APPROVED
by the order of the Cabinet of Ministers of Ukraine
No. 1078 dated 01.11.2024

SOUTHERN BUG RIVER BASIN
MANAGEMENT PLAN
2025-2030

CONTENTS

The maps of the Southern Bug River Basin Management Plan for 2025-2030 are attached as a separate file in .PDF format.

LIST OF ABBREVIATIONS

AWB – artificial water body
BOD – Biochemical Oxygen Demand
BUWR – Basin Water Resources Administration
CEA – cost-effectiveness analysis
CMU – Cabinet of Ministers of Ukraine
COD – Chemical Oxygen Demand
EEA – European Environment Agency
EQS – environmental quality standards
EU – European Union
GDP – gross domestic product
GRP – gross regional product
GVA – gross value added
GWB – groundwater body
HMWB – heavily modified water body
LLC – Limited Liability Company
LOQ – limit of quantification
ME – municipal enterprises
MENR – Ministry of Environmental Protection and Natural Resources of Ukraine
NEURC – National Energy and Utilities Regulatory Commission
NNP – natural native park
NRF – Nature Reserve Fund
OSCE – Organization for Security and Co-operation in Europe
PE – population equivalent
PJSC – Public joint stock company
PoM – programme of measures
RBD – river basin district
RBMP – river basin management plan
REPF – Regional Environmental Protection Funds
ROWR – regional office of water resources
SAWR – State Agency of Water Resources of Ukraine
SE – state enterprises
SEF – State Environmental Fund
SEI – State Environmental Inspectorate of Ukraine
SES – State Emergency Service
SFRD – State Fund for Regional Development
STPs – sewage treatment plants
SWB – surface water body
SWMI – significant water management issue
TLV – threshold limit value
TOT – temporarily occupied territories
TPP – Thermal Power Plant
VAT – Value Added Tax
WFD – Water Framework Directive

1 GENERAL CHARACTERISTICS OF SURFACE AND GROUNDWATER

1.1 Description of the basin

1.1.1 Hydrographic and water management zoning

The Southern Bug River is one of the major rivers in the Black Sea basin and is the largest river basin located entirely within Ukraine.

The total length of the Southern Bug is 806 km. The catchment area is 65.2 thousand km^2 . The Southern Bug RBD covers 10.5% of Ukraine's territory.

The Southern Bug basin area covers the territory of 7 oblasts of Ukraine (Khmelnytskyi, Vinnytsia, Kyiv, Cherkasy, Kirovohrad, Mykolaiv, Odesa).

The hydrographic network of the Southern Bug RBD includes 301 rivers with a length of more than 10 km and 164 reservoirs.

1.1.2 Climate

Atmospheric circulation plays an important role in shaping the climate in the Southern Bug RRB, which is associated with the movement of air masses from the Atlantic, Arctic and Mediterranean.

The climate in the upper and middle parts of the river basin is moderately continental. The climate in the southern areas is influenced by the Black Sea and slowly turns into arid in the lower reaches of the river.

The considerable length of the river basin from northwest to southeast causes marked differences in the distribution of air temperature. The average annual air temperature varies from 7.1 to 10.0 °C.

The average long-term air temperature in the upper and middle parts of the river basin ranges from 7.1 to 8.1°C. The maximum temperature in summer reaches +39°C, and the minimum temperature in the cold days of winter is down to -38°C. For this part of the basin, the winter season is characterised by precipitation in the form of snow and frequent fog. The average height of the snow cover is 10 to 15 cm. In some years, winters can be persistent and severe.

Spring is marked by a sharp transition from warming to cooling, from dry to rainy weather. Thunderstorm activity begins to develop in May. The weather conditions of the summer season are marked by a significant increase in temperature, a large number of clear days, increased precipitation, and active thunderstorm activity. The autumn season (especially the second half of it) is characterised by frequent cloudy days, prolonged precipitation and fog.

Annual precipitation in the upper and middle parts of the basin ranges from 669 to 550 mm, gradually decreasing from north to south.

The lower part of the Southern Bug River basin is located within the steppe zone of Ukraine with a temperate continental climate characterised by warm summers and mild, unstable winters. The average annual air temperature here ranges from 8.0 to 10°C. The maximum air temperature (up to +40°C) is observed in July and August, and the minimum temperature (up to -35°C) is observed in January.

In the lower part of the basin, the snow cover is established in the second half of December and melts in late February - early March. The average height of the snow cover is 5-8 cm. The depth of soil freezing in the middle and lower parts of the basin is 20-50 cm.

Annual precipitation in the lower part of the basin ranges from 410 to 540 mm. The relative average annual humidity is 60-65%.

Evaporation rates from the water surface in the upper and middle parts of the basin are 530-625 mm, and 800-900 mm in the lower part.

The prevailing winds in the basin are north-westerly. The average annual wind speed is 3.0-4.4 m/s, with a maximum of over 30 m/s.

In recent years, there has been a tendency for air temperatures to rise. This leads to a decrease in the proportion of solid precipitation, less snow accumulation and less water reserves, which in turn leads to a decrease in the intensity of spring floods on the rivers. In general, the basin can expect milder and wetter winters, hotter and drier summers, warmer and wetter September, and drier and warmer autumn.

1.1.3 Relief

The Southern Bug river basin is located in Right-Bank Ukraine, extending from northwest to southeast and lies on the Eastern European Plain. The current relief of the territory was formed under the influence of geological processes and consists of upland and lowland areas.

The Southern Bug river basin area is located within three geomorphological regions: the upper part of the river basin is located on the Podilska Upland, the middle part on the Prydniprovska Upland, and the lower part on the Black Sea Lowland.

Within the Podilska and Prydniprovska uplands, the terrain is flat: the catchment is a plateau with elevations of 120-396 m, strongly dissected by deeply incised river valleys (up to 150 m).

In the Black Sea Lowland, the catchment is characterised by a flat topography with a medium degree of dissection by river valleys and numerous steppe saucer depressions. Absolute heights vary from 120-150 m in the northern part to 10-20 m in the south.

1.1.4 Geology

The geological structure of the Southern Bug basin is determined by its location within the Pre-Rhine East European Platform. The main first-order regions in this area are the Ukrainian Shield, Volyn-Podolsk Plate and the Black Sea Basin.

The Ukrainian Shield is a large positive structure of the East European Platform, which is a raised block of Archean-Proterozoic basement bounded by a system of dumps. In its section, two structural floors are distinguished. The lower floor is composed of metamorphosed dislocated igneous and metamorphic rocks of the Archean-Proterozoic, while the upper floor is composed of sedimentary terrigenous deposits of the Meso-Cenozoic of low thickness, which are often eroded in river valleys.

The geological structure of the Volyn-Podolsk plate was formed under conditions of predominance of steady dips over upward tectonic movements, which contributed to the long-term multi-stage development of sedimentary basins within its boundaries. The plate is located on the southwestern margin of the East European Platform and within the Southern Bug basin represents the western and southwestern slopes of the Ukrainian Shield, filled with terrigenous-volcanogenic, terrigenous and carbonate rocks of the Vendian, Cretaceous, Paleogene, Neogene and mainly sandy rocks of the Quaternary system. The thickness of the sedimentary strata naturally increases from east to west and reaches 1.5-2 km (outside the basin).

The Black Sea Basin is a monocline with a basement that dips from the north, from the Ukrainian Shield to the south, and covers the area of sedimentary strata that overlie the basement of the East European Platform to the south. Its structural plan is characterised by a gentle dip of sedimentary strata in the southwest and south directions. The section of the sedimentary cover within the Southern Bug basin includes terrigenous carbonate sediments from the Cretaceous to the Anthropocene, which overlie crystalline rocks that dip in a southerly direction. The most interesting are the carbonate-terigenous deposits of the Neogene, which increase in thickness to the south. Older formations of the Cimmerian-Alpine structural floor lie at considerable depths.

1.1.5 Hydrogeology

The Southern Bug basin is divided into 3 first-order hydrogeological regions with inherent features of geological and hydrogeological sections of rocks and regional patterns of hydrogeological conditions: Volyn-Podillya artesian basin; Hydrogeological region of the Ukrainian Shield; Black Sea artesian basin.

The Volyn-Podilskyi artesian basin (its western part) is located in the north-west of the Southern Bug basin. It is a multi-storey system of aquifers, the number of which increases in the western direction. The peculiarity of this area is the absence of spatially consistent regional water sources. In the Volyn-Podilskyi artesian basin, within the Southern Bug basin, aquifers are widespread in Quaternary, Miocene, Upper Cretaceous formations and in the fractured zone of Vendian rocks. In this part, they contain fresh water.

In the context of the hydrogeological region of the Ukrainian Shield, two structural floors are distinguished. The lower one is formed by Archean-Proterozoic igneous and metamorphic rocks, while the upper one is formed by Meso-Cenozoic sediments. The aquifers of the lower floor are gneisses, granites and migmatites, which are characterised by extremely uneven fracturing both in area and depth. It determines their uneven water content. The aquifers of the upper structural floor in sediments are characterised by uneven distribution and thickness, most often confined to watershed areas or paleodolines of the basement and often eroded in river valleys. Weakly permeable sediments are unconformable in section, which causes interconnection between aquifers. The aquifers of the upper structural layer are confined to Quaternary sediments and rocks of the Meso-Cenozoic. Aquifers in the Quaternary, Neogene, Paleogene and Cretaceous sediments are used to meet domestic drinking water needs.

The hydrogeological conditions of the Black Sea artesian basin, located in the southern part of the Southern Bug basin, are complex. This is due to the diversity and irregular distribution of both water-bearing and water-resistant sediments, facies and lithological variability of rock composition, and the diversity of groundwater quality. The thickness of the active water exchange zone is 50-400 m, mostly not exceeding 100-200 m. Groundwater is found in Quaternary, Neogene, Paleogene, and Cretaceous sediments. The main aquifers are in Neogene sediments, and in local areas - in Paleogene and Cretaceous sediments. The groundwater of the Black Sea artesian basin is characterised by the widespread development of brackish and saline waters.

1.1.6 Soils

The current soil cover in the Southern Bug river basin was formed under the influence of the interaction of soil-forming rocks, vegetation, relief, climate and human activity. The soils were mainly formed on carbonate loess deposits. The Southern Bug basin is classified as a forest-steppe and steppe by the nature of its soil cover.

The soils in the upper part of the river basin are typical low-humus black soils, which change to light grey and dark grey podzolised soils formed under forest vegetation in the south-eastern direction. In the upper reaches of the Southern Bug and its tributaries Buzhok, Vovk, Zgar, and Riv, peat-bog soils and lowland peat bogs prevail in the valley bottoms and floodplains.

Most of the basin is covered by various black soils (typical, podzolic, leached and regraded) that were formed under herbaceous vegetation. On the elevated areas of the relief, where forests grow, grey podzolised soils of various shades (light grey, grey and dark grey) were formed. Light grey soils are the most podzolised and the least humified of the forest-steppe podzolised soils. The humus-eluvial horizon of podzolised chernozems is shallow - up to 35 cm.

To the south of the Balta-Pervomaisk line, there is a zone of grass steppe. The soil cover here is represented by black soils formed on heavy loamy loess rocks. In the area below Pervomaisk to Oleksandrivka in Mykolaiv region, low- and medium-humus, heavy and light loamy black soils prevail. In the lower reaches of the Southern Bug, they turn into slightly saline and chestnut soils.

The river basin is dominated by loamy soils of various particle sizes. Clay, sandy and clay-sandy soils are common in the lower part of the river basin.

1.1.7 Flora

The majority of the Southern Bug river basin lies within the forest-steppe zone and has a fairly rich and diverse flora, which is primarily due to its favourable climate, topography and fertile soils.

The vegetation of the north-western part of the basin is represented by young and medieval broadleaf forests located in separate massifs. The most common tree species are oak, hornbeam, ash, maple, linden, elm and alder. Shrubs and bushes include hazel, dog rose, honeysuckle and others.

To the south, the forests gradually change to forest-steppe, and south of the line through Balta - Pervomaisk (on the right bank of the Kodyma) to steppe, first feather grass and then feather grass and fescue. The steppe vegetation is represented by drought-resistant legume-grass associations such as timothy, violet, strawberry, lungwort, wheatgrass, cornflower, feather grass, nettle and others.

All forests in the basin are divided into two groups. The first group includes green zones around cities, other settlements and industrial enterprises, soil protection forest belts, water protection coastal protection belts, and protective forest belts along railways and highways. The second group includes operational forests, where logging is allowed, but not more than the annual growth rate.

The part of the Southern Bug basin occupied by arable land is cultivated for cultivated crops such as wheat, sugar beet, corn, rye, peas, buckwheat, potatoes and other crops.

The flora of the river basin includes a number of endemic species (plants that can be found only in this area): Savransky cornflower, large ibis, and others. You can also find relict species: big horsetail, small cinquefoil, soft lungwort and others.

1.1.8 Fauna

The fauna of the basin is diverse. There are about 420 species in total, including 30 fish, 11 amphibians, 8 reptiles, 300 birds, and 70 mammals. The forests of the Southern Bug basin are home to roe deer, wild pig, wolf, marten, squirrel, fox, hare, polecat, hamster, ferret, and field mouse.

The basin is home to moose, spotted deer, bison, fallow deer, beaver, muskrat, American mink, and pheasants. Otter and mink are found on the river banks; wild ducks and geese are found in the reservoirs; carp, bream, perch, tench, pike, catfish and others are found in the rivers and ponds.

The Red Book of Ukraine includes some species of bats, the steppe ferret, birds - the grey crane, the balaban, the peregrine falcon; reptiles - the steppe viper, the forest snake.

1.1.9 Hydrological regime

Average long-term runoff and its distribution in the Southern Bug basin

Based on the factors that determine the water regime of the rivers (climatic, hydrological and hydrographic features), two hydrological regions are conditionally distinguished in the Southern Bug basin: Podilskyi and Prychornomorskyi.

The Podil district is characterised by a pronounced spring flood and a low water mark, which is disturbed by summer and winter floods. Underground runoff is relatively low. The most favourable surface feeding conditions are observed in the upper reaches of the river, which account for 38% of the basin area and generate up to 56% of the annual runoff of the Southern Bug. In this part of the basin, the average long-term values of the annual runoff modulus are the highest (3.6-2.6 l/s km^2), and then the surface water conditions deteriorate, especially at the basin's exit from the forest-steppe zone below the mouth of the Sinyukha.

The Black Sea region is characterised by insufficient river flow. The runoff of the steppe part is only 17.5% of the annual runoff of the basin. The runoff module in this area is steadily decreasing from 2.4 to 1.3 l/s km^2 .

The average long-term flow of the Pivdennyi Buh River at the Oleksandrivka port is 91.4 m$^{3/}$ s, or 2.88 km /year.[3]

Intra-annual flow regime

The water regime of the Southern Bug is characterised by an uneven distribution of runoff throughout the year. The highest flows are in March and April, and in average years they account for up to 36% of the annual runoff. The lowest water months are July and August - only 8.5% in average years. The winter runoff (months XII-II) accounts for 23% of the annual runoff.

It should be noted that in recent years, the intra-annual distribution of runoff has changed somewhat, in particular, the spring flood discharge has become lower. In addition, the ice regime has become unstable with the establishment of a weak ice cover and its melting.

1.1.10 Specifics of the river basin

The specificity of the Southern Bug basin is that it is entirely located within the borders of one country - Ukraine.

According to typical river basin characteristics, the catchment area of the Southern Bug River Basin within Vinnytsia, Kirovohrad and Mykolaiv Oblasts is approximately the same (Khmelnytskyi Oblast is three times smaller). However, the main runoff (water content) of the entire basin is generated only in Khmelnytskyi and Vinnytsia oblasts (46%).

The basin is characterised by low summer and autumn water levels due to the fact that sanitary releases from reservoirs in Khmelnytsky and Vinnytsia regions are carried out almost annually to ensure ecological water flows in the middle and lower reaches of the Southern Bug.

The main feature of the hydrographic network of the Southern Bug basin is its largest tributary, the Sinyukha River. The basin area of this river is 26% of the total area.

The water of the Southern Bug is also characterised by a fairly high saturation of dissolved oxygen. A factor contributing to the improvement of the oxygen regime is the presence of rapids where water is mixed.

The Southern Bug river basin is considered to be the only river in Europe with a preserved rapids.

Another characteristic feature of the Southern Bug basin that distinguishes it from other large rivers is its heavy regulation. The total volume of artificial reservoirs exceeds the water resources of the basin in a very low-water year.

In addition, the Southern Bug is characterised by a rather large solid runoff. This is facilitated by the fragmented relief and large areas under arable land.

1.1.11 Typology of surface water bodies

The SWB typology was developed in accordance with the Methodology for Determining Surface and Groundwater Bodies (Methodology) approved by the Order of the Ministry of Ecology and Natural Resources No. 4 dated 14.01.2019 to detail the hydrographic zoning of Ukraine, prepare a state water monitoring programme, and develop and evaluate the effectiveness of the RBMP implementation.

Among the five categories of surface waters (rivers, lakes, transitional waters, coastal waters, artificial and heavily modified surface waters), three categories of SWBs have been identified in the Southern Bug basin - "rivers", "artificial and heavily modified surface waters" and "transitional waters".

The EU WFD system A was used for river typology and delineation (Table 1).

Table 1 Descriptors for rivers (system A)

Descriptors		
Catchment height, m	Catchment area, km^2	Geological rocks
• midlands: >800 • lowlands: 500 - 800 • upland: 200 - 500 • lowland: < 200	• small: 10 - 100 • average: >100 - 1000 • Large: >1 000 - 10 000 • very large: > 10 000	• limestone • silicate • organic

The EU WFD system B is used for the typology of SWBs in the category of "transitional waters".

For "transitional waters", in addition to ecoregion and salinity, an additional indicator is used among the mandatory descriptors - origin (Table 2). This indicator, as an additional descriptor, was included following the example of Romania and Bulgaria.

Table 2 Descriptors for transitional waters (system B)

Eco-region	Salinity, ‰	Origin
• Black Sea • Sea of Azov	• oligohaline 0.5 to < 5 • mesogastric 5 to < 18 • polygamous 18 to < 30 • euryhaline < 40	• seaside • estuaries are open • estuaries are closed

In accordance with the above descriptors, 15 types of SWBs in the Southern Bug RBD have been identified in the category of rivers (Table 3).

The Southern Bug RBD is located within two ecoregions - the Pontic Province (number 12) and the Eastern Plains (number 16).

Rivers are classified by catchment area as small (with a catchment area of less than 100 km^2), medium (100 to 1000 km^2), large (1000 to 10,000 km^2) and very large (over 10,000 km^2) rivers.

According to the height of the catchment area, the rivers of the basin are located on the uplands (from 200 to 500 m) and on the lowlands (less than 200 m).

Geological rocks in the Southern Bug River basin are of two types: limestone (Ca) and silicate (Si).

Table 3 Types of SWBs in the "rivers" category

№	Type code	Type
1	UA_R_12_M_2_Si	medium-sized river on a hill in silicate rocks
2	UA_R_16_XL_2_Si	very large river on a hill in silicate rocks
3	UA_R_12_S_1_Si	a small river in the lowlands in silicate rocks
4	UA_R_12_S_2_Ca	a small river on a hill in limestone rocks
5	UA_R_12_S_2_Si	a small river on a hill in silicate rocks
6	UA_R_12_M_1_Si	medium-sized river in the lowlands in silicate rocks
7	UA_R_12_L_1_Si	a large river in the lowlands in silicate rocks
8	UA_R_12_XL_1_Si	a very large river in the lowlands in silicate rocks
9	UA_R_16_S_1_Si	a small river in the lowlands in silicate rocks
10	UA_R_16_S_2_Si	a small river on a hill in silicate rocks
11	UA_R_16_M_1_Si	medium-sized river in the lowlands in silicate rocks
12	UA_R_16_M_2_Si	medium-sized river on a hill in silicate rocks
13	UA_R_16_L_1_Si	a large river in the lowlands in silicate rocks
14	UA_R_16_L_2_Si	a large river on a hill in silicate rocks
15	UA_R_16_XL_1_Si	a very large river in the lowlands in silicate rocks

In the category of "transitional waters", 1 type of SWB. has been identified (Table 4).

Table 4 Types of SWBs in the "transitional waters" category

№	Type code	Type
1	UA_TW_M5_O_O	Oligohaline open estuaries

1.1.12 Reference conditions

The assessment of the ecological state of the SWB is based on a coSWBrison of biological indicators (benthic macroinvertebrates, macrophytes, phytobenthos, phytoplankton and fish) with reference conditions that characterise the state of the SWB, which has not been subjected to anthropogenic impact or is minimal.

Reference conditions are determined on the basis of data obtained from reference sites, by modelling (predictive models or retrospective forecasting methods that take into account historical, paleogeographic and other available data that provide a sufficient level of confidence in the values for reference conditions for each type of SWB) or by a combination of these methods or based on expert opinion.

In order to establish reference values for biological indicators based on data from reference sites, it is necessary to establish such sites for each type of SWB in all natural categories. The network should cover a sufficient number of sites to provide a sufficient level of confidence and to account for the variability of values for indicators that correspond to the different ecological status of the SWB type.

Key criteria for selecting reference sites:

- characterise the state of the SWB without anthropogenic impact or with minimal iSWBct,
- there is no industry or intensive agriculture,
- concentrations of specific synthetic pollutants are zero or below the detection limits,
- no morphological changes,
- water intake and flow control cause only minor fluctuations in water levels and do not affect surface water quality,
- the vegetation of the coastal zone is appropriate for the type of SWB and geographical location,
- no invasive species,
- fishing and aquaculture do not affect the functioning of the ecosystem.

In accordance with paragraph 2 of clause VII of the Order of the Ministry of Ecology and Natural Resources of Ukraine No. 5 dated 14.01.2019 "On Approval of the Methodology for Assigning a Surface Water Body to One of the Classes of Ecological and Chemical Status of a Surface Water Body, as well as Assigning an Artificial [...]", type-specific reference conditions may also be determined on the basis of existing reference sites in other countries for the same type of SWB or by combining the procedures described above.

Given that reference conditions for all types of SWBs are not currently defined in Ukraine, it was suggested to use the reference conditions established for the same or similar types in neighbouring EU countries, namely the Slovak Republic and Romania.

The methodology includes four hydrobiological indicators (benthic macroinvertebrates, phytoplankton, phytobenthos, macrophytes, macroalgae and eutrophication, respectively) for four natural categories of surface waters (rivers, lakes, transitional waters and coastal waters) that have been identified in Ukraine.

The environmental quality standards (EQS) were approved by Order of the Ministry of Ecology No. 332 dated 01.04.2024 "On Approval of Environmental Water Quality Standards for Determining the Ecological Status of Surface Water Bodies and Amendments to Certain Regulatory Acts".

In the second cycle of the RBMP, it is necessary to revise the reference conditions (including for the fish fauna indicator) using data from state water monitoring.

1.2 Water bodies delineation

1.2.1 Surface water

In the Southern Bug RBD, the SWBs was determined on 301 rivers (according to the State Water Cadastre: Accounting of Surface Water Bodies geoportal of the SAWR).

Within the Southern Bug RBD, 1090 SWBs have been identified. The designated SWBs belong to the following categories of surface water:

- rivers,
- transitional waters,
- artificial (AWB) and heavily modified (HMWB).

Category "rivers"

According to the Methodology, 375 SWBs were identified. The number of identified SWBs depending on descriptors and types is shown in Tables 5 and 6.

Table 5 Distribution of SWBs in the "rivers" category by descriptors

Descriptor	Indicator	Number of SWBs
by eco-region	Eastern plains	138
	Pontic province	237
by catchment area	small (S)	198
	average (M)	128
	large (L)	41
	very large (XL)	8
by the height of the catchment area	on a hill	132
	in the lowlands	243
by geological type	in silicate rocks	373
	in limestone rocks	2

Table 6 Distribution of SWBs of the "rivers" category by type

№	Type code	Type	Number of SWBs
Ecoregion 12 Pontic Province			
1	UA_R_12_S_1_Si	a small river in the lowlands in silicate rocks	91
2	UA_R_12_S_2_Si	a small river on a hill in silicate rocks	34
3	UA_R_12_S_2_Ca	a small river on a hill in limestone rocks	2
4	UA_R_12_M_1_Si	medium-sized river in the lowlands in silicate rocks	84
5	UA_R_12_M_2_Si	medium-sized river on a hill in silicate rocks	1
6	UA_R_12_L_1_Si	a large river in the lowlands in silicate rocks	22
7	UA_R_12_XL_1_Si	a very large river in the lowlands in silicate rocks	4
Ecoregion 16 Eastern Plains			
8	UA_R_16_S_1_Si	a small river in the lowlands in silicate rocks	23
9	UA_R_16_S_2_Si	a small river on a hill in silicate rocks	48
10	UA_R_16_M_1_Si	medium-sized river in the lowlands in silicate rocks	16
11	UA_R_16_M_2_Si	medium-sized river on a hill in silicate rocks	27
12	UA_R_16_L_1_Si	a large river in the lowlands in silicate rocks	10
13	UA_R_16_L_2_Si	a large river on a hill in silicate rocks	9
14	UA_R_16_XL_1_Si	a very large river in the lowlands in silicate rocks	3
15	UA_R_16_XL_2_Si	very large river on a hill in silicate rocks	1

The category "heavily modified water bodies".

According to the Methodology, 692 heavily modified water bodies (HMWBs) were identified. The share of HMWBs in the total number of SWBs in the Southern Bug RBD is 63%. The main part (506 SWBs) are classified as HMWBs due to overregulation.

113 SWBs are classified as HMWBs due to a combination of overregulation and directionality.

73 SWBs are classified as HMWBs due to channel straightening (Fig. 1).

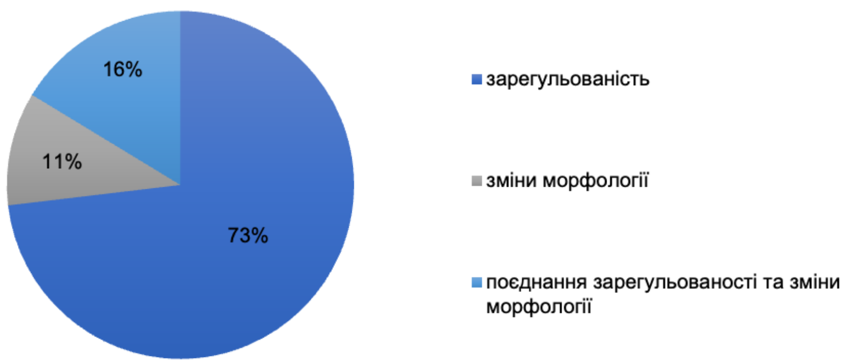


Figure 1 Distribution of HMWBs by causes of hydromorphological pressures (%)

Category "artificial surface water bodies".

According to the Methodology, 22 artificial SWBs were identified - ponds and bulk reservoirs.

The category "transitional waters".

According to the Methodology, 1 SWB was determined.

The percentage distribution of identified SWBs in the Southern Bug basin by category is shown in Figure 2.

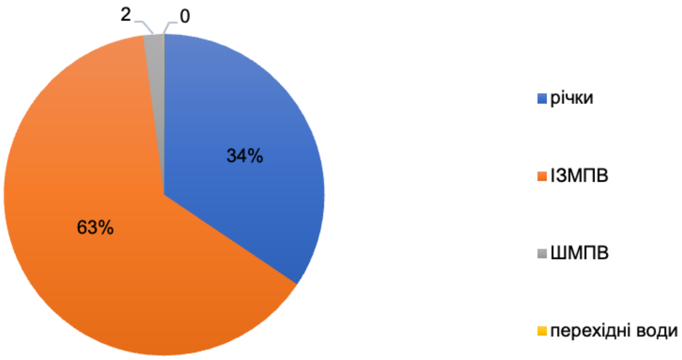


Figure 2 Breakdown of identified SWBs by category (%)

Each of the 1,090 SWBs identified in the Southern Bug basin has been assigned a unique code that looks like this:

UA_ M5.4_YYYY

- *UA* - Ukraine
- *M5.4* - code of the Southern Bug basin (according to the Order of the Ministry of Ecology and Natural Resources of Ukraine No. 103 of 29 March 2017 "On Approval of the Boundaries of River Basin Areas, Sub-basins and Water Management Areas")
- *YYYY is the* unique number of the designated SWBs in the Southern Bug basin.

Each linear SWB (categories "rivers", "AWB or HMWB") has a length (km). The length of the SWB in the Southern Bug RBD ranges from 0.15 km (UA_M5.4_0217 - Dumka River) to 170.3 km (UA_M5.4_0970 - Ingul River).

Figure 3 shows the distribution of the identified linear SWBs in the Pivdennyi Buh RBD by length.

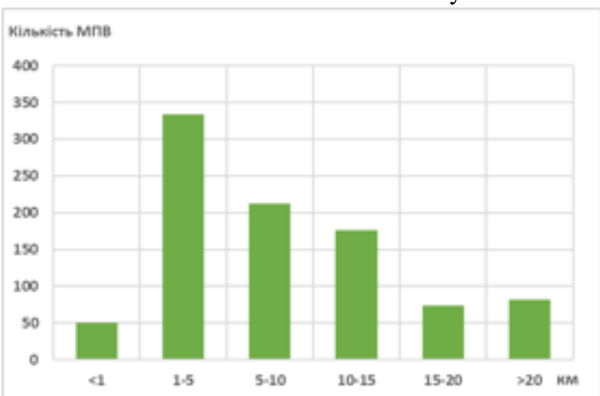


Figure 3 Distribution of the identified linear SWBs by length

Each polygonal SWB (categories "AWB or HMWB", "transitional waters") has an area (km^2). The area of the SWB in the Southern Bug RBD ranges from 0.11 km^2 (UA_M5.4_0843 - Shutovske Reservoir) to 146.5 km^2 (UA_M5.2_1090 - Buzky Estuary).

Figure 4 shows the distribution of identified polygonal SWB in the Southern Bug RBD by area.

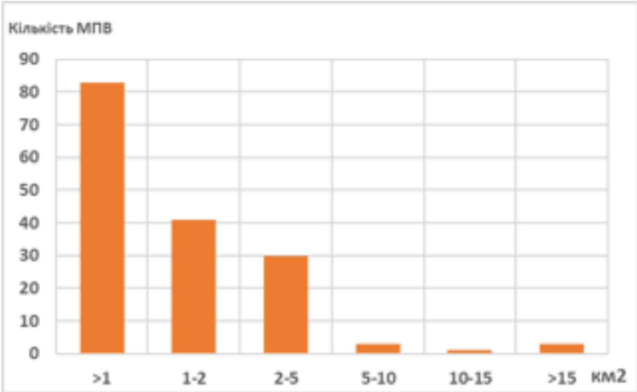


Figure 4 Distribution of identified polygonal SWBs by area

1.2.2 Groundwater

The deliniation of the GWBs was carried out in accordance with the Methodology for Determining Surface and Groundwater Bodies (Methodology) approved by the Order of the Ministry of Ecology and Natural Resources No. 4 dated 14.01.2019.

The definition of an GWBs includes the division of aquifers into smaller units, the preliminary establishment of GWBs boundaries based on individual characteristics and available knowledge of hydrogeological systems and anthropogenic iSWBcts.

The definition begins with the analysis of geological maps and well data to identify different hydrogeological units within the aquifer. First of all, attention is paid to those aquifer complexes whose reserves can provide water intake of more than 10 m3 per day.

The youngest aquifers are considered first. As a rule, the boundaries of surface water basins are approximated with the boundaries of groundwater basins, and then the determination of the GWBs for deeper aquifer complexes, the boundaries of which go beyond the boundaries of surface water basins, is performed.

The codes of the defining GWBs are formed as follows:

UAM5400Q100

- UA – Ukraine;
- M54 is the code for the Southern Bug basin;
- 0 - river sub-basin, according to the Water Code;
- 0Q - geological system (geological age of water-bearing rocks);
- 100 - the number of the GWB.

In the process of identifying groundwater bodies (GWBs) in the Southern Bug basin, 12 GWBs were identified**.**

Table 7 Non-pressure groups of GWBs

Group code of the GWBs	GWBs **groups**	**Area of the** GWBs**, km²**
UAM5400Q100	Group of GWBs in marsh and quaternary sediments	61
UAM5400Q200	Group of GWBs in alluvial quaternary sediments	8 232
UAM5400Q300	Group of GWBs in water-glacial and aeolian-deluvial Quaternary sediments	13 410
UAM5400Q400	Group of GWBs in aeolian-deluvial Quaternary sediments	42 250

Table 8 Pressure GWBs **and groups of pressure** GWBs

Group code of the GWBs	GWBs **groups**	**Area of the** GWBs**, km²**
UAM5400Q500	Group of GWBs in terrigenous alluvial and water-glacial Quaternary sediments	617
UAM5400N100	Group of GWBs in terrigenous carbonate deposits of the Sarmatian	14 650
UAM5400N200	GWBs in Miocene terrigenous sediments	58
UAM540PG100	Group of GWBs in terrigenous sediments of the Paleogene	1 543
UAM5400K100	GWBs in terrigenous sediments of the Cenomanian	1 353

Group code of the GWBs	GWBs **groups**	**Area of the** GWBs**, km²**
UAM5400K200	Group of GWBs in terrigenous deposits of the Lower and Upper Cretaceous	2 369
UAM540RE100	GWBs in effusive terrigenous rocks of the Precambrian	2 194
UAM540AR100	Group of GWBs in the fracture zone of crystalline rocks of the Archean-Proterozoic	52 690

Group of GWBs **in Quaternary marsh sediments (UAM5400Q100)**

The group of GWBs in marsh Quaternary sediments is limited in the valleys of the Pivdennyi Buh, Ingul and Zgar rivers. The water-bearing rocks are peat, sandy loam, loam with lenses of fine-grained sands 0.3-6 m thick, with a depth of 0.0-3.0 m.

The aquifer is weakly aquiferous. Daily water withdrawal from wells does not exceed 0.2 m^3. The filtration coefficient varies from 0.01-2.0 to 0.0001 - 0.0004 m/d (peat), 0.1 - 0.5 m/d (sandy loam), 0.05 - 1.0 to 4.7-5.0 m/d (fine sand).

The groundwater level is set at a depth of 0.0-0.5 to 1.0-1.5m, sometimes up to 3.5m.

Groundwater is recharged mainly by infiltration of precipitation and inflow of water from other horizons, and during periods of spring river flooding and rainfall floods - by flood water. The discharge is carried out by evaporation, flow into lower aquifers and complexes and directly into watercourses during low water. The aquifer is drained by rivers.

The level regime is formed under the influence of climatic factors, with the amplitude of level fluctuations ranging from 1.2-3.35 m, mostly up to 1 m.

The aquifer waters are hydraulically connected with the aquifer in modern alluvial deposits and surface waters. The chemical composition of the waters is mainly of mixed type: sulphate-hydrocarbonate-chloride, nitrate-chloride-sulphate, nitrate-hydrocarbonate. The waters have an unpleasant taste and smell, are yellow and yellow-brown in colour, contain a large amount of iron, ammonia and, in many cases, nitrates, the content of which varies from 93.63 to 125.26 mg/dm^3 . Mineralisation is 0.1 - 0.7 g/dm^3 . GWB is not suitable for water supply. It is associated with surface ecosystems and is highly vulnerable to pollution, so it needs to be protected.

Group of GWBs **in alluvial quaternary sediments (UAM5400Q200)**

The group of GWBs in alluvial Quaternary (Lower-Upper Neopleistocene and Holocene) sediments is distributed within the floodplains and overflow terraces of the Southern Bug with its tributaries.

The water-bearing rocks are predominantly fine- and medium-grained sands, which contain sandy loam and loam layers in the upper part of the section, and gravel and pebbles of bedrock in the lower part. It lies on Precambrian, Mesozoic and Cenozoic rocks. In the absence of water-resistant rocks, there is a hydraulic connection between alluvial deposits and the underlying rocks. The thickness varies from a few to 10-20 m in the valleys of small rivers, reaching 32 m in the floodplain of the Southern Bug.

The waters are non-pressurised, sometimes slightly pressurised, with a head of 1-3 m to 9 m. The water depth varies from 1.2-4 to 5-15 m. Well flow rates reach 0.1-0.5 dm^3 /s, sometimes more. The filtration coefficients of fine-grained sands are 3-6 m/d, medium-grained sands - 8-22 m/d, and the filtration coefficients of sandy loams - 0.2-0.4 m/d.

The chemical composition of the water is calcium-magnesium hydrocarbonate, sulphate-hydrocarbonate with a salinity of 0.3-4.3 g/dm3 . Groundwater is naturally unprotected from diffuse pollution within agricultural landscapes. Due to their high vulnerability, groundwater within settlements is contaminated with nitrogen compounds.

The annual amplitude of water level fluctuations is 1.0-1.2 m with a characteristic spring rise and summer and autumn water level drops. The groundwater is fed by infiltration. The groundwater of this group is widely used by the rural population for drinking and household purposes.

A group of GWBs **in water-glacial and aeolian-deluvial Quaternary sediments (UAM5400Q300)**

The group of GWBs in glacial and aeolian-deluvial Quaternary sediments is widespread within the watersheds of the northern part of the basin.

The lower part of the water-bearing rocks is represented by water-glacial, lake-glacial, alluvial sand with sandy loam and loam interlayers. The upper part is represented by aeolian-deluvial, eluvial-deluvial loams, sandy loams, loess-like loams.

The thickness of water-bearing sediments is unstable and varies from 2-5 to 15-20 m. The GWBs is underlain by pre-Quaternary rocks. The depth of the groundwater level varies from 0.5-1.8 to 12-15 m.

The water enrichment of the upper part of the formation is insignificant. The lower part is more water-enriched, with filtration coefficients varying from 0.1 to 2 m/d. Daily water withdrawal from wells does not exceed 3 m3 .

Calcium bicarbonate, calcium bicarbonate-chloride and calcium-magnesium waters with salinity ranging from 0.5-0.8 to 1.9 g/dm^3. The water is characterised by an elevated iron content coSWBred to the standard value. The groundwater of the GWBs group is naturally unprotected from diffuse pollution within agricultural landscapes and is therefore highly vulnerable. According to the results of chemical analyses, nitrates (up to 500 mg/dm^3), nitrites and ammonium ion were found in the water.

The groundwater is recharged by infiltration and discharged in river valleys and into the sediments underlying the aquifer. The annual amplitude of groundwater level fluctuations is 0.5-1.5 m.

This aquifer is not used for centralised water supply; the water is used by the local population for domestic needs through wells.

A group of GWBs **in aeolian-deluvial Quaternary sediments (UAM5400Q400)**

A group of GWBs in the Aeolian-Deluvial Quaternary sediments is located in the watersheds of the central and southern parts of the Southern Bug basin.

Underlying the water-bearing rocks are single-age clays and heavy loams or pre-Quaternary, mainly Neogene rocks.

The water-bearing rocks are represented by eolian-deluvial and eluvial-deluvial loams, sandy loams, loess-like loams with a total thickness of up to 20-30 m, the thickness of the watered stratum is from 1-2 to 10-15 m. The water permeability coefficient is 0.2-7.0 m^2 /d, the filtration coefficient varies from 0.1 to 0.8 m/d. The daily withdrawal from the wells mostly does not exceed 2-3 m^3 , in some cases it reaches 25 m^3 , well flow rates vary from 0.01 to 0.5 dm^3/s.

The depth of the level ranges from 1-2 to 8-11 m.

In the northern part of the distribution of the GWBs, the waters are hydrocarbonate, magnesium-calcium, with a salinity of 0.3-0.7 g/dm^3 , in the south - hydrocarbonate-sulfate, sulfate-hydrocarbonate magnesium-calcium-sodium with a salinity of 0.9-3 to 7-10 g/dm^3. GWBs is widespread in the area of insufficient moisture and, accordingly, groundwater recharge. In this part of the territory, the soils and rocks of the aeration zone are saline due to the natural process of continental salt accumulation. This causes an increase in salinity and worsens water quality. The chemical composition of the water in the aeolian-deluvial quaternary sediments is dominated by sulphates and chlorides, and the mineralisation often exceeds the standard values.

The groundwater of the GWBs group is naturally unprotected from diffuse contamination by products within agricultural landscapes and is therefore highly vulnerable. Nitrate pollution is observed in water within rural settlements.

The groundwater is infiltrated, and the regime is characterised by pronounced seasonal fluctuations. It is used for household and drinking water needs in rural areas.

Group of GWBs **in terrigenous alluvial and water-glacial Quaternary sediments (UAM5400Q500)**

The group of GWBs in terrigenous alluvial and glacial Middle Quaternary sediments is scattered over the area within the hydrogeological region of the Ukrainian Shield in the north and north-east of the Southern Bug basin. The water-bearing rocks are represented mainly by Middle Neopleistocene alluvial and glacial deposits that fill glacial water flow valleys. These are multi-grained, mostly fine-medium grained sands with sandy loam and loam interlayers in the upper part and pebbles and gravels in the lower part, with thicknesses ranging from 1-5 to 15-30 m. The sediments are overlain by crystalline basement rocks, sometimes by Paleogene and Neogene sediments. It is overlain by aeolian-deluvial loams. Depth of occurrence is 5-15 m. Due to the loams and clays occurring in the upper part of the rock section, the groundwater is pressure and non-pressure, the pressure reaches 5.0-15.0 m.

The daily withdrawal from wells is 0.5-1.0 m^3, sometimes 10-15 m^3, reaching 40-50 m^3. Well flow rates range from 0.7 to 5.5 dm^3/s. Filtration rates vary from 1.1-8.3 to 27.6-43.9 m/d.

The waters in the north-western and central parts of the shield are fresh, mainly hydrocarbonate, chloride-hydrocarbonate, sulphate-hydrocarbonate calcium and calcium-magnesium, magnesium-calcium with salinity up to 0.3-2.0 g/dm^3. Groundwater is characterised by a high iron content.

The amplitude of groundwater level fluctuations is 0.5-1.0 m.

The aquifer is fed by infiltration and by flow from the underlying horizons. Usually, water intakes that develop this horizon are located in river valleys, where there are favourable conditions for replenishing groundwater resources with surface water.

Water plays a significant role in meeting the economic and drinking needs of the population. The water supply of the settlements of Novomyrhorod, Vatutino (together with the aquifer in the Archean-Proterozoic fracture zone) and others is partially or fully based on the exploitation of this horizon. To meet the drinking water needs of Kropyvnytskyi, the Paleogene groundwater is used together with groundwater.

Group of GWBs **in terrigenous carbonate deposits of the Sarmatian (UAM5400N100)**

The group of GWBs in Miocene terrigenous carbonate sediments is distributed as a wide band bordering the western and southwestern slopes of the Ukrainian Shield, and in the south fills the Black Sea artesian basin. The water-bearing sediments are represented by formations of the Miocene Sarmatian region. In the south, within the Black Sea artesian basin, the GWBs in some small areas includes deposits of the Meotian and Pontic regional layers, which are not separated from the Sarmatian aquifers by the area.

The water-bearing sediments are inconsistent in section and area and are represented by limestones, sands, and in some places sandstones with clay interlayers. Thickness is 30-50 m, in some cases up to 100-120 m. They are underlain by single-age clays, with Miocene clays, Miocene-Pliocene formations, and Quaternary sediments in the overlying layer. These deposits act as upper and lower aquifers, respectively.

Depth varies from 5-10 to 25-115 m, increasing in the southern part. The waters are pressurised, the head varies from 3-20 to 58-119.5 m. The depth of the groundwater table ranges from 0-53 to 92 metres. The water content varies significantly depending on the lithological composition of the water-bearing layers and their thickness, with flow rates ranging from 0.1 to 11.6-20 dm^3/s.

The chemical composition of the water is hydrocarbonate, magnesium-calcium, calcium-magnesium sulphate-hydrocarbonate, sodium-magnesium sulphate-chloride, magnesium-sodium with a salinity of 0.3-1.0 to 3.0 g/dm^3 .

The thickness of the clays underlying the water-bearing sediments exceeds 10 m, so the group of IPPs in Miocene terrigenous carbonate sediments is protected from pollution. The increased content of sulphates and chlorides in the water of Sarmatian sediments is of natural origin due to their location in the zone of insufficient moisture. The groundwater is infiltration, with a water table fluctuation amplitude of 0.3-0.5 m.

Groundwater is used to meet the water needs of the settlements of Ochakiv, Balta, Kryzhopil, Tulchyn, Zhmerynka, Nova Odesa, etc.

GWBs in Miocene terrigenous sediments (UAM5400N200)

The GWBs in Miocene terrigenous sediments is represented by sands of the Novopetrivsk Formation and Miocene sand thickness. Miocene fine-grained and fine-grained sands with lenses and clay layers are limited in the north-eastern part of the basin. The sediments may be drained in some places, and usually only the lower part of the section (5-10 m thick) is waterlogged.

Depth varies from 0-10 m on plateau and gully slopes to 30-55 m on the plateau. The thickness of the watered stratum varies from several metres on the valley slopes where the complex is exposed to 20-25 metres in the watershed areas. The depth of the groundwater table varies from 0 m in the places where springs come to the surface on the valley slopes to 50 m in the highest parts of the watersheds. In the central parts of the watersheds, the aquifer water is pressurised. The head reaches 25 m, decreasing towards the slopes.

The rocks of the Miocene aquifer complex are overlain by a thickness of variegated and red-brown clays of the Miocene and Pliocene, and on the valley slopes by clays and loams of the Eopleistocene and Lower Neopleistocene. It is underlain by waterlogged sandy formations of Oligocene age, and in places of their absence - by crystalline basement.

The water enrichment of the complex is low. The flow rate of the sources varies from 0.01 to 0.8 dm^3 /sec, up to 1.5 dm^3 /sec. The specific flow rate of wells is 0.06-0.55 dm^3 /sec. The wells provide a daily water withdrawal of 0.2-2.0 m^3 . The filtration coefficient of sands varies from 2.1 to 10.2 m/d.

The chemical composition of the waters of the complex is calcium-magnesium, magnesium-calcium, and less often calcium-sodium with a salinity of mainly 0.7-0.8 g/dm^3 . The waters of the complex are often contaminated with nitrates (NO content$_3^-$ reaches 100-330 mg/dm^3), mostly hard and very hard (from 7 to 22 mg-eq). The water reaction is slightly alkaline, close to neutral (pH 7-7.8).

The complex is fed by flows from adjacent aquifers with which it has a hydraulic connection. On the slopes of the valleys, where there are no water-resistant clay rocks in the roof, the complex is also fed by infiltration of precipitation. The complex is drained by a hydrographic network. Its practical importance is small due to low water recharge and unsatisfactory water quality. However, it is possible to use groundwater from this GWBs for water supply of small farms far from the drainage areas.

A group of GWBs **in Paleogene terrigenous sediments (UAM540PG100)**

The group of GWBs in Paleogene terrigenous sediments is distributed in areas that fill paleodolines in the crystalline basement of the Ukrainian Shield, as well as on its southern slopes. This group of PGMs is associated mainly with Eocene and sometimes Oligocene deposits.

It is overlain by red-brown and variegated Miocene-Pliocene clays, Miocene terrigenous formations or Quaternary rocks, and in the southern part by a thickness of single-age clays and marls, Miocene clays or Quaternary sediments. The water-bearing rocks are mostly located on crystalline basement rocks. In the southern part of their distribution, they are underlain by Paleogene and Upper Cretaceous sediments.

The water-bearing rocks are fine-grained sands, sandstones with interlayers of clays, secondary kaolins, and Oligocene and Eocene lignite. The depth varies from 5-10 m to 68-112 m in the upland areas; in the south - from 3.5 to 135 m. The thickness of aquifers ranges from 15-20 m to 40-50 m.

The head is from 5 to 46-65.5 m. The piezometric groundwater level of the complex is set at depths from 0.6 to 65-75 m.

Water enrichment is quite high, with well flow rates varying from 0.3-2.4 to 24-27 dm^3/s. Filtration rates range from 0.6-6.9 to 66-75 m/d.

The chemical composition of the water of the complex is hydrocarbonate, sometimes sulphate-hydrocarbonate magnesium-sodium, calcium-sodium, and rarely magnesium-calcium. The water salinity is mostly 0.3-0.9 g/dm^3, in the south - up to 2.4 g/dm^3, the total hardness varies from 1.5 mg-eq to 10.5 mg-eq, the water reaction is slightly acidic to slightly alkaline.

The group of IPPs in Paleogene terrigenous sediments is protected by natural conditions, so it is not vulnerable to contamination.

It is fed by infiltration, as well as by flows from aquifers above and below the cut.

They are used to supply water to the settlements of Vatutino, Stavyshche, Kropyvnytskyi and others.

GWBs **in terrigenous sediments of the Cenomanian (UAM5400K100)**

The GWBs in Cenomanian terrigenous sediments is used for drinking water supply in shallow deposits in the area where the Volyn-Podilskyi artesian basin borders on the hydrogeological region of the Ukrainian Shield (northwestern part of the Southern Bug basin). In this part, the water-bearing rocks are underlain by Vendian, Archean-Proterozoic formations and overlain by Miocene carbonate-terigenous formations and Quaternary terrigenous sediments. The thickness of water-bearing rocks is 5-25 metres and more.

Water-bearing rocks are represented by sands, sandstones with interlayers of flints, limestones and opals. The depth of occurrence is 10-50 metres. The aquifer is a pressure aquifer with a head of 10-40 metres or more. Static levels are established at depths ranging from several to 25-65 metres.

The chemical composition of the water is calcium-magnesium-calcium bicarbonate with a salinity of 0.6-0.9 g/dm^3 and a total hardness of 4.0-8.0 $mmol/dm^3$.

The flow rates of the wells exploiting the horizon range from 4.0 to 40.0 dm^3/s.

The aquifer is fed mainly by water flow from the Miocene aquifers and by inflows from the Vendian aquifer complex.

There are no classical waterproofing materials in the roof or sole of the horizon, but a sufficiently reliable level of protection makes it invulnerable to contamination from the surface.

Within the area of operations, the Cenomanian aquifer is used to supply water to settlements, industrial enterprises and cities. The Cenomanian aquifer is one of the main sources of water supply to the cities of Khmelnytskyi and Krasyliv, where it is exploited together with the aquifers in Precambrian rocks. The horizon is exploited by the existing water intakes of Khmelnytskyi - Zakhidnyi, Pivdennyi, Sharovechka and Chernelivskyi.

Group of GWBs **in Lower and Upper Cretaceous terrigenous sediments (UAM5400K200)**

The GWBs in Lower and Upper Cretaceous terrigenous deposits is distributed in the southern and southwestern parts of the territory within the northern wing of the Black Sea artesian basin in the area of its junction with the Ukrainian Shield. It consists of sediments of the Cenomanian, Aptian and Albanian stages of the Lower and Upper Cretaceous. The rocks of the Aptian and Albanian formations fill the buried areas of the basement within the northern part of the Black Sea artesian basin.

In addition, the GWBs includes waterlogged formations of the Cretaceous system, which have a limited distribution and fill depressions in the crystalline basement within the Hydrogeological Region of the Ukrainian Shield (Novomyrhorod area).

The water-bearing rocks are sands of various grains, sandstones, fractured marls, and conglomerates and gravels in the lower part of the section.

In the southern part, the thickness of the aquifers ranges from 1-5 to 30 metres. Between them, layers of water-resistant clays can be traced at different depths. The aquifer complex is a pressure aquifer with a head of 9.6 to 154.0 m, which increases in the southern direction. The depth of the static level ranges from 8.0-20 to 96.0 m.

The well flow rates vary from 0.06 dm^3/s at a 1.0 to 13.3 dm^3/s at a 26.75 m dip, with specific flow rates of 0.06 and 0.5 dm^3/s, respectively. The water conductivity coefficients range from 36.7 to 220.0 m^2/d.

The chemical composition of the water is magnesium-sodium bicarbonate, sodium chloride-hydrocarbonate, sodium bicarbonate-chloride with a salinity of 0.3-1.8 g/dm^3 and more. The water quality deteriorates towards the southern dip of the sediments. The total hardness is from 0.5 to 29.8 mg-eq/dm^3. There is spotty water pollution with nitrogen compounds.

The groundwater is infiltrated, occurring on the slopes of the Ukrainian Shield. In addition, groundwater is recharged by flow from adjacent aquifers above and below the cut.

The aquifer complex in the Cretaceous sediments is used by the population for household and drinking purposes through production wells in settlements (Domanivka village and others).

The waterlogged formations of the Cretaceous system, which are widespread in the north, near Novomyrhorod, are located on crystalline Precambrian rocks and are overlain by formations of different ages at depths ranging from 3-10 to 100 m and more. The thickness of the aquifer complex is unstable and varies from 25-30 m in the axial parts of the depression to 5 m or less on the slopes.

The water content of the aquifer complex depends on the lithological composition of the water-bearing rocks. The wells flow rate varies from 0.9 to 1.37-2.75 dm^3/s with water levels ranging from 3.2-3.8 to 16.6-26.2 m. The waters of the aquifer complex are pressurised. The head is 35-73 m. The value of the rock filtration coefficient varies from 0.007 to 0.111 m/d.

The chemical composition of the waters of the complex is calcium bicarbonate, less often sodium-calcium, magnesium-calcium, calcium-sodium with a salinity of 0.4-0.6 g/dm^3 . The waters are moderately hard, the total hardness varies from 4.8 to 7.7 mmol/dm^3 . The water reaction is mostly neutral, sometimes slightly alkaline (pH = 7.0-7.3).

The aquifer complex in the Cretaceous formations is fed by the pressure waters of the fractured zone of the crystalline basement, as well as by groundwater flow from the Paleogene aquifers and overlying Quaternary sediments, with which the complex is hydraulically connected.

The satisfactory water quality of the complex and sufficient well flow rate ensure water supply to certain locations in the districts of Novomyrhorod, villages. Korobchyne, Byrzulove, Lebedyn, Nosachiv, Bilozirya.

GWBs **in effusive terrigenous rocks of the Precambrian (UAM540RE100)**

The GWBs in the Precambrian effusive and terrigenous rocks within the northwestern part of the Southern Bug River basin is associated with fractured effusive and terrigenous formations of the Upper and Lower Vendian (Mohyliv-Podilsky and Volyn series), which occur shallowly on the slopes of the Ukrainian Shield, mostly on crystalline rocks of the Archean-Proterozoic under carbonate-terigenous Meso-Cenozoic sediments.

The upper part of the water-bearing rocks is represented by sandstones, gravels, siltstones, and the lower part by sandstones and siltstones with interlayers of tuff-sandstones and tuff mudstones. In this area, Precambrian rocks contain groundwater of drinking quality. To the east, they are overlain by a thick layer of Paleozoic and Mesozoic rocks and are unsuitable for household and drinking water supply.

Water-enriched fractured zones are unevenly distributed over the area and in the section. This is due to the tectonic structure of the area, lithological and facies composition of rocks, depth of water-bearing sediments, feeding conditions, etc.

The depth of the aquifer complex depends on the local topography and varies from 25-40.0 to 100.0 m. The depth of effective fracturing is 70.0-80.0 m, and in areas of tectonic faults it reaches 100.0-125.0 m.

The groundwater is pressurised, with a head that varies from several metres to 30.0-50.0 metres. Piezometric levels are installed at a depth of 1.0-2.0 to 50.0-60.0 m.

The water content depends on the degree and nature of fracturing of water-bearing rocks and varies widely. Well flow rates vary from 0.5 dm^3 /s, reaching 20 dm^3/s.

The aquifer complex is fed by water flow from the aquifers above the section, as well as by the inflow of crystalline rock pressure water. The aquifer regime is relatively stable, with a water level fluctuation amplitude of 0.2-0.8 m.

The general direction of groundwater flow is to the west and south-west, with partial discharge of the aquifer complex into the Pivdennyi Buh River.

The waters of the complex are fresh, with the content of the main water components being mainly magnesium-calcium, calcium-sodium hydrocarbonate with a salinity of 0.3-0.6 g/dm^3 and a total hardness not exceeding 5.0-8.0 mmol/dm^3.

The aquifer complex of Precambrian sediments, together with the Cenomanian aquifer, is the main source of centralised water supply for Khmelnytskyi and other settlements and economic facilities.

A group of GWBs **in the fracture zone of Archean-Proterozoic crystalline rocks (UAM540AR100)**

The group of GWBs in the Archean-Proterozoic crystalline rock fracture zone is widespread in the Southern Bug basin within the hydrogeological region of the Ukrainian Shield. The water-bearing rocks are Precambrian basement rocks composed of various metamorphic and igneous formations, among which gneisses, granites and migmatites predominate. They are overlain by a thin layer of Meso-Cenozoic sediments and often come to the surface in river valleys.

The water enrichment is uneven, which is determined by uneven endogenous and exogenous fracturing of crystalline rocks in terms of area and depth. The most waterlogged zones are confined to the low areas of the modern relief, coinciding with the developed hydrographic network and large gullies. The thickness of intense fracture zones often does not exceed 20 m from the surface of crystalline rocks in watersheds and 50 m in river valleys, and usually extends to a depth of 80-100 m from the modern surface.

Almost everywhere, crystalline rocks are overlain by weathering crust, which directly determines the conditions of their interconnection with aquifers and overlying sedimentary complexes and, consequently, the conditions of their nutrition. The weathering crust plays a dual hydrogeological role. Under certain conditions, depending on its lithological structure, it is either an aquifer or a water bearing zone. Regionally, the weathering crust is fully exposed and has a greater thickness in watershed areas, while its thickness decreases towards the riverbeds, up to complete erosion.

The depth of the roof is 1.4-110.0 m. In river valleys, water-bearing rocks often come to the surface. To the south, the thickness of sedimentary rocks in the roof and, accordingly, the depth of occurrence increases. Groundwater levels range from + 0.5 to 65.0 m, usually not exceeding 20-30 m. The water is pressurised and non-pressurised, with a head of 1.0-66.0 m, usually 15-30 m, and some wells are self-pouring. In river valleys, the pressure decreases.

Water enrichment depends on the level of fracturing, thickness of the fracture zone and feeding conditions; well flow rates vary from 0.1 to 10-14 dm^3/s. Water permeability varies widely: background values are 1-10 m^2/d, varying from the first m^2/d to 500 m^2/d. High values of water permeability are associated with tectonic fault zones, river valleys, and gullies, where they usually amount to 50-100 m^2/d.

The chemical composition of groundwater is varied. In the northern part, the waters are magnesium hydrocarbonate, sulphate-hydrocarbonate magnesium-calcium, sodium-calcium with a mineralisation of 0.5-0.9 g/dm^3. In the south - sulphate-chloride, sulphate-hydrogen carbonate, hydrogen carbonate-sulphate, chloride-sulphate with a predominance of sodium in the cationic composition, mineralisation 0.6-3.8 g/dm^3.

Under the conditions of natural protection, depending on the thickness of weakly permeable rocks in the roof, the group of GWBs in the fractured crystalline rock zone of the Archean-Proterozoic is protected and conditionally protected. In the river valleys, where weakly permeable sediments are eroded, there are conditions for hydraulic connection with non-pressure Quaternary GWBs that lie above the section.

The aquifer is recharged over the entire area of its distribution, mainly through infiltration of precipitation and flow from aquifers confined to sedimentary rocks in areas where there are no watercourses. Discharge occurs in river valleys. The amplitude of groundwater level fluctuations varies widely depending on the type of regime: from 0.3-0.6 m (watershed regime) to 0.5-1.0 m (valley floor regime) and 1-2 m, sometimes 3-4 m (river valleys). It serves as the main source of domestic and drinking water supply for a number of large settlements throughout the entire area of distribution. Taking into account the specifics of crystalline rocks water content, it is exploited by small scattered water intakes of low capacity (about 1-2 thousand m^3/d). Water intakes often develop an aquifer in crystalline rocks together with aquifers that lie above the section

2 SIGNIFICANT ANTHROPOGENIC ISWBCTS ON THE QUANTITATIVE AND QUALITATIVE STATUS OF SURFACE AND GROUNDWATER, INCLUDING POINT AND DIFFUSE SOURCES

2.1 Surface water

The Southern Bug basin is located within 7 oblasts (Khmelnytskyi, Vinnytsia, Kyiv, Kirovohrad, Cherkasy, Mykolaiv, Odesa). The socio-economic structure of the basin creates prerequisites for the formation of anthropogenic pressure that affects surface water ecosystems. The main factors of anthropogenic pressure include:

- Population: there are 2,966 settlements in the basin, with a population of 3.7 million people as of 1 January 2018. The population density in Khmelnytskyi, Vinnytsia, and Mykolaiv regions ranges from 65 to 90 people/km^2 , in Kirovohrad and Cherkasy regions 40 to 50 people/km^2 , and in Kyiv and Odesa regions about 35 people/km . ^{2}
- Enterprises from various sectors of the Ukrainian economy. The main industrial sectors in the Southern Bug basin include energy, food and construction materials production, and the non-ferrous industry. The largest share of surface water abstraction in the Southern Bug River basin is carried out by the energy sector (85%), food production (8%), non-ferrous industry (3.0%) and construction materials industry (2%), and the smallest share is carried out by the fishing and printing industry (0.004%). The largest water intake is for: the energy sector in Mykolaiv (72%) and Vinnytsia (19%) oblasts, the food sector in Vinnytsia (59%), Mykolaiv (16%) and Khmelnytskyi (12%) oblasts, and the non-ferrous industry in Kirovohrad (100%). The main share of pollution with ammonium nitrogen compounds, nitrates, nitrites, and phosphates is generated by food processing enterprises.
- Agriculture, which is one of the leading economic sectors in all seven regions of the basin and is characterised by a high level of development. The main agricultural crops include: cereals, industrial crops, vegetables, melons and potatoes, and fodder crops.
- Cross structures on small and medium-sized rivers prevent the free passage of water, sediments and migration of aquatic life, and change the transit mode of rivers to an accumulation one.

The characterisation of anthropogenic pressures and its impact was carried out on the basis of chemical, physicochemical and hydromorphological indicators that reflect the conditions of existence of the biotic component of aquatic ecosystems. Changes in these parameters under conditions of significant anthropogenic pressure may lead to the risk of not achieving the "good" ecological status of the SWBs.

The assessment of the anthropogenic pressures on the SWBs was carried out in accordance with the Methodological Recommendations for the Analysis of the Main Anthropogenic pressures and Their Impact on the Surface Water Status, which were approved at the meeting of the Scientific and Technical Council of the State Agency of Ukraine for Water Resources on 20 April 2023, Minutes No. 2.

The methodological basis of the assessment was the DPSIR model developed by the European Environment Agency (EEA)[1] and adapted to the conditions of Ukraine. The determination of anthropogenic pressure was based on a sequential analysis of Drivers/Activities → Pressures → State → Impact → Response (Fig. 5).

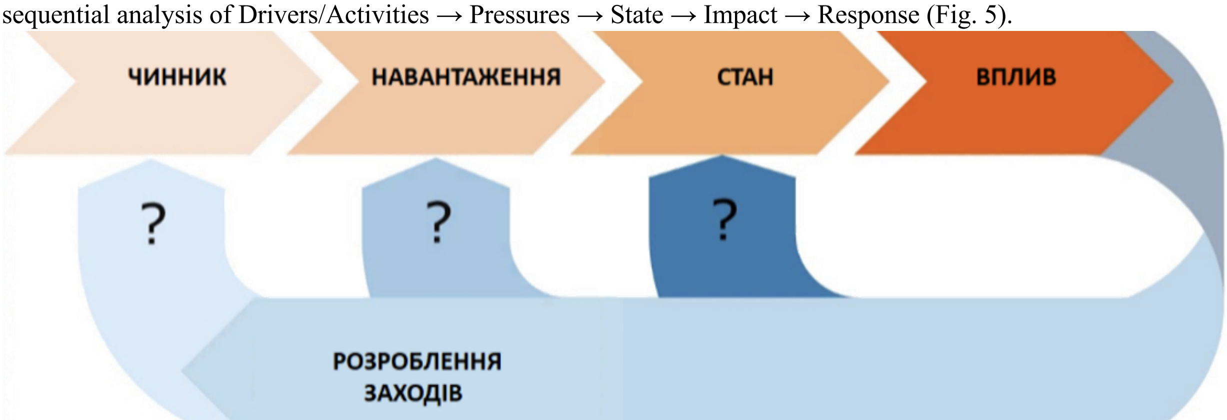


Figure 5 DPSIR conceptual model

[1] *CIS Guidance #3 Pressure and Impact Analysis, EU, 2003*

The risk of not achieving a "good" ecological status of the SWB is determined on the basis of criteria for chemical, physico-chemical and hydromorphological indicators.

Criteria for chemical and physicochemical indicators:

- Disposal of untreated wastewater (point sources) - used for organic matter and nutrients;
- Wastewater fraction (point sources) - used for hazardous substances;
- Soil nitrogen balance (diffuse sources) - to determine the impact of crop production;
- Livestock index (diffuse sources) - to determine the impact of livestock.

Criteria for hydromorphological indicators:

- Disruption of the continuity of water flow and environments due to the presence of transverse artificial structures in the riverbed, disruption of the continuity of water flow and sediment movement and migration of fish and other aquatic life;
- Water intake;
- Flow control;
- Fluctuations in water levels downstream artificial structures in the channel;
- Morphological changes that reflect a violation of the natural morphological characteristics of rivers.

By coSWBring the criteria with the thresholds, 3 risk categories are identified:

1. "not at risk"
2. "possibly at risk"
3. "at risk"

The overall risk assessment for a SWB is determined by the worst value of any one criterion.

Assessing the risk of not achieving "good" ecological status

The risk of not achieving "good" ecological status/potential of an SWB is the risk, for each individual SWB, of not achieving the environmental objectives of the EU WFD by the end of the planning cycle, taking into account the current state of the SWB, the expected changes in the pressures on the SWB and the possible effects of government programmes and projects already implemented.

To assess the risk, an analysis of the anthropogenic pressures within the river basin area is carried out, based on chemical and physico-chemical components and hydromorphological changes.

The risk of failure to achieve environmental objectives is assessed separately from diffuse and point sources of pollution, as well as hydromorphological changes.

Assessment of the risk of failure to achieve environmental objectives from point sources of pollution

Based on the results of the assessment of anthropogenic pressures from point sources of pollution and their impact on the basin's SWBs, the risk of failure to achieve good ecological status/potential (Fig. 8) was identified for

- 845 SWBs - "no risk"
- 200 SWBs - "possibly at risk"
- 20 SWBs - "at risk"
- 24 SWBs - not assessed.

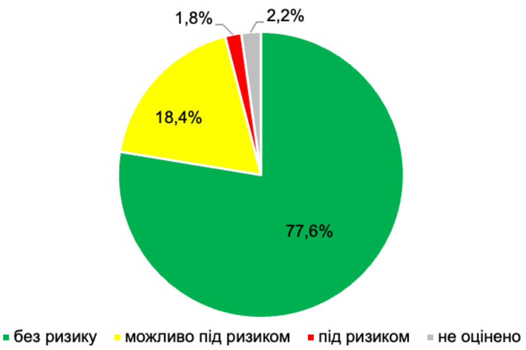


Figure 8 Risk assessment of failure to achieve good ecological status/potential based on the results of the assessment of anthropogenic pressures from point sources

Assessment of the risk of failure to achieve environmental goals from diffuse sources of pollution

Based on the results of the assessment of anthropogenic pressures from diffuse sources of pollution and their impact on the basin's SWBs, the risk of failure to achieve good ecological status/potential (Fig. 9) was identified for

- 602 SWBs - "no risk"
- 245 SWBs - "possibly at risk"
- 82 SWBs - "at risk"
- 160 SWBs - not estimated.

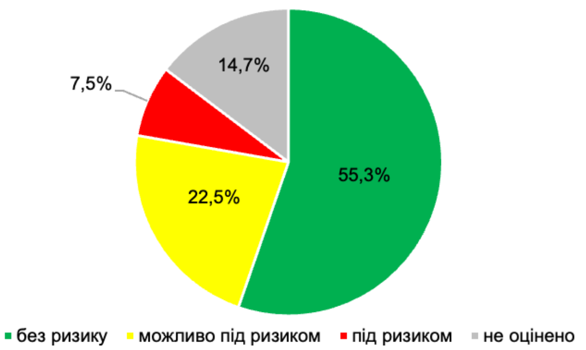


Figure 9 Risk assessment of failure to achieve good ecological status/potential based on the results of the assessment of anthropogenic pressures from diffuse sources

Assessing the risk of not achieving environmental objectives: hydromorphological changes

Based on the results of the hydromorphological changes assessment,[2] was established (Fig. 10):

- 375 SWBs - "no risk"
- 691 SWBs - "at risk"
- 23 SWBs - not assessed.

Figure 10 Risk assessment of failure to achieve good ecological status/potential based on anthropogenic pressure assessment: hydromorphological changes

Generalised risk assessment of failure to achieve good ecological status/potential

The risk of not achieving good ecological status/potential is assessed as follows (Figure 11):

- 218 SWBs - "no risk"
- 122 SWBs - "possibly at risk"
- 726 SWBs - "at risk"
- 23 SWBs - not assessed.

[2] *The risk of failure to achieve environmental objectives based on hydromorphological changes was not assessed for the SSSI*

Figure 11 Summary assessment of the risk of not achieving good ecological status / potential of the SWBs

Transitional water load and risk assessment

The Bug estuary in the Southern Bug River basin is classified as transitional water (Order of the Ministry of Ecology and Natural Resources of Ukraine No. 4 of 14 January 2019 "On Approval of the Methodology for Determining Surface and Groundwater Massifs"), where 1 SWB has been identified.

Table 8 Identified SWB in the category of "transitional waters"

№	Name	type of SWB	area (km)^2
1	Bug estuary	UA_TW_M5_O_O	145,8

The total discharge of return (waste) water is based on the data of state water use accounting (reports on water use in the form No. 2TP-vodkhoz (annual) in accordance with the Procedure for maintaining state water use accounting, available on the website of the SAWR. State accounting of water use (davr.gov.ua)

Table 9 General indicators of water discharge into the Bug estuary

Year	Discharged to surface water bodies of waste water, total million cubic metres	Discharged into surface water bodies of waste water: polluted	Discharged into surface water bodies of return (waste) water: normatively clean (without treatment)	Discharged to surface water bodies of waste water: normatively treated at facilities
2020	29,523	20,031	9,492	-
2021	29,267	18,685	10,512	0,070
2022	14,646	11,518	3,036	0,092

The assessment of the risks of failure to achieve environmental objectives by the transitional SWB of the Southern Bug River Basin was carried out in accordance with the Methodological Recommendations for determining the main anthropogenic pressures and their impact on the state of surface waters, approved by the Scientific and Technical Council of the SAWR (Minutes No. 2 of 27 November 2018), is presented in Table 10.

Table 10 Results of the assessment of risks of failure to achieve the environmental objectives of the SWB of the "transitional waters" category

Year	Point sources			Diffuse sources		
	Point sources: agglomeratio n	Point sources: industry	Point sources: (hazardous and other specific substances)	Diffuse sources: crop production	Diffuse sources: animal husbandry	Diffuse sources: (hazardous and other specific substances)
2020	3	3	1	1	0	0
2021	3	3	1	1	0	0
2022	3	3	1	1	0	0

Impact of military operations on the status of SWBs

1. **Pollution (organic, biogenic, hazardous) substances** caused by the **pollution:**

- **destruction, suspension, disruption of the technological process of treatment facilities and increased loads on them due to the growing number of internally displaced persons**

In the Southern Bug basin, there are no municipal wastewater treatment facilities that have been damaged, suspended or disrupted as a result of the hostilities.

- **destruction, suspension, or disruption of the technological process of enterprises (including warehouses and oil product depots)**

In the Southern Bug basin, 17 cases of destruction, suspension or disruption of the technological process of enterprises as a result of hostilities were recorded between March 2022 and May 2024.

Of these, 7 cases were related to the suspension of operations, 7 cases of infrastructure destruction and 3 cases of power outages (Annex 3).

The information was prepared by the Zoy Environmental Network for the OSCE Project Co-ordinator in Ukraine.

- **direct ingress of pollutants from missiles, shells of military equipment, their washing away, seepage in combat zones**

Artillery shells, missiles and other munitions are mainly composed of a metal shell filled with an explosive, propellant and a detonator.

Explosives are classified into primary explosives (mercury, lead azide, TNT) and secondary explosives (THE, hexogen, tetryl, TNT, picric acid, plastid-4, ammonites, dynamites, ammonals).

Metals are associated pollutants. The most common is lead, followed by antimony (stibium), copper, cadmium, chromium, mercury, arsenic (arsenic), nickel, bismuth and tungsten. As a rule, the metals are concentrated in the sinkhole.

Flares burn at high altitude and disperse metals over large areas. Pyrotechnics can contain barium, antimony (stibium), strontium, copper, magnesium, manganese, chromium and lead. Unlike explosives and propellants, metals occur naturally in the environment, so their background concentrations need to be measured.

The detonation of rockets, artillery shells and mines produces a number of chemical compounds, including carbon monoxide and carbon dioxide, water vapour, nitrogen oxide, nitrogen, etc. A number of toxic elements, including sulphur and nitrogen oxide, also evaporate.

2. **The hydromorphological changes** caused:

- **changes in the hydrological regime as a result of destruction, disruption of the operation of hydraulic structures (dams, dikes, locks)**
- **water intake to eliminate water shortages for drinking and other needs**
- **Increased fluctuations in water levels below hydroelectric dams during periods of peak load coverage**

No cases of hydromorphological changes caused by the impact of military operations have been recorded in the Southern Bug basin.

3. **Impossibility of water monitoring** or reduction of its programme (spatially and temporally) in the temporarily occupied territories (Fig. 6).

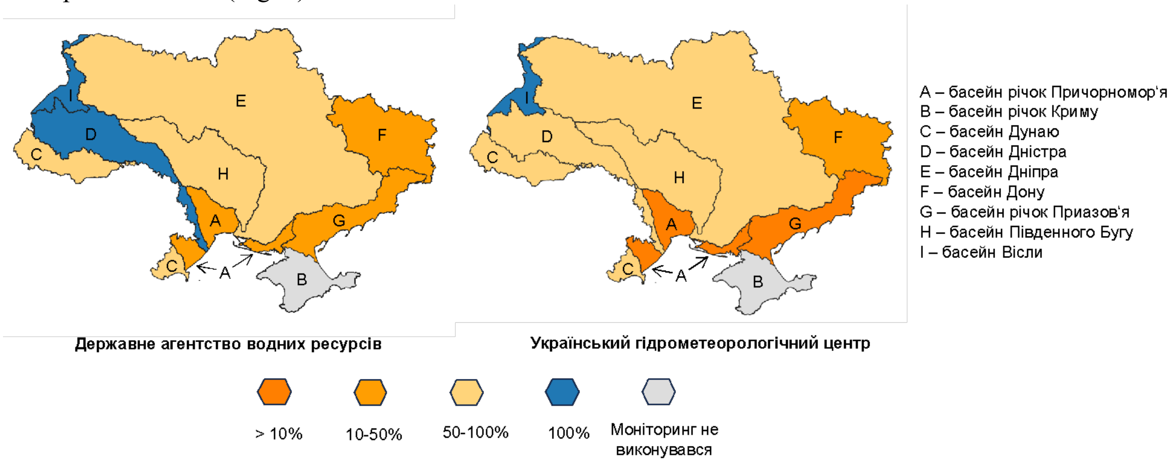


Figure 6 Achievement of surface water monitoring targets by river basin (%), 2022 [3]

4. **Impossibility or restrictions on water management in the** temporarily occupied territories (Fig. 7).

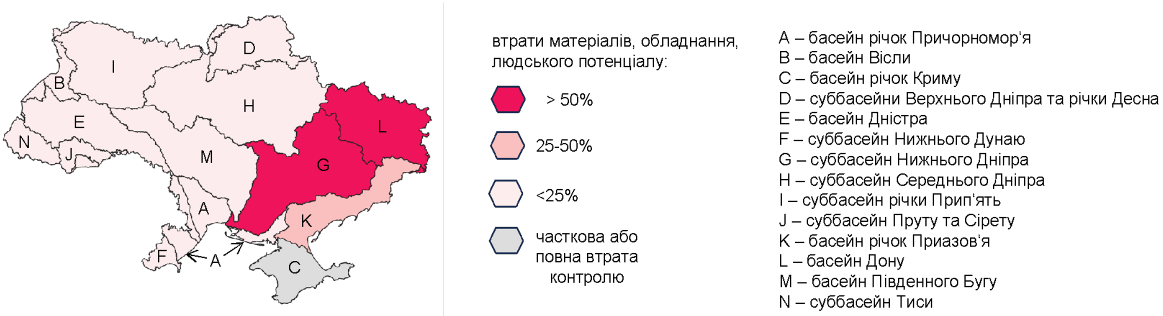


Figure 7 Impact of military operations on the ability to manage water resources [4]

[3] *The information was prepared by the Zoy Environmental Network for the OSCE Project Co-ordinator in Ukraine.*

[4] *The information was prepared by the Zoy Environmental Network for the OSCE Project Co-ordinator in Ukraine.*

2.1.1 Organic pollution

The main cause of organic pollution is insufficient or no wastewater treatment. Organic pollution can lead to significant changes in the oxygen balance of surface waters and, as a result, to changes in the species composition of aquatic life or even their death. The input of organic matter with wastewater is usually assessed by indirect indicators of BOD and COD.

Diffuse sources

The peculiarity of the soil cover within the Southern Bug River basin contributes to the retention of humus in the soil layer and prevents its leaching with water runoff. This natural feature prevents the loss of humus from the soil and results in a low content of naturally occurring organic matter in the river waters.

The main source of organic compounds is households of the predominantly rural population that are not served by the sewerage network. Wastewater in such individual households is discharged onto the terrain by accumulating in lagoons.

In rural settlements and small towns, wastewater is discharged into cesspools (pits) built in the ground, from where pollutants easily enter groundwater and are transported to the riverbed. Microbial and sorption processes in the soil cover contribute to the utilisation of 70% of organic matter. At the same time, a significant number of settlements without wastewater collection and treatment systems lead to surface water pollution.

Point sources

There are 2966 settlements in the Southern Bug basin. Cities with a population of more than 100,000 people have the greatest impact on the state of surface waters.

There are 35 large cities in the basin with a population of over 10,000 people. In total, these cities contributed 368.5 tonnes and 1575 tonnes of organic matter to the SWBs of the Southern Bug basin in 2018, according to BOD_5 and COD, respectively (Table 11).

Table 11 Settlements within the Southern Bug basin with a population of more than 100 thousand people

City	Population	Name of the water body to which the return (wastewater) flows	Type of wastewater treatment	Total organic matter load, tonnes per year	
				BOD_5	COD
Khmelnytskyi	268417	Southern Bug	biological	170,2	855,1
Vinnytsia	371855	Southern Bug	biological	68,30	
Kropyvnytskyi	228630	Ingul	biological	130,0	719,9
TOTAL	868902			368,5	1575

In 2018, a total of 2.45 thousand tonnes of organic matter (COD) was supplied to the Pivdennyi Buh basin SWBs.

Of this, 54% of the total load was discharged to the Pivdennyi Buh River, which receives return (wastewater) from the agglomeration of Vinnytsia and Khmelnytskyi. The Ingul and Umanka rivers received 23% and 7% of the total organic matter emissions, respectively.

In other words, 84% of organic pollution of the basin's surface waters is generated in these basins and in the Southern Bug itself (Tables 12-14).

Table 12 Inputs of organic substances in agglomerations' wastewater, 2018

Name	Organic matter, tonnes per year	
	BOD_5	COD
Southern Bug	312,7	1101,5
Wolf	1,600	7,700
Caviar	0,100	0,400
Fire	0,200	0,800
Gum	0,100	0,500
Untitled (Desna river basin)	-	0,100
Zherd (basin of the Desna River)	4,500	20,30
Cherry	0,400	2,300
Baran	3,000	13,10
Untitled (Funnel)	0,800	5,700
Untitled (Mouth)	0,700	4,900

Name	Organic matter, tonnes per year	
	BOD_5	COD
Selnytsia	5,900	29,80
Untitled (basin of the Silnytsia River)	3,800	17,00
Sob	6,400	25,40
Untitled (Kunka basin Sob)	0,100	0,100
Trostyanets	0,200	-
Udych	1,200	5,000
No name (Berezhanka basin, Dokhna basin)	2,000	9,800
Kodyma	0,900	-
Mountain Tikich (basin of the Sinyukha River)	0,300	2,800
Konelka (basin of the Hirskyi Tikych River, basin of the Syniukha River)	2,200	12,00
Litvynka (basin of the Gorny Tikich River, basin of the Sinyukha River)	1,000	2,900
Talnianka (basin of the Gorny Tikich river, basin of the Sinyukha river)	-	0,100
Gnarly Tikich (bass. Sinyukha River)	1,200	6,900
Shpolka (basin of the Gnily Tikich River, basin of the Sinyukha River)	16,10	127,3
Mala Vysya (basin of the Velyka Vysya River, basin of the Sinyukha River)	1,300	3,600
Kilten (basin of the Velyka Vysya River, basin of the Syniukha River)	28,30	43,60
Umanka (basin of the Yatran River, basin of the Sinyukha River)	41,80	238,7
Untitled (basin of Babanka river, basin of Syniukha river)	0,400	1,700
Untitled (Kainara river basin, Sinyukha river basin)		0,400
Dobra (basin of the Dry Tashlyk River, basin of the Sinyukha River)	1,500	-
Black Tashlyk (basin of the Sinyukha River)	0,500	3,700
Gruzka (Black Tashlyk basin, Sinyukha basin)	0,600	1,300
Pomoschna (basin of the Chornyi Tashlyk River, basin of the Syniukha River)	1,700	3,900
Wicker Tashlyk (basin of the Black Tashlyk River, Sinyukha River)	2,200	5,900
Ingul	131,0	730,5
Gruzka (basin of the Ingul River)	4,400	10,70
Sugoklia (basin of the Ingul River)	0,300	0,700
Ajamka (basin of the Ingul River)	0,700	2,100
Kamianka (basin of the Ingul River)	0,100	0,700
Lozovatka (basin of the Kamianka River, basin of the Ingul River)	0,600	1,000
Sukhokliya (basin of the Ingul River)	1,000	2,000
Untitled (Ingul basin)	-	5,300
Total	**581,8**	**2452,5**

Table 13 Inputs of organic substances in municipal wastewater, 2018

Name	Organic matter, tonnes per year	
	BOD_5	COD
Southern Bug	287,4	1024,8
Wolf	1,600	7,700
Caviar	0,100	0,400
Gum	0,100	0,500
Zherd (basin of the Desna River)	4,500	20,30
Cherry	0,400	2,200
Baran	3,000	13,10
Untitled (Funnel)	0,700	5,300
Untitled (Mouth)	0,700	4,600
Selnytsia	5,900	29,80
Untitled (basin of the Silnytsia River)	3,800	17,00
Sob	6,300	25,00
Udych	1,200	5,000
No name (Berezhanka basin, Dokhna basin)	1,300	6,400
Kodyma	0,900	-
Mountain Tikich (basin of the Sinyukha River)	0,300	2,800
Konelka (basin of the Hirskyi Tikych River, basin of the Syniukha River)	2,200	12,00

Name	Organic matter, tonnes per year	
	BOD5	COD
Gnarly Tikich (bass of the Sinyukha River)	1,200	6,900
Shpolka (basin of the Gnily Tikich river, basin of the Sinyukha river)	16,10	127,3
Mala Vysya (basin of the Velyka Vysya River, basin of the Sinyukha River)	1,300	3,600
Kilten (bass of the Velyka Vysya River, bass of the Sinyukha River)	28,30	43,60
Umanka (basin of the Yatran River, basin of the Sinyukha River)	41,50	237,4
Untitled (basin of Babanka river, basin of Syniukha river)	0,400	1,700
Untitled (basin of the Kainara River, basin of the Sinyukha River)	-	0,400
Dobra (basin of the Dry Tashlyk River, basin of the Sinyukha River)	1,500	-
Black Tashlyk (basin of the Sinyukha River)	0,400	0,800
Gruzka (bass. Ch. Tashlyk, bass. Sinyukha)	0,600	1,300
Helpful (bass C. Tashlyk, bass R. Syniukha)	1,700	3,900
Wicker Tashlyk (C. Tashlik, Sinyukha)	2,200	5,900
Ingul	131,0	730,5
Gruzka (basin of the Ingul River)	4,400	10,70
Sugoklia (basin of the Ingul River)	0,300	0,700
Ajamka (basin of the Ingul River)	0,700	2,100
Kamianka (basin of the Ingul River)	0,100	0,700
Lozovatka (Kamianka basin, Ingul river basin)	0,600	1,000
Sukhokliya (basin of the Ingul River)	1,000	2,000
Untitled (Ingul basin)		5,300
Total	**553,7**	**2363,0**

Table 14 Inputs of organic substances in industrial wastewater, 2018

Name	Organic matter, tonnes per year	
	BOD5	COD
Southern Bug	25,30	76,70
Fire	0,200	0,800
Untitled (Desna river basin)	-	0,100
Untitled (Funnel)	0,100	0,400
Cherry	-	0,100
Untitled (Mouth)	-	0,300
Sob	0,100	0,400
Untitled (Kunka basin, Sob River)	0,100	0,100
Trostyanets	0,200	-
No name (Berezhanka basin, Dokhna basin)	0,700	3,400
Lytvynka (basin of the Hirsky Tikich River, basin of the Sinyukha River)	1,000	2,900
Talnyanka (basin of the Gorny Tikich River, basin of the Sinyukha River)	-	0,100
Umanka (basin of the Yatran River, basin of the Sinyukha River)	0,300	1,300
Black Tashlyk (basin of the Sinyukha River)	0,100	2,900
Total	**28,10**	**89,50**

2.1.2 Nutrients pollution

Nutrients can come from both point and diffuse sources. The main sources are untreated wastewater from municipal and industrial facilities. The widespread use of phosphorus-containing detergents and washing powders with insufficient wastewater treatment increases nutrient pollution. The efficiency of phosphorus removal from wastewater at most wastewater treatment plants in Ukraine does not exceed 20%, but due to outdated equipment, the efficiency of phosphorus removal by treatment plants often does not reach design values.

Biogenic substances enter the Southern Bug River basin from point sources (agglomerations, industry, agriculture) and diffuse sources (surface runoff, precipitation). Diffuse sources are partly of natural and anthropogenic origin (mainly agriculture).

Diffuse sources

Nutrient inputs to water are the driving force behind eutrophication, which leads to an increase in primary production and accumulation of organic matter. The enrichment of water with nutrients that stimulate the development of autotrophic aquatic organisms leads to an imbalance of organisms in the aquatic environment and a decrease in water quality. Among the biogenic elements, phosphorus and nitrogen compounds play a dominant role, and in some cases, ferrous, silicon and molybdenum may have an iSWBct. Of the first two, phosphorus plays a greater role, while nitrogen is much less likely to limit the development of autotrophic organisms, due to the ability of many bacteria and cyanobacteria to fix it.

Land cover type is the dominant factor in the anthropogenic load on groundwater pollution from diffuse sources. Disturbance of the soil cover due to ploughing leads to significant losses of organic and nutrients due to deflation and water runoff.

Another important indicator of the anthropogenic load from diffuse sources of pollution is the intensity of agriculture, which is expressed primarily in the amount of fertiliser used.

Point sources

Pollution by nutrients in terms of phosphate ions is determined by the Dnipro-Kirovohrad Utility CoSWBny in Kropyvnytskyi (31%), Khmilnykvodokanal in Khmelnytskyi (26%), Smolinske ME “Dnipro-Kirovohrad" urban-type settlement Smolino (16%), ME "Vinnytsiaoblvodokanal Vinnytsia (14%), ME "Umanvodokanal in Uman (4%), Vatutino Municipal Utility CoSWBny "Vodokanal" in Vatutino. Vatutino (3%). The combined share of these cities among point sources reaches 94% of the total amount of nutrients discharged.

Table 15 Settlements in the Southern Bug basin with a population of more than 100 thousand people

City	Population	Name of the water body to which the return (wastewater) flows	Type of wastewater treatment	Pollutants, tonnes per year			
				nitrogen ammonium	nitrates	nitrites	phosphates
Khmelnytskyi	268417	Southern Bug	biological	48,2	86,4	17,3	49,81
Vinnytsia	371855	Southern Bug	biological	39,2	356,7	38,9	27,49
Kropyvnytskyi	228630	Ingul	biological	19,4	408,2	7,4	58,73
TOTAL	868902			106,8	851,3	63,6	136,03

Pollution by ammonium nitrogen is determined by Khmilnykvodokanal in Khmelnytskyi. Khmelnytskyi (34%), Municipal Enterprise "Vinnytsiaoblvodokanal", Vinnytsia Vinnytsia (28%), OKVP "Dnipro-Kirovohrad", Kropyvnytskyi (14%). Kropyvnytskyi (14%), Vatutino Municipal Utility CoSWBny "Vodokanal", Vatutino Vatutino, and Smolynske ME of the Dnipro-Kirovohrad Utility CoSWBny in Smolyno (11%). The combined share of these cities among point sources reaches 87% of the total amount of nutrients discharged.

Table 16 Inputs of nutrients in agglomerations' wastewater, 2018

Name of the water body to which the return (wastewater) flows	Pollutants, tonnes per year			
	ammonium nitrogen	nitrates	nitrites	phosphates
Southern Bug	95,00	583,6	62,40	89,927
Wolf	0,300	1,300	0,062	0,011
Caviar	-[5]	0,100	-	0,002
Fire	-	0,100	-	0,002
Gum	-	0,100	-	0,002
Untitled (Desna river basin)	-	0,100	-	-
Zherd (basin of the Desna River)	0,600	1,000	-	0,888
Cherry	-	0,100	-	0,013
Baran	1,200	4,500	-	0,385
Untitled (Funnel)	0,100	0,100	-	0,026
Untitled (Mouth)	-	0,500	-	0,051
Selnytsia	0,300	3,500	-	0,096
Untitled (bass of the Silnytsia River)	1,000	0,100	0,300	0,450
Sob	1,300	5,200	0,300	0,610
Untitled (Kunka bass. p Sob)	-	0,100	-	-

[5] *no wastewater inflows*

Name of the water body to which the return (wastewater) flows	Pollutants, tonnes per year			
	ammonium nitrogen	nitrates	nitrites	phosphates
Neminka (basin of the Sob River)	0,100	-	-	-
Trostyanets	0,100	-	-	-
Udych	0,400	0,900	-	0,267
No name (Berezhanka basin, Dokhna basin)	0,300	0,700	-	0,175
Kodyma	0,100	2,200	-	0,039
Mountain Tikich (basin of the Sinyukha River)	0,100	2,300	-	-
Konelka (basin of the Gorny Tikich River, basin of the Sinyukha River)	1,500	0,700	0,200	0,487
Lytvynka (basin of the Hirsky Tikich River, basin of the Sinyukha River)	-	0,300	-	0,030
Talnianka (Gorny Tikich basin, Sinyukha basin)	-		-	0,005
Gnarly Tikich (bass. Sinyukha River)	0,500	0,200	-	0,047
Shpolka (basin of the Gnily Tikich river, basin of the Sinyukha river)	7,700	0,800	0,100	5,552
Mala Vysya (basin of the Velyka Vysya River, basin of the Sinyukha River)	0,300	0,200	-	0,163
Kilten (basin of the Velyka Vysya River, basin of the Syniukha River)	8,100	0,600	-	30,30
Umanka (basin of the Yatran River, basin of the Sinyukha River)	1,600	58,50	0,300	8,297
Untitled (basin of Babanka river, basin of Syniukha river)	0,200	0,200	-	0,189
Untitled (basin of the Kainara River, basin of the Sinyukha River)	-	0,300	-	0,007
Dobra (basin of the Dry Tashlyk River, basin of the Sinyukha River)	0,100	0,300	-	0,028
Black Tashlyk (basin of the Sinyukha River)	0,100	1,200	-	0,244
Gruzka (bass. C. Tashlyk, r. Syniukha)	0,100	-	-	0,032
Pomoshna (bass. Ch. Tashlyk, r. Syniukha)	0,400	0,200	-	0,136
Wicker Tashlyk (bass. C. Tashlyk, r. Sinyukha)	0,500	0,200	-	0,081
Ingul	19,40	409,0	9,500	58,883
Gruzka (basin of the Ingul River)	1,100	4,000	-	0,610
Sugoklia (basin of the Ingul River)	0,100	-	-	0,042
Ajamka (bass of the Ingul River)	0,200	-	-	0,321
Kamianka (basin of the Ingul River)	-	0,100	-	0,006
Lozovatka (basin of the Kamianka River, basin of the Ingul River)	0,500	-	-	0,276
Sukhokliya (basin of the Ingul River)	0,300	-	-	0,050
Untitled (Ingul basin)	0,100	0,800	-	0,093
Total	**143,7**	**1084,1**	**73,162**	**198,823**

Table 17 Inputs of nutrients in wastewater from municipal enterprises, 2018

Name of the water body to which the return (wastewater) flows	Pollutants, tonnes per year			
	nitrogen ammonium	nitrates	nitrites	phosphates
Southern Bug	94,00	514,1	61,50	85,832
Wolf	0,300	1,300	0,062	0,011
Caviar	-	0,100	-	0,002
Gum	-	0,100	-	0,002
Zherd (bass .Desna river)	0,600	1,000	-	0,888
Cherry	-	-	-	0,005
Baran	1,200	4,500	-	0,385
Untitled (Funnel)	0,100	0,100	-	0,025
Untitled (Mouth)	-	0,200	-	0,022
Selnytsia	0,300	3,500	-	0,096
Untitled (basin of the Silnytsia River)	1,000	0,100	0,300	0,450
Sob	1,000	5,200	0,300	0,600

Name of the water body to which the return (wastewater) flows	Pollutants, tonnes per year			
	nitrogen ammonium	nitrates	nitrites	phosphates
Udych	0,400	0,900	-	0,267
No name (Berezhanka basin, Dokhna basin)	0,200	0,500	-	0,156
Neminka (basin of the Sob River)	0,100	-	-	-
Kodyma	0,100	2,200	-	0,039
Mountain Tikich (basin of the Sinyukha River)	0,100	2,300	-	-
Konelka (Hirskyi Tikych basin, Syniukha basin)	1,500	0,700	0,200	0,487
Gnarly Tikich (bass. Sinyukha River)	0,500	0,200	-	0,047
Shpolka (basin of the Gnily Tikich river, basin of the Sinyukha river)	7,700	0,800	0,100	5,552
Mala Vysya (basin of the Velyka Vysya River, basin of the Sinyukha River)	0,300	0,100	-	0,163
Kilten (basin of the Velyka Vysya River, basin of the Syniukha River)	8,100	0,600	-	30,30
Umanka (basin of the Yatran River, basin of the Sinyukha River)	1,600	58,50	0,300	8,283
Untitled (basin of Babanka river, basin of Syniukha river)	0,200	0,200	-	0,189
Untitled (basin of the Kainara River, basin of the Sinyukha River)	-	0,300	-	0,007
Dobra (basin of the Dry Tashlyk River, basin of the Sinyukha River)	0,100	0,300	-	0,028
Black Tashlyk (basin of the Sinyukha River)	0,100	0,500	-	0,118
Gruzka (bass. C. Tashlyk, r. Syniukha)	0,100		-	0,032
Pomoshna (bass. Ch. Tashlyk, r. Syniukha)	0,400	0,200	-	0,136
Wicker Tashlyk (bass. Ch. Tashlyk, r. Syniukha)	0,500	0,200	-	0,081
Ingul	19,40	409,0	9,500	58,883
Gruzka (basin of the Ingul River)	1,100	4,000	-	0,610
Sugoklia (basin of the Ingul River)	0,100	-	-	0,042
Ajamka (basin of the Ingul River)	0,200	-	-	0,320
Kamianka (basin of the Ingul River)	-	0,100	-	0,006
Lozovatka (basin of Kamianka river basin of Ingul river)	0,500	-	-	0,276
Sukhokliya (basin of the Ingul River)	0,300	-	-	0,050
Untitled (Ingul basin)	0,100	0,800	-	0,093
Total	142,2	1012,6	72,262	194,483

Thus, the flow of biogenic and organic substances into the ecosystem of the Southern Bug River is primarily caused by wastewater from the cities of Khmelnytskyi, Vinnytsia and Kropyvnytskyi, whose sewage treatment plants do not meet modern requirements, with a high specific discharge of mineral compounds of ammonium nitrogen, phosphates and organic substances. The situation at the sewage treatment plants of small settlements (Letychiv, Lozove, Tulchyn, Illintsi, Zhmerynka, Uman, Khrystynivka, Vatutine, Pervomaisk, Bashtanka, Olshanske) is extremely problematic. These settlements discharge insufficiently treated water into the Southern Bug basin.

Wastewater from municipal enterprises often contains a significant amount of trace elements, most of which have toxic properties. The main share of this group of components in the wastewater of municipal enterprises in the Southern Bug River basin is made up of heavy metal compounds. Iron compounds dominate among the heavy metals in municipal wastewater (8,172 tonnes). The wastewater also contains other metals, such as aluminium (0.052 tonnes), nickel (0.122 tonnes), total chromium (0.097 tonnes), zinc (0.286 tonnes), and copper (0.178 tonnes).

