

Povodí Labe, state enterprise

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Department of Ecology



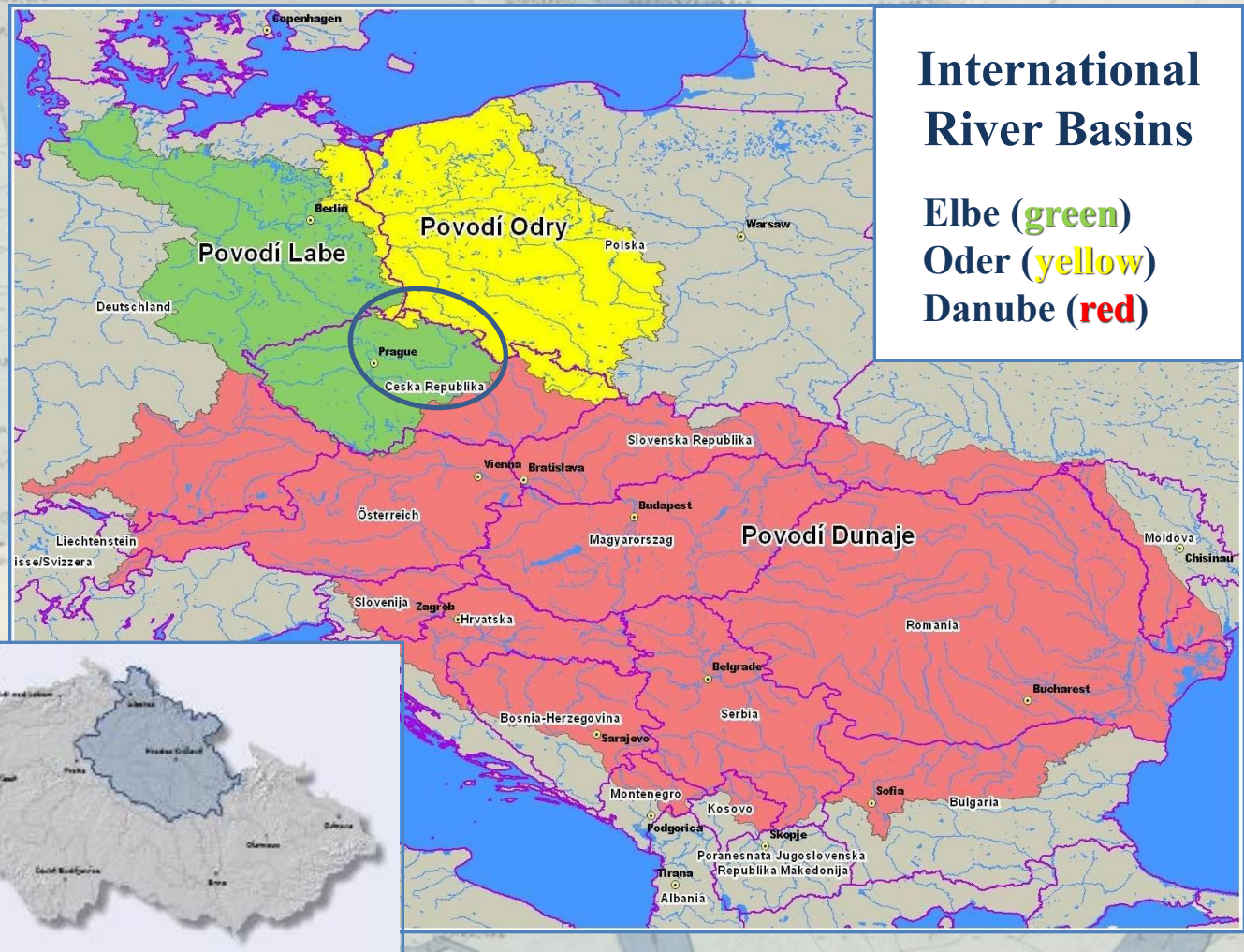
Elbe river (spring) – Giant Mountains

