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Naturskyddsföreningen

RIVER UNIVERSITY



RIVERS IN
POLISH
NRP

PAWEŁ PAWLACZYK

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NRR - What should be done:



- Inventory of barriers (transversal, longitudinal, vertical) and analysis of what to do with them
- Plan for the removal of certain barriers
- Restoration of „free-flowing rivers” (contribution to the 25,000 km target in the EU)
- Restoration of floodplain functions
- Restoration of good status of 90% riverine habitats
- Restoration of „sufficient quality and quantity” as well as habitats connectivity for species in rivers



NRR Article 9

Restoration of the natural connectivity of rivers and natural functions of the related floodplains

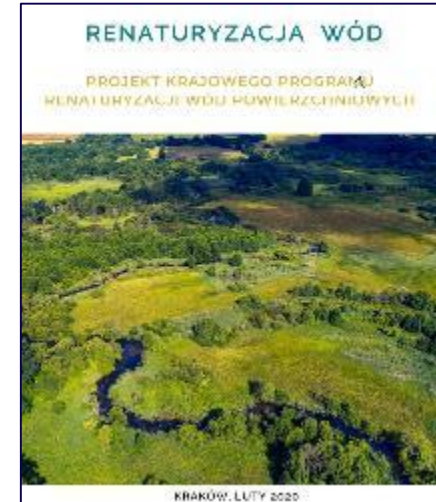


1. Member States shall make an inventory of artificial barriers to the connectivity of surface waters and, taking into account the socio-economic functions of the artificial barriers, identify the barriers that need to be removed **to contribute to meeting the restoration targets set out in Article 4** and **fulfilling the objective of restoring at least 25 000 km of rivers into free-flowing rivers** in the Union by 2030, ... without prejudice to WFD and TEEN-T
2. Member States shall remove the artificial barriers... in accordance with the plan ... shall primarily address obsolete barriers....
3. Member States shall complement the removal of artificial barriers ... by the measures necessary to improve the natural functions of the related floodplains.

Rivers restoration planning – where we are now?



Even before the NRR:



National Surface Waters Restoration Programme (WFD-based, 2020)

←
95% of waterbodies need restoration
92% need connectivity restoring

NRP PL preparing:

- 1st draft ready, waiting for government approval
- Particular parts prepared by relevant Ministries / authorities / agencies (incl. Art. 9 part in responsibility of Polish Waters Agency, Ministry of infrastructure)
- Commission opinion, final version of NRP expected September 2027

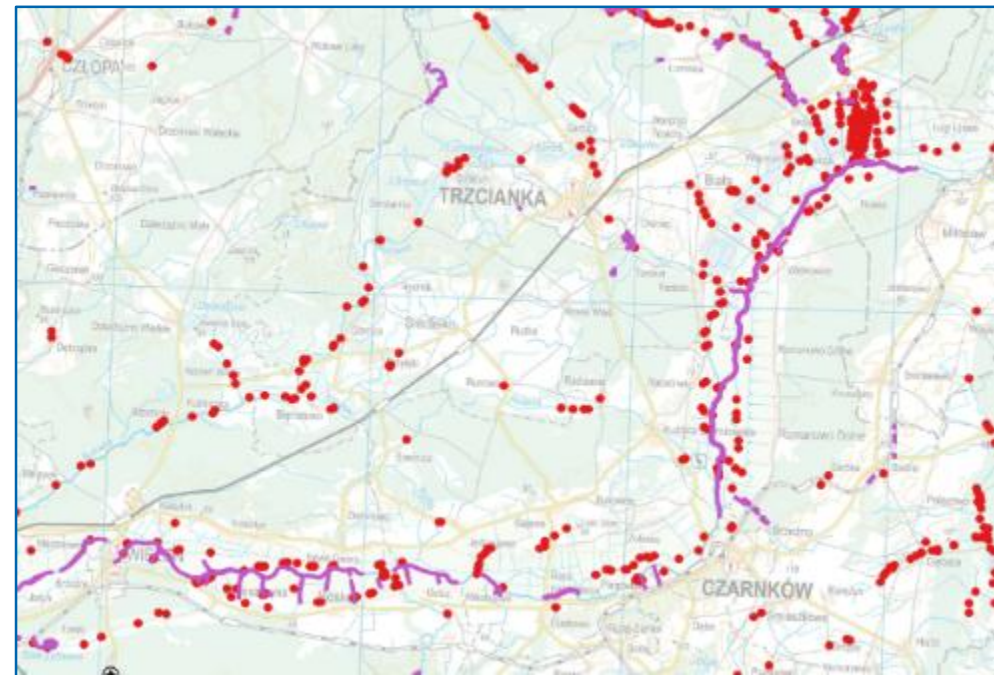
What we know about barriers ?