Table 18 Inputs of nutrients in industrial wastewater, 2018

Name of the water body to which the return (wastewater) flows	Pollutants, tonnes per year			
	ammonium nitrogen	nitrates	nitrites	phosphates
Southern Bug	1,000	69,50	0,900	4,095
Fire	-	0,100	-	0,002
Untitled (Desna river basin)	-	0,100	-	-
Untitled (Funnel)	-	-	-	0,001
Cherry	-	0,100	-	0,008
Untitled (Mouth)	-	0,300	-	0,029

Name of the water body to which the return (wastewater) flows	Pollutants, tonnes per year			
	ammonium nitrogen	nitrates	nitrites	phosphates
Sob	0,300	-	-	0,010
Untitled (Kunka basin, Sob River)	-	0,100	-	-
Trostyanets	0,100	-	-	-
Untitled (Berezhanka basin, Dokhna basin)	0,100	0,200	-	0,019
Litvynka (basin of the Gorny Tikich River, basin of the Sinyukha River)	-	0,300	-	0,030
Talnianka (basin of the Gorny Tikich River, basin of the Sinyukha River)	-	-	-	0,005
Mala Vysia (basin of the Sinyukha River)	-	0,100	-	0,135
Umanka (basin of the Yatran River, basin of the Sinyukha River)	-	-	-	0,014
Black Tashlyk (basin of the Sinyukha River)	-	0,700	-	0,126
Ajamka (basin of the Ingul River)	-	-	-	0,001
Total	1,500	71,50	0,900	4,474

The main share of pollution with ammonium nitrogen compounds, nitrates, nitrites and phosphates is caused by food processing enterprises. Two enterprises discharge insufficiently treated wastewater: Yablunevyi Dar Ltd. Lipovets in Vinnytsia region (0.006 million m^3) and PE "Agroprodukt" in Malashivtsi village. Malashivtsi in Khmelnytskyi Oblast (0.002 million m).[3]

According to the state water use accounting, reporting in the form 2TP-vodkhoz (annual) for 2018, the largest amount of nutrients, namely 74% of the total amount in the industry in the Pivdennyi Buh RBD, was discharged by the branch "Poultry Complex of Vinnytsia Poultry Farm LLC" in Olyanytsia village, Trostianets district, Vinnytsia region, into the Pivdennyi Buh River. Wastewater from industrial enterprises also often contains a significant amount of trace elements, most of which have toxic properties.

2.1.3 Pollution by hazardous substances

The pollutants for which quality standards (maximum concentrations) are set by Directive 2008/105/EC and compliance with which is a condition for achieving good chemical status of surface water bodies are divided into two groups of indicators:

- priority substances belonging to the group of indicators used to assess the chemical status of water bodies (nickel, cadmium and others listed in Annex X of the WFD);
- Specific substances (synthetic and non-synthetic) characteristic of the Southern Bug River basin belong to the group of indicators used to assess the ecological status of water bodies (zinc, copper, etc.).

The priority substances and other hazardous substances that enter the Southern Bug River are both man-made and naturally occurring: metals and their compounds, pharmaceuticals, and others.

Priority substances entering surface water bodies come from industry, sewage discharges, chemicals used in agriculture, and volleyed accidental pollution.

Control of pollutant content in wastewater and waste water discharges currently generally consists of determining the content of parameters stipulated in water users' draft WFDs and static reporting requirements (mainly pollution by organic and nutrients).

Diffuse sources.

The risk of pollution by hazardous substances from diffuse sources has not been assessed due to the lack of data on pesticide use.

Point sources.

The classical understanding of the term "heavy metals" today includes chromium, cobalt, nickel, copper, zinc, arsenic, selenium, silver, cadmium, mercury, thallium and lead.

Heavy metals (copper, nickel, chromium and zinc) are detected in the wastewater of the following water users:

- copper: Dnipro-Kirovohrad, Kropyvnytskyi, Khmilnykvodokanal, Khmelnytskyi, Starosyniavskyi Central Vodokanal, Stara Sinyava, ME "Umanvodokanal", Uman;
- Chrome: General: LTD "BOS" Voznesensk, MUNICIPAL COSWBNIES "Khmelnytskvodokanal, Khmelnytskyi, Dnipro-Kirovohrad, Kropyvnytskyi;

- nickel: Khmilnykvodokanal in Khmelnytskyi, ME Dnipro-Kirovohrad, Kropyvnytskyi;
- zinc: KP "Vinnytsiaoblvodokanal Vinnytsia, MUNICIPAL ENTERPRISE "Khmelnytskvodokanal, Khmelnytskyi, Dnipro-Kirovohrad, Kropyvnytskyi.

Monitoring of priority substances in surface waters and sediments was carried out in summer 2012 as part of the Ukrainian-Swedish project to develop a management plan for the Southern Bug River Basin. As part of the chemical status assessment, 33 priority substances were screened. The results of the studies revealed that the concentrations of cadmium, lead and nickel in surface water and sediments exceed the environmental quality standards set by EU Directive 2008/105/EC. The increase in cadmium concentration may be due to precipitation (plastic combustion releases cadmium into the atmosphere) and its use in chemical fertilisers. Increased lead content is caused by toxic waste entering surface waters, including unauthorised landfills.

Heavy metals are toxic to living organisms, accumulate in bottom sediments and can easily spread over long distances with groundwater.

According to Order No. 5 of the State Water Agency of Ukraine dated 12.01.2022, operational and diagnostic monitoring is carried out at 50 sites in the Southern Bug River basin. A total of 61 pollutants are identified as priority and basin-specific substances.

2.1.4 Accidental pollution and impact of contaminated areas (landfills, sites, zones, etc.)

The Southern Bug River basin has a fairly developed industrial activity, including energy production (heat/nuclear/hydroelectric power plants), mining, metallurgy, chemical industry, textiles, livestock and food industry (dairies, etc.), and utilities, which are potential sources of accidental pollution both through wastewater discharges and washouts from the areas of sites where production waste is stored.

The mechanism for preventing and minimising the risk of accidental pollution is established in the EU member states through the implementation of the Seveso-III Directive (Directive 2012/18/EU), the Industrial Waste from Mining Directive (2006/21/EC)10 and the Industrial Emissions Directive-IED (2010/75/EU)11 and for non-EU countries through the implementation of the recommendations of the UNECE Convention on the Transboundary Effects of Industrial Accidents.

The main provisions of the Seveso III Directive (Directive 2012/18/EU) were transposed into Ukrainian legislation in 2021 by amending the Civil Protection Code of Ukraine, the Law of Ukraine "On High Risk Facilities" (the Law) and a number of other laws.

Thus, in accordance with Article 9 of the Law, a business entity identifies high-risk facilities in accordance with the number of threshold masses of hazardous substances. Based on the results of the identification of a high-risk facility, it is assigned a class 1, 2 or 3.

Article 9-1 of the Law provides for the definition and approval of an accident prevention policy for a Class 1 or 2 hazardous facility. According to Article 10 of the Law, for a Class 1 or Class 2 hazardous facility, the operator shall develop and, in cases specified by the Law, review a report on safety measures at the hazardous facility.

Pursuant to Article 11 of the Law, in order to organise the response to accidents at high-risk facilities, operators develop and approve plans for localisation and elimination of accidents and their consequences for each high-risk facility they operate. The plan for localisation and elimination of accidents and their consequences shall be reviewed at least every three years. The procedure for action in the event of an accident at a high-risk facility is set out in Article 14 of the Law. Pursuant to this article, the Cabinet of Ministers of Ukraine approved the Procedure for Investigation of Accidents at High Risk Facilities by Resolution No. 965 dated 8 September 2023.

Article 15 of the Law stipulates that the operator shall annually submit to the competent authority, local executive authorities, and local self-government bodies information on high-risk facilities owned or operated by the operator by 30 December. At the request of a legal entity or individual or their representatives to obtain information about a hazard that has arisen at high-risk facilities and poses a threat to people and the environment, the operator must submit such information within 48 hours of receiving the request.

Pursuant to Article 16 of the Law, damage caused to individuals or legal entities as a result of an accident at a high-risk facility shall be compensated by the operator who owns the high-risk facility on the relevant legal basis, unless he or she proves that the damage was caused by force majeure or intent of the victim.

At the level of the Southern Bug River basin, a list of potential accident risk sites should be developed, including operating industrial facilities with a high risk of accidental pollution due to the nature of chemicals stored or used at industrial facilities, contaminated sites, including landfills and dumps located in flood zones. The preliminary list should include facilities located in the Southern Bug River basin that pose a risk of accidental pollution, primarily sludge pits and tailings, municipal treatment facilities, and sites where industrial waste is stored.

According to the state water use accounting, there was no accidental pollution of water bodies as a result of untreated wastewater discharge in the Southern Bug River basin in 2018-2022.

One of the most acute problems in the Southern Bug basin is reducing the generation and limiting the negative impact of waste on the environment. Every year, the amount of waste increases, unauthorised landfills appear, and the problem of hazardous waste management is not solved. Pursuant to the Order of the Ministry of Ecology and Natural Resources of Ukraine No. 17 dated 23 January 2017 "On Approval of the Regulation on Electronic Service", the e-service ecomapa.gov.ua was introduced in the regions. Pursuant to CMU Order No. 820 dated 08.11.17 "On Approval of the National Waste Management Strategy in Ukraine until 2030", the heads of Khmelnytskyi, Vinnytsia, Kyiv, Cherkasy, Kirovohrad, Mykolaiv, and Odesa Regional State Administrations have established working groups to develop drafts of the National Waste Management Plan.

The analysis of toxic waste management in the basin as a whole is based on information from the Main Statistical Departments in Khmelnytskyi, Vinnytsia, Kyiv, Cherkasy, Kirovohrad, Mykolaiv, Odesa regions and the State Statistics Service of Ukraine.

According to the degree of impact on the body, harmful substances are divided into four hazard classes: I - extremely hazardous substances; II - highly hazardous substances; III - moderately hazardous substances; and IV - low hazardous substances.

The quality of surface waters in the Southern Bug River basin is affected by the presence of solid waste landfills and unauthorised dumpsites. The largest landfills in regional centres include Khmelnytskyi and Vinnytsia

According to the 2021 Sanitary Cleaning Report of the Ministry of Communities and Territories Development of Ukraine, the total number of landfills and dumpsites by region in the Southern Bug River Basin is 960:

- Khmelnytsky region - 8 units, total area 31.0 ha;
- Vinnytsia region - 460 units, total area 454.0 hectares;
- Kyiv region - 2 units with a total area of 9.5 hectares;
- Cherkasy region - 9 units with a total area of 74.8 hectares;
- Kirovograd region - 265 units, total area 354 hectares;
- Mykolaiv region - 160 units, total area 316 hectares;
- Odesa region - 56 units with a total area of 94.2 hectares.

Of these, 107 landfills and dumpsites do not meet safety standards and are a potential source of environmental pollution.

In Vinnytsia Oblast, the 186-hectare ash and slag dump of the Ladyzhynska TPP of Zakhidenergo JSC is located 50 metres from the Silnytsia River outside the village of Zaozerne, Ladyzhynska urban territorial community of Haisynskyi district. Ladyzhynska TPP is the largest thermal power plant in the basin. It annually produces about 500 thousand tonnes of ash and slag and currently has about 30 million tonnes of ash and slag mixture. Ash dumps are special hydraulic structures designed to store ash and slag waste, the territory of which is limited by the enclosing dams and the terrain. Thus, despite the fenced area, power plant ash dumps are open systems. Hazardous substances contained in ash and slag can migrate from the ash dump surface through the air and water environment and pollute the surface atmosphere, soil, groundwater and surface water[6] .

In the Mykolaiv region, the Mykolaiv Alumina Plant (the largest in Ukraine and one of the largest non-ferrous metallurgy enterprises in Europe) is located in Halytsynove village on the left bank of the Bug Estuary. The main hazards at the plant are sludge pits No. 1 and No. 2. Red sludge is a solid or paste-like mixture of waste resulting from the release of aluminium oxide. In the event of an accident, red sludge could first enter the Bug Estuary and then the Black Sea, with the potential to affect not only the soil in the area, but also groundwater[7].

As a result of the agricultural sector, surface waters are polluted by mineral fertilisers, herbicides, pesticides and insecticides.

The greatest radioactive hazard in the Southern Bug River basin is posed by a nuclear power plant, uranium mines and ore processing enterprises, which generate solid residues containing radioactive elements with a half-life of 1600 to 80 thousand years.

The Ministry of Environmental Protection and Natural Resources of Ukraine has launched an electronic service that also contains the Register of Waste Disposal Sites and the List of Facilities that are the largest polluters of the environment in terms of discharging pollutants into water bodies.

[6] *Regional Waste Management Plan for Vinnytsia Oblast until 2030*

[7] *Position of the Ukrainian Ecological League on the environmental consequences of the Mykolaiv Alumina Plant slag dump*

The register of facilities in the Pivdennyi Buh River basin that are at risk of accidental pollution is presented in Table 19.

Table 19 Register of facilities in the Southern Bug River Basin that are at risk of accidental pollution

№	Object name
Khmelnytskyi region	
1	Khmelnytsky Regional Municipal Institution for Psychiatric Care of the Khmelnytsky Regional Council
2	Municipal enterprise ZLAGODA CGRP
3	Municipal enterprise "Starosyniavskyi Central Heating Plant No. 1" Starosyniavske village council
4	Municipal enterprise Khmelnytsky Vodokanal
5	Khmelnytsky Regional Hospital for War Veterans
6	Municipal enterprise Lozove Komunservice
7	Khmelnytsky Mlyn LLC
8	ELEVATOR BUD INVEST LTD.
Vinnytsia region	
1	SE "Clinical Sanatorium "AVANGARD" PJSC Medical and Healthcare Institutions of Trade Unions of Ukraine "UKRPROFOZDOROVNITSA"
2	Ladyzhynska TPP of DTEK Zakhidenergo JSC
3	PJSC "Vinnytsia Housing and Communal Services"
4	Municipal enterprise "Gaisinvodokanal"
5	Vinnytsiaoblvodokanal
6	IllintsiVodokanal of the Illintsi City Council
7	Municipal enterprise "Khmilnykvodokanal"
8	Kalynivka Vodokanal of the Kalynivka City Council
9	LUSTDORF coSWBny in the form of an LLC
10	PE "Michalich & Co"
11	Valerii Yuriiovych Prylutskyi
12	PE "CoSWBny Versailles"
13	ME "Zhilkomunservis-T"
14	Municipal enterprise "Tulchinvodokanal"
15	ME "NADIA" of Voronovytske village council
16	LVN LIMITED
17	Municipal enterprise "Zhmerynka Vodokanal"
18	Nemyrivvodokanal
19	Vinnytsia Poultry Farm LLC
20	Kryzhopilvodokanal
21	Turbovske police station of Turbovske village council
22	Kryzhopil branch of TERRAFUD LLC
Kyiv region	
1	Stavyshchenske Housing and Utility CoSWBny
Cherkasy region	
1	Municipal enterprise "VKV"

№	Object name
2	Starobabanivska Correctional Colony No. 92
3	Municipal enterprise Zvenigorod City Council
4	Katerynopilske Housing and Utility CoSWBny of Katerynopilske district
5	MUNICIPAL ENTERPRISE "VODOKANAL"
6	Monastyryshche Production Department of Housing and Communal Services
7	Municipal enterprise "Vodokanal" of the Talniv City Council
8	Uman Vodokanal of the Uman City Council
9	Municipal enterprise CHRISTIAN
10	Vatutinsky Municipal Enterprise "Vodokanal"
11	Zhashkiv Equestrian School LLC
12	Investment CoSWBny Limited Liability CoSWBny
Kirovohrad region	
1	Pobuzhsky Ferronickel Plant LLC
2	Municipal Enterprise "Novoarkhangelske ZhKh"
3	Municipal enterprise "Mala Vyska Vodokanal"
4	ME "NILOT"
5	Bobrynets Municipal Utility CoSWBny "MISKVODOKANAL"
6	Golovanivske District Police Department
7	Municipal enterprise KOMMUNIKATOR - 2016
8	Novoukrainske Housing and Communal Services
9	Smolinskaya mine, Eastern Mining and Processing Plant
10	JSC Gayvoronsky Special Quarry
11	Regional Clinical Psychiatric Hospital of the Kirovohrad Regional Council
12	Internal division Ingulska mine, SE Vostochny Ore Mining and Processing Plant
13	Municipal enterprise "Novhorodkovsky linear section of the sewerage system"
14	Municipal enterprise "Gayvoronsky communal utility"
15	Internal division Novokonstantinovskaya mine of VostGOK SE
16	Regional Municipal Enterprise "DNEPR-KIROVOGRAD" (Smolinskoye VKG)
17	ME "Teploenergetik" of the Kropyvnytskyi City Council"
18	Municipal enterprise "Sozonovsky communal utility"
19	Holovanivska Central District Hospital
20	Municipal enterprise Obriy
21	Kirovohrad Regional Phthisiopulmonary Medical Centre of the Kirovohrad Regional Council
22	Subottsovskoye SPE "Selkomunkhoz"
23	Municipal enterprise of Pervozvanivka village council "Dobrobut"
Mykolaiv region	
1	Municipal Enterprise "Vodoprovodnye Netsy" of Novobug City Council
2	Mykolaivvodokanal

№	Object name
3	State Enterprise National Nuclear Energy Generating CoSWBny ENERGOATOM (Centralised Control and Management Centre and TM of South Ukrainian NPP)
4	Pervomaisk Water Supply and Sewerage Department of the Pervomaisk City Council
5	Mykolaiv Housing and Maintenance Department
6	State Enterprise National Nuclear Energy Generating CoSWBny ENERGOATOM (Oleksandrivska HPP of the South Ukrainian NPP)
7	Municipal enterprise "Miskvodokanal" of the Bashtanka City Council
8	LLC JV NIBULON (Transshipment terminal)
9	Municipal enterprise "OLSHANSKOYE"
10	State Enterprise National Nuclear Energy Generating CoSWBny ENERGOATOM (Tashlyk HPSPP of the South Ukrainian NPP)
11	Biological treatment facilities LLC
12	Municipal enterprise "Prybuzke"
13	Municipal enterprise "Arbuzinsky checkpoint"
14	"EUROVNESHTORG" COSWBNY
15	NIBULON Shipbuilding and Repair Plant LLC
16	Mykolaiv branch of PJSC "ABINBEV EFES Ukraine"
17	Voznesenskaya Trade and Industrial CoSWBny LLC
18	PJSC "Nikitovsky Granite Quarry"

The register of facilities in the Southern Bug River basin that are at risk of accidental pollution needs to be updated annually.

The Ministry of Environmental Protection and Natural Resources of Ukraine has launched an electronic service that also contains the Register of Waste Disposal Sites and the List of Facilities that are the largest polluters of the environment in terms of discharging pollutants into water bodies.

2.1.5 Hydromorphological changes

Hydromorphological changes, namely changes or disturbance of the natural morphology of the riverbed, banks, and floodplains, are one of the main water and environmental problems in the Southern Bug River Basin.

Hydromorphological changes in the basin are caused by excessive regulation (including for hydropower), land development (urbanisation) and agricultural activities. There is almost no shipping (navigation) in the basin, which has a negative impact on the natural morphological characteristics of the riverbed and banks. The following types (components) of hydromorphological changes occur in the Southern Bug river basin:

- disruption of the free flow of rivers and unimpeded migration of living water resources;
- disruption of the hydraulic connection between river channels and their floodplains;
- hydrological changes;
- morphological changes (modification(s) of the channel morphology of the banks of the adjacent part of the floodplain).

Disruption of the free flow of rivers. In the Southern Bug basin, most of the artificial reservoirs (reservoirs and ponds) are channelised. There are 16 reservoirs built on the Southern Bug riverbed alone, 13 of which are used for hydropower. Their dams completely cross the riverbed, disrupting the free flow of rivers, crossing fish migration routes and preventing the spread of other living organisms. The height of dams usually exceeds 2.0-4.0 m. The highest dams (over 10 m) were built for the Ladyzhyn and Oleksandrivske reservoirs.

The largest reservoir and at the same time a flow regulator is the Ladyzhynske reservoir, created in 1964. Its area is 20.8 km^2 and its total volume is 150 million m^3 . In addition to being used for water management and hydropower, this reservoir is also a cooling pond for the Ladyzhynska TPP. During the year, the reservoir's level changes usually amount to about 0.5 m. In very low-water years, the drawdown reaches 1.5 m.

The Oleksandrivske reservoir is also large enough to be used primarily for the needs of the South Ukrainian Energy Complex. At the same time, the dam of this reservoir blocked the migration routes to the Myhia - Yuzhnoukrainsk section, where sturgeon spawning grounds were located.

The largest number of water bodies in the Southern Bug River Basin is located on the rivers of Vinnytsia Oblast - 3774, including 42 reservoirs. Kirovohrad (2349 reservoirs) and Cherkasy (1782) oblasts are next in terms of the number of water bodies in the basin, which is 1.6-2.2 times less than in Vinnytsia oblast.

Disruption of the hydraulic connection between river channels and their floodplains. The hydraulic connection between the riverbed and the floodplain plays an important role in the functioning of aquatic ecosystems, providing water for important habitats for fish and aquatic life, and has a positive impact on the condition of surface and groundwater.

It should be noted that there are virtually no continuous flood control dams in the Southern Bug basin. Local dams protecting individual economic facilities and floodplain dams do not significantly affect their hydraulic connection with the riverbed.

Assessment of this type of hydromorphological changes is included in the SES hydromorphological monitoring programme (Item 10 of the hydromorphological assessment protocol: "Interaction between the channel and the floodplain: 10a - Possibility of floodplain inundation, 10b - Limiting factor for the development of horizontal deformations of the channel).

Hydrological changes. The criteria for identifying hydrological changes defined by the International Commission for the Protection of the Danube River are:

- fluctuations in water levels below the dam by more than 1 m per day;
- upstream of dams with a length of more than 5 km;
- water withdrawals exceeding 50% of the average annual natural river flow.

Most of the small hydropower plants operating in the Southern Bug River basin regulate the flow on a daily basis and affect the level regime in the lower reaches. An analysis of the data on level changes shows that the daily fluctuation of levels ranges from 0.3 to 0.7 m. Some hydropower plants (Shchedrivska and Novokonstantynivska) operate in a cascade and in almost the same mode. Therefore, the fluctuation levels hardly change and amount to only 0.05-0.10 m.

In total, there are 45 operating small hydropower plants in the Southern Bug River basin, in addition to 11 currently inactive.

A number of relatively large reservoirs create a backwater over considerable distances (more than 5 km) due to the small longitudinal slope of the Southern Bug and its tributaries. This gives grounds to classify them as candidates for significantly altered water bodies - surface water bodies that have been preliminarily assessed (based on hydromorphological features) as having significantly changed their character as a result of anthropogenic iSWBct. Among them: Shchedrivske, Sabarivske, Ladyzhynske, Hlybochokske, Haivoronske, Oleksandrivske reservoirs on the Pivdennyi Buh River and Novoarkhangelske, Ternivske, Chervonokhutirske reservoirs on the Syniukha River.

One of the environmental challenges is maintaining a constant ecological flow rate in the river downstream of small hydropower plants. During periods of low water, the inflow of water is insufficient for the operation of most hydropower plants. As a result, downstream of most hydropower plants, after they are shut down, there is no water flow for some time and the rivers turn into separate plants.

Water withdrawals in the basin are not significant coSWBred to the average annual natural runoff and therefore do not affect the ecological status of the water bodies.

Morphological changes. Morphological changes in the basin have occurred in the upper reaches of the Southern Bug River and its tributaries with wetlands. Since the mid-twentieth century, wetlands in the river floodplains have been intensively drained for the purpose of further use as hayfields, garden crops and perennial grasses. Below the city of Khmelnytskyi, the floodplain was drained and the 28 km long channel of the Southern Bug was regulated (straightened), which serves as the main channel of the drainage system. The channel was also straightened (channelised) from the source downstream for 3.5 km. The channels are also straightened in some small sections of tributaries. Within the Cherkasy Oblast, in the Southern Bug basin, the channels of the small rivers Shpolka, Verbivka, and Maksyboloto are canalised. Within Vinnytsia Oblast, a part of the small rivers Kiltsivka and Savranka are canalised.

The number of channel straightenings on the basin's rivers is 73. The total length of the straightenings is 737 km. The maximum length of a straightening is 49.5 km (Vovk River), and the minimum is 0.1 km (Bez Naktyvka River, a tributary of the Gornyi Tikych River).

The criteria for classifying SWBs as "HMWB" due to hydromorphological changes are:

- disruption of the continuity of water flow and environments (transverse artificial structures in the riverbed, disruption of the continuity of water flow and sediment movement and migration of fish and other aquatic life);

- water withdrawals (small and medium-sized rivers - water withdrawals exceeding 75% of the supply; large and very large rivers - water withdrawals exceeding 90% of the supply);
- water accumulation (ponds with a ponding area of more than 1 km or several ponds with a ponding area of less than 1 km, but their total length is more than 30% of the length of the SWB, as well as reservoirs with a volume of more than 1 million m);[3]
- fluctuations in the water level below the dam (water level fluctuations exceeding 0.5 m per day for most of the year);
- disturbance of natural morphological characteristics of rivers (hydromorphological class below the third according to the monitoring results, or straightening of more than 70% of the length of the main river channel in the absence of monitoring data).

Among the 301 rivers in the basin, only 36 rivers (12%) have not undergone any hydromorphological changes. Based on the analysis of the main water and environmental problems associated with hydromorphological pressures in the Southern Bug basin, it can be concluded that 692 SWBs in the basin, defined as HMWBs, require restoration (revitalisation).

2.2 Groundwater

2.2.1 Pollution

The territory of the Southern Bug basin is located in different moisture conditions, and the natural non-pressure horizons at the regional level are characterised by an increase in mineralisation from north to south. The amount of sulphates and chlorides in the water increases in the same direction.

Quaternary non-pressure aquifers are widely distributed and widely used for household and drinking water needs of rural settlements, but their resources are limited, and the absence of water-resistant rocks in the roof makes the UAM5400Q100-UAM5400Q400 groups of GWBs unprotected from surface contamination and therefore vulnerable.

Due to the predominantly low and unstable thickness of water-bearing rocks and, accordingly, their unstable water enrichment, as well as vulnerability to anthropogenic load, the UAM5400Q100-UAM5400Q400 groups of GWBs in non-pressure Quaternary aquifers are unsuitable for centralised water supply in most of their distribution. In addition, groundwater in the first aquifers from the surface is characterised by a naturally high iron content.

Pressure GWBs and GWBs groups in pressure horizons have reliable protection against contamination, as they are covered in the roof with weakly permeable sediments. Therefore, the GWBs and GWBs groups (UAM5400Q500, UAM5400N100, UAM5400N200, UAM540PG100, UAM5400K100, UAM5400K200, UAM540RE100, UAM540AR100) are not connected with surface ecosystems and are not vulnerable to anthropogenic pollution. Only local (point) exceedances of the standardised elements can be observed in them, mainly in places of shallow water-containing sediments.

Point sources of pollution

Point sources of pollution are one of the most powerful factors of anthropogenic pressure on groundwater. These include enterprises of various industries.

The Southern Bug valley and its tributaries are home to such large settlements as Khmelnytskyi, Vinnytsia, Mykolaiv, Kropyvnytskyi, Ladyzhyn, Haivoron, Voznesensk, Nova Odesa, Yuzhnoukrainsk and others. Accordingly, the bulk of industrial production in the region is concentrated on the Southern Bug and its major tributaries.

According to regional reports on the state of the environment (Khmelnytskyi, Vinnytsia, Kyiv, Cherkasy, Kirovohrad, Mykolaiv, Odesa regions), there are 55 large enterprises in the Southern Bug basin that have a significant impact on the environment. Among them are 1 NPP, 2 TPPs, 1 CHP, 22 utility coSWBnies, 11 food industry facilities, 4 construction, 3 machine-building, 2 metallurgical enterprises, etc.

In areas with a high level of industrial development and dense construction, changes in the quality composition of groundwater of the UAM5400Q200, UAM5400Q300, UAM5400Q400 groundwater groups are observed. Here, non-pressure horizons are vulnerable to the impact of industrial wastewater. In these areas, groundwater free-flowing horizons have increased salinity (up to 3.4-8.6 g/dm3), high content of sulphates, chlorides, and hardness.

Diffuse sources of pollution

Diffuse sources of pollution that affect the quality of groundwater through dispersed anthropogenic load include urbanised areas, industrial zones and agricultural land.

Agricultural lands are subject to the most significant pressure due to the use of pesticides and fertilisers. Accordingly, pesticides and fertilisers are the main factor of pressure on the quality of non-pressure groundwater bodies (UAM5400Q100-UAM5400Q400). They are widely used in Ukraine; about 14.823 thousand tonnes of mineral fertilisers and over 26.34 thousand tonnes of pesticides are applied to the fields annually. Given the structure of the land fund in the Southern Bug basin, where the share of arable land reaches 59%, the area under chemicals is significant. Information on the load from the use of pesticides, mineral and organic fertilisers within the administrative regions located in the Southern Bug River basin is presented in Table 2.2.1.

Table 2.2.1 Load from pesticides, mineral and organic fertilisers within the administrative regions located in the Southern Bug River basin as of 2022 (numerator) and minimum and maximum for the period 2007-2022 (denominator)

Administrative regions	Mineral fertiliser application, 100% of nutrients per 1 ha of sown area, kg	Organic fertiliser application, thousand tonnes	Introduction pesticides, kg/ha
Vinnytsia	203 67-181	645,4 158,9-779,1	1,643 1,0-2,0
Kirovohradska	87 36-145	114,9 71,0-184,8	1,213 0,58-1,60
Kyiv	125 57-162	1547,4 917,2-1547,4	1,401 0,60-1,715
Mykolaivska	111 29-179	163,2 91,9-206,9	0,753 0,56-1,11
Odesa	79 35-133	70,0 31,5-210,4	0,71 0,57-0,9
Khmelnytska	136 67-163	785,0 466,1-828,5	1,977 0,91-2,4
Cherkassy	157 64-157	959,4 818,2-1230,6	1,449 1,10-2,0

The discovery of large areas of nitrate contamination indicates a steady trend towards their accumulation in groundwater.

The reason for the high content of nitrates, nitrites and ammonium in the water of non-pressure GWBs is also the lack of centralised sewage disposal. In Ukraine, only about 5.2% of villages are covered by centralised sewerage systems, with the figure for Cherkasy Oblast being only 0.2% and Kyiv Oblast 33.5%.

Agriculture has the most significant impact on the non-pressure groups of groundwater bodies (UAM5400Q100-UAM5400Q400) throughout the Southern Bug basin, with nitrogen contamination detected in almost all aquifers first from the surface within rural settlements. The deterioration of groundwater quality is significantly affected by the use of fertilisers and pesticides, irrigation on agricultural land and discharges of contaminated wastewater into surface water bodies. Detections of nitrate contamination indicate a steady trend towards its accumulation in groundwater. Another concern is the fact that in some cases pesticides have been detected in non-pressure water, which are contributed to by reclamation irrigation in the south

2.2.2 Volumes / reserves

Due to the geological structure of the territory, climatic and hydrogeological features, the territory is generally characterised by unfavourable conditions for the formation of groundwater resources.

Non-pressure GWBs are used for individual water supply in urban-type settlements in rural areas, while pressure GWBs are used for centralised water supply.

No assessment of groundwater resources in non-pressure aquifers has been carried out in Ukraine. Forecast groundwater resources of pressurised aquifers, which are used or can be used for centralised water supply in terms of qualitative and quantitative indicators, are determined for the territories of administrative regions (Table 22).

The availability of forecast groundwater resources (FGR) per capita within the basin is low, especially in the southern regions of Odesa and Mykolaiv.

According to Geoinform, the highest exploration of the FGR (ratio of operational groundwater reserves (OGR) to FGR, %) within the listed regions is in Odesa region (66.2%), and the lowest is in Vinnytsia region (17.3%). At the same time, the development of resources and reserves is relatively low, which allows for increased groundwater production.

Table 22. Forecasted resources, exploitable reserves and groundwater production (data for 2020).

Oblast	FGR, ths. m^3/day	FGR on 1 person, m^3/day	OGR (A+B+C), thousand m^3/day	Exploration, %	Extraction from FGR, thousand m^3/day	Extraction from OGR, thousand m^3/day	Development of the OGR, %	Development of the FGR, %
Vinnytsia	885,5	0,58	153,4	17,3	39,874	14,89	10	5
Kyiv	4215,3	0,89	1905,0	45,2	208,64	167,5	9	5
Kirovohradska	404,6	0,44	224,9	55,6	43,409	7,7	3	11
Mykolaivska	441,6	0,40	102,9	23,3	32,842	11,4	11	7
Odesa	736,7	0,31	487,4	66,2	74,51	31,0	6	10
Khmelnytska	1963,7	1,58	371,6	18,9	104,287	91,5	25	5
Cherkassy	1806,5	1,53	334,5	18,5	63,873	30,1	9	4

Taking into account the above data, there is no negative impact from anthropogenic groundwater abstraction for both non-pressure and pressure GWBs identified in the Southern Bug basin.

The impact of military operations on the status of GWBs

Russian aggression is a significant negative factor in the anthropogenic impact on the environment.

Non-pressure GWBs. The quality of non-pressure GWBs may be affected by the ingress of pollutants (heavy metals, fuels and lubricants, organic pollution, etc.) from the surface in areas of intense shelling. The destruction of industrial facilities can lead to the ingress of various pollutants into the soil and rocks of the aeration zone, and in the long term, negatively affect the quality of groundwater.

Changes in the quantitative state of non-pressure GWBs in most of the basin's territory are not expected due to military operations.

Pressure GWBs. A characteristic feature of the war is large demographic losses: increased mortality, decreased birth rate, migration, which is also typical for the territory of the study basin. Accordingly, in the coming years, industrial production will continue to decline, so, obviously, centralised consumption of groundwater for domestic use will decrease, and groundwater levels in the pressure GWBs will gradually recover. Therefore, the quantitative indicators will not undergo negative changes.

The chemical status of the pressure water treatment plant will remain stable.

Assessment of the risk of not achieving good status

Risk assessment of failure to achieve good quality (chemical) status

As for non-pressure GWBs, their quality condition within settlements is most likely poor (nitrate pollution). There is no data on the chemical composition of non-pressure GWBs outside settlements, but a significant anthropogenic load from diffuse sources of pollution within agricultural landscapes and their natural vulnerability allows us to conclude that they are at risk of not achieving good quality (chemical) status. Within agro-landscapes, this risk is caused by the possibility of nitrates and pesticides entering the water. An additional negative impact is caused by substances that have been or may be released into the environment as a result of military operations, such as heavy metals, nitrates, oil products, as well as elements and compounds released into the environment as a result of the destruction of industrial facilities.

Protected from contamination, the pressure GWBs is not at risk of failing to achieve good quality (chemical) status.

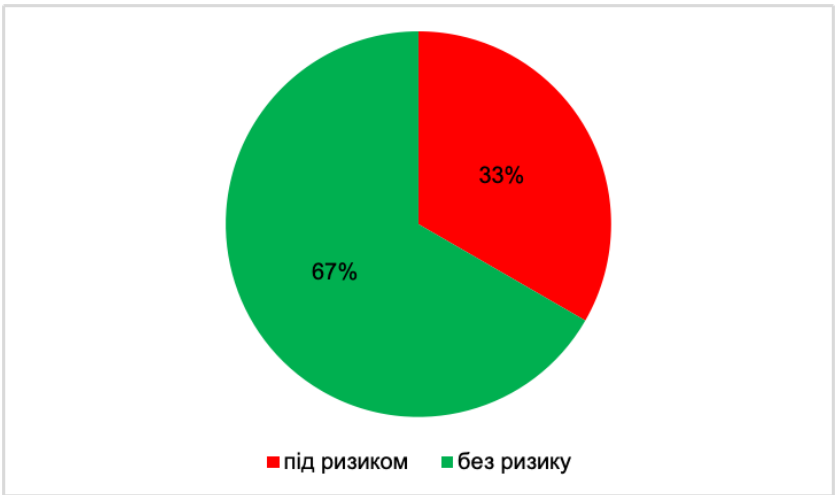


Fig. 12 Risk assessment of failure to achieve good chemical status of the GWBs

Assessing the risk of not achieving good quantitative status

There is no negative impact from anthropogenic groundwater abstraction for the pressure and non-pressure GWBs identified in the Southern Bug River Basin. Taking into account the reduction of groundwater extraction, there is no risk of failure to achieve good quantitative status for both pressurised and non-pressurised GWBs, according to available data.

Table 23. Risk of not achieving the environmental objectives of the GWBs

GWBs code	GWBs and GWBs groups	Quality risk		Quantitative risk	
		without risk/ at risk	at risk: the reason	without risk/ at risk	at risk: the reason
Non-pressure groups of GWBs					
UAM5400Q100	Group of GWBs in marsh and quaternary sediments	at risk	Nitrate pollution, Insecurity against contamination from the surface	No risk	
UAM5400Q200	Group of GWBs in alluvial quaternary sediments	at risk		No risk	
UAM5400Q300	Group of GWBs in water-glacial and aeolian-deluvial Quaternary sediments	at risk		No risk	
UAM5400Q400	Group of GWBs in aeolian-deluvial Quaternary sediments	at risk		No risk	
Pressure GWBs and groups of pressure GWBs					
UAM5400Q500	A group of GWBs in terrigenous alluvial and water-glacial Quaternary sediments	No risk		No risk	
UAM5400N100	Group of GWBs in terrigenous carbonate deposits of the Sarmatian	No risk		No risk	
UAM5400N200	GWBs in Miocene terrigenous sediments	No risk		No risk	
UAM540PG100	Group of GWBs in terrigenous sediments of the Paleogene	No risk		No risk	
UAM5400K100	GWBs in terrigenous sediments of the Cenomanian	No risk		No risk	
UAM5400K200	Group of GWBs in terrigenous deposits of the Lower and Upper Cretaceous	No risk		No risk	
UAM540RE100	GWBs in effusive terrigenous rocks of the Precambrian	No risk		No risk	
UAM540AR100	Group of GWBs in the Archean-Proterozoic crystalline rock fracture zone	No risk		No risk	

2.2.3. Other significant anthropogenic impacts

Climate change

One of the main manifestations of regional climate change against the backdrop of global warming is a significant increase in air temperature, changes in the thermal regime and precipitation patterns, an increase in the number of dangerous meteorological phenomena and extreme weather conditions, and the damage they cause to various sectors of the economy and the population. These trends are typical for Ukraine in general and the Southern Bug basin in particular. The greatest changes have been observed over the past thirty years, which have been the warmest for the period of instrumental weather observations.

The rise in air temperature is observed not only near the Earth's surface but also in the lower troposphere, accoSWBnied by an increase in tropospheric moisture content, and causes an increase in atmospheric instability and convection intensity. Such changes have led to an increase in the frequency and intensity of convective weather phenomena: thunderstorms, showers, hail, squalls, and an increase in the maximum intensity of precipitation and its storm component.

A characteristic feature of the changing moisture regime in Ukraine is a change in the structure of precipitation. In the warm period, this is manifested in an increase in the intensity of precipitation and an increase in its storm component. The increase in precipitation intensity has led to an increase in daily precipitation, although the number of rainy days has decreased and the maximum duration of the rain-free period has increased. These trends are also typical for the Southern Bug basin.

The rise in air temperature and uneven distribution of precipitation, which is localised and heavy in the warm season and does not ensure effective soil moisture accumulation, has led to an increase in the number and intensity of drought events.

During the cold season, a significant increase in air temperature led to a change in the precipitation pattern due to an increase in the frequency of rain and a decrease in the frequency of snowfall, resulting in an increase in the incidence of sleet, sleet and ice.

In 2021, a study[8] was published to assess future climate change in Ukraine based on an analysis of climate projections for the 21st century using modern scenarios - representative concentration trajectories (RCPs) and data from global and regional numerical climate models.

As a result of the study, simulated changes in the average annual river flow (flow rate) in the Southern Bug basin for two future periods (2041-2070 and 2071-2100) were calculated under the RCP2.6 and RCP8.5 scenarios.

According to the projections, river flows in the Southern Bug basin are expected to increase in January and February in both calculation periods: up to 35% under the RCP2.6 scenario and up to 30% under the RCP8.5 scenario. In the following months of the year, on the contrary, river runoff is expected to decrease by -3% to -26% under RCP2.6 and by -13% to -45% under RCP8.5 (except for a slight increase in June under RCP2.6). A particularly significant reduction in runoff is expected at the end of the 21st century under the severe scenario of RCP8.5.

The water and heat balance of the river basin is highly sensitive to climate change. Rising air temperatures and changes in precipitation patterns affect not only the hydrological regime of rivers, but also the overall water resources. Climate change is increasing the frequency of floods and droughts, which makes agriculture, energy, transport and the social sector vulnerable, as they depend on water resources.

Pollution of water bodies with solid household waste, including plastic

The pollution of water bodies by solid waste, primarily plastic, is one of the pressures that leads to the deterioration of the ecological and chemical state of surface waters. This problem is not specific to the Southern Bug river basin, but to the whole country and reflects the problem of waste management at both national and local levels.

Gaps in national legislation, an inefficient system of waste collection, transportation and disposal, and a low culture of waste management are manifested in a large number of unauthorised and spontaneous landfills, including on river banks. Some of the waste ends up directly in rivers and water bodies, which is not only an aesthetic problem, but also leads to chemical pollution of water, poisoning of living organisms and deterioration of their living conditions.

Over time, plastic breaks down and turns into microplastics, which get into living aquatic organisms, contributing to the accumulation of toxins.

[8] ANALYSIS OF THE IMPACT OF CLIMATE CHANGE ON THE WATER RESOURCES OF UKRAINE (research summary) / Snizhko S., Shevchenko O., Didovets Y. // Edited by Sadogurska S. Centre for Environmental Initiatives "Ecoaction", 2021, 32 p.

Microplastics are less than 5 mm in size and fall into two groups: primary and secondary. Primary microplastics are part of cosmetics (toothpastes, scrubs, shower gels, etc.), industrial cleaning products, and are also formed as a result of wear and tear on car tyres and when washing synthetic products.

Recycled plastic is produced by shredding large plastic waste such as bottles, disposable tableware, packaging, etc.

No special studies have been conducted on the amount of waste on the banks and directly in rivers and water bodies in the Southern Bug basin, nor on its direct impact on the ecological and chemical state of water bodies.

Invasive species

Invasions of alien species outside their "native" habitats are global in nature. The naturalisation and further spread of invaders can cause irreversible environmental damage and undesirable economic and social consequences.

Currently, biological invasions are considered to be biological pollution, but unlike most pollutants that can decompose in natural ecosystems through self-purification processes and whose content is controlled by humans, alien organisms that have successfully invaded begin to multiply uncontrollably and spread rapidly in the environment. This phenomenon can have unpredictable and irreversible consequences.

In addition, the introduction of alien species leads to irreparable losses of biodiversity, both through direct destruction of native species by predators, food and spatial competition, and as a result of displacement of native species, changes in their habitats and hybridisation. The emergence of any alien species is an indicator and, at the same time, a cause of the deterioration of the ecological state of a water body. All this causes a particular danger of invasions and determines the specifics of control measures in terms of the risks of not achieving a "good" ecological status of SWBs where the process of invasion of adventive species is carried out.

The issue of invasion of alien species is legally reflected in the Law of Ukraine "On the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the Period up to 2030", the Decree of the President of Ukraine of 17 December 2021 No. 668, which put into effect the decision of the National Security and Defence Council of Ukraine of 15 October 2021 "On the Strategy of Biosafety and Biological Protection", the Action Plan for the Implementation of the Strategy of Biosafety and Biological Protection for 2022-2025, approved by the Cabinet of Ministers of Ukraine on 07 July 2022 No. 57Z, and the Convention on Biological Diversity.

In accordance with paragraph 5 of the Action Plan for the Implementation of the Strategy for Biosafety and Biological Protection for 2022-2025, approved by the CMU Resolution No. 573 of 07.07.2022, the Ministry of Ecology approved the "Methodological Recommendations for Assessing the Existing and Potential Impact (Risks) of Invasive Alien Species" by Order No. 290 of 15.03.2024 (https://mepr.gov.ua/nakaz-mindovkillya-290-vid-15-03-2024/).

The Guidelines have been developed with due regard to the Regulation (EU) No 1143/2014 of the European Parliament and of the Council (22 October 2014) on the prevention and management of the introduction and spread of invasive alien species, and Delegated Regulation (EU) 2018/968 of the European Commission of 30 April 2018, supplementing Regulation (EU) No 1143/2014 of the European Parliament and of the Council on the risk assessment of invasive alien species, in order to harmonise approaches to impact (risk) assessment when preparing proposals for the inclusion of alien species in the List of Invasive Alien Species of Flora and Fauna of Ukraine.

Studies of alien aquatic species in the Southern Bug basin are not systematic and are sporadic.

According to research, the basin has recorded the spread of Zizania latifolia (Poaceae), a species of East Asian origin that was introduced in the early 50s of the last century as a fodder plant.

The reasons for the appearance of alien species are related to direct anthropogenic iSWBct. Almost half of the identified alien species appeared in the fish fauna as a result of human fishing activities.

The main ways of spreading invasive species are:

- aquaculture or fish farming of commercially valuable fish species;
- Accidental or unintentional introduction of commercial species along with stocking;
- aquarists, which contributed to the spread of species as a result of their deliberate release into natural reservoirs or accidental entry into the latter (sunfish, rotan, silver crucian carp);
- Expansion of the natural ranges of Ponto-Caspian species as a result of hydroelectric construction and global warming (round goby, sand goby, goby, goby, western goby, blunt-nosed goby);
- unauthorised stocking of rivers with alien species without scientific justification and expertise and relevant permits (Danube salmon).

According to the Convention on Biological Diversity (The Hague, 2002), measures aimed at mitigating the effects of invasions by alien species should be mainly preventive, but it is usually not possible to effectively control the process of invasions, primarily due to the lack of a biodiversity monitoring system.

After conducting special studies of alien aquatic species and determining the list of species in the area of their occurrence, the first and most important step is to establish a basin-wide monitoring system for invasions. Monitoring should be focused on:

- identification and analysis of the species composition of alien species, invasive corridors, geography and dynamics of invasions;
- population dynamics of the most significant invasions from emergence to naturalisation, as well as of invasive species that have already been naturalised, and the consequences of their impact on habitats, native species, communities and ecosystems;
- Inventory of possible intrusion sites and their survey (e.g., municipal wastewater leaks from large cities with a developed aquarium services market, discharges of heated water from thermal power plants and large industrial enterprises).

Provision must also be made at the basin level:

- development of regional/basin cadastral lists of alien, threatened (dangerous) species of flora and fauna of Ukraine;
- predicting the emergence of new invasive species that are potentially dangerous for human activities or established hydroecosystems;
- development of methods to curb the spread of alien species (e.g. physical removal, weakening the development of species using phytophagous animals, use of herbicides). An example is the programme for monitoring, localising and controlling the number of alien (invasive) plant species in the territory of the territorial community of Stryi City Council for the period 2021-2025.
- making management decisions on the protection and rational use of aquatic bioresources (including introduced ones), including regional lists of invasive species approved by local governments. For example, in 2017 the Zakarpattia Regional Council approved the first official regional list of invasive plant species in Ukraine.

3 ZONES (TERRITORIES) TO BE PROTECTED AND THEIR MAPPING

3.1 Emerald Network sites

The Emerald Network is an ecological network consisting of special areas for the conservation of biological diversity established (designated) in accordance with the Convention on the Conservation of Wild Flora and Fauna and Natural Habitats in Europe (Bern Convention). Its goal is to ensure the long-term survival of species and habitats listed in the Bern Convention that require special protection.

On 30 November 2018, six countries - the Republic of Belarus, Georgia, the Republic of Moldova, Norway, Switzerland and Ukraine - officially approved the lists of Emerald Network sites on their territories. The updated list of Emerald Network sites was approved on 2 December 2022. The Emerald Network of Ukraine includes 377 territories[9] , and covers about 8% of Ukraine's territory.

There are 45 Emerald Network sites in the Southern Bug basin. By category (Fig. 12), the sites are divided into:

- hydrological reserve - 1
- reserve - 8
- protected area - 26
- landscape reserve - 2
- forest reserve - 1
- national natural park - 4
- nature reserve - 1
- regional landscape park - 2

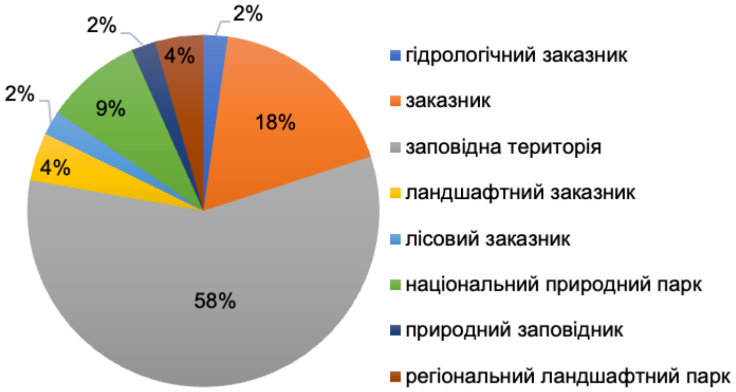


Figure 12 Breakdown of Emerald Network facilities by category (%)

Impact of military operations

Within the basin on the territory of Mykolaiv region, 7 sites of the Emerald Network were affected by military operations, including:

- 1 facility is subject to periodic shelling (Dnipro-Bug estuary),
- 6 sites where Russian military convoys passed through or along their territory in the spring of 2022 (Khrystoforivski Plavni, Gromokliya River Valley, Ratsynska Dacha, Yelanetska Steppe Nature Reserve, Mykhailivska Steppe, Nyzhne Pobuzhzhia).

Dnipro-Bug estuary (UA0000109)

- It is subjected to constant periodic shelling from artillery and multiple rocket launchers, primarily in the waters of the Ochakivska and Kutsurubska communities.
- The water area is polluted by the remains of ammunition and explosive devices, which affects aquatic life and the state of the reservoir.
- The explosion of the Kakhovka hydroelectric power station caused contamination of water and the coast with debris, garbage, chemical and biogenic compounds.

Christopher's Plains (UA0000216)

[9] UPDATED LIST OF OFFICIALLY ADOPTED EMERALD SITES (DECEMBER 2022) https://rm.coe.int/pa10e-2022-updated-list-officially-adopted-emerald-sites/1680a93ca5

- Active hostilities took place in March 2022.
- There are cases of mining, land contamination in areas where military equipment is deployed and in places where shells have exploded, and, accordingly, soil contamination with chemicals.
- The fighting has damaged forest ecosystems.

Gromokliya River Valley (UA0000307)

- A convoy of Russian military equipment passed through the territory and along the facility in the spring of 2022.
- Risks of land contamination by explosive ordnance.

Ratsynska dacha (UA0000217)

- A convoy of Russian military equipment passed through the territory in the spring of 2022.
- CoSWBction of the soil due to the passage of heavy military equipment and damage to tree and shrub vegetation.
- Risks of land contamination by explosive ordnance.

Nature Reserve "Yelanetska Steppe" (UA0000015)

- A convoy of Russian military equipment passed through the territory in the spring of 2022.
- The fire damaged vegetation and soil in the steppe ecosystem.
- Noise has become a factor in disturbing American bison, which are kept in semi-free conditions on the territory, and the animals have damaged the fence.

Mykhailivska steppe (UA0000203)

- A convoy of Russian military equipment passed along the southern edge of the facility in the spring of 2022.
- Risks of encountering explosive objects where enemy military equipment was moving.

Lower Pobuzhzhya (UA0000181)

- A convoy of Russian military equipment passed along the southern edge of the facility in the spring of 2022.
- Risks of encountering explosive objects where enemy military equipment was moving.

3.2 Sanitary protection zones

Sanitary protection zones include areas where water intakes for drinking water supply are located. According to the Resolution of the CMU "On the Legal Regime of Sanitary Protection Zones of Water Bodies" of 18 December 1998 No. 2024, these zones are classified as the so-called first zone (strict regime) of compliance with the use regime. The Resolution provides for a number of permitted and prohibited activities within drinking water intakes.

According to the EU WFD (Article 7), "Member States shall identify in each river basin:

- All surface/groundwater bodies used for abstraction of water intended for human consumption, providing on average more than 10 m³ of water per day or providing water consumption for more than 50 people and
- Those water bodies that are intended for future use for the same purpose."

There are 578 water intakes in the Southern Bug basin, withdrawing more than 10 m³ of water per day.

The SAWR is responsible for maintaining state water accounting.

3.3 Protection zones for valuable aquatic bioresources

Areas designated for the protection of economically important aquatic species or areas for the protection of valuable aquatic bioresources include those areas where such aquatic resources of significant economic value are found or cultivated.

Depending on the specifics of the protection zone for valuable aquatic bioresources, the monitoring programme may include additional indicators or sampling frequency.

According to the Resolution of the CMU No. 1209 "On Approval of Tariffs for Calculating the Amount of Compensation for Damage Caused by Illegal Harvesting (Collection) or Destruction of Valuable Aquatic Bioresources" dated 21 November 2011 (as amended by the Resolution of the CMU No. 1039 dated 6 October 2021), the list of valuable bioresources includes both rare and common fish species throughout Ukraine.

At the same time, according to Article 1 of the Law of Ukraine "On Fisheries, Commercial Fishing and Protection of Aquatic Bioresources", a fishery water body (part thereof) is a water body (part thereof) that is used or may be used for fisheries purposes.

Thus, taking into account the above, as well as the lack of an appropriate legislative and regulatory framework, the protection zones for valuable bioresources in Ukraine have not been defined.

3.4 SWBs/GWBs used for recreational, medical, resort and health purposes, as well as water intended for bathing

Recreation areas of water bodies are land plots with adjacent water space intended for organised recreation of the population on the coastal protective strips of water bodies. Places of mass recreation are determined by local governments in accordance with the powers vested in them every year before the start of the summer swimming season. Water protection zones are established along rivers, around lakes, reservoirs and other water bodies, within which land plots are allocated for coastal protection strips.

It is prohibited in water protection zones and coastal protection zones:

- storage and use of pesticides and fertilisers;
- construction of cemeteries, summer camps for livestock, manure storage facilities, cattle cemeteries, waste dumps, filtration fields, liquid and solid waste storage facilities, etc;
- discharge of untreated wastewater;
- construction of any structures (except for hydrotechnical, hydrometric and linear structures), including recreation centres, summer cottages, garages and car parks;
- Washing and maintenance of vehicles and equipment.

Requirements for the location and organisation of water body recreation areas:

- To organise recreational areas on water bodies, their owners or lessees are required to agree the operation of the beach with the State Service of Ukraine for Food Safety and Consumer Protection before the start of each swimming season;
- the recreation area should be located outside the sanitary protection zones of industrial enterprises. The recreation area should be located at the maximum possible distance (at least 500 m) from sluices, hydroelectric power plants, wastewater discharge sites, stables, livestock watering places and other sources of pollution;
- beaches should not be located within the first zone of the sanitary protection belt of drinking water sources.

Environmental goals for recreational areas:

- water quality of water bodies and rivers used in recreational areas must meet the requirements of sanitary legislation.
- the composition and properties of water in the area of recreational water use must meet the requirements for physical, chemical and sanitary-microbiological indicators.

Requirements for water monitoring in recreational areas:

- water sampling for departmental control in water bodies should be carried out annually by local self-government bodies at least 2 times before the start of the swimming season (at a distance of 1 km upstream from the swimming area on watercourses and at a distance of 0.1-1.0 km to either side of it on water bodies, as well as within the swimming area).
- during the swimming season, such water sampling shall be carried out at least twice a month at at least two points selected in accordance with the nature, length and intensity of use of swimming areas.

Pursuant to CMU Resolution No. 264 of 06.03.2002 "On Approval of the Procedure for Registration of Places of Mass Recreation on Water Bodies", local executive authorities and territorial fishery protection authorities are required to identify on maps and schemes land plots and water areas suitable for the organisation of beaches, boat rental facilities, water attractions, as well as places for water sports and places for amateur and sport fishing in winter.

Approved copies of the maps are submitted to the emergency rescue services that serve water bodies in their area of responsibility and to the regional coordination emergency rescue centres of the State Specialised Emergency Rescue Service on Water Bodies of the Ministry of Emergencies (currently the State Emergency Service).

Information on places of mass recreation is submitted annually by 1 April by local governments, and information on places of recreational and sport fishing is submitted on 10 February and 30 October by territorial fish protection authorities to regional coordination emergency and rescue centres of the State Emergency Service.

There are 22 recreation and leisure facilities in the Southern Bug basin.

3.5 Areas vulnerable to (accumulation of) nitrates

Ukraine has approved a methodology for determining nitrate vulnerability zones (Order of the Ministry of Ecology of Ukraine No. 244 dated 15.04.2021), as required by the EU Nitrate Directive. The methodological approach is to use a large amount of high-resolution spatial and temporal data, mainly surface and groundwater monitoring data, but the definition of these zones should also use statistical data such as the number of livestock, fertiliser application and surplus calculations for nitrogen. All this information of high quality and sufficient reliability is necessary to identify nitrate vulnerable areas where mandatory measures to reduce nitrate pollution should be taken. At present, the existing surface water monitoring network is insufficient in terms of its integrity and spatial coverage to apply the developed method, and groundwater monitoring is not carried out at all.

Therefore, given that in Ukraine:

- the highest percentage of arable land in the world (53.9%, 2021 data), while the ploughed-out agricultural land rate is 78.2%;
- lack of representative and reliable information on the content of nutrients in surface and groundwater;
- Eutrophication of water bodies is a widespread phenomenon;

In the short term, it is proposed to designate the entire territory of Ukraine as a nitrate vulnerable area. This approach is in line with the EU WFD, reflects the current very limited availability of the necessary information to identify nitrate vulnerable areas, is used in many EU countries (e.g. Germany, Austria, Lithuania and Romania), is easier to assess, and allows for refinement or identification of nitrate vulnerable areas in subsequent reporting periods based on improved, more reliable information.

This approach avoids competition among farmers in the short term and allows all farmers to be financially supported through future rural development programmes without the need to differentiate between different regions. It also allows for the general measures of the action programme to be applied to the entire territory, but for more stringent action programme measures to be applied only to regions where (based on available data) clear agricultural stress can be proven and specified in a step-by-step manner.

Therefore, in the medium term, it is necessary to focus on substantial and gradual improvement of the monitoring network (both groundwater and surface water) and database to ensure a more detailed approach to zone identification and monitoring, and thus achieve full compliance with the WFD with the identified nitrate vulnerable zones during the second cycle of the RBMP (2031-2036).

3.6 Vulnerable and less vulnerable zones identified in accordance with the criteria approved by the Ministry of Environment

As of 2023, no vulnerable or less vulnerable zones have been identified in Ukraine.

The regulatory document governing this issue is the Order of the Ministry of Ecology and Natural Resources of 14 January 2019 No. 6 (registered with the Ministry of Justice of Ukraine on 5 February 2019 under No. 125/33096) on approval of the Procedure for determining the population equivalent of a settlement and the Criteria for determining vulnerable and less vulnerable zones.

Also, in accordance with the Law of Ukraine On Water Disposal and Wastewater Treatment of 12 January 2023 (entered into force on 07 August 2023), Article 12. Powers of *local self-government bodies*, the powers of local self-government bodies in the field of water disposal include:

- upon the submission of the central executive body implementing the state policy in the field of water sector development, identification of vulnerable and less vulnerable zones in accordance with the criteria approved by the central executive body ensuring the formation of the state policy in the field of environmental protection.

As of 27 March 2024, local governments, upon the submission of the SAWR, recognised 11 SWBs as vulnerable zones, which is 1% of the total number of SWBs in the Southern Bug basin.

No decision has been made on less vulnerable areas.

4 MAPPING OF THE MONITORING SYSTEM, RESULTS OF MONITORING PROGRAMMES FOR SURFACE WATER (ECOLOGICAL AND CHEMICAL), GROUNDWATER (CHEMICAL AND QUANTITATIVE), AREAS (TERRITORIES) TO BE PROTECTED

4.1 Surface water

Surface water monitoring is carried out in accordance with the Procedure for State Water Monitoring, approved by CMU Resolution No. 758 of 19 September 2018. The Ministry of Ecology, the SAWR and the SES are the subjects of state water monitoring.

Every year since 2020, state water monitoring programmes have been approved by the relevant orders of the Ministry of Ecology (No. 410 of 31.12.2020, No. 3 of 05.01.2022, No. 27 of 17.01.2023) and enforced by the SAWR.

The state water monitoring programme includes:

- information on the object of state water monitoring (code, name of the object, location and other characteristics);
- biological, physicochemical, chemical and hydromorphological indicators, frequency of monitoring, information on the subject and the performer of water monitoring.

State water monitoring is carried out according to the indicators and frequency specified in Annexes 1-3 of the Procedure.

Depending on the goals and objectives of state water monitoring, the following procedures are established:

- the procedure for diagnostic monitoring of the SWBs and GWBs;
- Procedure for operational monitoring of the SWBs and GWBs;
- the procedure for research monitoring of the SWBs;
- procedure for monitoring marine waters.

Diagnostic monitoring is carried out during the first year of state water monitoring. For SWBs that do not pose a risk of failing to achieve environmental objectives, diagnostic monitoring is carried out additionally during the fourth year of state water monitoring.

Operational monitoring is carried out for SWBs that pose a risk of not achieving environmental goals, as well as for SWBs whose water intake to meet drinking and domestic needs of the population averages more than 100 cubic metres per day.

Operational monitoring is carried out annually between the years of diagnostic monitoring.

The research monitoring is carried out by the state water monitoring entities, which independently determine the monitoring points, the list of indicators and the frequency of their measurement.

4.1.1 Monitoring system

In the Southern Bug basin, during 2023, monitoring was carried out at 50 monitoring sites at 45 SWBs, including:

- 15 points at the SWBs, where water is abstracted to meet the drinking and household needs of the population;
- within the boundaries of the nature reserve fund - 3 SWBs.

4.1.2 Hydromorphological assessment / condition

Hydromorphological monitoring during 2021-2023 was carried out at 20 SWBs. The hydromorphological condition is assessed in accordance with the Methodology approved by the Order of the Ukrainian State Geological Survey No. 23 of 19.02.2019, in five classes.

According to the monitoring results, 10 SWBs are of nearly natural class, 10 SWBs are of slightly modified class (Fig. 13)

Figure 13 Distribution of SWBs according to the results of hydromorphological assessment

4.1.3 Chemical status assessment

The assessment of the chemical state of the SWBs is based on determining the concentrations of priority substances specified in Directive 2008/105/EC, taking into account Directive 2013/39/EU250, which sets the limit values of environmental quality standards.

In Ukraine, the Order of the Ministry of Ecology and Natural Resources of Ukraine No. 45 of 6 February 2017, registered with the Ministry of Justice of Ukraine on 20 February 2017 under No. 235/30103, defines a list of indicators for which environmental quality standards are set in Annex 8 of the Order of the Ministry of Ecology and Natural Resources of Ukraine No. 5 of 14.01.2019 No. 5 "On Approval of the Methodology for Assigning a Surface Water Body to One of the Classes of Ecological and Chemical Status of a Surface Water Body, as well as Assigning an Artificial or Significantly Modified Surface Water Body to One of the Classes of Ecological Potential of an Artificial or Significantly Modified Surface Water Body".

Directive 2009/90/EC (Article 5), which sets out technical requirements/criteria for the processing of monitoring data, was also taken into account when assessing the chemical state of the SWB:

- If the measured value was below the limit of quantification (LOQ), the calculation uses the value of half the LOQ for this indicator
- When summarising the results of individual isomers or mixtures (e.g. polycyclic aromatic hydrocarbons, cyclodiene pesticides, DDT), in the case of values measured below the LOQ, zero "0" should be used to calculate the average concentrations.

In addition, Article 4 of Directive 2009/90/EC stipulates that the methods for measuring the content of indicators must meet the minimum criteria: have a measurement uncertainty value below 50% (k=2) and a quantification limit equal to or below 30% of the relevant environmental quality standard.

Valuation reliability

The reliability of the chemical state assessment was performed using the criteria for establishing the reliability of the correct determination of the ecological and chemical status of the SWBs specified in Annex 11 of the Order of the Ministry of Ecology and Natural Resources of 14.01.2019 No. 5.

According to the established criteria, a three-stage scheme was used to assess the reliability of the correct determination of the chemical state of the SWB:

- A high level of assessment reliability means that most of the requirements have been met, namely: measurement data are available for all indicators specified in the List of Pollutants for Determining the Chemical State of Surface and Groundwater bodies and the Environmental Potential of an Artificial or Heavily Modified Surface Water Bodies in accordance with the Order of the Ministry of Environment No. 45 dated 6 February 2017, hereinafter referred to as the List, that meet the requirements of the Procedure (almost all relevant requirements for the list of indicators, methods and frequency have been met); the aggregation of SWBs demonstrates reliable results;
- The medium level of reliability of the assessment of the state of the SWB is established in the absence of sufficient monitoring data, frequency and measurement of all indicators identified in the List;
- The low level of reliability of the assessment of the state of SWB means that the assessment of the state of SWB was based on risk assessment, transfer of monitoring data through aggregation of SWB according to certain criteria.

The reference period for the assessment of the chemical state of the Southern Bug SWBs is 2022-2023. 38 SWBs were assessed based on monitoring data.

To assess the chemical state of the SWBs, we used statistically processed data of measurements of the content of pollutants in surface waters conducted at 42 monitoring points in 2022-2023, namely, the average and maximum values.

For SWBs that were not monitored in the reporting period, the chemical state was assessed by interpolating (transferring) the assessment results from SWBs that were monitored, according to the aggregation of SWBs.

From the List of indicators used to determine the chemical status of the SWBs, measurements were carried out only for 35 substances and their groups, of which 4 are heavy metals.

The following parameters were not measured: brominated diphenyl ethers (esters), chloralkanes, C $_{,10-13}$ di-(2-ethylhexyl)-phthalate, diuron, isoproturon, pentachlorophenol, tributyltin compounds (tributyltin cation), perfluorooctane sulfonate and its derivatives (PFOS), dioxins and dioxin-like compounds, hexabromocyclo-dodecane (HBCDD).

For the indicators fluoranthene, hexachlorobenzene, hexachlorobutadiene, mercury and its compounds, dicofol, heptachlor and heptachloroepoxide, for which the recommended object of control is biota, due to the lack of technical capabilities and measurement methods, concentrations were determined only in surface water samples.

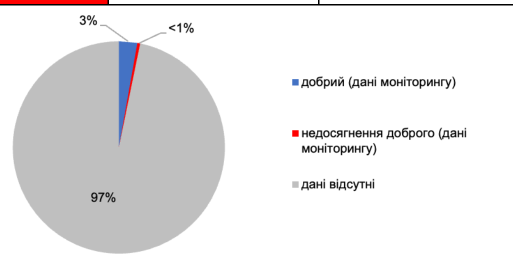
For dichlorvos, heptachlor and heptachlororepoxide, the limits of quantification of the analytical method exceed the environmental quality standard, so it must be stated that even one measured value above the LOQ leads to an exceedance of the EQS. These substances were excluded from the assessment of the chemical state of the SWBs.

Based on the results of the assessment of the chemical status of the SWBs in 2022-2023, the following conclusions can be drawn from the monitoring data (Table 22):

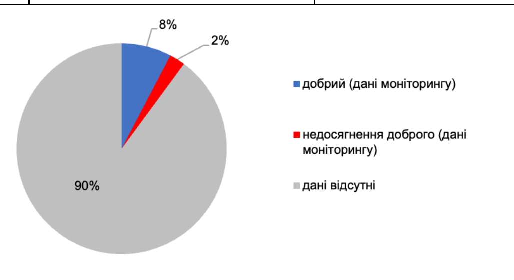
- "good" chemical condition – 26 linear SWBs (2.8% of the total number of linear SWBs), with a length of 679.3 km (7.7% of the total length of SWBs in the Southern Bug RBD). 5 polygonal SWBs (3.1% of the total number of polygonal SWBs), with a total area of 40.6 km^2 (9.9% of the total area of SWBs in the Southern Bug RBD).
- "failure to achieve good" chemical status – 4 linear SWBs (0.4% of the total number of linear SWBs), with a length of 213.4 km (2.4% of the total length of SWBs in the Southern Bug RBD). 3 polygonal SWBs (1.9% of the total number of polygonal SWBs), with a total SWBs area of 19.9 km (4.9% of the total SWBs area of the Southern Bug RBD).

Table 1 Chemical status of the SWBs in 2022-2023 (based on monitoring data)

Chemical status	number of linear SWBs	total length of the SWBs, km	number of polygonal SWB	total area of the SWB, km^2
"good"	26	679,3	5	40,6
"failure to achieve the good"	4	213,4	3	19,9

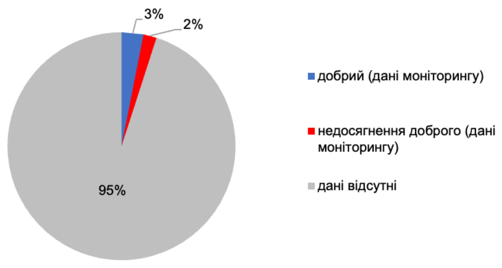


a) by number



b) by total length

Figure 26: Assessment of the chemical status of linear SWBs based on monitoring results



a) by number *b) by total area*

Figure 26: Assessment of the chemical status of polygonal SWBs based on monitoring results

The following substances have been found to exceed the EQS_{MAX} - maximum permissible concentration and/or EQS_{ave} - average annual concentration:

– cadmium (for 2 SWB)
– fluoranthene (for 2 SWB)
– mercury and its compounds (for 1 SWB)
– benzo(a) pyrene (for 6 SWB)
– lutrians (for 1 SWB).

The interpolation of the results of SWB monitoring to other SWB was carried out on the basis of SWB aggregation, which was performed in 2022 as part of the implementation of state water monitoring in accordance with the Order of the SAWR dated 06.05.2022 No. 42 "On Approval of the State Agency of Ukraine for Research and Scientific and Technical Development Plan for 2022".

The purpose of SWB aggregation is to combine all SWB in a river basin into different groups based on reasonable criteria for:

- Interpolation of the results of monitoring of the SWB to other SWB that are grouped with them;
- Use the results of aggregation in the development of monitoring programmes for the following years to maximise the interpolation of the assessment results.

The criteria for the aggregation of SWB of the "rivers" and "lakes" category are:

- the type of the defined SWB;
- assessing the risk of not achieving a good chemical status of the SWB;
- a physical and geographical unit of zoning of the basin to which the SWB belongs;
- the type of landscape where the SWB is located.

The criterion for linear SWB of the "HMWB" and "AWB" categories is:

- assessing the risk of not achieving a good chemical status of the SWB.

The criteria for polygonal SWB of the "HMWB" and "AWB" categories are:

- category;
- the volume of the reservoir;
- water exchange regime of the reservoir.

Based on interpolation of the monitoring results (low level of reliability of the condition assessment):

- "good" chemical condition: 454 linear SWB (48.9% of the total number of linear SWB), with a length of 3954.8 km (44.8% of the length of linear SWB in the Southern Bug RBD); 13 polygonal SWB (8.1% of the total number of polygonal SWB), with a surface area of 38.2 km^2 (9.3% of the surface area of polygonal SWB in the Southern Bug RBD) (Table 23).

- "failure to achieve good" chemical status: 161 linear SWB (17.3% of the number of linear SWB), with a length of 1531.8 km (17.4% of the length of linear SWB in the Southern Bug RBD); 104 polygonal SWB (64.6% of the number of polygonal SWB), with a surface area of 106.5 km^2 (26.0% of the surface area of polygonal SWB in the Southern Bug RBD) (Table 23).

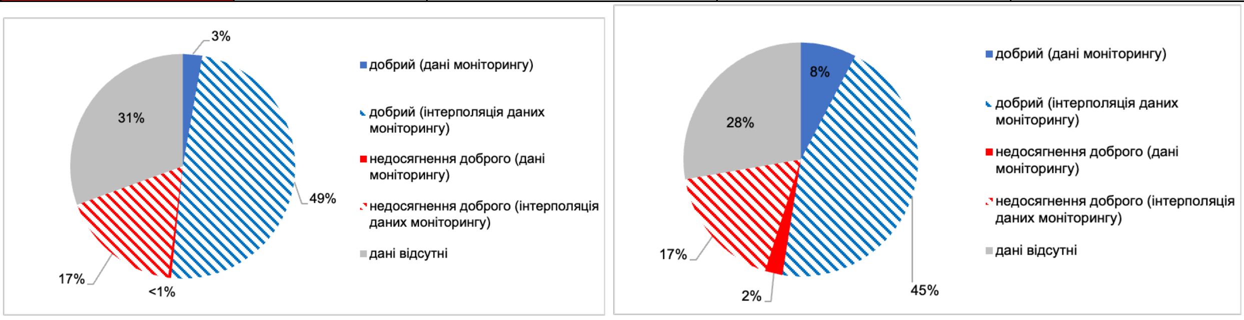
Table 2 Chemical status of the SWB based on interpolation of monitoring data

Chemical status	number of SWB	total length of the SWB, km	number of SWB	total area of the SWB, km^2
"good"	454	3954,8	13	38,2
"failure to achieve the good"	161	1531,8	104	106,5

A summary assessment of the chemical state of the SWBs is provided in Table 24 and the Appendix.

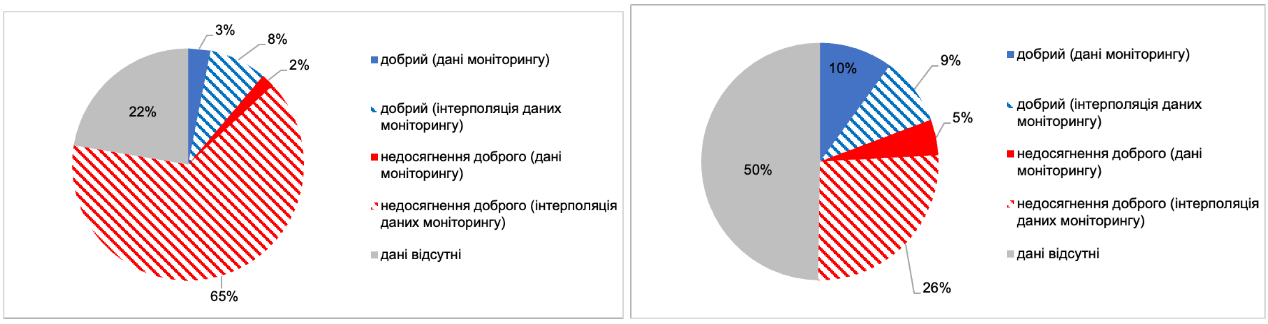
Table 3 Total assessment of the chemical status of the SWB for the period 2022-2023 (monitoring data and interpolation of monitoring data)

Chemical status	number of SWB	total length of the SWB, km	number of SWB	total area of the SWB, km^2
"good"	480	4634,1	18	78,8
"failure to achieve the good"	165	1745,2	107	126,4



by the number *by the length*

Figure 1 Assessment of the chemical status of the linear SWBs Southern Bug RBD



by the number *by the area*

Figure 2 Assessment of the chemical status of polygonal SWBs Southern Bug RBD

For 38 SWBs of the Southern Bug River Basin, the reliability of the assessment of the correct chemical state determination was determined according to the criteria of Annex 11 of the Order and corresponds to the average level of reliability.

732 SWBs were assessed with a low level of assessment reliability based on the transfer of the results obtained under the surface water quality monitoring programme to SWBs where monitoring was not conducted in the specified period, according to the aggregation of SWBs.

Taking into account the interpolation of monitoring data, the chemical status was assessed for 770 SWBs of the Southern Bug RBD.

The chemical status of the linear and polygonal SWBs is assessed in Figures 16 and 17 and the Annex.

4.1.4 Ecological status assessment

The determination of the ecological status of SWBs in accordance with the requirements of the Water Code of Ukraine and Order of the Ministry of Ecology and Natural Resources No. 5 dated 14 January 2019 "On Approval of the Methodology for Assigning a Surface Water Body to One of the Classes of Ecological and Chemical Status of a Surface Water Body, as well as Assigning an Artificial or Significantly Modified Surface Water Body to One of the Classes of

Ecological Potential of an Artificial or Heavily Modified Surface Water Body" is based on the use of a set of biotic and abiotic components inherent in aquatic ecosystems.

The basis for assessing the ecological status of SWBs is based on biological quality indicators that best reflect changes in the aquatic environment, including benthic invertebrates, phytobenthos, macrophytes, phytoplankton and fish. Auxiliary indicators include physicochemical and hydromorphological quality indicators. The environmental status assessment also includes specific synthetic and non-synthetic substances that are typical for the river basin.

The classification schemes for biological quality indicators depend on the type of SWBs and include possible anthropogenic pressures (e.g., organic and nutrient pollution, hydromorphological changes). The ecological status of an SWBs is assessed in relation to a reference value (i.e., the status of an SWBs of a certain type without or with minimal anthropogenic pressure). The degree of impact for individual biological quality indicators is converted into an ecological quality coefficient for individual boundaries of the five classes of ecological status of the SWBs.

The algorithm for determining the ecological status of SWBs based on the type-specific classification developed for biological, hydromorphological, chemical and physico-chemical indicators is given in the Order of the Ministry of Ecology and Natural Resources "On Approval of Environmental Water Quality Standards for Determining the Ecological Status of Surface Water Bodies...". Type-specific classification schemes were developed based on existing schemes in neighbouring EU countries for the respective types of intercalated SWBs.

The assessment of physicochemical and chemical indicators took into account the requirements of Directive 2009/90/EC (Article 5), which sets out technical requirements/criteria for the processing of monitoring data.

The results of state water monitoring conducted by the SAWR and the Ukrainian Hydrometeorological Centre were used to assess the ecological status of the SWBs as part of diagnostic and operational monitoring.

If during this period the monitoring of the SWBs was carried out more than once at the monitoring point, the assessment was made on the basis of the results of the last year in which the monitoring was carried out.

To assess the ecological state of the SWBs, we used data on the monitoring of the content of synthetic and non-synthetic specific substances typical of the Southern Bug RBD: phenol and zinc.

Background concentrations of non-synthetic specific substances were not taken into account when assessing the ecological status of the SWBs.

The Southern Bug SWBs was monitored for biological indicators only in 2023.

In the Southern Bug RBD the ecological status was assessed for 17 linear SWBs with a length of 700.6 km as of 2023. The ecological status of none of the polygonal SWBs was assessed. The results of the assessment of the ecological status of the SWBs are presented in the table and annex.

Table 26. Ecological status of the SWBs

Ecological status	Number of linear SWBs	Percentage of the total number of linear SWBs, %	Length of linear SWBs, km	Percentage of the total length, %
"high"	2	0,2	50,3	0,6
"good"	11	1,2	564,1	6,4
"moderate"	4	0,4	86,2	1,0
"poor"	0	0	0	0
"bad"	0	0	0	0

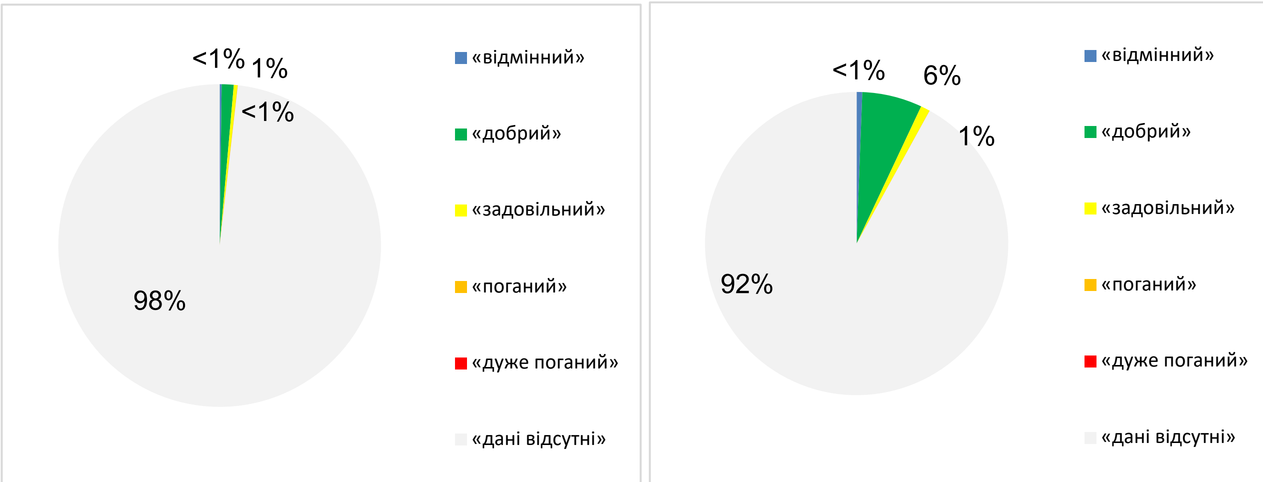
The level of reliability of the ecological status assessment for all 17 SWBs is average.

The ecological status of 2 linear SWBs with a total length of 50.3 km is "high". The "good" ecological status was achieved in 11 linear SWBs with a total length of 564.1 km.

The environmental objective for achieving "good" ecological status were met in 13 of the Southern Bug's SWBs, or 7.0% of the total length of the linear SWBs.

Moderate ecological status was determined in 4 linear SWBs with a length of 86.2 km, which is 1% of the total length of IBAs SWBs None of the assessed SWBs were classified as having poor or bad ecological status.

The results of the ecological status are presented for the linear SWBs of the "rivers" category in Figure 5.3.



by the number *by the length*

Figure 19. Assessment of the ecological status of the linear SWBs of the Southern Bug RBD

4.1.5 Ecological potential assessment

For an AWBs or HMWBs, the environmental objective is to achieve good ecological potential, for which less stringent criteria are applied with respect to iSWBcts associated with hydromorphological changes.

The ecological potential of an AWBs or HMWBs is determined in accordance with the classification established for determining the status of the SWBs of the relevant category (river, lake, transitional waters, coastal waters) to which the AWB or HMWB is most similar in terms of its characteristics.

In the Southern Bug RBD, according to 2023 data, the environmental potential was assessed for 21 SWBs, including 13 linear ones with a length of 192.1 km and 8 polygonal ones with an area of 60.6 km^2 . The results of the assessment of the ecological potential of the SWBs are presented in the table and annex.

Table 4 Ecological potential of SWBs (linear)

Ecological potential	Number of linear SWBs	Percentage of the total number of linear SWBs, %	Length of linear SWBs, km	Percentage of the total length, %
"good"	5	0,5	72,5	0,8
"moderate"	7	0,8	96,7	1,1
"poor"	1	0,1	22,9	0,3
"bad"	0	0	0	0

Table 5 Ecological potential of SWBs (polygonal)

Ecological potential	Number of polygonal SWBs	Percentage of the total number of polygonal SWBs, %	Area of polygonal SWBs, km^2	Percentage of the total area of the SWBs, %
"good"	3	1,9	18,4	4,5
"moderate"	5	3,1	42,2	10,3
"poor"	0	0	0	0
"bad"	0	0	0	0

The level of confidence in the ecological potential assessment for 21 SWBs is medium.

Good ecological potential was achieved in 5 linear SWBs with a total length of 72.5 km and 3 polygonal SWBs with an area of 18.4 km^2 .

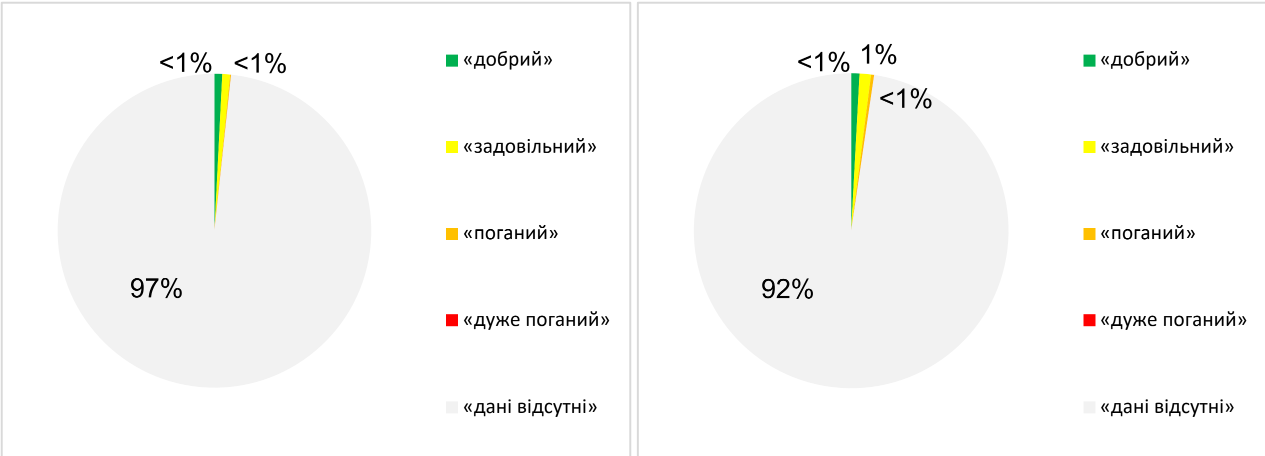
The environmental targets for achieving "good" ecological potential were achieved in 8 southern Bug SWBs, by 0.8% of the total length of linear SWBs and by 4.5% of the total area of polygonal SWBs.

Moderate ecological potential has been identified for 7 linear SWBs with a length of 96.7 km and 5 polygonal SWBs with an area of 42.2 km^2 (1.1% and 10.3% respectively of the total length and area of SWBs).

The "poor" ecological potential was determined for 1 linear SWB with a length of 22.9 km, which is 0.3% of the total length of the SWBs. In the Southern Bug RBD, the Zherd River (UA_M5.4_0181) was identified as having "poor" ecological potential due to non-compliance with the EQS for biological indicators: vascular plants and benthic macroinvertebrates.

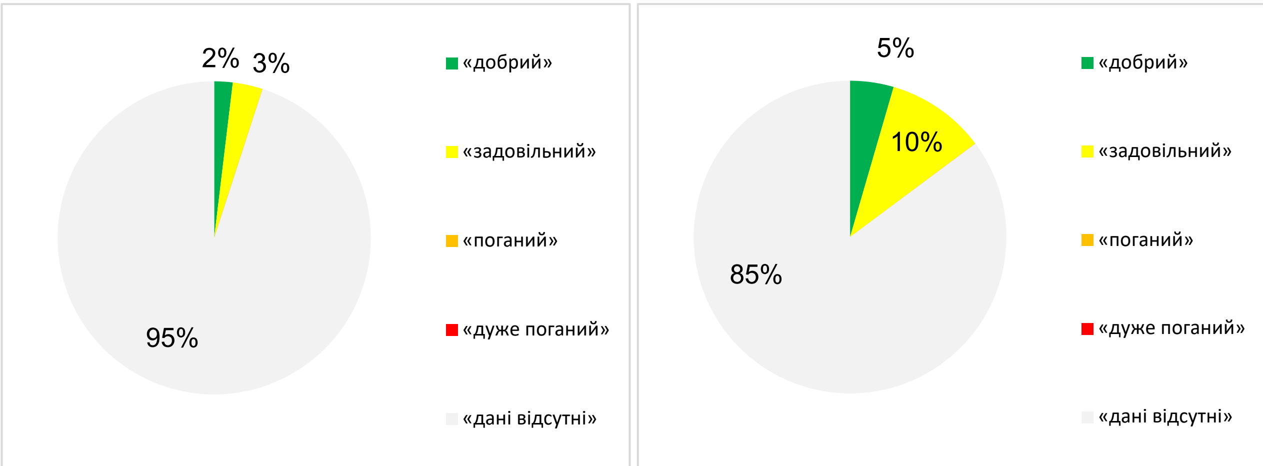
None of the assessed SWBs were classified as having "poor" ecological potential.

The results of the ecological potential assessment are presented for linear SWBs in Fig. and for polygonal SWBs in Fig.



by the number of SWBs *by the length of SWBs*

Figure 20. Assessment of the ecological potential of the linear SWBs of the Southern Bug River Basin



by the number of SWBs *by the length of SWBs*

Figure 21. Assessment of the ecological potential of polygonal SWBs in the Southern Bug RBD

4.2 Groundwater

4.2.1 Monitoring system

The quantitative and chemical state of groundwater is monitored within the framework of the state groundwater monitoring system and changes in the state are predicted both under natural conditions and under the influence of human activity. Quantitative and chemical monitoring is carried out in the same observation wells. The monitoring is carried out in both non-pressure and pressure aquifers under natural, slightly disturbed and disturbed conditions. The disturbed conditions are investigated within the operational water intakes.

The state groundwater monitoring includes diagnostic and operational monitoring, the indicators and frequency of which are defined in accordance with the WFD and are listed in Annex 2 of the Procedure for State Water Monitoring. The components of state monitoring of groundwater bodies include monitoring of quantitative, chemical and physico-chemical indicators. The Procedure for State Water Monitoring does not define the monitoring network (in particular, the number of monitoring points), but establishes the frequency and indicators to be monitored.

Table 29. Procedure for state water monitoring - Indicators and frequency of state monitoring of the GWB

The subject of the monitoring market	Name of the indicator	Frequency	Notes
Diagnostic monitoring*.**			
State Geological Survey	levels	one to three times a month	amount of water
	Temperature, redox potential permanganate oxidisability, mineralisation	at least twice a year	
	macro components: - calcium, magnesium, sodium, potassium, bicarbonate ions, total ferric iron, fluoride	four times a year	
	microcomponents	once a year	the list is determined taking into account the specifics of land use and indicators given in DsanPiN 2.2.4-171-10
	Pollutants according to the list of pollutants for determining the chemical state of surface and groundwater bodies and the environmental potential of artificial or significantly altered surface water bodies approved by the Ministry of Ecology and Natural Resources	four times a year	
	Specific synthetic pollutants (pesticides, pharmaceuticals and other substances)	once every two to six years	the list is determined taking into account the specifics of land use
	Specific non-synthetic pollutants (uranium, radium, radon and other substances)		
Operational monitoring***.			
State Geological Survey	Hydrogeological regime: groundwater levels	one to five times a month	
	total hardness, carbonate, non-carbonate mineralisation	quarterly, at least twice a year	
	phenols oil products synthetic surfactants	once every one to two years	
	macro components: hydrogen carbonate ions, calcium, potassium, magnesium sodium, silicon, total ferric, fluorine	quarterly, at least twice a year	
	microcomponents: aluminium, argentum, beryllium, cobalt, copper, manganese, molybdenum, nickel, selenium, strontium, chromium, zinc	once a year	The list of micro-components is determined taking into account the specifics of land use
	pollutants according to the list of pollutants for determining the chemical state of surface and groundwater bodies and the environmental potential of artificial or significantly altered surface water bodies approved by the Ministry of Ecology and Natural Resources	quarterly, at least twice a year	

The subject of the monitoring market	Name of the indicator	Frequency	Notes
	Specific synthetic pollutants (pesticides, pharmaceuticals and other substances);	once every six years	the list is determined taking into account the specifics of the array
	Specific non-synthetic pollutants (uranium, radium, radon and other substances)		

* In the Exclusion Zone and the Zone of Unconditional (Mandatory) Resettlement of the Territory Affected by Radioactive Contamination as a Result of the Chornobyl Disaster, the State Agency of Ukraine on Exclusion Zone Monitoring of Groundwater Resources is responsible for monitoring groundwater resources.

** Data are updated and supplemented taking into account the specifics of the array.

*** Data are updated and supplemented taking into account the specifics of the array and based on the results of diagnostic monitoring

According to Geoinform, as of 01.01.2021, there were 47 state groundwater monitoring sites within the Southern Bug basin, including 33 operating, 1 mothballed, 6 in need of repair, 3 proposed for liquidation, and the status of 4 sites was unknown.

Since the beginning of the Russian military aggression in 2022, the monitoring has been permanently suspended, as the implementation of the State Programme for the Development of Ukraine's Mineral Resources Base until 2030, which included monitoring and funding, was suspended.

The observation network for groundwater monitoring is currently in a dilapidated state. Observations conducted in 2018-2020 did not meet the requirements of the current Procedure for State Water Monitoring in terms of either quantitative or qualitative indicators.

4.2.2 Chemical assessment/risk assessment

Due to the lack of monitoring data, it is impossible to assess the current qualitative and quantitative state of the GWBs with sufficient reasonableness.

Based on the information from previous studies, it can be assumed that the water quality of non-pressure GWBs is most likely poor due to nitrogen pollution from diffuse sources within agricultural landscapes. As for the water of pressurised GWBs, its quality is mostly good, and the excess of the normative content of some components is of geogenic origin.

4.2.3 Estimation of groundwater volumes/reserves

As for the assessment of the quantitative state of both non-pressure and pressure GWBs, due to insignificant water withdrawal, this state is obviously good. The basis for such a conclusion with regard to pressure GWBs is a coSWBrison of forecast resources, operational groundwater reserves and data on current water withdrawal volumes.

Ways to restore and develop groundwater monitoring

The monitoring network needs to be urgently renewed and improved. The placement of observation points should be based on the principle of representativeness, which in the case of groundwater involves taking into account the prevalence of GWBs and the homogeneity/homogeneity of natural and anthropogenic conditions of groundwater resource formation and their changes over time.

Given the long period of no monitoring and the limited number of observation points, it is necessary to conduct diagnostic monitoring of groundwater quality indicators of all identified GWBs at all observation wells. All identified and within the Southern Bug basin are subject to diagnostic and operational monitoring procedures, as all non-pressure GWBs are associated with surface ecosystems, while pressure GWBs are used for water supply to the population, and the average water withdrawal from them for drinking and domestic needs exceeds 100 cubic metres per year.

The Order of the Ministry of Environment No. 78 of 19.01.24 approving the State Water Monitoring Programme provides for groundwater monitoring in 2024, subject to the availability of funding for the relevant work. In the annex to the above-mentioned order, 37 observation points were identified in the Southern Bug basin (Table 29).

Table 29. Observation points (o.p.) for groundwater monitoring in the Southern Bug River basin

Number of points	GWBs code	Name of the GWBs	Number of points on the GWBs
38	UAM5400Q200	GWBs in alluvial quaternary sediments	5
	UAM5.4GW0005	GWBs in upper Quaternary alluvial sediments	2
	UAM5.1211Q100	GWBs in alluvial quaternary sediments	1
	UAM5400Q400	GWBs in aeolian-deluvial upper Quaternary sediments	16
	UAM5400N100	GWBs in terrigenous carbonate sediments of the Sarmatian	4
	UAM540PG100	GWBs in terrigenous sediments of the Paleogene	2
	UAM540RE100	GWBs in effusive terrigenous rocks of the Precambrian	1
	UAM540AR100	GWBs in the fracture zone of Archean-Proterozoic crystalline rocks	6

The list of these observation points was compiled on the basis of data received from regional geological enterprises. There is currently no reason to revise them, as there is no newer reliable information on this matter. Obviously, there have been negative changes in recent years due to the consequences of Russian aggression and the final cessation of monitoring, so one of the first tasks should be to re-inventory the observation wells, after which the proposed network will be refined.

In the future, the priority is to resume groundwater monitoring. The resumption of observations on the state network is unrealistic in the near future due to lack of funding. The only realistic opportunity to obtain information on the state of the GWBs is to use data from chemical analyses performed at operational water intakes in accordance with the current Procedure for State Water Monitoring (clause 12), which stipulates that for groundwater intakes with a production volume of more than 100 cubic metres per day within the sanitary protection zones and adjacent territories, water users shall set up a local network of observation wells to determine the amount of water, chemical and physicochemical parameters and provide observation data to the State Service of Geology and Subsoil of Ukraine. If this requirement is met, information communication with water users is established, and scientific data processing and analysis is ensured, the state of groundwater monitoring information support could be significantly improved even before funding for observations at the network of wells of the state observation system is restored.

As intensive agricultural production is carried out within the basin, and according to available data, the waters of non-pressure GWBs are widespreadly contaminated with nitrogen compounds, special attention should be paid to improving the quality of non-pressure GWBs. One of the problems is that the existing observation points for non-pressure GWBs are wells located within rural settlements. The information obtained during the inspection of wells sometimes reflects the contamination of the water intake facility, not the aquifer. At the same time, there are virtually no observation points - wells that are better protected from surface contamination and points located within areas with minimal anthropogenic load - that would allow determining the background levels of chemical elements and compounds in the water of non-pressure GWBs. Obtaining information on background areas would allow more reasonable determination of the quality of non-pressure GWBs and assessment of the risk of their failure to achieve environmental objectives. Obviously, if appropriate funding is available, it is necessary to include new observation points located in protected areas in the monitoring network, and, if possible, to construct new ones (drilling wells) in representative areas that would allow obtaining information that could reasonably be extrapolated to large areas of groundwater distribution

Protected areas (territories)

The State Water Monitoring Programme for 2024 for the Southern Bug River Basin includes monitoring sites within two categories of protected areas (territories):

1. At the SWBs, where water is abstracted to meet the drinking and household needs of the population, there are 15 monitoring points that are classified as operational monitoring (Annex XX);
2. 3 monitoring points at SWBs located within the Emerald Network sites as part of diagnostic monitoring (Annex xx).

5 A LIST OF ENVIRONMENTAL OBJECTIVES FOR SURFACE WATERS, GROUNDWATER AND PROTECTED AREAS (TERRITORIES) AND DEADLINES FOR THEIR ACHIEVEMENT (IF NECESSARY, JUSTIFICATION FOR SETTING LESS STRINGENT OBJECTIVES AND/OR POSTPONEMENT OF THEIR ACHIEVEMENT)

Environmental objectives for surface water, groundwater and protected areas (territories) are set separately.

Surface water:

- Prevention of deterioration of all SWBs;
- Achievement/maintenance of good ecological and chemical status of all natural SWBs (rivers, lakes, transitional and coastal waters);
- Achieving/maintaining good ecological potential and chemical status of HMWBs and AWBs;
- Gradual reduction to the complete absence of hazardous substances.

Groundwater:

- Prevention of deterioration of all GWBs;
- Achieving/maintaining good quantitative and chemical status of all GWBs;
- Preventing and limiting groundwater pollution.

Areas (territories) to be protected:

Achieving standards and targets as required by applicable law for:

- Emerald Network facilities;
- sanitary protection zones;
- protection zones for valuable aquatic bioresources;
- surface/ground water bodies used for recreational, medical, resort and health purposes, as well as water intended for bathing;
- areas vulnerable to (accumulation of) nitrates;
- vulnerable and less vulnerable areas identified in accordance with the criteria approved by the Ministry of Environment.

In cases where several objectives are set for a particular SWBs or GWBs, the most stringent ones should be applied, while all other objectives should also be met.

