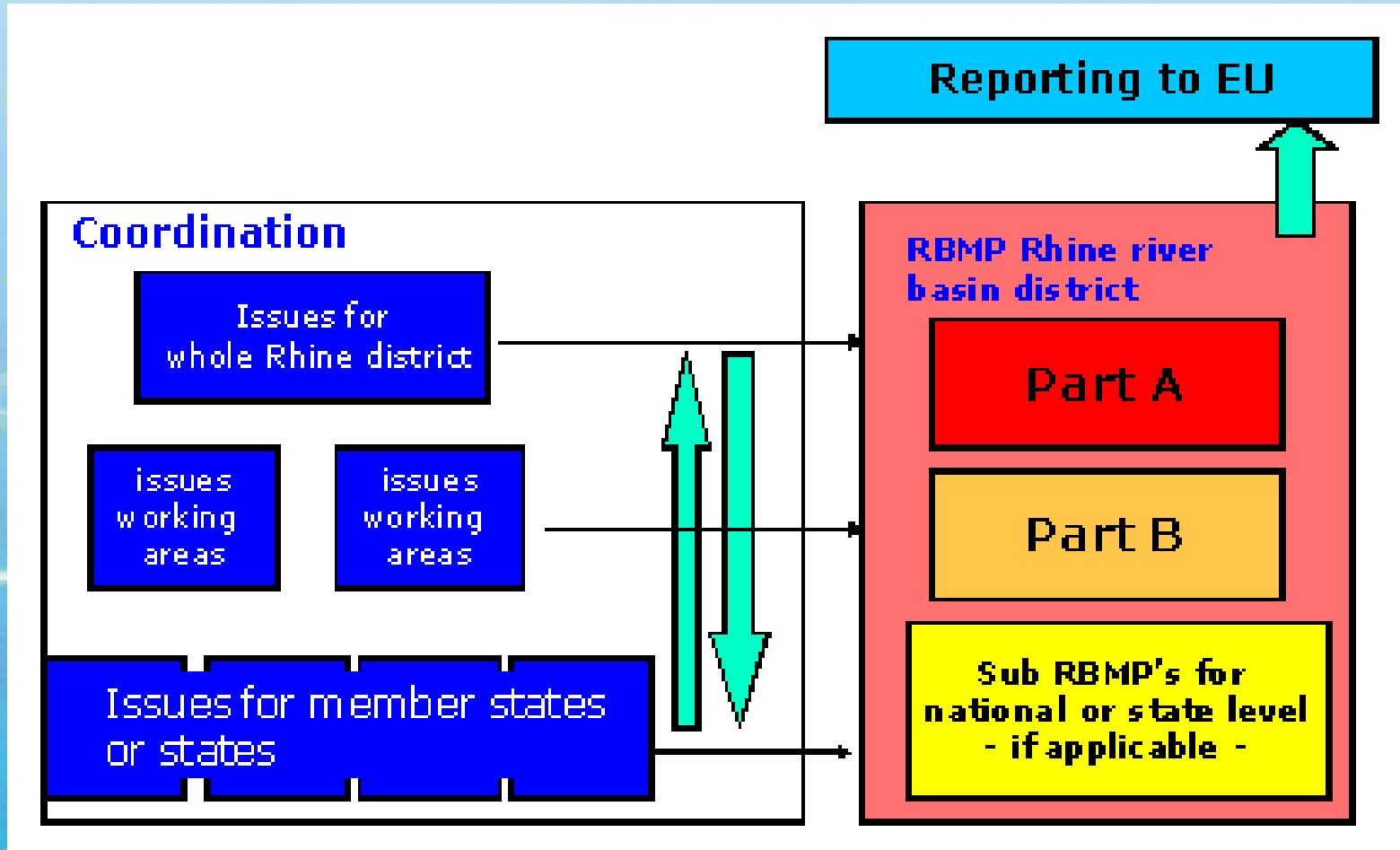
(3) Increasing flood awareness by drafting and spreading flood risk maps for 100 % of flood hazard areas V