**International Course on River and Wetland
Restoration**



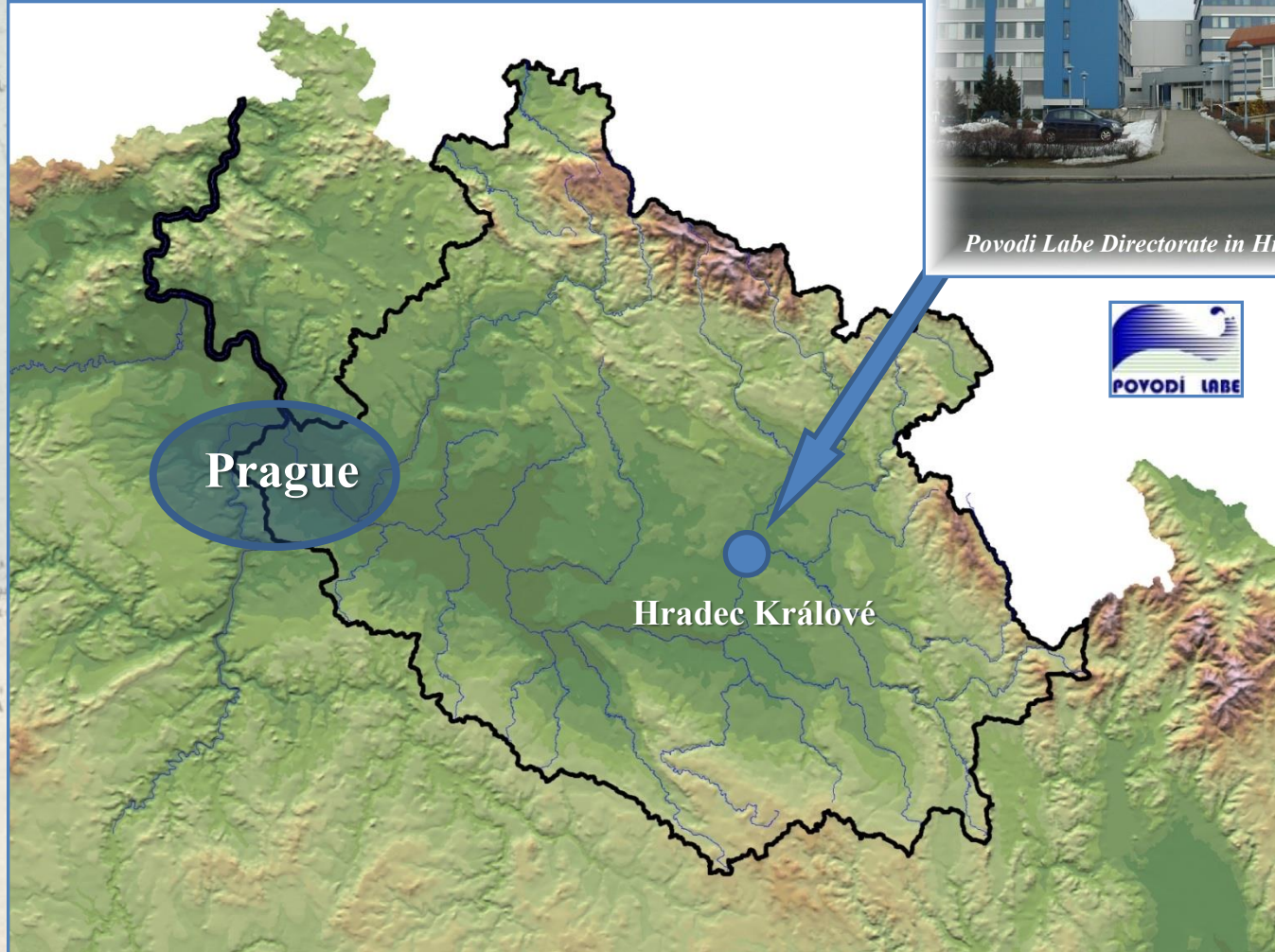
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International River Basins