In some cases, the deadlines for achieving environmental objectives or the targets themselves may be postponed as an exception.

It is allowed to postpone the date of achievement of the objective for a period of 6 years (until 2036), but not longer than 12 years (until the end of 2042) from the end of the implementation of the first cycle of the RBMP (2030).

An exemption applied to a particular SWB or GWB should not create a risk of not achieving the environmental objectives of the upstream (for SWB) or downstream (for SWB) and adjacent (for GWB) body or bodies.

The exceptions include:

Achieving less stringent objectives or postponing the date of their achievement due to technical reasons (e.g. lack of a technical solution, technical impracticality or impracticability), disproportionately high cost or the existing natural state of the water body that does not allow for its improvement in a timely manner (e.g. inert groundwater to be restored). The presence or absence of disproportionality is determined by the results of an economic assessment of costs and benefits;

Temporary deterioration of the status (objectives) as a result of an unforeseen force majeure of natural origin (e.g. extreme flood, drought) or anthropogenic (accident);

- **New physical changes to the SWB as a result of infrastructure projects** are permitted if the benefits to society are higher than the environmental benefits and there is no other option to avoid these changes for technical and/or financial reasons. Water pollution from point or diffuse sources is not allowed.

Environmental objectives for surface water

Based on the results of the assessment of anthropogenic pressure on the SWBs of the Southern Bug basin:

- 219 SWBs are not at risk of failing to achieve good ecological status/potential, 122 SWBs are possibly at risk, and 726 SWBs are at risk.
- 821 SWBs are at no risk of not achieving good chemical status, and 245 SWBs are at risk.

Good ecological status/potential by 2030 will be achieved by 265 SWBs, of which 219 SWBs are currently not at risk (they need to maintain this status), 46 SWBs are 5% of SWBs that are at risk or possibly at risk of not achieving environmental objectives based on the results of the anthropogenic pressures assessment, and will achieve environmental objectives through the implementation of the PoM.

The remaining 825 SWBs in the basin that are at risk or possibly at risk could achieve good ecological status/potential by 2036 or 2042, provided that the measures in the action programme are implemented.

By 2030, 821 SWBs will achieve good chemical status, including those that are currently at no risk (they need to maintain this status), 245 SWBs that are at risk according to the results of an assessment of anthropogenic pressures, and will achieve environmental objectives no earlier than 2036 or 2042, subject to the implementation of environmental protection measures.

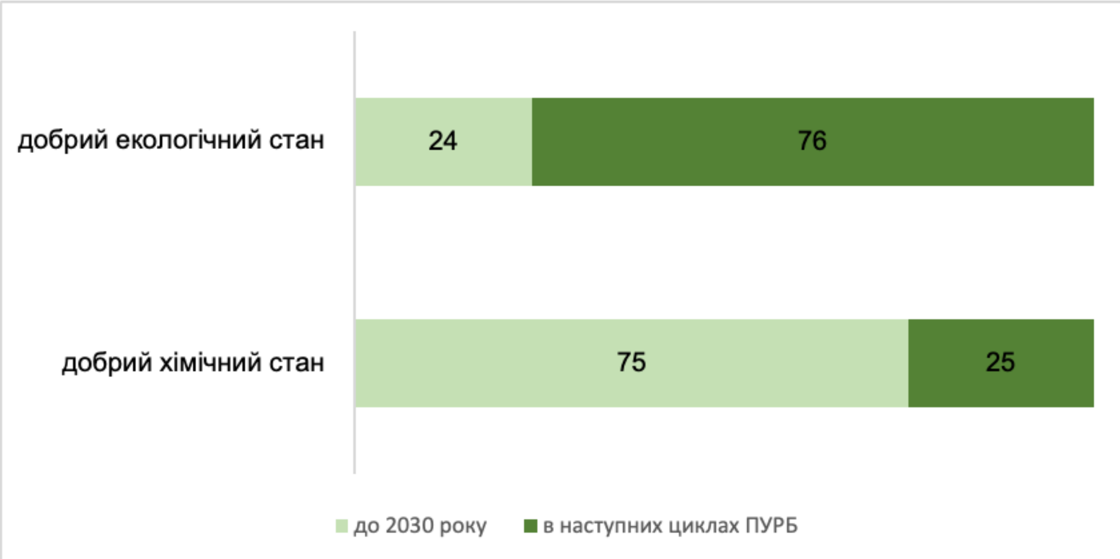


Figure 27. Timeframe for achieving the environmental objectives of the SWB

Annex 9 lists the environmental objectives of the SWBs, the timeframe for achieving them, reasons for postponement and setting less stringent targets.

Environmental objectives for groundwater

Environmental targets are set for each GWBs, both in terms of their quantitative and qualitative (chemical) status. According to the WFD, the main objective is to achieve good groundwater status. Additional targets for each individual GWBs are determined depending on the existing quantitative and qualitative status of GWBs, their use or potential use for water supply to the population, anthropogenic pressure and possible impact on surface ecosystems.

The main criterion for the good quantitative status of the GWBs should be the absence of groundwater depletion. Depletion is the state of aquifers in which, under the influence of artificial drainage, the decline in groundwater levels has reached such indicators that exclude the possibility of further use of the horizon to meet the needs of society using traditional technical means.

The assessment of the depletion of the GWBs is based on information on the level regime, data on groundwater extraction volumes and their coSWBrison with the resources and approved operational reserves.

In addition, for non-pressure GWBs the criterion of good condition is the appropriate condition of the associated surface water bodies and the absence of negative impact on surface ecosystems, primarily vegetation suppression.

The criteria for the good quality (chemical) status of the GWBs are the natural background content of chemical elements and compounds, as well as the standards set for drinking water by the State Sanitary Norms and Rules "Hygienic Requirements for Drinking Water Intended for Human Consumption" (SanPiN 2.2.4-171-10).

Quantitative state of non-pressure GWBs

The environmental objective is to avoid groundwater depletion and not to deteriorate its quantitative status. Given the extremely limited monitoring data, it can be concluded that, given the insignificant volumes of water extraction from non-pressure GWBs by private water consumers, negative trends in the quantitative state are not expected.

Qualitative (chemical) state of non-pressure GWBs

The non-pressure GWBs in the basin are unprotected and conditionally protected.

Non-pressure GWBs (except for GWBs in marsh sediments) are used by the rural population to meet drinking needs, therefore, to assess the quality state, the standards of Sanitary and Epidemiological Norms 2.2.4-171-10 should be used, except for those elements and compounds whose content exceeds the normative value in the natural state. For such components, the values of natural backgrounds should be used.

The environmental objective is compliance with Sanitary and Epidemiological Norms 2.2.4-171-10 and no deterioration of the quality state. However, it should be noted that the stability of the quality state is relative, and the content of macro- and micro-components in the water of non-pressure GWBs is subject to significant fluctuations in space and time, so it is necessary to have information on the intervals of changes in the content and to refine it in the course of monitoring.

Quantitative state of pressure GWBs

The quantitative status of the pressure GWBs is assessed by analysing the level regime and coSWBring the volumes of water withdrawal from these GWBs at water intakes with the volumes of OGR and FGR.

The environmental objective is the stability of the quantitative status and the absence of groundwater depletion. At groundwater abstractions, the volume of water withdrawal should not exceed the estimated operational reserves (within groundwater deposits).

The basin's groundwater is used for water supply, including centralised water supply, and is therefore subject to pressure. However, groundwater extraction does not exceed the value of forecasted resources and operational groundwater reserves. Groundwater exploitation has not led to significant changes in the water level regime, and the reduction of the operational load in recent years has contributed to the recovery of water levels.

Chemical state of pressure GWBs

Under natural conditions, the injection water treatment plants are protected from pollution from the surface. However, in some areas, spotty groundwater contamination with nitrogen compounds is periodically observed, which may indicate the inflow of contamination from overlying aquifers through defective wells.

Since groundwater of all the allocated pressure GWBs is used for centralised drinking water supply to the population, the criteria of good chemical condition were chosen to be the compliance of groundwater chemical parameters with the State Sanitary Norms and Rules "Hygienic Requirements for Drinking Water Intended for Human Consumption" (SanPiN 2.2.4-171-10).

An additional environmental objective is to avoid deterioration in the quality of the discharge GWBs, but conclusions on trends in chemical composition should be based on reliable monitoring data, since the content of components in water is subject to significant natural fluctuations. Therefore, for each GWBs, it is necessary to have information on the interval of changes in the content of water chemical components.

The poor state of groundwater monitoring over the past decades, and, consequently, insufficient information on the current state of the GWBs, allows defining environmental objectives only in the most general form. In the course of monitoring, the environmental objectives for each GWBs will be refined.

Annex 8 shows the environmental targets of the GWBs and their groups, the timeframe for achieving them, reasons for postponing them and setting less stringent targets.

It should be noted that the improvement of the status of non-pressure GWBs under the conditions of implementation of measures to reduce the impact of diffuse sources of pollution should be expected much later than the improvement of the condition of surface water bodies due to their position in the geological environment and a significant amount of accumulated pollutants (primarily nitrates). Given the current situation and a realistic forecast of when large-scale environmental protection measures could be implemented, such improvement should not be expected before 2042.

All 12 of the currently identified GWBs and their groups will reach good quantitative status by 2030, and 8 will reach good chemical status (67% of the identified GWBs and their groups). The remaining 4 groups of GWBs (non-pressure) are projected to reach good chemical (qualitative) status no earlier than 2042 (Fig.23), provided that large-scale measures are implemented to reduce the load from diffuse sources of pollution within agricultural landscapes.

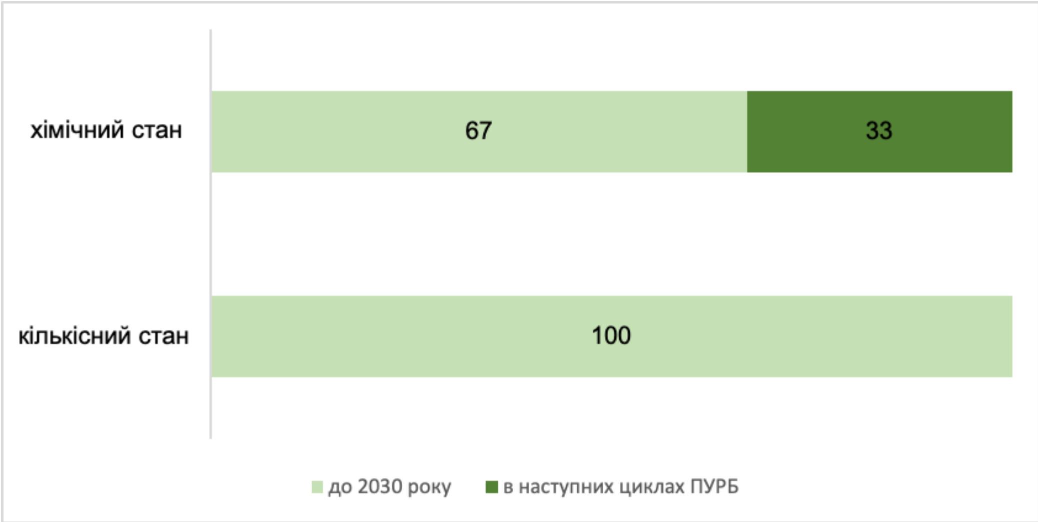


Figure 23. Timeframe for achieving the environmental objectives of the GWBs

6 ECONOMIC ANALYSIS OF WATER USE

The economic analysis of water use has been prepared in accordance with the schedule of the RBMP development process based on the data for 2015-2019. Due to the full-scale military invasion of Ukraine by the Russian Federation, the economic development of the territories and the structure of water use in the Southern Bug basin have undergone significant changes.

6.1 Economic development of the basin area

The Southern Bug River basin is partially located within 7 regions - Vinnytsia, Kyiv, Kirovohrad, Mykolaiv, Odesa, Khmelnytskyi, Cherkasy and accounts for 10.5% of Ukraine's territory.

The total population of the Southern Bug River basin is 3.7 million people, which is 8.8% of Ukraine's population.

Table 30. Share of area and population of oblasts within the Southern Bug basin, %.

Oblasts	Share of the oblast area within the basin	Share of the oblast population within the basin
Vinnytsia	61,9	76,9
Kyiv	3,5	2,0
Kirovohradska	62,6	65,7
Mykolaivska	60,2	82,5
Odesa	9,0	4,1
Khmelnytska	22,8	33,2
Cherkassy	40,2	35,2

A significant heterogeneity between the distribution of population and the area of the region is inherent in Mykolaiv region. In other regions of the river basin, the share of the region roughly corresponds to the percentage of the population.

Analysis of the GRP of the Southern Bug basin regions. In 2019, the GRP of the Southern Bug River Basin amounted to UAH 259,228.9 million. The dynamics of this indicator over the entire study period of 2015-2019 shows a positive trend. Thus, the highest growth rates were observed in 2016-2017 (at the level of 21-22%) coSWBred to the previous year, while in 2019 these rates decreased to 14% per annum. The share of the basin's GRP in the country's total GDP in 2019 was 6.5% (Table 31).

Table 31. GRP dynamics in the Southern Bug basin, 2015-2019[10]

Indicators.	2015	2016	2017	2018	2019
GRP in actual prices, UAH million	126268,9	153853,0	187161,2	225846,3	259228,9
The share of the basin's GRP in the total GDP of Ukraine, %.	6,3	6,4	6,3	6,3	6,5
Growth rate of the basin's GRP, % coSWBred to the previous year	100	121,0	122,4	120,6	114,5

By region of the Southern Bug River Basin, Vinnytsia region generated the largest GRP in 2019 - UAH 98846.9 million, while Kirovohrad region generated the average GRP in the total GRP of the basin - UAH 47652.0 million, Mykolaiv region - UAH 36550.0 million, Cherkasy region - UAH 36193.9 million, and Khmelnytskyi region - UAH 27486.1 million. The smallest GRP within the basin is generated by Odesa (UAH 8127.8 million) and Kyiv (UAH 4372.2 million) regions, whose share of area and population within the basin is low.

The GRP per capita within the Southern Bug River basin is UAH 70120.0 per person, which is less than the total for the whole of Ukraine (as of 2019, the GRP per capita according to the State Statistics Service of Ukraine is UAH 94632).

Analysis of the GVA of the Southern Bug River Basin. As of 2019, the GVA of the Southern Bug River Basin amounted to UAH 220310.0 million in actual prices, and it accounts for 6.4% of Ukraine's total GVA.

[10] *Calculated based on data from the State Statistics Service of Ukraine http:/www.ukrstat.gov.ua/*

Table 32. GVA of the Southern Bug River Basin by economic sector, 2019 [11]

Sectors of the economy	GVA, UAH million	Share in Ukraine's GVA, %.	Share in the basin's GVA, %.
Agriculture, forestry and fisheries	51854,4	1,5	23,5
mining industry	3717,9	0,1	1,7
processing industry	31816,8	0,9	14,4
supply of electricity, gas, steam and air conditioning	7802,9	0,2	3,5
Water supply; sewerage, waste management	858,9	0,03	0,4
Transport, warehousing, postal and courier services	15276,7	0,4	6,9
TOTAL water-dependent economic activities	**111327,6**	**3,2**	**50,4**
Other economic activities	108982,4	3,2	49,6
IN TOTAL ACROSS THE BASIN	**220310,0**	**6,4**	**100**

Agriculture, forestry and fisheries account for the largest share in the overall structure of GVA in the Southern Bug River Basin, accounting for UAH 51854.4 million or 23.5%, and its share in the total GVA of Ukraine is 1.5%. GVA by type of economic activity in the Southern Bug River Basin is shown in Table 3. The share of the processing industry in the basin's GVA among the water-dependent sectors of the economy is also high, namely 14.4%, which in absolute terms amounts to UAH 31816.8 million, and in total GVA of Ukraine it is 0.9%. Transport, warehousing, postal and courier activities amounted to UAH 15276.7 million, which is 6.9% of the total structure of the Southern Bug River Basin GVA, and its share in the total GVA of Ukraine is 0.4%. The supply of electricity, gas, steam and air conditioning accounts for 3.5% of the total GVA of the Southern Bug River Basin, which corresponds to UAH 7802.9 million, and 0.2% of the GVA of Ukraine. The share of the extractive industry in the basin's GVA among the water-dependent sectors of the economy is low, namely 1.7%, which amounts to UAH 3,717.9 million, and 0.1% in the total GVA of Ukraine. The share of water supply, sewerage and waste management is the lowest among the water-dependent sectors of the Southern Bug River Basin economy, at 0.4%, which is UAH 858.9 million and 0.03% of Ukraine's total GVA.

Other water-dependent economic activities accounted for UAH 108982.4 million, which corresponds to 49.6% of the Southern Bug River Basin's GVA and 3.2% of Ukraine's GVA.

In total, the GVA of water-dependent industries in the Southern Bug River Basin is UAH 111327.6 million, and in relative terms, it is 50.4% of the total GVA of the basin and 3.2% of the GVA of Ukraine.

During 2015-2019, the GVA of the water-dependent sectors of the Southern Bug River basin economy decreased from 57.6% in 2015 to 50.5% in 2019 of the basin's GVA, as did their share in the total GVA of Ukraine during the entire study period from 3.7 in 2015 to 3.2 in 2019.

By region, the largest share of water-dependent economic sectors in the total GRP is in Kirovohrad region (59%), slightly less in Vinnytsia region (50.3%), Cherkasy region (50.0%), Mykolaiv region (48.0%), and Khmelnytskyi region (46.3%). Odesa (39.6%) and Kyiv (39.5%) regions have the lowest share of water-dependent industries in the total GVA.

6.2. Characteristics of modern water use

In 2019, water users withdrew 291.6 million m^3 of water from groundwater and surface water bodies in the Southern Bug River basin, which is 3% of the total water withdrawal in Ukraine.

[11] *Calculated based on data from the State Statistics Service of Ukraine http:/www.ukrstat.gov.ua/*

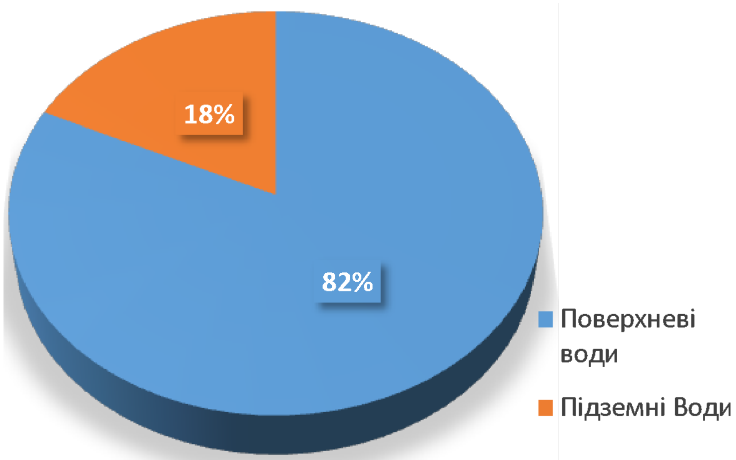


Figure 21 Sources of water intake

Water use within the Southern Bug River basin is mainly from surface sources (82% of the total water withdrawal), with only 18% coming from groundwater sources. Rivers are the main water bodies that meet the water needs of the basin's economic sectors: Southern Bug, Ingul, Sinyukha, Hirsky Tikich, and Gnily Tikich.

In terms of the regions of the Southern Bug River basin, the bulk of water resources are abstracted by water users in Mykolaiv (40%), Vinnytsia (32%), Cherkasy (12%), and Kirovohrad (11%) oblasts. The smallest percentage is accounted for by Khmelnytskyi (5%), Odesa (0.4%) and Kyiv (0.2%) regions.

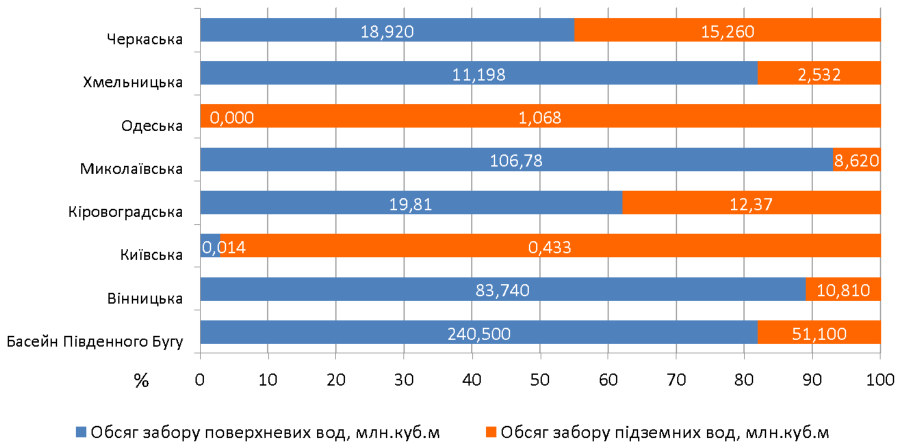


Figure 22 Distribution of water sources by regions, million m^3

The main water users within the river basin are industry, agriculture, housing and communal services, and transport.

The structure of water use is as follows: 39.1 per cent of water resources are consumed by industry, 37.4 per cent by agriculture, 22.3 per cent by housing and communal services, 0.5 per cent by transport and 0.7 per cent by other sectors.

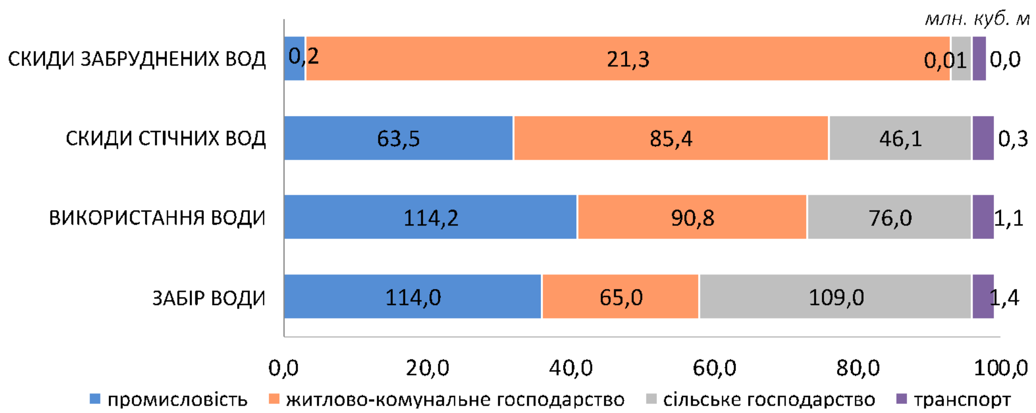


Figure 23 Characteristics of water use in the Southern Bug basin[12]

Water use in the Southern Bug basin is 286.3 million m^3, which is 4.7% of total water use in Ukraine.

A detailed description of water use in the Southern Bug River basin by economic sector is presented in Annex 10.1.

The basin's water users discharge 195.9 million m^3 of wastewater into surface water bodies, which is 4.7% of the total wastewater discharge in Ukraine.

As for the structure of wastewater discharge, more than 45% of wastewater is discharged into surface water bodies by housing and communal services, 32% by industrial water users and 23% by agriculture.

A significant 53% of the wastewater volume is discharged as normatively clean without treatment, 31% as normatively treated at wastewater treatment plants and 11% as contaminated wastewater.

Almost all (99%) of polluted wastewater comes from water users in the residential and communal sector.

Information on wastewater discharges to water bodies by categories of discharged water is provided in Annex 10.2.

To assess the socio-economic importance of water for economic sectors, we used a ranking of water users by 5 indicators adapted to the recommendations of the methodology[13] :

- GVA generated by the industry is an economic indicator of the sector's weight in the basin's economy;
- the volume of water withdrawn by the industry;
- water intensity of the industry coSWBred to other industries;
- The industry's dependence on water quality;
- pollution of water bodies by the industry's waste water.

Table 33. Water intensity of economic sectors

Industry sector	Water intake, million m^3	GVA, UAH million	Water intensity of GVA, m^3/1000 UAH
Industry	114,0	43337,6	2,6
Agriculture	109,0	51854,4	2,1
Housing and utilities	64,97	858,9	75,6
Transport	1,418	15276,7	0,1
Total for the basin	**291,6**	**220310,0**	**1,3**

Table 34. Socio-economic weight of the main water users in the Southern Bug basin

Name of economic sectors	Volumes creation of airborne troops	Water intake by the industry, million m^3	Water intensity of the industry	Dependence on water quality	Waste water pollution
Energy	moderate	high	moderate	low	low
Mechanical engineering and metalworking	moderate	low	low	low	low
Food industry	moderate	low	low	high	low
Non-ferrous metallurgy	moderate	low	low	low	low
Construction materials industry	moderate	low	low	low	low
Ferrous metallurgy	moderate	low	low	low	low
Light industry	moderate	low	low	low	low

[12] *Data from the State Water Cadastre, section "Water use", 2019, State Agency of Water Resources of Ukraine*

[13] *European Union report "The Economic Value of Water - Water as a Key Resource for Economic Growth in the EU"*

Name of economic sectors	Volumes creation of airborne troops	Water intake by the industry, million m^3	Water intensity of the industry	Dependence on water quality	Waste water pollution
Forestry woodworking	moderate	low	low	low	low
Microbiological	moderate	low	low	low	low
Chemical and petrochemical	moderate	low	low	low	low
Fisheries	high	high	low	moderate	low
Irrigation	high	low	low	low	low
Agricultural enterprises (including livestock and crop production)	high	moderate	low	moderate	low
Housing and utilities	low	high	high	high	high
Transport + logistics	moderate	low	low	low	low
Recreation and healthcare	low	low	low	high	low

Based on the results of the dependency assessment using the five criteria above, the economic sectors were divided into 5 groups according to their socio-economic importance in the Southern Bug River basin.

Group 1 "**Full dependence"** includes water users that are highly dependent on 4 indicators - water quality, high water intensity, exert significant pressure on water resources and produce small volumes of GVA, such as housing and communal services. Water in this sector is a key factor for their operations.

Group 2, "**Multiple dependence", includes** those with high dependence on at least two indicators, such as fisheries.

Group 3 "**Specific dependence" includes** those with high **dependence** on one of the indicators and moderate dependence on two indicators. This category includes the energy sector and agricultural enterprises (including livestock and crop production).

Group 4 "**Moderate dependence" includes** those with high and moderate dependence on at least one of the indicators, including machine building and metal processing, food industry, non-ferrous and ferrous metallurgy, chemical and petrochemical industry, light industry, construction materials, microbiological, forestry and woodworking industries, recreation and healthcare, and irrigation.

Group 5, "**Dependence without water use",** includes economic sectors that use water without abstraction from natural water bodies, generate low volumes of GVA and are minor polluters. Transport is included in this group.

According to the assessment of the socio-economic significance, the housing and utilities sector is completely dependent on water resources and is the most water-intensive sector of the economy (75.6 m^3/1000 UAH).

The level of water availability in the river basin per capita is below the minimum level of water availability according to the UN classification (1.7 thousand m^3 per year per capita) and amounts to 1.1 thousand m^3.

6.2.1. Municipal water use

Municipal water use in the Southern Bug River basin is aimed at meeting the drinking and domestic needs of the population. Municipal water use is mainly concentrated in large cities, such as Vinnytsia, Khmilnyk, Kropyvnytskyi, Pervomaisk, Yuzhnoukrainsk, and Voznesensk.

In 2019, residential and municipal water users abstracted 22.3% (64.97 million m^3) of the total water abstraction in the Southern Bug basin (291.6 million m^3).

The basin's peculiarity is that 75% of the population's needs are met from surface water bodies - the Southern Bug, rivers of the Ingul and Sinyukha basins - and 25% from underground sources.

The largest water users are Vinnytsiaoblvodokanal in Vinnytsia. Vinnytsia, Khmilnykvodokanal, Khmilnyk, OKVP Dnipro-Kirovohrad, Kropyvnytskyi. Kropyvnytskyi, ME "Teplovodokanalizatsionne Hospodarstvo", Yuzhnoukrainsk Yuzhnoukrainsk, Pervomaisk City Council Pervomaisk Water Supply and Sewerage Department, Pervomaisk

Pervomaisk, Municipal Enterprise "Vodosnabzhennya", m. Voznesensk, Municipal Enterprise "Vodoprovodnye Netsy", Novyi Buh. Novyi Buh.

The housing and utilities sector discharges 44% of the wastewater discharged to surface water bodies in the basin. In 2019, wastewater discharges totalled 85.4 million m^3 , of which 25% were polluted (21.33 million m^3).

The existing wastewater treatment facilities and the treatment technologies used (mainly biological methods) do not ensure that the quality of wastewater meets the regulatory requirements.

The housing and utilities sector is the main polluter of the basin and discharges 99% of polluted wastewater.

The largest polluter in the basin is Mykolaivvodokanal, which accounts for 89% of the polluted wastewater discharged into the Southern Bug River basin.

Wastewater from municipal enterprises is the largest source of pollutants in surface water bodies (84%).

Water losses during transportation across the basin amount to 25.38 million m^3, or 39% of the total water withdrawal by housing and utilities, which is higher than the average water losses during transportation in Ukraine (31% according to the performance report of the National Commission for State Regulation of Energy and Utilities).

6.2.2. Industrial water use

Water withdrawals by industrial water users account for 39.1% (114.0 million m^3) of the basin. The needs of industrial water users are met mainly from surface water bodies - 86% (98.6 million m^3) and groundwater - 14% (15.4 million m^3).

The main industrial sectors in the Southern Bug basin include energy, machine building and metalworking, food production, and non-ferrous metallurgy.

According to state water accounting data, the main industrial water use in the Southern Bug basin is carried out by water users in the energy sector (79% of water withdrawals). These are the South Ukrainian Nuclear Power Plant in Yuzhnoukrainsk and the heat and power enterprise (Ladyzhyn TPP of DTEK Zakhidenergo) in Ladyzhyn.

The main water users in the machine-building and metalworking sector are the State Enterprise "Research and Production Complex of Gas and Tubular Construction "Zorya" - "Mashproekt" in Mykolaiv.

The food industry is represented by water users producing fruit juices (SANDORA LLC, Mykolaiv region, Mykolaivske village), sugar production (Zorya Podillya PC LLC, Haisyn), Novomyrhorodskyi Sugar LLC, Novomyrhorodskyi Sugar, Kropyvnytskyi; production of oil by Vinnytsia OJK PrJSC.

The main non-ferrous metallurgy water users are Pobuzhsky Ferronickel Plant LLC, Golovanivsk. Golovanivsk, LLC, Mykolaiv Alumina Plant, Mykolaiv region, Halytsynove village.

Industrial water users discharge 32% of their wastewater into surface water bodies, discharging 63.49 million m3 of^3 wastewater, of which only 0.1% is polluted.

Insufficiently treated wastewater was discharged into surface water bodies by PJSC "Umanfermash" in Uman. Uman (0.094 million m^3) and Elevator Bud Invest LLC, Khmelnytsky region, Adampil village (0.092 million m^3).

6.2.3 Water use in agriculture

Water use in agriculture is carried out with the aim of providing water resources to business entities engaged in agricultural production.

85% (92.6 million m^3) of the agricultural needs in the Southern Bug basin are met from surface water bodies and 15% from groundwater sources (16.4 million m^3). The structure of water withdrawals for agricultural purposes is dominated by fisheries, accounting for 59% (63.9 million m^3) of the total withdrawals in this category.

In 2019, agricultural water users discharged 46.1 million m^3 of wastewater into surface water bodies, which is 23.5% of the total water discharge in the basin. The bulk (92.7%) of the wastewater discharged by agricultural water users is normatively clean water without treatment.

Insufficiently treated wastewater (ITW) is discharged by Zhashkivska Equestrian Sports School LLC in Sokolivka village, Cherkasy region (0.009 million m^3).

6.2.4. Water use in transport

Water use in transport involves the use of water resources mainly from groundwater sources (82%) and surface water sources (18%) for the needs of various types of transport, including land and water.

In the Southern Bug river basin, according to the list of inland waterways, a section of the Southern Bug River is navigable, with a length of 199 km.

Water use in transport in the Southern Bug River basin is carried out for the needs of passenger and land transport of urban and suburban traffic.

Water users in the transport sector used 1.096 million m^3 of water (0.4% of total water withdrawal).

Water users in the transport sector discharged 0.321 million m^3 of waste water into surface water bodies.

6.2.5. Other types of water use

Other types of water use withdraw water in the amount of 0.7% of the total water withdrawal in the Southern Bug basin.

Other sectors of the economy include healthcare, logistics, construction, trade and catering, and public education, which mainly use water resources from underground sources.

The low values of water intake and discharge from other types of water use indicate that there are no significant pressures on the water status from the above-mentioned sectors.

6.3 Forecast of water demand by major economic sectors

Water demand forecasts for the whole river basin and for the main economic sectors are made for the period of the River Basin Management Plan (until 2030) under three scenarios: realistic, optimistic and pessimistic.

The basis for the forecast is the water withdrawal rates within the Southern Bug basins for the period 2015-2020, their volume and by economic sector. The forecast of water withdrawals is based on the GDP of Ukraine for the same period and its forecast value for the short, medium and long term. The increment of optimistic and pessimistic scenarios was calculated by determining the average annual deviations for previous years from the forecasted values.

The main factors affecting water use in the river basin:

- economic development trends - growth in agriculture, mainly due to the development of irrigation in the southern part of the basin and the energy sector;
- the spread of the COVID-19 coronavirus infection and the introduction of restrictive measures;
- uneven natural conditions due to the geographical location of the river basin.

The forecast of water withdrawal for the short-term period - for 2021 - was made on the basis of the consensus forecast of the Ministry for Development of Economy, Trade and Agriculture of Ukraine (April 2021), taking into account the regional strategies of the regions that generate the largest GRP in the basin (Vinnytsia[14], Kirovohrad[15], Mykolaiv[16]). Ukraine's GDP forecast indicates a resumption of the positive trend in economic development after significant losses in 2020 caused by the COVID-19 pandemic, showing rapid growth in 2021-2023 with gradual stabilisation in the subsequent period. Thus, GDP growth is expected to reach 4.1% in 2021.

In the medium term, GDP is expected to grow by 3.7% in 2022-2024, with economic growth in Ukraine expected to reach 3.5% in 2023 and 3.9% in 2024.

The long-term forecast period - 2024-2030 - was calculated on the basis of the World Bank's forecast values of global development indicators, Oxford Economic Forecasting[21,22], which forecasts Ukraine's GDP growth by 3.2% annually until 2030.

The global outlook remains highly uncertain due to the pandemic. Provided that effective strategies for Ukraine's recovery and development are developed, including their high-quality and smooth implementation, it is possible to eliminate the effects of the pandemic on the economy and stimulate further development of economic potential in a fairly short period of time.

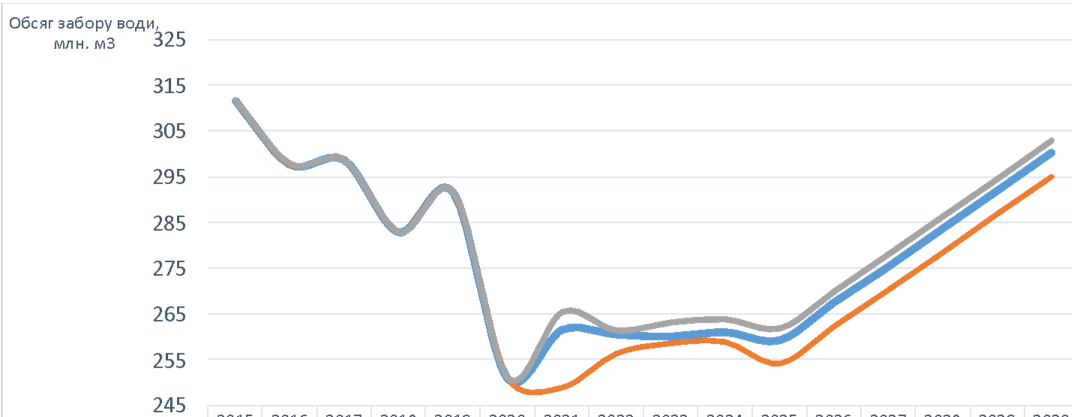
The method used to forecast water withdrawal rates was to calculate the projected exponential growth based on available data.

Preliminary expert forecasts of water withdrawal trends indicate an increase in water withdrawals in line with the economic recovery.

[14] Strategy for Balanced Regional Development of Vinnytsia Oblast for the period up to 2027 http://www.vin.gov.ua/images/doc/vin/ODA/strategy/strategy2027.pdf

[15] Kirovohrad Region Development Strategy for 2021-2027

[16] Mykolaiv Region Development Strategy for the period up to 2027

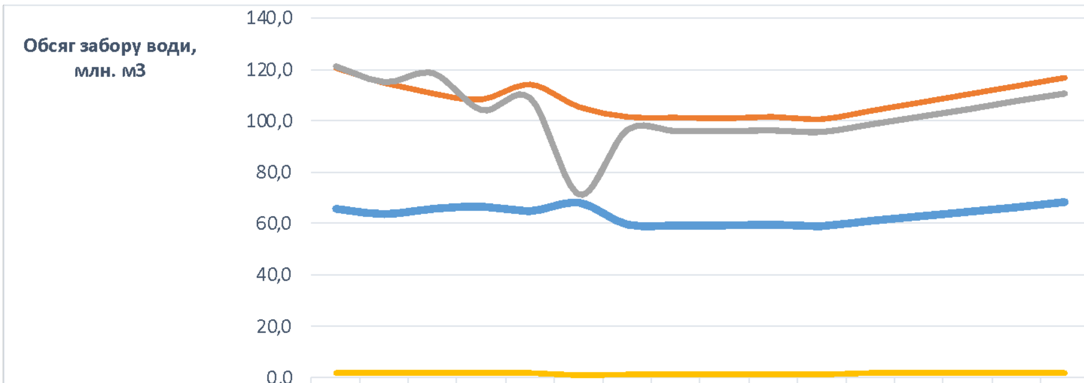


	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
реалістичний	311,8	297,8	298,7	282,9	291,6	251,12	261,6	260,6	260,1	261,1	259,4	267,4	275,4	283,7	292,0	300,3
песимістичний	311,8	297,8	298,7	282,9	291,6	251,12	249	256	259	258,9	254,1	262,2	270,2	278,5	286,8	295,1
оптимістичний	311,8	297,8	298,7	282,9	291,6	251,12	265,4	261,4	263,1	263,9	261,9	270,0	278,0	286,3	294,6	302,9

Figure 26 Forecast of water withdrawals in the Southern Bug basin up to 2030

Analysis of Figure 26 shows an increase in water use in the Southern Bug basin in 2021, with a gradual stabilisation of the trend. 2025 - a slight decrease in water withdrawals due to a slowdown in economic growth. In the period 2026-2030, there is a trend of consistent growth in water intake due to the growing needs of economic sectors.

The results of forecasting water withdrawals in the Southern Bug basin by 2030 by economic sector are shown in Figure 27.



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
комунальне господарство	65,82	63,53	65,7	66,54	64,97	68,08	59,5	59,3	59,2	59,4	59,0	60,9	62,7	64,6	66,5	68,4
промисловість	120,3	114,7	110,6	108,1	114	105,30	101,5	101,2	101,0	101,3	100,7	103,8	106,9	110,1	113,3	116,6
сільське господарство	121,2	115,2	118,5	104,2	109	71,39	96,5	96,1	95,9	96,3	95,7	98,6	101,6	104,6	107,7	110,8
транспорт	1,842	1,769	1,734	1,663	1,418	0,8	1,4	1,4	1,4	1,4	1,4	1,4	1,5	1,5	1,6	1,6

Figure 27 Forecast of water abstraction in the Southern Bug basin by 2030 by economic sector

An analysis of water use data from[17] shows that in 2020, there was a 35% drop in water withdrawals in the basin in the agriculture sector. This may be due to both the decline in the agricultural production index in 2020 and the conversion of water use reporting to electronic format and incomplete reporting by water users.

The municipal sector saw a slight increase in water intake by 5% in 2020.

In 2021, the volume of water withdrawals for the needs of the **housing and utilities sector is** forecast to decline**.** This is potentially due to an increase in tariffs for centralised water supply and sewerage and, as a result, more economical use of water. An additional reason is the quarantine restrictions imposed by the COVID-19 pandemic. Starting from 2022, water intake by the utilities sector is expected to stabilise and gradually increase.

For the **industry** in the Southern Bug basin, a consistent downward trend in projected water withdrawals is expected until 2026. An increase in water withdrawals in the study basin is expected in the period from 2026 to 2030. The growth may be about 10% coSWBred to 2020. Changes in the industrial structure will not be significant. The structure of the processing industry will continue to be dominated by the food industry, machine building and metallurgy.

[17] *Based on the water intake data for 2015-2019 provided by the Southern Bug BWRB and the State Agency of Water Resources' Electronic Services Portal for 2020*

The forecast of water abstraction for **agricultural** purposes in the Southern Bug basin is characterised by significant fluctuations. After a drop in water withdrawals in 2020, water withdrawals in this sector are expected to roughly double in 2021. Given favourable climatic conditions and a large amount of productive agricultural land, the river basin has all the opportunities to develop organic production, a priority for agricultural enterprises. This is an additional factor for the projected increase in water intake. In the long-term period up to 2030, there is a trend towards a gradual increase in water use in the basin's regions.

No significant increase in water abstraction by **transport sector** water users is forecast.

6.4 Economic control instruments

6.4.1 Payback of water resources use

Payback of water resources use is a coSWBrison of funds received from the use of water resources to funds spent on the provision of water services. The characteristics of water services and water use in the Southern Bug basin are presented in accordance with the institutional structure of water services regulation:

I. Centralised water supply and sewerage services;

II. Special water use by economic sectors - payments and fees are paid to the budgets of all levels (rent, environmental tax for discharges into water bodies in Ukraine, lease of water bodies);

III. Water supply services for irrigation.

I. Payback of centralised water supply and sewerage services

In the Southern Bug basin, centralised water supply and sewerage services are provided by licensees of the National Energy and Utilities Regulatory Commission and organisations licensed by local governments.

Water and sewerage coSWBnies receive the largest revenues. According to estimates, water and sewerage coSWBnies - NEURC licensees in the Southern Bug basin (5 licensees, 12% of the Ukrainian market[18]) received about UAH 2.2 billion in 2020[19] (including VAT).

The payback of water supply and wastewater services, calculated as the ratio of tariff to cost in the Southern Bug basin, is more than 100%. Due to the insufficient level of customer payments for the services provided, which amounted to 91% in 2020 (90% for water supply and 94% for wastewater), a situation arises where water services are not sufficiently covered by customer payments and the sustainability of water services is threatened. The average level of customer payments by the basin's licensees is **94.8%,** which corresponds to a high level. The lowest level is 90.4% for Vinnytsiaoblvodokanal.

The condition of water supply and sewerage networks in the Southern Bug basin is unsatisfactory, which affects water quality. The main source of investment in 2020 in the Southern Bug basin, as in previous years, was depreciation in the amounts provided for in the tariff structures. Funds were also raised from the profit provided for in the tariff structure of licensees.

Given that the profit in the tariffs was on average 2%, in the Southern Bug basin, according to the calculations, the profit of the utilities of the NEURC licensees was about UAH 43.5 million. **However, none of the coSWBnies provided for the use of profits to form a reserve fund (capital) for modernisation or for production investments, which should have been provided for in their business activities.**

According to the NEURC, "the amount of production investments from profits is determined in the amounts necessary for the gradual restoration of networks (improvement of the functioning of water and sewerage enterprises), and taking into account the needs to fulfil the financial obligations of licensees to international financial organisations". However, this level is extremely insufficient.

II. Payback of water resources use in the Southern Bug basin (based on public finance calculations)

Revenues for special water use

In accordance with the principles of "user pays" and "polluter pays" The Tax Code of Ukraine establishes a fee for special water use:

A. Rent for water abstraction for different types of water users;

Б. Environmental tax on discharges into water bodies.

[18] *As of the beginning of 2021, the NEURC licensed 55 water and wastewater coSWBnies, including 4 in the non-government controlled area*

[19] *Hereinafter, the calculations were made on the basis of available statistics in Ukraine.*

In addition, local budgets are charged for the use of water bodies for aquaculture:

C. Rent for water bodies,

D. Payment for special use of water bioresources.

A. Rent for special water use

The state (general and special funds combined) and local (general fund) budgets received a total of UAH 128 million from business entities in the Southern Bug basin by administrative region in 2017, UAH 170 million in 2018, UAH 150 million in 2019, and UAH 142 million in 2020. The maximum rent revenues to the budgets in the Southern Bug basin were observed in 2017.

In 2017-2020, there is a rapid downward trend in the volume of rent revenues for special water use.

Among the regions of the basin, Mykolaiv region receives the largest amount of payments, while Kyiv, Odesa and Khmelnytskyi regions receive the least.

Table 35. Dynamics of rent payments for special water use to the state and local budgets in the Southern Bug basin, UAH[20]

Region / year	2017		2018		2019		2020	
	State budget	Local budgets	State budget	Local budgets	State budget	Local budgets	State budget	Local budgets
Vinnytsia	11313037	11313036	15306086	12523160,5	15841064,5	12960870,1	13736632,2	11239062,3
Kyiv	1519843,1	1522042,5	2234726,1	1832995,4	2044412,4	1676486,3	2068617,6	1693475,5
Kirovohradska	12571845	12571845	20795872	170 14804	13755596,1	11254578,4	11730 509,1	9597691
Mykolaivska	23606980	23606980	29539340	24168550,4	33102995,8	27084268,9	31678716	25918949
Odesa	812259,4	813241,3	1337132,3	1097358,6	1395000,6	1142153,9	1300315,2	1065350,8
Khmelnytska	3863402,9	3863696,3	5337419,9	4367972,2	3186100,9	2608660,3	4049436,9	3313615,2
Cherkassy	11205411	11205418	19316713	15806837,1	12877571,1	10536060,5	13733849,7	11235 155
Together	64892777	64896258	93867289	76811678,1	82202741,4	67263078,4	78298076,6	64063298,8
Total for the basin	129789035,6		170678967,4		149465819,8		142361375,4	

B. Environmental tax on discharges of pollutants into water bodies

In the Southern Bug river basin, *in* 2017-2020, the state budget and the special fund of local budgets received UAH 7-10 million in tax revenues for pollutant discharges directly into water bodies. More than half of these funds (55%) are collected by local budgets in accordance with the budget allocation (Table 32). In 2017-2020, the trend of growth in environmental tax revenues was observed in Vinnytsia, Kirovohrad, Mykolaiv, and Khmelnytskyi regions. The largest amount of environmental tax for discharges of pollutants into water bodies is collected in Vinnytsia region (about 30% of all revenues in the basin).

Table 36 Revenues from environmental tax on discharges into water bodies to the state and local budgets in the Southern Bug basin, UAH[13]

Region/year	2017		2018		2019		2020	
	state budget	local budgets	state budget	local budgets	state budget	local budgets	state budget	local budgets
Vinnytsia	440759,5	1763037,8	1205708,4	1473644,4	1302165,8	1591536,9	1286732,2	1572673,2
Kyiv	23838,0	95352,0	60504,9	73950,4	64942,3	79374,0	62896,0	76872,9
Kirovohradska	372489,6	1489958,6	902289,5	1102798,6	907912,5	1109671,2	918554,0	1122677,5
Mykolaivska	199962,1	799848,3	558274,6	682335,9	591438,2	722869,2	711565,8	869691,8
Odesa	130078,9	520315,5	333478,8	407585,3	311572,5	380810,9	311214,2	380372,9
Khmelnytska	151892,7	607570,6	363774,8	444613,8	370498,5	452831,7	399180,1	487887,0
Cherkassy	103776,9	415107,5	939513,4	1148294,4	806693,8	985959,4	644266,6	787437,3
Together	1422797,6	5691190,3	4363544,4	5333222,8	4355223,6	5323053,1	4334408,9	5297612,6

[20] *Reports on local budget revenues, Reports on state budget revenues*

Region/year	2017		2018		2019		2020	
	state budget	local budgets	state budget	local budgets	state budget	local budgets	state budget	local budgets
Total for the basin	7113987,976		9696767,22		9678276,758		9632021,407	

C. Payment for the lease of water bodies

The weighted average rent is unified for all water bodies in the Southern Bug basin and is constantly increasing. Its dynamics is as follows: in 2017 - 156.9, in 2018-2020 - 162.7 UAH/ha.

In the Southern Bug basin, there is a trend towards an increase in revenues from the lease of water bodies, almost 2 times as much as in 2017. Local budgets in the basin's regions are estimated to have received UAH 1.4-2.9 million in rent for water bodies (or parts thereof) in 2017-2020, or 14-20% of the national figure.

According to the State Tax Service, in total, local budgets of all levels in Ukraine received UAH 1.4 million in 2017, UAH 1.9 million in 2018, UAH 2.7 million in 2019, and UAH 2.9 million in 2020 for the lease of water bodies in the basin (Table 33). The highest revenues were received in Vinnytsia and Kirovohrad regions.

Table 37. Dynamics of rent revenues to local budgets in the Southern Bug basin, UAH

Region/year	2017	2018	2019	2020
Vinnytsia	493302,6	650826,5	1051756,5	1166051,7
Kyiv	32497,9	30119,6	28810,3	24492,9
Kirovohradska	638628,6	823305,7	1013449,8	1024748,9
Mykolaivska	101521,6	102721,9	40400,8	79631,5
Odesa	101676,0	73905,6	91344,6	72311,0
Khmelnytska	7104,8	36502,8	87270,6	90037,2
Cherkassy	53243,5	166553,2	426990,5	454690,4
Total for the basin	1427974,9	1883935,3	2740023,0	2911963,6

D. Payment for special use of fish and other aquatic bioresources

The fee for the use of fish and other aquatic bioresources is levied in accordance with the Resolution of the Cabinet of Ministers of Ukraine No. 1347 “Some issues of special use of aquatic bioresources” dated December 22, 2023. According to the report on local budgets, the fee for the special use of fish and other aquatic bioresources within the Southern Bug basin amounted to UAH 0.9 million in 2020, which is almost three times more than in 2019.

The maximum values are in Cherkasy region.

Table 38. Dynamics of revenues from fees for the special use of water bioresources to local budgets in the Southern Bug basin, UAH

Region/year	2017	2018	2019	2020
Vinnytsia	551,89	64,41	0,00	69176,50
Kyiv	3708,57	5363,77	5747,54	11645,92
Kirovohradska	48777,49	74485,92	48080,40	189676,42
Mykolaivska	39391,12	130412,51	163013,71	268829,80
Odesa	41714,07	37133,21	71633,21	299460,73
Khmelnytska	451,63	0,00	0,00	858,23
Cherkassy	55082,71	124414,35	102026,60	391522,72
Total for the basin	189677,49	371874,18	390501,46	1231170,31

Expenditures on water resources in the Southern Bug basin

Capital and current expenditures from the state and local budgets for environmental programmes in the field of water resources protection

According to state statistical reports, capital investments and current expenditures are allocated to nine environmental areas, including those directly related to the reproduction and protection of water resources:

- waste water treatment;
- protection and rehabilitation of soil, groundwater and surface water.

The share of the former is more significant than the latter, accounting for about half of all expenditures out of the total amount of capital and current expenditures in all areas (Tables 39-41).

These 2 areas are covered by expenditures from the state (including the state environmental protection fund) and local budgets (including local environmental protection funds), own funds and other sources of funding. In 2020, UAH 646.69 million was allocated. In 2018 and 2019, the information on capital and current expenditures provided in the state statistical reports was the same in the respective regions. In 2020, capital and current expenditures increased by more than 40% due to capital investments in the area of wastewater treatment. These expenditures are allocated for the repair of water supply and sewerage systems and treatment facilities that ensure the treatment of return (waste) water from water users in the basin.

Table 39 Dynamics of capital investments in the Southern Bug basin, thousand UAH

Area.	2017			2018			2019			2020		
	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water
Vinnytsia	55062,8	36912,2	4598,2	37032,7	31145,2	10,4	37032,7	31145,2	10,4	112690,7	36912,2	4598,2
Kyiv	143158,3	1610,6	1514,8	243099,8	556,3	2065,7	243099,8	556,3	2065,7	9989,4	1610,6	1514,8
Kirovohradska	8876,3	26427,3	326,8	48361,9	44252,3	3374,6	48361,9	44252,3	3374,6	30352,5	26427,3	326,8
Mykolaivska	73391,6	32943,8	54,8	74748,9	34053,2	9,0	74748,9	34053,2	9,0	199524,4	32943,8	54,8
Odesa	9284,4	928,4	2169,8	6069,6	2984,3	47,3	6069,6	2984,3	47,3	11229,1	928,4	2169,8
Khmelnytska	8216,3	5525,0	495,1	16159,7	9916,5	15,6	16159,7	9916,5	15,6	13905,8	5525,0	495,1
Cherkassy	9066,2	13908,9	990,3	13300,5	3785,1	275,0	13300,5	3785,1	275,0	17242,7	13908,9	990,3
Together in the basin	307055,9	118256,1	10149,8	280132,5	31701,6	2076,1	280132,5	31701,6	2076,1	394934,6	118256,1	10149,8
% of programmes from the total		38,5	3,3		11,3	0,7		11,3	0,7		29,9	2,6
A total of 2 water protection programmes		128406,0			33777,7			33777,7			128406,0	

Table 40 Dynamics of current investments in the Southern Bug basin, thousand UAH

Area.	2017			2018			2019			2020		
	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water
Vinnytsia	134221,5	74345,2	3573,5	190508,5	106942,2	3954,4	190508,5	106942,2	3954,4	135400,7	74757,6	228,7
Kyiv	30788,8	11325,0	102,9	33775,7	13853,2	145,4	33775,7	13853,2	145,4	39298,7	16060,9	146,2
Kirovohradska	87861,2	57499,7	1089,1	115033,6	90618,1	1618,5	115033,6	90618,1	1618,5	128910,7	100137,1	1808,0
Mykolaivska	870903,7	120625,0	7743,0	555519,0	181143,7	6061,0	555519,0	181143,7	6061,0	389094,5	195120,5	16257,1
Odesa	70058,6	8535,4	0,8	35560,8	9997,7	51,5	35560,8	9997,7	51,5	71843,7	13507,1	762,5
Khmelnytska	48077,9	27209,3	862,5	72717,2	38782,4	303,1	72717,2	38782,4	303,1	72795,6	39308,4	108,4
Cherkassy	102155,7	47790,8	23,0	142534,5	56430,3	1753,9	142534,5	56430,3	1753,9	104955,0	59969,2	112,7
Together in the basin	1344067,5	347330,4	13394,8	1145649,4	497767,7	13887,8	1145649,4	497767,7	13887,8	942298,9	498860,8	19423,6
% of programmes from the total		25,8	1,0		43,4	1,2		43,4	1,2		52,9	2,1
A total of 2 water protection programmes		360725,2			511655,5			511655,5			518284,4	

Table 41 Dynamics of capital and current investments in the Southern Bug basin, thousand UAH

Area.	2017			2018			2019			2020		
	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water	Total expenditure on environmental programmes, including:	Waste water treatment	Protection and rehabilitation of soil, groundwater and surface water
Vinnytsia	189284,4	111257,4	8171,7	227541,2	138087,4	3964,8	227541,2	138087,4	3964,8	248091,4	111669,8	4827,0
Kyiv	173947,2	12935,6	1617,7	276875,5	14409,6	2211,1	276875,5	14409,6	2211,1	49288,1	17671,5	1661,0
Kirovohradska	96737,5	83927,0	1415,8	163395,5	134870,3	4993,1	163395,5	134870,3	4993,1	159263,2	126564,4	2134,7
Mykolaivska	944295,3	153568,8	7797,8	630267,9	215196,9	6070,0	630267,9	215196,9	6070,0	588618,8	228064,3	16311,9
Odesa	79343,0	9463,7	2170,6	41630,3	12982,1	98,8	41630,3	12982,1	98,8	83072,8	14435,4	2932,3
Khmelnytska	56294,2	32734,3	1357,6	88877,0	48698,9	318,7	88877,0	48698,9	318,7	86701,4	44833,4	603,5
Cherkassy	111221,9	61699,7	1013,3	155835,1	60215,4	2028,9	155835,1	60215,4	2028,9	122197,8	73878,2	1103,0
Together in the basin	1651123,4	465586,6	23544,6	1584422,5	624460,5	19685,4	1584422,5	624460,5	19685,4	1337233,6	617117,0	29573,4
% of programmes from the total		28,2	1,4		39,4	1,2		39,4	1,2		46,1	2,2
A total of 2 water protection programmes		489131,2			644146,0			644146,0			646690,4	

State budget expenditures for the maintenance of water infrastructure under the management of the State Agency of Ukraine for Water Resources

In the Southern Bug River Basin, water infrastructure maintenance activities are carried out by organisations under the management of the State Agency of Ukraine for Water Resources located in the respective areas of the basin, taking into account the basin management principle. The Southern Bug River Basin Management Authority is the Southern Bug River Basin Water Resources Administration. In addition, operational activities in the regions are carried out by the Regional Water Resources Offices in Cherkasy, Kirovohrad, Mykolaiv, Khmelnytskyi regions, the Middle Dnipro Basin Water Resources Administration, and the Black Sea and Lower Danube River Basin Water Resources Administration.

Expenditures for the operation of water infrastructure in 2020 were made under the budget programme KPKVK 2407050 "Operation of the State Water Management Complex and Water Resources Management" of the comprehensive programme "Operation of the State Water Management Complex and Water Resources Management", in the Southern Bug basin, expenditures in 2020 amounted to UAH 128138.2 thousand[21] .

Determining the payback of water resources use in the Southern Bug basin

If the payback ratio of water use, calculated using the formula "Revenues / Expenses * 100"

is more than 100%, this means that all costs are reimbursed by paying tax and non-tax revenues for services to budgets of all levels or by tariffs; budget revenues, if used for their intended purpose, can be used for water resources restoration; enterprises receive profits that can be used for production development - production investments, formation of a reserve fund (capital), etc. (part of which will be used to pay income tax);

if the indicator is **less than 100%,** this indicates a threat to the sustainability of the service, as the costs of budgets or enterprises are not covered by the revenues received.

The calculated return on water resources use is **20.2%**, which means that costs are higher than tax revenues for water services (Table 42).

This level of payback indicates a critical situation in terms of covering the costs of water services. Revenues are ***significantly lower than expenditures from the*** state and local budgets. The main share of expenditures (almost 46% of all expenditures on environmental measures) is made up of funds from the state and local budgets allocated to measures in the area of "Wastewater treatment".

The calculated level of cost coverage indicates that tax mechanisms in the area of water resources use recovery in the Southern Bug basin do not ensure the sustainability of service provision.

Table 42. Balance of revenues and capital expenditures by 2020 indicators in the Southern Bug basin

SOURCES.	Receipts, thousand UAH.	EXPENSES	Expenses , thousand UAH.
Rent for special water use (state and local budgets)	**142361,4**	Capital and current investments in water resources restoration and protection	**646690,4**
Environmental tax on discharges into water bodies (state and local budgets)	**9632,0**	Expenditures from the state budget for the operation of the state water management complex	**128138,2**
Rent for water bodies (parts thereof) provided for use on a lease basis (local budgets)	**2911,9**		
Payment for aquatic bioresources	**931,7**		
TOTAL RECEIPTS	**155837,0**	**TOTAL EXPENSES**	**774828,6**
ROI	**20,1%**		

6.4.2 Water tariffs

Tariffs for centralised water supply and sewerage

According to the institutional structure in Ukraine, the NEURC and local governments set the following types of tariffs for centralised water supply and sewerage services:

[21] *Expenditures adjusted according to the area of regions within the basin*

- tariff for centralised water supply (cold water) and sewerage (cold and hot water together) (calculated by water utilities, approved by the NEURC for its own licensees, by local authorities for other local licensees) and centralised water supply (hot water) (calculated by Teploenergo enterprises, approved by the NEURC for its own licensees, by local authorities for other local licensees);
- tariff for centralised supply (cold water, hot water separately) and sewerage (cold and hot water) using in-building systems;

The NEURC licenses the activities of water supply coSWBnies (water utilities) if these coSWBnies serve more than 100,000 people, the volume of water supply is more than 300,000 cubic metres, and the volume of water disposal is more than 200,000 cubic metres.

When setting tariffs, the NEURC is guided by the principle of balancing the interests of consumers, business entities and the state: it limits the planned costs of licensees to an economically justified level that should ensure self-sufficiency of their activities, provided that they are managed efficiently and use resources economically, while at the same time providing for the necessary investments for the safe and sustainable operation of water and sewerage systems.

As of the beginning of 2021, tariffs for centralised water supply and sewerage were set by the NEURC in the Southern Bug basin for 5 licensees (water and wastewater coSWBnies) (Table 39).

In 2020, the main items in the structure of the cost of services of NEURC licensees in the Southern Bug basin continue to be **labour** costs **(including social benefits) and electricity purchase**. Their shares are 34% and 26% in water supply and 40% and 31% in wastewater disposal, respectively. Less significant cost components are depreciation, repair costs, reagents and fuels and lubricants, as well as taxes and fees, including fees for special water use (rent) and subsoil use fees for fresh groundwater extraction.

In the structure of the weighted average tariffs for centralised water supply and wastewater disposal of the Southern Bug basin licensees, the main share is made up of labour costs (32 and 40% respectively) and electricity (25 and 32% respectively).

Water supply and sewerage services are provided in the Southern Bug basin by enterprises licensed by local authorities - these are communal enterprises of district, city, town and sometimes village councils. The tariffs differ for different categories of users: households, budgetary organisations and commercial organisations. In general, local tariffs are 2-5 times higher than those of the NEURC licensees (Table 40).

The tariffs set by local government licensees are the highest in Vinnytsia and Kirovohrad regions. Their amount is periodically reviewed and determined in accordance with the decisions of the executive committees of city councils.

The cost of water for industrial enterprises

The cost of water is actually paid by industrial enterprises in the form of a mandatory payment for special water use - rent. The object of taxation for rent for special water use is the actual volume of water used by water users.

In the case of **surface water use,** the rental rate depends on the needs of the use, the place and region of consumption, and the actual volume of water used. No rent is paid if the volume of consumption is less than 5 cubic metres per day and the water user does not have its own water intake facilities. The rent rates in the Southern Bug basin are among the **moderate in Ukraine**, the highest in Mykolaiv region, which receives the largest rent for special water use, and the lowest in Cherkasy region.

In the case of **groundwater use, the** rates of rent for special water use are set by the Tax Code of Ukraine and are differentiated by region. In the Southern Bug basin, the rates are shown in Table 41. The rates for groundwater use are among the highest in Ukraine.

Fees for pollution of water bodies are collected in the form of fines and environmental tax for discharges of pollutants into water bodies. The environmental tax is increasing annually, with the last increase in environmental tax rates occurring in 2019: the rates for discharges increased by more than 2.2 times in accordance with the Tax Code of Ukraine. Draft Law 5600 is currently under consideration by the Verkhovna Rada of Ukraine, which provides for changes to the rental rates.

Housing and communal enterprises apply a coefficient of 0.3 to rent rates in terms of water volumes of technological standards for the use of drinking water determined in accordance with the legislation on drinking water, drinking water supply and sewerage.

Cost of irrigation services

The procedure for determining the cost and provision of paid services by budgetary organisations under the management of the State Agency of Water Resources of Ukraine was approved by the joint order of the Ministry of Ecology, the Ministry of Economy and the Ministry of Finance No. 544/1561/1130 dated 25 December 2013. The amount of contractual (free) prices for services is determined on the basis of economically justified costs directly related to their provision.

The costs of providing (performing) paid services include: direct labour costs, direct material costs and other direct costs, general business expenses, including costs of renewal and modernisation of fixed assets in use. The costs of renewal and modernisation of fixed assets used include capital expenditures calculated at 10% of direct costs related to the provision of water intake for irrigation[22] .

The cost of water supply services for water withdrawn by agricultural producers for irrigation of agricultural land is determined by water management organisations, taking into account the costs from the point of water allocation. This cost may be set differentially, taking into account technological features.

According to the organisation's calculations, the costs of water supply to and from the water outlet point[23] , which are not covered by budgetary funding, are included in the calculation of the contract price (including electricity, capital expenditures, wages).

The cost of a service may be revised due to changes in the conditions of production and sale of the service that are independent of the business activity; those cost components for which price changes have occurred are subject to adjustment, which helps to ensure the economic reasonableness of the cost of the service.

Out of the 7 oblasts in the Southern Bug basin, 6 were involved in water abstraction for irrigation, while Khmelnytskyi oblast did not provide this service. The cost of this service varied in 2020 from UAH 0.237 to 4.66 (Table 43), with the lowest cost for rice cultivation, in particular, at UAH 0.237/m^3 in Odesa region.

Table 43. Cost of water abstraction for irrigation in the Southern Bug River basin regions, 2018-2020, UAH/cubic m (excluding VAT) [24]

Oblasts	2018	2019	2020	Including cost (2020)	
				electricity	own services
Vinnytsia	1,20-3,25	1,60-6,10	0,63-4,66	1,55-3,53	0,60-1,25
Kyiv	0,35-1,22	0,45-3,17	0,52-2,5	-	0,52-2,5
Kirovohradska	1,44-2,21	2,38-2,88	2,45-3,36	0,82-1,42	1,63-1,71
Mykolaivska	0,55-1,70	1,46-2,36	1,44-2,55	0,56-1,04	1,44-1,55
Odesa	0,143-2,48	0,194-4,37	0,237-3,31	0,125-2,79	0,112-1,30
Khmelnytska	-	-		-	-
Cherkassy	1,05-2,36	1,35-3,85	1,32-3,57	0,52-1,81	0,51-2,52

The cost of electricity and the cost of in-house services are important components of the cost of water intake for irrigation. Over the past three years, the cost of this service has increased mainly due to the rising cost of electricity and partly due to the increase in the level of the basic social standard, the minimum wage.

Funds received for the provision of paid services are transferred to a special fund of the State Budget of Ukraine and used in accordance with the budget of the water management organisation approved by the State Agency of Ukraine for Water Resources.

[22] According to the Procedure for Determining the Cost of Providing Paid Services by Budgetary Institutions Belonging to the Management of the State Agency of Water Resources of Ukraine, approved by the joint order of 25.12.2013, No. 544/1561/1130.

[23] water outlet point - a hydraulic structure, pumping station, canals and pipelines or reservoirs on the balance sheet of a water management organisation, from which or to which water is supplied (withdrawn) for the needs of water users.

[24] According to the State Agency of Water Resources of Ukraine, obtained upon official request

7 A REVIEW OF THE IMPLEMENTATION OF PROGRAMMES OR ACTIVITIES, INCLUDING HOW THE OBJECTIVES HAVE BEEN ACHIEVED

This section provides an overview of the implementation of environmental protection measures within the Southern Bug RBD, which were funded by existing national targeted programmes/state environmental protection fund, relevant regional and local programmes or funds, the state regional development fund, state investment projects, international technical assistance projects; regional and local infrastructure projects, etc. (Annex 10).

Among the numerous national environmental programmes developed in Ukraine, we will first analyse the implementation of the Dnipro Programme.

Paragraph 4 of the CMU Resolution No. 336 of 18 May 2017 "On Approval of the Procedure for Developing RBMPs" states that the development of the first RBMPs for each RBD is carried out during the period of implementation of the Dnipro Programme. In accordance with clause 11 of the said Procedure, the measures to develop the first RBMPs for each RBD are financed from the state budget, as provided for by the Dnipro Programme, within the expenditures envisaged by the State Budget of Ukraine for the respective year, as well as from other sources. The implementation of this programme is important both in the context of preparing the Southern Bug RBMP and implementing measures to achieve the strategic environmental objective for the Southern Bug RBD.

The Dnipro Programme aims to define the main directions of state policy in the field of water management, conservation and restoration of water resources, implementation of an integrated water resources management system based on the basin principle, restoration of the role of reclaimed land in the food and resource supply of the state, optimisation of water consumption, prevention and elimination of the consequences of harmful water iSWBct.

The main objectives of the Dnipro Programme are:

- harmonisation of Ukrainian legislation with international standards and improvement of the regulatory framework for innovation and investment development of the water sector (partially completed);
- Implementation of an effective, justified and balanced mechanism for the use, protection and reproduction of water resources, ensuring sustainable development of the state water monitoring system in accordance with international standards (achieved);
- Implementation of the integrated water resources management system based on the basin principle, development and implementation of river basin management plans, application of the economic model of targeted financing of activities in river basins, establishment of river basin councils, as well as enhancement of the role of existing and creation of new basin water resource management agencies (partially implemented);
- Improving the technological level of water use, introducing low-water and waterless technologies, developing more rational water use standards, construction, reconstruction and modernisation of water supply and sewage systems (partially completed);
- bank protection and regulation of river channels, construction and reconstruction of hydraulic structures, protective dams, polders, flood control reservoirs, clearing of river channels, arrangement of water protection zones and coastal protection strips, development of schemes for comprehensive flood protection of territories from the harmful effects of water, improvement of methods and technical devices for hydrometeorological observations, flood forecasting (partially completed);
- Ensuring the development of land reclamation and improvement of the ecological condition of irrigated and drained lands, including restoration of the water management and reclamation complex, reconstruction and modernisation of reclamation systems and their facilities, engineering infrastructure of reclamation systems with the creation of integrated technological complexes, introduction of new methods of irrigation and land drainage, application of water- and energy-saving environmentally safe irrigation and water regulation regimes (not fulfilled).

The creation of the so-called "single" water management programme was supposed to consolidate state and local funds specifically for the implementation of the Dnipro Programme's tasks and objectives. The estimated amount of its funding was UAH 46478.46 million, including UAH 21029.03 million from the state budget, UAH 9294.2 million from the local budget, and UAH 16155.2 million from other sources not prohibited by law (in dollar terms, the equivalent of USD 6.193 billion (as of 01.01.12), or an average of USD 688 million annually, or 0.4% of Ukraine's gross domestic product (GDP)). The amount of funding for the Dnipro Programme was determined annually when drafting the State Budget Law for the respective year, taking into account the real possibilities of the state budget, and each year less and less money was allocated to it. Since the start of the Dnipro Programme's activities, as of 1 January

2019, 26% of the envisaged need has been allocated from budgets of all levels and other sources, and as of 1 January 2020, 17% of the envisaged need, which has led to a significant failure to complete its tasks and activities on time.

The main implementer of the Dnipro Programme is the SAWR. If we analyse in detail the distribution of state budget expenditures on Ukraine's SACs over the past 3 years, we can see the following trend. State funds are allocated mainly for the costs of consumption of the water sector, labour remuneration, utilities, the share of financing from the state budget, for example, in 2020 was 93.5% (UAH 2092.16 million) from the general fund and 81.1% (UAH 2261.34 million) from the special fund. Total state budget expenditures to finance the Dnipro Programme in 2020 amounted to UAH 5022.67 million. The lion's share of all funds is used for the operation of the state water management complex and water resources management - UAH 4,561.35 million (90.8%).

In the context of the Southern Bug RBD, all these generalisations and conclusions on the implementation and financing of the Programme are approximated to the relevant regional water management units. Measures to maintain water infrastructure in the Southern Bug basin are carried out by organisations that fall under the management of the SAWR, located in the respective oblasts - the basin water management authorities: Southern Bug BUVR - within Vinnytsia Oblast (25.7% of the Southern Bug RBD), Middle Dnipro BUVR - within Kyiv Oblast (1.6%), Black Sea and Lower Danube BUVR - within Odesa Oblast (4,7%) and regional offices of water resources in Khmelnytskyi region - within Khmelnytskyi region (7.4%), Kirovohrad region - within Kirovohrad region (24.2%), Cherkasy region (13.2%), Mykolaiv region (23.2%). Expenditures for the operation of water infrastructure are made within the framework of the comprehensive programme "Operation of the State Water Management Complex and Water Resources Management" for each separate division of the SAWR, rather than on a basin basis.

For the third year in a row, the issue of extending the Programme's duration from 2022 to 2024 until the period of preparation of the RBMP has been resolved by reviewing the amount of funding for the measures and agreeing on their volumes at the central and regional levels. As of 8 June 2021, the Accounting Chamber of Ukraine conducted an audit of the effectiveness of the implementation of the Dnipro Programme measures for the period up to 2021. The purpose of the audit is to identify existing problems with the implementation of the Dnipro Programme and to confirm or deny the need to extend the National Target Programme for the Development of Water Management and Environmental Improvement of the Dnipro River Basin until 2024.

No less important and necessary was the National Target Programme "Drinking Water of Ukraine for 2011-2020" approved by the Law of Ukraine No. 2455-IV dated 03.03.2005 (hereinafter referred to as the Drinking Water Programme). Its main goal was to ensure the rights of citizens to an adequate standard of living and environmental safety guaranteed by the Constitution of Ukraine by providing drinking water in the required volumes and in accordance with the established standards. In order to achieve this, the Drinking Water Programme was intended to ensure the implementation of the state policy on the development and reconstruction of centralised water supply and sewerage systems; protection of drinking water sources; bringing the quality of drinking water in line with the requirements of regulatory acts; regulatory support in the field of drinking water supply and sewerage; development and implementation of research and development using the latest materials, technologies, equipment and devices.

The estimated amount of funding for the Drinking Water Programme was UAH 9471.7 million (in 2010 prices), of which UAH 3004.3 million was allocated from the state budget and UAH 6467.4 million from other sources. Due to the lack of adequate funding over the 10 years of the Drinking Water Programme in Ukraine, there have been no significant positive changes in the provision of drinking water in the required volumes and of appropriate quality. Thus, as of 1 January 2020, about 1% of cities, more than 10% of urban-type settlements and almost 70% of villages in Ukraine (8.934 million people) were not provided with centralised drinking water supply. Almost 1 in 4 citizens of the country is not provided with centralised water supply.

The problem of using imported water covers 9 regions of the country and directly affects at least 268,000 people living in 824 settlements.

According to global standards for water quantity and quality, Ukraine is classified as a low-water country. Ukraine ranks 37th out of 40 European countries in terms of drinking water quality. And over the past 10 years, our performance has only been deteriorating. And in terms of water per capita, Ukraine is 125th in the global ranking. At the same time, the national target programme Drinking Water of Ukraine is not being implemented or financed at all. The last time the Drinking Water Programme was financed was in 2018, but only UAH 200 million was allocated from the State Budget of Ukraine for the Drinking Water Programme in 2018, while only water and sewerage coSWBnies of Ukraine submitted projects totalling UAH 1.3 billion. Such activity of the enterprises is caused by their unsatisfactory financial and economic condition, as well as the inability of local governments to provide the necessary support for the renewal of fixed assets from local budgets. In addition, it should be noted that the procedures for obtaining grants and loans from international financial institutions are quite lengthy and involve significant risks, so obtaining state funds for the implementation of a particular infrastructure project was a desirable goal for each water utility. In 2019-2020, the Drinking Water Programme was not funded and ended in 2020.

In order to continue supporting water supply and wastewater treatment coSWBnies, in 2019, MinRegion of Ukraine developed and submitted to the central executive authorities and specialised associations a draft law "On Amendments to the Law of Ukraine "On the National Target Programme "Drinking Water of Ukraine" for 2011-2020", which provided for the extension of the Programme for another 5 years. Interagency approval, coordination, and consultations with the Ministry of Finance lasted for 2 years. The Resolution of the Verkhovna Rada of Ukraine No. 980-IX of 5 November 2020 provides for the possibility and expediency of increasing/predicting expenditures and providing loans from the general fund of the draft state budget for 2021 under the budget programme "Implementation of the National Target Programme "Drinking Water of Ukraine" for the Ministry of Communities and Territories Development of Ukraine (instead of MinRegion) (clause 2.17.68.). The Drinking Water of Ukraine programme will be extended until 2025.

"No one should be left behind" should be the principle underpinning state policy based on the global agenda. However, this does not automatically mean that the state level should bear the entire burden, including the financial burden. Public funds are not enough for everything and everyone - this is obvious and clear to everyone. So what should we do with limited resources? Assessing the initial conditions and prospects and helping those who are in the worst situation coSWBred to others would seem to be a logical and balanced decision. In our opinion, the "cumulative effect" or "synergy effect" of combining the two programmes Dnipro and Drinking Water could have a positive impact on the country's water sector. For example, the construction of main water pipelines at the expense of the SAWR (Dnipro Programme) could be simultaneously complemented by the creation or reconstruction of both local water supply and sewerage networks at the expense of the Ministry of Community and Territorial Development (Drinking Water Programme).

When analysing the implementation of these two programmes, which operated almost in parallel to each other in 2013-2020, we did not track the effect of synergy, continuation, or combination of actions of one and the other agency. The lack of interaction and coordination of activities carried out under these programmes led to a lack of complementary effect. The trend of synergy between programmes could be transferred to the regional level, where national programmes could also be complemented by regional programmes.

One of the elements of the RBMP structure is Section 3 "Areas (territories) to be protected and their mapping: Emerald Network sites; sanitary protection zones; protection zones for valuable aquatic bioresources; surface/groundwater bodies used for recreational, medical, resort and health purposes, as well as bathing waters; zones vulnerable to (accumulation of) nitrates", therefore, in the context of preparing and implementing the RBMP, it is very important to have information on the implementation of the "National Programme for the Development of Nature Reserves for the Period up to 2020" approved by the Cabinet of Ministers of Ukraine on 8 February 2006 No. 70-p (NRF Programme).

According to the data on the accounting of NRF territories and objects submitted by the executive authorities at the local level that ensure the implementation of the state policy in the field of environmental protection, as of 01.01.2020, the NRF of Ukraine comprises 8,512 territories and objects with a total area of 4.418 million hectares within the territory of Ukraine (actual area 4.085 million hectares) and 402.5 thousand hectares within the Black Sea. The ratio of the actual area of the nature reserve fund to the area of the state (the "reserve indicator") is 6.77%.

The NRF is under the state management of the MENR and is funded through the state budget programme "Conservation of protected areas". In 2020, UAH 403.73 million (state fund) and UAH 25.65 million (special fund) were used for measures to conserve and expand the PAs, totalling UAH 429.38 million. In general, the performance indicators under this budget programme were met.

The result of underfunding of the State Target Programme for the Development of Land Relations in Ukraine for the period up to 2020, approved by the Cabinet of Ministers of Ukraine on 17 June 2009 No. 743-r (the Land Programme), is excessive ploughing of agricultural land, which leads to a violation of the ecologically balanced ratio of agricultural, nature reserve and other environmental, health, recreational, historical, cultural, forestry, water fund lands, and an increase in the area of degraded land. As of 1 January 2021, more than 500,000 hectares of degraded, underutilised and technogenically contaminated land are subject to conservation, 143,000 hectares of disturbed land need reclamation, and 294,000 hectares of underutilised land need improvement.

A separate Ministry for Development of Economy, Trade and Agriculture of Ukraine has been established (Ministry of Economy, CMU Resolution No. 838 of 19.09.2019), which will implement the new State Target Programme for the Development of Land Relations and National Geospatial Data Infrastructure in Ukraine for the period up to 2030 (Land Programme, draft CMU Resolution of 13.04.2021).

Budgetary environmental funds are one of the most important sources of financing environmental activities. Currently, Ukraine has a three-tiered system of environmental funds, consisting of the State Environmental Protection Fund (SEPF), regional and local (city, town and village) environmental protection funds. At the regional level, the regional and local environmental protection funds are a significant source of funding for environmental protection measures. The environmental funds are used for targeted financing of environmental protection measures in accordance with the List of activities that are considered to be environmental protection measures approved by the CMU on 17.09.1996 №1147. In accordance with the Law of Ukraine "On Environmental Protection" of 25.06.1991 No. 1264-XII (as amended on 18.12.2019), funding for environmental protection measures, including water protection, is provided by the State Budget of Ukraine, local budgets, funds of enterprises, institutions and organisations, environmental protection funds, voluntary contributions and other funds.

In order to finance environmental protection and resource conservation measures, targeted environmental protection funds are created at the state and local levels, the so-called environmental funds. The idea of environmental funds is that polluters should finance the restoration or improvement of an object that is subject to pollution or deterioration as a result of their activities. Based on the experience of international practice, it is believed that earmarked revenues are a reliable way to secure sources of funding, so environmental funds are considered as sources of earmarked revenues for common environmental protection costs. However, in Ukraine, there is a paradoxical situation: business entities that pollute the environment pay for it, while most environmental, including water management, problems remain unresolved.

According to the Resolution of the CMU "On Approval of the Regulation on the State Environmental Protection Fund" of 7.05.1998 No. 634 (as amended by the Resolution of the CMU No. 1065 of 4.12.2019), the State Environmental Protection Fund became part of the State Budget of Ukraine. All environmental funds go to the consolidated budget, and environmental protection measures are financed on a residual basis, or on the principle of urgent need, when a critical, emergency environmental situation has already occurred.

In fact, all of the collected environmental tax is dissipated within the general and special funds of the state and local budgets. According to the Ministry of Finance, in 2018, the revenues from the environmental tax amounted to UAH 2779.6 million, which significantly exceeds the budget expenditures of UAH 361.1 million for targeted environmental protection measures, which has signs of inefficient and misuse of the environmental tax and is a violation of the current legislation.

In 2013, the Budget Code of Ukraine stipulated that 33% of 53%, and from 2014 - 50% of 65% of the funds received by the special fund of the state budget should be used to finance exclusively targeted environmental modernisation projects of enterprises within the amount of environmental tax paid by them in accordance with the procedure established by the CMU. However, not a single Ukrainian enterprise has been able to take advantage of this provision due to the lengthy development of bylaws.

According to 2018 data, the share of environmental revenues (rent, environmental tax, special permits, fines) in the state budget was over UAH 52 billion, of which UAH 4.6 billion was allocated to support the activities of the relevant central government agencies and environmental control, and only UAH 4.2 billion, or only 8% of environmental funds, were allocated for the implementation of environmental protection measures. This also includes the allocation of funds for the national budget programmes Dnipro and Drinking Water, the actual state of funding of which is presented above. The distribution of environmental funds among agencies and entities is as follows: the SAWR (38%), local budgets (24%), SAUEZM (22%), and the MENR (9%) received the most, State Environmental Inspectorate (4%), State Geological Survey (2%).

The State Budget for 2020 allocated UAH 496.356 million to finance environmental protection measures. It is quite obvious that such expenditures cannot play a significant role in solving environmental problems, including addressing the issue of pollution and water depletion, and even more so in fulfilling the obligations assumed by Ukraine to the international community in the field of environmental protection and, in particular, the preparation of RBMPs to achieve a good environmental status for the MEAs of each RBM. For coSWBrison, on average, EU countries spend 0.8% of their GDP on environmental protection. For example, in Poland, the average annual funding for environmental programmes is EUR 1-1.3 billion. Half of these funds are covered by national funding, and the other half by attracting international funding.

In our realities, it is obvious and undeniable that the urgent restoration and increase of the targeted use of environmental tax funds and the possible creation of an extra-budgetary State Environmental Protection Fund for this purpose with clear directions for the use of funds and the creation of an independent, effective, transparent instrument for financing environmental protection measures are needed. The implementation of Ukraine's international commitments in the field of environmental protection is impossible without financial support for the environmental modernisation of business entities themselves, which need to bring their activities in line with high European standards.

The State Fund for Regional Development (SFRD) was established to accelerate the socio-economic development of regions in Ukraine. This allowed for the financing of regional development projects on a competitive basis and in accordance with regional development strategies and action plans for their implementation. The distribution of the SFRD funds by administrative-territorial units and investment programmes and regional development projects is approved by the CMU in consultation with the Verkhovna Rada Committee on Budget.

In 2020, 14 water supply and sewerage projects totalling UAH 247.34 million were financed from the State Regional Development Fund. Funds from international financial organisations are also being raised for the reconstruction and implementation of new water treatment and wastewater disposal technologies. The project "Urban Infrastructure Development Project-2" is being implemented with funds from the International Bank for Reconstruction and Development. The total loan amount is USD 342.107 million. The total amount of the loan is USD 342.107 million

(USD 292.107 million - International Bank for Reconstruction and Development. USD 50 million - International Bank for Reconstruction and Development (hereinafter referred to as IBRD), USD 92.107 million - Clean Technology Fund. USD 50 million - Clean Technology Fund). The Project implementation period is 6 years (from 26 May 2014 to 31 October 2022). The objective of the Project is to improve the quality and reliability of service delivery and energy efficiency of municipal utilities by improving their institutional capacity and investing in the rehabilitation and replacement of damaged water supply, wastewater and solid waste treatment systems, as well as improving the environmental situation in the areas by addressing the problem of wastewater treatment. The project consists of 11 sub-projects in the areas of water supply, wastewater treatment and a pilot project on solid waste management. The beneficiaries of the Project within the Southern Bug RBM are the regional water utilities that are more or less related to the Southern Bug RBM: Vinnytsiaoblvodokanal, Cherkasyvodokanal, and Dnipro-Kirovohrad. The expected results of the Project implementation include the following:

- reconstruction of drinking water treatment facilities (Kropyvnytskyi);
- reconstruction of wastewater treatment facilities (Kropyvnytskyi and Cherkasy);
- re-equipment of the automated process control system using SCADA (Kropyvnytskyi, Cherkasy);
- re-equipment of water supply pumping stations (Kropyvnytskyi);
- re-equipment of sewage pumping stations (Kropyvnytskyi);
- replacement of 115 km of water supply networks and 20 km of centralised sewage networks (Kropyvnytskyi, Vinnytsia, Cherkasy);
- purchase of new laboratory equipment for water utilities (Kropyvnytskyi and Cherkasy);
- purchase of equipment (Kropyvnytskyi, Cherkasy, Vinnytsia).

In 2020, a contract was completed in Kropyvnytskyi to reconstruct the city's water supply and sewerage networks with a total length of almost 26 km; laboratory equipment was purchased in Cherkasy to improve, rapidly analyse and analytically monitor water quality.

The project "Development of Water Supply and Sewerage System in Mykolaiv" is being implemented in Ukraine with the funds of the European Investment Bank with a total cost of EUR 31.08 million (of which: EUR 15.54 million - loan funds; EUR 5.11 million - E5P Fund Grant; other - own funds). The purpose of the project is to reconstruct the water supply, wastewater disposal and wastewater treatment infrastructure and expand the water supply network in Mykolaiv.

In 2020, as part of the project "Development of the Water Supply and Sewerage System in Mykolaiv", part of the reconstruction of gravity sewerage collectors in Mykolaiv was completed for UAH 6.983 million. As part of the joint project with the European Investment Bank "The Municipal Infrastructure Development Programme for Ukraine envisages raising EUR 400 million to reconstruct and renovate Ukraine's municipal infrastructure, improve the energy efficiency of reconstructed facilities, reduce energy and water losses, centralised water supply (including hot and cold water supply, as well as water for drinking and other needs) and sewerage, and generally improve the safety and quality of services provided (including new construction, reconstruction, modernisation and other types of work).

The Southern Bug RBD implemented the state investment project "Provision of drinking water supply to rural settlements of Kazankivskyi and Novobuzkyi districts and reconstruction of the spillway structure of the Sofiivske reservoir in Novobuzkyi district, Mykolaiv region". The total cost of the state investment project is UAH 77.37 million. Given the hydrological situation and the level of drinking water supply in the region, this project is of utmost importance. The water supply to rural settlements in Mykolaiv Oblast is based on groundwater, which is limited and does not meet the quality requirements of the State Sanitary and Epidemiological Norms 2.2.4-171-10. The region's districts are less than 50 per cent water-supplied, with 236 rural settlements using imported drinking water. The operational water supply per capita in the region is 0.054 m3 /day (coSWBred to 0.131 m3 /day in Odesa region and 0.77 m3 /day in Kherson region). The length of the existing water supply networks in rural settlements is 4019.5 km, of which 1501.2 km are in an emergency condition. The most difficult situation with water supply to the rural population is in the area of the unfinished Kazankivsky water pipeline. It is known that only 13 per cent of the capacity envisaged by the project is used; 11 settlements actually consume water, while the rest of the settlements are not supplied with drinking water due to the lack of distribution networks and the destruction of existing ones.

As of 01.01.2022, under the budget programme "Implementation of the state investment project "Provision of drinking water supply to rural settlements of Kazankivskyi and Novobuzkyi districts and reconstruction of the spillway structure of the Sofiyivka reservoir in Novobuzkyi district of Mykolaiv region", the SAWR dated 22.04.2021 No. 288 approved the action plan for the implementation of the state investment project for the current year and the budget programme passport by the order of the Ministry of Ecology No. 336 dated 24.05.2021.

The works were completed at the facilities "Reconstruction of flushing and pressure pipelines at the treatment facilities of the Kazankivsky group water supply system in Novobug district of Mykolaiv region" and "Reconstruction of a part of the water pipeline from the 3rd ascent to Kazanka village (branch to Kazanka village) of the Kazanka group water supply system in Novobuzka district, Mykolaiv region". The uncompleted works are planned to be completed at the expense of funds provided under the budget programme "Priority provision of rural settlements with centralised water supply" in 2022.

With regard to the review of funding for regional local programmes and the implementation of environmental protection measures, it can be stated that only in all 7 administrative regions that are part of the Southern Bug RBD have targeted regional programmes been developed and approved by the sessions of the regional councils in areas in line with the national target programmes. Traditionally, each oblast develops its own environmental development programme, adding the specifics of the region. For example, the more agrarian regions of Khmelnytskyi and Vinnytsia emphasised and gave preference to the construction of drainage systems, reconstruction of sewage treatment facilities, clearing of riverbeds, reconstruction of hydraulic structures, and separately highlighted the issues of land protection and conservation, development of agriculture and fisheries (Khmelnytskyi) in the context of environmental protection. The southern oblasts of the Southern Bug RBD, Mykolaiv and Odesa, paid more attention in their environmental target programmes to the issue of drinking water supply to the oblast's settlements. Cherkasy Oblast's action programmes are mainly aimed at building and reconstructing sewerage networks, improving and re-equipping wastewater treatment facilities, and also at improving the technical condition and improvement of water bodies. The specificity of the programmes in Kirovohrad Oblast is that the planned activities were largely aimed at restoring and maintaining favourable hydrological conditions and the sanitary state of rivers and water bodies.

Each oblast had its own specifics in terms of programme titles, timelines and implementation stages. Some regional councils made changes to the regional programmes in advance, both in terms of their duration and sources of funding, while others left everything unchanged. Despite the specifics, the names of the regional target programmes, and the changes made, there was little funding from both the state and local budgets to implement the programme activities. Some state programmes had not been funded for years, and the burden of "patching up the holes" of urgent environmental and socio-economic problems fell on local regional programmes.

Since both national and regional programmes are funded on an administrative-territorial basis rather than on a basin basis, in the context of reviewing the implementation of programmes or activities, including ways to achieve the set objectives in the Southern Bug RBD, it can be argued that their funding at the regional level is practically very different, both in terms of the amount of investment and the number of projects implemented. Given the fact that the percentage share of the territory of the oblasts located in the Southern Bug RRB is different, the amount of funds allocated for environmental protection measures and the number of implemented projects differs significantly.

Given the economic situation in the country, the state budget is unable to finance significant expenditures on water management and reclamation, housing and communal services, or environmental protection, so at present and in the near future, to address the problems that were the focus of regional programmes, some new administrative units have begun to focus on their own investments, seek internal reserves of enterprises and funds in the regional, district and amalgamated territorial community budgets, and attract international technical assistance. The first RBMP for the Southern Bug should be the first to help local communities and lay the foundation for future action planning, with specific measures for each identified SWBs.

8 A COMPLETE LIST OF PROGRAMMES (PLANS) FOR THE RIVER BASIN OR SUB-BASIN AREA, THEIR CONTENT AND PROBLEMS TO BE SOLVED

The PoM was developed in accordance with the "Methodological Recommendations for Setting Environmental Objectives, Developing a Programme of Measures and Performing a Cost-Effectiveness Analysis of the River Basin Management Plan" (Methodological Recommendations), approved at the meeting of the Scientific and Technical Council of the SAWR on 12 July 2023. The Guidelines have been developed by the Southern Bug BUVR together with the Regional Offices of Water Resources (ROVR) within the river basin oblasts, in cooperation with local executive authorities, local self-government bodies, non-governmental organisations (NGOs), research and educational institutions and other stakeholders, taking into account the proposals and decisions of the Southern Bug River Basin Council.

The programme is developed for a period of 6 years, starting with the first cycle of the plan for 2025-2030. The start of the measure implementation should be no later than the third year from the beginning of the cycle (no later than 1 January 2028). In total, the programme includes 130 measures (110 main and 20 additional).

A full list of measures is provided in Annex 11.

8.1 Surface water

For surface waters, the PoM includes measures aimed at:

- Reducing organic pollution (diffuse and point sources);
- Reducing nutrient pollution (diffuse and point sources);
- Reducing pollution by hazardous substances (diffuse and point sources);
- Improvement/restoration of the hydrological regime and morphological indicators in case of disruption of the free flow of rivers, hydraulic connection between river channels and their floodplains, hydrological changes, and modification of river morphology.

In addition to these measures, the PoM also includes other measures aimed at addressing other SWMI of the Southern Bug Basin identified in view of its specifics.

8.1.1. Measures to reduce pollution by organic matter, nutrients and hazardous substances (diffuse and point sources)

The anthropogenic pressures on the SWB is primarily due to pollution with organic, biogenic and hazardous substances from sewage treatment plants (STPs) and diffuse sources.

Number of measures aimed at reducing pollution (diffuse and point sources):

- organic substances - 77;
- biogenic substances - 85;
- hazardous substances - 77.

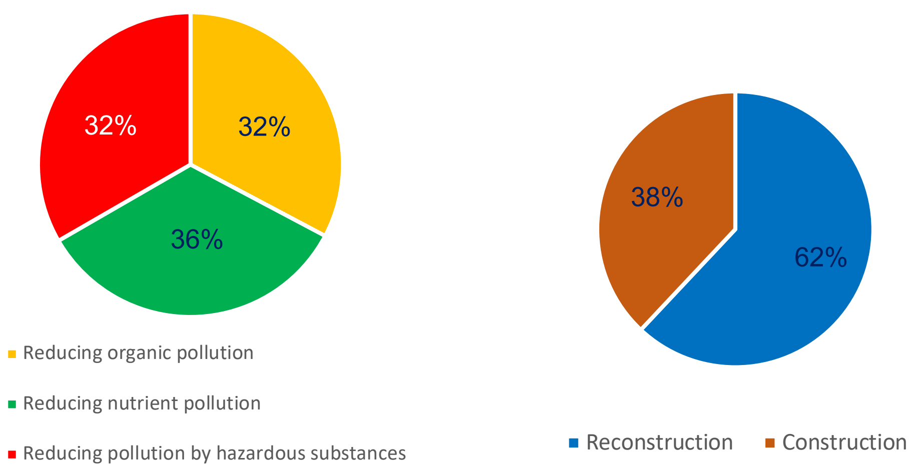


Figure 29. Measures aimed at reducing pollution by organic, biogenic and hazardous substances from point and diffuse sources and the way they are implemented (reconstruction or construction of STPs and SN), %

Measures aimed at reducing pollution by nutrients (diffuse sources) also include measures to establish water protection zones and bank protection strips in Khmelnytskyi, Vinnytsia, Kyiv, Cherkasy, Kirovohrad, Odesa, and Mykolaiv regions (#102 - 108, Annex 11) and "Creation of buffer zones between water bodies and land. Afforestation of territories in the area of the Southern Bug River Basin in Vinnytsia Oblast" (#8, Annex 11). The latter measure is planned to be implemented in the Southern Bug River basin both to achieve a "good" SWB status and to prevent floods, soil erosion and soil washout into the river.

In accordance with the requirements of the Law of Ukraine "On Wastewater Disposal and Treatment" dated 12 January 2023 No. 2887-IX, in order to ensure high-quality centralised wastewater disposal while reducing the impact of return (wastewater) on the SWB, the construction and reconstruction of STPs and SN is planned for 71 settlements in the Southern Bug basin with a population equivalent (PE) of 2,000 or more. Reconstruction/modernisation of STPs and SN is envisaged in 54 communities, including 27 communities with tertiary (proper) wastewater treatment with removal of nitrogen and phosphorus compounds. Construction of new STPs and SN is planned in 19 communities. In the future, it is planned to combine the STPs and SN of the communities settlements into separate agglomerations (treatment clusters) around cities, including the district centres of the basin. Two separate measures are planned for three settlements (Khmelnytskyi, Nemyrov, Tulchyn): reconstruction of existing treatment facilities and construction of new STPs, including construction of a SN in the cities.

Among the measures aimed at reducing pollution by organic, biogenic and hazardous substances (diffuse and point sources), 57 relate to SWB that are "at risk" of failing to achieve environmental objectives. Measures aimed at reducing pollution by organic, biogenic and hazardous substances from point sources, depending on the risk assessment of the SWB, are presented in Fig. 30.

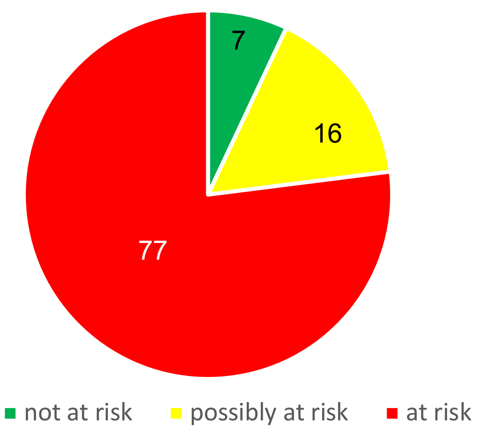


Figure 30. Measures aimed at reducing pollution by organic, biogenic and hazardous substances from point sources of pollution depending on the risk assessment of the SWB, %

8.1.2 Measures aimed at improving/restoring the hydrological regime and morphological indicators

27 measures aimed at improving/restoring the hydrological regime and morphological indicators in case of disruption of the free flow of rivers, hydraulic connection between river channels and their floodplains, hydrological changes, and modification of river morphology. Almost all of them are aimed at improving the ecological status of rivers and restoring their flow. When developing the measures, it was taken into account that the environmental objectives for the SWB are to maintain the "good" of 6 SWB and achieve "good status" for 21 SWB. Measures aimed at improving/restoring the hydrological regime and morphological indicators in case of disruption of the free flow of rivers, hydraulic connection between river channels and their floodplains, hydrological changes, modification of river morphology, depending on the risk assessment of the SWB, are presented in Fig. 30.

