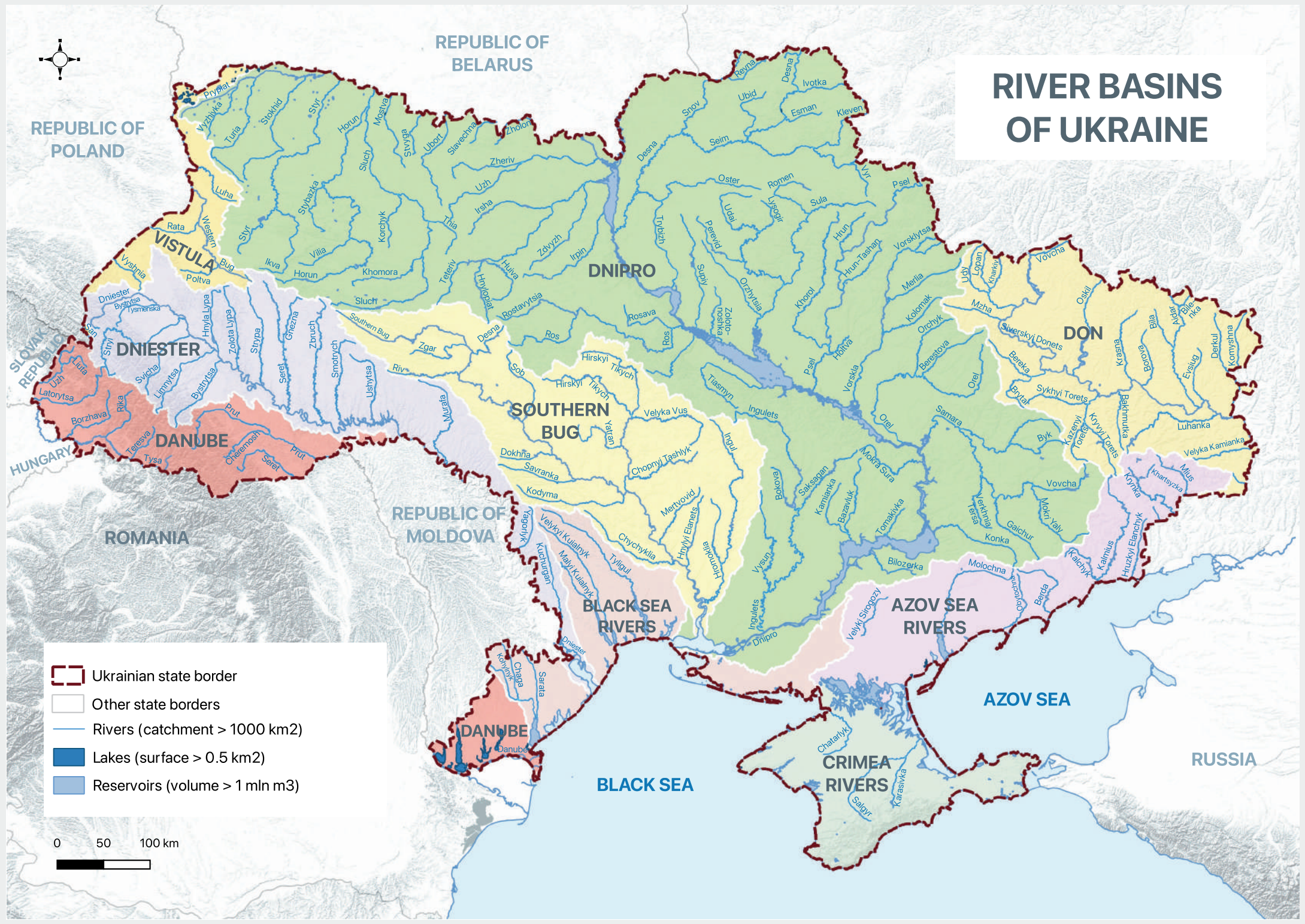







River Basin Management Plan

Southern Bug 2025–2030




RIVER BASINS OF UKRAINE



-  Ukrainian state border
-  Other state borders
-  Rivers (catchment > 1000 km²)
-  Lakes (surface > 0.5 km²)
-  Reservoirs (volume > 1 mln m³)

0 50 100 km



RIVER BASIN GEOGRAPHY



The basin is located entirely within Ukraine.