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Location

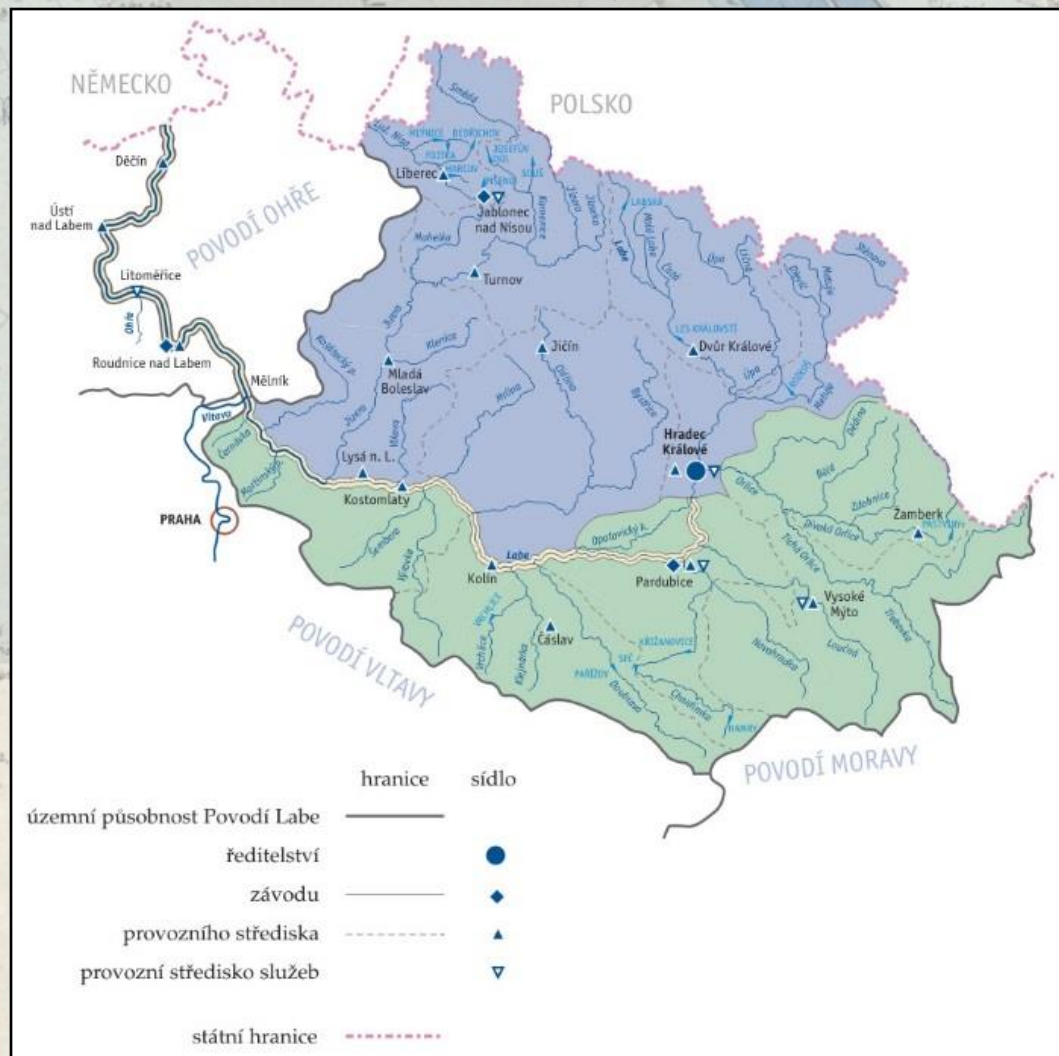


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Spatial pattern of organization units

3 Operation Divisions

- Directorate in Hradec Králové
- Operational Division Hradec Králové
- Operational Division Pardubice
- Operational Division Roudnice nad Labem



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Basic data on water management property

Drainage area managed	km ²	14 976,1
Length of rivers managed	km	9 367,7
Weirs	units	196
Ponds	units	79
Reservoirs (dams)	units	23
- waterworks	units	7
- total storage capacity	mill.m ³	180,9
- water surface of the reservoir	km ²	20,9
Waterway with river transport	km	244,8
Hydro-electric power plants	units	20
- installed capacity	kW	6 108



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Hydrological extremes

Floods

(in 1997, 1998, 2000, 2002, 2006, 2010, 2013, 2024)



Prague 2013



Mlýnské dam 2013 (Albrechtický stream)



Flood in Víška 2013



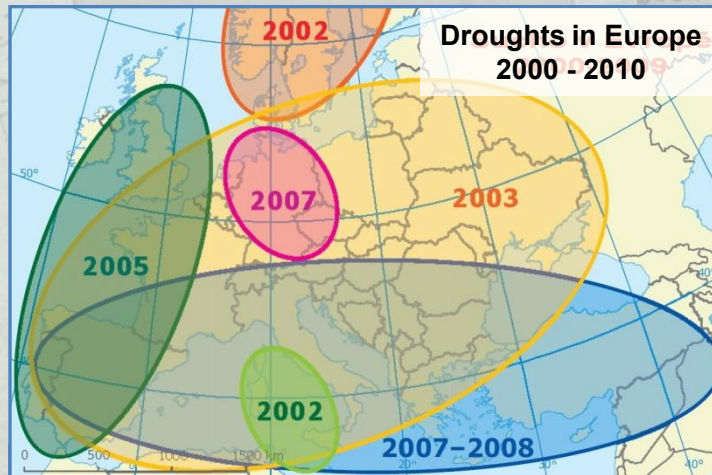
Flood in Litoměřice and surroundings 2013 (Elbe)



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Hydrological extremes

Droughts (in 1991, 1992, 2003, 2007, 2014?)





