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DON RIVER BASIN
MANAGEMENT PLAN
2025-2030

CONTENTS

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

The total length of the Don River is 1,870 km; the Don does not flow within Ukraine. The catchment area is 422,000 km^2, and 54,437 km^2 on the territory of Ukraine.

The Don RBD covers 9% of Ukraine's territory and is located within three of its oblasts (Kharkiv, Donetsk and Luhansk).

The hydrographic network of the Don RBD includes 253 rivers with a catchment area of more than 10 km^2, 31 reservoirs.

The Don RBD has two sub-basins: Siverskyi Donets and Lower Donets.

1.1.2 Climate

The Don RBD has a temperate continental climate and is part of the moderately arid zone.

Annual precipitation in the north-west is 600 mm and gradually decreases to 500 mm in the south-east. During the warm season (April-October), 250-300 mm of precipitation falls.

The average annual air temperature is 7-8°C. In summer, the air can warm up to +38...+40°C, while in winter the temperature can drop to -32...-40°C.

The greatest thickness of snow cover is observed in the northwestern part of the basin, in the forest-steppe natural zone - in Kharkiv region (up to 20 cm on average, with a maximum of 63 cm). In the central and eastern parts of the basin, in Donetsk and Luhansk oblasts, and in the steppe zone, snow depths average up to 10 cm, with a maximum of 33-48 cm.

The highest evaporation from the water surface is observed in the southeast of the Don RBD, the lowest - in the northwest and averages 630-800 mm. The wind regime is characterised by frequent changes in wind directions over time. At most weather stations, winds from the east and southeast prevail, which is associated with the general atmospheric circulation.

In recent decades, there has been a tendency for air temperatures to rise. The most accelerated rate of air temperature increase is in the spring months of March and April (by 0.0225-0.0239°C per year), as well as in the winter months. This leads to a decrease in the proportion of solid precipitation, a decrease in snow accumulation and water reserves, which, in turn, leads to a decrease in the intensity of spring floods on rivers. Rivers are also experiencing a reduction in the duration of ice cover and an increase in the ice-free period.

1.1.3 Relief

The relief of the Don RBD is characterised by a flat terrain. The northern part of the basin, which corresponds to the left-bank territory of the Siverskyi Donets sub-basin, is located on the spurs of the Srednoruska Upland with average ground surface elevations of 60-150 metres. The horizontal relief of this area does not exceed 0.2 km/km^2 . The southern part of the basin is represented by the right-bank territory of the Siverskyi Donets sub-basin and the Lower Don sub-basin. It is located on the spurs of the Donetsk Ridge, which determines the ground surface elevations of 60-230 metres. The horizontal relief of the area is 0.2-0.3 km/km^2 .

The relief is based on a wide valley of the Siverskyi Donets River, with the general direction of the river valley being from north to south in the upper reaches and from northwest to southeast in the middle reaches. The surface is a slightly undulating plain crossed by numerous river valleys, gullies and ravines, and is inclined mainly to the south-east. All the left-bank tributaries of the river and the right-bank tributaries in the upper part of the basin (up to the confluence of the Uda River) flow from the south-western spurs of the Srednorusskaya Upland. The right-bank tributaries flow from the northern slopes of the Donetsk Ridge. The Mozh and Bereka rivers begin at the watershed with the Oril River (Dnipro River basin).

The Siverskyi Donets sub-basin is characterised by a left-handed asymmetry: the left-bank part of the basin covers 68%, the right-bank part - 32% of its total area. The source of the Siverskyi Donets is 234 m, the mouth - 4.8 m;

the river drops 229.2 m, the average slope is 0.21 0/00; the smallest slope is observed in the lower reaches up to the confluence of the Derkul River - 0.084 0/00; in the upper reaches, the largest slope is from the source to the confluence of the Vovcha River - 1.04 0/00, in the middle reaches - 0.10-0.15 0/00.

The basin's topography is hilly. Almost all of its tributaries and the Siverskyi Donets itself have asymmetrical right-bank valleys - the right-hand slopes are steep and eroded, while the left-hand slopes are more gentle. The Siverskyi Donets is particularly distinctive in its course along the Donetsk ridge - the right-hand slopes of the valley are so steep in places that there are landslides, slides, and rocky outcrops. Closer to the river valleys, the ruggedness of the terrain increases. The ravines on the right side are shorter and more active; they have a large drop and branch out in the upper reaches. The ravines and gullies on the left, gentler side are less active, elongated in length, and have permanent watercourses along their bottoms.

1.1.4 Geology

Geostructurally, the Don RBD is located in the zone of dissection of the northern slope of the Dnipro-Donetsk Basin, which in the south-eastern direction passes into the Donetsk folded area (Donetsk Ridge) with the southern slope of the Voronezh crystalline massif. A characteristic feature of the Dnipro-Donetsk Basin is the extensive development of salt-dome tectonics.

The geological structure includes: Archean and Proterozoic crystalline formations (granites, magmatites, shales, gneisses, quartzites); sediments of the Paleozoic group: Devonian system (sedimentary: fine-grained sandstones, greenish-grey and light grey sandy-clay shales, rock salt; magmatic: paleobasalts, porphyries, andesites), Carboniferous system (mudstones, siltstones, sandstones, with subordinate limestone and coal beds), Permian system (sandstones, shales, limestones, rock salt); Mesozoic sediments: Triassic system (mudstones with layers of greenish and red clays interbedded with yellow or white sand with a significant admixture of kaolin), Jurassic system (clays and ferruginous conglomerates, limestone sandstones predominate), Cretaceous system (glauconite sands, chalky marls, marl clays, white chalk); Cenozoic sediments: Paleogene system (different-grained sands, clays with layers of brown coal, clayey sands, grey clays), Neogene system (alluvial white sands of the Novopetrovska Suite with layers of clays, sandy loams and loams), Pliocene-Lower Quaternary system (red-brown, dark brown clays with inclusions of carbonate nodules), Quaternary system: Lower-Middle-Upper Quaternary alluvial and aeolian-deluvial deposits (light, medium and heavy loams), modern alluvial-deluvial deposits (grey, dark grey silty redeposited loams), modern alluvial deposits (silt, silty sandy loams, grey plastic loams, dusty and fine greyish-yellow sands), modern anthropogenic deposits (formed as a result of human activity: loams with inclusion of soil layer and grit), modern eluvial deposits (soil and vegetation layer).

1.1.5 Hydrogeology

Two hydrogeological regions are distinguished in the Don RBD: The Dnipro-Donetsk artesian basin and the Donetsk hydrogeological fold region.

The Dnipro-Donetsk artesian basin in the Don River Basin covers the territory of Kharkiv (excluding the south-eastern part) and the northern part of Luhansk oblasts and is a typical artesian basin.

The Donetsk hydrogeological fold area in the Don basin covers the southeastern part of Kharkiv Oblast, the northern part of Donetsk Oblast and the southern part of Luhansk Oblast.

The junction area of Donbas and Dnipro-Donetsk Basin is marked by complex hydrogeological conditions of groundwater formation, characterised by inconsistencies in the area and in the aquifers, which leads to the formation of interconnected aquifers. The region is characterised by a relatively arid climate and intensive groundwater development, as well as a significant impact of mine drainage, which increases flows between aquifers, intensifies groundwater drainage and their connection with surface water.

The following aquifers and complexes are developed in the river basin: Precambrian formations, Devonian sediments, coal deposits (Lower, Middle and Upper Carboniferous aquifers), Permian sediments, Triassic sediments, Jurassic sediments (Lower, Middle and Upper Jurassic aquifers), Cretaceous sediments (Upper Cretaceous, Lower Cretaceous, Albo-Cenomanian, and Cretaceous Cenomanian, and marl and chalk aquifers), Paleogene sediments (Buchach, Kharkiv, and Kyiv aquifers), Neogene sediments (Novopetrivsk, Sarmatian, Meotian, and Pontian aquifers), and Quaternary sediments (aquifers in aeolian-deluvial, eluvial-deluvial loams, and alluvial deposits).

1.1.6 Soils

The soil cover of the Don RBD is predominantly black soils with varying degrees of podzolisation and humus content. Typical chernozems and ordinary chernozems on loess rocks prevail. In the northern part of the basin there are soils of the forest-steppe zone with varying degrees of podzolisation. The largest areas are represented by typical chernozems. In the southern part of the middle reaches of the Siverskyi Donets sub-basin of the Don RBD, there are medium humus chernozems. There are meadow, sod-gley, alluvial, saline and sandy loam soils, which are characterised by high fertility. On the slopes of the southern exposure, where the upper horizons of loess loams have been washed away, the soil-forming rocks are Permian clays. They are heavier in mechanical composition, sometimes saline with chlorides and sulphates, which causes salinity of the soil and increased mineralisation of underground and surface runoff. In the south-western part, the main area is occupied by ordinary chernozems with varying humus content. There are other types of soil that differ in erosion and salt composition.

The humus content of the soil decreases from the north-west, where it is 350-600 t/ha, towards the south-east, where the humus reserves range from 50-250 t/ha. The percentage of eroded land is about 50%. The percentage of ploughed land in the Don RDB is 45%.

The content of salt indicators in the surface water bodies of the Siverskyi Donets sub-basin has certain regularities and is determined by soil, climatic and geological features. The sub-basins of the Siverskyi Donets and Lower Donets differ in terms of soil cover, landscape and geomorphological conditions:

- the northern forest-steppe part above the mouth of the Oskil River, where the chemical composition of water is formed in conditions of sufficient moisture under the influence of carbonate-rich chernozem soils and underlying rocks. The riverbed waters are characterised by a bicarbonate-calcium composition and moderate salinity (salinity 600-700 mg/dm^3);
- the left-bank steppe part, which covers the catchments of the left tributaries of the Siverskyi Donets south of the Oskil River, where the degree of soil salinity with sulphates and chlorides increases with a decrease in the moisture coefficient from north to south. River waters are predominantly of bicarbonate-sulfate and sulfate composition (salinity 600-1500 mg/dm^3);
- the right-bank part between the upper reaches of the Kazennyi Torets and Kundriucha rivers, where the chemical composition of the water is influenced by saline rocks. The river waters are characterised by high and elevated salinity and predominantly sulphate-chloride composition (salinity is mainly 2000-5000 mg/dm^3). The riverbed waters of the Kazennyi Torets, Kryvyi Torets and Bakhmutka river basins are particularly saline.

1.1.7 Flora

The territory of the Don RBD is located in the forest-steppe and steppe zones. Both zonal and azonal vegetation types are represented in the basin, namely upland oak forests, ravine oak forests, ash forests, mixed oak and pine forests, light coniferous pine forests, broadleaf pine forests, birch and floodplain forests, dry meadows, meadow steppes, and grass and fescue steppes, Vegetation of chalk and stone outcrops, floodplain meadows, halophytic, meadow-bog, marsh, coastal and aquatic vegetation, vegetation of anthropogenic origin, agrophytocoenoses, synanthropic and adventitious (alien) vegetation. The richest forest vegetation is along the Siverskyi Donets. Almost 70% of the forests are of artificial origin and are planted primarily on lands subject to water and wind erosion, as well as in floodplains and artificial reservoirs.

The vegetation of the Don RBD has undergone a major anthropogenic transformation due to the high level of urbanisation of the territory, intensive industrial and agricultural pressure. The vegetation cover of the steppe phytocoenoses has been greatly altered by economic activity. Virgin steppe phytocoenoses have been preserved in the territories of the nature reserve fund and on lands unsuitable for agricultural use. Synanthropic (atypical) vegetation is quite typical in the basin, the distribution of which is associated with disturbed habitats - agricultural land, urbanised areas, and man-made ecotopes (quarries, dumps, etc.).

1.1.8 Fauna

The location of the Don RBD in the forest-steppe and steppe zones, the presence of wetlands, lakes, large reservoirs, and landscapes transformed by humans, including agrocenoses and urban cenoses, determines the species composition of the fauna. The fauna of the basin is represented by terrestrial, aquatic and near-water fauna: invertebrates (molluscs, insects, millipedes, arachnids, crustaceans, etc.), fish, roundworms, amphibians, reptiles, birds, and mammals. The reduction of areas historically suitable for wildlife, direct destruction of wildlife, and anthropogenic and recreational pressure on the environment have led to a general depletion of species and population composition of fauna.

In recent decades, the surrounding waters and, above all, the valley landscapes have undergone significant anthropogenic transformation. With the creation of large reservoirs in the basin (Pechenizke, Oskil, Krasnopavlivka, etc.), the avifauna has been replenished with elements that are atypical for inland water bodies. Birds inhabiting the sea coasts appeared. The steppe fauna has also undergone significant changes, with the habitats of some animals shrinking or completely disappearing as a result of ploughing the steppes.

1.1.9 Hydrological regime

The hydrological regime of the Don RBD rivers is characterised by spring floods, summer, autumn and winter low water, which is interrupted by floods. The rivers are fed by surface water runoff from rains and snowmelt, as well as by springs. The water regime of rivers is largely influenced by water abstraction for the needs of municipal services, industry, agriculture, wastewater and mine water discharge, and regulation of flow in ponds and reservoirs.

The average long-term runoff module decreases from north to south from 2.9 to 1 dm^3 /(s-km^2), but in the upper reaches of the rivers of the Kryvyi Torets, Bakhmutka, Luhan and Velyka Kamyanka basins, the average annual runoff module increases to 2-3 dm^3 /(s-km^2). The average long-term runoff volume of the Siverskyi Donets River in Ukraine (Kruzhylivka, 222 km from the mouth) is 4610 million m^3 . The flow along the Siverskyi Donets river channel is uneven both over many years and by seasons. Average annual flows in low-water and high-water years can differ by a factor of 10-12.

The coefficient of runoff regulation by ponds and reservoirs for the year of 95% availability is 1.54, which indicates overregulation.

The average long-term spring flood depth also decreases from north to south from 40 to 20 mm, and increases to 30 mm on the rivers of the Donetsk Ridge. The maximum spring runoff modules vary between 300-500 dm^3 /(s×km^2) and increase in the north-eastern direction. Maximum flood runoff modules are 180-220 dm^3 /(s×km^2). The maximum discharge of spring floods in the Siverskyi Donets river channel averages 198 m^3/s in the upper part of the basin and 620 m^3/s in the lower part. Spring flooding in the basin lasts from February to April. The highest discharges of spring floods were observed in 1942 (Lysychansk) - 3310 m^3/s; 1953 (Zmiiv, Izium) - 2020 and 1920 m^3/s respectively; 1963 (Ogirtsevo, Chuhuiv, Yaremivka, Starodubivka, Kruzhylivka) - 1090, 1490, 2760, 3400 and 2920 m^3/s respectively; 1964 (Pechenyhy) - 1000 m^3/s.

According to the intra-annual distribution of water flow, the Don RBD is divided into two parts. The first part (the left bank of the Siverskyi Donets sub-basin and the rivers of the Uda basin) is characterised by a significant predominance of spring runoff compared to runoff in other seasons - 46%. Winter runoff accounts for 22%. In summer, 15% of the total annual runoff occurs. In autumn, water runoff is 17% of the annual runoff volume. The second part (the right bank of the Siverskyi Donets sub-basin and the rivers of the Lower Donets sub-basin) is characterised by a more even distribution of water flow throughout the year. Spring runoff accounts for 38% of the annual runoff volume, and 28% in winter. Runoff in the summer and autumn period is 34%, and 17% each season in summer and autumn.

The temperature regime of river water is not characterised by a clear uniformity. Water in rivers with stable ice cover begins to warm up in the late second or early third decade of March, when the water temperature exceeds 0.2°C. The maximum water temperature is observed in July (up to 27°C). A sharp drop in water temperatures is observed in late September and early October. The water temperature crosses the 0.2°C mark in winter in mid-December. The onset of river ice is recorded in the late third decade of November and early first decade of December. The ice cover is established in the second decade of December and lasts until the second decade of March. The annual water temperature regime of rivers with unstable ice cover differs significantly from rivers with stable ice cover. Ice phenomena begin to appear in the first or second decade of December and completely disappear in February and early March. In winter, the water temperature in these watercourses averages 1-6°C.

1.1.10 Specifics of the river basin

There are 24 rivers in the Don RBD that cross the state border (20 in the Siverskyi Donets sub-basin and 4 in the Lower Donets sub-basin).

In the Don RBD, 99% of the area is covered by the Siverskyi Donets sub-basin. The Siverskyi Donets sub-basin is low-water due to its geographical location and climatic characteristics. According to the "Water Balance for the Siverskyi Donets River Sub-basin" approved by the Head of the State Agency of Water Resources of Ukraine for on 13.06.2019, there are water management areas with water shortages along the Siverskyi Donets riverbed. The most scarce area is the Siverskyi Donets riverbed in Donetsk Oblast, where water shortages in the year of 95% availability are observed throughout the year, except for the spring flood period.

At the same time, the Siverskyi Donets River is the main source of water supply for the region, with over 1.1 km of water withdrawn.m^3 of water (85% of the intake from surface sources and 80% of the total intake in the basin); irreversible use of water from surface water bodies in the basin of about 600 million m^3 per year, including through inter-basin transfer of flow to the Azov River basin in Donetsk Oblast; discharge of waste water - 831 million m^3 (according to state water use accounting for 2019).

The water management complex of the sub-basin of the Siverskyi Donets RBD Don includes: multi-purpose reservoirs - Pechenizke (383 million m^3), Oskilske (435.5 million m^3); systems for inter-basin flow transfers - the Dnipro-Donbas canal (from the Dnipro basin to the Siverskyi Donets sub-basin, including the Krasnopavlivka reservoir (410 million m^3), the Siverskyi Donets-Donbas canal system, including the Second Donetsk and South Donbas waterways for flow transfers from the Siverskyi Donets River. Siverskyi Donets to the low-water central and southern regions of Donetsk Oblast to the Lower Dnipro and Azov basins, including Mariupol.

One of the important factors that also determine the specifics of the Siverskyi Donets sub-basin of the Don RBD within Ukraine is the uneven distribution of flow along its length: the main flow regulators - the Pechenizke and Oskilske reservoirs - are located in Kharkiv Oblast, while the main and largest riverbed water intakes are located in the Siverskyi Donets River section. Siverskyi Donets River in Donetsk Oblast (intake into the Siverskyi Donets-Donbas Canal by the municipal enterprise Water of Donbas Company and Slavianska TPP of Donbasenergo) and the drinking water intake of the Popasna District Water Supply Company for the needs of Luhansk Oblast.

Since the second half of 2014, following the armed invasion of Russia, part of the sub-basins of the Siverskyi Donets and Lower Donets within Donetsk and Luhansk oblasts have been temporarily occupied by Ukraine. In total, 87% of the watershed area, or 47.5 thousand km^2 and 539 km of the Siverskyi Donets riverbed, remained in the Government-controlled territory, including the unchanged territory within Kharkiv Oblast. In Donetsk Oblast: the length of the Siverskyi Donets riverbed was entirely in the government-controlled area, the catchment area in the government-controlled area decreased from 8.01 thousand km^2 to 7.5 thousand km^2, and the sources of the Kryvyi Torets and Bakhmutka rivers remained in the temporarily occupied territory. The territory of the Siverskyi Donets sub-basin in Luhansk Oblast has undergone the greatest changes: the basin area in the government-controlled territory has decreased from 25.3 to 18 thousand km^2, the temporarily occupied territory of Ukraine includes the channel of the Siverskyi Donets from Svitlychne village (406 km from the mouth) to the border with Rostov Oblast (RF) (222 km from the mouth), as well as sub-basins of the right tributaries: Lugan, Luganchik, Bolshaya Kamenka and Kundryuchaya. The Lower Don sub-basin within the Luhansk region is completely within the temporarily occupied territory.

As of December 2023, about 50% of the catchment area and 35% of the Siverskyi Donets sub-basin remained in the government-controlled area: in Kharkiv oblast, the territory is entirely in the government-controlled area; in Donetsk oblast, the length of the Siverskyi Donets riverbed is entirely in the government-controlled area, and the catchment area has decreased to about 6.0 thousand km2 (the Bakhmuta River, the Luhan River, the sources of the Kryvyi Torets and Kazenyi Torets Rivers are located on the temporarily occupied territory; in Luhansk region, the territory is completely temporarily occupied.

After the full-scale invasion of Ukraine by the Russian Federation, the water sector and water management system were disrupted. As a result of damage to the hydrotechnical structures of the main channel regulating reservoirs, the following problems exist: Pechenizka Reservoir - it is impossible to fill it to its design levels and accumulate its resources; Oskilske Reservoir - it is completely impossible to accumulate resources and compensate for water intake into the Siverskyi Donets-Donbas Canal, the reservoir looks like a river; Rayhorod Dam - it is currently unable to guarantee the operation modes provided for by the operating rules to maintain the required level in the Siverskyi Donets for water intake into the Siverskyi Donets-Donbas Canal, as well as for environmental release to downstream sections of the Siverskyi Donets River (not lower than 22 m^3/s). In addition, the treatment facilities of the enterprises were damaged or destroyed, which affected the quality of water resources in the Siverskyi Donets sub-basin of the Don RBD.

In general, the Don River Basin is distinguished by the development of productive forces and a high population density, which has led to a high degree of regulation and use of water resources against the background of the region's low water availability, as well as the load of wastewater and pollutants in the basin's water bodies, which is complicated by the consequences of Russia's full-scale invasion and the associated risks of surface and groundwater pollution.

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.

Out of the five categories of surface waters (rivers, lakes, transitional waters, coastal waters, artificial and heavily modified water bodies), three categories of SWBs have been identified in the Don basin - "rivers", “lakes” and "AWB and HMWB".

For the typology and delineation of rivers and lakes, the EU WFD system A was used (Tables 1, 2).

Table 1. Descriptors for rivers (system A)

Descriptors		
Catchment height, m	**Catchment area, km^2**	**Geological rocks**
• midlands: over 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

Table 2. Descriptors for lakes (system A)

Descriptors			
Catchment height, m	**Average depth, m**	**Water mirror area, km^2**	**Geological breeds**
• midlands: over 800 • lowlands: 500 - 800 • upland: 200 - 500 • lowland: < 200	• shallow: <3 • average in depth: 3 - 15 • deep: >15	• small: 0,5 - 1 • average: 1 - 10 • large: 10 - 100	• limestone • silicate • organic

The Don RBD is located within one ecoregion, the Eastern Plains (number 16).

The rivers of the basin are classified 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 by catchment area.

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

The basin's geological rocks are of two types: limestone (Ca) and silicate (Si).

Table 3. Types of SWBs in the "rivers" category

№	Type code	Type
1	UA_R_16_S_1_Ca	a small river in the lowlands in limestone rocks
2	UA_R_16_S_1_Si	a small river in the lowlands in silicate rocks
3	UA_R_16_S_2_Ca	a small river on a hill in limestone rocks
4	UA_R_16_S_2_Si	a small river on a hill in silicate rocks
5	UA_R_16_M_1_Ca	medium-sized river in the lowlands in limestone rocks
6	UA_R_16_M_1_Si	medium-sized river in the lowlands in silicate rocks
7	UA_R_16_L_1_Ca	a large river in the lowlands in limestone rocks
8	UA_R_16_L_1_Si	a large river in the lowlands in silicate rocks
9	UA_R_16_XL_1_Ca	a very large river in the lowlands in limestone rocks
10	UA_R_16_XL_1_Si	a very large river in the lowlands in silicate rocks

The category "lakes" includes 1 type of SWB (Table 4).

Table 4. Type of SWB in the "lakes" category

№	Type code	Type
1	UA_L_16_L_1_SH_Si	a large lake in the lowlands is shallow in silicate rocks

1.1.12 Reference conditions

The assessment of the ecological state of the SWB is based on a comparison 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 impact,
- 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, phyto-benthos, 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 Don RBD, the SWBs was determined on 253 rivers (according to the State Water Cadastre: Accounting of Surface Water Bodies geoportal of the SAWR).

Within the Don RBD, 699 SWBs have been identified. The identified SWBs are classified into the following categories of surface water:

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

Category "rivers"

According to the Methodology, 488 SWBs of the "rivers" category were identified. The number of identified SWBs depending on descriptors and types is shown in Tables 5 and 6.

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

Descriptor	Indicator	Number of SWBs
by eco-region	Eastern plains	488
by catchment area	small (S)	312
	average (M)	139
	large (L)	32
	very large (XL)	5
by the height of the catchment area	on a hill	39
	in the lowlands	449
by geological type	in silicate rocks	349
	in limestone rocks	139

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

№	Type code	Type	Quantity of the designated SWB
1	UA_R_16_S_1_Ca	small river in the lowlands in limestone rocks	66
2	UA_R_16_S_1_Si	a small river in the lowlands in silicate rocks	207
3	UA_R_16_S_2_Ca	a small river on a hill in limestone rocks	38
4	UA_R_16_S_2_Si	a small river on a hill in silicate rocks	1
5	UA_R_16_M_1_Ca	medium-sized river in the lowlands in limestone rocks	28
6	UA_R_16_M_1_Si	medium-sized river in the lowlands in silicate rocks	111
7	UA_R_16_L_1_Ca	a large river in the lowlands in limestone rocks	6
8	UA_R_16_L_1_Si	a large river in the lowlands in silicate rocks	26
9	UA_R_16_XL_1_Ca	a very large river in the lowlands in limestone rocks	1
10	UA_R_16_XL_1_Si	a very large river in the lowlands in silicate rocks	4

Category "lakes"

According to the Methodology, 1 SWB of the "lakes" category was identified (Table 7).

Table 7. SWB of the "lakes" category

№	**Type code**	**Type**	**Quantity of the designated SWB**
1	UA_L_16_L_1_SH_Si	a large lake in the lowlands is shallow in silicate rocks	1

Category "heavily modified water bodies"

There are 203 HMWB were identified in the Don RBD. The share of HMWBs in the total number of SWB in the Don RBD is 29%. The bulk of them (155 SWBs) are classified as HMWB due to their overregulation.

21 SWBs are classified as HMWBs due to channel straightening.

26 SWBs are classified as HMWBs due to a combination of regulation and channel straightening.

1 SWB is classified as an HMWB due to fluctuations in water levels below the dam (Figure 1).

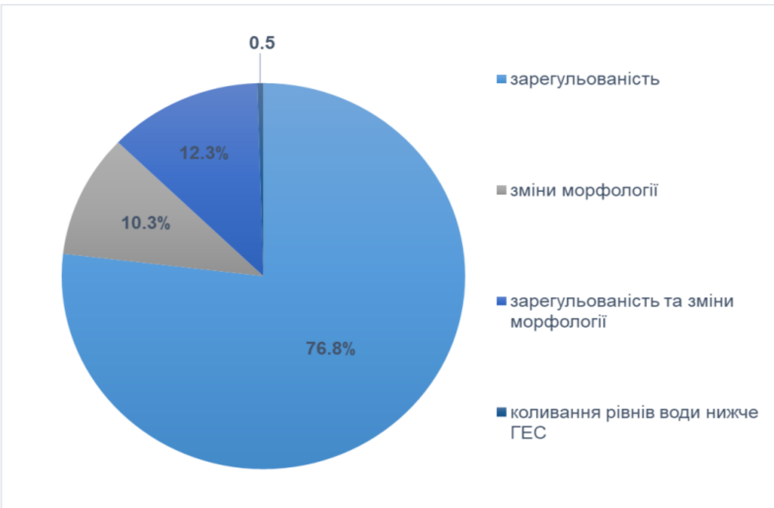


Figure 1. Distribution of HMWBs by causes of hydromorphological pressures, %

Category "artificial surface water bodies"

In the Don RBD, 7 AWBs have been identified. Of these, 2 are canals, and 5 are ponds and reservoirs.

The percentage distribution of the identified SWBs in the Don RBD by category is shown in Figure 2.

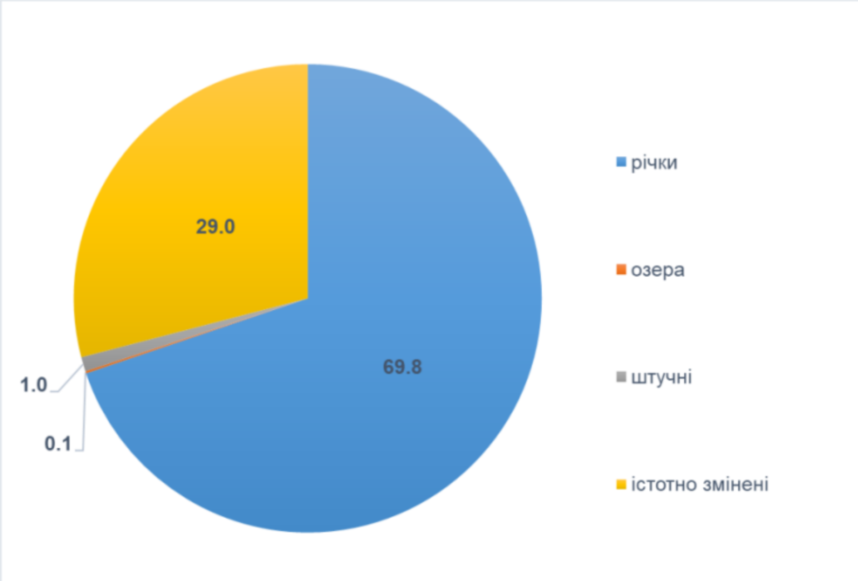


Figure 2. Breakdown of identified SWBs by category, %.

Each of the 699 SWBs identified in the Don RBD has been assigned a unique code that looks like this:

UA_ M6.5.1_YYYY and UA_ M6.5.2_YYYY

- *UA* - Ukraine
- *M6.5* - code of the Don RBD (according to the Order of the Ministry of Ecology and Natural Resources of 29.03.2017 No. 103 "On Approval of the Boundaries of River Basin Districts, Subbasins and Water Management Areas")
- *M6.5.1* - code of the Siverskyi Donets sub-basin
- *M6.5.2* - Lower Don sub-basin code
- *YYYY is the* unique number of the designated SWBs in the Don basin.

Each linear SWB (categories "rivers", "AWB" or "HMWB") has a length (km). The length of the SWBs in the Don RBD ranges from 0.1 km (UA_M6.5.1_0634 - Matyakina River) to 322.6 km (UA_M6.5.1_0004 - Siverskyi Donets River).

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

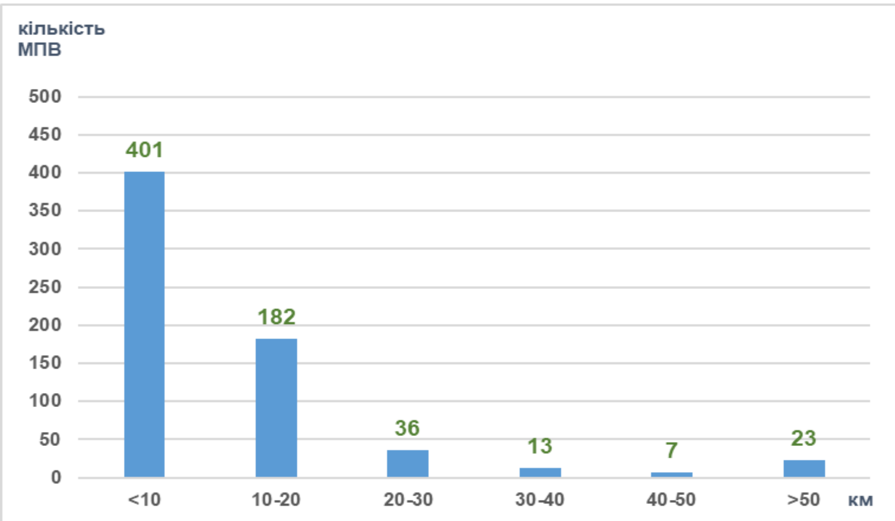


Figure 3. Distribution of the identified linear SWBs by length

Each polygonal SWBs (categories "lakes", "AWB and HMWB") has an area (km^2). The area of the Don RBD SWBs ranges from 0.22 km^2 (UA_M6.5.1_0349 - Cherkasy reservoir) to 91.2 km^2 (UA_M6.5.1_0189 - Oskil reservoir).

The distribution of the identified polygonal SWBs in the Don RBD by area is shown in Figure 4.

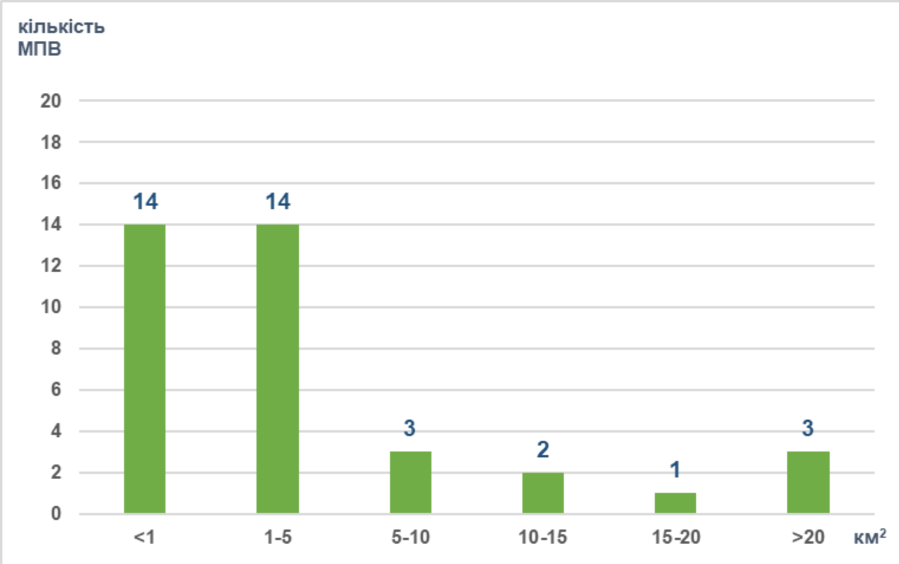


Figure 4. Distribution of identified polygonal SWBs depending on the area

1.2.2 Groundwater

The determination of the GWB 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 GWB includes the division of aquifers into smaller units, the preliminary establishment of GWB boundaries based on individual characteristics and available knowledge of hydrogeological systems and anthropogenic impacts.

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 withdrawals of more than 10 m^3 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 GWB 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:

UAM6510Q101

- UA – Ukraine,
- M65 – is the code for the Don basin,
- 1 – river sub-basin, according to the Water Code,
- 0Q – geological system (geological age of water-bearing rocks),
- 101 – the number of the GWB.

The Don RBD is associated with Quaternary, Neogene, Paleogene, Cretaceous, Jurassic, Triassic, Permian, and coal-bearing aquifers. The water-bearing rocks are sands, loams, porous and fractured sandstones, karst, fractured marls, chalk and limestone. Water-resistant clays, dense sandstones and limestones are developed between the water-bearing rocks. However, there is a lot of fracturing of the aquifers, which leads to the creation of single aquifer complexes.

In total, 39 non-pressure, pressure and non-pressure GWB and groups of pressure GWB and pressure GWB have been identified in the basin (Tables 8, 9, 10, 11).

The GWB were allocated in accordance with the Methodology for Determining Surface and Groundwater Bodies, approved by the Order of the Ministry of Ecology and Natural Resources of Ukraine No. 4 of 14 January 2019.

Table 8. Non-pressure, pressure and non-pressure GWB

GWB code	GWB	Area of the GWB, km^2
UAM6510Q101		

GWB code	GWB	Area of the GWB, km^2
UAM6510Q102 UAM6510Q103 UAM6510Q104 UAM6510Q105 UAM6510Q106	GWB in alluvial deposits of the Quaternary system	12912

Table 9. Non-pressure, pressure and non-pressure GWB

GWB code	GWB	Area of the GWB, km^2
UAM6510N100	GWB in alluvial deposits of Pliocene terraces	2908,5

Table 10. Pressure and non-pressure GWB

GWB code	GWB	Area of the GWB, km^2
UAM651PG100	GWB in Eocene-Miocene sediments	9300,8
UAM651PG200	GWB in the Kyiv, Kharkiv, Beretska and Novopetrovska sediments	11894,7
UAM6510K101 UAM6510K103 UAM6510K104 UAM6510K105 UAM6510K106 UAM6510K108 UAM6510K110 UAM6510K111 UAM6510K112 UAM6510K113 UAM6510K114 UAM6510K116 UAM6510K117	GWB in the Upper Cretaceous sediments	14954,14
UAM6510P100	GWB in Lower Permian sediments	1801
UAM6520C100 UAM6510C101 UAM6510C102	GWB in terrigenous carbonate sediments of the coal system	9196
UAM6510C103 UAM6510C104 UAM6510C105		

Table 11. Pressure GWB and groups of pressure GWB

GWB code	GWB	Area of the GWB, km^2
UAM6510K200	GWB in the Cretaceous Alb-Cenomanian deposits	10177,7
UAM6510K102 UAM6510K107 UAM6510K109 UAM6510K115	GWB in Upper Cretaceous sediments	13148,03
UAM651PG300	GWB in the Kaniv-Buchatsky Eocene sediments	19348
UAM6510J100	GWB in the Oxfordian and Kimeridgeian deposits of the Upper Jurassic	13635
UAM6510J200	GWB in Middle-Upper Jurassic sediments	3769,7
UAM6510T100	GWB in Upper Triassic sediments	5562,5
UAM6510T200	GWB in Lower-Middle-Upper Triassic sediments	7355

GWB in alluvial deposits of the Quaternary system (UAM6510Q101, UAM6510Q102, UAM6510Q103, UAM6510Q104, UAM6510Q105, UAM6510Q106)

The alluvial Quaternary aquifers are distributed on the terraces that lie in a strip along the valley of the Siverskyi Donets River and its tributaries (the Luhan, Oskil, Derkul, Aidar, Bila, Kazennyi Torets and other rivers). Alluvial groundwater is confined to river valleys.

The depth of the Quaternary groundwater aquifers ranges from 1.0 to 25.0 metres. The thickness of the aquifer varies from 5.0 to 28.0 m. The groundwater has a free surface. The flow rates of wells and boreholes are 0.1-1.8 dm^3/s.

The water-bearing sediments are coarse and fine-grained sands, quartz with layers of silt, clay and loam. The aquifers are mostly unconfined or locally confined, where the horizon is overlain by deposits of the same age within the floodplain terraces.

The aquifer is fed mainly by precipitation and recharged in river floodplains during floods and by water inflows from the aquifers below. Groundwater is discharged in river valleys and gullies. The alluvial aquifer is hydraulically connected to the Upper Cretaceous aquifers and the underlying coal deposits. Therefore, the highest groundwater discharges are observed in these sections of the Siverskyi Donets River.

Alluvial water is filtered through an eluvial layer of clay marls (the "siltation" zone). Lenticular clay inclusions also serve as a water retaining layer.

The chemical composition of groundwater is quite varied. The waters are sulphate-hydrocarbonate, hydrocarbonate-sulphate calcium-sodium and calcium-magnesium with water salinity ranging from 0.4 to 3.0-4.5 g/dm^3. The total hardness varies between 4.0-43 $mmol/dm^3$. The highest water salinity is observed in the watersheds of the left tributaries of the Siverskyi Donets River, where aquifers are common in the thickness of alluvial sands of floodplain terraces, with water salinity of 8.0-13.0 g/dm^3, sulphate water prevails. Fresh water with a salinity of 0.2-0.6 g/dm^3, sometimes in the floodplain it reaches 1.0-1.2 g/dm^3 and more: in Donetsk Oblast it is 8.4 g/dm^3, in Kharkiv Oblast it reaches 5.37 g/dm^3. The total hardness varies between 15-30.0 $mmol/dm^3$, in some places in the Luhansk region it reaches 4.0-43 $mmol/dm^3$.

The formation of the chemical composition of groundwater in alluvial deposits of the Quaternary system is significantly influenced by river, industrial water and domestic wastewater discharged into rivers.

In the basement, in most of the area of the GWB distribution, there are mainly Paleogene and Cretaceous sediments, and in the Donetsk folded area - sediments of different ages of the Paleozoic and Mesozoic (Neogene, Triassic, coal).

The increased mineralisation of groundwater in the alluvial aquifer complex, which is hydraulically connected to the surface waters of the Kazennyi Torets River (Donetsk Oblast), is caused not only by anthropogenic conditions, but also by natural ones, namely the geological structure: the presence of anticline and dome structures with saline Lower Permian sediments. The presence of halogen deposits in the geological section and their dissolution causes the formation of highly mineralised waters and sodium chloride brines.

In the valleys of the right-bank tributaries of the Siverskyi Donets River, the salinity of groundwater, namely mineralisation and chemical type of water, is significantly affected by discharges of industrial and mine water (Lugan and Kazennyi Torets rivers).

Due to their shallow occurrence and easy capture (shallow wells and boreholes), alluvial deposits are widely used by the local population for individual household and drinking water supply. However, due to the low water content and poor water quality of alluvium, they are not recommended for centralised drinking water supply.

In some areas, in particular at Slovianska, which intercepts brines, there is a constant gradual increase in the salinity composition of groundwater (mineralisation, total hardness, chlorides, etc.), and there is a risk of not achieving the environmental goals for the quality of groundwater.

Within the sub-basins of the Lugan, Bakhmutka, Kazennyi Torets, Bilenka and other rivers, the presence of micro-components (chromium, cobalt, manganese, phosphorus, etc.) in alluvial aquifers exceeding the TLV by several times was recorded.

GWB in alluvial deposits of Pliocene terraces (UAM6510N100)

These deposits are very widely distributed in the Siverskyi Donets sub-basin. This aquifer complex is most exposed on the left bank of the Siverskyi Donets River.

For household drinking purposes with groundwater extraction of more than 10.0 m^3/day, these waters are used only in the northern part of the sub-basin - in the Kharkiv region.

The water-bearing rocks are brownish-grey, yellow, sometimes clayey quartz fine- and medium-grained sands. The thickness of water-bearing rocks reaches 15-25.0 m. The absence of a lower water table ensures hydraulic connection of the aquifer with the underlying Paleogene aquifers, into which discharge occurs.

The wells are fed by infiltration of precipitation. The well flow rates vary from 0.8 dm^3/s to 2.5 dm^3/s with a groundwater level drop of 9-10.0 m.

The water level ranges from 2 m to 8.0 m. The waters are non-pressure or pressure-non-pressure (local head can reach 12.0 m).

In terms of chemical composition, the waters of this horizon are mainly of the hydrocarbonate-sulfate, calcium-sodium type and mixed, with a salinity of up to 1.0 g/dm^3.

The groundwater is used for water supply to small facilities and for local water supply. The aquifer is distributed on the left bank of the Vovcha, Plotva, Oskil and Siverskyi Donets rivers.

The water-bearing rocks are represented by different-grained sands, sandy loams, loams with clay layers. The thickness of Eocene-Miocene sediments ranges from 48 to 150 m.

Water-bearing sediments are mainly found on clays and marls of the Kyiv Formation. The water table depth ranges from 1.1 to 14.5 m. The depth of the wells that capture this horizon is 3.4-17 m.

The aquifer has a free surface. The aquifer is fed by infiltration of precipitation and water inflow from underlying aquifers, and discharged in river valleys and gullies in the form of springs with a flow rate of 0.86 to 30.0 m^3/day. Filtration coefficients vary between 0.01 and 4.56 m/d.

The aquifer's regime depends on the amount of precipitation and, in some areas, on the regime of rivers. The aquifer is unprotected in terms of its occurrence and feeding.

The chemical composition of the water is hydrocarbonate-sulphate, sulphate-hydrocarbonate in terms of anions and calcium-sodium, magnesium-calcium and mixed in terms of cations. The salinity of groundwater varies from 1.1 to 4.6 g/dm^3, and the total hardness ranges from 10.1 to 36.0 mmol/dm^3. The water is often contaminated with nitrates, the content of which in some cases exceeds the TLV by 2.4-16 times.

The aquifer is widely used by the rural population for drinking and household purposes through wells and boreholes as the only source of water supply.

GWB in the Kyiv, Kharkiv, Beretska and Novopetrivska sediments (UAM651PG200)

The groundwater of these deposits has a limited distribution. The waters are pore-forming, non-pressure. The water-bearing rocks are sands and sandstones, rarely siltstones. The water table depth is 1.5-7.0 m. Water enrichment is weak. The flow rates of springs do not exceed 0.4 dm^3/s, of wells - 0.01- 0.2 dm^3/s, with a drop of 1-2.5 m. Filtration coefficients are 0.004-4.0 m/d.

The groundwater is recharged by infiltration of precipitation. The underground water is discharged into springs and ponds or into underlying aquifers.

The waters are predominantly fresh (up to 1.0 g/dm^3). In areas where the Beretska-Novopetrivska sediments are overlain by loams, the mineralisation increases to 2.0-3.0 g/dm^3.

Waters from sodium hydrocarbonate to sodium sulphate-chloride. This horizon has no practical significance in Luhansk Oblast, but in Donetsk and Kharkiv Oblasts it is widely used for local water supply and can be contaminated.

GWB in the Kaniv-Buchaky Eocene sediments (UAM651PG300)

The aquifer is represented by sands of various grains with clay and siltstone interlayers. The thickness of the water-bearing rocks is 5-38 m, and the depth ranges from 10.3 m to 98 m. Only in the valleys of large rivers (Siverskyi Donets, Oskil, etc.), where the Kyiv Formation deposits are eroded, do the Buchach deposits directly overlie Quaternary or Neogene alluvial formations. The aquifer is predominantly pressure. The Buchachian sediments of the Eocene series are mainly overlain by marl and chalk strata of the Maastrichtian and Campanian stages, as well as by Jurassic and Triassic formations.

The flow rates of the sources are from 0.01 to 11.0 dm^3/s, and of the wells are 0.05-0.1 dm^3/s. Filtration coefficients range from 0.01-4.6 m/d. Groundwater salinity is 0.5-3.0 g/dm^3. The chemical composition is varied, from calcium hydrogen carbonate to sulphate chloride.

The aquifer is fed by groundwater flow from overlying aquifers and precipitation.

The aquifer is one of the main sources of water supply for individual facilities and settlements. The waters of the Kaniv-Buchaky deposits are used by the population for local water supply.

The aquifer is protected from pollution in most of its distribution, but in large settlements and industrial enterprises it is subject to anthropogenic impact.

GWBs in Upper Cretaceous sediments (UAM6510K101, UAM6510K103, UAM6510K104, UAM6510K105, UAM6510K106, UAM6510K108, UAM6510K110, UAM6510K111, UAM6510K112, UAM6510K113, UAM6510K114, UAM6510K116, UAM6510K117)

The water-bearing capacity of the marl and chalk strata is determined by the conditions of its occurrence, as well as the lithological composition and water-physical properties of the overlying sediments. The upper fractured zone, formed as a result of chemical and physical weathering, is watered. The fractured zone is divided into the upper subzone of silting and cementation, the middle subzone of maximum fracturing and the lower subzone of dying fracturing, which is replaced by monolithic chalk. The total thickness of the fractured zone reaches 100 m, but the first 50-70 m are the most fractured. The almost widespread development of fractures in the upper part of the marl and chalk strata creates favourable conditions for the formation of a powerful aquifer, which is widely used for water supply. Only in the far western part of the sub-basin does the stratum sink to a depth of more than 100 m, and the aquifer loses its practical significance.

The majority of observation wells and water intakes belong to this aquifer. Its regime is studied in the most detailed way within all geomorphological elements. The aquifer is widespread throughout the Dnipro-Donetsk artesian basin. The aquifer in the fractured zone of the marl and chalk strata of the Turonian-Maastrichtian Upper Cretaceous is most widespread in Luhansk Oblast. Its water enrichment is uneven, which is due to different degrees of fracturing and karstification of chalk and marl, as well as the nature of the relationship with the overlying and underlying aquifers and orohydrography.

The thickness of the fractured zone increases from watersheds to river valleys and large gullies, and follows the contours of the relief. The degree of its fracturing is consistent with the increase in its thickness and the direction of underground flow.

In the vertical section, the fractured zone is also heterogeneous. It has the highest degree of fracturing in the middle part. The depth of the lower boundary of the fractured zone in river valleys reaches 60-75.0 m. Along the rivers, in the area of development of their floodplains and first terraces, the upper part of the fractured zone is sometimes overlain by viscous clayey marl with a thickness of 1-10.0 m and very low filtration properties ("silting zone").

The thickness of the aquifer varies from 1.0 to 55-65.0 m, and the depth of the cover ranges from 10-20 m (within floodplains and floodplain terraces) to 45-70 m (in watersheds and riparian areas).

The aquifer is pressure and non-pressure. The head above the roof varies from 0.0 to 16-25.0 m. In river valleys, the aquifer has a head of up to 20 m. It is formed due to the slope of the fractured zone towards the valleys and the presence of weakly fractured marls and alluvial deposits in its cover. There is no water pressure in the watersheds. The same situation exists in the area of development of the upper terraces of the left bank of the Siverskyi Donets River, where the fractured aquifer is significant, but its supply is insufficient.

The maximum depths of static groundwater levels are 70-100 m in the watersheds, and up to 10 m in the valleys, especially near the river channels. The absolute water table levels of the Upper Cretaceous decrease from the watersheds to the river valleys from +130.0 to +25.0 m.

The maximum flow rates are observed in wells drilled along river valleys, especially on the left bank of the Siverskyi Donets River, where they reach 40-70 dm^3/s. On the valley slopes, the wells have flow rates of 1.5-14 dm^3/s, and within sandy terraces and the modern floodplain – 7.0-150 dm^3/s.

In the watersheds, the fractured zone of the Upper Cretaceous is practically waterless, with well flow rates of less than 0.05 dm^3/s. The conditional boundary of the virtually waterless zone is located along the contour of the Kyiv marls. The filtration coefficients of the Upper Cretaceous aquifer range from 5 to 200 m/d.

In the Siverskyi Donets River valley, there are wells with the highest flow rates of 20-165 dm^3/s. The permeability of rocks increases from watersheds to river floodplains. In the watersheds, the water permeability is 20-30 m^2/d, and within the floodplains – 200-300 m^2/d.

The Upper Cretaceous aquifer's feeding area coincides with its distribution. The aquifer is fed by precipitation and resources drawn from rivers, surface waters of rivers, lakes, and ponds, as well as capacitive reserves of alluvium in floodplains, which are periodically replenished during floods. The discharge is mainly into the river network.

The Siverskyi Donets River is the main drainage of groundwater in the Cretaceous horizon. The regime of the aquifer is largely related to fluctuations in surface water levels. In the wells located in the river floodplain, where the hydraulic connection with surface water is the highest, maximum fluctuations in groundwater levels of 1.0 to 3.0 m are observed. In the wells drilled on the valley slopes, water level fluctuations are insignificant. On the upper terraces, the aquifer regime is associated with precipitation.

The waters of the fractured zone of the Upper Cretaceous are calcium hydrocarbonate and calcium sodium hydrocarbonate-sulfate with mineralisation up to 1.3 g/dm^3. At the mouth of the Luhan River, the water in the Upper Cretaceous sediments is highly mineralised (2-12 g/dm^3), sodium chloride and contains hydrogen sulphide in the amount of up to 10 mg/dm^3.

In the watersheds, water salinity increases to 3-19 g/dm^3, and the waters become sulphate-chloride and chloride-sulphate calcium-sodium, sodium-calcium.

The Upper Cretaceous and alluvial aquifers within the study area are directly connected in the process of water exchange, so the operation mode of the Upper Cretaceous aquifer affects the level regime of the alluvial aquifer. Water exchange is also affected by slowdown in underground flow, which is the result of buried foundations and underground structures, disorderly stormwater runoff and possible leaks from water supply networks, which leads to flooding of the territory.

The operation mode of water intakes of the right-bank tributaries of the Siverskyi Donets River is influenced by irrigation of agricultural areas, which causes a significant increase in the levels of the exploited aquifer. The anthropogenic factor plays a significant role in shaping the water balance of the area, which complicates groundwater recharge conditions.

Due to the fact that the Upper Cretaceous fractured zone aquifer is developed over a large area, it is the main source of water supply for settlements. Due to its shallow occurrence, good water quality, relatively high flow rates, and simple well designs, this aquifer is widely used to supply water to both small and large water consumers. The most promising areas for its exploitation are the river valley areas. In watersheds, its value decreases sharply due to a sharp decline in water enrichment.

Groundwater from the fractured zone of the marl and chalk strata of the upper part of the Cretaceous system is used for both centralised and individual drinking and technical water supply to cities, industrial facilities and rural villages. This horizon remains the most promising for exploration planning. In the Luhansk region, this aquifer is the main source of groundwater supply for the population.

GWB in the Cretaceous Alb-Cenomanian deposits (UAM6510K200)

The water-bearing sediments are multigrained glauconite sands and fine-grained sandstones of the Albonian stage and medium-fine-grained sands of the Cenomanian stage with clay interlayers and lenses. The depth of water-bearing rocks varies from 233 m (Dvorichanskyi district) to 583 m (Shevchenkivskyi district of Kharkiv region). The thickness varies from 2.0 to 50 m.

The water is highly pressurised, with a head ranging from 5-45 m to 224-438 m, and the head increases with depth. Filtration coefficients range from 0.6-4.7 m/day. The value of the water conductivity coefficient varies from 60 m^2/day to 115 m^2/day.

The production wells drilled at this complex have a production rate of 84-717.1 m^3/day at water levels of 1.7-42 m. Well flow rates in the Kharkiv region are 1.5-100 dm^3/s.

The water table depth varies from 2.1 m (Izium district) to 146 m (Shevchenkivskyi district). Some wells in the Dvorichansky and Kupyansky districts are self-pouring, and the water level exceeded the wellhead level by 1.0-18 m. The general slope of the piezometric surface is south-west.

The chemical composition of the water is mainly sulphate-hydrocarbonate sodium-calcium or mixed in terms of cations and anions (Dvorichansky and Velykoburlutsky districts), sodium chloride-hydrocarbonate water prevails in Shevchenkivsky district, and sodium hydrocarbonate-chloride water prevails in Kupyansky district. The water often contains excessive levels of iron ions. The water salinity is 0.5-1.9 g/dm^3, the total hardness is 1-22.5 mmol/dm^3.

The lower aquifer is made up of clays and siltstones of the Titonian stage of the Upper Jurassic with a thickness of 16-20 m.

The aquifer is reliably protected from pollution from the surface and is intensively exploited for domestic, industrial, technical and agricultural water supply to both small and large water consumers in Vovchansk, Shevchenkivsk and Velykoburlutsk districts of Kharkiv region. The water intakes operating this aquifer complex operate on unapproved reserves.

Long-term exploitation of the aquifer complex has led to a decrease in elastic reserves and the development of a depression sinkhole in the Kharkiv region.

It is not recommended to use the groundwater of this complex in the area of dome-shaped structures, as it has increased mineralisation.

GWB in the Upper Jurassic Oxfordian and Kimeridgeian deposits (UAM6510J100)

The Jurassic deposits that lie within the Luhansk Oblast, in the northwestern part of the territory, are not of interest for water supply. However, Jurassic sediments, which are widespread in the Upper Jurassic Kimeridzhian and Oxfordian aquifers, are used for water supply and are represented by fractured sandstones, limestones and fine-medium grained sands. The aquifer was discovered by wells in Velykoburlutskyi, Shevchenkivskyi and Borivskyi districts of Kharkiv region**.**

The depth of the aquifer cover varies from 350 to 550 m, and the thickness of water-bearing rocks is 20-50 m. The aquifer is a pressure aquifer, with a static water level at a depth of 50-60 m, which corresponds to a head of 370-510 m. The flow rate of the wells drilled into this aquifer is 600-950 m^3/day at water levels down to 50 m. The specific flow rate of the wells varies from 2.59 to 25.9 m^3/day. The chemical composition of the water is calcium-sodium hydrogen carbonate-sulfate and sodium chloride-hydrogen carbonate with a mineralisation of 0.6-0.8 g/dm^3 and a total hardness of up to 4 mmol/dm^3.

This aquifer is fed by the western spurs of the Voronezh massif and discharges into the underlying aquifers.

This aquifer is promising for the purposes of domestic water supply to large water consumers. It is used to supply water to the cities of Lozova, Izium, Kharkiv and other small facilities.

GWB in Middle-Upper Jurassic sediments (UAM6510J200)

The water is confined to grey quartz sands and sandstones. The depth of the aquifer ranges from 238 m to 382 m. The thickness of water-bearing rocks is 6-80 m. The water is pressurised, with a head of 230-371 m. Some of the wells that have discovered this horizon are self-priming with a flow rate of up to 15.6 m^3/d. The wells drilled in the Dvorichansky district have flow rates from 138 to 432 m^3/d with a water level drop of 18-48 m, the water table depth is 10-43 m. The chemical composition of the water is sodium-calcium bicarbonate, calcium-sodium chloride and sodium bicarbonate-chloride, with a mineralisation of 0.6-1.5 g/dm^3. The water is transparent, colourless and odourless, pleasant in taste, with a total water hardness of 1.8-6.7 mmol/dm^3.

Some wells that have uncovered an aquifer in the deposits of the Bayosian stage of the Middle Jurassic are used by the population of Dvorichansky district of Kharkiv region for domestic and drinking water supply.

In the Balakliya and Izyum districts, this aquifer lies closer to the surface and is also often exploited by wells for domestic water supply.

The aquifer in the Middle-Upper Jurassic sediments is widely developed in the synclinal structures of the Bakhmutska basin and in the middle part of the Kalmius-Toretska basin and extends to the surface and under the Quaternary sediments in the form of narrow strips. Water-bearing rocks are gravelly sands, sands and sandstones. The thickness varies from 3-5 to 200 m. The depth of aquifers varies from 0.7 m on the sides of anticline structures to 300 to 700 m in interdome troughs. The waters are pressure. The head is 14.7-150 m. Well flow rates are 0.2-1.9 dm^3/s. Filtration coefficients are 0.1-20 m/d. Mineralisation is 0.7-2.7 g/dm^3. Water of sulphate-chloride, calcium-sodium bicarbonate type. It is used for local water supply by separate production wells.

GWB in Upper Triassic sediments (UAM6510T100)

The water-bearing complex is widespread in the Bakhmutska basin and is represented by sandstones, colourful clays and siltstones. The Triassic waters are pore-forming, pressure waters.

The depth of the aquifer complex is 46-354.4 m in Izyum district and 57-466 m in Balakliya district. The revealed thickness of the aquifer ranges from 11.2 to 99 m, the water level is 0-77 m, some wells are self-pouring, and the head is 0-448 m.

The horizon is characterised by filtration heterogeneity, with maximum well flow rates ranging from 1.3 to 59.6 m^3/d and filtration coefficients of 0.13-3.8 m/d. The waters of the Triassic aquifer are sodium chloride and chloride-sulfate with mineralisation from 2 to 30 g/dm^3, the total hardness varies from 0.6 to 40.8 mmol/dm^3.

The Triassic waters are hydraulically connected to the Carboniferous aquifers and are located in the zone of complicated water exchange, which is why they are highly saline. The waters are characterised by an increased content of such a microcomponent as bromine (38.6-117 mg/dm^3). In this regard, Triassic waters have balneological value and can be used in the form of baths to treat respiratory and peripheral nervous system diseases.

The aquifer complex is fed by infiltration of precipitation and by unloading overlying aquifers.

The groundwater of the complex is a source of water supply for the towns of Kramatorsk and Oleksandriya. Kramatorsk and Oleksandrivka.

There are observation wells drilled into the Triassic aquifer in the Luhansk region.

GWB in Lower-Middle-Upper Triassic sediments (UAM6510T200)

The following aquifers in the Lower-Middle-Upper Triassic sediments unite the following aquifer complexes in the sediments: the Upper Triassic Protopian Formation; the Lower-Middle Triassic Serebrianka Formation; and the Lower Triassic Dronivska Formation.

The water-bearing rocks are fine-grained sandstones, sometimes medium-grained sandstones, ranging in thickness from 3-8 m to 50-80.0 m, with interlayers of clays, mudstones, and siltstones. The total thickness of the aquifers is 80-450 m.

Medium- and fine-grained sandstones have a low open porosity coefficient (10-21%). The water is pressure. The piezometric levels in the river valleys are up to +8.5 m and up to 50-70 m in the watersheds. The piezometric surface of groundwater decreases both in the direction of the aquifer complex dipping and towards the valleys of the Siverskyi Donets, Kazenyi Torets and Sukhyi Torets rivers.

The depth of the aquifer complex varies from 0.0-100.0 m in the places of outcrops to the diurnal or Precenozoic surface to 400-1100 m in the axial parts of the Bakhmut and Kalmius-Toretsk basins. The head varies from 20-45 m to 210-1000 m.

The well flow rates vary from 0.3 dm^3/s to 10.5 dm^3/s at depths of 40-70 m. The filtration rate is 0.4-7.0 m/d. In the weathering zone, in the feeding areas, under conditions of active water exchange, mainly hydrocarbonate-sulfate and sulfate-hydrocarbonate calcium-sodium groundwater with a salinity of 0.5-0.8 g/dm^3 is formed.

As the aquifer complex sinks to a depth, the water becomes sulphate, sulphate-hydrocarbonate to sodium chloride brines with an increase in mineralisation from 3.0 to 6.3 g/dm^3.

Groundwater is recharged by infiltration of precipitation within the outcrops to the surface and partially by inflow from overlying Cenozoic sediments.

The use of groundwater for drinking purposes is advisable in the area of sediments outcrop on the daytime surface and the pre-Cenozoic surface on the left bank of the Bakhmutka and Sukhyi Torets rivers, in the northern part of the Slavic Dome and in the area of Kreminna. The aquifer complex is used for drinking water supply of small enterprises.

GWB in Lower Permian sediments (UAM6510P100)

Groundwater massifs have been identified in the Permian system sediments exploited within the Siverskyi Donets sub-basin, which include the following aquifers in the sediments: the Lower Permian Nikitivska Suite; the Lower Permian Kartamykska Suite; and the Lower Permian Slavianska Suite.

The water content of the Permian sediments is poorly understood, but groundwater is more widespread in the sediments of the Kartamyska Formation aquifer complex. The water-bearing rocks of the formation are siltstones, mudstones and sandstones with low-permeability limestone layers. Groundwater of the Mykytytivska Formation is represented by sandstones with limestone interlayers.

The thickness of the aquifer complex varies from 100-200 m to 400 m. The upper part of the complex is represented by water-resistant rocks in most of the territory. The most suitable for drinking water supply are the waters of the Karthamian Formation within the outcrop of the Precainozoic surface, where the rocks are in the zone of intensive water exchange, and the mudstones and siltstones are also fractured and, together with sandstones and limestones, form a single watered zone with a thickness of 20-40.0 m.

In the areas where the aquifer is fed, groundwater is non-pressure. As the Kartamyska Suite sinks beneath Cenozoic sediments, the water becomes pressurised to 100 m or more.

Well flow rates in river valleys and beams increase from 0.1 to 25 dm^3/s, and average 5-10 dm^3/s.

The groundwater of this formation is very diverse in chemical composition. At the outcrops of water-bearing rocks on the diurnal or pre-Cenozoic surface, mainly hydrocarbonate-sulfate or sulfate-hydrocarbonate calcium-sodium waters with a salinity of 0.5-3.3 g/dm^3 are formed.

The aquifer is recharged mainly by infiltration of precipitation in the areas of outcrops to the surface.

The waters found in the Lower Permian Kartamyska Formation sediments are used for private water supply or small enterprises (Popasna, Luhansk Oblast).

Other aquifers in the Permian sediments are not suitable for water supply and can serve as a source of highly mineralised brines, as well as targets for prospecting for commercial deposits of Br, I and B.

GWB in terrigenous carbonate sediments of the coal system (UAM6520C100, UAM6510C101, UAM6510C102)

Coal deposits are represented by a thickness of argillites and siltstones interspersed with sandstones, limestones and coal seams.

The water-bearing rocks are limestone and sandstone, and sometimes groundwater is found in mudstones and siltstones. The thickness of sandstones is on average 15-20 m, sometimes reaching 70-120 m. The thickness of limestone does not exceed 2-3 m in most cases, but sometimes reaches 10 m.

Hydrogeologically, the worlds of the coal system differ little from each other, mainly in the number of aquifers (limestone and sandstone).

In the Starobilsko-Millerivska monocline, the aquifer complex is characterised by an increase in carbonate rocks, with its lower parts composed mainly of limestone and the upper part of argillites and siltstones.

In the zone of intensive weathering, all coal bed rocks are water-bearing. Here, they form a single zone with a close hydraulic connection to the overlying aquifers.

The water is pressure and non-pressure. The head above the roof is from 0.0-1254 m. Specific flow rates vary from 0.001 to 15.1 dm^3/s. Rock filtration coefficients are 0.01-98 m/d.

The chemical composition of groundwater is predominantly calcium-magnesium sulphate-hydrogen carbonate. Mineralisation is 0.5-6.3 g/dm^3.

The aquifer complex is fed by infiltration of precipitation at the outcrops and by flow from overlying aquifers.

Three districts are distinguished by the conditions of groundwater accumulation and circulation in the area:

1. The area of distribution of the complex of water-bearing coal deposits within the southern part of the Starobilsko-Millerivska monocline.
2. The area of distribution of a complex of water-bearing coal-bearing deposits within the fine fold zone underlying Meso-Cenozoic rocks.
3. The area of distribution of the complex of water-bearing coal deposits within the limits of the outcrop of coal formations to the surface.

The first area has minor rock fractures due to monoclinal gentle dipping and weak tectonic disturbance.

Sandstones with a porosity of 10-40% are water-bearing, while limestones are less common. Argillites and siltstones reliably isolate the aquifers. The groundwater of the complex has a significant head - 10-12.0 m above the ground surface. The initial flow rates of the drilled wells were 6-10 dm^3/s. A significant cover of practically permeable Upper Cretaceous sediments and screening of the area from the south by the Hlybokinske thrust (from the side of the coal bed mantle) resulted in slow water exchange.

Only sodium chloride waters with a mineralisation of 20-70 g/dm^3 are common in the area of this region in coal deposits; Br content - 140-200 mg/dm^3; J - up to 5 mg/dm^3; F - 5-12 mg/dm^3. The gas coming out of the flowing wells has a predominantly methane composition (up to 68-90%).

Limestone and sandstones are water-bearing in the second area, while clay and siltstone shales, mudstones, and siltstones are water-resistant. The water is fractured and stratified, less often pore water in sandstones. The most intense fracturing is recorded in areas of steep formation bends and in tensile zones on the wings of landslides. The wells in the area are pressure wells, with a head higher than the depth of the aquifer.