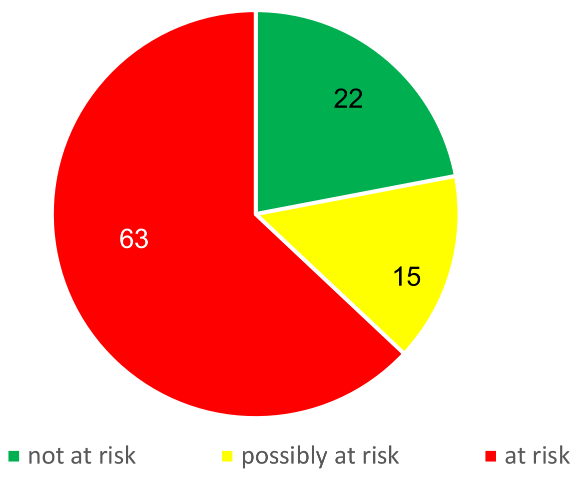


Figure 31. Measures aimed at improving/restoring the hydrological regime and morphological indicators in case of disruption of free flow of rivers, hydraulic connection between river channels and their floodplains, hydrological changes, modification of river morphology, depending on the assessment of SWB risks, %

To improve state accounting of water use, assessment of anthropogenic pressure and regulation of groundwater/surface water abstraction, analysis of hydrological changes, and real-time balancing, the programme includes the following measure: "Improvement of state accounting of water use in the Southern Bug basin within Khmelnytskyi, Vinnytsia, Kirovohrad, Kyiv, Mykolaiv, Odesa and Cherkasy oblasts" (#110, Annex 11). All water users in the basin are scheduled to install/upgrade water metering devices with online data transmission.

8.1.3. Planned infrastructure projects and measures to reduce their impact on surface water

The PoM does not include infrastructure projects and measures aimed at reducing their impact on surface water.

8.2 Groundwater

8.2.1 Measures to reduce pollution (diffuse and point sources)

It is mandatory to establish the boundaries of sanitary protection zones for groundwater intakes used for centralised water supply to the population, medical and recreational needs, indicate them in land management documentation, urban planning documentation at the local and regional levels, enter information on the relevant restrictions on land use in the State Land Cadastre and mark these boundaries on the ground with information signs. For groundwater abstractions with an extraction volume of more than 100 m^3/day within the sanitary protection zones and adjacent territories, water users shall set up a local network of observation wells to determine the amount of water and chemical and physicochemical parameters and provide observation data to the State Service of Geology and Subsoil of Ukraine.

Due to the cessation of groundwater monitoring since 2018, all measures are considered additional measures that relate not to a separate GWB, but to groundwater monitoring in general, namely

1) Inventory of the observation well network. The inventory is necessary to resume monitoring observations and assess the need to drill additional observation wells.

2) Based on the results of the inventory, wells requiring repair, remedial plugging or conservation will be identified.

3) For non-pressure GWB, it is advisable to arrange new observation points to characterise their quality status in areas with minimal anthropogenic impact on the quantitative and qualitative status of groundwater, including from point and diffuse sources.

8.2.2 Measures aimed at preventing groundwater depletion

At water intakes, where operational monitoring is carried out in accordance with the "Procedure for State Water Monitoring", it is necessary to reassess the operational groundwater reserves, which will allow for a more reliable assessment of the quantitative state of the GWB.

8.2.3 Planned infrastructure projects and measures to reduce their impact on surface water

The PoM does not include infrastructure projects and measures aimed at reducing their impact on ground water.

8.3 Other measures

Other measures include legislative and legal, administrative, fiscal, research and development, educational and awareness-raising, new technologies, environmental and communication, project, and other measures.

Other activities include awareness-raising activities for surface water, in particular, awareness-raising activities on the protection, conservation and restoration of water resources in all communities located in the Southern Bug basin. It is planned to hold the Wetlands Day (2 February), International Water Day (22 March), Southern Bug Day (22 May), and Clean Shores Day (third Saturday of September) annually. Research activities: "Improvement of the surface water quality control system in the cities of the Southern Bug River basin by installing indicative automatic observation stations" and "Improvement of the surface water quality control system in the Southern Bug River basin by installing reference automatic observation stations". Both measures are aimed at obtaining additional statistical data on the state of the basin's surface waters. Implementation by local executive authorities of local measures for the conservation, protection and restoration of water resources.

Analysis of the cost-effectiveness of the PoM

The cost-effectiveness analysis (CEA) was conducted only for the main measures.

The largest share of measures is aimed at reducing pollution of the SWB (87%). Some measures are aimed at addressing several SWMI. The vast majority of measures relate to settlements with a population of 10 to 100 thousand - there are 46 such measures (42%). These are measures in the administrative district centres of the seven basin oblasts. The number of measures for settlements with a population of 2.0 to 10.0 thousand is 45 (41%). 21 measures (9%) are planned for settlements with a population of more than 100,000, in particular in the cities of Khmelnytskyi, Vinnytsia, Kropyvnytskyi and Mykolaiv.

The measures envisaged in the Programme will be financed from the state and local budgets, as well as other sources not prohibited by law. Financing of these measures from the state budget shall be carried out within the expenditures provided for in the State Budget of Ukraine for the relevant year.

The total cost of the main measures for the period 2025-2030 is UAH 28,745 million, with an estimated UAH 7984 per capita (3.6 million people, 2020 data) (UAH 1,330 per year). The most costly measures are the reconstruction/modernisation of STPs and SN. For example, to implement the measure: "Reconstruction of sewerage networks and sewage treatment facilities of the "Vinnytsiaoblvodokanal" in Vinnytsia, Vinnytsia oblast" requires about UAH 8.5 billion.

Among the main measures, no measures with a very high level of efficiency were identified.

The group with a high level of efficiency includes 12 measures with a total cost of UAH 19,775 million (69%), 5 of which have a very high cost of over UAH 1 billion. Social impact is expected for 2011.07 thousand people. These measures are aimed at reducing pollution by organic, biogenic and hazardous substances (SWMI 1 - 3) from the largest cities of Khmelnytskyi, Vinnytsia, Kropyvnytskyi, Pervomaisk, Uman, Mykolaiv, Khmilnyk, Voznesensk, Zhmerynka, Haisyn and Talne. All the objects of the measures belong to the high-pressure water use sector (housing and communal services).

The group with an medium level of efficiency includes 64 measures with a total cost of UAH 7,552 million (26%). All measures in this group are primarily aimed at reducing pollution by organic, biogenic and hazardous substances (SWMI 1 - 3) from small towns and villages in the basin, including Yuzhnoukrainsk, Haivoron, Nova Odesa, Kalynivka, Nemyriv, Monastyryshche, Zvenyhorodka and Stavyshche. The social effect is 636 thousand people. According to the criteria of social effectiveness and cost-benefit balance, the measures are assessed as medium, low and very low and belong to the high-pressure water use sector - housing and communal services.

The group with a low level of effectiveness includes 26 measures with a total cost of UAH 1,373 million (4%), which have a social impact on 6,363 thousand people. The measures in this group are aimed at reducing pollution by organic, biogenic, and hazardous substances from point and diffuse sources (SWMI 1-3), and at improving/restoring the hydrological regime and morphological indicators in case of disruption of the free flow of rivers, hydraulic connection between river channels and their floodplains, hydrological changes, and modification of river morphology (SWMI 4), including the Southern Bug River. The balance of measures is characterised by a medium, low and very low level and belongs to the very low-pressure water use sector.

The group with a very low level of effectiveness includes 8 measures aimed at improving/restoring the hydrological regime and morphological indicators in case of disruption of the free flow of rivers, hydraulic connection between river channels and their floodplains, hydrological changes, and modification of river morphology (SWMI 4). UAH 43 million (less than 1%) is envisaged for the implementation of these measures and achievement of social effect for 17 thousand people, which corresponds to a very low level of efficiency. The economic sector's pressure on water resources is minimal and corresponds to the lowest score.

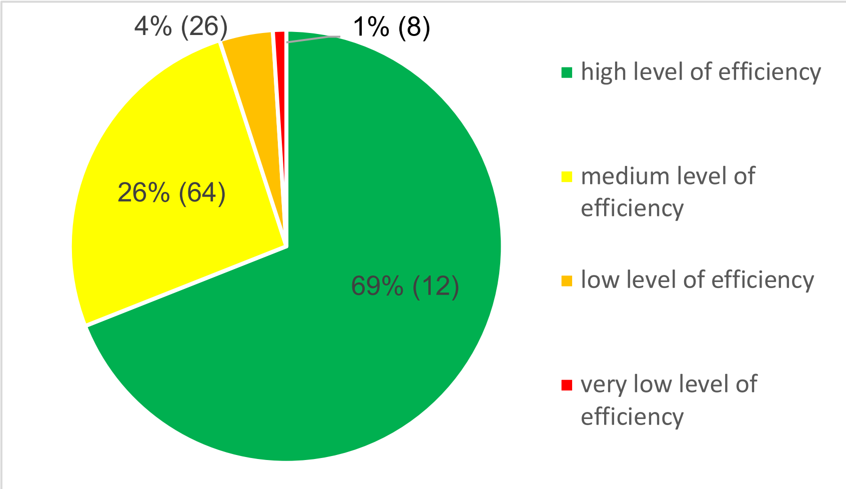


Figure 3Distribution of main measures with different levels of efficiency by total cost of measures (number of measures in brackets)

A detailed CEA of the measures is provided in Annex 12.

9 REPORT ON PUBLIC INFORMATION AND PUBLIC DISCUSSION OF THE DRAFT RIVER BASIN MANAGEMENT PLAN

The main requirements for the organisation and conduct of public consultations by executive authorities on the formation and implementation of state policy are set out in the Procedure approved by the Cabinet of Ministers of Ukraine on 3 November 2010, No. 996. In accordance with paragraph 5 of the Procedure, public consultations are organised and conducted by the executive body that is the main developer of the draft legal act. In accordance with paragraphs 11 and 12 of the Procedure, public consultations on draft regulatory legal acts that define strategic goals, priorities and objectives in the relevant area of public administration, affect the vital interests of citizens, including those that affect the state of the environment, are mandatory in the form of public discussion and/or electronic public consultations.

In accordance with the second paragraph of clause 7 of the Procedure for Developing a River Basin Management Plan, public discussion of the draft river basin management plan is conducted for at least six months from the date of their publication. In accordance with the first paragraph of clause 8-1, the public has the right to provide comments and suggestions on information on the main anthropogenic impacts on the quantitative and qualitative status of surface and groundwater, including point and diffuse sources, within six months from the date of their publication on the website of the Ministry of Ecology.

Consultations in the process of drafting the RBMP

The following information was made available to the public on the official website of the Southern Bug River Basin Water Resources Authority (BUVR): a schedule of the process of developing the draft Southern Bug RBMP; SWMI identified in the Southern Bug basin; and the draft Southern Bug RBMP, which as of the end of 2022 contained 7 sections.

The BUVR and Regional Water Resources Offices (ROVRs) located in the Southern Bug basin held regular working meetings with the Regional Military Administrations and their departments, departments of ecology and housing and communal services, territorial communities, enterprises, institutions and organisations on the development and implementation of the draft Southern Bug RBMP for 2025-2030. During 2022-2023, the Southern Bug BUVR held consultations on the SWMI of the Southern Bug basin and developed a full list of action programmes (plans) for the Southern Bug basin, their content and problems to be solved (PoM).

In order to timely prepare the draft RBMP for the Southern Bug River Basin, approved by the Order of the Ministry of Environmental Protection and Natural Resources of Ukraine No. 313 "Schedule for the Development of the Draft River Basin Management Plan for the Southern Bug River" dated 27 November 2020, and to implement the Orders of the State Agency of Water Resources of Ukraine No. 44 "On Approval of the Action Plan" dated 16 May 2022 and No. 1105 "On Development of Draft River Basin Management Plans" dated 18 December 2020, the Southern Bug BUVR together with the ROVRs prepared and sent letters to business entities providing water supply and sewerage services (water utilities), industrial enterprises, agricultural enterprises that discharge waste water into surface water bodies (SWB) of the Southern Bug basin with a request to submit their proposals to the PoM aimed at addressing the SWMI of this river basin.

In May 2023, a communication training was held for representatives of water utilities, regional military administrations and regional water resources offices in the Southern Bug basin. The main objective of the training was to address topical issues related to the preparation and inclusion of effective and practical PoM in the Southern Bug RBMP. Starting in 2020, the sections of the draft Southern Bug RBMP developed according to the schedule were gradually submitted for consideration and discussion by the Southern Bug Basin Council. At the meetings, members of the basin council had the opportunity to make comments, suggestions and additions to the draft RBMP. In particular, in August 2023, the basin council made several proposals to the presented PoM aimed at addressing the SWMI of the Southern Bug River Basin at its regular meeting.

Public consultation of the draft RBMP

The information notice on the public consultation of the draft RBMPs (2025-2030) and the draft RBMPs was published on the website of the SAWR on 21 December 2023 at the link: https://davr.gov.ua/informacijne-povidomlennya-pro-provedennya-publichnogo-gromadskogo-obgovorennya-proyektiv-planiv-upravlinnya-richkovimi-basejnami-20252030

Information on the start of public consultation of the draft RBMPs and the draft RBMPs was published on the website of the Ministry of Ecology on 25 December 2023 at the link: https://mepr.gov.ua/ukrayina-zavershyla-robotu-nad-9-proyektamy-planiv-upravlinnya-richkovymy-basejnamy-rozpochalosya-gromadske-obgovorennya/

According to the information published in the announcement of the public consultation of the draft RBMPs (2025-2030), comments and proposals in hard copy were accepted at the following address: State Agency of Water Resources of Ukraine, 8 Velyka Vasylkivska St., Kyiv, 01024, and in electronic form to the e-mail address rbmp@davr.gov.ua. The deadline for submitting comments and proposals to the draft RBMP was 21 June 2024.

As part of the public consultation, the SAWR, with the support of the EU4Environment project, initiated a series of public engagement activities, the schedule of which was announced on 28 February 2024 on the website at the link: https://davr.gov.ua/news/derzhvodagentstvo-iniciyuye-zahodi-iz-zaluchennya-gromadskosti-do-obgovorennya-proyektiv-purb

In particular, the invitation to public consultation of the draft Southern Bug RBMP was published on the website of the SAWR for everyone on 18 March 2014 https://davr.gov.ua/news/provedennya-publichnogo-gromadskogo-obgovorennya-proyektu-planu-upravlinnya-richkovim-basejnom-pivdennogo-bugu-20252030-roki

The Southern Bug BUVR has sent out invitations to water users, all territorial communities and other stakeholders. The invitation to the public consultation of the draft Southern Bug RBMP was also published on 12 March 2024 on the BUVR website at the link: https://buvrpb.davr.gov.ua/novyny/provedennia-publichnoho-hromadskoho-obhovorennia-proiektu-planu-upravlinnia-richkovym-baseinom-pivdennoho-buhu-2025-2030-roky

In order to present the results of the analysis of the status of SWB in the Southern Bug basin and the relevant PoM, 6 infographics were developed: basin location features; SWMI; chemical status of the SWB; hydromorphological changes; PoM; and how to join public discussions.

The infographics are published on the website of the SAWR at the link: https://davr.gov.ua/plan-upravlinnya-richkovim-basejnom-pivdennogo-bugu

On 21 March 2024, Vinnytsia hosted a public discussion of the draft Southern Bug RBMP. The event was attended by 62 participants, including representatives of government agencies, water management organisations, members of the basin council, representatives of local communities, water users, scientists, NGOs and stakeholders. The event presented the results of the analysis of the above-mentioned basin and the PoM, the vast majority of which relate to the construction or reconstruction of sewage treatment plants. This was followed by a discussion of the proposals and comments made by the participants to the draft RBMP. The results of the discussion are recorded in the Minutes (Annex 1 to the report on the results of the public consultation). Information about the event is available on the SAWR website https://davr.gov.ua/news/vidbulosya-publichne-gromadske-obgovorennya-proyektu-planu-upravlinnya-richkovim-basejnom-pivdennogo-bugu-

The report on the results of the public consultation will be posted on the website of the SAWR and on the website of the Ministry of Environment.

Strategic environmental assessment of the draft RBMP

The procedure for conducting a strategic environmental assessment (SEA) is set out in the Law of Ukraine "On Strategic Environmental Assessment" No. 2354-VIII dated 20 March 2018. Pursuant to Article 9(3)(1) of the Law, one of the stages of the SEA is public discussion and consultations in accordance with the procedure set out in Articles 12 and 13 of the Law, as well as transboundary consultations in accordance with the procedure set out in Article 14 of the Law. Pursuant to part nine of Article 12 of the Law, "based on the results of the public discussion, the customer shall prepare a certificate on public discussion, which summarises the comments and proposals received and indicates how the state planning document and the strategic environmental assessment report take into account the comments and proposals submitted in accordance with this article (or justify their rejection), and also justifies the selection of this particular state planning document in the form in which it is proposed for approval, among other justified al The certificate shall be accompanied by the minutes of public hearings (if held) and written comments and suggestions received. The certificate on public discussion is public information and is entered by the customer into the Unified Register of Strategic Environmental Assessment."

The certificate of public consultation of the draft RBMP will be entered by the SAWR into the Unified Register of Strategic Environmental Assessment together with the approved RBMP for the Southern Bug.

10 LIST OF COMPETENT STATE AUTHORITIES RESPONSIBLE FOR THE IMPLEMENTATION OF THE RIVER BASIN MANAGEMENT PLAN

According to part two of Article 13 of the Water Code of Ukraine, the CMU, the Council of Ministers of the Autonomous Republic of Crimea, village, town and city councils and their executive bodies, district and regional councils, executive authorities and other state bodies are responsible for public administration in the field of water use and protection and water resources restoration in accordance with the legislation of Ukraine.

The executive authorities in the field of water use and protection and water resources reproduction are the Ministry of Ecology, the SAWR, the State Geological Survey, the State Ecological Inspectorate and other bodies in accordance with the law.

Table 44 Executive authorities in the field of water use and protection and water resources restoration

Title	Address.	Official website address
Ministry of Environmental Protection and Natural Resources of Ukraine (MENR)	35, Metropolyt Vasyl Lypkivskyi St., Kyiv, 03035 tel.: (044) 206-31-00, (044) 206-31-15, fax: (044) 206-31-07, E-mail: info@mepr.gov.ua	www.mepr.gov.ua
State Agency of Water Resources of Ukraine (SAWR)	8 Velyka Vasylkivska St., Kyiv, 01024 tel./fax: (044) 235-31-92, tel. (044) 235-61-46 E-mail: davr@davr.gov.ua	www.davr.gov.ua
State Service of Geology and Mineral Resources of Ukraine (Derzhgeonadra)	16 Anton Tsedik St., Kyiv, 03057 tel: (044) 536-13-18 E-mail: office@geo.gov.ua	www.geo.gov.ua
State Environmental Inspectorate of Ukraine (SEI)	3, building 2, Novopecherskyi lane, Kyiv, 01042 tel./fax +38 (044) 521-20-40 tel: (044) 521-20-38 E-mail: info@dei.gov.ua	www.dei.gov.ua

Table 45 Main regulatory acts that define the powers of executive authorities in the field of water use and protection and water resources restoration

Name of the body	Legal act	Link on the official website of the Parliament of Ukraine
Ministry of Environmental Protection and Natural Resources of Ukraine (MENR)	The Water Code of Ukraine of 6 June 1995, No. 213/95-BP (Bulletin of the Verkhovna Rada of Ukraine (VVR), 1995, No. 24, p. 189) - Articles 15 and 15^1	https://zakon.rada.gov.ua/laws/show/213/95-%D0%B2%D1%80#Text
	Regulation on the Ministry of Environmental Protection and Natural Resources of Ukraine, approved by the Resolution of the Cabinet of Ministers of Ukraine of 25 June 2020, No. 614 (Official Gazette of Ukraine, 2020, No. 59, p. 32, Article 1853)	https://zakon.rada.gov.ua/laws/show/614-2020-%D0%BF#Text
State Agency of Water Resources of Ukraine (SAWR)	The Water Code of Ukraine of 6 June 1995, No. 213/95-BP (Bulletin of the Verkhovna Rada of Ukraine (VVR), 1995, No. 24, p. 189) - Article 16	https://zakon.rada.gov.ua/laws/show/213/95-%D0%B2%D1%80#Text

Name of the body	Legal act	Link on the official website of the Parliament of Ukraine
	Regulation on the State Agency of Water Resources of Ukraine, approved by the Resolution of the Cabinet of Ministers of Ukraine of 20 August 2014, No. 393 (Official Gazette of Ukraine, 2014, No. 71, p. 34, Article 1995)	https://zakon.rada.gov.ua/laws/show/393-2014-%D0%BF#Text
State Service of Geology and Mineral Resources of Ukraine (Derzhgeonadra)	The Water Code of Ukraine of 6 June 1995, No. 213/95-BP (Bulletin of the Verkhovna Rada of Ukraine (VVR), 1995, No. 24, p. 189) - Article 17	https://zakon.rada.gov.ua/laws/show/213/95-%D0%B2%D1%80#Text
	Regulation on the State Service of Geology and Subsoil of Ukraine, approved by the Resolution of the Cabinet of Ministers of Ukraine of 30 December 2015 No. 1174 (Official Gazette of Ukraine, 2016, No. 3, p. 284, Article 192)	https://zakon.rada.gov.ua/laws/show/1174-2015-%D0%BF#Text
State Environmental Inspectorate of Ukraine (SEI)	The Water Code of Ukraine of 6 June 1995, No. 213/95-BP (Bulletin of the Verkhovna Rada of Ukraine (VVR), 1995, No. 24, p. 189) - Article 15^2	https://zakon.rada.gov.ua/laws/show/213/95-%D0%B2%D1%80#Text
	Regulation on the State Environmental Inspectorate of Ukraine, approved by the Resolution of the Cabinet of Ministers of Ukraine of 19 April 2017, No. 275 (Official Gazette of Ukraine, 2017, No. 36, p. 73, Article 1131)	https://zakon.rada.gov.ua/laws/show/275-2017-%D0%BF#Text
	Regulations on Territorial and Interregional Territorial Bodies of the State Environmental Inspectorate, approved by the Order of the Ministry of Energy and Environmental Protection of Ukraine dated 07 April 2020 No. 230, registered with the Ministry of Justice of Ukraine on 16 April 2020 under No. 350/34633 (Official Gazette of Ukraine, 2020, No. 33, p. 25, Article 1116)	https://zakon.rada.gov.ua/laws/show/z0350-20#Text

In order to ensure the implementation of the state policy in the field of management, use and reproduction of surface water resources within the Southern Bug River Basin area, to direct and coordinate the activities of organisations under the management of the SAWR on the management, use and reproduction of surface water resources within the Southern Bug River Basin area, the SAWR established the Southern Bug River Basin Water Resources Management (BUVR).

Table 46 Contact details for the Southern Bug River BUVR

Name of the organisation	Address.	Telephone/fax	Email.	Website.
Southern Bug River Basin Water Resources Management	21100, 7 Vasyla Stusa Str., Vinnytsia	(0432) 52-09-00	buvrpb@davr.gov.ua	buvrpb.davr.gov.ua

The names of sub-basins and water management areas within river basin districts are given in the Annex to the Order of the Ministry of Ecology and Natural Resources of Ukraine No. 25 "On the Allocation of Sub-Basins and Water

Management Areas within Established River Basin Districts" dated 26 January 2017, registered with the Ministry of Justice of Ukraine on 14 February 2017 under No. 208/30076 (https://zakon.rada.gov.ua/laws/show/z0208-17#Text).

The boundaries of river basin districts, sub-basins and water management areas were approved by the Order of the Ministry of Ecology and Natural Resources of Ukraine No. 103 dated 03.03.2017, registered with the Ministry of Justice of Ukraine on 29 March 2017 under No. 421/30289 (https://zakon.rada.gov.ua/laws/show/z0421-17#Text).

The Pivdennyi Buh River Basin Management Authority is a budgetary non-profit organisation that belongs to the management of the SAWR. The Regulation on the Pivdennyi Buh River BUVR was approved by the Order of the State Agency of Ukraine for Water Resources dated 02.08.2023 No. 98 (https://drie.google.com/file/d/1gXv01oGz_TK0scfpRGhX91P9ZraMAHW9/view).

In order to develop proposals and ensure coordination of interests of enterprises, institutions and organisations in the field of water use and protection and water resources restoration within the Southern Bug River Basin area, to promote integrated water resources management within the Southern Bug River Basin area, to ensure coordination of interests and coordination of stakeholders' actions in water resources management within the Southern Bug River Basin area, to facilitate cooperation between central and local executive authorities, the organisation The Southern Bug River Basin Council is an advisory body of the SAWR within the Southern Bug River Basin area. The Regulation on the Southern Bug Basin Council was approved by the Order of SAWR dated 27.12.2018 No. 987 (https://buvrpb.davr.gov.ua/baseinova-rada/polozhennya-ta-sklad).

According to the List approved by Resolution of the CMU No. 1371 dated 13 September 2002 (as amended by Resolution of the CMU No. 1276 dated 30 November 2011) (https://zakon.rada.gov.ua/laws/show/1371-2002-%D0%BF#n38), the Ministry of Ecology and/or the SAWR are responsible for fulfilling international obligations in the field of water protection arising from Ukraine's membership in international organisations or in accordance with international treaties concluded by Ukraine.

11 PROCEDURE FOR OBTAINING INFORMATION, INCLUDING PRIMARY INFORMATION, ON THE STATE OF SURFACE AND GROUNDWATER

In order to ensure proper organization of access to public information, implementation of the Law of Ukraine “On Access to Public Information”, the Decree of the President of Ukraine of May 5, 2011, No. 547 “Issues of Providing Access to Public Information by Executive Authorities” (Official Gazette of Ukraine, 2011, No. 35, p. 14, p. 1433), resolutions of the CMU of May 25, 2011, No. 583 “Issues of Implementation of the Law of Ukraine ‘On Access to Public Information’ in the Secretariat of the CMU, central and local executive authorities” (Official Gazette of Ukraine, 2011, No. 41, p. 1694), of October 21, 2015, No. 835 “On Approval of the Regulation on Sets of Data to be Disclosed in the Form of Open Data” (Official Gazette of Ukraine, 2015, No. 85, p. 1450), No. 85, p. 2850), Order of the Ministry of Ecology and Natural Resources of Ukraine No. 793 of December 2, 2021 “On Approval of the Procedure for Compiling, Submitting and Processing Requests for Information Managed by the Ministry of Environmental Protection and Natural Resources of Ukraine, and Forms for Submitting Such Requests”, registered with the Ministry of Justice of Ukraine on February 1, 2022. No. 123/37459, approved the Procedure for Preparing, Submitting and Processing Requests for Information Managed by the Ministry of Environmental Protection and Natural Resources of Ukraine, a form for submitting a request for information in writing, a form for submitting a request for information by e-mail and a form for submitting a request for information by telephone.

To regulate the procedure for access to public information, the SAWR adopted Order No. 163 dated 08.12.2023 "On Certain Issues of Implementation of the Law of Ukraine "On Access to Public Information" in the SAWR".

In accordance with paragraphs 16-18 of the Procedure for State Water Monitoring, approved by Resolution of the Cabinet of Ministers of Ukraine No. 758 of 19 September 2018, the results of state water monitoring are:

- Primary information (observation data) provided by the subjects of state water monitoring;
- generalised data relating to a certain period of time or a certain territory;
- Assessment of the ecological and chemical state of surface water bodies, the ecological potential of artificial or significantly modified surface water bodies, the quantitative and chemical state of groundwater bodies, the ecological state of marine waters and identification of sources of negative impact on them;
- forecasts of water conditions and their changes;
- scientifically based recommendations necessary for making management decisions in the field of water use and protection and water resources reproduction.

Subjects of state water monitoring are obliged to store primary information (observation data) obtained as a result of state water monitoring for an indefinite period of time.

The information obtained and processed by the state water monitoring bodies is official.

Primary information (observation data), generalised data, assessment results, forecasts and recommendations resulting from the state water monitoring are provided free of charge:

- for SWBs (including coastal waters) - to the SAWR and the Ministry of Environment;
- for GWBs – to the State Service of Geology and Mineral Resources and the Ministry of Environment, as well as to the SAWR in terms of generalised data, assessment results and forecasts;
- for marine waters - the Ministry of Environment.

The subjects of state water monitoring shall exchange information with each other on the data and results of state water monitoring on a free-of-charge basis.

The SAWR collects and publishes information on the state of surface waters in the public domain by maintaining the following information resources:

- geoportal "State Water Cadastre: Accounting of Surface Water Bodies" (http://geoportal.davr.gov.ua:81/);
- the web-based system "Monitoring and Environmental Assessment of Water Resources of Ukraine" (http://monitoring.davr.gov.ua/EcoWaterMon/GDKMap/Index).

Automatic data exchange has been set up between these information resources and the Ministry of Ecology's EcoHazard resource.

ANNEXES

TO THE SOUTHERN BUG RIVER BASIN MANAGEMENT PLAN

2025-2030

Annex 1. List of identified SWBs in the Southern Bug RBD

The risk of not achieving the environmental objectives of the SWB: 1 – no risk, 2 – possibly at risk, 3 – at risk.

Linear SWBs

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Southern Bug	Black Sea	UA_R_16_S_2_Si	24,8	River	UA_M5.4_0001	1	1	1	1	1
Southern Bug	Southern Bug	Black Sea	UA_R_16_M_2_Si	23,0	River	UA_M5.4_0002	2	1	1	2	3
Southern Bug	Southern Bug	Black Sea	-	26,4	HMWB	UA_M5.4_0004	3	1	3	3	3
Southern Bug	Southern Bug	Black Sea	UA_R_16_L_2_Si	8,0	River	UA_M5.4_0005	1	2	1	2	3
Southern Bug	Southern Bug	Black Sea	UA_R_16_L_2_Si	6,0	River	UA_M5.4_0007	1	2	1	2	3
Southern Bug	Southern Bug	Black Sea	UA_R_16_L_2_Si	20,2	River	UA_M5.4_0010	1	1	1	1	1
Southern Bug	Southern Bug	Black Sea	UA_R_16_L_2_Si	28,2	River	UA_M5.4_0012	2	1	1	2	3
Southern Bug	Southern Bug	Black Sea	UA_R_16_XL_2_Si	50,0	River	UA_M5.4_0015	2	3	1	3	3
Southern Bug	Southern Bug	Black Sea	UA_R_16_XL_1_Si	20,1	River	UA_M5.4_0016	1	3	1	3	1
Southern Bug	Southern Bug	Black Sea	UA_R_16_XL_1_Si	20,1	River	UA_M5.4_0018	1	1	1	1	1
Southern Bug	Southern Bug	Black Sea	UA_R_16_XL_1_Si	4,3	River	UA_M5.4_0020	2	3	1	3	3
Southern Bug	Southern Bug	Black Sea	UA_R_12_XL_1_Si	9,3	River	UA_M5.4_0021	3	3	1	3	3
Southern Bug	Southern Bug	Black Sea	UA_R_12_XL_1_Si	71,9	River	UA_M5.4_0026	2	1	1	2	1
Southern Bug	Southern Bug	Black Sea	UA_R_12_XL_1_Si	147,4	River	UA_M5.4_0029	3	2	1	3	3
Southern Bug	Mshanets	Southern Bug	UA_R_16_S_2_Si	7,2	River	UA_M5.4_0030	1	1	1	1	1
Southern Bug	Mshanets	Southern Bug	-	1,6	HMWB	UA_M5.4_0031	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Mshanets	Southern Bug	UA_R_16_S_2_Si	2,4	River	UA_M5.4_0032	1	1	1	1	1
Southern Bug	Mshanets	Southern Bug	-	1,3	HMWB	UA_M5.4_0033	1	1	3	3	1
Southern Bug	Mshanets	Southern Bug	-	5,1	HMWB	UA_M5.4_0035	1	1	3	3	1
Southern Bug	Mshanets	Southern Bug	-	7,8	HMWB	UA_M5.4_0036	1	1	3	3	1
Southern Bug	Untitled	Mshanets	-	9,6	HMWB	UA_M5.4_0037	1	1	3	3	1
Southern Bug	Untitled	Mshanets	-	3,0	HMWB	UA_M5.4_0038	1	1	3	3	1
Southern Bug	Untitled	Mshanets	-	6,3	HMWB	UA_M5.4_0039	1	1	3	3	1
Southern Bug	Voitovina	Southern Bug	-	21,3	HMWB	UA_M5.4_0040	1	1	3	3	1
Southern Bug	Flat	Southern Bug	UA_R_16_S_2_Si	11,1	River	UA_M5.4_0041	1	1	1	1	1
Southern Bug	Flat	Southern Bug	-	1,3	HMWB	UA_M5.4_0042	1	1	3	3	1
Southern Bug	Flat	Southern Bug	UA_R_16_S_2_Si	4,0	River	UA_M5.4_0043	1	1	1	1	1
Southern Bug	Flat	Southern Bug	UA_R_16_S_2_Si	3,0	River	UA_M5.4_0045	2	1	1	2	1
Southern Bug	Flat	Southern Bug	-	8,4	HMWB	UA_M5.4_0046	2	1	3	3	1
Southern Bug	Male	Southern Bug	-	24,8	HMWB	UA_M5.4_0047	2	1	3	3	3
Southern Bug	Zinchitsa	Southern Bug	-	19,9	HMWB	UA_M5.4_0048	1	1	3	3	1
Southern Bug	Zinchitsa	Southern Bug	-	2,1	HMWB	UA_M5.4_0051	1	1	3	3	1
Southern Bug	Buzhok	Southern Bug	-	8,2	HMWB	UA_M5.4_0052	1	1	3	3	1
Southern Bug	Buzhok	Southern Bug	-	3,4	HMWB	UA_M5.4_0053	1	1	3	3	1
Southern Bug	Buzhok	Southern Bug	-	8,9	HMWB	UA_M5.4_0054	1	1	3	3	1
Southern Bug	Buzhok	Southern Bug	-	2,2	HMWB	UA_M5.4_0055	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Buzhok	Southern Bug	-	4,7	HMWB	UA_M5.4_0056	1	1	3	3	1
Southern Bug	Buzhok	Southern Bug	-	29,5	HMWB	UA_M5.4_0058	1	1	3	3	1
Southern Bug	Buzhok	Southern Bug	-	11,8	HMWB	UA_M5.4_0060	1	2	3	3	1
Southern Bug	Untitled	Buzhok	-	11,2	HMWB	UA_M5.4_0061	1	1	3	3	1
Southern Bug	Untitled	Buzhok	-	10,8	HMWB	UA_M5.4_0062	1	1	3	3	1
Southern Bug	Untitled	Buzhok	-	9,5	HMWB	UA_M5.4_0063	1	1	3	3	1
Southern Bug	Zobara	Buzhok	UA_R_16_S_2_Si	10,5	River	UA_M5.4_0064	1	1	1	1	1
Southern Bug	Untitled	Buzhok	-	17,1	HMWB	UA_M5.4_0065	1	1	3	3	1
Southern Bug	Wolf	Southern Bug	UA_R_16_S_2_Si	3,9	River	UA_M5.4_0066	1	1	1	1	1
Southern Bug	Wolf	Southern Bug	-	1,2	HMWB	UA_M5.4_0067	1	1	3	3	1
Southern Bug	Wolf	Southern Bug	-	2,7	HMWB	UA_M5.4_0068	1	1	3	3	1
Southern Bug	Wolf	Southern Bug	-	12,5	HMWB	UA_M5.4_0069	2	1	3	3	3
Southern Bug	Wolf	Southern Bug	-	49,5	HMWB	UA_M5.4_0070	2	1	3	3	3
Southern Bug	Wolf	Southern Bug	-	2,0	HMWB	UA_M5.4_0072	1	2	3	3	1
Southern Bug	Wolfberry	Wolf	-	20,1	HMWB	UA_M5.4_0073	1	1	3	3	1
Southern Bug	Wolfberry	Wolf	-	20,0	HMWB	UA_M5.4_0074	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	-	11,7	HMWB	UA_M5.4_0075	1	2	3	3	1
Southern Bug	Tarihva	Southern Bug	UA_R_16_S_2_Si	9,5	River	UA_M5.4_0076	1	2	1	2	1
Southern Bug	Kudinka	Southern Bug	UA_R_16_S_2_Si	24,4	River	UA_M5.4_0077	1	1	1	1	1
Southern Bug	Tesovka	Southern Bug	-	12,3	HMWB	UA_M5.4_0078	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Tesovka	Southern Bug	UA_R_16_M_2_Si	6,2	River	UA_M5.4_0079	1	2	1	2	1
Southern Bug	Untitled	Tesovka	-	14,2	HMWB	UA_M5.4_0080	1	2	3	3	1
Southern Bug	Caviar	Southern Bug	-	14,3	HMWB	UA_M5.4_0081	1	1	3	3	1
Southern Bug	Caviar	Southern Bug	-	5,9	HMWB	UA_M5.4_0083	1	1	3	3	1
Southern Bug	Caviar	Southern Bug	-	4,5	HMWB	UA_M5.4_0085	1	1	3	3	1
Southern Bug	Caviar	Southern Bug	-	6,2	HMWB	UA_M5.4_0086	1	1	3	3	1
Southern Bug	Caviar	Southern Bug	-	24,0	HMWB	UA_M5.4_0087	2	1	3	3	3
Southern Bug	Untitled	Caviar	-	11,1	HMWB	UA_M5.4_0088	1	1	3	3	1
Southern Bug	Untitled	Caviar	-	6,9	HMWB	UA_M5.4_0089	1	1	3	3	1
Southern Bug	Untitled	Caviar	-	3,1	HMWB	UA_M5.4_0091	1	1	3	3	1
Southern Bug	Fire	Southern Bug	-	11,7	HMWB	UA_M5.4_0092	2	1	3	3	3
Southern Bug	Fire	Southern Bug	UA_R_16_M_2_Si	7,8	River	UA_M5.4_0093	1	1	1	1	1
Southern Bug	Fire	Southern Bug	-	1,4	HMWB	UA_M5.4_0094	1	1	3	3	1
Southern Bug	Fire	Southern Bug	UA_R_16_M_2_Si	0,8	River	UA_M5.4_0095	1	1	1	1	1
Southern Bug	Big Ore (Tailings)	Southern Bug	-	17,6	HMWB	UA_M5.4_0096	1	1	3	3	1
Southern Bug	Big Ore (Tailings)	Southern Bug	UA_R_16_M_2_Si	7,6	River	UA_M5.4_0097	1	1	1	1	1
Southern Bug	Snivoda	Southern Bug	-	13,0	HMWB	UA_M5.4_0098	1	1	3	3	1
Southern Bug	Snivoda	Southern Bug	-	15,2	HMWB	UA_M5.4_0099	1	1	3	3	1
Southern Bug	Snivoda	Southern Bug	UA_R_16_M_2_Si	2,4	River	UA_M5.4_0101	1	1	1	1	1
Southern Bug	Snivoda	Southern Bug	UA_R_16_M_2_Si	2,4	River	UA_M5.4_0103	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Snivoda	Southern Bug	-	4,4	HMWB	UA_M5.4_0105	1	1	3	3	1
Southern Bug	Snivoda	Southern Bug	-	8,8	HMWB	UA_M5.4_0107	1	1	3	3	1
Southern Bug	Salnytska	Snivoda	-	19,2	HMWB	UA_M5.4_0108	1	1	3	3	1
Southern Bug	Vytkhla	Snivoda	-	9,6	HMWB	UA_M5.4_0109	1	1	3	3	1
Southern Bug	Vytkhla	Snivoda	UA_R_16_M_2_Si	8,3	River	UA_M5.4_0110	1	1	1	1	1
Southern Bug	Untitled	Snivoda	-	13,4	HMWB	UA_M5.4_0111	1	1	3	3	1
Southern Bug	Untitled	Snivoda	UA_R_16_S_2_Si	13,7	River	UA_M5.4_0112	1	1	1	1	1
Southern Bug	Untitled	Snivoda	-	11,3	HMWB	UA_M5.4_0113	1	1	3	3	1
Southern Bug	Postolova	Southern Bug	-	14,6	HMWB	UA_M5.4_0114	1	1	3	3	1
Southern Bug	Postolova	Southern Bug	UA_R_16_M_2_Si	4,3	River	UA_M5.4_0115	1	1	1	1	1
Southern Bug	Postolova	Southern Bug	-	3,3	HMWB	UA_M5.4_0117	1	1	3	3	3
Southern Bug	Postolova	Southern Bug	-	11,2	HMWB	UA_M5.4_0119	1	1	3	3	3
Southern Bug	Untitled	Postolova	-	18,3	HMWB	UA_M5.4_0120	1	1	3	3	1
Southern Bug	Ulasova Ore yard	Postolova	-	18,6	HMWB	UA_M5.4_0121	1	1	3	3	1
Southern Bug	Ulasova Ore Yard	Postolova	-	4,5	HMWB	UA_M5.4_0122	1	1	3	3	1
Southern Bug	Zgar	Southern Bug	-	14,2	HMWB	UA_M5.4_0123	1	1	3	3	1
Southern Bug	Zgar	Southern Bug	-	6,3	HMWB	UA_M5.4_0125	1	2	3	3	1
Southern Bug	Zgar	Southern Bug	-	36,9	HMWB	UA_M5.4_0126	1	2	3	3	1
Southern Bug	Zgar	Southern Bug	-	30,4	HMWB	UA_M5.4_0128	2	1	3	3	1
Southern Bug	Zgar	Southern Bug	UA_R_16_L_2_Si	3,3	River	UA_M5.4_0129	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Zgar	Southern Bug	-	2,9	HMWB	UA_M5.4_0130	1	1	3	3	1
Southern Bug	Zgar	Southern Bug	UA_R_16_L_2_Si	10,0	River	UA_M5.4_0131	1	1	1	1	1
Southern Bug	Zagarok	Zgar	-	16,7	HMWB	UA_M5.4_0132	1	1	3	3	1
Southern Bug	Zagarok	Zgar	-	2,7	HMWB	UA_M5.4_0133	1	2	3	3	1
Southern Bug	Untitled	Zgar	UA_R_16_S_2_Si	19,6	River	UA_M5.4_0134	1	1	1	1	1
Southern Bug	Untitled	Zgar	UA_R_16_M_2_Si	5,7	River	UA_M5.4_0135	1	1	1	1	1
Southern Bug	Untitled	Zgar	-	11,5	HMWB	UA_M5.4_0136	1	1	3	3	3
Southern Bug	Hump	Zgar	-	18,2	HMWB	UA_M5.4_0137	1	1	3	3	3
Southern Bug	Zagarok	Zgar	-	15,1	HMWB	UA_M5.4_0138	1	1	3	3	1
Southern Bug	Zagarok	Zgar	-	24,4	HMWB	UA_M5.4_0139	1	1	3	3	1
Southern Bug	Zagarok	Zgar	UA_R_16_M_2_Si	5,1	River	UA_M5.4_0141	1	1	1	1	1
Southern Bug	Gum	Southern Bug	-	13,1	HMWB	UA_M5.4_0142	1	1	3	3	1
Southern Bug	Gum	Southern Bug	UA_R_16_M_2_Si	1,8	River	UA_M5.4_0143	1	1	1	1	1
Southern Bug	Gum	Southern Bug	-	1,1	HMWB	UA_M5.4_0145	1	1	3	3	1
Southern Bug	Gum	Southern Bug	UA_R_16_M_2_Si	29,0	River	UA_M5.4_0147	1	1	1	1	1
Southern Bug	Gum	Southern Bug	-	2,7	HMWB	UA_M5.4_0149	2	1	3	3	3
Southern Bug	Gum	Southern Bug	UA_R_16_L_2_Si	10,6	River	UA_M5.4_0150	1	1	1	1	1
Southern Bug	Gum	Southern Bug	-	3,2	HMWB	UA_M5.4_0151	1	1	3	3	3
Southern Bug	Gum	Southern Bug	UA_R_16_L_2_Si	13,2	River	UA_M5.4_0152	1	2	1	2	1
Southern Bug	Untitled	Gum	-	8,2	HMWB	UA_M5.4_0153	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Gum	-	1,4	HMWB	UA_M5.4_0154	1	1	3	3	3
Southern Bug	Untitled	Gum	UA_R_16_S_2_Si	3,7	River	UA_M5.4_0155	1	1	1	1	1
Southern Bug	Untitled	Gum	-	3,4	HMWB	UA_M5.4_0156	1	1	3	3	1
Southern Bug	Untitled	Gum	-	8,8	HMWB	UA_M5.4_0157	1	1	3	3	1
Southern Bug	Untitled	Gum	-	1,1	HMWB	UA_M5.4_0158	1	1	3	3	1
Southern Bug	Untitled	Gum	-	1,1	HMWB	UA_M5.4_0159	1	1	3	3	3
Southern Bug	Untitled	Gum	-	3,3	HMWB	UA_M5.4_0160	1	1	3	3	1
Southern Bug	Untitled	Gum	-	1,6	HMWB	UA_M5.4_0161	1	1	3	3	1
Southern Bug	Untitled	Gum	UA_R_16_S_2_Si	0,5	River	UA_M5.4_0162	1	1	1	1	1
Southern Bug	Untitled	Gum	-	5,5	HMWB	UA_M5.4_0163	1	1	3	3	1
Southern Bug	Untitled	Gum	-	0,9	HMWB	UA_M5.4_0164	1	1	3	3	1
Southern Bug	Untitled	Gum	UA_R_16_S_2_Si	3,5	River	UA_M5.4_0165	1	1	1	1	1
Southern Bug	Untitled	Gum	-	1,0	HMWB	UA_M5.4_0166	1	1	3	3	3
Southern Bug	Untitled	Gum	UA_R_16_S_2_Si	1,0	River	UA_M5.4_0167	1	1	1	1	1
Southern Bug	Untitled	Gum	-	5,2	HMWB	UA_M5.4_0168	1	1	3	3	3
Southern Bug	Untitled	Gum	-	1,4	HMWB	UA_M5.4_0169	1	1	3	3	1
Southern Bug	Untitled	Gum	-	8,2	HMWB	UA_M5.4_0170	1	1	3	3	1
Southern Bug	Alder	Gum	-	15,8	HMWB	UA_M5.4_0171	1	1	3	3	1
Southern Bug	Alder	Gum	-	11,9	HMWB	UA_M5.4_0172	1	1	3	3	3
Southern Bug	Stables (Desenka)	Gum	UA_R_16_S_2_Si	12,8	River	UA_M5.4_0173	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Stables (Desenka)	Gum	-	1,3	HMWB	UA_M5.4_0174	1	1	3	3	1
Southern Bug	Stables (Desenka)	Gum	UA_R_16_M_2_Si	13,2	River	UA_M5.4_0175	1	1	1	1	1
Southern Bug	Untitled	Stables (Desenka)	UA_R_12_S_2_Si	0,5	River	UA_M5.4_0176	1	1	1	1	1
Southern Bug	Untitled	Stables (Desenka)	UA_R_16_S_2_Si	14,3	River	UA_M5.4_0177	1	1	1	1	1
Southern Bug	Untitled	Stables (Desenka)	-	9,6	HMWB	UA_M5.4_0178	2	2	3	3	1
Southern Bug	Untitled	Stables (Desenka)	-	1,2	HMWB	UA_M5.4_0179	1	2	3	3	1
Southern Bug	Untitled	Stables (Desenka)	-	4,5	HMWB	UA_M5.4_0180	1	1	3	3	1
Southern Bug	Pole	Gum	-	22,9	HMWB	UA_M5.4_0181	2	1	3	3	3
Southern Bug	Pole	Gum	UA_R_16_M_2_Si	0,4	River	UA_M5.4_0182	1	1	1	1	3
Southern Bug	Periorca	Southern Bug	-	14,1	HMWB	UA_M5.4_0183	1	2	3	3	3
Southern Bug	Winnie the Pooh	Southern Bug	-	14,9	HMWB	UA_M5.4_0184	2	2	3	3	3
Southern Bug	Cherry	Southern Bug	-	16,5	HMWB	UA_M5.4_0185	2	2	3	3	1
Southern Bug	Cherry	Southern Bug	-	6,3	HMWB	UA_M5.4_0186	2	2	3	3	1
Southern Bug	Rovets	Southern Bug	-	24,7	HMWB	UA_M5.4_0187	1	1	3	3	1
Southern Bug	Rovets	Southern Bug	-	15,4	HMWB	UA_M5.4_0188	1	2	3	3	3
Southern Bug	Ditch	Southern Bug	-	11,4	HMWB	UA_M5.4_0189	1	1	3	3	1
Southern Bug	Ditch	Southern Bug	-	6,3	HMWB	UA_M5.4_0191	1	1	3	3	1
Southern Bug	Ditch	Southern Bug	-	11,3	HMWB	UA_M5.4_0192	1	1	3	3	3
Southern Bug	Ditch	Southern Bug	UA_R_16_M_2_Si	3,9	River	UA_M5.4_0194	1	1	1	1	3
Southern Bug	Ditch	Southern Bug	UA_R_16_M_2_Si	6,3	River	UA_M5.4_0196	1	1	1	1	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Ditch	Southern Bug	-	5,2	HMWB	UA_M5.4_0198	1	1	3	3	3
Southern Bug	Ditch	Southern Bug	UA_R_16_M_2_Si	6,9	River	UA_M5.4_0200	1	1	1	1	1
Southern Bug	Ditch	Southern Bug	UA_R_16_M_2_Si	6,2	River	UA_M5.4_0202	1	1	1	1	1
Southern Bug	Ditch	Southern Bug	UA_R_16_M_2_Si	2,6	River	UA_M5.4_0204	1	1	1	1	1
Southern Bug	Ditch	Southern Bug	UA_R_16_L_2_Si	23,3	River	UA_M5.4_0206	1	1	1	1	1
Southern Bug	Scoop	Ditch	-	17,4	HMWB	UA_M5.4_0207	1	1	3	3	3
Southern Bug	Scoop	Ditch	-	8,0	HMWB	UA_M5.4_0208	1	1	3	3	1
Southern Bug	Scoop	Ditch	-	5,0	HMWB	UA_M5.4_0210	1	1	3	3	1
Southern Bug	Untitled	Scoop	-	12,7	HMWB	UA_M5.4_0211	1	1	3	3	3
Southern Bug	Untitled	Ditch	UA_R_16_S_2_Si	12,4	River	UA_M5.4_0212	1	1	1	1	1
Southern Bug	Untitled	Ditch	-	1,4	HMWB	UA_M5.4_0213	1	1	3	3	3
Southern Bug	Untitled	Ditch	-	3,9	HMWB	UA_M5.4_0214	1	1	3	3	3
Southern Bug	Opinion.	Ditch	UA_R_16_S_2_Si	10,8	River	UA_M5.4_0215	1	1	1	1	1
Southern Bug	Opinion.	Ditch	-	5,4	HMWB	UA_M5.4_0216	1	1	3	3	3
Southern Bug	Opinion.	Ditch	-	0,1	HMWB	UA_M5.4_0217	1	1	3	3	1
Southern Bug	Opinion.	Ditch	-	7,7	HMWB	UA_M5.4_0218	1	1	3	3	1
Southern Bug	Untitled	Ditch	-	17,3	HMWB	UA_M5.4_0219	1	1	3	3	3
Southern Bug	Untitled	Southern Bug	UA_R_16_S_2_Si	16,1	River	UA_M5.4_0220	1	1	1	1	1
Southern Bug	Baran	Southern Bug	UA_R_16_S_2_Si	11,6	River	UA_M5.4_0221	3	1	1	3	3
Southern Bug	Baran	Southern Bug	UA_R_16_M_2_Si	6,6	River	UA_M5.4_0222	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Kudashivka	Southern Bug	UA_R_16_S_2_Si	8,3	River	UA_M5.4_0223	1	2	1	2	3
Southern Bug	Untitled	Southern Bug	-	11,7	HMWB	UA_M5.4_0224	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_16_M_2_Si	11,1	River	UA_M5.4_0225	2	1	1	2	1
Southern Bug	Untitled	Southern Bug	-	1,5	HMWB	UA_M5.4_0226	1	2	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_16_M_2_Si	1,9	River	UA_M5.4_0227	1	2	1	2	1
Southern Bug	Whip	Funnel	-	10,4	HMWB	UA_M5.4_0228	2	2	3	3	1
Southern Bug	Whip	Funnel	-	1,7	HMWB	UA_M5.4_0229	1	2	3	3	1
Southern Bug	Whip	Funnel	-	2,3	HMWB	UA_M5.4_0230	1	2	3	3	1
Southern Bug	Whip	Funnel	UA_R_16_M_2_Si	3,3	River	UA_M5.4_0231	1	2	1	2	1
Southern Bug	Krasnyanka	Southern Bug	-	9,1	HMWB	UA_M5.4_0232	1	2	3	3	3
Southern Bug	Krasnyanka	Southern Bug	-	21,2	HMWB	UA_M5.4_0233	1	2	3	3	1
Southern Bug	Untitled	Krasnyanka	-	12,6	HMWB	UA_M5.4_0234	1	2	3	3	1
Southern Bug	Untitled	Krasnyanka	UA_R_16_M_2_Si	9,6	River	UA_M5.4_0235	1	2	1	2	1
Southern Bug	Roof tiles	Southern Bug	-	21,4	HMWB	UA_M5.4_0236	1	3	3	3	3
Southern Bug	Roof tiles	Southern Bug	-	14,3	HMWB	UA_M5.4_0237	1	3	3	3	1
Southern Bug	Roof tiles	Southern Bug	UA_R_16_M_1_Si	2,2	River	UA_M5.4_0238	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	UA_R_16_S_2_Si	9,0	River	UA_M5.4_0239	1	3	1	3	1
Southern Bug	Untitled	Southern Bug	-	2,6	HMWB	UA_M5.4_0240	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	-	12,8	HMWB	UA_M5.4_0241	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_16_M_2_Si	15,1	River	UA_M5.4_0242	2	1	1	2	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Southern Bug	-	3,4	HMWB	UA_M5.4_0243	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	-	1,2	HMWB	UA_M5.4_0244	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_16_M_1_Si	2,9	River	UA_M5.4_0245	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	UA_R_12_S_2_Si	1,0	River	UA_M5.4_0246	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	-	14,1	HMWB	UA_M5.4_0247	1	1	3	3	3
Southern Bug	Untitled	Southern Bug	UA_R_16_S_1_Si	6,1	River	UA_M5.4_0248	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	UA_R_12_S_2_Si	0,5	River	UA_M5.4_0249	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	UA_R_16_S_2_Si	16,2	River	UA_M5.4_0250	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	UA_R_16_M_1_Si	9,7	River	UA_M5.4_0251	1	1	1	1	1
Southern Bug	Yazovets	Southern Bug	UA_R_16_S_2_Si	3,6	River	UA_M5.4_0252	1	1	1	1	1
Southern Bug	Yazovets	Southern Bug	UA_R_16_S_1_Si	4,7	River	UA_M5.4_0253	1	1	1	1	3
Southern Bug	Selnytsia	Southern Bug	-	20,1	HMWB	UA_M5.4_0254	1	3	3	3	3
Southern Bug	Selnytsia	Southern Bug	-	8,8	HMWB	UA_M5.4_0255	2	3	3	3	1
Southern Bug	Selnytsia	Southern Bug	UA_R_16_M_1_Si	0,7	River	UA_M5.4_0256	1	3	1	3	3
Southern Bug	Selnytsia	Southern Bug	-	8,0	HMWB	UA_M5.4_0258	3	3	3	3	3
Southern Bug	Selnytsia	Southern Bug	UA_R_16_M_1_Si	11,8	River	UA_M5.4_0260	1	3	1	3	1
Southern Bug	Selnytsia	Southern Bug	-	11,9	HMWB	UA_M5.4_0261	1	3	3	3	1
Southern Bug	Selnytsia	Southern Bug	UA_R_16_M_1_Si	6,3	River	UA_M5.4_0262	2	3	1	3	1
Southern Bug	Tulchinka	Selnytsia	UA_R_16_S_2_Si	13,5	River	UA_M5.4_0263	2	3	1	3	1
Southern Bug	Tulchinka	Selnytsia	UA_R_16_S_1_Si	1,6	River	UA_M5.4_0264	2	3	1	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Selnytsia	-	13,1	HMWB	UA_M5.4_0265	3	3	3	3	1
Southern Bug	Untitled	Selnytsia	-	8,5	HMWB	UA_M5.4_0266	2	3	3	3	1
Southern Bug	Untitled	Selnytsia	-	0,9	HMWB	UA_M5.4_0267	1	3	3	3	1
Southern Bug	Untitled	Selnytsia	-	3,9	HMWB	UA_M5.4_0269	1	3	3	3	1
Southern Bug	Untitled	No name (right tributary of the Szilnytsia)	-	17,1	HMWB	UA_M5.4_0270	1	3	3	3	3
Southern Bug	Untitled	No name (right tributary of Silnytsia)	-	3,8	HMWB	UA_M5.4_0271	1	3	3	3	3
Southern Bug	Untitled	Selnytsia	-	13,1	HMWB	UA_M5.4_0272	1	3	3	3	1
Southern Bug	Untitled	Selnytsia	-	5,8	HMWB	UA_M5.4_0273	1	3	3	3	1
Southern Bug	Untitled	Selnytsia	UA_R_16_M_1_Si	1,0	River	UA_M5.4_0274	1	3	1	3	1
Southern Bug	Sob	Southern Bug	-	20,4	HMWB	UA_M5.4_0275	1	1	3	3	1
Southern Bug	Sob	Southern Bug	-	18,9	HMWB	UA_M5.4_0276	2	1	3	3	1
Southern Bug	Sob	Southern Bug	UA_R_12_M_2_Si	0,2	River	UA_M5.4_0278	2	1	1	2	3
Southern Bug	Sob	Southern Bug	UA_R_12_M_1_Si	10,7	River	UA_M5.4_0279	3	1	1	3	3
Southern Bug	Sob	Southern Bug	UA_R_12_L_1_Si	2,7	River	UA_M5.4_0280	1	1	1	1	1
Southern Bug	Sob	Southern Bug	-	2,3	HMWB	UA_M5.4_0281	1	1	3	3	3
Southern Bug	Sob	Southern Bug	UA_R_12_L_1_Si	52,2	River	UA_M5.4_0282	2	1	1	2	3
Southern Bug	Sob	Southern Bug	UA_R_12_L_1_Si	2,6	River	UA_M5.4_0284	1	3	1	3	1
Southern Bug	Untitled	Sob	-	16,3	HMWB	UA_M5.4_0285	1	1	3	3	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Horse	Sob	-	12,3	HMWB	UA_M5.4_0286	1	1	3	3	3
Southern Bug	Poganka	Sob	UA_R_12_S_2_Si	22,2	River	UA_M5.4_0287	1	1	1	1	1
Southern Bug	Kamenka	Sob	-	9,8	HMWB	UA_M5.4_0288	1	1	3	3	3
Southern Bug	Shirokaya Ruda	Sob	UA_R_12_S_2_Si	11,5	River	UA_M5.4_0289	1	1	1	1	1
Southern Bug	Untitled	Sob	UA_R_12_S_2_Si	9,9	River	UA_M5.4_0290	1	1	1	1	1
Southern Bug	Sobik	Sob	-	11,8	HMWB	UA_M5.4_0291	1	1	3	3	3
Southern Bug	Sobik	Sob	-	21,4	HMWB	UA_M5.4_0292	1	1	3	3	3
Southern Bug	Untitled	Sobik	-	15,7	HMWB	UA_M5.4_0293	1	1	3	3	3
Southern Bug	Untitled	Sobik	-	17,0	HMWB	UA_M5.4_0294	1	1	3	3	1
Southern Bug	Untitled	Sobik	-	16,2	HMWB	UA_M5.4_0295	1	1	3	3	1
Southern Bug	Neminka	Sob	-	13,8	HMWB	UA_M5.4_0296	2	1	3	3	3
Southern Bug	Neminka	Sob	-	2,2	HMWB	UA_M5.4_0297	1	1	3	3	3
Southern Bug	Satorichka	Sob	-	9,9	HMWB	UA_M5.4_0298	1	1	3	3	3
Southern Bug	Satorichka	Sob	UA_R_12_S_1_Si	2,4	River	UA_M5.4_0299	1	1	1	1	1
Southern Bug	Slice	Sob	-	14,0	HMWB	UA_M5.4_0300	1	1	3	3	3
Southern Bug	Slice	Sob	UA_R_12_S_1_Si	2,4	River	UA_M5.4_0301	1	1	1	1	1
Southern Bug	Kalnika	Sob	UA_R_12_S_2_Si	11,2	River	UA_M5.4_0302	1	1	1	1	1
Southern Bug	Kalnika	Sob	UA_R_12_S_1_Si	3,9	River	UA_M5.4_0303	1	1	1	1	1
Southern Bug	Untitled	Sob	-	9,1	HMWB	UA_M5.4_0304	1	1	3	3	3
Southern Bug	Untitled	Sob	-	2,4	HMWB	UA_M5.4_0305	1	1	3	3	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Sob	-	1,4	HMWB	UA_M5.4_0306	1	1	3	3	3
Southern Bug	Untitled	Sob	-	0,9	HMWB	UA_M5.4_0307	1	1	3	3	3
Southern Bug	Untitled	Sob	UA_R_12_M_1_Si	2,3	River	UA_M5.4_0308	1	1	1	1	1
Southern Bug	Forty	Sob	-	12,8	HMWB	UA_M5.4_0309	1	2	3	3	3
Southern Bug	Forty	Sob	-	3,2	HMWB	UA_M5.4_0310	1	1	3	3	3
Southern Bug	Forty	Sob	-	5,0	HMWB	UA_M5.4_0311	1	1	3	3	3
Southern Bug	Forty	Sob	-	5,6	HMWB	UA_M5.4_0312	1	1	3	3	1
Southern Bug	Forty	Sob	-	8,3	HMWB	UA_M5.4_0314	1	1	3	3	3
Southern Bug	Untitled	Forty	-	11,4	HMWB	UA_M5.4_0315	1	3	3	3	1
Southern Bug	Untitled	Forty	-	2,2	HMWB	UA_M5.4_0316	1	1	3	3	3
Southern Bug	Untitled	Forty	-	7,1	HMWB	UA_M5.4_0317	1	1	3	3	1
Southern Bug	Untitled	Forty	-	1,7	HMWB	UA_M5.4_0318	1	1	3	3	3
Southern Bug	Untitled	Forty	-	6,6	HMWB	UA_M5.4_0319	1	1	3	3	3
Southern Bug	Squirrel	Sob	-	8,6	HMWB	UA_M5.4_0320	1	1	3	3	3
Southern Bug	Squirrel	Sob	UA_R_12_S_1_Si	2,3	River	UA_M5.4_0321	1	1	1	1	1
Southern Bug	Squirrel	Sob	-	1,3	HMWB	UA_M5.4_0322	1	1	3	3	1
Southern Bug	Squirrel	Sob	UA_R_12_S_1_Si	2,2	River	UA_M5.4_0323	1	1	1	1	1
Southern Bug	Verbych	Sob	-	9,1	HMWB	UA_M5.4_0324	1	1	3	3	3
Southern Bug	Verbych	Sob	-	2,9	HMWB	UA_M5.4_0325	1	1	3	3	1
Southern Bug	Verbych	Sob	-	8,5	HMWB	UA_M5.4_0326	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Kiblych	Sob	-	18,3	HMWB	UA_M5.4_0327	1	3	3	3	3
Southern Bug	Kiblych	Sob	-	11,5	HMWB	UA_M5.4_0328	1	2	3	3	2
Southern Bug	Kiblych	Sob	-	36,9	HMWB	UA_M5.4_0329	1	2	3	3	1
Southern Bug	Untitled	Kiblych	UA_R_12_S_2_Si	14,7	River	UA_M5.4_0330	1	2	1	2	1
Southern Bug	Popov Yarok	Kiblych	-	10,7	HMWB	UA_M5.4_0331	1	1	3	3	1
Southern Bug	Popov Yarok	Kiblych	UA_R_12_S_1_Si	0,7	River	UA_M5.4_0332	1	2	1	2	1
Southern Bug	Untitled	Sob	UA_R_12_S_2_Si	4,9	River	UA_M5.4_0333	2	1	1	2	1
Southern Bug	Untitled	Sob	-	1,1	HMWB	UA_M5.4_0334	1	1	3	3	3
Southern Bug	Untitled	Sob	UA_R_12_S_2_Si	1,7	River	UA_M5.4_0335	1	1	1	1	1
Southern Bug	Untitled	Sob	-	12,2	HMWB	UA_M5.4_0336	1	1	3	3	3
Southern Bug	Trostyanets	Southern Bug	-	12,2	HMWB	UA_M5.4_0337	1	3	3	3	1
Southern Bug	Trostyanets	Southern Bug	UA_R_12_S_1_Si	6,0	River	UA_M5.4_0338	1	3	1	3	1
Southern Bug	Trostyanets	Southern Bug	UA_R_12_M_1_Si	2,2	River	UA_M5.4_0339	1	3	1	3	3
Southern Bug	Trostyanets	Southern Bug	-	1,8	HMWB	UA_M5.4_0340	1	3	3	3	3
Southern Bug	Trostyanets	Southern Bug	UA_R_12_M_1_Si	2,5	River	UA_M5.4_0341	1	3	1	3	3
Southern Bug	Trostyanets	Southern Bug	-	2,7	HMWB	UA_M5.4_0342	2	3	3	3	3
Southern Bug	Trostyanets	Southern Bug	-	18,7	HMWB	UA_M5.4_0343	2	3	3	3	3
Southern Bug	Untitled	Southern Bug	UA_R_12_S_2_Si	5,9	River	UA_M5.4_0344	1	2	1	2	1
Southern Bug	Untitled	Southern Bug	-	16,2	HMWB	UA_M5.4_0345	1	2	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_12_S_2_Si	5,6	River	UA_M5.4_0346	1	2	1	2	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Southern Bug	-	7,1	HMWB	UA_M5.4_0347	1	2	3	3	3
Southern Bug	Untitled	Southern Bug	UA_R_12_M_1_Si	3,0	River	UA_M5.4_0348	1	2	1	2	1
Southern Bug	Untitled	Southern Bug	-	1,2	HMWB	UA_M5.4_0349	1	2	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_12_M_1_Si	2,5	River	UA_M5.4_0350	1	2	1	2	1
Southern Bug	Untitled	Southern Bug	-	2,0	HMWB	UA_M5.4_0351	1	2	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_12_M_1_Si	3,8	River	UA_M5.4_0352	1	2	1	2	1
Southern Bug	Untitled	Southern Bug	-	1,2	HMWB	UA_M5.4_0353	1	2	3	3	3
Southern Bug	Untitled	Southern Bug	UA_R_12_M_1_Si	0,7	River	UA_M5.4_0354	1	2	1	2	1
Southern Bug	Udych	Southern Bug	-	8,6	HMWB	UA_M5.4_0355	3	3	3	3	1
Southern Bug	Udych	Southern Bug	UA_R_12_S_1_Si	2,4	River	UA_M5.4_0356	1	3	1	3	3
Southern Bug	Udych	Southern Bug	-	48,7	HMWB	UA_M5.4_0357	1	2	3	3	1
Southern Bug	Velikaya Stinka	Udych	-	8,8	HMWB	UA_M5.4_0358	1	3	3	3	1
Southern Bug	Velikaya Stinka	Udych	UA_R_12_S_1_Si	7,1	River	UA_M5.4_0359	1	2	1	2	3
Southern Bug	Udych	Udych	UA_R_12_S_2_Si	4,4	River	UA_M5.4_0360	1	2	1	2	1
Southern Bug	Udych	Udych	-	8,4	HMWB	UA_M5.4_0361	1	2	3	3	1
Southern Bug	Ternivka	Udych	UA_R_12_S_2_Si	2,3	River	UA_M5.4_0362	1	2	1	2	1
Southern Bug	Ternivka	Udych	-	15,3	HMWB	UA_M5.4_0363	1	2	3	3	1
Southern Bug	Ternivka	Udych	-	0,7	HMWB	UA_M5.4_0364	1	2	3	3	1
Southern Bug	Greenhouse	Udych	UA_R_12_S_2_Si	5,5	River	UA_M5.4_0365	1	2	1	2	1
Southern Bug	Greenhouse	Udych	UA_R_12_S_1_Si	3,3	River	UA_M5.4_0366	1	2	1	2	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Greenhouse	Udych	-	0,9	HMWB	UA_M5.4_0367	1	2	3	3	1
Southern Bug	Greenhouse	Udych	UA_R_12_S_1_Si	4,9	River	UA_M5.4_0368	1	2	1	2	3
Southern Bug	Greenhouse	Udych	-	1,3	HMWB	UA_M5.4_0369	1	2	3	3	3
Southern Bug	Greenhouse	Udych	-	3,7	HMWB	UA_M5.4_0370	1	2	3	3	3
Southern Bug	Untitled	Udych	UA_R_12_S_2_Si	2,7	River	UA_M5.4_0371	1	2	1	2	1
Southern Bug	Untitled	Udych	UA_R_12_S_1_Si	12,6	River	UA_M5.4_0372	1	2	1	2	1
Southern Bug	Untitled	Udych	UA_R_12_S_2_Si	4,4	River	UA_M5.4_0373	1	2	1	2	3
Southern Bug	Untitled	Udych	-	5,8	HMWB	UA_M5.4_0374	1	2	3	3	1
Southern Bug	Untitled	Udych	-	1,3	HMWB	UA_M5.4_0375	1	2	3	3	1
Southern Bug	Untitled	Udych	UA_R_12_S_1_Si	10,5	River	UA_M5.4_0376	1	2	1	2	3
Southern Bug	Doha	Southern Bug	-	2,8	HMWB	UA_M5.4_0377	1	1	3	3	3
Southern Bug	Doha	Southern Bug	-	3,8	HMWB	UA_M5.4_0378	1	1	3	3	1
Southern Bug	Doha	Southern Bug	-	4,8	HMWB	UA_M5.4_0379	1	3	3	3	3
Southern Bug	Doha	Southern Bug	-	2,5	HMWB	UA_M5.4_0380	1	3	3	3	3
Southern Bug	Doha	Southern Bug	-	27,8	HMWB	UA_M5.4_0381	1	3	3	3	3
Southern Bug	Doha	Southern Bug	-	4,7	HMWB	UA_M5.4_0384	1	2	3	3	1
Southern Bug	Doha	Southern Bug	-	2,9	HMWB	UA_M5.4_0385	1	2	3	3	1
Southern Bug	Doha	Southern Bug	-	12,8	HMWB	UA_M5.4_0386	1	2	3	3	1
Southern Bug	Krynytsia-Vyazovaya	Doha	UA_R_12_S_2_Ca	6,1	River	UA_M5.4_0387	1	3	1	3	1
Southern Bug	Krynytsia-Vyazovaya	Doha	UA_R_12_S_2_Si	1,6	River	UA_M5.4_0388	1	1	1	1	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Krynytsia-Vyazovaya	Doha	UA_R_12_S_1_Si	7,7	River	UA_M5.4_0389	1	1	1	1	3
Southern Bug	Berladinka	Doha	-	11,9	HMWB	UA_M5.4_0390	1	1	3	3	1
Southern Bug	Berladinka	Doha	-	1,6	HMWB	UA_M5.4_0391	1	1	3	3	1
Southern Bug	Berladinka	Doha	-	5,0	HMWB	UA_M5.4_0392	1	3	3	3	1
Southern Bug	Berladinka	Doha	-	4,3	HMWB	UA_M5.4_0393	1	3	3	3	1
Southern Bug	Berladinka	Doha	-	39,3	HMWB	UA_M5.4_0394	2	3	3	3	1
Southern Bug	Untitled	Berladinka	UA_R_12_S_2_Si	5,7	River	UA_M5.4_0395	1	1	1	1	1
Southern Bug	Untitled	Berladinka	-	1,3	HMWB	UA_M5.4_0396	1	1	3	3	1
Southern Bug	Untitled	Berladinka	UA_R_12_S_2_Si	0,6	River	UA_M5.4_0397	1	1	1	1	1
Southern Bug	Untitled	Berladinka	-	1,0	HMWB	UA_M5.4_0398	1	1	3	3	1
Southern Bug	Untitled	Berladinka	UA_R_12_S_2_Si	5,0	River	UA_M5.4_0399	1	1	1	1	1
Southern Bug	Untitled	Berladinka	UA_R_12_S_1_Si	8,9	River	UA_M5.4_0400	1	3	1	3	1
Southern Bug	Untitled	Berladinka	-	2,9	HMWB	UA_M5.4_0401	1	3	3	3	1
Southern Bug	Untitled	Berladinka	-	8,3	HMWB	UA_M5.4_0402	2	1	3	3	3
Southern Bug	Untitled	Berladinka	-	1,4	HMWB	UA_M5.4_0403	1	1	3	3	1
Southern Bug	Untitled	Berladinka	UA_R_12_S_2_Si	2,7	River	UA_M5.4_0404	1	1	1	1	1
Southern Bug	Untitled	Berladinka	UA_R_12_S_1_Si	1,9	River	UA_M5.4_0405	1	1	1	1	1
Southern Bug	Untitled	Berladinka	UA_R_12_M_1_Si	2,3	River	UA_M5.4_0406	1	3	1	3	3
Southern Bug	Untitled	Berladinka	-	1,0	HMWB	UA_M5.4_0407	1	3	3	3	1
Southern Bug	Untitled	Berladinka	UA_R_12_M_1_Si	4,9	River	UA_M5.4_0408	1	3	1	3	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Berladinka	-	2,8	HMWB	UA_M5.4_0409	1	3	3	3	1
Southern Bug	Untitled	Berladinka	-	7,2	HMWB	UA_M5.4_0410	1	3	3	3	3
Southern Bug	Osiivka	Southern Bug	-	15,2	HMWB	UA_M5.4_0411	1	2	3	3	1
Southern Bug	Tashlychka	Southern Bug	-	2,7	HMWB	UA_M5.4_0412	1	2	3	3	1
Southern Bug	Tashlychka	Southern Bug	-	15,2	HMWB	UA_M5.4_0413	1	2	3	3	1
Southern Bug	Tashlychka	Southern Bug	UA_R_12_M_1_Si	1,9	River	UA_M5.4_0414	1	2	1	2	1
Southern Bug	Tashlychka	Southern Bug	-	1,3	HMWB	UA_M5.4_0415	1	2	3	3	1
Southern Bug	Tashlychka	Southern Bug	UA_R_12_M_1_Si	2,4	River	UA_M5.4_0416	1	2	1	2	1
Southern Bug	Tashlychka	Southern Bug	UA_R_12_M_1_Si	1,6	River	UA_M5.4_0417	1	2	1	2	1
Southern Bug	Tashlychka	Southern Bug	UA_R_12_M_1_Si	3,7	River	UA_M5.4_0418	1	2	1	2	3
Southern Bug	Road	Tashlychka	-	0,8	HMWB	UA_M5.4_0419	1	2	3	3	1
Southern Bug	Road	Tashlychka	-	13,8	HMWB	UA_M5.4_0420	1	2	3	3	1
Southern Bug	Dark	Tashlychka	UA_R_12_S_2_Si	1,5	River	UA_M5.4_0421	1	2	1	2	1
Southern Bug	Dark	Tashlychka	-	10,2	HMWB	UA_M5.4_0422	1	1	3	3	1
Southern Bug	Dark	Tashlychka	-	2,3	HMWB	UA_M5.4_0423	1	2	3	3	1
Southern Bug	Dark	Tashlychka	-	2,1	HMWB	UA_M5.4_0424	1	2	3	3	1
Southern Bug	Dark	Tashlychka	UA_R_12_M_1_Si	6,5	River	UA_M5.4_0425	1	2	1	2	1
Southern Bug	Moschona	Tashlychka	UA_R_12_S_1_Si	14,3	River	UA_M5.4_0426	1	2	1	2	1
Southern Bug	Untitled	Southern Bug	UA_R_12_S_1_Si	12,8	River	UA_M5.4_0427	1	2	1	2	1
Southern Bug	Savranka	Southern Bug	UA_R_12_S_2_Si	1,2	River	UA_M5.4_0428	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Savranka	Southern Bug	UA_R_12_S_2_Ca	1,4	River	UA_M5.4_0429	1	1	1	1	1
Southern Bug	Savranka	Southern Bug	-	10,8	HMWB	UA_M5.4_0430	1	1	3	3	1
Southern Bug	Savranka	Southern Bug	-	2,9	HMWB	UA_M5.4_0431	1	1	3	3	1
Southern Bug	Savranka	Southern Bug	-	46,0	HMWB	UA_M5.4_0432	2	1	3	3	1
Southern Bug	Savranka	Southern Bug	-	8,9	HMWB	UA_M5.4_0434	1	2	3	3	3
Southern Bug	Savranka	Southern Bug	UA_R_12_L_1_Si	28,2	River	UA_M5.4_0435	2	2	1	2	1
Southern Bug	Untitled	Savranka	UA_R_12_S_1_Si	11,9	River	UA_M5.4_0436	1	1	1	1	1
Southern Bug	Untitled	Savranka	-	18,9	HMWB	UA_M5.4_0437	1	1	3	3	1
Southern Bug	Untitled	Savranka	-	3,1	HMWB	UA_M5.4_0438	1	1	3	3	1
Southern Bug	Untitled	Savranka	-	15,1	HMWB	UA_M5.4_0439	1	1	3	3	1
Southern Bug	Untitled	Savranka	-	6,1	HMWB	UA_M5.4_0440	1	1	3	3	3
Southern Bug	Untitled	Savranka	-	19,9	HMWB	UA_M5.4_0441	1	1	3	3	3
Southern Bug	Untitled	Savranka	-	11,5	HMWB	UA_M5.4_0442	1	2	3	3	3
Southern Bug	Untitled	Savranka	-	2,0	HMWB	UA_M5.4_0443	1	2	3	3	3
Southern Bug	Untitled	Savranka	-	22,6	HMWB	UA_M5.4_0444	1	2	3	3	1
Southern Bug	Jalanec	Savranka	-	13,2	HMWB	UA_M5.4_0445	1	2	3	3	1
Southern Bug	Jalanec	Savranka	-	10,2	HMWB	UA_M5.4_0446	1	2	3	3	1
Southern Bug	Jalanec	Savranka	-	4,7	HMWB	UA_M5.4_0448	1	2	3	3	1
Southern Bug	Jalanec	Savranka	UA_R_12_M_1_Si	19,1	River	UA_M5.4_0450	1	1	1	1	1
Southern Bug	Untitled	Jalanec	UA_R_12_S_1_Si	10,4	River	UA_M5.4_0451	1	2	1	2	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Jalanec	-	1,0	HMWB	UA_M5.4_0452	1	2	3	3	3
Southern Bug	Untitled	Jalanec	UA_R_12_S_1_Si	3,5	River	UA_M5.4_0453	1	2	1	2	3
Southern Bug	Untitled	Southern Bug	-	22,8	HMWB	UA_M5.4_0454	1	2	3	3	1
Southern Bug	Titmouse	Southern Bug	-	13,8	HMWB	UA_M5.4_0455	1	2	3	3	1
Southern Bug	Titmouse	Southern Bug	-	5,4	HMWB	UA_M5.4_0456	1	1	3	3	1
Southern Bug	Titmouse	Southern Bug	-	36,7	HMWB	UA_M5.4_0457	1	1	3	3	1
Southern Bug	Titmouse	Southern Bug	-	2,5	HMWB	UA_M5.4_0458	1	1	3	3	1
Southern Bug	Titmouse	Southern Bug	UA_R_12_M_1_Si	12,5	River	UA_M5.4_0459	1	1	1	1	1
Southern Bug	Titmouse	Southern Bug	-	9,6	HMWB	UA_M5.4_0461	1	1	3	3	1
Southern Bug	Untitled	Titmouse	UA_R_12_S_1_Si	15,6	River	UA_M5.4_0462	1	1	1	1	1
Southern Bug	Untitled	Titmouse	UA_R_12_M_1_Si	0,4	River	UA_M5.4_0463	1	1	1	1	1
Southern Bug	Untitled	Titmouse	-	18,2	HMWB	UA_M5.4_0464	1	1	3	3	1
Southern Bug	Untitled	Titmouse	UA_R_12_S_1_Si	16,4	River	UA_M5.4_0465	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	-	8,5	HMWB	UA_M5.4_0466	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	-	1,1	HMWB	UA_M5.4_0467	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	-	4,7	HMWB	UA_M5.4_0468	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_12_S_1_Si	6,5	River	UA_M5.4_0469	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	-	1,3	HMWB	UA_M5.4_0470	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	UA_R_12_S_1_Si	0,9	River	UA_M5.4_0471	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	-	1,1	HMWB	UA_M5.4_0472	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Southern Bug	UA_R_12_S_1_Si	3,8	River	UA_M5.4_0473	1	1	1	1	1
Southern Bug	Moldovan	Southern Bug	UA_R_12_S_1_Si	12,9	River	UA_M5.4_0474	1	1	1	1	1
Southern Bug	Moldovan	Southern Bug	UA_R_12_M_1_Si	2,8	River	UA_M5.4_0475	1	1	1	1	1
Southern Bug	Moldovan	Southern Bug	-	1,4	HMWB	UA_M5.4_0476	1	1	3	3	1
Southern Bug	Moldovan	Southern Bug	UA_R_12_M_1_Si	1,7	River	UA_M5.4_0477	1	1	1	1	1
Southern Bug	Moldovan	Southern Bug	-	1,3	HMWB	UA_M5.4_0478	1	1	3	3	1
Southern Bug	Moldovan	Southern Bug	UA_R_12_M_1_Si	2,6	River	UA_M5.4_0479	1	1	1	1	1
Southern Bug	Secretary	Southern Bug	UA_R_12_S_1_Si	22,3	River	UA_M5.4_0480	1	1	1	1	1
Southern Bug	Secretary	Southern Bug	-	3,1	HMWB	UA_M5.4_0481	1	1	3	3	1
Southern Bug	Secretary	Southern Bug	UA_R_12_M_1_Si	6,1	River	UA_M5.4_0482	1	1	1	1	1
Southern Bug	Untitled	Southern Bug	-	5,9	HMWB	UA_M5.4_0483	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	-	2,6	HMWB	UA_M5.4_0484	1	1	3	3	1
Southern Bug	Untitled	Southern Bug	-	6,1	HMWB	UA_M5.4_0485	1	1	3	3	1
Southern Bug	Derenyukha	Southern Bug	UA_R_12_S_1_Si	3,8	River	UA_M5.4_0486	1	1	1	1	1
Southern Bug	Derenyukha	Southern Bug	-	1,1	HMWB	UA_M5.4_0487	1	1	3	3	1
Southern Bug	Derenyukha	Southern Bug	UA_R_12_S_1_Si	9,2	River	UA_M5.4_0488	1	1	1	1	1
Southern Bug	Derenyukha	Southern Bug	UA_R_12_M_1_Si	12,5	River	UA_M5.4_0489	1	1	1	1	1
Southern Bug	Kodyma	Southern Bug	-	11,2	HMWB	UA_M5.4_0490	1	2	3	3	1
Southern Bug	Kodyma	Southern Bug	-	2,1	HMWB	UA_M5.4_0491	1	2	3	3	1
Southern Bug	Kodyma	Southern Bug	-	33,7	HMWB	UA_M5.4_0492	3	2	3	3	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Kodyma	Southern Bug	-	18,3	HMWB	UA_M5.4_0494	1	2	3	3	1
Southern Bug	Kodyma	Southern Bug	-	6,4	HMWB	UA_M5.4_0495	1	2	3	3	1
Southern Bug	Kodyma	Southern Bug	UA_R_12_L_1_Si	74,6	River	UA_M5.4_0497	2	1	1	2	1
Southern Bug	Untitled	Kodyma	UA_R_12_S_1_Si	11,4	River	UA_M5.4_0498	1	2	1	2	1
Southern Bug	Untitled	Kodyma	-	11,4	HMWB	UA_M5.4_0499	1	2	3	3	3
Southern Bug	Gedziliv Yar	Kodyma	-	4,6	HMWB	UA_M5.4_0500	1	1	3	3	1
Southern Bug	Gedziliv Yar	Kodyma	-	26,1	HMWB	UA_M5.4_0501	1	1	3	3	1
Southern Bug	Untitled	Gedziliv Yar	UA_R_12_S_1_Si	12,0	River	UA_M5.4_0502	1	1	1	1	1
Southern Bug	Blue	Southern Bug	UA_R_12_XL_1_Si	4,0	River	UA_M5.4_0505	1	2	1	2	1
Southern Bug	Blue	Southern Bug	-	20,0	HMWB	UA_M5.4_0507	1	1	3	3	1
Southern Bug	Tikich	Blue	UA_R_16_L_1_Si	3,5	River	UA_M5.4_0508	1	1	1	1	1
Southern Bug	Gorny Tikich	Tikich	-	13,9	HMWB	UA_M5.4_0509	1	1	3	3	1
Southern Bug	Gorny Tikich	Tikich	-	0,6	HMWB	UA_M5.4_0510	1	1	3	3	1
Southern Bug	Gorny Tikich	Tikich	-	2,5	HMWB	UA_M5.4_0512	1	1	3	3	3
Southern Bug	Gorny Tikich	Tikich	UA_R_16_M_1_Si	4,0	River	UA_M5.4_0513	1	1	1	1	1
Southern Bug	Gorny Tikich	Tikich	UA_R_16_M_1_Si	32,7	River	UA_M5.4_0515	1	2	1	2	1
Southern Bug	Gorny Tikich	Tikich	UA_R_16_L_1_Si	12,7	River	UA_M5.4_0516	1	3	1	3	3
Southern Bug	Gorny Tikich	Tikich	UA_R_16_L_1_Si	31,3	River	UA_M5.4_0518	1	2	1	2	3
Southern Bug	Gorny Tikich	Tikich	UA_R_16_L_1_Si	20,0	River	UA_M5.4_0520	1	2	1	2	1
Southern Bug	Gorny Tikich	Tikich	UA_R_16_L_1_Si	30,3	River	UA_M5.4_0522	2	1	1	2	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Gorny Tikich	UA_R_16_S_2_Si	7,5	River	UA_M5.4_0523	1	1	1	1	1
Southern Bug	Untitled	Gorny Tikich	-	1,2	HMWB	UA_M5.4_0524	1	1	3	3	1
Southern Bug	Untitled	Gorny Tikich	-	0,9	HMWB	UA_M5.4_0525	1	1	3	3	1
Southern Bug	Untitled	Gorny Tikich	-	1,2	HMWB	UA_M5.4_0526	1	1	3	3	1
Southern Bug	Untitled	Gorny Tikich	UA_R_16_S_1_Si	1,4	River	UA_M5.4_0527	1	1	1	1	1
Southern Bug	Gnily Tikich stream	Gorny Tikich	UA_R_16_S_2_Si	12,7	River	UA_M5.4_0528	1	1	1	1	1
Southern Bug	Gnily Tikich stream	Gorny Tikich	-	1,1	HMWB	UA_M5.4_0529	1	1	3	3	1
Southern Bug	Gnily Tikich stream	Gorny Tikich	UA_R_16_S_2_Si	5,0	River	UA_M5.4_0530	1	1	1	1	1
Southern Bug	Gnily Tikich stream	Gorny Tikich	-	2,4	HMWB	UA_M5.4_0531	1	1	3	3	1
Southern Bug	Gnily Tikich stream	Gorny Tikich	-	2,7	HMWB	UA_M5.4_0532	1	1	3	3	3
Southern Bug	Rotten Tikich	Gorny Tikich	-	11,2	HMWB	UA_M5.4_0533	1	1	3	3	3
Southern Bug	Rotten Tikich	Gorny Tikich	UA_R_16_S_1_Si	1,8	River	UA_M5.4_0534	1	1	1	1	1
Southern Bug	Rotten Tikich	Gorny Tikich	-	6,6	HMWB	UA_M5.4_0535	1	2	3	3	3
Southern Bug	Rye	Gorny Tikich	-	9,6	HMWB	UA_M5.4_0536	1	3	3	3	3
Southern Bug	Rye	Gorny Tikich	-	7,6	HMWB	UA_M5.4_0537	1	3	3	3	3
Southern Bug	Konelka	Gorny Tikich	-	11,6	HMWB	UA_M5.4_0538	2	1	3	3	3
Southern Bug	Konelka	Gorny Tikich	UA_R_16_M_2_Si	3,4	River	UA_M5.4_0539	1	1	1	1	3
Southern Bug	Konelka	Gorny Tikich	-	2,3	HMWB	UA_M5.4_0540	1	1	3	3	1
Southern Bug	Konelka	Gorny Tikich	UA_R_16_M_1_Si	15,7	River	UA_M5.4_0541	1	3	1	3	3
Southern Bug	Konelka	Gorny Tikich	-	3,8	HMWB	UA_M5.4_0542	1	3	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Konelka	Gorny Tikich	-	1,5	HMWB	UA_M5.4_0543	1	3	3	3	3
Southern Bug	Konelka	Gorny Tikich	-	11,4	HMWB	UA_M5.4_0544	1	3	3	3	3
Southern Bug	Untitled	Konelka	-	11,8	HMWB	UA_M5.4_0545	1	3	3	3	3
Southern Bug	Untitled	Konelka	-	1,9	HMWB	UA_M5.4_0546	1	1	3	3	1
Southern Bug	Untitled	Konelka	UA_R_16_S_2_Si	1,1	River	UA_M5.4_0547	1	1	1	1	1
Southern Bug	Ruda stream	Konelka	-	15,9	HMWB	UA_M5.4_0548	1	3	3	3	3
Southern Bug	Ruda stream	Konelka	-	7,7	HMWB	UA_M5.4_0549	1	3	3	3	3
Southern Bug	Ruda Stream	Konelka	UA_R_16_M_1_Si	0,7	River	UA_M5.4_0550	1	3	1	3	3
Southern Bug	Untitled	Konelka	-	9,7	HMWB	UA_M5.4_0551	1	1	3	3	3
Southern Bug	Untitled	Konelka	-	2,2	HMWB	UA_M5.4_0552	1	1	3	3	3
Southern Bug	Untitled	Konelka	UA_R_16_S_2_Si	1,1	River	UA_M5.4_0553	1	1	1	1	1
Southern Bug	Untitled	Konelka	UA_R_16_S_1_Si	1,7	River	UA_M5.4_0554	1	1	1	1	1
Southern Bug	Torch	Gorny Tikich	-	15,2	HMWB	UA_M5.4_0555	1	2	3	3	1
Southern Bug	Torch	Gorny Tikich	-	1,7	HMWB	UA_M5.4_0556	1	3	3	3	3
Southern Bug	Torch	Gorny Tikich	-	15,9	HMWB	UA_M5.4_0557	1	3	3	3	3
Southern Bug	Litvinka	Torch	-	7,9	HMWB	UA_M5.4_0558	3	3	3	3	3
Southern Bug	Litvinka	Torch	-	4,2	HMWB	UA_M5.4_0559	1	3	3	3	3
Southern Bug	Burti	Gorny Tikich	-	5,6	HMWB	UA_M5.4_0560	1	2	3	3	1
Southern Bug	Burti	Gorny Tikich	UA_R_16_M_1_Si	13,9	River	UA_M5.4_0561	1	3	1	3	3
Southern Bug	Teterovka	Burti	-	6,4	HMWB	UA_M5.4_0562	1	3	3	3	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Teterovka	Burti	-	7,4	HMWB	UA_M5.4_0563	1	3	3	3	1
Southern Bug	Silver	Gorny Tikich	-	5,7	HMWB	UA_M5.4_0564	1	3	3	3	1
Southern Bug	Silver	Gorny Tikich	-	5,9	HMWB	UA_M5.4_0565	1	2	3	3	1
Southern Bug	Silver	Gorny Tikich	-	2,5	HMWB	UA_M5.4_0566	1	3	3	3	1
Southern Bug	Silver	Gorny Tikich	UA_R_16_S_1_Si	3,3	River	UA_M5.4_0567	1	2	1	2	1
Southern Bug	Silver	Gorny Tikich	UA_R_16_M_1_Si	1,7	River	UA_M5.4_0568	1	2	1	2	1
Southern Bug	Subsistence	Silver	UA_R_16_S_2_Si	2,7	River	UA_M5.4_0569	1	1	1	1	1
Southern Bug	Subsistence	Silver	-	2,1	HMWB	UA_M5.4_0570	1	1	3	3	3
Southern Bug	Subsistence	Silver	-	3,6	HMWB	UA_M5.4_0571	1	1	3	3	1
Southern Bug	Subsistence	Silver	-	4,8	HMWB	UA_M5.4_0572	1	1	3	3	3
Southern Bug	Baghwa	Silver	-	5,3	HMWB	UA_M5.4_0573	1	1	3	3	1
Southern Bug	Baghwa	Silver	-	2,0	HMWB	UA_M5.4_0574	1	1	3	3	3
Southern Bug	Baghwa	Silver	-	4,9	HMWB	UA_M5.4_0575	1	2	3	3	1
Southern Bug	Tassel	Gorny Tikich	UA_R_16_S_2_Si	0,8	River	UA_M5.4_0576	1	1	1	1	1
Southern Bug	Tassel	Gorny Tikich	UA_R_16_S_1_Si	11,7	River	UA_M5.4_0577	1	1	1	1	1
Southern Bug	Kishchikha	Gorny Tikich	-	6,8	HMWB	UA_M5.4_0578	1	2	3	3	1
Southern Bug	Kishchikha	Gorny Tikich	-	8,8	HMWB	UA_M5.4_0579	1	2	3	3	3
Southern Bug	Kishchikha	Gorny Tikich	-	10,0	HMWB	UA_M5.4_0580	1	2	3	3	1
Southern Bug	Mankivka	Kishchikha	UA_R_16_S_2_Si	4,9	River	UA_M5.4_0581	1	2	1	2	1
Southern Bug	Mankivka	Kishchikha	-	11,8	HMWB	UA_M5.4_0582	1	2	3	3	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Kishchikha	UA_R_16_S_2_Si	4,1	River	UA_M5.4_0583	1	2	1	2	1
Southern Bug	Untitled	Kishchikha	-	7,5	HMWB	UA_M5.4_0584	1	2	3	3	3
Southern Bug	б. Duck	Kishchikha	UA_R_16_S_2_Si	1,5	River	UA_M5.4_0585	1	2	1	2	1
Southern Bug	б. Duck	Kishchikha	-	9,5	HMWB	UA_M5.4_0586	1	2	3	3	1
Southern Bug	Popovka	Kishchikha	-	2,6	HMWB	UA_M5.4_0587	1	2	3	3	1
Southern Bug	Popovka	Kishchikha	-	14,6	HMWB	UA_M5.4_0588	1	2	3	3	1
Southern Bug	Romanivka	Gorny Tikich	-	1,3	HMWB	UA_M5.4_0589	1	2	3	3	1
Southern Bug	Romanivka	Gorny Tikich	-	13,6	HMWB	UA_M5.4_0590	1	2	3	3	3
Southern Bug	Berinka	Gorny Tikich	UA_R_16_S_2_Si	3,5	River	UA_M5.4_0591	1	1	1	1	1
Southern Bug	Berinka	Gorny Tikich	-	14,8	HMWB	UA_M5.4_0592	1	1	3	3	1
Southern Bug	Makszyboloto	Gorny Tikich	-	3,3	HMWB	UA_M5.4_0593	1	1	3	3	3
Southern Bug	Makszyboloto	Gorny Tikich	UA_R_16_S_1_Si	14,7	River	UA_M5.4_0594	1	1	1	1	1
Southern Bug	Makszyboloto	Gorny Tikich	-	2,6	HMWB	UA_M5.4_0595	1	1	3	3	3
Southern Bug	Makszyboloto	Gorny Tikich	-	11,3	HMWB	UA_M5.4_0596	1	1	3	3	3
Southern Bug	Maksibolitsky	Makszyboloto	UA_R_16_S_2_Si	2,2	River	UA_M5.4_0597	1	1	1	1	1
Southern Bug	Maksibolitsky	Makszyboloto	-	7,1	HMWB	UA_M5.4_0598	1	1	3	3	1
Southern Bug	Maksibolitsky	Makszyboloto	-	1,6	HMWB	UA_M5.4_0599	1	1	3	3	1
Southern Bug	Maksibolitsky	Makszyboloto	UA_R_16_S_1_Si	6,0	River	UA_M5.4_0600	1	1	1	1	1
Southern Bug	Untitled	Makszyboloto	-	1,2	HMWB	UA_M5.4_0601	1	1	3	3	1
Southern Bug	Untitled	Makszyboloto	-	15,1	HMWB	UA_M5.4_0602	1	1	3	3	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Moshchuriv	Gorny Tikich	-	2,9	HMWB	UA_M5.4_0603	1	1	3	3	1
Southern Bug	Moshchuriv	Gorny Tikich	UA_R_16_S_1_Si	12,9	River	UA_M5.4_0604	1	1	1	1	1
Southern Bug	Talnyanka	Gorny Tikich	UA_R_16_S_2_Si	1,8	River	UA_M5.4_0605	1	2	1	2	1
Southern Bug	Talnyanka	Gorny Tikich	UA_R_16_S_1_Si	10,7	River	UA_M5.4_0606	1	2	1	2	1
Southern Bug	Talnyanka	Gorny Tikich	-	1,5	HMWB	UA_M5.4_0607	1	1	3	3	3
Southern Bug	Talnyanka	Gorny Tikich	UA_R_16_S_1_Si	2,4	River	UA_M5.4_0608	1	1	1	1	1
Southern Bug	Talnyanka	Gorny Tikich	-	19,8	HMWB	UA_M5.4_0609	2	1	3	3	1
Southern Bug	Bilashka	Talnyanka	UA_R_16_S_2_Si	1,5	River	UA_M5.4_0610	1	1	1	1	1
Southern Bug	Bilashka	Talnyanka	-	13,3	HMWB	UA_M5.4_0611	1	1	3	3	1
Southern Bug	Rotten Tikich	Tikich	UA_R_16_S_2_Si	2,9	River	UA_M5.4_0612	1	2	1	2	1
Southern Bug	Rotten Tikich	Tikich	-	10,3	HMWB	UA_M5.4_0613	2	2	3	3	1
Southern Bug	Rotten Tikich	Tikich	-	5,7	HMWB	UA_M5.4_0614	2	2	3	3	3
Southern Bug	Rotten Tikich	Tikich	-	11,8	HMWB	UA_M5.4_0616	1	1	3	3	1
Southern Bug	Rotten Tikich	Tikich	-	18,2	HMWB	UA_M5.4_0618	1	1	3	3	1
Southern Bug	Rotten Tikich	Tikich	UA_R_16_L_1_Si	16,4	River	UA_M5.4_0619	1	1	1	1	1
Southern Bug	Rotten Tikich	Tikich	UA_R_16_L_1_Si	30,7	River	UA_M5.4_0621	2	1	1	2	3
Southern Bug	Rotten Tikich	Tikich	UA_R_16_L_1_Si	7,1	River	UA_M5.4_0623	1	1	1	1	1
Southern Bug	Rotten Tikich	Tikich	UA_R_16_L_1_Si	24,6	River	UA_M5.4_0625	1	1	1	1	3
Southern Bug	Rotten Tikich	Tikich	UA_R_16_L_1_Si	6,5	River	UA_M5.4_0627	1	1	1	1	1
Southern Bug	Krasilovka	Rotten Tikich	-	6,2	HMWB	UA_M5.4_0628	1	2	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Krasilovka	Rotten Tikich	-	16,5	HMWB	UA_M5.4_0629	1	2	3	3	1
Southern Bug	Krasilovka	Rotten Tikich	-	2,0	HMWB	UA_M5.4_0630	1	2	3	3	1
Southern Bug	Cecilia	Rotten Tikich	-	6,6	HMWB	UA_M5.4_0631	1	1	3	3	1
Southern Bug	Cecilia	Rotten Tikich	-	14,0	HMWB	UA_M5.4_0632	1	1	3	3	1
Southern Bug	Untitled	Cecilia	-	2,3	HMWB	UA_M5.4_0633	1	1	3	3	3
Southern Bug	Untitled	Cecilia	UA_R_16_S_1_Si	8,5	River	UA_M5.4_0634	1	1	1	1	1
Southern Bug	Lupus erythematosus	Rotten Tikich	-	3,5	HMWB	UA_M5.4_0635	1	1	3	3	1
Southern Bug	Lupus erythematosus	Rotten Tikich	-	13,5	HMWB	UA_M5.4_0636	1	1	3	3	1
Southern Bug	Fedyukivka	Rotten Tikich	UA_R_16_S_2_Si	1,4	River	UA_M5.4_0637	1	1	1	1	1
Southern Bug	Fedyukivka	Rotten Tikich	UA_R_16_S_1_Si	9,0	River	UA_M5.4_0638	1	1	1	1	1
Southern Bug	Berezovka	Rotten Tikich	-	4,7	HMWB	UA_M5.4_0639	1	1	3	3	1
Southern Bug	Berezovka	Rotten Tikich	-	3,7	HMWB	UA_M5.4_0640	1	1	3	3	1
Southern Bug	Berezovka	Rotten Tikich	-	9,0	HMWB	UA_M5.4_0642	1	1	3	3	1
Southern Bug	Berezovka	Rotten Tikich	-	1,2	HMWB	UA_M5.4_0643	1	1	3	3	1
Southern Bug	Berezovka	Rotten Tikich	UA_R_16_M_1_Si	3,9	River	UA_M5.4_0644	1	1	1	1	1
Southern Bug	Boyarka	Rotten Tikich	UA_R_16_S_2_Si	0,7	River	UA_M5.4_0645	1	1	1	1	1
Southern Bug	Boyarka	Rotten Tikich	-	19,0	HMWB	UA_M5.4_0646	1	1	3	3	1
Southern Bug	Boyarka	Rotten Tikich	-	3,5	HMWB	UA_M5.4_0647	1	1	3	3	1
Southern Bug	Boyarka	Rotten Tikich	-	9,8	HMWB	UA_M5.4_0648	1	1	3	3	1
Southern Bug	Pigsty	Rotten Tikich	UA_R_16_S_2_Si	0,5	River	UA_M5.4_0649	1	3	1	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Pigsty	Rotten Tikich	-	1,7	HMWB	UA_M5.4_0650	1	3	3	3	1
Southern Bug	Pigsty	Rotten Tikich	UA_R_16_S_2_Si	4,1	River	UA_M5.4_0651	1	2	1	2	1
Southern Bug	Pigsty	Rotten Tikich	UA_R_16_S_1_Si	6,4	River	UA_M5.4_0652	1	1	1	1	1
Southern Bug	Pigsty	Rotten Tikich	-	1,1	HMWB	UA_M5.4_0653	1	1	3	3	1
Southern Bug	Pigsty	Rotten Tikich	-	2,6	HMWB	UA_M5.4_0654	1	1	3	3	1
Southern Bug	Pigsty	Rotten Tikich	UA_R_16_M_1_Si	6,8	River	UA_M5.4_0655	1	1	1	1	1
Southern Bug	Goncharikha	Rotten Tikich	UA_R_16_S_2_Si	3,5	River	UA_M5.4_0656	1	1	1	1	1
Southern Bug	Goncharikha	Rotten Tikich	UA_R_16_S_1_Si	4,9	River	UA_M5.4_0657	1	1	1	1	1
Southern Bug	Goncharikha	Rotten Tikich	-	1,5	HMWB	UA_M5.4_0658	1	1	3	3	1
Southern Bug	Goncharikha	Rotten Tikich	UA_R_16_S_1_Si	5,7	River	UA_M5.4_0659	1	1	1	1	1
Southern Bug	Goncharikha	Rotten Tikich	-	2,2	HMWB	UA_M5.4_0660	1	1	3	3	1
Southern Bug	Goncharikha	Rotten Tikich	-	3,6	HMWB	UA_M5.4_0661	1	1	3	3	1
Southern Bug	Zhabianka	Rotten Tikich	UA_R_16_S_2_Si	0,9	River	UA_M5.4_0662	1	1	1	1	1
Southern Bug	Zhabianka	Rotten Tikich	UA_R_16_S_1_Si	12,0	River	UA_M5.4_0663	1	1	1	1	1
Southern Bug	Untitled	Rotten Tikich	-	11,5	HMWB	UA_M5.4_0664	1	1	3	3	1
Southern Bug	Popovka	Rotten Tikich	-	1,8	HMWB	UA_M5.4_0665	1	1	3	3	1
Southern Bug	Popovka	Rotten Tikich	UA_R_16_S_1_Si	13,3	River	UA_M5.4_0666	1	1	1	1	1
Southern Bug	Popovka	Rotten Tikich	-	2,1	HMWB	UA_M5.4_0667	1	1	3	3	1
Southern Bug	Popovka	Rotten Tikich	UA_R_16_S_1_Si	0,5	River	UA_M5.4_0668	1	1	1	1	1
Southern Bug	Popovka	Rotten Tikich	-	8,4	HMWB	UA_M5.4_0669	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Shelf	Rotten Tikich	-	16,1	HMWB	UA_M5.4_0670	2	1	3	3	1
Southern Bug	Shelf	Rotten Tikich	-	6,5	HMWB	UA_M5.4_0671	1	1	3	3	1
Southern Bug	Shelf	Rotten Tikich	-	10,1	HMWB	UA_M5.4_0673	1	1	3	3	1
Southern Bug	Shelf	Rotten Tikich	-	10,8	HMWB	UA_M5.4_0676	1	2	3	3	1
Southern Bug	Khovkivka	Shelf	-	10,3	HMWB	UA_M5.4_0677	1	1	3	3	3
Southern Bug	Untitled	Shelf	-	12,5	HMWB	UA_M5.4_0678	1	1	3	3	1
Southern Bug	Untitled	Shelf	-	18,4	HMWB	UA_M5.4_0679	3	1	3	3	3
Southern Bug	Untitled	Shelf	-	15,4	HMWB	UA_M5.4_0680	1	1	3	3	3
Southern Bug	Untitled	Shelf	-	7,5	HMWB	UA_M5.4_0681	1	1	3	3	1
Southern Bug	Rosokhovatka	Rotten Tikich	-	12,3	HMWB	UA_M5.4_0682	1	2	3	3	1
Southern Bug	Kayetanivka	Rotten Tikich	-	9,9	HMWB	UA_M5.4_0683	1	2	3	3	1
Southern Bug	Kayetanivka	Rotten Tikich	UA_R_16_M_1_Si	12,2	River	UA_M5.4_0684	1	2	1	2	1
Southern Bug	Untitled	Kayetanivka	UA_R_16_S_1_Si	2,7	River	UA_M5.4_0685	1	2	1	2	1
Southern Bug	Untitled	Kayetanivka	-	1,1	HMWB	UA_M5.4_0686	1	2	3	3	3
Southern Bug	Untitled	Kayetanivka	UA_R_16_S_1_Si	7,1	River	UA_M5.4_0687	1	2	1	2	1
Southern Bug	Velikaya Vysya	Blue	-	1,1	HMWB	UA_M5.4_0688	1	1	3	3	1
Southern Bug	Velikaya Vysya	Blue	-	4,6	HMWB	UA_M5.4_0689	1	1	3	3	1
Southern Bug	Velikaya Vysya	Blue	-	10,1	HMWB	UA_M5.4_0691	1	1	3	3	1
Southern Bug	Velikaya Vysya	Blue	-	3,1	HMWB	UA_M5.4_0692	1	1	3	3	1
Southern Bug	Velikaya Vysya	Blue	UA_R_12_M_1_Si	3,4	River	UA_M5.4_0693	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Velikaya Vysya	Blue	-	2,6	HMWB	UA_M5.4_0694	1	1	3	3	1
Southern Bug	Velikaya Vysya	Blue	UA_R_12_M_1_Si	23,3	River	UA_M5.4_0695	1	1	1	1	1
Southern Bug	Velikaya Vysya	Blue	UA_R_12_M_1_Si	18,0	River	UA_M5.4_0697	2	1	1	2	3
Southern Bug	Velikaya Vysya	Blue	UA_R_12_L_1_Si	46,3	River	UA_M5.4_0698	1	1	1	1	3
Southern Bug	Velikaya Vysya	Blue	UA_R_12_L_1_Si	32,3	River	UA_M5.4_0700	1	2	1	2	1
Southern Bug	Untitled	Velikaya Vysya	-	11,4	HMWB	UA_M5.4_0701	1	1	3	3	1
Southern Bug	Untitled	Velikaya Vysya	UA_R_12_M_1_Si	1,8	River	UA_M5.4_0702	1	1	1	1	1
Southern Bug	Untitled	Velikaya Vysya	-	9,1	HMWB	UA_M5.4_0703	1	1	3	3	1
Southern Bug	Untitled	Velikaya Vysya	-	1,2	HMWB	UA_M5.4_0704	1	1	3	3	1
Southern Bug	Untitled	Velikaya Vysya	UA_R_12_S_1_Si	0,7	River	UA_M5.4_0705	1	1	1	1	1
Southern Bug	Untitled	Velikaya Vysya	-	15,8	HMWB	UA_M5.4_0706	1	1	3	3	1
Southern Bug	Turia	Velikaya Vysya	-	14,4	HMWB	UA_M5.4_0707	1	1	3	3	1
Southern Bug	Turia	Velikaya Vysya	-	12,8	HMWB	UA_M5.4_0708	1	1	3	3	1
Southern Bug	Byrzolivka	Velikaya Vysya	-	7,4	HMWB	UA_M5.4_0709	1	1	3	3	1
Southern Bug	Byrzolivka	Velikaya Vysya	-	1,3	HMWB	UA_M5.4_0710	1	1	3	3	1
Southern Bug	Byrzolivka	Velikaya Vysya	UA_R_12_S_1_Si	3,2	River	UA_M5.4_0711	1	1	1	1	1
Southern Bug	Mala Vysya	Velikaya Vysya	-	5,6	HMWB	UA_M5.4_0712	2	1	3	3	3
Southern Bug	Mala Vysya	Velikaya Vysya	UA_R_12_S_1_Si	1,6	River	UA_M5.4_0714	1	1	1	1	1
Southern Bug	Mala Vysya	Velikaya Vysya	-	31,5	HMWB	UA_M5.4_0716	3	1	3	3	3
Southern Bug	Lozovatka	Mala Vysya	-	16,3	HMWB	UA_M5.4_0717	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Lozovatka	Mala Vysya	UA_R_12_S_1_Si	1,1	River	UA_M5.4_0718	1	1	1	1	1
Southern Bug	Kopanka	Mala Vysya	-	10,9	HMWB	UA_M5.4_0719	1	1	3	3	1
Southern Bug	Tovmach	Velikaya Vysya	-	9,1	HMWB	UA_M5.4_0720	1	1	3	3	1
Southern Bug	Tovmach	Velikaya Vysya	-	14,2	HMWB	UA_M5.4_0721	1	1	3	3	1
Southern Bug	Lipyanka	Tovmach	UA_R_12_S_2_Si	0,4	River	UA_M5.4_0722	1	1	1	1	1
Southern Bug	Lipyanka	Tovmach	UA_R_12_S_1_Si	12,5	River	UA_M5.4_0723	1	1	1	1	1
Southern Bug	Lipyanka	Tovmach	-	18,8	HMWB	UA_M5.4_0724	1	1	3	3	1
Southern Bug	Kaligurka	Velikaya Vysya	-	11,9	HMWB	UA_M5.4_0725	1	2	3	3	3
Southern Bug	Kilten	Velikaya Vysya	-	14,3	HMWB	UA_M5.4_0726	1	1	3	3	1
Southern Bug	Kilten	Velikaya Vysya	-	4,6	HMWB	UA_M5.4_0727	3	1	3	3	3
Southern Bug	Kilten	Velikaya Vysya	-	10,0	HMWB	UA_M5.4_0729	1	1	3	3	3
Southern Bug	Kilten	Velikaya Vysya	UA_R_12_M_1_Si	4,5	River	UA_M5.4_0731	1	2	1	2	1
Southern Bug	Alder	Velikaya Vysya	-	20,7	HMWB	UA_M5.4_0732	1	2	3	3	1
Southern Bug	Dovgay	Blue	-	10,3	HMWB	UA_M5.4_0733	1	1	3	3	1
Southern Bug	Kamenka	Blue	-	7,3	HMWB	UA_M5.4_0734	1	2	3	3	1
Southern Bug	Kamenka	Blue	-	1,7	HMWB	UA_M5.4_0735	1	2	3	3	1
Southern Bug	Kamenka	Blue	UA_R_12_S_1_Si	4,5	River	UA_M5.4_0736	1	2	1	2	1
Southern Bug	Kamenka	Blue	-	6,7	HMWB	UA_M5.4_0737	1	2	3	3	1
Southern Bug	Trader	Blue	-	15,3	HMWB	UA_M5.4_0738	1	2	3	3	1
Southern Bug	Malomuzhiv	Blue	-	12,8	HMWB	UA_M5.4_0739	1	2	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Kagarlyk	Blue	-	7,9	HMWB	UA_M5.4_0740	1	2	3	3	1
Southern Bug	Kagarlyk	Blue	-	4,2	HMWB	UA_M5.4_0741	1	2	3	3	1
Southern Bug	Kagarlyk	Blue	UA_R_12_M_1_Si	11,8	River	UA_M5.4_0743	1	2	1	2	1
Southern Bug	Kagarlyk	Blue	UA_R_12_M_1_Si	14,3	River	UA_M5.4_0745	1	2	1	2	1
Southern Bug	Bondar	Blue	UA_R_12_S_1_Si	11,0	River	UA_M5.4_0746	1	2	1	2	1
Southern Bug	Ternivka	Blue	UA_R_12_S_1_Si	16,9	River	UA_M5.4_0747	1	2	1	2	1
Southern Bug	Yatran	Blue	-	10,2	HMWB	UA_M5.4_0748	1	1	3	3	3
Southern Bug	Yatran	Blue	-	11,4	HMWB	UA_M5.4_0749	1	1	3	3	1
Southern Bug	Yatran	Blue	-	20,6	HMWB	UA_M5.4_0750	1	1	3	3	3
Southern Bug	Yatran	Blue	-	6,0	HMWB	UA_M5.4_0752	1	1	3	3	3
Southern Bug	Yatran	Blue	-	6,9	HMWB	UA_M5.4_0754	1	1	3	3	3
Southern Bug	Yatran	Blue	UA_R_12_L_1_Si	1,3	River	UA_M5.4_0756	1	1	1	1	1
Southern Bug	Yatran	Blue	UA_R_12_L_1_Si	8,0	River	UA_M5.4_0758	1	1	1	1	1
Southern Bug	Yatran	Blue	-	3,9	HMWB	UA_M5.4_0759	1	1	3	3	1
Southern Bug	Yatran	Blue	-	25,2	HMWB	UA_M5.4_0761	1	1	3	3	1
Southern Bug	Untitled	Yatran	-	6,0	HMWB	UA_M5.4_0762	1	1	3	3	1
Southern Bug	Untitled	Yatran	-	7,5	HMWB	UA_M5.4_0763	1	1	3	3	1
Southern Bug	Untitled	Yatran	-	2,3	HMWB	UA_M5.4_0764	1	1	3	3	1
Southern Bug	Untitled	Yatran	UA_R_12_S_1_Si	7,5	River	UA_M5.4_0765	1	1	1	1	1
Southern Bug	Umanka	Yatran	-	7,1	HMWB	UA_M5.4_0766	1	2	3	3	11