HYMO database – official register

- 45.700 transversal barriers
- 61.700 longitudinal barriers



16.000 transversal barriers mapped
77.000 transversal barriers estimated
No data concerning longitudinal
barriers



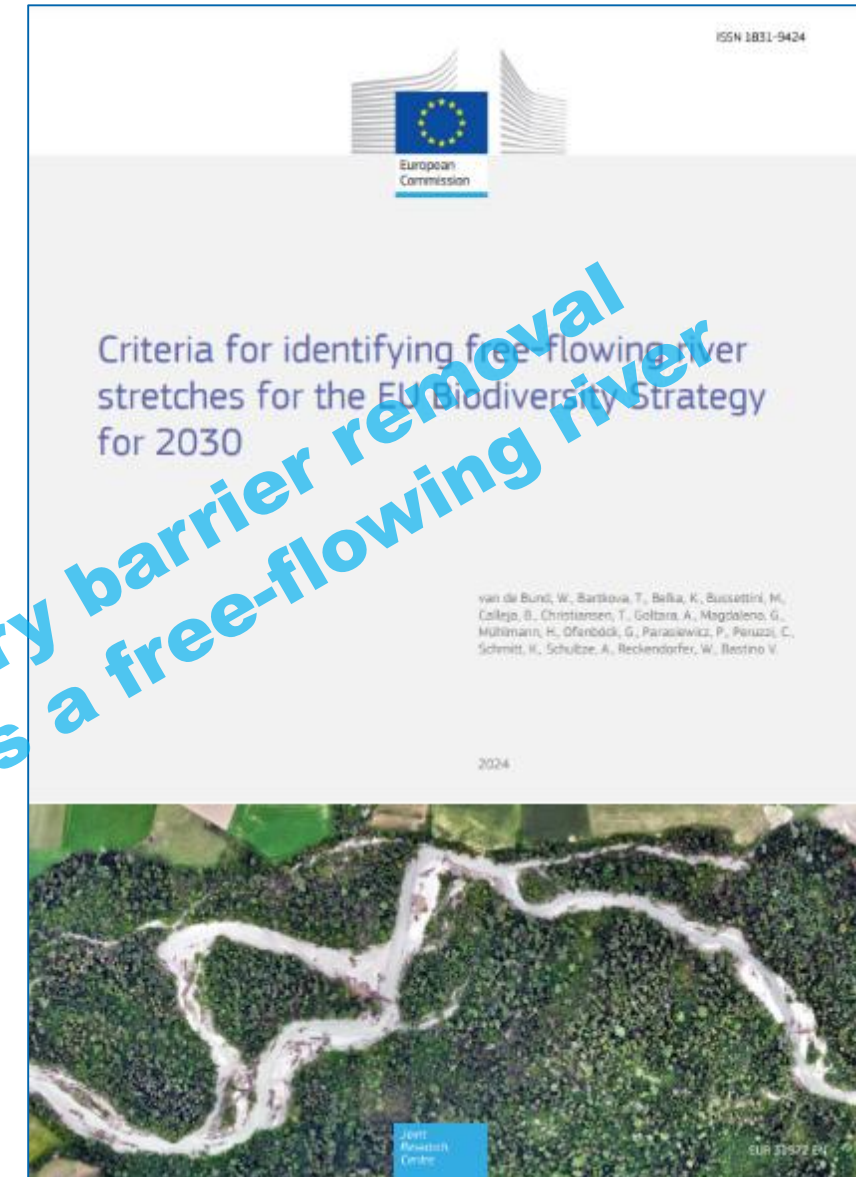


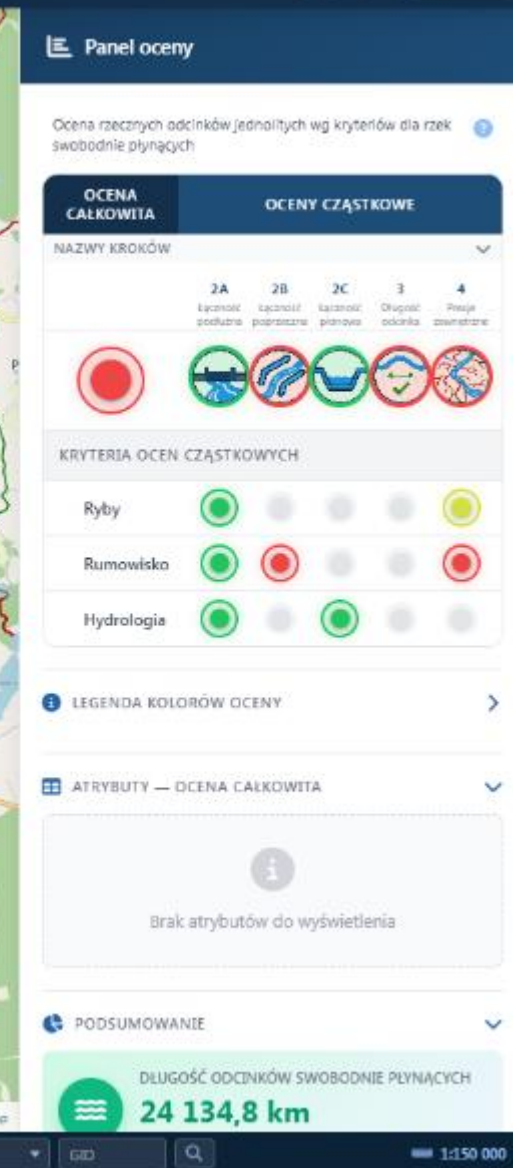
