# Measures to improve the status of sediment in the German part of the Elbe River Basin

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The management of sediment quantity and quality as well as the implementation of measures is continuously of high actuality

- Sediment dynamic during hydrological extremes (see presentation Medek and Rohde as well as FGG reports about HW 2013 and NW 2015)
- PCB- contamination and management
- Public requests (i.e. for interview of a pupil's magazine)





Pressure	Number of SWB	Number of SWB with exemption eco. status because of pressure
1.5 - Point - Contaminated sites or abandoned industrial sites	16	16
1.7 - Point - Mine waters	34	19
2.5 - Diffuse - Contaminated sites or abandoned industrial sites	50	41
2.8 Diffuse - Mining	60	60
<ul> <li>9 - Anthropogenic pressure - Historical pollution</li> </ul>	93	83



Data from WISE

reporting



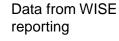
#### SeMK in E-reporting

Contaminant	EC- Relevance	Number of SWB above EQS	
Quecksilber		3149	
Cadmium		103	
Blei		3	
Zink		107	
Kupfer		79	
Nickel		72	
Arsen		81	
Chrom		1	
α-HCH			
β-НСН		12	
ү-НСН			
p,p'-DDT		28	
p,p'-DDE		?	
p,p'-DDD		ſ	
PCB Nr. 28		15	
PCB Nr. 52		11	
PCB Nr. 101		18	
PCB Nr. 118		-	
PCB Nr. 138		37	
PCB Nr. 153		31	
PCB Nr. 180		8	
Summe 7 PCB		-	
Pentachlorbenzen		1	
HCB		28	
Benzo(a)pyren		432	
Anthracen		10	
Fluoranthen		377	
Summe 5 PAK (CR)		-	
Tributylzinn Kation		101	
Dioxine/Furane		?	

Wide distribution, i.a. from combustion

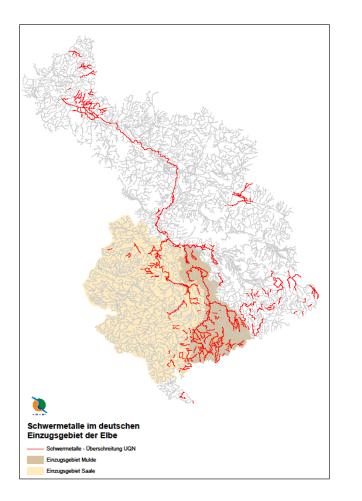
**Historical mining** 

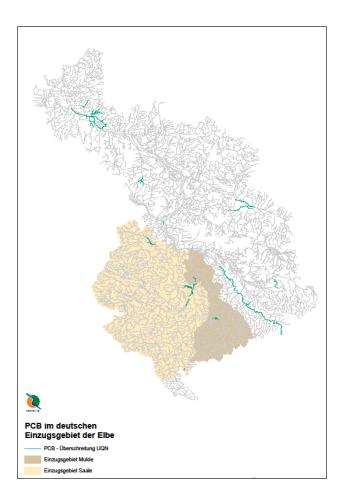
Weiße Elster, Bode, CZ





















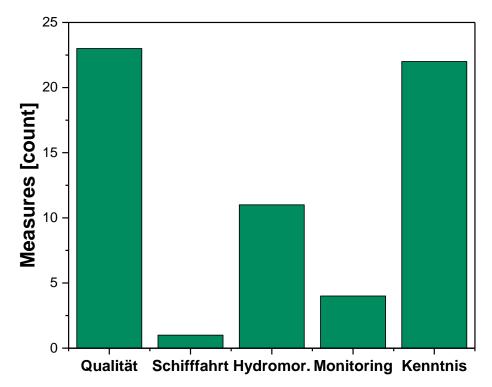












Reply on the questionnaire:

## Key aspect

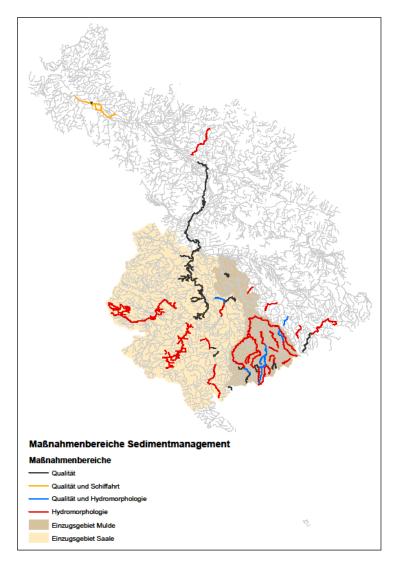
- <u>Quality of sediment</u> remediation of sediment depots, sediment management
- Improvement of knowledge (!) SeMK is a conceptual basis for studies to prepare measures and estimation of costs
- <u>Connectivity (lateral and</u> <u>longitudinal), bed load</u> <u>management, river conservancy</u> (<u>estuary)</u>







Main focus of planned measure is located in the sub-catchments of Saale, Mulde and the tidal estuary























Aspects of implementation and updating SeMK on the background of the questionnaire

- Sediment management in ST: Presentation Kasimir
- SQI: Presentation Medek, Wiemann
- Monitoring program for hydrological extremes: Presentation Medek, Rohde







# Expert discussions i.e. together with BfG

- Quality of suspended sediment and retention in floodplains
- Increase or diminishing of topsoil contamination after flood 2013
- Function of groin fields and lateral structures for contaminant transport

# **Continuation of monitoring**

- Deficit analysis of the SeMK monitoring program and agreement of continuation
- Data management in FIS with supplement of existing data from rivers of category 2

# New projects/pilot studies

- Passability for sediments and balanced sediment budget
- Assessment of quantitative and hydromorphological aspects of tributaries





#### Discussion about "less stringent objectives"

Common understanding of designation of "less stringent objectives" in cases of too high metal concentrations in sediments of historical mining areas

Conceptual works on the consideration of catchment-wide effects of the designation of "less stringent objectives" on a water body level

## **Dialog and public involvement**

Organisation of an expert dialog of the FGG Elbe together with NGOs and scientific institutions to support the solving of the implementation problem

The positive experiences of "Dialogforums Strombau- und Sedimentmanagement Tideelbe" can be a template





# **Conceptual considerations of AG OW**

The status of implementation thitherto requires a sharpening of the strategy for a closer collaboration of the states and the federal government and a prioritisation of preferential projects and mutual realisation.

-> planning an implementation of measures in the catchment of Saale (incl. Bode, Schlenze and Weiße Elster) as well as in the transnational catchment of the Mulde as a priority;

-> considering a joint financing of these priority measures by the states, i.e. a financing fund



# Thank you