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Umanka	Yatran	-	4,7	HMWB	UA_M5.4_0767	1	2	3	3	3
Southern Bug	Umanka	Yatran	-	30,5	HMWB	UA_M5.4_0768	3	1	3	3	3
Southern Bug	Untitled	Umanka	-	8,4	HMWB	UA_M5.4_0769	1	1	3	3	1
Southern Bug	Untitled	Umanka	UA_R_12_S_1_Si	6,1	River	UA_M5.4_0770	1	1	1	1	1
Southern Bug	Revukha	Yatran	-	8,8	HMWB	UA_M5.4_0771	1	1	3	3	3
Southern Bug	Revukha	Yatran	UA_R_12_S_1_Si	4,2	River	UA_M5.4_0772	1	1	1	1	1
Southern Bug	Revukha	Yatran	-	44,2	HMWB	UA_M5.4_0773	2	1	3	3	3
Southern Bug	Babanka	Revukha	-	5,0	HMWB	UA_M5.4_0774	1	2	3	3	1
Southern Bug	Babanka	Revukha	-	7,0	HMWB	UA_M5.4_0775	1	1	3	3	1
Southern Bug	Kolodyachna	Revukha	-	8,8	HMWB	UA_M5.4_0776	1	2	3	3	1
Southern Bug	Kolodyachna	Revukha	-	12,2	HMWB	UA_M5.4_0777	1	1	3	3	3
Southern Bug	Untitled	Yatran	UA_R_12_S_1_Si	10,5	River	UA_M5.4_0778	1	1	1	1	1
Southern Bug	Untitled	Yatran	UA_R_12_M_1_Si	6,7	River	UA_M5.4_0779	1	1	1	1	1
Southern Bug	Untitled	Untitled (left tributary of the Yatran River)	UA_R_12_S_1_Si	9,2	River	UA_M5.4_0780	1	1	1	1	1
Southern Bug	Gypsy	Yatran	-	11,1	HMWB	UA_M5.4_0781	1	1	3	3	1
Southern Bug	Gypsy	Yatran	UA_R_12_M_1_Si	9,2	River	UA_M5.4_0782	1	1	1	1	1
Southern Bug	Untitled	Gypsy	UA_R_12_S_1_Si	4,3	River	UA_M5.4_0783	1	1	1	1	1
Southern Bug	Untitled	Gypsy	-	0,9	HMWB	UA_M5.4_0784	1	1	3	3	3
Southern Bug	Untitled	Gypsy	-	7,3	HMWB	UA_M5.4_0785	2	1	3	3	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Untitled	Gypsy	UA_R_12_M_1_Si	2,5	River	UA_M5.4_0786	1	1	1	1	1
Southern Bug	Untitled	Yatran	-	9,0	HMWB	UA_M5.4_0787	1	1	3	3	1
Southern Bug	Untitled	Yatran	-	8,1	HMWB	UA_M5.4_0788	1	1	3	3	1
Southern Bug	Untitled	Blue	-	8,1	HMWB	UA_M5.4_0789	1	2	3	3	1
Southern Bug	Untitled	Blue	-	1,6	HMWB	UA_M5.4_0790	1	2	3	3	1
Southern Bug	Untitled	Blue	UA_R_12_S_1_Si	1,0	River	UA_M5.4_0791	1	2	1	2	1
Southern Bug	Untitled	Blue	-	1,6	HMWB	UA_M5.4_0792	1	2	3	3	1
Southern Bug	Untitled	Blue	UA_R_12_S_1_Si	3,8	River	UA_M5.4_0793	1	1	1	1	1
Southern Bug	Untitled	Blue	UA_R_12_S_1_Si	14,6	River	UA_M5.4_0794	1	1	1	1	1
Southern Bug	Untitled	Blue	UA_R_12_M_1_Si	0,8	River	UA_M5.4_0795	1	1	1	1	1
Southern Bug	Untitled	Blue	-	0,8	HMWB	UA_M5.4_0796	1	1	3	3	1
Southern Bug	Untitled	Blue	-	2,3	HMWB	UA_M5.4_0797	1	1	3	3	1
Southern Bug	Untitled	Untitled (right tributary of the Syr Darya)	-	5,0	HMWB	UA_M5.4_0798	1	1	3	3	1
Southern Bug	Untitled	Untitled (right tributary of the Syr Darya)	-	1,4	HMWB	UA_M5.4_0799	1	1	3	3	1
Southern Bug	Untitled	Untitled (right tributary of the Syr Darya)	UA_R_12_S_1_Si	5,7	River	UA_M5.4_0800	1	1	1	1	1
Southern Bug	Dry Tashlyk	Blue	-	7,8	HMWB	UA_M5.4_0801	1	1	3	3	1
Southern Bug	Dry Tashlyk	Blue	UA_R_12_S_1_Si	0,8	River	UA_M5.4_0803	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Dry Tashlyk	Blue	-	12,8	HMWB	UA_M5.4_0804	1	1	3	3	1
Southern Bug	Dry Tashlyk	Blue	-	11,3	HMWB	UA_M5.4_0806	1	2	3	3	1
Southern Bug	Dry Tashlyk	Blue	UA_R_12_M_1_Si	19,2	River	UA_M5.4_0808	1	1	1	1	1
Southern Bug	Good.	Dry Tashlyk	UA_R_12_S_1_Si	1,6	River	UA_M5.4_0809	1	2	1	2	1
Southern Bug	Good.	Dry Tashlyk	-	1,5	HMWB	UA_M5.4_0810	1	2	3	3	1
Southern Bug	Good.	Dry Tashlyk	-	8,4	HMWB	UA_M5.4_0811	2	2	3	3	3
Southern Bug	Good.	Dry Tashlyk	UA_R_12_M_1_Si	6,4	River	UA_M5.4_0812	1	2	1	2	1
Southern Bug	б. Stiff	Dry Tashlyk	-	14,7	HMWB	UA_M5.4_0814	1	1	3	3	1
Southern Bug	Untitled	Blue	UA_R_12_S_1_Si	14,7	River	UA_M5.4_0815	1	1	1	1	1
Southern Bug	Black Tashlyk	Blue	UA_R_12_S_1_Si	3,5	River	UA_M5.4_0816	1	1	1	1	1
Southern Bug	Black Tashlyk	Blue	-	4,4	HMWB	UA_M5.4_0819	1	1	3	3	1
Southern Bug	Black Tashlyk	Blue	-	2,1	HMWB	UA_M5.4_0820	1	1	3	3	1
Southern Bug	Black Tashlyk	Blue	UA_R_12_M_1_Si	3,4	River	UA_M5.4_0822	1	1	1	1	1
Southern Bug	Black Tashlyk	Blue	UA_R_12_M_1_Si	9,3	River	UA_M5.4_0824	1	1	1	1	3
Southern Bug	Black Tashlyk	Blue	UA_R_12_M_1_Si	1,9	River	UA_M5.4_0826	1	1	1	1	1
Southern Bug	Black Tashlyk	Blue	UA_R_12_L_1_Si	0,5	River	UA_M5.4_0827	1	1	1	1	1
Southern Bug	Black Tashlyk	Blue	UA_R_12_L_1_Si	4,7	River	UA_M5.4_0829	1	1	1	1	3
Southern Bug	Black Tashlyk	Blue	-	10,7	HMWB	UA_M5.4_0830	1	1	3	3	3
Southern Bug	Black Tashlyk	Blue	UA_R_12_L_1_Si	16,7	River	UA_M5.4_0831	2	2	1	2	3
Southern Bug	Black Tashlyk	Blue	-	4,2	HMWB	UA_M5.4_0832	1	2	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Black Tashlyk	Blue	UA_R_12_L_1_Si	12,5	River	UA_M5.4_0833	1	1	1	1	3
Southern Bug	Black Tashlyk	Blue	-	7,8	HMWB	UA_M5.4_0834	1	1	3	3	3
Southern Bug	Black Tashlyk	Blue	UA_R_12_L_1_Si	36,3	River	UA_M5.4_0835	2	1	1	2	3
Southern Bug	Untitled	Black Tashlyk	UA_R_12_S_2_Si	1,1	River	UA_M5.4_0836	1	1	1	1	1
Southern Bug	Untitled	Black Tashlyk	-	4,3	HMWB	UA_M5.4_0837	1	1	3	3	1
Southern Bug	Untitled	Black Tashlyk	-	1,1	HMWB	UA_M5.4_0838	1	1	3	3	1
Southern Bug	Untitled	Black Tashlyk	UA_R_12_S_1_Si	5,1	River	UA_M5.4_0839	1	1	1	1	1
Southern Bug	Tashlyk	Black Tashlyk	-	3,2	HMWB	UA_M5.4_0840	1	1	3	3	1
Southern Bug	Tashlyk	Black Tashlyk	UA_R_12_S_1_Si	9,6	River	UA_M5.4_0841	1	1	1	1	1
Southern Bug	Tashlyk	Black Tashlyk	UA_R_12_M_1_Si	3,1	River	UA_M5.4_0842	1	1	1	1	1
Southern Bug	Tashlyk	Black Tashlyk	UA_R_12_M_1_Si	5,7	River	UA_M5.4_0844	1	1	1	1	1
Southern Bug	Tashlyk	Black Tashlyk	-	3,3	HMWB	UA_M5.4_0845	1	1	3	3	1
Southern Bug	Tashlyk	Black Tashlyk	UA_R_12_M_1_Si	5,2	River	UA_M5.4_0846	1	1	1	1	1
Southern Bug	Untitled	Tashlyk	-	5,2	HMWB	UA_M5.4_0847	1	1	3	3	1
Southern Bug	Untitled	Tashlyk	-	11,2	HMWB	UA_M5.4_0848	1	1	3	3	1
Southern Bug	Shuta	Tashlyk	-	5,5	HMWB	UA_M5.4_0849	1	1	3	3	1
Southern Bug	Shuta	Tashlyk	-	12,4	HMWB	UA_M5.4_0850	1	1	3	3	1
Southern Bug	Water	Tashlyk	UA_R_12_S_2_Si	2,6	River	UA_M5.4_0851	1	1	1	1	1
Southern Bug	Water	Tashlyk	UA_R_12_S_1_Si	11,0	River	UA_M5.4_0852	1	1	1	1	1
Southern Bug	Liver	Tashlyk	UA_R_12_S_2_Si	2,5	River	UA_M5.4_0853	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Liver	Tashlyk	UA_R_12_S_1_Si	6,9	River	UA_M5.4_0854	1	1	1	1	1
Southern Bug	Liver	Tashlyk	UA_R_12_S_1_Si	1,0	River	UA_M5.4_0856	1	1	1	1	1
Southern Bug	Gruzka	Black Tashlyk	UA_R_12_S_2_Si	4,0	River	UA_M5.4_0857	1	1	1	1	1
Southern Bug	Gruzka	Black Tashlyk	UA_R_12_S_1_Si	1,5	River	UA_M5.4_0858	1	1	1	1	1
Southern Bug	Gruzka	Black Tashlyk	-	12,7	HMWB	UA_M5.4_0859	1	1	3	3	1
Southern Bug	Gruzka	Black Tashlyk	-	2,9	HMWB	UA_M5.4_0860	1	1	3	3	1
Southern Bug	Gruzka	Black Tashlyk	-	6,7	HMWB	UA_M5.4_0862	2	1	3	3	3
Southern Bug	б. Pomoshna	Black Tashlyk	-	1,7	HMWB	UA_M5.4_0863	1	1	3	3	1
Southern Bug	б. Pomoshna	Black Tashlyk	-	6,7	HMWB	UA_M5.4_0864	1	1	3	3	1
Southern Bug	б. Pomoshna	Black Tashlyk	-	3,1	HMWB	UA_M5.4_0865	1	1	3	3	1
Southern Bug	б. Pomoshna	Black Tashlyk	-	4,2	HMWB	UA_M5.4_0866	1	1	3	3	3
Southern Bug	б. Pomoshna	Black Tashlyk	UA_R_12_M_1_Si	1,0	River	UA_M5.4_0867	1	1	1	1	1
Southern Bug	б. Pomoshna	Black Tashlyk	-	3,2	HMWB	UA_M5.4_0868	1	1	3	3	1
Southern Bug	б. Pomoshna	Black Tashlyk	UA_R_12_M_1_Si	0,7	River	UA_M5.4_0869	1	1	1	1	1
Southern Bug	б. Pomoshna	Black Tashlyk	-	1,7	HMWB	UA_M5.4_0870	1	1	3	3	1
Southern Bug	б. Pomoshna	Black Tashlyk	-	4,9	HMWB	UA_M5.4_0871	2	1	3	3	3
Southern Bug	Wicker Tashlik	Black Tashlyk	UA_R_12_S_1_Si	4,9	River	UA_M5.4_0872	1	1	1	1	1
Southern Bug	Wicker Tashlik	Black Tashlyk	-	2,9	HMWB	UA_M5.4_0873	1	1	3	3	1
Southern Bug	Wicker Tashlik	Black Tashlyk	-	25,8	HMWB	UA_M5.4_0874	2	1	3	3	3
Southern Bug	Beech trees	Wicker Tashlik	UA_R_12_S_1_Si	5,4	River	UA_M5.4_0875	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Beech trees	Wicker Tashlik	-	1,9	HMWB	UA_M5.4_0876	1	1	3	3	1
Southern Bug	Beech trees	Wicker Tashlik	-	5,2	HMWB	UA_M5.4_0877	1	1	3	3	3
Southern Bug	Maznytsia	Black Tashlyk	UA_R_12_S_1_Si	8,7	River	UA_M5.4_0878	1	2	1	2	1
Southern Bug	Maznytsia	Black Tashlyk	-	1,4	HMWB	UA_M5.4_0879	1	2	3	3	1
Southern Bug	Maznytsia	Black Tashlyk	UA_R_12_S_1_Si	2,5	River	UA_M5.4_0880	1	1	1	1	1
Southern Bug	Dry Tashlyk	Blue	-	16,1	HMWB	UA_M5.4_0881	1	1	3	3	1
Southern Bug	Dry Tashlyk	Blue	-	3,2	HMWB	UA_M5.4_0882	1	1	3	3	3
Southern Bug	Dry Tashlyk	Blue	UA_R_12_M_1_Si	6,6	River	UA_M5.4_0883	1	1	1	1	1
Southern Bug	Migiyskiy Tashlyk	Southern Bug	UA_R_12_S_1_Si	8,8	River	UA_M5.4_0884	1	1	1	1	1
Southern Bug	Migiyskiy Tashlyk	Southern Bug	-	1,5	HMWB	UA_M5.4_0885	1	1	3	3	1
Southern Bug	Migiyskiy Tashlyk	Southern Bug	UA_R_12_S_1_Si	0,6	River	UA_M5.4_0886	1	1	1	1	1
Southern Bug	Migiyskiy Tashlyk	Southern Bug	-	7,4	HMWB	UA_M5.4_0887	1	1	3	3	1
Southern Bug	Ship's	Southern Bug	-	2,4	HMWB	UA_M5.4_0888	1	2	3	3	1
Southern Bug	Ship's	Southern Bug	UA_R_12_M_1_Si	14,9	River	UA_M5.4_0890	1	1	1	1	1
Southern Bug	Bolshaya Korabelnaya	Ship's	UA_R_12_S_1_Si	3,8	River	UA_M5.4_0891	1	2	1	2	1
Southern Bug	Bolshaya Korabelnaya	Ship's	-	1,6	HMWB	UA_M5.4_0892	1	2	3	3	1
Southern Bug	Bolshaya Korabelnaya	Ship's	UA_R_12_S_1_Si	5,9	River	UA_M5.4_0893	1	2	1	2	1
Southern Bug	Bolshaya Korabelnaya	Ship's	UA_R_12_S_1_Si	0,8	River	UA_M5.4_0895	1	2	1	2	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Bolshaya Korabelnaya	Ship's	UA_R_12_M_1_Si	7,3	River	UA_M5.4_0896	1	2	1	2	3
Southern Bug	Bolshaya Korabelnaya	Ship's	-	1,2	HMWB	UA_M5.4_0897	1	2	3	3	1
Southern Bug	Bolshaya Korabelnaya	Ship's	UA_R_12_M_1_Si	6,1	River	UA_M5.4_0898	1	2	1	2	3
Southern Bug	Malaya Korabelnaya	Ship's	-	16,5	HMWB	UA_M5.4_0899	1	2	3	3	1
Southern Bug	Malaya Korabelnaya	Ship's	-	12,1	HMWB	UA_M5.4_0900	1	2	3	3	3
Southern Bug	Bakshala	Southern Bug	-	8,5	HMWB	UA_M5.4_0902	1	2	3	3	1
Southern Bug	Bakshala	Southern Bug	UA_R_12_M_1_Si	42,6	River	UA_M5.4_0904	1	2	1	2	1
Southern Bug	Chortala	Southern Bug	-	33,3	HMWB	UA_M5.4_0906	1	2	3	3	3
Southern Bug	Chortala	Southern Bug	-	2,1	HMWB	UA_M5.4_0908	1	2	3	3	1
Southern Bug	Deadhead	Southern Bug	UA_R_12_S_2_Si	1,7	River	UA_M5.4_0909	1	1	1	1	1
Southern Bug	Deadhead	Southern Bug	-	13,3	HMWB	UA_M5.4_0910	1	1	3	3	1
Southern Bug	Deadhead	Southern Bug	UA_R_12_M_1_Si	10,9	River	UA_M5.4_0911	1	1	1	1	1
Southern Bug	Deadhead	Southern Bug	-	2,5	HMWB	UA_M5.4_0912	1	2	3	3	1
Southern Bug	Deadhead	Southern Bug	UA_R_12_M_1_Si	48,5	River	UA_M5.4_0913	1	2	1	2	1
Southern Bug	Deadhead	Southern Bug	UA_R_12_L_1_Si	15,8	River	UA_M5.4_0914	1	2	1	2	1
Southern Bug	Deadhead	Southern Bug	-	1,9	HMWB	UA_M5.4_0915	1	2	3	3	1
Southern Bug	Deadhead	Southern Bug	UA_R_12_L_1_Si	1,1	River	UA_M5.4_0916	1	2	1	2	1
Southern Bug	Deadhead	Southern Bug	UA_R_12_L_1_Si	13,2	River	UA_M5.4_0918	2	2	1	2	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Lozovatka	Deadhead	-	1,4	HMWB	UA_M5.4_0919	1	1	3	3	1
Southern Bug	Lozovatka	Deadhead	UA_R_12_S_1_Si	12,2	River	UA_M5.4_0920	1	1	1	1	1
Southern Bug	Stone-bone	Deadhead	UA_R_12_M_1_Si	14,5	River	UA_M5.4_0921	1	2	1	2	1
Southern Bug	Bony I	Stone-bone	UA_R_12_S_2_Si	2,0	River	UA_M5.4_0922	1	1	1	1	1
Southern Bug	Bony I	Stone-bone	UA_R_12_S_1_Si	14,4	River	UA_M5.4_0923	1	2	1	2	1
Southern Bug	Bony I	Stone-bone	UA_R_12_M_1_Si	5,6	River	UA_M5.4_0924	1	2	1	2	1
Southern Bug	Kostovata II	Stone-bone	UA_R_12_S_2_Si	0,6	River	UA_M5.4_0925	1	1	1	1	1
Southern Bug	Kostovata II	Stone-bone	-	3,6	HMWB	UA_M5.4_0926	1	1	3	3	1
Southern Bug	Kostovata II	Stone-bone	UA_R_12_S_1_Si	5,8	River	UA_M5.4_0928	1	2	1	2	3
Southern Bug	Kostovata II	Stone-bone	UA_R_12_M_1_Si	7,0	River	UA_M5.4_0929	1	2	1	2	1
Southern Bug	Mashnitsa	Kostovata II	UA_R_12_S_2_Si	0,9	River	UA_M5.4_0930	1	2	1	2	1
Southern Bug	Mashnitsa	Kostovata II	UA_R_12_S_1_Si	9,6	River	UA_M5.4_0931	1	2	1	2	1
Southern Bug	Lumpy	Deadhead	UA_R_12_S_1_Si	13,4	River	UA_M5.4_0932	1	2	1	2	1
Southern Bug	Lumpy	Deadhead	-	1,3	HMWB	UA_M5.4_0933	1	2	3	3	3
Southern Bug	Lumpy	Deadhead	-	1,9	HMWB	UA_M5.4_0934	1	2	3	3	3
Southern Bug	Lumpy	Deadhead	UA_R_12_S_1_Si	0,8	River	UA_M5.4_0935	1	2	1	2	1
Southern Bug	Lumpy	Deadhead	UA_R_12_M_1_Si	1,7	River	UA_M5.4_0936	1	2	1	2	1
Southern Bug	Lumpy	Deadhead	-	1,9	HMWB	UA_M5.4_0937	1	2	3	3	1
Southern Bug	Lumpy	Deadhead	UA_R_12_M_1_Si	8,3	River	UA_M5.4_0938	1	2	1	2	1
Southern Bug	Pumpkin	Deadhead	UA_R_12_S_1_Si	1,4	River	UA_M5.4_0939	1	2	1	2	3

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Pumpkin	Deadhead	-	1,2	HMWB	UA_M5.4_0940	1	2	3	3	1
Southern Bug	Pumpkin	Deadhead	UA_R_12_S_1_Si	5,4	River	UA_M5.4_0941	1	2	1	2	1
Southern Bug	Pumpkin	Deadhead	UA_R_12_M_1_Si	10,8	River	UA_M5.4_0942	1	2	1	2	3
Southern Bug	Pumpkin	Deadhead	-	2,3	HMWB	UA_M5.4_0943	1	2	3	3	3
Southern Bug	Pumpkin	Deadhead	UA_R_12_M_1_Si	21,3	River	UA_M5.4_0944	1	2	1	2	1
Southern Bug	Pumpkin	Deadhead	UA_R_12_M_1_Si	9,0	River	UA_M5.4_0945	2	2	1	2	3
Southern Bug	Chichicle	Southern Bug	UA_R_12_S_1_Si	17,1	River	UA_M5.4_0946	1	2	1	2	1
Southern Bug	Chichicle	Southern Bug	UA_R_12_M_1_Si	65,9	River	UA_M5.4_0947	1	1	1	1	1
Southern Bug	Chichicle	Southern Bug	UA_R_12_L_1_Si	85,3	River	UA_M5.4_0948	2	2	1	2	1
Southern Bug	Stem	Chichicle	UA_R_12_M_1_Si	31,1	River	UA_M5.4_0950	1	1	1	1	1
Southern Bug	Rotten Yelanets	Southern Bug	-	17,5	HMWB	UA_M5.4_0951	1	1	3	3	1
Southern Bug	Rotten Yelanets	Southern Bug	UA_R_12_M_1_Si	35,6	River	UA_M5.4_0952	1	1	1	1	1
Southern Bug	Rotten Yelanets	Southern Bug	UA_R_12_M_1_Si	10,1	River	UA_M5.4_0954	1	2	1	2	1
Southern Bug	Rotten Yelanets	Southern Bug	UA_R_12_L_1_Si	26,4	River	UA_M5.4_0956	1	2	1	2	1
Southern Bug	Salty	Rotten Yelanets	UA_R_12_S_1_Si	3,2	River	UA_M5.4_0957	1	2	1	2	1
Southern Bug	Salty	Rotten Yelanets	UA_R_12_M_1_Si	28,6	River	UA_M5.4_0959	1	2	1	2	1
Southern Bug	Untitled	Salty	-	10,4	HMWB	UA_M5.4_0960	1	2	3	3	3
Southern Bug	Ingul	Southern Bug	-	10,6	HMWB	UA_M5.4_0961	1	1	3	3	1
Southern Bug	Ingul	Southern Bug	-	4,7	HMWB	UA_M5.4_0962	1	1	3	3	1
Southern Bug	Ingul	Southern Bug	UA_R_12_M_1_Si	13,0	River	UA_M5.4_0963	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Ingul	Southern Bug	UA_R_12_M_1_Si	7,9	River	UA_M5.4_0965	3	1	1	3	3
Southern Bug	Ingul	Southern Bug	UA_R_12_L_1_Si	46,5	River	UA_M5.4_0966	3	1	1	3	3
Southern Bug	Ingul	Southern Bug	UA_R_12_L_1_Si	84,6	River	UA_M5.4_0968	1	2	1	2	1
Southern Bug	Ingul	Southern Bug	UA_R_12_L_1_Si	170,3	River	UA_M5.4_0970	3	2	1	3	1
Southern Bug	Krutoyarka	Ingul	-	7,8	HMWB	UA_M5.4_0971	1	1	3	3	1
Southern Bug	Krutoyarka	Ingul	-	3,2	HMWB	UA_M5.4_0973	1	1	3	3	1
Southern Bug	Krutoyarka	Ingul	UA_R_12_M_1_Si	0,7	River	UA_M5.4_0974	1	1	1	1	1
Southern Bug	Severinka	Ingul	-	5,3	HMWB	UA_M5.4_0975	1	1	3	3	1
Southern Bug	Severinka	Ingul	UA_R_12_S_1_Si	0,8	River	UA_M5.4_0977	1	1	1	1	1
Southern Bug	Severinka	Ingul	UA_R_12_M_1_Si	3,4	River	UA_M5.4_0978	1	1	1	1	1
Southern Bug	Severinka	Ingul	UA_R_12_M_1_Si	6,4	River	UA_M5.4_0980	1	1	1	1	1
Southern Bug	Mamaika	Ingul	-	14,6	HMWB	UA_M5.4_0981	1	1	3	3	1
Southern Bug	Gruzka	Ingul	-	11,9	HMWB	UA_M5.4_0982	1	1	3	3	3
Southern Bug	Gruzka	Ingul	UA_R_12_M_1_Si	5,2	River	UA_M5.4_0983	2	1	1	2	3
Southern Bug	Gruzka	Ingul	-	4,0	HMWB	UA_M5.4_0985	2	1	3	3	3
Southern Bug	Sugoklia	Ingul	-	11,1	HMWB	UA_M5.4_0986	1	1	3	3	1
Southern Bug	Sugoklia	Ingul	-	7,4	HMWB	UA_M5.4_0987	2	1	3	3	3
Southern Bug	Sugoklia	Ingul	-	16,3	HMWB	UA_M5.4_0989	2	1	3	3	3
Southern Bug	Sugoklia stony	Sugoklia	UA_R_12_S_1_Si	4,7	River	UA_M5.4_0990	1	1	1	1	1
Southern Bug	Sugoklia stony	Sugoklia	-	1,8	HMWB	UA_M5.4_0991	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Sugoklia stony	Sugoklia	UA_R_12_S_1_Si	5,0	River	UA_M5.4_0992	1	1	1	1	1
Southern Bug	Sugoklia stony	Sugoklia	-	5,6	HMWB	UA_M5.4_0993	1	1	3	3	1
Southern Bug	Hemp	Sugoklia	-	16,0	HMWB	UA_M5.4_0994	1	1	3	3	1
Southern Bug	Lozovatka	Sugoklia	-	11,1	HMWB	UA_M5.4_0995	1	1	3	3	1
Southern Bug	Lozovatka	Sugoklia	-	5,5	HMWB	UA_M5.4_0997	1	1	3	3	1
Southern Bug	Ajamka	Ingul	UA_R_12_S_1_Si	5,7	River	UA_M5.4_0998	1	1	1	1	1
Southern Bug	Ajamka	Ingul	-	0,9	HMWB	UA_M5.4_0999	1	1	3	3	3
Southern Bug	Ajamka	Ingul	UA_R_12_S_1_Si	0,5	River	UA_M5.4_1000	1	1	1	1	3
Southern Bug	Ajamka	Ingul	-	4,9	HMWB	UA_M5.4_1001	2	1	3	3	1
Southern Bug	Ajamka	Ingul	UA_R_12_M_1_Si	27,2	River	UA_M5.4_1003	1	1	1	1	1
Southern Bug	Ajamka	Ingul	-	4,0	HMWB	UA_M5.4_1004	1	1	3	3	1
Southern Bug	Ajamka	Ingul	UA_R_12_M_1_Si	5,6	River	UA_M5.4_1005	1	1	1	1	1
Southern Bug	Serebryanka	Ajamka	-	10,6	HMWB	UA_M5.4_1006	1	1	3	3	1
Southern Bug	Serebryanka	Ajamka	-	2,0	HMWB	UA_M5.4_1007	1	1	3	3	3
Southern Bug	Louse	Ingul	-	14,8	HMWB	UA_M5.4_1008	1	2	3	3	1
Southern Bug	Louse	Ingul	-	9,5	HMWB	UA_M5.4_1009	1	2	3	3	1
Southern Bug	Kamenka	Ingul	UA_R_12_S_1_Si	3,8	River	UA_M5.4_1010	1	1	1	1	1
Southern Bug	Kamenka	Ingul	-	1,6	HMWB	UA_M5.4_1011	1	1	3	3	1
Southern Bug	Kamenka	Ingul	UA_R_12_S_1_Si	1,8	River	UA_M5.4_1012	1	1	1	1	1
Southern Bug	Kamenka	Ingul	-	1,4	HMWB	UA_M5.4_1013	1	1	3	3	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Kamenka	Ingul	UA_R_12_S_1_Si	3,4	River	UA_M5.4_1014	1	1	1	1	1
Southern Bug	Kamenka	Ingul	UA_R_12_M_1_Si	3,1	River	UA_M5.4_1015	1	1	1	1	1
Southern Bug	Kamenka	Ingul	UA_R_12_M_1_Si	8,9	River	UA_M5.4_1017	1	1	1	1	3
Southern Bug	Kamenka	Ingul	-	4,2	HMWB	UA_M5.4_1018	2	1	3	3	3
Southern Bug	Kamenka	Ingul	UA_R_12_M_1_Si	12,5	River	UA_M5.4_1019	1	1	1	1	1
Southern Bug	B. Popova	Kamenka	-	12,3	HMWB	UA_M5.4_1020	1	1	3	3	3
Southern Bug	Lozovatka	Kamenka	-	12,9	HMWB	UA_M5.4_1021	1	1	3	3	1
Southern Bug	Sukhoi	Ingul	-	15,2	HMWB	UA_M5.4_1022	1	2	3	3	1
Southern Bug	Sukhoi	Ingul	-	14,0	HMWB	UA_M5.4_1023	1	2	3	3	1
Southern Bug	Sukhoi	Ingul	UA_R_12_M_1_Si	29,7	River	UA_M5.4_1025	2	1	1	2	3
Southern Bug	Savakliy	Sukhoi	UA_R_12_S_1_Si	5,0	River	UA_M5.4_1026	1	2	1	2	1
Southern Bug	Savakliy	Sukhoi	UA_R_12_M_1_Si	6,8	River	UA_M5.4_1028	1	2	1	2	1
Southern Bug	Savakliy	Sukhoi	UA_R_12_M_1_Si	8,3	River	UA_M5.4_1030	1	2	1	2	1
Southern Bug	б. Corovan	Savakliy	-	1,2	HMWB	UA_M5.4_1031	1	1	3	3	1
Southern Bug	б. Corovan	Savakliy	-	9,6	HMWB	UA_M5.4_1032	1	2	3	3	1
Southern Bug	Water	Sukhoi	UA_R_12_S_2_Si	1,3	River	UA_M5.4_1033	1	2	1	2	1
Southern Bug	Water	Sukhoi	-	12,7	HMWB	UA_M5.4_1034	1	2	3	3	1
Southern Bug	Asinine	Water	UA_R_12_S_1_Si	15,9	River	UA_M5.4_1035	1	1	1	1	1
Southern Bug	Dryukova	Sukhoi	-	15,6	HMWB	UA_M5.4_1036	1	1	3	3	1
Southern Bug	Dryukova	Sukhoi	UA_R_12_M_1_Si	5,8	River	UA_M5.4_1037	1	1	1	1	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Dryukova	Sukhoi	-	1,9	HMWB	UA_M5.4_1038	1	1	3	3	3
Southern Bug	Dryukova	Sukhoi	UA_R_12_M_1_Si	3,9	River	UA_M5.4_1039	1	1	1	1	1
Southern Bug	Untitled	Sukhoi	-	10,6	HMWB	UA_M5.4_1040	1	1	3	3	1
Southern Bug	Berezovka	Ingul	-	6,7	HMWB	UA_M5.4_1041	1	2	3	3	1
Southern Bug	Berezovka	Ingul	-	3,1	HMWB	UA_M5.4_1043	1	2	3	3	1
Southern Bug	Berezovka	Ingul	-	5,0	HMWB	UA_M5.4_1045	1	2	3	3	1
Southern Bug	Berezovka	Ingul	-	15,1	HMWB	UA_M5.4_1047	1	3	3	3	3
Southern Bug	Berezovka	Ingul	UA_R_12_M_1_Si	41,5	River	UA_M5.4_1049	1	3	1	3	1
Southern Bug	Krynichovata	Berezovka	UA_R_12_S_1_Si	11,3	River	UA_M5.4_1050	1	2	1	2	1
Southern Bug	Stem	Ingul	-	16,5	HMWB	UA_M5.4_1051	1	2	3	3	1
Southern Bug	Stem	Ingul	UA_R_12_M_1_Si	2,1	River	UA_M5.4_1052	1	3	1	3	1
Southern Bug	Halberd	Ingul	-	22,7	HMWB	UA_M5.4_1053	1	2	3	3	1
Southern Bug	Halberd	Ingul	-	29,3	HMWB	UA_M5.4_1055	1	3	3	3	1
Southern Bug	Untitled	Ingul	-	2,5	HMWB	UA_M5.4_1056	1	3	3	3	3
Southern Bug	Untitled	Ingul	-	2,0	HMWB	UA_M5.4_1057	1	3	3	3	3
Southern Bug	Untitled	Ingul	UA_R_12_S_1_Si	11,4	River	UA_M5.4_1058	3	3	1	3	3
Southern Bug	Untitled	Ingul	UA_R_12_M_1_Si	6,7	River	UA_M5.4_1059	1	3	1	3	3
Southern Bug	Gromokliya	Ingul	-	14,6	HMWB	UA_M5.4_1060	1	1	3	3	1
Southern Bug	Gromokliya	Ingul	-	40,2	HMWB	UA_M5.4_1061	1	1	3	3	1
Southern Bug	Gromokliya	Ingul	UA_R_12_M_1_Si	49,2	River	UA_M5.4_1063	1	2	1	2	1

River basin	Name of the SWB	Where the SWB flows into	Type of SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
										good ecological status	good chemical status
Southern Bug	Godly	Gromokliya	-	23,5	HMWB	UA_M5.4_1064	1	1	3	3	1
Southern Bug	Godly	Gromokliya	-	13,3	HMWB	UA_M5.4_1065	1	1	3	3	1
Southern Bug	Godly	Gromokliya	-	1,0	HMWB	UA_M5.4_1067	1	1	3	3	1

Polygonal SWBs

River basin	Name of the SWB	Area, km^2	Category of SWB	SWB code	Point sources	Diffuse sources	Hydro morph ology	Risk of not achieving environmental objectives	
								good ecological status	good chemic al status
Southern Bug	Khmelnytsky Reservoir	1,4	HMWB	UA_M5.4_0003	2	0	3	3	1
Southern Bug	Medzhybizh reservoir	0,5	HMWB	UA_M5.4_0006	2	0	3	3	3
Southern Bug	Shchedrivske Reservoir	12,2	HMWB	UA_M5.4_0008	2	0	3	3	3
Southern Bug	Novokonstantinovskoye reservoir	3,0	HMWB	UA_M5.4_0009	2	0	3	3	3
Southern Bug	Sandrak reservoir	1,9	HMWB	UA_M5.4_0011	2	0	3	3	3
Southern Bug	Sabarivske reservoir	3,4	HMWB	UA_M5.4_0013	2	0	3	3	3
Southern Bug	Sutiska reservoir	3,0	HMWB	UA_M5.4_0014	3	0	3	3	3
Southern Bug	Bratslav reservoir	1,1	HMWB	UA_M5.4_0017	2	0	3	3	1
Southern Bug	Ladyzhynske Reservoir	19,9	HMWB	UA_M5.4_0019	2	0	3	3	1
Southern Bug	Hlybochokske Reservoir	3,4	HMWB	UA_M5.4_0022	2	0	3	3	1
Southern Bug	Chernyatyn reservoir	2,6	HMWB	UA_M5.4_0023	2	0	3	3	1
Southern Bug	Gayvoronske Reservoir	5,2	HMWB	UA_M5.4_0024	2	0	3	3	1
Southern Bug	Savranskoye reservoir	2,9	HMWB	UA_M5.4_0025	2	0	3	3	1

River basin	Name of the SWB	Area, km^2	Category of SWB	SWB code	Point sources	Diffuse sources	Hydro morph ology	Risk of not achieving environmental objectives	
								good ecological status	good chemic al status
Southern Bug	Pervomaiskoye Reservoir	2,6	HMWB	UA_M5.4_0027	2	0	3	3	1
Southern Bug	Oleksandrivske Reservoir	17,0	HMWB	UA_M5.4_0028	3	0	3	3	3
Southern Bug	Nakrevytske reservoir	1,1	HMWB	UA_M5.4_0034	2	0	3	3	1
Southern Bug	Malashivtsi reservoir	1,0	HMWB	UA_M5.4_0044	2	0	3	3	1
Southern Bug	Bakhmatovetske Reservoir	0,5	HMWB	UA_M5.4_0049	2	0	3	3	1
Southern Bug	Pirogovo reservoir No. 2	0,9	HMWB	UA_M5.4_0050	2	0	3	3	1
Southern Bug	Mytinetskoye reservoir	1,7	HMWB	UA_M5.4_0057	2	0	3	3	1
Southern Bug	Anastava reservoir (upper)	6,4	HMWB	UA_M5.4_0059	2	0	3	3	1
Southern Bug	Rudnyansky reservoir	0,6	HMWB	UA_M5.4_0071	2	0	3	3	1
Southern Bug	Nemyrynets reservoir	1,5	HMWB	UA_M5.4_0082	2	0	3	3	1
Southern Bug	Kantovets reservoir	1,1	HMWB	UA_M5.4_0084	2	0	3	3	1
Southern Bug	Starosyniavske reservoir	0,6	HMWB	UA_M5.4_0090	2	0	3	3	1
Southern Bug	Voronivets Reservoir	1,1	HMWB	UA_M5.4_0100	2	0	3	3	1
Southern Bug	Kryvoshyinske Reservoir	0,9	HMWB	UA_M5.4_0102	2	0	3	3	1
Southern Bug	Pykivka reservoir (upper)	1,7	HMWB	UA_M5.4_0103	2	0	3	3	1
Southern Bug	Zhigalivske reservoir	1,0	HMWB	UA_M5.4_0106	2	0	3	3	1
Southern Bug	Kommunarivske Reservoir	2,7	HMWB	UA_M5.4_0116	2	0	3	3	1
Southern Bug	Pysarivske Reservoir	0,3	HMWB	UA_M5.4_0118	2	0	3	3	1
Southern Bug	Bucnianske Reservoir	0,9	HMWB	UA_M5.4_0124	2	0	3	3	1
Southern Bug	Petrykske Reservoir	4,9	HMWB	UA_M5.4_0127	2	0	3	3	1
Southern Bug	Bruslynivske Reservoir	1,2	HMWB	UA_M5.4_0140	2	0	3	3	1
Southern Bug	Lozovske Reservoir	1,2	HMWB	UA_M5.4_0144	2	0	3	3	1
Southern Bug	Novohrebelske reservoir	1,2	HMWB	UA_M5.4_0146	2	0	3	3	1
Southern Bug	Turbovske reservoir	1,7	HMWB	UA_M5.4_0148	2	0	3	3	1
Southern Bug	Zhenishkovets Reservoir	0,8	HMWB	UA_M5.4_0190	2	0	3	3	1
Southern Bug	Barske Reservoir	1,6	HMWB	UA_M5.4_0193	2	0	3	3	1
Southern Bug	Antonivske Reservoir	1,7	HMWB	UA_M5.4_0195	2	0	3	3	1
Southern Bug	Tokarivske Reservoir	1,0	HMWB	UA_M5.4_0197	2	0	3	3	1
Southern Bug	Serbynivka reservoir	1,2	HMWB	UA_M5.4_0199	2	0	3	3	1
Southern Bug	Martynivka Reservoir	1,1	HMWB	UA_M5.4_0201	2	0	3	3	1
Southern Bug	Tartak reservoir	0,8	HMWB	UA_M5.4_0203	2	0	3	3	1
Southern Bug	Brailovskoye Reservoir	0,6	HMWB	UA_M5.4_0205	2	0	3	3	1

River basin	Name of the SWB	Area, km^2	Category of SWB	SWB code	Point sources	Diffuse sources	Hydro morph ology	Risk of not achieving environmental objectives	
								good ecological status	good chemic al status
Southern Bug	Garmak reservoir	2,3	HMWB	UA_M5.4_0209	2	0	3	3	1
Southern Bug	Kynashiv reservoir	0,7	HMWB	UA_M5.4_0257	2	0	3	3	1
Southern Bug	Klebanske Reservoir	0,4	HMWB	UA_M5.4_0259	2	0	3	3	1
Southern Bug	Kyrnasivske reservoir	0,6	HMWB	UA_M5.4_0268	2	0	3	3	1
Southern Bug	Illinetsky reservoir	1,3	HMWB	UA_M5.4_0277	2	0	3	3	1
Southern Bug	Dmytrenkivske Reservoir	3,6	HMWB	UA_M5.4_0283	2	0	3	3	1
Southern Bug	Gorodkovske Reservoir	0,9	HMWB	UA_M5.4_0313	2	0	3	3	1
Southern Bug	Bershad reservoir (upper)	1,8	HMWB	UA_M5.4_0382	2	0	3	3	1
Southern Bug	Bershad reservoir (lower)	0,6	HMWB	UA_M5.4_0383	2	0	3	3	1
Southern Bug	Pishchanske Reservoir	0,4	HMWB	UA_M5.4_0433	2	0	3	3	1
Southern Bug	Bandura reservoir 1	1,3	HMWB	UA_M5.4_0447	2	0	3	3	1
Southern Bug	Bandura reservoir 2	2,2	HMWB	UA_M5.4_0449	2	0	3	3	1
Southern Bug	Sinitsevo reservoir	0,6	HMWB	UA_M5.4_0460	2	0	3	3	1
Southern Bug	Pereletskoye reservoir	1,3	HMWB	UA_M5.4_0493	2	0	3	3	1
Southern Bug	Zaplazske Reservoir	2,1	HMWB	UA_M5.4_0496	2	0	3	3	1
Southern Bug	Novoarkhangelsk reservoir	2,8	HMWB	UA_M5.4_0503	2	0	3	3	3
Southern Bug	Ternivka Reservoir	2,9	HMWB	UA_M5.4_0504	2	0	3	3	1
Southern Bug	Chervonokhutirske Reservoir	3,4	HMWB	UA_M5.4_0506	2	0	3	3	1
Southern Bug	Knyazhe Krynytsia reservoir	0,9	HMWB	UA_M5.4_0511	2	0	3	3	1
Southern Bug	Ivakhnyavskoye reservoir	0,3	HMWB	UA_M5.4_0514	2	0	3	3	1
Southern Bug	Voronyansky reservoir	4,2	HMWB	UA_M5.4_0517	2	0	3	3	3
Southern Bug	Yurpilske Reservoir	1,3	HMWB	UA_M5.4_0519	2	0	3	3	1
Southern Bug	Talnivske Reservoir	0,7	HMWB	UA_M5.4_0521	2	0	3	3	1
Southern Bug	Brylivka Reservoir	1,2	HMWB	UA_M5.4_0615	2	0	3	3	1
Southern Bug	Veselokutske reservoir	1,5	HMWB	UA_M5.4_0617	2	0	3	3	1
Southern Bug	Lysianske Reservoir	1,0	HMWB	UA_M5.4_0620	2	0	3	3	1
Southern Bug	Zvenigorodske Reservoir	2,4	HMWB	UA_M5.4_0622	2	0	3	3	1
Southern Bug	Stebnivske Reservoir	1,0	HMWB	UA_M5.4_0624	2	0	3	3	1
Southern Bug	Lotashivske Reservoir	1,6	HMWB	UA_M5.4_0626	2	0	3	3	1
Southern Bug	Velykyi Bereznyi reservoir	0,2	HMWB	UA_M5.4_0641	2	0	3	3	1
Southern Bug	Iskra reservoir	1,1	HMWB	UA_M5.4_0672	2	0	3	3	1
Southern Bug	Yurkivske Reservoir	0,6	HMWB	UA_M5.4_0674	2	0	3	3	1

River basin	Name of the SWB	Area, km^2	Category of SWB	SWB code	Point sources	Diffuse sources	Hydro morph ology	Risk of not achieving environmental objectives	
								good ecological status	good chemic al status
Southern Bug	Vatutino reservoir	0,9	HMWB	UA_M5.4_0675	2	0	3	3	1
Southern Bug	Velykovyske Reservoir	0,5	HMWB	UA_M5.4_0690	2	0	3	3	1
Southern Bug	Kamianske Reservoir	2,2	HMWB	UA_M5.4_0696	2	0	3	3	1
Southern Bug	Nadlatske reservoir No. 1	0,9	HMWB	UA_M5.4_0699	2	0	3	3	1
Southern Bug	Manuylivske Reservoir	0,4	HMWB	UA_M5.4_0713	2	0	3	3	1
Southern Bug	Malovisky reservoir	0,7	HMWB	UA_M5.4_0715	2	0	3	3	1
Southern Bug	Novovoznesenskoye reservoir	0,9	HMWB	UA_M5.4_0728	2	0	3	3	1
Southern Bug	Nadlatske reservoir No. 2	1,1	HMWB	UA_M5.4_0730	2	0	3	3	1
Southern Bug	Hayivske Reservoir	0,9	HMWB	UA_M5.4_0742	2	0	3	3	1
Southern Bug	Kagarlytske reservoir	0,5	HMWB	UA_M5.4_0744	2	0	3	3	1
Southern Bug	Yatranivske reservoir	0,4	HMWB	UA_M5.4_0751	2	0	3	3	1
Southern Bug	Sushkivske Reservoir	0,5	HMWB	UA_M5.4_0753	2	0	3	3	1
Southern Bug	Dubove Reservoir	0,4	HMWB	UA_M5.4_0755	2	0	3	3	1
Southern Bug	Ostrovetske Reservoir	0,4	HMWB	UA_M5.4_0757	2	0	3	3	1
Southern Bug	Polonial reservoir	0,3	HMWB	UA_M5.4_0760	2	0	3	3	1
Southern Bug	Glodos Reservoir	0,2	HMWB	UA_M5.4_0802	2	0	3	3	1
Southern Bug	Skopiyivka reservoir	0,8	HMWB	UA_M5.4_0805	2	0	3	3	1
Southern Bug	Lipnyazhskoye reservoir	1,2	HMWB	UA_M5.4_0807	2	0	3	3	1
Southern Bug	Ivanovo reservoir	0,6	HMWB	UA_M5.4_0817	2	0	3	3	1
Southern Bug	Zakharivske Reservoir	0,2	HMWB	UA_M5.4_0821	2	0	3	3	1
Southern Bug	Voronivske Reservoir	0,6	HMWB	UA_M5.4_0823	2	0	3	3	1
Southern Bug	Novoukrainske Reservoir No. 1	0,5	HMWB	UA_M5.4_0825	2	0	3	3	1
Southern Bug	Novoukrainske Reservoir No. 2	0,2	HMWB	UA_M5.4_0828	2	0	3	3	1
Southern Bug	Shutovske reservoir	0,1	HMWB	UA_M5.4_0843	2	0	3	3	1
Southern Bug	Vilna Reservoir	0,2	HMWB	UA_M5.4_0855	2	0	3	3	1
Southern Bug	Novoukrainske Reservoir No. 3	0,4	HMWB	UA_M5.4_0861	2	0	3	3	1
Southern Bug	Blagodatnenskoye reservoir	0,5	HMWB	UA_M5.4_0889	2	0	3	3	3
Southern Bug	Ryabokonivske reservoir	0,4	HMWB	UA_M5.4_0894	2	0	3	3	1
Southern Bug	Marynivka Reservoir	0,8	HMWB	UA_M5.4_0901	2	0	3	3	3
Southern Bug	Kuznetsovskoye Reservoir	0,6	HMWB	UA_M5.4_0903	2	0	3	3	1
Southern Bug	Mayorivske Reservoir	0,7	HMWB	UA_M5.4_0905	2	0	3	3	1
Southern Bug	Prybuzhanivske reservoir	2,4	HMWB	UA_M5.4_0907	2	0	3	3	1

River basin	Name of the SWB	Area, km^2	Category of SWB	SWB code	Point sources	Diffuse sources	Hydro morph ology	Risk of not achieving environmental objectives	
								good ecological status	good chemic al status
Southern Bug	Taborivske Reservoir	2,1	HMWB	UA_M5.4_0917	2	0	3	3	1
Southern Bug	Mostivske reservoir	0,3	HMWB	UA_M5.4_0927	2	0	3	3	1
Southern Bug	Trykratskoye reservoir	0,6	HMWB	UA_M5.4_0945	0	0	3	3	0
Southern Bug	Filimonovskoye reservoir	0,5	HMWB	UA_M5.4_0949	2	0	3	3	3
Southern Bug	Yelanets reservoir	1,1	HMWB	UA_M5.4_0953	2	0	3	3	1
Southern Bug	Shcherbanivske Reservoir	4,5	HMWB	UA_M5.4_0955	2	0	3	3	3
Southern Bug	Nikolskoye reservoir	0,4	HMWB	UA_M5.4_0958	2	0	3	3	1
Southern Bug	Novomykolaivske Reservoir	1,1	HMWB	UA_M5.4_0964	2	0	3	3	3
Southern Bug	Ingul reservoir	0,2	HMWB	UA_M5.4_0967	2	0	3	3	1
Southern Bug	Sofiyivka Reservoir	4,3	HMWB	UA_M5.4_0969	2	0	3	3	1
Southern Bug	Pushkinskoye Reservoir	0,8	HMWB	UA_M5.4_0972	2	0	3	3	1
Southern Bug	Dolyna-Kamianske reservoir	0,9	HMWB	UA_M5.4_0976	2	0	3	3	1
Southern Bug	Kandaura reservoir	0,5	HMWB	UA_M5.4_0979	2	0	3	3	1
Southern Bug	Lelekivka Reservoir	0,9	HMWB	UA_M5.4_0984	2	0	3	3	3
Southern Bug	Novopavlivka reservoir	0,2	HMWB	UA_M5.4_0988	2	0	3	3	1
Southern Bug	Fedorivske Reservoir	0,4	HMWB	UA_M5.4_0996	2	0	3	3	1
Southern Bug	Ajam reservoir	1,0	HMWB	UA_M5.4_1002	2	0	3	3	1
Southern Bug	Vorontsovo reservoir	2,3	HMWB	UA_M5.4_1016	2	0	3	3	1
Southern Bug	Polumyanske reservoir	0,6	HMWB	UA_M5.4_1024	2	0	3	3	1
Southern Bug	Kamianobridske Reservoir	0,5	HMWB	UA_M5.4_1027	2	0	3	3	3
Southern Bug	Sofiyivka Reservoir	0,7	HMWB	UA_M5.4_1029	2	0	3	3	1
Southern Bug	Novohryhorivske Reservoir	0,6	HMWB	UA_M5.4_1042	2	0	3	3	1
Southern Bug	Rozdilnivske Reservoir	0,4	HMWB	UA_M5.4_1044	2	0	3	3	1
Southern Bug	Swan Reservoir	0,2	HMWB	UA_M5.4_1046	2	0	3	3	1
Southern Bug	Ustinovskoye reservoir	0,5	HMWB	UA_M5.4_1048	2	0	3	3	1
Southern Bug	Dokuchaevskoye reservoir	1,1	HMWB	UA_M5.4_1054	2	0	3	3	1
Southern Bug	Vodyano-Lorinskoye reservoir	1,4	HMWB	UA_M5.4_1062	2	0	3	3	1
Southern Bug	Vosseyatskoye reservoir	1,1	HMWB	UA_M5.4_1066	2	0	3	3	1
Southern Bug	Maryanivske Reservoir	0,8	AWB	UA_M5.4_1068	0	0	0	0	0
Southern Bug	Sharovetsky reservoir	0,6	AWB	UA_M5.4_1069	0	0	0	0	0
Southern Bug	Ruzhychnyansky reservoir	0,8	AWB	UA_M5.4_1070	0	0	0	0	0
Southern Bug	Pond with a filling station	0,4	AWB	UA_M5.4_1071	0	0	0	0	0

River basin	Name of the SWB	Area, km^2	Category of SWB	SWB code	Point sources	Diffuse sources	Hydro morph ology	Risk of not achieving environmental objectives	
								good ecological status	good chemic al status
Southern Bug	Pond with a filling station	0,5	AWB	UA_M5.4_1072	0	0	0	0	0
Southern Bug	Molomolynets Reservoir	1,5	AWB	UA_M5.4_1073	0	0	0	0	0
Southern Bug	Anastava reservoir (lower)	3,4	AWB	UA_M5.4_1074	0	0	0	0	0
Southern Bug	Derkachevsky pond	1,0	AWB	UA_M5.4_1075	0	0	0	0	0
Southern Bug	Novosynyavske reservoir	2,2	AWB	UA_M5.4_1076	0	0	0	0	0
Southern Bug	Pykivka reservoir (lower)	1,9	AWB	UA_M5.4_1077	0	0	0	0	0
Southern Bug	Grushkovske reservoir	1,0	AWB	UA_M5.4_1078	0	0	0	0	0
Southern Bug	Mykulynets Reservoir (upper)	3,4	AWB	UA_M5.4_1079	0	0	0	0	0
Southern Bug	Mykulynetske reservoir (lower)	3,4	AWB	UA_M5.4_1080	0	0	0	0	0
Southern Bug	Staroprilutske reservoir	0,9	AWB	UA_M5.4_1081	0	0	0	0	0
Southern Bug	Staroprilutske reservoir	0,9	AWB	UA_M5.4_1082	0	0	0	0	0
Southern Bug	New water reservoir	1,3	AWB	UA_M5.4_1083	0	0	0	0	0
Southern Bug	A filling pond in the village of Shershni	0,8	AWB	UA_M5.4_1084	0	0	0	0	0
Southern Bug	Balanivske Reservoir	3,5	AWB	UA_M5.4_1085	0	0	0	0	0
Southern Bug	Ostrozhansky reservoir	4,9	AWB	UA_M5.4_1086	0	0	0	0	0
Southern Bug	Konelskoye reservoir	1,3	AWB	UA_M5.4_1087	0	0	0	0	0
Southern Bug	Semenivske reservoir 2	0,5	AWB	UA_M5.4_1088	0	0	0	0	0
Southern Bug	Semenivske reservoir 1	0,3	AWB	UA_M5.4_1089	0	0	0	0	0
Southern Bug	Tashlyk Reservoir	7,2	HMWB	UA_M5.4_1090	0	0	0	0	0

River basin	Name of the IPO	Type of MPV	Area, km^2	Category of IPO	IPO code
Southern Bug	Bug estuary	UA_TW_M5_O_O	147,9	transitional waters	UA_M5.4_1091

Annex 2. Characteristics of the identified GWBs, groups of GWBs

Table 1: Characteristics of the group of GWB in marsh quaternary sediments

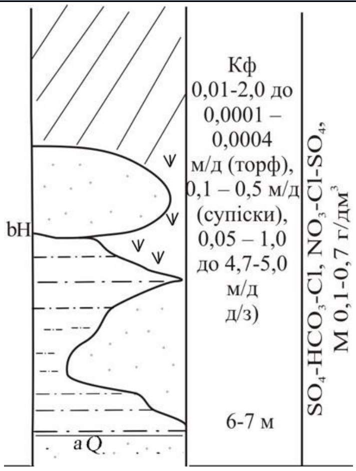
Parameters	Characteristics	Lithological and hydrogeological column
Combined code of the GWB group	UAM5.4GW0001	
GWB group code	UAM5400Q100	
Name of the GWB group	The GWB group in the marshland Quaternary deposits	
Area of the GWB group, km2	61	
Geological index	bH	
Lithology of water-bearing rocks	Peat, fine-grained lenses sands, sandy loams and loams	
Type of aquifer: non-pressure or artesian	Non-pressure	
Overlapping rocks	-	
Capacity of the GWB group, min. average, m	0,3-6,0 6,0	
Filtration coefficient, k min. max/average, m/day	0,0001-5,0 2	
Water supply, km, min.-max. average, m2/day	0,01-0,1 0,1	
PV level, min-max/average, m	0,01-3,0 0,3-0,6	
Average annual fluctuations in the level of GWB, m	1,2-3,35 1,0	
Use for water extraction >10 m3/day: yes/no	No.	
Number of captive sources	-	
Number of operational units.	-	
Chemical composition (mineralization, main anions, cations)	Mineralisation is 0.1-0.7 g/dm3, variegated chemical composition	
Main power supply	Infiltration of atmospheric precipitation, surface water, flow from the horizons that lie beyond below	
Relationship to surface water	Directly related	
RPV trend	To reduce	
The predominant human activity	Drainage reclamation, peat extraction	
Chemical status of the GWB group	Bad, local nitrate pollution	
Quantitative status of the GWB group	Bad	
Reliability of information	High	
Annual precipitation, mm	386-512	

Table 2: Characteristics of the group of GWB in alluvial quaternary sediments

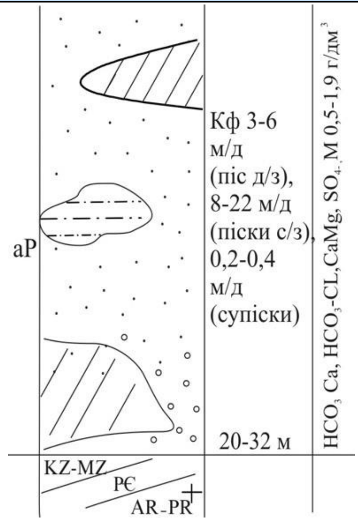
Parameters	Characteristics	Lithological and hydrogeological column
Combined code of the GWB group	UAM5.4GW0002	
GWB Group code	UAM5400Q200	
Name of the GWB group	Group of GWB in alluvial Quaternary deposits	
Area of the GWB group, km2	8 232	
Geological index	aP	
Lithology of water-bearing rocks	Sands of different grains	
Type of aquifer: non-pressure or artesian	Non-pressure	
Overlapping rocks	-	
Capacity of the GWB group, min. average, m	5-32 7-10	
Filtration coefficient, k min. max/average, m/day	0,2-22,0 5-10	
Water supply, km, min.-max. average, m2/day	N.v.	
GWB level, min-max/average, m	1,2-15 5-8	
Average annual fluctuations in the level of PV, m	1,0-1,2	
Use for water extraction >10 m3/day: yes/no	No.	
Number of captive sources	-	
Number of operational units.	-	
Chemical composition (mineralization, main anions, cations)	Mineralisation 0.3-4.3 g/dm3, HCO3 Ca	
Main power supply	Infiltration of atmospheric precipitation, surface water, flow from the horizons below	
Relationship to surface water	Yes	
RPV trend	Levels are stable	
The predominant human activity	For the domestic needs of rural population	
Chemical status of the GWB group	Good, local nitrate pollution	
Quantitative status of the GWB group	Good	
Reliability of information	High	
Annual precipitation, mm	386-1197	

Table 3: Characteristics of the group of GWB in glacial and aeolian-deluvial Quaternary sediments

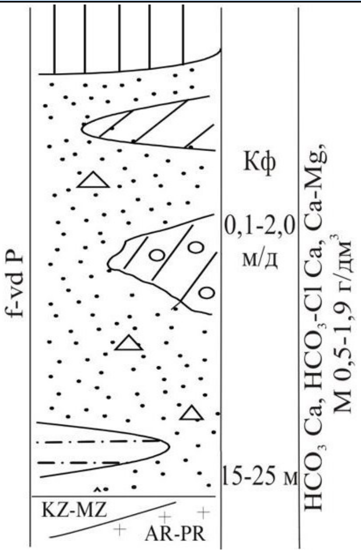
Parameters	**Characteristics**	**Lithological and hydrogeological column**
Combined code of the GWB group	UAM5.4GW0003	
GWB Group code	UAM5400Q300	
Name of the GWB group	The GWB Group in the water and glacial and aeolian deluvial quaternary sediments	
Area of the GWB group, km2	13 410	
Geological index	f+vdP	
Lithology of water-bearing rocks	Sands with sandy loam layers, loams, sandy loams, loams scaffolding	
Type of aquifer: non-pressure or artesian	non-pressure	
Overlapping rocks	-	
Capacity of the GWB group, min. average, m	2-20 8-10	
Filtration coefficient, k min. max/average, m/day	0,1-2,0 1,0	
Water supply, km, min.-max. average, m2/day	N.v.	
GWB level, min-max/average, m	0,5-15 7-8	
Average annual fluctuations in the level of GWB, m	0,5-1,5	
Use for water extraction >10 m3/day: yes/no	No.	
Chemical composition (mineralization, main anions, cations)	Mineralisation 0.5-0.8, up to 1.9 g/dm3, HCO3, HCO3-Cl, Ca, Mg	
Main power supply	Infiltration of atmospheric precipitation, flowing from the horizons that lie below	
Number of captive sources	-	
Number of operational units.	N.v.	
Relationship to surface water	Yes	
RPV trend	Levels are stable	
The predominant human activity	For household needs rural population	
Chemical status of the GWB group	Good, local nitrate pollution	
Quantitative status of the GWB group	Good	
Reliability of information	High	
Annual precipitation, mm	412-1197	

Table 4. Characteristics of the group of GWB in aeolian-deluvial Quaternary sediments

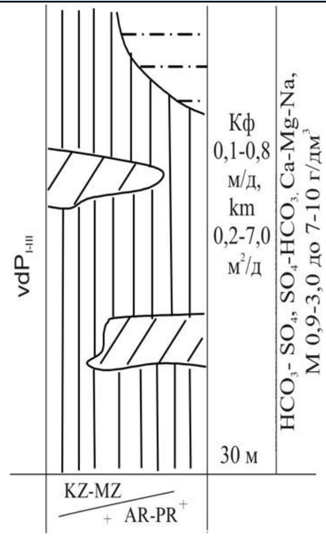
Parameters	Characteristics	Lithological and hydrogeological column
Combined code of the GWB group	UAM5.4GW0004	
GWB group code	UAM5400Q400	
Name of the GWB group	GWB in the aeolian-deluvial Quaternary deposits	
Area of the GWB group,42 250	42 250	
Geological index	vdPI-III	
Lithology of water-bearing rocks	Loams, sandy loams, loams scaffolding	
Type of aquifer: non-pressure or artesian	non-pressure	
Overlapping rocks	-	
Capacity of the GWB group, min. average, m	1-15 8-10	
Filtration coefficient, k min. max/average, m/day	0,1-0,8 0,7	
Water supply, km, min.-max. average, m2/day	0,2-7,0 3,6	
PV level, min-max/average, m	1-11 5-7	
Average annual fluctuations in the level of PV, m	1,0-1,5	
Use for water extraction >10 m3/day: yes/no	No.	
Chemical composition (mineralization, main anions, cations)	Mineralisation is 0.9-3.0 g/dm3, HCO3- SO4, SO4-HCO3, Ca-Mg-Na	
Main power supply	Infiltration of atmospheric precipitation, flowing from the horizons that lie below	
Number of captive sources	-	
Number of operational units.	-	
Relationship to surface water	Yes	
RPV trend	Levels are stable	
The predominant human activity	For the domestic needs of rural population	
Chemical status of the GWB group	Good, local nitrate pollution	
Quantitative status of the GWB group	Good	
Reliability of information	High	
Annual precipitation, mm	386-653	

Table 5. Characteristics of the group of GWB in terrigenous alluvial and glacial Quaternary sediments

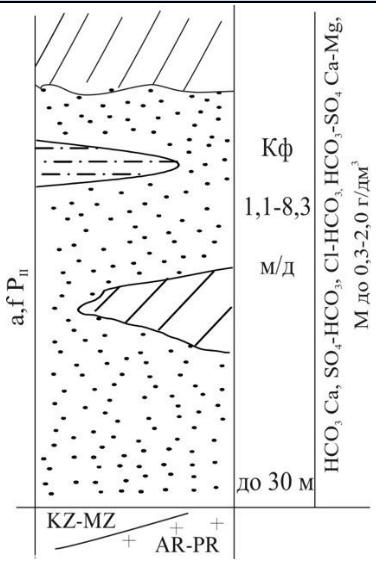
Parameters	Characteristics	Lithological and hydrogeological column
Combined GWB code	UAM5.4GW0005	
GWB group code	UAM5400Q500	
Name of the GWB	The GWB Group in the mid- to Upper Quaternary sediments	
GWB area, km2	617	
Geological index	a,f PII	
Lithology of water-bearing rocks	The different-grained sands of the layers of sandy loam and loam, Sands with pebbles and gravel	
Type of aquifer: non-pressure or artesian	Pressure and non-pressure	
Overlapping rocks	Loams, clays	
Power of the GWB, min. average, m	5-30 15	
Filtration coefficient, k min. max/average, m/day	1,1-8,3 5	
Water supply, km, min.-max. average, m2/day	N.v.	
PV head, min-max/average, m	5-15 10	
Average annual fluctuations in the level of PV, m	0,5-1,0	
Use for water extraction >10 m3/day: yes/no	Yes	
Number of captive sources	-	
Number of operational units.	More than 20	
Chemical composition (mineralization, main anions, cations)	HCO3 Ca, SO4-HCO3, Cl-HCO3, HCO3-SO4 Ca-Mg, Mineralisation up to 0.3-2.0 g/dm3	
Main power supply	Infiltration of atmospheric precipitation, and surface water, flowed from the horizons that lie below	
Relationship to surface water	No.	
RPV trend	Levels are stable	
The predominant human activity	Meeting the needs drinking water supply	
Chemical status of the GWB	Good, increased content iron	
Quantitative status of the GWB	Good	
Reliability of information	High	

Table 6. Characteristics of the GWB group in Sarmatian terrigenous carbonate sediments

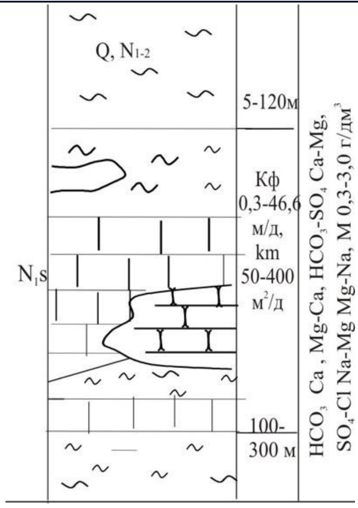
Parameters	Characteristics	Lithological and hydrogeological column
Combined GWB code	UAM5.1GW0006	
GWB code	UAM5400N100	
Name of the GWB	Group of GWB in terrigenous carbonate deposits of the Sarmatian	
GWB area, km2	14 650	
Geological index	N1s	
Lithology of water-bearing rocks	Limestone, sandstone, and sand layers	
Type of aquifer: unconfined or artesian	Pressure	
Overlapping rocks	Loams, clays, sandy rocks	
Power of the GWB, min-max/average, m	From 20-50 and more than 20-25	
Filtration coefficient, k min.-max./average, m/day	0,3-46,6 25-30	
Water supply, km, min-max/average, m2/day	50-400 Up to 250-300	
GWB head, min-max/average, m	from 3-20 to 58-119.5 30-40	
Average annual fluctuations in the level of GWB, m	0,3-0,5	
Use for water extraction >10 m3/day: yes/no	Yes	
Number of captive sources	-	
Number of operational units.	More than 90	
Chemical composition (mineralisation, major anions, cations)	Mineralisation 0.3-3.0 g/dm3, HCO3 Mg-Ca, HCO3-SO4 Ca-Mg, SO4-Cl Na-Mg, Mg- Na	
Main power supply	Infiltration of precipitation	
Relationship to surface water	No.	
GWB trend	Levels are stable	
The predominant human activity	Water extraction	
Chemical status of the GWB	Good	
Quantitative status of the GWB	Good	
Reliability of information	High	
Annual precipitation, mm	386-653	

Table 7. Characteristics of GWB in Miocene terrigenous sediments

Parameters	Characteristics	Lithological and hydrogeological column
Combined GWB code	UAM5.1GW0007	
GWB code	UAM5400N200	
Name of the IPO GWB	GWB in Miocene terrigenous sediments	
GWB area, km2	58	
Geological index	N1	
Lithology of water-bearing rocks	Sands of the sands	
Type of aquifer: unconfined or artesian	Pressure	
Overlapping rocks	Loams, clays	
Power of the GWB, min-max/average, m	5 -25 15	
Filtration coefficient, k min.-max./average, m/day	2,1 - 10,2	
Water supply, km, min-max/average, m2/day	N.v.	
GWB head, min-max/average, m	Up to 25	
Average annual fluctuations in the level of GWB, m	0,5-0,8	
Use for water withdrawal >10 m3/day: yes/no	Yes	
Number of captive sources	-	
Number of operational units.	2	
Chemical composition (mineralisation, major anions, cations)	Mineralisation 0.7-0.8 g/dm3, HCO3 Ca-Mg, Mg-Ca	
Main power supply	Infiltration of precipitation	
Relationship to surface water	-	
GWB trend	RPV is stable	
The predominant human activity	Water extraction	
Chemical status of the GWB	Good	
Quantitative status of the GWB	Good	
Reliability of information	High	
Annual precipitation, mm	412-653	

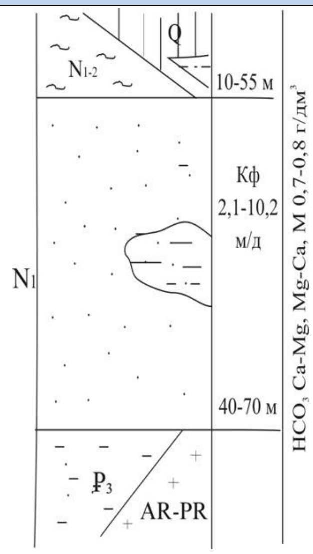


Table 8. Characteristics of the group of GWB in terrigenous sediments of the Paleogene

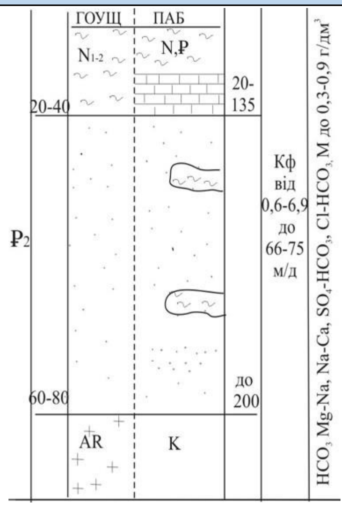
Parameters	Characteristics	Lithological and hydrogeological column
Combined GWB code	UAM5.4GW0008	
GWB code	UAM540PG100	
Name of the GWB	Group of GWB in terrigenous sediments of the Paleogene	
GWB area, km2	1 543	
Geological index	P	
Lithology of water-bearing rocks	Sands of different grains with sandstone, clay, and lignite layers	
Type of aquifer: unconfined or artesian	Pressure	
Overlapping rocks	Clays, sandy rocks	
Power of the GWB, min-max/average, m	15-50	
Filtration coefficient, k min.-max./average, m/day	6.9-66 to 75 41	
Water supply, km, min-max/average, m2/day	N.v.	
GWB head, min-max/average, m	5-65,5 30	
Average annual fluctuations in the level of GWB, m	0,1-0,3	
Use for water withdrawal >10 m3/day: yes/no	Yes	
Number of captive sources	-	
Number of operational units.	More than 31	
Chemical composition (mineralisation, major anions, cations)	Mineralisation up to 0.3-0.9 g/dm3, HCO3 Mg-Na, Na-Ca, SO4-HCO3, Cl-HCO3	
Main power supply	Infiltration of precipitation, flow from horizons below and above	
Relationship to surface water	-	
GWB trend	Levels are stable	
The predominant human activity	Water abstraction for water supply to individual settlements, etc.	
Chemical status of the GWB	Good	
Quantitative status of the GWB	Good	
Reliability of information	High	
Annual precipitation, mm	386-653	

Table 9. Characteristics of GWB in terrigenous sediments of the Cenomanian

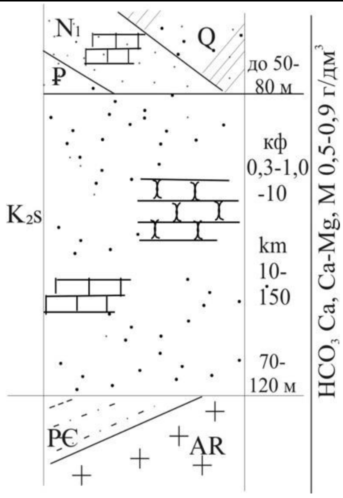
Parameters	Characteristics	Lithological and hydrogeological column
Combined GWB code	UAM5.4GW0009	
GWB code	UAM5.4K100	
Name of the GWB M	GWB in terrigenous sediments of the Cenomanian	
GWB area, km2	1 353	
Geological index	K2s	
Lithology of water-bearing rocks	sands, sandstones with interlayers of flints, limestones, and opals	
Type of aquifer: unconfined or artesian	Pressure	
Overlapping rocks	Sandy rocks, clays, loams	
Power of the GWB, min-max/average, m	5-25 and more 14-16	
Filtration coefficient, k min.-max./average, m/day	1-3 to 10	
Water supply, km, min-max/average, m2/day	10-150	
GWB head, min-max/average, m	10-40	
Average annual fluctuations in the level of GWB, m	01-0,45	
Use for water withdrawal >10 m3/day: yes/no	Yes	
Number of captive sources	-	
Number of operational units.	More than 30	
Chemical composition (mineralisation, major anions, cations)	HCO3 Ca, Ca-Mg, mineralisation 0.5-0.9 g/dm3	
Main power supply	Infiltration of precipitation	
Relationship to surface water	-	
GWB trend	Levels are stable	
The predominant human activity	Operation for centralised water supply	
Chemical status of the GWB	Good	
Quantitative status of the GWB	Good	
Reliability of information	High	
Annual precipitation, mm	569-1197	

Table 10. Characteristics of the group of GWB in terrigenous deposits of the Lower and Upper Cretaceous

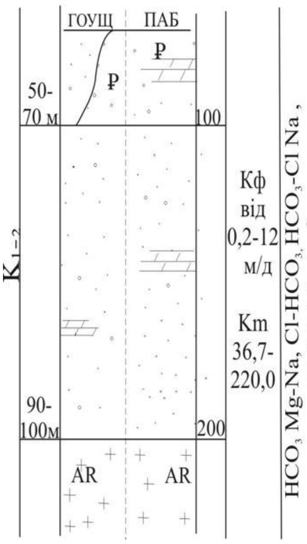
Parameters	Characteristics	Lithological and hydrogeological column
Combined GWB code	UAM5.4GW0010	
GWB code	UAM5400K200	
Name of the GWB	GWB in terrigenous sediments of the Lower and Upper Cretaceous	
GWB area, km2	2 369	
Geological index	K1-2	
Lithology of water-bearing rocks	sandy grained sands, sandstones, fractured marls in the lower part of the section, conglomerates and gravels	
Type of aquifer: unconfined or artesian	Pressure	
Overlapping rocks	Sandy rocks, clays, loams	
Power of the GWB, min-max/average, m	1-5 to 30	
Filtration coefficient, k min.-max./average, m/day	0,2-4,2	
Water supply, km, min-max/average, m2/day	36,7 - 220,0	
GWB head, min-max/average, m	9.6 to 154.0	
Average annual fluctuations in the level of GWB, m	0,1-0,5	
Use for water extraction >10 m3/day: yes/no	Yes	
Number of captive sources	-	
Number of operational units.	About 13	
Chemical composition (mineralisation, major anions, cations)	HCO3 Mg-Na, Cl-HCO3, HCO3-Cl Na mineralisation 0.3-1.8 g/dm3	
Main power supply	Infiltration of precipitation	
Relationship to surface water	-	
RPV trend	Levels are stable	
The predominant human activity	Operation for centralised water supply	
Chemical status of the GWB	Good	
Quantitative status of the GWB	Good	
Reliability of information	High	
Annual precipitation, mm	386-512	

Table 11: Characteristics of GWB in effusive terrigenous rocks of the Precambrian

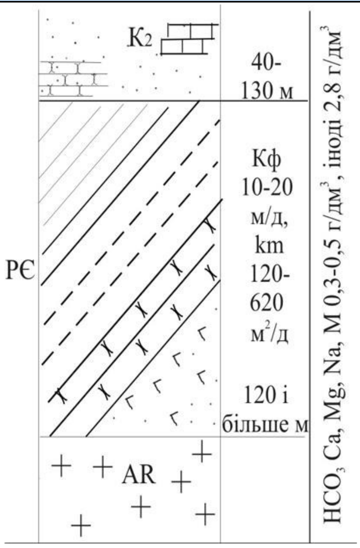
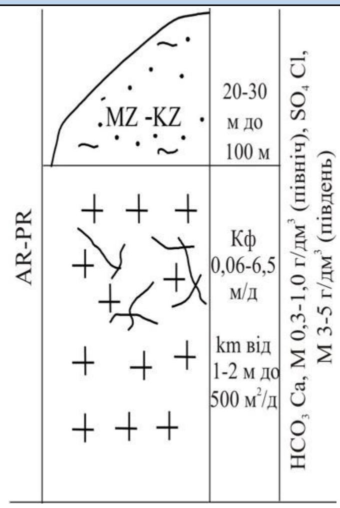
Parameters	Characteristics	Lithological and hydrogeological column
Combined GWB code	UAM5.4GW0011	
GWB code	UAM540RE100	
Name of the GWB	GWB in effusive terrigenous rocks of the Precambrian	
GWB area, km2	2 194	
Geological index	CE	
Lithology of water-bearing rocks	Sandstones, mudstones, siltstones, tuff sandstones, tuff mudstones	
Type of aquifer: unconfined or artesian	Pressure	
Overlapping rocks	Sand and clay rocks	
Power of the GWB, min-max/average, m	From 10-67 to 60-80 40-50	
Filtration coefficient, k min.-max./average, m/day	10-20	
Water supply, km, min-max/average, m2/day	120-620	
GWB head, min-max/average, m	30-50	
Average annual fluctuations in the level of GWB, m	0,2-0,8	
Use for water extraction >10 m3/day: yes/no	Yes	
Number of captive sources	-	
Number of operational units.	More than 30	
Chemical composition (mineralisation, major anions, cations)	HCO3 Ca, Mg, Na, mineralisation 0.3-0.5 g/dm3, sometimes 2.8	
Main power supply	Infiltration of precipitation, flow from overlying and underlying horizons	
Relationship to surface water	-	
RPV trend	Levels are stable	
The predominant human activity	Operation for centralised water supply	
Chemical status of the GWB	Good	
Quantitative status of the GWB	Good	
Reliability of information	High	
Annual precipitation, mm	569-1197	

Table 12. Characteristics of the GWB group in the fracture zone of Archean-Proterozoic crystalline rocks

Parameters	Characteristics	Lithological and hydrogeological column
Combined GWB code	UAM5.4GW0012	
	UAM5.4AR100	
Name of the GWB	A group of GWB in the fracture zone crystalline rocks of the Archean-Proterozoic	
GWB area, km2	52 690	
Geological index	AR-PR	
Lithology of water-bearing rocks	Fractured granites, gneisses, migmatites	
Type of aquifer: non-pressure or artesian	Pressure and non-pressure	
Overlapping rocks	Kaolins, sandy clay rocks	
Power of the GWB, min. average, m	1-100 20-50	
Filtration coefficient, k min-max/average, m/day	0,04-7,2 3,0	
Water supply, km, min. max/average, m2/day	From 1-2 to 200	
GWB head, min.-max. average, m	15-20, in some cases up to 58	
Average annual fluctuations GWB level, m	From 0.3-0.6 to 3	
Use for water withdrawal >10 m3/day: yes/no	Yes	
Number of captive sources	-	
Number of operational units.	More than 208	
Chemical composition (mineralisation, main anions, cations)	HCO3 Ca, mineralisation 0.3-1.0 g/dm3 (north), SO4 Cl 0.5-4 g/dm3 (south)	
Main power supply	Infiltration of precipitation, flow from underlying horizons above	
Connection to the surface by the waters	In the river valleys	
GWB trend	Levels are stable	
Predominant activity human	Operation for centralised water supply	
Chemical status of the GWB	Good	
Quantitative status of the GWB	Good	
Reliability of information	High	
Annual precipitation, mm	412-653	