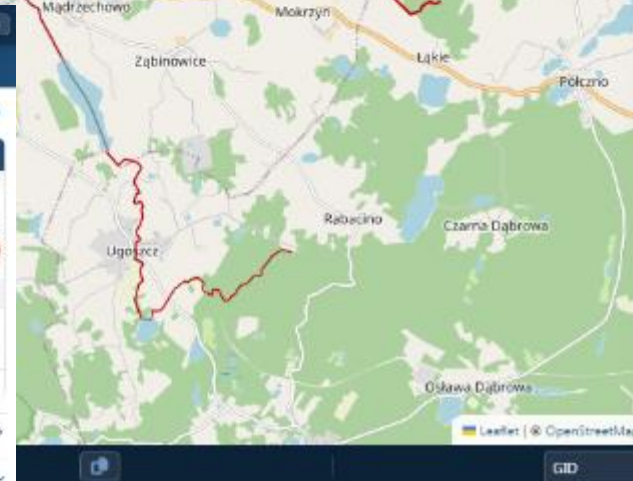
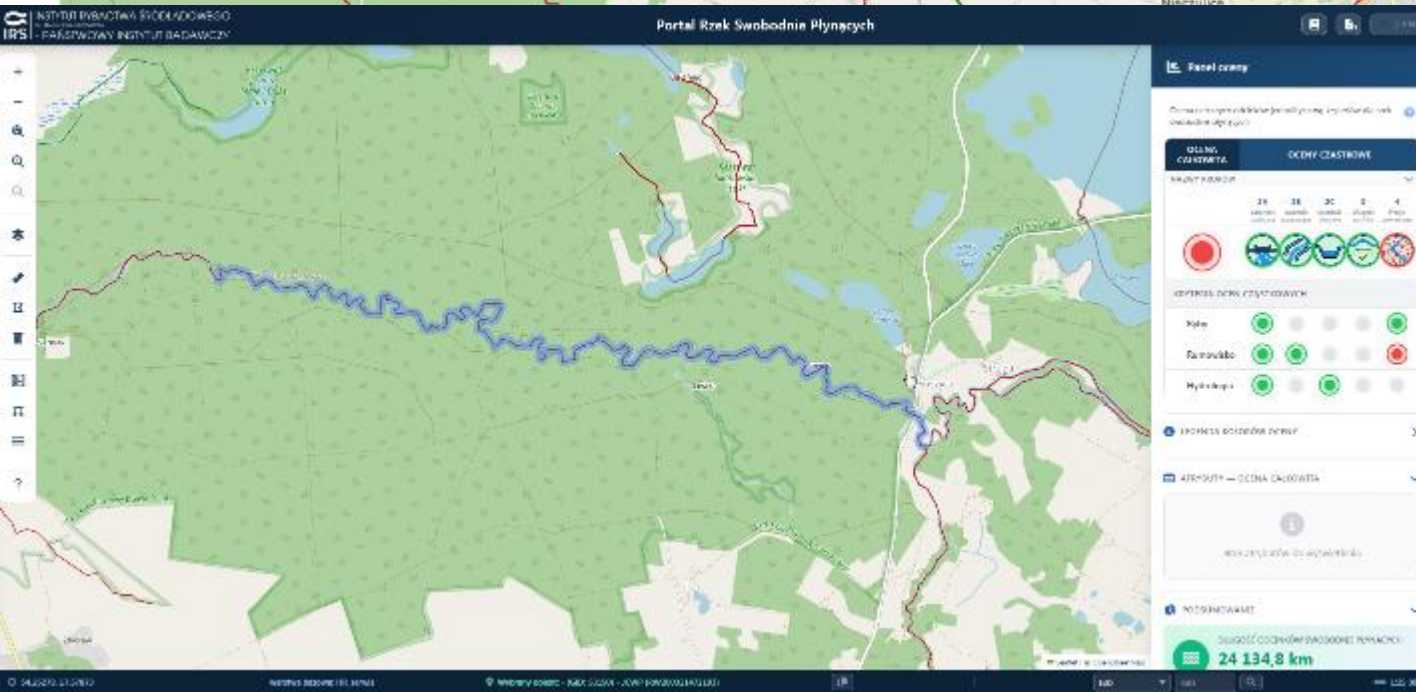
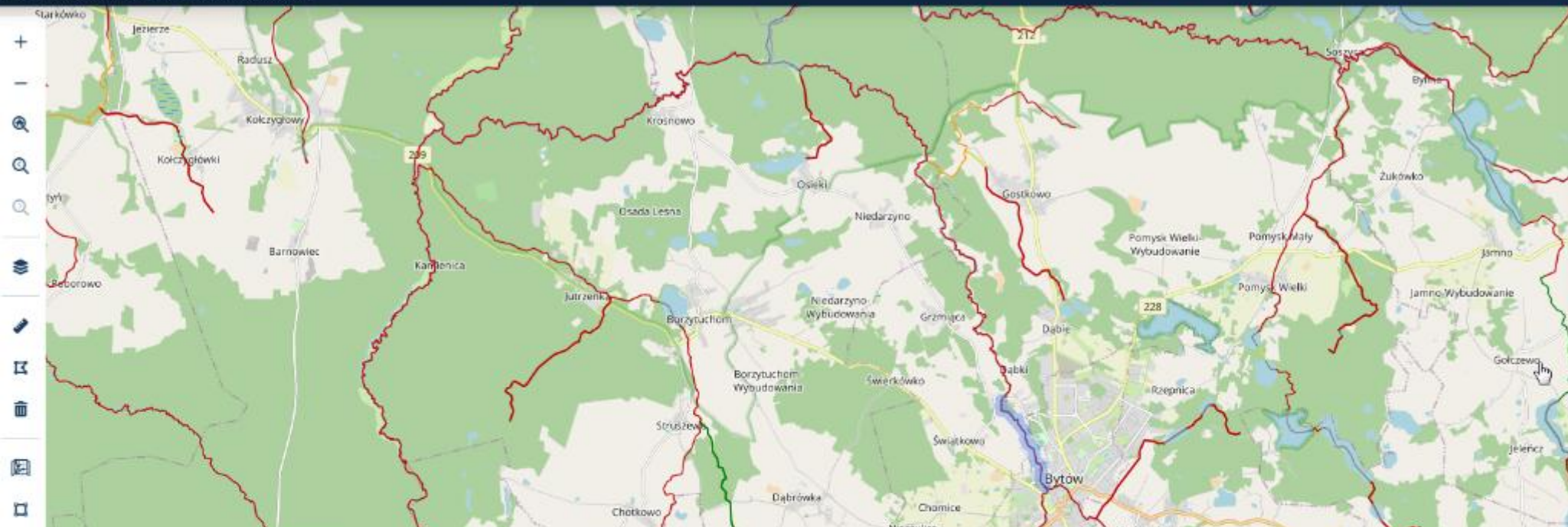
In the field – ghost barriers...