In the southern part of the second area, at the contact of open and blocked coal formations, sodium chloride-sulfate waters with a mineralisation of 10-20 g/dm^3 are developed. From the Samsonivske thrust and further north, a strip up to 9 km wide of sodium chloride-hydrogen carbonate, hydrogen carbonate-chloride waters with a salinity of 1.0-2.0 g/dm^3 extends under the marl and chalk strata. Near the Hlybokinske thrust, these waters are replaced by sodium chloride waters with a salinity of 3.0-20.0 g/dm^3.

With depth, chloride-sulphate and chloride-hydrocarbonate waters turn into sodium chloride waters containing bromine in the amount of 19.0 mg/dm^3 and iodine - 2-11.0 mg/dm^3.

Meso-Cenozoic sediments are an obstacle to groundwater recharge in coalbed methane formations.

Under these conditions, there is no water exchange, and the aquifer is poorly fed, occurring only through tectonic zones from the Upper Cretaceous aquifer at the outcrops of coal-bearing rocks to the ground surface. In the deeper horizons of the aquifer complex, water exchange is practically absent.

The third area covers the area of coalbed methane outcrops. The total thickness of the aquifer complex, represented by rocks of the middle and lower sections, varies from 4 to 8 km. The rocks have a high degree of metamorphism.

The weathering zone fractures are developed from the surface to a depth of 150 m throughout the area, with the maximum development in the river valleys. The cracks of the weathering zone penetrate the formations most densely at the surface to a depth of 15-20 m, regardless of lithological composition. Fracture water circulates in the weathering zone (up to 20 m), which is similar to groundwater. Their surface mirrors the relief. In rivers and gullies (with watercourses), the absolute elevations of the relief and groundwater levels are the same; in watersheds, the levels are 10.0 m below the daytime surface on average. At depths of 20-150 m, fracture and fracture-formation waters with low heads (1.0-6.0 m below the surface) are common.

The flow rates of springs and wells in the area of large structures development vary from 0.1 to 1.0 dm^3/s, sometimes the flow rate varies from 2.5 to 19 dm^3/s; in the strip of fine folding (along the border with overlapping coal formations) and in the area of the northern anticline, the flow rates are 0.01-0.1 dm^3/s. The average specific flow rates of wells drilled into limestone are 0.5-0.6 dm^3/s, into sandstones - 0.2-0.3 dm^3/s, into shale - 0.1-0.2 dm^3/s. Increased flow rates are observed at water points located near discharge zones (tectonic faults) and in river valleys where there is direct hydraulic interaction with surface water.

At depths of more than 150 m, tectonic fractures are of greatest importance. Limestone and sandstones are most fractured along the dumps, as well as in tensile areas and flexural bends. Coarse-grained sandstones and limestones have the most open fractures. From a depth of 300-400 m, the fracturing of aquifers begins to subside. Groundwater, pressure, levels are established at a depth of 5.0-20.0 m below the ground surface. The aquifer complex in the area of open coal formations is fed throughout the territory by atmospheric precipitation.

Groundwater discharge from the upper fractured weathered Carboniferous zone of this complex (to depths of 250-300 m) is carried out into gullies and rivers.

At depths of up to 200 m, groundwater has a chemical composition of sulphate-hydrocarbonate, calcium-sodium hydrocarbonate, calcium-magnesium with a salinity of 0.9-1.2 g/dm^3, the total hardness is 2-10.0 $mmol/dm^3$. In the north of the district, the water chemistry changes to sulphate-chloride, chloride-sulphate with a water salinity of 1.0-3.0 g/dm^3.

Along the Main watershed, where the deposits of the coal system are overlain by loams, groundwater has a sulphate-hydrocarbonate, sodium-calcium sulphate composition, with a water salinity of 2.5 g/dm^3.

In the south of the district, fresh water in some springs contains radon up to 50 emman.

In the western part of the area, groundwater has a sodium hydrogen carbonate-chloride, chloride-hydrogen carbonate composition. In the eastern part of the area, they change into sulphate-chloride, chloride-sulphate sodium waters with a water salinity of 1.0-2.0 g/dm^3. The depth of groundwater occurrence in the band of fine carbonate folding is up to 300 m.

The aquifer complex is widely used for centralised and individual water supply to both small and large water consumers. The aquifers in the coal deposits contain saline and bitter-saline water, which can be used for balneological purposes as highly mineralised brines, as well as for the production of bromine, iodine and boron.

Poor quality and quantity of groundwater in the areas affected by mines and other industrial facilities. Within the mine fields, the drained carboniferous strata are a group of close layers within which a local hydrogeological depression is formed, the dimensions of which extend beyond the mining contours, changing the chemical composition of groundwater, increasing its mineralisation, and increasing the content of sulphates and chlorides. The Vasylivka water intake with approved reserves (Chervonyi Partizan mine, Dovzhanskyi district, Luhansk region) is located within this groundwater massif, and a network of observation wells has been created.

GWB in terrigenous carbonate sediments of the coal system (UAM6510C103, UAM6510C104, UAM6510C105)

Carboniferous deposits are mainly clayey rocks interbedded with sandstones and limestones, which are widespread throughout the Lower Don sub-basin. The water-bearing rocks in the area of the folded carbonate development are sandstones and limestones, sometimes siltstone shales, sometimes clayey shales.

The coal seams are practically identical in terms of rock composition and differ little in hydrogeological terms, mainly in the number of aquifer layers (limestone and sandstone).

Carboniferous deposits are located at a shallow depth in the south of the area. The full capacity of the water-bearing complex, which is represented mainly by rocks of the middle and lower sections, varies from 4.0 km to the north to 18 km to the south.

The rocks are characterised by a high degree of metamorphosis.

Fractured weathering is widespread throughout the sub-basin area from the surface to a depth of approximately 100 m, with the most extensive fracturing in the river valleys. Maximum weathering fracturing is observed up to a depth of 15 m. Cracks in limestone can be traced to a depth of 150 m. Sandstones, especially fine-grained sandstones, have a dense network of cracks that do not extend to a considerable depth. Siltstone shales and, especially, clayey shales have minor fractures that extend to about 15 m in depth.

Water enrichment of coal deposits in the weathering zone is mostly low. The water is pressure and non-pressure. The head above the roof is 0.0-790 m. Specific flow rates vary from 0.001 to 15.1 dm^3/s. Rock filtration coefficients are 0.01-90 m/d.

The chemical composition of groundwater is predominantly calcium-magnesium sulphate-hydrogen carbonate. Mineralisation is 0.5-6.3 g/dm^3.

The aquifer complex is fed by infiltration of precipitation at the outcrops and by flow from overlying aquifers. The groundwater of the upper fractured weathered Carboniferous zone of this complex (to depths of 250-300 m) is discharged into gullies and rivers.

Groundwater of coal deposits is widely used within the open area of the Carboniferous. Waters with salinity up to 1.2 g/dm^3 are used for domestic and drinking water supply of mines and settlements. Groundwater is captured by wells with a depth of 50-100 m and shallow wells (up to 10.0 m). Within the Lower Don sub-basin, a network of observation wells for the natural groundwater regime has been established (Dyakove village, Antratsytskyi district, Luhansk oblast).

Characteristics of the Don RBD GWB groups are presented in Annex 2

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

2.1. Surface water

The Don RBD is located within 3 oblasts (Donetsk, Luhansk, Kharkiv). 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 2,420 settlements in the basin, with a population of about 8 million people, with a population density of about 90 people/km^2 in Kharkiv and Luhansk region, and about 160 people/km^2 in Donetsk region.
- Enterprises from various sectors of the Ukrainian economy. The main industrial sectors in the basin include mining, metallurgy, chemical and petrochemical, food processing, metallurgical production, and mechanical engineering.

  The main negative impact of coal mining is associated with mine water generated by groundwater drainage. The metallurgical industry is one of the largest water consumers, accounting for 19% of total industrial water consumption. The chemical industry includes a number of different production facilities that consume significant amounts of water and produce highly polluted and complex waste water. The machine-building industry is concentrated mainly in Kharkiv region, accounting for 10.5% of Ukraine's total output.
- Agriculture. It is one of the leading sectors of the economy in all three basin regions 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. They prevent the free passage of water, sediments and migration of aquatic organisms, and change the transit mode of rivers to an accumulation mode.

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 can lead to the risk of not achieving good ecological status of the SWB.

The assessment of the anthropogenic pressures on the SWB was carried out in accordance with the Methodological Recommendations for the Analysis of the Main Anthropogenic Loads 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 20.04.2023, Minutes No. 2.

The methodological basis of the assessment is 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).

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

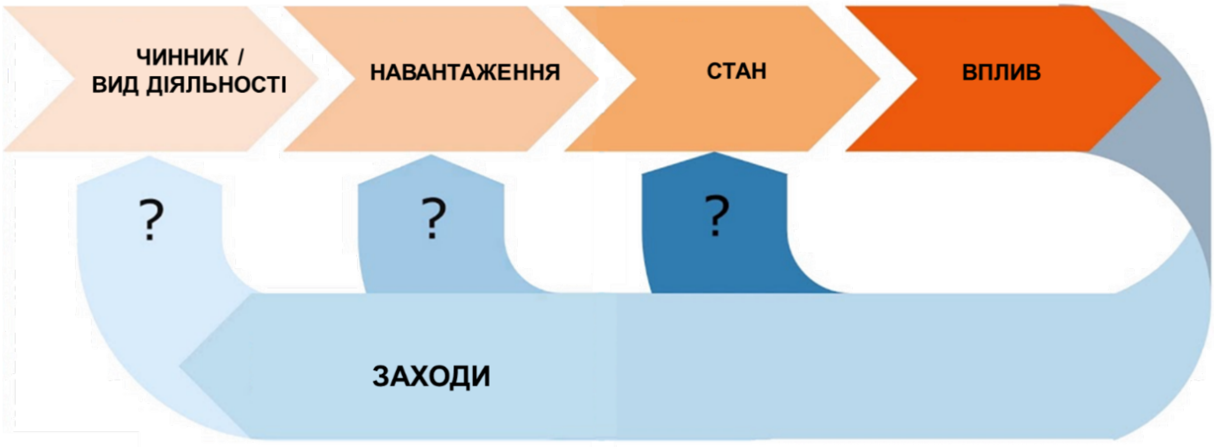


Figure 5. DPSIR conceptual model

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 comparing 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 state of the SWBs of the Don River Basin, the risk of not achieving good ecological status/potential was established (Fig. 6) for

- 196 SWB - "not at risk"

- 162 SWB - "possibly at risk"
- 341 SWB - "at risk"

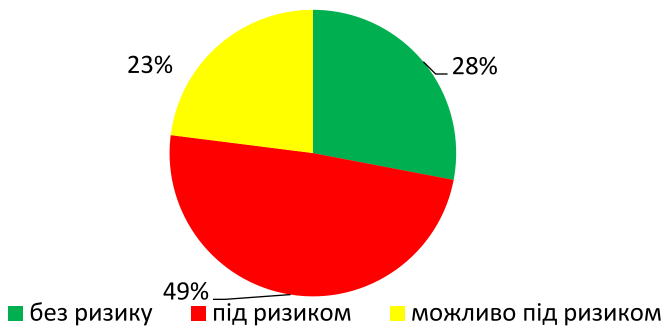


Figure 6. Risk assessment of failure to achieve good ecological status/potential based on the results of the assessment of anthropogenic pressures from point sources, %

Assessment of the risk of failure to achieve environmental objectives 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 state of the SWB of the Don River Basin, the risk of not achieving good ecological status/potential was identified (Fig. 7) for

- 1 SWB - "not at risk"
- 375 SWB - "possibly at risk"
- 323 SWB - "at risk".

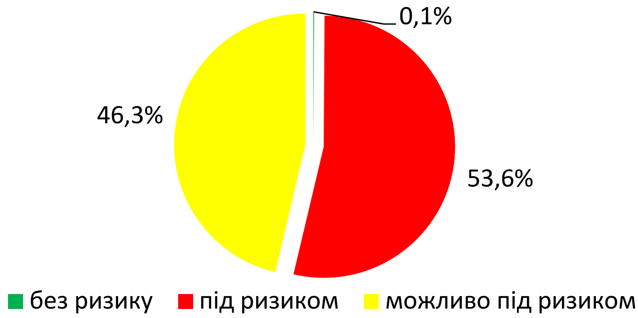


Figure 7. Risk assessment of failure to achieve good ecological status/potential based on the results of the assessment of anthropogenic pressures from diffuse sources, %

Assessing the risk of not achieving environmental objectives: hydromorphological changes

Based on the results of the assessment of anthropogenic pressures from hydromorphological changes and their impact on the status of the SWBs, the risk of not achieving good ecological status/potential (Fig. 8) was established for the following:

- 489 SWB - "not at risk"
- 1 SWB - "possibly at risk"
- 209 SWB - "at risk".

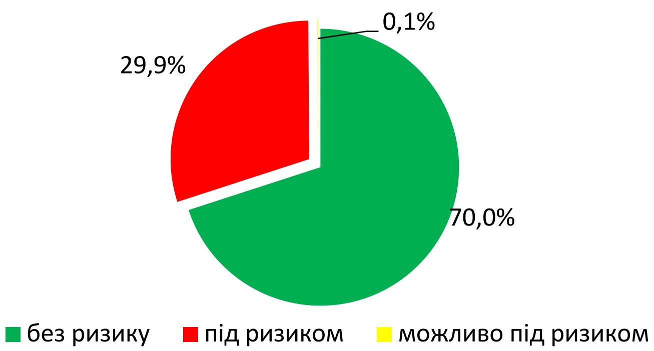


Figure 8. Risk assessment of failure to achieve good ecological status/potential based on the results of anthropogenic pressure assessment: hydromorphological changes, %

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 9):

- 1 SWB - "not at risk"
- 114 SWB - "possibly at risk"
- 584 SWB - "at risk".

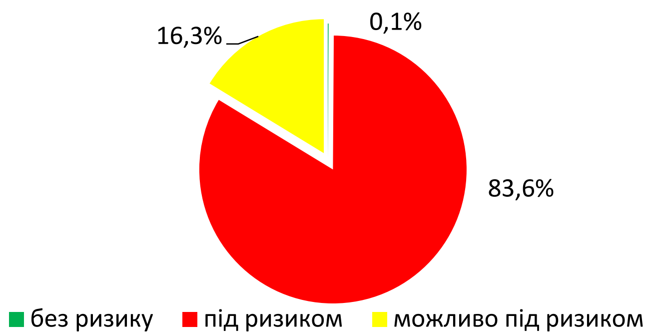


Figure 9. Generalised assessment of the risk of not achieving good ecological status / potential of SWB, %

Impact of military operations on the status of SWBs

In the Don River Basin, hostilities following Russia's armed invasion have been ongoing since the second quarter of 2014. As of 01.01.2022, 20% of surface water bodies were located in the temporarily occupied territory of Ukraine. Since 24.02.2022, the situation has deteriorated further due to Russia's full-scale invasion of Ukraine.

The Don River Basin is one of the most difficult in terms of natural conditions for the formation of water chemistry. The use of water from the Siverskyi Donets by industrial and municipal enterprises is characterised by significant volumes of water intake and discharge. Due to the active use of water resources in the Siverskyi Donets sub-basin of the Don RBD, its aquatic ecosystem has undergone significant changes.

Before 2014, the basin's surface waters were insufficiently supplied with oxygen, which indicates that the self-purification of the aquatic environment was inhibited.

The impact of Russia's armed invasion has primarily disrupted the sustainable and well-established water use system. Water intake volumes do not take into account the existing water balance, which can lead to significant shifts in the course of various processes when the ecosystem is unable to ensure its self-healing.

Another aspect of water use is water disposal, which must be controlled in terms of pollutant intake and compliance with maximum permissible discharges by business entities. As a result of Russia's armed invasion, emergencies have become more frequent, leading to the sudden release of a significant amount of pollutants in the discharge of waste water.

The system of continuous water monitoring has been disrupted, resulting in the interruption of long-term data series on the basis of which measures to improve the status of the SWBs are being designed, reducing the reliability of the conclusions drawn. Observation posts in the combat zone and temporarily occupied territories are closed.

A part of the statistical archives on agricultural indicators in Luhansk and Donetsk oblasts was lost, and conclusions on the main anthropogenic pressures and their impact, in particular from diffuse sources of pollution, were made on the basis of 2011-2012 data.

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

- **Destruction, shutdown, disruption of the technological process of treatment facilities and increased load on them due to the growing number of internally displaced persons**

The list of facilities in the Don RBD that have suffered damage, suspension or disruption of the sewage treatment plans is shown in Table 12.

Table 12. List of objects affected by hostilities

№	Entity	Information on destruction / damage
1	Kupyansk water utility company Kupyansk City Council	No information available
2	Municipal enterprise Vovchansk of Vovchansk city council	Information not provided
3	Soledar municipal Vodokanal enterprise	Information is not available due to the temporary occupation territories
4	Chasovoyarsk Regional Production Department Municipal Enterprise "Water of Donbass" (treatment facilities industrial wastewater after water treatment)	Buildings, structures and equipment have been destroyed and damaged. However, due to the hostilities and lack of access, it is impossible to inspect the facilities to provide specific information on the destruction and damage
5	Chasovoyarsk Regional Production Department Municipal enterprise "Water of Donbass Company" (Chasiv Yar)	Buildings, structures and equipment have been destroyed and damaged. However, due to the hostilities and lack of access, it is impossible to inspect the facilities to provide Specific information on destruction and damage
6	Chasovoyarsk Regional Production Department Municipal enterprise "Water of Donbass Company" (Siversk)	Buildings, structures and equipment have been destroyed and damaged. However, due to the hostilities and lack of access, it is impossible to inspect the facilities to provide Specific information on destruction and damage
7	Svitlodarsk city territorial community, servicing - Chasovoyarsk regional production department Municipal enterprise "Water of Donbass Company" (Novoluhanske village)	The treatment facilities are located on the temporarily occupied territory. Information on damage and destruction needs to be clarified
8	Donetskteplocomunenergo regional utility company (Sviatohirsk district heating company)	The visual inspection revealed damage to the compressors of the treatment facilities, a damaged boiler room, laboratory, and a completely destroyed hypochlorator room. Electricity is needed for further examination. The primary and secondary aeration tanks were damaged, one of two 400kVA transformers was destroyed by shelling, the well of the treatment plant was damaged and pumping equipment was stolen. A non-pressure discharge pipe was cut off as a result of shelling 500 mm collector in the area of Yarova village
9	Bakhmut-Voda utility company (Bakhmut)	Information is not available due to the temporary occupation of the territory
10	Bakhmut-Voda utility company (Ivanivske village)	Information is not available due to the temporary occupation of the territory
11	Municipal Unitary Enterprise "Mirkom" of the Myronivka Village Council of Bakhmut District Donetsk region	Information is not available due to the temporary occupation of the territory
12	Popasna District Water Utility Company Separate subdivision "Popasna Department" (Popasna)	Significantly damaged, the extent and list of damages/destructions cannot be determined at this time

№	Entity	Information on destruction / damage
13	Popasna District Water Utility Company Separate subdivision "Popasna Department" (Girske)	Significantly damaged, the extent and list of damages/destructions cannot be determined at this time
14	Popasna District Water Utility Company Separate subdivision "Popasna Department" (Zolote)	Significantly damaged, the extent and list of damages/destructions cannot be determined at this time
15	Lysychansk Municipal Specialised Enterprise "Lysychanskvodokanal	Significant damage has been sustained, the extent and list of damage/destruction is currently being established impossible
16	Kreminnavodokanal utility company Kreminna city community	Information is not available due to the temporary occupation of the territory
17	Rubizhanske Utility Company production department of the water supply and sewerage sector" Rubizhne City Council	Information is not available due to the temporary occupation of the territory
18	Popasna District Water Utility (industrial wastewater treatment facilities after water treatment)	Information is not available due to the temporary occupation of the territory
19	Popasna District Water Utility Company Separate subdivision "Popasna Department" (Toshkivka village)	Information is not available due to the temporary occupation of the territory
20	Municipal enterprise Popasna District Vodokanal Separate subdivision Svitlichansky Department (Nizhne)	Information is not available due to the temporary occupation of the territory
21	Municipal enterprise "Popasna District Water Utility" Separate subdivision "Stanytsia Luhanska Department" (Nizhnieteple village)	Information is not available due to the temporary occupation of the territory
22	Lysychanskvodokanal, a specialised municipal utility company (Pryvillia)	Information is not available due to the temporary occupation of the territory
23	Lysychanskvodokanal, a specialised municipal utility company (Novodruzhesk)	Information is not available due to the temporary occupation of the territory
24	Utility company "Zhilbudservice (Schastye)	Information is not available due to the temporary occupation territories
25	Municipal enterprise "Water of Starobilsk region" Starobilsk City Council	Information is not available due to the temporary occupation territories
26	Municipal enterprise Novopskovzhytlo	Information is not available due to the temporary occupation territories
27	Municipal enterprise Belokurakine	Information is not available due to the temporary occupation territories
28	The municipal enterprise Troitsky Centre for Public Utilities services"	Information is not available due to the temporary occupation of the territory
29	Utility company "Novoaidarske "	Information is not available due to the temporary occupation territories
30	Utility company "Markivka Voda"	Information is not available due to the temporary occupation territories
31	"Belovodsk repair and operating company"	Information is not available due to the temporary occupation territories
32	Utility company Kommunservice Milove village council	Information is not available due to the temporary occupation of the territory
33	A municipal utility company "Svatovsky Vodokanal	Information is not available due to the temporary occupation of the territory

Due to the fact that part of the territory of the Don RBD is temporarily occupied, the full list and level of damage or destruction of the treatment facilities cannot be determined at this time.

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

In the Siverskyi Donets sub-basin of the Don RBD, 59 cases of destruction, stoppages or disruption of the technological process of enterprises as a result of hostilities were recorded between February 2022 and May 2024.

Disruption of the work process concerns 8 cases, destruction of the infrastructure of enterprises - 49 cases, 2 cases concern the interruption of power supply to enterprises.

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

Data on the destruction, suspension or disruption of the technological process of enterprises as of May 2024 are presented in Annex 3.

- **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, but also antimony, copper, cadmium, chromium, mercury, arsenic, nickel, bismuth and tungsten. As a rule, metals are concentrated in the sinkhole.

Flares burn at high altitude and disperse metals over large areas. Pyrotechnics can contain barium, antimony, 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.

Monitoring of surface water in the area of active hostilities is not currently carried out for security reasons.

2. Hydromorphological changes caused:

- **Changes in the hydrological regime due to the destruction or disruption of hydraulic structures (dams, dikes, locks)**

In March-May 2022, hostilities damaged the main channel control structures in the Siverskyi Donets sub-basin of the Don RBD.

Pecheneg reservoir

Damage to the Pechenizske reservoir's hydraulic structure has resulted in the current inability to fill it to its design levels and accumulate resources to maintain water levels in the Siverskyi Donets River in downstream areas in Kharkiv, Donetsk and Luhansk oblasts.

Oskilskoye reservoir

Damage to the Oskil reservoir's hydraulic structure on 13 March 2022 led to unproductive losses of water and artificial flooding along the Oskil and Siverskyi Donets rivers, which resulted in flooding of the territories. At present, there is no possibility to accumulate the resource and compensate for the water intake into the Siverskyi Donets-Donbas canal, and the reservoir looks like a river.

Given that the Oskil reservoir regulates the flow of the Oskil River for many years, compensating for the supply of water to the Siverskyi Donets-Donbas Canal for water consumers in Donetsk Oblast, as well as the supply of water to water consumers in the lower section of the Siverskyi Donets River, the damage and loss of the resource creates risks of an emergency situation in the supply of water to the settlements of Donetsk and Luhansk Oblasts.

Rayhorod Dam

As a result of the damage to the hydraulic unit of the Rayhorod dam on the night of 29-30 May 2022, uncontrolled discharge through the dam occurred for a long time, which led to a decrease in water levels (approximately 1.5 m according to the data of the Water of Donbas Company provided at the meeting of the Interagency Commission of 31.05.2022) at drinking water intakes from the Siverskyi Donets River for the needs of Donetsk Oblast (540 km from the Mayaki water intake in the village of Sidorove village of the Municipal Enterprise "Slovmiskvodokanal"; 527 km further from Donetsk, water intake of the Slavic District Water Supply Department of the Municipal

Enterprise "Water of Donbas"; 522 km from Rayhorodok village, water intake of the Regional Water Supply Department of the Municipal Enterprise "Water of Donbas" into the Siverskyi Donets-Donbas Canal).

Due to the damage, the Raigorod hydroelectric power station, which maintained the required water level in the Siverskyi Donets River, in particular at drinking water intakes for the cities of Donetsk Oblast, and also met the requirements for environmental releases to downstream sections of the Siverskyi Donets River (not lower than 22 m^3/s), cannot guarantee the operation modes stipulated by the operating rules.

- **water intake to eliminate water shortages for drinking and other needs**

As a result of damage to the main channel regulating reservoirs by the hydraulic structure, the following issues have arisen: Pechenizka Reservoir - it is not possible to fill it to its design levels and accumulate its resource; Oskilske Reservoir - it is not possible to accumulate its resource at all and compensate for water withdrawals into the Siverskyi Donets-Donbas Canal, the reservoir looks like a river; Rayhorod Dam - it is not currently able to guarantee the operating modes provided for by the operating rules to maintain the required level in the river. Siverskyi Donets for water intake into the Siverskyi Donets-Donbas Canal, as well as for environmental release to downstream sections of the river (not lower than 22 m^3/s).

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

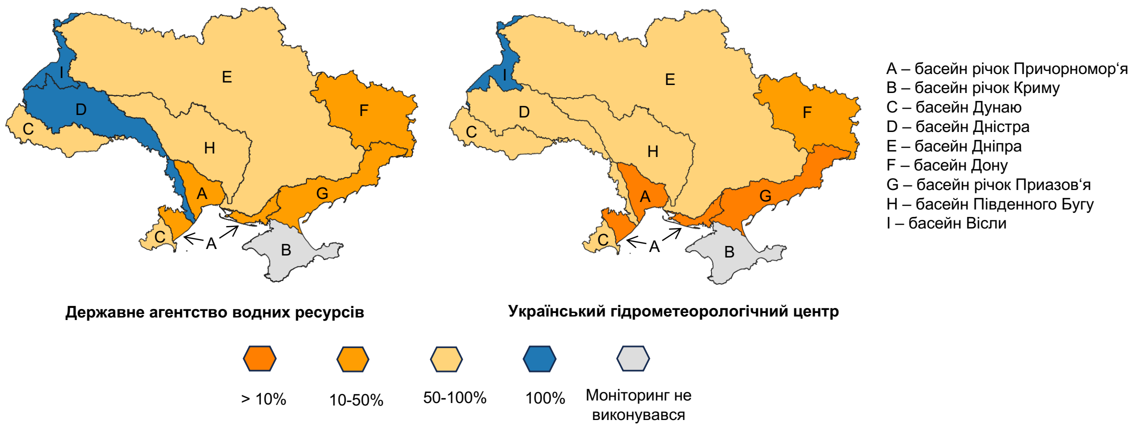


Figure 10. Achievement of surface water monitoring targets by river basin (%), 2022 [2]

4. Impossibility or restrictions on water management in the temporarily occupied territories of Ukraine.

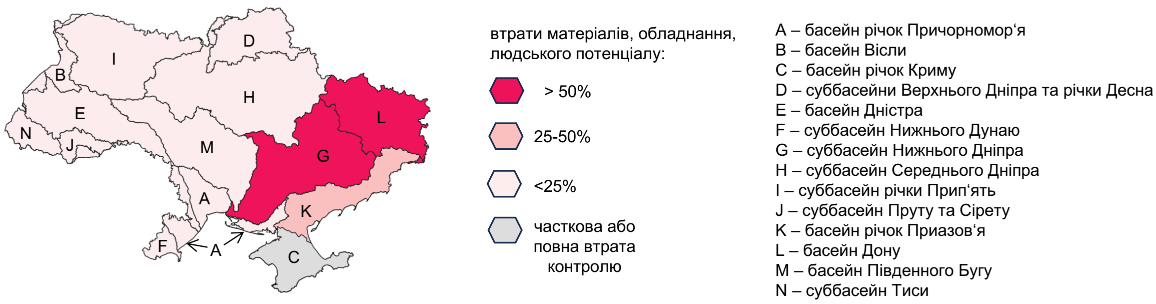


Figure 11: Impact of military operations on the ability to manage water resources [3]

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.

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

Diffuse sources

Organic pollution from diffuse sources is mainly caused by rural households that are not connected to sewerage networks. Such individual households dispose of wastewater by accumulating it in lagoons, from which it is filtered into the nearest groundwater horizons.

The load from the rural population was assessed using the calculation method. For this purpose, we used the coefficients of organic matter intake due to the vital activity of 1 person. In European countries, the generation of load from the population is calculated according to the following indicators: BOD5 - 60 g/day/person, COD - 110 g/day/person.

The assessment revealed that in just one year, distributed sources of organic matter enter the Don RBD: 11430 tonnes of BOD_5 and 19327 tonnes of COD, which is significantly higher than the total input from point sources. The reason for this is the low level of population connection to sewage treatment plants. In rural settlements and small towns, wastewater is discharged into lagoons built in the ground, from where pollutants easily enter groundwater and are transported to surface waters.

The following 6 sub-basins play a key role in organic pollution of the Don RBD from diffuse sources: Velyka Kamianka, Kazennyi Torets, Siverskyi Donets, Udy, Aidar, Borova, which together account for 59% of the RBD Don load from diffuse sources. The calculation of the organic matter runoff indicator indicates the leading role of the Shabelinka River, with 1 km^2 of its territory receiving organic matter in the amount of 1.53 t/km^2 ·year in terms of BOD_5 and 2.61 t/km^2 ·year in terms of COD.

Point sources

In total, there are 2,420 settlements in the Don River Basin. Cities with a population of more than 100,000 people have the greatest impact on the state of surface waters. There are 8 such cities in the basin, the largest of which is Kharkiv (1.451 million inhabitants).

There are 64 large cities in the basin with a population of >10,000 people. In 2017, these large cities contributed a total of 2891.8 tonnes and 12359.3 tonnes of organic matter to the Don RBD in terms of BOD_5 and COD, respectively (Table 13).

Table 13. Settlements of the Don RBD with a population of more than 100 thousand people

City	Population	Name of the SWB on which the wastewater is discharged	Type of wastewater treatment	Total organic matter pressures, tonnes per year	
				BOD_5	COD
Kharkiv	1451028	Udy, Lopan	biological	1759,1	9444,9
Luhansk	425848	Siverskyi Donets, Lugan	biological	384,0[4]	1177,7[5]
Horlivka	256714	Zalizna, Bakhmutka (Bakhmut)	biological	103,6	419,3
Kramatorsk	164283	Treasury end	biological	44,0	140,5
Sloviansk	117445	Treasury end	biological	40,6	92,5
Alchevsk	111360	White , Vine	biological	495,4[5]	816,0[5]
Sievierodonetsk	109466	Siverskyi Donets	biological	15,4	125,8
Lysychansk	104314	Siverskyi Donets, White	biological	49,7	142,6
TOTAL	**2740 458**			**2891,8**	**12359,3**

In total, in 2017, 13 thousand tonnes of organic matter (COD) was supplied to the Don River Basin Wastewater Treatment Plant.

Of these, 73% of the total load was discharged to the Uda River, which receives the return (wastewater) from the Kharkiv metropolitan area. Kazennyi Torets and the Siverskyi Donets received 12% and 11% of the total organic matter emissions, respectively.

That is, 96% of organic pollution of the surface waters of the Don RBF is generated in these sub-basins and in the Siverskyi Donets itself (Tables 14, 15, 16).

[4] Data of Siversko Donets basin water resources authority, 2013.

Table 14. Inputs of organic substances to surface waters as part of wastewater from urban agglomerations, 2017

Name	Organic matter, tonnes per year	
	BOD_5	COD
Siverskyi Donets	262,3	1430,1
Lugan	1219,7	3098,0[6]
Lower Bilenka	3	7,3
Upper Bilenka (Bilenka)	11,4	58,4
Krasna	7,7	18,6
Bakhmutka (Bakhmut)	24,5	75,7
Kazenyi Torets	201,2	800,5
Oskil	2,9	18
Bereka	-	-
Srednyaya Balakliyka	6,2	33,7
Mozh	27	53,7
Udy	519,2	1961,5
Tetliga	0,7	1,8
Velykyi Burluk	0,2	0,7
Rozryta	0,1	0,4
Vovcha	0,4	3,5
Lopan	1249,7	7520,8
Kharkiv	1	3,1
Studenok	37,1	97,2
Rohan (Rohanka)	4,9	26,8
Hnylytsia	14	104,1
Bolgar	3,8	8
Merefa	33,5	20,1
Kraynaya Balakleyka	0,9	2,7
Popilnaya	-	0,4
Vodoljatka (Olkhovatka)	2,6	9,6
Borova	0,8	2,4
Kryvyi Torets	120,8	283
Shyroka	8,7	68,8
Zalizna	101,1	410,8
Beam Zalizna	-	4,5
Gruzka	5,3	19
Sukhyi Torets	0,4	2,5
Kodyma	1,1	3,6
Serednia Stupka	1,2	9,8
Mokra Plotva	8,7	25
Kamenka	2	7,3
Komyshuvakha	0,9	1,9
Aydar	7,3	-
Bila	1,1	-
Mayachka	0,1	0,3
Chasiv Yar	0,2	0,8
Bychok (Kleban-Bik)	0,3	0,8
Skotovata (Kamianka)	0,5	3,2
Lozova	2,5	10,6
No name (Udy tributary)	2,2	0,9
Plotva	0,8	5,2
Total	**3900.0** (2681.9)[5]	**16215.1** (13134.1)

Table 15. Inputs of organic substances to surface waters as part of municipal wastewater, 2017

[5] Data from 2017.

Name	Organic matter, tonnes per year	
	BOD_5	COD
Siverskyi Donets	136,7	436,2
Lugan	856,2[6]	1989,3
Lower Bilenka	3	7,3
Upper Bilenka (Bilenka)	0,3	0,7
Krasna	7,7	18,6
Bakhmutka (Bakhmut)	23,8	71,2
Kazenyi Torets	182	680,9
Oskil	-	-
Bereka	-	-
Srednyaya Balakliyka	6,2	33,7
Mozh	27	53,7
Udy	514,7	1946,3
Tetliga	0,7	1,8
Velykyi Burluk	0,1	0,5
Rozryta	-	-
Vovcha	-	-
Lopan	1248,7	7517,7
Kharkiv	0,9	2,7
Studenok	37,1	97,2
Rohan (Rohanka)	0,1	-
Hnylytsia	14	104,1
Bolgar	3,8	8
Merefa	33,2	17,6
Kraynaya Balakleyka	-	-
Popilnaya	-	0,4
Vodoljatka (Olkhovatka)	2,5	9,2
Borova	0,8	2,4
Kryvyi Torets	116,5	258,4
Shyroka	8,7	68,8
Zalizna	101,1	410,8
Beam Zalizna	-	4,5
Gruzka	5,3	19
Sukhyi Torets	-	-
Kodyma	1,1	3,6
Serednia Stupka	1,2	9,8
Mokra Plotva	8,1	21,7
Kamenka	1,8	6
Komyshuvakha	0,9	1,9
Aydar	7,3	-
Bila	1,1	-
Mayachka	-	-
Chasiv Yar	-	-
Bychok (Kleban-Bik)	-	-
Skotovata (Kamianka)	-	-
Lozova	-	-
No name (Udy tributary)	2	-
Plotva	-	-
Total	**3354.6** (2498.4)[7]	**13804.0** (11814.7)

Table 16. Organic matter discharges to surface waters as part of industrial wastewater, 2017

[6] For the temporarily occupied territories of Ukraine, data for 2013 is provided.
[7] Data from 2017.

Name	Organic matter, tonnes per year	
	BOD_5	COD
Siverskyi Donets	122,7	986,7
Lugan	1,6	17
Lower Bilenka	-	-
Upper Bilenka (Bilenka)	11,1	57,7
Krasna	-	-
Bakhmutka (Bakhmut)	0,7	4,5
Kazenyi Torets	19,2	119,6
Oskil	-	-
Bereka	-	-
Srednyaya Balakliyka	-	-
Mozh	-	-
Udy	0,6	2,7
Tetliga	-	-
Velykyi Burluk	0,1	0,2
Rozryta	-	-
Vovcha	0,4	3,5
Lopan	1	3,1
Kharkiv	-	0,2
Studenok	-	-
Rohan (Rohanka)	4,8	26,8
Hnylytsia	-	-
Bolgar	-	-
Merefa	0,3	2,5
Kraynaya Balakleyka	-	-
Popilnaya	-	-
Vodoljatka (Olkhovatka)	0,1	0,4
Borova	-	-
Kryvyi Torets	4,3	24,6
Shyroka	-	-
Zalizna	-	-
Beam Zalizna	-	-
Gruzka	-	-
Sukhyi Torets	0,4	2,5
Kodyma	-	-
Serednia Stupka	-	-
Mokra Plotva	0,6	3,2
Kamenka	0,2	1,3
Komyshuvakha	-	-
Aydar	-	-
Bila	-	-
Mayachka	0,1	0,3
Chasiv Yar	0,2	0,8
Bychok (Kleban-Bik)	0,3	0,8
Skotovata (Kamianka)	0,5	3,2
Lozova	2,5	10,6
No name (Udy tributary)	-	-
Plotva	0,8	5,2
Total	**172,5**	**1277,4**

2.1.2. Nutrients pollution

Nutrient inputs to the surface waters of the Don RBD 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 undesirable imbalance of organisms in the aquatic environment and a decrease in water quality.

Phosphorus and nitrogen compounds play a dominant role among biogenic substances, with some influence from ferrous, silicon and molybdenum. 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.

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.

Diffuse sources

Land cover type is the dominant factor in anthropogenic load from diffuse sources. In the Don RBD, there is a significant disparity between the main types of land use, which results in significant water pollution (Figure 12). More than half of the territory of the Don RBD (66.5%) is cultivated agricultural land. The disturbance of soil cover due to ploughing leads to significant nutrient losses due to deflation and water runoff.

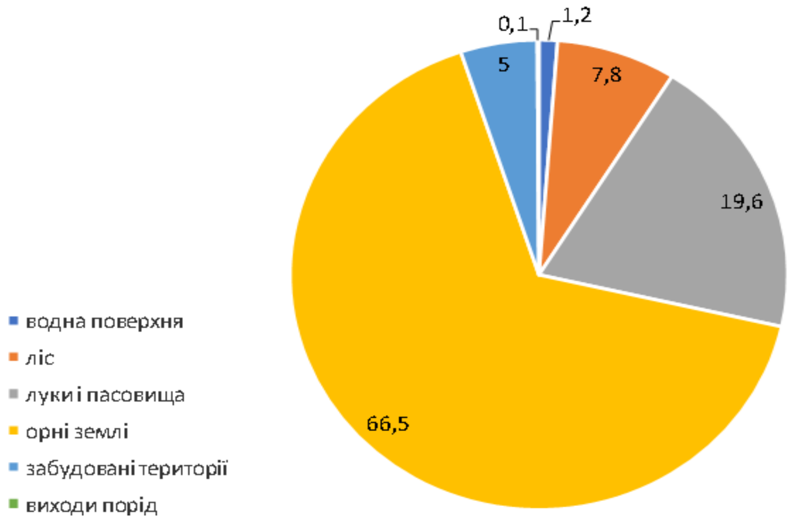


Figure 12. Main types of land use in the Don RBD

Within the individual sub-basins of the Don RBD, the share of agricultural land, which includes arable land and meadows and pastures, ranged from 64-91% (Figure 13). Only in three sub-basins was the level of agricultural development less than 64%. These are the subbasins of the Starytsia, Vilkhova, and Gomulsha rivers, where the share of agricultural land was 54%, 51%, and 31%, respectively.

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. Kharkiv region has the highest rates of fertiliser use. Nitrogen fertilisers dominate in the composition of applied mineral fertilisers.

Overall, there is a general downward trend in fertiliser use in Ukraine compared to the 1990s. However, the use of mineral fertilisers in the Don RBD is well in line with many Central European countries.

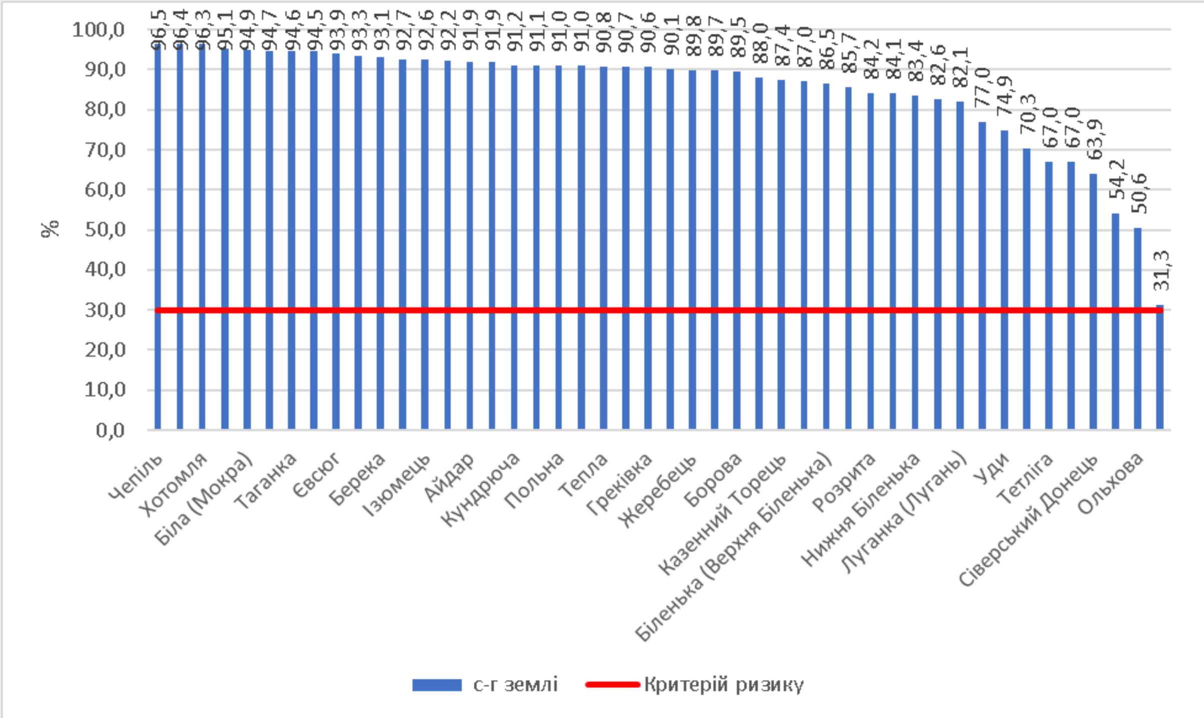


Figure 13. The share of agricultural land within the Don RBD, %

An important indicator of the impact of agricultural sources is also the share of livestock production $I_{ТВ}$. On average, this indicator is 0.23 in Kharkiv Oblast, 0.15 and 0.25 in Luhansk and Donetsk Oblasts respectively, and in none of them does it exceed the threshold value of the risk of water pollution.

The analysis at the district level showed that there is considerable variability within each region. For example, in Kharkiv region, the value of $I_{ТВ}$ ranged from 0.1-0.26. In Luhansk region, it ranged from 0.11 to 0.21. The largest fluctuations in the livestock indicator were found in Donetsk Oblast - 0.08-0.59. In five districts of the region, the threshold values of the criterion for the risk of pollution (I>0.3) are exceeded, which means that there is a risk of deviation from the "good" ecological status of the SWBs. Such risks are likely to occur at the Lugan, Bakhmutka (Bakhmut) and Kazennyi Torets SWBs.

In the Don RBD, there is a significant anthropogenic load due to diffuse sources of agricultural origin. First of all, its impact is associated with intensive agriculture.

Nitrogen. The Don River Basin generates an emission flow of nitrogen compounds equal to 9122 tonnes per year, which corresponds to an average runoff rate of 0.09 tonnes per km^2*year. At the same time, the spatial distribution of the nitrogen runoff module is characterised by high heterogeneity. The highest value of 0.71 tonnes per km^2*year is observed in the Udy sub-basin, where the impact of point sources is the highest in the basin and reaches 55%. Significant flow modulus values are also observed in the Siverskyi Donets, Oskol and Kazenyi Torets SWBs, at 0.45, 0.29 and 0.23 tonnes per km^2*year, respectively. However, in these sub-basins, nitrogen runoff is more related to agricultural production.

Nitrogen emissions are distributed by source as follows: 72% comes from arable land, and 20% from municipal wastewater. The impact of other sources is much smaller and ranges from 1-3% (Fig. 14).

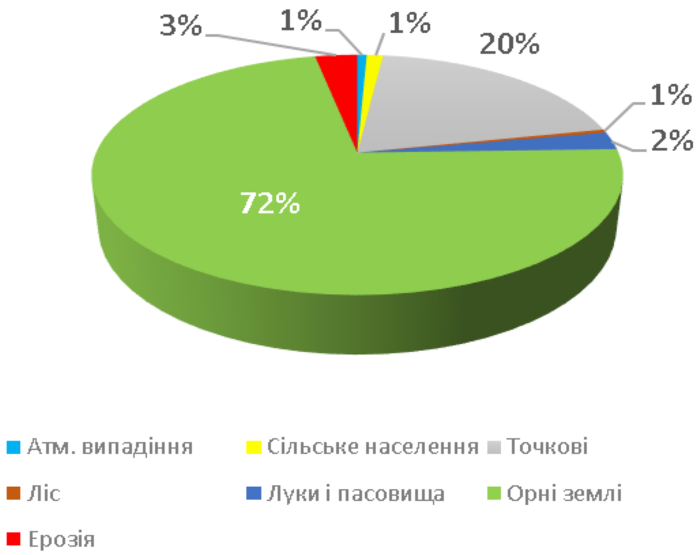


Figure 14. Main sources of nitrogen inputs to the Don River Basin, %

The results obtained are also confirmed by long-term field observations in the Siverskyi Donets sub-basin of the Don RBD. The significant influence of agricultural sources on the runoff of nitrogen compounds is clearly manifested in the ratio of its main forms in aqueous solution.

A characteristic feature of the Don RBD is that the dissolved nitrogen is dominated by the nitrate form (71%). This is significantly different from other river basins in Ukraine, where nitrogen in the form of ammonium compounds, the end product of protein mineralisation, predominates in the waters. In other words, if ammonium compounds dominate the nitrogen runoff, it can be concluded that the predominant influence of point sources is prevalent. In the soil cover, the content of ammonium nitrogen compounds is minimal due to their sorption on the surface of clay minerals. Instead, the soil solution is dominated by the nitrate form of nitrogen, which is one of the most soluble and mobile compounds. They do not accumulate in the soil cover, but, on the contrary, are easily washed out during runoff-forming precipitation. The predominance of nitrogen in the nitrate form indicates the influence of diffuse sources of pollution, primarily of agricultural origin. The distribution of the main sources of nitrogen is shown in Figure 15.

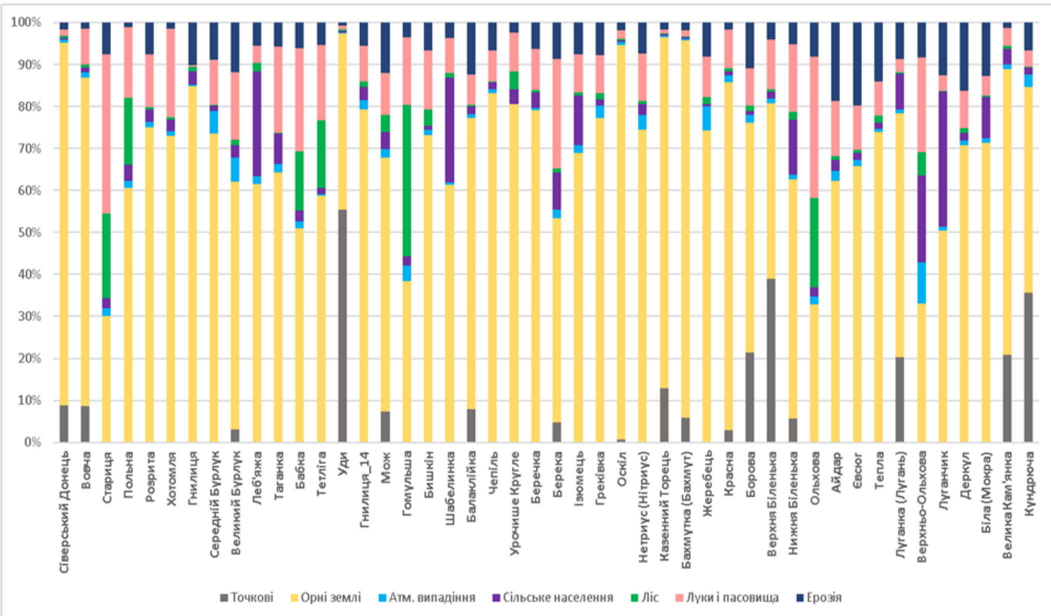


Figure 15. Main sources of nitrogen compounds runoff within individual sub-basins

As can be seen from Figure 15, the dominance of arable land influence is clearly evident in most of the identified 1st order tributaries. Their share falls below 50% only in 8 sub-basins and is explained by various reasons. In such sub-basins as the Udy and Bilenka rivers, this is due to the significant role of point sources of pollution.

In general, there is a dependence of the increase in the impact of diffuse sources of pollution on the degree of ploughed land for each individual SWB. Each percentage of the ploughed area leads to an increase in the nitrogen removal module to an average of 0.81 kg/km^2 ·year.

It is worth noting that at some SWBs, point sources also have a significant impact on nitrogen emissions (Fig. 16). Among them, the greatest impact is observed at the Uda SWBs, where the role of this factor exceeds 55%. In the Bilenka and Kundryucha rivers, the contribution of wastewater from urban agglomerations reaches 39% and 35%, respectively. In the Borova, Kamianka and Luhanka rivers, the impact of point sources reaches 20%. In other sub-basins of the Don RBD, no significant impact of point sources was identified.

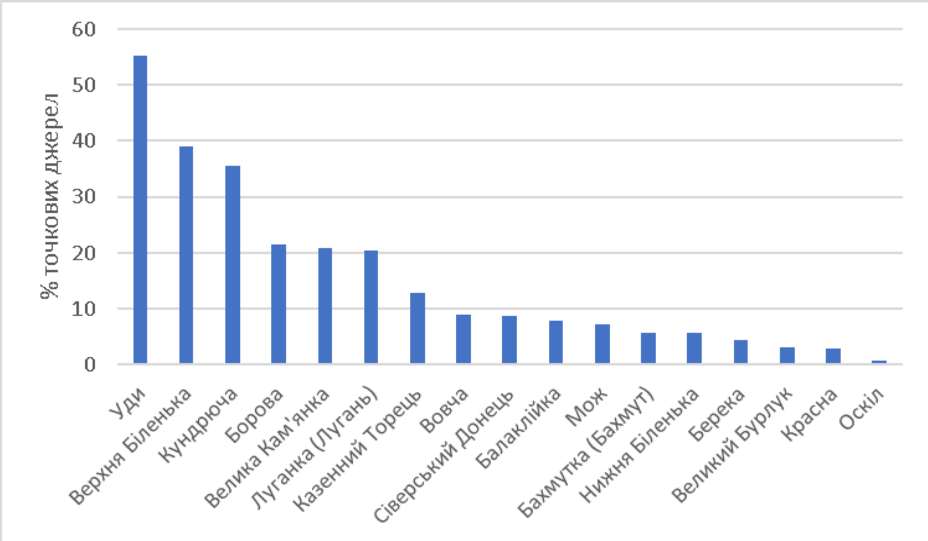


Figure 16. Share of point sources in nitrogen emissions in selected sub-basins

The high importance of agricultural sources in the formation of nitrogen emissions is a prerequisite for the existence of zones sensitive to nitrate pollution. To identify such zones, we used a methodology based on long-term water monitoring data. In total, we considered monitoring data from the SAWR and the SES of Ukraine for the period 2000-2017.

The criterion used was a concentration of N_{min} > 11.3 mg N/dm^3.

Analysis of the available data showed that there are currently no monitoring points within the Don RBD where the nitrogen content exceeds the required criterion. However, in 3 watercourses, such an excess may occur in the near future. All SWBs located below these points should be classified as sensitive to nitrate pollution.

Table 17. List of monitoring sites in the Don River Basin where nitrogen content may be exceeded

№ s/n	SWB	City	N_{95} mg/N	Note
1	Bakhmutka (Bakhmut)	Artemivsk (Bakhmut)	8,73	Diffuse, exceeding the threshold in 2023 for the average value and 95% confidence level, high level of conclusion reliability
2	Kazenyi Torets	Sloviansk	6,84	Diffuse, exceeding the threshold in 2023 for the average value and 95% confidence level, high level of conclusion reliability
3	Kryvyi Torets	Druzhkivka	8,19	Diffuse, exceeding the threshold in 2023 for the average value and 95% confidence level, high level of conclusion reliability

The degree of anthropogenic influence is strongly related to local environmental conditions. Given the high degree of soil exploitation and fertiliser use, there should be many more areas sensitive to nitrate pollution. However, the soil cover of the basin is composed mainly of chernozem soils with a high organic matter content and heavy particle size distribution. This prevents precipitation from infiltrating to a considerable depth and helps to retain moisture by the soil's colloidal complex.

Climatic conditions also play an important role, namely the prevalence of evaporation over precipitation. In the Don RBD, upward flows of soil moisture are formed, which prevent the occurrence of non-equilibrium processes in the soil-water system and the transition of nitrate compounds into solution. Nitrogen compounds are mainly flushed out during the short phase of surface runoff.

Phosphorus. The total phosphorus load of the SWB is 2937 t/year, or 0.03 tonnes per km^2*year. At the same time, the highest values of the phosphorus runoff module are typical for the Udy sub-basin and the Siverskyi Donets SWB and are associated with the impact of sewage from settlements. The phosphorus runoff in these sub-basins reaches 0.25 and 0.15 tonnes per km^2*year, respectively.

By source, the total phosphorus runoff is distributed as follows (Figure 17):

- The dominant share comes from point sources - 37%;
- The contribution of agricultural land is about 32%;
- Erosion processes account for 26% of the load.

The impact of other inputs is much smaller. The role of the main sources of phosphorus emissions to the Siverskyi Donets sub-basin of the Don RBD can be assessed from the results presented in Figure 18.

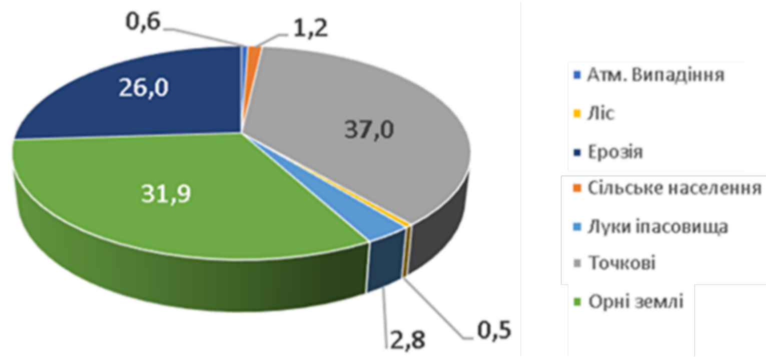


Figure 17. The main sources of phosphorus supply to the Don River Basin SWBs

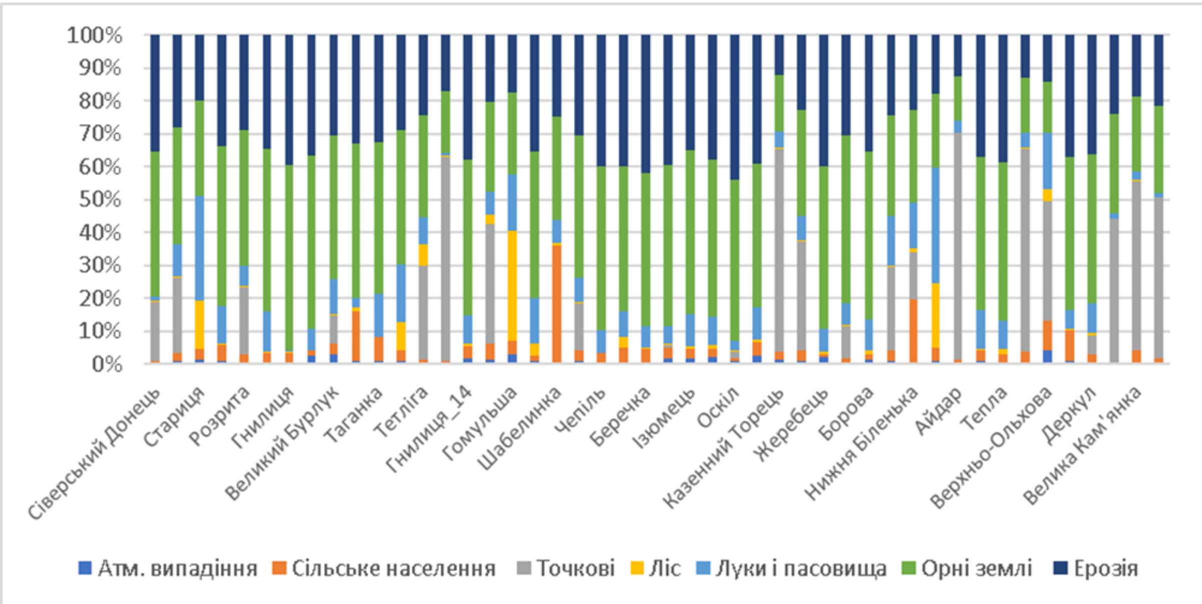


Figure 18. Main sources of phosphorus compounds runoff within individual sub-basins

The high impact of point sources is associated with a significant concentration of population within certain sub-basins. The use of phosphorus-containing detergents for household needs leads to the accumulation of phosphates in wastewater. The current microbial wastewater treatment method in Ukraine allows for the removal of only 20% of phosphorus compounds, with the rest entering water bodies. In freshwater, phosphorus is one of the main factors in the development of eutrophication. The relative role of point sources in the formation of phosphorus runoff within individual sub-basins is shown in Figure 19.

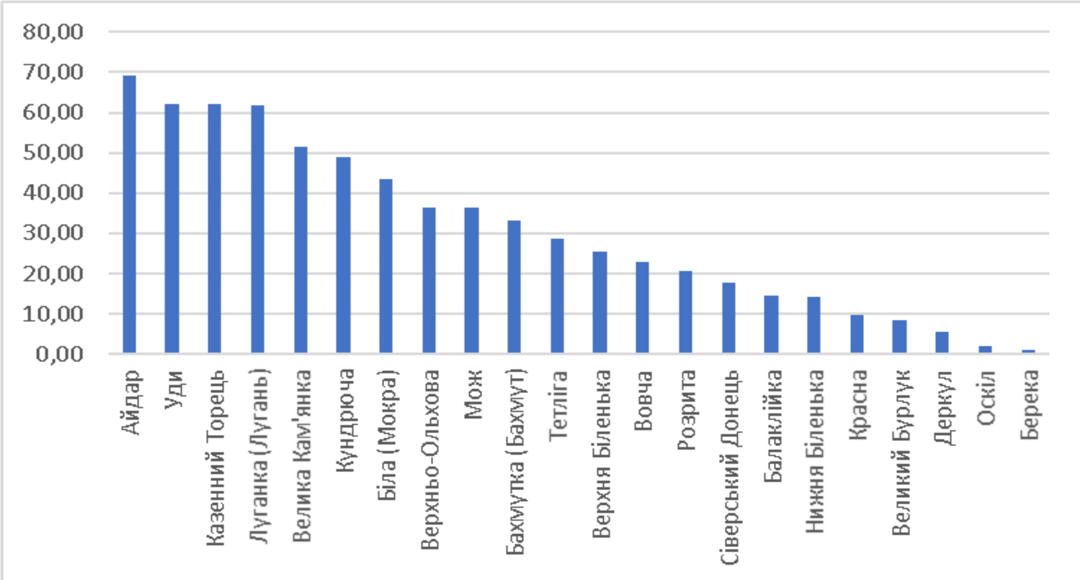


Figure 19. Rivers of the Don RBD with the largest contribution from point sources of pollution in the formation of phosphorus runoff

Unlike nitrogen, phosphorus from arable land enters the river network in almost equal proportions between dissolved and sorbed forms.

The high contribution of erosion processes is determined by the specific behaviour of phosphorus in soils. Once it gets into the soil with mineral fertilisers, it is quickly adsorbed by the minerals of the soil and retained for a long time. The high level of land ploughing and the development of erosion processes contribute to the migration of phosphorus compounds as part of suspended particles.

The proportion of phosphorus inputs within individual sub-basins from agricultural sources and erosion processes is closely related to the degree of ploughing (Fig. 20).

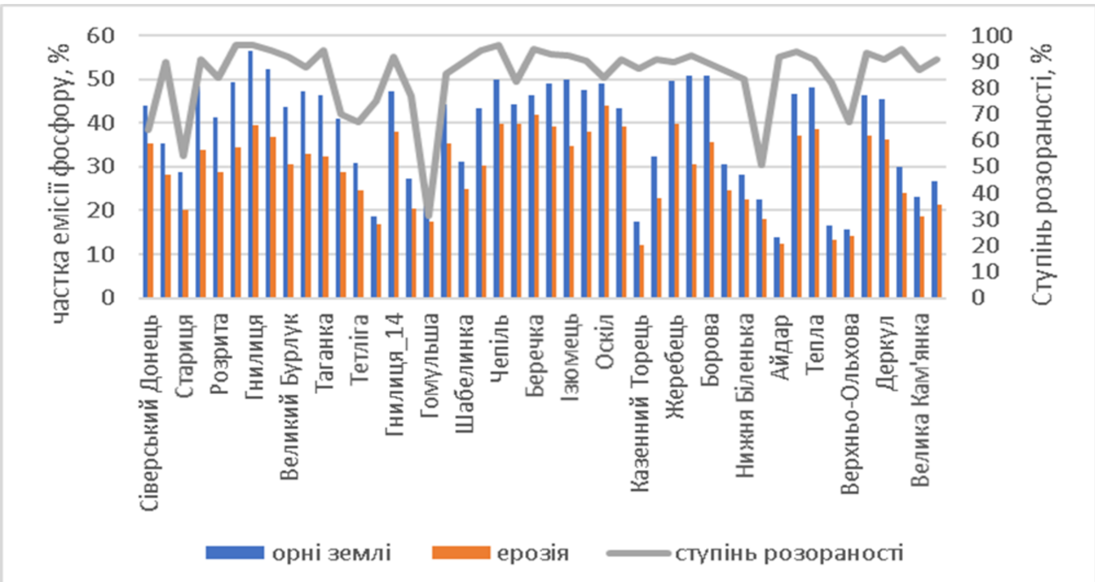


Figure 20. Influence of the degree of ploughing of individual sub-basins on the emission of phosphorus compounds from agricultural land and erosion processes

Point sources

Indicators of the main nutrient inputs to the surface waters of the Don RBD are shown in Table 18.

Table 18. Inputs of nutrients in wastewater to the Don RBD SWBs (2017 data)

Name	Pollutants			
	ammonium nitrogen, tonne	nitrates, tone	nitrites, tone	orthophosphates, tone
Siverskyi Donets	42,5	399	14,6	78,519
Lugan	0,4	3,2	0,1	0,533
Aydar	2,0	1,2	0,5	1,648
Lower Belenka	0,5	0,3	0,1	0,532
Upper Belenka (Belenka)	6,0	19,3	0,6	1,123
Krasna	9,0	8,7	0,6	1,095
Bakhmutka (Bakhmut)	6,1	106,8	2,4	9,259
Kazenyi Torets	68,6	1375,9	27,5	125,617
Oskil	4,6	27,0	2,1	5,014
Bereka	0,2	2,4	0,1	0,528
Serednyaya Balakleyka	6,9	12,2	0,1	3,093
Mozh	22,2	2,8	-	14,783
Udy	370,9	6432,7	132,2	580,013
Tetliga	0,1	0,1	-	0,074
Velykyi Burluk	-	0,3	-	0,058
Rozryta	-	0,4	-	0,053
Vovcha	0,1	5,3	-	2,385
Total	**540,1**	**8397,6**	**180,9**	**824,327**

According to the state water use accounting - reporting in the form No. 2TP-Vodkhoz (annual) - the largest amount of nutrients, namely 75% of the total volume, was discharged to the Udy SWB of the Bezlyudovsky and Dikanovsky biological treatment complex of the ME "Kharkivvodokanal".

In 2017, nitrate and nitrite concentrations were at the level of the previous year, 2016, and varied slightly within the long-term average, except for the sites at the Udy and Seversky Donets water supply systems below the confluence of the Udy River (813 km from the mouth), where nitrite concentrations are 1.5-2 times lower than the long-term average.

The content of nutrients increases significantly after the confluence of the Uda River, which is due to discharges from the treatment facilities of Kharkiv Vodokanal (Bezlyudivskyi and Dykanivskyi).

According to the monitoring conducted by the Siverskyi Donets BUWR Laboratory in 2017, the content of nutrients in the surface waters of the Siverskyi Donets sub-basin of the Don RBD was in line with the following trends:

- Increase in ammonium nitrogen content (Udy and Nizhnyaya Belenka SWBs);
- Increased concentration of orthophosphate (Siverskyi Donets SWBs between km 813 and 712 and at the mouth of the Uda River);
- nitrate and nitrite concentrations in surface water bodies were at the level of 2016 and varied slightly within the long-term average, except for the sites at the Udy and Siverskyi Donets water bodies below the confluence of the Udy River (813 km from the mouth).

The influence of nutrients on the state of the SWB can be reflected in the values of phytoplankton, phytobenthos and macroliths and described through the eutrophication process.

The eutrophication assessment is based on two separate modules:

a. biological indicators reflecting eutrophication,
b. nutrients that express the underlying cause of eutrophication.

To assess the degree of eutrophication, the results of biological studies are required:

0. Phytoplankton (microscopic plant organisms living in water, cyanobacteria and algae).
1. Phytobenthos - bottom diatoms (microscopic and macroscopic diatoms).
2. Macrophytes (aquatic vascular plants, mosses, macrophytes).