Annex 3. List of cases of destruction, stoppages, and disruptions to the technological process of enterprises

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Length	Latitude	Settlement	Territorial community	District	Oblast
1	14.03.2022	Mykolaiv Alumina Plant	Non-ferrous metal production	nitric acid	Environment + Population	Destruction of infrastructure	46.77	31.95	Halitsynove	Halitsynivska	Mykolaivskyi	Mykolaivska
2	22.03.2022	Mykolaiv Alumina Plant	Non-ferrous metal production	nitric acid	Environment + Population	Destruction of infrastructure	46.77	31.95	Halitsynove	Halitsynivska	Mykolaivskyi	Mykolaivska
3	01.03.2022	Mykolaiv Alumina Plant	Non-ferrous metal production	nitric acid	Environment + Population	Disruption of work	46.77	31.95	Halitsynove	Halitsynivska	Mykolaivskyi	Mykolaivska
4	03.04.2022	Mykolaiv Alumina Plant	Non-ferrous metal production	nitric acid	Environment + Population	Destruction of infrastructure	46.77	31.95	Halitsynove	Halitsynivska	Mykolaivskyi	Mykolaivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Length	Latitude	Settlement	Territorial community	District	Oblast
5	28.03.2022	Mykolaiv Alumina Plant	Non-ferrous metal production	nitric acid	Environment + Population	Destruction of infrastructure	46.77	31.95	Halitsynove	Halitsynivska	Mykolaivskyi	Mykolaivska
6	05.06.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Disruption of work	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
7	26.06.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Destruction of infrastructure	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
8	19.09.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Destruction of infrastructure	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Length	Latitude	Settlement	Territorial community	District	Oblast
9	19.09.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Power outage	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
10	17.10.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Power outage	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
11	23.11.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Power outage	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
12	23.11.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Disruption of work	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Length	Latitude	Settlement	Territorial community	District	Oblast
13	29.11.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Disruption of work	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
14	19.12.2022	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Disruption of work	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
15	18.02.2023	South Ukrainian NPP	Nuclear energy	radioactive substances	Environment + Population	Disruption of work	47.81	31.21	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
16	12.04.2023	Pobuzhsky Ferronickel Plant	Production of iron, steel and ferroalloys	nitric acid	Environment + Population	Disruption of work	48.15	30.61	Pobuzhske	Pobuzka	Golovanivsky	Kirovohradska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Length	Latitude	Settlement	Territorial community	District	Oblast
17	08.06.2023	Uman Greenhouse Plant	Crop production	organophosphate: pesticide	Environment + Population	Destruction of infrastructure	48.73	30.17	Uman	Umanska	Umansky	Cherkassy

Annex 4. List of the Emerald Network sites

№	Name of the territory	Code	Area, km^2
1	Nature Reserve "Yelanetska Steppe"	UA0000015	16,77
2	Buzky Gard National Nature Park	UA0000040	61,45
3	Karmeliukove Podillia National Nature Park	UA0000089	201,51
4	Protected area of the Dnipro-Bug Estuary	UA0000109	712,62
5	Zgarsky Nature Reserve	UA0000153	56,26
6	Hydrological reserve "Shulyatske marsh"	UA0000162	20,99
7	Bugo-Desnyansky Nature Reserve	UA0000163	190,15
8	Regional landscape park "Pryingulsky"	UA0000166	38,03
9	Verkhne Pobuzhzhia National Nature Park	UA0000169	132,86
10	National Nature Park "Lower Pobuzhye"	UA0000181	97,03
11	Sebrino customer	UA0000196	16,38
12	Mikhailovsky Step Landscape Reserve	UA0000203	17,32
13	Pokrovsko-Dolyna Regional Landscape Park	UA0000205	10,64
14	Christopher's Plains landscape reserve	UA0000216	15,37
15	Ratsinskaya Dacha Nature Reserve	UA0000217	22,46
16	Barsky Nature Reserve	UA0000228	28,03
17	Berladinsky Nature Reserve	UA0000230	83,58
18	Protected area "Ladyzhynske Reservoir"	UA0000242	16,15
19	Starosyniavsky Nature Reserve	UA0000249	5,16
20	Savransky Forest Reserve	UA0000257	84,61
21	Forest reserve "Marksova Dacha"	UA0000265	2,96
22	Protected area "Upper Ingul River Valley"	UA0000304	187,3
23	Srednyi Ingul River Valley Protected Area	UA0000305	310,3
24	Protected area "Gromokliya River Valley"	UA0000307	215,2
25	Protected area "Valleys of the Southern Bug and Snivody in Vinnytsia region"	UA0000333	450,9
26	Nizhnepodilsky Nature Reserve	UA0000341	51,4
27	Protected area "Gorny Tikich River Basin"	UA0000385	617,6
28	Protected area "Lower Ingul River Valley"	UA0000408	253,1
29	Protected area "Savakliya and Sugokliya River Valleys"	UA0000410	70,4
30	Manneh protected area	UA0000454	4,2
31	Protected area "Chortala River Valley in Mykolaiv Oblast"	UA0000455	47,6
32	Protected area "Chichiklia River Basin"	UA0000456	253,3

№	Name of the territory	Code	Area, km^2
33	Kodyma River Valley Protected Area	UA0000459	246,5
34	Kulbakino protected area	UA0000471	0,50
35	Protected area "Savranka River Valley"	UA0000560	31,9
36	Protected area "Sinyukha River Valley"	UA0000565	138,1
37	Berezansko-Soloninsky Steppe Reserve"	UA0000571	250,5
38	Protected area "Olbian Chora"	UA0000572	13,2
39	Halytsynivski Sands protected area	UA0000573	13,4
40	Protected area "Sukhyi Yelanets River Valley"	UA0000574	46,9
41	Protected area "Hnylyi Yelanets River Basin"	UA0000575	23,9
42	Protected area "Mertvovid River Basin"	UA0000579	159,8
43	Velyka Vysya protected area	UA0000598	143,2
44	Protected area "Voznesenskoye Pobuzhye"	UA0000600	143,7
45	Protected area "Mykolaivske Pobuzhzhia"	UA0000601	172,6

Annex 5. List of places of recreation and leisure within the Southern Bug RBD

	Name	Address	Territorial community	District	Oblast
1.	City beach in Khmelnytskyi Khmelnytskyi	Khmelnytskyi, left bank of the Khmelnytskyi Reservoir on Bandera Street	Khmelnytska	Khmelnytsky	Khmelnytska
2.	Golovchyntsi Lake water body of Laguna Podillya PE (former quarry)	Holovchyntsi village	Medzhybizhskaya	Khmelnytsky	Khmelnytska
3.	A place for swimming in the local hydrological reserve "Khrystosivskyi"	Stara Synyava village, reservoir on the Khrystosivka River - left tributary of the Ikva River	Starosyniavska	Khmelnytsky	Khmelnytska
4.	A place of mass recreation on the water on the Vovk River	25 Naberezhna St., Letychiv	Letychivska	Khmelnytsky	Khmelnytska
5.	"Local beach in Katerynivka village" A pond in the quarry notch	Katerynivka village	Dolinska	Kropyvnytskyi	Kirovohradska
6.	Pivdennyi Buh River "Haivoronskyi city beach"	Hayvoron	Gaivoronskaya	Golovanivsky	Kirovohradska
7.	"Selyshchyna Beach No. 1, Sinyukha	Novoarkhangelsk urban-type settlement	Golovanivsky	Golovanivsky	Kirovohradska
8.	"Selyshcheske Beach No. 2", Sinyukha River	Novoarkhangelsk urban-type settlement	Golovanivsky	Golovanivsky	Kirovohradska
9.	"Scythia, Black Tashlyk	Zakharivka village	Novoukrainska	Novoukrainsky	Kirovohradska
10.	The beach in Pervomaisk	Pervomaisk	Pervomaiskaya	Pervomaisky	Mykolaivska
11.	Beach in Yuzhnoukrainsk	Yuzhnoukrainsk	Yuzhnoukrainska	Voznesensky	Mykolaivska
12.	Beach in Nova Odesa	Nova Odesa	Novo Odesa	Mykolaivskyi	Mykolaivska
13.	Pelagievsky children's camp	Pelagiivka village	Sofiyivska	Bashtansky	Mykolaivska
14.	Vatutinsky city beach	Vatutino, Shpolka River	Vatutinskaya	Zvenigorodsky	Cherkassy
15.	A place of mass recreation in the town of Zvenigorodka, Gnily Tikich River	Zvenyhorodka (400 m upstream of the reservoir dam)	Zvenigorodskaya	Zvenigorodsky	Cherkassy
16.	Hromadsky Pond	Berestivets village, unnamed stream, tributary of the Revukha river	Palanska	Umansky	Cherkassy
17.	Ostashivskyi pond	Uman, Nezalezhnosti str.	Umanska	Umansky	Cherkassy

	Name	Address	Territorial community	District	Oblast
18.	The Gorny Tikich River	Chorna Kamianka village	Ivanivska	Umansky	Cherkassy
19.	The Gorny Tikich River	Berezivka village	Ivanivska	Umansky	Cherkassy
20.	The Dolynka tract pond	Khrystynivka, unnamed stream, tributary of the Udych River	Khrystynivska	Umansky	Cherkassy
21.	Pond	Monastyryshche, Kalinin lane, unnamed stream, tributary of the Konelka river	Monastyryshchenska	Umansky	Cherkassy
22.	Upper pond	Avramivka village, unnamed stream, tributary of the Konelka river	Monastyryshchenska	Umansky	Cherkassy

Annex 6 List of surface water monitoring sites in the Southern Bug basin

№	SWB code	The name of the water object	Item name monitoring	Item code monitoring	Geographical coordinates		Category SWB	Type of SWB
1	UA_M5.4_0002	p. Southern Bug	755 km, 0.7 km above Khmelnytskyi	UA_M5.4_0002_01	26°55′41.08″E	49°27′15.42″N	river	UA_R_16_M_2_Si
2	UA_M5.4_0004	p. Southern Bug	743 km, Kopystyn village, Khmelnytskyi district, 1 km below Khmelnytskyi city	UA_M5.4_0004_01	27°06′29.19″E	49°23′48.44″N	HMWB	no
3	UA_M5.4_0008	p. Southern Bug (Shchedrivske Reservoir)	681 km, Shchedrove village, Khmeelnytskyi district	UA_M5.4_0008_01	27°37′47.47″E	49°24′43.63″N	HMWB	no
4	UA_M5.4_0011	p. Southern Bug	652 km, Khmilnyk, drinking water supply, above the city	UA_M5.2_0011_01	27°54'47 "E	49°33'23 "N	HMWB	no
5	UA_M5.4_0013	p. Southern Bug	607 km, below Gushchyntsi village, drinking water supply, Kalynivka town	UA_M5.4_0013_01	28°22'57 "E	49°25'16 "N	HMWB	no
6	UA_M5.4_0013	p. Southern Bug (Sabarivske reservoir)	582 km, Sabarivske wdx, drinking water supply from Vinnytsia	UA_M5.4_0013_02	28°28'17 "E	49°16'23 "N	HMWB	no
7	UA_M5.4_0014	p. Southern Bug (Sutyske Reservoir)	570 km from the mouth 500 m downstream of the discharge of the VKVP Vinnytsia Vodokanal	UA_M5.4_0014_01	28°26'36,3 "E	49°11'26,5 "N	HMWB	no
8	UA_M5.4_0019	p. Southern Bug	413 km, Mankivka village, above the village, drinking water supply station Ladyzhyn	UA_M5.4_0019_01	29°5'21 "E	48°44'20 "N	HMWB	no
9	UA_M5.4_0021	p. Southern Bug	393 km, Ladyzhyn discharge site LLC Vinnytsia Poultry Farm	UA_M5.4_0021_01	29°18'18,0 "E	48°39'42,6 "N	river	UA_R_12_XL_1_Si
10	UA_M5.4_0026	Southern Bug River	237 km, drinking water intake in Pobuzke village	UA_M5.4_0026_01	30°36'11.08 "E	48°8'20.40 "N	river	UA_R_12_XL_1_Si
11	UA_M5.4_0028	Southern Bug River (Oleksandrivske Reservoir)	Buzky Gard National Nature Park, Myhia village, below Pervomaisk	UA_M5.4_0028_02	30°57'07.8 "E	48°01'55.9 "N	HMWB	no

№	SWB code	The name of the water object	Item name monitoring	Item code monitoring	Geographical coordinates		Category SWB	Type of SWB
12	UA_M5.4_0028	Southern Bug River (Oleksandrivske Reservoir)	153 km, Oleksiivka village, drinking water supply from Yuzhnoukrainsk	UA_M5.4_0028_01	31° 7' 11.03 "E	47° 52' 7.52 "N	HMWB	no
13	UA_M5.4_0029	Southern Bug River	136 km, within Oleksandrivka village	UA_M5.4_0029_01	31°15'17.28 "E	47°42'9.72 "N	river	UA_R_12_XL_1_Si
14	UA_M5.4_0029	Southern Bug River	51 km, discharge from Prybuzke, Nova Odesa	UA_M5.4_0029_03	31°46'42.9E	47°16'48.1 "N	river	UA_R_12_XL_1_Si
15	UA_M5.4_0029	Southern Bug River	97 km, Voznesensk, drinking water supply 2 km to the entrance to Voznesensk	UA_M5.4_0029_02	31° 22' 37,26 "E	47° 32' 16,28 "N	river	UA_R_12_XL_1_Si
16	UA_M5.4_0060	p. Buzhok	Medzhybizh village	UA_M5.4_0060_01	27°25′03.45″E	49°26′16.93″N	HMWB	no
17	UA_M5.4_0143	p. Desna	c. Samhorodok, Kozyatyn district, Vinnytsia region Hydrological reserve of local importance "Opustia"	UA_M5.4_0143_01	28°50'58.1 "E	49°31'15.1 "N	river	UA_R_16_M_2_SI
18	UA_M5.4_0181	Zherd River	16 km, Kalynivka	UA_M5.4_0181_01	28°31'49,44 "E	49°26'47,76 "N	HMWB	no
19	UA_M5.4_0206	Riv River	within the village of Demydivka	UA_M5.4_0206_01	28°15'15,48 "E	49°6'40,68 "N	river	UA_R_16_L_2_SI
20	UA_M5.4_0221	Baran river	17 km Zhmerynka	UA_M5.4_0221_01	28°10'34.3 "E	49°02'01.6 "N	river	UA_R_16__S_2_Si
21	UA_M5.4_0258	p. Silnytsia	33 km discharge, Tulchyn, Tulchyn district Municipal enterprise "Tulchynvodokanal"	UA_M5.4_0258_01	28°54′27″E	48°40′30″N	HMWB	no
22	UA_M5.4_0356	p. Udych	47 km, Yahubets village, Uman district, Khrystynivka housing and communal services coSWBny	UA_M5.4_0356_01	29°57'22,8 "E	48°44'41,2 "N	river	UA_R_12_S_1_SI

№	SWB code	The name of the water object	Item name monitoring	Item code monitoring	Geographical coordinates		Category SWB	Type of SWB
23	UA_M5.4_0492	p. Kodyma	103 km, within the city of Balta, Odesa region	UA_M5.4_0492_01	29°37'34.6 "E	47°56'04.3 "N	HMWB	no
24	UA_M5.4_0503	p. Blue	94 km, Novoarkhangelsk reservoir, Novoarkhangelsk drinking water supply	UA_M5.4_0503_01	30°48'36.8 "E	48°41'46.8 "N	HMWB	no
25	UA_M5.4_0507	Sinyukha river	10 km, drinking water supply from Pervomaisk	UA_M5.4_0507_01	30° 48' 55.31 "E	48° 5' 25.35 "N	HMWB	no
26	UA_M5.4_0508	p. Tikic	3 km, Dobrianka village, Zvenyhorod district	UA_M5.4_0508_01	30°53'15.5 "E	48°46'13,5 "N	river	UA_R_16_L_1_Si
27	UA_M5.4_0513	p. Gorny Tikich	118 km, Zarubyntsi village, Uman district (Shulyatske bog, emerald network)	UA_M5.4_0513_01	29°59'15.6 "E	49°06'50.4 "N	river	UA_R_16_L_1_Si
28	UA_M5.4_0522	p. Gorny Tikich	21 km, Talne, Zvenyhorod district, Vodokanal of the Talne City Council	UA_M5.4_0522_01	30°44'09.4 "E	48°53'17.0 "N	river	UA_R_16_L_1_Si
29	UA_M5.4_0558	p. Litvinka	10 km, Zhashkiv, Zhashkiv Equestrian School LLC	UA_M5.4_0558_01	30°7'23.16 "E	49°13'7.68 "N	HMWB	no
30	UA_M5.4_0622	p. Rotten Tikich	41 km, Zvenyhorodka, drinking water supply and sewerage of the Municipal Enterprise "Water Supply and Sewerage" of Zvenyhorod City Council	UA_M5.4_0622_01	30°56'41.0 "E	49°06'14.0 "N	HMWB	no
31	UA_M5.4_0625	p. Rotten Tikich	21 km, Katerynopil, Katerynopil Village Housing and Communal Services of Katerynopil Village Council	UA_M5.4_0625_01	30°58'27.0 "E	48°53'47.2 "N	river	UA_R_16_L_1_Si

№	SWB code	The name of the water object	Item name monitoring	Item code monitoring	Geographical coordinates		Category SWB	Type of SWB
32	UA_M5.4_0676	p. Shelf	43 km, Vatutino, Vodokanal utility coSWBny	UA_M5.4_0676_01	31°01'52.3 "E	48°59'55.8 "N	HMWB	no
33	UA_M5.4_0698	Velyka Vysya river	below Novomyrhorod	UA_M5.4_0698_01	31°32'50.9 "E	48°46'16.6 "N	river	UA_R_12_M_1_Si
34	UA_M5.4_0700	Velyka Vysya river	within Yampil urban-type settlement	UA_M5.4_0700_01	30°58'51.96 "E	48°45'46.44 "N	river	UA_R_12_L_1_SI
35	UA_M5.4_0727	Kiltan River	14 km, Smolinskoye Mining and Processing Division of the Dnipro-Kirovograd Mining and Processing Plant, VostGOK Smolinskoye Mine	UA_M5.4_0727_01	31°17'13.4 "E	48°36'14.4 "N	HMWB	no
36	UA_M5.4_0768	p. Umanka	4 km, Uman, Umanvodokanal Municipal Enterprise	UA_M5.4_0768_01	30°21'03.7 "E	48°41'01.8 "N	HMWB	no
37	UA_M5.4_0811	p. Good	25 km, discharge of NILOT, Dobrovelychkivka, Dobrovelychkivskyi district	UA_M5.4_0811_01	31°10'26.1 "E	48°23'4.6 "N	HMWB	no
38	UA_M5.4_0830	p. Black Tashlyk	51 km, drinking water supply from Pomichna village	UA_M5.4_0830_01	31°22'39.6 "E	48°18'00.1 "N	HMWB	no
39	UA_M5.4_0874	Pleteniy Tashlyk River	Voynivskyi Landscape Reserve, Voynivka village	UA_M5.4_0874_01	31°29'33.72 "E	48°22'29.64 "N	HMWB	no
40	UA_M5.4_0913	Mertvovid River	above Kryva Pustosh village	UA_M5.4_00913_01	31°43'28.0 "E	47°56'17.7 "N	river	UA_R_12_M_1_SI
41	UA_M5.4_0963	Ingul river	338 km, upper reaches of the Ingul River	UA_M5.4_0963_01	32°10'52.2 "E	48°39'49.4 "N	river	UA_R_12_M_1_Si
42	UA_M5.4_0964	p. Ingul	318 km, drinking water supply from Kropyvnytskyi	UA_M5.4_0964_01	32°14'20.23 "E	48°32'2.09 "N	HMWB	no
43	UA_M5.4_0966	Ingul river	294 km, Kropyvnytskyi Mining Division of Dnipro-Kirovohrad Mining CoSWBny, VostGOK Ingulets Mine	UA_M5.4_0966_01	32°22'09.0 "E	48°25'34.0 "N	river	UA_R_12_M_1_Si
44	UA_M5.4_0969	Ingul river	163 km, Sofiivske east, drinking water supply to Novyi Buh village	UA_M5.4_0969_01	32° 22' 35,17 "E	47° 42' 13,54 "N	HMWB	no

№	SWB code	The name of the water object	Item name monitoring	Item code monitoring	Geographical coordinates		Category SWB	Type of SWB
45	UA_M5.4_0970	Ingul River	103 km, drinking water intake in Bashtanka, Odradne village	UA_M5.4_0970_01	32°18'48.88 "E	47°26'5.84 "N	river	UA_R_12_L_1_Si
46	UA_M5.4_0989	p. Sugoklia	313 km, Kropyvnytskyi, Peremohy Park	UA_M5.4_0989_01	32°15'18.0 "E	48°28'58.9 "N	HMWB	no
47	UA_M5.4_1019	Kamenka river	7 km, Municipal Enterprise "Novhorodkovsky linear section of the sewerage system"	UA_M5.4_1019_01	32°31'15.6 "E	48°18'34.9 "N	river	UA_R_12_M_1_Si
48	UA_M5.4_1025	p. Sukhoklia	26 km, Bobrynets, drinking water supply	UA_M5.4_1025_01	32°10'28.8 "E	48°05'31.8 "N	river	UA_R_12_M_1_Si

Annex 7 Integrated assessment table of the status of the Southern Bug RBD SWBs for 2022-2023.

№	SWB				Biological indicators						Hydromorphological indicators - high status (Yes/No)	Chemical and physicochemical parameters Code SWB	Basin specific		Environmental status	Assessment reliability level***.	AWB and HMWB			Chemical status	
	Name of the SWB	Code SWB	Type SWB	The length of the SWB, km	Phytoplankton	Microphytobenthos	Vascular plants	Bottom macroinvertebrates	The status of the SWB by biological indicators	Assessment reliability level***.*			Basin specific	Assessment reliability level***.			AWB (Yes/No)	HMWB(Yes/Candidate)	Ecological potential	Chemical state***.	Assessment reliability level***.
1	Southern Bug	UA_M5.4_0002	UA_R_16_M_2_Si	23,0	б/о	B/B	A/B	A/A	2	C	yes	2	2	C	2	C				D	C
2	Southern Bug	UA_M5.4_0004	-	26,4	A/A	A/A	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	D	C
3	Southern Bug (Shchedrivske reservoir)	UA_M5.4_0008	-	12,2	B/A	A/B	B/B	A/A	2	C	-	3	2	C		C		HMWB	2	D	C
4	Southern Bug	UA_M5.4_0011	-	1,9	B/A	C/B	B/B	A/A	3	C	-	3	2	C		C		HMWB	3	ND	C
5	Southern Bug	UA_M5.4_0013	-	3,4	B/A	B/A	A/B	A/A	2	C	-	3	2	C		C		HMWB	2	D	C
6	Southern Bug	UA_M5.4_0019	-	19,9	B/A	B/A	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	D	C
7	Southern Bug	UA_M5.4_0026	UA_R_12_XL_1_Si	71,9	A/A	B/B	A/A	A/A	2	C	no	2	2	C	2	C				D	C
8	Southern Bug (Oleksandrivske reservoir)	UA_M5.4_0028	-	17,0	A/A	B/A	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	ND	C
9	Southern Bug	UA_M5.4_0029	UA_R_12_XL_1_Si	147,4	A/B	B/A	A/A	A/A	2	C	no	3	2	C	2	C				ND	C
10	Buzhok	UA_M5.4_0060	-	11,8	A/A	B/A	A/B	A/A	2	C	-	3	2	C		C		HMWB	2	D	C
11	Desna	UA_M5.4_0143	UA_R_16_M_2_SI	1,8	б/о	B/A	B/B	A/A	1	C	no	3	2	C	1	C				D	C
12	Zherd	UA_M5.4_0181	-	22,9	A/A	б/о	A/B	A/A	4	C	-	3	2	C		C		HMWB	4	D	C
13	Riv	UA_M5.4_0206	UA_R_16_L_2_SI	23,3	б/о	A/B	A/B	A/A	2	C	yes	3	2	C	2	C				D	C
14	Baran	UA_M5.4_0221	UA_R_16__S_2_Si	11,6	б/о	A/A	A/C	A/A	3	C	yes	3	2	C	3	C				ND	C
15	Selnytsia	UA_M5.4_0258	-	8,0	A/A	B/B	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	ND	C
16	Udych	UA_M5.4_0356	UA_R_12_S_1_SI	2,4	б/о	B/A	A/B	A/A	2	C	yes	3	2	C	2	C				D	C
17	Syniukha	UA_M5.4_0503	-	2,8	A/A	B/A	B/B	A/A	2	C	-	3	2	C		C		HMWB	2	D	C
18	Syniukha	UA_M5.4_0507	-	20,0	A/A	B/A	B/A	A/A	2	C	-	2	2	C		C		HMWB	2	D	C
19	Tikich	UA_M5.4_0508	UA_R_16_L_1_Si	3,5	A/A	B/A	A/B	A/A	3	C	yes	3	2	C	3	C				D	C

№	SWB				Biological indicators								Basin specific				AWB and HMWB			Chemical status	
	Name of the SWB	Code SWB	Type SWB	The length of the SWB, km	Phytoplankton	Microphytobenthos	Vascular plants	Bottom macroinvertebrates	The status of the SWB by biological indicators	Assessment reliability level***.*	Hydromorphological indicators - high status (Yes/No)	Chemical and physicochemical parameters	Basin specific	Assessment reliability level***.	Environmental status	Assessment reliability level***.	AWB (Yes/No)	HMWB(Yes/Candidate)	Ecological potential	Chemical state***.	Assessment reliability level***.
20	Mountain Tikych	UA_M5.4_0513	UA_R_16_L_1_Si	4,0	A/A	B/A	A/B	A/A	2	C	no	3	2	C	2	C				D	C
21	Mountain Tikych	UA_M5.4_0522	UA_R_16_L_1_Si	30,3	A/A	A/A	A/B	A/A	2	C	yes	3	2	C	2	C				D	C
22	Lytvynka	UA_M5.4_0558	-	7,9	A/A	B/A	B/B	A/A	3	C	-	3	2	C		C		HMWB	3	D	C
23	Gnilyi Tikych	UA_M5.4_0622	-	2,4	B/A	B/A	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	D	C
24	Hnylyi Tikych	UA_M5.4_0625	UA_R_16_L_1_Si	24,6	A/A	A/A	A/B	A/A	3	C	yes	3	2	C	3	C				D	C
25	Shpolka	UA_M5.4_0676	-	10,8	A/A	B/A	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	D	C
26	Velyka Vysya	UA_M5.4_0698	UA_R_12_M_1_Si	46,3	б/о	B/A	A/B	A/A	2	C	no	3	2	C	2	C				D	C
27	Velyka Vysya	UA_M5.4_0700	UA_R_12_L_1_SI	32,3	A/B	C/A	A/B	B/A	2	C	no	3	2	C	2	C				D	C
28	Kilten	UA_M5.4_0727	-	4,6	B/A	B/B	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	D	C
29	Umanka	UA_M5.4_0768	-	30,5	B/B	A/A	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	D	C
30	Dobra	UA_M5.4_0811	-	8,4	B/A	B/B	A/B	A/A	3	C	-	3	2	C		C		HMWB	3	D	C
31	Black Tashlyk	UA_M5.4_0830	-	10,7	B/A	B/B	A/B	A/A	2	C	-	3	2	C		C		HMWB	2	D	C
32	Wicker Tashlik	UA_M5.4_0874	-	25,8	B/A	B/A	A/B	A/A	2	C	-	3	2	C		C		HMWB	2	D	C
33	Mertvovod	UA_M5.4_0913	UA_R_12_M_1_SI	48,5	б/о	B/B	B/B	A/A	1	C	no	3	2	C	1	C				D	C
34	Ingul	UA_M5.4_0963	UA_R_12_M_1_Si	13,0	б/о	B/A	B/B	A/A	2	C	no	3	2	C	2	C				D	C
35	Ingul	UA_M5.4_0964	-	1,1	A/A	B/A	A/C	A/A	3	C	-	3	2	C		C		HMWB	3	ND	C
36	Ingul	UA_M5.4_0966	UA_R_12_M_1_Si	46,5	б/о	B/A	A/B	A/A	3	C	no	3	2	C	3	C				ND	C
37	Ingul	UA_M5.4_0969	-	4,3	A/A	B/A	A/B	B/A	2	C	-	3	2	C		C		HMWB	2	D	C
38	Ingul	UA_M5.4_0970	UA_R_12_L_1_Si	170,3	A/A	B/A	A/B	A/A	2	C	no	3	2	C	2	C				D	C

Notes:

-	not applicable
н/пр	no monitoring was conducted
б/о	without assessment

Level of reliability of the assessment **

В	high
С	medium
Н	low

Ecological status/potencial:

1	High
2	Good
3	Moderate
4	Poor
5	Bad

Chemical status**

D	Good
ND	Failing to achieve good

Annex 8. Achieving environmental objectives in 2030

Table 1 Achievement of the environmental objectives of the SWBs in 2030

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
SWB not at risk								
1	Untitled	UA_M5.4_0308	PR	risk-free	risk-free	yes	yes	
2	Jalanec	UA_M5.4_0450	PR	risk-free	risk-free	yes	yes	
3	Titmouse	UA_M5.4_0459	PR	risk-free	risk-free	yes	yes	
4	Untitled	UA_M5.4_0463	PR	risk-free	risk-free	yes	yes	
5	Moldovan	UA_M5.4_0475	PR	risk-free	risk-free	yes	yes	
6	Moldovan	UA_M5.4_0477	PR	risk-free	risk-free	yes	yes	
7	Moldovan	UA_M5.4_0479	PR	risk-free	risk-free	yes	yes	
8	Secretary	UA_M5.4_0482	PR	risk-free	risk-free	yes	yes	
9	Derenyukha	UA_M5.4_0489	PR	risk-free	risk-free	yes	yes	
10	Velikaya Vysya	UA_M5.4_0693	PR	risk-free	risk-free	yes	yes	
11	Velikaya Vysya	UA_M5.4_0695	PR	risk-free	risk-free	yes	yes	
12	Untitled	UA_M5.4_0702	PR	risk-free	risk-free	yes	yes	
13	Untitled	UA_M5.4_0779	PR	risk-free	risk-free	yes	yes	
14	Gypsy	UA_M5.4_0782	PR	risk-free	risk-free	yes	yes	

[25] PR - SWB of natural categories (rivers, lakes, transitional, coastal), HMWB/AWB – heavily modified or artificial SWB

[26] NN - natural causes, TA - technical causes (lack of technical solution, technical impracticality or impracticability), VH - disproportionately high cost, VO - causes related to military operations, temporary occupation of the territory, NA - unknown causes

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
15	Untitled	UA_M5.4_0786	PR	risk-free	risk-free	yes	yes	
16	Untitled	UA_M5.4_0795	PR	risk-free	risk-free	yes	yes	
17	Dry Tashlyk	UA_M5.4_0808	PR	risk-free	risk-free	yes	yes	
18	Black Tashlyk	UA_M5.4_0822	PR	risk-free	risk-free	yes	yes	
19	Black Tashlyk	UA_M5.4_0824	PR	risk-free	risk-free	yes	yes	
20	Black Tashlyk	UA_M5.4_0826	PR	risk-free	risk-free	yes	yes	
21	Tashlyk	UA_M5.4_0842	PR	risk-free	risk-free	yes	yes	
22	Tashlyk	UA_M5.4_0844	PR	risk-free	risk-free	yes	yes	
23	Tashlyk	UA_M5.4_0846	PR	risk-free	risk-free	yes	yes	
24	б. Pomoshna	UA_M5.4_0867	PR	risk-free	risk-free	yes	yes	
25	б. Pomoshna	UA_M5.4_0869	PR	risk-free	risk-free	yes	yes	
26	Dry Tashlyk	UA_M5.4_0883	PR	risk-free	risk-free	yes	yes	
27	Ship's	UA_M5.4_0890	PR	risk-free	risk-free	yes	yes	
28	Deadhead	UA_M5.4_0911	PR	risk-free	risk-free	yes	yes	
29	Chichicle	UA_M5.4_0947	PR	risk-free	risk-free	yes	yes	
30	Stem	UA_M5.4_0950	PR	risk-free	risk-free	yes	yes	
31	Rotten Yelanets	UA_M5.4_0952	PR	risk-free	risk-free	yes	yes	
32	Ingul	UA_M5.4_0963	PR	risk-free	risk-free	yes	yes	
33	Krutoyarka	UA_M5.4_0974	PR	risk-free	risk-free	yes	yes	
34	Severinka	UA_M5.4_0978	PR	risk-free	risk-free	yes	yes	
35	Severinka	UA_M5.4_0980	PR	risk-free	risk-free	yes	yes	

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
36	Ajamka	UA_M5.4_1003	PR	risk-free	risk-free	yes	yes	
37	Ajamka	UA_M5.4_1005	PR	risk-free	risk-free	yes	yes	
38	Kamenka	UA_M5.4_1015	PR	risk-free	risk-free	yes	yes	
39	Kamenka	UA_M5.4_1017	PR	risk-free	risk-free	yes	yes	
40	Kamenka	UA_M5.4_1019	PR	risk-free	risk-free	yes	yes	
41	Dryukova	UA_M5.4_1037	PR	risk-free	risk-free	yes	yes	
42	Driukova	UA_M5.4_1039	PR	risk-free	risk-free	yes	yes	
43	Sob	UA_M5.4_0280	PR	risk-free	risk-free	yes	yes	
44	Velikaya Vysya	UA_M5.4_0698	PR	risk-free	risk-free	yes	yes	
45	Yatran	UA_M5.4_0756	PR	risk-free	risk-free	yes	yes	
46	Yatran	UA_M5.4_0758	PR	risk-free	risk-free	yes	yes	
47	Black Tashlyk	UA_M5.4_0827	PR	risk-free	risk-free	yes	yes	
48	Black Tashlyk	UA_M5.4_0829	PR	risk-free	risk-free	yes	yes	
49	Black Tashlyk	UA_M5.4_0833	PR	risk-free	risk-free	yes	yes	
50	Satorichka	UA_M5.4_0299	PR	risk-free	risk-free	yes	yes	
51	Slice	UA_M5.4_0301	PR	risk-free	risk-free	yes	yes	
52	Kalnika	UA_M5.4_0303	PR	risk-free	risk-free	yes	yes	
53	Squirrel	UA_M5.4_0321	PR	risk-free	risk-free	yes	yes	
54	Squirrel	UA_M5.4_0323	PR	risk-free	risk-free	yes	yes	
55	Krynytsia-Vyazovaya	UA_M5.4_0389	PR	risk-free	risk-free	yes	yes	
56	Untitled	UA_M5.4_0405	PR	risk-free	risk-free	yes	yes	

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
57	Untitled	UA_M5.4_0436	PR	risk-free	risk-free	yes	yes	
58	Untitled	UA_M5.4_0462	PR	risk-free	risk-free	yes	yes	
59	Untitled	UA_M5.4_0465	PR	risk-free	risk-free	yes	yes	
60	Untitled	UA_M5.4_0469	PR	risk-free	risk-free	yes	yes	
61	Untitled	UA_M5.4_0471	PR	risk-free	risk-free	yes	yes	
62	Untitled	UA_M5.4_0473	PR	risk-free	risk-free	yes	yes	
63	Moldovan	UA_M5.4_0474	PR	risk-free	risk-free	yes	yes	
64	Secretary	UA_M5.4_0480	PR	risk-free	risk-free	yes	yes	
65	Derenyukha	UA_M5.4_0486	PR	risk-free	risk-free	yes	yes	
66	Derenyukha	UA_M5.4_0488	PR	risk-free	risk-free	yes	yes	
67	Untitled	UA_M5.4_0502	PR	risk-free	risk-free	yes	yes	
68	Untitled	UA_M5.4_0705	PR	risk-free	risk-free	yes	yes	
69	Byrzolivka	UA_M5.4_0711	PR	risk-free	risk-free	yes	yes	
70	Mala Vysya	UA_M5.4_0714	PR	risk-free	risk-free	yes	yes	
71	Lozovatka	UA_M5.4_0718	PR	risk-free	risk-free	yes	yes	
72	Lipyanka	UA_M5.4_0723	PR	risk-free	risk-free	yes	yes	
73	Untitled	UA_M5.4_0765	PR	risk-free	risk-free	yes	yes	
74	Untitled	UA_M5.4_0770	PR	risk-free	risk-free	yes	yes	
75	Revukha	UA_M5.4_0772	PR	risk-free	risk-free	yes	yes	
76	Untitled	UA_M5.4_0778	PR	risk-free	risk-free	yes	yes	
77	Untitled	UA_M5.4_0780	PR	risk-free	risk-free	yes	yes	

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
78	Untitled	UA_M5.4_0783	PR	risk-free	risk-free	yes	yes	
79	Untitled	UA_M5.4_0793	PR	risk-free	risk-free	yes	yes	
80	Untitled	UA_M5.4_0794	PR	risk-free	risk-free	yes	yes	
81	Untitled	UA_M5.4_0800	PR	risk-free	risk-free	yes	yes	
82	Dry Tashlyk	UA_M5.4_0803	PR	risk-free	risk-free	yes	yes	
83	Untitled	UA_M5.4_0815	PR	risk-free	risk-free	yes	yes	
84	Black Tashlyk	UA_M5.4_0816	PR	risk-free	risk-free	yes	yes	
85	Untitled	UA_M5.4_0839	PR	risk-free	risk-free	yes	yes	
86	Tashlyk	UA_M5.4_0841	PR	risk-free	risk-free	yes	yes	
87	Water	UA_M5.4_0852	PR	risk-free	risk-free	yes	yes	
88	Liver	UA_M5.4_0854	PR	risk-free	risk-free	yes	yes	
89	Liver	UA_M5.4_0856	PR	risk-free	risk-free	yes	yes	
90	Gruzka	UA_M5.4_0858	PR	risk-free	risk-free	yes	yes	
91	Wicker Tashlik	UA_M5.4_0872	PR	risk-free	risk-free	yes	yes	
92	Beech trees	UA_M5.4_0875	PR	risk-free	risk-free	yes	yes	
93	Maznytsia	UA_M5.4_0880	PR	risk-free	risk-free	yes	yes	
94	Migiyskiy Tashlyk	UA_M5.4_0884	PR	risk-free	risk-free	yes	yes	
95	Migiyskiy Tashlyk	UA_M5.4_0886	PR	risk-free	risk-free	yes	yes	
96	Lozovatka	UA_M5.4_0920	PR	risk-free	risk-free	yes	yes	
97	Severinka	UA_M5.4_0977	PR	risk-free	risk-free	yes	yes	
98	Sugoklia stony	UA_M5.4_0990	PR	risk-free	risk-free	yes	yes	

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
99	Sugoklia stony	UA_M5.4_0992	PR	risk-free	risk-free	yes	yes	
100	Ajamka	UA_M5.4_0998	PR	risk-free	risk-free	yes	yes	
101	Ajamka	UA_M5.4_1000	PR	risk-free	risk-free	yes	yes	
102	Kamenka	UA_M5.4_1010	PR	risk-free	risk-free	yes	yes	
103	Kamenka	UA_M5.4_1012	PR	risk-free	risk-free	yes	yes	
104	Kamenka	UA_M5.4_1014	PR	risk-free	risk-free	yes	yes	
105	Asinine	UA_M5.4_1035	PR	risk-free	risk-free	yes	yes	
106	Savranka	UA_M5.4_0429	PR	risk-free	risk-free	yes	yes	
107	Untitled	UA_M5.4_0176	PR	risk-free	risk-free	yes	yes	
108	Untitled	UA_M5.4_0246	PR	risk-free	risk-free	yes	yes	
109	Untitled	UA_M5.4_0249	PR	risk-free	risk-free	yes	yes	
110	Poganka	UA_M5.4_0287	PR	risk-free	risk-free	yes	yes	
111	Shirokaya Ruda	UA_M5.4_0289	PR	risk-free	risk-free	yes	yes	
112	Untitled	UA_M5.4_0290	PR	risk-free	risk-free	yes	yes	
113	Kalnika	UA_M5.4_0302	PR	risk-free	risk-free	yes	yes	
114	Untitled	UA_M5.4_0335	PR	risk-free	risk-free	yes	yes	
115	Krynytsia-Vyazovaya	UA_M5.4_0388	PR	risk-free	risk-free	yes	yes	
116	Untitled	UA_M5.4_0395	PR	risk-free	risk-free	yes	yes	
117	Untitled	UA_M5.4_0397	PR	risk-free	risk-free	yes	yes	
118	Untitled	UA_M5.4_0399	PR	risk-free	risk-free	yes	yes	
119	Untitled	UA_M5.4_0404	PR	risk-free	risk-free	yes	yes	

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
120	Savranka	UA_M5.4_0428	PR	risk-free	risk-free	yes	yes	
121	Lipyanka	UA_M5.4_0722	PR	risk-free	risk-free	yes	yes	
122	Untitled	UA_M5.4_0836	PR	risk-free	risk-free	yes	yes	
123	Water	UA_M5.4_0851	PR	risk-free	risk-free	yes	yes	
124	Liver	UA_M5.4_0853	PR	risk-free	risk-free	yes	yes	
125	Gruzka	UA_M5.4_0857	PR	risk-free	risk-free	yes	yes	
126	Deadhead	UA_M5.4_0909	PR	risk-free	risk-free	yes	yes	
127	Bony I	UA_M5.4_0922	PR	risk-free	risk-free	yes	yes	
128	Kostovata II	UA_M5.4_0925	PR	risk-free	risk-free	yes	yes	
129	Fire	UA_M5.4_0093	PR	risk-free	risk-free	yes	yes	
130	Fire	UA_M5.4_0095	PR	risk-free	risk-free	yes	yes	
131	Big Ore (Tailings)	UA_M5.4_0097	PR	risk-free	risk-free	yes	yes	
132	Snivoda	UA_M5.4_0101	PR	risk-free	risk-free	yes	yes	
133	Snivoda	UA_M5.4_0103	PR	risk-free	risk-free	yes	yes	
134	Vytkhla	UA_M5.4_0110	PR	risk-free	risk-free	yes	yes	
135	Postolova	UA_M5.4_0115	PR	risk-free	risk-free	yes	yes	
136	Untitled	UA_M5.4_0135	PR	risk-free	risk-free	yes	yes	
137	Zagarok	UA_M5.4_0141	PR	risk-free	risk-free	yes	yes	
138	Gum	UA_M5.4_0143	PR	risk-free	risk-free	yes	yes	
139	Gum	UA_M5.4_0147	PR	risk-free	risk-free	yes	yes	
140	Stables (Desenka)	UA_M5.4_0175	PR	risk-free	risk-free	yes	yes	

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
141	Pole	UA_M5.4_0182	PR	risk-free	risk-free	yes	yes	
142	Ditch	UA_M5.4_0194	PR	risk-free	risk-free	yes	yes	
143	Ditch	UA_M5.4_0196	PR	risk-free	risk-free	yes	yes	
144	Ditch	UA_M5.4_0200	PR	risk-free	risk-free	yes	yes	
145	Ditch	UA_M5.4_0202	PR	risk-free	risk-free	yes	yes	
146	Row)	UA_M5.4_0204	PR	risk-free	risk-free	yes	yes	
147	Baran	UA_M5.4_0222	PR	risk-free	risk-free	yes	yes	
148	Konelka	UA_M5.4_0539	PR	risk-free	risk-free	yes	yes	
149	Tikich	UA_M5.4_0508	PR	risk-free	risk-free	yes	yes	
150	Rotten Tikich	UA_M5.4_0619	PR	risk-free	risk-free	yes	yes	
151	Rotten Tikich	UA_M5.4_0623	PR	risk-free	risk-free	yes	yes	
152	Rotten Tikich	UA_M5.4_0625	PR	risk-free	risk-free	yes	yes	
153	Rotten Tikich	UA_M5.4_0627	PR	risk-free	risk-free	yes	yes	
154	Southern Bug	UA_M5.4_0010	PR	risk-free	risk-free	yes	yes	
155	Zgar	UA_M5.4_0129	PR	risk-free	risk-free	yes	yes	
156	Zgar	UA_M5.4_0131	PR	risk-free	risk-free	yes	yes	
157	Gum	UA_M5.4_0150	PR	risk-free	risk-free	yes	yes	
158	Ditch	UA_M5.4_0206	PR	risk-free	risk-free	yes	yes	
159	Roof tiles	UA_M5.4_0238	PR	risk-free	risk-free	yes	yes	
160	Untitled	UA_M5.4_0245	PR	risk-free	risk-free	yes	yes	
161	Untitled	UA_M5.4_0251	PR	risk-free	risk-free	yes	yes	

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
162	Gorny Tikich	UA_M5.4_0513	PR	risk-free	risk-free	yes	yes	
163	Berezovka	UA_M5.4_0644	PR	risk-free	risk-free	yes	yes	
164	Pigsty	UA_M5.4_0655	PR	risk-free	risk-free	yes	yes	
165	Untitled	UA_M5.4_0248	PR	risk-free	risk-free	yes	yes	
166	Yazovets	UA_M5.4_0253	PR	risk-free	risk-free	yes	yes	
167	Untitled	UA_M5.4_0527	PR	risk-free	risk-free	yes	yes	
168	Rotten Tikich	UA_M5.4_0534	PR	risk-free	risk-free	yes	yes	
169	Untitled	UA_M5.4_0554	PR	risk-free	risk-free	yes	yes	
170	Tassel	UA_M5.4_0577	PR	risk-free	risk-free	yes	yes	
171	Makszyboloto	UA_M5.4_0594	PR	risk-free	risk-free	yes	yes	
172	the stream of Mkshibolotsky	UA_M5.4_0600	PR	risk-free	risk-free	yes	yes	
173	Moshchuriv	UA_M5.4_0604	PR	risk-free	risk-free	yes	yes	
174	Talnyanka	UA_M5.4_0608	PR	risk-free	risk-free	yes	yes	
175	Untitled	UA_M5.4_0634	PR	risk-free	risk-free	yes	yes	
176	Fedyukivka	UA_M5.4_0638	PR	risk-free	risk-free	yes	yes	
177	Pigsty	UA_M5.4_0652	PR	risk-free	risk-free	yes	yes	
178	Goncharikha	UA_M5.4_0657	PR	risk-free	risk-free	yes	yes	
179	Goncharikha	UA_M5.4_0659	PR	risk-free	risk-free	yes	yes	
180	Zhabianka	UA_M5.4_0663	PR	risk-free	risk-free	yes	yes	
181	Popovka	UA_M5.4_0666	PR	risk-free	risk-free	yes	yes	
182	Popovka	UA_M5.4_0668	PR	risk-free	risk-free	yes	yes	

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183	Southern Bug	UA_M5.4_0001	PR	risk-free	risk-free	yes	yes	
184	Mshanets	UA_M5.4_0030	PR	risk-free	risk-free	yes	yes	
185	Mshanets	UA_M5.4_0032	PR	risk-free	risk-free	yes	yes	
186	Flat	UA_M5.4_0041	PR	risk-free	risk-free	yes	yes	
187	Flat	UA_M5.4_0043	PR	risk-free	risk-free	yes	yes	
188	Zobara	UA_M5.4_0064	PR	risk-free	risk-free	yes	yes	
189	Wolf	UA_M5.4_0066	PR	risk-free	risk-free	yes	yes	
190	Kudinka	UA_M5.4_0077	PR	risk-free	risk-free	yes	yes	
191	Untitled	UA_M5.4_0112	PR	risk-free	risk-free	yes	yes	
192	Untitled	UA_M5.4_0134	PR	risk-free	risk-free	yes	yes	
193	Untitled	UA_M5.4_0155	PR	risk-free	risk-free	yes	yes	
194	Untitled	UA_M5.4_0162	PR	risk-free	risk-free	yes	yes	
195	Untitled	UA_M5.4_0165	PR	risk-free	risk-free	yes	yes	
196	Untitled	UA_M5.4_0167	PR	risk-free	risk-free	yes	yes	
197	Stables (Desenka)	UA_M5.4_0173	PR	risk-free	risk-free	yes	yes	
198	Untitled	UA_M5.4_0177	PR	risk-free	risk-free	yes	yes	
199	Untitled	UA_M5.4_0212	PR	risk-free	risk-free	yes	yes	
200	Opinion.	UA_M5.4_0215	PR	risk-free	risk-free	yes	yes	
201	Untitled	UA_M5.4_0220	PR	risk-free	risk-free	yes	yes	
202	Untitled	UA_M5.4_0250	PR	risk-free	risk-free	yes	yes	
203	Yazovets	UA_M5.4_0252	PR	risk-free	risk-free	yes	yes	

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204	Untitled	UA_M5.4_0523	PR	risk-free	risk-free	yes	yes	
205	Gnily Tikich stream	UA_M5.4_0528	PR	risk-free	risk-free	yes	yes	
206	Gnily Tikich stream	UA_M5.4_0530	PR	risk-free	risk-free	yes	yes	
207	Untitled	UA_M5.4_0547	PR	risk-free	risk-free	yes	yes	
208	Untitled	UA_M5.4_0553	PR	risk-free	risk-free	yes	yes	
209	Subsistence	UA_M5.4_0569	PR	risk-free	risk-free	yes	yes	
210	Tassel	UA_M5.4_0576	PR	risk-free	risk-free	yes	yes	
211	Berinka	UA_M5.4_0591	PR	risk-free	risk-free	yes	yes	
212	Maksibolotsky Stream	UA_M5.4_0597	PR	risk-free	risk-free	yes	yes	
213	Bilashka	UA_M5.4_0610	PR	risk-free	risk-free	yes	yes	
214	Fedyukivka	UA_M5.4_0637	PR	risk-free	risk-free	yes	yes	
215	Boyarka	UA_M5.4_0645	PR	risk-free	risk-free	yes	yes	
216	Goncharikha	UA_M5.4_0656	PR	risk-free	risk-free	yes	yes	
217	Zhabianka	UA_M5.4_0662	PR	risk-free	risk-free	yes	yes	
218	Southern Bug	UA_M5.4_0018	PR	risk-free	risk-free	yes	yes	
5% OF THE SWBs								
1	Southern Bug	UA_M5.4_0004	HMWB	at risk	at risk	yes	yes	
2	Southern Bug	UA_M5.4_0005	PR	possibly at risk	at risk	yes	yes	
3	Southern Bug	UA_M5.4_0012	PR	possibly at risk	at risk	yes	yes	
4	Southern Bug	UA_M5.4_0015	PR	at risk	at risk	yes	yes	
5	Southern Bug	UA_M5.4_0016	PR	at risk	risk-free	yes	yes	

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6	Wolf	UA_M5.4_0070	HMWB	at risk	at risk	yes	yes	
7	Caviar	UA_M5.4_0087	HMWB	at risk	at risk	yes	yes	
8	Gum	UA_M5.4_0149	HMWB	at risk	at risk	yes	yes	
9	Pole	UA_M5.4_0181	HMWB	at risk	at risk	yes	yes	
10	Baran	UA_M5.4_0221	PR	at risk	at risk	yes	yes	
11	Untitled	UA_M5.4_0242	PR	possibly at risk	at risk	yes	yes	
12	Untitled	UA_M5.4_0243	HMWB	at risk	risk-free	yes	yes	
13	Selnytsia	UA_M5.4_0258	HMWB	at risk	at risk	yes	yes	
14	Untitled	UA_M5.4_0265	HMWB	at risk	risk-free	yes	yes	
15	Sob	UA_M5.4_0276	HMWB	at risk	risk-free	yes	yes	
16	Sob	UA_M5.4_0282	PR	possibly at risk	at risk	yes	yes	
17	Greenhouse	UA_M5.4_0368	PR	possibly at risk	at risk	yes	yes	
18	Doha	UA_M5.4_0381	HMWB	at risk	at risk	yes	yes	
19	Untitled	UA_M5.4_0402	HMWB	at risk	at risk	yes	yes	
20	Savranka	UA_M5.4_0432	HMWB	at risk	risk-free	yes	yes	
21	Savranka	UA_M5.4_0434	HMWB	at risk	at risk	yes	yes	
22	Titmouse	UA_M5.4_0458	HMWB	at risk	risk-free	yes	yes	
23	Kodyma	UA_M5.4_0492	HMWB	at risk	at risk	yes	yes	
24	Gorny Tikich	UA_M5.4_0522	PR	possibly at risk	at risk	yes	yes	
25	Konelka	UA_M5.4_0538	HMWB	at risk	at risk	yes	yes	
26	Rotten Tikich	UA_M5.4_0613	HMWB	at risk	risk-free	yes	yes	

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27	Rotten Tikich	UA_M5.4_0621	PR	possibly at risk	at risk	yes	yes	
28	Shelf	UA_M5.4_0676	HMWB	at risk	risk-free	yes	yes	
29	Khovkivka	UA_M5.4_0677	HMWB	at risk	at risk	yes	yes	
30	Mala Vysya	UA_M5.4_0712	HMWB	at risk	at risk	yes	yes	
31	Mala Vysya	UA_M5.4_0716	HMWB	at risk	at risk	yes	yes	
32	Umanka	UA_M5.4_0767	HMWB	at risk	at risk	yes	yes	
33	Umanka	UA_M5.4_0768	HMWB	at risk	at risk	yes	yes	
34	Untitled	UA_M5.4_0785	HMWB	at risk	at risk	yes	yes	
35	Ingul	UA_M5.4_0966	PR	at risk	at risk	yes	yes	
36	Ingul	UA_M5.4_0970	PR	at risk	risk-free	yes	yes	
37	Gruzka	UA_M5.4_0983	PR	possibly at risk	at risk	yes	yes	
38	Gruzka	UA_M5.4_0985	HMWB	at risk	at risk	yes	yes	
39	Shchedrivske Reservoir	UA_M5.4_0008	HMWB	at risk	possibly at risk	yes	yes	
40	Sandrak reservoir	UA_M5.4_0011	HMWB	at risk	possibly at risk	yes	yes	
41	Sabarivske reservoir	UA_M5.4_0013	HMWB	at risk	possibly at risk	yes	yes	
42	Sutiska reservoir	UA_M5.4_0014	HMWB	at risk	at risk	yes	yes	
43	Pishchanske Reservoir	UA_M5.4_0433	HMWB	risk-free	possibly at risk	yes	yes	
44	Lelekivka Reservoir	UA_M5.4_0984	HMWB	at risk	possibly at risk	yes	yes	
45	Bug estuary	UA_M5.4_1091	PR	at risk	risk-free	yes	yes	
all other SWBs								
1	Southern Bug	UA_M5.4_0002	PR	possibly at risk	at risk	no	no	NV

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2	Khmelnytsky Reservoir	UA_M5.4_0003	HMWB	at risk	risk-free	no	yes	TP, BB
3	Medzhybizh reservoir	UA_M5.4_0006	HMWB	at risk	at risk	no	no	TP, BB
4	Southern Bug	UA_M5.4_0007	PR	possibly at risk	at risk	no	no	NV
5	Novokonstantinovskoye reservoir	UA_M5.4_0009	HMWB	at risk	at risk	no	no	TP, BB
6	Bratslav reservoir	UA_M5.4_0017	HMWB	at risk	risk-free	no	yes	TP, BB
7	Ladyzhynske Reservoir	UA_M5.4_0019	HMWB	at risk	risk-free	no	yes	TP, BB
8	Southern Bug	UA_M5.4_0020	PR	at risk	at risk	no	no	NV
9	Southern Bug	UA_M5.4_0021	PR	at risk	at risk	no	no	NV
10	Hlybochokske Reservoir	UA_M5.4_0022	HMWB	at risk	risk-free	no	yes	TP, BB
11	Chernyatyn reservoir	UA_M5.4_0023	HMWB	at risk	risk-free	no	yes	TP, BB
12	Gayvoronske Reservoir	UA_M5.4_0024	HMWB	at risk	risk-free	no	yes	TP, BB
13	Savranskoye reservoir	UA_M5.4_0025	HMWB	at risk	risk-free	no	yes	TP, BB
14	Southern Bug	UA_M5.4_0026	PR	possibly at risk	risk-free	no	yes	NV
15	Pervomaiskoye Reservoir	UA_M5.4_0027	HMWB	at risk	risk-free	no	yes	TP, BB
16	Oleksandrivske Reservoir	UA_M5.4_0028	HMWB	at risk	at risk	no	no	TP, BB
17	Southern Bug	UA_M5.4_0029	PR	at risk	at risk	no	no	NV
18	Mshanets	UA_M5.4_0031	HMWB	at risk	risk-free	no	yes	NV
19	Mshanets	UA_M5.4_0033	HMWB	at risk	risk-free	no	yes	NV
20	Nakrevytske reservoir	UA_M5.4_0034	HMWB	at risk	risk-free	no	yes	TP, BB
21	Mshanets	UA_M5.4_0035	HMWB	at risk	risk-free	no	yes	NV
22	Mshanets	UA_M5.4_0036	HMWB	at risk	risk-free	no	yes	NV

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23	Untitled	UA_M5.4_0037	HMWB	at risk	risk-free	no	yes	NV
24	Untitled	UA_M5.4_0038	HMWB	at risk	risk-free	no	yes	NV
25	Untitled	UA_M5.4_0039	HMWB	at risk	risk-free	no	yes	NV
26	Voitovina	UA_M5.4_0040	HMWB	at risk	risk-free	no	yes	NV
27	Flat	UA_M5.4_0042	HMWB	at risk	risk-free	no	yes	NV
28	Malashivtsi reservoir	UA_M5.4_0044	HMWB	at risk	risk-free	no	yes	TP, BB
29	Flat	UA_M5.4_0045	PR	possibly at risk	risk-free	no	yes	NV
30	Flat	UA_M5.4_0046	HMWB	at risk	risk-free	no	yes	NV
31	Male	UA_M5.4_0047	HMWB	at risk	at risk	no	no	NV
32	Zinchitsa	UA_M5.4_0048	HMWB	at risk	risk-free	no	yes	NV
33	Bakhmatovetske Reservoir	UA_M5.4_0049	HMWB	at risk	risk-free	no	yes	TP, BB
34	Pirogovo reservoir No. 2	UA_M5.4_0050	HMWB	at risk	risk-free	no	yes	TP, BB
35	Zinchitsa	UA_M5.4_0051	HMWB	at risk	risk-free	no	yes	NV
36	Buzhok	UA_M5.4_0052	HMWB	at risk	risk-free	no	yes	NV
37	Buzhok	UA_M5.4_0053	HMWB	at risk	risk-free	no	yes	NV
38	Buzhok	UA_M5.4_0054	HMWB	at risk	risk-free	no	yes	NV
39	Buzhok	UA_M5.4_0055	HMWB	at risk	risk-free	no	yes	NV
40	Buzhok	UA_M5.4_0056	HMWB	at risk	risk-free	no	yes	NV
41	Mytinetskoye reservoir	UA_M5.4_0057	HMWB	at risk	risk-free	no	yes	TP, BB
42	Buzhok	UA_M5.4_0058	HMWB	at risk	risk-free	no	yes	NV
43	Anastava reservoir (upper)	UA_M5.4_0059	HMWB	at risk	risk-free	no	yes	TP, BB

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44	Buzhok	UA_M5.4_0060	HMWB	at risk	risk-free	no	yes	NV
45	Untitled	UA_M5.4_0061	HMWB	at risk	risk-free	no	yes	NV
46	Untitled	UA_M5.4_0062	HMWB	at risk	risk-free	no	yes	NV
47	Untitled	UA_M5.4_0063	HMWB	at risk	risk-free	no	yes	NV
48	Untitled	UA_M5.4_0065	HMWB	at risk	risk-free	no	yes	NV
49	Wolf	UA_M5.4_0067	HMWB	at risk	risk-free	no	yes	NV
50	Wolf	UA_M5.4_0068	HMWB	at risk	risk-free	no	yes	NV
51	Wolf	UA_M5.4_0069	HMWB	at risk	at risk	no	no	NV
52	Rudnyansky reservoir	UA_M5.4_0071	HMWB	at risk	risk-free	no	yes	TP, BB
53	Wolf	UA_M5.4_0072	HMWB	at risk	risk-free	no	yes	NV
54	Wolfberry	UA_M5.4_0073	HMWB	at risk	risk-free	no	yes	NV
55	Wolfberry	UA_M5.4_0074	HMWB	at risk	risk-free	no	yes	NV
56	Untitled	UA_M5.4_0075	HMWB	at risk	risk-free	no	yes	NV
57	Tarihva	UA_M5.4_0076	PR	possibly at risk	risk-free	no	yes	NV
58	Tesovka	UA_M5.4_0078	HMWB	at risk	risk-free	no	yes	NV
59	Tesovka	UA_M5.4_0079	PR	possibly at risk	risk-free	no	yes	NV
60	Untitled	UA_M5.4_0080	HMWB	at risk	risk-free	no	yes	NV
61	Caviar	UA_M5.4_0081	HMWB	at risk	risk-free	no	yes	NV
62	Nemyrynets reservoir	UA_M5.4_0082	HMWB	at risk	risk-free	no	yes	TP, BB
63	Caviar	UA_M5.4_0083	HMWB	at risk	risk-free	no	yes	NV
64	Kantovets reservoir	UA_M5.4_0084	HMWB	at risk	risk-free	no	yes	TP, BB

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65	Caviar	UA_M5.4_0085	HMWB	at risk	risk-free	no	yes	NV
66	Caviar	UA_M5.4_0086	HMWB	at risk	risk-free	no	yes	NV
67	Untitled	UA_M5.4_0088	HMWB	at risk	risk-free	no	yes	NV
68	Untitled	UA_M5.4_0089	HMWB	at risk	risk-free	no	yes	NV
69	Starosyniavske reservoir	UA_M5.4_0090	HMWB	at risk	risk-free	no	yes	TP, BB
70	Untitled	UA_M5.4_0091	HMWB	at risk	risk-free	no	yes	NV
71	Fire	UA_M5.4_0092	HMWB	at risk	at risk	no	no	NV
72	Fire	UA_M5.4_0094	HMWB	at risk	risk-free	no	yes	NV
73	Big Ore (Tailings)	UA_M5.4_0096	HMWB	at risk	risk-free	no	yes	NV
74	Snivoda	UA_M5.4_0098	HMWB	at risk	risk-free	no	yes	NV
75	Snivoda	UA_M5.4_0099	HMWB	at risk	risk-free	no	yes	NV
76	Voronivets Reservoir	UA_M5.4_0100	HMWB	at risk	risk-free	no	yes	TP, BB
77	Kryvoshyinske Reservoir	UA_M5.4_0102	HMWB	at risk	risk-free	no	yes	TP, BB
78	Pykivka reservoir (upper)	UA_M5.4_0103	HMWB	at risk	risk-free	no	yes	TP, BB
79	Snivoda	UA_M5.4_0105	HMWB	at risk	risk-free	no	yes	NV
80	Zhigalivske reservoir	UA_M5.4_0106	HMWB	at risk	risk-free	no	yes	NV
81	Snivoda	UA_M5.4_0107	HMWB	at risk	risk-free	no	yes	TP, BB
82	Salnytska	UA_M5.4_0108	HMWB	at risk	risk-free	no	yes	NV
83	Vytkhla	UA_M5.4_0109	HMWB	at risk	risk-free	no	yes	NV
84	Untitled	UA_M5.4_0111	HMWB	at risk	risk-free	no	yes	NV
85	Untitled	UA_M5.4_0113	HMWB	at risk	risk-free	no	yes	NV

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86	Postolova	UA_M5.4_0114	HMWB	at risk	risk-free	no	yes	NV
87	Kommunarivske Reservoir	UA_M5.4_0116	HMWB	at risk	risk-free	no	yes	TP, BB
88	Postolova	UA_M5.4_0117	HMWB	at risk	at risk	no	no	NV
89	Pysarivske Reservoir	UA_M5.4_0118	HMWB	at risk	risk-free	no	yes	TP, BB
90	Postolova	UA_M5.4_0119	HMWB	at risk	at risk	no	no	NV
91	Untitled	UA_M5.4_0120	HMWB	at risk	risk-free	no	yes	NV
92	Ulasova Ore yard	UA_M5.4_0121	HMWB	at risk	risk-free	no	yes	NV
93	Ulasova Ore yard	UA_M5.4_0122	HMWB	at risk	risk-free	no	yes	NV
94	Zgar	UA_M5.4_0123	HMWB	at risk	risk-free	no	yes	NV
95	Bucnianske Reservoir	UA_M5.4_0124	HMWB	at risk	risk-free	no	yes	TP, BB
96	Zgar	UA_M5.4_0125	HMWB	at risk	risk-free	no	yes	NV
97	Zgar	UA_M5.4_0126	HMWB	at risk	risk-free	no	yes	NV
98	Petrykske Reservoir	UA_M5.4_0127	HMWB	at risk	risk-free	no	yes	TP, BB
99	Zgar	UA_M5.4_0128	HMWB	at risk	risk-free	no	yes	NV
100	Zgar	UA_M5.4_0130	HMWB	at risk	risk-free	no	yes	NV
101	Zagarok	UA_M5.4_0132	HMWB	at risk	risk-free	no	yes	NV
102	Zagarok	UA_M5.4_0133	HMWB	at risk	risk-free	no	yes	NV
103	Untitled	UA_M5.4_0136	HMWB	at risk	at risk	no	no	NV
104	Hump	UA_M5.4_0137	HMWB	at risk	at risk	no	no	NV
105	Zagarok	UA_M5.4_0138	HMWB	at risk	risk-free	no	yes	NV
106	Zagarok	UA_M5.4_0139	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
107	Bruslynivske Reservoir	UA_M5.4_0140	HMWB	at risk	risk-free	no	yes	TP, BB
108	Gum	UA_M5.4_0142	HMWB	at risk	risk-free	no	yes	NV
109	Lozovske Reservoir	UA_M5.4_0144	HMWB	at risk	risk-free	no	yes	TP, BB
110	Gum	UA_M5.4_0145	HMWB	at risk	risk-free	no	yes	NV
111	Novohrebelske reservoir	UA_M5.4_0146	HMWB	at risk	risk-free	no	yes	TP, BB
112	Turbovske reservoir	UA_M5.4_0148	HMWB	at risk	risk-free	no	yes	TP, BB
113	Gum	UA_M5.4_0151	HMWB	at risk	at risk	no	no	NV
114	Gum	UA_M5.4_0152	PR	possibly at risk	risk-free	no	yes	NV
115	Untitled	UA_M5.4_0153	HMWB	at risk	risk-free	no	yes	NV
116	Untitled	UA_M5.4_0154	HMWB	at risk	at risk	no	no	NV
117	Untitled	UA_M5.4_0156	HMWB	at risk	risk-free	no	yes	NV
118	Untitled	UA_M5.4_0157	HMWB	at risk	risk-free	no	yes	NV
119	Untitled	UA_M5.4_0158	HMWB	at risk	risk-free	no	yes	NV
120	Untitled	UA_M5.4_0159	HMWB	at risk	at risk	no	no	NV
121	Untitled	UA_M5.4_0160	HMWB	at risk	risk-free	no	yes	NV
122	Untitled	UA_M5.4_0161	HMWB	at risk	risk-free	no	yes	NV
123	Untitled	UA_M5.4_0163	HMWB	at risk	risk-free	no	yes	NV
124	Untitled	UA_M5.4_0164	HMWB	at risk	risk-free	no	yes	NV
125	Untitled	UA_M5.4_0166	HMWB	at risk	at risk	no	no	NV
126	Untitled	UA_M5.4_0168	HMWB	at risk	at risk	no	no	NV
127	Untitled	UA_M5.4_0169	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
128	Untitled	UA_M5.4_0170	HMWB	at risk	risk-free	no	yes	NV
129	Alder	UA_M5.4_0171	HMWB	at risk	risk-free	no	yes	NV
130	Alder	UA_M5.4_0172	HMWB	at risk	at risk	no	no	NV
131	Stables (Desenka)	UA_M5.4_0174	HMWB	at risk	risk-free	no	yes	NV
132	Untitled	UA_M5.4_0178	HMWB	at risk	risk-free	no	yes	NV
133	Untitled	UA_M5.4_0179	HMWB	at risk	risk-free	no	yes	NV
134	Untitled	UA_M5.4_0180	HMWB	at risk	risk-free	no	yes	NV
135	Periorca	UA_M5.4_0183	HMWB	at risk	at risk	no	no	NV
136	Tyazhilov	UA_M5.4_0184	HMWB	at risk	at risk	no	no	NV
137	Cherry	UA_M5.4_0185	HMWB	at risk	risk-free	no	yes	NV
138	Cherry	UA_M5.4_0186	HMWB	at risk	risk-free	no	yes	NV
139	Rovets	UA_M5.4_0187	HMWB	at risk	risk-free	no	yes	NV
140	Rovets	UA_M5.4_0188	HMWB	at risk	at risk	no	no	NV
141	Ditch	UA_M5.4_0189	HMWB	at risk	risk-free	no	yes	NV
142	Zhenishkovets Reservoir	UA_M5.4_0190	HMWB	at risk	risk-free	no	yes	TP, BB
143	Ditch	UA_M5.4_0191	HMWB	at risk	risk-free	no	yes	NV
144	Ditch	UA_M5.4_0192	HMWB	at risk	at risk	no	no	NV
145	Barske Reservoir	UA_M5.4_0193	HMWB	at risk	risk-free	no	yes	TP, BB
146	Antonivske Reservoir	UA_M5.4_0195	HMWB	at risk	risk-free	no	yes	TP, BB
147	Tokarivske Reservoir	UA_M5.4_0197	HMWB	at risk	risk-free	no	yes	TP, BB
148	Ditch	UA_M5.4_0198	HMWB	at risk	at risk	no	no	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
149	Serbynivka reservoir	UA_M5.4_0199	HMWB	at risk	risk-free	no	yes	TP, BB
150	Martynivka Reservoir	UA_M5.4_0201	HMWB	at risk	risk-free	no	yes	TP, BB
151	Tartak reservoir	UA_M5.4_0203	HMWB	at risk	risk-free	no	yes	TP, BB
152	Brailovskoye Reservoir	UA_M5.4_0205	HMWB	at risk	risk-free	no	yes	TP, BB
153	Scoop	UA_M5.4_0207	HMWB	at risk	at risk	no	no	NV
154	Scoop	UA_M5.4_0208	HMWB	at risk	risk-free	no	yes	NV
155	Garmak reservoir	UA_M5.4_0209	HMWB	at risk	risk-free	no	yes	TP, BB
156	Scoop	UA_M5.4_0210	HMWB	at risk	risk-free	no	yes	NV
157	Untitled	UA_M5.4_0211	HMWB	at risk	at risk	no	no	NV
158	Untitled	UA_M5.4_0213	HMWB	at risk	at risk	no	no	NV
159	Untitled	UA_M5.4_0214	HMWB	at risk	at risk	no	no	NV
160	Opinion.	UA_M5.4_0216	HMWB	at risk	at risk	no	no	NV
161	Opinion.	UA_M5.4_0217	HMWB	at risk	risk-free	no	yes	NV
162	Opinion.	UA_M5.4_0218	HMWB	at risk	risk-free	no	yes	NV
163	Untitled	UA_M5.4_0219	HMWB	at risk	at risk	no	no	NV
164	Kudashivka	UA_M5.4_0223	PR	possibly at risk	at risk	no	no	NV
165	Untitled	UA_M5.4_0224	HMWB	at risk	risk-free	no	yes	NV
166	Untitled	UA_M5.4_0225	PR	possibly at risk	risk-free	no	yes	NV
167	Untitled	UA_M5.4_0226	HMWB	at risk	risk-free	no	yes	NV
168	Untitled	UA_M5.4_0227	PR	possibly at risk	risk-free	no	yes	NV
169	Whip	UA_M5.4_0228	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
170	Whip	UA_M5.4_0229	HMWB	at risk	risk-free	no	yes	NV
171	Whip	UA_M5.4_0230	HMWB	at risk	risk-free	no	yes	NV
172	Whip	UA_M5.4_0231	PR	possibly at risk	risk-free	no	yes	NV
173	Krasnyanka	UA_M5.4_0232	HMWB	at risk	at risk	no	no	NV
174	Krasnyanka	UA_M5.4_0233	HMWB	at risk	risk-free	no	yes	NV
175	Untitled	UA_M5.4_0234	HMWB	at risk	risk-free	no	yes	NV
176	Untitled	UA_M5.4_0235	PR	possibly at risk	risk-free	no	yes	NV
177	Roof tiles	UA_M5.4_0236	HMWB	at risk	at risk	no	no	NV
178	Roof tiles	UA_M5.4_0237	HMWB	at risk	risk-free	no	yes	NV
179	Untitled	UA_M5.4_0239	PR	at risk	risk-free	no	yes	NV
180	Untitled	UA_M5.4_0240	HMWB	at risk	risk-free	no	yes	NV
181	Untitled	UA_M5.4_0241	HMWB	at risk	risk-free	no	yes	NV
182	Untitled	UA_M5.4_0244	HMWB	at risk	risk-free	no	yes	NV
183	Untitled	UA_M5.4_0247	HMWB	at risk	at risk	no	no	NV
184	Selnytsia	UA_M5.4_0254	HMWB	at risk	at risk	no	no	NV
185	Selnytsia	UA_M5.4_0255	HMWB	at risk	risk-free	no	yes	NV
186	Selnytsia	UA_M5.4_0256	PR	at risk	at risk	no	no	NV
187	Kynashiv reservoir	UA_M5.4_0257	HMWB	at risk	risk-free	no	yes	TP, BB
188	Klebanske Reservoir	UA_M5.4_0259	HMWB	at risk	risk-free	no	yes	TP, BB
189	Selnytsia	UA_M5.4_0260	PR	at risk	risk-free	no	yes	NV
190	Selnytsia	UA_M5.4_0261	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
191	Selnytsia	UA_M5.4_0262	PR	at risk	risk-free	no	yes	NV
192	Tulchinka	UA_M5.4_0263	PR	at risk	risk-free	no	yes	NV
193	Tulchinka	UA_M5.4_0264	PR	at risk	risk-free	no	yes	NV
194	Untitled	UA_M5.4_0266	HMWB	at risk	risk-free	no	yes	NV
195	Untitled	UA_M5.4_0267	HMWB	at risk	risk-free	no	yes	NV
196	Kyrnasivske reservoir	UA_M5.4_0268	HMWB	at risk	risk-free	no	yes	TP, BB
197	Untitled	UA_M5.4_0269	HMWB	at risk	risk-free	no	yes	NV
198	Untitled	UA_M5.4_0270	HMWB	at risk	at risk	no	no	NV
199	Untitled	UA_M5.4_0271	HMWB	at risk	at risk	no	no	NV
200	Untitled	UA_M5.4_0272	HMWB	at risk	risk-free	no	yes	NV
201	Untitled	UA_M5.4_0273	HMWB	at risk	risk-free	no	yes	NV
202	Untitled	UA_M5.4_0274	PR	at risk	risk-free	no	yes	NV
203	Sob	UA_M5.4_0275	HMWB	at risk	risk-free	no	yes	NV
204	Illinetsky reservoir	UA_M5.4_0277	HMWB	at risk	risk-free	no	yes	TP, BB
205	Sob	UA_M5.4_0278	PR	possibly at risk	at risk	no	no	NV
206	Sob	UA_M5.4_0279	PR	at risk	at risk	no	no	NV
207	Sob	UA_M5.4_0281	HMWB	at risk	at risk	no	no	NV
208	Dmitrenkivske reservoir	UA_M5.4_0283	HMWB	at risk	risk-free	no	yes	TP, BB
209	Sob	UA_M5.4_0284	PR	at risk	risk-free	no	yes	NV
210	Untitled	UA_M5.4_0285	HMWB	at risk	at risk	no	no	NV
211	Horse	UA_M5.4_0286	HMWB	at risk	at risk	no	no	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
212	Kamenka	UA_M5.4_0288	HMWB	at risk	at risk	no	no	NV
213	Sobik	UA_M5.4_0291	HMWB	at risk	at risk	no	no	NV
214	Sobik	UA_M5.4_0292	HMWB	at risk	at risk	no	no	NV
215	Untitled	UA_M5.4_0293	HMWB	at risk	at risk	no	no	NV
216	Untitled	UA_M5.4_0294	HMWB	at risk	risk-free	no	yes	NV
217	Untitled	UA_M5.4_0295	HMWB	at risk	risk-free	no	yes	NV
218	Nymynka	UA_M5.4_0296	HMWB	at risk	at risk	no	no	NV
219	Nymynka	UA_M5.4_0297	HMWB	at risk	at risk	no	no	NV
220	Satorichka	UA_M5.4_0298	HMWB	at risk	at risk	no	no	NV
221	Slice	UA_M5.4_0300	HMWB	at risk	at risk	no	no	NV
222	Untitled	UA_M5.4_0304	HMWB	at risk	at risk	no	no	NV
223	Untitled	UA_M5.4_0305	HMWB	at risk	at risk	no	no	NV
224	Untitled	UA_M5.4_0306	HMWB	at risk	at risk	no	no	NV
225	Untitled	UA_M5.4_0307	HMWB	at risk	at risk	no	no	NV
226	Forty	UA_M5.4_0309	HMWB	at risk	at risk	no	no	NV
227	Forty	UA_M5.4_0310	HMWB	at risk	at risk	no	no	NV
228	Forty	UA_M5.4_0311	HMWB	at risk	at risk	no	no	NV
229	Forty	UA_M5.4_0312	HMWB	at risk	risk-free	no	yes	NV
230	Gorodkovske Reservoir	UA_M5.4_0313	HMWB	at risk	risk-free	no	yes	TP, BB
231	Forty	UA_M5.4_0314	HMWB	at risk	at risk	no	no	NV
232	Untitled	UA_M5.4_0315	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
233	Untitled	UA_M5.4_0316	HMWB	at risk	at risk	no	no	NV
234	Untitled	UA_M5.4_0317	HMWB	at risk	risk-free	no	yes	NV
235	Untitled	UA_M5.4_0318	HMWB	at risk	at risk	no	no	NV
236	Untitled	UA_M5.4_0319	HMWB	at risk	at risk	no	no	NV
237	Squirrel	UA_M5.4_0320	HMWB	at risk	at risk	no	no	NV
238	Squirrel	UA_M5.4_0322	HMWB	at risk	risk-free	no	yes	NV
239	Verbych	UA_M5.4_0324	HMWB	at risk	at risk	no	no	NV
240	Verbych	UA_M5.4_0325	HMWB	at risk	risk-free	no	yes	NV
241	Verbych	UA_M5.4_0326	HMWB	at risk	risk-free	no	yes	NV
242	Kiblych	UA_M5.4_0327	HMWB	at risk	at risk	no	no	NV
243	Kiblych	UA_M5.4_0328	HMWB	at risk	at risk	no	no	NV
244	Kiblych	UA_M5.4_0329	HMWB	at risk	risk-free	no	yes	NV
245	Untitled	UA_M5.4_0330	PR	possibly at risk	risk-free	no	yes	NV
246	Popov Yarok	UA_M5.4_0331	HMWB	at risk	risk-free	no	yes	NV
247	Popov Yarok	UA_M5.4_0332	PR	possibly at risk	risk-free	no	yes	NV
248	Untitled	UA_M5.4_0333	PR	possibly at risk	risk-free	no	yes	NV
249	Untitled	UA_M5.4_0334	HMWB	at risk	at risk	no	no	NV
250	Untitled	UA_M5.4_0336	HMWB	at risk	at risk	no	no	NV
251	Trostyanets	UA_M5.4_0337	HMWB	at risk	risk-free	no	yes	NV
252	Trostyanets	UA_M5.4_0338	PR	at risk	risk-free	no	yes	NV
253	Trostyanets	UA_M5.4_0339	PR	at risk	at risk	no	no	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
254	Trostyanets	UA_M5.4_0340	HMWB	at risk	at risk	no	no	NV
255	Trostyanets	UA_M5.4_0341	PR	at risk	at risk	no	no	NV
256	Trostyanets	UA_M5.4_0342	HMWB	at risk	at risk	no	no	NV
257	Trostyanets	UA_M5.4_0343	HMWB	at risk	at risk	no	no	NV
258	Untitled	UA_M5.4_0344	PR	possibly at risk	risk-free	no	yes	NV
259	Untitled	UA_M5.4_0345	HMWB	at risk	risk-free	no	yes	NV
260	Untitled	UA_M5.4_0346	PR	possibly at risk	at risk	no	no	NV
261	Untitled	UA_M5.4_0347	HMWB	at risk	at risk	no	no	NV
262	Untitled	UA_M5.4_0348	PR	possibly at risk	risk-free	no	yes	NV
263	Untitled	UA_M5.4_0349	HMWB	at risk	risk-free	no	yes	NV
264	Untitled	UA_M5.4_0350	PR	possibly at risk	risk-free	no	yes	NV
265	Untitled	UA_M5.4_0351	HMWB	at risk	risk-free	no	yes	NV
266	Untitled	UA_M5.4_0352	PR	possibly at risk	risk-free	no	yes	NV
267	Untitled	UA_M5.4_0353	HMWB	at risk	at risk	no	no	NV
268	Untitled	UA_M5.4_0354	PR	possibly at risk	risk-free	no	yes	NV
269	Udych	UA_M5.4_0355	HMWB	at risk	risk-free	no	yes	NV
270	Udych	UA_M5.4_0356	PR	at risk	at risk	no	no	NV
271	Udych	UA_M5.4_0357	HMWB	at risk	risk-free	no	yes	NV
272	Velikaya Stinka	UA_M5.4_0358	HMWB	at risk	risk-free	no	yes	NV
273	Velikaya Stinka	UA_M5.4_0359	PR	possibly at risk	at risk	no	no	NV
274	Udych	UA_M5.4_0360	PR	possibly at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
275	Udych	UA_M5.4_0361	HMWB	at risk	risk-free	no	yes	NV
276	Ternivka	UA_M5.4_0362	PR	possibly at risk	risk-free	no	yes	NV
277	Ternivka	UA_M5.4_0363	HMWB	at risk	risk-free	no	yes	NV
278	Ternivka	UA_M5.4_0364	HMWB	at risk	risk-free	no	yes	NV
279	Greenhouse	UA_M5.4_0365	PR	possibly at risk	risk-free	no	yes	NV
280	Greenhouse	UA_M5.4_0366	PR	possibly at risk	risk-free	no	yes	NV
281	Greenhouse	UA_M5.4_0367	HMWB	at risk	risk-free	no	yes	NV
282	Greenhouse	UA_M5.4_0369	HMWB	at risk	at risk	no	no	NV
283	Greenhouse	UA_M5.4_0370	HMWB	at risk	at risk	no	no	NV
284	Untitled	UA_M5.4_0371	PR	possibly at risk	risk-free	no	yes	NV
285	Untitled	UA_M5.4_0372	PR	possibly at risk	risk-free	no	yes	NV
286	Untitled	UA_M5.4_0373	PR	possibly at risk	at risk	no	no	NV
287	Untitled	UA_M5.4_0374	HMWB	at risk	risk-free	no	yes	NV
288	Untitled	UA_M5.4_0375	HMWB	at risk	risk-free	no	yes	NV
289	Untitled	UA_M5.4_0376	PR	possibly at risk	at risk	no	no	NV
290	Doha	UA_M5.4_0377	HMWB	at risk	at risk	no	no	NV
291	Doha	UA_M5.4_0378	HMWB	at risk	risk-free	no	yes	NV
292	Doha	UA_M5.4_0379	HMWB	at risk	at risk	no	no	NV
293	Doha	UA_M5.4_0380	HMWB	at risk	at risk	no	no	NV
294	Bershad reservoir (upper)	UA_M5.4_0382	HMWB	at risk	risk-free	no	yes	TP, BB
295	Bershad reservoir (lower)	UA_M5.4_0383	HMWB	at risk	risk-free	no	yes	TP, BB