Hydraulic structures



Water-management laboratories



Watercourses management



Environmental care for river systems

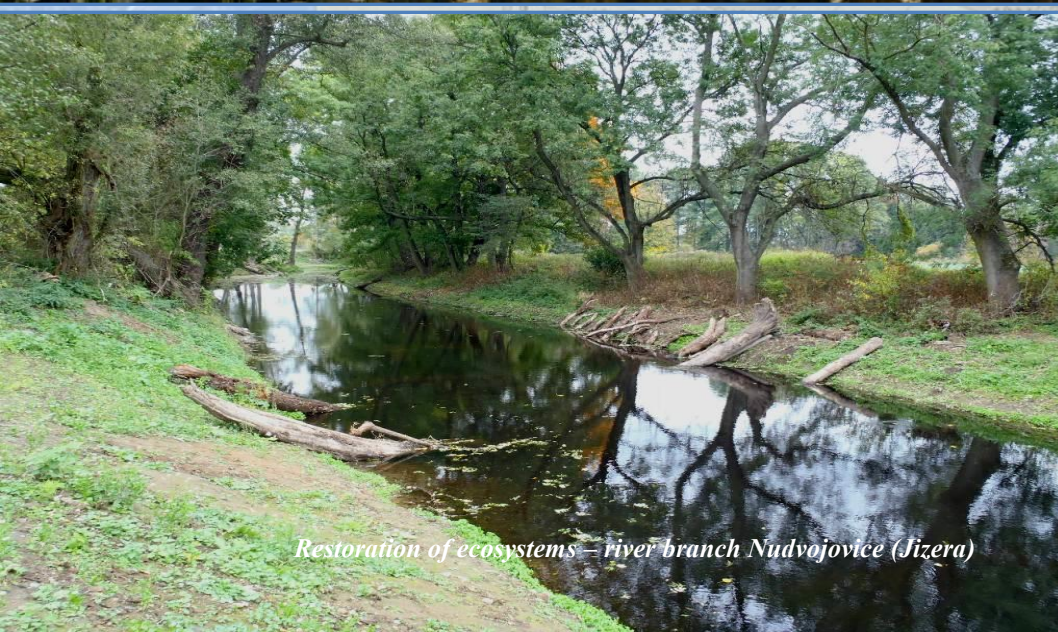
Investment construction...



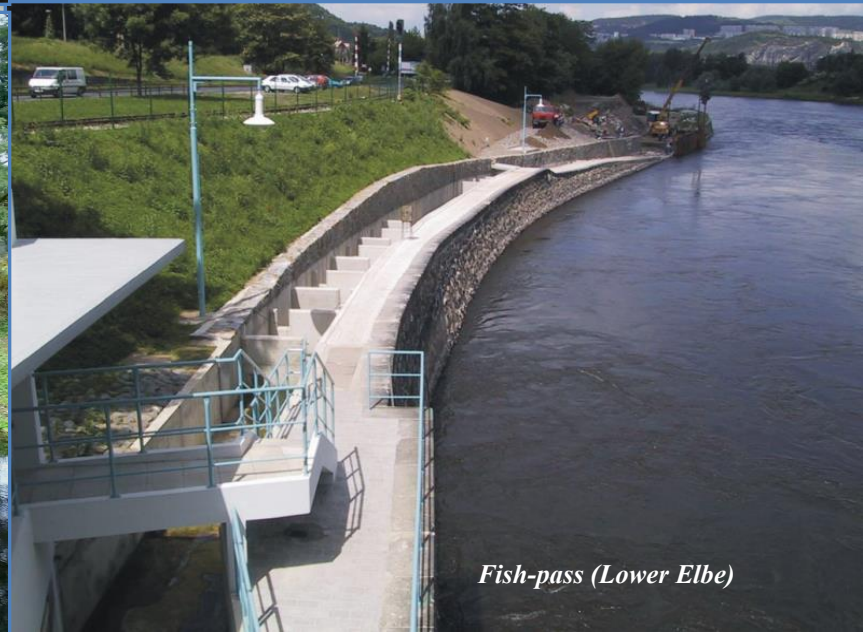
Polder and outflow – flood protection (Třebovka)



Concrete dam – flood protection in Choceň (Orlice)



Restoration of ecosystems – river branch Nudvojovice (Jizera)



Fish-pass (Lower Elbe)