2.1.3. Pollution by hazardous substances

Hazardous substances are represented by priority pollutants. They are subject to control in accordance with the Order of the Ministry of Ecology and Natural Resources of 06.02.2017 No. 45 "On Approval of the List of Pollutants for Determining the Chemical Status of Surface and Groundwater Bodies and the Ecological Potential of an Artificial or Heavily Modified Surface Water Bodies" and the Order of the Ministry of Ecology and Natural

Resources 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 Heavily Modified Surface Water Body to One of the Classes of Ecological Potential of an Artificial or Heavily Modified Surface Water Body".

However, the available information on the discharge of priority pollutants is currently quite limited. According to the 2TP-Vodkhoz (annual) reporting for 2017, only 12 business entities in the Don River Basin provided information on the presence of pollutants in their wastewater discharges, which were included in the list of priority pollutants by the Ministry of Environment's Order No. 45 (only heavy metals were indicated).

The situation is the same with substances that are discharged into the SWBs in large quantities, are toxic and capable of accumulation and should be included in the list of substances specific to the Don RBD. The list of such substances is given in Table 19.

Table 19. List of specific substances characteristic of the Don RBD for 2TP water management (based on 2017 data)

Name of specific substances	
Aluminium	Copper
Aniline	Sodium
Arsen	SPAR
Vanadium	Phenol
Calcium	Formaldehyde
Magnesium	Hexavalent chromium
Mangal	Zinc
Plumbum	Nickel

The list of priority pollutants and other substances specific to the Don RBD discharged to the SWBs according to the 2TP-Vodkhoz (annual) reporting for 2017 is presented in Table 20.

Table 20. Pollutant discharges to surface waters (2017 data)[8]

Name	Indicators									
	Aluminium, kg	Vanaday, kg	Copper, kg	Manganese, kg	Nickel, kg	Sodium, kg	Lead, kg	Steam, kg	Chromium 6+, kg	Chrome total, kg
Siverskyi Donets	415	-	100,3	-	143,7	-	12	3274,5	3,7	108
Lugan	-	9,8	-	-	2,1	-	-	2	-	-
Lower Belenka	-	-	-	-	-	-	-	10	-	-
Upper Belenka	-	-	-	-	-	-	-	94	-	-
Krasna	-	-	-	-	-	-	-	101,2	-	-
Bakhmutka (Bakhmut)	39,7	-	36	-	2,3	-	2,1	1042,1	-	-
Kazenyi Torets	337,5	-	177,6	600,3	-	-	-	6969,4	51,8	-
Oskil	-	-	-	51,3	-	-	-	147,6	-	-
Bereka	-	-	-	-	-	-	-	16,8	-	-
Balakliyka	-	-	-	-	-	-	-	49,5	-	-
Mozh	-	-	-	-	-	-	-	171,5	-	-
Udy	-	-	689,4	-	4013,0	10366,9	-	37997,2	812	-
Tetliga	-	-	-	-	-	-	-	4,9		-
Velykyi Burluk	-	-	-	-	-	-	-	6,4		-
Rozryta	-	-	-	-	-	-	-	0,6		-
Vovchs	-	-	-	-	-	-	-	8,6		-

[8] The "-" sign means that water users that discharge wastewater into the MWR did not indicate these ingredients in their water use reports in the form No. 2TP-vodkhoz (annual) for 2017. According to the data provided by the Siverski-Donetsk BUVR, no pollutant discharges were made to the Aidar SWBs in 2017.

Name	Indicators									
	Aluminium, kg	Vanaday, kg	Copper, kg	Manganese, kg	Nickel, kg	Sodium, kg	Lead, kg	Steam, kg	Chromium 6+, kg	Chrome total, kg
Total	**792,2**	**9,8**	**1003,3**	**651,6**	**4161,1**	**10366,9**	**14,1**	**49896,3**	**867,5**	**108**

It should be noted that the available data on anthropogenic impacts are analysed here only in the context of the overall river sub-basin, and not in terms of a separate identified SWB, which is the main "management unit" of the RBMP.

Therefore, each SWB has to be assessed and, depending on the assessment, measures will be applied to preserve, maintain or restore it. These measures should be implemented on a site-specific basis, not for the sub-basin or river as a whole.

The discharges of non-synthetic pollutants, as defined by the Order of the Ministry of Environment No. 45, to the SWB Don RBD by individual SWB and enterprises that discharge them are presented in Table 21.

Table 21. Discharges of non-synthetic pollutants to the Don RBD SWB

№	Name	SWB code	Ni	Pb	Name of the company
			kg	kg	
1	Siversky Donets	UA_M6.5.1_0004	143,7	12,0	"Izyum State Instrumentation Plant“; Research and production enterprise “Zarya“; PJSC Severodonetsk Azot Association
2	Udy	UA_M6.5.1_0059	886,0	-	Biological treatment complex «Bezlyudovsky» ME "Kharkivvodokanal"
3	Lopan	UA_M6.5.1_0072	3127,0	-	Biological treatment complex “Dikanovsky“ ME "Kharkivvodokanal"
4	Bakhmutka (Bakhmut)	UA_M6.5.1_0355	2,3	2,1	Nonferrous Metal Plant LLC
5	Luganka (Lugan)	UA_M6.5.1_0507	2,1	-	Vuhlehirska TPP

In 2017, according to the results of measurements of the content of certain non-synthetic pollutants, the concentrations at most monitoring sites were below the long-term average. Concentrations of hazardous pollutants increased in 2017 only after the confluence of the "most polluted" tributaries, namely the Udy, Kazennyi Torets and Bakhmutka rivers, which is undoubtedly due to intensive economic activity in the basins of these tributaries and anthropogenic pressure, in particular, discharges of industrial wastewater containing hazardous pollutants.

Impact of the coal industry

In 2021[9], 17 coal industry enterprises discharged wastewater into surface water bodies of the Siverskyi Donets sub-basin of the Don RBD. The volume of discharge was 36.9 million m^3 (6% of the total discharge in the Don RBD), including 32.2 million m^3 (41% of the total discharge in the Don RBD). Waste water was discharged to the Siverskyi Donets, Krasna, Verkhnia Bilenka, Nyzhnia Bilenka, Krmyshuvakha, Kazennyi Torets, Kryvyi Torets and Zhuravka. At the same time, hazardous substances were discharged only into the Nizhnya Bilenka, Komyshuvakha and Kryvyi Torets rivers.

Table 22. Pollutant discharges to surface waters from coal industry enterprises (2021 data)

[9] data for 2021 is used due to the lack of information on the content of pollutants in mine and quarry waters in the form 2-TP vodhosp for 2017, in accordance with the Procedure for maintaining state water use accounting, approved by the Order of the Ministry of Ecology and Natural Resources of Ukraine dated 16 March 2015 No. 78

Name	Indicators								
	Aluminium, kg	Vanaday, kg	Copper, kg	Manganese, kg	Nickel, kg	Bismuth, kg	Lead, kg	Cadmium, kg	Cobalt, kg
Lower Belenka	70,6	13,8	10,6	603,2	34,1	26,7	17	2,3	19,8
Komyshuvakha	219,5	19,8	26	853,5	248,9	67,3	59,1	0,4	1
Kryvyi Torets	0	0	0	100	0	0	0	0	0
Total	290,1	33,6	36,6	1556,7	283	94	76,1	2,7	20,8
Percentage of discharge by basin, %.	31	84	4	86	7	100	98	100	100

Table 23: Pollutant discharges to surface waters from coal industry enterprises (2021 data)

Name	Indicators.							
	Chrome total, kg	Arsenic, kg	Molybdenum, kg	Tin, kg	Mercury, kg	Antimony, kg	Titanium, kg	Zinc, kg
Lower Belenka	1,8	1,9	17,6	12,4	1	4,8	0	54,6
Komyshuvakha	10,3	0	20,6	27,4	0	37,7	44	302
Total	12,1	1,9	38,2	39,8	1	42,5	44	356,6
Percentage of discharge by basin	98	100	100	100	100	100	100	7

At the same time, only 4 coal industry enterprises in the Luhansk region reported the discharge of priority indicators in wastewater discharges to 2 SWBs UA_M6.5.1_0460 and UA_M6.5.1_0539.

Table 24. Discharges of non-synthetic pollutants to the Don River Basin SWB by coal industry enterprises

No	Name	SWB code	Cd	Ni	Hg	Pb	Name of the company
			kg	kg	kg	kg	
1	Nyzhnia Bilenka	UA_M6.5.1_0460	2,3	34,1	-	17	1. Gorska mine of Pervomaiskvuhillia SE 2. Toshkivska Mine of Pervomaiskvuhillia SE
2	Komyshuvakha	UA_M6.5.1_0539	0,4	248,9	1	59,1	1. Carbonite mine of Pervomaiskvuhillia SE 2. Zolote Mine of Pervomaiskvuhillia SE

The wastewater discharges of coal industry enterprises contain such industry-specific indicators as arsenic, molybdenum, tin, antimony, titanium, vanadium, bismuth and cobalt. However, only 4 mines reported on the presence of these indicators in their wastewater discharges, as well as priority indicators: Girska mine, Toshkivska mine, Carbonit mine, and Zolote mine of Pervomaiskvuhillya. In addition to the 4 mines in Luhansk Oblast, only 1 enterprise in Donetsk Oblast reported on the manganese content in their wastewater discharges: Toretska Mine of Toretskvuhillya (discharge to the Kryvyi Torets River).

Due to the fact that the state monitoring of surface waters below the confluence of the Nyzhnya Bilenka (a tributary of the Siverskyi Donets River) and Kamyshuvakha (a tributary of the Luhan River) has not been carried out since the first quarter of 2014 due to the temporary occupation of the territory of Luhansk Oblast, it is impossible to determine the impact of mines that discharge waste water into these rivers on the downstream areas, including the Siverskyi Donets River.

In the Kryvyi Torets River, according to the state surface water monitoring data for 2021, the manganese concentration at the monitoring point below the wastewater discharge of the Toretska mine is 1.5 times lower than at the monitoring point above the discharge of the enterprise.

In view of the above, in order to fully assess the impact of coal industry enterprises on the quality of surface water bodies, it is necessary to include in the special water use permits the control of discharge of priority, basin-specific substances, as well as substances typical for the industry's waste water discharges.

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

The Don RBD is home to a highly developed industrial activity, including energy production (heat/hydroelectric power plants), mining (coal), ferrous and non-ferrous metallurgy, chemical and petrochemical industry, machine building, livestock and food industry, etc., which are potential sources of accidental pollution both through wastewater discharges and washouts from sites where industrial 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.

A list of potential accident risk sites should be developed at the level of the Don RBD, including operating industrial facilities with a high risk of accidental pollution due to the nature of chemicals stored or used at industrial facilities, as well as contaminated sites, including landfills and dumps located in flood zones. The register should initially include the Don RBD facilities that pose risks of accidental pollution, primarily sludge ponds and tailings ponds, municipal wastewater treatment facilities, and sites where industrial waste is stored.

Environmentally hazardous enterprises

Since 2014, a number of enterprises, including potentially hazardous ones, have been located in the temporarily occupied territory of Ukraine, which may affect the water bodies of the sub-basins of the Kryvyi Torets and Bakhmutka rivers in the government-controlled territory, and the effects may spread along the riverbed of the Siverskyi Donets, including in the area of the surface drinking water intake from the Siverskyi Donets River for the needs of Luhansk Oblast, which is located in the village of Bilohorivka (467 km from the mouth) downstream of the confluence of these tributaries.

These tributaries do not affect the state of the Siverskyi Donets in the area of water intake into the Siverskyi Donets-Donbas Canal for the needs of Donetsk Oblast (522 km from the mouth), as they are located downstream.

In the Kryvyi Torets sub-basin, the main potentially hazardous facilities located in the temporarily occupied territory of Ukraine and on the contact line or in the so-called "grey zone", as a result of economic activity / suspension / termination or other force majeure circumstances, including the consequences of military operations, may have a significant impact on the state of the basin's SWB.

Russia's armed invasion in 2014 disrupted the operation of a large number of industrial enterprises that pose a potential danger to the public and the environment.

Tailings ponds, which are accumulators of liquid multi-tonnage waste from various industries, are one of the objects of increased danger to the region's water resources. These are natural or artificially created earthen tanks for industrial waste that are transported from their generation sites mainly hydraulically through pipelines and stored in liquid, slurry and paste form.

When any tailings management system fails, the liquid component of the waste disrupts the protective functions of the enclosing structures, escapes and causes destruction. Tailings facilities are complex structures with long-term functionality that are not only influenced by the natural environment, but also by many socio-political and economic factors (e.g., military operations, forced change of business partnerships, policies of nearby enterprises and local authorities, quality of legislative regulation and methodological support, distribution of responsibility in emergency situations, corruption, human factor, etc.) Thus, tailings management is a dynamic, complex and interconnected system that requires a comprehensive public-business approach to protecting the environment from the devastating consequences of accidents throughout the entire life cycle of tailings facilities.

According to the results of the identification, there are 200 tailing pits in Donetsk and Luhansk oblasts that contain 939 million tonnes of industrial waste. Of these, 75 facilities are located on the temporarily occupied territory of Ukraine.

The location of tailing ponds as potentially hazardous facilities in the area of military operations, in close proximity to the demarcation line, increases the risk of existing hazards from these facilities turning into environmental disasters, including those of a transboundary scale.

The sludge ponds located in Donetsk and Luhansk oblasts pose the greatest risk: Avdiivka Coke Plant, INCOR & Co, Bakhmut Agrarian Union, Dzerzhynska, Rubizhne (a storage facility of Rubizhne Dye), Severodonetsk Azot Association, and the former Lisichanska Soda. These sites were selected based on clear criteria of potential danger to the public and the environment, such as toxicity and volume of accumulated waste, proximity to water bodies, residential and industrial buildings, and the demarcation line.

Tailings ponds are intended to serve as safe storage facilities for production waste and, if they discharge drainage or return water, are point sources of hazardous substances pollution of surface waters.

In the event of accidents, tailing ponds become sources of accidental pollution and impact of contaminated areas on surface and groundwater as a result of one-time accidental releases and/or chronic leaks due to structural failure. In this case, the toxic substances contained in the waste are released directly or from contaminated areas into the nearest surface and/or groundwater.

The available monitoring results indicate that even in the absence of direct discharge of contaminated water directly from the storage facilities, the load from their operation leads to changes in the state of the SWB and GWB, probably due to infiltration of hazardous substances from the storage facilities and their surface flushing from the contaminated adjacent territory.

The Ministry of Environmental Protection and Natural Resources of Ukraine has launched an electronic service that also includes 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.

Table 25. Register of facilities in the Don RBD that pose risks of accidental pollution

№	Object name
1	Municipal enterprise "Kharkivvodokanal"
2	SE Pervomaiskugol (Zolote Mine)
3	PJSC Avdiivka Coke Plant
4	PJSC Dzerzhinskaya CPP
5	PJSC "Bakhmut Agrarian Union"
6	Municipal enterprise "Rubizhne"

№	**Object name**
7	PJSC Severodonetsk Azot Association
8	Horlivka Municipal Water and Sewerage Company "Water of Donbass"
9	Myrnohrad Municipal Water and Sewerage Company "Water of Donbass"
10	Makiivka water and wastewater treatment plant of the "Water of Donbass" Company
11	PJSC Novokramatorsk Machine-Building Plant
12	Municipal enterprise "Slovmiskvodokanal"
13	SE Mirnogradvuhillya (Central Mine)
14	Kramatorsk Vodokanal
15	SE Pervomaiskugol (Gorska Mine)
16	Lysychanskvodokanal
17	PJSC Rubizhne Cardboard and Packaging Plant
18	SE Selydivuhillya (Mine 1-3 Novogrodovskaya)
19	SE Toretskugol (Central Mine)
20	State Enterprise "Krasnolimanskaya"
21	SE Toretskugol (Toretska Mine)
22	ME "Bakhmut-Voda"
23	SE Pervomaiskugol (Toshkivska Mine)
24	SE Myrnogradvuhillya (Mine 5/6)
25	ME "Water of Donbass"
26	SE Myrnogradvuhillya (Capital Mine)
27	Donetsk Regional Branch of ME "Water of Donbass"
28	Ukrvuhlelerestructuring SE (Eastern Mine Liquidation Division, Nova Mine)
29	Konstantinovskoye water and wastewater treatment plant of the Water of Donbass Company
30	Druzhkovske water and wastewater treatment plant of the Water of Donbass Company
31	Kupyansky Vodokanal
32	PJSC "Centrenergo" Vuhlehirska, Svitlodarske village
33	Melnikov Mine of Lisichanskugol JSC
34	Sloviansk Regional Branch of the Water of Donbass Company
35	Toretsk water and wastewater treatment plant of the Water of Donbass Company
36	SE Pervomaiskugol (Carbonite Mine)
37	ME in Izyum
38	Chuguivvoda Municipal Enterprise
39	ALC Lisichansk Gelatin Plant
40	JSC Lisichanskugol (Novodruzheskaya Mine of JSC Lisichanskugol)
41	Zarya LLC
42	Ukrshakhtgidrozakhyst
43	JSC Lisichanskugol (Kapustin Mine of JSC Lisichanskugol)
44	Balakleya Vodokanal

The register of facilities in the Don RBD that pose risks of accidental pollution needs to be updated annually.

2.1.5. Hydromorphological changes

Hydromorphological changes are one of the significant water management issue (SWMI) that impede the achievement of the environmental objectives set out in the RBMP. Hydromorphological changes as a result of economic activity affect the habitats of aquatic communities. The presence of hydromorphological changes in SWBs leads to the deterioration of the ecological status of many SWBs in the Don RBD .

Hydromorphological changes are divided into types:

- disruption of the continuity of water flow and habitats - longitudinal disruption of the continuity of rivers and habitats (transverse artificial structures in the river channel, interruption of water flow, disruption of the free flow of rivers, movement of sediments, migration of fish and other aquatic life);
- disruption of the hydraulic connection between river channels and their floodplains;
- hydrological changes (water abstraction, hydropicking / fluctuations in water levels of artificial origin);
- morphological changes (modification of the morphology of the riverbed, banks, and adjacent parts of the floodplain, e.g. straightening).

Disruption of the free flow of rivers. Dams and other artificial cross structures located in riverbeds were built primarily to accumulate water, with its subsequent use for irrigation, water supply for the population and industry. The Don RBD identifies 181 SWBs where there is a disruption of the continuity of water flow and environments (regulation).

The accumulation of water in ponds and reservoirs upstream of dams also provides flood protection for areas downstream of dams. According to 2019 data, there are 2,679 ponds in the Don RBD, and the basin's overregulation ratio is 1[10] . According to the SAWR, a significant number of ponds are in poor technical condition. Most of them were built in 1960-1980 according to simplified design documentation. The dams are earthen, with loose slopes, and many of them are eroded. Spillway structures usually do not meet modern requirements in terms of their technical condition.

Some dams were built as part of hydropower plants. The presence of dams and other structures crossing the riverbed disrupts the continuity of water flow and sediment movement, as well as the migration of fish and other aquatic life.

No fish passages have been built in the cross structures and, as a result, populations of various fish species have declined or disappeared. To date, the construction of fish passages on existing dams on the rivers of the Don RBD looks quite problematic due to the lack of not only funds, but also the very assessment of the economic feasibility of building a fish passage.

Disruption of the hydraulic connection between river channels and 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.

The assessment of this type of hydromorphological changes is included in the hydromorphological protocol for assessing the SWB used by the SES in the course of state monitoring of surface waters (indicators No. 10: "Interaction between the channel and the floodplain: 10a - Possibility of floodplain inundation, 10b - Limiting factor for the development of horizontal deformations of the channel"). Hydromorphological monitoring in the Don RBD has been carried out since 2019.

Hydrological changes. Hydrological changes affect water bodies through water withdrawals and fluctuations in water levels below dams, and as a result, lead to changes in the regime and distribution of river flows. Discharges, water abstractions and artificial periodic fluctuations in water levels (hydroelectricity) are key pressures that require compensatory measures to be implemented on a river basin-wide scale.

Only one case of hydrological changes at the Don RBD was identified - fluctuations in water levels below the Rayhorod Dam, which is located on the Siverskyi Donets River (522 km from the source) in Donetsk Oblast. Water level fluctuations here exceed 0.5 m per day for most of the year. The length of the Siverskyi Donets River affected by water level fluctuations is 7.7 km.

[10] Water Fund of Ukraine: Artificial reservoirs - reservoirs and ponds: Handbook / V.V. Greben, V.K. Khilchevskyi, V.A. Stashuk, O.V. Chunariov, O.E. Yaroshevych / Edited by V.K. Khilchevskyi, V.V. Greben. Kyiv. Interpress, 2014. 192 c.

In July 2021, the volume of water discharged to the downstream site to maintain water availability in Donetsk and Luhansk regions was 82 million m^3, with an average flow rate of 30.6 m^3/s (environmental flow is 22 m^3/s). During the month, water flows below the dam ranged from 20.7 to 45 m^3/s.

Decreased natural flows in the context of global warming and natural water shortages, reduced flow velocities and the formation of stagnant zones contribute to eutrophication processes and, as a result, lead to a deterioration in biodiversity and degradation of aquatic ecosystems.

Morphological changes. The main factors that adversely affect the natural morphology of the riverbeds, banks and floodplains of the Don RBD are urbanisation, flood protection, agriculture and shipping. As a result of these activities, the rivers in certain areas are straightened, dredged, and banked, the floodplain is ploughed up almost to the channel, and its natural vegetation is changed.

Within the Don RBD, the river channelization occurs at 47 SWBs.

Reduced variability in channel depth and width, disruption of the natural balance of erosion and accumulation, narrowing of the inter-dam space and restriction of free river meandering lead to an impoverishment of the composition and reduction in the number of biological indicators, such as fish, benthic invertebrates, higher aquatic vegetation, and phytoplankton.

According to hydromorphological monitoring, which has been carried out in the Don RBD on an ongoing basis since 2019 by the Ukrainian Hydrometeorological Centre (UkrHMC) and the territorial offices of the Hydrometeorological Centres in Kharkiv and Luhansk oblasts, in most cases, the deterioration of the hydromorphological condition of the RBD is due to morphological changes in the floodplain. According to the hydromorphological assessment of the "Channel", "Bank/coastal zone" and "Floodplain" zones, the floodplain is most affected, the bank and coastal zone are less affected, and the channel is even less affected.

Over time, when the amount of monitoring data increases and the network of observation points expands, the assessment of hydromorphological changes in the SWB can be performed using the monitoring data.

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 water levels 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).

Most cases of hydromorphological changes occur on small rivers in the Don RBD. Small rivers, according to the classification of rivers by basin area used in the definition of the SWB, are rivers with a basin area of up to 100 km^2.

2.2. Groundwater

2.2.1. Pollution

The anthropogenic load on groundwater within the Don RBD is carried out by point and diffuse sources.

Diffuse sources of pollution

The main source of diffuse groundwater pollution is agriculture (runoff from agricultural land) and urban land use (runoff from the surface of urbanised areas).

The main reason for the deterioration in the quality of groundwater from diffuse sources is its contamination with nitrogen compounds, such as nitrates and ammonium ion. Preliminary studies in the Don River Basin revealed a significant exceedance of the TLV for ammonium (up to 2.6 mg/dm^3) in the water of the GWBs in Quaternary and Upper Cretaceous sediments (Luhansk Oblast - sub-basins of the Krasna, Bila, and Derkul Rivers). The content of ammonium compounds in the identified wells significantly exceeds the TLV. The highest nitrate content, which is close to the TLV, was found within the Aidar River sub-basin (up to 46 mg/dm^3).

Point sources of pollution

The Don RDB is home to the largest petrochemical, metallurgical, machine-building, metallurgical complexes and coal mining enterprises. Accordingly, the largest number of sludge and tailings ponds, industrial wastewater lagoons, household waste landfills and rock dumps are located here in Ukraine. These facilities have a significant impact on groundwater conditions.

Mine drainage waters also have a significant impact on the groundwater quality of the first aquifers from the surface. Mine drainage waters usually contain large amounts of metals, sulphates, oil products, phenols, cyanides, etc. and are characterised by high salinity (up to 20 g/dm^3).

Potential and existing sources of significant anthropogenic impact on the geological environment in the northern part of the basin (Kharkiv region) include oil and gas production facilities, power generation facilities, and machine-building and metalworking industries. Mining operations release many elements and compounds into the environment, changing the hydrological regime of groundwater and subsidence of the earth's surface. The source of groundwater pollution from the energy industry is the flow of pollutants from ash and sludge ponds.

Donetsk region is characterised by the concentration of significant fuel and energy and other mineral resources. This contributed to the development of heavy industry in the region. The technogenic load in Donetsk region is the largest in Ukraine. Mining, metallurgy, metalworking and coke-chemical industries are concentrated here. The Siverskyi Donets sub-basin includes some of the most critical infrastructure facilities in terms of environmental safety, such as the Central Coal Mining District and the northern wing of the Pokrovskii District. The environmental situation in the Central Donbass region in the area of the Horlivka-Yenakiieve industrial complex is currently extremely tense.

Heavy toxic metals and organic pollutants are accumulating in the soil and groundwater of the area in excess of the TLV.

Industrial enterprises are concentrated in large industrial and urban agglomerations: Horlivka-Yenakiyevo, Kramatorsk-Sloviansk, Rubizhne-Lysychansk, Luhansk, and Alchevsk.

Thus, it is typical for the territory of the Siverskyi Donets sub-basin of the Don RBD to locate environmentally hazardous enterprises in the area of the main drinking aquifers.

Critical infrastructure facilities, including Luhansk Thermal Power Plant, Popasna District Water Utility, Alchevsk Iron and Steel Works, Alchevsk Coke Plant and numerous other chemical, metallurgical and mining enterprises, operating and closed mines, as well as mines where mine water drainage has been suspended, are located on the temporarily occupied territory of Ukraine and on the verge of the conflict.

Groundwater quality is adversely affected by the discharge of highly mineralised mine water into the hydrographic network. Critical industrial facilities that worsen groundwater quality are PJSC Sievierodonetske Azot Association (chemical leaks within the industrial site create groundwater pollution sites); Rubizhansky Farbnyk LLC; Sievierodonetskvodokanal and Lysychanskvodokanal (groundwater pollution within sanitary protection zones); coal industry enterprises (discharge of mine saline water into the river network with subsequent groundwater pollution); chemical plant LLC Inkor & K (filtration and seepage of hazardous pollutants, including phenols, from sludge ponds); LINIK PJSC (filtration of oil refining products from the company's industrial sites and subsequent groundwater pollution); storage facilities of the former Lisichansk Soda OJSC (filtration of highly mineralised contaminated water from the White Sea industrial wastewater storage facility); PJSC Rubizhne Cardboard and Packaging Plant (pollutants entering the territory of the industrial site, in the area of buffer ponds and silt maps); storage facilities of the former Khimprom (groundwater pollution due to injection of industrial wastewater into aquifers).

Among the artificial facilities affecting the groundwater status in the Upper Cretaceous sediments is the Siverskyi Donets-Donbas Canal (filtration losses from the canal affect and change the hydrodynamic situation).

The situation with closed mines in the region requires special attention. Due to the economic and political instability in the region, a large number of mines are currently closed. Due to the temporary occupation of part of the territory of the Donbas by the Russian Federation, the closure of mines cannot be controlled. Therefore, there is a high risk of accidents at these facilities.

For example, some of the mines in the Central Donbass region (the oldest region with the largest number of workings) and the Pervomaisk group of mines are located in the temporarily occupied territory of Ukraine.

Given that almost all mines are interconnected, the process of flooding one group of mines can cause an increase in the level of mine water in another.

There is a threat of hydrogeological hazard due to the flooding of mine workings with mine waters of the inactive Pervomayskaya and Golubovskaya mines (Pervomayskaya group of mines), which are located on the temporarily occupied territory and are hydrogeologically connected with the operating Zolote, Carbonite and Girskaya mines located on the territory controlled by Ukraine of the territory. At the mines closed in 2017, namely Rumyantsev, Kalinin, Lenin, Gayovoye and Karl Marx, a significant rate of rise in the level of mine water was recorded - 0.49, 1.07, 0.55, 0.75 and 0.52 m/d, respectively. Within the Central region of Donbas, there is a productive coal seam with coal seams concentrated at depths of 700-1300 m. In the productive thickness of coal deposits, aquifers are confined to sandstone and limestone layers, which are intensively drained by mine workings and represent an aquifer that has been completely transformed into a man-made aquifer.

The process of rising mine water levels is generally non-linear due to the presence of hydraulic connections between some mines and the process of restoring storage reserves at the initial stage of mine water drainage shutdown. Therefore, predicting the expected level of mine flooding at a given point in time is a complex issue. However, we should expect irreversible changes in the geological environment as a result of mass mine closures and subsequent flooding. Mine closure will result in the emergence and subsidence of the earth's surface over mine workings and flooding of territories as a result of a disturbance in the regional balance in the geological environment and the recovery of the level of drained groundwater above the previously recorded natural level.

Mines that are flooded usually have a mineralisation 2-3 times higher than that at the time of operation. For example, a number of closed mines in the Central District have increased the salinity of their mine water by up to several times. The Stakhanov mine discharges water with a salinity of more than 10 g/dm^3 into the Kazennyi Torets River. Most of the mine water is of the sulphate-chloride type.

Sodium sulphate water is very hard and moderately aggressive to concrete and metal structures. The content of chlorides and sulphates in mine water significantly exceeds the TLV. Water with such indicators has a very harmful effect on biological organisms. In addition to the high content of sulphates and chlorides, the water of the Pervomaisk group of mines (from the moment it reaches the level of the man-made aquifer of the earth's surface and enters surface waters) will also introduce other hazardous chemical components, such as metals, phenols, methane, chlorobenzene, etc.

The type of load from each industrial facility that can affect groundwater quality is characterised by a certain set of specific components and substances that can enter groundwater as a result of a particular industrial activity.

2.2.2. Volumes / reserves

According to the State Water Cadastre of Groundwater Deposits of Ukraine, the projected groundwater resources within the Don RBD are more than 8000 thousand m^3/d. At the same time, proven operational groundwater reserves are estimated at 3500 thousand m^3/d. However, the availability of natural groundwater resources in the river basin and the percentage of groundwater resources used within different aquifers are unevenly distributed throughout the territory. The situation with groundwater resources in coal deposits is critical. The intensity of exploitation of groundwater aquifers in coal deposits, as well as the impact of mining operations, has led to a widespread decline in levels and the formation of regional sinkholes (over 50 m deep) in mine workings. In the coal mining regions, the drainage impact of mines is felt in the aquifers of the Carboniferous strata, as well as in the aquifers in the overlying Neogene-Palaeogene sediments. The percentage of groundwater resources used in relation to the value of the corresponding projected resources over the entire area of the aquifer in coal deposits is 75-100%, sometimes even more than 100%. At the same time, the quality of groundwater does not meet the drinking water standards. This has led to the need to use mine drainage water as a source of drinking water supply with a salinity of more than 1 g/dm^3 .

The percentage of groundwater resources utilisation in the Upper Cretaceous aquifers in relation to the value of the corresponding forecasted resources within the Don RBD is 25-50%. For the remaining aquifers within the basin, the share of groundwater use does not exceed 25-30% of the projected groundwater resources.

The overall trend in groundwater extraction at important water intakes (groundwater extraction >10 m^3/d) is characterised by a decrease in extraction volumes compared to previous years.

The impact of groundwater extraction has the following tendencies to influence the groundwater regime.

At the beginning of the water intake operation, from the 1970s to the late 1990s, depression sinkholes were formed. As a result of intensive water withdrawal from the Upper Cretaceous aquifer, the floodplain of the Siverskyi Donets River turned from a natural discharge area into a source of water supply. In this regard, there was a deterioration in groundwater quality due to the penetration of pollutants from contaminated surface water.

and groundwater. However, the last decade has seen a decline in groundwater extraction due to a reduction in industrial capacity and a decrease in the number of water consumers due to the war in the region.) The reduction in water withdrawals has led to the beginning of the recovery of groundwater levels. However, this situation does not indicate an improvement in groundwater quality, but rather that groundwater in the process of recovery is in contact with a man-made aeration zone containing high concentrations of soluble pollutant compounds, which worsens groundwater quality. This situation is typical for the groundwater of carbonate aquifers in Luhansk Oblast, where, along with specific hydrodynamic conditions, there is a dense location of hazardous industrial enterprises such as Rubizhne Dye LLC, Zorya LLC, Sievierodonetsk Azot Association PJSC, storage facilities of the former Lysychansk Soda, LINIK PJSC, etc.

2.2.3 Other significant anthropogenic impacts

A significant negative factor of anthropogenic impact on the environment is Russian aggression. Currently, most of the basin's territory is occupied.

Non-pressure GWBs. The quality of non-pressure GWBs may be subject to changes due to the ingress of pollutants (heavy metals, fuels and lubricants, organic pollution, etc.) from the surface in areas of intense shelling. Massive destruction of settlements and industrial facilities may result in the ingress of various pollutants into the soil and rocks of the aeration zone, and in the long term, adversely 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 Ukraine's recent civilisational development due to the war with Russia is large demographic losses: increased mortality, decreased birth rate, and migration, which is typical for the territory of the study basin. Accordingly, in the coming years, industrial production is likely to decline, so, obviously, centralised consumption of groundwater for domestic use will decrease, and groundwater levels in the pressure groundwater supply systems will gradually recover. Therefore, the quantitative indicators will not undergo negative changes.

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

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. An additional factor of negative impact on non-pressure water treatment plants in the Don basin is highly mineralised mine water, especially after massive uncontrolled flooding of mines in the occupied territories.

Protected from contamination, injection groundwater resources are mostly beyond the risk of not achieving good quality (chemical) status (Table 26), except for GWBs in Cretaceous and Carboniferous rocks.

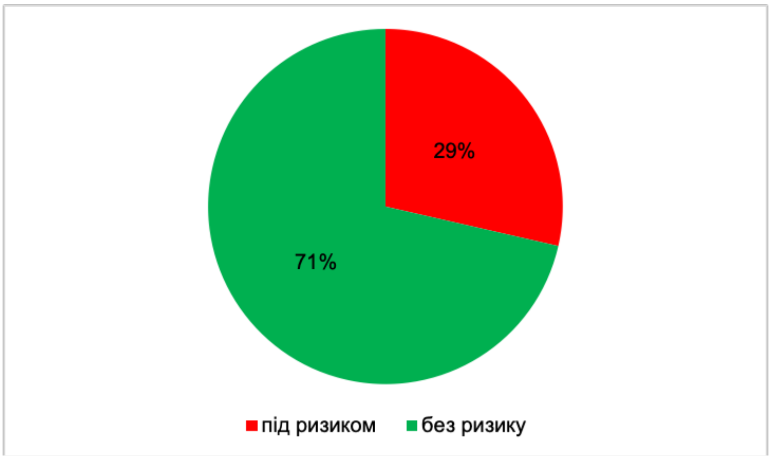


Figure 21. Assessment of the risk of not achieving good chemical status of the GWBs

Risk assessment of failure to achieve good quantitative status

There is no negative impact from anthropogenic groundwater abstraction for the non-pressure GWBs identified in the Don RBD. According to pre-war data, the risk of not achieving good quantitative status is posed to the GWBs in the Upper Cretaceous sediments

Given the reduction in groundwater extraction, there is no risk of failure to achieve good quantitative condition of the remaining pressure GWBs, according to available data.

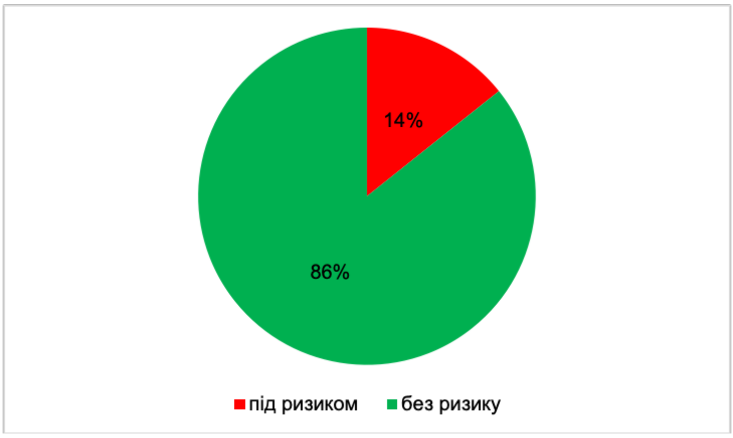


Figure 22. Assessment of the risk of not achieving a good quantitative status of GWBs

Table 26. Risk assessment of failure to achieve good qualitative (chemical) and quantitative status

GWBs code	GWBs and GWBs groups	Quality risk		Quantitative risk	
		Not at risk / at risk	at risk: the reason	Not at risk / at risk	at risk: the reason
UAM6510Q101 UAM6510Q102 UAM6510Q103 UAM6510Q104 UAM6510Q105 UAM6510Q106	GWBs in alluvial deposits quaternary system	at risk	Nitrogen pollution within agricultural landscapes, impact of mine water	Not at risk	
UAM6510N100	GWBs in alluvial deposits of Pliocene terraces	Not at risk		Not at risk	
UAM651PG100	GWBs in Eocene-Miocene sediments	Not at risk		Not at risk	
UAM651PG200	GWBs in the Kyiv-Kharkiv, Beretsky and Novopetro-vsky sediments	Not at risk		Not at risk	
UAM6510K101 UAM6510K103 UAM6510K104 UAM6510K105 UAM6510K106 UAM6510K108 UAM6510K110 UAM6510K111 UAM6510K112 UAM6510K113 UAM6510K114 UAM6510K116 UAM6510K117	GWBs in Upper Cretaceous sediments	at risk	Nitrogen pollution within agricultural landscapes	Not at risk (except for UAM6510K101 and UAM6510K106)	Changes in the hydrodynamic situation due to intensive water extraction UAM6510K101 and UAM6510K106
UAM6510P100	GWBs in Lower Permian sediments	at risk		Not at risk	
UAM6520C100 UAM6510C101 UAM6510C102	GWBs in sandy-clay deposits of the coal system	at risk	Impact of coal mining	at risk	Impact of coal mining

GWBs code	GWBs and GWBs groups	Quality risk		Quantitative risk	
		Not at risk / at risk	at risk: the reason	Not at risk / at risk	at risk: the reason
UAM6510C103 UAM6510C104 UAM6510C105					
UAM6510K200	GWBs in the Cretaceous Alb-Cenomanian deposits	Not at risk		Not at risk	
UAM6510K102 UAM6510K107 UAM6510K109 UAM6510K115	GWBs in Upper Cretaceous sediments	Not at risk		Not at risk	
UAM651PG300	GWBs in the Kaniv-Buch-atsky Eocene sediments	Not at risk		Not at risk	
UAM6510J100	GWBs in the Oxfordian and Kimeridgeian deposits of the Upper Jurassic	Not at risk		Not at risk	
UAM6510J200	GWBs in Middle-Upper Ju-rassic sediments	Not at risk		Not at risk	
UAM6510T100	GWBs in Upper Triassic sediments	Not at risk		Not at risk	
UAM6510T200	GWBs in Lower-Middle-Upper Triassic sediments	Not at risk		Not at risk	

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 as a whole and for the eastern region of the country. The greatest changes have been observed over the past thirty years, which have been the warmest for the period of instrumental weather observations.

During 1991-2020, Luhansk Oblast experienced a significant increase in the average annual air temperature, with a rate of 0.56°C/10 years. These changes were three times higher than the rate of change in global temperature during this period. As a result, the average annual air temperature increased by 0.8°C compared to its average long-term values in 1961-1990. Winter became warmer by 1.4°C, summer by 1.0°C, spring by 0.7°C, and autumn by 0.5°C. These changes were caused by an increase in the maximum and, especially, the minimum air temperature. The increase in temperature resulted in an increase in the duration of the warm and vegetation periods by 9.0 and 6.0 days over 10 years, respectively, an increase in the number of summer days (2 days/10 years), the number of hot days (5-6 days/10 years), the maximum duration of the hot period (3 days/10 years), and an increase in fire danger in weather conditions, as evidenced by an increase in the maximum daily value of the fire danger index and the number of days with an extreme fire danger class (2-4 days/10 years). A significant increase in the maximum and, especially, minimum air temperature during the cold season resulted in a decrease in the duration of the cold period, the number of frosty days and winter severity, and the duration of stable snow cover.

The increase in air temperature is observed not only near the Earth's surface but also in the lower troposphere, accompanied 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.

The amount of precipitation per year has not changed significantly over the past 30 years compared to the climatic norm of 1961-1990, but there has been a redistribution of precipitation between seasons - a decrease in summer (-6%) and winter (-10%) and an increase in autumn (3%). A characteristic feature of the change in the moisture regime in Ukraine is the 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 eastern regions of Ukraine.

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 period, 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 recent decades, eastern Ukraine has also seen a downward trend in average and maximum wind speeds and a decrease in the frequency of related hazards, such as blizzards and dust storms, due to changes in the conditions for weather phenomena.

Pollution of water bodies with solid 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 Don RBD, but is also common to other river basins in Ukraine and reflects the problem of waste management at both the 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.

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 carried out on the amount of waste on the banks and directly in rivers and water bodies in the Don RBD, nor on their 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 MPAs 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 species of aquatic organisms in the Don RBD in Ukraine are not systematic and are sporadic.

Several papers are devoted to the cases of massive development of water lettuce Pistia stratiotes (Araceae), a species of pantropical origin. In Ukraine, these plants were observed in the 1980s, but they did not pose a particular threat due to freezing in winter. In 2013-2015, their impact was catastrophic for the Siverskyi Donets River within the Kharkiv region. In particular, dense masses of P. stratiotes covered the entire water surface of the riverbed and stretched from several hundred metres to 10 km in length. This has resulted in the degradation of aquatic ecosystems, a decrease in the viability of native flora and fauna populations, and direct damage to the fishery (Kazarinova, 2016).

Expeditionary surveys conducted as part of the OSCE Project Co-ordinator in Ukraine project in the least disturbed areas (i.e. with the lowest risk of invasions) showed the presence of plants, invertebrates and fish even in areas approaching the reference condition.

In the water bodies of the Don RBD in the upper and middle reaches of the Siverskyi Donets, 18 fish species alien to the basin (27% of the total fish fauna) were recorded, of which 15 species were confirmed to be present (26% of the current fish fauna). Of these, 8 species have been introduced to the basin as a result of deliberate human resettlement, including 6 species: European eel Anguilla anguilla, paddlefish Polyodon spathula, white carp Ctenopharyngodon idella, variegated Aristichthys nobilis and white silver carp Hypophthalmichthis molitrix, and channel catfish Ictalurus punctatus, whose numbers and distribution are maintained only through artificial introduction. The other two naturalised species, Chinese carp Carassius auratus and silver carp Carassius gibelio, although they are the objects of fisheries introduction, have reached their current numbers and distribution mainly through self-propagation. Of the other naturalised species, the Black Sea-Azov seal Clupeonella cultiventris, southern multi-needle stickleback Pungitius platygaster, pufferfish Syngnathus abaster and goby Ponticola kessleri were first introduced to the basin as a result of self-settlement, although caused by human activity, and Amur chub Pseudorasbora parva, sunfish Lepomis gibbosus and Caucasian dace Knipowitschia caucasica were introduced by unintentional human introduction, most likely with fish stocking material.

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 in the Don RBD and determining the list of species at their location, the first and most important step is to establish a basin-wide monitoring system for invasions. Monitoring should focus 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 economic activity 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);

- 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.

In December 2020, eight countries - the Republic of Belarus, Andorra, Georgia, the Republic of Moldova, Norway, Switzerland, the United Kingdom 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. Ukraine's Emerald Network includes 377 territories[11] and covers about 8% of the country's territory.

There are 64 Emerald Network sites in the Don RBD, covering approximately 13.5% (7485 km^2) of the basin area. It should be noted that 31 of the Emerald Network sites (which were approved in 2018) have approved boundaries and status of protected areas under Ukrainian legislation, while the remaining 33 sites (which were added in 2020) do not have approved protected area boundaries or are partially within the approved boundaries of protected areas under Ukrainian legislation.

By category (Fig. 23), the sites of the Don RBD Emerald Network are divided into:

- nature reserves - 3
- national natural parks - 4
- regional landscape parks - 5
- protected tracts - 2
- nature reserves - 7
- botanical reserves - 5
- landscape reserves - 4
- botanical natural monuments - 1
- other facilities - 33

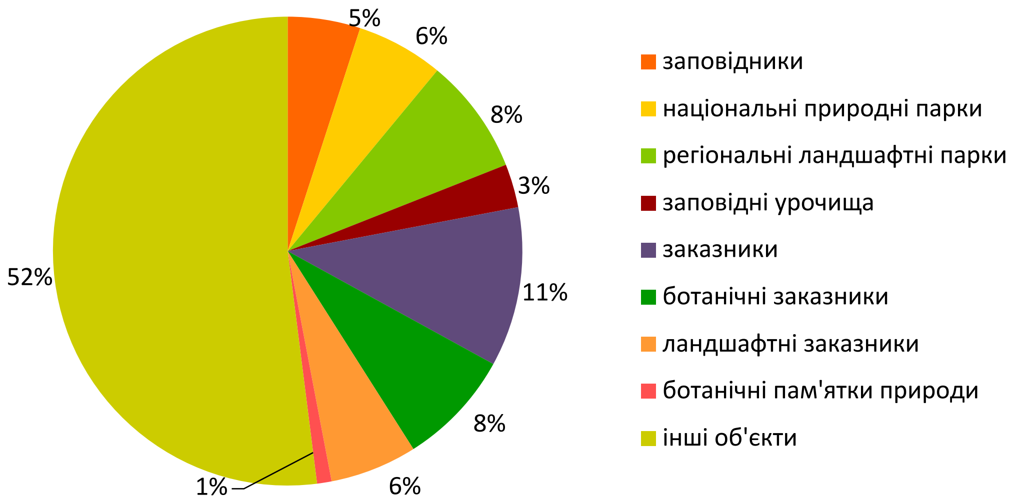


Figure 23. Breakdown of Emerald Network sites by category, %.

None of the site has a management and development plan in place. The list of sites in the Emerald Network is provided in Annex 4.

Impact of military operations

At the request of the Siverski-Donetsk Regional Military Police Department, the environmental departments of the Kharkiv, Donetsk and Luhansk regional military administrations provided information on crimes against the environment as a result of Russia's full-scale invasion of Ukraine.

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

In the Siverskyi Donets sub-basin of the Don RBD, the Emerald Network sites were affected by military operations (some are still affected).

1. **Ukrainian steppe nature reserve**

From March to September 2022, the Cretaceous Flora Reserve, a branch of the Ukrainian Steppe Nature Reserve of the National Academy of Sciences of Ukraine, was temporarily occupied by the Russian Federation. There is no reliable information on the number and extent of damage. Detonations, shelling, and mining of the territory lead to the mechanical destruction of wildlife, and explosions pose a threat to birds. Active earthworks damage the topsoil and destroy steppe vegetation. Tree felling causes irreparable damage to the reserve's forest plantations.

The site is currently located near the area of active hostilities.

2. **Holy Mountains National Nature Park**

From March to September 2022, the territory of the Holy Mountains National Nature Park was temporarily occupied by the Russian Federation and in the zone of active hostilities.

Out of the total area of 40.6 thousand hectares, 38.6 thousand hectares (95%) have been de-occupied, of which no more than 1.5% have been surveyed for explosives. Access to the forests is currently limited or non-existent.

There is no reliable and complete information on the number and extent of damage. According to preliminary estimates, the area of forests damaged by fires and mechanical damage is almost 18,000 hectares.

Birds die as a result of hostilities, leave their habitats, lose their young, and migrate to safer places. Large cloven-hoofed animals suffer the most from the contamination of forests with explosive devices: elk, deer, chamois, wild pigs, which can be blown up by mines and tripwires.

A significant part of the administrative and workplace premises was destroyed, as well as all vehicles, firefighting equipment and machinery, the fire station building, and the forest fire detection system.

3. **Kleban-Byk Regional Landscape Park**

An observation deck on the ecological trail was destroyed in the Kleban-Byk forest park. As a result of missile hits, fires broke out on the territory of the park, including within the Kleban-Byky outcrop geological monument of national importance, covering a total area of more than 30 hectares. Steppe and shrub ecosystems were damaged.

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 Cabinet of Ministers of Ukraine No. 2024 "On the Legal Regime of Sanitary Protection Zones of Water Bodies" dated 18.12.1998, 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."

According to the state water use accounting data for 2021, there are 127 water intakes in the Don RBD that withdraw more than 10 m³ per day for drinking water supply. Of these, 122 are groundwater intakes and 5 are surface water intakes (Fig. 24).

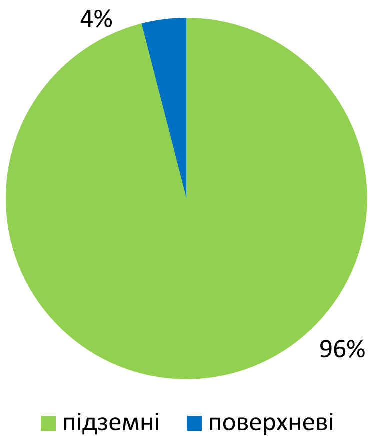


Figure 24. Distribution of drinking water intakes by type, %.

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 dated 21.11.2011 "On Approval of Tariffs for Calculating the Amount of Compensation for Damage Caused by Illegal Harvesting (Collection) or Destruction of Valuable Aquatic Bioresources" (as amended by the Resolution of the Cabinet of Ministers of Ukraine No. 1039 dated 06.10.2021), 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 (or part thereof) is a water body (or 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:

- The water quality of reservoirs 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 authorities at least 2 times before the start of the bathing season (at a distance of 1 km upstream of the bathing area on watercourses and at a distance of 0.1-1.0 km in both directions from it on water bodies, as well as within the bathing 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.

According to the SES of Ukraine in Kharkiv, Donetsk and Luhansk regions, as of 01.01.2022 (before the start of the full-scale armed invasion of the Russian Federation), there were 65 officially designated recreation and leisure facilities in the Donbas RBD that were open (Annex 5).

3.5. Areas vulnerable to (accumulation of) nitrate

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 areas 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 17 SWBs as vulnerable zones, which is 2% of the total number of SWBs in the Don 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 the CMU on 19.09.2018 No. 758. The Ministry of Environment, the SAWR and the SES are the subjects of state water monitoring.

Every year, starting from 2020, the monitoring programmes are approved by the relevant orders of the Ministry of Ecology (No. 410 of 31.12.2020, No. 1 of 05.01.2022) 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 objectives, 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.

Research monitoring is carried out by the state water monitoring bodies, which independently determine the monitoring points, the list of indicators and the frequency of their measurement/

4.1.1 Monitoring system

In the Don RBD, monitoring was carried out in 2023 at 73 monitoring sites located at 63 SWBs, including:

- at cross-border SWBs - 1;
- at the SWBs from which water is abstracted to meet the drinking and household needs of the population - 4.

Since October 2022, in accordance with paragraph 2 of the minutes of the offsite meeting chaired by the Minister of Environmental Protection and Natural Resources of Ukraine on the calculation of the assessment of damage caused to the environment of the Kharkiv region as a result of the armed invasion of the Russian Federation, including in the de-occupied territories, research monitoring of surface water bodies in the Kharkiv region has been carried out. The Research Monitoring Programme (Order of the State Agency of Ukraine for Water Resources No. 117 dated 05.10.2022) includes 17 monitoring points on the Siverskyi Donets, Vovcha, Velykyi Burluk, Udy, Lopan, Kharkiv, Lipetsk, Mozh and Oskil rivers.

4.1.2 Hydromorphological assessment / status

Hydromorphological monitoring was carried out at 47 SWBs in 2020-2023. The hydromorphological status is assessed in accordance with the Methodology approved by the Order of the Ukrainian Hydrometeorological Centre of the State Emergency Service of Ukraine No. 23 dated 19.02.2019, in five classes.

According to the assessment results, 39 SWBs are classified as nearly natural, 7 SWBs are classified as slightly modified, and 1 SWB is classified as satisfactory (Figure 25).

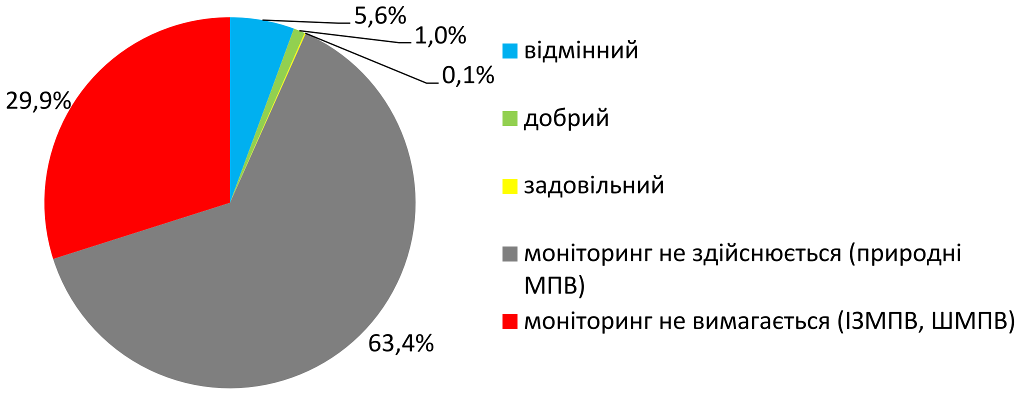


Figure 25. Distribution of SWBs according to the results of hydromorphological assessment

4.1.3 Chemical status assessment

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

In Ukraine, the Order of the Ministry of Ecology and Natural Resources of 06.02.2017 No. 45, registered with the Ministry of Justice of Ukraine on 20.02.2017 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 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 Heavily Modified Surface Water Body".

Directive 2009/90/EC (Article 5) sets out technical requirements/criteria for the processing of monitoring data, which were also taken into account in the assessment of 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 environmental and chemical states of the SWB 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 defined in the List of Pollutants for Determining the Chemical status of Surface and Groundwater bodies and the Ecological Potential of an Artificial or Heavily Modified Surface Water bodies, according to the Order of the Ministry of Ecology dated 06.02.2017 No. 45, hereinafter referred to as the List, which meets the requirements of the Procedure (almost all relevant requirements for the list of indicators, methods and frequency are 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.

In the Siverskyi Donets sub-basin of the Don RBD, surface water quality monitoring by indicators that determine the chemical state of surface water massifs in 2022-2023 was not carried out in full (taking into account the operational military situation) due to the full-scale Russian invasion of Ukraine.

To assess the chemical status of the SWB, statistically processed data of measurements of pollutants in surface waters conducted at 76 monitoring sites for 65 SWB in 2021-2023 were used, namely the average and maximum values.

Background concentrations for non-synthetic substances (mercury, lead, cadmium, nickel) were not taken into account when assessing the chemical status of the SWB.

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

From the List of indicators used to determine the chemical status of the SWB in 2021-2023, measurements were carried out only for 37 substances and their groups, of which 4 are heavy metals.

The following parameters were not measured: brominated diphenyl ethers, chloralkanes, C_{10-13} , di-(2-ethylhexyl)-phthalate, diuron, isoproturon, chlorophenyl phosphate, octylphenols, pentachlorophenol, tributyltin compounds (tributyltin cation), perfluorooctane sulfonate and its derivatives (PFOS), dioxins and dioxin-like compounds, biphenox, 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.

The results of the assessment of the chemical ststua of SWB in the Siverskyi Donets sub-basin of the Don RBD are presented in Annex 8.

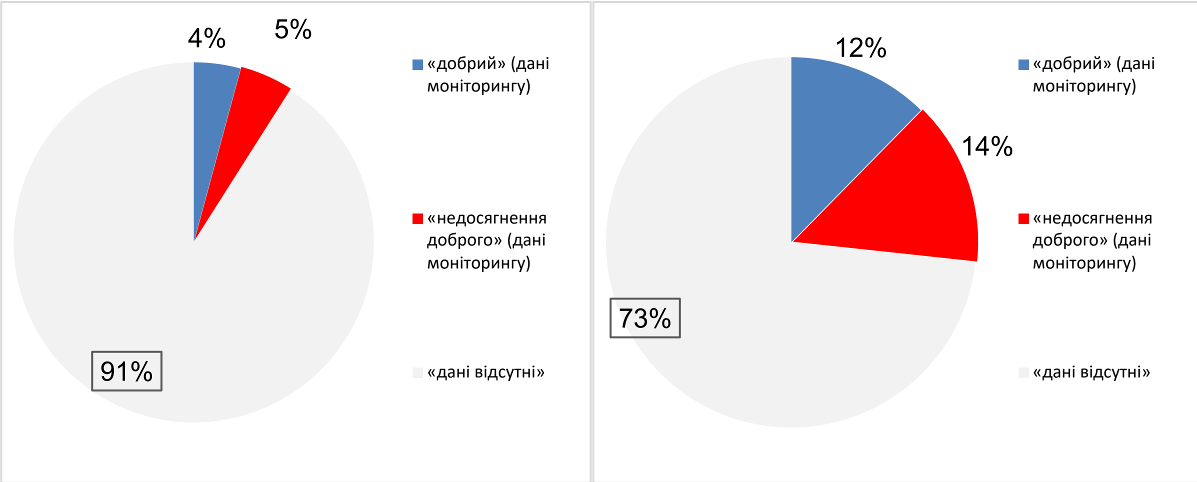
The reliability of the assessment of the correct determination of the chemical status of these SWB is determined according to the criteria of Annex 11 of the Order and corresponds to the average level of reliability.

Based on the results of the assessment of the chemical status of the SWB in 2021-2023, the following conclusions can be drawn from the monitoring data (Table 31, Fig. 26):

- "good" chemical status – 28 linear SWB (4% of the total number of linear SWB in the Don RBD), with a length of 986 km (12% of the total length of SWB in the Don RBD);
- "not achieving good" chemical status – 32 linear SWB (5% of the total number of linear SWB in the Don RBD), with a length of 1144 km (14% of the total length of SWB in the Don RBD), 5 polygonal SWB (14% of the total number of polygonal SWB in the Don RBD), with an area of 199 km^2 (67% of the total area of polygonal SWB in the Don RBD).

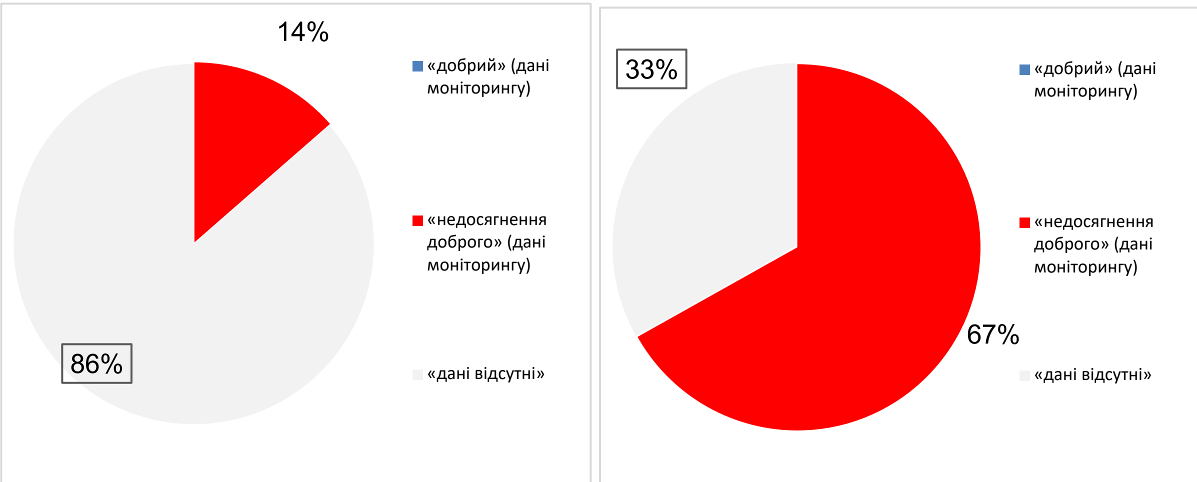
Table 27. Chemical status of the SWBs for 2021-2023 (based on monitoring data)

Chemical status	number of SWB	total length of the SWB, km	number of SWB	total area of the SWB, km^2
"good"	28	986	0	0
"failure to achieve the good"	32	1144	5	199



a) by number *b) by total length*

Figure 26. Assessment of the chemical status of linear SWB based on monitoring results



a) by number *b) by total area*

Figure 27. Assessment of the chemical status of polygonal SWB 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:

- anthracene (for 1 SWB)
- cadmium (for 10 SWB)
- chlorpyrifos (for 4 SWB)
- fluoranthene (for 14 SWB)
- lead (for 11 SWB)
- pentachlorobenzene (for 8 SWB)
- benzo(a) pyrene (for 11 SWB)
- benzo(b) fluoranthene (for 12 SWB)
- benzo(k) fluoranthene (for 4 SWB)
- benzo(g,h,i)perylene (for 1 SWB)
- trichloromethane (for 3 SWB)
- dicofol (for 4 SWB)
- lutrium (for 4 SWB)
- Cypermethrin (for 3 SWB)
- dichlorvos (for 4 SWB)
- nickel (for 2 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 state of the SWB.

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

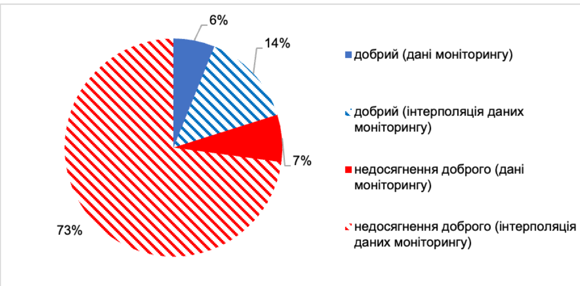
- category;
- the volume of the reservoir;
- water exchange regime of the reservoir.

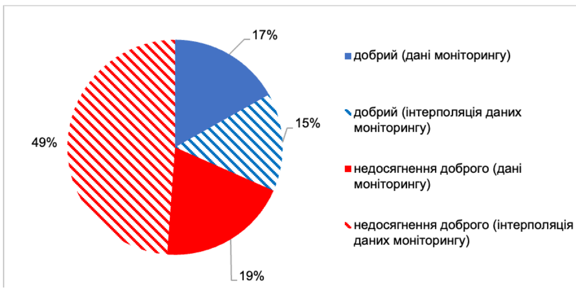
Based on interpolation of the monitoring results in accordance with the aggregation of the SWB (low level of reliability of the condition assessment), the results are as follows:

- "good" chemical stattus – 64 linear SWB (10% of the total number of linear SWB in the Don RBD), with a length of 863 km (11% of the total length of linear SWB in the Don RBD);
- "failure to achieve good" chemical status – 333 linear SWB (50% of the total number of linear SWB in the Don RBD), with a length of 2856 km (36% of the total length of SWB in the Don RBD), 17 polygonal SWB (46% of the total number of polygonal SWB in the Don RBD), with an area of 59 km^2 (20% of the total area of polygonal SWB in the Don RBD).

Table 28. Chemical status of the SWBs 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"	64	863	0	0
"failure to achieve the good"	333	2856	17	59





by number by total length

Figure 28. Assessment of the chemical status of linear SWBs based on interpolation of monitoring results, according to SWBs aggregation

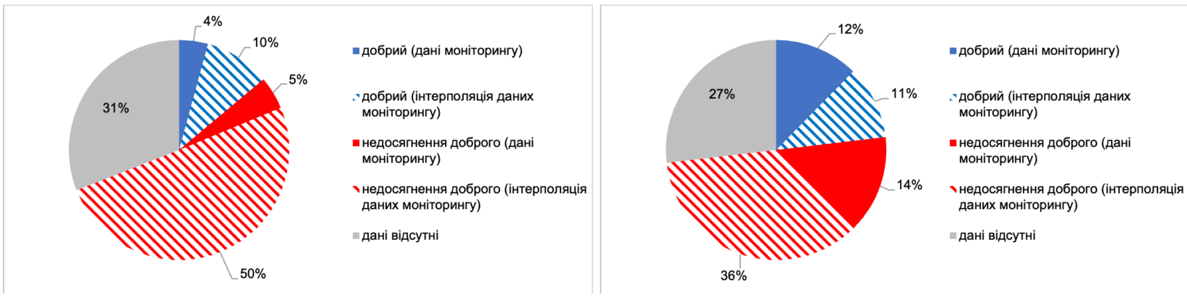
by number *by total area*

Figure 29. Assessment of the chemical status of polygonal SWBs based on interpolation of monitoring results, according to the aggregation of SWBs

A summary assessment of the chemical status of the SWB is shown in Table 29 and Figure 30, 31.

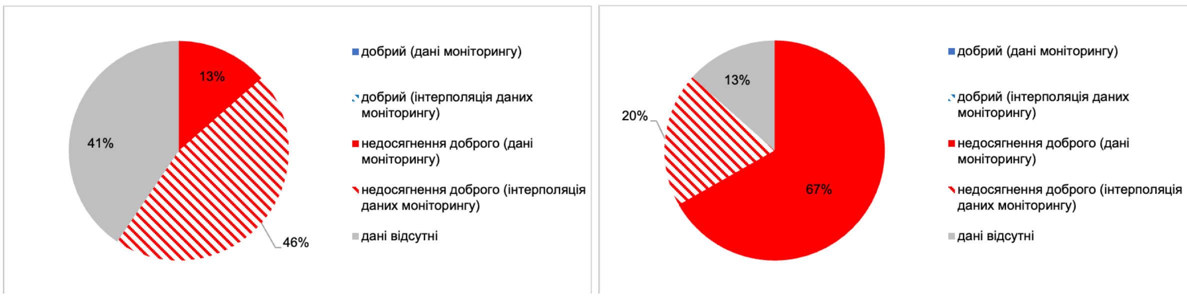
Table 29. Total assessment of the chemical status of the SWBs for 2021-2023 (monitoring data + interpolation of monitoring data)

Chemical status	number of SWB	total length of the SWB, km	number of SWB	total area of the SWB, km^2
"good"	92	1849	0	0
"failure to achieve the good"	365	4000	22	258



by number *by total length*

Figure 30. Total assessment of the chemical status of linear SWBs



by number *by total area*

Figure 31. Total assessment of the chemical status of polygonal SWBs

Taking into account the interpolation of monitoring data, the chemical status was assessed for 479 SWB.

414 SWB were assessed with a low level of assessment reliability based on the transfer of results obtained from the surface water quality monitoring programme to those SWB that were not monitored in the period under review, according to the SWB aggregation.

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 Heavily 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 monitoring data on the content of synthetic and non-synthetic specific substances typical for the Siverskyi Donets sub-basin of the Don RBD: promethrin, terbutylazine, bisphenol A, carbamazepine, imidacloprid, thiacloprid, flame retardant, zinc, copper, chromium, manganese, barium, lithium, strontium.