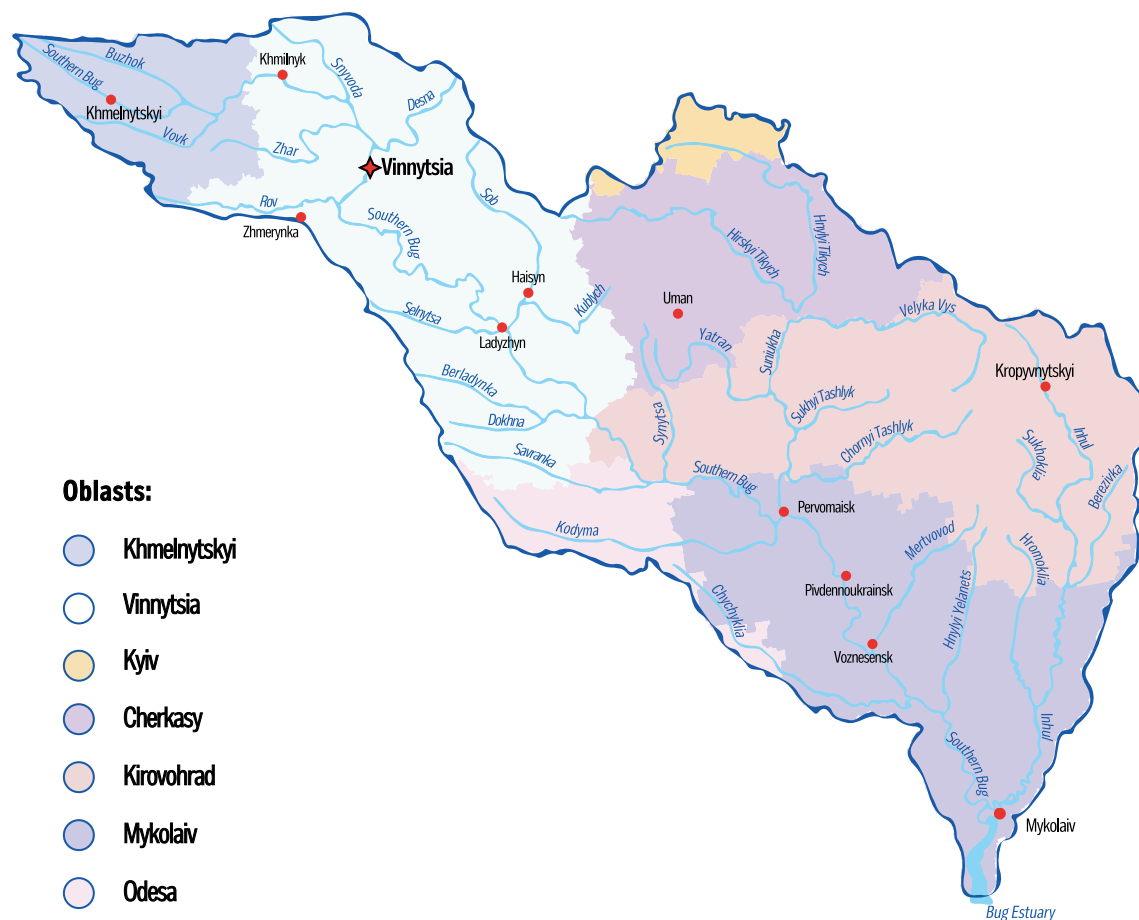
The basin is located within **7 oblasts of Ukraine**: Khmelnytskyi, Vinnytsia, Kyiv, Cherkasy, Kirovohrad, Mykolaiv, Odesa.