(4) Improve the flood forecasting system - Prolong forecasting periods by 100 % by 2005 V



Since 2007:

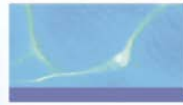
ICPR = Frame for the exchange of information and the coordinated implementation of the EU FLOODS DIRECTIVE



The new draft of the Flood risk management plan for the Rhine river basin

Flood risk management plan
for the international river
basin district Rhine,
level A

Status: Draft, Dec. 2014



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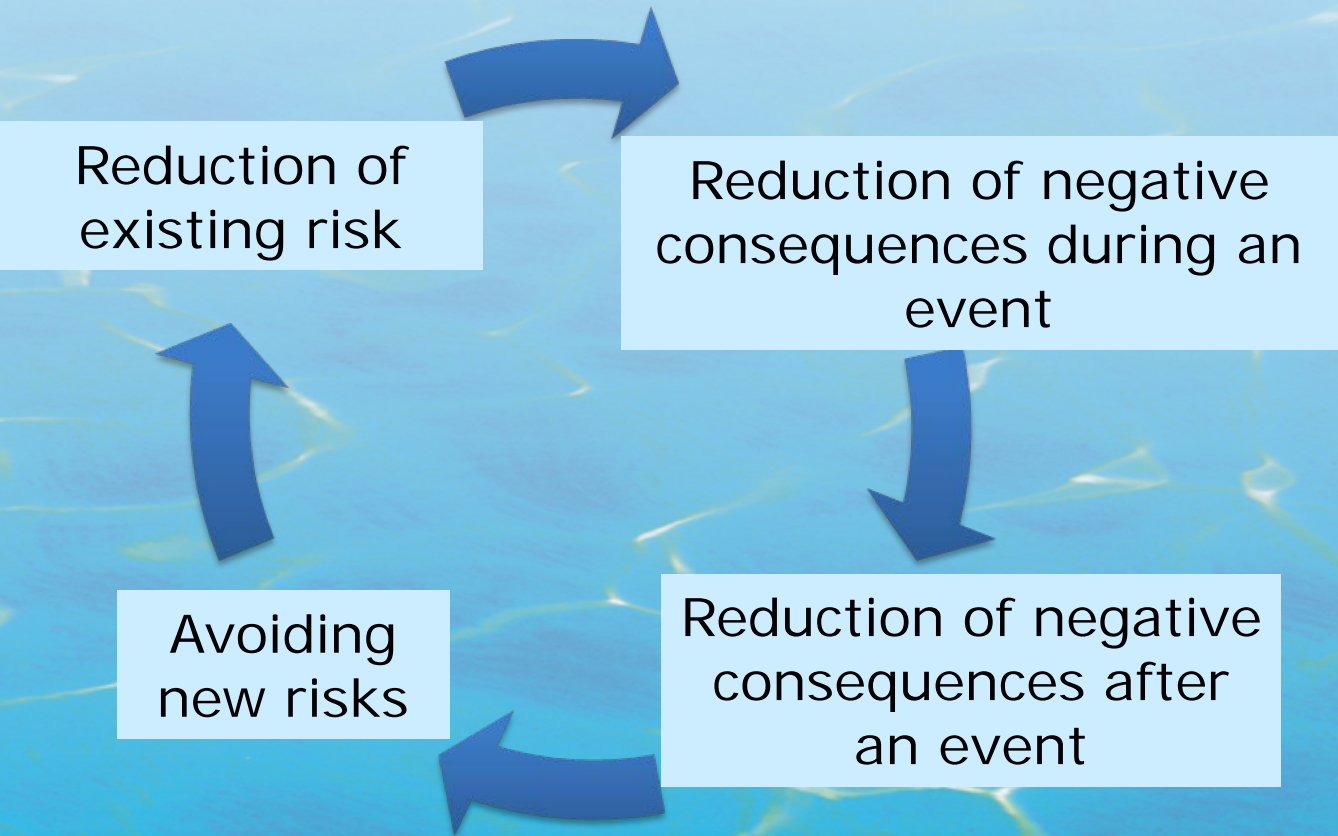
Since December 22th 2014:
available for public information
and consultation on www.iksr.org