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

In the Siverskyi Donets sub-basin of the Don RBD, monitoring of the SWBs by biological indicators was carried out in 2021-2023.

According to the monitoring data carried out in 2021-2023, the ecological status was assessed for 31 linear SWBs with a length of 1455 km. None of the polygonal SWBs were assessed for ecological status. The results of the assessment of the ecological status of the SWBs are presented in the table and the annex.

Table 30. 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"	0	0	0	0
"good"	14	2,1	875,5	10,9
"moderate"	10	1,5	400,9	5,0
"poor"	5	0,8	148,1	1,9
"bad"	2	0,3	30,4	0,4

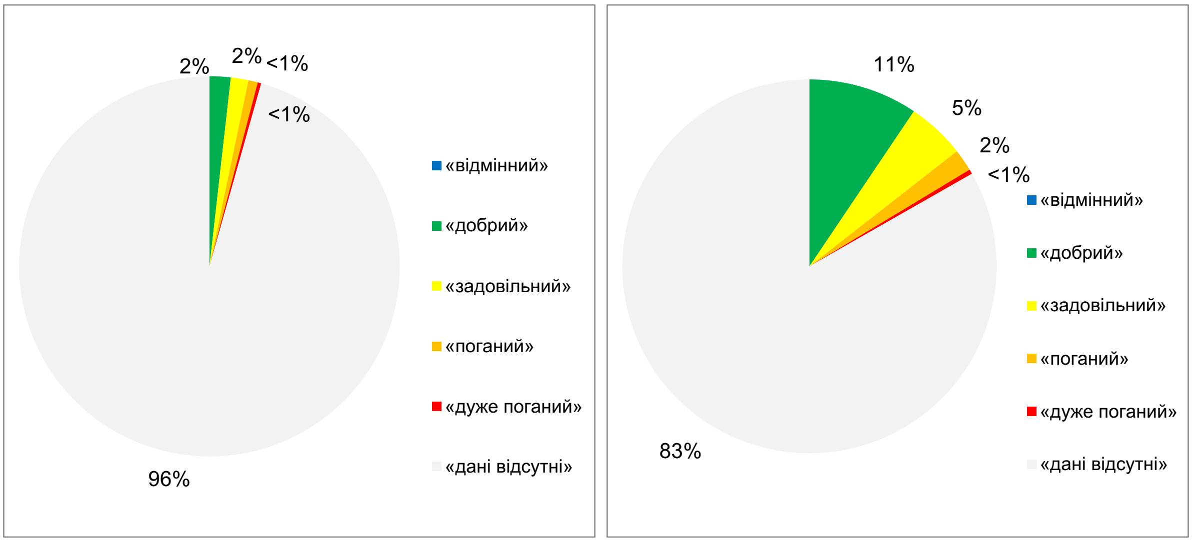
The level of reliability of the ecological status assessment for all 29 SWBs is average.

The environmental objective for achieving "good" ecological status were achieved in 14 SWBs, or 10.9% of the total length of linear SWBs.

Moderate ecological status was determined for 10 linear SWBs with a length of 400.9 km, which is 5% of the total length of SWBs. The "poor" ecological status was assessed at 5 linear SWBs with a length of 148.1 km (1.9% of the total length of SWBs) and the " poor" ecological status was assessed at 2 SWBs with a length of 30.4 km (0.4% of the total length of SWBs).

In the Don RBD, the Kharkiv River (UA_M6.5.1_0079), the Kazennyi Torets River (UA_M6.5.1_0251, UA_M6.5.1_0265), the Sukhyi Torets River (UA_M6.5.1_0338), the Bakhmutka River (UA_M6.5.1_0361), the Tetlega River (UA_M6.5.1_0055) and the Mokra Plotva River (UA_M6.5.1_0379) were determined to be in "bad" ecological status due to non-compliance with the EQS for benthic macroinvertebrates and vascular plants.

The results of the ecological status assessment are presented for the linear SWBs of the "rivers" category in Figure 32.



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

Figure 32. Assessment of the ecological status of linear SWBs

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 impacts 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 Siverskyi Donets sub-basin of the Don RBD, the environmental potential was assessed for 11 SWBs, including 7 linear ones with a length of 96.6 km and 4 polygonal ones with an area of 193.3 km^2, according to the 2021-2023 data. The results of the assessment of the ecological potential of the SWBs are presented in the table and appendix.

Table 31. 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"	0	0	0	0
"moderate"	3	0,5	28,4	0,4
"poor"	4	0,6	68,2	0,9
"bad"	0	0	0	0

Table 32. 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"	2	5,4	74,8	25,1
"moderate"	2	5,4	118,5	39,7
"poor"	0	0	0	0
"bad"	0	0	0	0

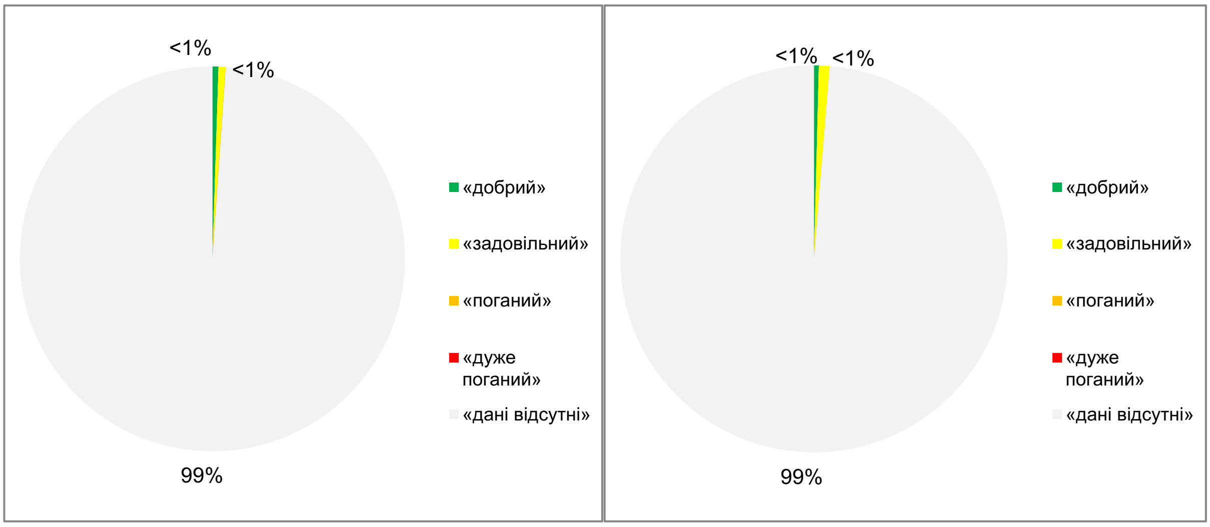
The level of reliability of the ecological potential assessment for all 11 SWBs is medium. Good ecological potential was achieved in 2 polygonal SWBs with an area of 74.8 km^2 .

The environmental objectives for achieving "good" ecological potential were achieved in 2 polygonal SWBs, or 25.1% of the total area of the total polygonal SWBs.

Moderate ecological potential has been identified for 3 linear SWBs with a length of 28.4 km and 2 polygonal SWBs with an area of 118.5 km^2 (0.4% and 39.7% respectively of the total length and area of SWBs).

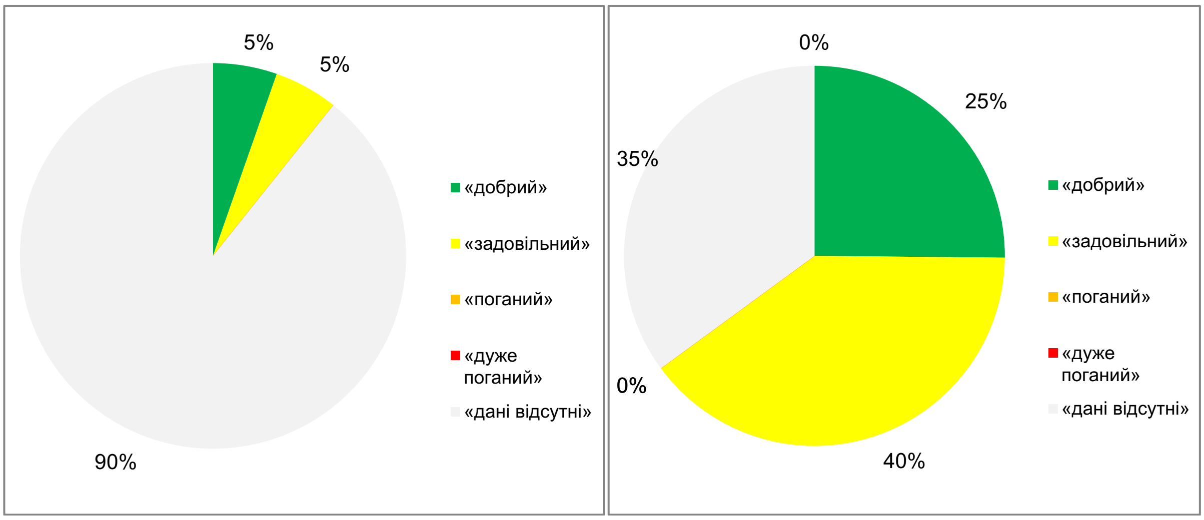
"Poor" and "bad" ecological potential has not been identified at any of the assessed SWBs.

The results of the ecological potential assessment are presented for linear SWBs in Fig.33 and for polygonal SWBs in Fig.34



by the number of SWBs   length of SWBs

Figure 33. Assessment of the ecological potential of linear SWBs



by the number of SWBs   length of SWBs

Figure 34. Assessment of the ecological potential of polygonal SWBs

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 (Table 33). 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 33. Procedure for state water monitoring - Indicators and frequency of state monitoring of GWBs

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, hydrocarbonate 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	

The subject of the monitoring market	Name of the indicator	Frequency	Notes
	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	
	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, 148 state groundwater monitoring stations were located within the Don basin, including 62 operating and 16 mothballed, and the status of 70 monitoring stations was unknown (including 31 located in the uncontrolled territory).

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 status assessment / risk assessment

Due to the lack of monitoring data, the occupation of the territory and active hostilities, it is impossible to reliably assess the current qualitative and quantitative status of the GWBs.

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 in pressurised GWBs, its quality is mostly good, except for GWBs in Cretaceous and Carboniferous sediments, and in the rest of pressurised GWBs, 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 non-pressure WMSs, due to the reduction of water withdrawal, this state is obviously good. Some negative changes in this state may be caused by global warming.

With regard to pressure GWBs, according to expert data, poor quantitative condition is inherent in GWBs in Cretaceous and Carboniferous sediments. As for the rest of the GWBs, the quantitative state of the identified GWBs can be preliminarily determined as good. The basis for this conclusion is a comparison of forecasted resources and operational groundwater reserves with data on water withdrawal volumes at the beginning of the military conflict.

Ways to restore and develop groundwater monitoring

Thus, the monitoring network needs to be restored and improved after de-occupation. 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 designated and within the Don 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.

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, 60 observation points are identified in the Don basin (Table 34).

Table 34. Observation points (o.p.) for groundwater monitoring in the Don River basin

Number of o.p.	GWB code	Name of the GWB	Number of points on the GWB
57	UAM6510Q100	Group of GWBs in alluvial quaternary sediments	17
	UAM6510N100	GWBs in alluvial sediments of Pliocene terraces	1
	UAM651PG200	GWBs in Eocene-Pliocene sediments	24
	UAM651PG300	GWBs in the Kaniv-Buchak sediments of the Eocene	4
	UAM6510K100	GWBs in fractured marl and chalk deposits	9
	UAM6510K200	GWBs in the Alb-Cenomanian Cretaceous sediments	2

The list of these observation points was compiled on the basis of data received from regional geological enterprises. It should be noted that the list of observation points does not cover all designated GWBs. However, there are currently no grounds for revising them, as there is no new reliable information on this issue. Obviously, in recent years, there have been negative changes due to the consequences of Russian aggression and the final cessation of monitoring, so one of the first tasks after de-occupation and cessation of hostilities should be an inventory of observation wells, after which the proposed network will be refined.

As there is intensive agricultural production within the basin, and as the waters of non-pressure GWBs are reported to be widespreadly contaminated with nitrogen compounds, special attention will need to be paid to improving the quality of the 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 2024 State Water Monitoring Programme for the Don Basin includes monitoring sites within one category of protected areas (territories):

1. 4 monitoring points related to operational monitoring at the SWBs from which water is abstracted to meet the drinking and household needs of the population (Annex 6).

5 A LIST OF ENVIRONMENTAL OBJECTIVES FOR SURFACE WATER, 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

According to the results of the assessment of the anthropogenic load on the SWBs of the Don basin:

- 1 SWB is not at risk of failing to achieve good ecological status/potential, 114 SWBs are possibly at risk, and 584 SWBs are at risk;
- 631 SWBs are at no risk of not achieving good chemical status, and 68 SWBs are at risk.

By 2030, 24 SWBs will have achieved good ecological status/potential, of which 1 SWB is currently not at risk (it needs to maintain this status), 23 SWBs are 3.3% 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.

Hostilities have been ongoing in the Donbas since the second quarter of 2014. As of 01.01.2022, 20% of the SWBs were located in the temporarily occupied territory of Ukraine. As of 01.10.2023, 379 SWBs are located in the temporarily occupied territory or in the area of active hostilities, which is 54% of all identified SWBs. For these Mine Action Plans, the date of achievement of environmental objectives is planned to be postponed for reasons related to military operations and temporary occupation of the territory.

The remaining Don RBD SWBs that are at risk or possibly at risk (675 SWBs) could achieve good ecological status/potential by 2036 or 2042, subject to the implementation of remedial measures.

By 2030, 631 SWBs will achieve good chemical status - these are those that are currently not at risk (they need to maintain this status), and 68 SWBs that are at risk according to the results of the anthropogenic pressures assessment will achieve the environmental objectives no earlier than 2036 or 2042, subject to the implementation of environmental protection measures.

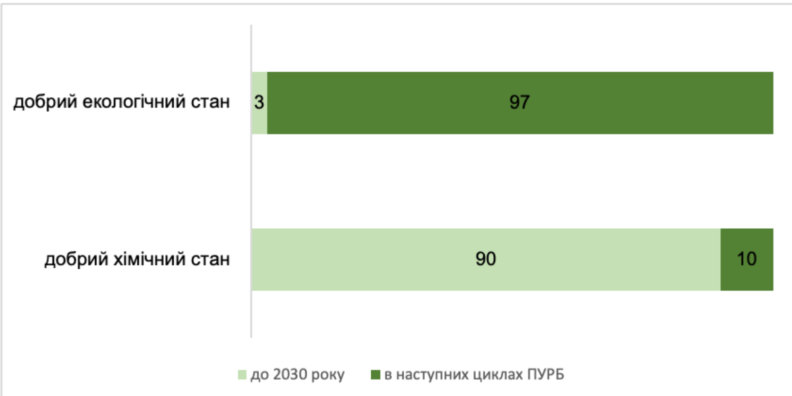


Figure 35. Timeframe for achieving the environmental objectives of the SWBs, %.

Annex 8 lists the environmental objectives of the SWBs, the timeframe for achieving them, reasons for postponement and setting less stringent objectives.

Environmental objectives for groundwater

Environmental objectives 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 objectives for each individual GWB are defined depending on the existing quantitative and qualitative state of GWB, 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 condition of the GWB 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 GWB is based on information on the level regime, data on groundwater extraction volumes and their comparison with the resources and approved operational reserves.

In addition, for non-pressure GWB, 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) state of the GWB 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 the quantitative state. 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

Unpressurised groundwater resources in the basin are unprotected and conditionally protected, and are negatively impacted by diffuse sources within agricultural landscapes and mine drainage.

At the same time, non-pressure GWB are used by the rural population to meet their drinking needs, so the standards of Sanitary and Epidemiological Norms 2.2.4-171-10 should be used to assess the quality state, except for those elements and compounds whose content exceeds the normative level 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 WTPs 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 state of the pressure GWB is assessed by analysing the level regime and comparing the volumes of water withdrawal from these GWB at water intakes with the volumes of GWB and GWB.

The environmental objective is the stability of the quantitative state 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. The groundwater extraction of most of the GWB 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. For most GWB, the environmental objective is to achieve a good quantitative status. However, in the Don basin, the risk of not achieving good status is posed by GWB in Cretaceous and Carboniferous sediments. The environmental objective for these GWB is no deterioration in the quantitative status, and the achievement of good status is postponed until 2042.

Chemical state of pressure GWBs

By their natural conditions, the pressure GWB are protected from pollution from the surface. Since groundwater from all the pressure GWB is used for centralised drinking water supply to the population, the criteria for 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 GWB, 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 GWB, it is necessary to have information on the interval of changes in the content of water chemical components.

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

It should be noted that the improvement of the condition of non-pressure GWB 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). For the GWB that are at risk of not achieving good status, it is impossible to achieve it by 2042.

The unsatisfactory state of groundwater monitoring over the past decades and the occupation of the territory allow defining environmental objectives only in the most general form. After the de-occupation of the basin territory, the environmental objectives for each GWB will be specified in the course of monitoring.

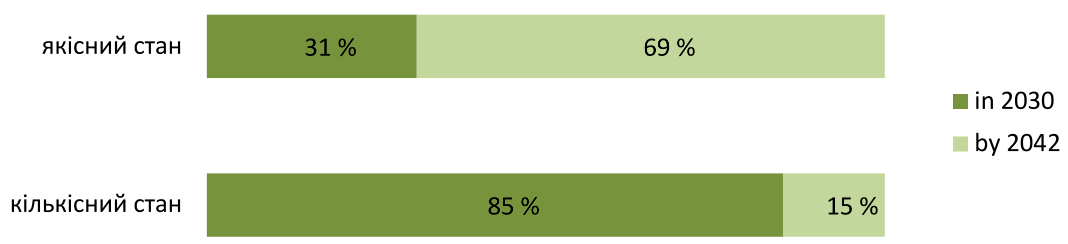


Figure 36. Timeframe for achieving the environmental objectives of the GWBs

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 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 Don basin have undergone significant changes.

6.1 Economic development of the basin area

Geographically, the Don RBD partially covers three oblasts: Donetsk, Luhansk and Kharkiv oblasts, and the total population of these river basin regions is 6.1 million people, which is 14.6% of the total population of Ukraine (Table 35).

Table 35. Population of the Don RBD, as of 01.01.2020 [12]

Indicators	2019
Population, total, people	6099079
Share of the river basin population in the total population of Ukraine, %.	14,6
Basin population by region	
Population of Donetsk region, million people	*1,6*
- of which: in the temporarily occupied territories of Ukraine, million people	0,3
Share of the population of Donetsk region in the total population of the basin, %.	26,8
Share of the population of Donetsk Oblast living in the temporarily occupied territories of Ukraine in the total population of the basin, %.	5
Share of the population of Donetsk region living in the temporarily occupied territories of Ukraine, % of the population of the region	17,2
Population of Luhansk region, million people	*1,9*
- of which: in the temporarily occupied territories of Ukraine, million people	1,2
Share of the population of Luhansk region in the total population of the basin, %.	31,7
Share of the population of Luhansk Oblast living in the temporarily occupied territories of Ukraine in the total population of the basin,%.	21
The share of the population of Luhansk region living in the temporarily occupied territories of Ukraine, from the population of the region, %	65
Population of Kharkiv region, million people	*2,5*
Share of the population of Kharkiv region in the total population of the basin,%.	41,5

The structure of the employed population is also of interest for analysing the socio-economic situation in the Don RBD. Thus, the proportion of the population living within the basin has a high degree of employment in water-dependent sectors of the economy - 39% (680.4 thousand people), including: industry - 19.8%, agriculture - 13.1%, transport - 6%.

Among other industries, the largest share of the population of the Don RBD is employed in wholesale and retail trade - 25%.

The share of the employed population of the Don River Basin in the water-dependent sectors of the economy in the total number of the employed population of Ukraine is 4%.

The structure of population distribution in the Don RBD is dominated by urban population, with its share ranging from 80-90% (Donetsk - 91%, Luhansk - 87%, Kharkiv - 81%), while the average value of this indicator in Ukraine is 70%. This distribution indicates a high level of urbanisation in the basin, which in turn means a significant pressure on water resources and high water consumption.

[12] Source: calculated on the basis of data from the State Statistics Service of Ukraine: http://www.ukrstat.gov.ua/

Thus, considering the social position of the Don RBD, it can be concluded that, in general, the distribution of the population by employment and place of residence corresponds to the directions of economic development and water consumption trends. The region is industrially developed, with a high proportion of the urban population employed in such sectors of the economy as industry and agriculture, which makes it highly water-dependent.

Analysis of the GRP of the Don RBD

In 2019, the GRP in the Don River Basin was UAH 361.1 billion, which is 9.8% of Ukraine's total GDP. In 2019, the GRP for the temporarily occupied territories of Ukraine was UAH 34.9 billion (9.7% of the total GRP of the river basin; 1% of the total GDP of Ukraine).

In terms of the RBD Don regions, the highest GRP share is in Kharkiv region (62%), three times lower in Donetsk region (22%), and the lowest in Luhansk region (16%) (Table 36).

Table 36. Dynamics of the GRP of the Don RBD, 2013-2019[13]

Indicators	2013	2014	2015	2016	2017	2018	2019
GRP in actual prices, UAH billion	196,3	189,3	202,2	251,6	292,3	354,0	361,1
The share of GRP of the Don RDB in the total GDP of Ukraine, %	12,9	11,9	10,2	10,5	9,8	9,9	9,8
GRP growth rate of the Don RBD, % to the previous year	100,0	96,4	106,8	124,4	116,2	121,1	102,0

The dynamics of the GRP indicator has a negative trend due to political influence, as in 2013-2014, this indicator decreased by 4%, from UAH 196.3 billion to UAH 189.3 billion. However, since 2014, the basin as a whole has seen an increase in GRP from UAH 189 billion to UAH 361 billion in 2019. This indicates a recovery in economic activity in the region.

The GRP per capita in the Don RBD in 2019 was UAH 59 thousand, which is less than the average for the whole of Ukraine (as of 2019, the GRP per capita, according to the authors' calculations, is UAH 87 thousand). The value of this indicator for the temporarily occupied territories of Ukraine corresponds to UAH 22.6 thousand, which is 4 times less than the average value in Ukraine and 3 times less than the value for the Don RBD.

The positive dynamics of the GRP indicator is a natural response of the river basin economy to the military operations in the east of the country that began in 2014. This is a rehabilitation reaction of the economy within the river basin, which consists of rapid growth in the post-crisis period with a gradual slowdown, which is observed in the growth rate of GRP since 2018.

GRP per capita by region: Kharkiv region - UAH 89 thousand per capita, Donetsk region - UAH 48 thousand per capita, Luhansk region - UAH 30 thousand per capita.

Kharkiv region had the highest GRP among the Donbas RBD regions, as it had not been affected by military operations before the full-scale Russian invasion of Ukraine.

Analysis of GVA in the Don RBD

The value of GVA in actual prices is UAH 308 billion for the territory of the Don RBD (Table 37), or 9.9% of GVA in Ukraine as a whole, of which the value of GVA generated in the temporarily occupied territories of Ukraine is UAH 29.3 billion (9.5% of the total GVA of the river basin; 1% of the total GVA of Ukraine).

The growth rate of Don RBD GVA slightly slowed down in 2019, after rapid growth in 2016-2018. This dynamics is fully consistent with the dynamics of GRP.

In the structure of the GVA, some types of economic activity – those that are the largest water users – were identified and their share in the total volume of the GVA of Ukraine was calculated (Table 37).

Table 37. GVA of water-dependent industries in the Don RBD, 2019[14]

[13] Source: calculated on the basis of data from the State Statistics Service of Ukraine http://www.ukrstat.gov.ua/

[14] Source: calculated on the basis of data from the State Statistics Service of Ukraine http://www.ukrstat.gov.ua/

Water-dependent sectors of the economy	GVA, billion UAH		Share in Ukraine's GDP, %		Share in the basin's GVA, %	
	Total	of which: created in the TOT*	Total	of which: created in the TOT*	Total	of which: created in the TOT[15]
Agriculture, forestry and fisheries	25	6,5	0,8	0,2	8,1	2,1
mining industry and career development	42,7	25,9	1,4	0,8	13,9	8,4
processing industry	47	6,2	1,5	0,2	15,3	2,0
electricity supply, gas, steam and conditioned air	12,8	1,7	0,4	0,05	4,2	0,6
water supply and sewerage, Waste management	1,4	0,14	0,05	0,004	0,5	0,05
transport, warehousing, postal and courier services	16,3	1,3	0,5	0,04	5,3	0,4
Total for the basin	**307.9**		**9.9**		**100**	

The total share of water-dependent economic activities in the Don RBD in Ukraine's total GVA was 4.7% in 2019, which indicates a slight slowdown in economic development compared to 2014, when this figure was 5.4%.

Agriculture, forestry and fisheries within the Don RBD account for 0.8% of Ukraine's GVA, mining and quarrying accounts for 1.4%, manufacturing 1.5%, electricity, gas, steam and air conditioning 0.4%, water supply, sewerage, waste management 0.05% and transport, warehousing, postal and courier services 0.5%.

Among other non-water-dependent economic activities that form the GVA of the Don RBD, it is worth highlighting the industries that have a high aggregate share in the overall structure of GVA, namely: wholesale and retail trade; repair of motor vehicles and motorcycles; information and telecommunications; real estate transactions; public administration and defence; compulsory social insurance; and education.

The total volume of GVA of water-dependent economic activities in the Don RBD in the total volume of GVA of the basin during 2014-2019 ranged from 45-52% (in 2019 - UAH 145 billion, which is 47.2%, of which GVA of water-dependent economic activities created in the temporarily occupied territories is UAH 18.4 billion, or 6% of the total volume of GVA of the basin). However, in 2019, the volume of GVA of water-dependent economic activities slightly decreased due to a decline in the activity of such industries as mining and quarrying, electricity, gas, steam and air conditioning, water supply, sewerage, waste management and transport, warehousing, postal and courier activities.

All oblasts within the Don RBD are industrially developed and contribute a high share of the country's GDP (10%). The total share of water-dependent economic activities in the Don RBD in the total GVA of Ukraine is 4.7%. The total volume of GVA of water-dependent economic activities in the total GRP of the Don RBD is 47.2%, of which the GVA of water-dependent economic activities generated in the temporarily occupied territories of Ukraine is 6% of the total GVA of the basin, which indicates a high degree of dependence of the river basin economy on the use of water resources.

In the overall structure of GVA by type of economic activity, the largest total share of water-dependent economic sectors is in Donetsk Oblast - 72.5%. The total share of water-dependent economic sectors in the GVA structure of the part of Kharkiv region that falls within the Don RBD is rather high - 43.7%. The lowest total share of water-dependent economic sectors in the GVA structure is in Luhansk Oblast - 31.4%.

The largest total share of water-dependent economic sectors in the structure of GVA is concentrated in Donetsk Oblast - 72.5%. The lowest total share of water-dependent economic sectors in the structure of GVA is in Luhansk Oblast - 31.4%.

[15] Temporarily occupied territories (TOT) of Ukraine

6.2 Characteristics of modern water use

The current water use of the Don RBD was characterised using the data of the State Water Cadastre in the section "Water Use" for 2019. According to the hydrographic zoning of Ukraine, the Don RBD consists of two sub-basins – Siverskyi Donets and Lower Don.

Given that the territory of the Lower Don sub-basin is located on the temporarily occupied territory of Ukraine, there is no official data on water use in the sub-basin.

The volume of water abstraction in the Don RBD is 1,448 million m^3, which is almost 14% of the total volume of water abstracted in Ukraine.

An analysis of water withdrawals in 2013-2019 shows an upward trend in demand for water resources in recent years. Despite the fact that almost 40% of water users remained in the temporarily occupied territory of Ukraine, water withdrawals reached the level of the period before the outbreak of hostilities. In 2019, the volume of wastewater discharges exceeded the levels of 2013-2014.

The stabilisation of the economy and its gradual recovery after a significant downturn in 2013-2014 are likely reasons for the increase in water abstraction and, consequently, wastewater discharges into surface water bodies. This indicates a more intensive use of water resources by users.

Surface water is the main (90%) source of water in Kharkiv and Donetsk oblasts, with only 10% of water abstraction coming from groundwater. In Luhansk region, the ratio of surface water abstraction to groundwater is 45% and 55%, respectively. The main source of water resources is the Siverskyi Donets River, from which 1149.9 million m^3 (80% of the total water intake in the basin) is taken directly. The main water users within the Don RBD are housing and communal services, industry, agriculture and transport.

In terms of regions, the leader in water abstraction is Donetsk region (73%), followed by Kharkiv region (20%) and Luhansk region (7%) (Figure 37).

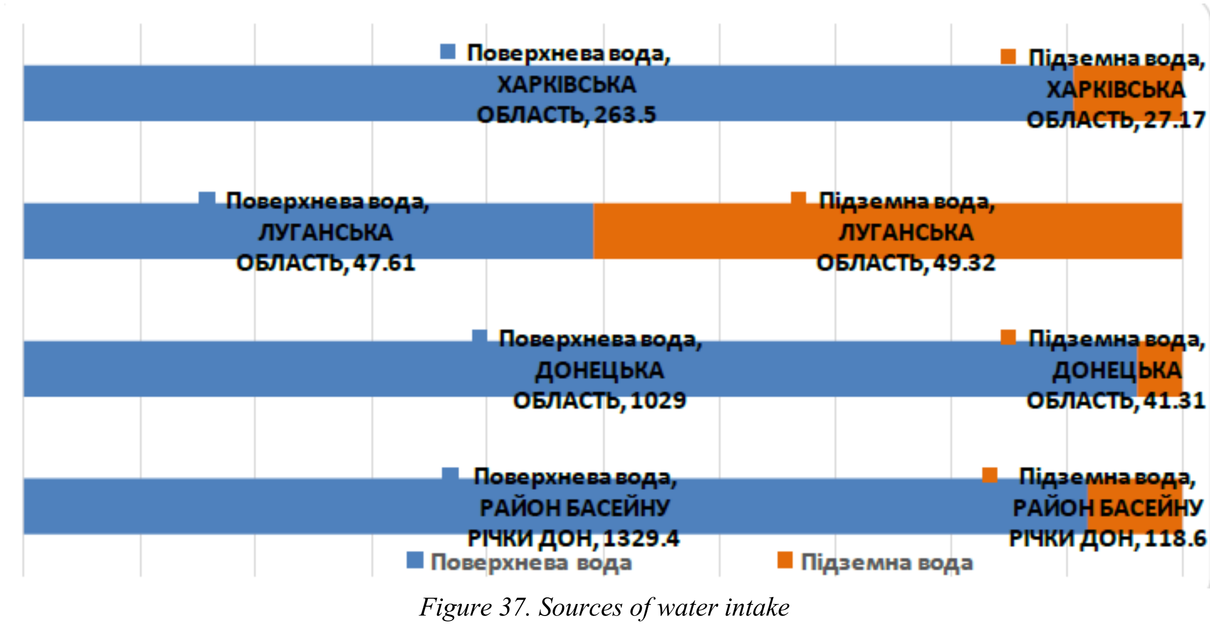


Figure 37. Sources of water intake

The largest percentage of water resources is withdrawn by the housing and utilities sector (52.4%), a significant portion is withdrawn by industrial water users, in particular the energy sector (43.5%), almost 4% of water use is for the needs of agriculture, and less than 0.1% is withdrawn by other sectors. Water use by economic sector is shown in Figure 38.

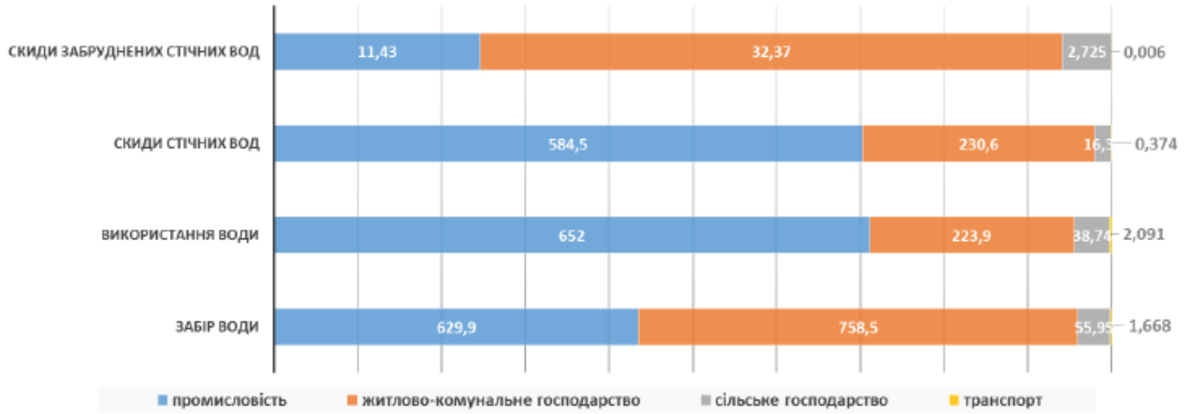


Figure 37. Characteristics of water use in the Don RBD[16]

The characteristics of water use in the Don RBD are presented in Annex 9.2.

In terms of wastewater disposal, more than 70% of wastewater is discharged into surface waters by industrial water users, almost 28% by housing and communal services and 2% by agriculture.

The highest percentage of wastewater discharge (61%) is in Donetsk Oblast, 34% in Kharkiv Oblast, and the lowest (5%) in Luhansk Oblast.

65% of wastewater is discharged as normatively clean without treatment, with only 6% being polluted[17].

The bulk (70%) of polluted wastewater comes from residential and municipal water users, with 24% discharged by industrial enterprises.

Information on wastewater discharges to water bodies by categories of discharged water is provided in Annex 9.3.

Industry and housing and communal services are the main economic sectors that have an impact on the quantity and quality of water resources in the Don RBD.

The main polluter is the housing and communal sector, which discharges almost 70% of polluted wastewater into the Don RBD.

The socio-economic importance of water for economic sectors was assessed on the basis of the European methodology for assessing the value of water[18]. The ranking of economic sectors by five indicators of economic and resource direction, which are adapted in accordance with the recommendations of the methodology, was applied, namely

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

Table 38. Water use and water intensity of GVA by sectors of the Don RBD economy

Industry sector	Water intake, million m^3	Water withdrawal taking into account the TOT, million m^3	GVA, UAH million	Water intensity of GVA, m^3 /1000 UAH
Industry	629,9	808,93	102523,5	7,89
Housing and communal services	758,5	962,11	1409,1	682,76
Rural economy	55,95	85,57	24984,1	3,43
Transport	1,668	2,77	16268,6	0,17
Total	**1448,0**	**1862,0**	**307913,9**	**6,05**

[16] Data source: State water cadastre data, section "Water use", 2019, State Agency of Water Resources of Ukraine

[17] Categories of wastewater in accordance with the Procedure for maintaining state water accounting.

[18] "The Economic Value of Water - Water as a Key Resource for Economic Growth in the EU" http://ec.europa.eu/environment/blue2_study/pdf/BLUE2%20Task%20A2%20Final%20Report_CLEAN.pdf

The water-dependent sectors of the economy were assessed for each indicator and its socio-economic weight was determined as low, moderate or high.

Table 39. Socio-economic weight of the main water users

Industry sector	Scope of GVA creation	Water intake by the industry	Water intensity of the industry	Dependence on water quality	Waste water contamination
Electricity	moderate	high	high	low	moderate
Ferrous metallurgy	high	moderate	low	low	moderate
Chemical industry	high	moderate	low	low	high
Mechanical engineering and metalworking	high	moderate	low	low	moderate
Food industry	high	low	low	high	moderate
Coal industry	high	moderate	low	low	high
Housing and communal services	low	high	high	high	high
Fisheries	moderate	moderate	moderate	moderate	moderate
Irrigation	low	moderate	moderate	low	low
Other types of agriculture (including livestock and crop production)	moderate	low	moderate	high	low
Transport	moderate	low	low	low	low
Recreation and healthcare	low	low	low	high	low

Based on the assessment results, economic sectors are grouped into 5 groups according to their dependence on water resources and socio-economic importance.

Group 1 "Full dependence" includes water users that are highly dependent on 4 indicators - water quality, high water intensity, significant pressure on water resources and small volumes of water supply - such as housing and communal services.

Group 2, "Multiple dependence", includes the electricity, coal, chemical, and food industries, which are highly dependent on at least two indicators.

Group 3, "Specific dependence", includes those with high dependence on only one indicator: machine building and metalworking, ferrous metallurgy, recreation and healthcare, and other types of agriculture.

Group 4, "Moderate dependence", includes fisheries and irrigation, which are moderately dependent on at least 2 indicators.

Group 5, "Dependence without water use", includes sectors of the economy that use water without abstraction from natural water bodies, generate low volumes of Gross Domestic Product and are minor polluters.

The assessment showed that the housing and utilities sector is completely dependent on water resources and is the most water-intensive sector of the economy.

The level of water availability in the river basin per capita is 0.756 thousand m^3, which is below the minimum level of water availability according to the UN classification (1.7 thousand m^3 per person per year).

6.2.1 Municipal water use

The needs of the housing and utilities sector are mainly to meet the drinking and domestic needs of the population and are covered by 92% from surface sources, with only 8% from groundwater. Water users in the housing and utilities sector abstracted 758.5 million m^3 – 52.4% of the total abstraction.

The main users of surface water in the municipal sector are enterprises that draw water from the Siverskyi Donets River:

- ME "Water of Donbas Company" Regional Canal Operation Department - carries out water intake into the Seversky Donets-Donbas Canal to meet the water needs of the population and economic sectors of the southern part of Donetsk Oblast in the amount of 492.7 million m^3;
- ME “Kharkivvodokanal” – 148.6 million m^3 of water was withdrawn for the needs of the population and industry in Kharkiv region;

- The Popasna District Water Utility provides 33.89 million m^3 of water to Luhansk Oblast.

The bulk of water resources (60% of water intake) is used for drinking purposes.

The peculiarity of municipal water use is significant water losses (64% of water intake by municipalities / 482.8 million m^3) due to the unsatisfactory condition of water supply systems. This percentage of water losses is critical for the water supply infrastructure.

The housing and utilities sector is the largest polluter of surface water, discharging 69% of polluted wastewater into the Don River Basin due to inefficient or non-existent wastewater treatment facilities.

The largest polluters in the housing and utilities sector are the following companies:

- ME "Water of Donbas Company" – 16.98 million m^3 (95% of the volume of polluted wastewater in the region);
- ME “Kharkivvodokanal” – 5.787 million m^3 (43% of the volume of polluted wastewater in the region), of which 99.8% is untreated;
- Lysychanskvodokanal and Rubizhne vodokanal – 5.32 million m^3 (34% of the volume of polluted wastewater in the region).

The estimated water withdrawal in the temporarily occupied territory of Ukraine by housing and communal enterprises is 203.61 million m^3[19].

6.2.2 Industrial water use

Industrial water use is the predominant use within the Donetsk Oblast.

The largest industrial water users, which withdraw 70.6% of the total water use in the river basin, are power generation enterprises (TPPs) – PJSC Donbasenergo Slavianska TPP (229.2 million m^3), Zmiivska TPP (14.7 million m^3), Luhanska TPP in Schastya (8.081 million m^3).

Water use is higher than water abstraction due to the use of recycling cycles in industry.

In 2019, industrial water users in the Don River Basin RBD discharged clean water into water bodies. A total of 584.52 million m^3 of waste water was discharged into surface water bodies, of which only 2% was contaminated.

The main industrial polluters of the Don River Basin are enterprises in Luhansk Oblast, such as Rubizhne Cardboard and Packaging Plant and Severodonetsk Azot Association.

Water users in the industrial sector discharge hazardous pollutants such as phenols, oil products, surfactants, iron, methanol and lead into surface water bodies with wastewater. Pollutant discharge regulations do not take into account the specifics of industrial water users' technological cycles and result in a lack of control over the flow of hazardous pollutants into water bodies.

The quality of the water resources of the Don River Basin is affected by the activities of industrial enterprises in the temporarily occupied territory of Ukraine, where coal mines are flooded and coal mining is carried out uncontrolled[20].

There are mines in Horlivka (Gagarin mine) and Kalinin mine (according to unofficial sources, they are not working). The approximate water withdrawal in the temporarily occupied territory of Ukraine by industrial enterprises (mines) is 179.03 million m^3[21].

6.2.3 Water use in agriculture

Water use in agriculture is mainly from surface water bodies. The total water withdrawal for agricultural purposes is 55.9 million m^3 (almost 4% of the basin's water withdrawal), including 53.0 million m^3 from surface sources and 2.9 million m^3 from groundwater sources. The volume of water abstraction from water bodies without withdrawal is 88.8 million m^3.

The structure of water withdrawals by agriculture is dominated by fisheries – 78% of agricultural water withdrawals.

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[19] Calculated based on the dependence of water intake dynamics on the state water cadastre data for 2013-2019.

[20] Technical report "State of the Siverskyi Donets Basin and Factors of Influence in the Context of Military Operations" by the OSCE Project Co-ordinator in Ukraine, 2018.

[21] Based on the dependence of water withdrawal dynamics on the state water cadastre data for 2013-2019.

As a result of climate change and adaptation of agricultural water users, the area of irrigated land in the Don RBD is growing (from 589 hectares in 2018 to 1,646 hectares in 2019, i.e. 2.8 times). In 2019, water users used 8.314 million m^3 (15% of water withdrawals by agriculture) for irrigation purposes, which is 194 agricultural producers.

Crop production uses 0.592 million m^3, including 0.233 million m^3, and livestock - 0.506 million m^3, including 0.470 million m^3. Wastewater was discharged to surface water bodies by 6 water users with a discharge volume of 16.392 million m^3, of which 2.725 million m^3 and 13.667 million m^3.

The growth of irrigation and the pressure on water resources requires compliance with the requirements and quality control of the water used. The estimated water withdrawal in the temporarily occupied territory of Ukraine in agriculture is 29.62 million m^3.

6.2.4 Water use in transport

Water use in transport does not place a significant burden on the Don RBR, as water withdrawals by transport sector users in 2019 amounted to less than 0.1% of the total withdrawals (2.092 million m^3 of fresh water). These are mainly drinking and sanitary needs - 1.251 million m^3, production needs amount to only 0.841 million m^3 of water.

In 2019, transport users withdrew 1.669 million m^3 of water from underground sources.

The company discharged 0.374 million m^3 of wastewater into surface water bodies, including 0.007 million m^3 of polluted water and 0.288 million m^3 of water treated to the standard at treatment plants.

Estimated water withdrawal in the temporarily occupied territory of Ukraine in transport, which amounts to 1.11 million m^3.

6.2.5 Other types of water use

Other types of water use withdraw water in the amount of less than 0.1% of the total water withdrawal in the river basin.

These include trade and catering, logistics, construction, communications, healthcare and physical education, and education.

6.3 Forecast of water demand by major economic sectors

Water demand forecasts for the main sectors of the economy are made for the period of the RBMP (until 2030) under three scenarios: realistic, optimistic and pessimistic.

The basis for calculating the forecast is the economic indicators of GDP/GRP for previous years and their forecast values. The increments of the optimistic and pessimistic scenarios are calculated by determining the average annual deviations over the previous years from the forecast values.

The deviation of the forecasted water withdrawal volumes under the pessimistic scenario ranges from 1.2-3.5% of the realistic scenario. The optimistic scenario shows a maximum increase in the projected demand for water resources by 0.1-1.8% compared to the realistic scenario.

Since the beginning of Russia's armed invasion of eastern Ukraine (2014), the economic profile of the Don RBD has been on the decline. Water intake volumes were decreasing. Only in 2017 did the volume of water withdrawals begin to grow as the economy began to recover. In 2019, water withdrawals reached the level of the period before the outbreak of hostilities in eastern Ukraine (2014).

2020 is the year of a significant drop in economic indicators[22] and, accordingly, in water intake.

The main factors affecting water use in the Don RBD include the following:

- the spread of COVID-19 coronavirus infection and the introduction of restrictive measures;
- Political: military operations near the contact line;
- economic development - driving sectors: industry and agriculture;
- Natural: climate change → increased irrigation;
- greening the energy sector through the implementation of the European Green Deal (GreenDeal) - reducing water intake by thermal power plants (coal mines).

[22] Consensus Forecast Issue "Impact of COVID-19 on the economy and society - post-pandemic development. Consensus Forecast" (July 2020)

Forecasting values until 2030 is based on the Forecast of Economic and Social Development of Ukraine for 2021-2023 of the Ministry of Economy, Trade and Agriculture of Ukraine[23] and forecast values of the World Bank's global development indicators, international financial statistics of the International Monetary Fund (IMF), IHS GlobalInsight and Oxford Economic[24] .

A number of data were calculated by determining the relationship between GDP and water withdrawal in the Don River Basin in 2013-2019 and based on the water content per unit of GDP. Based on these calculations, a forecast was made for the growth of water withdrawal by the main sectors of the economy in the Don River Basin under a realistic scenario until 2030.

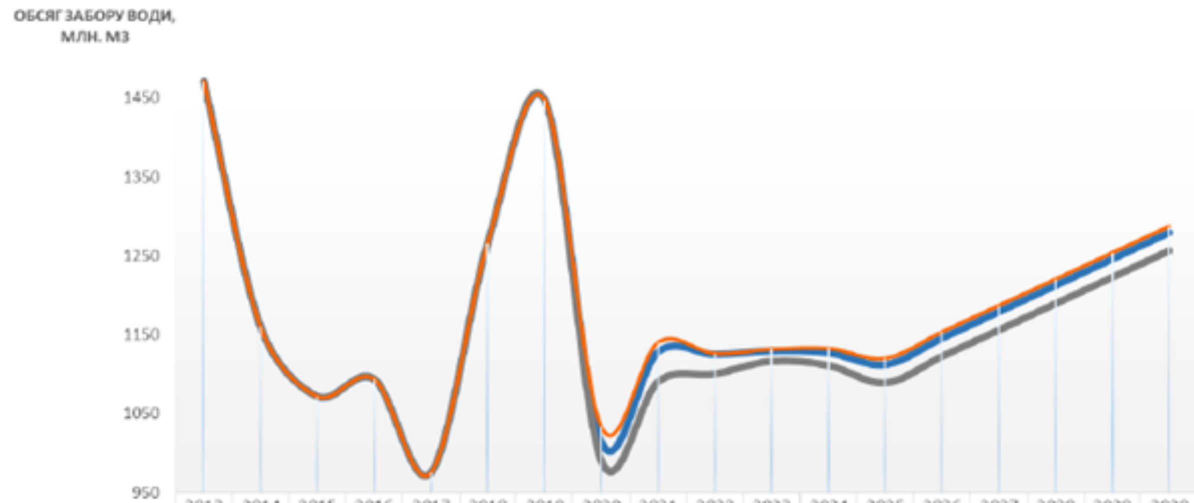
Under the baseline (realistic) scenario, the NBU assumed that the positive trend in economic development would resume after the significant losses caused by the COVID-19 pandemic in 2020, and forecast GDP growth at 4.6% in 2021, 4.3% in 2022, and 4.7% in 2023.

In 2020, the Ministry of Economy predicted a slowdown in water intake and a decline in economic indicators due to the spread of the acute respiratory disease COVID-19 caused by the coronavirus SARS-CoV-2. Further declines in industrial production indices and volumes were expected in water-dependent sectors of the economy, in particular in mining and quarrying, production, supply and distribution of electricity, gas, and light industry.

The largest decrease was expected in the industry and municipal sector, which are the main water users in the Don RBD. Almost constant withdrawals were observed in the agriculture and transport sectors.

2021-2025 - growth is expected with slight fluctuations in water intake within 5%.

2025-2030 - a trend of intensive growth in water intake due to the projected economic growth of 3.1% annually.

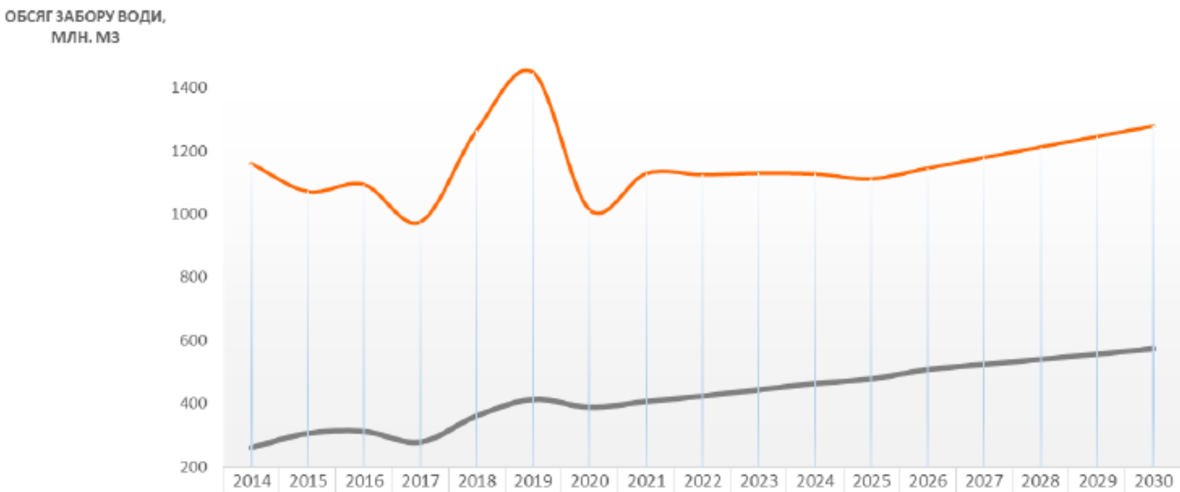


	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
реалістичний	1471	1160	1072	1094	975,3	1266	1448	1014,1	1128,4	1125,2	1129,5	1127,4	1112,3	1145,7	1179,2	1212,6	1246,0	1279,5
песимістичний	1471	1160	1072	1094	975,3	1266	1448	990	1091	1100	1117	1111,2	1089,2	1122,6	1156,1	1189,5	1223,0	1256,4
оптимістичний	1471	1160	1072	1094	975,3	1266	1448	1033,5	1140,3	1126,3	1131,7	1132,8	1120,3	1153,7	1187,1	1220,6	1254,0	1287,5

Figure 39. Forecast of water intake in the Don RBD

[23] https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=98c3a695-56bb-42ba-b651-60ce1f899654&title=PrognozEkonomichnogoISotsialnogoRozvitkuUkrainiNa2021-2023-Roki

[24] https://www.ers.usda.gov/data-products/international-macroeconomic-data-set.aspx



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
річковий басейн Дону	1160	1072	1094	975,3	1266	1448	1014,	1128,	1125,	1129,	1127,	1112,	1145,	1179,	1212,	1246,	1279,
окуповані території	261,3	306,5	312,8	278,9	362	414	389,2	407,1	424,6	444,5	464,5	478,9	508,6	524,4	540,6	557,4	574,7

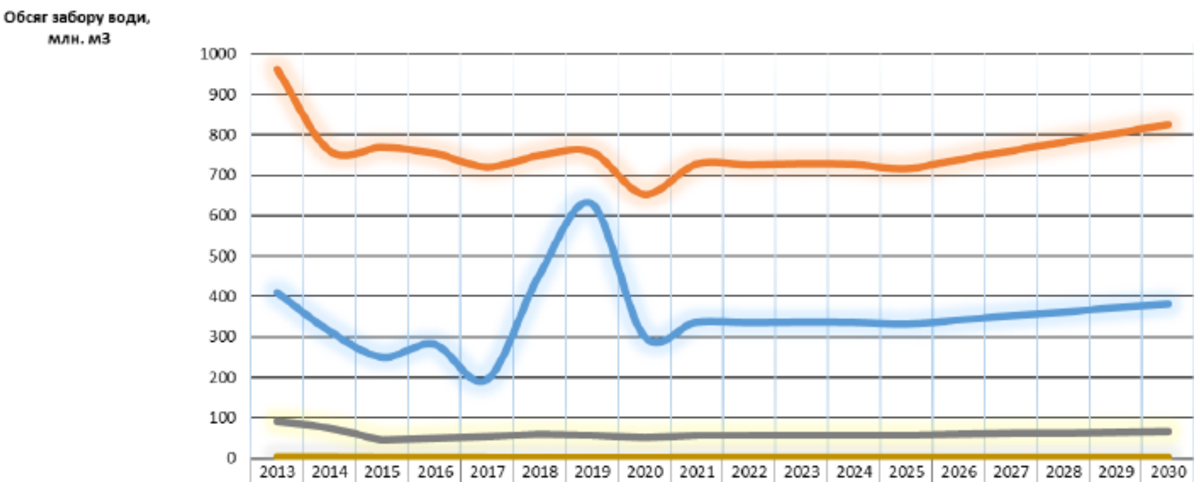
Figure 40. Forecast of water intake in the Don River Basin until 2030, taking into account the TOT of Ukraine

The forecast of water withdrawals until 2030 was also made for the temporarily occupied territories of Ukraine based on a comparison of the state water cadastre data from the years before and after the start of the armed invasion of Russia (since 2014) to assess current water use and applying World Bank forecasts to predict the trend of water withdrawals until 2030.

A decrease in water use was expected in 2020 due to the COVID-19 pandemic. Since 2021, there has been a stable trend of gradual growth in water withdrawals.

Given the instability of the situation in the temporarily occupied territories of Ukraine, the assessment of water withdrawals needs to be updated with official water use data (if possible).

The forecast of water withdrawals in the Don RBD up to 2030 by economic sectors was made based on the analysis of water use data series and their modelling in retrospect based on forecast values. The results are presented in Figure 41.



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
промисловість	410,6	315,5	251,2	282,6	194,8	453,1	629,9	303,2	337,4	336,5	337,8	337,1	332,6	342,6	352,6	362,6	372,6	382,6
комунальне господарство	961,6	761,6	769,3	755,2	721,6	749,4	758,5	654,5	728,3	726,2	729,0	727,6	717,9	739,5	761,0	782,6	804,2	825,8
транспорт	3,413	3,104	2,413	2,298	2,109	1,823	1,668	2,0	2,2	2,2	2,2	2,2	2,2	2,3	2,3	2,4	2,5	2,5
сільське господарство	91,72	76,49	46,07	50,94	54,35	59,75	55,95	52,0	57,9	57,7	57,9	57,8	57,0	58,8	60,5	62,2	63,9	65,6

Figure 41. Forecast of water intake in the Don RBD by economic sector

In 2020, the volume of water withdrawals for housing and communal services was forecast to decline due to the impact of the COVID-19 pandemic, and population growth was not expected.

Due to the intensification of economic processes, water intake was expected to increase in 2021. The trend of consistent growth is from 2025. Fluctuations in the range of 5-10%.

Water resources for the industrial sector are of significant importance, according to the socio-economic importance assessment. Industrial water users are mainly represented by the energy sector (thermal power plants). Government policies to reduce greenhouse gas emissions may affect water abstraction by industry. This will lead to a decrease in the operation of thermal power plants and coal mines.

In terms of industry, in 2021, an increase was expected in the mining industry (production of coke and petroleum products) and quarrying, production of chemicals and chemical products, and machine building. At the same time, production was expected to decline in metallurgy.[25]

Agriculture in the Don RBD in terms of intake had a gradually uniform growth trend until 2030, mainly due to the development of irrigation.

No significant increase in water withdrawals by transport sector water users was forecast.

6.4 Tools of economic control

6.4.1 Payback of water resources use

The use of water resources in Ukraine (general and special) is regulated by the Water Code of Ukraine, the Law of Ukraine "On Environmental Protection" and other legislative acts developed pursuant to these laws and approved by joint orders of the ministries and departments concerned.

I. CENTRALISED WATER SUPPLY AND SEWERAGE SERVICES

The principles of "user pays" and "polluter pays" are implemented in Ukraine primarily through the payment of utility bills for water supply and sewerage by individuals, households and legal entities. According to the Law of Ukraine "On Drinking Water, Drinking Water Supply and Sewerage"[26], "drinking water supply has priority over other types of special water use". Consumption of quality drinking water is the most important factor in the life support of every citizen of the country. In Ukraine, the National Commission for State Regulation of Energy and Public Utilities (hereinafter referred to as the "NEURC") and local governments establish the following tariffed water services:

1) for centralised water supply and sewerage (cold water), and sewerage (cold and hot water);
2) for centralised supply (cold water) and sewage (cold and hot water) using in-building systems.

Services are provided to the following customers in accordance with the law:

- consumers who are business entities in the water supply and sewerage sector;
- Consumers who are not business entities in the field of centralised water supply and sewerage (budgetary organisations, households, other consumers).

In Donbas, centralised water supply and sewerage services are provided by 9 licensees of the National Energy and Utilities Regulatory Commission and more than 100 organisations licensed by local authorities.

The most significant revenues are received by water and sewerage companies. According to estimates, water and sewerage companies - licensees of the NEURC in the Don Region (9 licensees, 22% of the country's market[27]) received about UAH 2022.4 million[28] (including VAT) in 2019, or 19% more than in the previous year, and UAH 1689.6 million (including VAT) in 2018.

According to the calculations, the Don RBD received from local government licensees: UAH 674.1 million (including VAT) in 2019 and UAH 563.2 million (including VAT) in 2018, respectively.

Overall, in 2019, consumers in Ukraine received water consumption services (centralised water supply and sewerage with and without in-building systems) from business entities in the supply and sewerage sector - NEURC licensees - for a total amount of UAH 15.8 billion (excluding VAT) or UAH 19.75 billion including VAT[29] or 19% more than in 2018 - UAH 13.2 billion (excluding VAT) or UAH 16.5 billion including VAT[30]).

According to the State Statistics Service of Ukraine, in 2019, the volume of water consumption services sold in Ukraine totalled UAH 21.1 billion (excluding VAT).

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[25] Programme of economic and social development of Donetsk region for 2019 and main development directions for 2020 and 2021.

[26] The Law as amended on 01.05.2019.

[27] At the beginning of 2020, theNEURC licensed 51 water and wastewater companies.

[28] Hereinafter, the calculations were made on the basis of available statistics in Ukraine, excluding the temporarily occupied territory.

[29] Report on the results of the activities of the National Energy and Utilities Regulatory Commission in 2019. - Kyiv, 2020 - P. 181.

[30] Report on the results of the activities of the National Energy and Utilities Regulatory Commission in 2018 - Kyiv, 2019 - P. 158.

Despite the rather substantial revenues, the financial position of water and sewerage companies remains unsatisfactory. The reasons for this are primarily the insufficient level of payments by consumers for services rendered, which amounted to 94% in 2019, with the largest debts owed by consumers to two RDB Don enterprises: Kharkivvodokanal - UAH 1.4 billion, and Voda Donbasu - UAH 0.9 billion. This, in turn, worsens the solvency of enterprises and creates debts for electricity and wages[31] . The worst situation with electricity payments was experienced by two licensees located in the Don RBD, whose debt crossed the UAH 1 billion threshold in previous years: ME "Company "Water of Donbas" - UAH 3,667.9 million, ME "Kharkivvodokanal" - UAH 1,236.2 million.

The condition of the water and sewerage networks in the Don RBD is extremely poor (Table 40).

Table 40. The level of deterioration of water supply and sewerage networks in the Don RBD [32]

Area	Water supply networks			Sewerage networks		
	Total length, m	including worn-out and emergency ones	were replaced during the year as needed	Total length, m	including worn-out and emergency ones	were replaced during the year as needed
Donetsk	15313,7	54%	1,5%	4761,5	58,9%	0,4%
Luhansk	2367,6	58,9%	5%	880,8	58,1	0,4
Kharkivska	6829,4	46,1%	2,2%	2860,5	63,8%	0,5%

More than half of the water supply and sewerage networks are in a state of disrepair and deterioration, and only 2% of the identified needs are repaired annually. The cost of rehabilitating the networks is so high that it is impossible to do so through depreciation alone, as the duration of the rehabilitation would exceed hundreds of years.

The Don RBD is home to 9 of the NEURC's 52 water and wastewater licensees, covering 22% of the country's water supply market. According to estimates, these water and sewerage companies are significant recipients of cash payments, with about UAH 2022.4 million received in 2019 for services rendered.

However, the insufficient level of solvency of users of these services, in turn, worsens the solvency of the main water utilities of the Don RBD (ME "Voda Donbasu", ME "Kharkivvodokanal", ME "Popasna District Water Utility"), primarily in terms of electricity and labour costs.

The total length of the water supply networks of the NEURC licensees in Ukraine is 54.9 thousand km, of which 45% are dilapidated and in disrepair. The funds of enterprises that can be used for rehabilitation purposes (annual depreciation) amount to about UAH 410 million, but the cost of rehabilitation is 549 times higher[33] .

It should be noted that the approval of planned tariffs for water utilities for the next calendar year is carried out by the NEURC and local governments if the company has investment programmes, which is a significant step towards modernising water and sewerage networks.

The main source of investment in 2019, as in previous years, was depreciation in the amounts provided for in the tariff structures (58% of total investment). Funds were also raised from the profit provided for in the tariff structure of licensees.

The payback period for centralised water supply and sewerage services, based on the calculation of the cost of the service and the established service tariff, is more than 100%.

Given that the profit in the tariffs was on average 2%, in RBD Don, it is estimated that the profit of the utilities of the NEURC licensees (9 licensees, 22% of the country's market) amounted to about UAH 40.4 million (the total amount of revenue received by the companies was about UAH 2022.4 million). However, none of the companies planned to use the profit to form a reserve fund (capital) for modernisation, 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. In 2019, the level of investments from all sources under 44 investment programmes approved by the NEURC amounted to UAH 1,316.81 million (an

[31] Results of monitoring the activities of NEURC licensees in the field of centralised water supply and centralised sewerage for the first half of 2020. URL. http://www.nerc.gov.ua/data/filearch/monitoryng/Voda/2020/monitoryng_vodaTSVV_I-pivricha-2020.pdf

[32] Data for 2018, National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine in 2018.

[33] Report on the results of the activities of the National Energy and Utilities Regulatory Commission in 2019. - Kyiv, 2020 - P. 181.

average of UAH 29 million per company), of which 57.6% was due to depreciation (as provided for in the tariff), 28.8% - to production investments from profits, 10% - unused funds of other periods, and 3.6% - funds from other sources.

II. SPECIAL WATER USE AND REVENUES FOR IT

According to the Water Code of Ukraine (Article 48), special water use is carried out by legal entities and individuals to meet the drinking needs of the population, as well as for household, medical, health, agricultural, industrial, transport, energy, fisheries (including aquaculture) and other state and public needs. According to Article 50 of the Water Code, special water use may be short-term (for three years) or long-term (from three to twenty-five years).

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

1) rent for water intake for different types of water users;
2) environmental tax on discharges into water bodies.

In addition, there is a fee for the use of water bodies for aquaculture purposes:

3) rent for water bodies,
4) payment for special use of water bioresources

1) Rent for special water use

Rent for special water use is paid:

1) business entities that have their own water intake facilities and relevant equipment for water intake (the so-called primary water users, Article 42 of the Water Code of Ukraine) that use and/or transfer water obtained by water intake from water bodies to secondary users;
2) business entities that use water for hydropower, water transport and fish farming.

In Ukraine, 10% of the rent payment for special water use is credited to the State Water Development Fund[34] , the remaining 45% is directed to the general fund of the state budget[35] for other purposes and 45% remains in local budgets. The State Fund for Water Development has been operating in Ukraine since 2018 and is the first state financial instrument to address water issues, through which the principle of "water pays for water" is implemented. It is replenished with funds directly received by the budget from the use of water resources. The average annual volume of this fund is UAH 140 million.

The largest payers of rent for special water use in the Don RBD as primary water users are the ME "Water of Donbas Company" for an average annual water intake of 471 million m^3, ME "Kharkivvodokanal" - 161 million m^3, ME "Popasna District Water Utility" - 32 million m^3.

The state and local budgets received a total of UAH 216.9 million from business entities in the Don DBD by administrative region in 2017, UAH 201.8 million in 2018, and UAH 231.3 million in 2019 (Table 41).

Table 41. Dynamics of rent revenues for special water use to the state and local budgets in the Don RBD regions, thousand UAH[36]

Oblasts	2017		2018		2019	
	state budget	local budgets	state budget	local budgets	state budget	local budgets
Donetsk	83 568,8	68 374,5	75325,4	61629,9	66902,8	54738,7
Luhansk	16 169,2	13 229,3	14611,4	11954,8	14458,0	11829,3
Kharkivska	19 593,7	16 031,2	21057,5	17228,9	45852,7	37515,9
Total for individual budgets	119 331,7	97 635,0	110 994,3	90 813,5	127 213,6	104 083,8
Total for the Don River basin	216 966,7 / **98 622,9**[45]		201 807,8 / **93 269,1**[37]		231 297,4 / **119 847,3**[45]	

[34] Budget Code of Ukraine, Article 24. State Fund for Water Management Development.

[35] Budget Code of Ukraine, Article 29, paragraph 4.

[36] Source: Local Budget Revenue Reports, State Budget Revenue Reports.

[37] The indicator is adjusted in accordance with the share of the oblast territory in the Don RBD.

Total in Ukraine, UAH million	-	-	**892,7+730,4 =1623,5**

In general, the dynamics of rent revenues to the budgets of the Don RBD regions is downward, with only Kharkiv region increasing its figures, while in Donetsk and Luhansk regions the dynamics of water rent revenues is downward.

According to the Siverski-Donetsk BUWR, the estimated amount of fees for special water use in the Don RBD as of September 2020 is UAH 264.9 million, while 46% of the accrued amount has actually been collected – UAH 122.6 million[38] .

In total, the state and local budgets of Ukraine received UAH 1623.5 million from rent for special water use in 2019 (see Table 1 of Annex 9.7). Specifically, the state budget of Ukraine received UAH 892.7 million, which is 91% of the 2018 figure of UAH 976.8 million (although the planned values are higher both in 2018 - UAH 1,162.5 million and in 2019 - UAH 1,021.9 million). In 2019, local budgets of all levels received rent for special water use in the amount of UAH 730.8 million, of which:

- UAH 524.4 million or 71% of the rent for special water use (except for the rent for special water use of local water bodies) and UAH 0.3 million of the rent for special water use of local water bodies;
- UAH 83.7 million, or 11.4% of the rent for the use of water for hydropower;
- UAH 114.8 million, or 15.7% of the rent for water use from housing and communal services;
- UAH 7.6 million or 1% of the rent for special water use in terms of the use of surface water for water transport (except for parking and auxiliary fleets).