1090 surface water bodies (SWBs):

- 375** rivers
- 0** lakes
- 1** transitional waters
- 0** coastal waters
- 692** HMWBs*
- 22** AWBs*

12 groundwater bodies (GWBs)

* HMWBs – heavily modified water bodies, AWBs – artificial water bodies



ECOLOGICAL STATUS AND POTENTIAL



MAIN ELEMENTS:

- ✓ **Biological** (composition and abundance) parameters
 - macro invertebrates
 - other aquatic flora
 - phytoplankton
 - fish (not determined)



SUPPORTING ELEMENTS:

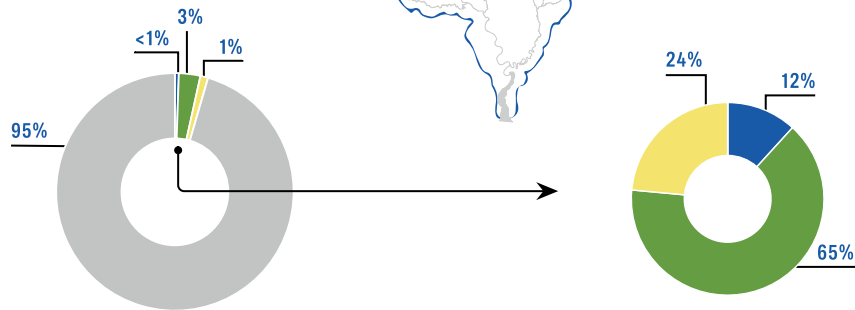
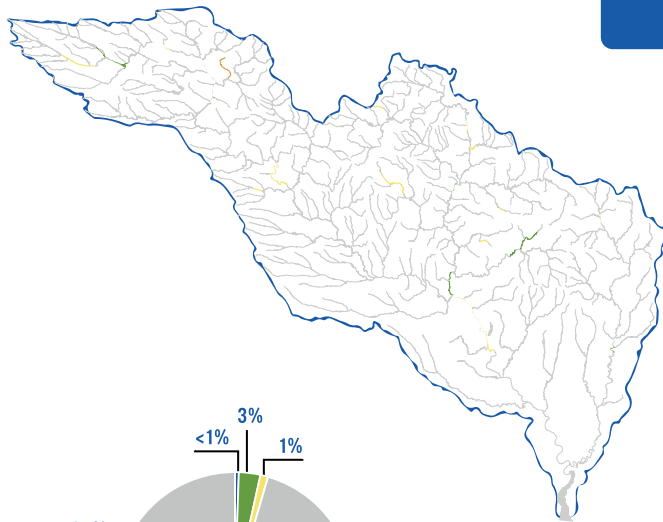
- ✓ Chemical and physico-chemical parameters
- ✓ Hydromorphology (flows, sediments)
- ✓ Basin specific (synthetic and non-synthetic) pollutants



Link to the methodology document
<https://cutt.ly/cenginwr>

ECOLOGICAL STATUS

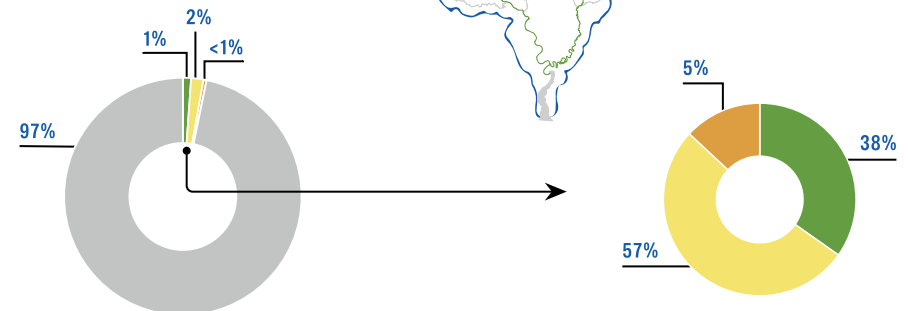
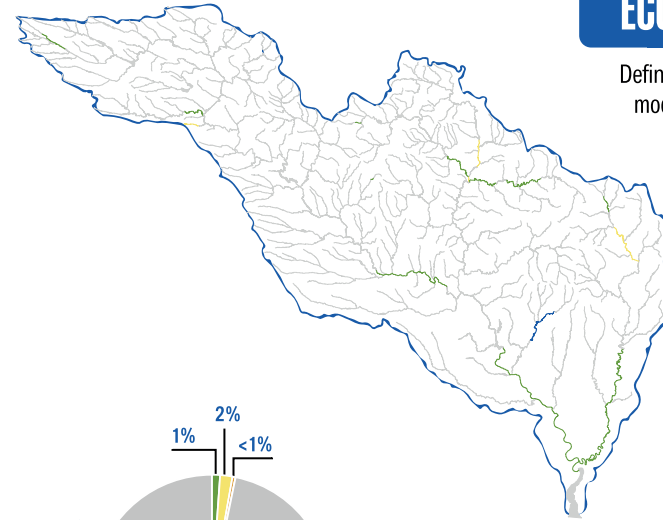
Defined only for the category of natural surface water bodies, 376 SWBs