Finalized and available in English
by **December 22th 2015.**

Main principles

- **Responsability, solidarity and proportionality**
- **Synergy with other EU environmental politics**
- **Sustainable and integral flood risk management**
- **Security level ecologically, economically and socially compliant**
- **Flood risk management = common task (clear task distribution)**
- **No 100% security, always residual risks**

Common objectives



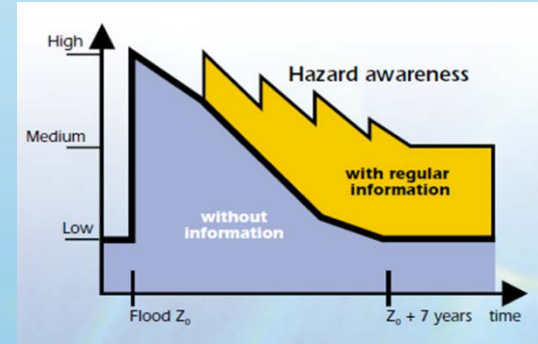
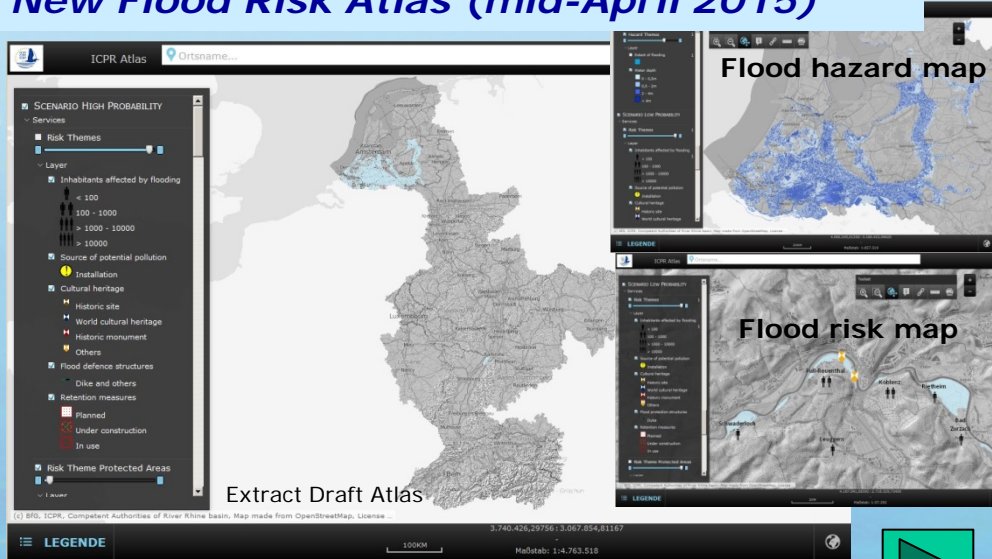
Common concrete measures

- 1. International coordination of measures (measures with transboundary effects)**
- 2. Improvement of information exchange and access**
- 3. Improvement of flood forecast and flood warning system**
- 4. Realization of water level reduction measures**

Improvement of information exchange and access

- Risk knowledge and awareness

New Flood Risk Atlas (mid-April 2015)