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
296	Doha	UA_M5.4_0384	HMWB	at risk	risk-free	no	yes	NV
297	Doha	UA_M5.4_0385	HMWB	at risk	risk-free	no	yes	NV
298	Doha	UA_M5.4_0386	HMWB	at risk	risk-free	no	yes	NV
299	Krynytsia-Vyazovaya	UA_M5.4_0387	PR	at risk	risk-free	no	yes	NV
300	Berladinka	UA_M5.4_0390	HMWB	at risk	risk-free	no	yes	NV
301	Berladinka	UA_M5.4_0391	HMWB	at risk	risk-free	no	yes	NV
302	Berladinka	UA_M5.4_0392	HMWB	at risk	risk-free	no	yes	NV
303	Berladinka	UA_M5.4_0393	HMWB	at risk	risk-free	no	yes	NV
304	Berladinka	UA_M5.4_0394	HMWB	at risk	risk-free	no	yes	NV
305	Untitled	UA_M5.4_0396	HMWB	at risk	risk-free	no	yes	NV
306	Untitled	UA_M5.4_0398	HMWB	at risk	risk-free	no	yes	NV
307	Untitled	UA_M5.4_0400	PR	at risk	risk-free	no	yes	NV
308	Untitled	UA_M5.4_0401	HMWB	at risk	risk-free	no	yes	NV
309	Untitled	UA_M5.4_0403	HMWB	at risk	risk-free	no	yes	NV
310	Untitled	UA_M5.4_0406	PR	at risk	at risk	no	no	NV
311	Untitled	UA_M5.4_0407	HMWB	at risk	risk-free	no	yes	NV
312	Untitled	UA_M5.4_0408	PR	at risk	at risk	no	no	NV
313	Untitled	UA_M5.4_0409	HMWB	at risk	risk-free	no	yes	NV
314	Untitled	UA_M5.4_0410	HMWB	at risk	at risk	no	no	NV
315	Osiivka	UA_M5.4_0411	HMWB	at risk	risk-free	no	yes	NV
316	Tashlychka	UA_M5.4_0412	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
317	Tashlychka	UA_M5.4_0413	HMWB	at risk	risk-free	no	yes	NV
318	Tashlychka	UA_M5.4_0414	PR	possibly at risk	risk-free	no	yes	NV
319	Tashlychka	UA_M5.4_0415	HMWB	at risk	risk-free	no	yes	NV
320	Tashlychka	UA_M5.4_0416	PR	possibly at risk	risk-free	no	yes	NV
321	Tashlychka	UA_M5.4_0417	PR	possibly at risk	risk-free	no	yes	NV
322	Tashlychka	UA_M5.4_0418	PR	possibly at risk	at risk	no	no	NV
323	Road	UA_M5.4_0419	HMWB	at risk	risk-free	no	yes	NV
324	Road	UA_M5.4_0420	HMWB	at risk	risk-free	no	yes	NV
325	Dark	UA_M5.4_0421	PR	possibly at risk	risk-free	no	yes	NV
326	Dark	UA_M5.4_0422	HMWB	at risk	risk-free	no	yes	NV
327	Dark	UA_M5.4_0423	HMWB	at risk	risk-free	no	yes	NV
328	Dark	UA_M5.4_0424	HMWB	at risk	risk-free	no	yes	NV
329	Dark	UA_M5.4_0425	PR	possibly at risk	risk-free	no	yes	NV
330	Moschona	UA_M5.4_0426	PR	possibly at risk	risk-free	no	yes	NV
331	Untitled	UA_M5.4_0427	PR	possibly at risk	risk-free	no	yes	NV
332	Savranka	UA_M5.4_0430	HMWB	at risk	risk-free	no	yes	NV
333	Savranka	UA_M5.4_0431	HMWB	at risk	risk-free	no	yes	NV
334	Savranka	UA_M5.4_0435	PR	possibly at risk	risk-free	no	yes	NV
335	Untitled	UA_M5.4_0437	HMWB	at risk	risk-free	no	yes	NV
336	Untitled	UA_M5.4_0438	HMWB	at risk	risk-free	no	yes	NV
337	Untitled	UA_M5.4_0439	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
338	Untitled	UA_M5.4_0440	HMWB	at risk	at risk	no	no	NV
339	Untitled	UA_M5.4_0441	HMWB	at risk	at risk	no	no	NV
340	Untitled	UA_M5.4_0442	HMWB	at risk	at risk	no	no	NV
341	Untitled	UA_M5.4_0443	HMWB	at risk	at risk	no	no	NV
342	Untitled	UA_M5.4_0444	HMWB	at risk	risk-free	no	yes	NV
343	Jalanec	UA_M5.4_0445	HMWB	at risk	risk-free	no	yes	NV
344	Jalanec	UA_M5.4_0446	HMWB	at risk	risk-free	no	yes	NV
345	Bandura reservoir 1	UA_M5.4_0447	HMWB	at risk	risk-free	no	yes	TP, BB
346	Jalanec	UA_M5.4_0448	HMWB	at risk	risk-free	no	yes	NV
347	Bandura reservoir 2	UA_M5.4_0449	HMWB	at risk	risk-free	no	yes	TP, BB
348	Untitled	UA_M5.4_0451	PR	possibly at risk	risk-free	no	yes	NV
349	Untitled	UA_M5.4_0452	HMWB	at risk	at risk	no	no	NV
350	Untitled	UA_M5.4_0453	PR	possibly at risk	at risk	no	no	NV
351	Untitled	UA_M5.4_0454	HMWB	at risk	risk-free	no	yes	NV
352	Titmouse	UA_M5.4_0455	HMWB	at risk	risk-free	no	yes	NV
353	Titmouse	UA_M5.4_0456	HMWB	at risk	risk-free	no	yes	NV
354	Titmouse	UA_M5.4_0457	HMWB	at risk	risk-free	no	yes	NV
355	Sinitsevo reservoir	UA_M5.4_0460	HMWB	at risk	risk-free	no	yes	TP, BB
356	Titmouse	UA_M5.4_0461	HMWB	at risk	risk-free	no	yes	NV
357	Untitled	UA_M5.4_0464	HMWB	at risk	risk-free	no	yes	NV
358	Untitled	UA_M5.4_0466	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
359	Untitled	UA_M5.4_0467	HMWB	at risk	risk-free	no	yes	NV
360	Untitled	UA_M5.4_0468	HMWB	at risk	risk-free	no	yes	NV
361	Untitled	UA_M5.4_0470	HMWB	at risk	risk-free	no	yes	NV
362	Untitled	UA_M5.4_0472	HMWB	at risk	risk-free	no	yes	NV
363	Moldovan	UA_M5.4_0476	HMWB	at risk	risk-free	no	yes	NV
364	Moldovan	UA_M5.4_0478	HMWB	at risk	risk-free	no	yes	NV
365	Secretary	UA_M5.4_0481	HMWB	at risk	risk-free	no	yes	NV
366	Untitled	UA_M5.4_0483	HMWB	at risk	risk-free	no	yes	NV
367	Untitled	UA_M5.4_0484	HMWB	at risk	risk-free	no	yes	NV
368	Untitled	UA_M5.4_0485	HMWB	at risk	risk-free	no	yes	NV
369	Derenyukha	UA_M5.4_0487	HMWB	at risk	risk-free	no	yes	NV
370	Kodyma	UA_M5.4_0490	HMWB	at risk	risk-free	no	yes	NV
371	Kodyma	UA_M5.4_0491	HMWB	at risk	risk-free	no	yes	NV
372	Pereletskoye reservoir	UA_M5.4_0493	HMWB	at risk	risk-free	no	yes	TP, BB
373	Kodyma	UA_M5.4_0494	HMWB	at risk	risk-free	no	yes	NV
374	Kodyma	UA_M5.4_0495	HMWB	at risk	risk-free	no	yes	NV
375	Zaplazske reservoir	UA_M5.4_0496	HMWB	at risk	risk-free	no	yes	TP, BB
376	Kodyma	UA_M5.4_0497	PR	possibly at risk	risk-free	no	yes	NV
377	Untitled	UA_M5.4_0498	PR	possibly at risk	risk-free	no	yes	NV
378	Untitled	UA_M5.4_0499	HMWB	at risk	at risk	no	no	NV
379	Gedziliv Yar	UA_M5.4_0500	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
380	Gedziliv Yar	UA_M5.4_0501	HMWB	at risk	risk-free	no	yes	NV
381	Novoarkhangelsk reservoir	UA_M5.4_0503	HMWB	at risk	at risk	no	no	TP, BB
382	Ternivka Reservoir	UA_M5.4_0504	HMWB	at risk	risk-free	no	yes	TP, BB
383	Blue	UA_M5.4_0505	PR	possibly at risk	risk-free	no	yes	NV
384	Chervonokhutirske Reservoir	UA_M5.4_0506	HMWB	at risk	risk-free	no	yes	TP, BB
385	Blue	UA_M5.4_0507	HMWB	at risk	risk-free	no	yes	NV
386	Gorny Tikich	UA_M5.4_0509	HMWB	at risk	risk-free	no	yes	NV
387	Gorny Tikich	UA_M5.4_0510	HMWB	at risk	risk-free	no	yes	NV
388	Knyazhe Krynytsia reservoir	UA_M5.4_0511	HMWB	at risk	risk-free	no	yes	TP, BB
389	Gorny Tikich	UA_M5.4_0512	HMWB	at risk	at risk	no	no	NV
390	Ivakhnovske reservoir	UA_M5.4_0514	HMWB	at risk	risk-free	no	yes	TP, BB
391	Gorny Tikich	UA_M5.4_0515	PR	possibly at risk	risk-free	no	yes	NV
392	Gorny Tikich	UA_M5.4_0516	PR	at risk	at risk	no	no	NV
393	Voronensky Reservoir	UA_M5.4_0517	HMWB	at risk	at risk	no	no	TP, BB
394	Gorny Tikich	UA_M5.4_0518	PR	possibly at risk	at risk	no	no	NV
395	Yurpilske Reservoir	UA_M5.4_0519	HMWB	at risk	risk-free	no	yes	TP, BB
396	Gorny Tikich	UA_M5.4_0520	PR	possibly at risk	risk-free	no	yes	NV
397	Talnivske Reservoir	UA_M5.4_0521	HMWB	at risk	risk-free	no	yes	TP, BB
398	Untitled	UA_M5.4_0524	HMWB	at risk	risk-free	no	yes	NV
399	Untitled	UA_M5.4_0525	HMWB	at risk	risk-free	no	yes	NV
400	Untitled	UA_M5.4_0526	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
401	Gnily Tikich stream	UA_M5.4_0529	HMWB	at risk	risk-free	no	yes	NV
402	Gnily Tikich stream	UA_M5.4_0531	HMWB	at risk	risk-free	no	yes	NV
403	Gnily Tikich stream	UA_M5.4_0532	HMWB	at risk	at risk	no	no	NV
404	Rotten Tikich	UA_M5.4_0533	HMWB	at risk	at risk	no	no	NV
405	Rotten Tikich	UA_M5.4_0535	HMWB	at risk	at risk	no	no	NV
406	Rye	UA_M5.4_0536	HMWB	at risk	at risk	no	no	NV
407	Rye	UA_M5.4_0537	HMWB	at risk	at risk	no	no	NV
408	Kanelka	UA_M5.4_0540	HMWB	at risk	risk-free	no	yes	NV
409	Kanelka	UA_M5.4_0541	PR	at risk	at risk	no	no	NV
410	Kanelka	UA_M5.4_0542	HMWB	at risk	risk-free	no	yes	NV
411	Kanelka	UA_M5.4_0543	HMWB	at risk	at risk	no	no	NV
412	Kanelka	UA_M5.4_0544	HMWB	at risk	at risk	no	no	NV
413	Untitled	UA_M5.4_0545	HMWB	at risk	at risk	no	no	NV
414	Untitled	UA_M5.4_0546	HMWB	at risk	risk-free	no	yes	NV
415	Ruda stream	UA_M5.4_0548	HMWB	at risk	at risk	no	no	NV
416	Ruda stream	UA_M5.4_0549	HMWB	at risk	at risk	no	no	NV
417	Ruda stream	UA_M5.4_0550	PR	at risk	at risk	no	no	NV
418	Untitled	UA_M5.4_0551	HMWB	at risk	at risk	no	no	NV
419	Untitled	UA_M5.4_0552	HMWB	at risk	at risk	no	no	NV
420	Torch	UA_M5.4_0555	HMWB	at risk	risk-free	no	yes	NV
421	Torch	UA_M5.4_0556	HMWB	at risk	at risk	no	no	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
422	Torch	UA_M5.4_0557	HMWB	at risk	at risk	no	no	NV
423	Litvinka	UA_M5.4_0558	HMWB	at risk	at risk	no	no	NV
424	Litvinka	UA_M5.4_0559	HMWB	at risk	at risk	no	no	NV
425	Burti	UA_M5.4_0560	HMWB	at risk	risk-free	no	yes	NV
426	Burti	UA_M5.4_0561	PR	at risk	at risk	no	no	NV
427	Teterovka	UA_M5.4_0562	HMWB	at risk	at risk	no	no	NV
428	Teterovka	UA_M5.4_0563	HMWB	at risk	risk-free	no	yes	NV
429	Silver	UA_M5.4_0564	HMWB	at risk	risk-free	no	yes	NV
430	Silver	UA_M5.4_0565	HMWB	at risk	risk-free	no	yes	NV
431	Silver	UA_M5.4_0566	HMWB	at risk	risk-free	no	yes	NV
432	Silver	UA_M5.4_0567	PR	possibly at risk	risk-free	no	yes	NV
433	Silver	UA_M5.4_0568	PR	possibly at risk	risk-free	no	yes	NV
434	Subsistence	UA_M5.4_0570	HMWB	at risk	at risk	no	no	NV
435	Subsistence	UA_M5.4_0571	HMWB	at risk	risk-free	no	yes	NV
436	Subsistence	UA_M5.4_0572	HMWB	at risk	at risk	no	no	NV
437	Baghwa	UA_M5.4_0573	HMWB	at risk	risk-free	no	yes	NV
438	Baghwa	UA_M5.4_0574	HMWB	at risk	at risk	no	no	NV
439	Baghwa	UA_M5.4_0575	HMWB	at risk	risk-free	no	yes	NV
440	Kishchikha	UA_M5.4_0578	HMWB	at risk	risk-free	no	yes	NV
441	Kishchikha	UA_M5.4_0579	HMWB	at risk	at risk	no	no	NV
442	Kishchikha	UA_M5.4_0580	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
443	Mankivka	UA_M5.4_0581	PR	possibly at risk	risk-free	no	yes	NV
444	Mankivka	UA_M5.4_0582	HMWB	at risk	at risk	no	no	NV
445	Untitled	UA_M5.4_0583	PR	possibly at risk	risk-free	no	yes	NV
446	Untitled	UA_M5.4_0584	HMWB	at risk	at risk	no	no	NV
447	б. Duck	UA_M5.4_0585	PR	possibly at risk	risk-free	no	yes	NV
448	б. Duck	UA_M5.4_0586	HMWB	at risk	risk-free	no	yes	NV
449	Popovka	UA_M5.4_0587	HMWB	at risk	risk-free	no	yes	NV
450	Popovka	UA_M5.4_0588	HMWB	at risk	risk-free	no	yes	NV
451	Romanivka	UA_M5.4_0589	HMWB	at risk	risk-free	no	yes	NV
452	Romanivka	UA_M5.4_0590	HMWB	at risk	at risk	no	no	NV
453	Berinka	UA_M5.4_0592	HMWB	at risk	risk-free	no	yes	NV
454	Makszyboloto	UA_M5.4_0593	HMWB	at risk	at risk	no	no	NV
455	Makszyboloto	UA_M5.4_0595	HMWB	at risk	at risk	no	no	NV
456	Makszyboloto	UA_M5.4_0596	HMWB	at risk	at risk	no	no	NV
457	Maksibolotsky Stream	UA_M5.4_0598	HMWB	at risk	risk-free	no	yes	NV
458	Maksibolotsky Stream	UA_M5.4_0599	HMWB	at risk	risk-free	no	yes	NV
459	Untitled	UA_M5.4_0601	HMWB	at risk	risk-free	no	yes	NV
460	Untitled	UA_M5.4_0602	HMWB	at risk	at risk	no	no	NV
461	Moshchuriv	UA_M5.4_0603	HMWB	at risk	risk-free	no	yes	NV
462	Talnyanka	UA_M5.4_0605	PR	possibly at risk	risk-free	no	yes	NV
463	Talnyanka	UA_M5.4_0606	PR	possibly at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
464	Talnyanka	UA_M5.4_0607	HMWB	at risk	at risk	no	no	NV
465	Talnyanka	UA_M5.4_0609	HMWB	at risk	risk-free	no	yes	NV
466	Bilashka	UA_M5.4_0611	HMWB	at risk	risk-free	no	yes	NV
467	Rotten Tikich	UA_M5.4_0612	PR	possibly at risk	risk-free	no	yes	NV
468	Rotten Tikich	UA_M5.4_0614	HMWB	at risk	at risk	no	no	NV
469	Brylivka Reservoir	UA_M5.4_0615	HMWB	at risk	risk-free	no	yes	TP, BB
470	Rotten Tikich	UA_M5.4_0616	HMWB	at risk	risk-free	no	yes	NV
471	Veselokutske reservoir	UA_M5.4_0617	HMWB	at risk	risk-free	no	yes	TP, BB
472	Rotten Tikich	UA_M5.4_0618	HMWB	at risk	risk-free	no	yes	NV
473	Lysianske Reservoir	UA_M5.4_0620	HMWB	at risk	risk-free	no	yes	TP, BB
474	Zvenigorodske Reservoir	UA_M5.4_0622	HMWB	at risk	risk-free	no	yes	TP, BB
475	Stebnivske Reservoir	UA_M5.4_0624	HMWB	at risk	risk-free	no	yes	TP, BB
476	Lotashivske Reservoir	UA_M5.4_0626	HMWB	at risk	risk-free	no	yes	TP, BB
477	Krasilovka	UA_M5.4_0628	HMWB	at risk	risk-free	no	yes	NV
478	Krasilovka	UA_M5.4_0629	HMWB	at risk	risk-free	no	yes	NV
479	Krasilovka	UA_M5.4_0630	HMWB	at risk	risk-free	no	yes	NV
480	Cecilia	UA_M5.4_0631	HMWB	at risk	risk-free	no	yes	NV
481	Cecilia	UA_M5.4_0632	HMWB	at risk	risk-free	no	yes	NV
482	Untitled	UA_M5.4_0633	HMWB	at risk	at risk	no	no	NV
483	Lupus erythematosus	UA_M5.4_0635	HMWB	at risk	risk-free	no	yes	NV
484	Lupus erythematosus	UA_M5.4_0636	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
485	Berezovka	UA_M5.4_0639	HMWB	at risk	risk-free	no	yes	NV
486	Berezovka	UA_M5.4_0640	HMWB	at risk	risk-free	no	yes	NV
487	Velykyi Bereznyi reservoir	UA_M5.4_0641	HMWB	at risk	risk-free	no	yes	TP, BB
488	Berezovka	UA_M5.4_0642	HMWB	at risk	risk-free	no	yes	NV
489	Berezovka	UA_M5.4_0643	HMWB	at risk	risk-free	no	yes	NV
490	Boyarka	UA_M5.4_0646	HMWB	at risk	risk-free	no	yes	NV
491	Boyarka	UA_M5.4_0647	HMWB	at risk	risk-free	no	yes	NV
492	Boyarka	UA_M5.4_0648	HMWB	at risk	risk-free	no	yes	NV
493	Pigsty	UA_M5.4_0649	PR	at risk	risk-free	no	yes	NV
494	Pigsty	UA_M5.4_0650	HMWB	at risk	risk-free	no	yes	NV
495	Pigsty	UA_M5.4_0651	PR	possibly at risk	risk-free	no	yes	NV
496	Pigsty	UA_M5.4_0653	HMWB	at risk	risk-free	no	yes	NV
497	Pigsty	UA_M5.4_0654	HMWB	at risk	risk-free	no	yes	NV
498	Goncharikha	UA_M5.4_0658	HMWB	at risk	risk-free	no	yes	NV
499	Goncharikha	UA_M5.4_0660	HMWB	at risk	risk-free	no	yes	NV
500	Goncharikha	UA_M5.4_0661	HMWB	at risk	risk-free	no	yes	NV
501	Untitled	UA_M5.4_0664	HMWB	at risk	risk-free	no	yes	NV
502	Popovka	UA_M5.4_0665	HMWB	at risk	risk-free	no	yes	NV
503	Popovka	UA_M5.4_0667	HMWB	at risk	risk-free	no	yes	NV
504	Popovka	UA_M5.4_0669	HMWB	at risk	risk-free	no	yes	NV
505	Shelf	UA_M5.4_0670	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
506	Shelf	UA_M5.4_0671	HMWB	at risk	risk-free	no	yes	NV
507	Iskra reservoir	UA_M5.4_0672	HMWB	at risk	risk-free	no	yes	TP, BB
508	Shelf	UA_M5.4_0673	HMWB	at risk	risk-free	no	yes	NV
509	Yurkivske Reservoir	UA_M5.4_0674	HMWB	at risk	risk-free	no	yes	TP, BB
510	Vatutino reservoir	UA_M5.4_0675	HMWB	at risk	risk-free	no	yes	TP, BB
511	Untitled	UA_M5.4_0678	HMWB	at risk	risk-free	no	yes	NV
512	Untitled	UA_M5.4_0679	HMWB	at risk	at risk	no	no	NV
513	Untitled	UA_M5.4_0680	HMWB	at risk	at risk	no	no	NV
514	Untitled	UA_M5.4_0681	HMWB	at risk	risk-free	no	yes	NV
515	Rosokhovatka	UA_M5.4_0682	HMWB	at risk	risk-free	no	yes	NV
516	Kayetanivka	UA_M5.4_0683	HMWB	at risk	risk-free	no	yes	NV
517	Kayetanivka	UA_M5.4_0684	PR	possibly at risk	risk-free	no	yes	NV
518	Untitled	UA_M5.4_0685	PR	possibly at risk	risk-free	no	yes	NV
519	Untitled	UA_M5.4_0686	HMWB	at risk	at risk	no	no	NV
520	Untitled	UA_M5.4_0687	PR	possibly at risk	risk-free	no	yes	NV
521	Velikaya Vysya	UA_M5.4_0688	HMWB	at risk	risk-free	no	yes	NV
522	Velikaya Vysya	UA_M5.4_0689	HMWB	at risk	risk-free	no	yes	NV
523	Velykovyske Reservoir	UA_M5.4_0690	HMWB	at risk	risk-free	no	yes	TP, BB
524	Velikaya Vysya	UA_M5.4_0691	HMWB	at risk	risk-free	no	yes	NV
525	Velikaya Vysya	UA_M5.4_0692	HMWB	at risk	risk-free	no	yes	NV
526	Velikaya Vysya	UA_M5.4_0694	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
527	Kamianske Reservoir	UA_M5.4_0696	HMWB	at risk	risk-free	no	yes	TP, BB
528	Velikaya Vysya	UA_M5.4_0697	PR	possibly at risk	at risk	no	no	NV
529	Nadlatske reservoir No. 1	UA_M5.4_0699	HMWB	at risk	risk-free	no	yes	TP, BB
530	Velikaya Vysya	UA_M5.4_0700	PR	possibly at risk	risk-free	no	yes	NV
531	Untitled	UA_M5.4_0701	HMWB	at risk	risk-free	no	yes	NV
532	Untitled	UA_M5.4_0703	HMWB	at risk	risk-free	no	yes	NV
533	Untitled	UA_M5.4_0704	HMWB	at risk	risk-free	no	yes	NV
534	Untitled	UA_M5.4_0706	HMWB	at risk	risk-free	no	yes	NV
535	Turia	UA_M5.4_0707	HMWB	at risk	risk-free	no	yes	NV
536	Turia	UA_M5.4_0708	HMWB	at risk	risk-free	no	yes	NV
537	Byrzolivka	UA_M5.4_0709	HMWB	at risk	risk-free	no	yes	NV
538	Byrzolivka	UA_M5.4_0710	HMWB	at risk	risk-free	no	yes	NV
539	Manuylivske Reservoir	UA_M5.4_0713	HMWB	at risk	risk-free	no	yes	TP, BB
540	Malovisky reservoir	UA_M5.4_0715	HMWB	at risk	risk-free	no	yes	TP, BB
541	Lozovatka	UA_M5.4_0717	HMWB	at risk	risk-free	no	yes	NV
542	Kopanka	UA_M5.4_0719	HMWB	at risk	risk-free	no	yes	NV
543	Tovmach	UA_M5.4_0720	HMWB	at risk	risk-free	no	yes	NV
544	Tovmach	UA_M5.4_0721	HMWB	at risk	risk-free	no	yes	NV
545	Lipyanka	UA_M5.4_0724	HMWB	at risk	risk-free	no	yes	NV
546	Kaligurka	UA_M5.4_0725	HMWB	at risk	at risk	no	no	NV
547	Kilten	UA_M5.4_0726	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
548	Kilten	UA_M5.4_0727	HMWB	at risk	at risk	no	no	NV
549	Novovoznesenskoye reservoir	UA_M5.4_0728	HMWB	at risk	risk-free	no	yes	TP, BB
550	Kilten	UA_M5.4_0729	HMWB	at risk	at risk	no	no	NV
551	Nadlatske reservoir No. 2	UA_M5.4_0730	HMWB	at risk	risk-free	no	yes	TP, BB
552	Kilten	UA_M5.4_0731	PR	possibly at risk	risk-free	no	yes	NV
553	Alder	UA_M5.4_0732	HMWB	at risk	risk-free	no	yes	NV
554	Dovgay	UA_M5.4_0733	HMWB	at risk	risk-free	no	yes	NV
555	Kamenka	UA_M5.4_0734	HMWB	at risk	risk-free	no	yes	NV
556	Kamenka	UA_M5.4_0735	HMWB	at risk	risk-free	no	yes	NV
557	Kamenka	UA_M5.4_0736	PR	possibly at risk	risk-free	no	yes	NV
558	Kamenka	UA_M5.4_0737	HMWB	at risk	risk-free	no	yes	NV
559	Trader	UA_M5.4_0738	HMWB	at risk	risk-free	no	yes	NV
560	Malomuzhiv	UA_M5.4_0739	HMWB	at risk	risk-free	no	yes	NV
561	Kagarlyk	UA_M5.4_0740	HMWB	at risk	risk-free	no	yes	NV
562	Kagarlyk	UA_M5.4_0741	HMWB	at risk	risk-free	no	yes	NV
563	Hayivske Reservoir	UA_M5.4_0742	HMWB	at risk	risk-free	no	yes	TP, BB
564	Kagarlyk	UA_M5.4_0743	PR	possibly at risk	risk-free	no	yes	NV
565	Kagarlytske reservoir	UA_M5.4_0744	HMWB	at risk	risk-free	no	yes	TP, BB
566	Kagarlyk	UA_M5.4_0745	PR	possibly at risk	risk-free	no	yes	NV
567	Bondar	UA_M5.4_0746	PR	possibly at risk	risk-free	no	yes	NV
568	Ternivka	UA_M5.4_0747	PR	possibly at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
569	Yatran	UA_M5.4_0748	HMWB	at risk	at risk	no	no	NV
570	Yatran	UA_M5.4_0749	HMWB	at risk	risk-free	no	yes	NV
571	Yatran	UA_M5.4_0750	HMWB	at risk	at risk	no	no	NV
572	Yatranivske reservoir	UA_M5.4_0751	HMWB	at risk	risk-free	no	yes	TP, BB
573	Yatran	UA_M5.4_0752	HMWB	at risk	at risk	no	no	NV
574	Sushkivske Reservoir	UA_M5.4_0753	HMWB	at risk	risk-free	no	yes	TP, BB
575	Yatran	UA_M5.4_0754	HMWB	at risk	at risk	no	no	NV
576	Dubove Reservoir	UA_M5.4_0755	HMWB	at risk	risk-free	no	yes	TP, BB
577	Ostrovetske Reservoir	UA_M5.4_0757	HMWB	at risk	risk-free	no	yes	TP, BB
578	Yatran	UA_M5.4_0759	HMWB	at risk	risk-free	no	yes	NV
579	Polonial reservoir	UA_M5.4_0760	HMWB	at risk	risk-free	no	yes	TP, BB
580	Yatran	UA_M5.4_0761	HMWB	at risk	risk-free	no	yes	NV
581	Untitled	UA_M5.4_0762	HMWB	at risk	risk-free	no	yes	NV
582	Untitled	UA_M5.4_0763	HMWB	at risk	risk-free	no	yes	NV
583	Untitled	UA_M5.4_0764	HMWB	at risk	risk-free	no	yes	NV
584	Umanka	UA_M5.4_0766	HMWB	at risk	risk-free	no	yes	NV
585	Untitled	UA_M5.4_0769	HMWB	at risk	risk-free	no	yes	NV
586	Revukha	UA_M5.4_0771	HMWB	at risk	at risk	no	no	NV
587	Revukha	UA_M5.4_0773	HMWB	at risk	at risk	no	no	NV
588	Babanka stream	UA_M5.4_0774	HMWB	at risk	risk-free	no	yes	NV
589	Babanka stream	UA_M5.4_0775	HMWB	at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
590	Kolodyachna	UA_M5.4_0776	HMWB	at risk	risk-free	no	yes	NV
591	Kolodyachna	UA_M5.4_0777	HMWB	at risk	at risk	no	no	NV
592	Gypsy	UA_M5.4_0781	HMWB	at risk	risk-free	no	yes	NV
593	Untitled	UA_M5.4_0784	HMWB	at risk	at risk	no	no	NV
594	Untitled	UA_M5.4_0785	HMWB	at risk	at risk	no	no	NV
595	Untitled	UA_M5.4_0787	HMWB	at risk	risk-free	no	yes	NV
596	Untitled	UA_M5.4_0788	HMWB	at risk	risk-free	no	yes	NV
597	Untitled	UA_M5.4_0789	HMWB	at risk	risk-free	no	yes	NV
598	Untitled	UA_M5.4_0790	HMWB	at risk	risk-free	no	yes	NV
599	Untitled	UA_M5.4_0791	PR	possibly at risk	risk-free	no	yes	NV
600	Untitled	UA_M5.4_0792	HMWB	at risk	risk-free	no	yes	NV
601	Untitled	UA_M5.4_0796	HMWB	at risk	risk-free	no	yes	NV
602	Untitled	UA_M5.4_0797	HMWB	at risk	risk-free	no	yes	NV
603	Untitled	UA_M5.4_0798	HMWB	at risk	risk-free	no	yes	NV
604	Untitled	UA_M5.4_0799	HMWB	at risk	risk-free	no	yes	NV
605	Dry Tashlyk	UA_M5.4_0801	HMWB	at risk	risk-free	no	yes	NV
606	Glodos Reservoir	UA_M5.4_0802	HMWB	at risk	risk-free	no	yes	TP, BB
607	Dry Tashlyk	UA_M5.4_0804	HMWB	at risk	risk-free	no	yes	NV
608	Skopiyivka reservoir	UA_M5.4_0805	HMWB	at risk	risk-free	no	yes	TP, BB
609	Dry Tashlyk	UA_M5.4_0806	HMWB	at risk	risk-free	no	yes	NV
610	Lipnyazhskoye reservoir	UA_M5.4_0807	HMWB	at risk	risk-free	no	yes	TP, BB

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
611	Good.	UA_M5.4_0809	PR	possibly at risk	risk-free	no	yes	NV
612	Good.	UA_M5.4_0810	HMWB	at risk	risk-free	no	yes	NV
613	Good.	UA_M5.4_0811	HMWB	at risk	at risk	no	no	NV
614	Good.	UA_M5.4_0812	PR	possibly at risk	risk-free	no	yes	NV
615	Б. Stiff	UA_M5.4_0814	HMWB	at risk	risk-free	no	yes	NV
616	Ivanovo reservoir	UA_M5.4_0817	HMWB	at risk	risk-free	no	yes	TP, BB
617	Black Tashlyk	UA_M5.4_0819	HMWB	at risk	risk-free	no	yes	NV
618	Black Tashlyk	UA_M5.4_0820	HMWB	at risk	risk-free	no	yes	NV
619	Zakharivske Reservoir	UA_M5.4_0821	HMWB	at risk	risk-free	no	yes	TP, BB
620	Voronivske Reservoir	UA_M5.4_0823	HMWB	at risk	risk-free	no	yes	TP, BB
621	Novoukrainske Reservoir	UA_M5.4_0825	HMWB	at risk	risk-free	no	yes	TP, BB
622	Novoukrainske Reservoir	UA_M5.4_0828	HMWB	at risk	risk-free	no	yes	TP, BB
623	Black Tashlyk	UA_M5.4_0830	HMWB	at risk	at risk	no	no	NV
624	Black Tashlyk	UA_M5.4_0831	PR	possibly at risk	at risk	no	no	NV
625	Black Tashlyk	UA_M5.4_0832	HMWB	at risk	risk-free	no	yes	NV
626	Black Tashlyk	UA_M5.4_0834	HMWB	at risk	at risk	no	no	NV
627	Black Tashlyk	UA_M5.4_0835	PR	possibly at risk	at risk	no	no	NV
628	Untitled	UA_M5.4_0837	HMWB	at risk	risk-free	no	yes	NV
629	Untitled	UA_M5.4_0838	HMWB	at risk	risk-free	no	yes	NV
630	Tashlyk	UA_M5.4_0840	HMWB	at risk	risk-free	no	yes	NV
631	Shutovske reservoir	UA_M5.4_0843	HMWB	at risk	risk-free	no	yes	TP, BB

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
632	Tashlyk	UA_M5.4_0845	HMWB	at risk	risk-free	no	yes	NV
633	Untitled	UA_M5.4_0847	HMWB	at risk	risk-free	no	yes	NV
634	Untitled	UA_M5.4_0848	HMWB	at risk	risk-free	no	yes	NV
635	Shuta	UA_M5.4_0849	HMWB	at risk	risk-free	no	yes	NV
636	Shuta	UA_M5.4_0850	HMWB	at risk	risk-free	no	yes	NV
637	Vilna Reservoir	UA_M5.4_0855	HMWB	at risk	risk-free	no	yes	TP, BB
638	Gruzka	UA_M5.4_0859	HMWB	at risk	risk-free	no	yes	NV
639	Gruzka	UA_M5.4_0860	HMWB	at risk	risk-free	no	yes	NV
640	Novoukrainske Reservoir	UA_M5.4_0861	HMWB	at risk	risk-free	no	yes	TP, BB
641	Gruzka	UA_M5.4_0862	HMWB	at risk	at risk	no	no	NV
642	B. Pomoshna	UA_M5.4_0863	HMWB	at risk	risk-free	no	yes	NV
643	B. Pomoshna	UA_M5.4_0864	HMWB	at risk	risk-free	no	yes	NV
644	B. Pomoshna	UA_M5.4_0865	HMWB	at risk	risk-free	no	yes	NV
645	B. Pomoshna	UA_M5.4_0866	HMWB	at risk	at risk	no	no	NV
646	B. Pomoshna	UA_M5.4_0868	HMWB	at risk	risk-free	no	yes	NV
647	B. Pomoshna	UA_M5.4_0870	HMWB	at risk	risk-free	no	yes	NV
648	B. Pomoshna	UA_M5.4_0871	HMWB	at risk	at risk	no	no	NV
649	Wicker Tashlik	UA_M5.4_0873	HMWB	at risk	risk-free	no	yes	NV
650	Wicker Tashlik	UA_M5.4_0874	HMWB	at risk	at risk	no	no	NV
651	Beech trees	UA_M5.4_0876	HMWB	at risk	risk-free	no	yes	NV
652	Beech trees	UA_M5.4_0877	HMWB	at risk	at risk	no	no	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
653	Maznytsia	UA_M5.4_0878	PR	possibly at risk	risk-free	no	yes	NV
654	Maznytsia	UA_M5.4_0879	HMWB	at risk	risk-free	no	yes	NV
655	Dry Tashlyk	UA_M5.4_0881	HMWB	at risk	risk-free	no	yes	NV
656	Dry Tashlyk	UA_M5.4_0882	HMWB	at risk	at risk	no	no	NV
657	Migiyskiy Tashlyk	UA_M5.4_0885	HMWB	at risk	risk-free	no	yes	NV
658	Migiyskiy Tashlyk	UA_M5.4_0887	HMWB	at risk	risk-free	no	yes	NV
659	Ship's	UA_M5.4_0888	HMWB	at risk	risk-free	no	yes	NV
660	Blagodatnenskoye reservoir	UA_M5.4_0889	HMWB	at risk	at risk	no	no	TP, BB
661	Bolshaya Korabelnaya	UA_M5.4_0891	PR	possibly at risk	risk-free	no	yes	NV
662	Bolshaya Korabelnaya	UA_M5.4_0892	HMWB	at risk	risk-free	no	yes	NV
663	Bolshaya Korabelnaya	UA_M5.4_0893	PR	possibly at risk	risk-free	no	yes	NV
664	Ryabokonivske reservoir	UA_M5.4_0894	HMWB	at risk	risk-free	no	yes	TP, BB
665	Bolshaya Korabelnaya	UA_M5.4_0895	PR	possibly at risk	risk-free	no	yes	NV
666	Bolshaya Korabelnaya	UA_M5.4_0896	PR	possibly at risk	at risk	no	no	NV
667	Bolshaya Korabelnaya	UA_M5.4_0897	HMWB	at risk	risk-free	no	yes	NV
668	Bolshaya Korabelnaya	UA_M5.4_0898	PR	possibly at risk	at risk	no	no	NV
669	Malaya Korabelnaya	UA_M5.4_0899	HMWB	at risk	risk-free	no	yes	NV
670	Malaya Korabelnaya	UA_M5.4_0900	HMWB	at risk	at risk	no	no	NV
671	Marynivka Reservoir	UA_M5.4_0901	HMWB	at risk	at risk	no	no	TP, BB
672	Bakshala	UA_M5.4_0902	HMWB	at risk	risk-free	no	yes	NV
673	Kuznetsovskoye Reservoir	UA_M5.4_0903	HMWB	at risk	risk-free	no	yes	TP, BB

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674	Bakshala	UA_M5.4_0904	PR	possibly at risk	risk-free	no	yes	NV
675	Mayorivske Reservoir	UA_M5.4_0905	HMWB	at risk	risk-free	no	yes	TP, BB
676	Chortala	UA_M5.4_0906	HMWB	at risk	at risk	no	no	NV
677	Prybuzhanivske reservoir	UA_M5.4_0907	HMWB	at risk	risk-free	no	yes	TP, BB
678	Chortala	UA_M5.4_0908	HMWB	at risk	risk-free	no	yes	NV
679	Deadhead	UA_M5.4_0910	HMWB	at risk	risk-free	no	yes	NV
680	Deadhead	UA_M5.4_0912	HMWB	at risk	risk-free	no	yes	NV
681	Deadhead	UA_M5.4_0913	PR	possibly at risk	risk-free	no	yes	NV
682	Deadhead	UA_M5.4_0914	PR	possibly at risk	risk-free	no	yes	NV
683	Deadhead	UA_M5.4_0915	HMWB	at risk	risk-free	no	yes	NV
684	Deadhead	UA_M5.4_0916	PR	possibly at risk	risk-free	no	yes	NV
685	Taborivske Reservoir	UA_M5.4_0917	HMWB	at risk	risk-free	no	yes	TP, BB
686	Deadhead	UA_M5.4_0918	PR	possibly at risk	at risk	no	no	NV
687	Lozovatka	UA_M5.4_0919	HMWB	at risk	risk-free	no	yes	NV
688	Stone-bone	UA_M5.4_0921	PR	possibly at risk	risk-free	no	yes	NV
689	Bony I	UA_M5.4_0923	PR	possibly at risk	risk-free	no	yes	NV
690	Bony I	UA_M5.4_0924	PR	possibly at risk	risk-free	no	yes	NV
691	Kostovata II	UA_M5.4_0926	HMWB	at risk	risk-free	no	yes	NV
692	Mostovoyevodskoye Reservoir	UA_M5.4_0927	HMWB	at risk	risk-free	no	yes	TP, BB
693	Kostovata II	UA_M5.4_0928	PR	possibly at risk	at risk	no	no	NV
694	Kostovata II	UA_M5.4_0929	PR	possibly at risk	risk-free	no	yes	NV

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				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
695	Mashnitsa	UA_M5.4_0930	PR	possibly at risk	risk-free	no	yes	NV
696	Mashnitsa	UA_M5.4_0931	PR	possibly at risk	risk-free	no	yes	NV
697	Lumpy	UA_M5.4_0932	PR	possibly at risk	risk-free	no	yes	NV
698	Lumpy	UA_M5.4_0933	HMWB	at risk	at risk	no	no	NV
699	Lumpy	UA_M5.4_0934	HMWB	at risk	at risk	no	no	NV
700	Lumpy	UA_M5.4_0935	PR	possibly at risk	risk-free	no	yes	NV
701	Lumpy	UA_M5.4_0936	PR	possibly at risk	risk-free	no	yes	NV
702	Lumpy	UA_M5.4_0937	HMWB	at risk	risk-free	no	yes	NV
703	Lumpy	UA_M5.4_0938	PR	possibly at risk	risk-free	no	yes	NV
704	Pumpkin	UA_M5.4_0939	PR	possibly at risk	at risk	no	no	NV
705	Pumpkin	UA_M5.4_0940	HMWB	at risk	risk-free	no	yes	NV
706	Pumpkin	UA_M5.4_0941	PR	possibly at risk	risk-free	no	yes	NV
707	Pumpkin	UA_M5.4_0942	PR	possibly at risk	at risk	no	no	NV
708	Pumpkin	UA_M5.4_0943	HMWB	at risk	at risk	no	no	NV
709	Pumpkin	UA_M5.4_0944	PR	possibly at risk	risk-free	no	yes	NV
710	Pumpkin	UA_M5.4_0945	PR	possibly at risk	at risk	no	no	NV
711	Trykratskoye Reservoir	UA_M5.4_0945	HMWB	at risk	not rated	no	no	TP, BB
712	Chichicle	UA_M5.4_0946	PR	possibly at risk	risk-free	no	yes	NV
713	Chichicle	UA_M5.4_0948	PR	possibly at risk	risk-free	no	yes	NV
714	Filimonovskoye reservoir	UA_M5.4_0949	HMWB	at risk	at risk	no	no	TP, BB
715	Rotten Yelanets	UA_M5.4_0951	HMWB	at risk	risk-free	no	yes	NV

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
716	Yelanets reservoir	UA_M5.4_0953	HMWB	at risk	risk-free	no	yes	TP, BB
717	Rotten Yelanets	UA_M5.4_0954	PR	possibly at risk	risk-free	no	yes	NV
718	Shcherbanivske Reservoir	UA_M5.4_0955	HMWB	at risk	at risk	no	no	TP, BB
719	Rotten Yelanets	UA_M5.4_0956	PR	possibly at risk	risk-free	no	yes	NV
720	Salty	UA_M5.4_0957	PR	possibly at risk	risk-free	no	yes	NV
721	Nikolskoye reservoir	UA_M5.4_0958	HMWB	at risk	risk-free	no	yes	NV
722	Salty	UA_M5.4_0959	PR	possibly at risk	risk-free	no	yes	TP, BB
723	Untitled	UA_M5.4_0960	HMWB	at risk	at risk	no	no	NV
724	Ingul	UA_M5.4_0961	HMWB	at risk	risk-free	no	yes	NV
725	Ingul	UA_M5.4_0962	HMWB	at risk	risk-free	no	yes	NV
726	Novomykolaivske Reservoir	UA_M5.4_0964	HMWB	at risk	at risk	no	no	TP, BB
727	Ingul	UA_M5.4_0965	PR	at risk	at risk	no	no	NV
728	Ingul reservoir	UA_M5.4_0967	HMWB	at risk	risk-free	no	yes	TP, BB
729	Ingul	UA_M5.4_0968	PR	possibly at risk	risk-free	no	yes	NV
730	Sofiyivka Reservoir	UA_M5.4_0969	HMWB	at risk	risk-free	no	yes	TP, BB
731	Krutoyarka	UA_M5.4_0971	HMWB	at risk	risk-free	no	yes	NV
732	Pushkinskoye Reservoir	UA_M5.4_0972	HMWB	at risk	risk-free	no	yes	TP, BB
733	Krutoyarka	UA_M5.4_0973	HMWB	at risk	risk-free	no	yes	NV
734	Severinka	UA_M5.4_0975	HMWB	at risk	risk-free	no	yes	NV
735	Dolyna-Kamianske reservoir	UA_M5.4_0976	HMWB	at risk	risk-free	no	yes	TP, BB
736	Kandaura reservoir	UA_M5.4_0979	HMWB	at risk	risk-free	no	yes	TP, BB

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
737	Mamaika	UA_M5.4_0981	HMWB	at risk	risk-free	no	yes	NV
738	Gruzka	UA_M5.4_0982	HMWB	at risk	at risk	no	no	NV
739	Sugoklia	UA_M5.4_0986	HMWB	at risk	risk-free	no	yes	NV
740	Sugoklia	UA_M5.4_0987	HMWB	at risk	at risk	no	no	NV
741	Novopavlivka reservoir	UA_M5.4_0988	HMWB	at risk	risk-free	no	yes	TV, BB
742	Sugoklia	UA_M5.4_0989	HMWB	at risk	at risk	no	no	NV
743	Sugoklia stony	UA_M5.4_0991	HMWB	at risk	risk-free	no	yes	NV
744	Sugoklia stony	UA_M5.4_0993	HMWB	at risk	risk-free	no	yes	NV
745	Hemp	UA_M5.4_0994	HMWB	at risk	risk-free	no	yes	NV
746	Lozovatka	UA_M5.4_0995	HMWB	at risk	risk-free	no	yes	NV
747	Fedorivske Reservoir	UA_M5.4_0996	HMWB	at risk	risk-free	no	yes	TP, BB
748	Lozovatka	UA_M5.4_0997	HMWB	at risk	risk-free	no	yes	NV
749	Ajamka	UA_M5.4_0999	HMWB	at risk	at risk	no	no	NV
750	Ajamka	UA_M5.4_1001	HMWB	at risk	risk-free	no	yes	NV
751	Ajam reservoir	UA_M5.4_1002	HMWB	at risk	risk-free	no	yes	TP, BB
752	Ajamka	UA_M5.4_1004	HMWB	at risk	risk-free	no	yes	NV
753	Serebryanka	UA_M5.4_1006	HMWB	at risk	risk-free	no	yes	NV
754	Serebryanka	UA_M5.4_1007	HMWB	at risk	at risk	no	no	NV
755	Louse	UA_M5.4_1008	HMWB	at risk	risk-free	no	yes	NV
756	Louse	UA_M5.4_1009	HMWB	at risk	risk-free	no	yes	NV
757	Kamenka	UA_M5.4_1011	HMWB	at risk	risk-free	no	yes	NV

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
758	Kamenka	UA_M5.4_1013	HMWB	at risk	risk-free	no	yes	NV
759	Vorontsovo reservoir	UA_M5.4_1016	HMWB	at risk	risk-free	no	yes	TP, BB
760	Kamenka	UA_M5.4_1018	HMWB	at risk	at risk	no	no	NV
761	B. Popova	UA_M5.4_1020	HMWB	at risk	at risk	no	no	NV
762	Lozovatka	UA_M5.4_1021	HMWB	at risk	risk-free	no	yes	NV
763	Sukhoi	UA_M5.4_1022	HMWB	at risk	risk-free	no	yes	NV
764	Sukhoi	UA_M5.4_1023	HMWB	at risk	risk-free	no	yes	NV
765	Polumyanske reservoir	UA_M5.4_1024	HMWB	at risk	risk-free	no	yes	TP, BB
766	Sukhoi	UA_M5.4_1025	PR	possibly at risk	at risk	no	no	NV
767	Savakliy	UA_M5.4_1026	PR	possibly at risk	risk-free	no	yes	NV
768	Kamianobridske Reservoir	UA_M5.4_1027	HMWB	at risk	at risk	no	no	TP, BB
769	Savakliy	UA_M5.4_1028	PR	possibly at risk	risk-free	no	yes	NV
770	Sofiyivka Reservoir	UA_M5.4_1029	HMWB	at risk	risk-free	no	yes	TP, BB
771	Savakliy	UA_M5.4_1030	PR	possibly at risk	risk-free	no	yes	NV
772	б. Corovan	UA_M5.4_1031	HMWB	at risk	risk-free	no	yes	NV
773	б. Corovan	UA_M5.4_1032	HMWB	at risk	risk-free	no	yes	NV
774	Water	UA_M5.4_1033	PR	possibly at risk	risk-free	no	yes	NV
775	Water	UA_M5.4_1034	HMWB	at risk	risk-free	no	yes	NV
776	Driukova	UA_M5.4_1036	HMWB	at risk	risk-free	no	yes	NV
777	Dryukova	UA_M5.4_1038	HMWB	at risk	at risk	no	no	NV
778	Untitled	UA_M5.4_1040	HMWB	at risk	risk-free	no	yes	NV

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
779	Berezovka	UA_M5.4_1041	HMWB	at risk	risk-free	no	yes	NV
780	Novohryhorivske Reservoir	UA_M5.4_1042	HMWB	at risk	risk-free	no	yes	TP, BB
781	Berezovka	UA_M5.4_1043	HMWB	at risk	risk-free	no	yes	NV
782	Rozdilnivske Reservoir	UA_M5.4_1044	HMWB	at risk	risk-free	no	yes	TP, BB
783	Berezovka	UA_M5.4_1045	HMWB	at risk	risk-free	no	yes	NV
784	Swan Reservoir	UA_M5.4_1046	HMWB	at risk	risk-free	no	yes	TP, BB
785	Berezovka	UA_M5.4_1047	HMWB	at risk	at risk	no	no	NV
786	Ustinovskoye reservoir	UA_M5.4_1048	HMWB	at risk	risk-free	no	yes	TP, BB
787	Berezovka	UA_M5.4_1049	PR	at risk	risk-free	no	yes	NV
788	Krynichovata	UA_M5.4_1050	PR	possibly at risk	risk-free	no	yes	NV
789	Stem	UA_M5.4_1051	HMWB	at risk	risk-free	no	yes	NV
790	Stem	UA_M5.4_1052	PR	at risk	risk-free	no	yes	NV
791	Halberd	UA_M5.4_1053	HMWB	at risk	risk-free	no	yes	NV
792	Dokuchaevskoye reservoir	UA_M5.4_1054	HMWB	at risk	risk-free	no	yes	TP, BB
793	Halberd	UA_M5.4_1055	HMWB	at risk	risk-free	no	yes	NV
794	Untitled	UA_M5.4_1056	HMWB	at risk	at risk	no	no	NV
795	Untitled	UA_M5.4_1057	HMWB	at risk	at risk	no	no	NV
796	Untitled	UA_M5.4_1058	PR	at risk	at risk	no	no	NV
797	Untitled	UA_M5.4_1059	PR	at risk	at risk	no	no	NV
798	Gromokliya	UA_M5.4_1060	HMWB	at risk	risk-free	no	yes	NV
799	Gromokliya	UA_M5.4_1061	HMWB	at risk	risk-free	no	yes	NV

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
800	Vodyano-Lorinskoye reservoir	UA_M5.4_1062	HMWB	at risk	risk-free	no	yes	TP, BB
801	Gromokliya	UA_M5.4_1063	PR	possibly at risk	risk-free	no	yes	NV
802	Godly	UA_M5.4_1064	HMWB	at risk	risk-free	no	yes	NV
803	Godly	UA_M5.4_1065	HMWB	at risk	risk-free	no	yes	NV
804	Vosseyatskoye reservoir	UA_M5.4_1066	HMWB	at risk	risk-free	no	yes	TP, BB
805	Godly	UA_M5.4_1067	HMWB	at risk	risk-free	no	yes	NV
806	Marianivka Reservoir	UA_M5.4_1068	AWB	not rated	not rated	no	no	TP, BB
807	Sharovetsky reservoir	UA_M5.4_1069	AWB	not rated	not rated	no	no	TP, BB
808	Ruzhychnyansky reservoir	UA_M5.4_1070	AWB	not rated	not rated	no	no	TP, BB
809	Pond with a filling station	UA_M5.4_1071	AWB	not rated	not rated	no	no	TP, BB
810	Pond with a filling station	UA_M5.4_1072	AWB	not rated	not rated	no	no	TP, BB
811	Molomolynets reservoir	UA_M5.4_1073	AWB	not rated	not rated	no	no	TP, BB
812	Anastava reservoir (lower)	UA_M5.4_1074	AWB	not rated	not rated	no	no	TP, BB
813	Derkachevsky pond	UA_M5.4_1075	AWB	not rated	not rated	no	no	TP, BB
814	Novosynyavske reservoir	UA_M5.4_1076	AWB	not rated	not rated	no	no	TP, BB
815	Pykivka reservoir (lower)	UA_M5.4_1077	AWB	not rated	not rated	no	no	TP, BB
816	Grushkovske reservoir	UA_M5.4_1078	AWB	not rated	not rated	no	no	TP, BB
817	Mykulynets Reservoir (upper)	UA_M5.4_1079	AWB	not rated	not rated	no	no	TP, BB
818	Mykulynetske reservoir (lower)	UA_M5.4_1080	AWB	not rated	not rated	no	no	TP, BB
819	Staroprilutske reservoir	UA_M5.4_1081	AWB	not rated	not rated	no	no	TP, BB
820	Staroprilutske reservoir	UA_M5.4_1082	AWB	not rated	not rated	no	no	TP, BB

№	Title SWB	Code SWB	Category (PR, HMWB/AWB)[25]	Assessment of the risks of not achieving good status (completed in 2020)		Environmental goals, 2030		Reason for postponement of the date of achievement of environmental objectives (NN, TA, VH, VO, NA)[26]
				Ecological status/potential (at risk, possibly at risk, not at risk)	Chemical status (at risk, possibly at risk, not at risk)	Good ecological status/ potential (yes, no, unknown)	Good chemical status (yes, no, unknown)	
821	New water reservoir	UA_M5.4_1083	AWB	not rated	not rated	no	no	TP, BB
822	A filling pond in the village of Shershni	UA_M5.4_1084	AWB	not rated	not rated	no	no	TP, BB
823	Balanivske reservoir	UA_M5.4_1085	AWB	not rated	not rated	no	no	TP, BB
824	Ostrozhansky reservoir	UA_M5.4_1086	AWB	not rated	not rated	no	no	TP, BB
825	Konelskoye reservoir	UA_M5.4_1087	AWB	not rated	not rated	no	no	TP, BB
826	Semenivske reservoir 2	UA_M5.4_1088	AWB	not rated	not rated	no	no	TP, BB
827	Semenivske reservoir 1	UA_M5.4_1089	AWB	not rated	not rated	no	no	TP, BB
828	Tashlyk Reservoir	UA_M5.4_1090	HMWB	not rated	not rated	no	no	TP, BB

Table 2: Achievement of environmental objectives by GWBs and their groups

№	GWB code	Name of the GWB	Quantitative status		Chemical status		Reason for postponement[27]	Reasons for setting less stringent objectives[28]	Note[29]
			Objective.	Timeframe for achievement	Objective.	Timeframe for achievement			
Groups of non-pressure GWB									
1	UAM5400Q100	Group of GWBs in marsh and quaternary sediments	Good	2030	Good	2042	T,S	NZ	EO
2	UAM5400Q200	Group of GWBs in alluvial quaternary sediments	Good	2030	Good	2042	T, S	NZ	EO
3	UAM5400Q300	Group of GWBs in water-glacial and aeolian-deluvial Quaternary sediments	Good	2030	Good	2042	T, S	NZ	EO
4	UAM5400Q400	A group of GWBs in aeolian-deluvial Quaternary sediments	Good	2030	Good	2042	T, S	NZ	EO
Pressure GWB and groups of pressure GWB									
5	UAM5400Q500	Group of GWBs in terrigenous alluvial and water-glacial Quaternary sediments	Good	2030	Good	2030			EO
6	UAM5400N100	A group of GWBs in terrigenous carbonate deposits of the Sarmatian	Good	2030	Good	2030			EO
7	UAM5400N200	GWB in Miocene terrigenous sediments	Good	2030	Good	2030			EO

27 T - technical reasons, H - disproportionately high cost, S - existing natural state

28 Not applicable (NA) in the first cycle of the RBMP 2025-2030

29 AR - risk assessment of failure to achieve good status, ES - ecological status according to monitoring data, CS - chemical status according to monitoring data, EO - expert assessment

№	GWB code	Name of the GWB	Quantitative status		Chemical status		Reason for postponement[27]	Reasons for setting less stringent objectives[28]	Note[29]
			Objective.	Timeframe for achievement	Objective.	Timeframe for achievement			
8	UAM540PG100	Group of GWBs in terrigenous sediments of the Paleogene	Good	2030	Good	2030			EO
9	UAM5400K100	GWBs in terrigenous sediments of the Cenomanian	Good	2030	Good	2030			EO
10	UAM5400K200	Group of GWBs in terrigenous deposits of the Lower and Upper Cretaceous	Good	2030	Good	2030			EO
11	UAM540RE100	GWBs in effusive terrigenous rocks of the Precambrian	Good	2030	Good	2030			EO
12	UAM540AR100	Group of GWBs in the fracture zone of crystalline rocks of the Archean-Proterozoic	Good	2030	Good	2030			EO

Annex 9.1 Characteristics of water use in the Southern Bug basin

Name of economic sectors	Water intake, million m^3	Volume of water used, million m^3	Share of total water withdrawal within the river basin, %
Total for the basin	**291,6**	**286,3**	**100**
Industry	**114,0**	**114,2**	**39,1**
including energy	90,38	83,93	31,0
Mechanical engineering and metalworking	8,296	9,680	2,8
food industry	8,168	11,31	2,8
non-ferrous metallurgy	3,170	7,342	1,1
construction materials industry	2,171	1,156	0,7
ferrous metallurgy	1,139	0,065	0,4
light industry	0,306	0,267	0,1
forestry woodworking	0,081	0,008	0,03
microbiological	0,029	0,046	0,01
chemical and petrochemical	0,005	0,056	0,002
Agriculture	**109,0**	**76,03**	**37,4**
including fisheries	63,92	41,43	21,9
irrigation	11,31	5,313	3,9
agricultural enterprises	26,11	22,70	9,0
Housing and utilities	**64,97**	**90,84**	**22,3**
Transport	**1,418**	**1,096**	**0,5**
Other	**2,212**	**4,134**	**0,7**

Annex 9.2 Wastewater discharges to water bodies by category of water discharged in the Southern Bug basin

Name of economic sectors	Volume of water discharged, million m^3	including				Share of the total discharge within the river basin,%
		contaminated	normatively clean without purification	normatively treated at treatment plants	uncategorise d	
Total for the basin	**195,9**	**21,59**	**103,8**	**61,56**	**8,927**	**100**
Industry	**63,49**	**0,186**	**52,84**	**2,004**	**8,466**	**32,4**
including energy	52,94	-	45,17	1,464	6,302	27,0
Mechanical engineering and metalworking	6,967	0,094	6,835	0,038	-	3,6
food industry	1,233	-	0,763	0,470	-	0,6
non-ferrous metallurgy	-	-	-	-	-	-
construction materials industry	1,105	-	0,016	0,003	1,086	0,6
ferrous metallurgy	1,079				1,079	0,6
light industry	-	-	-	-	-	-
forestry woodworking	-	-	-	-	-	-
microbiological	-	-	-	-	-	-
chemical and petrochemical	-	-	-	-	-	-
Agriculture	**46,08**	**0,009**	**43,40**	**2,665**	**-**	**23,5**
including fisheries	41,18	-	41,18	-	-	21,0
irrigation	0,013	-	0,013	-	-	0,01
agricultural enterprises	4,750	0,009	2,076	2,665	-	2,4
Housing and utilities	**85,37**	**21,33**	**7,443**	**56,60**	**-**	**43,6**
Transport	**0,348**	**-**	**0,024**	**0,095**	**0,230**	**0,2**
Other	**0,621**	**0,062**	**0,120**	**0,210**	**0,230**	**0,3**

Annex 10 List of national targeted programmes, regional and local programmes, funds, state investment projects, international technical assistance projects, regional and local infrastructure projects, etc.

Name of the programme/fund/project	"National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the Period up to 2021" (hereinafter referred to as the Dnipro 2021 Programme)
Name of the conservation measure	Ensuring the development of land reclamation and improvement of the environmental condition of irrigated and drained land.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by nutrients. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages.
Implementation of environmental protection measures and their financing	The Dnipro-2021 programme envisaged this: maintenance of the water management and reclamation complex; ensuring sustainable operation and environmental safety of reclamation systems; Improving the regulatory framework and organisational structure of the water sector to ensure water management and water monitoring. Financing in the amount of UAH 30090.49 million for the entire implementation period from 2013 to 2021 (9 years). This measure was intended to continue the implementation of the previously existing state target programme "Comprehensive Programme for the Development of Land Reclamation and Improvement of the Ecological Condition of Irrigated and Drained Lands in 2001-2005 and Forecast to 2010". The measures were to ensure the development of land reclamation and improvement of the ecological condition of irrigated and drained lands, including the restoration of the water management and reclamation complex, reconstruction and modernisation of reclamation systems and their facilities, engineering infrastructure of reclamation systems with the creation of integrated technological complexes, introduction of new methods of irrigation and land drainage, application of water- and energy-saving environmentally safe irrigation and water regulation regimes. The planned activities were implemented over 9 years, in two stages: 2013-2016 and 2017-2021. Since the beginning of the Dnipro-2021 Programme's activities, as of 1 January 2019, 26% of the envisaged need has been allocated from budgets of all levels and other sources, and as of 1 January 2020, UAH 5115.383 million (17%) has been allocated, which has led to a significant failure to complete its tasks and activities on time.
Achievement of set goals	The set goals were not achieved. The reason for this is the low amount of actual funding for tasks and activities from all sources of funding.
Name of the programme/fund/project	"National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the Period up to 2021" (hereinafter referred to as the Dnipro 2021 Programme)
Name of the conservation measure	Priority provision of centralised water supply to rural settlements that use imported water.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages.
Implementation of environmental protection measures and their financing	The Dnipro-2021 programme provided funding of UAH 1668.6 million for the measure for the entire period of implementation from 2013 to 2021 (9 years).

	This event was a continuation of the implementation of the state target programme "Comprehensive Programme for Priority Provision of Rural Settlements Using Imported Water with Centralised Water Supply in 2001-2005 and Forecast to 2010". The event was to improve the technological level of water use, introduce low-water and waterless technologies, develop more rational water use standards, build, reconstruct and modernise water supply systems, and provide Ukrainian settlements that used imported water with drinking water in sufficient quantity and of appropriate quality. The measure was implemented over 9 years, in two stages: 2013-2016 and 2017-2021. As of 1 January 2020, UAH 283.6 million has been allocated from budgets of all levels since the start of the Dnipro-2021 Programme, which has led to a significant failure to complete its tasks and activities on time. For example, in 2020, the State Agency of Ukraine for Water Resources used only UAH 205.0 million (4.2% of the total expenditures for 2020) to implement this measure under the Dnipro-2021 Programme (4.2% of the total expenditures for 2020).
Achievement of set goals	The set goals were not achieved. The reason for this is the low amount of actual funding for tasks and activities from all sources of funding.
Name of the programme/fund/project	"National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the Period up to 2021" (hereinafter referred to as the Dnipro 2021 Programme)
Name of the conservation measure	Protecting rural settlements and agricultural land from the harmful effects of water
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories.
Implementation of environmental protection measures and their financing	The Dnipro-2021 Programme envisaged allocating UAH 1571.48 million for the implementation of measures to protect rural settlements and agricultural land from the harmful effects of water for the entire implementation period from 2013 to 2021 (9 years). This measure was intended to continue the implementation of the previously existing "Comprehensive Programme for Protection against Harmful Effects of Water from Rural Settlements and Agricultural Lands in Ukraine in 2001-2005 and Forecast to 2010". The project included bank protection and river channel regulation, construction and reconstruction of hydraulic structures, protective dams, polders, flood control reservoirs, clearing river channels, arranging water protection zones and coastal protection strips, developing schemes for comprehensive flood protection of territories from the harmful effects of water, improving methods and technical devices for hydrometeorological observations and flood forecasting. The planned action was implemented over 9 years, in two stages: 2013-2016 and 2017-2021. Since the start of the Dnipro-2021 Programme, as of 1 January 2020, UAH 267.152 million of the envisaged need has been allocated from budgets of all levels and other sources.
Achievement of set goals	The set goals were not achieved. The reason for this is the low amount of actual funding for tasks and activities from all sources of funding.
Name of the programme/fund/project	"National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the Period up to 2021" (hereinafter referred to as the Dnipro 2021 Programme)
Name of the conservation measure	Operation of the state water management complex and management of water resources, including environmental rehabilitation of the Dnipro River basin and improvement of drinking water quality
Relevance of the environmental measure to the main water and environmental issues and the code	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Hydromorphological changes.

of the surface/groundwater body it affects	Spread of invasive species. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages.
Implementation of environmental protection measures and their financing	The event was implemented over 9 years, in two stages: 2013-2016 and 2017-2021. Stage 2 is particularly noteworthy, during which it was planned to: implement a system of integrated water resources management based on the basin principle by developing and implementing river basin management plans, applying an economic model of targeted financing of activities in river basins, establishing river basin councils, as well as enhancing the role of existing and establishing new basin water resource management departments; implement water-saving technologies that ensure the improvement of the functioning of the water management and reclamation complex; improve the Since the beginning of the Dnipro-2021 Programme, as of 1 January 2019, 26% of the envisaged need has been allocated from budgets of all levels and other sources, and as of 1 January 2020, 17% of the envisaged need has been allocated. State funds are allocated mainly for the costs of consumption in the water sector, labour remuneration, and utilities, the share of which was financed from the state budget in 2020, for example: from the general fund - 93.5% (UAH 2092.16 million), from the special fund - 81.1% (UAH 2261.34 million). Total state budget expenditures to finance the Dnipro 2021 Programme in 2020 amounted to UAH 5022.67 million. The lion's share of all funds is used for the operation of the state water management complex and water resources management - UAH 4,561.35 million (90.8%). Total expenditures for the operation of the water sector in 2020 amounted to UAH 4,353.50 million (86.7%) of total expenditures. At the same time, UAH 144.62 million was allocated from the state fund and UAH 524.54 million from the special fund for the development of the water sector, which totalled UAH 669.17 million (13.3%) of the expenditures for the entire Programme.
Achievement of set goals	The targets were partially achieved. The reason for this is the low amount of actual funding for tasks and activities from all sources of funding.
Name of the programme/fund/project	The National Target Programme "Drinking Water of Ukraine for 2011-2020"
Name of the conservation measure	Implementation of the state policy on development and reconstruction of centralised water supply and sewerage systems; protection of drinking water sources; bringing the quality of drinking water to the requirements of regulatory acts; regulatory support in the field of drinking water supply and sewerage; development and implementation of research and development developments using the latest materials, technologies, equipment and devices
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Hydromorphological changes. Spread of invasive species. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages.
Implementation of environmental protection measures and their financing	The estimated amount of funding for the Programme was UAH 9,471.7 million (in 2010 prices), including UAH 3,004.3 million from the state budget and UAH 6,467.4 million from other sources. Main objectives of the Programme: - Bringing sanitary protection zones and water protection zones of drinking water sources into compliance with regulatory requirements, assessing the environmental and hygienic condition of drinking water sources for compliance with the established requirements; - inventory of sewage treatment facilities;

	- construction and reconstruction of water and sewage treatment facilities to reduce the amount of untreated wastewater discharged into water bodies and to recycle sediments; - construction and implementation of drinking water treatment plants and bottling stations using the latest materials, technologies, equipment, devices and research and development; - Developing schemes to optimise the operation of centralised water supply systems; - equipping water and wastewater quality control laboratories with modern control and analytical equipment; - Bringing the regulatory framework for drinking water supply and wastewater disposal in line with EU standards, taking into account national peculiarities, including in terms of increased liability for violations of environmental pollution standards, primarily discharges by industrial enterprises into water bodies; - Carrying out comprehensive research and development activities using the latest technologies, equipment, materials, and devices, the use of which is aimed, in particular, at energy and resource conservation, improving the quality of drinking water and wastewater treatment, and implementing such developments. Funding for the last 3 years: 2018 - UAH 200 million (the need is UAH 1.3 billion), 2019 - no funds were allocated at all. 2020 - no funds were allocated at all.
Achievement of set goals	The set goals were not achieved. The reason is the lack of funding for the project from the state budget.
Name of the programme/fund/project	The National Programme for the Development of Nature Reserves for the period up to 2020
Name of the conservation measure	Preservation and expansion of the country's nature reserve fund. RBMP / Section 3 "Areas (territories) to be protected and their mapping: Emerald Network facilities; sanitary protection zones; protection zones for valuable types of aquatic bioresources; massifs of surface/groundwater used for recreational, medical, resort and health purposes, as well as water intended for bathing; areas vulnerable to (nitrate) accumulation"
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Spread of invasive species. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages.
Implementation of environmental protection measures and their financing	In 2019, the number of sites and territories of the nature reserve fund (NRF) of national and local importance increased by 116 units with a total area of 94224.2 hectares. In 2019, 116 territories and objects of the nature reserve fund were created (declared), 9 were expanded, 3 were reduced in area, 1 status was cancelled and 13 objects were reclassified. The NRF is managed by the Ministry of Ecology and is funded through the state budget programme KPKVK 2701160 "Conservation of protected areas".

	In 2020, UAH 403.73 million (state fund) and UAH 25.64 million (special fund) were spent on measures to preserve and expand protected areas, for a total of UAH 429.37 million. The area of protected areas of Ukraine was increased by 1%, and the territories of protected areas were expanded: Uzhanskyi NNP, Oleshkivski Sands NNP, Biloberezhzhzhya Svyatoslav NNP.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	The State Target Programme for the Development of Land Relations in Ukraine for the period up to 2020
Name of the conservation measure	Protection and rational use of land
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by nutrients. Pollution by hazardous substances. Spread of invasive species. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages.
Implementation of environmental protection measures and their financing	Excessive ploughing of agricultural land leads to a violation of the ecologically balanced ratio of agricultural, nature reserve and other environmental, health, recreational, historical, cultural, forestry, water fund lands, and an increase in the area of degraded, low-productive, and technogenically polluted land. The Ministry of Agrarian Policy and Food of Ukraine (MAPF), as the main spending unit of the state budget, and the StateGeoCadastre, as a lower-level spending unit, were responsible for implementing the Programme. As of 1 January 2021, 500,000 hectares of degraded, underutilised and technogenically contaminated land are subject to conservation, 143,000 hectares of disturbed land need reclamation, and 294,000 hectares of underutilised land need improvement. Ineffective management by the Ministry of Agrarian Policy as the main spending unit and the StateGeoCadastre as a lower-level spending unit resulted in the liquidation of the Ministry of Agrarian Policy and the government's reform of the StateGeoCadastre in 2020.
Achievement of set goals	The set goals were not achieved. Lack of funding for the Programme from the state budget in this area in 2018-2020.
Name of the programme/fund/project	The Environmental Protection Fund (hereinafter referred to as the EPF)
Name of the conservation measure	Environmental protection (targeted financing of environmental protection measures).
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Littering with plastic and other solid waste. Hydromorphological changes. Spread of invasive species. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages.
Implementation of environmental protection measures and their financing	Currently, Ukraine has a three-tier system of environmental funds, consisting of the State Environmental Fund, regional and local (city, town and village) environmental funds. At the regional level, the regional and local environmental funds are a significant source of funding for environmental protection measures. Environmental funds are used for targeted financing of environmental protection measures in accordance with the List of activities that are considered to be environmental protection measures approved by the Cabinet of Ministers of Ukraine on 17.09.1996 No. 1147.

	In accordance with the Law of Ukraine "On Environmental Protection" dated 25.06.1991 No. 1264-XII (as amended on 18.12.2019), financing of environmental protection measures (hereinafter referred to as NEP), including water resources, is carried out at the expense of the State Budget of Ukraine, local budgets, funds of enterprises, institutions and organisations, funds of the National Environmental Protection Agency, voluntary contributions and other funds. The CMU Resolution "On Approval of the Regulation on the State Environmental Protection Fund" dated 7.05.1998 No. 634 (as amended by the CMU Resolution No. 1065 dated 4.12.2019), according to which the State Environmental Protection Fund became part of the State Budget of Ukraine. According to 2018 data, the share of environmental revenues (rent, environmental tax, special permits, fines) in the state budget was over UAH 52 billion, of which UAH 4.6 billion was allocated to support the activities of the relevant central government agencies and environmental control, and only UAH 4.2 billion, or only 8% of environmental funds, were allocated for the implementation of environmental protection measures. This also includes the allocation of funds for the national budget programmes Dnipro-2021 and Drinking Water-2020. If these 4.2 billion UAH are divided between agencies and entities, the following picture emerges: the State Agency of Water Resources (38%), local budgets (24%), SAUEZM (22%), Ministry of Ecology (now Ministry of Environment) (9%), State Ecological Inspectorate (4%), State Geological Survey (2%) received the largest share of environmental funds. At present, Ukraine lacks monitoring of the effectiveness of environmental protection measures, a system of proper planning, inefficient use of funds, and the possibility of financial support for environmental modernisation by business entities themselves.
Achievement of set goals	The set goals were not achieved. In fact, the entirety of the environmental tax collected is dispersed within the general and special funds of the state and local budgets.
Name of the programme/fund/project	"Environmental Protection Programme for Khmelnytskyi Oblast for 2016-2020"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety, including the conservation and protection of water resources. To stop the loss of biological and landscape diversity and to form an ecological network. Setting up an environmental monitoring system. Raising the level of public environmental awareness.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Littering with plastic and other solid waste. Hydromorphological changes. Spread of invasive species. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages. Southern Bug RBD / Rivers of the oblast (22% of the oblast area).
Implementation of environmental protection measures and their financing	Implementation in 2 stages: Phase I: 2016 - 2017, Stage II: 2018 - 2020. Sources of funding for the Programme activities: state budget (including the state ONSF), local budgets (including local ONSF), other sources not prohibited by the current legislation. The total amount of financial resources required for the implementation was UAH 240.728 million. Funding for environmental protection measures in Khmelnytskyi Oblast in 2017-2019 was carried out in a planned and systematic manner: 2017 - UAH 9.623 million. 2018 - UAH 79.861 million. 2019 - UAH 62.696 million.

	In 2019, UAH 62.696 million was allocated for the implementation of the ONAP Programme activities, including: UAH 20.480 million from the State Budget (including UAH 6.00 million from the State Regional Development Fund); UAH 20.180 million from the Regional Environmental Protection Fund; UAH 15.041 million from local budgets (including UAH 1.305 million from local environmental protection funds); and UAH 6.995 million from enterprises' own funds. If we analyse the implementation of the Programme by activity area, we get the following results: - improving the environmental situation and increasing the level of environmental safety: UAH 54.068 million; - to stop the loss of biological and landscape diversity and to form an ecological network: UAH 8.234 million; - Raising the level of public environmental awareness: UAH 91.14 thousand; - Organisation of the environmental monitoring system: UAH 302.1 thousand.
Achievement of set goals	The targets were partially achieved. The Programme activities have not been fully funded.
Name of the programme/fund/project	"The Programme for the Development of the Water Sector in Khmelnytskyi Oblast for the Period up to 2021
Name of the conservation measure	Ensuring the development of land reclamation and improvement of the ecological condition of irrigated and drained lands, water resources management
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Littering with plastic and other solid waste. Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages. Southern Bug RBD / Rivers of the region (22% of the oblast area).
Implementation of environmental protection measures and their financing	State budget funds were used to ensure the operation of national and inter-farm state land reclamation systems, water management, and monitoring of surface water resources: in 2019 - UAH 21.580 million; in 2020 - UAH 26.732 million; in 2021 - UAH 32.704 million. Due to low funding from all sources, the programme is not being implemented in full.
Achievement of set goals	The set goals were not achieved. The reason for this is the low amount of actual funding for tasks and activities from all sources of funding.
Name of the programme/fund/project	"Programme for the Development of Water Management in Khmelnytskyi Oblast for the period up to 2021"
Name of the conservation measure	Protecting settlements and agricultural land from the harmful effects of water
Relevance of the environmental measure to the main water and environmental issues and the code	Hydromorphological changes. Floods and floods, flooding of territories. SWB of the Vovk River / UA_M5.4_0070.

of the surface/groundwater body it affects	
Implementation of environmental protection measures and their financing	In 2019, the state budget funds were allocated to develop a working project for the project "Clearing the channel of the Vovk River and protection against flooding in Nyzhne village, Chereshenka village and the eastern part of Derazhnia town, Derazhnia district, Khmelnytskyi region" - UAH 286.0 thousand. In 2020 and 2021, the programme activities in this area were not funded.
Achievement of set goals	The set goals were not achieved. The reason for this is the low amount of actual funding for tasks and activities from all sources of funding.
Name of the programme/fund/project	"The Programme for the Development of the Water Sector in Khmelnytskyi Oblast for the Period up to 2021
Name of the conservation measure	Environmental rehabilitation of the Dnipro River basin and improvement of drinking water quality
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Littering with plastic and other solid waste. Southern Bug RBD / Rivers of the region (22% of the oblast area).
Implementation of environmental protection measures and their financing	In 2019, 2020 and 2021, the programme activities in this area were not funded
Achievement of set goals	The set goals were not achieved. The reason for this is the low amount of actual funding for tasks and activities from all sources of funding.
Name of the programme/fund/project	"The Environmental Protection Programme of Khmelnytskyi Oblast for 2016-2020
Name of the conservation measure	Reconstruction of the treatment facilities of Khmelnytsky Regional Psychiatric Hospital No. 1 in the village of Skarzhyntsi, Yarmolynets district
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. SWB of the river Vovk / UA_M5.4_0069
Implementation of environmental protection measures and their financing	In 2019, the regional environmental protection fund financed a UAH 5.265 million environmental protection measure to reconstruct the treatment facilities of Khmelnytsky Regional Psychiatric Hospital No. 1 in the village of Skarzhyntsi, Yarmolynets district; in 2020, UAH 275.0 thousand was financed from the regional environmental protection fund (repayment of accounts payable registered as at 01.01.2020). The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"The Environmental Protection Programme of Khmelnytskyi Oblast for 2016-2020

Name of the conservation measure	Reconstruction of the wastewater disposal and treatment system of the Khmelnytsky Regional Hospital for War Veterans
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. SWB of the river Vovk / UA_M5.4_0069
Implementation of environmental protection measures and their financing	In 2019, the regional environmental protection fund financed the reconstruction of the wastewater disposal and treatment system at the Khmelnytsky Regional Hospital for War Veterans in the amount of UAH 4.840 million; In 2020, UAH 3.019 million was financed from the regional environmental protection fund; In 2021, UAH 176.4 thousand was financed from the regional environmental protection fund. The work has been completed in full, but there is no certificate of completion.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"The Environmental Protection Programme of Khmelnytskyi Oblast for 2016-2020
Name of the conservation measure	Reconstruction of wastewater treatment facilities of the regional TB dispensary in Ostashky village, Khmelnytsky district, with a capacity of 50 m3 /day[3]
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Pivdennyi Buh River SWB / UA_M5.4_0002
Implementation of environmental protection measures and their financing	In 2019, the regional environmental protection fund was used to pay off accounts payable in the amount of UAH 74.5 thousand registered as at 01 January 2019; The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"The Environmental Protection Programme of Khmelnytskyi Oblast for 2016-2020
Name of the conservation measure	Reconstruction of external sewage networks of the sewage pumping station No. 4 at 8/1 Promyslova Street, Derazhnya
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. SWB of the river Vovk / UA_M5.4_0070
Implementation of environmental protection measures and their financing	In 2019, a subvention from the regional environmental protection fund was used to reconstruct water supply networks to prevent emergencies at the collector and possible leakage of wastewater into the Vovk River and groundwater pollution in the amount of UAH 1.2 million; The work has been completed in full.

Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"The Environmental Protection Programme of Khmelnytskyi Oblast for 2016-2020
Name of the conservation measure	Current repair of the coastal strip of the Vovk River
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Floods and floods, flooding of territories. SWB of the river Vovk / UA_M5.4_0070
Implementation of environmental protection measures and their financing	In 2019, the local environmental protection fund was used to repair the coastal protection zone in the amount of UAH 81.2 thousand; The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"The Environmental Protection Programme of Khmelnytskyi Oblast for 2016-2020
Name of the conservation measure	Preparation of design and estimate documentation for clearing the pond bed on the territory of Derazhnyansky City Council
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Floods and floods, flooding of territories. Droughts and water shortages. SWB of the river Vovk / UA_M5.4_0070
Implementation of environmental protection measures and their financing	In 2019, the local environmental protection fund provided UAH 150,000 to prepare design and estimate documentation for clearing the pond bed on the territory of the Derazhnyansky City Council. The work has been completed in full.
Achievement of the set goals	Design and estimate documentation for clearing the pond bed on the territory of Derazhnyansky City Council was developed
Name of the programme/fund/project	"The Environmental Protection Programme of Khmelnytskyi Oblast for 2016-2020
Name of the conservation measure	Reconstruction of the sewerage network from the Silhosptekhnika neighbourhood along Promyslova Street to the Tsukovykovyky neighbourhood and the sewage treatment plant No. 6 in Derazhnya, Khmelnytskyi region
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. SWB of the river Vovk / UA_M5.4_0070
Implementation of environmental protection measures and their financing	The measure was not implemented due to the fact that the municipal enterprise Derazhnyanskyi municipal water supply coSWBny did not receive a declaration for the start of work. Funds in the amount of UAH 732.2 thousand were returned to the regional budget
Achievement of set goals	Not achieved.

Name of the programme/fund/project	"Environmental Protection Programme of Khmelnytskyi Region for 2021-2025"
Name of the conservation measure	Reconstruction of the wastewater disposal and treatment system of the Khmelnytsky Regional Hospital for War Veterans
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. SWB of the river Vovk / UA_M5.4_0069
Implementation of environmental protection measures and their financing	In 2021, UAH 167.3 thousand was financed from the regional environmental protection fund The work has been completed in full (a certificate of completion has been obtained).
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Khmelnytskyi Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Acquisition of systems and devices for monitoring the quality of surface and groundwater in the city
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Southern Bug River SWB / UA_M5.4.0003, UA_M5.4.0004 Ploska River SWB / UA_M5.4_0046 Kudryanka River SWB / UA_M5.4_0047
Implementation of environmental protection measures and their financing	At the expense of the municipal environmental protection fund In 2019, a muffle furnace SNOL 7.2/1100 ceramic, microprocessor (Termolab) was purchased for UAH 39.0 thousand in 2020, thermostat equipment (1 unit) was purchased for Khmelnytskvodokanal, UAH 46.0 thousand was financed The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Khmelnytskyi Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Measures to restore and maintain a favourable hydrological regime and sanitary condition of the city's water bodies
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Littering with plastic and other solid waste. Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Southern Bug River SWB / UA_M5.4.0003, UA_M5.4.0004 Kudryanka River SWB / UA_M5.4_0047

Implementation of environmental protection measures and their financing	At the expense of the municipal environmental protection fund In 2019, the design and estimate documentation for the "Overhaul and cleaning of the Pivdennyi Buh River and drainage channels from Trudova Street to the Eastern Bypass Road" was developed, the project was examined and the environmental impact assessment (EIA) procedure was carried out, and UAH 459.6 thousand was financed in 2020, design and estimate documentation was developed for the overhaul and cleaning of the Kudryanka River within the city limits with the passage of expert procedures (expertise, EIA, etc.), UAH 395.7 thousand was financed, and measures were taken to biologically reclaim water bodies (introduction of chlorella into the Khmelnytsky reservoir), UAH 48.4 thousand was financed The work was completed in full (design and estimate documentation was developed).
Achievement of the set goals	The project is planned to be implemented in the coming years.
Name of the programme/fund/project	"Khmelnytskyi Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Carrying out works related to the improvement of the technical condition and landscaping surface water bodies of the city (cleaning, mowing, clearing channels under bridges, etc.)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Littering with plastic and other solid waste. Hydromorphological changes. Southern Bug River SWB / UA_M5.4.0003, UA_M5.4.0004 Kudryanka River SWB / UA_M5.4_0047
Implementation of environmental protection measures and their financing	At the expense of the city budget: In 2019, the coastal strip of the lake in the Ozerna neighbourhood, Kudryanka in the area of Dzherelna Street, Pivdennyi Buh River was maintained, UAH 1.476 million was financed In 2020, the coastal strip of the lake in the Ozerna neighbourhood, Kudryanka in the area of Dzherelna Street, Pivdennyi Buh River was maintained, UAH 2.098 million was financed The work is carried out continuously
Achievement of set goals	The set goals are achieved in stages.
Name of the programme/fund/project	"Khmelnytskyi Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Overhaul and replacement of worn-out water supply and sewerage networks
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug River SWB / UA_M5.4.0003, UA_M5.4.0004
Implementation of environmental protection measures and their financing	In 2019, at the expense of the city budget and the utility coSWBny, the coSWBny replaced and repaired water supply networks (785.8 m); repaired wells and gravity sewerage networks. A section of the water supply system on S. Bandera Street was reconstructed, with funding of UAH 940.2 thousand (including UAH 764.8 thousand from the city budget and UAH 175.47 thousand from Khmelnytskvodokanal).

	In 2020, Khmelnytskvodokanal replaced and repaired 94.2 m of water supply networks; repaired 42.6 m of wells and gravity sewerage networks, with funding of UAH 130.9 thousand. The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Khmelnytskyi Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Work to restore strict regime zones of artesian wells at water intakes Modernisation of pumping equipment at wells Overhaul of electrical, pumping equipment and blowers Overhaul of primary settling tanks KOS 2 - 4 pcs. Overhaul of secondary settling tanks Replacement of worn-out pipelines with a 300 m.p. PSC. Cleaning of sludge sites (COS 2)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug River SWB / UA_M5.4_0004
Implementation of environmental protection measures and their financing	In 2019, Khmelnytskvodokanal, a municipal utility coSWBny, carried out works to improve the territories of artificial wells at the expense of the coSWBny and adjacent territories, cementing and whitewashing of wellheads, and inspection of wells for flooding. Repair and restoration of well fences was carried out at the coSWBny's own expense. 54 wells were fenced (UAH 30.0 thousand); pumping equipment was repaired at municipal water intake wells No. 8, 24, 27 (UAH 15.6 thousand); 6 pumping units and 2 blowers were overhauled (UAH 25.3 thousand); 3 first-rate wells were repaired (UAH 25.3 thousand). UAH 36.7 thousand); repair of 3 primary settling tanks; repair of the aeration tank and secondary settling tank (UAH 45.6 thousand); replacement of 42 m.p. of worn-out pipelines at SWB 2 (UAH 29.2 thousand); sludge areas are being cleaned. During the year, 17 sludge sites were cleaned up (UAH 146.0 thousand). In 2020, the CoSWBny carried out works on the improvement of artificial artificial wells and adjacent territories, cementation and whitewashing of wellheads, and inspection of wells for flooding. Repair and restoration of well fences was carried out at the coSWBny's own expense (UAH 83.0 thousand); overhaul of 6 pumping units and 3 blowers (UAH 98.3 thousand); repair of 4 primary sedimentation tanks (UAH 108.3 thousand); repair of 2 secondary sedimentation tanks (UAH 96.2 thousand); replacement of 220 metres of worn-out pipelines at the secondary sedimentation tank 2 (UAH 105.8 thousand); sludge sites are being cleaned. During the year, 21 sludge sites were cleaned (UAH 96.2 thousand) The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Khmelnytskyi Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Construction of street drainage networks, sewage collectors, sewage and pumping station in Dubovo neighbourhood with preparation of design and estimate documentation
Relevance of the environmental measure to the main water and	Pollution by organic substances. Pollution by nutrients.

environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances. Kudryanka River SWB / UA_M5.4_0047
Implementation of environmental protection measures and their financing	In 2020, an additional agreement dated 15.04.2020 was concluded at the expense of the city budget. Funds in the amount of UAH 250.0 thousand were provided, UAH 183.1 thousand were financed The work is underway.
Achievement of set goals	The set goals are being achieved.
Name of the programme/fund/project	"Environmental Protection Programme of the Khmelnytskyi City Territorial Community for 2021-2025"
Name of the conservation measure	Biological reclamation of water bodies
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pivdennyi Buh River SWB/ UA_M5.4_0003
Implementation of environmental protection measures and their financing	In 2021, at the expense of the city environmental protection fund, measures were taken to introduce chlorella algae paste into the Khmelnytsky reservoir, with UAH 49.8 thousand financed The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Environmental Protection Programme of the Khmelnytskyi City Territorial Community for 2021-2025"
Name of the conservation measure	Scientific research (laboratory tests of surface water)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Southern Bug River SWB / UA_M5.4.0003, UA_M5.4.0004 Ploska River SWB / UA_M5.4_0046 Kudryanka River SWB / UA_M5.4_0047
Implementation of environmental protection measures and their financing	At the expense of the municipal environmental protection fund in 2021, laboratory tests of surface water samples of water bodies in the city were carried out, UAH 34.3 thousand were financed The work has been completed in full.
Achievement of set goals	Set goals achieved
Name of the programme/fund/project	"Environmental Protection Programme of the Khmelnytskyi City Territorial Community for 2021-2025"

Name of the conservation measure	Inspection and certification of hydraulic structures
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. SWB for the Southern Bug River Basin/ UA_5.4_0001 - UA_5.4_0010
Implementation of environmental protection measures and their financing	At the expense of the municipal environmental protection fund in 2021, a survey and inventory of water bodies within the territorial community was carried out, UAH 44.8 thousand were financed The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Environmental Protection Programme of the Khmelnytskyi City Territorial Community for 2021-2025"
Name of the conservation measure	Measures to restore and maintain a favourable hydrological regime and sanitary condition of water bodies (including implementation of projects to improve and clean up the P.Bug, Ploska, Kudryanka rivers)
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Littering with plastic and other solid waste. Hydromorphological changes. Pivdennyi Buh River SWB/ UA_M5.4_0004 Ploska River SWB / UA_M5.4_0046 Kudryanka River SWB / UA_M5.4_0047
Implementation of environmental protection measures and their financing	In 2021, the project for the reconstruction of the discharge collector and cleaning of the Ploska River was adjusted at the expense of the Khmelnytskyi City Territorial Community budget, with UAH 149.4 thousand financed The work has been completed in full.
Achievement of the set goals	The project is planned to be implemented in the coming years.
Name of the programme/fund/project	"Environmental Protection Programme of the Khmelnytskyi City Territorial Community for 2021-2025"
Name of the conservation measure	Routine repair and maintenance of public wells
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances.
Implementation of environmental protection measures and their financing	In 2021, the budget of the Khmelnytskyi City Territorial Community funded UAH 37.1 thousand for the routine repair and maintenance of public wells in the settlements that are part of the Khmelnytskyi City Territorial Community. The work has been completed in full.
Achievement of set goals	The set goals have been achieved.

Name of the programme/fund/project	"Environmental Protection Programme of the Khmelnytskyi City Territorial Community for 2021-2025"
Name of the conservation measure	Ensuring the functioning of open channels of the reclamation drainage system
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Floods and floods, flooding of territories. Southern Bug River SWB / UA_M5.4_0004
Implementation of environmental protection measures and their financing	In 2021, the budget of the Khmelnytskyi City Territorial Community was used to clean drainage channels in the city of Khmelnytskyi and the village of Kopystyn, with funding of UAH 298.6 thousand. The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Environmental Protection Programme of the Khmelnytskyi City Territorial Community for 2021-2025"
Name of the conservation measure	Carrying out works related to the improvement of the technical condition and improvement of surface water bodies on the territory of the territorial community
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Littering with plastic and other solid waste. Hydromorphological changes. Southern Bug River SWB / UA_M5.4.0003, UA_M5.4.0004 Ploska River SWB / UA_M5.4_0046 Kudryanka River SWB / UA_M5.4_0047
Implementation of environmental protection measures and their financing	In 2021, the budget of the Khmelnytskyi city territorial community was used to maintain the coastal strip of the lake in the Ozerna neighbourhood, Kudrianka, in the area of Dzherelna Street, Pivdennyi Buh River. Improvement of the stream in the area on Khotovytskoho Street, UAH 3.257 million was financed (including UAH 3.209 million from the city budget, UAH 48 thousand from the city fund of the National Emergency Service) The work is carried out continuously
Achievement of set goals	The set goals are being achieved.
Name of the programme/fund/project	"Environmental Protection Programme of the Khmelnytskyi City Territorial Community for 2021-2025"
Name of the conservation measure	Construction of sanitary protection zones (I belt) for artesian wells and water pumping stations Modernisation and overhaul of artesian wells and water pumping stations Construction, overhaul of water supply and sewerage facilities and networks Reconstruction and overhaul of facilities, equipment and utilities of municipal sewage treatment plants and sewage pumping stations
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug River SWB / UA_M5.4_0004

Implementation of environmental protection measures and their financing	In 2021, the budget of the Khmelnytskyi City Territorial Community was used to improve the territories of artificial artesian wells, water pumping stations and adjacent areas, namely: cementing and whitewashing of wellheads, inspection for flooding, and cleaning of the territories (UAH 28.5 thousand); two wells were overhauled at the 10th oil and gas production unit (UAH 285.0 thousand); the coSWBny replaced and repaired water supply networks - 112.5 m.p.; repaired wells and sewerage networks - 47.5 m.p. (UAH 138.2 thousand); 4 primary and 4 secondary sedimentation tanks were overhauled at the sewage treatment plant No. 2, 6 SD-800 pumping units and 1 blower were repaired, 16 sludge sites were cleaned, and 366 metres of sludge pipeline were replaced (UAH 287.3 thousand). The work has been completed.
Achievement of set goals	The set goals are being achieved.
Name of the programme/fund/project	"The "Drinking Water of Khmelnytskyi Region Programme for 2021"
Name of the conservation measure	Construction (reconstruction) of water supply networks in settlements
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Southern Bug RBD / Rivers of the oblast (22% of the oblast area).
Implementation of environmental protection measures and their financing	In 2021, 36 water supply facilities were constructed (reconstructed) in the region at the expense of the regional budget subvention to local budgets and at the expense of local budgets, with UAH 49.0 million financed from the regional budget. The work has been completed.
Achievement of set goals	The set goals are being achieved.
Name of the programme/fund/project	"Waste Management Programme in Khmelnytskyi Oblast for 2018-2022"
Name of the conservation measure	Implementation of a systematic approach to waste management at the regional level, reduction of waste generation; introduction of an effective waste sorting and recycling system.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Littering with plastic and other solid waste. Southern Bug RBD / Rivers of the oblast (22% of the oblast area).
Implementation of environmental protection measures and their financing	The programme was adopted and approved to implement a systematic approach to waste management at the regional level, reduce waste generation, introduce an effective waste sorting system and recycle waste into materials and products, and identify sites for the construction of regional landfills (waste processing plants) that meet modern standards and sanitary norms. To implement the Programme in 2019, UAH 40.75 million worth of activities were financed, including: UAH 4.08 million from the state budget, UAH 0.524 million from local ONPS funds, UAH 17.3 million from local budgets, UAH 8.11 million from solid waste management coSWBnies, and UAH 10.73 million from other sources.
Achievement of the set goals	The set goals were only partially achieved.

	Some of the Programme's activities (purchase of containers, special equipment, landfill arrangement) were implemented at the expense of AHs
Name of the programme/fund/project	"Fisheries Development Programme for Khmelnytskyi Region for 2018-2022"
Name of the conservation measure	Protection and conservation of water resources. Increasing fish productivity and improving the ecological state of water bodies through the introduction of herbivorous fish species (biomeliorators)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Spread of invasive species Southern Bug RBD / Rivers of the region (22% of the oblast area).
Implementation of environmental protection measures and their financing	The main objective of the Programme is to meet the needs of the population with a wide range of fish products of its own production in accordance with physiologically sound standards, to preserve and increase fish resources, and to address the tasks of protecting and preserving water resources. The total amount of planned financial resources for the implementation of the Programme is UAH 23.813 million (without the involvement of the state budget), including: funds from the local budget - UAH 0.97 million and funds from other sources (fisheries enterprises, water body lessees) - UAH 22.841 million. For example, in 2019, the Programme provided funding of UAH 4.796 million for the implementation of the measure "Increasing fish productivity of water bodies and improving the ecological state through the introduction of herbivorous fish species (biomeliorators)", UAH 0.441 million from local budgets, and the rest from fisheries enterprises. In 2019, no funds were allocated from local budgets for this measure, and information on the funds of fisheries enterprises and water body lessees is quite different and requires further clarification.
Achievement of the set goals	The set goals were only partially achieved. Some local measures were taken to biomeliorate water bodies at the expense of fisheries enterprises' own funds.
Name of the programme/fund/project	"Programme for the Development of Land Relations in Khmelnytskyi Region for 2018-2022"
Name of the conservation measure	Protection and efficient use of land resources. Conducting survey work, developing land management projects for the reclamation of disturbed land. Developing land management projects for the conservation (through reforestation) of degraded and unproductive land.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by nutrients. Spread of invasive species. Southern Bug RBD / Rivers of the oblast (22% of the oblast area).
Implementation of environmental protection measures and their financing	The total amount of financial resources required for the implementation of the Programme was UAH 98.455 million, including: the state budget - UAH 15.0 million, local budgets - UAH 63.225 million and other sources - UAH 20.230 million. In this Programme, we were most interested in the area of "Surveying, development of land management projects for the reclamation of disturbed land", for which UAH 212 thousand was provided. As of 1 January 2018, there were 2764 hectares of disturbed land in Khmelnytskyi Oblast. In 2018, no funds were allocated for this purpose, and in 2019, out of the planned UAH 50 thousand, no funds were allocated from local budgets.

	More important for the Southern Bug RBD in the context of land protection was the direction "Development of land management projects for the conservation (through reforestation) of degraded and unproductive lands", for the implementation of which UAH 777.4 thousand of local budget funds were provided. As in the previous direction, funds were provided only in 2019. Unfortunately, local governments have ignored the funding of this Programme measure.
Achievement of set goals	The set goals were not achieved. The implementation of the Programme's environmental measures was not funded.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021"
Name of the conservation measure	Monitoring the state of water resources using modern technologies
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. UA_M5.4_0004; UA_M5.4_0008; UA_M5.4_00011; UA_M5.4_00013; UA_M5.4_0014; UA_M5.4_00019; UA_M5.4_00028; UA_M5.4_0060; UA_M5.4_0503; UA_M5.4_0727; UA_M5.4_0830; UA_M5.4_0874; UA_M5.4_0964; UA_M5.4_0989.
Implementation of environmental protection measures and their financing	In total, UAH 0.8 million from the state budget: (2013 - 0,06; 2014 - 0,07; 2015 - 0,08 2016 - 0,08; 2017 - 0,09; 2018 - 0,09; 2019 - 0,1; 2020 - 0,11 2021 - UAH 0.12 million) A total of 77,481 measurements are planned for the programme period. No funding was allocated to re-equip the laboratories.
Achievement of set goals	The goal was partially achieved. There was no funding for modern equipment. According to the Monitoring Programme, 63,905 measurements (82.5%) were carried out.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021
Name of the conservation measure	Ensuring the development of land reclamation and improvement of the ecological condition of irrigated and drained lands, as well as water resources management: - ensuring the operation of national and inter-farm state and on-farm land reclamation systems; - reconstruction of the engineering infrastructure of irrigation systems; - construction and reconstruction of drip irrigation systems; - purchase of modern irrigation equipment. Southern Bug RBD / Rivers of the oblast (62% of the oblast area).
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages.

Implementation of environmental protection measures and their financing	Expected results from the implementation of these measures: Increase the area of land on which guaranteed crop yields will be obtained to 23.7 thousand hectares; Increase the area of land to be reconstructed to 18.4 thousand hectares; increase in the area under drip irrigation by 31.3 thousand hectares; purchase of modern irrigation equipment in the amount of 10 units. Funding is envisaged from the state budget and other sources (agricultural producers) in the amount of UAH 134.44 million (121.6 from the state budget, 12.84 from other sources) in the period 2013-2021. As a result, we prepared for the growing season: - irrigated land 12.5 thousand hectares (100%) - drainage land 53.1 thousand hectares (100%) Measures to reconstruct the engineering infrastructure and drip irrigation systems were not funded, and as a result, the area of reclaimed land did not increase. Modern irrigation equipment has not been purchased due to a lack of investment. There was no state funding at all, and reclamation measures were carried out only at the expense of local funds and agricultural enterprises.
Achievement of set goals	The targets were partly achieved due to the lack of state funding for the Programme.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021"
Name of the conservation measure	Construction, reconstruction and overhaul of hydraulic structures
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages.
Implementation of environmental protection measures and their financing	It was planned to reconstruct and repair 2 gas transmission systems at the expense of the state budget in the amount of UAH 2.82 million. The activities were to be carried out in 2017 and 2021. No state funding was allocated.
Achievement of set goals	The targets were not achieved due to the lack of funding for the Programme.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021"
Name of the conservation measure	Construction and reconstruction of coastal protection structures
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories.
Implementation of environmental protection measures and their financing	The planned length of the reconstructed bank protection structures is 1.7 km. Funding was envisaged for the period 2013-2021 from the state budget in the amount of UAH 6.37 million. No funds were received to implement the programme.

	Reconstruction of bank protection structures was carried out, in particular, at the expense of the regional ONPS fund (reconstruction of bank protection structures with cleaning of the Desna riverbed from the mouth to the 900-metre-long bridge overpass of the Vinnytsia-Kalynivka road within the village of Stryzhavka (Regional State Administration of Housing and Communal Services) - UAH 2.058 million from the regional budget). Desna River SWB/ UA_M5.4_0152
Achievement of set goals	The targets were partially achieved (28%).
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021"
Name of the conservation measure	Construction, reconstruction and overhaul of flood protection dams
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Floods and floods, flooding of territories.
Implementation of environmental protection measures and their financing	The planned length of the constructed, reconstructed and repaired defences is 1.4 km. Funding was provided from the state budget in the amount of UAH 3.34 million over the period 2013-2021.
Achievement of set goals	The targets were not achieved due to the lack of funding for the Programme.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021"
Name of the conservation measure	Clearing and regulating riverbeds and water bodies, restoring and maintaining favourable hydrological conditions and the sanitary state of rivers and water bodies.
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages.
Implementation of environmental protection measures and their financing	The planned length of the cleared and regulated riverbeds and water bodies is 12.1 km. Funding was provided from the state budget in the amount of UAH 18.51 million for the period 2013-2021.
Achievement of set goals	The targets were not achieved due to the lack of funding for the Programme.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021"
Name of the conservation measure	Reforestation of coastal protection strips, implementation of agrotechnical, agroforestry and erosion control measures
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages.

Implementation of environmental protection measures and their financing	Reforestation of coastal protection strips, implementation of agrotechnical, agroforestry and anti-erosion measures on an area of 42 hectares.
Achievement of set goals	The set goals were not achieved due to the lack of funding for the Programme. This measure is envisaged by the Southern Bug RMP protection programme.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021"
Name of the conservation measure	Construction of contour reclamation systems in watersheds, water drainage systems from urbanised rural areas
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by nutrients. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Floods and floods, flooding of territories.
Implementation of environmental protection measures and their financing	The plan is to cover an area of 6.2 hectares of urbanised rural areas with contour reclamation systems. Funding was provided from the state budget in the amount of UAH 0.42 million over the period 2013-2021.
Achievement of the set goals	The set goals were not achieved due to the lack of funding for the Programme.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021"
Name of the conservation measure	Carrying out design and survey work on water protection facilities and coastal protection strips along rivers and water bodies.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by nutrients. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories.
Implementation of environmental protection measures and their financing	It was planned to prepare 12 working projects for the construction, reconstruction and overhaul of water protection facilities in the amount of 12 pieces. Funding was provided from the state budget in the amount of UAH 1.16 million over the period 2013-2021.
Achievement of set goals	The targets were not achieved due to the lack of funding for the Programme.
Name of the programme/fund/project	"Comprehensive Target Programme for the Development of the Water Sector in Vinnytsia Oblast for the Period of 2021
Name of the conservation measure	Establishment and reconstruction of production bases for the operation of flood control structures
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Floods and floods, flooding of territories.

Implementation of environmental protection measures and their financing	Funding was envisaged for the period 2013-2021 from the state budget in the amount of UAH 0.76 million
Achievement of set goals	The targets were not achieved due to the lack of funding for the Programme.
Name of the programme/fund/project	"Regional Programme "Drinking Water" for 2012-2020"
Name of the conservation measure	Construction of external water supply networks on Morozivska Street to PC 11 + 21, B. Khmelnytskoho Street and B. Khmelnytskoho Lane in Illintsi, Vinnytsia region
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Sob river SWB/ UA_M5.4_0279 Ilyinetska Reservoir SWB/ UA_M5.4_0277 Sobyk River SWB/ UA_M5.4_0292
Implementation of environmental protection measures and their financing	The programme includes measures to protect and rationally use drinking water sources, organise effective management in the production and provision of water supply and sewerage services, and upgrade and modernise enterprises. The Programme was developed due to the unsatisfactory ecological condition of surface and underground sources of drinking water supply; the potential threat of worsening the sanitary and epidemiological situation in certain regions of the oblast due to poor quality of drinking water; unsatisfactory technical condition and deterioration of fixed assets of drinking water supply and wastewater disposal systems; use of outdated technologies and equipment in drinking water supply and wastewater disposal systems of settlements; limited investment and lack of financial resources required to In 2020, UAH 375.0 thousand was financed from the regional budget.
Achievement of the set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Programme "Drinking Water" for 2012-2020"
Name of the conservation measure	New construction of distribution networks for drinking water supply in Klishchiv village, Tyvriv district (now Tyvrivska TG, Vinnytsia district), Vinnytsia region
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages Pivdennyi Buh River SWB/ UA_M5.4_0015
Implementation of environmental protection measures and their financing	The programme includes measures to protect and rationally use drinking water sources, organise effective management in the production and provision of water supply and sewerage services, and upgrade and modernise enterprises. The Programme was developed due to the unsatisfactory ecological condition of surface and underground sources of drinking water supply; the potential threat of worsening the sanitary and epidemiological situation in certain regions of the oblast due to poor quality of drinking water;

	unsatisfactory technical condition and deterioration of fixed assets of drinking water supply and wastewater disposal systems; use of outdated technologies and equipment in drinking water supply and wastewater disposal systems of settlements; limited investment and lack of financial resources required to In 2020, UAH 500.0 thousand was financed from the regional budget.
Achievement of the set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Programme "Drinking Water" for 2012-2020"
Name of the conservation measure	New construction of a domestic water supply system along Desnianska, Brovarska and Tsehelna streets in the village of Samhorodok, Koziatyn district (now Samhorodska TG, Khmilnyk district), Vinnytsia region.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Desna River SWB UA_M5.4_0143 Desna River SWB UA_M5.4_0142 SWB river No Name UA_M5.4_0156
Implementation of environmental protection measures and their financing	The programme includes measures to protect and rationally use drinking water sources, organise effective management in the production and provision of water supply and sewerage services, and upgrade and modernise enterprises. The Programme was developed due to the unsatisfactory ecological condition of surface and underground sources of drinking water supply; the potential threat of worsening the sanitary and epidemiological situation in certain regions of the oblast due to poor quality of drinking water; unsatisfactory technical condition and deterioration of fixed assets of drinking water supply and wastewater disposal systems; use of outdated technologies and equipment in drinking water supply and wastewater disposal systems of settlements; limited investment and lack of financial resources required to In 2020, UAH 750.0 thousand was financed from the regional budget.
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety. Reconstruction and construction of new sewage treatment plants and sewerage networks in settlements. Construction of a sewerage system, Stryzhavka village
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Sabarivske reservoir UA_M5.4_0013 Periorka River SWB UA_M5.4_0183 Desna River SWB UA_M5.4_0152

Implementation of environmental protection measures and their financing	The main objective of the event is to eliminate and prevent surface water pollution. In 2019 and 2021, UAH 16.248 million was financed, including UAH 11.086 million from the regional fund of the National Health Insurance Fund and UAH 2.576 million from the local budget.
Achievement of set goals	The target was partially achieved. The event was planned to be completed in 2022.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety. Reconstruction of a self-draining sewerage system, Agronomic village.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Sutyske reservoir UA_M5.4_0014
Implementation of environmental protection measures and their financing	The main objective of the event is to eliminate and prevent surface water pollution. In 2019-2020, UAH 1873.2 thousand were financed, UAH 1675.6 thousand from the regional fund of the National Health Service, and UAH 197.6 thousand from the local budget
Achievement of set goals	The target was partially achieved. Implementation of the measure has been suspended.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety. Reconstruction of sewage treatment facilities in Zarvantsi village
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Vyshnia river SWB UA_M5.4_0185 Vyshnia river SWB UA_M5.4_0186
Implementation of environmental protection measures and their financing	The main objective of the event is to eliminate and prevent surface water pollution. During 2019-2021, UAH 3.771 million was financed, including UAH 3.0 million from the regional fund of the National Health Service and UAH 0.771 million from the local budget.
Achievement of set goals	The target was partially achieved. The event was expected to be completed in 2022.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety. Reconstruction of the pressure sewer collector from the SPS on Gastello Street to the extinguishing chamber on I. Franko Street in Zhmerynka.