● high status ● good status ● moderate status ● no monitoring data

ECOLOGICAL POTENTIAL

Defined only for the categories of heavily modified (HMWB) and artificial (AWB) surface water bodies, 714 SWBs



● good potential ● moderate potential ● poor potential ● no monitoring data

CHEMICAL STATUS



This is determined for **45 pollutants**.

If the concentration of any of them exceeds the established environmental quality standard for surface water, the status of the SWB is classified as **“failure to achieve good status”**.



Exceedances of the following pollutants were identified:

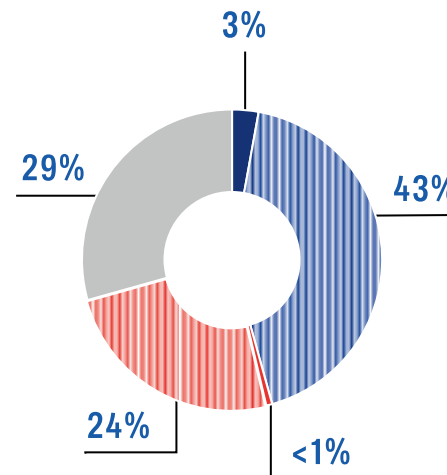
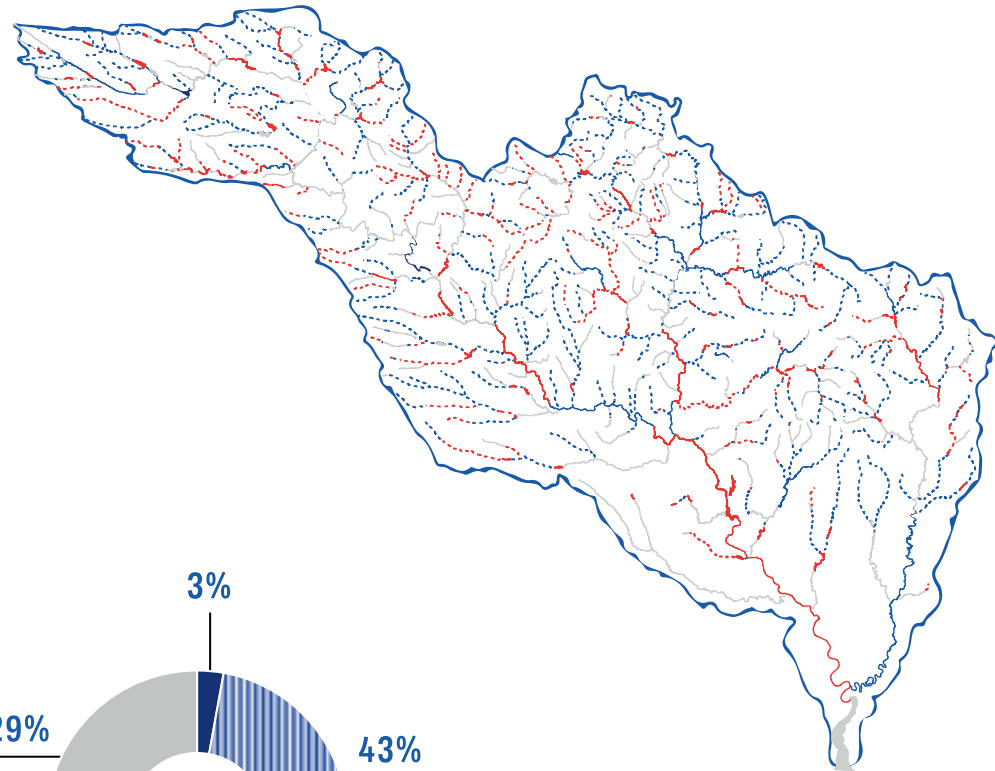
cadmium-chlorpyrifos (chlorpyrifos-ethyl), fluoranthene, lead and its compounds, mercury and its compounds, nickel and its compounds, benzo(a)pyrene, dicofol, cybutrin, cypermethrin.