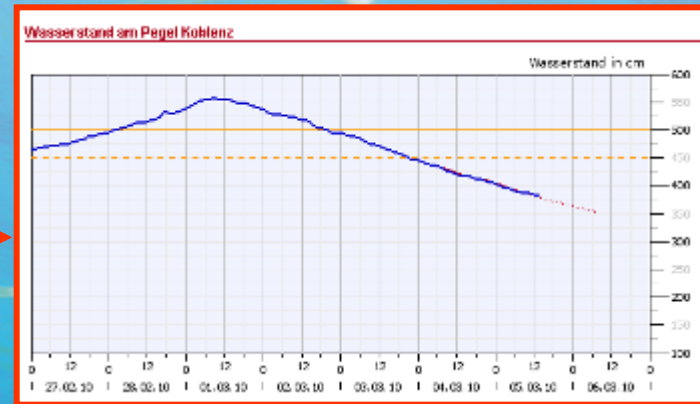
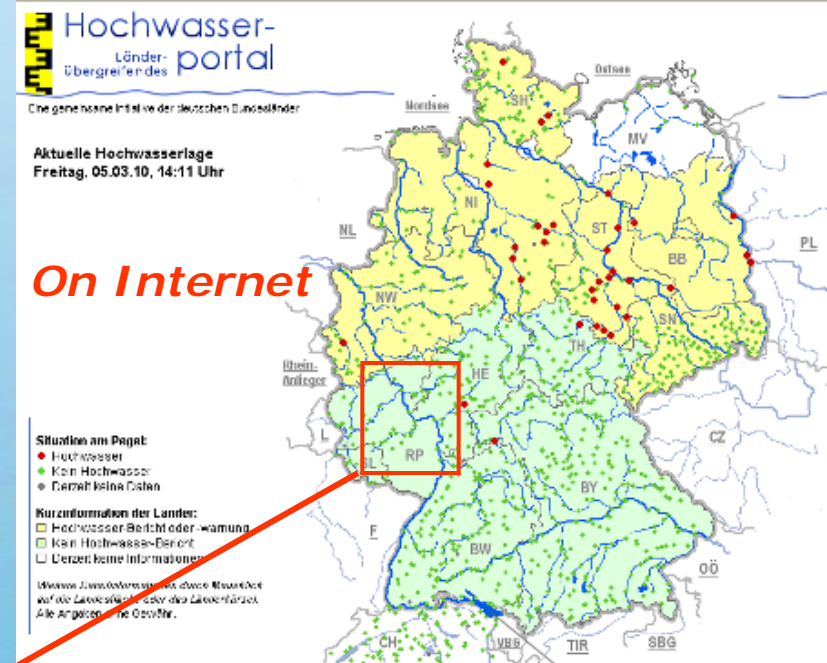
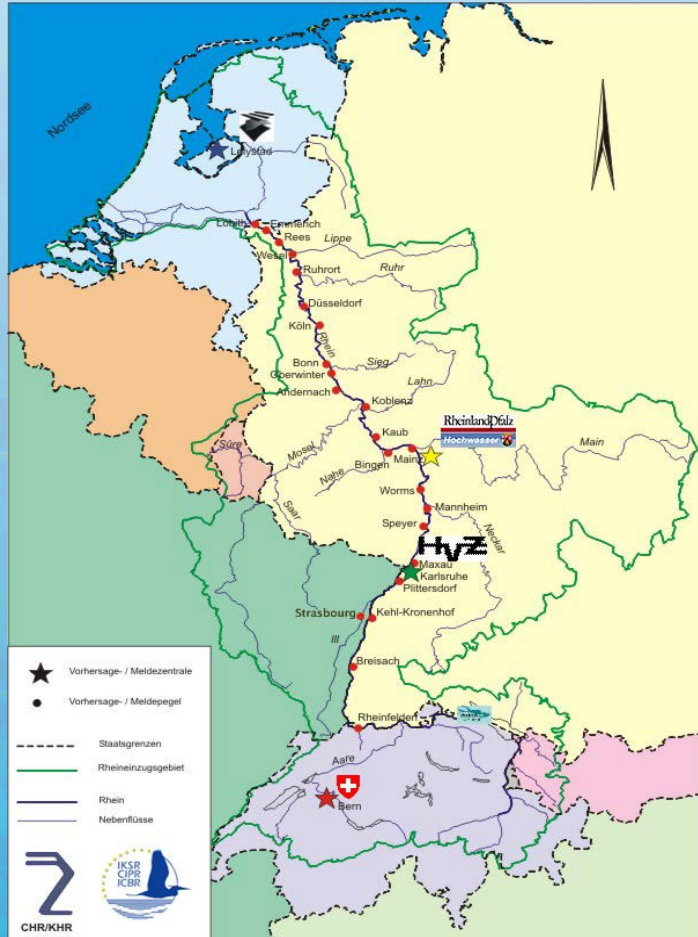


