

# **RIVER BASIN GEOGRAPHY**



The transboundary Don River Basin is located on the territory of **two countries**: Ukraine and the Russian Federation.



The basin covers the territory of **3 oblasts of Ukraine** – Kharkiv, Donetsk, Luhansk. The Don basin has **two sub-basins**: Siverskyi Donets and Lower Don.

### 699 surface water bodies (SWBs):

**488** rivers

1 lakes

1 transitional waters

O coastal waters

**203** HMWBs\*

7 AWBs\*

### 39 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)

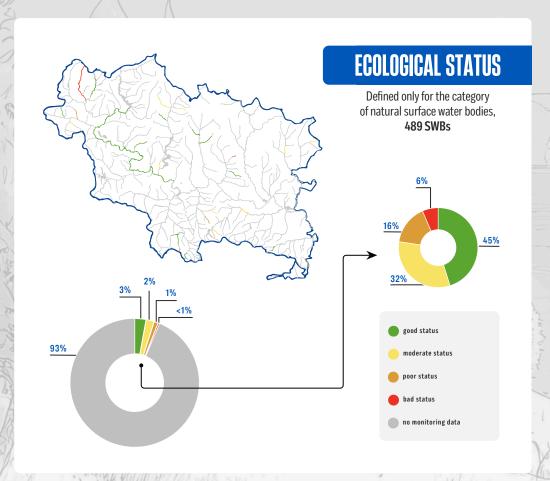


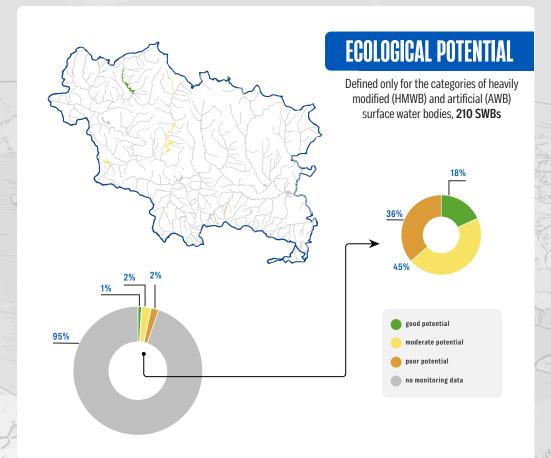
#### **SUPPORTING ELEMENTS:**

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



Link to the methodology document





## **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:**

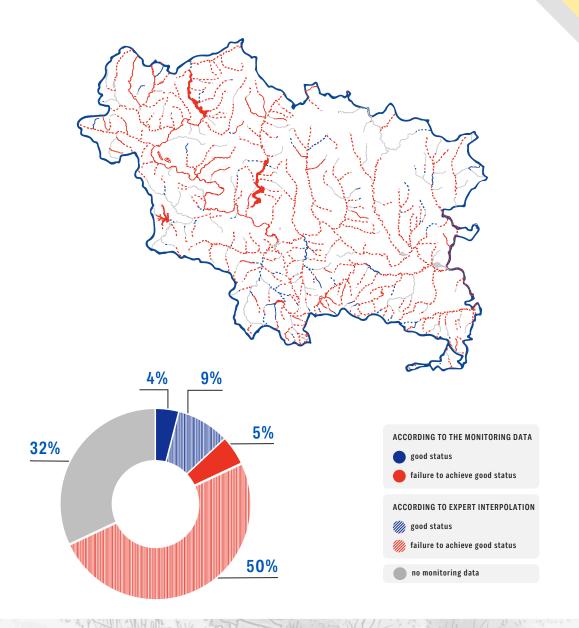
aclonifen, benzo(b)fluoranthene, benzo(g,h,i)perylene83, benzo(k)fluoranthene, endosulfan, fluoranthene, chlorpyrifos, cybuthrin, cypermethrin, DDT, dicofol, para-para-DDT, trifluralin, trichloromethane, cyclodiene pesticides, lead, nickel, cadmium.



Chemical monitoring of GWBs is not conducted at present.



**List of pollutants** 



### **ENVIRONMENTAL OBJECTIVES FOR SWBs**\*

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



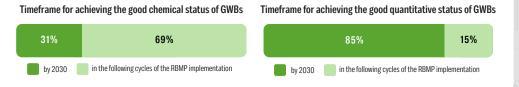




- Preventing the deterioration of all GWBs
- Achieving / maintaining a **good quantitative** and **chemical status** of all GWBs
- **8** Preventing and limiting groundwater pollution



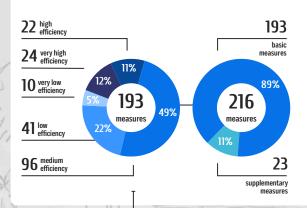




<sup>\*</sup>The map shows the deadlines for achieving a good ecological status of the SWBs

<sup>\*\*</sup> The map shows the deadlines for achieving a good chemical status of the GWBs