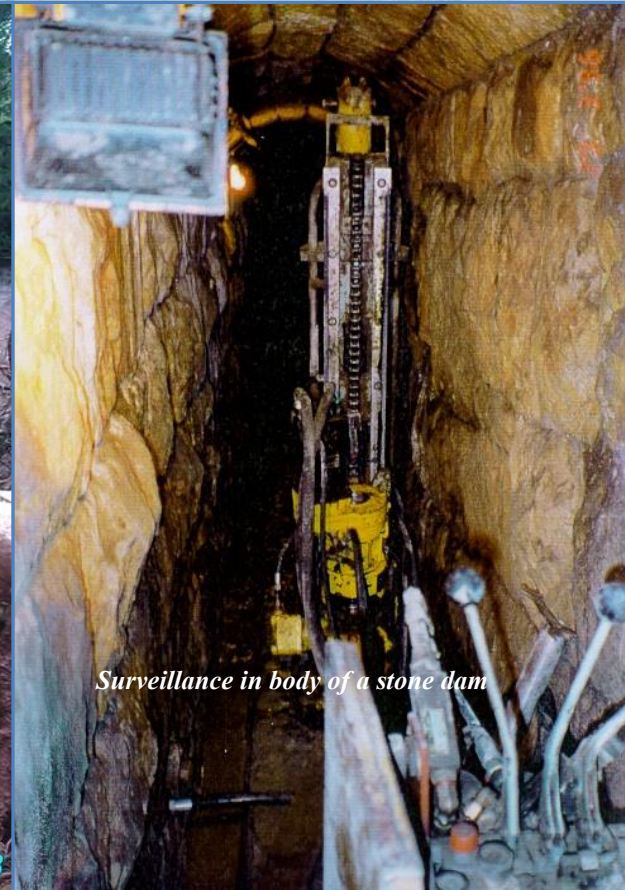
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Repairs of structure and technical surveillance and maintenance...



Repairing structure of riverbed after flood event (Menzimuck)

Povodně Trutnovsko 2013



Surveillance in body of a stone dam

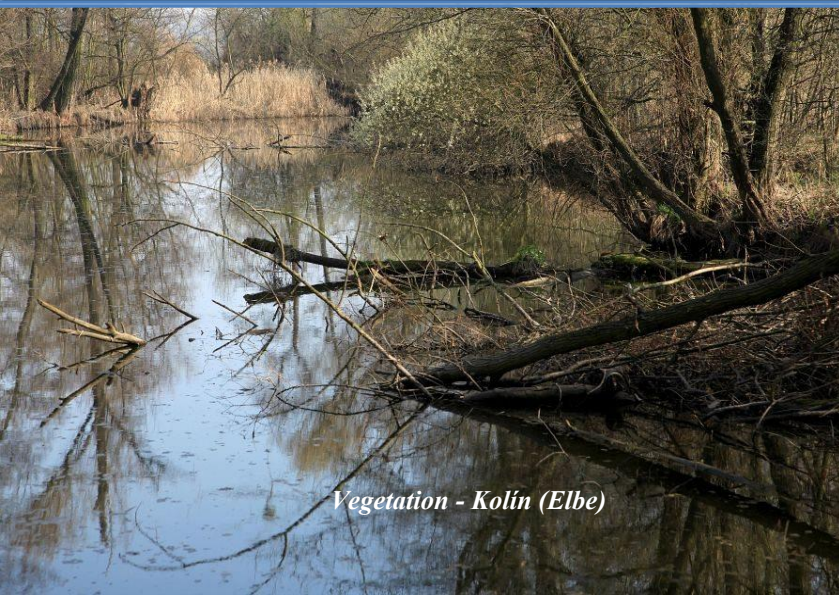
River bank vegetation care



River bank with vegetation (Orlice)



Meanders (Smědá)



Vegetation - Kolín (Elbe)



Restoration (Malostranský stream)