- Knowledge about the impacts of climate change
→ *New climate change adaptation strategy*

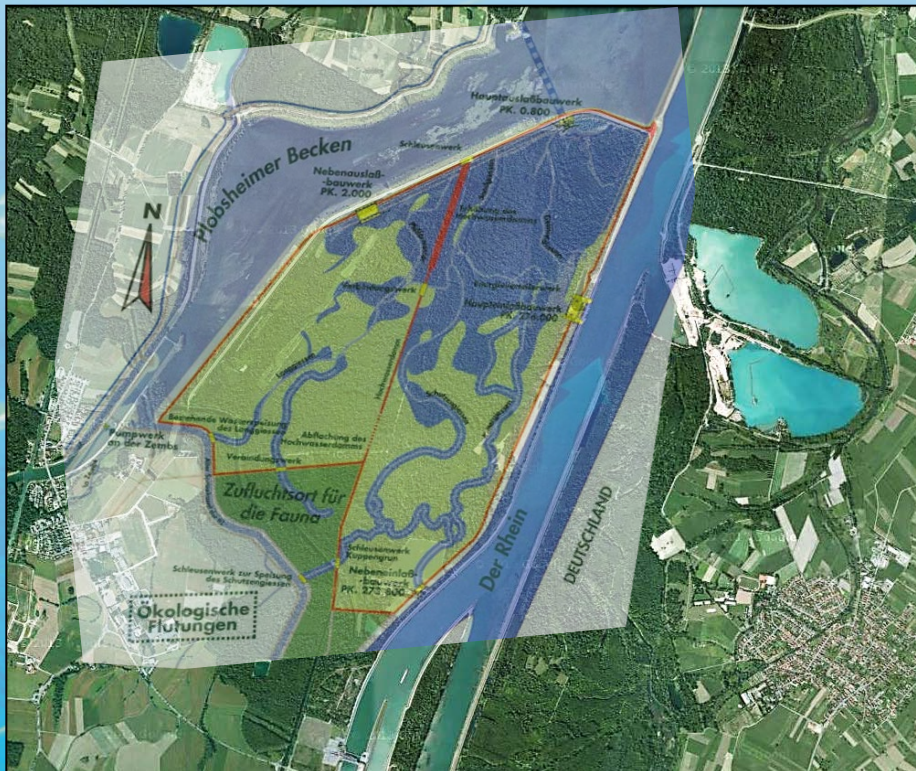
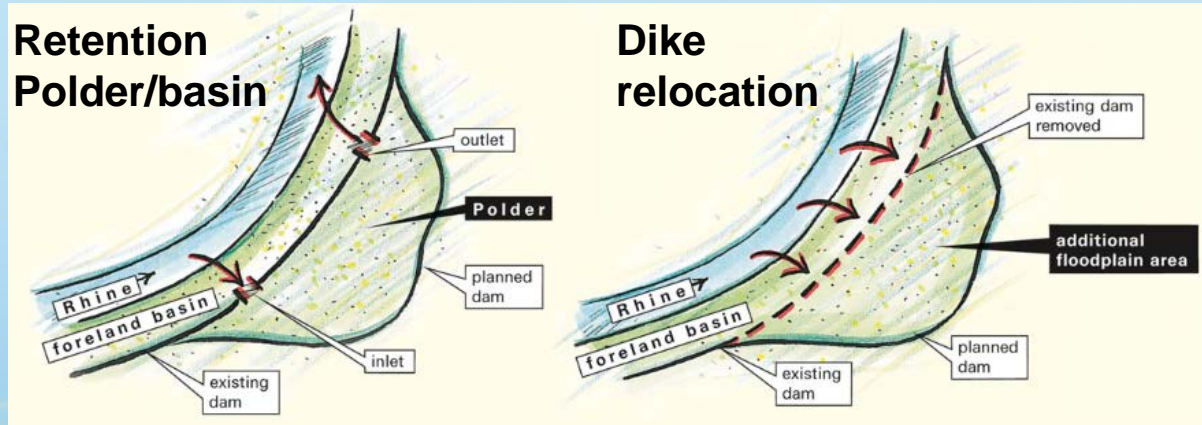