### **PROGRAMMES OF MEASURES**



€819M\* TOTAL COSTS OF MEASURES

COSTS OF MEASURES PER INHABITANT PER YEAR



A full list of Measures is available in the Don River Basin **Management Plan** 

#### Reconstruction of WWTPs and SNs\*\* in Vovchansk, Rubizhne, Lysychansk, Chasiv Yar, Popasna, Soledar cities...

- Reconstruction of WWTPs, SPSs\*\* and SNs in Kharkiv, Siversk
- 8 Recovery of the drainage system in Sviatohirsk city
- Reconstruction of WWTPs and SNs in Horlivka, Myrnohrad, Kupiansk, Bakhmut cities
- Reconstruction of WWTPs. SPSs and SNs in Toretsk. Kramatorsk, Izyum, Druzhkivka, Kostiantynivka, Lyman, Avdiivka cities (or construction)
- Reconstruction of the WWTP, SPS, SN and construction of stormwater treatment facilities in Sloviansk city

- Construction and reconstruction of stormwater drainage networks and treatment facilities in Kharkiv city
- Construction of industrial wastewater treatment facilities after water treatment at the Municipal enterprise "Kharkiyyodokanal"
- Construction of a WWTP in Pechenihy city
- Construction of a WWTP and SN at the Tsvrkunivska and Shakhivska communities... Pivdenne city, Peresichne and Vilshany towns... the villages of Mala Rogan, Snizhkiv..
- Reconstruction of WWTPs in Valky and Nova Vodolaha cities, Budy and Mykolaivka towns, Khoroshevsky Geriatric Nursing Home

- Reconstruction of WWTPs and SNs in Shchastia, Chuhuiv, Piatyhirske, New York towns... Strilecha and Serhiivka villages...
- Reconstruction of WWTPs, SPSs and SNs in Balakliya, Dokuchaevske, Zmiiv, Shevchenkove, Liubotyn, Pokrovske towns...

Reconstruction of WWTPs at the LLC "Naftogazyvdobuvan Kompaniya" of the "Teploelektrocentral" branch, the SE "Myrnohradvuhillya", the SE "Selydivvuhillya", the SE "Toretskvuhillya", the "Zmiivska Paper Mill" LLC, and the 'Novokramatorsk Machine-Building Plant' PJSC..

Reconstruction of WWTPs at the JSC "Ukrzaliznytsia" Branches of Panyutinsky Carriage Repair Plant and the PJSC "Slavyansky Chalk TOTAL COSTS OF MEASURES

#### Restoration of the damaged hydropower station of Pechenizhske Reservoir

- Project "Reconstruction of the Hydropower Station of the Kleban-Byk Reservoir"
- Revitalization of rivers and installation of bank revitalization or needs and installation of dank protection zones in the towns of Sukhyi Torets, Kazenyi Torets, Naumikha (Neumikha) (elimination of dams), Bychok, Bilenka II, Bilenka, Sukhyi Torets, Bakai (Sorishchi), Mayachka,
- protection zones at Liman-1 and Liman-2 lakes, at Shovkowchne and Mykhailivske lakes
- neandering river channels and establishment of bank protection zones at Duvanka and Yevsyug
- Establishment of water protection zones and bank protection zones at Haryache, Repne, Slipne, Levadne 1 and -2 and Chervone lakes (within t

- Remeandering rivers and establishment of bank protection zones at Babka
- sluice gates at the Kazennyi Torets, Bila, Kryvyi Torets and Mazaniv Yar (Orikhova)
- Reconstruction of hydraulic structures of Mayachka Reservoir (the Mayachka River) with the development of new operating rules with
- iver basin), Bez nazvy Bereka river basin) and Bez

### Prevention of pollution by hazardous substances from storage facilities through research and monitoring of the storage facilities at the PJSC "Severodonets Azor Association", the UJSC "Lysychanska Soda", the PJSC "Audinivia Coke Plant", and the PJSC "Central Processing Plant Dzerzhynska" Prevention of pollution by hazardous substances from the storage facility through waste disposal at the "Rubizhne Water and Sewerage Utility Company", the "Lysychansk Soda" OJSC

- Reconstruction of treatment facilities at the "Ukrshakhtgidrozakhyst" State Enterprise
- Reconstruction of treatment facilities at the "Myrnohradvuhillya" State Enterprise

### Prevention of contamination by livestock waste from the storage facility at the PJSC "Bakhmut

- Establishment of bank protection zones within the city of Sloviansk at the Sloviansk community
- mproving state water accounting in the Don River Basir

### **VERY HIGH**



of the budget

1



benefit for 5976K ppl





30% benefit for of the budget 3188K ppl.

### MEDIUM



13 % benefit for of the budget 2333K ppl.



7% benefit for of the budget 3366K ppl.

LOW



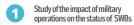


benefit for 96K ppl.

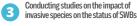
**MEASURES** 



measures



Inventory of surface water bodies and survey of hydrotechnical



Conducting research on the restoration of the Rayhorod and Oskil Reservoir

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

Inventory of the network of observation wells of GWBs , reassessment of operational groundwater reserves