„Free-flowing rivers”

- longitudinal continuity in both directions for all fish living in it,
- longitudinal continuity for sediment transport,
- the combined length of adjacent longitudinal barriers on both banks $< 20\%$ of reach length,
- the combined length of longitudinal barriers on both banks located less than 2 river widths away $< 40\%$ of reach length,
- no anthropogenic incision,
- impermeable bed $< 5\%$ of reach length,
- natural continuity of flow,
- barriers upstream retain $< 30\%$ of sediment,
- for diadromous fish, full access from downstream,
- for river-resident fish only, the entire length of the „functional unit” must be passable (depending on river size, at least 5-15 km)

Not every barrier removal creates a free-flowing river





We can model impact of particular barriers removing on free-flowing rivers restoration...

For planning, we need to know:

Barriers inventory

- Transversal
- Longitudinal
- Vertical

HyMo database

topography

AMBER

field reality



Does the barrier:

- ❖ disturb natural habitats or species from Art. 4?
- ❖ prevent free-flowing of river?
- ❖ hinder achievement of environmental objectives (WFD)?
- ❖ increase flood risk?
- ❖ is useful for any other purposed (how important?)



What should be done?

- ❖ remove ?
- ❖ mitigate (f.e. fish pass) ?
- ❖ accept ?

Where, apart from that, we want to improve natural functions of floodplains?



October 2025:

„We are restoring our rivers, using numerous LIFE projects. NRR does not surprise us. We will be happy to provide significant contribution to free flowing rivers target in EU”



and others...

Paręta
Rega



Ina Drawa 2
Drawa

Bug

Bóbr

Pilica

Odra

Biała

Raba

Wisłoka





August 2026:

„In the draft of NRP we propose ZERO barriers to be removed and ZERO contribution to the free flowing rivers target in EU”



NRR Article 4

Restoration of terrestrial, coastal and freshwater ecosystems



1. Member States shall put in place the restoration measures that are necessary to improve to good condition areas of habitat types listed in Annex I which are not in good condition.

Such restoration measures shall be put in place: by 2030 on at least 30 %, by 2040 on at least 60 % and by 2050, on at least 90 % of the area not in good condition.



NRR Article 4

Restoration of terrestrial, coastal and freshwater ecosystems



7. Member States shall put in place restoration measures for the habitats of the species listed in Annexes to Directive 92/43/EEC and of wild birds, that are necessary to improve the quality and quantity of those habitats, including by re-establishing them, and to enhance connectivity, until sufficient quality and quantity of those habitats is achieved.

cf. Annex V!