Chemical monitoring of GWBs is not conducted at present.



List of pollutants



ACCORDING TO THE MONITORING DATA

- good status
- failure to achieve good status

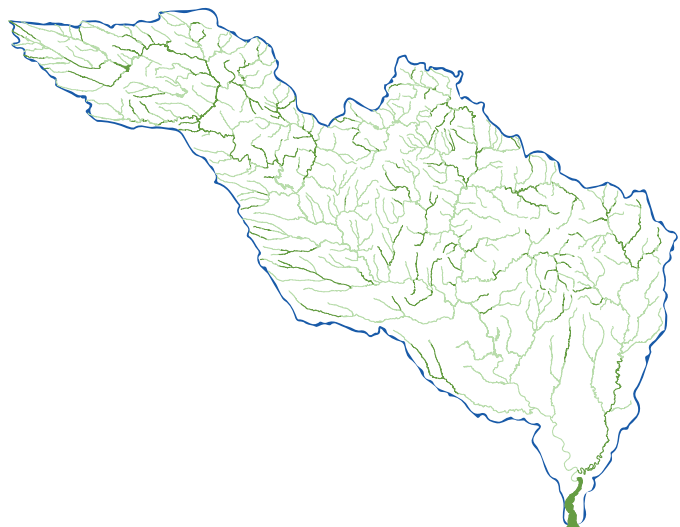
ACCORDING TO EXPERT INTERPOLATION

- good status
- failure to achieve good status

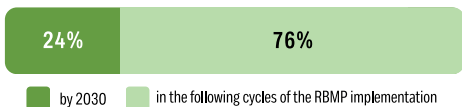
● no monitoring data

ENVIRONMENTAL OBJECTIVES FOR SWBs*

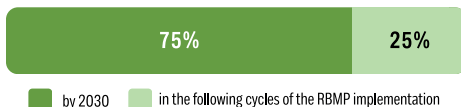
- 1 Preventing the deterioration of all SWBs
- 2 Achieving / maintaining a **good ecological** and **chemical status** of all natural SWBs (rivers, lakes, transitional and coastal waters)
- 3 Achieving / maintaining a **good ecological potential** and **chemical status** of heavily modified and artificial SWBs
- 4 Gradual **reduction** to the complete **absence of hazardous substances**



Timeframe for achieving the good ecological status of SWBs



Timeframe for achieving the good chemical status of SWBs



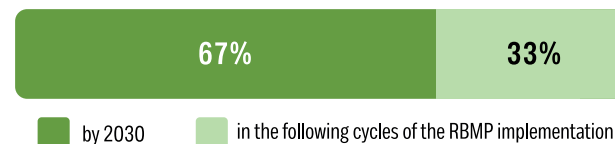
ENVIRONMENTAL OBJECTIVES FOR GWBs

- 1 Preventing the deterioration of all GWBs
- 2 Achieving / maintaining a **good quantitative** and **chemical status** of all GWBs
- 3 Preventing and limiting groundwater pollution



<https://cutt.ly/oengy9ji>
Link to the methodology document

Timeframe for achieving the good chemical status of GWBs

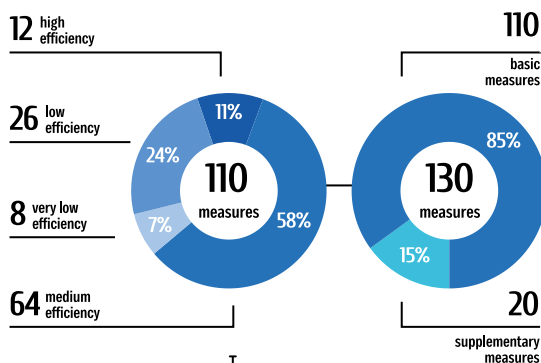


Timeframe for achieving the good quantitative status of GWBs



* The map shows the deadlines for achieving a good ecological status of the SWBs

PROGRAMMES OF MEASURES



€642M*

TOTAL COSTS OF MEASURES

€29*

COSTS OF MEASURES PER INHABITANT PER YEAR



<https://cutt.ly/ce0DaAcP>

A full list of Measures is available in the Southern Bug River Basin Management Plan