An analysis of revenues from rents for special water use in the Don RBD indicates that about 7-8% of all revenues in Ukraine are generated in this river basin.

2) Environmental tax for discharges of pollutants into water bodies

One of the most important economic instruments through which the "polluter pays" principle is implemented is the environmental tax, in accordance with the Tax Code of Ukraine. Water users are obliged, among other things, to comply with the established standards of maximum permissible discharge of pollutants and limits of discharge of pollutants; to monitor the quality and quantity of waste water and pollutants discharged into water bodies and the water quality of water bodies in control structures (which the state does not actually control in good faith, notwithstanding scheduled inspections by the State Environmental Inspectorate); carry out special water use only with a permit (Article 44 of the Water Code of Ukraine).

The limit of pollutant discharge is specified in the special water use permit issued in accordance with the Procedure for Issuing Special Water Use Permits approved by the Cabinet of Ministers of Ukraine dated 13.03.2002 No. 321 (hereinafter - Procedure No. 321). However, according to the Accounting Chamber[39], the number of taxpayers submitting tax reports on environmental tax to the SFS in Ukraine may be less than the number of business entities that have special water use permits with established limits of discharges into water bodies from the State Agency of Ukraine for Water Resources. According to the allocation of funds set out in the Budget Code of Ukraine, 45% of the environmental tax on discharges of pollutants into water bodies goes to the general fund of the state budget[40], 55% to the special fund of local budgets, including:

- to village, settlement, city budgets, budgets of amalgamated territorial communities established in accordance with the law and the perspective plan for the formation of community territories - 25%;
- regional budgets - 30%.

In 2019, the special fund of local budgets in the Don RBD received UAH 17.9 million in tax revenues for pollutant discharges directly into water bodies, which is 20% of all local budget revenues collected in Ukraine. More than half of these funds (54-55%) are collected by oblast budgets, and the rest by other local budgets (Table 2, Annex 9.7).

The general fund of the state budget received UAH 14.6 million (45% according to the budget allocation) from the regions of the Donbas DBD. In 2019, the total consolidated budget in the Donbas regions was UAH 32.5 million.

[38] Source: Letter dated 18.09.2020 from Siverskyi Donets RBM for information.

[39] REPORT on the results of the audit of the effectiveness of the exercise of powers by public authorities in terms of control over the completeness and timeliness of the environmental tax on emissions into the atmosphere and discharges into water bodies. 2018: URL: https://rp.gov.ua/upload-files/Activity/Collegium/2018/10-3_2018/Zvit_10-3_2018.pdf

[40] Budget Code of Ukraine, Article 29, paragraph 16.

Overall, in 2017, the consolidated budget of Ukraine (state and local) received UAH 144.8 million in tax revenues for pollutant discharges directly into water bodies, in 2018 - UAH 159.1 million, and in 2019 - UAH 155.7 million (which is about 0.01% of all tax revenues in Ukraine).

In addition to low rates of environmental tax, there is also a problem of unfair payment of this tax by enterprises. According to the Accounting Chamber[41], in Ukraine, including in the regions of the Don River Basin, the number of taxpayers submitting tax reports on environmental tax payments to the SFS is less than the number of business entities that have special water use permits with established limits on discharges into water bodies from the State Agency of Ukraine for Water Resources. In addition, there are differences between the data on tax returns submitted by environmental tax payers for pollutant discharges and the data on state water use accounting by the names and volumes of pollutants[42].

In the Don RBD, a 55% share of the environmental tax on discharges into water bodies is allocated to a special fund of local budgets, which allows these funds to be used for environmental protection measures in the field of water resources protection.

Instead, 45% of the tax collected goes to the general fund of the state budget, which, in turn, does not provide for its targeted use.

3) Payment for the lease of water bodies and payment for special use of water bioresources

Payment for the lease of water bodies is made in accordance with the Methodology for determining the amount of payment for leased water bodies[43]. The calculation of the rent for a fishery technological reservoir is carried out in accordance with another Methodology[44].

The fee for the lease of water bodies goes to local budgets of all levels (regional, district, and basic local budgets).

The weighted average rent is unified for all water bodies of the Don RBD and is constantly increasing. Its dynamics is as follows: in 2014 - UAH 100/ha, in 2015 - UAH 114.9/ha, in 2016 - UAH 153.2/ha, in 2017 - UAH 156.9/ha, in 2018 - UAH 162.7/ha, in 2019 - UAH 162.7/ha. According to estimates, in 2017-2019, local budgets in the Don RBZ regions received rent for water bodies (parts of them) in the amount of UAH 1-1.2 million annually, while according to adjusted data, this amount is at the level of UAH 0.4-0.5 million (Figure 45 and Table 3 of Annex 9.7). According to the SFS, in total, local budgets of all levels in Ukraine received UAH 10-10.4 million for the lease of water bodies in 2017-2018, and UAH 13.5 million in 2019.

4) Payment for the use of aquatic bioresources

The fee for the use of aquatic bioresources is levied in accordance with the resolution of the CMU[45]. According to the report on local budgets, according to the budget code, in 2019, the fee for the special use of aquatic bioresources received in Donetsk region (Donetsk city) was UAH 351.6 thousand, in Kharkiv region (Kharkiv city) - UAH 15.2 thousand, in Luhansk region - no revenues, for a total of UAH 366.8 thousand. In total, UAH 3.94 million was collected in Ukraine. In the Don RBD, payments for the use of water bioresources amounted to 9% of the total.

Despite a 62% increase in rents over the past 5 years, the level of rents remains quite low. The rent for water facilities in the Don RBD goes to local budgets of all levels and accounts for 10% of all funds collected in the country. It is one of the largest in Donetsk Oblast - UAH 1 million in 2019 - and is rather low in Luhansk and Kharkiv Oblasts - UAH 0.1 and 0.08 million, respectively. In total, the Don RBD brings about UAH 0.5 million to local budgets.

A special fee for the use of aquatic bioresources is paid to local budgets, but its amount is not very significant.

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41 REPORT on the results of the audit of the effectiveness of the exercise of powers by public authorities in terms of control over the completeness and timeliness of the environmental tax on emissions into the atmosphere and discharges into water bodies. 2018: URL: https://rp.gov.ua/upload-files/Activity/Collegium/2018/10-3_2018/Zvit_10-3_2018.pdf.

42 p. 34 of the said report: "Thus, in 2015-2016, 474.6 and 443.0 thousand tonnes of sulphates and 585.4 and 533.3 thousand tonnes of chlorides were discharged into water bodies, respectively, with the share of these in the total discharge amounting to more than 80 per cent. According to the State Agency of Ukraine for Water Resources, in 2015-2016, 405.7 and 285.1 thousand tonnes of sulphates and 491.7 and 418.2 thousand tonnes of chlorides were discharged into water bodies, respectively, which is 17 and 55.4% and 19.1 and 27.5% less than the discharges reported in tax reports."

43 Methodology for determining the amount of payment for leased water bodies, approved by Order of the Ministry of Ecology and Natural Resources of Ukraine No. 236 dated 28.05.2013.

44 Methodology for Determining the Amount of Payment for the Use of a Part of a Fishery Water Body, Fishery Technological Reservoir on a Leasehold Basis, approved by the Ministry of Agrarian Policy and Food of Ukraine on 14 January 2014, No. 11.

45 Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Procedure for Charging Fees for the Special Use of Water Bioresources and the Amount of Fees for Their Use" of 12.02.2020 No. 125.

ANALYSIS OF THE INVESTMENT COLLATERAL OF THE RBR DON

The analysis of the investment support for the reproduction of the water sector in the Don RBD allows us to calculate the payback of water services. This section considers: 1) capital investments by type of environmental activity (in wastewater treatment, soil protection and rehabilitation, groundwater and surface water) from budgets of all levels and from enterprises, 2) state budget expenditures for water sector operation (irrigation infrastructure), 3) borrowed funds and technical assistance from international financial organisations. Forecasting the required investments is one of the next steps in modernising the water sector and identifying and ranking the necessary measures.

The sectoral peculiarities of investment support in the water use sector are due to the fact that investment activities of both the state and business entities are mainly focused on the current maintenance and repair of hydraulic and treatment facilities. In the industrial water use sector, large water users - industrial enterprises - are slow to introduce recycling water supply systems and modernise wastewater treatment facilities due to limited domestic and inability to attract external investments, as well as the lack of appropriate incentives that would encourage businesses to introduce low-water and waterless technologies. In the water sector, investment priorities include the construction of new and reconstruction of existing flood control and flood protection facilities, upgrading the material and technical base for monitoring the state of water resource potential, and developing the infrastructure of the basin management system.

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

Investment in the water sector in Ukraine is limited by the dominance of state ownership of water and water management assets and the small share of investment in tariffs for water supply and sewerage services. The state and local budgets are important sources of investment in the water sector.

In 2015-2020, several state and regional investment programmes were implemented in the Don RDB[46]. Their peculiarity is constant underfunding based on the "residual principle".

A) National programmes

The State Target Programme for Restoration and Peacebuilding in the Eastern Regions of Ukraine was approved by the CMU Resolution No. 1071 of 13.12.2017, which financed the restoration of critical infrastructure of water supply and sewage systems (100 facilities and 425 km of water supply and sewage networks); the National Target Programme "Drinking Water of Ukraine" for 2011-2020, whose funding was suspended each year by the Laws on Budget for the following year. Some measures were financed under regional programmes.

B) Regional programmes

Donetsk region

1. The updated Regional Programme "Water of Donetsk Oblast for 2017-2023" includes 67 measures worth UAH 6.3 billion, with extra-budgetary funding sources - IFIs (UNICEF - UAH 1,113.5 million, World Bank - 140 million, KWF - 140 million, European Investment Bank - 140 million, Red Cross - 14.8 million, UNDP - 1,860.9 million, and other sources).

Luhansk region

2. Regional comprehensive programme for flood protection of cities and towns in Luhansk Oblast for 2010-2019. The programme was to be financed from the local budget (UAH 21160 thousand in 2017), other sources (UAH 16597 thousand in 2017), and the state budget (UAH 49015 thousand in 2017). However, no funds were actually allocated, so the programme was cancelled in 2018.

3. The Regional Programme "Drinking Water of Luhansk Region" for 2006-2020, which is not systematically implemented due to lack of financial resources.

Kharkiv region

1. Comprehensive Programme for the Development of the Water Sector in Kharkiv Region for the Period up to 2021. The amount of funds required to finance the Programme's activities is UAH 692.95 million, including UAH 329.15 million from the state budget and UAH 363.8 million from other sources, including in the following areas: ensuring the development of land reclamation and improving the environmental condition of irrigated lands - UAH

[46] According to the websites of Kharkiv, Donetsk and Luhansk regional military administrations.

632.25 million; protection of rural settlements and agricultural land from the harmful effects of water - UAH 60.7 million.

2. Drinking Water Programme for Kharkiv Region for 2012-2020. The amount of funding for the Programme is UAH 1,228,783.7 thousand, including UAH 238,192.6 thousand from the state budget, UAH 518,982.6 thousand from the oblast budget, UAH 254,406.6 thousand from local budgets, UAH 38,783.9 thousand from enterprises, and UAH 178,418.0 thousand from other sources.

According to government statistics, capital investments and current expenditures are allocated to nine environmental areas, which are classified as such:

1) air protection and climate change issues;
2) waste water treatment and waste management;
3) protection and rehabilitation of ground and surface water;
4) conservation of biodiversity and habitats;
5) reducing noise and vibration impact;
6) radiation safety;
7) environmental research and development;
8) waste management;
9) other areas of environmental protection activities.

Among them, two areas are directly related to the reproduction and protection of water resources, namely: 1) wastewater treatment and 2) protection and rehabilitation of soil, groundwater and surface water. The share of the first direction is more significant than the second, together they account for one third of all expenditures from the total amount of capital and current expenditures in all directions (Fig. 46), calculation of total expenditures in the Don RBD as of the beginning of 2020.

It should be noted that the actual volume of investments is growing from year to year, but the share of capital expenditures in total expenditures (capital and current expenditures combined) is unsatisfactory: from 4 to 9.5% in Donetsk Oblast, from 2 to 7% in Luhansk Oblast, where there have been no expenditures on groundwater and surface water protection over the past five years; the situation in Kharkiv Oblast is slightly better – from 5% in 2015 to 17.6% in 2019 (the dynamics of capital expenditures is shown in Table 42).

Table 42. Dynamics of capital expenditures on water resources restoration and protection in the Don RBD in 2015-2019, UAH thousand[47]

Year	Donetsk region		Luhansk region		Kharkiv region	
	Total wastewater treatment + protection and rehabilitation of soil, groundwater and surface water	% of capital expenditures of total (capital and current) expenditures	purification reverse waters	% of capital expenditure of total expenditure	Total wastewater treatment + protection and rehabilitation of soil, groundwater and surface water	% of capital expenditure of total expenditure
2015	36373,2	4,4	8740	2,3	22825	5,9
2016	93890,4	6,2	3463,9	0,8	30106,2	7,0
2017	119103,9	9,4	11095	2,9	53379,2	12,0
2018	140318,4	9,0	19890,2	7,1	70720,8	12,9
2019	120064,9	7,2	9246,9	3,0	109462,8	17,6

Given that more than 50% of capital investments (50.6% in 2017, 63.3% in 2018, 68.1% in 2019) are made up of companies' own funds, the 89% coverage rate in 2019 indicates a critical situation when capital investments in water resources restoration and protection are no longer covered by companies' tax payments (rent + environmental tax + rent + payment for biological resources).

Some investment programmes in water supply and sewerage are implemented by regional utilities, for example, the regional utility Donetskteplocomunenergo for 2021 in the field of centralised water supply and sewerage[48] .

2) State budget expenditures for the State Agency of Water Resources of Ukraine for water infrastructure

[47] The indicators are adjusted in accordance with the share of the region's territory in the Don RDB.

[48] https://dn.gov.ua/ua/npa/pro-pogodzhennya-investicijnoyi-programi-oblasnogo-komunalnogo-pidpriyemstva-doneckteplokomunenergo-na-2021-rik-u-sferi-centralizovanogo-vodopostachannya-ta-vodovidvedennya.

One of the main problems on the way to establishing highly productive agricultural production in the Don RBD is the unsatisfactory technical condition of reclamation systems caused by insufficient funding for their reconstruction and modernisation. The following measures will help to increase the efficiency of irrigated land use: development and reconstruction of irrigation systems; flood control measures; restoration of domestic sprinkler equipment production; monitoring the hydrogeological situation of irrigated land, minimising irrigation rates and optimising the regional structure of irrigated areas; and introducing water conservation technologies.

Expenditures for the operation of irrigation infrastructure are made within the framework of the SAWR expenditures from the state budget, which totalled UAH 4.3 billion in 2019 (UAH 3.9 billion in 2018). 95% of these expenditures are accounted for by the programme "Operation of the State Water Management Complex and Water Resources Management", 5% - by water management and other programmes.

The dynamics of Siverski-Donetsk BUWR expenditures on the operation of the state water management complex and water resources management is positive, amounting to UAH 32.4 million in 2019. In 2015-2020, funding increased 8.5 times, and two more sources of funding were added in 2019-2020: The State Water Development Fund (3-4%) and a subvention from the state budget to local budgets (Table 43).

Table 43. Dynamics of expenditures for the operation of the state water management complex in the Siverski-Donetsk, thousand UAH[49]

Year	General fund	Water Industry Development Fund	Subvention	Together
2015	6122,3			**6122,3**
2016	6994,3			**6994,3**
2017	9042,3			**9799,3**
2018	11829,5			**12467,4**
2019	16159,5	1393,0	13657,0	**32335,8**
2020	37151,1	1598,7	610,0	**52609,8**

Based on the economic efficiency of growing crops on irrigated land, the cost of irrigation services can reach UAH 6 per 1 m^3 of water[50] (as of early 2019).

3) Raising funds from international financial institutions

Another source of investment is external loans and non-repayable international technical assistance from international financial institutions, including through regional infrastructure programmes. According to the Ministry of Finance of Ukraine, as of early 2020, a large-scale EBRD Urban Infrastructure Development project is underway[51], with a 2014-2020 implementation period.

The goal of this project is to improve the quality and reliability of utility services and their energy efficiency for about 6 million residents of Ukraine in 11 cities by restoring and replacing damaged water supply and sewage systems, improving the environmental situation by addressing the problem of wastewater treatment, improving institutional capacity, etc. The total amount of sub-loan agreements of the NEURC licensees under the project is USD 276.9 million.

The project participant is one of the Don RDB: ME Kharkivvodokanal.

In addition, in 2018-2020, the OSCE Project Co-ordinator in Ukraine implemented international technical assistance projects in the field of water resources protection in the Don River Basin regions for a total amount of EUR 303.5 thousand, including in the following areas: analytical and expert, research and practice, technical, training, and educational (Table 44).

Table 44. Funding for projects of the OSCE Project Co-ordinator in Ukraine in the Don RBD

Year	2018	2019	2020
Projected amount, thousand euros	**113,900**	**76,500**	**113,500**
including projects analytical and expert	56,600	5,100	44,200

[49] Letter dated 18.09.2020 from the Siverskyi Donets Basin Water Resources Administration on the provision of information.

[50] Draft Strategy for Irrigation and Drainage in Ukraine until 2030.

[51] Information on the projects of socio-economic development of Ukraine supported by international financial organisations that are under preparation and implementation. URL: https://mof.gov.ua/uk/reestr-spilnih-z-mfo-proektiv-shho-znahodjatsja-na-stadii-pidgotovki-ta-realizacii-informacija.

Year	2018	2019	2020
research and practice	40,900	33,700 37,700	35,200
technical	16,400	-	20,700
educational	-	-	5,600
training	-	-	7,800

PAYBACK OF WATER RESOURCES USE IN THE DON REGION

If the payback period for water use, calculated using the formula "Revenues / Expenses * 100", is

- **more than 100%** - this means that all costs are reimbursed through the payment of tax and non-tax revenues for services to budgets of all levels or through tariffs; budget revenues, if used for their intended purpose, can be used for the restoration of water resources; enterprises receive profits that can be used for production development - production investments, formation of a reserve fund (capital), etc;
- **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 payback period for water use in the Don RBD, calculated using the formula, is 89%, which means that costs are higher than fiscal payments (Table 45).

Table 45. The balance of revenues and capital expenditures in 2019 in the Don RBD

SOURCES	The amount of income in the Don RBD, thousand UAH	EXPENSES	The amount of expenditures in the Don RBD, thousand UAH
Rent for special water use (state and local budgets)	119 847,3	Capital expenditures on water resources restoration and protection	121 890,3
Environmental tax on discharges into water bodies (state and local budgets)	17900, 9	Expenses from the state budget for the operation of the state water management complex	32 335,8
Rent for water bodies (parts thereof) provided for use on a lease basis (local budgets)	503,6	Subsidies from the state budget to pay for water supply and sewerage services	103837,8
Payment for special use of bioresources (local budgets)	366,8		
TOTAL	**138 618,70**	**TOTAL EXPENSES (without subsidies)**	**154 226,1**
Payback (income/expenditure*100%)		89%	
Payback (revenues-subsidies/expenditures*100%)		22,5%	

With a coverage rate of 89% in 2019, a critical situation is evident when capital investments in water resources restoration and protection are no longer covered by fiscal payments from enterprises (rent + environmental tax + rent + payment for biological resources).

Among the reasons for this situation is, in particular, the non-payment of rent by some business entities. However, the main reason is the lack of financial instruments that would balance state budget expenditures and fiscal revenues in planning at the legislative level.

And if we take into account the existing subsidy mechanism in Ukraine, which provides for compensation to households within the social norms for water supply and sewerage services, and take it into account in the formula (Table 46), the payback of water resources use will be 22.5%, which is already critical in terms of the expenditure side of the state budget of Ukraine and the payback of state budget expenditures.

According to the State Statistics Service of Ukraine, the average amount of subsidies in the Donbas regions is as follows: in Donetsk and Kharkiv regions, the amount of subsidies granted is over UAH 100 million and amounts to UAH 151.5 million and UAH 221 million, respectively, while in Luhansk region, the amount of subsidies granted is UAH 59.4 million (Table 46).

According to the calculations of the Don RBD, the amount of subsidies for water consumption services as of 2019 was UAH 103,837.8 thousand. The calculation was made taking into account that on average 30-40% of the amount of subsidies granted is spent on water supply and sewerage services.

Table 46. Housing subsidies for housing and communal services in the regions of the Don RBD

	Number of farms receiving subsidies	Average amount of subsidy	Amount of granted subsidies	including the amount of subsidies for water supply and sewerage services
Donetsk	415 631	624,3	151534,4	**18 184,128**
Luhansk	170557	471,3	59351,7	**23 740,68**
Kharkivska	464 742	669,6	221118,1	**61 913,068**
Total to the Don RBD				**103 837,8**

6.4.2 Water tariffs

Tariffs for centralised water supply and sewerage

In Ukraine, the NEURC and local governments set the following types of tariffs for centralised water supply and sewerage services (see Annex 9.8 for details):

1) Tariff for centralised supply (cold water, hot water separately) and sewerage (cold and hot water together);

2) Tariff for centralised supply (cold water, hot water separately) and sewerage (cold and hot water) using in-building systems.

As of the beginning of 2020, tariffs for centralised water supply and sewerage were set for nine enterprises in the Don RBD.

As of 01.01.2020, there were 51 such licensees in Ukraine, providing services to 76% of consumers in the country. The remaining 24% of consumers are provided by about 3,000 enterprises throughout Ukraine that are business entities in the water supply and sewerage sector and are licensed by local governments[52] .

In the Don RBD, only two licensees have established tariffs for water supply and sewerage for consumers who are water supply and sewerage entities in the area of centralized water supply and sewerage: ME "Company "Voda Donbasu" and ME "Kharkivvodokanal", from which other water utilities buy water, the costs of which are included in the tariffs of these enterprises.

The level of cost recovery for centralised water supply and wastewater treatment for consumers who are not centralised water supply and wastewater treatment entities (tariff to cost) for all water utilities licensed by the NEURC in the Donbas is above 100% and varies from 102.3% to 305%. At the same time, the level of cost recovery by the tariff for the centralised water supply and wastewater treatment entities is below 100% and amounts to 46% for water supply and 36% for wastewater for the ME "Kharkivvodokanal", 68% for wastewater for the ME "Bakhmut-voda".

The weighted average cost of centralised water supply and sewerage services increased by 20% and 11% in 2019, respectively.

The main items in the cost structure are labour costs (including social benefits) and electricity. Their shares are 38% and 28% in water supply and 51% and 25% in wastewater disposal, respectively.

Less significant cost components are depreciation, repair costs, reagents and fuels and lubricants, as well as taxes and fees, including a fee for special use of water (rent) and subsoil use fees for fresh groundwater extraction. The weighted average tariff structure includes 0.5% of these taxes.

The profit as part of the weighted average tariff in 2019 was UAH 0.16/m^3 or 2%.

In addition to the NEURC licensees, for example, in Kharkiv region, water supply and sewerage services are provided by 64 other utilities, which are characterised by separate tariffs for households, budgetary organisations and other categories of consumers.

[52] Report on the results of the activities of the National Energy and Utilities Regulatory Commission in 2019 - URL: http://www.nerc.gov.ua/data/filearch/Catalog3/Richnyi_zvit_NKREKP_2019.pdf

The discrepancy between these tariffs is very significant: for example, the tariff set by the ME "Voda Eskhara" for households is 15.24 UAH for water supply, while for budgetary and other organisations it is 8 times higher and amounts to 124.20 UAH per m^3 of water[53] .

In the structure of the weighted average tariff calculated for 52 NEURC licensees, the average share of water purchases from other water utilities is 5.4%.

If we look at the cost of water as a resource, it is primarily reflected in the tariffs of water utilities. After all, the tariff structure includes the cost of mandatory fiscal payments, which include rent for special water use, which is about 0.5-1%. However, for some water utilities in the Don RBD, such as Kramatorsk Vodokanal and Slovmiskvodokanal, in addition to these tax payments, 44-47% of the tariff structure is allocated for the purchase of water from another entity.

2) Cost of water for industrial enterprises

It should be noted that the cost of water is actually paid by industrial enterprises in the form of a mandatory payment for special water use - a rent, the amount of which depends on the type of water consumed, the purpose, place and region of consumption, and the actual volume of water used.

This cost is not paid if the volume of consumption is less than 5 m^3 per day and the water user does not have its own water intake facilities.

The rates of rent for special water use established by the Tax Code of Ukraine are differentiated by region and basin. The rates in the Don RBD are shown in Table 47. It should be noted that the rates for the use of water in the Siverskyi Donets River are among the highest in Ukraine, for example, the rates for the use of water in the Dnipro River are half as high.

The rates allocated for groundwater use in the Don RBD are as follows: Luhansk Oblast has the highest rate of 122 UAH per 100 m^3 , Donetsk Oblast - 110, Kharkiv Oblast - 87.2.

Separate rent rates are set for special water use for hydropower, water transport, fish farming, etc.

For thermal power plants, the rent for the volume of water passed through the turbine condensers for cooling is calculated with a coefficient of 0.005. In the structure of the heat tariff, the cost of water rent generally does not exceed 1%.

Table 47. Rent rates for special water use in the Don RBD[54]

Basins and regions	Rate, UAH per 100 m^3
For the use of surface water	
Siverskyi Donets	113, 45
For the use of groundwater	
Donetsk	110,56
Luhansk	122,13
Kharkivska	87,21
Other rates for special water use	
For the needs of hydropower	UAH 11.31 per 10 thousand m ^{3}
For the needs of water transport on all rivers	UAH 0.1938 per 1 tonne-day of operation
For the needs of fish farming	UAH 59.36 per 10 thousand m^3 of surface water; 71.36 - groundwater
For water in beverages	55.21 UAH per 1 m^3 of surface water; 64.39 - groundwater
For mine, quarry and drainage water	UAH 12.79 per 100 m^3

The rent is not paid if:

- water is only purchased from primary water users and is not produced independently;
- is used only to meet the drinking and sanitary needs of the population, including to meet exclusively their own drinking and sanitary needs (toilets, showers, bathrooms and washbasins, maintaining the sanitary and hygienic condition of the premises);

53 Certificate on the amount of current tariffs for water supply and sewerage services provided by the region's housing and communal services as of 01.11.2020 - Official website of the Kharkiv Regional State Administration - URL: https://kharkivoda.gov.ua/dokumenti/116/422/3131/3217/105887

54 Article 255 of the Tax Code of Ukraine.

- for firefighting purposes; for external improvement of cities (e.g. fountains); in other cases, in accordance with clause 255.4 of the Tax Code of Ukraine and Article 48 of the Water Code of Ukraine.
- water intake is carried out, but within the limits of up to 5 m^3 per day. This is not considered special water use (Article 48 of the Water Code of Ukraine). However, if water is used as an ingredient in beverages and packaged drinking water, then rent must be paid regardless of the volume of extraction. Therefore, beverage companies pay rent for special water use as the cost of water.

The cost of polluting water bodies is paid in the form of fines and environmental tax for discharges of pollutants into water bodies. The environmental tax has been increasing year on year, with the most recent increase in environmental tax rates occurring in 2019: emission rates increased by more than 2.2 times in accordance with the Tax Code of Ukraine. The tax rates for discharges of pollutants into water bodies are presented in Table 48.

Table 48. Environmental tax rates for discharges of certain pollutants into water bodies[55]

Name of the pollutant	Tax rate, UAH per 1 tonne
Ammonium nitrogen	1610,48
Organic matter (based on biochemical oxygen demand (BOD 5)	644,6
Suspended solids	46,19
Petroleum products	9474,05
Nitrates	138,57
Nitrites	7909,77
Sulphates	46,19
Phosphates	1287,18
Chlorides	46,19

The main requirements for regulating the maximum permissible discharge (MPD) of pollutants generated in the course of production activities of water users are determined by the Procedure for the Development and Approval of Maximum Permissible Discharge Standards for Pollutants[56] .

In accordance with paragraph 3 of this Procedure, the MPD standards for pollutants are set with the aim of gradually achieving the environmental water quality standard for water bodies. In accordance with paragraph 8 of the Procedure, the lists of pollutants whose discharge is regulated are reviewed and supplemented by the Ministry of Ecology and approved by the CMU (once every three years). The State Audit found that the lists of pollutants of the Ministry of Ecology and Natural Resources have not been reviewed and supplemented during the period of the Procedure (more than 21 years).

3) Cost of water intake services for irrigation

The state operators of the market of water supply for irrigation (water abstraction for irrigation) are water management organisations of the SAWR of Ukraine.

The cost of such services is formed on the basis of a unified approach, which is determined by the joint order of the Ministry of Ecology and Natural Resources of Ukraine, the Ministry of Economic Development and Trade of Ukraine, the Ministry of Finance of Ukraine dated December 25, 2013 No. 544/1561/113057 “On Approval of the Procedure for Determining the Cost and Provision of Paid Services by Budgetary Institutions Belonging to the Management of the State Agency of Water Resources of Ukraine and Recognition of Certain Orders as Invalid” and is determined on the basis of economically justified costs related to the The costs include direct labor costs, direct material costs and other direct costs, general and administrative expenses, including renewal and modernization of fixed assets used in the amount of 10% of direct costs. This cost is differentiated according to technological features.

The principle of pricing this service is not intended to generate profit, as the state in the risky farming zone has committed itself to subsidising agricultural production. The service of water supply for irrigation is a kind of subsidy to agribusiness in the form of reducing the cost of irrigation through state maintenance (operation) of irrigation systems and service personnel.

55 Article 245 of the Tax Code of Ukraine.

56 The Procedure for the Development and Approval of Maximum Permissible Discharge Standards for Pollutants, approved by the Cabinet of Ministers of Ukraine on 11.09.1996, No. 1100.

The peculiarity of cost formation is that the calculation of the cost of this service includes the cost of water supply[57], which is not covered by budget funding (including electricity, salaries, capital expenditures).

The cost of the service does not include the cost of water as a resource, as water management organisations are not primary water users.

Out of the three oblasts in the Don RBD, two were abstracting water for irrigation. The cost of this service varied from UAH 0.77 to 3.79 as of June 2019 (Table 49).

Table 49. Cost of water abstraction for irrigation by regions of the Don RBD, 2017-2019, UAH/m^3 (excluding VAT)

Oblasts	2017	2018	Cost in total 2019	including the cost of	
				electricity	own services
Donetsk	1,22-2,07	1,97-3,37	2,44-5,63	1,53-3,05	0,91-2,59
Kharkivska	0,58-2,80	0,77-3,26	1,24-3,79	0,77-2,26	0,46-2,69

Electricity accounts for 70% of the cost of water intake for irrigation. Over the past three years, the cost of this service has increased by 2-4 times, 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.

[57] Water outlet point means 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.

7 A REVIEW OF THE IMPLEMENTATION OF PROGRAMMES OR ACTIVITIES, INCLUDING HOW THE OBJECTIVES HAVE BEEN ACHIEVED

This section provides an overview of budget programs at various levels that were implemented in the Don RBD in 2018-2020 and contained measures aimed at improving the ecological status of the SWBs (Annex 10). The list of environmental protection areas and specific measures in the programs was determined by the Resolution of the CMU of September 17, 1996, No. 1147 “On Approval of the List of Activities Related to Environmental Protection Measures” (Collection of Resolutions of the Government of Ukraine, 1996, No. 18, p. 505).

In accordance with the CMU Resolution No. 336 "On Approval of the Procedure for Developing a River Basin Management Plan" dated 18.05.2017, the Programme of Measures (PoM) in the RBMP is financed from the state and local budgets within the limits of expenditures provided for in the State Budget of Ukraine for the respective year. Other sources not prohibited by law may also be used for this purpose.

The National Target Programme for the Development of the Water Sector and Environmental Rehabilitation of the Dnipro River Basin for the Period up to 2021.

The purpose of the Programme is to define the main directions of state policy in the field of water management, conservation and restoration of water resources, implementation of the integrated water resources management system based on the basin principle, restoration of the role of reclaimed lands in the food and resource supply of the state, optimisation of water consumption, prevention and elimination of the consequences of harmful water impact.

The Programme was implemented in two phases - 2012-2016 and 2017-2021, and its main objectives were:

- 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 planned amount of funding for the State Regional Development Programme was UAH 46,478.46 million, including UAH 21,029.03 million from the state budget, UAH 9,294.20 million from the local budget, and UAH 16,155.20 million from other sources. The amount of funding was approved annually when the draft law on the State Budget of Ukraine was prepared. The planned and actual expenditures for 2019 and 2020 are shown in Table 50.

Table 50. Planned and actual expenditures of the Programme (2019-2020)

	Source of funding	2019	2020
Planned, thousand UAH	TOTAL	4 057 103,95	3 715 963,68
	State fund	2 133 375,2	2 778 911,73
	Special fund	1 780 717,6	937 051,95
Actual expenditures, thousand UAH	TOTAL	3 454 185,08 (85%)	3 473 917,62 (93,5%)
	State fund	2 173 458,7 (98,2%)	2 617 531,33 (94,2%)
	Special fund	1 280 726,38 (71,9%)	856 386,29 (91,4%)

An analysis of expenditures under the Programme showed that the bulk of them were spent on consumption, while only a small portion of funds was allocated for the development of the industry, namely 6.4% of the general fund and 18.8% of the special fund.

The state budget funds under the Programme were allocated to 4 budget programmes and 4 state investment projects. Among them, 90.8% of funding was allocated to the programme under "Operation of the State Water Management Complex and Water Resources Management", which performs tasks on the operation of the state water management complex, water resources management (maintenance of budgetary institutions), state water monitoring for river basin areas (maintenance of budgetary institutions) and the development of RBMPs.

Within the Don RBD, the financial resources of the Programme "Operation of the State Water Management Complex and Water Resources Management" were used to support the functions of the Siverskyi Donets Basin Water Resources Administration in operating the state water management complex, managing water resources, carrying out state water monitoring (maintenance of budgetary institutions) and developing the Don RBMP. In 2019, a total of UAH 32,335.8 thousand was received, in 2020 - UAH 52,609.8 thousand. To ensure the operation of reclamation systems in Kharkiv region, the Regional Water Resources Office in Kharkiv region was funded in the amount of UAH 41.07 million in 2019 and UAH 42.79 million in 2020. The amount of funding for the ROWR in Luhansk region was UAH 19.86 million in 2019 and UAH 22.03 million in 2020.

In 2020, the passport of the budget programme "Operation of the State Water Management Complex and Water Resources Management" included a single measure aimed at improving the ecological status of the basin's water resources, namely the purchase of equipment to improve the hydrological regime of the Dnipro-Donbas Canal and Krasnopavlivka Reservoir. This measure was fully implemented at the expense of the state budget allocations in the amount of UAH 43,727.5 thousand.

In connection with the expiration of the Programme in 2021, a draft Law of Ukraine "On Amendments to the National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the Period up to 2024" has been developed. The estimated amount of funding for the Programme's tasks and activities until 2024 is UAH 41,265.05 million, including UAH 21,029.03 million from the state budget, UAH 7,545.65 million from local budgets, and UAH 12,690.37 million from other sources. The law has not yet been adopted by the Verkhovna Rada of Ukraine.

The National Target Programme "Drinking Water of Ukraine" for 2011-2020 (the "Drinking Water Programme"). The Ministry of Regional Development, Construction, Housing and Communal Services of Ukraine is the Programme's implementing agency, and since September 2019, the Ministry of Communities and Territories Development of Ukraine (MinRegion) is the Programme's executing agency.

The goal of the Drinking Water Programme was to ensure the rights of citizens to an adequate standard of living and environmental safety guaranteed by the Constitution of Ukraine, and to provide drinking water in the required volumes and in accordance with established standards. The main objective was to be achieved through 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 projects using the latest materials, technologies, equipment and devices.

The estimated amount of funding for the Drinking Water Programme was UAH 9,471.7 million, of which UAH 3,004.3 million was allocated from the state budget and UAH 6,467.4 million from other sources.

Funding for the Drinking Water Programme was extremely unstable. The Ministry of Regional Development as the state customer of the Drinking Water Programme did not fully manage the Programme, which led to imperfect regulatory and organisational support for the implementation of the Programme's tasks and activities. The defined procedure for interaction and coordination of central and local executive authorities, local self-government bodies, enterprises, institutions and organisations on the implementation of the Drinking Water Programme was not applied.

In recent years, the Drinking Water Programme was funded only in 2011, 2012 and 2018, and after 2018 its funding was completely suspended. This state of organisation of the Programme's tasks led to its implementation barely exceeding 13 per cent.

The Government of Ukraine has decided to comprehensively address the drinking water problem by developing a new Programme until 2026 and ensuring stable funding for its activities. The concept of the National Targeted Social Programme "Drinking Water of Ukraine" for 2022-2026 was approved by the Order of the Cabinet of Ministers of Ukraine No. 388-p dated 28.04.2021 , and the Ministry of Communities and Territories Development, together with the interested central executive authorities, was instructed to develop and submit to the Cabinet of Ministers of Ukraine the draft Law of Ukraine "On the National Targeted Social Programme "Drinking Water of Ukraine" for 2022-2026".

The State Budget Programme "Forestry and Hunting Management, Protection and Conservation of Forests in the Forest Fund" ("Forest Programme"), which is administered by the State Agency of Forest Resources of Ukraine.

The purpose of the Forest Programme was to ensure the protection, efficient use, conservation and restoration of the forest and nature reserve fund of Ukraine, and its tasks included supporting the activities of budgetary institutions of forestry and hunting, as well as implementing measures for forest management and reforestation, and creating protective forest plantations.

The task of implementing forest management and reforestation measures was financed from a special fund at the expense of rent for the special use of forest resources. In 2019 and 2020, the amount of funding was UAH 316,533.3 thousand and UAH 288,183.7 thousand, respectively. All the funds from the special fund were used for forest management at the enterprises of the southeastern region.

In the context of the Siverskyi Donets sub-basin of the Don RBD, reforestation was carried out on an area of 717 hectares at the expense of the special fund and the own funds of Luhansk Oblast enterprises. The planned measures to arrange field protection strips were not implemented.

The budget programme "Conservation of the Nature Reserve Fund" (NRF Programme).

According to the results of the accounting data of the NRF territories and objects submitted by the executive authorities at the local level, which ensure the implementation of the state policy in the field of environmental protection (hereinafter referred to as the NRF), as of January 01, 2020, the NRF of Ukraine includes 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%.

Clause 46 Ensuring the creation of new or expansion of existing territories and objects of the nature reserve fund of the National Action Plan for Environmental Protection for the period up to 2025, approved by the Order of the Cabinet of Ministers of Ukraine of April 21, 2021, No. 443 “On Approval of the National Action Plan for Environmental Protection for the period up to 2025” (Official Gazette of Ukraine, 2021, No. 42, p. 2557) provides for an increase in the area of territories and objects of the nature reserve fund by 3% of the total area of the state.

The State Strategy for Regional Development for 2021-2027, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 695 “On Approval of the State Strategy for Regional Development for 2021-2027” of August 05, 2020 (Official Gazette of Ukraine, 2020, No. 67, p. 2155), stipulates that the share of territories and objects of the nature reserve fund in relation to the area of the state (region) tends to increase in each region to reach 15 percent by 2027.

In order to intensify the government's activities in the field of nature reserves, Presidential Decree No. 838/2005 of May 23, 2005 “On Measures for the Further Development of Nature Reserves in Ukraine” was adopted, pursuant to which the Ministry of Ecology and Natural Resources in 2008 developed and submitted to the Verkhovna Rada of Ukraine a draft Law of Ukraine “On Approval of the National Target Environmental Program for the Development of Nature Reserves for the Period up to 2020.” The concept of this Program was approved by the Cabinet of Ministers of Ukraine in its Resolution No. 70 of February 08, 2006 “On Approval of the Concept of the National Program for the Development of Nature Reserves for the Period up to 2020” (Official Gazette of Ukraine, 2006, No. 6, Article 315). However, the Program was not supported by the Ministry of Finance and the Ministry of Economy.

Today, the development of the nature reserve fund does not have a separate target program and is funded by the budget program “Conservation of the Nature Reserve Fund”, which is implemented by the Ministry of Ecology.

The program was financed from the general and special funds of the State Budget of Ukraine and in 2020 amounted to UAH 432849.8 thousand, of which the share of the general fund was 93%.

The main tasks of the program are the maintenance of the institutions of the nature reserve fund.The performance indicators under this program were fully implemented.

There are 4 national nature parks within the Siverskyi Donets sub-basin of the Don RBD: Dvorichansky NNP (Kharkiv oblast), Gomilshansky Forests NNP (Kharkiv oblast), Sviati Hory NNP (Donetsk oblast) and Kreminna Forests NNP (formerly Siverski-Donetsk NNP) (Luhansk oblast). One of the tasks of the NRF Program in the area "Conservation of the Nature Reserve Fund" was to develop forest management materials for the Holy Mountains NNP with a total cost of UAH 1341.7 thousand, including UAH 569.0 thousand for 2020.

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 units and investment programmes and regional development projects is approved by the CMU in consultation with the Verkhovna Rada Committee on Budget.

In 2020, the SFRD financed 284 projects in the water supply and wastewater treatment sector with a total value of UAH 294 million.

In the Siverskyi Donets sub-basin of the RBD Don, the project "Reconstruction of sewage treatment facilities in Malynivka village, Kharkiv region (Adjustment)" was selected and funded, which was implemented in 2019-2021. Malynivka village is economically developed, with the Malynivka Industrial Zone located on its territory, which includes the five largest industrial enterprises of Chuhuiv district: Prime Distillery LLC, Malynivka Glassworks LLC, TMM Energobud-Management LLC, Bikorm LLC, and KGS&CO PrJSC.

The project was implemented by the SFRD on a co-financing basis with the local budget. In 2019 and 2020, both the SFRD and the Regional Environmental Protection Fund of Kharkiv Oblast fulfilled their financial obligations in full, allocating UAH 40,016.2203 thousand and UAH 28,307.653 thousand, respectively.

The project to restore the hydrological and sanitary condition of the Borova River, approved by the CMU Resolution No. 297-p of 12.04.2021, has been competitively selected and has been funded by the SFRD since 2021.

In order to finance environmental protection and resource conservation measures, the Law of Ukraine "On Environmental Protection" provides for the establishment of targeted environmental protection funds at both the state and local levels. The idea behind these funds is for polluters to finance the improvement of the environmental condition of the object affected by their activities.

The State Fund for Stimulation and Financing of Environmental Protection Measures is hereinafter referred to as the State Environmental Fund (SEF). According to the Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Regulation on the State Fund for Environmental Protection" dated 07.05.1998 No. 634 (as amended by the Resolution of the Cabinet of Ministers of Ukraine No. 1065 dated 04.12.2019), the SEF is part of the State Budget of Ukraine.

The funds of the environmental tax levied on emissions, discharges of pollutants and waste disposal are distributed as follows: 45% is allocated to the general fund of the state budget; 55% - to the special fund of local budgets (except for the tax levied on radioactive waste generation). In turn, the special fund of local budgets is distributed between regional budgets and the budget of the Autonomous Republic of Crimea - 30% and village, town, city budgets, budgets of amalgamated territorial communities established in accordance with the law and the perspective plan for the formation of community territories - 25%.

An analysis of the use of environmental tax funds showed that they are being dispersed and not fully used for environmental protection measures. Out of the UAH 2,779.6 million of environmental tax collected in 2018, only UAH 522.3 million was allocated for environmental protection measures.

In 2019-2020, the State Investment Fund financed 4 state investment projects under the National Target Programme for the Development of Water Management and Environmental Improvement of the Dnipro River Basin until 2021.

The study of the conditions and procedure for financing environmental measures from the SEF led to the conclusion that the current regulations governing the procedure for opening financing of environmental measures from the State Budget have been amended to block the possibility of regional and district administrations and local governments to receive funds.

The procedure for using the funds provided for in the state budget for environmental protection measures is set out in CMU Resolution No. 163 dated 28.02.2011. On 4 July 2018, the following amendments were made to CMU Resolution No. 163:

Clause 2 limited the types of activities that could be financed according to the list approved by CMU Resolution No. 1147.

Clause 3. The environmental action plan shall be developed in accordance with the procedure established by the Ministry of Ecology and Natural Resources of Ukraine, based on the following criteria: the general fund of the state budget is used exclusively for environmental protection measures carried out at state-owned facilities.

This information shows that the amendments introduced in 2018 to CMU Resolution No. 163 provide formal grounds for rejecting budget requests for financing environmental projects at municipal and other property.

In 2019-2020, a total of UAH 426,531.02 thousand was allocated from state programmes and funds for water protection measures in the Siverskyi Donets sub-basin.

The Regional Environmental Protection Funds (REPF) were a source of funding for environmental protection measures under 19 regional programmes that operated in Kharkiv (5 programmes), Donetsk (7 programmes) and Luhansk (7 programmes) oblasts in 2019-2020.

Given that the financing of activities is based on the administrative-territorial principle, there is a need for coordinated actions by public authorities to ensure the integral management of the Don RDB.

The distribution of SWBs in the Siverskyi Donets sub-basin of the Don RBD by administrative region is as follows: Kharkiv oblast - 258, Donetsk oblast - 182 and Luhansk oblast – 279.

In the Kharkiv region, funding for activities from the regional REPF fund is approved annually by a decision of the Kharkiv Regional Council as a general list.

Comprehensive Environmental Protection Programme in Kharkiv Oblast for 2009-2013 and for the period up to 2020 (the Programme)**,** approved by the decision of the Kharkiv Oblast Council of 29.10.2009 No. 1413-V (as amended).

For the period 2019-2020, the approved funding amounted to UAH 33,386,996 thousand, and UAH 35,037.07 thousand was actually financed. The full list of water protection measures of the Programme with reference to the SWB is provided in Annex 10.

Nine measures addressed the environmental condition of the waters of the Siverskyi Donets sub-basin, including 7 that addressed the upgrade of treatment facilities, one that provided for the purchase of technological equipment to improve water exchange in the Krasnopavlivka reservoir, and one that provided for the clearing of the riverbed.

The programme "Drinking Water of Kharkiv Region" for 2012-2020, approved by the decision of the Kharkiv Regional Council No. 350-VI dated 01.03.2012, is aimed at providing the population of the region with high-quality drinking water.

All the measures of this Programme are included in the Comprehensive Environmental Protection Programme in Kharkiv Region for 2009-2013 and for the period up to 2020.

As part of the Programme's activities, 2.6 km of sewerage collectors and 1 sewage pumping station were reconstructed. Work has begun on the reconstruction of one and construction of two sewage treatment plants and construction of two sewage pumping stations.

The Comprehensive Programme for the Development of the Water Sector in Kharkiv Region for the period up to 2021 was approved by the decision of the Kharkiv Regional Council of 20.06.2013 No. 746-VI.

The programme aims to increase the efficiency of the region's reclamation systems and prevent harmful effects of water. The responsible executor of the Programme is the Regional Water Resources Office in Kharkiv Oblast.

In 2019-2020, the programme was funded exclusively for the task "Maintenance of the water management and land reclamation complex", which was 85% funded from the state budget. Measures to prevent the formation of surface runoff, which transports pollutants, and to improve the hydromorphological characteristics of river basins were not funded at all.

The Programme of Economic and Social Development of Kharkiv Region in 2019, approved by the Kharkiv Regional Council on 06.12.2018 No. 832-VII, and the **Programme of Economic and Social Development of Kharkiv Region in 2020,** approved by the Kharkiv Regional Council on 05.12.2019 No. 1129-VII, contained 5 measures for the reconstruction of sewage collectors and treatment facilities.

In the Kharkiv region, a total of UAH 163,638,296 thousand was spent on water protection measures in the Siverskyi Donets sub-basin of the Don RBD in 2019-2020 . The breakdown between different programmes by year is shown in Table 51.

Table 51. Distribution of funds between different programmes

Programme	2019, thousand UAH	2020, thousand UAH
Comprehensive Environmental Protection Programme in Kharkiv Oblast for 2009-2013 and for the period up to 2020	20 893,9	14 143,17
Comprehensive Programme for the Development of the Water Sector in Kharkiv Region for the period up to 2021	47 768,261	46 676,3
Programmes of economic and social development of Kharkiv region	24 164,665	9 992,0
TOTAL	**92,826,826**	**70 811,47**

The overall effectiveness of water protection measures in the Don RBD was 83% in 2019 and 96% in 2020. In terms of achieving the strategic environmental objective of basin management, 9 measures contributed to its partial implementation, and 3 measures did not address any water and environmental issues.

The Waste Management Programme for Donetsk Oblast for 2016-2020, approved by the Order of the Head of Donetsk Oblast State Administration, Head of the Oblast Military-Civilian Administration No. 216 "On Approval of the Programme Measures of the Oblast Environmental Protection Fund for 2015" dated 22.05.2015 (as amended).

The programme is aimed at analysing the current state of household waste management within the settlements of Donetsk Oblast controlled by the Government of Ukraine to support management decision-making in the field of waste management.

Under the Programme, 9 activities were carried out to construct and rehabilitate landfills, develop sanitary cleaning schemes for territories, and purchase a unit for processing and disposal of mercury-containing waste.

The total funding for the Programme in 2019-2020 amounted to UAH 94,733,974 thousand.

The Regional Programme for Industrial Waste Management in Donetsk Oblast for 2018-2020, approved by the Order of the Head of Donetsk Oblast State Administration, Head of the Military-Civilian Administration of 28.12.2018 No. 1580/5-18.

The aim of the Programme is to improve the industrial waste management system in the region, which will reduce the volume of waste generation; increase the volume of recycling and utilisation and promote safe waste disposal and the implementation of a range of measures to address industrial waste management issues.

Under the Programme, 15 activities were planned to be implemented, of which 3 activities were funded by the regional REPF fund and 12 by business entities.

The measures to improve the processing of chemical production wastes are implemented by PJSC "AVDIIVKA COKE" at its own expense.

In the course of the Programme's implementation, imperfect legislation and unregulated mechanisms for the use of industrial waste, including metallurgical slag, in construction and other sectors of the economy were noted.

A total of UAH 2,540.9 thousand was spent on the implementation of the Programme's activities, most of which came from enterprises.

The regional programme "Forests of Donetsk Region", was approved by the order of the Head of the Donetsk Regional State Administration, Head of the Regional Military-Civilian Administration of 08.10.2018 No. 1212/5-18.

The main objective of the Programme is to ensure the implementation of the state policy in the field of forestry in the context of the industry reform, as well as the protection, conservation, rational use and reproduction of forest resources, increase of forestry efficiency, and satisfaction of the society's needs for environmental and raw forest resources.

In the course of the Programme implementation, 50 hectares of protective forest plantations were created on degraded and unproductive lands, which helped prevent water pollution from diffuse sources.

UAH 635.9 thousand was spent on the implementation of the measures, with the Programme's efficiency at 83.4%.

Regional Programme for the Formation and Development of the Ecological Network in Donetsk Oblast for the Period 2019-2022, approved by the Order of the Head of Donetsk Regional State Administration, Head of the Regional Military-Civilian Administration of 19.03.2019 No. 300/5-19.

The main goal of the Programme is to direct the actions of regional and local state executive authorities and local self-government bodies to implement priority areas in the formation of regional and local ecological networks.

The programme envisages the creation of new and expansion of existing territories and objects of the nature reserve fund, creation of Lists of territories and objects of the regional ecological network and development of schemes for the formation of local ecological networks (at the district level).

The event implemented under the Programme was included in the Forests of Donetsk Oblast programme.

The Action Plan for Environmental Protection of Donetsk Oblast for 2013-2020 (the Action Plan), approved by the decision of the Donetsk Oblast Council of 30 May 2013 No. 6/21-59.

The main goal is to ensure environmental safety by preventing and minimising the negative impact of human activity on the environment, rational use and conservation of natural resources, and transition to sustainable, environmentally balanced development of the region.

The Action Plan includes 61 measures in the area of water resources protection, for which UAH 456,659.67 thousand is allocated, of which UAH 68,500.00 thousand will be allocated from the state environmental protection fund, UAH 221,228.7 thousand from the regional environmental protection fund, UAH 41,351.6 thousand from the local environmental protection funds, and UAH 125,579.37 thousand from the enterprises.

Most of the measures relate to the construction and reconstruction of wastewater treatment plants and sewerage networks. Some of the measures were implemented under the Regional Target Programme for the Clearing and Regulation of Riverbeds for 2018-2022.

Regional target programme for clearing and regulating riverbeds for 2018-2022, approved by the order of the head of the Donetsk regional state administration, head of the regional military-civilian administration of 10.09.2018 No. 1123/5-18.

The main objective of the Programme is to transform river basins into stable landscapes in compliance with environmental standards, as provided for by the Water Code of Ukraine and Directive 2000/60/EC of the European Parliament and of the Council "Establishing a framework for Community action in the field of water policy" of 23.10.2000 (as amended), with "good" surface water conditions, and to restore their recreational attractiveness.

Implementation of the Programme will address the most pressing and urgent issues of restoring and improving the ecological condition of rivers and other water bodies, as well as significantly reduce the anthropogenic impact on water bodies in the region and their ecosystems by reducing the flow of untreated and insufficiently treated wastewater into water bodies.

According to the Programme, 13 environmental measures were planned for 2019, of which 3 measures for the reconstruction of sewage treatment facilities were implemented for a total amount of UAH 47,700.95 thousand. The source of funding for these measures was the regional environmental protection fund. No funds were allocated from local budgets in 2019. Other planned activities were not implemented due to rejected bids, the contractor's failure to fulfil contractual obligations, and underfunding.

In 2020, 2 activities were carried out to strengthen the banks and clear the beds of the Kazennyi Torets and the 2a Bilenka River, as well as to reconstruct 2 sewer collectors.

The total amount of funding for the Programme was UAH 156,784.06 thousand, and its implementation efficiency was 39% in 2019 and 68% in 2020.

The consolidated financial indicators of the Programme implementation in Donetsk Oblast for 2019-2020 were as follows: approved funding - UAH 312,953.92 thousand, actual implementation - UAH 207,327.85 thousand (including UAH 4,849.90 thousand of the implementers' own funds).

The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025, approved by the order of the Head of the Luhansk Oblast State Administration - Head of the Oblast Military-Civilian Administration No. 127 of 21 February 2019. The Programme is characterised by a large number of amendments introduced by orders of the Head of the Regional State Administration - Head of the Regional Military-Civilian Administration (No. 164 and 167 of 28 February 2019, No. 316 of 18 April 2019, No. 319 of 19 April 2019, No. 335 of 23 April 2019, No. 433 and No. 344 of 22 May 2019).2019 No. 433 and No. 434, of 18.06.2019 No. 521, of 18.02.2020 No. 129, of 21.02.2020 No. 138, of 18.03.2020 No. 210, of 22.06.2020 No. 449, of 18.08.2020 No. 559, of 20.08.2020 No. 566, of 18.09.2020 No. 611 and No. 616, 13.10.2020 No. 688, 21.10.2020 No. 709, 30.10.2020 No. 741, 10.12.2020 No. 873, 19.02.2021 No. 80 and No. 81, 26.04.2021 No. 275) for the purpose of redistribution of funds.

The Department of Ecology and Natural Resources of the Luhansk Oblast State Administration is responsible for the implementation of the Programme. This department has now been liquidated and replaced by the Department of Municipal Property, Land, Property Relations, Ecology and Natural Resources.

The main goal of the Programme was to stabilise and consistently improve the environmental situation in the region, creating the right conditions for achieving an environment that is safe for human health.

In total, the Programme in the area of Water Resources Protection and Rational Use plans to implement 75 measures, namely to develop 24 projects and sets of design estimates for the construction and reconstruction of sewage pumping stations, sewage networks and collectors, treatment facilities, and mine flood protection; to carry out construction and reconstruction of 59 sewage pumping stations, sewage networks and collectors, and treatment facilities; to develop 90 passports for the region's water bodies; to take measures for environmentally safe

In 2019-2020, 43 activities were implemented, the financial indicators of which are shown in Table 52.

Table 52. Financial indicators of completed activities

Year	Regional budget, thousand UAH	
	planned	done
2019	115 397,433	50 500,523
2020	122 290, 208	98 002,060
Total	**237 687,641**	**148 503,132**

The overall efficiency of the programme in 2019 was 43.7%, and in 2020, as a result of optimising the list of measures depending on the real financial capabilities of the regional budget, it increased to 80%.

The lowest efficiency is in the implementation of measures to build and reconstruct sewage pumping stations, sewage networks and collectors, treatment and hydraulic structures.

The programme has obvious planning shortcomings. At the stage of its development, a total of 49 wastewater treatment facilities were planned, with 68% of the state budget funding allocated for their implementation. When the number of measures was reviewed and reduced to 40 and their funding approved for 2019-2020, it was also expected that 57% of the funds would come from the state budget. However, in 2019-2020, Luhansk region failed to attract subventions from the state budget. The relevant materials were submitted to the working group of the Ministry of Ecology for consideration for funding in accordance with the Procedure and Conditions for Providing Subventions from the State Budget to Local Budgets for Environmental Protection Measures at Communal Property (CMU Resolution No. 228 of 20.03.2019). Based on the results of the review, the measures were not included in the list of projects to be funded in 2019 and 2020 in accordance with the said Procedure.

In Luhansk Oblast, there is also a negative practice of repeatedly amending the Programme passport, shortcomings in terms of clearly defining the types of activities that can be attributed to environmental protection measures; an inadequate system of monitoring the implementation of measures.

The Programme "Drinking Water of Luhansk Region" for 2006-2020, approved by the decision of the Luhansk Regional Council of 23.09.2005 No. 20/85 (as amended by the order of the Head of the Regional State Administration - Regional Military-Civilian Administration of 17.08.2012 No. 14/29, No. 425 of 19.07.2016, No. 390 of 13.06.2017 (new version), No. 632 of 05.09.2017, No. 796 of 31.10.2017, No. 796 of 29.12.2017, No. 971 of 29.03.2018, No. 255 of 29.03.2018, No. 646 of 27.08.2018, No. 371 of 07.05.2019).

The objective of the Regional Programme "Drinking Water of Luhansk Region" for 2006-2020 (hereinafter - the Programme) is to improve the provision of drinking water of standard quality to the population of the region within the scientifically based standards (norms) of drinking water supply; reform and development of the water supply and sewerage network; increase the efficiency and reliability of its functioning; restoration, protection and rational use of drinking water sources.

The programme included 141 measures totalling UAH 1,415,763,557 thousand. Due to the low level of funding, which amounted to only 4.1% of the budgets of all levels, most of the measures were not implemented.

Two measures with a total funding of UAH 41,478,576 thousand were implemented to improve the ecological status of the SWB Don RBD.

In 2021, work began to restore the hydrological and sanitary condition of the Borova River by reconstructing an existing spillway dam located near the city of Sievierodonetsk. The project was included in the list of investment programmes for regional development approved by the Cabinet of Ministers of Ukraine on 12.04.2021 No. 297-p. The Capital Construction Department of the Sievierodonetsk City Military-Civilian Administration was appointed as the project's fund manager.

Regional Solid Waste Management Programme in Luhansk Oblast, approved by the decision of the Luhansk Oblast Council of 29.01.2009 No. 26/21, as amended by the order of the Head of the Luhansk Oblast State Administration - Head of the Oblast Military-Civilian Administration of 31.03.2017 No. 195 (new version), of 07.08.2017 No. 528, of 20.09.2017 No. 671. Programme implementation period: 2017-2020.

The purpose of the Regional Solid Waste Management Programme in Luhansk Oblast is to reduce the negative impact of solid waste on the environment and public health while ensuring the cost-effective operation of the waste management system.

As part of the Programme, unauthorised landfills were eliminated for the amount of UAH 1,374,509 thousand.

The Regional Water Development Programme for Luhansk Oblast for the period up to 2021, approved by the Luhansk Oblast Council on 31 January 2014.

The programme is designed to improve the efficiency of the region's reclamation systems and prevent the harmful effects of water. The responsible implementer of the Programme is the Regional Water Resources Office in Luhansk Oblast.

Budget funding came from the State Agency of Ukraine for Water Resources programme "Operation of the State Water Management Complex and Water Resources Management" and amounted to UAH 41,892.98 thousand (48% of the planned amount) in 2019-2020. These funds were used for the maintenance and operation of the state water management and land reclamation complex of the region. The programme items 2.1.3 "Clearing and regulation of riverbeds, restoration and maintenance of a favourable hydrological regime and sanitary condition of rivers and water bodies" and 2.2.1 "Development of land management projects to establish the boundaries and mapping of coastal protection strips along water bodies" have not been funded from any source since 2014.

In general, in Luhansk region, water protection measures under various regional programmes were financed in the amount of UAH 162,173,328 thousand (80%) in 2019-2020. The largest share of measures was financed under the Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025.

Due to the distribution of environmental tax funds, only 25% of the collected funds are allocated to municipal and rural budgets, which is clearly insufficient for the implementation of costly measures. In addition, funds are often received with a long delay. An analysis of local and regional programmes has shown that measures to improve the ecological condition of water are most often implemented on the basis of co-financing from the regional environmental protection fund.

Thus, in total, UAH 460,290,528 thousand was spent from the regional programmes to implement water protection measures in the Siverskyi Donets sub-basin of the Don RBD in 2019-2020.

The World Bank, the International Bank for Reconstruction and Development (IBRD) and the **Clean Technology Fund,** together with the Ministry of Regional Development, are implementing the Urban Infrastructure Development 2 project to improve the water supply, wastewater and solid waste management infrastructure.

Under the IBRD and World Bank loan programme, 2 sub-projects are being implemented in the Siverskyi Donets sub-basin of the RDB Don:

1. Kharkivvodokanal is implementing the investment project "Improvement of the sludge management system of the sewage treatment plants in Kharkiv". The total cost of the project is USD 75.8 million. (USD 60.2 million from the IBRD and USD 15.6 million from the Clean Technology Fund), which at the average 2020 exchange rate is UAH 2,042.81 million. Of this amount, USD 51.8 million will be used for sludge disposal. USD 51.8 million will be used for sludge disposal and USD 24.0 million for the reconstruction of treatment facilities. The total amount of the investment is usd 24.0 million.

The project includes five stages, including a complete reconstruction of the treatment facilities, construction of a duplicate sewer and reconstruction of the existing one, selection of the optimal option for sludge disposal, and introduction of new nitri-denitrification technologies that will allow for in-depth wastewater treatment of nitrogen and phosphorus compounds. It is also planned to build a sludge processing complex and produce biogas from it, which will subsequently generate electricity. This technology will cover at least 70% of the complex's energy consumption and solve the issue of sludge storage and disposal. At the same time, sludge will be processed only at treatment plant No. 2, while sludge from treatment plant No. 1 will be supplied here.

The Project is based on the technology and equipment of VOMM and Geo Teck (Italy), which will ensure the treatment and complete disposal of sludge.

The design has now been completed, a permit for preparatory work has been obtained from the SACC, and the construction phase has begun. The project is being implemented according to plan.

2. The Municipal Waste Management Company of the Kharkiv Regional Council is implementing the project "Construction of a solid waste processing complex with a landfill gas collection system and electricity generation in Dergachi, Kharkiv region" with a total cost of USD 43.9 million. (approximately UAH 1,183.105 million). The project aims to introduce separate collection of solid waste, its subsequent sorting, and the creation of a landfill gas collection and utilisation system with electricity generation.

The project includes 6 stages, including the construction of a modern landfill in accordance with the requirements of Ukrainian and European environmental legislation; reclamation of the existing landfill; installation of a landfill gas collection and transportation system at the new landfill and at adjacent landfills; installation of a landfill gas utilisation system with electricity generation and a system for transferring the generated energy to the grid of the National Energy Company Ukrenergo; construction of a separate waste collection line; construction of a

Construction work on the new landfill is at the final stage, and reclamation of the existing landfill has begun, which is being carried out by the Turkish company Goksin Insaat Gida Turizm Bilisim Tuketim Mallari Pazarlama Madencilik ve Proje Musavirlik Hiz. San. Ve Tic. Ltd. (Bursa, Turkey).

Financial Agreement between Ukraine and the European Investment Bank (**Emergency Credit Programme for Ukraine's Recovery Project),** ratified by the Law of Ukraine No. 346-VIII dated 22.04.2015.

The agreement is aimed at overcoming the consequences of the geopolitical events in eastern Ukraine, facilitating and accelerating the speedy restoration of housing, administrative buildings, educational and healthcare facilities and other social infrastructure in the territories under the control of the Government of Ukraine. The following water sector facilities are financed under the Don RDB:

1. Reconstruction of the drinking water disinfection system at the filtering station with the introduction of electrolysis plants for the production of sodium hypochlorite in Kramatorsk, the contract value is UAH 74,089.2 thousand.

2. Comprehensive project of the municipal utility company "Svatove Vodokanal" for the overhaul of emergency areas and facilities located at the following addresses: Budivelnykiv Quarter, Pryvokzalna Street, Chelyuskintsi Street, 1 Myrnyi Quarter, Vodopianova Street, Poleva Street, Zaliznychnykiv Quarter, 72a Druzhby Street, 74 Sadova Street, 6a Budivelnykiv Quarter, 8a Dokuchaeva Street, in Svatove, Luhansk Oblast (adjustment). The cost is UAH 8,481,756 thousand. The amount of subvention from the local budget is UAH 3,053,368 thousand (special fund - UAH 2,544,473 thousand, general fund - UAH 508,895 thousand).

The project of the Food and Agriculture Organization of the United Nations (FAO) and the Global Environment Facility (GEF) "Integrated natural resource management in degraded landscapes in the forest-steppe and steppe zones of Ukraine". The project aims to restore degraded landscapes in the steppe and forest-steppe zones of Ukraine.

The project is being implemented by the National Research Centre "Sokolovsky Institute of Soil Science and Agrochemistry" of the National Academy of Agrarian Sciences of Ukraine under the leadership of the Ministry of Ecology and supported by the Ministry of Economy.

The main objectives of the project are to support the leading public authorities in developing environmental monitoring and achieving a neutral level of soil degradation in the forest-steppe and steppe zones. Project implementation is focused on raising awareness of sustainable natural resource management.

The project's significant results include the preparation of a methodological approach to the creation and reconstruction of shelterbelts, the creation of an educational platform for the project (https://healthy-soils.org.ua/), and the practical part of the Best Agroforestry Practices training in March 2021.

International Committee of the Red Cross

In 2019, the company financed the repair of one tank at the emergency pumping station of the Popasna District Water Utility, which was damaged as a result of hostilities. The total amount of funding was UAH 1809.00 thousand.