The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages.
Implementation of environmental protection measures and their financing	The event is aimed at eliminating and preventing surface water pollution. In 2020, UAH 1,440.4 thousand was financed, including UAH 1,055.5 thousand from the regional fund of the National Health Service and UAH 384.9 thousand from the local budget. Baran River SWB UA_M5.4_0221 Baran River SWB UA_M5.4_0222
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Restoring and maintaining favourable hydrological conditions and the sanitary state of rivers. Cleaning of a part of the Vilshanka River on the territory of Turbiv Village Council, Turbiv (major repairs - 1st stage)
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. SWB of the Vilshanka River UA_M5.4_0172 Turbivske reservoir UA_M5.4_0148
Implementation of environmental protection measures and their financing	The expected result of the event is the elimination and prevention of surface water pollution. The depth of silt in the Vilshanka River (within the Turbivska community) reached 2.5 metres in some places. A total of 37.4 hectares of the riverbed was cleaned. The task was not only to deepen the river bottom, but also to remove the cause of the unpleasant smell that affected Turbove residents, improve the ecological condition of the reservoir, which is a habitat for valuable biological resources, create conditions for quality recreation, and develop green tourism in the community. The goal of the event is to increase the depth by 0.8-2.5 m (before the cleaning, it was less than 80 cm in some places), improve the ecological condition of the Vilshanka River and thus the Desna River, into which it flows (the left tributary of the Southern Bug River). In 2019 and 2021, UAH 8.729 million was financed, including UAH 7.446 million from the regional fund of the National Health Service and UAH 1.283 million from the local budget.
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Restoring and maintaining favourable hydrological conditions and the sanitary state of rivers. Cleaning of the pond from silt sediments on the Bezymennyi Stream - the left tributary of the Rovets River in the village of Pochapintsy (overhaul)
Relevance of the environmental measure to the main water and	Pollution by organic substances. Pollution by nutrients.

environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Rovets River SWB UA_M5.4_0187
Implementation of environmental protection measures and their financing	In 2020, UAH 345 thousand was financed, including UAH 300 thousand from the regional ONPS fund and UAH 45 thousand from the local budget.
Achievement of set goals	The first stage of the event has been completed.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety. Reconstruction of a sewage pumping station with a pressure and gravity sewage collector on Radyanska Street, Kryzhopil
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. SWB river No name (Berladynka river basin) UA_M5.4_0402 - UA_M5.4_0410
Implementation of environmental protection measures and their financing	In 2019 and 2021, UAH 3.141 million was financed, including UAH 2.512 million from the regional fund of the National Health Insurance Fund and UAH 300.0 thousand from the local budget.
Achievement of set goals	The target was partially achieved. The event was planned to be completed in 2022.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety. Construction of hydraulic structures to protect the land in the central part of Trostyanets, start-up complex.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Trostianets River SWB UA_M5.4_0340 - UA_M5.4_0343
Implementation of environmental protection measures and their financing	In 2020, UAH 2.824 million was financed, including UAH 2.445 million from the regional fund of the National Health Insurance Fund and UAH 379 thousand from the local budget.
Achievement of set goals	The target was partially achieved. The event was planned to be completed in 2022.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"

Implementation of environmental protection measures and their financing	In 2019, UAH 740.0 thousand was financed, including UAH 700.0 thousand from the regional fund of the National Health Insurance Fund and UAH 40.0 thousand from the local budget.
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Restoring and maintaining favourable hydrological conditions and the sanitary state of rivers. Improving the environmental situation and increasing the level of environmental safety. Reconstruction and improvement of the technical condition and improvement of the reservoir No. 1, V.Ostrizhok village (Khmilnyk district)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. SWB of the river Vitkhla UA_M5.4_0109 SWB of the river Vitkhla UA_M5.4_0110 Voronivtsi Reservoir UA_M5.4_0100
Implementation of environmental protection measures and their financing	In 2019, UAH 200.0 thousand was allocated from the regional ONPS fund and UAH 40.0 thousand from the local budget.
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety. Reconstruction of the culvert crossing of the pressure sewer across the Pivdennyi Buh River from SPS 1-A to the SWB (Vinnytsia)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Sabarivske reservoir UA_M5.4_0013
Implementation of environmental protection measures and their financing	During 2019-2021, UAH 4.92 million was financed from the regional ONPS fund
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Improving the environmental situation and increasing the level of environmental safety. Construction of a sewerage network in the private sector of the Dobrobut neighbourhood committee in the Staryi Misto neighbourhood in Vinnytsia

The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Sabarivske reservoir UA_M5.4_0013
Implementation of environmental protection measures and their financing	In 2019 and 2021, UAH 11,130.2 thousand were financed, including UAH 6,000.0 thousand from the regional fund of the National Health Service and UAH 5,130.2 thousand from the local budget
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Restoring and maintaining favourable hydrological conditions and the sanitary state of rivers. Improving the environmental situation and increasing the level of environmental safety. Overhaul of the Pivdennyi Buh River in Vinnytsia (between the area of the 29th school and the Festivalnyi Island) (Phase II) (Classifier DK 021:2015 - 45240000-1 Construction of hydraulic structures)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Sabarivske reservoir UA_M5.4_0013
Implementation of environmental protection measures and their financing	The general capital repair measures are aimed at restoring a favourable hydrological regime and improving the sanitary condition of the Pivdennyi Buh River within (between the area of the 29th school and the Festivalnyi (KeSWB) Island) of the city of Vinnytsia. Vinnytsia. In 2021, UAH 29.63 million was financed, including UAH 10.0 million from the regional fund of the National Health Service and UAH 19.63 million from the local budget
Achievement of set goals	The target was partially achieved. The event was planned to be completed in 2022.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Restoring and maintaining favourable hydrological conditions and the sanitary state of rivers. Improving the environmental situation and increasing the level of environmental safety. Reconstruction of bank protection structures with cleaning of the Desna riverbed from the mouth to the bridge overpass of the Vinnytsia-Kalynivka motorway over a length of 900 m within the village of Stryzhavka (Vinnytsia district)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories

	Desna River SWB UA_M5.4_0152 Sabarivske reservoir UA_M5.4_0013
Implementation of environmental protection measures and their financing	In 2019, UAH 2.058 million was financed from the regional ONPS fund.
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Acquisition of a plant for clearing water bodies
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Southern Bug RBD / Rivers of the oblast (62% of the oblast area).
Implementation of environmental protection measures and their financing	In 2019, UAH 5.99 million was financed from the regional ONPS fund.
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Construction of a sewerage system for the complex for keeping and breeding wild Red Book animals (Vinnytsia)
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Sabarivske reservoir UA_M5.4_0013
Implementation of environmental protection measures and their financing	In 2019, UAH 269 thousand was financed from the regional ONPS fund.
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Reconstruction of the sewer pressure collector D=700 mm from SPS 1-A (Staromichny district) to the WPS in Vinnytsia
Relevance of the environmental measure to the main water and environmental issues and the code	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change.

of the surface/groundwater body it affects	Droughts and water shortages. Sabarivske reservoir UA_M5.4_0013 SWB of Tyazhyliv (Vinnytsia) UA_M5.4_0184
Implementation of environmental protection measures and their financing	In 2021, UAH 4.49 million was financed, including UAH 4.40 million from the regional ONPS fund and UAH 90 thousand from the local budget
Achievement of set goals	The target was achieved in full.
Name of the programme/fund/project	"Regional Environmental Budget Programme for 2019-2023"
Name of the conservation measure	Treatment of silt sediments in the Pivdennyi Buh River within the city of Khmilnyk and Khmilnyk district (overhaul).
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Sandrak reservoir UA_M5.4_0011
Implementation of environmental protection measures and their financing	The terms of reference stipulate that the clean-up area is located within the boundaries of the Khmilnyk City Council. The total length of the Pivdennyi Buh River clean-up is 7.3 kilometres, from the Khmilnyk treatment plant to the water intake station of the Khmilnykvodokanal utility (300 metres higher). The documentation includes, among other things, the following works: tree removal, stump uprooting, waste removal and other preparatory works, river cleaning, installation and dismantling of spillways and landscaping. The total volume of clearing to be carried out as a result of the work is expected to be 264 thousand m3. The expected cost of the works is UAH 50.0 million. If the tender is successful, the works should be completed by 31 December 2024.
Achievement of set goals	The target was not achieved. Under the supplemental agreement, the completion of the work was postponed to 2022.
Name of the programme/fund/project	"Regional Programme for Achieving Optimal Forest Cover in Vinnytsia Oblast for 2012-2025
Name of the conservation measure	Achieving the optimum level of forest cover in Vinnytsia region, protecting forest resources and preserving biodiversity.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Spread of invasive species. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Southern Bug RBD / Rivers of the oblast (62% of the oblast area).
Implementation of environmental protection measures and their financing	In order to achieve the optimum level of forest cover in the region, Vinnytsia Regional Specialised Forestry Enterprise Vinoblagrolis is implementing the Regional Programme for Achieving Optimum Forest Cover in Vinnytsia Region for 2012-2025. In 2019, our subsidiaries produced 35 of title documents for land plots (former "collective farm forests") in local ATCs. In 2019, Vinoblagrolis spent UAH 507 thousand to strengthen control over the protection of endangered and threatened animals, including aquatic life, against the target of UAH 560 thousand (maintenance of a hunting expert, gamekeepers and expenses related to the protection of hunting grounds and endangered plants).

Achievement of set goals	The targets were partially achieved. A special measure was taken to preserve Red Book plant species. Lack of funding for the Programme.
Name of the programme/fund/project	"Regional Programme for the use of funds for the development of land for agricultural and forestry needs, improvement of relevant land and land protection, normative monetary valuation of land, land inventory in Vinnytsia region for 2016-2020"
Name of the conservation measure	Development of land for agricultural and forestry purposes, improvement of relevant land and land protection.
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by nutrients. Pollution by hazardous substances. Spread of invasive species. Southern Bug RBD / Rivers of the oblast (62% of the oblast area).
Implementation of environmental protection measures and their financing	This Programme was approved in order to use the funds received from the payment of losses of agricultural and forestry production for the development of land for agricultural and forestry needs, improvement of the relevant land and land protection, normative monetary valuation of land, and land inventory. The sources of funding for the Programme are the funds received as compensation for losses in agricultural and forestry production from the oblast, rayon budgets and budgets of cities of rayon significance, towns, villages, and their associations, as well as funds from the state, oblast budgets and other sources. Another area of the Programme is the implementation of water protection zone projects. The Programme provides funds for such work, but to date it has not been funded by state and local budgets, so out of a total area of 425,000 hectares of water protection zones (including 41,000 hectares of coastal protection zones), only 3,800 hectares have actually been delineated. This situation contributes to the ploughing of coastal areas and, as a result, to the siltation of water bodies. At the same time, in 2019, the Group applied 153.5 thousand tonnes of mineral fertilisers in nutrients on an area of 966.5 thousand hectares and 625.5 thousand tonnes of organic fertilisers on an area of 37.1 thousand hectares.
Achievement of set goals	The set goals were not achieved. The Programme activities were not funded.
Name of the programme/fund/project	The Programme "Drinking Water of Vinnytsia" for 2012-2020
Name of the conservation measure	1. Improving the technological treatment of drinking water. 2. Development and reconstruction of water supply and sewage systems (replacement of pumping units, reconstruction of water pipelines, culverts, gravity collectors, etc.) 3. Protection and rational use of drinking water supply sources (sewerage and reconstruction of sewage treatment plants). 4. Prospects for the development of the city's water supply and sewerage system. 5. Education, training and public awareness in addressing drinking water issues
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Sabarivske reservoir UA_M5.4_0013 SWB of Tyazhyliv (Vinnytsia) UA_M5.4_0184

	Vyshnia River SWB UA_M5.4_0186
Implementation of environmental protection measures and their financing	In 2018-2020, at the expense of the territorial community of Vinnytsia: 2018: 2.2 km of water supply network, 4.26 km of sewerage network and 3 sewage pumping stations were built; 2019: 6.07 km of sewerage networks; 1 sewage pumping station; 3.21 km of water supply networks were built; 2020: 1.9 km of networks were built and 2.2 km of networks were reconstructed. Between 2012 and 2020, Vinnytsiaoblvodokanal reconstructed 41.7 km of emergency networks and replaced 1,029 valves at the coSWBny's expense. To ensure the implementation of the Programme's activities, it was planned to improve the training of workers and employees of housing and communal enterprises at the Vinnytsia Training and Course Combine of Housing and Communal Services and the training centre of the Vinnytsiaoblvodokanal utility coSWBny.
Achievement of set goals	Due to the lack of funding from the state budget and significant limitations of the city budget, the measures envisaged by the Programme were not fully implemented.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Reconstruction of the pressure sewer collector from the main pumping station to the treatment plant (emergency section) in Vatutino, Cherkasy region
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances SWB Shpolka river UA_M5.4_0676
Implementation of environmental protection measures and their financing	In 2019, cash expenditures amounted to UAH 2.694 million at the expense of a subvention from the state budget to local budgets for the implementation of measures for the socio-economic development of certain territories and UAH 68 thousand of local budget funds. The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Reconstruction of the pressure sewer collector of the GPP on Blagovisna Street in Zvenyhorodka, Cherkasy region
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances SWB Shpolka river UA_M5.4_0676
Implementation of environmental protection measures and their financing	In 2019, cash expenditures totalled UAH 2.587 million, of which UAH 1.552 million came from the regional budget and UAH 1.035 million from the city budget. The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Reconstruction of sewage treatment facilities and a sewage pumping station in Khrystynivka

The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Udych River SWB UA_M5.4_0357
Implementation of environmental protection measures and their financing	In 2019, UAH 11.470 million was spent on the event (including UAH 10.323 million from the state budget and UAH 1.147 million from the local budget). The event was fully funded
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Construction of a gravity sewage collector on Pershotravneva Street from the kindergarten No. 3 and residential area to the sewage treatment plant on Karmelyuka Street in Khrystynivka
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Udych River SWB UA_M5.4_0357
Implementation of environmental protection measures and their financing	In 2019, cash expenditures for the event totalled UAH 1.343 million (including UAH 1.209 million from the state budget and UAH 134 thousand from the local budget). The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020"
Name of the conservation measure	Reconstruction of the sewage system of the outpatient clinic of general practice of family medicine No. 2 and the sewage system of the residential building and kindergarten No. 6 in Khrystynivka, Cherkasy region.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Udych River SWB UA_M5.4_0357
Implementation of environmental protection measures and their financing	In 2019, cash expenditures for the event amounted to UAH 776.2 thousand (including UAH 698.5 thousand from the regional budget and UAH 77.7 thousand from the city budget). The event was fully funded.
Achievement of set goals	Set goals achieved
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020"

Name of the conservation measure	Measures to restore and maintain a favourable hydrological regime and sanitary condition of the Revukha riverbed within the administrative boundaries of Baban village council, Uman district, Cherkasy region (reconstruction of the facility)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Revukha River SWB UA_M5.4_0773
Implementation of environmental protection measures and their financing	In 2019, UAH 1.968 million was spent on the implementation of the event, including UAH 1.852 million from the state budget and UAH 116 thousand from the settlement budget. The event was fully funded.
Achievement of set goals	To restore and maintain favourable hydrological conditions and sanitary condition of the Revukha River channel. The following objectives have been achieved
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020" (decision of the Cherkasy Regional Council of 03.06.2016 No. 5-2/VII)
Name of the conservation measure	Reconstruction of sewage treatment facilities in Vatutino, Cherkasy region (including development of design and estimate documentation)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Vatutinske reservoir UA_M5.4_0675 SWB Shpolka river UA_M5.4_0676
Implementation of environmental protection measures and their financing	In 2020, cash expenditures at the expense of the regional budget amounted to UAH 54.3 thousand (expenditures for the development of design and estimate documentation)
Achievement of set goals	The targets were partially achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020" (decision of the Cherkasy Regional Council of 03.06.2016 No. 5-2/VII)
Name of the conservation measure	Reconstruction of a hydraulic structure on Pushkina Street in Zhashkiv, Cherkasy region
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Lytvynka River SWB UA_M5.4_0558 Lytvynka River SWB UA_M5.4_0559
Implementation of environmental protection measures and their financing	In 2020, cash expenditures for the event totalled UAH 2.45 million (UAH 1.838 million from the regional budget, UAH 612.0 thousand from the local budget). The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020" (decision of the Cherkasy Regional Council of 03.06.2016 No. 5-2/VII)

Name of the conservation measure	Reconstruction of the pressure sewer collector of the CNG station on B. Khmelnytsky Street in Zvenyhorodka, Cherkasy region
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Vatutinske reservoir UA_M5.4_0675 SWB Shpolka river UA_M5.4_0676
Implementation of environmental protection measures and their financing	In 2020, cash expenditures for the event amounted to UAH 1.481 million (UAH 1.093 million from the regional budget, UAH 388 thousand from the local budget's own funds. The event was fully funded
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020" (decision of the Cherkasy Regional Council of 03.06.2016 No. 5-2/VII)
Name of the conservation measure	Acquisition of pumping and process equipment to replace the equipment that has reached the end of its technical life at the main pumping and sewage station in Talne
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Gorny Tikich River SWB UA_M5.4_0522
Implementation of environmental protection measures and their financing	In 2020, cash expenditures for the event amounted to UAH 386,208 thousand (UAH 350,108 thousand from the regional budget, UAH 36,100 thousand from the local budget's own funds). The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020" (decision of the Cherkasy Regional Council of 03.06.2016 No. 5-2/VII)
Name of the conservation measure	Measures to restore and maintain a favourable hydrological regime and sanitary condition of the Hirskyi Tikych River (0.8 km from the stone ridge of the old mill to the Talnivskyi educational complex "Secondary school of I-III degrees No. 1 - gymnasium")
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Gorny Tikich River SWB UA_M5.4_0522
Implementation of environmental protection measures and their financing	In 2020, cash expenditures for the event amounted to UAH 1.878 million (UAH 1.631 million from the regional budget, UAH 247 thousand from the local budget). The event was fully funded.
Achievement of set goals	The measure is aimed at maintaining a favourable hydrological regime and sanitary condition of the Hirskyi Tikych River. The objectives were achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020" (decision of the Cherkasy Regional Council of 03.06.2016 No. 5-2/VII)

Name of the conservation measure	Development of design and estimate documentation for the reconstruction of sewerage networks and facilities within the Talnivska AH
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Gorny Tikich River SWB UA_M5.4_0522
Implementation of environmental protection measures and their financing	In 2020, cash expenditures for the event amounted to UAH 730.5 thousand (UAH 657.45 thousand from the regional budget, UAH 73.05 thousand from the local budget). The event was fully funded.
Achievement of set goals	Set goals achieved
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2016-2020" (decision of the Cherkasy Regional Council of 03.06.2016 No. 5-2/VII)
Name of the conservation measure	Reconstruction and waterproofing of the treatment facilities of the inpatient wastewater treatment plant of the Kolomiychenko brothers' Shpola Central District Hospital at 10 Amosova Street in Shpola, Cherkasy region
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances SWB Shpolka river UA_M5.4_0670
Implementation of environmental protection measures and their financing	In 2020, cash expenditures for the event totalled UAH 3.356 million at the expense of the regional budget. The event was fully funded.
Achievement of set goals	Set goals achieved
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2021-2027" (decision of the Cherkasy Regional Council of 19.02.2021 No. 5-23/VII)
Name of the conservation measure	Restoration and maintenance of a favourable hydrological regime and sanitary condition of the Talyanka River within the administrative boundaries of Talne for a length of 1.76 km from the dam of the sugar factory pond to the confluence with the Hirskyi Tikych River (including development of design and estimate documentation)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Talyanka River SWB UA_M5.4_0609
Implementation of environmental protection measures and their financing	In 2021, cash expenditures for the event totalled UAH 1.442 million (UAH 1.154 million from the regional budget, UAH 288 thousand from the local budget). The event was fully funded.
Achievement of set goals	The event is aimed at maintaining a favourable hydrological regime and sanitary condition of the Taglyanka River. The following objectives were achieved

Name of the programme/fund/project	Regional "Environmental Protection Programme for 2021-2027" (decision of the Cherkasy Regional Council of 19.02.2021 No. 5-23/VII)
Name of the conservation measure	Acquisition of pumping and technological equipment to replace the equipment that has exhausted its technical capabilities in the municipal sewage systems of the Vatutinsky territorial community
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Vatutinske reservoir UA_M5.4_0675 SWB Shpolka river UA_M5.4_0676
Implementation of environmental protection measures and their financing	In 2021, cash expenditures for the event amounted to UAH 985.0 thousand (UAH 837.25 thousand from the regional budget, UAH 147.75 thousand from the local budget's own funds. The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2021-2027" (decision of the Cherkasy Regional Council of 19.02.2021 No. 5-23/VII)
Name of the conservation measure	Acquisition of pumping and technological equipment to replace the equipment that has exhausted its technical capabilities at municipal sewage systems (treatment facilities of the municipal enterprise "Katerynopilske Village Housing and Communal Services" of Katerynopilske Village Council at the address: Shostakove village, Cherkasy region)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Gnily Tikich River SWB UA_M5.4_0625
Implementation of environmental protection measures and their financing	In 2021, cash expenditures for the event amounted to UAH 202.4 thousand (UAH 172.0 thousand - regional budget, UAH 30.4 thousand - own funds of the local budget). The event was fully funded
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2021-2027" (decision of the Cherkasy Regional Council of 19.02.2021 No. 5-23/VII)
Name of the conservation measure	Measures to restore and maintain a favourable hydrological regime and sanitary condition of the Gerasymivka River in Kosenivka village, Uman district, Cherkasy region (adjustment)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Kolodiachna River (Gerasymivka River) UA_M5.4_0777

Implementation of environmental protection measures and their financing	In 2021, cash expenditures for the event totalled UAH 1.288 million (UAH 1.139 million from the regional budget, UAH 149 thousand from the local budget). The event was fully funded.
Achievement of set goals	The event is aimed at maintaining a favourable hydrological regime and sanitary condition of the Gerasymivka River. The objectives have been achieved.
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2021-2027" (decision of the Cherkasy Regional Council of 19.02.2021 No. 5-23/VII)
Name of the conservation measure	Reconstruction of a sewage pumping station in Mankivka
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Organic pollution Pollution by nutrients Pollution by hazardous substances Mankivka River SWB UA_M5.4_0582
Implementation of environmental protection measures and their financing	In 2021, cash expenditures for the event amounted to UAH 1.345 million (UAH 897.9 thousand from the regional budget, UAH 447.1 thousand from the local budget). The event was fully funded.
Achievement of set goals	Set goals achieved
Name of the programme/fund/project	Regional "Environmental Protection Programme for 2021-2027" (decision of the Cherkasy Regional Council of 19.02.2021 No. 5-23/VII)
Name of the conservation measure	Measures for restoration and maintenance of favourable hydrological regime and sanitary condition of the river Umanka (from the hydraulic structure on Nezalezhnosti Street to the confluence with the Palanka River) within the administrative boundaries of Uman, Cherkasy region - new construction.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Umanka River SWB UA_M5.4_0768
Implementation of environmental protection measures and their financing	In 2021, cash expenditures for the event amounted to UAH 9.214 million (UAH 2.55 million from the regional budget, UAH 6.664 million from the local budget's own funds. The event was fully funded.
Achievement of set goals	Set goals achieved
Name of the programme/fund/project	Own funds of local budgets of local budgets of village, town, city and amalgamated territorial communities for environmental protection measures
Name of the conservation measure	Improvement of the technical condition and improvement of water bodies (Bilashkivska village council)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Bilashka River SWB UA_M5.4_0611

Implementation of environmental protection measures and their financing	In 2019, UAH 31.75 thousand of funds from the village council budget were used to implement the event. In 2020, cash expenditures for the event amounted to UAH 210.07 thousand at the expense of the local budget. The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Own funds of local budgets of local budgets of village, town, city and amalgamated territorial communities for environmental protection measures
Name of the conservation measure	Improvement of the technical condition and improvement of water bodies (Shpolka River) (Yerkivska AH, Katerynopil district)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes SWB Shpolka river UA_M5.4_0676
Implementation of environmental protection measures and their financing	In 2019, UAH 55.0 thousand of funds from the community budget were used to implement the event. The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	Own funds of local budgets of local budgets of village, town, city and amalgamated territorial communities for environmental protection measures
Name of the conservation measure	Measures to restore and maintain the hydrological and sanitary condition of the reservoir (stocking) Zvenyhorod district
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes SWB Zvenigorodske reservoir UA_M5.4_0622
Implementation of environmental protection measures and their financing	In 2019, UAH 180 thousand of local budget funds were used to implement the event. In 2020, cash expenditures for the event amounted to UAH 400.00 thousand (UAH 200.0 thousand from the regional and UAH 200.0 thousand from the local budget). The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Regional Programme for the Development of the Water Sector in Odesa Oblast for the Period up to 2021", approved by the decision of the Odesa Oblast Council of 18 September 2013 No. 882-VI
Name of the conservation measure	Increasing the efficiency of the use of the state reclamation network and on-farm reclamation systems of the region, increasing crop yields, improving the ecological state of rural areas and living conditions of the population; implementing state and regional water policy, meeting the needs of the population for quality water and the region's economic sectors for water resources; inventorying and certifying water bodies, creating a register of hydraulic structures and their owners in the basins of the
Relevance of the environmental measure to the main water and environmental issues and the code	Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories.

of the surface/groundwater body it affects	Droughts and water shortages. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	Stages of the Programme implementation: Stage I - 2013-2016, Stage II - 2017-2021. The total amount of financial resources required for the implementation of the Programme is UAH 2969.16 million, including: state budget funds - UAH 1,656.1 million, local budget funds - UAH 450.3 million, funds from other sources - UAH 862.76 million Due to the lack of funding, many performance indicators could not be achieved. The expenditures of the regional water management department for the implementation of functional tasks, including the maintenance of the water management and reclamation complex in terms of the operation of national reclamation systems, were practically funded, and local budget funds were sufficient to address extremely urgent problems.
Achievement of set goals	The target was not achieved.
Name of the programme/fund/project	"Regional Programme for the Development of Land Relations and Land Protection for 2016-2020", approved by the Odesa Regional Council on 21 December 2015, No. 39-VII.
Name of the conservation measure	Rational use and protection of land resources.
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by nutrients. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	The total amount of financial resources required for the implementation of the Programme is UAH 40.870 million, all at the expense of the local budget and the oblast budget. In 2019, UAH 4.079 million was allocated from the regional budget for the implementation of the Programme's activities. Unfortunately, the work on this project, including the surveying of the land fund boundaries, started in 2017 and was not completed due to lack of funding.
Achievement of set goals	Target not achieved
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Improvement of drinking water supply sources
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	The programme focuses on the protection of drinking water sources. The indicator of the measure is the number of water intakes where sanitary protection zones for drinking water sources will be improved. According to the programme, there should be 88 such water intakes. The event is planned to be implemented in stages: 2021 - 12 water intakes, 2022 - 24, 2023 - 26 and 2024 - 26 water intakes. The event is funded from district and city budgets (UAH 16.4 thousand), as well as from the budgets of villages, towns, cities of district significance, territorial communities (UAH 13.1 thousand) and other sources (UAH 20.0 thousand). As of the end of 2021, the planned event was partially completed due to insufficient funding.

Achievement of set goals	In the process of implementation
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Construction and reconstruction of water intake facilities using the latest technologies and equipment
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances.
Implementation of environmental protection measures and their financing	The programme focuses on the protection of drinking water sources. The indicator of the measure is the number of water intake structures to be built and reconstructed. According to the programme, there should be 253 such water intake structures. The event is planned to be implemented in stages: 2021 - 36 structures, 2022 - 59, 2023 - 68 and 2024 - 90 structures. The event is funded from district and city budgets (UAH 34.5 thousand), as well as from the budgets of villages, towns, cities of district significance, territorial communities (UAH 11.7 thousand) and other sources (UAH 48.3 thousand). As of the end of 2021, the planned event was partially completed due to insufficient funding.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Implementation of drinking water treatment plants in centralised water supply systems, primarily for water supply to pre-schools, schools and hospitals, particularly in rural areas, and arrangement of drinking water bottling points with delivery by special vehicles
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	The programme's objective is to bring the quality of drinking water to the established standards. The indicator of the measure is the number of drinking water treatment stations (facilities) in centralised drinking water supply systems and drinking water bottling points to be implemented. According to the programme, there should be 36 such stations (installations). The implementation of the measure is planned in stages: 2021 - 0 structures, 2022 - 9, 2023 - 11 and 2024 - 18 stations. The event is financed from the state budget (UAH 9.0 thousand), district and city budgets (UAH 33.0 thousand), as well as from the budgets of villages, towns, cities of district significance, territorial communities (UAH 49.5 thousand) and other sources (UAH 7.6 thousand). In 2021, according to the Programme, this measure was not funded.
Achievement of set goals	In the process of implementation
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Inventory of sewage treatment plants

The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	The programme is aimed at bringing the quality of drinking water to the established standards. The indicator of the measure is the number of sewage treatment plants to be inventoried. According to the programme, there should be 15 such treatment facilities. The measure is planned to be implemented in stages: 2021 - 0 structures, 2022 - 2, 2023 - 4 and 2024 - 9 structures. The event is funded from district and city budgets (UAH 2.0 thousand), as well as from the budgets of villages, towns, cities of district significance, territorial communities (UAH 3.3 thousand) and other sources (UAH 4.5 thousand). In 2021, according to the Programme, this measure was not funded.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Construction and reconstruction of water and sewage treatment facilities using the latest technologies and equipment
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	The programme's objective is to bring the quality of drinking water to the established standards. The indicator of the measure is the number of treatment facilities to be built and reconstructed. According to the programme, there should be 14 such treatment facilities. The event is planned to be implemented in stages: 2021 - 1 structure, 2022 - 3 structures, 2023 - 5 structures and 2024 - 5 structures. The event is financed from the state budget (UAH 260.0 thousand), district and city budgets (UAH 90.0 thousand), as well as from the budgets of villages, towns, cities of district significance, territorial communities (UAH 44.6 thousand) and other sources (UAH 42.0 thousand). As of the end of 2021, the planned event was partially completed due to insufficient funding.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Development of schemes for optimising the operation of centralised water supply and sewage systems
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances.

Implementation of environmental protection measures and their financing	The programme's objective is to bring the quality of drinking water to the established standards. The indicator of the measure is the number of schemes for optimising the operation of centralised water supply and sewerage systems to be developed. According to the programme, there should be 22 such schemes. The event is planned to be implemented in stages: 2021 - 2 schemes, 2022 - 6, 2023 - 6 and 2024 - 8 schemes. The event is funded from district and city budgets (UAH 40.2 thousand), as well as from the budgets of villages, towns, cities of district significance, territorial communities (UAH 12.4 thousand) and other sources (UAH 8.2 thousand). As of the end of 2021, the planned event was partially completed due to insufficient funding.
Achievement of set goals	In the process of implementation
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Equipping water and wastewater quality control laboratories with modern control and analytical equipment
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	The programme's objective is to bring the quality of drinking water to the established standards. The number of laboratories that will be equipped with modern equipment is an indicator of the measure's implementation. According to the programme, there should be 8 such treatment laboratories. The event is planned to be implemented in stages: 2021 - 0 laboratories, 2022 - 2, 2023 - 3 and 2024 - 3 laboratories. The event is funded entirely from other sources (UAH 8.5 thousand). In 2021, according to the Programme, this measure was not funded.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Construction, reconstruction and repair of centralised water supply networks
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	The programme's focus area is Improving the provision of centralised water supply and sewerage. The measure is measured by the length of centralised water supply networks to be built, reconstructed and repaired. According to the programme, the length of such networks will be 478 km. The event is planned to be implemented in stages: 92 km in 2021, 126 km in 2022, 130 km in 2023 and 130 km in 2024. The event is funded from the state budget (UAH 115 thousand), district and city budgets (UAH 56 thousand), as well as from the budgets of villages, towns, cities of district significance, territorial communities (UAH 118 thousand) and other sources (UAH 72 thousand).

	As of the end of 2021, the planned event was partially completed due to insufficient funding.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Programme "Drinking Water of Odesa Region" for 2021-2024 was approved by the decision of the Odesa Regional Council of 16 April 2021 No. 141-VIII.
Name of the conservation measure	Construction, reconstruction, and repair of centralised sewerage networks.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug RBD / Rivers of the oblast (9% of the oblast area).
Implementation of environmental protection measures and their financing	The programme's focus area is Improving the provision of centralised water supply and sewerage. The measure of the measure is the length of centralised sewage networks to be built, reconstructed and repaired. According to the programme, the length of such networks will be 165 km. The event is planned to be implemented in stages: 2021 - 26 km, 2022 - 42 km, 2023 - 46 km and 2024 - 51 km. The event is financed from the state budget (UAH 107.5 thousand), district and city budgets (UAH 42.0 thousand), as well as from the budgets of villages, towns, cities of district significance, territorial communities (UAH 15.8 thousand) and other sources (UAH 49.7 thousand). As of the end of 2021, the planned event was partially completed due to insufficient funding.
Achievement of set goals	In the process of implementation
Name of the programme/fund/project	"Ecology and Nature Management in Savransky District for 2014-2020" approved by the decision of the Savransky District Council of 7 February 2014 No. 319 - VI
Name of the conservation measure	Improvement of landfills, nature reserves, and other areas to improve the environmental well-being of the district
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Littering with plastic and other solid waste. Pivdennyi Buh River SWB UA_M5.4_0025 Pivdennyi Buh River SWB UA_M5.4_0026
Implementation of environmental protection measures and their financing	The event will be financed by the environmental protection fund and the local budget in the amount of UAH 10 thousand. As of the end of 2020, the planned event was not implemented due to lack of funding.
Achievement of set goals	The target was not achieved.
Name of the programme/fund/project	"Ecology and Nature Management in Savransky District for 2014-2020" approved by the decision of the Savransky District Council of 7 February 2014 No. 319 - VI
Name of the conservation measure	Monitoring the condition of the nature reserve fund, water protection zones, forest-steppe areas, landfills and environmentally hazardous facilities in the district.
Relevance of the environmental measure to the main water and environmental issues and the code	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Littering with plastic and other solid waste.

of the surface/groundwater body it affects	Pivdennyi Buh River SWB UA_M5.4_0025 Pivdennyi Buh River SWB UA_M5.4_0026
Implementation of environmental protection measures and their financing	The event will be financed from the local budget in the amount of UAH 10 thousand. As of the end of 2020, the planned event was not implemented due to lack of funding.
Achievement of set goals	Target not achieved
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Kirovograd Oblast for 2016-2020" approved by the decision of the Kirovohrad Regional Council of 25 March 2016 No. 44 (as amended)
Name of the conservation measure	Reconstruction of the hydraulic structure of the pond on the territory of Pletenotashlyk village council of Malovyskivskyi district of Kirovohrad region (adjustment)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Floods and floods, flooding of territories. Droughts and water shortages. Questions about the relationship between water quantity and quality related to climate change Pletenyi Tashlyk River Southern Bug basin UA_M5.4_0872
Implementation of environmental protection measures and their financing	The total cost of the event is UAH 5.392 million In 2018, the design and estimate documentation was adjusted, with funding totalling UAH 7.6 thousand In 2020, the reconstruction of the hydraulic structure was carried out, with funding totalling UAH 4.726 million The reconstruction work is complete. The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Kirovograd Oblast for 2016-2020" approved by the decision of the Kirovohrad Regional Council of 25 March 2016 No. 44 (as amended)
Name of the conservation measure	Reconstruction of certain structural elements of the culvert on the Synytsia River on Zavodska Street in Blahovishchenske, Kirovohrad Oblast (with the preparation of design and estimate documentation).
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Floods and floods, droughts and water shortages. Synytsia River UA_M5.4_0458 (rivers, UA_R_12_M_1_Si UA_M5.4_0459 (ISMV)
Implementation of environmental protection measures and their financing	In 2019, the coSWBny planned to spend UAH 2.717 million, of which UAH 2.696 million, or 99.2%, was spent on the first stage of works at the facility, namely the reconstruction of certain structural elements of the culvert on the Sinitsa River. The event was fully funded.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2016-2020" approved by the Kirovohrad Oblast Council on 25 March 2016, No. 44 (as amended)
Name of the conservation measure	Reconstruction of the drainage channel of the culvert on the Synytsia River on Zavodska Street in Blahovishchenske, Kirovohrad Oblast (with preparation of design and estimate documentation)

Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes SWB of the river Sinitsa UA_M5.4_0458 (rivers, UA_R_12_M_1_Si UA_M5.4_0459)
Implementation of environmental protection measures and their financing	UAH 1.490 million was planned for expenditures in 2019, and UAH 1.359 million, or 91.2%, was used, which made it possible to complete the second stage of work, namely the reconstruction of the water diversion channel of the culvert on the Sinitsa River.
Achievement of set goals	The goals have been achieved. The event was fully funded.
Name of the programme/fund/project	"The Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2016-2020 was approved by the Kirovohrad Oblast Council on 25 March 2016 No. 44 (as amended)
Name of the conservation measure	Reconstruction of the shoreline to improve the sanitary condition of the Velyka Vysya riverbed in the area of Panchyve village, Novomyrhorod district, Kirovohrad region (with preparation of design and estimate documentation)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Floods and floods, flooding of territories Droughts and water shortages Pollution by hazardous substances Littering with plastic and other solid waste. Velyka Vysya River SWB UA_M5.4_0695
Implementation of environmental protection measures and their financing	The implementation period is 2019-2020. The total cost of the project is UAH 1.752 million. In 2019, UAH 221 thousand was financed, which made it possible to prepare design and estimate documentation, and in 2020, UAH 533 thousand was financed to improve the sanitary condition of the riverbed, which is 43.0% of the total project cost. Balance as at 01.10.2022 - UAH 998 thousand.
Achievement of set goals	The targets were partly achieved due to insufficient funding.
Name of the programme/fund/project	"The Comprehensive Environmental Protection Programme in Kirovohrad Region for 2021-2025 was approved by the Kirovohrad Regional Council on 30.03.2021 No. 86.
Name of the conservation measure	Preparation of a working draft on the development of measures to restore and maintain a favourable hydrological regime and sanitary condition of the Velyka Vysya River, aimed at its natural restoration
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Velyka Vysya River SWB UA_M5.4_0695
Implementation of environmental protection measures and their financing	The implementation period of the event is 2021. The total cost of the project is UAH 600 thousand In 2021, the planned funding amounted to UAH 547.3 thousand, which is 91.2% of the planned funding, which made it possible to prepare design and estimate documentation. In 2022, no work was carried out due to lack of funding. Balance as at 01.10.2022 - UAH 52.7 thousand
Achievement of set goals	The set goals were partially achieved

Name of the programme/fund/project	"The Comprehensive Environmental Protection Programme in Kirovohrad Region for 2021-2025 was approved by the Kirovohrad Regional Council on 30 March 2021, No. 86.
Name of the conservation measure	Restoration and maintenance of favourable hydrological regime and sanitary condition of the Ingul River aimed at its natural restoration (with preparation of design and estimate documentation)
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Ingul River SWB UA_M5.4_0961, UA_M5.4_0962, UA_M5.4_0963
Implementation of environmental protection measures and their financing	The implementation period of this project is 2021. In 2021, funding in the amount of UAH 1.0 million is planned for the preparation of design and estimate documentation. The measure was not implemented due to lack of funding
Achievement of set goals	The set goals were not achieved. Lack of funding
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2016-2020 approved by the Kirovohrad Oblast Council on 25 March 2016, No. 44 (as amended) "The Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2021-2025 was approved by the decision of the Kirovohrad Oblast Council of 30 March 2021 No. 86
Name of the conservation measure	Clearing of the coastal zone, reconstruction of the dam, fixing of the wet slope of the dam using gabions and anti-erosion geomats, flexible fixing of the right bank of the pond of the park-monument of landscape art of national importance "Khutir Nadiya" (with adjustment of design and estimate documentation)"
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes Floods and floods, flooding of territories Droughts and water shortages Pollution by hazardous substances Organic pollution Pollution by nutrients Littering with plastic and other solid waste. Sugoklia River SWB UA_M5.4_0992
Implementation of environmental protection measures and their financing	The project implementation period is 2016-2020. In 2019, the total cost of UAH 4.623 million (funds from the regional environmental protection fund) was financed in the amount of UAH 973 thousand, which made it possible to clear the coastal zone and clear the reservoir of vegetation. No work was carried out in 2020-2021 due to lack of funding. The balance as of 01.10.2022, taking into account the recalculation of the design and estimate documentation, is UAH 32.4 million.
Achievement of set goals	The set goals were partially achieved. The project is underway.

Name of the programme/fund/project	"Comprehensive Programme of Environmental Protection in Kirovograd Oblast for 2016-2020" approved by the Kirovograd Oblast Council on 25.03.2016 No. 44
Name of the conservation measure	Reconstruction of sewage treatment facilities in Smolino at 1 b Polyova Street, Berezivka village, Malovyskivskyi (Novoukrainskyi) district, Kirovohrad region. Environmental impact assessment.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients UA_M5.4_0727
Implementation of environmental protection measures and their financing	The event is scheduled to be implemented in 2019. In 2019, funding was approved and financed in the amount of UAH 120 thousand
Achievement of set goals	After the reconstruction is completed, the target will be partially achieved. There are other point sources in the MEP.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2016-2020" approved by the Kirovohrad Oblast Council on 25 March 2016, No. 44 (as amended)
Name of the conservation measure	Reconstruction of 150 mcm/day treatment facilities in Novhorodka, Kirovohrad region (with adjustment of design and estimate documentation)
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances Organic pollution Pollution by nutrients UA_M5.4_1019
Implementation of environmental protection measures and their financing	The event is scheduled to be implemented in 2018-2020. In 2018, expenditures in the amount of UAH 15.566 million were envisaged, of which UAH 15.191 million were transferred to the contractor. Expenditures in the amount of UAH 517 thousand were planned for 2019, of which UAH 507 thousand were used to complete the works at the facility. In 2020, expenses in the amount of UAH 12.0 thousand were foreseen, of which cash expenses in the amount of UAH 9.7 thousand were made to obtain a certificate of readiness of the facility.
Achievement of set goals	The facility was put into operation. The goal was partially achieved. Wastewater contains excessive levels of pollutants
Name of the programme/fund/project	State Fund for Environmental Protection "Comprehensive Programme of Environmental Protection in Kirovohrad Oblast for 2016-2020" approved by the Kirovohrad Oblast Council on 25 March 2016, No. 44 (as amended)
Name of the conservation measure	Reconstruction of sewage treatment facilities with new construction of a mechanical dewatering workshop for sewage sludge at 107 Baikalska Street in Kropyvnytskyi, Kirovohrad Oblast (co-financing)

The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances Organic pollution Pollution by nutrients UA_M5.4_0966
Implementation of environmental protection measures and their financing	The event is scheduled to be implemented in 2018-2021. In 2018, total state budget expenditures for financing amounted to UAH 22.732 million; equipment (High-power sludge dewatering decanter complete with a dry and liquid solution production unit, flocculant dosing pump, sludge dosing pump, induction flow meters for sludge supply) was delivered for UAH 21.307 million, the balance of the funds was used to reconstruct the sewage treatment facilities in December 2018). 2019 - the state budget provides for funds in the amount of UAH 25.0 million, cash expenditures amounted to UAH 21.8 thousand, unused funds - UAH 3.2 thousand local budget - UAH 2.5 million used - UAH 2.2 million 2020 - state budget - UAH 19.5 million is provided for (no funds were allocated for the implementation of the measure) local budget - UAH 1.95 million (no funds were allocated for the event); 2021 - approved amount of funding from the local budget - UAH 18.98 million, actually used - UAH 14.88 million to continue the reconstruction of the existing mechanical dewatering shop for sewage sludge by placing new technological equipment in a separate building The event is scheduled to be completed in 2022.
Achievement of set goals	The project is currently being completed. The implementation of the measure will contribute to the improvement of the indicator "Point sources - wastewater discharges". In addition, the implementation of the measure will help improve the technological process of sludge treatment, which is formed as a result of the activity of bacteria that treat wastewater, as a result of which it will be possible to reduce the area of bioponds where sludge is stored.
Name of the programme/fund/project	"Comprehensive Programme of Environmental Protection in Kirovohrad Oblast for 2016-2020" approved by the Kirovohrad Oblast Council on 25 March 2016, No. 44 (as amended)
Name of the conservation measure	Reconstruction of the treatment facilities of the Kirovohrad Regional Psychiatric Hospital in Novyi village, Kirovohrad (Kropyvnytskyi), Kirovohrad region
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances Organic pollution Pollution by nutrients UA M5.4_0983
Implementation of environmental protection measures and their financing	The event is scheduled for implementation in 2018. 2018 - approved funding amounted to UAH 85.0 thousand, cash expenditures amounted to UAH 84.8 thousand (99.8%).
Achievement of set goals	This goal was partially achieved.

	Wastewater contains excessive levels of pollutants
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2016-2020 approved by the Kirovohrad Oblast Council on 25 March 2016, No. 44 (as amended) "The Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2021-2025 was approved by the decision of the Kirovohrad Oblast Council of 30 March 2021 No. 86
Name of the conservation measure	Reconstruction of CNS-1 at 1b Shevchenko Street, Berezivka village, Malovyskivskyi district, Kirovohrad region, adjustment
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances Organic pollution Pollution by nutrients UA_M5.4_0727
Implementation of environmental protection measures and their financing	The event is scheduled to be implemented in 2020-2021. 2020 - approved funding amounted to UAH 2.5 million, of which UAH 850 thousand was used to start work on the site (34.1%) 2021 - approved expenditures in the amount of UAH 1.25 million. The funds were used in full for the installation of new energy-saving equipment at the CNG station. The works at the facility have been completed in full.
Achievement of set goals	The targets were partially achieved. There are other point sources in the MEP.
Name of the programme/fund/project	"The Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2021-2025 was approved by the decision of the Kirovohrad Oblast Council of 30 March 2021 No. 86
Name of the conservation measure	Acquisition of pumping equipment for the pumping station No. 2 of the Smolinsky VKG of the Dnipro-Kirovograd Production and Distribution CoSWBny
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances Organic pollution Pollution by nutrients UA_M5.4_0727
Implementation of environmental protection measures and their financing	The event is scheduled to be implemented in 2021. 2021 - approved amount of funding - UAH 100.0 thousand, funded - UAH 100.0 thousand, (100%)
Achievement of the set goals	The measure contributed to the collection of municipal wastewater and its delivery to the wastewater treatment plant. The objective was partially achieved, as the measure was not aimed at direct wastewater treatment
Name of the programme/fund/project	The Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2016-2020 was approved by the decision of the Kirovohrad Oblast Council of 25 March 2016 No. 44 (as amended) The Comprehensive Environmental Protection Programme in Kirovohrad Region for 2021-2025 was approved by the decision of the Kirovohrad Regional Council of 30 March 2021 No. 86

Name of the conservation measure	Wastewater treatment plant in Rivne, Novoukrainsk district, Kirovohrad region
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances Organic pollution Pollution by nutrients UA M5.4_0843
Implementation of environmental protection measures and their financing	2020 - expenditures in the amount of UAH 610.8 thousand are envisaged, of which cash expenditures in the amount of UAH 147 thousand were made to adjust the design and estimate documentation. 2021 - expenditures in the amount of UAH 500.0 thousand were approved. UAH 452.7 thousand was used and the project documentation was adjusted.
Achievement of set goals	Once completed, the measure will contribute to the improvement of the Point Source Waste Water Discharge indicator.
Name of the programme/fund/project	The Comprehensive Environmental Protection Programme in Kirovohrad Region for 2021-2025 was approved by the decision of the Kirovohrad Regional Council of 30 March 2021 No. 86
Name of the conservation measure	New construction of a sewage pumping station at 70B Druzhby Street, Novhorodka
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances Organic pollution Pollution by nutrients UA_M5.4_1019
Implementation of environmental protection measures and their financing	In 2021, expenditures in the amount of UAH 900.0 thousand were approved The procurement to determine the contractor did not take place due to the lack of proposals. The funds were not used.
Achievement of set goals	Target not achieved
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2016-2020 approved by the Kirovohrad Oblast Council on 25 March 2016, No. 44 (as amended) "The Comprehensive Environmental Protection Programme in Kirovohrad Oblast for 2021-2025 was approved by the Regional Council on 30 March 2021, No. 86
Name of the conservation measure	Ensuring environmentally safe collection, transportation, disposal and burial of waste in the Kirovograd region (Kropyvnytskyi Municipal CoSWBny "Teploenergetik") (transitional projects)
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances Organic pollution Pollution by nutrients Inhul River SWB UA_M5.4_0964

Implementation of environmental protection measures and their financing	The project implementation period is 2019-2025. The total cost of the project activities is UAH 10.372 million. In 2019, UAH 1.324 million was allocated from the regional environmental protection fund for the collection, transportation, disposal and burial of waste in Kirovohrad Oblast, which is 12.8% of the total cost of the activities.
Achievement of set goals	The set goals were not achieved. The project is underway.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2018-2020", approved by the decision of the Mykolaiv Oblast Council of 21.12.2017 No. 22 (as amended on 12.04.2018 No. 9, 21.12.2018 No. 21, 16.05.2019 No. 17, 13.12.2019 No. 6, 26.12.2019 No. 14)
Name of the conservation measure	Reconstruction of the pressure sewer collector on Kyivska Street from Osypenko Street to Tanaschyshyn Street in Voznesensk, Mykolaiv region
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Mertvovid River SWB UA_M5.4_0918 Pivdennyi Buh River SWB UA_M5.4_0029
Implementation of environmental protection measures and their financing	In 2019, the Capital Construction Department of the Regional State Administration carried out reconstruction measures worth UAH 971 thousand (subvention from the Regional Environmental Protection Fund of the National Environmental Protection Agency). Construction work was carried out at the facility, and the asphalt pavement was restored; The work has been completed in full.
Achievement of set goals	The set goals have been achieved.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2018-2020", approved by the decision of the Mykolaiv Oblast Council of 21.12.2017 No. 22 (as amended on 12.04.2018 No. 9, 21.12.2018 No. 21, 16.05.2019 No. 17, 13.12.2019 No. 6, 26.12.2019 No. 14) Regional fund of the ONPS
Name of the conservation measure	Reconstruction of a section of the pressure sewer collector of the PTU sewage pumping station - Pivdenna sewage pumping station in Pervomaisk, Mykolaiv region.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Sinyukha River SWB UA_M5.4_0507 Oleksandrivske reservoir UA_M5.4_0028 Pervomaiskoye reservoir UA_M5.4_0027
Implementation of environmental protection measures and their financing	In 2019-2020, the Capital Construction Department of the Regional State Administration carried out reconstruction measures worth UAH 1.35 million (subvention from the regional ONPS fund). Work was carried out on the reconstruction of a section of the pressure collector of the PTU sewage pumping station - Pivdenna sewage pumping station in Pervomaisk.
Achievement of set goals	The targets were partially achieved. The implementation of these measures has been postponed to 2021-2023.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2018-2020", approved by the decision of the Mykolaiv Oblast Council of 21.12.2017 No. 22 (as amended on 12.04.2018 No. 9, 21.12.2018 No. 21, 16.05.2019 No. 17, 13.12.2019 No. 6, 26.12.2019 No. 14)

Name of the conservation measure	Reconstruction of sewage treatment facilities in Pervomaisk, Mykolaiv region
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Sinyukha River SWB UA_M5.4_0507 Oleksandrivske reservoir UA_M5.4_0028 Pervomaiskoye reservoir UA_M5.4_0027
Implementation of environmental protection measures and their financing	The Capital Construction Department of the Regional State Administration reconstructed sewage treatment facilities (including the preparation of design estimates and expert evaluation) for UAH 15.306 million (subvention from the Regional Environmental Protection Fund of the National Environmental Protection Agency). Reconstruction of sewage treatment facilities in Pervomaisk, Mykolaiv region. Mechanical treatment equipment was installed. The sand traps, intake and distribution chambers and the original distribution tanks were completely reconstructed.
Achievement of set goals	The targets were partially achieved. The event is to be implemented in 2021-2023.
Name of the programme/fund/project	Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027, approved by the decision of the Mykolaiv Oblast Council dated 23.12.2020 No. 16
Name of the conservation measure	Reconstruction of a section of the pressure sewer collector of the sewage pumping station "PTU" - sewage pumping station "Pivdenna" in Pervomaisk, Mykolaiv region (transitional project)
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Sinyukha River SWB UA_M5.4_0507 Oleksandrivske reservoir UA_M5.4_0028 Pervomaiskoye reservoir UA_M5.4_0027
Implementation of environmental protection measures and their financing	Planned funding by year..: In total, UAH 4,661 million (2021: UAH 1,553 million); from the state budget: a total of UAH 3.728 million (2021: UAH 1.242 million); from the regional budget, including the regional fund of the National Health Service: total - UAH 466.1 thousand (2021 - UAH 155.4 thousand); from other local budgets: total - UAH 466.1 thousand (2021 - UAH 155.3 thousand)
Achievement of the set goals	In the process of implementing the event. The actual funding of the event needs to be clarified.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"
Name of the conservation measure	Reconstruction of sewage treatment facilities in Pervomaisk, Mykolaiv region (discharge to the Sinyukha River and Pivdennyi Buh) (transitional project)
The relevance of the environmental measure to the	Pollution by organic substances. Pollution by nutrients.

main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Sinyukha River SWB UA_M5.4_0507 Oleksandrivske reservoir UA_M5.4_0028 Pervomaiskoye reservoir UA_M5.4_0027
Implementation of environmental protection measures and their financing	The implementation of Stage 1 of this measure was envisaged by the Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2018-2020, approved by the decision of the Mykolaiv Oblast Council dated 21.12.2017 No. 22 (as amended). Further works are planned for the period from 2021 to 2023. Funding for the programme of activities was extended for future periods. Amounts of funding by year: Total - UAH 46.162 million (2021 - UAH 14.378 million); from the state budget: a total of UAH 36.929 million (2021-11.502 million); from the regional budget, including the regional fund of the National Health Service: a total of UAH 4.616 million (2021: UAH 1.437 million); from other local budgets: a total of UAH 4.616 million (2021: UAH 1.437 million);
Achievement of the set goals	In the process of implementing the event. The actual funding of the event needs to be clarified.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"
Name of the conservation measure	Reconstruction of the sewage pumping station at 35 Kosiora Street with replacement of pumping equipment in Pervomaisk, Mykolaiv region
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Sinyukha River SWB UA_M5.4_0507 Oleksandrivske reservoir UA_M5.4_0028 Pervomaiskoye reservoir UA_M5.4_0027
Implementation of environmental protection measures and their financing	Planned funding amounts: Total - UAH 1,114 million UAH 1.013 million from the state budget; From other local budgets - UAH 101 thousand The event was supposed to be implemented in 2021, but was postponed to 2022
Achievement of set goals	The event is scheduled for completion in 2022.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"
Name of the conservation measure	Construction of sewerage networks and facilities in Kryve Ozero, Mykolaiv region (Kodyma river basin)
Relevance of the environmental measure to the main water and environmental issues and the code	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change.

of the surface/groundwater body it affects	Kodyma River SWB UA_M5.4_0497 Gedzyliv Yar river SWB UA_M5.4_0501
Implementation of environmental protection measures and their financing	Planned funding amounts: Total - UAH 20.531 million (2021 - UAH 5.783 million); from the state budget: a total of UAH 18.471 million (2021: UAH 5.203 million); from other local budgets: a total of UAH 2.060 million (2021: UAH 580.0 thousand).
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"
Name of the conservation measure	Reconstruction of CNS-3 at 11 Yelanetske Shosse in Taborivka village, Voznesenskyi district, Mykolaiv region.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Mertvovid River SWB UA_M5.4_0918 Pivdennyi Buh River SWB UA_M5.4_0029
Implementation of environmental protection measures and their financing	Planned funding amounts: Total - UAH 7,929 million (2021 - UAH 3,839 million) from the state budget: a total of UAH 6.343 million (2021: UAH 3.071 million); from the regional budget, including the regional fund of the National Health Service: total - UAH 793 thousand (2021: UAH 384 thousand); from other local budgets: a total of UAH 2.060 million (2021: UAH 384 thousand);
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"
Name of the conservation measure	Reconstruction of the sewerage collector on Korolenko Street in Voznesensk with the preparation of a working draft
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Mertvovid River SWB UA_M5.4_0918 Pivdennyi Buh River SWB UA_M5.4_0029
Implementation of environmental protection measures and their financing	The amount of funding for the event: A total of UAH 700 thousand from local budgets
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"

Name of the conservation measure	Reconstruction of the sewerage collector on Heroiv Ukrayiny Street on the section from Kyivska Street to Sukhomlynskoho Street in Voznesensk with the preparation of a working draft
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Mertvovid River SWB UA_M5.4_0918 Pivdennyi Buh River SWB UA_M5.4_0029
Implementation of environmental protection measures and their financing	The amount of funding for the event: A total of UAH 720 thousand from local budgets
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"
Name of the conservation measure	Reconstruction of the complex of buildings and facilities for biological wastewater treatment in Voznesensk with the preparation of design estimates and project expertise
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Mertvovid River SWB UA_M5.4_0918 Pivdennyi Buh River SWB UA_M5.4_0029
Implementation of environmental protection measures and their financing	Planned funding amounts: Total - UAH 20.7 million (2021 - UAH 700.0 thousand): from the state budget: total - UAH 16.0 million from the regional budget, including the regional fund of the National Health Service: total - UAH 2.00 million from other local budgets: a total of UAH 2.700 million (2021: UAH 700.0 thousand).
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"
Name of the conservation measure	Reconstruction of the rake coSWBrtment ceiling, emergency wastewater tank ceiling and installation of metering devices at the Buzke Pumping Station-1 in the village of Buzke, Voznesensk district, Mykolaiv region, 17 Stepova street (with adjustment of the estimate documentation and project expertise)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Pivdennyi Buh River SWB UA_M5.4_0029

Implementation of environmental protection measures and their financing	The amount of funding for the event: The total amount is UAH 7.110 million: from the state budget: UAH 5,688 million; from the regional budget, including the regional fund of the National Health Service: UAH 711 thousand; from other local budgets: in total - UAH 711 thousand The event was supposed to be implemented in 2021, but was postponed to 2022
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	"Comprehensive Environmental Protection Programme in Mykolaiv Oblast for 2021-2027"
Name of the conservation measure	Construction of a sewerage collector on Kvitneva Street in Bashtanka (Ingul River basin)
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Unnamed river (tributary of the Ingul river) UA_M5.4_1058 Unnamed river (tributary of the Ingul river) UA_M5.4_1059 Ingul River WMA UA_M5.4_0970
Implementation of environmental protection measures and their financing	The planned amount of funding for the event: The total amount is UAH 8.776 million: UAH 7.898 million from the state budget; from other local budgets: total - UAH 878 thousand
Achievement of the set goals	The event is scheduled for 2022
Name of the programme/fund/project	"Programme for the Development of the Water Sector of Mykolaiv Oblast for 2019-2021"
Name of the conservation measure	Ensuring the development of land reclamation and improvement of the ecological condition of irrigated and drained lands, as well as water resources management: - ensuring the operation of national and inter-farm state and on-farm land reclamation systems; - reconstruction of the engineering infrastructure of irrigation systems; - restoring the engineering infrastructure of on-farm irrigation systems; - construction and reconstruction of drip irrigation systems; - reconstruction of drainage systems; - Priority provision of centralised water supply to rural settlements that use imported drinking water; - Inventory and certification of water bodies; - mapping and arrangement of river coastal protection zones; - protecting rural settlements and agricultural land from the harmful effects of water.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Hydromorphological changes. Issues related to the relationship between water quantity and quality in relation to climate change. Floods and floods, flooding of territories. Droughts and water shortages. Southern Bug RBD of the oblast rivers (60% of the oblast area).

Implementation of environmental protection measures and their financing	Expected results from the implementation of these measures: gradual increase in the area of land on which guaranteed crop yields will be provided up to 88.5 thousand hectares; Increase the area of land to be reconstructed and modernised to 20.2 thousand hectares of irrigated land; The area of land where the engineering infrastructure of irrigation systems was restored is 33.5 thousand hectares; the area of land on which drip irrigation systems were built and reconstructed is 3 thousand hectares; purchase of modern irrigation equipment in the amount of 538 units. Funding was provided from the state and local budgets, as well as from other sources, including funds from agricultural producers and grant projects. Total from the state budget: UAH 334.5 thousand. From local budgets: UAH 248.7 thousand. From other sources: UAH 2992 thousand. Due to the lack of funding, many performance indicators could not be achieved. The expenses of the Regional Water Resources Office in Mykolaiv Oblast were practically funded for the implementation of functional tasks, in particular, the maintenance of the water management and reclamation complex in terms of operation of the national reclamation systems, and local budget funds were sufficient to address extremely urgent problems. Separate state investments were allocated to address the issue of water supply to the region's settlements that use imported water. A total of UAH 1,135.18 million was actually financed for the implementation of the Programme's activities, including: state budget funds - UAH 844.74 million, local budget funds - UAH 65.0 million, and funds from other sources - UAH 225.44 million.
Achievement of the set goals	The goal was partially achieved.
Name of the programme/fund/project	"Regional Comprehensive Environmental Protection Programme of Mykolaiv Region for 2021-2027", Funds of Mykolaivvodokanal
Name of the conservation measure	Replacement of pumping equipment at sewage pumping stations in Mykolaiv
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Pivdennyi Buh River SWB UA_M5.4_0029 Ingul River SWB UA_M5.4_0970 SWB Bug estuary UA_M5.4_1091
Implementation of environmental protection measures and their financing	The aim of the event is to reduce the volume of untreated and insufficiently treated wastewater discharged into water bodies of Mykolaivvodokanal. The event was financed in the amount of UAH 433.95 thousand. Two pumps were replaced (at the GKNS and KNS of the railway station) for wastewater pumping. In 2021, the primary radial settling tank was repaired and new sludge scraper equipment IRPO-40 was installed at the Sewage Treatment Plant in Mykolaiv (cost - UAH 2953.8 thousand, source of funding - the coSWBny's own funds).
Achievement of set goals	The goal was partially achieved.
Name of the programme/fund/project	The Regional Regional Programme "Drinking Water of Mykolaiv Region" for 2021-2025
Name of the conservation measure	Improvement of sanitary protection zones for drinking water sources. Improvement and repair of the fence of the first belt of the sanitary zone of the water intake in the village of Lysa Gora, Pervomaisk district, Mykolaiv region
Relevance of the environmental measure to the main water and	Pollution by organic substances. Pollution by nutrients.

environmental issues and the code of the surface/groundwater body it affects	Pollution by hazardous substances. Droughts and water shortages. Issues related to the relationship between water quantity and quality in relation to climate change. Black Tashlyk River SWB UA_M5.4_0835
Implementation of environmental protection measures and their financing	The indicator of the measure is the number of water intakes where sanitary protection zones for drinking water sources will be improved. According to the programme, there should be 28 such water intakes. The measure is planned to be implemented in stages: 2021 - 13 water intakes, 2022 - 4, 2023 - 5, 2024 - 3 and 2025 - 3 water intakes. The event was funded from local budgets in the amount of UAH 10.55 million. In 2021, the project "Improvement and repair of the fence of the first belt of the sanitary water intake zone in the village of Lysa Hora, Pervomaisk district, Mykolaiv region" was implemented with a total cost of UAH 99.95 thousand.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Regional Programme "Drinking Water of Mykolaiv Region" for 2021-2025
Name of the conservation measure	Construction, reconstruction and repair of water intake facilities using the latest technologies and equipment.
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Oleksandrivske reservoir UA_M5.4_0028 Pervomaiskoye reservoir UA_M5.4_0027 Kodyma River SWB UA_M5.4_0497 Pivdennyi Buh River SWB UA_M5.4_0029
Implementation of environmental protection measures and their financing	The programme focuses on the protection of drinking water sources. The indicator of the measure is the number of water intake structures to be built, reconstructed or repaired. According to the programme, there should be 37 such water intake structures. The event is planned to be implemented in stages: 2021 - 15 structures, 2022 - 7, 2023 - 7, 2024 - 4 and 2025 - 4 structures. The event is to be financed from the state budget in the amount of UAH 37.33 million, from the local budget in the amount of UAH 29.04 million, and from extra-budgetary funds in the amount of UAH 16.59 million. As of 01.01.2022, the planned action was partially completed due to insufficient funding. In 2021, UAH 17.616 million was allocated for the construction, reconstruction and repair of water intake facilities using the latest technologies and equipment, which resulted in the implementation of 14 projects in the settlements of Voznesensk urban TC, Pervomaisk urban TC, Vradiyivka settlement TC, Pervomaisk settlement TC, Prybuzhanivska rural TC and the repair of: 16 wells; 7 Rozhnovsky towers; 2 WPS;
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Regional Programme "Drinking Water of Mykolaiv Region" for 2021-2025
Name of the conservation measure	Implementation of drinking water treatment stations (facilities) in centralised water supply systems, primarily for water supply to pre-school and general secondary education institutions, healthcare facilities, particularly in rural areas, and arrangement of drinking water bottling points with delivery by special vehicles.
The relevance of the environmental measure to the	Pollution by organic substances. Pollution by nutrients.

main water and environmental issues and the code of the surface/groundwater body it affects	Droughts and water shortages.
Implementation of environmental protection measures and their financing	The programme is aimed at bringing the quality of drinking water to the established standards. The indicator of the measure is the number of drinking water treatment stations (facilities) in centralised drinking water supply systems and drinking water bottling points to be implemented. According to the programme, there should be 32 such stations (installations). The event is planned to be implemented in stages: 2021 - 5 structures, 2022 - 5, 2023 - 5, 2024 - 7 and 2025 - 10 structures. The event will be financed from the state budget in the amount of UAH 1.13 million, from the local budget in the amount of UAH 0.75 million, and from extra-budgetary funds in the amount of UAH 1.5 million. As of 01.01.2022, 17 drinking water purification systems were installed in educational institutions of Novomariivka TC (Hryhorivka village branch of Novomariivka OTESI, Novomariivka secondary school, Kostuvata secondary school, Myroliubivka secondary school, Myroliubivka secondary school), Bratske TG (Bratske secondary school 1-3, Novooleksandrivka secondary school 1-2, Novokonstantynivka secondary school 1-3, Bratske gymnasium), Pryvilne TG (Starohorodene, Pryvilne, Lukianivka villages).
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	Long-term Clean Water Programme Funds of Sandora LLC of PepsiCo in Ukraine
Name of the conservation measure	Improving the quality of drinking water.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by nutrients. Droughts and water shortages.
Implementation of environmental protection measures and their financing	PepsiCo Ukraine's Sandora LLC has launched a long-term programme in Mykolaiv region aimed at improving the quality of drinking water. This is the Clean Water project, which aims to ensure access to safe water for the population, especially children, by installing local drinking water treatment plants in institutions and facilities. Over the period of implementation of the Clean Water social programme, Sandora LLC has invested financial resources in the implementation of 63 collective water treatment plants, including 6 units in 2021.
Achievement of set goals	The event is long-term. The goal has been achieved.
Name of the programme/fund/project	The Regional Regional Programme "Drinking Water of Mykolaiv Region" for 2021-2025
Name of the conservation measure	Construction, reconstruction and repair of water and sewage treatment facilities.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Mertvovid River SWB UA_M5.4_0918 Pivdennyi Buh River SWB UA_M5.4_0029

Implementation of environmental protection measures and their financing	The indicator of the measure is the number of water intake structures to be built, reconstructed or repaired. According to the programme, there should be 13 such water intake structures. The event is planned to be implemented in stages: 2021 - 4 buildings, 2022 - 1, 2023 - 1, 2024 - 4 and 2025 - 3 buildings. The event is to be financed from the state budget - UAH 396.35 million, the local budget - UAH 308.27 million and extra-budgetary funds - UAH 176.15 million. In 2021, UAH 43.630 million were allocated for the construction, reconstruction and repair of water supply and sewage treatment plants in the settlements of the region, at the expense of which, as of 01.01.2022, 3 projects were implemented in the settlements of Mykolaivska urban TG, Voznesenska urban TG for repairs: WSS - 1 unit; KOS - 1 unit; CNS - 9 units.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Regional Programme "Drinking Water of Mykolaiv Region" for 2021-2025
Name of the conservation measure	Construction, reconstruction and repair of water supply and sewerage networks.
The relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Pivdennyi Buh River SWB UA_M5.4_0028 Pivdennyi Buh River SWB UA_M5.4_0029 Inhul River SWB UA_M5.4_0970
Implementation of environmental protection measures and their financing	The programme is aimed at bringing the quality of drinking water to the established standards. The measure is the number of networks (km) to be built, reconstructed or repaired. According to the programme, there should be 179 km of such networks. The event is planned to be implemented in stages: 2021 - 34 km, 2022 - 50 km, 2023 - 27 km, 2024 - 32 km and 2025 - 36 km. The event is to be financed from the state budget - UAH 252.33 million, the local budget - UAH 196.26 million, and extra-budgetary funds - UAH 112.15 million. In 2021, UAH 42.762 million was allocated for the construction, reconstruction and repair of water supply and sewerage networks, which was used to implement 24 projects in the settlements of Mykolaivska urban TG, Pervomaiska urban TG, Yuzhnoukrainska urban TG, Novobuzka urban AH, Kazankivska rural AH, Arbuzynska rural AH, Pervomaiska rural AH, Voskresenska rural AH, Shevchenkivska rural AH, Myhiyivska rural AH, Mostivska rural AH and 24.85 km of water supply networks and 0.48 km of sewerage networks were repaired (replaced).
Achievement of set goals	In the process of implementation.
Name of the project programme/fund	The Regional Regional Programme "Drinking Water of Mykolaiv Region" for 2021-2025
Name of the conservation measure	Carrying out systematic annual maintenance and overhaul of water supply and sewerage networks.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Southern Bug RBD of the oblast rivers (60% of the oblast area).

Implementation of environmental protection measures and their financing	The implementation of this measure is specified in paragraph 3.3 of the Programme. The programme is aimed at bringing the quality of drinking water to the established standards. The measure is measured by the number of water supply and sewerage networks that have been repaired and overhauled (km). According to the programme, there should be 100 km of such networks. The event is planned to be implemented in stages: 2021 - 20 km, 2022 - 20, 2023 - 20, 2024 - 20 and 2025 - 20 km. The event will be financed from the local budget - UAH 0.5 million and from extra-budgetary funds - UAH 0.5 million As of 01.01.2022, the planned action was partially completed due to insufficient funding.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Regional Regional Programme "Drinking Water of Mykolaiv Region" for 2021-2025
Name of the conservation measure	Implementation of commercial water metering devices.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Issues related to the relationship between water quantity and quality in relation to climate change. Droughts and water shortages. Southern Bug RBD of the oblast rivers (60% of the oblast area).
Implementation of environmental protection measures and their financing	The measure is measured by the number of commercial water metering devices (units). According to the programme, there should be 3,500 such networks. The measure is planned to be implemented in stages: 2021 - 700 units, 2022 - 700 units, 2023 - 700 units, 2024 - 700 units and 2025 - 700 units. The event is to be financed from the local budget - UAH 19.9 million and from extra-budgetary funds - UAH 15.0 million As of 01.01.2022, it was equipped with commercial water metering devices: residential buildings - 93.5%; non-residential buildings -98.3%. By this indicator, the region ranks 1st and 5th in Ukraine, respectively.
Achievement of set goals	In the process of implementation.
Name of the programme/fund/project	The Voznesensk District Drinking Water Programme for 2011-2020
Name of the conservation measure	- Construction and reconstruction, maintenance of water pipelines. -Technical re-equipment of water supply and sewerage facilities. - Replacement of pumping equipment with a booster pump station. - Construction, reconstruction and maintenance of artesian wells. - Installation of frequency control systems. - Replacement or reconstruction of the Rozhnovsky Towers.
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. Mertvovid River SWB UA_M5.4_0918 Pivdennyi Buh River SWB UA_M5.4_0029

Implementation of environmental protection measures and their financing	The required amount of funds for the implementation of measures for the technical re-equipment and modernisation of facilities is UAH 26.865 million (an average of UAH 2.686 million per year for the duration of the programme) In 2018, the following activities were carried out: routine repairs and replacement of water supply networks; wells; routine repairs of 6 artesian wells; routine repairs of the pumping station; repair of pumps; technical inspection of electrical appliances. Samples were taken from 13 wells on a quarterly basis and water quality indicators were analysed. chlorination of wells. In 2019, the coSWBny carried out repairs and maintenance of water supply systems worth UAH 2.194 million, including overhaul of the water supply network with the replacement of the pipeline; installation, repair, disinfection, and sampling of wells; repair and installation of new water towers. In May 2019, Rayvodpostach signed a contract for industrial control of drinking water and collected water samples for sanitary and microbiological tests from 13 operating wells. In 2020, the coSWBny carried out UAH 571 thousand worth of repairs and maintenance of water supply networks.
Achievement of set goals	The targets were partially achieved.
Name of the programme/fund/project	State investment project "Provision of drinking water supply to rural settlements of Kazankivskyi and Novobuzkyi districts and reconstruction of the spillway structure of the Sofiyivka reservoir in Novobuzkyi district of Mykolaiv region"
Name of the conservation measure	Provision of drinking water supply to rural settlements in Kazankivskyi and Novobuzkyi districts and reconstruction of the spillway structure of the Sofiyivka reservoir in Novobuzkyi district, Mykolaiv region
Relevance of the environmental measure to the main water and environmental issues and the code of the surface/groundwater body it affects	Pollution by organic substances. Pollution by nutrients. Pollution by hazardous substances. Issues related to the relationship between water quantity and quality in relation to climate change. SWB Sofiyivske reservoir UA_M5.4_0969 Sahaidak River SWB UA_M5.4_0969
Implementation of environmental protection measures and their financing	The total cost of the investment project is UAH 77.370 million The project provides for: - preparing funding from the state budget; - adjusting and producing design and estimate documentation, and approving it; - conducting public procurement for construction works envisaged by the working draft, signing the contract; - construction works on the reconstruction of pumping stations, the site of treatment facilities and preliminary filters; - construction works to replace the main water pipelines; - ensuring construction control; - commissioning of construction projects; - concluding contracts for centralised drinking water supply with consumers; - reconstruction of the spillway structure of the Sofiyivka reservoir and ice gobies. The design and construction project "Reconstruction of the water supply system in the Kazankivsky group water supply system in the Kazankivsky district of Mykolaiv region (10 sections)" was developed, and contracts with contractors were signed. It was restored in the course of the work: - concrete foundation of the spillway and retaining walls of the structure, 93.5 m long; - 15 ice cutters.

	The works made it possible to ensure reliable operation of the Sofiyivka Reservoir (which is the source of drinking water supply for residents of Bashtanka, Kazankivka and Novobuzka districts), prevent and protect 12 settlements in Novobuzka and Mykolaiv districts, 9 road bridges and 6100 hectares of land from possible flooding. The works were completed at the facilities "Reconstruction of flushing and pressure pipelines at the treatment facilities of the Kazanka group water supply system of the Novobuzka district of Mykolaiv region" and "Reconstruction of a part of the water supply system from the 3rd ascent to the village of Kazanka (branch to the village of Kazanka) of the Kazanka group water supply system of the Novobuzka district of Mykolaiv region". The uncompleted works are planned to be completed at the expense of funds provided under the budget programme KPKVK 2707090 "Priority provision of rural settlements with centralised water supply" in 2022.
Achievement of set goals	The project is in the process of implementation.

Annex 11. Full list of mesures presented separately in Excel format

Annex 12 Cost-effectiveness analysis of the PoM

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
							thousands of people		*million UAH*	
1	2	3	4	5	6	7	*8*	9	*10*	11
6	Construction of new sewage treatment facilities with a capacity of 60 thousand m³/day and reconstruction of the sewerage network of Khmelnytskvodokanal in Khmelnytsky, Khmelnytsky district, Khmelnytsky region	4,25	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	274,4	4	2622,40	5
14	Reconstruction of sewerage networks and sewage treatment facilities of Vinnytsiaoblvodokanal in Vinnytsia. Vinnytsia COMMUNITY Vinnytsia district, Vinnytsia region	4,25	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	416	4	8414,48	5
88	Reconstruction of sewage treatment plants and sewage networks of Kropyvnytskyi VKG of the Dnipro-Kirovohrad Utility Company in Kropyvnytskyi, Kropyvnytskyi district, Kirovohrad region	4,25	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	250	4	2530,00	5
20	Reconstruction of sewage treatment facilities and sewage network of Pervomaisk Water Supply and Sewerage Department of Pervomaisk City Council in Pervomaisk, Pervomaisk COMMUNITY , Pervomaisk District, Mykolaiv Region	4	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	66,0	3	1188,00	5
77	Reconstruction of sewage treatment facilities and sewerage networks of the Uman Vodokanal of the Uman City Council in Uman, Uman Territorial Community, Uman District, Cherkasy Region	4	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	82,603	3	1486,85	5
3	Construction and reconstruction of stormwater drainage networks and facilities in Khmelnytskyi, Khmelnytskyi district, Khmelnytskyi region	3,75	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	274	4	184,00	3

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
101	Reconstruction of treatment facilities and sewerage networks of Mykolaivvodokanal of Mykolaiv City Council of Mykolaiv, Mykolaiv COMMUNITY , Mykolaiv district, Mykolaiv region	3,75	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	486	4	434,04	3
9	Reconstruction of sewage treatment facilities and sewerage network of Khmilnykvodokanal in Khmilnyk, Khmilnyk COMMUNITY , Khmilnyk district, Vinnytsia region	3,5	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	30	2	540,00	4
22	Reconstruction of sewerage networks and sewage treatment facilities for Biological Treatment Facilities LLC in Voznesensk, Voznesensk COMMUNITY , Voznesensk district, Mykolaiv region	3,5	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	34,4	2	619,20	4
35	Reconstruction of sewage treatment facilities and sewerage networks of the Municipal Enterprise "Zhmerynka Vodokanal" in Zhmerynka, Zhmerynka COMMUNITY , Zhmerynka district, Vinnytsia region	3,5	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	38	2	684,00	4
45	Reconstruction of sewage treatment facilities and sewerage network of the Municipal Enterprise "Haysynvodokanal" in Haysyn, Haysyn COMMUNITY , Haysyn district, Vinnytsia region	3,5	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	29	2	522,00	4
61	Reconstruction of treatment facilities and sewage networks of the Municipal Enterprise "Vodokanal" of the Talniv City Council in Talne, Talnivska AH, Zvenyhorod district, Cherkasy region	3,5	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	30,6	2	550,39	4
7	Reconstruction of sewage treatment facilities and sewerage network of Zlagoda in Letychiv village, Letychivska COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	11	2	198,00	3
16	Reconstruction of sewage treatment facilities and drainage networks of the Municipal Enterprise "Gayvoronskyi" in the city of Gayvoron, Golovanivskyi district, Kirovohrad region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	14,2	2	142,00	3

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
19	Reconstruction of sewerage networks of KP "TVKG" in Yuzhnoukrainsk, Yuzhnoukrainsk COMMUNITY , Voznesensk district, Mykolaiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	40,221	2	50,00	3
21	Reconstruction of sewerage networks and sewage treatment facilities of KP "Prybuzke" in Nova Odesa, Novodeska COMMUNITY , Mykolaiv district, Mykolaiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	11,7	2	210,60	3
27	Reconstruction of sewage treatment facilities and sewerage network of the Municipal Enterprise "Derazhnyansky municipal water supply channel" in Derazhnya, Derazhnyanska COMMUNITY , Khmelnytsky district, Khmelnytsky region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	11	2	198,00	3
33	Reconstruction of sewage treatment facilities and sewerage network of Kalynivka Vodokanal in Kalynivka, Kalynivka COMMUNITY , Khmilnyk district, Vinnytsia region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	20	2	360,00	3
34	Reconstruction of the treatment facilities of the Barsky KVU of the Barvodokanal in Bar, Zhmerynka COMMUNITY , Vinnytsia region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	17	2	306,00	3
37	Reconstruction of sewage treatment facilities (outside Nemyriv) and sewerage networks (in Nemyriv) of the ME "Nemyrivvodokanal" of Nemyrivska COMMUNITY , Vinnytsia district, Vinnytsia region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	25	2	450,00	3
39	Reconstruction of sewage treatment facilities and networks of the Municipal Enterprise " Tulchynvodokanal" in Tulchyn, Tulchyn COMMUNITY , Tulchyn district, Vinnytsia region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	14	2	252,00	3
40	Construction of sewage treatment facilities and sewage networks of the Tulchyn branch of the State Enterprise "Ukrvetssanzavod" in Tulchyn, Tulchyn COMMUNITY , Tulchyn district, Vinnytsia region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	15	2	270,00	3

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
44	Reconstruction of the sewage treatment facilities of the Illintsi Vodokanal of the Illintsi City Council outside the village of Pariyivka, Illintsi COMMUNITY , Vinnytsia district, Vinnytsia region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	11	2	198,00	3
49	Reconstruction of sewerage networks and treatment facilities of the Municipal Enterprise "Bershadvodokanal" in Bershad, Bershadska AH, Haisyn district, Vinnytsia region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	13	2	234,00	3
56	Construction of sewage treatment facilities and reconstruction of the sewerage network of the Baltavodokanal in Balta, Baltska COMMUNITY , Podilskyi district, Odesa region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	15	2	270,00	3
62	Reconstruction of sewage treatment facilities and sewerage networks of the Monastyryshche Municipal Utility Company in Monastyryshche, Monastyryshche COMMUNITY , Uman district, Cherkasy region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	16,038	2	288,68	3
63	Reconstruction of treatment facilities and sewage networks of the Stavyshche housing and communal services in the village of Stavyshche, Stavyshchenska AH, Bila Tserkva district, Kyiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	21,11	2	379,98	3
66	New construction of sewage treatment facilities and reconstruction of the sewerage network of the Municipal Enterprise "Water Supply and Sewerage" of Zvenyhorod City Council in Zvenyhorodka, Zvenyhorodska COMMUNITY , Zvenyhorod district, Cherkasy region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	16,643	2	299,57	3
68	Construction of sewage treatment plants and sewage networks for Kommunalnyk Municipal Enterprise of Shpola City Council in Shpola, Shpola COMMUNITY , Zvenyhorod district, Cherkasy region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	16,616	2	299,09	3

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
69	Reconstruction of sewage treatment facilities and sewerage networks at Vatutino Municipal Utility Company "Vodokanal" in Vatutino (Bagacheve), Vatutino COMMUNITY , Zvenyhorod district, Cherkasy region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	16,8	2	302,40	3
71	Reconstruction of sewage treatment facilities and drainage networks of KP "KOMUNALNIK - 2016" in Novomyrhorod, Novomyrhrod COMMUNITY , Novoukrainsk district, Kirovohrad region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	10	2	100,00	3
72	Reconstruction of sewage treatment plants and sewage networks of the Mala Vyska Vodokanal in Mala Vyska, Malovyskivska COMMUNITY , Novoukrayinsky district, Kirovohrad region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	10	2	100,00	3
73	Reconstruction of sewage treatment facilities and drainage networks of the Smolinske VKG of the Dnipro-Kirovohrad Utility Company in the village of Smolinske, Maloviskivska COMMUNITY , Novoukrainsk district, Kirovohrad region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	10	2	125,90	3
81	Reconstruction of sewage treatment facilities and sewerage networks of Novoukrainske Housing and Communal Services in Novoukrainka, Novoukrainske COMMUNITY , Novoukrainsk district, Kirovohrad region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	17	2	170,00	3
89	Reconstruction of sewerage networks and sewage treatment facilities of the Municipal Enterprise "Miskvodokanal" of the Bashtanka City Council in Bashtanka, Bashtanka COMMUNITY , Bashtanka district, Mykolaiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	12,449	2	224,08	3

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
90	Construction of sewage treatment plants and water disposal networks of the Municipal Enterprise "Vodoprovodni Networks" of Novi Buh City Council in Novi Buh, Novi Buh COMMUNITY , Bashtanka district, Mykolaiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	15,5	2	279,00	3
99	Reconstruction of sewage treatment facilities and sewage networks of Bobrynets Municipal Utility Company "Miskvodokanal" in Bobrynets, Bobrynets COMMUNITY , Kropyvnytskyi district, Kirovohrad region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	11	2	110,00	3
13	Reconstruction of sewage treatment facilities and sewerage network of Supark LLC in the village of Sutisky, Sutiskivska COMMUNITY , Vinnytsia district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	7	1	56,00	3
31	Construction of sewage treatment plants and sewage networks of KP "KOMUNSERVICE" of Litynska rural settlement in Lityn village, Lityn COMMUNITY , Vinnytsia district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	7	1	56,00	3
32	Reconstruction of sewage treatment facilities and sewage networks of the Turbiv Municipal Utility Company of the Turbiv Settlement Council in Turbiv village, Turbiv COMMUNITY , Vinnytsia district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	7	1	56,00	3
36	Reconstruction of sewage treatment facilities and networks of the Municipal Enterprise "Nadiya" of Voronovytska Village Council in Voronovytsia village, Voronovytska COMMUNITY , Vinnytsia district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	7	1	56,00	3
41	Reconstruction of sewage treatment facilities and sewerage networks of Vapnyarka Vodokanal in the village of Vapnyarka, Vapnyarka COMMUNITY , Tulchyn district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	8	1	64,00	3

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
43	Construction of treatment facilities and sewage networks of the Lipovetsvodokanal of the Lipovets City Council in Lipovets, Lipovetska COMMUNITY , Vinnytsia district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	8	1	64,00	3
46	Reconstruction of sewage treatment facilities and sewage networks of the Trostyanets Village Council's Trostyanetsvodokanal in the village of Trostyanets, Trostyanets COMMUNITY , Haisyn district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	8	1	64,00	3
47	Reconstruction of sewage treatment facilities and drainage networks of the Khrystynivka Municipal Utility Department outside the village of Talalaivka, Khrystynivka COMMUNITY , Uman district, Cherkasy region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	9	1	72,00	3
48	Reconstruction of sewage treatment facilities and sewerage networks of the Communal Enterprise "Zhytlokomunservis-T" in the village of Teplyk, Teplytska COMMUNITY , Haisyn district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	7	1	56,00	3
50	Reconstruction of sewage treatment facilities and sewerage networks of Kryzhopilvodokanal in Kryzhopil village, Kryzhopil COMMUNITY , Tulchyn district, Vinnytsia region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	9	1	72,00	3
58	Construction of sewerage networks and facilities of KP "Zlagoda" of Kryvoozerka village council in Kryve Ozero village of Kryvoozerka COMMUNITY , Pervomaiskyi district, Mykolaiv region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	7,7	1	61,60	3
65	Reconstruction of sewage treatment facilities and sewerage networks of the Municipal Enterprise "Vodo-Kanal" in the village of Lysyanka, Lysyanka COMMUNITY , Zvenyhorod district, Cherkasy region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	7,618	1	60,94	3

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75	Reconstruction of sewage treatment facilities and drainage networks of the Municipal Enterprise "NovoarkhangelskeZhKh" in the village of Novoarkhangelsk, Novoarkhangelsk COMMUNITY , Holovanivskyi district, Kirovohrad region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	6,5	1	52,00	3
80	Reconstruction of sewage treatment facilities and drainage networks of NILOT in the village of Dobrovelychkivka, Dobrovelychkivka COMMUNITY , Novoukrainsk district, Kirovohrad region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	6	1	52,00	3
83	Reconstruction of sewage treatment facilities and sewage networks of the Municipal Enterprise "Arbuzynskyi KKP" in the village of Arbuzynka, Arbuzynska COMMUNITY , Voznesenskyi district, Mykolaiv region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	6,337	1	50,70	3
92	Reconstruction of sewage treatment facilities and drainage networks of the KP "Teploenergetik" of the Kropyvnytskyi City Council in the village of Nove Kropyvnytske, Kropyvnytskyi district, Kirovohrad region	3	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	9	1	72,00	3
5	Construction of domestic wastewater treatment plants at Elevator in Bogdanivka village, Khmelnytsky COMMUNITY , Khmelnytsky district, Khmelnytsky region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	1,1	1	4,00	2
15	Construction of sewage treatment plants and sewage networks of Tyvriv Municipal Utility Company in Tyvriv village, Tyvriv COMMUNITY , Vinnytsia region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	4	1	32,00	2

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23	Reconstruction of sewerage networks and sewage treatment facilities of the Olshanske Utility Company in the village of Olshanske, Olshanska COMMUNITY , Mykolaiv district, Mykolaiv region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	5,92	1	47,36	2
28	Reconstruction of sewage treatment facilities and sewerage network of Lozove Utility Company in Lozove village, Derazhnyanska COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	1,5	1	5,00	2
30	Reconstruction of sewage treatment facilities of the Municipal Enterprise "Starosyniavskyi CEC No. 1" in the village of Stara Syniava, Starosyniavska COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	5,6	1	5,70	2
38	Completion of the construction of sewage treatment facilities for Nemyrivkomunservice in Nemyriv, Nemyrivska COMMUNITY , Vinnytsia region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	6	1	48,00	2
42	Construction of sewage treatment plants and sewage networks of communal enterprises in the village of Kyrnasivka, Tulchyn COMMUNITY , Tulchyn district, Vinnytsia region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	5	1	40,00	2
51	Construction of sewage treatment plants and sewerage networks by Blagoustriy in Pishchana village, Pishchanska COMMUNITY , Podilskyi district, Odesa region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	3,2	1	25,60	2
52	Construction of sewage treatment facilities and sewage networks by the Chechelnykvodokanal in the village of Chechelnyk, Chechelnytska COMMUNITY , Haisyn district, Vinnytsia region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	5	1	40,00	2
53	Construction of sewage treatment facilities and sewerage network of the Savransky Municipal Utility Department in the village of Savran, Savranska COMMUNITY , Podilskyi district, Odesa region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	6,2	1	49,60	2

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55	Construction of sewerage networks and sewage treatment facilities of the Blagoveshchensk Municipal Enterprise "Kommunalnyk" in Blagoveshchenske, Blagoveshchensk COMMUNITY , Golovanivskyi district, Kirovohrad region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	6	1	48,00	2
57	Development of projects of sanitary protection zones for water supply sources and their removal to the field in the territory of Baltska COMMUNITY and Pishchanska COMMUNITY in Podilskyi district of Odesa region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	41,6	2	1,20	1
67	Reconstruction of sewage treatment facilities and sewerage networks of the Municipal Enterprise "Katerynopilske SZHKG" in the village of Katerynopil, Katerynopilska COMMUNITY , Zvenyhorod district, Cherkasy region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	5,443	1	43,54	2
79	Reconstruction of sewage treatment facilities and drainage networks of the Golovanivske Municipal Utility Company in the village of Golovanivsk, Golovanivska COMMUNITY , Golovanivskyi district, Kirovohrad region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	6	1	48,00	2
84	Construction of sewerage networks and treatment facilities by Dzherelo-Kommunservice in the village of Liubashivka, Liubashivska COMMUNITY , Podilskyi district, Odesa region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	3,4	1	27,20	2
85	Reconstruction of treatment facilities and sewerage network of the Yelanets settlement communal enterprise "Yelanetsvodopostach" in the village of Yelanets, Yelanets COMMUNITY , Voznesensk district, Mykolaiv region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	4,9	1	39,20	2

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87	Reconstruction of sewage treatment facilities and drainage networks of the Sozonivskyi Komunikator in the village of Sozonivka, Velykoseverinivska COMMUNITY , Kropyvnytskyi district, Kirovohrad region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	2	1	16,00	2
91	Reconstruction of sewage treatment facilities and drainage networks of Obriy Utility Company in Katerynivka village, Katerynivka COMMUNITY , Kropyvnytskyi district, Kirovohrad region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	1	1	8,00	2
93	Construction of sewerage networks and sewage treatment facilities for housing and communal services in the village of Vilne, Sokolivska COMMUNITY , Kropyvnytskyi district, Kirovohrad region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	1	1	8,00	2
94	Reconstruction of sewage treatment facilities and sewerage networks of the Municipal Enterprise "Dobrobut" of Pervozvanivka Village Council in Pervozvanivka village, Pervozvanivka COMMUNITY , Kropyvnytskyi district, Kirovohrad region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	1	1	8,00	2
95	Reconstruction of sewage treatment facilities and drainage networks of Subotivske SPE "SILKOMUNGOSP" in Subottsi village, Subottsivska COMMUNITY , Kropyvnytskyi district, Kirovohrad region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	4	1	32,00	2
96	Reconstruction of sewage treatment plants and sewage networks of the Municipal Enterprise "Novhorodka Linear Sewage Plant" in the village of Novhorodka, Novhorodka COMMUNITY , Kropyvnytskyi district, Kirovohrad region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	5,76	1	46,00	2

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
110	Improvement of state accounting of water use within the districts of the Southern Bug River Basin in Khmelnytskyi, Vinnytsia, Kirovohrad, Kyiv, Mykolaiv, Odesa and Cherkasy oblasts	2,5	**average**	SWMI 4, SWMI 6, SWMI 9	3	3	0,0	1	148,01	3
11	Revitalisation of the Diogtyanets River in Vinnytsia, Vinnytsia Oblast, Vinnytsia COMMUNITY	2,25	**low**	SWMI 4	1	1	369,7	4	50,00	3
12	"Overhaul of the Pivdennyi Buh River in Vinnytsia" by Vinnytsia COMMUNITY of Vinnytsia district, Vinnytsia region	2,25	**low**	SWMI 4	1	1	369,7	4	313,60	3
86	Improvement of the ecological condition of the Ingul riverbed in the area from the Petrivske reservoir to the border of Kropyvnytskyi, in the territory of Kropyvnytskyi COMMUNITY and Severynivska COMMUNITY , Kropyvnytskyi district, Kirovohrad region	2,25	**low**	SWMI 4	1	1	256,5	4	63,80	3
103	Establishment of water protection zones and coastal protection strips in Vinnytsia region	1,75	**low**	SWMI 2, SWMI 4	2	1	0	1	100,00	3
106	Establishment of water protection zones and coastal protection strips in Cherkasy region	1,75	**low**	SWMI 2, SWMI 4	2	1	0	1	55,05	3
109	Fighting invasive species, reducing their spread and impact on the ecosystem in Khmelnytskyi, Vinnytsia, Kyiv, Kirovohrad, Cherkasy, Mykolaiv, Odesa regions	2,25	**low**	SWMI 11	1	1	4200	5	21,00	2
4	Restoring the flow of the Pivdennyi Buh River in the territory of Khmelnytskyi COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	2	**low**	SWMI 4	1	1	274	4	14,64	2
8	Establishment of buffer zones between a water body and a farmland (Afforestation of territories in the area of the Southern Bug River basin in Vinnytsia Oblast)	2	**low**	SWMI 1, SWMI 2, SWMI 3, SWMI 4	4	1	10,5	2	1,50	1

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
25	Restoring the flow of the Ploska River in the territory of Khmelnytskyi COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	2	**low**	SWMI 4	1	1	274	4	12,36	2
26	Restoring the flow of the Kudryanka River in the territory of Khmelnytskyi COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	2	**low**	SWMI 4	1	1	274	4	8,40	2
100	Improving the ecological condition of the Berezivka riverbed	2	**low**	SWMI 4	1	1	110,0	3	115,20	3
102	Establishment of water protection zones and coastal protection strips in Khmelnytsky district of Khmelnytsky region	1,5	**low**	SWMI 2, SWMI 4	2	1	0	1	22,00	2
104	Establishment of water protection zones and coastal protection strips in Mykolaiv region	1,5	**low**	SWMI 2, SWMI 4	2	1	0	1	45,00	2
105	Establishment of water protection zones and coastal protection strips on the territory of Mykolaiv COMMUNITY , Savran COMMUNITY , Balta COMMUNITY , Zelenohirsk COMMUNITY , Kodym COMMUNITY , Liubashiv COMMUNITY , Pishchan COMMUNITY of Berezivskyi and Podilskyi districts of Odesa region	1,5	**low**	SWMI 2, SWMI 4	2	1	0	1	2,97	2
107	Establishment of water protection zones and coastal protection strips in the Kirovohrad region	1,5	**low**	SWMI 2, SWMI 4	2	1	0	1	26,50	2
108	Establishment of water protection zones and coastal protection strips in the Kyiv region	1,5	**low**	SWMI 2, SWMI 4	2	1	0	1	2,10	2
10	"Cleaning of the Pivdennyi Buh River from silt sediments within the city of Khmilnyk and Khmilnyk district of Vinnytsia region (overhaul)" Khmilnyk COMMUNITY , Khmilnyk district, Vinnytsia region	1,75	**low**	SWMI 4	1	1	26,9	2	58,10	3

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
17	Clearing the channel and improving the condition of the coastal protection zone of the Pivdennyi Buh River within the Yuzhnoukrainska urban territorial community	1,75	**low**	SWMI 4	1	1	42,47	2	131,50	3
54	Revitalisation of the Savranka River within the administrative boundaries of the Savranska COMMUNITY of Podilskyi Rayon	1,75	**low**	SWMI 4	1	1	18,2	2	85,75	3
74	Improving the ecological condition of the Kilten River bed	1,75	**low**	SWMI 4	1	1	14,9	2	53,00	3
98	Improving the ecological condition of the Bobrynets Riverbed	1,75	**low**	SWMI 4	1	1	24,3	2	78,00	3
29	Restoration of the hydrological regime of the Vovk River in the territory of Derazhnyanska COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	1,5	**low**	SWMI 4	1	1	11	2	8,77	2
60	Measures to restore and maintain a favourable hydrological regime of the Hirskyi Tikych River within the administrative boundaries of Talne for a length of 1.6 km from the railway bridge to the stone ridge of the old mill (including the development of design and estimate documentation), Talne COMMUNITY , Zvenyhorod Rayon, Cherkasy Oblast	1,5	**low**	SWMI 4	1	1	13,156	2	5,00	2
70	Clearing the channel of the Velyka Vysya River	1,5	**low**	SWMI 4	1	1	26,7	2	49,10	2
82	Clearing the Mertvovod riverbed in Voznesensk district, Mykolaiv region	1,5	**low**	SWMI 4	1	1	34,404	2	40,00	2
97	Reconstruction of emergency hydraulic structures of the Polumyanske reservoir built on the Sugoklia River	1,5	**low**	SWMI 4	1	1	13	2	10,00	2

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
18	Clearing the channel of the Pivdennyi Buh River within the boundaries of the Myhiyivka Rural Territorial Community, and improving the local beach in Myhiyivka	1,25	**very low**	SWMI 4	1	1	2,099	1	5,50	2
24	Restoration of the hydrological regime of the Ploska River in the territory of Hvardiyska COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	1,25	**very low**	SWMI 4	1	1	0,7	1	15,00	2
59	"Restoration and maintenance of favourable hydrological regime of the Butska HPP reservoir in the village of Buky, Mankiv district (Overhaul)" Butska COMMUNITY , Mankivskyi district, Cherkasy region	1,25	**very low**	SWMI 4	1	1	1,753	1	9,23	2
64	"Reconstruction of the hydraulic structure and works related to the improvement of the technical condition and improvement of the Shkilny pond within the administrative boundaries of the Morinsky village council (including the development of design and estimate documentation)" Zvenyhorod COMMUNITY , Zvenyhorod district, Cherkasy region	1,25	**very low**	SWMI 4	1	1	2,103	1	2,00	2
76	"Restoration and maintenance of a favourable hydrological regime of the Zhurbynka River in the village of Gromy, Uman district, Cherkasy region" and development of project documentation for the facility	1,25	**very low**	SWMI 4	1	1	0,684	1	5,35	2
78	Restoration and maintenance of a favourable hydrological regime of the Revukha riverbed within the administrative boundaries of the Babanska settlement council of the Babanska COMMUNITY , Uman district, Cherkasy region	1,25	**very low**	SWMI 4	1	1	7,84	1	4,37	2

№	Name of the measure	Level of efficiency	Description of the level of efficiency	SWMI	Success rate	Pressure from the water sector	Number of people affected by the measure	Social efficiency	Total cost of investment	Value for money
1	Repair of the hydraulic structure of the pond on the road P-48 and works related to the improvement of its technical condition in the village of Kupil in the territory of Viytovetska COMMUNITY , Khmelnytskyi district, Khmelnytskyi region	1	**very low**	SWMI 4	1	1	0,7	1	1,00	1
2	Determining the location of the source of the Southern Bug River near the village of Kholodets, Volochysk COMMUNITY , Khmelnytskyi district, Khmelnytskyi region, and identifying measures for its restoration and conservation	1	**very low**	SWMI 4	1	1	1,0	1	1,00	1