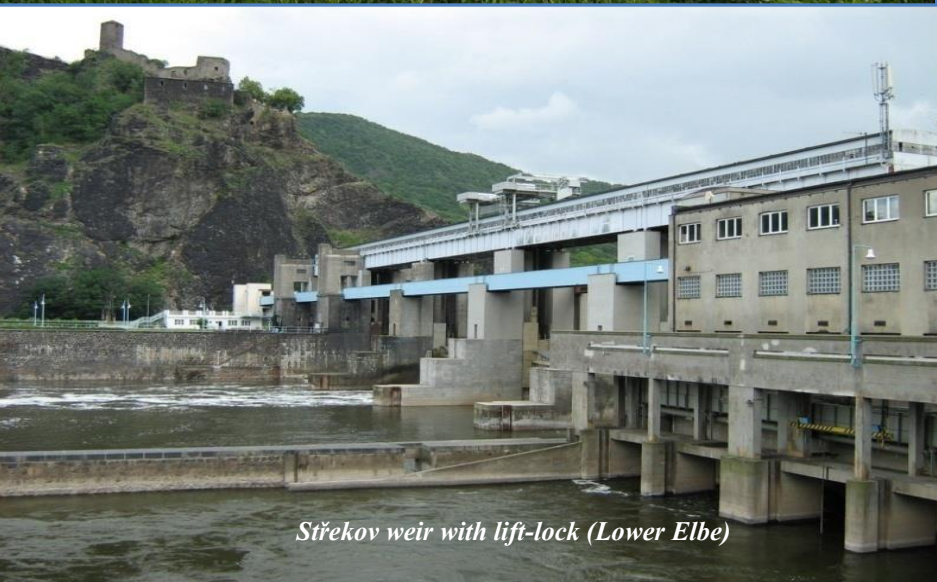
Waterway transport (navigation)



Tug (Lower Elbe)



Remove sediments in waterway - Komatsu bulldozer (Lower Elbe)

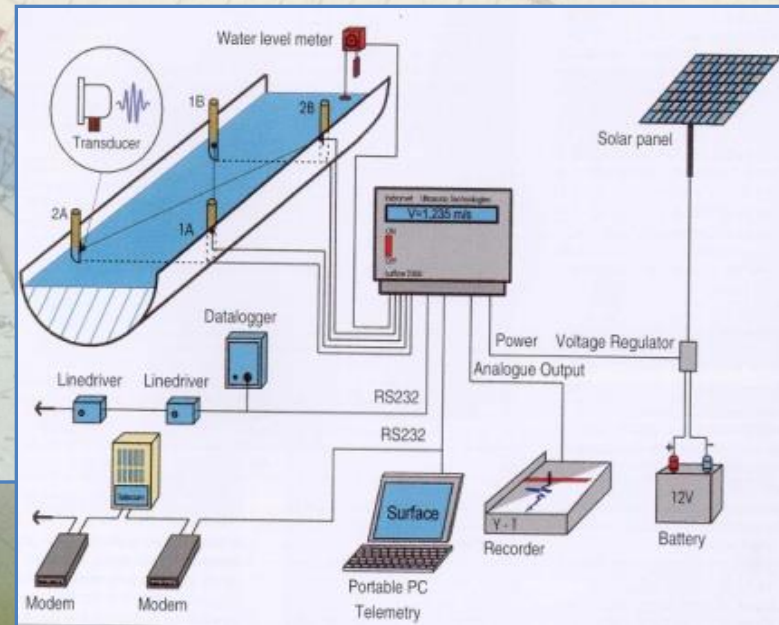
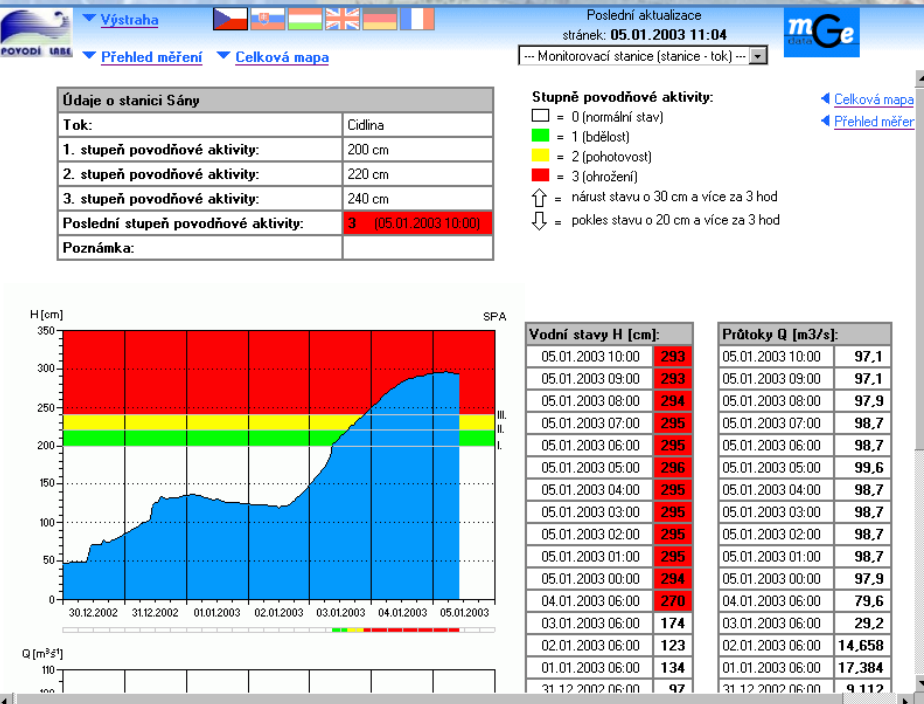