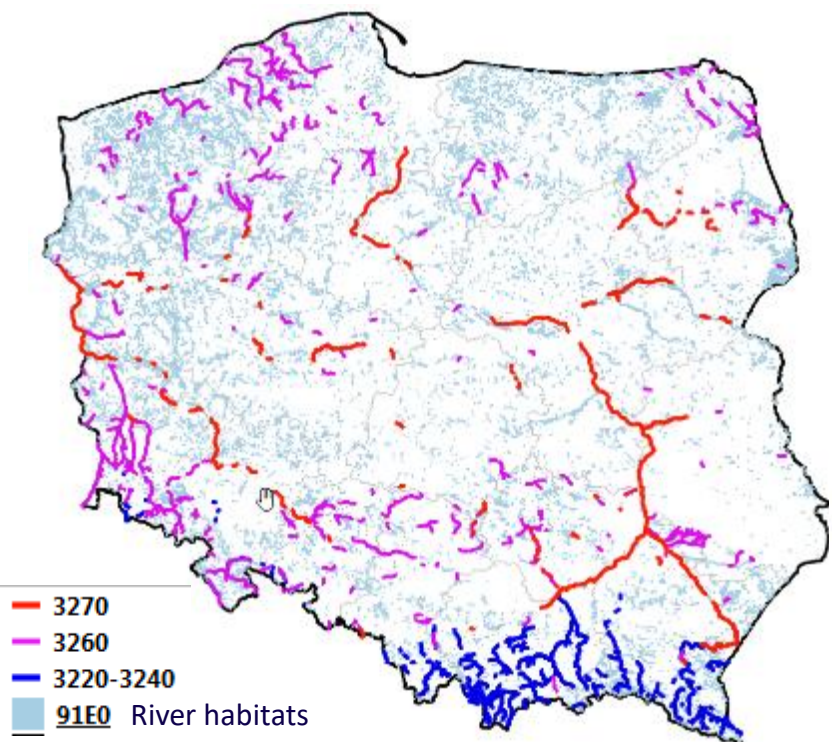


Common frog: viter, [Media Nauka](#)

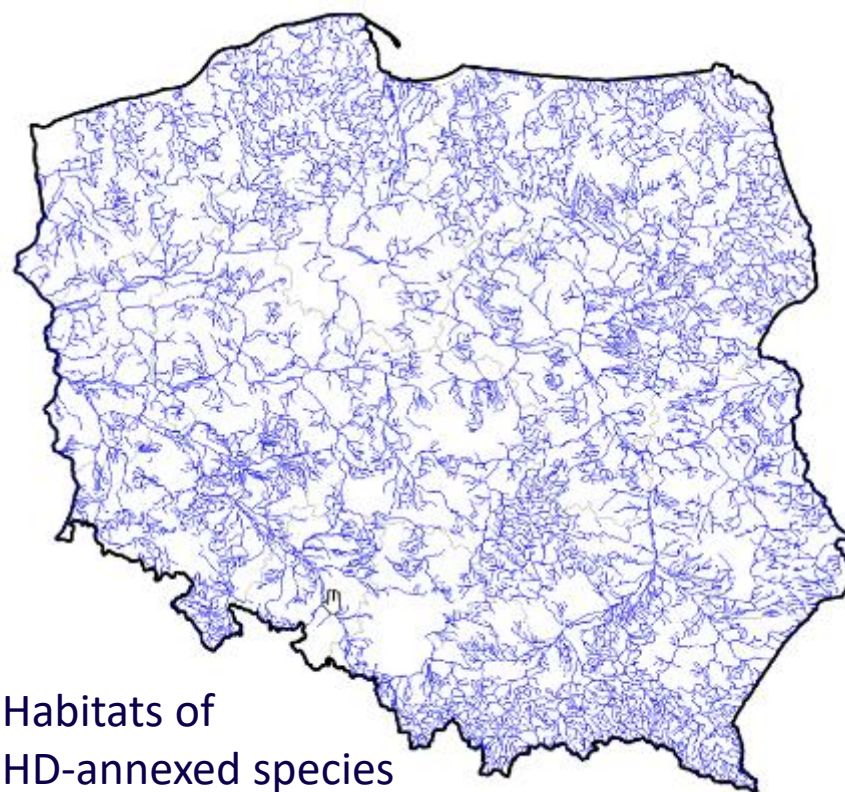
Kingfisher: [Karolina Kijak](#); from [birdwatching.pl](#)

Bullhead, <http://ryby.fishing.pl>

Art. 4 - What we really have in NRP draft?

