garden, and that the germplasm of at least 100 species will be collected and conserved in the Germplasm Bank of Wild Species at Kunming Institute of Botany. A database will be
developed to collect and store survey information, and after the 
completion of the programme these data will be shared on 
the National Infrastructure Platform of Science and 
Technology, to support conservation and research. In addi-
tion, a germplasm collecting and conserving standard for 
Plant Species with Extremely Small Populations will be de-
veloped. It is anticipated that this programme will not only 
help to conserve the target species, but will also help to im-
prove scientific research and investigations of the economic 
values of these plants.

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Poland: Central European large river ecosystems 
under unprecedented threat

In 2016 the government of Poland adopted a development 
strategy for inland waterways, to adapt the country’s rivers 
to the criteria of international standards for inland water-
ways, corresponding to at least navigability class IV. The 
Act relating to Poland’s ratification of the European 
Agreement on Main Inland Waterways of International 
Importance came into force on 15 February 2017. The 
Act, even if only partially implemented, will pose a grave 
threat to the largest Central European rivers. The strategy’s 
main aims include modifying river beds, drainage, dredg-
ing, and the construction of dams, reservoirs, levees and 
riverside revetments along the lengths of Poland’s longest 
rivers. The strategy is only viable if the main rivers are 
converted into a series of canals by the construction of 
barrages. This would have a dramatic impact on 
pan-European environmental corridors and river ecosys-
tems in Germany, the Czech Republic, Ukraine and 
Belarus.

Implementing the strategy in the Oder valley would 
undermine the integrity of the entire chain of protected 
areas along this river, including 17 Natura 2000 sites from 
the Czech border to the Baltic Sea. A preliminary analysis 
carried out by a team of scientists and NGO experts, led 
by the Naturalists’ Club (www.kp.org.pl/pdf/stonowiska/
wodne/2016-09_Risk_influence_inl_waterways_develop_on_ 
nature.pdf), indicates that the project threatens some of the 
most valuable rivers in Europe, including associated 
riparian, ash–elm–oak forest, and large numbers of nesting 
and foraging sites of threatened species such as the white-
tailed eagle Haliaeetus albicilla, black kite Milvus migrans,
red kite Milvus milvus, black tern Chlidonias niger, corn 
crake Crex crex, middle spotted woodpecker Dendrocopos 
medius and others protected by the EU’s Habitats and 
Birds Directives. Most of the unique oxbow ecosystem to-
gether with its plants and animals would disappear, includ-
ing many localities of the floating water-plantain Luronium 
natans, northern crested newt Triturus cristatus, European 
fire-bellied toad Bombina bombina, yellow-bellied toad 
Bombina variegata, Eurasian otter Lutra lutra and 
Eurasian beaver Castor fiber. The estimated cost of the 
works on the 742 km of the Oder alone is USD 7.1 billion 
during the next 15 years.

In the Vistula valley the integrity of the 10 Natura 2000 areas 
and 10 nature reserves between Warsaw and the Baltic 
Sea would be damaged. Habitats for rare species of birds 
(e.g. the largest Polish breeding populations of common 
ringed plover Charadrius hiaticula, common gull Larus 
canis, sandwich tern Sterna sandvicensis, common tern 
Sterna hirundo and little tern Sterna albitrons) would be 
destroyed, as would sandbanks, the sole resting sites of the 
grey seal Halichoerus grypus in Poland. Barrage construc-
tion on both the Vistula and Oder would hamper the migra-
tion of diadromous fish, reducing access to their spawning 
grounds.

Important aspects of the strategy are canal connections 
with the Dniester and Danube basins. These would threaten 
Europe’s freshwater ecosystems by facilitating migration of 
alien plant and animal species between basins.

The Polish government’s strategy appears to contradict 
EU law, and contravenes the Habitats and Birds Directive 
and the Water Framework Directive. Nevertheless, some 
aspects of this strategy are to be financed by the 
European Investment Bank (part of the so-called Juncker 
Plan) and are being considered by the World Bank. The 
European Commission is, however, investigating whether 
the strategy’s environmental impact has been properly as-
sessed. In response to the threat posed by the strategy, 
more than 20 NGOs (including WWF Poland and 
BirdLife Poland) have formed a coalition under the name 
Koalicja Ratujmy Rzeki! (Save the rivers!; www.kp.org.pl/
index.php?option=com_content&task=view&id=1173& 
Itemid=353).

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