Střekov weir with lift-lock (Lower Elbe)



Winter in Ústí nad Labem (Lower Elbe)

Water management control



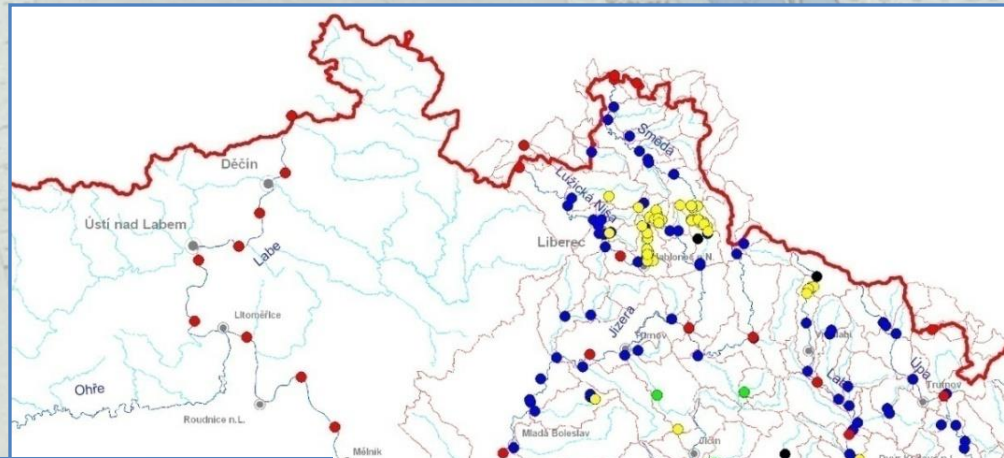
Measure device (Orlice)



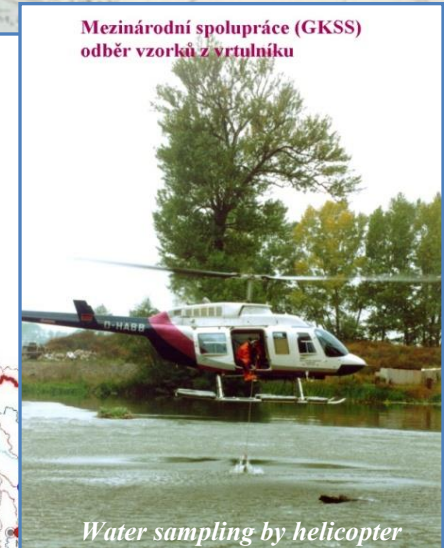
Water management control room

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Monitoring of surface water quality



Mezinárodní spolupráce (GKSS)
odběr vzorků z vrtulníku



Water sampling by helicopter



Water sampling in Hradec Králové

Representative profiles of river basin Elbe



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Water management balance and assessment

Waste water disposal
...in 2013 = 730,8 mill. m³
number of disposal 876



Surface water abstraction
...in 2013 = 608,8 mill. m³
number of abstraction 216

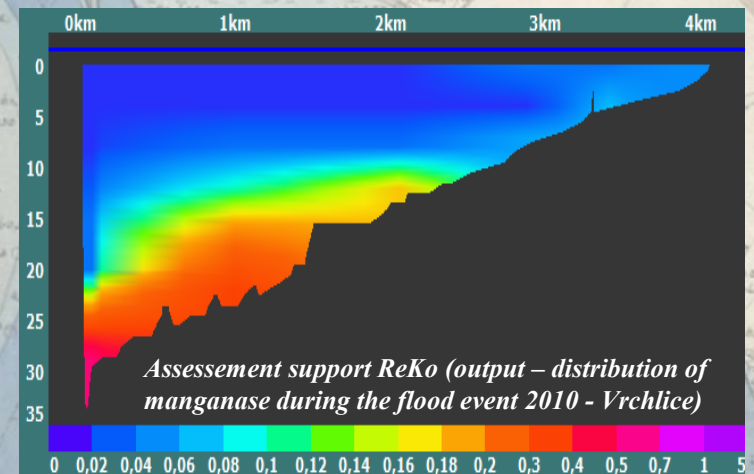


Ground water abstraction
...in 2013 = 109,3 mill. m³
number of abstraction 1 028



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Protection of drinking and bathing water