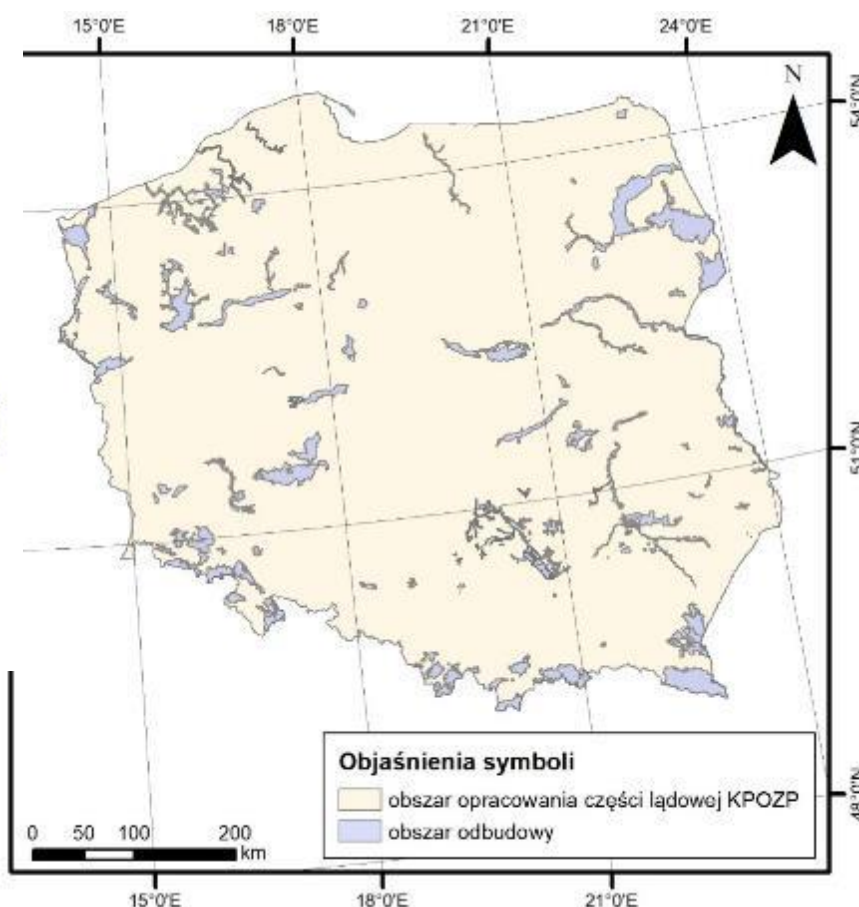


Natural habitats



Habitats of
HD-annexed species

Natura 2000 sites selected for
the 1st phase



Measure No. 4 – Improving connectivity and natural flow of watercourses

- removal of bank reinforcements,
 - removal or mitigation of transversal barriers,
 - removal of bed reinforcements,
 - initiation of lateral channel erosion,
 - enrichment of the channel with natural morphological elements
 - creation of riparian buffer zones
- implemented in a manner that maximizes the restoration of natural fluvial processes,



Measure No. 12 – Restoration of riverine natural habitats using natural hydromorphological processes

- ceasing or limiting maintenance works
- allowing natural fluvial processes
- considering use of post-flood transformations
- initiating fluvial geomorphological processes by introducing natural deflectors in the form of woody debris or gravel mounds



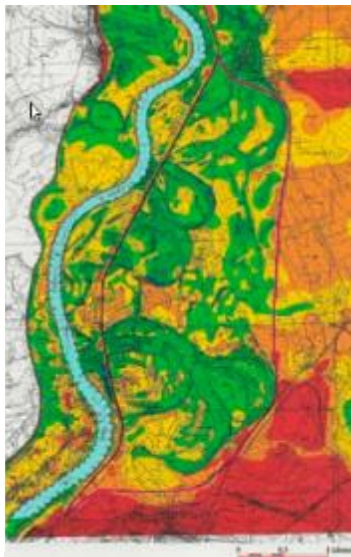
Fot. Ewa
Leś



Fot. PGW WP Gliwice - <https://www.czecho.pl/>

Measure No. 18 – Creating conditions for the restoration of water-dependent natural habitats through broad renaturalisation of surface waters, floodplains, and other wetlands

- creating buffer zones
- restoring floods of floodplains
- reducing wetlands drainage



Fot. K. Konieczny

Measure No. 19 – Restoration of the ecosystems of the Odra River and its tributaries



Response for Odra ecological disaster' 2022

- reduce salinity of the Odra by mining sector discharges
- reduce agricultural pollution – Nitrate Program review
- increase in river ecosystem resilience by implementation of renaturalisation projects in the basin





Ambitious restoration?
Not yet !
But maybe path towards?

UPGRADING !
UPSCALING !

Please keep
fingers crossed!