United Nations Children's Fund (UNICEF) in Ukraine

In 2019, to ensure continuous water supply in Luhansk Oblast, the United Nations Children's Fund (UNICEF) in Ukraine funded the purchase of a truck crane (UAH 4,509.00 thousand), reconstruction of the main water supply pipeline in Popasna (UAH 3,752.76 thousand). A total of 3,000 metres of pipes were replaced.

OSCE Project Co-ordinator in Ukraine

To support the Ministry of Environmental Protection and Natural Resources of Ukraine in approximating Ukrainian legislation to EU requirements, financial support was provided for the development of certain elements of the Don RBMP.

A total of UAH 3,900.82 thousand was spent on analytical, expert and research work at Don RBD, of which UAH 3,051.5 thousand was spent in 2019-2020.

An analysis of the implementation of the Programmes and international projects showed that the total investment in measures aimed at improving the ecological status of surface waters in the Don RBD with the sub-basins of the Siverskyi Donets and Lower Don in 2019-2020 amounted to UAH 4,281,279,104 thousand.

In this amount, the dominant share of funds, namely 77.6%, came from international loan programmes and international assistance. The share of regional environmental protection funds and, accordingly, regional programmes was 12.5%.

The contribution of the state programmes was the smallest, given the main tasks defined in the state programmes. In the coming years, funding for programmes aimed at developing the water sector is expected to increase. At the same time, expenditures under the Programme "Forestry and hunting, protection and conservation of forests in the forest fund" are expected to decrease**.** In 2019, due to the fires in Luhansk region, all funds from the special fund of this Programme were allocated to the farms of the southeastern region of Ukraine.

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 PoM have been developed by the Siverskyi Donets BUWR and ROWR in Kharkiv Oblast in cooperation with local executive authorities, local self-government bodies, non-governmental organisations (NGOs), scientific and educational institutions and other stakeholders, taking into account the proposals and decisions of the Siverskyi Donets and Lower Don Basin Council.

The PoM 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 216 measures (193 main and 23 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;
- to reduce/eliminate the negative impact of hostilities.

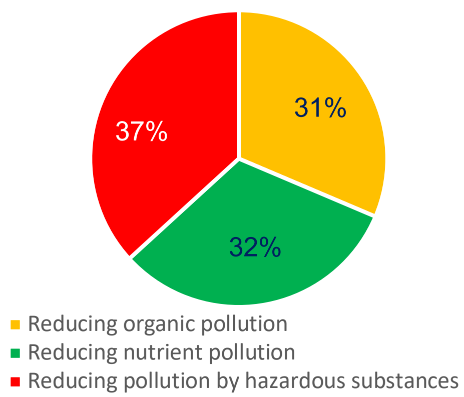
In addition to these measures, the PoM includes other measures aimed at addressing other SWMI of the Don RBD identified in the context of the basin.

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 - 151;
- biogenic substances - 153;
- hazardous substances - 177.



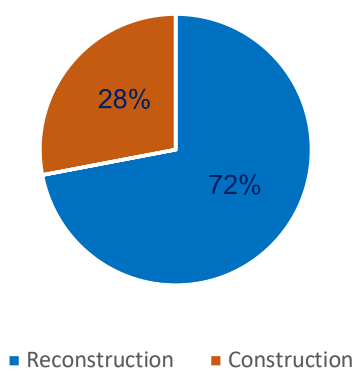


Figure 42. Measures aimed at reducing pollution by organic, biogenic and hazardous substances from point and diffuse sources and the way they are implemented (reconstruction or construction of STPs and SN), %.

Measures aimed at reducing pollution by nutrients (diffuse sources) also include: "Establishment of water protection zones and bank protection strips of water bodies in the Don River basin area within Kharkiv, Donetsk and Luhansk oblasts" (#105, Annex 11) and "Establishment of coastal protection strips of Lake Haryache, Lake Repne, Lake Slipne, Lake Levadne-1, Lake Levadne-2 and Lake Chervone within the city of Sloviansk, Sloviansk community, Kramatorsk district, Donetsk oblast" (#107, Annex 11).

In accordance with the requirements of the Law of Ukraine "On Water Disposal and Wastewater Treatment" dated 12 January 2023 No. 2887-IX, in order to ensure high-quality centralised water disposal while reducing the impact of return (waste) water on the SWB, the construction and reconstruction of STPs and SN is planned for 96 settlements of the Don RBD with a population equivalent (PE) of 2,000 or more and 16 settlements with a PE of less than 2,000. Reconstruction/modernisation of STPs and SN is envisaged in 55 communities, including 10 with tertiary (proper) wastewater treatment with removal of nitrogen and phosphorus compounds. The construction of new STPs and SN is planned for 30 communities, including 3 communities with tertiary (proper) wastewater treatment with removal of nitrogen and phosphorus compounds.

Among the measures aimed at reducing pollution by organic, biogenic and hazardous substances (diffuse and point sources), 173 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. 43.

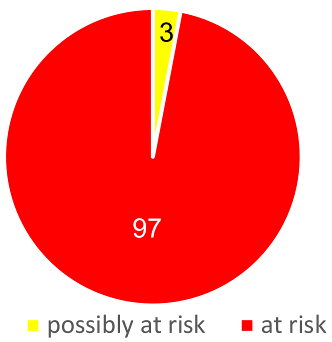


Figure 43. Measures aimed at reducing pollution by organic, biogenic and hazardous substances from point sources of pollution depending on the risk assessment of the SWB, %

8.1.2. Measures aimed at improving/restoring the hydrological regime and morphological indicators

38 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. When developing the measures, it was taken into account that the environmental objectives are to maintain the "good" status of 1 SWB and achieve "good" status for 37 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. 44.

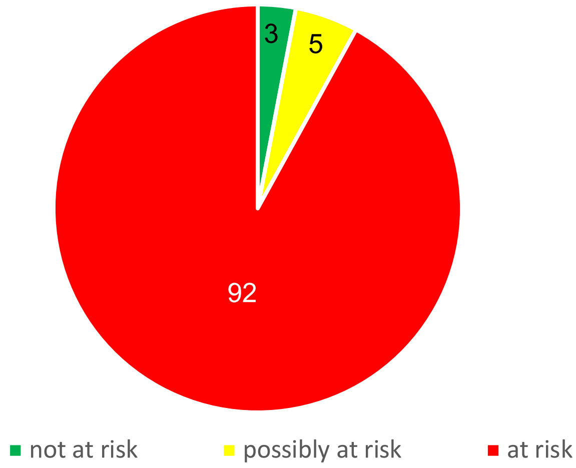


Figure 44. Measures aimed at improving/restoring the hydrological regime and morphological indicators in case of disruption of free flow of rivers, hydraulic connection between river channels and their floodplains, hydrological changes, modification of river morphology, depending on the assessment of SWB risks, %

In order to improve state accounting of water use, assessment of anthropogenic load and regulation of groundwater/surface water withdrawals, analysis of hydrological changes, and real-time balancing, the programme includes the measure: "Improvement of State Water Use Accounting in the Don River Basin within Kharkiv, Donetsk and Luhansk Oblasts" (#195, Annex 11). All water users in the Don RBD are scheduled to install/upgrade water metering devices with online data transmission.

Measures to reduce/eliminate the negative impact of hostilities

Since the second half of 2014, due to the armed aggression of the Russian Federation, part of the sub-basins of the Siverskyi Donets and Lower Don RBD within Donetsk and Luhansk regions has been temporarily occupied (about 13% of the catchment area and 25% of the Siverskyi Donets riverbed). Since February 2022, after Russia's full-scale invasion of Ukraine, the situation has become even more complicated. Currently, most of Donetsk region, part of Kharkiv region and all of Luhansk region (about 50% of the catchment area and 35% of the Siverskyi Donets riverbed) remain temporarily occupied and in the zone of active hostilities. Military operations in the Don River Basin have led to pollution of surface water bodies, including drinking water intakes; damage to infrastructure, major channel control structures and other negative consequences.

To reduce/eliminate the consequences of the negative impact of hostilities, the PoM includes the main measures for the reconstruction/construction of the agglomerations' STPs and SN after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and obtaining recommendations for the restoration of the facilities affected by hostilities. Measures to restore critical hydraulic water management facilities are included, in particular: "Restoration of the damaged Pechenizka Reservoir hydroelectric power unit on the Siverskyi Donets River in the Pechenizka community of Chuhuiv District, Kharkiv Oblast" (#3, Annex 11) and "Reconstruction of the Kleban-Bykske Reservoir hydroelectric power unit" within the Illinivska community of Kramatorsk District, Donetsk Oblast" (#130, Annex 11).

Other measures include research on the restoration of the Rayhorod dam of the Rayhorod hydroelectric complex and the dam of the Oskil reservoir, research and monitoring of the condition of storage facilities (Severodonetsk Azot Association, formerly Lysychansk Soda, Avdiivka Coke Plant, Central Processing Plant Dzerzhynska); inspection of water disposal facilities with recommendations on the need and possibility of their restoration; study of the impact of military operations on the status of the SWB; inventory of SWB and inspection of hydraulic structures on water bodies in the Don River Basin within the territorial communities of Kharkiv, Donetsk and Luhansk oblasts, whose territory was under occupation or in the area of active hostilities.

The implementation of activities located in the temporarily occupied territory or in the area of hostilities is possible only after the complete completion of hostilities, de-occupation and demining of the territory, and determination of the technical condition of the facilities.

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 aimed at reducing 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 groundwater monitoring, 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, among other things, awareness-raising activities on the protection, conservation and restoration of water resources in all communities of the Don RBD. It is planned to hold the Wetlands Day (2 February), the International Water Day (22 March), the Siverskyi Donets Day (21 September), the Clean Banks Day (third Saturday of September), scientific and practical conferences, thematic lectures, educational hours in educational institutions, thematic seminars, printing and distribution of leaflets and other information materials on water resources protection, rational use and restoration every year.

Activities are also planned with local communities, NGOs, schoolchildren and youth in the field of water resources protection, solid waste management, research, education, information and public environmental events. Implementation of local measures by local executive authorities to conserve, protect and restore 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 (78%). Some measures are aimed at addressing several SWMI. The vast majority of measures relate to settlements with a population of 2.0 to 10.0 thousand people. The largest number of such measures is 77 (39%). For settlements with a population of up to 2.0 thousand people, 21 measures (11%) are planned, for settlements with a population of 10 to 100.0 thousand people - 39 measures (20%). 43 measures (21%) are planned to be implemented in settlements with a population of more than 100.0 thousand people.

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 34,927 million, with a per capita cost of UAH 5373 (UAH 896 per year) per capita (6.5 million people, 2020 data). The most costly measures are the reconstruction/modernisation of STPs and SN, especially in the cities of Kharkiv, Sievierodonetsk, and Lysychansk.

The group with a very high level of effectiveness includes 24 measures to be prioritised (impact of hostilities) and aimed at reducing pollution by organic, biogenic and hazardous substances (SWMI 1 - 3) through the reconstruction of the STPs and SN in the cities of Vovchansk, Sviatohirsk, Rubizhne, Sievierodonetsk, Kreminna, Lysychansk, Chasiv Yar, Novoluhanske, Popasna, Soledar, Siversk, Hirske, Zolote. These measures can be implemented only after the complete cessation of hostilities, de-occupation and demining of the territory. This group also includes the measure: "Reconstruction of sewage treatment plants, sewage pumping stations and sewage networks in the city of Kharkiv of Kharkiv community of Kharkiv rayon of Kharkiv oblast". The total cost of the measures is UAH 18,090 million (52%), including 3 measures with a very high cost of more than UAH 1 billion. All the objects of implementation belong to the housing and communal services sector. Social impact is expected for 5976 thousand people.

The group with a high level of effectiveness includes 22 measures with a total cost of UAH 9,591 million (27%), including 4 measures with a very high cost of more than UAH 1 billion. First of all, these are measures aimed at reducing pollution by organic, biogenic and hazardous substances (SWMI 1-3) from the cities of Sloviansk, Kostiantynivka, Kramatorsk, Myrnohrad, Toretsk, Kupiansk, Izium, Lyman, Druzhkivka, Avdiivka and Bakhmut. All of the objects are in the housing and utilities sector. The social impact is 3,188 thousand people.

The group with an medium level of efficiency includes 96 measures with a total cost of UAH 4,782 million (13%). The overwhelming majority of measures for the reconstruction of the STPs and SN of settlements and industrial enterprises are aimed at reducing pollution by organic, nutrient and hazardous substances from (SWMI 1-3). This group also includes 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 (SWMI 4). Social impact is expected to affect 2,333 thousand people.

The group with a low level of effectiveness includes 43 measures with a total cost of UAH 2,413 million (7%), which are characterised by medium and low cost. Measures in this group are aimed at reducing pollution with organic, nutrient and hazardous substances from point and diffuse pollution (SWMI 1 - 3), 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 (SWMI 4). Social impact is expected to affect 3593.8 thousand people.

The group with a very low level of effectiveness includes only 10 measures with a total cost of UAH 51 million (1%), which are 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). The implementation of these measures will achieve a social effect for 96 thousand people. The economic sector's pressure on water resources is minimal and corresponds to the lowest score.

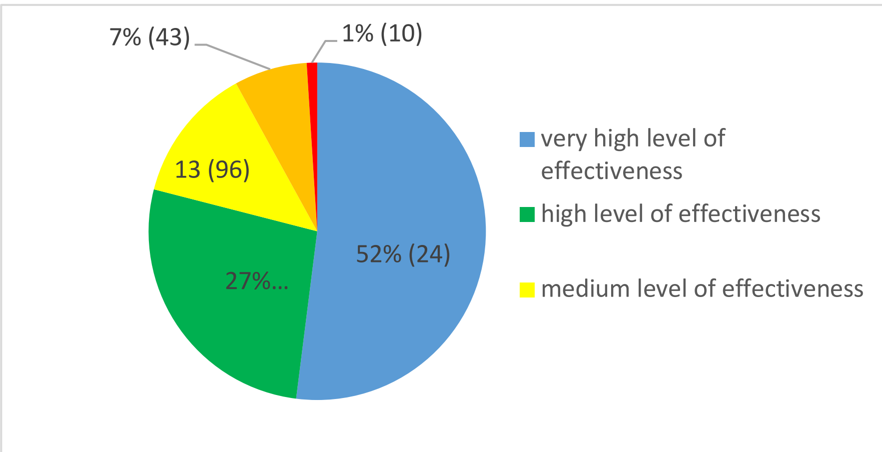


Figure 45. Distribution of main measures with different levels of efficiency by total cost of measures (number of measures in brackets)

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 CMU 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

In September-November 2020, public consultations were held to identify the SWMI for the Don RBD with the Siverskyi Donets and Lower Don sub-basins. The announcement of the start of the consultations was made at the meeting of the Siverskyi Donets and Lower Donets Basin Council on 21 September 2020 (Minutes No. 4 of 21.09.2020), and information materials and a questionnaire were posted on the official website of the Siverskyi Donets BUWR. The results were announced at a meeting of the basin council on 23 December 2020 (Minutes of 23.12.2020 No. 5).

70 people from local authorities, water users, non-governmental organisations, science, education, and the public joined the survey, supported the relevance of the main water and environmental issues and expressed their opinions on these problems:

- a large percentage of ploughing (including bank protection strips, water protection zones, river floodplains and bank slopes) and other intensive use and development of land around water bodies (the PoM, the draft of which was approved at the meeting of the Seversky Donets and Lower Don Basin Council on 1 November 2023 (Minutes of 01.11.2023 No. 13), includes measures to "Establish water protection zones and bank protection strips of water bodies in the Don RBD within Kharkiv, Donetsk and Luhansk oblasts" and 38 more measures for 31 SWBs with the delineation of the boundaries of bank protection strips and water protection zones during the remanding and revitalisation of river channels);
- Insufficient number and area of nature reserve fund sites and territories with water bodies within their boundaries, including hydrological reserves (according to the updated information on Section 3, the list of protected areas was supplemented by 33 sites, including 28 in Kharkiv region);
- thermal pollution and poaching;
- the unsatisfactory condition of municipal wastewater treatment plants and the resulting pollution of surface water bodies with nitrogen compounds (the Action Programme, the draft of which was approved at a meeting of the Severskyi Donets and Lower Donets Basin Council (Minutes No. 13 of 01.11.2023), includes 205 measures, of which 129 (63%) are for municipal wastewater treatment plants, including 29 with proper treatment of nitrogen and phosphorus compounds, as proposed by 83 territorial communities).

In order to inform the public and engage them in discussions, a shortened version of the Don RBMP, Section 2 "Anthropogenic Impacts Taking into Account the Impact of War", was prepared and published on the website of the Ministry of Environment and the Siverskyi Donets BUWR.

In order to broaden stakeholder engagement in the discussion of the draft Don RBMP and all its elements, including Section 8 "Full list of programmes (plans) for the river basin or sub-basin area, their content and problems to be solved", during 2020-2023. The results of its development were presented and discussed at meetings of the Siverskyi Donets and Lower Don Basin Councils, at scientific and practical conferences as part of the annual celebration of the Siverskyi Donets Day, with up to 300 participants from the public, scientists, water users, and local governments (from 2022, in an online format).

In 2020-2021, with the support of the OSCE Project Co-ordinator in Ukraine, meetings were held with representatives of local communities and businesses, with the participation of non-governmental organisations in Kharkiv, Donetsk and Luhansk oblasts, to discuss SWMI and PoM to address them.

The draft Don RBMP takes into account all the SWMI and additional ones related to invasive species (pistia, etc.), the impact of military operations, and the presence of temporarily occupied territories within the river basin since 2014 and from 2022, which was also taken into account when assessing anthropogenic impacts and planning measures to overcome them in the PoM for the period 2025-2030, taking into account the need to plan measures for the military and reconstruction periods.

The importance of additional issues that should be investigated was also noted: damage to hydraulic structures as a result of hostilities and the feasibility of their restoration to meet the water needs of the population after the de-occupation of the territories of Donetsk and Luhansk oblasts, taking into account environmental impacts. The collected proposals for the PoM were presented and approved during a meeting of the Siverskyi Donets and Lower Don Basin Council on 1 November 2023 (Minutes No. 13 of 1 November 2023).

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 addresses: 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 RBMP for the Don RBD was published on the website of the SAWR for everyone on 19 April 2024 https://davr.gov.ua/news/provedennya-publichnogo-gromadskogo-obgovorennya-proyektu-planu-upravlinnya-richkovim-basejnom-donu-20252030

The Siverski-Donetsk BUWR sent out invitations to water users, all territorial communities and other stakeholders. The invitation to the public discussion of the draft RBMP for the Don River Basin Region was also published on the same day on the BUWR website at the following link: https://sdbuvr.gov.ua/news/provedennya-publichnoho-hromadskoho-obhovorennya-proyektu-planu-upravlinnya-richkovym-baseynom-donu

In order to present the results of the analysis of the status of SWB in the Don RBD and the relevant PoM, 7 infographics were developed: sub-basin location features; SWMI; ecological status of SWB (by biological indicators); chemical status of SWB; hydromorphological changes; PoM; and how to join public consultation.

The infographics are published on the website of the SAWR at the link: https://davr.gov.ua/plan-upravlinnya-richkovim-basejnom-donu34

On 30 April, the city of Sloviansk hosted a public consultation of the draft Don RBMP. The event was attended by 103 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/u-slovyansku-vidbulosya-gromadske-obgovorennya-proyektu-purb-donu

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

In accordance with paragraph 7 of the Procedure for Developing a River Basin Management Plan, approved by the Resolution of the CMU No. 336 of 18.05.2017, the Ministry of Ecology ensures that strategic environmental assessment of draft river basin management plans is carried out in accordance with the Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context, ratified by the Law of Ukraine No. 562-VIII of 1 July 2015. Currently, the Agreement with Russia on the Joint Use and Protection of Border Water Bodies has been terminated.

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 for the Don RBD will be entered by the SAWR into the Unified Register of Strategic Environmental Assessment together with the approved RBMP.

10 LIST OF COMPETENT STATE AUTHORITIES RESPONSIBLE FOR IMPLEMENTING THE RIVER BASIN MANAGEMENT PLAN

Pursuant to Article 13(2) 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 53. Central executive authorities in the field of water use and protection and water resources restoration

Name of the body (full and abridged)	Legal address	Official website
Ministry of Environmental Protection and Natural Resources of Ukraine (MENR)	35, Metropolyt Vasyl Lypkivskyi Street, 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 54. Main regulatory acts that define the powers of central executive authorities in the field of water use and protection and water resources reproduction

Name of the body (full and abridged)	Legal act	Link on the official web portal of the Verkhovna Rada of Ukraine
Ministry of Environmental Protection and Natural Resources of Ukraine (MENR)	The Water Code of Ukraine of 06.06.1995 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 dated 25.06.2020 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 Water Resources of Ukraine (SAWR)	Water Code of Ukraine dated 06.06.1995 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
	Regulation on the State Agency of Water Resources of Ukraine, approved by the Resolution of the Cabinet of Ministers of Ukraine of 20.08.2014 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

Name of the body (full and abridged)	Legal act	Link on the official web portal of the Verkhovna Rada of Ukraine
State Service of Geology and Mineral Resources of Ukraine (Derzhgeonadra)	Water Code of Ukraine dated 06.06.1995 No. 213/95-BP (Bulletin of the Verkhovna Rada of Ukraine (VVR), 1995, No. 24, Art. 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 30.12.2015 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)	Water Code of Ukraine dated 06.06.1995 No. 213/95-BP (Bulletin of the Verkhovna Rada of Ukraine (VVR), 1995, No. 24, Article 189) - Article 15[2]	https://zakon.rada.gov.ua/laws/show/213/95-%D0%B2%D1%80#Text
	Regulation on the State Ecological Inspection of Ukraine, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 19.04.2017 No. 275 (Official Gazette of Ukraine, 2017, No. 36, pg. 73, Article 1131)	https://zakon.rada.gov.ua/laws/show/275-2017-%D0%BF#Text
	Regulation on Territorial and Interregional Territorial Bodies of the State Ecological Inspectorate, approved by the Order of the Ministry of Energy and Environmental Protection of Ukraine dated 07.04.2020 No. 230, registered with the Ministry of Justice of Ukraine on 16.04.2020 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 Don River Basin, to direct and coordinate the activities of organisations under the management of the SAWR on management, use and reproduction of surface water resources within the Don River Basin (except for the temporarily occupied territory), as well as to ensure the implementation of the state policy in the field of water management within the Donetsk region (except for the temporarily occupied territory), the SAWR established the

Table 55. Representative of the central executive authority in the field of water use and protection and water resources restoration in the Don RBD[58]

Name of the body (full and abridged)	Legal address	Tel/fax	Email.	Website.
Siverskyi Donets Basin Authority water resources (Siversko-Donetsk BUVR)	35 Torska St., Sloviansk, Donetsk region, 84112	(0626) 22-78-94	sdbuvr@gmail.com	https://sdbuvr.gov.ua

The names of sub-basins and water management areas within river basin districts and sub-basins are given in the Annex to the Order of the Ministry of Ecology and Natural Resources of 26.01.2017 No. 25 "On the Allocation of Sub-Basins and Water Management Areas within Established River Basin Districts", registered with the Ministry of Justice of Ukraine on 14.02.2017 under No. 208/30076 (https://zakon.rada.gov.ua/laws/show/z0208-17#Text).

The boundaries of river basin and sub-basin areas and water management sites were approved by the Order of the Ministry of Ecology and Natural Resources of 03.03.2017 No. 103, registered with the Ministry of Justice of Ukraine on 29.03.2017 under No. 421/30289 (https://zakon.rada.gov.ua/laws/show/z0421-17#Text).

58 Source: https://davr.gov.ua/vodogospodarskiorganizacii

The Siverskyi Donets BUWR is a budgetary non-profit organisation that belongs to the management of the SAWR. The Regulation on the Siverskyi Donets BUWR was approved by the Order of the SAWR dated 19.10.2020 No. 928 (https://sdbuvr.gov.ua/pro-upravlinnya/osnovni-zavdannya).

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 Don RBD, to promote integrated water resources management within the Don RBD, to ensure coordination of interests and coordination of actions of stakeholders in water resources management within the Don RBD, to promote cooperation between central and local executive authorities, local self-government bodies, enterprises, institutions, organisations, international bodies

The Siverskyi Donets and Lower Don Basin Council is an advisory body of the SAWR within the Don RBD with the Siverskyi Donets and Lower Don sub-basins. The Regulation on the Seversky Donets and Lower Don Basin Council was approved by the Order of the SAWR No. 734 dated 27.09.2018 (https://sdbuvr.gov.ua/sites/sdbuvr.gov.ua/files/inline-files/basrada_nakaz_0.pdf)

According to the List approved by the Resolution of the CMU No. 1371 dated 13.09.2002 (as amended by the Resolution of the CMU No. 1276 dated 30.11.2011) (https://zakon.rada.gov.ua/laws/show/1371-2002-%D0%BF#n38), the Ministry of Ecology and/or the SAWRare 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.

The Agreement between Ukraine and the Russian Federation on the Joint Use and Protection of Boundary Water Bodies, signed on 19.10.1992 in Kyiv, was terminated pursuant to the Resolution of the CMU No. 1488 dated 30.12.2022 "On Termination of the Agreement between Ukraine and the Russian Federation on the Joint Use and Protection of Boundary Water Bodies".

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 accordance with paragraphs 16-18 of the Procedure for State Water Monitoring approved by the Resolution of the CMU No. 758 dated 19.09.2018, 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 altered 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), summary data, assessment results, forecasts and recommendations based on the results of state water monitoring are provided free of charge:

- for SWBs (including coastal waters) – to the SAWR and the MENR;
- for GWBs – to the State Service of Geology and Subsoil of Ukraine and the MENR, as well as to the SAWR n terms of generalised data, assessment results and forecasts;
- for marine waters – the MENR.

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 MENR EcoHazard resource.

ANNEXES

TO THE DON RIVER BASIN MANAGEMENT PLAN

2025-2030

Annex 1. List of identified SWBs in the Don 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	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
1	Don	Siverskyi Donets	Siverskyi Donets	Don	UA_R_16_L_1_Si	12,39835222	river	UA_M6.5.1_0001	3	2	1	3	1
2	Don	Siverskyi Donets	Siverskyi Donets	Don	UA_R_16_L_1_Si	31,70009979	river	UA_M6.5.1_0003	2	3	1	3	1
3	Don	Siverskyi Donets	Siverskyi Donets	Don	UA_R_16_XL_1_Si	322,5967787	river	UA_M6.5.1_0004	3	3	1	3	3
4	Don	Siverskyi Donets	Siverskyi Donets	Don	no	7,737355834	HMWB	UA_M6.5.1_0006	1	3	3	3	1
5	Don	Siverskyi Donets	Siverskyi Donets	Don	UA_R_16_XL_1_Si	222,2485322	river	UA_M6.5.1_0007	1	3	2	3	3
6	Don	Siverskyi Donets	Siverskyi Donets	Don	UA_R_16_XL_1_Ca	72,5284652	river	UA_M6.5.1_0008	1	3	1	3	3
7	Don	Siverskyi Donets	Vovcha	Siverskyi Donets	UA_R_16_M_1_Si	26,90251295	river	UA_M6.5.1_0009	2	3	1	3	1
8	Don	Siverskyi Donets	Vovcha	Siverskyi Donets	UA_R_16_L_1_Si	37,28005096	river	UA_M6.5.1_0010	3	3	1	3	3
9	Don	Siverskyi Donets	Plotva	Vovk	UA_R_16_S_1_Si	11,32441147	river	UA_M6.5.1_0011	2	2	1	2	1
10	Don	Siverskyi Donets	Plotva	Vovk	UA_R_16_M_1_Si	26,1725926	river	UA_M6.5.1_0012	3	2	1	3	3
11	Don	Siverskyi Donets	Karaechnyi Yar	Vovk	UA_R_16_S_1_Si	9,116722681	river	UA_M6.5.1_0013	2	2	1	2	1
12	Don	Siverskyi Donets	Karaechnyi Yar	Vovk	no	2,254990023	HMWB	UA_M6.5.1_0014	2	2	3	3	1
13	Don	Siverskyi Donets	Karaechnyi Yar	Vovk	UA_R_16_S_1_Si	6,82821721	river	UA_M6.5.1_0015	3	2	1	3	1
14	Don	Siverskyi Donets	Yar Bilyi	Vovk	no	14,8863797	HMWB	UA_M6.5.1_0016	3	2	3	3	1
15	Don	Siverskyi Donets	Staritsa	Siverskyi Donets	UA_R_16_S_1_Si	14,60619539	river	UA_M6.5.1_0017	3	3	1	3	1
16	Don	Siverskyi Donets	Polna	Siverskyi Donets	UA_R_16_S_1_Si	4,964318369	river	UA_M6.5.1_0018	2	3	1	3	1
17	Don	Siverskyi Donets	Polna	Siverskyi Donets	no	2,07775724	HMWB	UA_M6.5.1_0019	1	3	3	3	1
18	Don	Siverskyi Donets	Polna	Siverskyi Donets	UA_R_16_S_1_Si	12,64589558	river	UA_M6.5.1_0020	2	3	1	3	1
19	Don	Siverskyi Donets	Polna	Siverskyi Donets	UA_R_16_M_1_Si	18,0963739	river	UA_M6.5.1_0021	1	3	1	3	1
20	Don	Siverskyi Donets	Gryvkiv Yar	Siverskyi Donets	UA_R_16_S_1_Si	8,512574006	river	UA_M6.5.1_0022	2	2	1	2	1
21	Don	Siverskyi Donets	Gryvkiv Yar	Polna	no	9,782153831	HMWB	UA_M6.5.1_0023	1	2	3	3	1
22	Don	Siverskyi Donets	Gryvkiv Yar	Polna	UA_R_16_S_1_Si	1,664433333	river	UA_M6.5.1_0024	1	2	1	2	1
23	Don	Siverskyi Donets	Rozryta	Polna	UA_R_16_S_1_Si	1,852857631	river	UA_M6.5.1_0025	3	3	1	3	3
24	Don	Siverskyi Donets	Hotomlya	Siverskyi Donets	UA_R_16_S_1_Si	3,979593127	river	UA_M6.5.1_0026	3	3	1	3	1
25	Don	Siverskyi Donets	Hotomlya	Siverskyi Donets	no	1,394413517	HMWB	UA_M6.5.1_0027	1	3	3	3	1
26	Don	Siverskyi Donets	Hotomlya	Siverskyi Donets	UA_R_16_S_1_Si	10,63999647	river	UA_M6.5.1_0028	3	3	1	3	1
27	Don	Siverskyi Donets	Hotomlya	Siverskyi Donets	UA_R_16_M_1_Si	27,51818682	river	UA_M6.5.1_0029	3	3	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
28	Don	Siverskyi Donets	Khotomelka	Hotomlya	UA_R_16_S_1_Si	14,26281027	river	UA_M6.5.1_0030	3	3	1	3	1
29	Don	Siverskyi Donets	Hnylytsia	Siverskyi Donets	UA_R_16_S_1_Si	12,17504645	river	UA_M6.5.1_0031	3	3	1	3	1
30	Don	Siverskyi Donets	Hnylytsia	Siverskyi Donets	UA_R_16_M_1_Si	19,0536835	river	UA_M6.5.1_0032	3	3	1	3	1
31	Don	Siverskyi Donets	Seredniy Burluk	Siverskyi Donets	UA_R_16_S_1_Si	11,99042922	river	UA_M6.5.1_0033	2	3	1	3	1
32	Don	Siverskyi Donets	Seredniy Burluk	Siverskyi Donets	no	4,12549552	HMWB	UA_M6.5.1_0034	2	3	3	3	1
33	Don	Siverskyi Donets	Sukhyi Burluk	Seredniy Burluk	UA_R_16_S_1_Si	14,01047677	river	UA_M6.5.1_0035	1	3	1	3	1
34	Don	Siverskyi Donets	Sukhyi Burluk	Seredniy Burluk	UA_R_16_M_1_Si	6,491436011	river	UA_M6.5.1_0036	3	3	1	3	1
35	Don	Siverskyi Donets	Velichkiv Yar	Sukhyi Burluk	UA_R_16_S_1_Si	10,78589218	river	UA_M6.5.1_0037	1	2	1	2	1
36	Don	Siverskyi Donets	Velichkiv Yar	Sukhyi Burluk	no	2,07608139	HMWB	UA_M6.5.1_0038	1	2	3	3	1
37	Don	Siverskyi Donets	Velichkiv Yar	Sukhyi Burluk	UA_R_16_S_1_Si	2,489188448	river	UA_M6.5.1_0039	2	2	1	2	1
38	Don	Siverskyi Donets	Velykyi Burluk	Siverskyi Donets	UA_R_16_S_1_Si	13,32221454	river	UA_M6.5.1_0040	2	3	1	3	1
39	Don	Siverskyi Donets	Velykyi Burluk	Siverskyi Donets	UA_R_16_M_1_Si	11,41079064	river	UA_M6.5.1_0041	3	3	1	3	1
40	Don	Siverskyi Donets	Velykyi Burluk	Siverskyi Donets	no	5,587861202	HMWB	UA_M6.5.1_0042	2	3	3	3	1
41	Don	Siverskyi Donets	Velykyi Burluk	Siverskyi Donets	UA_R_16_M_1_Si	73,85695402	river	UA_M6.5.1_0043	3	3	1	3	3
42	Don	Siverskyi Donets	Husynka	Velykyi Burluk	no	15,1149818	HMWB	UA_M6.5.1_0044	2	2	3	3	1
43	Don	Siverskyi Donets	Husynka	Velykyi Burluk	no	6,972559146	HMWB	UA_M6.5.1_0045	2	2	3	3	1
44	Don	Siverskyi Donets	Lebyazha	Siverskyi Donets	UA_R_16_S_1_Si	12,39970578	river	UA_M6.5.1_0046	3	3	1	3	1
45	Don	Siverskyi Donets	Taganka	Siverskyi Donets	UA_R_16_S_1_Si	6,366634717	river	UA_M6.5.1_0047	3	3	1	3	1
46	Don	Siverskyi Donets	Taganka	Siverskyi Donets	no	1,10310997	HMWB	UA_M6.5.1_0048	2	3	3	3	1
47	Don	Siverskyi Donets	Taganka	Siverskyi Donets	UA_R_16_S_1_Si	4,105863055	river	UA_M6.5.1_0049	2	3	1	3	1
48	Don	Siverskyi Donets	Babka	Siverskyi Donets	no	16,23640067	HMWB	UA_M6.5.1_0050	1	3	3	3	1
49	Don	Siverskyi Donets	Babka	Siverskyi Donets	UA_R_16_M_1_Si	28,33433813	river	UA_M6.5.1_0051	2	3	1	3	1
50	Don	Siverskyi Donets	Olega	Babka	UA_R_16_S_1_Si	2,025314749	river	UA_M6.5.1_0052	1	3	1	3	1
51	Don	Siverskyi Donets	Olega	Babka	no	1,252148575	HMWB	UA_M6.5.1_0053	1	3	3	3	1
52	Don	Siverskyi Donets	Olega	Babka	UA_R_16_S_1_Si	8,881519019	river	UA_M6.5.1_0054	1	3	1	3	1
53	Don	Siverskyi Donets	Tetliga	Siverskyi Donets	UA_R_16_S_1_Si	18,04984194	river	UA_M6.5.1_0055	3	3	1	3	3
54	Don	Siverskyi Donets	Udy	Siverskyi Donets	UA_R_16_M_1_Si	47,67009366	river	UA_M6.5.1_0056	3	3	1	3	3
55	Don	Siverskyi Donets	Udy	Siverskyi Donets	UA_R_16_M_1_Si	24,26781977	river	UA_M6.5.1_0058	3	3	1	3	1
56	Don	Siverskyi Donets	Udy	Siverskyi Donets	UA_R_16_L_1_Si	83,45334831	river	UA_M6.5.1_0059	3	3	1	3	3
57	Don	Siverskyi Donets	Rogozyanka	Udy	UA_R_16_S_1_Si	20,00566597	river	UA_M6.5.1_0060	3	2	1	3	1
58	Don	Siverskyi Donets	Rogozyanka	Udy	UA_R_16_M_1_Si	10,54723989	river	UA_M6.5.1_0061	3	2	1	3	1
59	Don	Siverskyi Donets	Kryvorotivka	Udy	UA_R_16_S_1_Si	1,169981606	river	UA_M6.5.1_0062	1	2	1	2	1
60	Don	Siverskyi Donets	Kryvorotivka	Udy	no	1,093506871	HMWB	UA_M6.5.1_0063	1	2	3	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
61	Don	Siverskyi Donets	Kryvorotivka	Udy	UA_R_16_S_1_Si	2,102706865	river	UA_M6.5.1_0064	2	2	1	2	1
62	Don	Siverskyi Donets	Kryvorotivka	Udy	no	1,102315938	HMWB	UA_M6.5.1_0065	1	2	3	3	1
63	Don	Siverskyi Donets	Kryvorotivka	Udy	UA_R_16_S_1_Si	0,798302472	river	UA_M6.5.1_0066	1	2	1	2	1
64	Don	Siverskyi Donets	Kryvorotivka	Udy	no	1,106471809	HMWB	UA_M6.5.1_0067	1	2	3	3	1
65	Don	Siverskyi Donets	Kryvorotivka	Udy	UA_R_16_S_1_Si	6,58028877	river	UA_M6.5.1_0068	3	2	1	3	1
66	Don	Siverskyi Donets	Kryvorotivka	Udy	UA_R_16_M_1_Si	3,425139767	river	UA_M6.5.1_0069	3	2	1	3	1
67	Don	Siverskyi Donets	No nane	Udy	no	11,95284986	HMWB	UA_M6.5.1_0070	3	2	3	3	1
68	Don	Siverskyi Donets	Lopan	Udy	UA_R_16_M_1_Si	64,16473828	river	UA_M6.5.1_0071	3	3	1	3	3
69	Don	Siverskyi Donets	Lopan	Udy	UA_R_16_L_1_Si	8,396449066	river	UA_M6.5.1_0072	3	3	1	3	3
70	Don	Siverskyi Donets	Lozovenka	Lopan	UA_R_16_S_1_Si	9,045315056	river	UA_M6.5.1_0073	3	3	1	3	1
71	Don	Siverskyi Donets	Lozovenka	Lopan	UA_R_16_S_1_Si	4,182358162	river	UA_M6.5.1_0075	2	3	1	3	3
72	Don	Siverskyi Donets	Kharkiv	Lopan	UA_R_16_M_1_Si	1,610152364	river	UA_M6.5.1_0076	3	3	1	3	1
73	Don	Siverskyi Donets	Kharkiv	Lopan	UA_R_16_M_1_Si	37,05659728	river	UA_M6.5.1_0078	3	3	1	3	3
74	Don	Siverskyi Donets	Kharkiv	Lopan	UA_R_16_L_1_Si	8,390126379	river	UA_M6.5.1_0079	3	3	1	3	3
75	Don	Siverskyi Donets	Lypets	Kharkiv	UA_R_16_S_1_Si	4,153995089	river	UA_M6.5.1_0080	3	2	1	3	1
76	Don	Siverskyi Donets	Lypets	Kharkiv	UA_R_16_M_1_Si	17,54960512	river	UA_M6.5.1_0081	3	2	1	3	1
77	Don	Siverskyi Donets	Lypets	Lypets	UA_R_16_S_1_Si	0,809309597	river	UA_M6.5.1_0082	1	2	1	2	1
78	Don	Siverskyi Donets	Murom	Kharkiv	UA_R_16_S_1_Si	8,751476712	river	UA_M6.5.1_0083	3	2	1	3	3
79	Don	Siverskyi Donets	Murom	Kharkiv	UA_R_16_M_1_Si	2,026162114	river	UA_M6.5.1_0084	3	2	1	3	1
80	Don	Siverskyi Donets	Murom	Kharkiv	UA_R_16_M_1_Si	5,749231452	river	UA_M6.5.1_0086	3	2	1	3	1
81	Don	Siverskyi Donets	Vialyi	Kharkiv	UA_R_16_S_1_Si	3,438292092	river	UA_M6.5.1_0087	1	2	1	2	1
82	Don	Siverskyi Donets	Vialyi	Kharkiv	UA_R_16_S_1_Si	4,177972651	river	UA_M6.5.1_0089	1	2	1	2	1
83	Don	Siverskyi Donets	Nemyshlya	Kharkiv	UA_R_16_S_1_Si	24,58204601	river	UA_M6.5.1_0090	3	2	1	3	1
84	Don	Siverskyi Donets	Studenok	Udy	UA_R_16_S_1_Si	0,447608753	river	UA_M6.5.1_0091	1	2	1	2	1
85	Don	Siverskyi Donets	Studenok	Udy	no	1,037628848	HMWB	UA_M6.5.1_0092	1	2	3	3	1
86	Don	Siverskyi Donets	Studenok	Udy	UA_R_16_S_1_Si	17,43818014	river	UA_M6.5.1_0093	3	2	1	3	3
87	Don	Siverskyi Donets	Rohan	Udy	UA_R_16_S_1_Si	7,602547847	river	UA_M6.5.1_0094	3	2	1	3	1
88	Don	Siverskyi Donets	Rohan	Udy	no	2,813239351	HMWB	UA_M6.5.1_0095	3	2	3	3	1
89	Don	Siverskyi Donets	Rohan	Udy	UA_R_16_S_1_Si	6,54366754	river	UA_M6.5.1_0096	2	2	1	2	1
90	Don	Siverskyi Donets	Rohan	Udy	UA_R_16_M_1_Si	17,65011023	river	UA_M6.5.1_0097	3	2	1	3	3
91	Don	Siverskyi Donets	Studenok	Udy	UA_R_16_S_1_Si	1,741353313	river	UA_M6.5.1_0098	1	2	1	2	1
92	Don	Siverskyi Donets	Studenok	Udy	no	1,022040202	HMWB	UA_M6.5.1_0099	1	2	3	3	1
93	Don	Siverskyi Donets	Studenok	Udy	UA_R_16_S_1_Si	14,03720992	river	UA_M6.5.1_0100	3	2	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
94	Don	Siverskyi Donets	Hnylytsa	Siverskyi Donets	no	13,03641161	HMWB	UA_M6.5.1_0101	3	3	3	3	1
95	Don	Siverskyi Donets	Hnylytsa	Siverskyi Donets	no	27,94381787	HMWB	UA_M6.5.1_0102	3	3	3	3	3
96	Don	Siverskyi Donets	Mozh	Siverskyi Donets	no	13,10621098	HMWB	UA_M6.5.1_0103	1	3	3	3	1
97	Don	Siverskyi Donets	Mozh	Siverskyi Donets	UA_R_16_M_1_Si	29,58099697	river	UA_M6.5.1_0104	1	3	1	3	1
98	Don	Siverskyi Donets	Mozh	Siverskyi Donets	UA_R_16_L_1_Si	45,98141981	river	UA_M6.5.1_0105	3	3	1	3	3
99	Don	Siverskyi Donets	Bolgar	Mozh	no	13,68318653	HMWB	UA_M6.5.1_0106	3	3	3	3	3
100	Don	Siverskyi Donets	Cheremushna	Mozh	no	12,71110081	HMWB	UA_M6.5.1_0107	3	3	3	3	1
101	Don	Siverskyi Donets	Cheremushna	Mozh	UA_R_16_M_1_Si	1,73485621	river	UA_M6.5.1_0108	3	3	1	3	1
102	Don	Siverskyi Donets	Chernecha	Cheremushna	no	11,74884684	HMWB	UA_M6.5.1_0109	3	3	3	3	1
103	Don	Siverskyi Donets	Vodolazhka	Mozh	UA_R_16_S_1_Si	12,39257245	river	UA_M6.5.1_0110	3	3	1	3	1
104	Don	Siverskyi Donets	Vodolazhka	Mozh	UA_R_16_M_1_Si	23,44194753	river	UA_M6.5.1_0111	3	3	1	3	1
105	Don	Siverskyi Donets	Kniazhna	Vodolazhka	UA_R_16_S_1_Si	13,61402319	river	UA_M6.5.1_0112	3	3	1	3	1
106	Don	Siverskyi Donets	Dzhun	Vodolazhka	UA_R_16_S_1_Si	13,8035686	river	UA_M6.5.1_0113	3	3	1	3	1
107	Don	Siverskyi Donets	Dzhun	Vodolazhka	UA_R_16_M_1_Si	9,722871282	river	UA_M6.5.1_0114	3	3	1	3	1
108	Don	Siverskyi Donets	Merefa	Mozh	UA_R_16_S_1_Si	3,83382612	river	UA_M6.5.1_0115	3	3	1	3	3
109	Don	Siverskyi Donets	Merefa	Mozh	no	1,213547205	HMWB	UA_M6.5.1_0116	1	3	3	3	1
110	Don	Siverskyi Donets	Merefa	Mozh	UA_R_16_S_1_Si	8,654792892	river	UA_M6.5.1_0117	1	3	1	3	1
111	Don	Siverskyi Donets	Merefa	Mozh	no	15,34046251	HMWB	UA_M6.5.1_0118	3	3	3	3	3
112	Don	Siverskyi Donets	Borovenka	Mozh	no	11,46762148	HMWB	UA_M6.5.1_0119	1	2	3	3	1
113	Don	Siverskyi Donets	Olshanka	Mozh	no	14,54427336	HMWB	UA_M6.5.1_0120	3	3	3	3	3
114	Don	Siverskyi Donets	Gomulsha	Siverskyi Donets	no	10,77760329	HMWB	UA_M6.5.1_0121	3	3	3	3	1
115	Don	Siverskyi Donets	Gomulsha	Siverskyi Donets	UA_R_16_M_1_Si	5,775814669	river	UA_M6.5.1_0122	3	2	1	3	1
116	Don	Siverskyi Donets	Byshkin	Siverskyi Donets	UA_R_16_S_1_Si	1,31432676	river	UA_M6.5.1_0123	1	3	1	3	1
117	Don	Siverskyi Donets	Byshkin	Siverskyi Donets	no	8,539027125	HMWB	UA_M6.5.1_0124	3	3	3	3	1
118	Don	Siverskyi Donets	Byshkin	Siverskyi Donets	UA_R_16_S_1_Si	12,01938481	river	UA_M6.5.1_0125	3	3	1	3	1
119	Don	Siverskyi Donets	Shabelynka	Siverskyi Donets	UA_R_16_S_1_Si	4,287383798	river	UA_M6.5.1_0126	3	3	1	3	1
120	Don	Siverskyi Donets	Balakliyka	Siverskyi Donets	UA_R_16_M_1_Si	10,17133516	river	UA_M6.5.1_0127	1	3	1	3	1
121	Don	Siverskyi Donets	Balakliyka	Siverskyi Donets	UA_R_16_L_1_Si	1,419346606	river	UA_M6.5.1_0128	1	3	1	3	1
122	Don	Siverskyi Donets	Serednia Balakliyka	Balakliyka	UA_R_16_S_1_Si	7,676032512	river	UA_M6.5.1_0129	3	3	1	3	1
123	Don	Siverskyi Donets	Srednia Balakliyka	Balakliyka	no	1,810558957	HMWB	UA_M6.5.1_0130	3	3	3	3	1
124	Don	Siverskyi Donets	Serednia Balakliyka	Balakliyka	UA_R_16_S_1_Si	2,535598031	river	UA_M6.5.1_0131	2	3	1	3	1
125	Don	Siverskyi Donets	Serednia Balakleyka	Balakliyka	UA_R_16_M_1_Si	37,75006814	river	UA_M6.5.1_0132	1	3	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
126	Don	Siverskyi Donets	Kraynia Balakleyka	Balakliyka	UA_R_16_S_1_Si	10,64011981	river	UA_M6.5.1_0133	2	3	1	3	1
127	Don	Siverskyi Donets	Kraynia Balakleyka	Balakliyka	UA_R_16_M_1_Si	29,26131658	river	UA_M6.5.1_0134	3	3	1	3	3
128	Don	Siverskyi Donets	Voloska Balakliika	Balakliyka	UA_R_16_S_1_Si	11,47176425	river	UA_M6.5.1_0135	3	3	1	3	1
129	Don	Siverskyi Donets	Voloska Balakliika	Balakliyka	UA_R_16_M_1_Si	49,57266174	river	UA_M6.5.1_0136	3	3	1	3	1
130	Don	Siverskyi Donets	Teplianka	Siverskyi Donets	no	19,55020487	HMWB	UA_M6.5.1_0137	3	3	3	3	1
131	Don	Siverskyi Donets	Teplianka	Siverskyi Donets	UA_R_16_M_1_Si	8,462914983	river	UA_M6.5.1_0138	3	3	1	3	1
132	Don	Siverskyi Donets	Chepil	Siverskyi Donets	no	10,34577104	HMWB	UA_M6.5.1_0139	3	3	3	3	1
133	Don	Siverskyi Donets	Chepil	Siverskyi Donets	UA_R_16_M_1_Si	25,6155397	river	UA_M6.5.1_0140	3	3	1	3	1
134	Don	Siverskyi Donets	Viknina	Chepil	UA_R_16_S_1_Si	11,97802468	river	UA_M6.5.1_0141	3	2	1	3	1
135	Don	Siverskyi Donets	Urochyshche Krugle	Siverskyi Donets	no	11,95134036	HMWB	UA_M6.5.1_0142	3	3	3	3	1
136	Don	Siverskyi Donets	Berechka	Siverskyi Donets	UA_R_16_S_1_Si	14,52381112	river	UA_M6.5.1_0143	1	3	1	3	1
137	Don	Siverskyi Donets	Berechka	Siverskyi Donets	UA_R_16_M_1_Si	9,561110019	river	UA_M6.5.1_0144	3	3	1	3	1
138	Don	Siverskyi Donets	Bereka	Siverskyi Donets	UA_R_16_S_1_Si	9,578895544	river	UA_M6.5.1_0145	2	3	1	3	3
139	Don	Siverskyi Donets	Bereka	Siverskyi Donets	UA_R_16_M_1_Si	14,27261663	river	UA_M6.5.1_0146	2	3	1	3	1
140	Don	Siverskyi Donets	Bereka	Siverskyi Donets	no	5,150125031	HMWB	UA_M6.5.1_0147	3	3	3	3	3
141	Don	Siverskyi Donets	Bereka	Siverskyi Donets	UA_R_16_M_1_Si	54,46245533	river	UA_M6.5.1_0148	3	3	1	3	1
142	Don	Siverskyi Donets	Bereka	Siverskyi Donets	no	19,47192505	HMWB	UA_M6.5.1_0149	2	3	3	3	1
143	Don	Siverskyi Donets	Kysil	Bereka	no	10,38603824	HMWB	UA_M6.5.1_0150	2	3	3	3	1
144	Don	Siverskyi Donets	Kysil	Bereka	UA_R_16_M_1_Si	10,07122445	river	UA_M6.5.1_0151	2	3	1	3	1
145	Don	Siverskyi Donets	Lozovenka	Bereka	UA_R_16_S_1_Si	18,19521101	river	UA_M6.5.1_0152	3	3	1	3	3
146	Don	Siverskyi Donets	Brytai	Bereka	UA_R_16_S_1_Si	13,16141461	river	UA_M6.5.1_0153	2	3	1	3	1
147	Don	Siverskyi Donets	Brytai	Bereka	UA_R_16_M_1_Si	6,677806833	river	UA_M6.5.1_0154	2	3	1	3	1
148	Don	Siverskyi Donets	Brytai	Bereka	no	4,859665346	HMWB	UA_M6.5.1_0155	2	3	3	3	1
149	Don	Siverskyi Donets	Brytai	Bereka	UA_R_16_M_1_Si	38,70109638	river	UA_M6.5.1_0156	3	3	1	3	1
150	Don	Siverskyi Donets	Brytai	Bereka	no	6,181144337	HMWB	UA_M6.5.1_0157	3	3	3	3	1
151	Don	Siverskyi Donets	Brytai	Bereka	no	15,38112149	HMWB	UA_M6.5.1_0158	3	3	3	3	1
152	Don	Siverskyi Donets	Lozova	Brytai	UA_R_16_S_1_Si	14,39012234	river	UA_M6.5.1_0159	3	3	1	3	1
153	Don	Siverskyi Donets	Kobylna	Brytai	UA_R_16_S_1_Si	14,26647592	river	UA_M6.5.1_0160	3	2	1	3	1
154	Don	Siverskyi Donets	Popilna	Brytai	no	9,371861029	HMWB	UA_M6.5.1_0161	3	2	3	3	1
155	Don	Siverskyi Donets	Popilna	Brytai	no	6,296061497	HMWB	UA_M6.5.1_0163	3	2	3	3	3
156	Don	Siverskyi Donets	Shyroka	Popilna	no	5,401741526	HMWB	UA_M6.5.1_0164	1	2	3	3	1
157	Don	Siverskyi Donets	Samarka	Brytai	UA_R_16_S_1_Si	6,823477196	river	UA_M6.5.1_0165	1	2	1	2	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
158	Don	Siverskyi Donets	Samarka	Brytai	no	1,269278748	HMWB	UA_M6.5.1_0166	1	2	3	3	1
159	Don	Siverskyi Donets	Samarka	Brytai	UA_R_16_S_1_Si	7,756439692	river	UA_M6.5.1_0167	1	2	1	2	1
160	Don	Siverskyi Donets	Samarka	Brytai	no	1,629966066	HMWB	UA_M6.5.1_0168	1	2	3	3	1
161	Don	Siverskyi Donets	Samarka	Brytai	UA_R_16_S_1_Si	2,563475883	river	UA_M6.5.1_0169	3	2	1	3	1
162	Don	Siverskyi Donets	Dovzhyk	Bereka	UA_R_16_S_1_Si	9,451237264	river	UA_M6.5.1_0170	1	2	1	2	1
163	Don	Siverskyi Donets	Dovzhyk	Bereka	no	2,668732828	HMWB	UA_M6.5.1_0171	1	2	3	3	1
164	Don	Siverskyi Donets	Dovzhyk	Bereka	UA_R_16_S_1_Si	8,549181955	river	UA_M6.5.1_0172	1	2	1	2	1
165	Don	Siverskyi Donets	Dovzhyk	Bereka	UA_R_16_M_1_Si	1,824514282	river	UA_M6.5.1_0173	2	2	1	2	1
166	Don	Siverskyi Donets	Velyka Komyshuvakha	Bereka	UA_R_16_S_1_Si	11,88411377	river	UA_M6.5.1_0174	1	3	1	3	1
167	Don	Siverskyi Donets	Velyka Komyshuvakha	Bereka	no	3,614165142	HMWB	UA_M6.5.1_0175	3	3	3	3	1
168	Don	Siverskyi Donets	Komyshuvakha	Siverskyi Donets	no	3,154339765	HMWB	UA_M6.5.1_0176	2	3	3	3	1
169	Don	Siverskyi Donets	Komyshuvakha	Velyka Komyshuvakha	no	12,18000917	HMWB	UA_M6.5.1_0177	3	3	1	3	1
170	Don	Siverskyi Donets	Izyumets	Velyka Komyshuvakha	UA_R_16_S_1_Si	5,716012283	river	UA_M6.5.1_0178	2	3	3	3	1
171	Don	Siverskyi Donets	Izyumets	Siverskyi Donets	no	6,420931548	HMWB	UA_M6.5.1_0179	2	2	3	3	1
172	Don	Siverskyi Donets	Izyumets	Siverskyi Donets	UA_R_16_S_1_Si	2,45598694	river	UA_M6.5.1_0180	3	3	1	3	1
173	Don	Siverskyi Donets	Izyumets	Siverskyi Donets	no	2,899140851	HMWB	UA_M6.5.1_0181	2	3	3	3	1
174	Don	Siverskyi Donets	Izyumets	Siverskyi Donets	UA_R_16_M_1_Si	28,21737702	river	UA_M6.5.1_0182	3	3	1	3	1
175	Don	Siverskyi Donets	Kunne	Izyumets	UA_R_16_S_1_Si	16,2435295	river	UA_M6.5.1_0183	3	2	1	3	1
176	Don	Siverskyi Donets	Sukhyi Izyumets	Izyumets	UA_R_16_S_1_Si	11,9684451	river	UA_M6.5.1_0184	2	3	1	3	1
177	Don	Siverskyi Donets	Sukhyi Izyumets	Izyumets	UA_R_16_M_1_Si	1,961413099	river	UA_M6.5.1_0185	2	3	1	3	1
178	Don	Siverskyi Donets	Grekivka	Siverskyi Donets	no	5,059116883	HMWB	UA_M6.5.1_0186	3	3	3	3	1
179	Don	Siverskyi Donets	Grekivka	Siverskyi Donets	UA_R_16_M_1_Si	5,098192479	river	UA_M6.5.1_0187	3	3	1	3	1
180	Don	Siverskyi Donets	Oskil	Siverskyi Donets	UA_R_16_XL_1_Si	92,33282675	river	UA_M6.5.1_0188	2	3	1	3	3
181	Don	Siverskyi Donets	Oskil	Siverskyi Donets	UA_R_16_XL_1_Si	13,84681513	river	UA_M6.5.1_0190	2	3	1	3	1
182	Don	Siverskyi Donets	Urazova	Oskil	UA_R_16_S_1_Si	1,24439724	river	UA_M6.5.1_0191	1	2	1	2	1
183	Don	Siverskyi Donets	Urazova	Oskil	UA_R_16_M_1_Si	23,20426226	river	UA_M6.5.1_0192	3	2	1	3	1
184	Don	Siverskyi Donets	Demyne	Urazova	UA_R_16_M_1_Si	13,62029992	river	UA_M6.5.1_0193	3	2	1	3	1
185	Don	Siverskyi Donets	Kamennyi Yar	Oskil	UA_R_16_S_1_Si	12,55503111	river	UA_M6.5.1_0194	3	2	1	3	1
186	Don	Siverskyi Donets	Kamennyi Yar	Oskil	no	2,163681105	HMWB	UA_M6.5.1_0195	3	2	3	3	1
187	Don	Siverskyi Donets	Kamennyi Yar	Oskil	UA_R_16_S_1_Si	6,748942411	river	UA_M6.5.1_0196	3	2	1	3	1
188	Don	Siverskyi Donets	Kolodna	Oskil	UA_R_16_S_1_Si	21,54816949	river	UA_M6.5.1_0197	3	2	1	3	1
189	Don	Siverskyi Donets	Tavolzhanka	Oskil	UA_R_16_S_1_Si	12,06170996	river	UA_M6.5.1_0198	2	2	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
190	Don	Siverskyi Donets	Tavolzhanka	Oskil	no	1,422819933	HMWB	UA_M6.5.1_0199	2	2	3	3	1
191	Don	Siverskyi Donets	Tavolzhanka	Oskil	UA_R_16_S_1_Si	5,710816703	river	UA_M6.5.1_0200	3	2	1	3	1
192	Don	Siverskyi Donets	Verkhnia Dvurichna	Oskil	UA_R_16_S_1_Si	14,64029717	river	UA_M6.5.1_0201	3	2	1	3	1
193	Don	Siverskyi Donets	Verkhnia Dvurichna	Oskil	no	22,68799834	HMWB	UA_M6.5.1_0202	3	2	3	3	1
194	Don	Siverskyi Donets	Nyzhnia Dvurichna	Oskil	UA_R_16_S_1_Si	7,165677634	river	UA_M6.5.1_0203	3	2	1	3	1
195	Don	Siverskyi Donets	Nyzhnia Dvurichna	Oskil	no	1,499332006	HMWB	UA_M6.5.1_0204	1	2	3	3	1
196	Don	Siverskyi Donets	Nyzhnia Dvurichna	Oskil	UA_R_16_S_1_Si	3,521098844	river	UA_M6.5.1_0205	1	2	1	2	1
197	Don	Siverskyi Donets	Nyzhnia Dvurichna	Oskil	UA_R_16_M_1_Si	33,00942794	river	UA_M6.5.1_0206	3	2	1	3	1
198	Don	Siverskyi Donets	Vilshana	Oskil	UA_R_16_S_1_Si	2,78745151	river	UA_M6.5.1_0207	1	3	1	3	1
199	Don	Siverskyi Donets	Vilshana	Oskil	no	1,017422276	HMWB	UA_M6.5.1_0208	1	3	3	3	1
200	Don	Siverskyi Donets	Vilshana	Oskil	UA_R_16_S_1_Si	12,26285356	river	UA_M6.5.1_0209	2	3	1	3	3
201	Don	Siverskyi Donets	Vilshana	Oskil	UA_R_16_M_1_Si	12,14957835	river	UA_M6.5.1_0210	2	3	1	3	1
202	Don	Siverskyi Donets	Hnylytsia	Oskil	UA_R_16_S_1_Si	3,279853984	river	UA_M6.5.1_0211	1	3	1	3	1
203	Don	Siverskyi Donets	Hnylytsia	Oskil	no	2,014761156	HMWB	UA_M6.5.1_0212	1	3	3	3	1
204	Don	Siverskyi Donets	Hnylytsia	Oskil	UA_R_16_S_1_Si	6,658059652	river	UA_M6.5.1_0213	1	3	1	3	1
205	Don	Siverskyi Donets	Hnylytsia	Oskil	UA_R_16_M_1_Si	6,630027714	river	UA_M6.5.1_0214	3	3	1	3	1
206	Don	Siverskyi Donets	Kupianka	Oskil	UA_R_16_S_1_Si	0,530516066	river	UA_M6.5.1_0215	1	3	1	3	1
207	Don	Siverskyi Donets	Kupianka	Oskil	no	1,225623559	HMWB	UA_M6.5.1_0216	1	3	3	3	1
208	Don	Siverskyi Donets	Kupianka	Oskil	UA_R_16_S_1_Si	13,85705987	river	UA_M6.5.1_0217	3	3	1	3	1
209	Don	Siverskyi Donets	Kupianka	Oskil	UA_R_16_M_1_Si	2,282260358	river	UA_M6.5.1_0218	2	3	1	3	1
210	Don	Siverskyi Donets	Osynivka	Oskil	UA_R_16_S_1_Si	13,38087738	river	UA_M6.5.1_0219	3	2	1	3	1
211	Don	Siverskyi Donets	Osynivka	Oskil	UA_R_16_M_1_Si	11,12975473	river	UA_M6.5.1_0220	3	2	1	3	1
212	Don	Siverskyi Donets	Pishchana	Oskil	UA_R_16_S_1_Si	13,36747917	river	UA_M6.5.1_0221	3	2	1	3	1
213	Don	Siverskyi Donets	Pishchana	Oskil	UA_R_16_M_1_Si	7,981383717	river	UA_M6.5.1_0222	3	2	1	3	1
214	Don	Siverskyi Donets	Sinykha	Oskil	UA_R_16_S_1_Si	5,764249572	river	UA_M6.5.1_0223	3	2	1	3	1
215	Don	Siverskyi Donets	Sinykha	Oskil	no	1,528141281	HMWB	UA_M6.5.1_0224	2	2	3	3	1
216	Don	Siverskyi Donets	Sinykha	Oskil	UA_R_16_S_1_Si	9,067909463	river	UA_M6.5.1_0225	3	2	1	3	1
217	Don	Siverskyi Donets	Sinykha	Oskil	no	5,837010824	HMWB	UA_M6.5.1_0226	3	2	3	3	1
218	Don	Siverskyi Donets	Lozova	Oskil	UA_R_16_S_1_Si	10,64469209	river	UA_M6.5.1_0227	3	3	1	3	3
219	Don	Siverskyi Donets	Lozova	Oskil	no	2,220326001	HMWB	UA_M6.5.1_0228	2	3	3	3	1
220	Don	Siverskyi Donets	Lozova	Oskil	UA_R_16_S_1_Si	6,784824454	river	UA_M6.5.1_0229	2	3	1	3	1
221	Don	Siverskyi Donets	Lymanska	Oskil	UA_R_16_S_1_Si	2,780355246	river	UA_M6.5.1_0230	1	2	1	2	1
222	Don	Siverskyi Donets	Lymanska	Oskil	no	1,295792411	HMWB	UA_M6.5.1_0231	1	2	3	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
223	Don	Siverskyi Donets	Lymanska	Oskil	UA_R_16_S_1_Si	14,26974854	river	UA_M6.5.1_0232	1	2	1	2	1
224	Don	Siverskyi Donets	Horokhovatka	Oskil	UA_R_16_S_1_Si	18,48016506	river	UA_M6.5.1_0233	2	3	1	3	1
225	Don	Siverskyi Donets	Borova	Oskil	UA_R_16_S_1_Si	10,49270535	river	UA_M6.5.1_0234	2	3	1	3	1
226	Don	Siverskyi Donets	Borova	Oskil	no	1,065552243	HMWB	UA_M6.5.1_0235	2	2	3	3	1
227	Don	Siverskyi Donets	Borova	Oskil	UA_R_16_S_1_Si	13,83840904	river	UA_M6.5.1_0236	3	2	1	3	1
228	Don	Siverskyi Donets	Solona	Oskil	UA_R_16_S_1_Si	9,159458236	river	UA_M6.5.1_0237	2	2	1	2	1
229	Don	Siverskyi Donets	Solona	Oskil	no	1,344900832	HMWB	UA_M6.5.1_0238	2	2	3	3	1
230	Don	Siverskyi Donets	Solona	Oskil	UA_R_16_S_1_Si	4,591214726	river	UA_M6.5.1_0239	3	2	1	3	1
231	Don	Siverskyi Donets	Karachova	Salty	UA_R_16_S_1_Si	14,7197372	river	UA_M6.5.1_0240	3	2	1	3	1
232	Don	Siverskyi Donets	Bakhtyn	Oskil	UA_R_16_S_1_Si	5,114390266	river	UA_M6.5.1_0241	2	2	1	2	1
233	Don	Siverskyi Donets	Bakhtyn	Oskil	no	1,978853995	HMWB	UA_M6.5.1_0242	2	2	3	3	1
234	Don	Siverskyi Donets	Bakhtyn	Oskil	UA_R_16_S_1_Si	14,45140693	river	UA_M6.5.1_0243	3	2	1	3	1
235	Don	Siverskyi Donets	Bakhtyn	Oskil	UA_R_16_M_1_Si	0,884823685	river	UA_M6.5.1_0244	2	2	1	2	1
236	Don	Siverskyi Donets	Netryus (Nitrius)	Siverskyi Donets	no	18,09104342	HMWB	UA_M6.5.1_0245	1	3	3	3	1
237	Don	Siverskyi Donets	Netryus (Nitrius)	Siverskyi Donets	no	14,69730948	HMWB	UA_M6.5.1_0246	3	3	3	3	1
238	Don	Siverskyi Donets	Kazennyi Torets	Siverskyi Donets	no	12,51687922	HMWB	UA_M6.5.1_0247	3	3	3	3	3
239	Don	Siverskyi Donets	Kazennyi Torets	Siverskyi Donets	UA_R_16_M_1_Si	55,19139625	river	UA_M6.5.1_0248	3	3	1	3	3
240	Don	Siverskyi Donets	Kazennyi Torets	Siverskyi Donets	UA_R_16_L_1_Si	6,750802031	river	UA_M6.5.1_0249	3	3	1	3	3
241	Don	Siverskyi Donets	Kazennyi Torets	Siverskyi Donets	no	29,8849152	HMWB	UA_M6.5.1_0250	3	3	3	3	3
242	Don	Siverskyi Donets	Kazennyi Torets	Siverskyi Donets	UA_R_16_L_1_Si	25,28315929	river	UA_M6.5.1_0251	3	3	1	3	3
243	Don	Siverskyi Donets	Zhuravka	Kazennyi Torets	UA_R_16_S_1_Si	14,87113224	river	UA_M6.5.1_0252	3	2	1	3	1
244	Don	Siverskyi Donets	Poltavka	Kazennyi Torets	no	12,59063318	HMWB	UA_M6.5.1_0253	2	2	3	3	1
245	Don	Siverskyi Donets	Poltavka	Kazennyi Torets	UA_R_16_M_1_Si	1,432725031	river	UA_M6.5.1_0255	2	2	1	2	1
246	Don	Siverskyi Donets	Poltavka	Kazennyi Torets	UA_R_16_M_1_Si	5,382249556	river	UA_M6.5.1_0257	3	2	1	3	1
247	Don	Siverskyi Donets	Gruzka	Kazennyi Torets	UA_R_16_S_1_Si	6,639732665	river	UA_M6.5.1_0258	3	3	1	3	3
248	Don	Siverskyi Donets	Gruzka	Kazennyi Torets	no	1,547515433	HMWB	UA_M6.5.1_0259	2	3	3	3	1
249	Don	Siverskyi Donets	Gruzka	Kazennyi Torets	UA_R_16_S_1_Si	1,963262573	river	UA_M6.5.1_0260	2	3	1	3	1
250	Don	Siverskyi Donets	Gruzka	Kazennyi Torets	UA_R_16_M_1_Si	13,46144342	river	UA_M6.5.1_0261	2	3	1	3	1
251	Don	Siverskyi Donets	Kryvyi Torets	Kazennyi Torets	UA_R_16_S_1_Ca	11,97744815	river	UA_M6.5.1_0262	2	3	1	3	1
252	Don	Siverskyi Donets	Kryvyi Torets	Kazennyi Torets	no	18,44887535	HMWB	UA_M6.5.1_0263	3	3	3	3	3
253	Don	Siverskyi Donets	Kryvyi Torets	Kazennyi Torets	no	15,14075073	HMWB	UA_M6.5.1_0264	2	3	3	3	1
254	Don	Siverskyi Donets	Kryvyi Torets	Kazennyi Torets	UA_R_16_L_1_Si	30,08981776	river	UA_M6.5.1_0265	3	3	1	3	3