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Planning in water management

Planning period by the WFD:

I. 2009 - 2015

II. 2016 - 2021

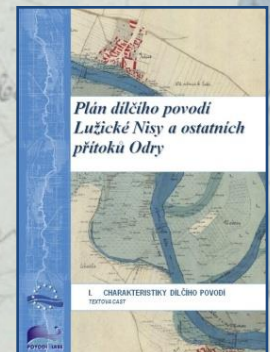
III. 2022 - 2027



The Upper and Middle Elbe River
Basin District Plan

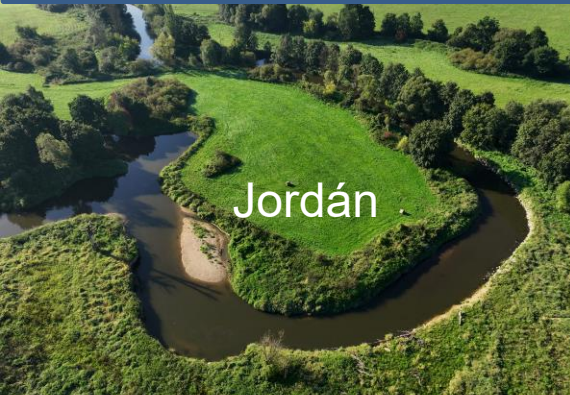


The Lusatian Nisa and other tributary
by Oder River Basin District Plan



Restoration projects

River restorations



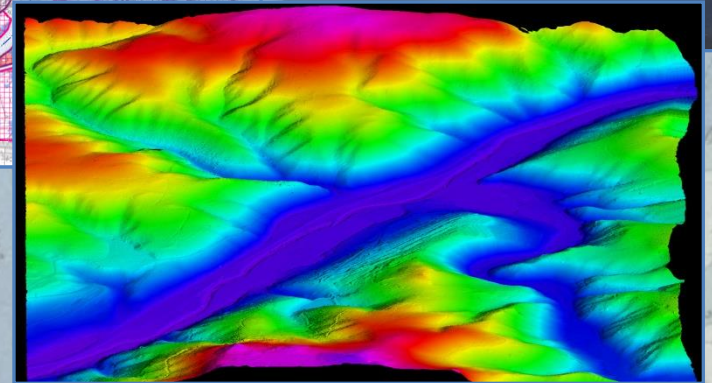
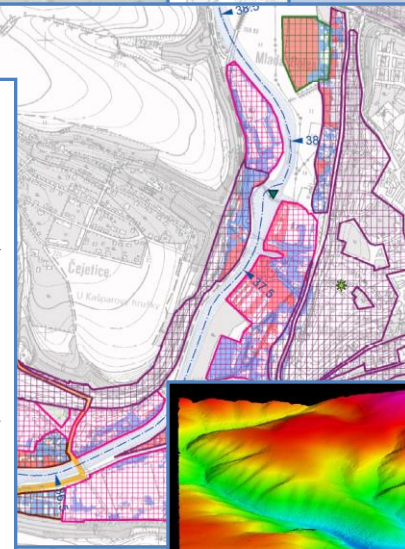
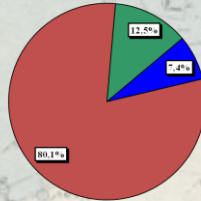
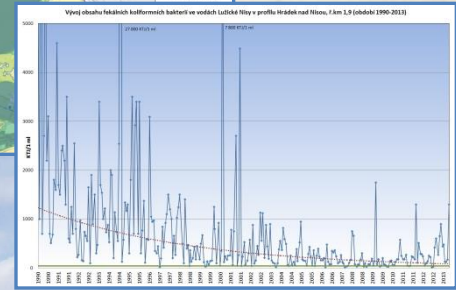
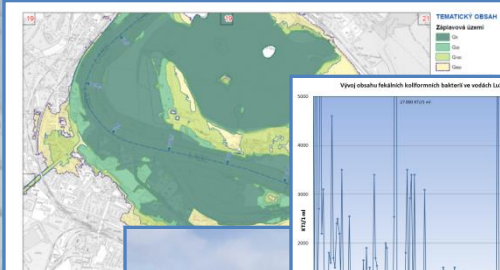
Migration restoration



River arms restorations



Conceptual activity...



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...thank you for your attention...

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Vrchlice reservoir