Improvement of flood forecast and flood warning system

Flood announcement and forecasting centres

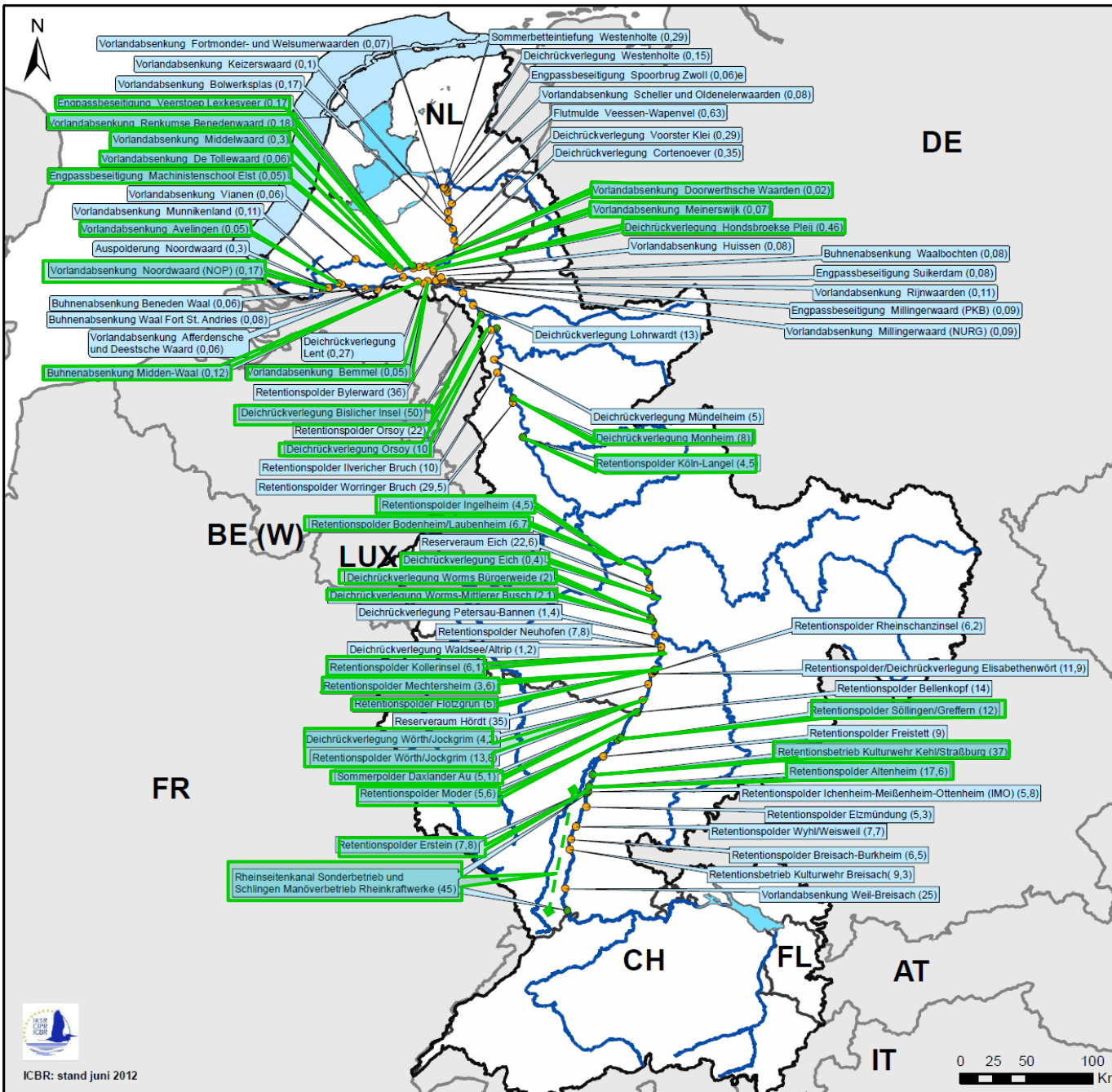


Realization of water level reduction measures



Retention basin Erstein

Realization of water level reduction measures



Maatregelen voor de retentie van hoogwater in de hoofdstroom van de Rijn

Stand van de uitvoering van de maatregelen

- Afgerond
- In uitvoering / in planning

Wateren

- Rivieren
- Kust- en overgangswateren

Toelichting bij de cijfers

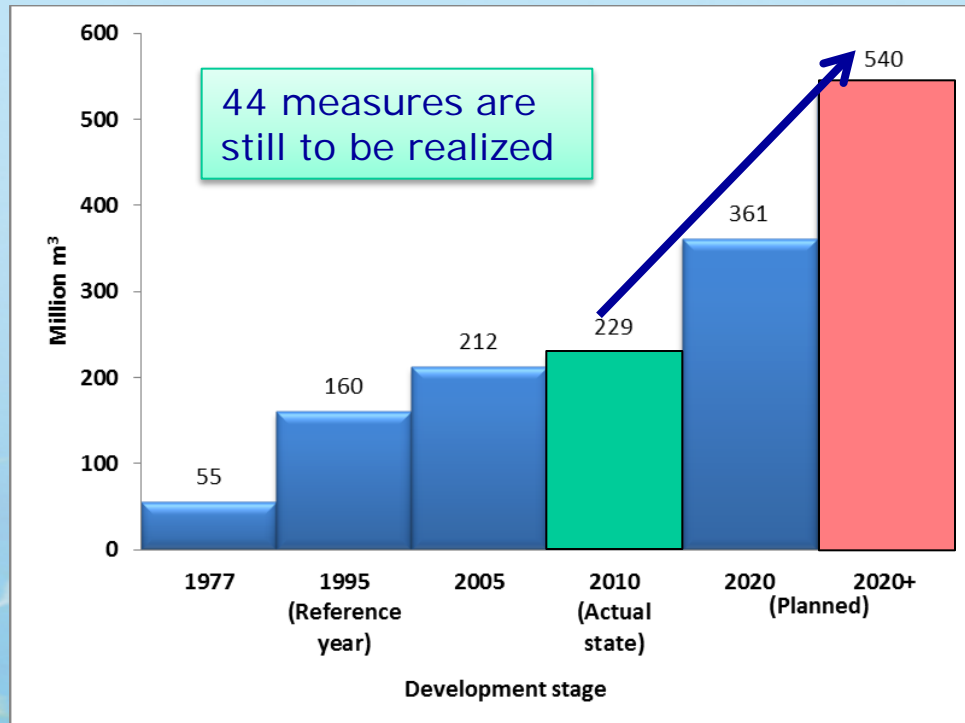
Voor de waterstandverlagende maatregelen in de Rijndelta vanaf Lobith: verlaging van de waterstand in m

Voor de retentiemaatregelen tussen Bazel en Lobith: volumes in miljoen m³

Opmerking: De Franse of Nederlandse naam van de maatregelen is te vinden in de bijgevoegde tabellen.

32 from 76 measures are accomplished

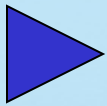




Reduction of flood water levels

(downstream of the impounded river stretch, **state as 2020**; 100years returning period)

Upper Rhine	10-23 cm (max. 44 cm)
Middle Rhine	16-29 cm (max. 50 cm)
Lower Rhine	4-14 cm (max. 25 cm)
Rhine delta	10-45 cm (max. 57 cm)



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