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
255	Don	Siverskyi Donets	Kryvyi Torets	Kazennyi Torets	no	8,466718901	HMWB	UA_M6.5.1_0266	3	3	3	3	3
256	Don	Siverskyi Donets	Kryvyi Torets	Kazennyi Torets	UA_R_16_L_1_Si	3,982671634	river	UA_M6.5.1_0267	3	3	1	3	3
257	Don	Siverskyi Donets	Shyroka	Kryvyi Torets	no	1,758800009	HMWB	UA_M6.5.1_0268	1	2	3	3	1
258	Don	Siverskyi Donets	Shyroka	Kryvyi Torets	UA_R_16_S_1_Ca	1,491323781	river	UA_M6.5.1_0269	3	2	1	3	3
259	Don	Siverskyi Donets	Shyroka	Kryvyi Torets	UA_R_16_S_1_Ca	4,225504269	river	UA_M6.5.1_0271	2	2	1	2	1
260	Don	Siverskyi Donets	Druha	Kryvyi Torets	UA_R_16_S_2_Ca	2,576063017	river	UA_M6.5.1_0272	1	2	1	2	1
261	Don	Siverskyi Donets	Druha	Kryvyi Torets	UA_R_16_S_1_Ca	7,989603384	river	UA_M6.5.1_0273	3	2	1	3	1
262	Don	Siverskyi Donets	Ocheretova	Kryvyi Torets	UA_R_16_S_1_Ca	4,953255641	river	UA_M6.5.1_0274	3	2	1	3	3
263	Don	Siverskyi Donets	Ocheretova	Kryvyi Torets	UA_R_16_S_1_Si	2,089969034	river	UA_M6.5.1_0275	2	2	1	2	1
264	Don	Siverskyi Donets	Ocheretova	Kryvyi Torets	no	1,502010057	HMWB	UA_M6.5.1_0276	2	2	3	3	1
265	Don	Siverskyi Donets	Ocheretova	Kryvyi Torets	UA_R_16_S_1_Si	2,682248515	river	UA_M6.5.1_0277	3	2	1	3	1
266	Don	Siverskyi Donets	Ocheretova	Kryvyi Torets	no	5,274398115	HMWB	UA_M6.5.1_0278	3	2	3	3	1
267	Don	Siverskyi Donets	Ocheretova	Kryvyi Torets	no	1,079548914	HMWB	UA_M6.5.1_0279	2	2	3	3	1
268	Don	Siverskyi Donets	Skotovata	Ocheretova	no	0,372252816	HMWB	UA_M6.5.1_0280	1	2	3	3	1
269	Don	Siverskyi Donets	Skotovata	Ocheretova	no	1,777267269	HMWB	UA_M6.5.1_0281	3	2	3	3	1
270	Don	Siverskyi Donets	Skotovata	Ocheretova	no	11,37564687	HMWB	UA_M6.5.1_0282	3	2	3	3	1
271	Don	Siverskyi Donets	Batmanka	Kryvyi Torets	UA_R_16_S_1_Ca	9,616892279	river	UA_M6.5.1_0283	3	2	1	3	1
272	Don	Siverskyi Donets	Zalizna	Kryvyi Torets	UA_R_16_S_2_Ca	4,590124158	river	UA_M6.5.1_0284	1	2	1	2	1
273	Don	Siverskyi Donets	Zalizna	Kryvyi Torets	UA_R_16_S_1_Ca	12,62885834	river	UA_M6.5.1_0285	3	2	1	3	3
274	Don	Siverskyi Donets	Zalizna	Kryvyi Torets	no	1,774682059	HMWB	UA_M6.5.1_0286	2	2	3	3	1
275	Don	Siverskyi Donets	Shyroka	Zalizna	UA_R_16_S_1_Ca	3,436627063	river	UA_M6.5.1_0287	1	2	1	2	1
276	Don	Siverskyi Donets	Shyroka	Zalizna	UA_R_16_S_1_Ca	8,185403154	river	UA_M6.5.1_0289	3	2	1	3	1
277	Don	Siverskyi Donets	Zalizna	Kryvyi Torets	UA_R_16_S_2_Ca	2,608580506	river	UA_M6.5.1_0290	1	2	1	2	1
278	Don	Siverskyi Donets	Zalizna	Kryvyi Torets	UA_R_16_S_1_Ca	11,32352478	river	UA_M6.5.1_0291	3	2	1	3	1
279	Don	Siverskyi Donets	Sukhyi Yar	Kryvyi Torets	no	16,2267473	HMWB	UA_M6.5.1_0292	3	2	3	3	1
280	Don	Siverskyi Donets	Bychok	Kryvyi Torets	no	12,47496982	HMWB	UA_M6.5.1_0293	2	2	3	3	1
281	Don	Siverskyi Donets	Bychok	Kryvyi Torets	UA_R_16_M_1_Si	3,459259741	river	UA_M6.5.1_0295	2	2	1	2	1
282	Don	Siverskyi Donets	Bychok	Kryvyi Torets	no	2,035614606	HMWB	UA_M6.5.1_0296	2	2	3	3	1
283	Don	Siverskyi Donets	Bychok	Kryvyi Torets	UA_R_16_M_1_Si	12,98545629	river	UA_M6.5.1_0297	3	2	1	3	1
284	Don	Siverskyi Donets	Bychok	Kryvyi Torets	UA_R_16_M_1_Si	2,335853405	river	UA_M6.5.1_0299	3	2	1	3	3
285	Don	Siverskyi Donets	Kalynivka	Bychok	UA_R_16_S_1_Si	6,469463371	river	UA_M6.5.1_0300	2	2	1	2	1
286	Don	Siverskyi Donets	Kalynivka	Bychok	no	1,30700723	HMWB	UA_M6.5.1_0301	2	2	3	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
287	Don	Siverskyi Donets	Kalynivka	Bychok	UA_R_16_S_1_Si	3,223887072	river	UA_M6.5.1_0302	2	2	1	2	1
288	Don	Siverskyi Donets	Kalynivka	Bychok	no	2,314144438	HMWB	UA_M6.5.1_0303	2	2	3	3	1
289	Don	Siverskyi Donets	Kalynivka	Bychok	UA_R_16_M_1_Si	13,46538724	river	UA_M6.5.1_0304	3	2	1	3	1
290	Don	Siverskyi Donets	Neumyha (Naumyha)	Kryvyi Torets	UA_R_16_S_1_Si	11,00506516	river	UA_M6.5.1_0305	3	2	1	3	1
291	Don	Siverskyi Donets	Neumyha (Naumyha)	Kryvyi Torets	no	9,576123621	HMWB	UA_M6.5.1_0306	3	2	3	3	1
292	Don	Siverskyi Donets	Balamutka	Neumyha (Naumyha)	UA_R_16_S_1_Ca	3,029277322	river	UA_M6.5.1_0307	3	2	1	3	1
293	Don	Siverskyi Donets	Balamutka	Neumyha (Naumyha)	UA_R_16_S_1_Si	10,07018777	river	UA_M6.5.1_0308	3	2	1	3	1
294	Don	Siverskyi Donets	Gruzka	Kryvyi Torets	UA_R_16_S_1_Si	8,809373285	river	UA_M6.5.1_0309	3	3	1	3	3
295	Don	Siverskyi Donets	Gruzka	Kryvyi Torets	no	1,24630494	HMWB	UA_M6.5.1_0310	2	3	3	3	1
296	Don	Siverskyi Donets	Gruzka	Kryvyi Torets	UA_R_16_S_1_Si	4,95800933	river	UA_M6.5.1_0311	2	3	1	3	1
297	Don	Siverskyi Donets	Lozova	Kryvyi Torets	UA_R_16_S_1_Si	6,970386062	river	UA_M6.5.1_0312	2	3	1	3	1
298	Don	Siverskyi Donets	Lozova	Kryvyi Torets	no	1,516938173	HMWB	UA_M6.5.1_0313	2	3	3	3	1
299	Don	Siverskyi Donets	Lozova	Kryvyi Torets	UA_R_16_S_1_Si	0,355208799	river	UA_M6.5.1_0315	2	3	1	3	1
300	Don	Siverskyi Donets	Lozova	Kryvyi Torets	UA_R_16_S_1_Si	2,033369676	river	UA_M6.5.1_0317	2	3	1	3	1
301	Don	Siverskyi Donets	Bychok	Kazennyi Torets	no	21,93912729	HMWB	UA_M6.5.1_0318	2	3	3	3	1
302	Don	Siverskyi Donets	Bychok	Kazennyi Torets	UA_R_16_M_1_Si	2,046284015	river	UA_M6.5.1_0319	2	3	1	3	1
303	Don	Siverskyi Donets	Bilenka	Kazennyi Torets	UA_R_16_S_1_Si	11,38930859	river	UA_M6.5.1_0320	3	3	1	3	1
304	Don	Siverskyi Donets	Bilenka	Kazennyi Torets	no	11,83159262	HMWB	UA_M6.5.1_0321	3	3	3	3	1
305	Don	Siverskyi Donets	Chasiv Yar	Bilenka	UA_R_16_S_1_Si	9,96717491	river	UA_M6.5.1_0322	3	2	1	3	3
306	Don	Siverskyi Donets	Chasiv Yar	Bilenka	no	1,078290951	HMWB	UA_M6.5.1_0323	3	2	3	3	1
307	Don	Siverskyi Donets	Chasiv Yar	Bilenka	UA_R_16_S_1_Si	2,861018587	river	UA_M6.5.1_0324	3	2	1	3	1
308	Don	Siverskyi Donets	Mayachka	Kazennyi Torets	no	14,32887521	HMWB	UA_M6.5.1_0325	3	2	3	3	3
309	Don	Siverskyi Donets	Mayachka	Kazennyi Torets	no	8,016650373	HMWB	UA_M6.5.1_0326	3	2	3	3	1
310	Don	Siverskyi Donets	Mayachka	Kazennyi Torets	no	8,872467054	HMWB	UA_M6.5.1_0328	3	2	3	3	3
311	Don	Siverskyi Donets	Bilenka	Kazennyi Torets	UA_R_16_S_1_Si	6,794438578	river	UA_M6.5.1_0329	2	3	1	3	1
312	Don	Siverskyi Donets	Bilenka	Kazennyi Torets	no	1,278150872	HMWB	UA_M6.5.1_0330	2	3	3	3	1
313	Don	Siverskyi Donets	Bilenka	Kazennyi	UA_R_16_S_1_Si	3,377409371	river	UA_M6.5.1_0331	2	3	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
				Torets									
314	Don	Siverskyi Donets	Bilenka	Kazennyi Torets	no	9,300598399	HMWB	UA_M6.5.1_0332	2	3	3	3	1
315	Don	Siverskyi Donets	Sukhyi Torets	Kazennyi Torets	UA_R_16_S_1_Si	2,710447073	river	UA_M6.5.1_0333	1	3	1	3	1
316	Don	Siverskyi Donets	Sukhyi Torets	Kazennyi Torets	no	1,471839594	HMWB	UA_M6.5.1_0334	1	3	3	3	1
317	Don	Siverskyi Donets	Sukhyi Torets	Kazennyi Torets	UA_R_16_S_1_Si	1,998616328	river	UA_M6.5.1_0335	1	3	1	3	1
318	Don	Siverskyi Donets	Sukhyi Torets	Kazennyi Torets	no	1,236773482	HMWB	UA_M6.5.1_0336	1	3	3	3	1
319	Don	Siverskyi Donets	Sukhyi Torets	Kazennyi Torets	UA_R_16_S_1_Si	2,067285478	river	UA_M6.5.1_0337	1	3	1	3	1
320	Don	Siverskyi Donets	Sukhyi Torets	Kazennyi Torets	UA_R_16_M_1_Si	46,81801673	river	UA_M6.5.1_0338	3	3	1	3	1
321	Don	Siverskyi Donets	Sukhyi Torets	Kazennyi Torets	UA_R_16_L_1_Si	43,84118228	river	UA_M6.5.1_0339	3	3	1	3	3
322	Don	Siverskyi Donets	Luknovakha	Sukhyi Torets	UA_R_16_S_1_Si	4,000450065	river	UA_M6.5.1_0340	1	2	1	2	1
323	Don	Siverskyi Donets	Luknovakha	Sukhyi Torets	UA_R_16_M_1_Si	21,92114303	river	UA_M6.5.1_0341	3	2	1	3	1
324	Don	Siverskyi Donets	Kurulka	Sukhyi Torets	UA_R_16_S_1_Si	13,89678586	river	UA_M6.5.1_0342	2	2	1	2	1
325	Don	Siverskyi Donets	Kurulka	Sukhyi Torets	UA_R_16_M_1_Si	4,381612895	river	UA_M6.5.1_0343	2	2	1	2	1
326	Don	Siverskyi Donets	Bychok	Sukhyi Torets	no	16,37268521	HMWB	UA_M6.5.1_0344	1	2	3	3	1
327	Don	Siverskyi Donets	Bychok	Sukhyi Torets	UA_R_16_M_1_Si	4,620311943	river	UA_M6.5.1_0345	3	2	1	3	1
328	Don	Siverskyi Donets	Bychok	Sukhyi Torets	no	2,111868039	HMWB	UA_M6.5.1_0346	2	2	3	3	1
329	Don	Siverskyi Donets	Bychok	Sukhyi Torets	UA_R_16_M_1_Si	4,791340946	river	UA_M6.5.1_0347	3	2	1	3	1
330	Don	Siverskyi Donets	Cherkaska	Sukhyi Torets	UA_R_16_S_1_Si	1,512303845	river	UA_M6.5.1_0348	1	2	1	2	1
331	Don	Siverskyi Donets	Cherkaska	Sukhyi Torets	UA_R_16_S_1_Si	13,98928387	river	UA_M6.5.1_0350	3	2	1	3	1
332	Don	Siverskyi Donets	Gola Dolyna	Sukhyi Torets	no	5,143782577	HMWB	UA_M6.5.1_0351	3	2	3	3	1
333	Don	Siverskyi Donets	Gola Dolyna	Sukhyi Torets	no	16,86994667	HMWB	UA_M6.5.1_0352	3	2	3	3	3

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
334	Don	Siverskyi Donets	Soryshchi	Kazennyi Torets	UA_R_16_S_1_Si	14,22830418	river	UA_M6.5.1_0353	3	2	1	3	1
335	Don	Siverskyi Donets	Bessarabivka	Kazennyi Torets	UA_R_16_S_1_Si	11,96613471	river	UA_M6.5.1_0354	3	2	1	3	1
336	Don	Siverskyi Donets	Bakhmutka (Bakhmut)	Siverskyi Donets	UA_R_16_S_2_Ca	2,666459054	river	UA_M6.5.1_0355	1	3	1	3	1
337	Don	Siverskyi Donets	Bakhmutka (Bakhmut)	Siverskyi Donets	UA_R_16_S_1_Ca	6,661392685	river	UA_M6.5.1_0356	3	3	1	3	1
338	Don	Siverskyi Donets	Bakhmutka (Bakhmut)	Siverskyi Donets	UA_R_16_S_1_Si	4,369792267	river	UA_M6.5.1_0357	3	3	1	3	1
339	Don	Siverskyi Donets	Bakhmutka (Bakhmut)	Siverskyi Donets	UA_R_16_M_1_Si	16,84073644	river	UA_M6.5.1_0358	3	3	1	3	3
340	Don	Siverskyi Donets	Bakhmutka (Bakhmut)	Siverskyi Donets	no	1,47876887	HMWB	UA_M6.5.1_0359	3	3	3	3	1
341	Don	Siverskyi Donets	Bakhmutka (Bakhmut)	Siverskyi Donets	UA_R_16_M_1_Si	24,92723171	river	UA_M6.5.1_0360	3	3	1	3	3
342	Don	Siverskyi Donets	Bakhmutka (Bakhmut)	Siverskyi Donets	UA_R_16_L_1_Si	37,49369141	river	UA_M6.5.1_0361	3	3	1	3	3
343	Don	Siverskyi Donets	Kodyma	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	4,27368495	river	UA_M6.5.1_0362	2	2	1	2	1
344	Don	Siverskyi Donets	Kodyma	Bakhmutka (Bakhmut)	no	1,242796493	HMWB	UA_M6.5.1_0363	2	2	3	3	1
345	Don	Siverskyi Donets	Kodyma	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	8,04323926	river	UA_M6.5.1_0364	3	2	1	3	3
346	Don	Siverskyi Donets	Zaitseva	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	11,54602186	river	UA_M6.5.1_0365	3	2	1	3	1
347	Don	Siverskyi Donets	No name	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	12,4189485	river	UA_M6.5.1_0366	3	2	1	3	1
348	Don	Siverskyi Donets	Velyka Stupka	Bakhmutka (Bakhmut)	no	1,379744075	HMWB	UA_M6.5.1_0367	1	2	3	3	1
349	Don	Siverskyi Donets	Velyka Stupka	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	10,04555019	river	UA_M6.5.1_0368	2	2	1	2	1
350	Don	Siverskyi Donets	Velyka Stupka	Bakhmutka (Bakhmut)	no	1,109958182	HMWB	UA_M6.5.1_0369	2	2	3	3	1
351	Don	Siverskyi Donets	Velyka Stupka	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	2,954719708	river	UA_M6.5.1_0370	3	2	1	3	1
352	Don	Siverskyi Donets	Serednia Stupka	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	7,031205435	river	UA_M6.5.1_0371	3	2	1	3	1
353	Don	Siverskyi Donets	Serednia Stupka	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	4,635092589	river	UA_M6.5.1_0373	3	2	1	3	3
354	Don	Siverskyi Donets	Serednia Stupka	Bakhmutka (Bakhmut)	UA_R_16_M_1_Si	0,99037643	river	UA_M6.5.1_0374	3	2	1	3	1
355	Don	Siverskyi Donets	Mokra Plotva	Bakhmutka (Bakhmut)	UA_R_16_S_1_Ca	5,34187625	river	UA_M6.5.1_0375	2	3	1	3	3
356	Don	Siverskyi Donets	Mokra Plotva	Bakhmutka (Bakhmut)	no	1,036756857	HMWB	UA_M6.5.1_0376	2	3	3	3	1
357	Don	Siverskyi Donets	Mokra Plotva	Bakhmutka (Bakhmut)	UA_R_16_S_1_Ca	5,941802927	river	UA_M6.5.1_0377	3	3	1	3	1
358	Don	Siverskyi Donets	Mokra Plotva	Bakhmutka (Bakhmut)	UA_R_16_M_1_Ca	8,38350198	river	UA_M6.5.1_0378	3	3	1	3	1
359	Don	Siverskyi Donets	Mokra Plotva	Bakhmutka (Bakhmut)	UA_R_16_M_1_Si	12,40106401	river	UA_M6.5.1_0379	3	3	1	3	3
360	Don	Siverskyi Donets	Kruta	Mokra Plotva	UA_R_16_S_2_Ca	0,641002918	river	UA_M6.5.1_0380	1	2	1	2	1
361	Don	Siverskyi Donets	Kruta	Mokra Plotva	UA_R_16_S_1_Ca	9,179763993	river	UA_M6.5.1_0381	3	2	1	3	1
362	Don	Siverskyi Donets	Horilyi Pen	Mokra Plotva	UA_R_16_S_1_Ca	11,22070906	river	UA_M6.5.1_0382	3	2	1	3	1
363	Don	Siverskyi Donets	Horilyi Pen	Mokra Plotva	UA_R_16_M_1_Ca	5,747211792	river	UA_M6.5.1_0383	3	2	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
364	Don	Siverskyi Donets	Horilyi Pen	Mokra Plotva	UA_R_16_M_1_Si	5,739007687	river	UA_M6.5.1_0384	3	2	1	3	1
365	Don	Siverskyi Donets	No name	Horilyi Pen	UA_R_16_S_1_Si	2,965234923	river	UA_M6.5.1_0385	1	2	1	2	1
366	Don	Siverskyi Donets	No name	Horilyi Pen	UA_R_16_S_1_Ca	4,893204953	river	UA_M6.5.1_0386	3	2	1	3	1
367	Don	Siverskyi Donets	Vasyukivka	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	11,880413	river	UA_M6.5.1_0387	3	2	1	3	1
368	Don	Siverskyi Donets	Vasyukivka	Bakhmutka (Bakhmut)	UA_R_16_M_1_Si	6,111540715	river	UA_M6.5.1_0388	3	2	1	3	1
369	Don	Siverskyi Donets	Kopanka	Vasyukivka	UA_R_16_S_1_Si	10,58572602	river	UA_M6.5.1_0389	3	2	1	3	1
370	Don	Siverskyi Donets	Sukha Plotva	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	17,93764897	river	UA_M6.5.1_0390	3	3	1	3	3
371	Don	Siverskyi Donets	Sukha Plotva	Bakhmutka (Bakhmut)	UA_R_16_M_1_Si	4,166809926	river	UA_M6.5.1_0391	3	3	1	3	1
372	Don	Siverskyi Donets	Sukha	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	16,41848209	river	UA_M6.5.1_0392	2	2	1	2	1
373	Don	Siverskyi Donets	Sukha	Bakhmutka (Bakhmut)	UA_R_16_M_1_Si	6,181228657	river	UA_M6.5.1_0393	2	2	1	2	1
374	Don	Siverskyi Donets	Yama (Sukha Plotva)	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	7,290239813	river	UA_M6.5.1_0394	1	2	1	2	1
375	Don	Siverskyi Donets	Yama (Sukha Plotva)	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	4,75653732	river	UA_M6.5.1_0396	2	2	1	2	1
376	Don	Siverskyi Donets	Yama (Sukha Plotva)	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	2,507119841	river	UA_M6.5.1_0398	2	2	1	2	1
377	Don	Siverskyi Donets	Berestova	Yama (Sukha Plotva)	UA_R_16_S_1_Si	11,73913504	river	UA_M6.5.1_0399	3	3	1	3	1
378	Don	Siverskyi Donets	Kamianka	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	10,3543792	river	UA_M6.5.1_0400	3	3	1	3	1
379	Don	Siverskyi Donets	Kamianka	Bakhmutka (Bakhmut)	UA_R_16_S_1_Si	5,314586215	river	UA_M6.5.1_0402	3	3	1	3	1
380	Don	Siverskyi Donets	Zherebets	Siverskyi Donets	UA_R_16_S_1_Si	2,185133918	river	UA_M6.5.1_0403	1	3	1	3	1
381	Don	Siverskyi Donets	Zherebets	Siverskyi Donets	no	1,179976936	HMWB	UA_M6.5.1_0404	1	3	3	3	1
382	Don	Siverskyi Donets	Zherebets	Siverskyi Donets	UA_R_16_S_1_Si	12,17323771	river	UA_M6.5.1_0405	1	3	1	3	1
383	Don	Siverskyi Donets	Zherebets	Siverskyi Donets	no	2,543652011	HMWB	UA_M6.5.1_0406	1	3	3	3	1
384	Don	Siverskyi Donets	Zherebets	Siverskyi Donets	UA_R_16_M_1_Si	81,38212338	river	UA_M6.5.1_0407	3	3	1	3	3
385	Don	Siverskyi Donets	Tekuch	Zherebets	UA_R_16_S_1_Si	14,51899557	river	UA_M6.5.1_0408	1	2	1	2	1
386	Don	Siverskyi Donets	Krasna	Siverskyi Donets	UA_R_16_M_1_Si	29,55043876	river	UA_M6.5.1_0409	3	3	1	3	1
387	Don	Siverskyi Donets	Krasna	Siverskyi Donets	UA_R_16_L_1_Si	96,22882836	river	UA_M6.5.1_0410	3	3	1	3	3
388	Don	Siverskyi Donets	Naugolna	Krasna	UA_R_16_S_1_Si	11,75888654	river	UA_M6.5.1_0411	1	2	1	2	1
389	Don	Siverskyi Donets	Naugolna	Krasna	no	3,837848624	HMWB	UA_M6.5.1_0412	1	2	3	3	1
390	Don	Siverskyi Donets	Naugolna	Krasna	UA_R_16_M_1_Si	3,122200068	river	UA_M6.5.1_0413	3	2	1	3	1
391	Don	Siverskyi Donets	Hnyla	Krasna	UA_R_16_M_1_Si	23,22413121	river	UA_M6.5.1_0414	3	2	1	3	1
392	Don	Siverskyi Donets	Duvanka	Krasna	UA_R_16_S_1_Si	6,414714421	river	UA_M6.5.1_0415	1	2	1	2	1
393	Don	Siverskyi Donets	Duvanka	Krasna	no	23,45441665	HMWB	UA_M6.5.1_0416	3	2	3	3	1
394	Don	Siverskyi Donets	Kobylka	Krasna	no	9,010912501	HMWB	UA_M6.5.1_0417	2	2	3	3	1
395	Don	Siverskyi Donets	Kobylka	Krasna	UA_R_16_M_1_Si	2,030864646	river	UA_M6.5.1_0418	2	2	1	2	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
396	Don	Siverskyi Donets	Kobylka	Krasna	no	1,898611068	HMWB	UA_M6.5.1_0419	2	2	3	3	1
397	Don	Siverskyi Donets	Kobylka	Krasna	UA_R_16_M_1_Si	14,36624292	river	UA_M6.5.1_0420	3	2	1	3	1
398	Don	Siverskyi Donets	Khoryna	Krasna	UA_R_16_S_1_Si	5,439413573	river	UA_M6.5.1_0421	1	2	1	2	1
399	Don	Siverskyi Donets	Khoryna	Krasna	no	22,12356531	HMWB	UA_M6.5.1_0422	3	2	3	3	1
400	Don	Siverskyi Donets	Mechetna	Krasna	UA_R_16_S_1_Si	17,87185341	river	UA_M6.5.1_0423	2	2	1	2	1
401	Don	Siverskyi Donets	Mechetna	Krasna	UA_R_16_M_1_Si	3,325616992	river	UA_M6.5.1_0424	2	2	1	2	1
402	Don	Siverskyi Donets	Borova	Siverskyi Donets	no	8,11992097	HMWB	UA_M6.5.1_0425	3	3	3	3	1
403	Don	Siverskyi Donets	Borova	Siverskyi Donets	no	40,62347457	HMWB	UA_M6.5.1_0426	3	3	3	3	1
404	Don	Siverskyi Donets	Borova	Siverskyi Donets	UA_R_16_L_1_Si	43,97335734	river	UA_M6.5.1_0427	3	3	1	3	1
405	Don	Siverskyi Donets	Mokryi Baglay	Borova	UA_R_16_S_1_Si	7,44808203	river	UA_M6.5.1_0428	2	2	1	2	1
406	Don	Siverskyi Donets	Mokryi Baglay	Borova	no	3,124095491	HMWB	UA_M6.5.1_0429	2	2	3	3	1
407	Don	Siverskyi Donets	Mokryi Baglay	Borova	UA_R_16_S_1_Si	2,281988918	river	UA_M6.5.1_0430	2	2	1	2	1
408	Don	Siverskyi Donets	Mokryi Baglay	Borova	UA_R_16_M_1_Si	2,169676424	river	UA_M6.5.1_0431	3	2	1	3	1
409	Don	Siverskyi Donets	Hnyla Plotva	Borova	UA_R_16_S_1_Si	4,017581669	river	UA_M6.5.1_0432	3	3	1	3	1
410	Don	Siverskyi Donets	Hnyla Plotva	Borova	UA_R_16_M_1_Si	15,37209176	river	UA_M6.5.1_0433	3	3	1	3	1
411	Don	Siverskyi Donets	Borovyk	Borova	UA_R_16_S_1_Si	1,306171724	river	UA_M6.5.1_0434	1	2	1	2	1
412	Don	Siverskyi Donets	Borovyk	Borova	no	2,11536549	HMWB	UA_M6.5.1_0435	1	2	3	3	1
413	Don	Siverskyi Donets	Borovyk	Borova	UA_R_16_S_1_Si	14,00740135	river	UA_M6.5.1_0436	2	2	1	2	1
414	Don	Siverskyi Donets	Borovyk	Borova	no	1,551870693	HMWB	UA_M6.5.1_0437	2	2	3	3	1
415	Don	Siverskyi Donets	Borovyk	Borova	UA_R_16_S_1_Si	2,857502887	river	UA_M6.5.1_0438	3	2	1	3	1
416	Don	Siverskyi Donets	Borovyk	Borova	UA_R_16_M_1_Si	19,92620411	river	UA_M6.5.1_0439	3	2	1	3	1
417	Don	Siverskyi Donets	Plotva	Borova	UA_R_16_S_1_Si	3,404071454	river	UA_M6.5.1_0440	1	3	1	3	1
418	Don	Siverskyi Donets	Plotva	Borova	no	1,746680465	HMWB	UA_M6.5.1_0441	1	3	3	3	1
419	Don	Siverskyi Donets	Plotva	Borova	UA_R_16_S_1_Si	10,87035194	river	UA_M6.5.1_0442	1	3	1	3	1
420	Don	Siverskyi Donets	Khvyliova Plotva	Borova	UA_R_16_S_1_Si	7,873173467	river	UA_M6.5.1_0443	2	3	1	3	1
421	Don	Siverskyi Donets	Khvyliova Plotva	Borova	no	1,692975552	HMWB	UA_M6.5.1_0444	2	3	3	3	1
422	Don	Siverskyi Donets	Khvyliova Plotva	Borova	UA_R_16_S_1_Si	7,283754947	river	UA_M6.5.1_0445	3	3	1	3	1
423	Don	Siverskyi Donets	Konoplyaniy Yar	Borova	UA_R_16_S_1_Si	17,87895948	river	UA_M6.5.1_0446	2	2	1	2	1
424	Don	Siverskyi Donets	Konoplyaniy Yar	Borova	UA_R_16_M_1_Si	5,579781031	river	UA_M6.5.1_0447	2	2	1	2	1
425	Don	Siverskyi Donets	Sukhyi Yar	Borova	UA_R_16_S_1_Si	21,62480173	river	UA_M6.5.1_0448	3	2	1	3	1
426	Don	Siverskyi Donets	Erik	Borova	no	3,353753186	HMWB	UA_M6.5.1_0449	1	2	3	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
427	Don	Siverskyi Donets	Erik	Borova	no	1,460573246	HMWB	UA_M6.5.1_0450	1	2	3	3	1
428	Don	Siverskyi Donets	Erik	Borova	UA_R_16_S_1_Si	15,49403422	river	UA_M6.5.1_0451	3	2	1	3	1
429	Don	Siverskyi Donets	Erik	Borova	UA_R_16_M_1_Si	25,18417681	river	UA_M6.5.1_0452	3	2	1	3	1
430	Don	Siverskyi Donets	Popasna	Erik	no	10,46601693	HMWB	UA_M6.5.1_0453	3	2	3	3	1
431	Don	Siverskyi Donets	Upper Bilenka	Siverskyi Donets	UA_R_16_S_1_Si	3,757034503	river	UA_M6.5.1_0454	1	3	1	3	1
432	Don	Siverskyi Donets	Upper Bilenka	Siverskyi Donets	UA_R_16_S_1_Ca	4,012728128	river	UA_M6.5.1_0455	2	3	1	3	1
433	Don	Siverskyi Donets	Upper Bilenka	Siverskyi Donets	no	2,083922752	HMWB	UA_M6.5.1_0456	1	3	3	3	1
434	Don	Siverskyi Donets	Upper Bilenka	Siverskyi Donets	UA_R_16_S_1_Ca	1,050379177	river	UA_M6.5.1_0457	1	3	1	3	1
435	Don	Siverskyi Donets	Upper Bilenka	Siverskyi Donets	UA_R_16_M_1_Ca	3,879911048	river	UA_M6.5.1_0458	3	3	1	3	1
436	Don	Siverskyi Donets	Upper Bilenka	Siverskyi Donets	UA_R_16_M_1_Si	11,66913972	river	UA_M6.5.1_0459	3	3	1	3	1
437	Don	Siverskyi Donets	Lower Bilenka	Siverskyi Donets	UA_R_16_S_1_Ca	20,67234734	river	UA_M6.5.1_0460	3	3	1	3	1
438	Don	Siverskyi Donets	Lower Bilenka	Siverskyi Donets	UA_R_16_M_1_Si	2,207332148	river	UA_M6.5.1_0461	2	3	1	3	1
439	Don	Siverskyi Donets	Olkhova	Siverskyi Donets	UA_R_16_S_1_Si	11,05563773	river	UA_M6.5.1_0462	3	3	1	3	1
440	Don	Siverskyi Donets	Olkhova	Siverskyi Donets	UA_R_16_L_1_Si	58,97815919	river	UA_M6.5.1_0463	3	3	1	3	1
441	Don	Siverskyi Donets	Olkhova	Siverskyi Donets	no	13,94523908	HMWB	UA_M6.5.1_0464	3	3	3	3	1
442	Don	Siverskyi Donets	Olkhova	Siverskyi Donets	UA_R_16_L_1_Si	146,4208956	river	UA_M6.5.1_0465	3	3	1	3	1
443	Don	Siverskyi Donets	Lozova	Aydar	UA_R_16_M_1_Si	2,233990162	river	UA_M6.5.1_0466	1	3	1	3	1
444	Don	Siverskyi Donets	Lozna	Aydar	UA_R_16_S_1_Si	1,356416165	river	UA_M6.5.1_0467	3	3	1	3	1
445	Don	Siverskyi Donets	Lozna	Aydar	UA_R_16_M_1_Si	29,61184358	river	UA_M6.5.1_0468	3	3	1	3	1
446	Don	Siverskyi Donets	No name	Aydar	UA_R_16_S_1_Si	13,28150894	river	UA_M6.5.1_0469	3	2	1	3	1
447	Don	Siverskyi Donets	No name	Aydar	UA_R_16_M_1_Si	1,347853953	river	UA_M6.5.1_0470	3	2	1	3	1
448	Don	Siverskyi Donets	Bilenka	Aydar	UA_R_16_L_1_Si	27,94255982	river	UA_M6.5.1_0471	3	2	1	3	3
449	Don	Siverskyi Donets	No name	White	UA_R_16_S_1_Si	2,050136479	river	UA_M6.5.1_0472	3	2	1	3	1
450	Don	Siverskyi Donets	Kamenka	Aydar	UA_R_16_S_1_Si	16,22879086	river	UA_M6.5.1_0473	2	3	1	3	1
451	Don	Siverskyi Donets	Kamenka	Aydar	UA_R_16_M_1_Si	2,908729599	river	UA_M6.5.1_0474	2	3	1	3	1
452	Don	Siverskyi Donets	Kamenka	Aydar	no	2,181005142	HMWB	UA_M6.5.1_0475	2	3	3	3	1
453	Don	Siverskyi Donets	Kamenka	Aydar	UA_R_16_M_1_Si	17,59625234	river	UA_M6.5.1_0476	3	3	1	3	1
454	Don	Siverskyi Donets	Kamenka	Aydar	no	1,679706493	HMWB	UA_M6.5.1_0477	3	3	3	3	1
455	Don	Siverskyi Donets	Kamenka	Aydar	UA_R_16_M_1_Si	18,84981591	river	UA_M6.5.1_0478	3	3	1	3	1
456	Don	Siverskyi Donets	Bila	Aydar	UA_R_16_S_1_Si	1,282571285	river	UA_M6.5.1_0479	1	3	1	3	1
457	Don	Siverskyi Donets	Bila	Aydar	no	51,87779963	HMWB	UA_M6.5.1_0480	3	3	3	3	1
458	Don	Siverskyi Donets	Bila	Aydar	UA_R_16_L_1_Si	7,043543063	river	UA_M6.5.1_0481	3	3	1	3	1
459	Don	Siverskyi Donets	Kozynka	Bila	no	1,637835781	HMWB	UA_M6.5.1_0482	1	2	3	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
460	Don	Siverskyi Donets	Kozynka	Bila	UA_R_16_S_1_Si	1,423428782	river	UA_M6.5.1_0483	1	2	1	2	1
461	Don	Siverskyi Donets	Kozynka	Bila	UA_R_16_M_1_Si	21,92254528	river	UA_M6.5.1_0484	3	2	1	3	1
462	Don	Siverskyi Donets	Shulgynka	Aydar	UA_R_16_S_1_Si	9,582540833	river	UA_M6.5.1_0485	1	2	1	2	1
463	Don	Siverskyi Donets	Shulgynka	Aydar	no	7,790874047	HMWB	UA_M6.5.1_0486	3	2	3	3	1
464	Don	Siverskyi Donets	Yevsyug	Siverskyi Donets	no	9,575575811	HMWB	UA_M6.5.1_0487	2	3	3	3	1
465	Don	Siverskyi Donets	Yevsyug	Siverskyi Donets	UA_R_16_M_1_Si	72,12592044	river	UA_M6.5.1_0488	3	3	1	3	1
466	Don	Siverskyi Donets	Yevsyug	Siverskyi Donets	UA_R_16_L_1_Si	5,288981601	river	UA_M6.5.1_0489	3	3	1	3	1
467	Don	Siverskyi Donets	Hrymucha	Yevsyug	UA_R_16_S_1_Si	18,8662898	river	UA_M6.5.1_0490	3	2	1	3	1
468	Don	Siverskyi Donets	Zhuravka	Yevsyug	UA_R_16_S_1_Si	11,72322477	river	UA_M6.5.1_0491	2	2	1	2	1
469	Don	Siverskyi Donets	Zhuravka	Yevsyug	no	1,993348753	HMWB	UA_M6.5.1_0492	3	2	3	3	3
470	Don	Siverskyi Donets	Zhuravka	Yevsyug	UA_R_16_M_1_Si	3,101923131	river	UA_M6.5.1_0493	2	2	1	2	1
471	Don	Siverskyi Donets	Kovsyug	Yevsyug	UA_R_16_S_1_Ca	11,39366993	river	UA_M6.5.1_0494	3	3	1	3	1
472	Don	Siverskyi Donets	Kovsyug	Yevsyug	UA_R_16_S_1_Si	4,793142961	river	UA_M6.5.1_0495	3	3	1	3	1
473	Don	Siverskyi Donets	Kovsyug	Yevsyug	no	1,008851223	HMWB	UA_M6.5.1_0496	3	3	3	3	1
474	Don	Siverskyi Donets	Kovsyug	Yevsyug	UA_R_16_S_1_Si	5,165961659	river	UA_M6.5.1_0497	3	3	1	3	1
475	Don	Siverskyi Donets	Kovsyug	Yevsyug	UA_R_16_M_1_Si	37,79022767	river	UA_M6.5.1_0498	3	3	1	3	1
476	Don	Siverskyi Donets	Medvizha	Kovsyug	UA_R_16_S_1_Si	9,941115529	river	UA_M6.5.1_0499	1	2	1	2	1
477	Don	Siverskyi Donets	Medvizha	Kovsyug	no	1,65377525	HMWB	UA_M6.5.1_0500	1	2	3	3	1
478	Don	Siverskyi Donets	Medvizha	Kovsyug	UA_R_16_S_1_Si	4,705235033	river	UA_M6.5.1_0501	3	2	1	3	1
479	Don	Siverskyi Donets	Dovga	Kovsyug	UA_R_16_S_1_Si	12,07809068	river	UA_M6.5.1_0502	3	2	1	3	1
480	Don	Siverskyi Donets	Sukhodil	Kovsyug	UA_R_16_S_1_Si	21,62313043	river	UA_M6.5.1_0503	3	2	1	3	1
481	Don	Siverskyi Donets	Tepla	Siverskyi Donets	UA_R_16_S_1_Si	17,43573309	river	UA_M6.5.1_0504	3	3	1	3	1
482	Don	Siverskyi Donets	Tepla	Siverskyi Donets	UA_R_16_M_1_Si	23,6173167	river	UA_M6.5.1_0505	3	3	1	3	1
483	Don	Siverskyi Donets	Plotynna	Tepla	no	18,45949494	HMWB	UA_M6.5.1_0506	3	2	3	3	1
484	Don	Siverskyi Donets	Luganka (Lugan)	Siverskyi Donets	UA_R_16_S_2_Ca	4,978664193	river	UA_M6.5.1_0507	1	3	1	3	1
485	Don	Siverskyi Donets	Luganka (Lugan)	Siverskyi Donets	no	5,910472174	HMWB	UA_M6.5.1_0508	1	3	3	3	1
486	Don	Siverskyi Donets	Luganka (Lugan)	Siverskyi Donets	UA_R_16_M_1_Si	0,837727145	river	UA_M6.5.1_0510	1	3	1	3	1
487	Don	Siverskyi Donets	Luganka (Lugan)	Siverskyi Donets	UA_R_16_M_1_Ca	63,19482643	river	UA_M6.5.1_0512	3	3	1	3	3
488	Don	Siverskyi Donets	Luganka (Lugan)	Siverskyi Donets	UA_R_16_L_1_Ca	20,06694721	river	UA_M6.5.1_0513	3	3	1	3	1
489	Don	Siverskyi Donets	Luganka (Lugan)	Siverskyi Donets	UA_R_16_L_1_Si	28,14499315	river	UA_M6.5.1_0514	3	3	1	3	1
490	Don	Siverskyi Donets	Luganka (Lugan)	Siverskyi Donets	UA_R_16_L_1_Ca	79,16328078	river	UA_M6.5.1_0515	3	3	1	3	1
491	Don	Siverskyi Donets	Hurty	Luganka (Lugan)	UA_R_16_S_2_Ca	3,658395914	river	UA_M6.5.1_0516	1	2	1	2	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
492	Don	Siverskyi Donets	Hurty	Luganka (Lugan)	UA_R_16_S_1_Ca	4,431544819	river	UA_M6.5.1_0517	1	2	1	2	1
493	Don	Siverskyi Donets	Lozova	Luganka (Lugan)	UA_R_16_S_2_Ca	2,155223308	river	UA_M6.5.1_0518	1	3	1	3	1
494	Don	Siverskyi Donets	Lozova	Luganka (Lugan)	UA_R_16_S_1_Ca	5,104646025	river	UA_M6.5.1_0519	3	3	1	3	1
495	Don	Siverskyi Donets	Karapulka	Luganka (Lugan)	UA_R_16_S_2_Ca	4,013075767	river	UA_M6.5.1_0520	2	2	1	2	1
496	Don	Siverskyi Donets	Karapulka	Luganka (Lugan)	UA_R_16_S_1_Ca	5,566374167	river	UA_M6.5.1_0521	2	2	1	2	1
497	Don	Siverskyi Donets	Karapulka	Luganka (Lugan)	no	1,040195175	HMWB	UA_M6.5.1_0522	2	2	3	3	1
498	Don	Siverskyi Donets	Karapulka	Luganka (Lugan)	UA_R_16_S_1_Ca	1,348082398	river	UA_M6.5.1_0523	2	2	1	2	1
499	Don	Siverskyi Donets	Karapulka	Luganka (Lugan)	UA_R_16_S_1_Ca	3,049737514	river	UA_M6.5.1_0525	2	2	1	2	1
500	Don	Siverskyi Donets	Karapulka	Luganka (Lugan)	UA_R_16_M_1_Si	3,185352365	river	UA_M6.5.1_0526	3	2	1	3	1
501	Don	Siverskyi Donets	Skeleva	Luganka (Lugan)	UA_R_16_S_2_Ca	4,908210525	river	UA_M6.5.1_0527	1	2	1	2	1
502	Don	Siverskyi Donets	Skeleva	Luganka (Lugan)	UA_R_16_S_1_Ca	12,0372121	river	UA_M6.5.1_0528	3	2	1	3	1
503	Don	Siverskyi Donets	Kartomysha	Luganka (Lugan)	UA_R_16_S_1_Ca	9,800247528	river	UA_M6.5.1_0529	3	2	1	3	1
504	Don	Siverskyi Donets	Zapadna	Luganka (Lugan)	UA_R_16_S_2_Ca	2,494930211	river	UA_M6.5.1_0530	1	2	1	2	1
505	Don	Siverskyi Donets	Zapadna	Luganka (Lugan)	UA_R_16_S_1_Ca	7,890866044	river	UA_M6.5.1_0531	1	2	1	2	1
506	Don	Siverskyi Donets	Sanzharivka	Luganka (Lugan)	UA_R_16_S_2_Ca	5,434634446	river	UA_M6.5.1_0532	1	2	1	2	1
507	Don	Siverskyi Donets	Sanzharivka	Luganka (Lugan)	UA_R_16_S_1_Ca	17,36046938	river	UA_M6.5.1_0533	3	2	1	3	1
508	Don	Siverskyi Donets	Sanzharivka	Luganka (Lugan)	UA_R_16_M_1_Ca	5,541918031	river	UA_M6.5.1_0534	3	2	1	3	1
509	Don	Siverskyi Donets	Lomovatka	Luganka (Lugan)	UA_R_16_S_2_Ca	3,873145773	river	UA_M6.5.1_0535	3	2	1	3	1
510	Don	Siverskyi Donets	Lomovatka	Luganka (Lugan)	UA_R_16_S_1_Ca	12,30716175	river	UA_M6.5.1_0536	3	2	1	3	1
511	Don	Siverskyi Donets	Komyshuvakha	Luganka (Lugan)	UA_R_16_S_1_Ca	5,040943923	river	UA_M6.5.1_0537	3	2	1	3	3
512	Don	Siverskyi Donets	Komyshuvakha	Luganka (Lugan)	no	1,101899728	HMWB	UA_M6.5.1_0538	3	2	3	3	1
513	Don	Siverskyi Donets	Komyshuvakha	Luganka (Lugan)	UA_R_16_S_1_Ca	11,63974864	river	UA_M6.5.1_0539	3	2	1	3	3
514	Don	Siverskyi Donets	Komyshuvakha	Luganka (Lugan)	UA_R_16_M_1_Ca	5,966478486	river	UA_M6.5.1_0540	3	2	1	3	3
515	Don	Siverskyi Donets	Orikhova	Luganka (Lugan)	UA_R_16_S_1_Ca	8,366934107	river	UA_M6.5.1_0541	3	2	1	3	1
516	Don	Siverskyi Donets	Komyshuvakha	Luganka (Lugan)	UA_R_16_S_2_Ca	1,906117526	river	UA_M6.5.1_0542	1	2	1	2	1
517	Don	Siverskyi Donets	Komyshuvakha	Luganka (Lugan)	UA_R_16_S_1_Ca	15,35615306	river	UA_M6.5.1_0543	3	2	1	3	1
518	Don	Siverskyi Donets	Komyshuvakha	Luganka (Lugan)	UA_R_16_M_1_Ca	6,673326145	river	UA_M6.5.1_0544	3	2	1	3	1
519	Don	Siverskyi Donets	Komyshuvakha	Luganka (Lugan)	UA_R_16_M_1_Si	3,547563842	river	UA_M6.5.1_0545	3	2	1	3	1
520	Don	Siverskyi Donets	Lozova (Lozovenka)	Luganka (Lugan)	UA_R_16_S_2_Ca	3,808204302	river	UA_M6.5.1_0546	1	3	1	3	1
521	Don	Siverskyi Donets	Lozova (Lozovenka)	Luganka (Lugan)	no	1,062586898	HMWB	UA_M6.5.1_0547	1	3	3	3	1
522	Don	Siverskyi Donets	Lozova (Lozovenka)	Luganka (Lugan)	UA_R_16_S_2_Ca	5,020795926	river	UA_M6.5.1_0548	1	3	1	3	1
523	Don	Siverskyi Donets	Lozova (Lozovenka)	Luganka (Lugan)	UA_R_16_S_1_Ca	11,39028227	river	UA_M6.5.1_0549	3	3	1	3	1
524	Don	Siverskyi Donets	Lozova (Lozovenka)	Luganka (Lugan)	UA_R_16_M_1_Ca	30,5020187	river	UA_M6.5.1_0550	3	3	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
525	Don	Siverskyi Donets	Lozova (Lozovenka)	Luganka (Lugan)	UA_R_16_M_1_Si	1,266892352	river	UA_M6.5.1_0551	3	3	1	3	1
526	Don	Siverskyi Donets	Bila (Bila Lugan)	Luganka (Lugan)	no	10,05656259	HMWB	UA_M6.5.1_0552	1	2	3	3	1
527	Don	Siverskyi Donets	Bila (Bila Lugan)	Luganka (Lugan)	UA_R_16_S_1_Ca	7,115936264	river	UA_M6.5.1_0553	3	2	1	3	1
528	Don	Siverskyi Donets	Bila (Bila Lugan)	Luganka (Lugan)	UA_R_16_M_1_Ca	29,51667636	river	UA_M6.5.1_0554	3	2	1	3	1
529	Don	Siverskyi Donets	Bila (Bila Lugan)	Luganka (Lugan)	UA_R_16_M_1_Ca	39,38307352	river	UA_M6.5.1_0556	3	2	1	3	1
530	Don	Siverskyi Donets	Gorodna	Bila (Bila Lugan)	no	6,591817446	HMWB	UA_M6.5.1_0557	1	2	3	3	1
531	Don	Siverskyi Donets	Gorodna	Bila (Bila Lugan)	UA_R_16_S_1_Ca	2,190590776	river	UA_M6.5.1_0558	3	2	1	3	1
532	Don	Siverskyi Donets	Chernushyna	Bila (Bila Lugan)	UA_R_16_S_2_Ca	4,965072713	river	UA_M6.5.1_0559	1	2	1	2	1
533	Don	Siverskyi Donets	Chernushyna	Bila (Bila Lugan)	no	1,5303001	HMWB	UA_M6.5.1_0560	1	2	3	3	1
534	Don	Siverskyi Donets	Chernushyna	Bila (Bila Lugan)	UA_R_16_S_2_Ca	2,610944034	river	UA_M6.5.1_0561	1	2	1	2	1
535	Don	Siverskyi Donets	Chernushyna	Bila (Bila Lugan)	UA_R_16_S_1_Ca	6,763872806	river	UA_M6.5.1_0562	3	2	1	3	1
536	Don	Siverskyi Donets	Utkina	Bila (Bila Lugan)	UA_R_16_S_2_Ca	3,313988641	river	UA_M6.5.1_0563	3	2	1	3	1
537	Don	Siverskyi Donets	Utkina	Bila (Bila Lugan)	UA_R_16_S_1_Ca	8,597083041	river	UA_M6.5.1_0564	3	2	1	3	1
538	Don	Siverskyi Donets	Dovga	Bila (Bila Lugan)	no	3,370257249	HMWB	UA_M6.5.1_0565	1	2	3	3	1
539	Don	Siverskyi Donets	Dovga	Bila (Bila Lugan)	UA_R_16_S_1_Ca	11,21764303	river	UA_M6.5.1_0566	3	2	1	3	1
540	Don	Siverskyi Donets	Komyshuvakha	Bila (Bila Lugan)	UA_R_16_S_1_Ca	10,63639579	river	UA_M6.5.1_0567	3	3	1	3	1
541	Don	Siverskyi Donets	Olkhivka	Luganka (Lugan)	UA_R_16_S_2_Ca	8,747780822	river	UA_M6.5.1_0568	1	3	1	3	1
542	Don	Siverskyi Donets	Olkhivka	Luganka (Lugan)	UA_R_16_S_1_Ca	10,70426229	river	UA_M6.5.1_0569	3	3	1	3	1
543	Don	Siverskyi Donets	Olkhivka	Luganka (Lugan)	no	3,604370217	HMWB	UA_M6.5.1_0570	3	3	3	3	1
544	Don	Siverskyi Donets	Olkhivka	Luganka (Lugan)	UA_R_16_M_1_Ca	61,88717566	river	UA_M6.5.1_0571	3	3	1	3	1
545	Don	Siverskyi Donets	Vasyukova	Olkhivka	UA_R_16_S_2_Ca	6,297573583	river	UA_M6.5.1_0572	3	2	1	3	1
546	Don	Siverskyi Donets	Vasyukova	Olkhivka	UA_R_16_S_1_Ca	8,866673111	river	UA_M6.5.1_0573	3	2	1	3	1
547	Don	Siverskyi Donets	Yulyna	Vasyukova	UA_R_16_S_2_Ca	6,032651587	river	UA_M6.5.1_0574	3	2	1	3	1
548	Don	Siverskyi Donets	Yulyna	Vasyukova	UA_R_16_S_1_Ca	3,861623052	river	UA_M6.5.1_0575	3	2	1	3	1
549	Don	Siverskyi Donets	Orikhivka	Olkhivka	UA_R_16_S_2_Ca	2,952074896	river	UA_M6.5.1_0576	2	2	1	2	1
550	Don	Siverskyi Donets	Orikhivka	Olkhivka	UA_R_16_S_1_Ca	12,35215601	river	UA_M6.5.1_0577	2	2	1	2	1
551	Don	Siverskyi Donets	Sukha	Olkhivka	no	4,178575625	HMWB	UA_M6.5.1_0578	3	2	3	3	1
552	Don	Siverskyi Donets	Sukha	Olkhivka	UA_R_16_S_1_Ca	10,63520674	river	UA_M6.5.1_0579	3	2	1	3	1
553	Don	Siverskyi Donets	Sukha	Olkhivka	no	1,798057552	HMWB	UA_M6.5.1_0580	2	2	3	3	1
554	Don	Siverskyi Donets	Sukha	Olkhivka	UA_R_16_S_1_Ca	4,266596212	river	UA_M6.5.1_0581	2	2	1	2	1
555	Don	Siverskyi Donets	Verkhnio-Olkhova	Siverskyi Donets	UA_R_16_S_1_Si	21,01936207	river	UA_M6.5.1_0582	2	3	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
556	Don	Siverskyi Donets	Verkhnio-Olkhova	Siverskyi Donets	UA_R_16_M_1_Si	0,716849249	river	UA_M6.5.1_0583	2	3	1	3	1
557	Don	Siverskyi Donets	Brodok	Verkhne-Olkhovaya	UA_R_16_S_1_Si	17,46525452	river	UA_M6.5.1_0584	3	2	1	3	1
558	Don	Siverskyi Donets	Luganchyk	Siverskyi Donets	UA_R_16_S_2_Ca	18,96500373	river	UA_M6.5.1_0585	3	3	1	3	1
559	Don	Siverskyi Donets	Luganchyk	Siverskyi Donets	UA_R_16_S_1_Ca	8,958904796	river	UA_M6.5.1_0586	3	3	1	3	1
560	Don	Siverskyi Donets	Luganchyk	Siverskyi Donets	UA_R_16_M_1_Ca	66,02781746	river	UA_M6.5.1_0587	3	3	1	3	1
561	Don	Siverskyi Donets	Orikhova	Luganchyk	UA_R_16_S_2_Ca	4,449183497	river	UA_M6.5.1_0588	1	3	1	3	1
562	Don	Siverskyi Donets	Orikhova	Luganchyk	UA_R_16_S_1_Ca	9,066639211	river	UA_M6.5.1_0589	3	3	1	3	1
563	Don	Siverskyi Donets	Derkul	Siverskyi Donets	no	6,160339846	HMWB	UA_M6.5.1_0590	1	3	3	3	1
564	Don	Siverskyi Donets	Derkul	Siverskyi Donets	no	31,85460281	HMWB	UA_M6.5.1_0591	2	3	3	3	1
565	Don	Siverskyi Donets	Derkul	Siverskyi Donets	UA_R_16_M_1_Ca	14,36413249	river	UA_M6.5.1_0592	2	3	1	3	1
566	Don	Siverskyi Donets	Derkul	Siverskyi Donets	UA_R_16_L_1_Ca	16,28456907	river	UA_M6.5.1_0593	2	3	1	3	1
567	Don	Siverskyi Donets	Derkul	Siverskyi Donets	UA_R_16_L_1_Si	26,21324625	river	UA_M6.5.1_0594	2	3	1	3	1
568	Don	Siverskyi Donets	Derkul	Siverskyi Donets	UA_R_16_L_1_Ca	18,93004472	river	UA_M6.5.1_0595	2	3	1	3	1
569	Don	Siverskyi Donets	Derkul	Siverskyi Donets	UA_R_16_L_1_Si	55,85525817	river	UA_M6.5.1_0596	2	3	1	3	1
570	Don	Siverskyi Donets	Derkul	Siverskyi Donets	UA_R_16_L_1_Ca	6,659450217	river	UA_M6.5.1_0597	2	3	1	3	1
571	Don	Siverskyi Donets	Bila	Derkul	UA_R_16_S_1_Si	10,20967452	river	UA_M6.5.1_0598	1	3	1	3	1
572	Don	Siverskyi Donets	Bila	Derkul	no	3,413233967	HMWB	UA_M6.5.1_0599	1	3	3	3	1
573	Don	Siverskyi Donets	Bila	Derkul	UA_R_16_S_1_Si	1,144350642	river	UA_M6.5.1_0600	1	3	1	3	1
574	Don	Siverskyi Donets	Bila	Derkul	UA_R_16_M_1_Si	6,63056063	river	UA_M6.5.1_0601	3	3	1	3	1
575	Don	Siverskyi Donets	Lizna	Derkul	UA_R_16_S_1_Si	0,845403987	river	UA_M6.5.1_0602	3	2	1	3	1
576	Don	Siverskyi Donets	Lizna	Derkul	no	5,258658657	HMWB	UA_M6.5.1_0603	3	2	3	3	1
577	Don	Siverskyi Donets	Lizna	Derkul	UA_R_16_M_1_Si	15,81004351	river	UA_M6.5.1_0604	3	2	1	3	1
578	Don	Siverskyi Donets	Zhuravka	Derkul	UA_R_16_S_1_Si	13,71573181	river	UA_M6.5.1_0605	3	2	1	3	1
579	Don	Siverskyi Donets	Byshkin	Derkul	UA_R_16_S_1_Si	3,404834539	river	UA_M6.5.1_0606	3	2	1	3	1
580	Don	Siverskyi Donets	Byshkin	Derkul	UA_R_16_M_1_Ca	22,93928084	river	UA_M6.5.1_0607	3	2	1	3	1
581	Don	Siverskyi Donets	Skorodna	Byshkin	UA_R_16_S_1_Si	9,912241922	river	UA_M6.5.1_0608	1	2	1	2	1
582	Don	Siverskyi Donets	Skorodna	Byshkin	UA_R_16_S_1_Ca	5,241000031	river	UA_M6.5.1_0609	2	2	1	2	1
583	Don	Siverskyi Donets	Skorodna	Byshkin	UA_R_16_M_1_Ca	2,905334576	river	UA_M6.5.1_0610	2	2	1	2	1
584	Don	Siverskyi Donets	Skorodna	Byshkin	no	2,701101231	HMWB	UA_M6.5.1_0611	2	2	3	3	1
585	Don	Siverskyi Donets	Skorodna	Byshkin	UA_R_16_M_1_Ca	4,114581467	river	UA_M6.5.1_0612	2	2	1	2	1
586	Don	Siverskyi Donets	Dubovets	Derkul	UA_R_16_S_1_Si	1,637109936	river	UA_M6.5.1_0613	1	2	1	2	1
587	Don	Siverskyi Donets	Dubovets	Derkul	no	8,163679948	HMWB	UA_M6.5.1_0614	1	2	3	3	1
588	Don	Siverskyi Donets	Dubovets	Derkul	UA_R_16_M_1_Ca	1,651620813	river	UA_M6.5.1_0615	1	2	1	2	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
589	Don	Siverskyi Donets	Chugunka	Derkul	UA_R_16_S_1_Si	1,230208006	river	UA_M6.5.1_0616	1	2	1	2	1
590	Don	Siverskyi Donets	Chugunka	Derkul	UA_R_16_S_1_Ca	16,71436215	river	UA_M6.5.1_0617	3	2	1	3	1
591	Don	Siverskyi Donets	Povna	Derkul	UA_R_16_M_1_Si	4,002777919	river	UA_M6.5.1_0618	1	2	1	2	1
592	Don	Siverskyi Donets	Povna	Derkul	UA_R_16_L_1_Si	1,884591928	river	UA_M6.5.1_0619	1	2	1	2	1
593	Don	Siverskyi Donets	Rogalyk	Povna	UA_R_16_M_1_Si	0,297296798	river	UA_M6.5.1_0620	1	2	1	2	1
594	Don	Siverskyi Donets	Komyshuvakha	Povna	UA_R_16_S_1_Si	8,258804519	river	UA_M6.5.1_0621	3	2	1	3	1
595	Don	Siverskyi Donets	Komyshna	Povna	UA_R_16_S_1_Si	11,26623259	river	UA_M6.5.1_0622	3	2	1	3	1
596	Don	Siverskyi Donets	Komyshna	Povna	UA_R_16_M_1_Si	58,38228855	river	UA_M6.5.1_0623	3	2	1	3	1
597	Don	Siverskyi Donets	Komyshna	Povna	UA_R_16_L_1_Si	8,960842511	river	UA_M6.5.1_0624	3	2	1	3	1
598	Don	Siverskyi Donets	Milova	Komyshna	UA_R_16_S_1_Si	12,55829162	river	UA_M6.5.1_0625	3	2	1	3	1
599	Don	Siverskyi Donets	Milova	Komyshna	UA_R_16_M_1_Si	18,21653991	river	UA_M6.5.1_0626	3	2	1	3	1
600	Don	Siverskyi Donets	Cherepakha	Milova	UA_R_16_S_1_Si	15,77190204	river	UA_M6.5.1_0627	2	2	1	3	1
601	Don	Siverskyi Donets	Cherepakha	Milova	UA_R_16_M_1_Si	2,574872026	river	UA_M6.5.1_0628	2	2	1	3	1
602	Don	Siverskyi Donets	Berezovy	Komyshna	UA_R_16_S_1_Si	6,028559304	river	UA_M6.5.1_0629	1	2	1	3	1
603	Don	Siverskyi Donets	Berezovy	Komyshna	UA_R_16_M_1_Si	4,74109346	river	UA_M6.5.1_0630	1	2	1	2	1
604	Don	Siverskyi Donets	Berezovy	Komyshna	no	2,449980515	HMWB	UA_M6.5.1_0631	1	2	3	3	1
605	Don	Siverskyi Donets	Berezovy	Komyshna	UA_R_16_M_1_Si	4,328573684	river	UA_M6.5.1_0632	3	2	1	3	1
606	Don	Siverskyi Donets	Gerasimova (Tsapova)	Derkul	UA_R_16_S_1_Si	17,50145441	river	UA_M6.5.1_0633	3	2	1	3	1
607	Don	Siverskyi Donets	Matyakina	Siverskyi Donets	UA_R_16_M_1_Ca	0,143717006	river	UA_M6.5.1_0634	1	3	1	3	1
608	Don	Siverskyi Donets	Bila (Mokra)	Siverskyi Donets	UA_R_16_S_1_Ca	4,729215221	river	UA_M6.5.1_0635	3	3	1	3	1
609	Don	Siverskyi Donets	Bila (Mokra)	Siverskyi Donets	UA_R_16_M_1_Ca	14,35108668	river	UA_M6.5.1_0636	3	3	1	3	1
610	Don	Siverskyi Donets	Velyka Kamenka	Siverskyi Donets	UA_R_16_S_2_Ca	7,147624635	river	UA_M6.5.1_0637	3	3	1	3	1
611	Don	Siverskyi Donets	Velyka Kamenka	Siverskyi Donets	UA_R_16_S_1_Ca	12,35304031	river	UA_M6.5.1_0638	3	3	1	3	1
612	Don	Siverskyi Donets	Velyka Kamenka	Siverskyi Donets	UA_R_16_M_1_Ca	3,001442884	river	UA_M6.5.1_0639	2	3	1	3	1
613	Don	Siverskyi Donets	Velyka Kamenka	Siverskyi Donets	no	6,178286313	HMWB	UA_M6.5.1_0640	2	3	3	3	1
614	Don	Siverskyi Donets	Velyka Kamenka	Siverskyi Donets	UA_R_16_M_1_Ca	54,16992081	river	UA_M6.5.1_0641	3	3	1	3	1
615	Don	Siverskyi Donets	Velyka Kamenka	Siverskyi Donets	UA_R_16_L_1_Ca	33,02482369	river	UA_M6.5.1_0642	3	3	1	3	1
616	Don	Siverskyi Donets	Mala Kamenka	Velyka Kamenka	UA_R_16_S_2_Ca	9,837307195	river	UA_M6.5.1_0643	3	3	1	3	1
617	Don	Siverskyi Donets	Mala Kamenka	Velyka Kamenka	UA_R_16_S_1_Ca	9,074853605	river	UA_M6.5.1_0644	3	3	1	3	1
618	Don	Siverskyi Donets	Mechetna	Velyka Kamenka	UA_R_16_S_2_Ca	4,713113868	river	UA_M6.5.1_0645	3	2	1	3	1
619	Don	Siverskyi Donets	Mechetna	Velyka Kamenka	UA_R_16_S_1_Ca	12,77936975	river	UA_M6.5.1_0646	3	2	1	3	1
620	Don	Siverskyi Donets	Medvizhka	Velyka Kamenka	UA_R_16_S_2_Ca	7,309178062	river	UA_M6.5.1_0647	3	2	1	3	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
621	Don	Siverskyi Donets	Medvizhka	Velyka Kamenka	UA_R_16_S_1_Ca	9,476780369	river	UA_M6.5.1_0648	3	2	1	3	1
622	Don	Siverskyi Donets	Medvizhka	Velyka Kamenka	UA_R_16_M_1_Ca	9,992037408	river	UA_M6.5.1_0649	1	2	1	2	1
623	Don	Siverskyi Donets	Medvizhka	Velyka Kamenka	no	2,593232038	HMWB	UA_M6.5.1_0650	1	2	3	3	1
624	Don	Siverskyi Donets	Medvizhka	Velyka Kamenka	UA_R_16_M_1_Ca	3,188536482	river	UA_M6.5.1_0651	3	2	1	3	1
625	Don	Siverskyi Donets	Kamenka	Medvizhka	UA_R_16_S_2_Ca	7,868747142	river	UA_M6.5.1_0652	3	3	1	3	1
626	Don	Siverskyi Donets	Kamenka	Medvizhka	UA_R_16_S_1_Ca	12,52806525	river	UA_M6.5.1_0653	3	3	1	3	1
627	Don	Siverskyi Donets	Dovzhyk	Velyka Kamenka	UA_R_16_S_2_Ca	4,796024947	river	UA_M6.5.1_0654	1	2	1	2	1
628	Don	Siverskyi Donets	Dovzhyk	Velyka Kamenka	UA_R_16_S_1_Ca	5,966387799	river	UA_M6.5.1_0655	3	2	1	3	1
629	Don	Siverskyi Donets	Dovzhyk	Velyka Kamenka	no	2,138112416	HMWB	UA_M6.5.1_0656	2	2	3	3	1
630	Don	Siverskyi Donets	Dovzhyk	Velyka Kamenka	UA_R_16_S_1_Ca	3,491660458	river	UA_M6.5.1_0657	2	2	1	2	1
631	Don	Siverskyi Donets	Dovzhyk	Velyka Kamenka	UA_R_16_M_1_Ca	15,15466622	river	UA_M6.5.1_0658	3	2	1	3	1
632	Don	Siverskyi Donets	Derevechka	Velyka Kamenka	UA_R_16_S_2_Ca	0,996107504	river	UA_M6.5.1_0659	1	2	1	2	1
633	Don	Siverskyi Donets	Derevechka	Velyka Kamenka	UA_R_16_S_1_Ca	13,10285855	river	UA_M6.5.1_0660	2	2	1	2	1
634	Don	Siverskyi Donets	Derevechka	Velyka Kamenka	UA_R_16_M_1_Ca	6,903535274	river	UA_M6.5.1_0661	2	2	1	2	1
635	Don	Siverskyi Donets	Derevechka	Derevechka	UA_R_16_S_2_Ca	3,304606408	river	UA_M6.5.1_0662	3	2	1	2	1
636	Don	Siverskyi Donets	Derevechka	Derevechka	UA_R_16_S_1_Ca	10,98143804	river	UA_M6.5.1_0663	3	2	1	2	1
637	Don	Siverskyi Donets	Upper Provallia	Velyka Kamenka	UA_R_16_S_2_Ca	1,520838045	river	UA_M6.5.1_0664	2	2	1	2	1
638	Don	Siverskyi Donets	Upper Provallia	Velyka Kamenka	UA_R_16_S_1_Ca	10,7556179	river	UA_M6.5.1_0665	2	2	1	2	1
639	Don	Siverskyi Donets	Upper Provallia	Velyka Kamenka	UA_R_16_M_1_Ca	19,25504022	river	UA_M6.5.1_0666	2	2	1	2	1
640	Don	Siverskyi Donets	LowerProvallia	Velyka Kamenka	UA_R_16_M_1_Ca	9,313188131	river	UA_M6.5.1_0667	1	2	1	2	1
641	Don	Siverskyi Donets	Milova	Kalytva	UA_R_16_S_2_Si	1,526174554	river	UA_M6.5.1_0668	1	2	1	2	1
642	Don	Siverskyi Donets	Milova	Kalytva	UA_R_16_S_1_Si	5,125921557	river	UA_M6.5.1_0669	1	2	1	2	1
643	Don	Siverskyi Donets	Milova	Kalytva	no	1,668526286	HMWB	UA_M6.5.1_0670	1	2	3	3	1
644	Don	Siverskyi Donets	Milova	Kalytva	UA_R_16_S_1_Si	2,258734428	river	UA_M6.5.1_0671	1	2	1	2	1
645	Don	Siverskyi Donets	Kundryucha	Siverskyi Donets	UA_R_16_S_2_Ca	5,516858311	river	UA_M6.5.1_0672	1	3	1	3	1
646	Don	Siverskyi Donets	Kundryucha	Siverskyi Donets	no	1,600228027	HMWB	UA_M6.5.1_0673	3	3	3	3	1
647	Don	Siverskyi Donets	Kundryucha	Siverskyi Donets	UA_R_16_S_2_Ca	1,791107578	river	UA_M6.5.1_0674	3	3	1	3	1
648	Don	Siverskyi Donets	Kundryucha	Siverskyi Donets	no	8,802154767	HMWB	UA_M6.5.1_0675	2	3	3	3	1
649	Don	Siverskyi Donets	Kundryucha	Siverskyi Donets	no	5,59913212	HMWB	UA_M6.5.1_0676	2	3	3	3	1
650	Don	Siverskyi Donets	Talova	Kundryucha	UA_R_16_S_2_Ca	11,23692112	river	UA_M6.5.1_0677	1	2	1	2	1
651	Don	Siverskyi Donets	Talova	Kundryucha	no	2,979469879	HMWB	UA_M6.5.1_0678	1	2	3	3	1
652	Don	Siverskyi Donets	Velyka Burgustka	Kundryucha	UA_R_16_S_2_Ca	8,886230955	river	UA_M6.5.1_0679	2	2	1	2	1
653	Don	Siverskyi Donets	Velyka Burgustka	Kundryucha	UA_R_16_S_1_Ca	13,16234935	river	UA_M6.5.1_0680	2	2	1	2	1