SANITATION

- Construction of a WWTP** and reconstruction of the SN** at the “Khmelnyskvodokanal” in Khmelnytskyi
- Construction and reconstruction of stormwater drainage networks and treatment facilities in Khmelnytskyi city
- Reconstruction of WWTPs and SNs in the cities of Vinnytsia, Kropyvnytskyi, Pervomaisk, Uman, Mykolaiv, Khmilnyk, Voznesensk, Zhmerynka, Haisyn, Talne
- Reconstruction of WWTPs in Bar City and at the villages of Pariivka, Stara Syniava
- Reconstruction of WWTPs and SNs in the cities of Derazhnia, Pivdenoukrainsk, Haivoron, Bashtanka, Nemyriv, Bobrynets... the towns of Letychiv, Teplyk, Katerynopil, Novhorodka... the villages of Katerynivka, Subotsi, Vilne...
- Construction of WWTPs and SNs in the cities of Tulchyn, Zvenyhorodka, Shpola, Novyi Buh, Lypovets, Blahovishchenke... the towns of Lityn, Kryve, Tyvriv, Kyrnasivka, Savran, Liubashivka, Chechelnyk... the village of Pishchana...
- Construction of a WWTP and reconstruction of the SN in Balta city

TOTAL COSTS OF MEASURES

€610M
%56 to 95%

OTHER

- Improvement of water use accounting
- Combating invasive species, reducing their spread and impact on the ecosystem
- Identification of the source of the Southern Bug River near the village of Kholodets and identification of measures for its restoration and conservation

HYDROMORPHOLOGY

- Revitalization, improvement of the ecological status and restoration of river flow of the Diagtyanets, Inhul, Berezivka, Southern Bug (Khmelnyskyi, Yuzhnoukrainskyi communities), Ploska, Kudryanka, Savranka, Kilten, Bobrynets, Vovk, Hirsnyi Tikych (in Talne city), Velyka Vysia, Mertvovod rivers
- Reconstruction of emergency hydraulic structures of Polumyanske Reservoir
- Revitalization, improvement of the ecological status and restoration of river flow of the Zhurbynka and Revukha rivers
- Restoration and maintenance of a favorable hydrological regime of the Butska HPP Reservoir in the village of Buky
- Reconstruction of emergency hydraulic structures of Shkilnyi Pond (Morynska community), pond at the road P-48 in Kupil village

AGRICULTURE

- Development of projects of sanitary protection zones for the water supply sources of Balta and Pishchanska communities in Odesa oblast

INDUSTRY

- Construction of a WWTP and SN at the State Enterprise “Ukrvetssanzavod” in Tulchyn city
- Reconstruction of the WWTP and SN at the LLC “Supark” at the village of Sutysky

HIGH EFFICIENCY



69% of the budget



benefit for 2M ppl.

MEDIUM EFFICIENCY



26% of the budget



benefit for 636K ppl.

LOW EFFICIENCY



4% of the budget



benefit for 6.4M ppl.

VERY LOW EFFICIENCY



<1% of the budget



benefit for 17K ppl.

SUPPLEMENTARY MEASURES

20 measures
benefit for 3.7M ppl.

- Development of a methodology for determining and calculating the ecological flow
- Inventory of the network of groundwater observation wells
- Inventory and subsequent rehabilitation / repairing or preservation of the network of observation wells
- Reassessment of operational groundwater reserves

- Development of a Drought Management Plan (DMP) as part of the RBMP

- Inventory of barriers that impede the free flow of rivers and prioritization of their removal

- Development of recommendations for restoring the forest landscape of river valleys

- Public campaigns for waste collection, awareness raising activities

* according to the NBU rate 1 EUR = 45 UAH, June 2024; calculations of costs of measures were carried out during 2016-2023

** WWTP – waste water treatment plant, SN – sewage network

M – million; K – thousand; ppl. – people

