Preservation and Renovation of Historical Polders in Szczecin Area in Poland

Oder National Park & Technical Heritage
The polders are located in the wespomeraniam voivodeship transborder part of the Oder river. They were created during regulation works to adjust to present sailing conditions. The stream of the Oder divided to two river beds created (30 km long and 1,5 - 3,0 km width). Widuchowa weir was built to increase water level in the East river bed. All Polder waters are separated from the river by floodgates and sluices. They include 33 km canals, 179 km levees and 129 hydro-technical structures (4 shipping sluices, 2 weirs, 3 big bridges longer than 100m, 6 middle bridges in length between 20 and 100m and 10 small to 20 m in length). In the line of leaves 21 maintenance sluices, 30 culverts, 35 floodgates, 10 ferry shipping, 2 siphons and pump stations) were constructed. After opening EU borders (2008) International Park of Lower Oder River was created along the river 117 000 ha total area. Many species of animals, plants & fishes are protected (e.g. White eagle, Water lily, Otter, Loach) unique in European and World scale.

History of Szczecin’s Polders
Middlepolder Polders were formed from 1849 to 1932 (Lower Cedyinia/Zehden Polder 1849-58 and Upper Polder 1906-32). In 1851 German king Wilhelm I appointed reclamation company to manage construction process. In 1904 passed a bill to receive a needed credit. Main construction spanned from 1906 to 1932, and to 1937 were continued finishing works. All area of Middlepolder polders (5360 ha) allowed for retention of 31min m² of water. Cost of the construction process were over 60mink deutchs mark that was more expensive than projected. After Second World War in 70’s, stopped use of polders to farming due to high cost of exploitation. Since 1993 the Lower Oder Landscape Park have been created.

Future actions and transformation of polders
implementation that would be considered: SzczeCIN
• Protection of the morphological richness and complexity
• Reduction of pollution from power plants and factories and improvement of water quality in Oder river
• Protection from high water including extreme events
• Preservation of hydrological heritage of polders
• Promotion of historical transborder waterway from Berlin to the Baltic Sea.
Transformation would be continued by:
- Control and management including: studies, surveys, monitoring, data banks
- Renovation and maintenance of hydrological structures (e.g. steel and wooden elements of sluices gates and opening mechanisms)
As a result in the future all information for Oder river hydrological system would be collected in data banks. This system would support monitoring and control of high water hazard in Central Europe.

Technical Heritage Maintenance Sluices (1912-1921)
The sluices were used in everyday transport from fields during farming and for desication of polders. 21 maintenance sluices are located along levees of polders. The sluice measureusable length 15,0m, width 6,0m and depth 1,6m.

Technical Heritage Shipping Sluices (1912-21)
Shipping sluices Marwice and Gartz are located on Berlin – Szczecin - Baltic Sea, waterway and connect West and East Oder river bed. The sluice measure: length max. 7,8m, usable length 5,4m; width 9,06m and depth 3,04m.

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