#	River basin	River sub-basin	Name of the SWB	Where does the SWB go?	Type SWB	Length, km	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
												Good ecological status/potential	Good chemical status
654	Don	Lower Don	Pravyi Tuzlov	Tuzlov	UA_R_16_S_1_Ca	4,3685686	river	UA_M6.5.2_0681	1	2	3	3	1
655	Don	Lower Don	Seredniy Tuzlov	Tuzlov	no	3,480744683	HMWB	UA_M6.5.2_0682	2	2	1	2	1
656	Don	Lower Don	Livyi Tuzlov	Tuzlov	no	4,475314615	HMWB	UA_M6.5.2_0683	2	2	3	3	1
657	Don	Lower Don	Kripka	Tuzlov	no	3,215898283	HMWB	UA_M6.5.2_0684	3	2	1	3	1
658	Don	Lower Don	Kripka	Tuzlov	UA_R_16_S_1_Ca	8,323714335	river	UA_M6.5.2_0685	1	1	1	1	1
659	Don	Lower Don	Kripka	Tuzlov	no	1,663607297	HMWB	UA_M6.5.2_0686	2	2	3	3	1
660	Don	Siverskyi Donets	Kripka	Tuzlov	UA_R_16_M_1_Ca	11,34303417	river	UA_M6.5.1_0687	3	2	1	3	1
661	Don	Siverskyi Donets	Dnipro-Donbass channel		no	2,883749564	AWB	UA_M6.5.1_0688	1	2	3	3	1
662	Don	Siverskyi Donets	Siverskyi Donets - Donbass channel		no	106,3002115	AWB	UA_M6.5.1_0689	1	2	3	3	1

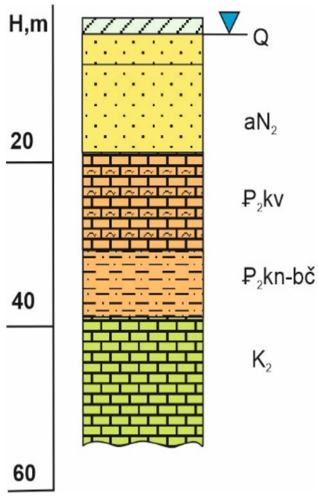
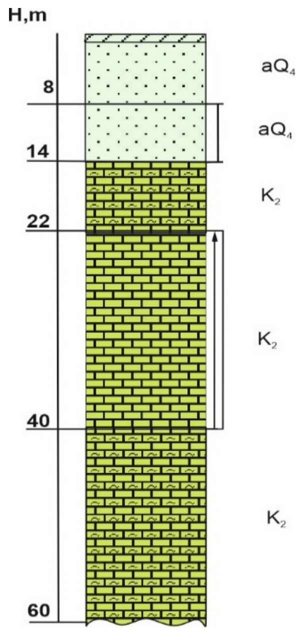
Polygonal SWBs

#	River basin	River sub-basin	Name of the SWB	Type of SWB	Area, km^2	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
											Good ecological status/potential	Good chemical status
1	Don	Siverskyi Donets	Pechenizke reservoir	no	72,21	HMWB	UA_M6.5.1_0002	1	3	3	3	1
2	Don	Siverskyi Donets	Rayhorodske reservoir	no	2,54	HMWB	UA_M6.5.1_0005	1	2	3	3	1
3	Don	Siverskyi Donets	Rogozyanske reservoir	no	4,76	HMWB	UA_M6.5.1_0057	1	3	3	3	1
4	Don	Siverskyi Donets	Lozovenkivske reservoir	no	0,95	HMWB	UA_M6.5.1_0074	1	2	3	3	1
5	Don	Siverskyi Donets	Travianske reservoir	no	4,83	HMWB	UA_M6.5.1_0077	1	3	3	3	1
6	Don	Siverskyi Donets	Muromske reservoir	no	3,36	HMWB	UA_M6.5.1_0085	1	3	3	3	1
7	Don	Siverskyi Donets	Vyalivske reservoir	no	1,62	HMWB	UA_M6.5.1_0088	1	3	3	3	1
8	Don	Siverskyi Donets	Krasnopavlivske reservoir	no	27,29	HMWB	UA_M6.5.1_0162	1	3	3	3	1
9	Don	Siverskyi Donets	Oskilske reservoir	no	91,21	HMWB	UA_M6.5.1_0189	1	3	3	3	1
10	Don	Siverskyi Donets	Rusynoyarivske reservoir	no	0,45	HMWB	UA_M6.5.1_0254	1	3	3	3	1
11	Don	Siverskyi Donets	Sofiyivske reservoir	no	0,67	HMWB	UA_M6.5.1_0256	1	3	3	3	1
12	Don	Siverskyi Donets	Makiivske (Yasynovske) reservoir	no	1,1	HMWB	UA_M6.5.1_0270	1	3	3	3	1

#	River basin	River sub-basin	Name of the SWB	Type of SWB	Area, km^2	Category of SWB	SWB code	Point sources	Diffuse sources	Hydromorphology	Risk of not achieving environmental objectives	
											Good ecological status/potential	Good chemical status
13	Don	Siverskyi Donets	Horlivske reservoir	no	0,95	HMWB	UA_M6.5.1_0288	1	2	3	3	1
14	Don	Siverskyi Donets	Pervomaiske reservoir	no	0,63	HMWB	UA_M6.5.1_0294	1	3	3	3	1
15	Don	Siverskyi Donets	Kleban-Bykske reservoir	no	5,33	HMWB	UA_M6.5.1_0298	1	3	3	3	1
16	Don	Siverskyi Donets	Sadove reservoir	no	0,35	HMWB	UA_M6.5.1_0314	1	3	3	3	1
17	Don	Siverskyi Donets	Markivske reservoir	no	0,51	HMWB	UA_M6.5.1_0316	1	3	3	3	1
18	Don	Siverskyi Donets	Mayachkivske reservoir (Kramatorske)	no	4,49	HMWB	UA_M6.5.1_0327	1	3	3	3	1
19	Don	Siverskyi Donets	Cherkaske reservoir	no	0,23	HMWB	UA_M6.5.1_0349	1	2	3	3	1
20	Don	Siverskyi Donets	Berkhivske reservoir	no	0,59	HMWB	UA_M6.5.1_0372	1	3	3	3	1
21	Don	Siverskyi Donets	Ivanodarivske reservoir	no	0,25	HMWB	UA_M6.5.1_0395	1	3	3	3	1
22	Don	Siverskyi Donets	Zvanivske reservoir	no	0,42	HMWB	UA_M6.5.1_0397	1	3	3	3	1
23	Don	Siverskyi Donets	Verkhnekamenske reservoir	no	0,67	HMWB	UA_M6.5.1_0401	1	3	3	3	1
24	Don	Siverskyi Donets	Vuglegirske reservoir	no	14,23	HMWB	UA_M6.5.1_0509	1	3	3	3	1
25	Don	Siverskyi Donets	Myronivske reservoir	no	3,66	HMWB	UA_M6.5.1_0511	1	3	3	3	1
26	Don	Siverskyi Donets	Luhanske reservoir	no	0,48	HMWB	UA_M6.5.1_0524	1	3	3	3	1
27	Don	Siverskyi Donets	Isakivske reservoir	no	2,88	HMWB	UA_M6.5.1_0555	1	2	3	3	1
28	Don	Siverskyi Donets	Sukhyi Lyman	no	5,2	HMWB	UA_M6.5.1_0690	1	2	3	3	1
29	Don	Siverskyi Donets	Ocheretiane reservoir	no	2,49	HMWB	UA_M6.5.1_0691	1	2	3	3	1
30	Don	Siverskyi Donets	Chaika reservoir	no	1,85	HMWB	UA_M6.5.1_0692	1	2	3	3	1
31	Don	Siverskyi Donets	Lyman	no	12,2	HMWB	UA_M6.5.1_0693	1	2	3	3	1
32	Don	Siverskyi Donets	No name (Liman)	UA_L_16_M_1_SH_Si	1,11	lake	UA_M6.5.1_0694	1	2	1	2	1
33	Don	Siverskyi Donets	Sump	no	0,64	AWB	UA_M6.5.1_0695	1	3	-	3	1
34	Don	Siverskyi Donets	Sump	no	4,69	AWB	UA_M6.5.1_0696	1	2	-	2	1
35	Don	Siverskyi Donets	Sump	no	1,59	AWB	UA_M6.5.1_0697	1	2	-	2	1
36	Don	Siverskyi Donets	Water coolers	no	6,83	AWB	UA_M6.5.1_0698	1	2	-	2	1
37	Don	Siverskyi Donets	Sumps	no	15,03	AWB	UA_M6.5.1_0699	1	2	-	2	1

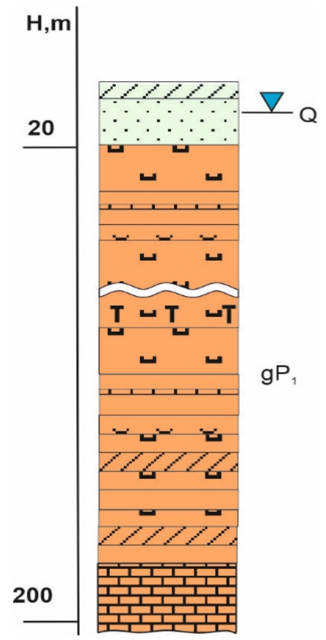
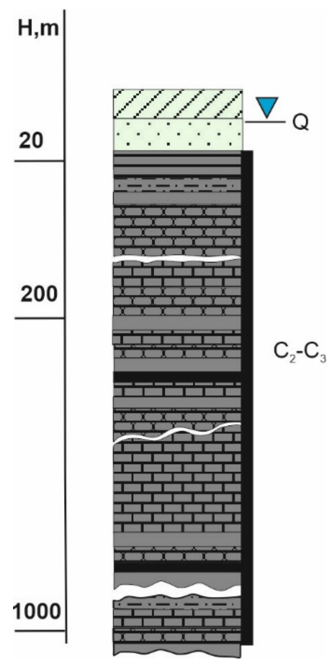
Annex 2. Characteristics of the identified GWBs, groups of GWBs

Table 1: Characteristics of GWB in alluvial sediments of the Quaternary system with mineralisation up to 5 g/dm^3

Parameters	Characteristics	Lithological and hydrogeological column
GWB code	UAM6510Q101, UAM6510Q104, UAM6510Q105, UAM6510Q106	
Name of the GWB	GWB in alluvial deposits of the Quaternary system with mineralisation up to 5 g/dm^3	
Area of distribution, km^2	1608, 828, 6893, 2850	
Geological index	aH, a, aDH, aD P_{III} -H, a^{1-5} P_{II-III}, a^{6-10} laP_1	
Lithology	Sands of various grains with clay layers, sandy loams, loams	
Type of aquifer	Non-pressure, locally pressurised	
Composition of rocks overlying the aquifer complex	Soils	
Thickness of the aquifer, m Min, Max, average	1 - 42; 20	
Filtration coefficient, Kf, m/day. Min, Max, average	1,5 - 25; 15	
Water permeability coefficient, T, m^2 /day. Min, Max, average	In press.	
Absolute groundwater level, m, Min, Max, avwrage	20 - 125; 120	
Annual amplitude of level fluctuations, m	0,5 - 2,0	
Used for water intake >10 m /day^3	No - UAM651Q101, UAM651Q104, UAM651Q106. Yes - UAM651Q105	
It is used for drinking, agricultural and industrial water supply	Widely used by the rural population	
Flow rate of wells and springs, l/s	Wells: 0.3 - 6.0; springs: 0.005 - 0.5; wells: 0,04 - 1,96	
Chemical composition (main cations and anions)	Sodium-calcium sulphate-hydrogen carbonate, calcium-sodium hydrogen carbonate-sulphate, calcium-magnesium (NSO^{3-} , SO_4^{2-} , Ca^{2+} , Na^+ , Mg^{2+}); M - 0.1-5.0 g/dm^3	
Main power supply	Precipitation, river flooding, groundwater runoff	
Relationship to surface water	Hydraulic connection to surface water	

Parameters	Characteristics	Lithological and hydrogeological column
Trend of level change (decreasing-increasing)	Natural fluctuations depending on rainfall	
The predominant type of human activity	Water supply for rural population, agriculture	
Chemical status	UAM6510Q101, UAM6510Q104; UAM6510Q106 - poor, UAM6510Q105 - good (preliminary assessment)	
Quantitative status	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	435 - 540	

Table 2: Characteristics of GWB in alluvial sediments of the Quaternary system with mineralisation over 5 g/dm^3

Parameters	Characteristics	Lithological and hydrogeological column
GWB	UAM6510Q102, UAM6510Q103	
Name of the GWB	GWB in alluvial sediments Quaternary system with mineralisation of more than 5 g/dm^3	
Area of distribution, km^2	142, 591	
Geological index	aH, a, aDH, aD P_{III} -H, a^{1-5} P_{II-III}, a^{6-10} laP_1	
Lithology	Sands of various grains with clay layers, sandy loams, loams	
Type of aquifer	Non-pressure, locally pressurised	
Composition of rocks overlying the aquifer complex	Soils	
Thickness of the aquifer, m Min, Max, average	1 - 21; 10	
Filtration coefficient, Kf, m/day. Min, Max, average	0,01 - 25; 10 - 15	
Water permeability coefficient, T, m^2 /day. Min, Max, average	In press.	
Absolute groundwater level, m, Min, Max, average	20 - 125; 120	
Annual amplitude of level fluctuations, m	±1	
Used for water intake >10 m /day^3	no	
It is used for drinking, agricultural and industrial water supply	Widely used by the rural population	
Flow rate of wells and springs, l/s	Wells: 0,01 - 3,4; wells: 0,01 - 4,97	
Chemical composition (main cations and anions)	Sulfate-hydrocarbonate calcium-sodium, sulphate-chloride (NSO^{3-} , SO_4^{2-} , Ca^{2+} , Na);$^{+}$ M - 0.5-13.0 g/dm^3	
Main power supply	Precipitation, river flooding, groundwater runoff	
Relationship to surface water	Hydraulic connection to surface water	
Trend of level change (decreasing-increasing)	Natural fluctuations depending on rainfall	
The predominant type of human activity	Water supply for rural population, agriculture	
Chemical status	Bad	
Quantitative status	Good	
Reliability of information (high/low)	High	

Parameters	Characteristics	Lithological and hydrogeological column
Annual precipitation, mm	464	

Table 3: Characteristics of GWB in alluvial sediments of Pliocene terraces

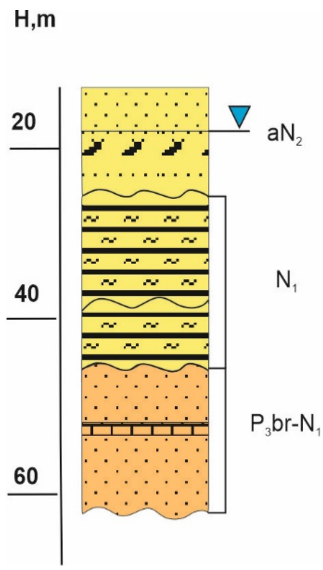
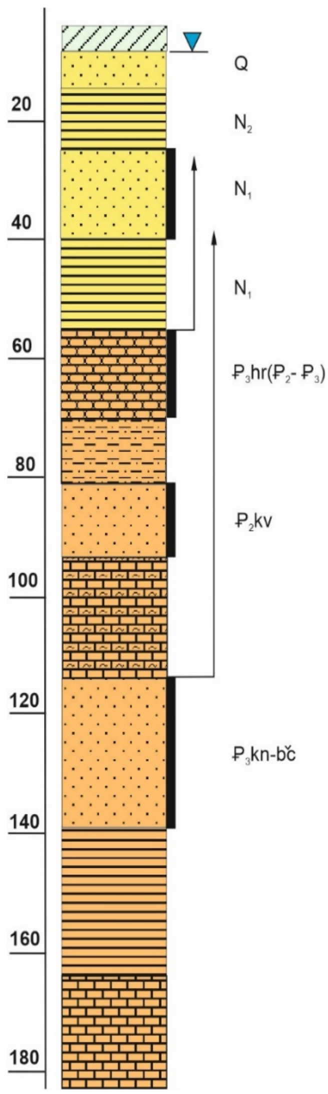
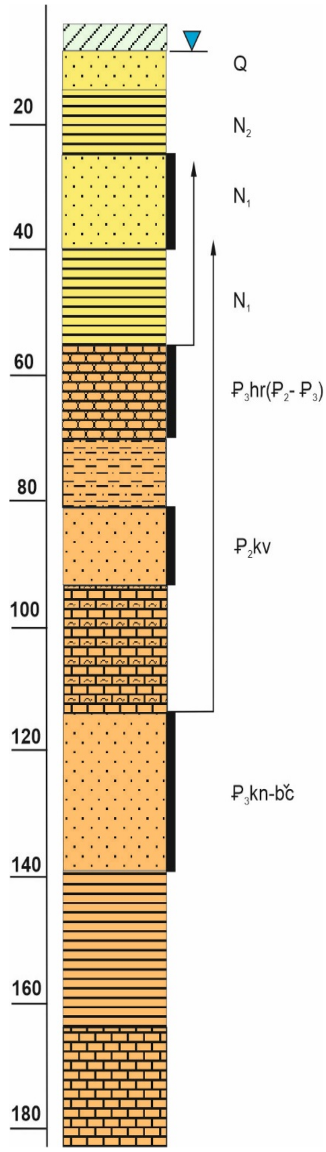
Parameters	Characteristics	Lithological and hydrogeological column
GWB	UAM6510N100	
Name of the GWB	GWB in alluvial sediments of Pliocene terraces	
Area of distribution, km^2	2908,5	
Geological index	aN_2	
Lithology	Brownish-grey, grey and yellow, clayey quartzey, multigrained sands	
Type of aquifer	Non-pressure, pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Soil, sands of alluvial quaternary deposits, possible upper water retention - single-age mottled clays	
Thickness of the aquifer, m Min, Max, average	5 - 25	
Filtration coefficient, Kf, m/day. Min, Max, average	0,08 - 1,2; 0,7	
Water permeability coefficient, T, m^2 /day. Min, Max, average	0,4 - 30; 15	
Absolute groundwater level, m. Min, Max, average	135 - 207; 150	
Annual amplitude of level fluctuations, m	±1 - 1,5	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	It is used for water supply of small objects	
Flow rate of wells and springs, l/s	0,8 - 2,5	
Chemical composition (main cations and anions)	Calcium hydrogen carbonate, calcium sodium hydrogen carbonate, calcium-magnesium (NSO^{3-} , SO^{4-} , Ca^{2+} , Na^{+} , Mg);$^{2+}$ M - up to 1 g/dm^3	
Main power supply	Infiltration of precipitation	
Relationship to surface water	Hydraulic connection to surface water	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Agriculture, water supply for rural population and small facilities	
Chemical state	Good (preliminary assessment)	
Quantitative state	Good	
Reliability of information (high/low)	Low	
Annual precipitation, mm	460	

Table 4. Characteristics of GWB in Eocene-Miocene sediments (₽$_{2-3}$ *hr*+ ₽$_3$ *br*, ₽$_2$ ob+ ₽$_3$ mž, ₽$_3$ *br* +*N*$_{21}$ np, N$_1$ np, ₽$_3$ br-N$_1$ sg)

Parameters	Characteristics	Lithological and hydrogeological column
GWB code	UAM651PG100	
Name of the GWB	GWB in Eocene-Miocene sediments	
Area of distribution, km^2	9300,8	
Geological index	₽$_{2-3}$ hr+₽$_3$ *br*, ₽$_2$ ob+ ₽$_3$ mž, ₽$_3$ *br* +*N*$_{21}$ np, N$_1$ np, ₽$_3$ br-N sg$_1$	
Lithology	Variegated sands with clay interbedded, sandstones and sometimes spinel siltstones	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Aquifer The Oligocene Beretska Formation and Miocene Novopetrivska Formation are overlain by red-brown and variegated clays	
Thickness of the aquifer, m Min, Max, average	48 - 150; 80	
Filtration coefficient, Kf, m/day. Min, Max, average	0,01 - 15; 8	
Water permeability coefficient, T, m^2 /day. Min, Max, average	0,48 - 750; 375	
Absolute groundwater level, m, Min, Max, average	1 - 125	
Annual amplitude of level fluctuations, m	±1 - 2	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	It is used for domestic water supply to small consumers and for production and technical needs	
Flow rate of wells and springs, l/s	Number of wells: 0.01 - 10; sources: up to 20	
Chemical composition (main cations and anions)	Sodium-calcium hydrogen carbonate, calcium-magnesium, sodium-calcium hydrogen carbonate (NSO$_3^-$, Na$^+$, Mg^{2+} Ca);$^{2+}$ M - 0.41-1.0 g/dm^3	
Main power supply	Infiltration of precipitation, flow from adjacent aquifers	
Relationship to surface water	Hydraulic connection to surface water in river valleys	
Trend in level change (decreasing-increasing)	Rising	
The predominant type of human activity	Agriculture, industry, municipal water supply	
Chemical state	Good (preliminary assessment)	

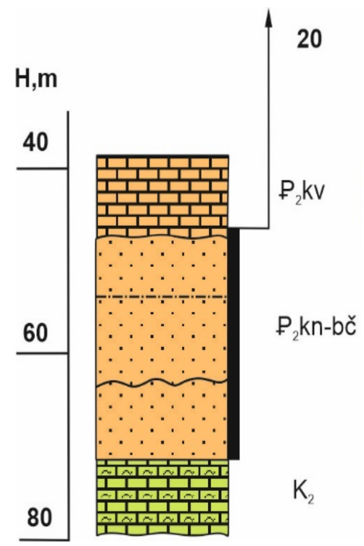
Parameters	Characteristics	Lithological and hydrogeological column
Quantitative state	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	409 - 454	

Table 5. Characteristics of the GWB in the Kyiv-Kharkiv, Beretska and Novopetrivska sediments (₽$_2$ kv-₽$_3$ br$_2$ +N$_1$ np, ₽$_{2-3}$ hr+₽$_3$ br-N$_1$ np, ₽$_3$ *br* +*N*$_{21}$ np)

Parameters	Characteristics	Lithological and hydrogeological column
GWB code	UAM651PG200	
Name of the GWB	GWB in Kyiv-Kharkiv, Beretska and Novopetrivska sediments	
Area of distribution, km^2	11894,7	
Geological index	₽$_2$ kv-₽$_3$ br$_2$ +N$_1$ np, ₽$_{2-3}$ hr +₽$_3$ br-N$_1$ np, ₽$_3$ *br* +*N np*$_{21}$	
Lithology	Sands and sandstones	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Loams, soils	
Thickness of the aquifer, m Min, Max, average	1 - 14; 10	
Filtration coefficient, Kf, m/day. Min, Max, average	0,001 - 15	
Water permeability coefficient, T, m^2 /day. Min, Max, average	0,001 - 210; 100	
Absolute groundwater level, m, Min, Max, average	5 - 89	
Annual amplitude of level fluctuations, m	±1 - 1,5	
Used for water intake >10 m /day^3	no	
It is used for drinking, agricultural and industrial water supply	Used by. for local water supply	
Flow rate of wells and springs, l/s	Wells: 1.0 - 3.1; springs: 0.001 - 0.4; wells: 0,01 - 0,2	
Chemical composition (main cations and anions)	Sodium bicarbonate, sodium sulphate-hydrogen carbonate (NSO^{3-} , SO^{4-} , Cl, Na);$^+$ M - 0.3-1.2 g/dm^3	
Main power supply	Infiltration of precipitation	
Relationship to surface water	Hydraulic connection to surface water in river valleys	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Agriculture	
Chemical state	Good (preliminary assessment)	
Quantitative state	Good	
Reliability of information (high/low)	High	

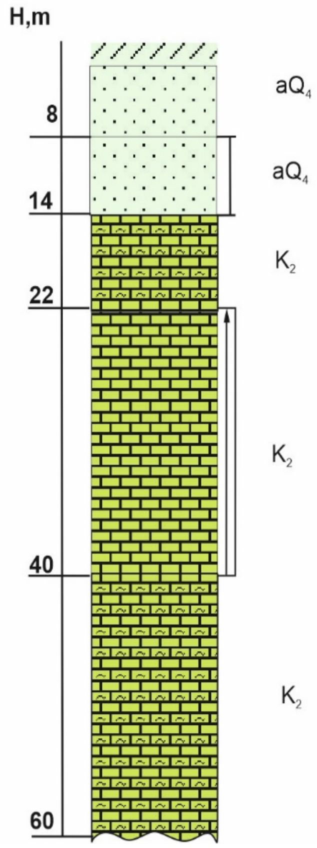
Parameters	Characteristics	Lithological and hydrogeological column
Annual precipitation, mm	409 - 540	

Table 6. Characteristics of the GWB in the Kaniv-Buchak sediments of the Eocene (₽$_2$ *kp-bč*, ₽$_2$ *kn+bč*, ₽$_2$ bč)

Parameters	Characteristics	Lithological and hydrogeological column
GWB code	UAM651 PG300	
Name of the GWB	GWB in the Kaniv-Buchak sediments of the Eocene	
Area of distribution, km^2	19348	
Geological index	₽$_2$ *kn-bč*, ₽$_2$ *kn+bč*, ₽ bč$_2$	
Lithology	Various grains of sand with a predominance of medium and fine grains	
Type of aquifer	Pressure	
Composition of rocks overlying the aquifer complex	Clays and marls of the Kyiv Formation	
Thickness of the aquifer, m Min, Max, average	15 - 25; 20	
Filtration coefficient, Kf, m/day. Min, Max, average	0,01 - 4,56	
Conductivity coefficient, T, m^2 /day. Min, Max, average	0,15 - 100; 50	
Absolute groundwater level, m, Min, Max, average	89 - 149	
Annual amplitude of level fluctuations, m	±0,1 - 1,5	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	It is the main source of water supply for individual facilities and settlements	
Flow rate of wells and springs, l/s	Wells: 0,04 - 11,1	
Chemical composition (main cations and anions)	Calcium hydrogen carbonate, sulfate-hydrogen carbonate calcium-magnesium, calcium-sodium (NSO_3^- , SO_4^- , Na^+ , Mg^{2+} Ca); $^{2+}$ M - up to 1.5 g/dm^3	
Main power supply	Infiltration of precipitation, flow from adjacent aquifers	
Relationship to surface water	Hydraulic connection to surface water in river valleys	
Trend in level change (decreasing-increasing)	-	
The predominant type of human activity	Agriculture, industry, municipal water supply	
Chemical status	Good	

Parameters	Characteristics	Lithological and hydrogeological column
Quantitative status	Good, but depression funnels have formed in the areas where large cities are located (Kharkiv, etc.)	
Reliability of information (high/low)	Low	
Annual precipitation, mm	450	

Table 7. Characteristics of GWB in Upper Cretaceous sediments (K_2) with mineralisation up to 2.5 g/dm^3

Parameters	**Characteristics**	**Lithological and hydrogeological column**
GWB code	UAM6510K101	
Name of the GWB	GWB in Upper Cretaceous sediments with mineralisation up to 2.5 g/dm^3	
Area of distribution, km^2	1219,6	
Geological index	K_2	
Lithology	Marl and chalk deposits	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Soils, alluvial sands of the Quaternary system, sands and sandstones of the Paleogene-Neogene	
Thickness of the aquifer, m Min, Max, average	10 - 100; 45	
Filtration coefficient, Kf, m/day. Min, Max, average	3,8 - 405; 10 - 45	
Water permeability coefficient, T, m^2 /day. Min, Max, average	20 - 300	
Absolute groundwater level, m, Min, Max, average	20 - 150	
Annual amplitude of level fluctuations, m	±0,3 - 0,5	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Centralised water supply; industrial and technical water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Sulfate-chloride-hydrocarbonate, sulphate-hydrocarbonate magnesium-sodium-calcium, sodium-calcium, M - 0.1-2.42 g/dm^3	
Main power supply	Infiltration of precipitation, flow from overlying aquifers	
Relationship to surface water	Hydraulic connection to surface water	
Trend in level change (decreasing-increasing)	decreases	
The predominant type of human activity	Agriculture, water supply to settlements, industry	
Chemical status	Poor (rhodanides, cyanides, nitrates are observed)	
Quantitative status	Poor (depression sinkhole due to operation)	
Reliability of information (high/low)	High	

Parameters	Characteristics	Lithological and hydrogeological column
Annual precipitation, mm	454 - 476	

Table 8. Characteristics of GWB in Upper Cretaceous sediments (K_2) with mineralisation up to 1.5 g/dm^3

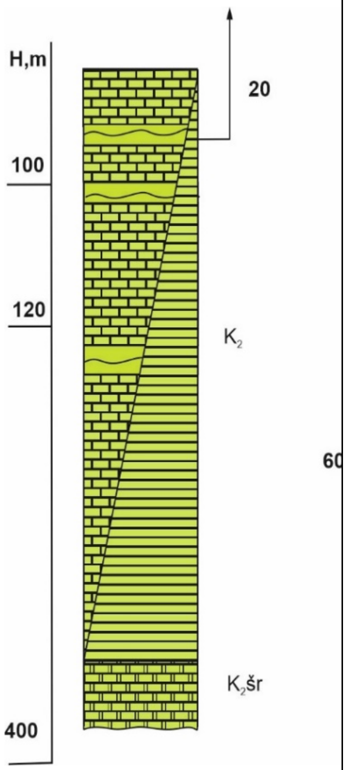
Parameters	**Characteristics**	**Lithological and hydrogeological column**
GWB code	UAM6510K102	
Name of the GWB	GWB in Upper Cretaceous sediments with mineralisation up to 1.5 g/dm^3	
Area of distribution, km^2	13110	
Geological index	K_2	
Lithology	Marl and chalk deposits	
Type of aquifer	Pressure	
Composition of rocks overlying the aquifer complex	Soils, alluvial sands of the Quaternary system, sands and sandstones of the Paleogene-Neogene	
Thickness of the aquifer, m Min, Max, average	60 - 100; 50 - 70	
Filtration coefficient, Kf, m/day. Min, Max, average	30,01 - 150; 11	
Water permeability coefficient, T, m^2 /day. Min, Max, average	20 - 300	
Absolute groundwater level, m, Min, Max, average	35 - 120; 100	
Annual amplitude of level fluctuations, m	±0,3 - 0,7	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Centralised water supply; industrial and technical water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Calcium hydrogen carbonate (NSO_3^- , SO_4^- , Ca^{2+} , Na); $^+$ M - up to 1.5 g/dm^3	
Main power supply	Infiltration of precipitation, flow from overlying aquifers	
Relationship to surface water	Yes	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Agriculture, water supply to settlements, industry	
Chemical status	Good	
Quantitative status	Good	
Reliability of information (high/low)	Low	
Annual precipitation, mm	454 - 476	

Table 9. Characteristics of GWB in Upper Cretaceous sediments (K_2) with mineralisation up to 1.0 g/dm^3

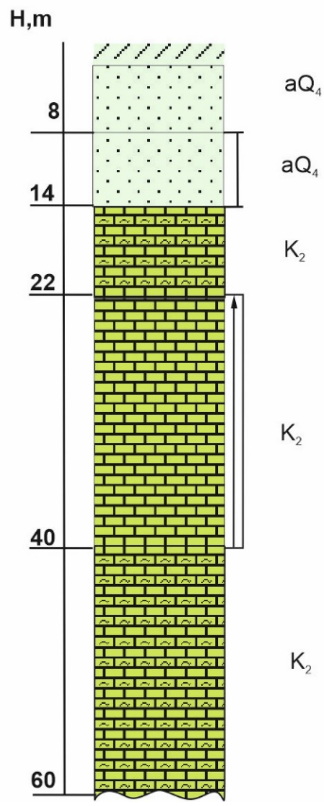
Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510K103	
Name of the GWB	GWB in Upper Cretaceous sediments with mineralisation up to 1.0 g/dm^3	
Area of distribution, km^2	2659,2	
Geological index	K_2	
Lithology	Marl and chalk deposits	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Soils, alluvial sands of the Quaternary system	
Thickness of the aquifer, m Min, Max, average	10 - 50; 35	
Filtration coefficient, Kf, m/day. Min, Max, average	0,72 - 226; 20 - 90	
Water permeability coefficient, T, m^2 /day. Min, Max, average	20 - 12000	
Absolute groundwater level, m, Min, Max, average	35 - 120	
Annual amplitude of level fluctuations, m	±0,3 - 0,6	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Centralised water supply; industrial and technical water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Chloride-hydrogen carbonate-sulfate, chloride-hydrogen carbonate, sodium-calcium sulphate-hydrogen carbonate (NSO_3^- , SO_4^- , Cl^- , Ca^{2+} , Na);$^+$ M - 0.2-0.9 g/dm^3	
Main power supply	Infiltration of precipitation	
Relationship to surface water	Yes	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Agriculture, water supply to settlements, industry	
Chemical status	Good	
Quantitative status	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	454 - 476	

Table 10. Characteristics of the GWB in Upper Cretaceous sediments (K_2 t-m)

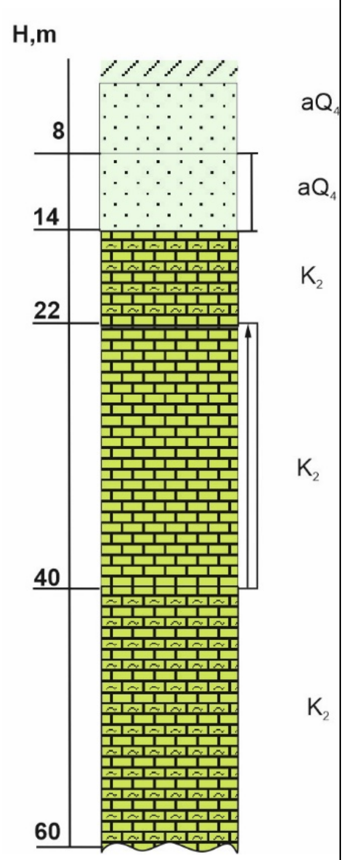
Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510K104	
Name of the GWB	GWB in Upper Cretaceous sediments with poor chemical condition	
Area of distribution, km^2	3693	
Geological index	K t-m_2	
Lithology	Marl and chalk deposits	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Soils, alluvial sands of the Quaternary system	
Thickness of the aquifer, m Min, Max, average	10 - 80; 20	
Filtration coefficient, Kf, m/day. Min, Max, average	7 - 80; 30	
Water permeability coefficient, T, m^2 /day. Min, Max, average	20 - 21000	
Absolute groundwater level, m, Min, Max, average	35 - 120	
Annual amplitude of level fluctuations, m	±0,3 - 0,5	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Centralised water supply; industrial and technical water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Chloride-hydrogen carbonate-sulfate, chloride-hydrocarbonate, sometimes sulphate-chloride magnesium-sodium-calcium (NSO_3^- , SO_4^- , Cl^- , Ca^{2+} , Na^+ , Mg^{2+}); M - 0.15-1.5 g/dm^3	
Main power supply	Infiltration of precipitation	
Relationship to surface water	Yes	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Agriculture, water supply to settlements, industry	
Chemical status	Poor (contamination with phenols, organic compounds, salt pollution)	
Quantitative status	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	454 - 476	

Table 11. Characteristics of the GWB in Upper Cretaceous sediments (K_2 t-m) with mineralisation up to 1.7 g/dm^3

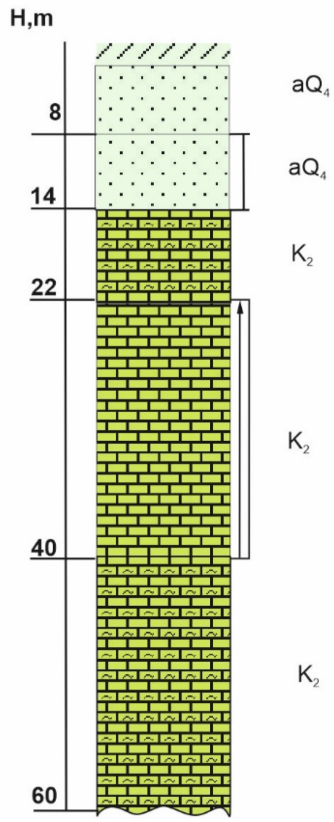
Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510K105	
Name of the GWB	GWB in Upper Cretaceous deposits with mineralisation up to 1.7 g/dm^3	
Area of distribution, km^2	3872	
Geological index	K t-m_2	
Lithology	Marl and chalk deposits	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Soils, alluvial sands of the Quaternary system	
Thickness of the aquifer, m Min, Max, average	20 - 60; 35	
Filtration coefficient, Kf, m/day. Min, Max, average	4,7 - 110; 25	
Water permeability coefficient, T, m^2 /day. Min, Max, average	In press.	
Absolute groundwater level, m, Min, Max, average	35 - 120	
Annual amplitude of level fluctuations, m	±0,3 - 0,5	
Used for water intake >10 m $/day^3$	yes	
It is used for drinking, agricultural and industrial water supply	Centralised water supply; industrial and technical water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Chloride-hydrogen carbonate, sulphate-chloride-hydrogen carbonate, sometimes sodium-calcium sulfate-chloride (NSO_3^- , SO_4^- , Cl^- , Ca^{2+} , Na); ^+M - 0.2-1.7 g/dm^3	
Main power supply	Infiltration of precipitation, flow from overlying aquifers	
Relationship to surface water	Yes	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Agriculture, water supply to settlements, industry	
Chemical status	Poor (pollution with phenols, organic compounds, nitrates)	
Quantitative status	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	454 - 476	

Table 12. Characteristics of GWB in Upper Cretaceous sediments (K_2 t-m) with mineralisation up to 2.1 g/dm^3

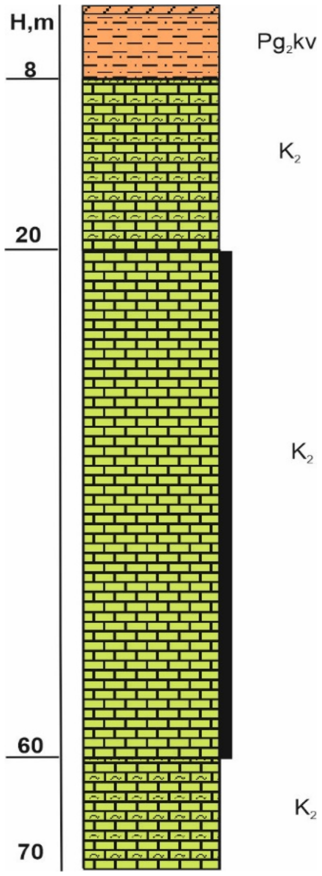
Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510K106	
Name of the GWB	GWB in Upper Cretaceous sediments with mineralisation up to 2.1 g/dm^3	
Area of distribution, km^2	3436,9	
Geological index	K t-m_2	
Lithology	Marl, sandstones, sands, chalk	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Soils, alluvial sands of the Quaternary system, Slightly permeable Paleogene sediments-clays, siltstones; clayey marl of the Upper Cretaceous	
Thickness of the aquifer, m Min, Max, average	20 - 40; 30	
Filtration coefficient, Kf, m/day. Min, Max, average	5 - 324; 90	
Water permeability coefficient, T, m^2 /day. Min, Max, average	In press.	
Absolute groundwater level, m, Min, Max, average	35 - 120	
Annual amplitude of level fluctuations, m	±0,3 - 0,5	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Centralised water supply; industrial and technical water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Mostly sulphate-hydrocarbonate, sometimes sodium-calcium chloride-sulfate (NSO_3^- , SO_4^- , Cl^- , Ca^{2+} , Na);$^+$M - 0.1-2.1 g/dm^3	
Main power supply	Infiltration of precipitation, flow from overlying aquifers	
Relationship to surface water	Yes	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Agriculture, water supply to settlements, industry	
Chemical status	Poor (pollution with phenols, organic compounds, nitrates)	
Quantitative status	Bad	
Reliability of information (high/low)	Good	
Annual precipitation, mm	454-460	

Table 13. Characteristics of the MHW in the Cretaceous Alb-Cenomanian sediments (K_1 al+K_2 s)

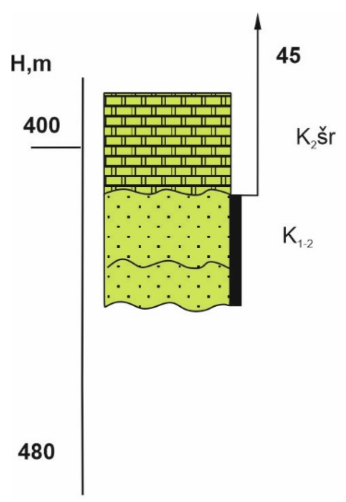
Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510K200	
Name of the GWB	GWB in the Alb-Cenomanian Cretaceous sediments	
Area of distribution, km^2	10177,7	
Geological index	K_1 al+K s_2	
Lithology	Variegated sands and sandstones of the Albanian Stage and medium-fine-grained sands of the Cenomanian Stage with clay interbeds and lenses	
Type of aquifer	Pressure	
Composition of rocks overlying the aquifer complex	Soils, alluvial sands, fractured Paleocene sandstones	
Thickness of the aquifer, m Min, Max, average	2 - 50; 25	
Filtration coefficient, Kf, m/day. Min, Max, average	0,6 - 4,7	
Water permeability coefficient, T, m^2 /day. Min, Max, average	20 - 200	
Absolute groundwater level, m, Min, Max, average	76 - 113; 100	
Annual amplitude of level fluctuations, m	-	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Domestic and drinking water supply in large cities and towns	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Hydrocarbonate, sodium (Ca^{2+} , Na^+); M - 1.12-1.14 g/dm^3	
Main power supply	Infiltration of precipitation, flows from overlying and underlying aquifers	
Relationship to surface water	No.	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Agriculture, water supply to settlements, industry	
Chemical status	Good	
Quantitative status	Good	
Reliability of information (high/low)	Low	
Annual precipitation, mm	454-476	

Table 14. Characteristics of the GWB in the Oxford and Kimeridge sediments of the Upper Jurassic (J_3 o, J_3 km)

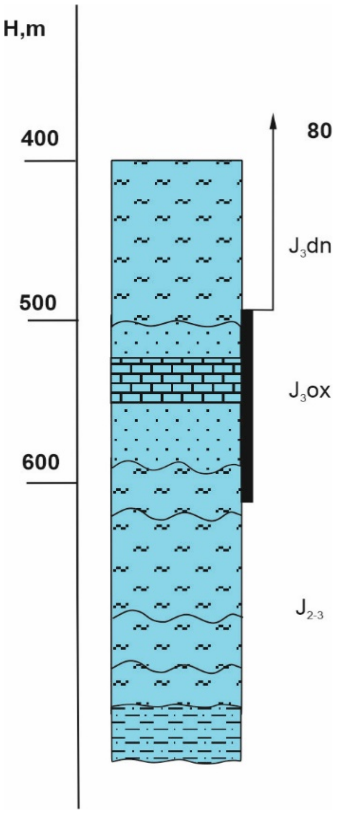
Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510J100	
Name of the GWB	GWB in the Oxfordian and Kimeridgeian deposits of the Upper Jurassic	
Area of distribution, km^2	13635	
Geological index	J_3 o, J_3 km	
Lithology	Sands, sandstones and oolitic limestones	
Type of aquifer	Pressure	
Composition of rocks overlying the aquifer complex	Sands and sandstones of the Cenomanian stage of the Lower Cretaceous, clay	
Thickness of the aquifer, m Min, Max, average	70 - 150; 100	
Filtration coefficient, Kf, m/day. Min, Max, average	0,1 - 20	
Water permeability coefficient, T, m^2 /day. Min, Max, average	20 - 1000	
Absolute groundwater level, m, Min, Max, average	80 - 102	
Annual amplitude of level fluctuations, m	-	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Domestic and drinking water supply in the cities of Lozova, Izyum, Kharkiv and rural settlements	
Flow rate of wells and springs, l/s	Wells: 0,4-18	
Chemical composition (main cations and anions)	Hydrocarbonate, calcium-sodium (NSO^{3-} , Ca^{2+} , Na^{+}); M - 0.24-0.92 g/dm^3	
Main power supply	flows from adjacent aquifers	
Relationship to surface water	missing	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Water supply to settlements	
Chemical status	Good	
Quantitative status	Good	
Reliability of information (high/low)	Low	
Annual precipitation, mm	460	

Table 15. Characteristics of the GWB in Middle-Upper Jurassic sediments (J_2 b, J bt_{22-3} , J $)_{2-3}$

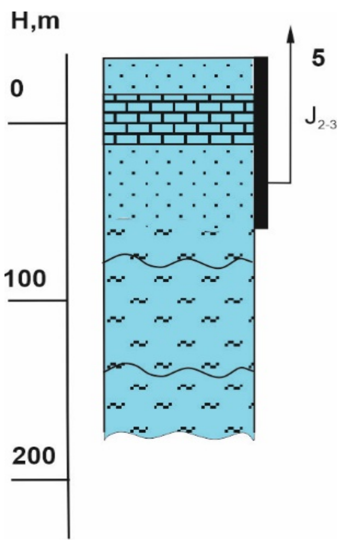
Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510J200	
Name of the GWB	GWB in the Middle-Upper Jurassic sediments	
Area of distribution, km^2	3769,7	
Geological index	J_2 b, J bt_{22-3}, J_{2-3}	
Lithology	Gravelly sands, sands and sandstones with clay interbeds and lenses and limestone interbeds	
Type of aquifer	Pressure	
Composition of rocks overlying the aquifer complex	Alluvial sands of Quaternary deposits, Paleogene-Neogene deposits	
Thickness of the aquifer, m Min, Max, average	3 - 200	
Filtration coefficient, Kf, m/day. Min, Max, average	0,1 - 20	
Water permeability coefficient, T, m^2 /day. Min, Max, average	20 - 1000	
Absolute groundwater level, m, Min, Max, average	70 - 121	
Annual amplitude of level fluctuations, m	±0,5 - 1,5-	
Used for water intake >10 m/day^3	yes	
It is used for drinking, agricultural and industrial water supply	It is used for local water supply by individual production wells	
Flow rate of wells and springs, l/s	Wells: 0,2 - 1,9	
Chemical composition (main cations and anions)	Mixed: sulphate-chloride, hydrocarbonate, calcium-sodium (NSO_3^- , SO_4^- , Cl^- , Ca^{2+} , Na^+); M - 1.12-1.14 g/dm^3	
Main power supply	Infiltration of precipitation, flow from adjacent aquifers	
Relationship to surface water	In places of outcrop under alluvial deposits	
Trend of level change (decreasing-increasing)	In press.	
The predominant type of human activity	Water supply to settlements, industry	
Chemical status	Good	
Quantitative status	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	460	

Table 16. Characteristics of the MWR in the Upper Triassic sediments (T)3

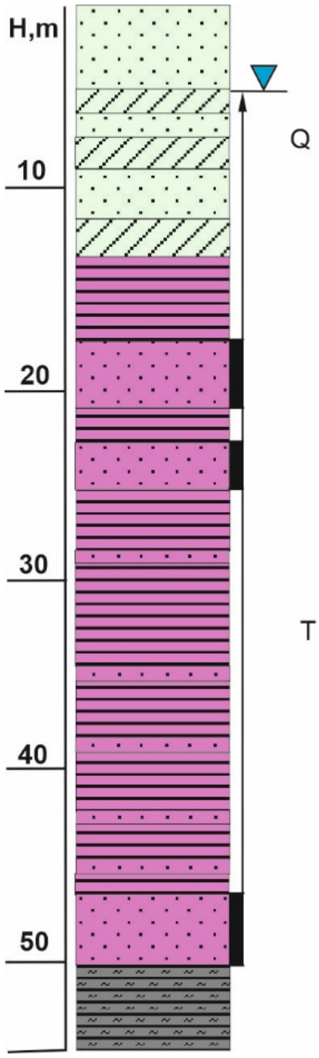
Parameters	Characteristics	Lithological and hydrogeological column
GWB code	UAM6510T100	
Name of the GWB	GWB in Upper Triassic sediments	
Area of distribution, km^2	5562,5	
Geological index	T_3	
Lithology	Sands, sandstones with clay layers	
Type of aquifer	Pressure	
Composition of rocks overlying the aquifer complex	Alluvial sands of Quaternary deposits, Paleogene-Neogene deposits, Lower Jurassic clays	
Thickness of the aquifer, m Min, Max, average	12 - 30;100 - 185	
Filtration coefficient, Kf, m/day. Min, Max, average	1,8 - 26,8	
Water permeability coefficient, T, m^2 /day. Min, Max, average	In press.	
Absolute groundwater level, m, Min, Max, average	79 - 105	
Annual amplitude of level fluctuations, m	-	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Local water supply	
Flow rate of wells and springs, l/s	Wells: 0,001-0,015	
Chemical composition (main cations and anions)	Mixed: bicarbonate-sulfate-chloride, chloride-sulfate-hydrocarbonate, sodium-calcium (NSO_3^- , SO_4^- , Cl^- , Ca^{2+} , Na); $^+$M - 0.4-1.7 g/dm^3	
Main power supply	Infiltration of atmospheric precipitation and unloading of Paleogene-Neogene aquifer complexes	
Relationship to surface water	-	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Local water supply	
Chemical status	Good	
Quantitative status	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	450	

Table 17. Characteristics of the GWB in the Lower-Middle-Upper Triassic sediments (T1dr, T1-2sr, T3pr)

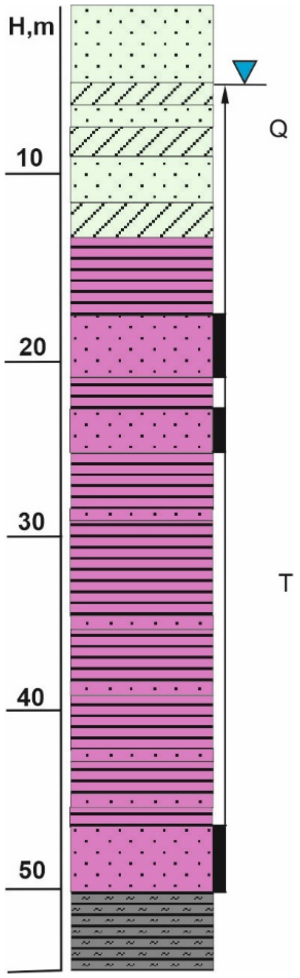
Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510T200	
Name of the GWB	GWB in Lower-Middle-Upper Triassic sediments	
Area of distribution, km^2	7355	
Geological index	T_1 *dr*, $T_{1\text{-}2}$ *sr*, T_3 *pr*	
Lithology	Various sands and sandstones	
Type of aquifer	Pressure	
Composition of rocks overlying the aquifer complex	Alluvial sands of Quaternary sediments, Paleogene-Neogene sediments, Lower Jurassic clays, sands and sandstones of Upper Triassic sediments	
Thickness of the aquifer, m Min, Max, average	10 - 350	
Filtration coefficient, Kf, m/day. Min, Max, average	0,4 - 7,0	
Water permeability coefficient, T, m^2 /day. Min, Max, average	In press.	
Absolute groundwater level, m, Min, Max, average	70 - 130	
Annual amplitude of level fluctuations, m	-	
Used for water intake >10 m/day^3	yes	
It is used for drinking, agricultural and industrial water supply	Local and balneological water supply	
Flow rate of wells and springs, l/s	Wells: 0,3-10,5	
Chemical composition (main cations and anions)	Hydrocarbonate-sulphate sulphate-hydrocarbonate, calcium-sodium (NSO_3^- , SO_4^- , Ca^{2+} , Na);$^+$ M - 0.5-0.8 g/dm^3	
Main power supply	Infiltration of precipitation and unloading of Cenozoic complexes	
Relationship to surface water	-	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Local water supply	
Chemical status	Good	
Quantitative status	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	450	

Table 18. Characteristics of GWB in Lower Permian sediments (P1kr, P1mk, P1sl)

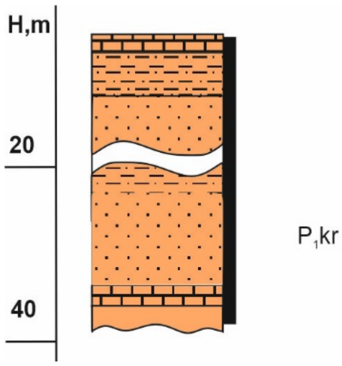
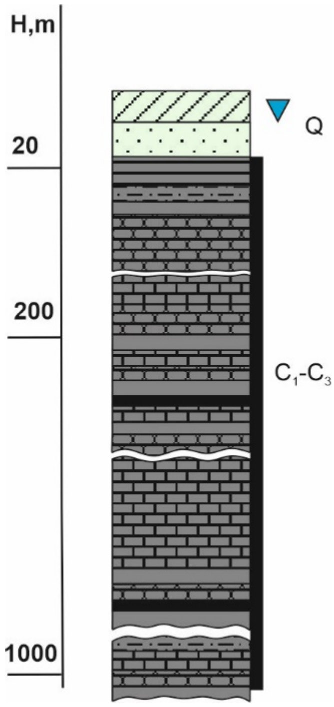
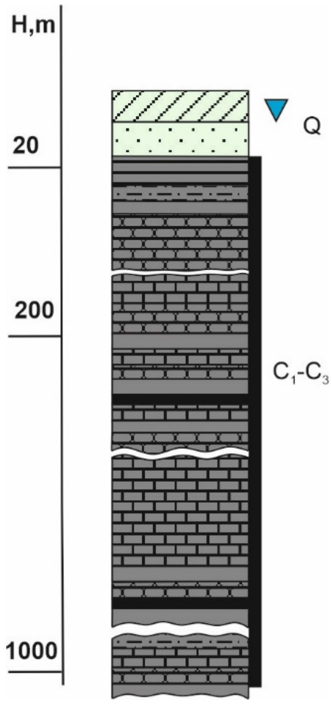
Parameters	**Characteristics**	**Lithological and hydrogeological column**
GWB code	UAM6510P100	
Name of the GWB	GWB in Lower Permian sediments	
Area of distribution, km^2	1801	
Geological index	P_1 kr, P_1 mk, P_1 *sl*	
Lithology	Sandstones with interbedded argillites, siltstones, limestones and dolomites	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Cenozoic and Mesozoic sediments	
Thickness of the aquifer, m Min, Max, average	5 - 120	
Filtration coefficient, Kf, m/day. Min, Max, average	0,006 - 3,3	
Water permeability coefficient, T, m^2 /day. Min, Max, average	Up to 360	
Absolute groundwater level, m, Min, Max, average	8 - 478	
Annual amplitude of level fluctuations, m	-	
Used for water intake >10 m/day^3	yes	
It is used for drinking, agricultural and industrial water supply	Private water supply, industrial and technical supply	
Flow rate of wells and springs, l/s	Wells: 0,004 - 1,25	
Chemical composition (main cations and anions)	Hydrocarbonate-sulfate sulphate-hydrocarbonate, calcium-magnesium (NSO_3^- , SO_4^- , Ca^{2+} , Mg); $^{2+}$ M - 0.5-2.9 g/dm^3	
Main power supply	Infiltration of precipitation and unloading of Paleogene-Neogene aquifer complexes	
Relationship to surface water	In areas of access to the daytime surface	
Trend in level change (decreasing-increasing)	In press.	
The predominant type of human activity	Water supply to settlements, industrial sites	
Chemical status	Poor (nitrite contamination)	
Quantitative status	Good	
Reliability of information (high/low)	High	
Annual precipitation, mm	454	

Table 19: Characteristics of GWB in sandy clay deposits of the coal system (C1-C3)

Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510C101	
Name of the GWB	GWB in sandy clay deposits of the coal system	
Area of distribution, km^2	7269	
Geological index	$C - C_{13}$	
Lithology	Sandstones with alternating mudstones, siltstones, with thin limestone and coal beds	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Paleogene-Neogene sediments, mainly located in the weathering zone	
Thickness of the aquifer, m Min, Max, average	50 - 100	
Filtration coefficient, Kf, m/day. Min, Max, average	5,1 - 158; 85	
Conductivity coefficient, T, m^2 /day. Min, Max, average	30 - 200; 100	
Absolute groundwater level, m, Min, Max, average	43,7 - 325	
Annual amplitude of level fluctuations, m	In press.	
Used for water intake >10 m/day^3	Yes	
It is used for drinking, agricultural and industrial water supply	Centralised and private water supply	
Flow rate of wells and springs, l/s	Wells: 0,02 - 15,1	
Chemical composition (main cations and anions)	Chloride-hydrogen carbonate-sulfate, hydrogen carbonate-sulfate magnesium-sodium-calcium (NSO_3^- , SO_4^- , Cl^- , Ca^{2+} , Na^+ , Mg^{2+}); M - 0.8-2 g/dm^3	
Main power supply	Infiltration of precipitation and flows from overlying aquifers	
Relationship to surface water	In areas of access to the daytime surface	
Trend in level change (decreasing-increasing)	rising	
The predominant type of human activity	Water supply to settlements and industrial hubs, mining industry	
Chemical status	Poor (localised pollution with nitrogenous compounds, salts, heavy metals, phenols)	
Quantitative status	Poor (operation with exceeding groundwater reserves)	

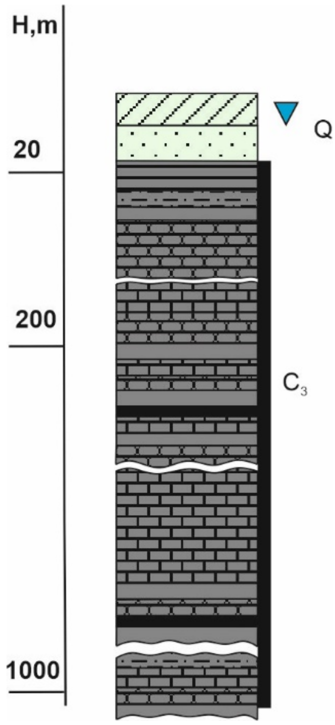
Parameters	Characteristics	Lithological hydrogeological column
Reliability of information (high/low)	High	
Annual precipitation, mm	454	

Table 20. Characteristics of GWB in sandy-clayey sediments of the coal system (C1-C2)

Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510C104	
Name of the GWB	GWB in sandy clay deposits of the coal system	
Area of distribution, km^2	986,2	
Geological index	C -C_{12}	
Lithology	Sandstones with alternating mudstones, siltstones, with thin limestone and coal beds	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Paleogene-Neogene sediments, mainly located in the weathering zone	
Thickness of the aquifer, m Min, Max, average	50 - 100	
Filtration coefficient, Kf, m/day. Min, Max, average	0,5 - 48,2	
Conductivity coefficient, T, m^2 /day. Min, Max, average	30 - 200; 100	
Absolute groundwater level, m, Min, Max, average	43,7 - 325	
Annual amplitude of level fluctuations, m	In press.	
Used for water intake >10 m /day^3	yes	
Number of captive sources	-	
Number of water intakes	18, 15, 6	
It is used for drinking, agricultural and industrial water supply	Centralised and private water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Chloride-hydrogen carbonate-sulfate, magnesium-sodium-calcium (NSO_3 , SO_4^- , Na^+); M - 2-4 g/dm^3	
Main power supply	Infiltration of precipitation and flows from overlying aquifers	
Relationship to surface water	In areas of access to the daytime surface	
Trend in level change (decreasing-increasing)	rising	
The predominant type of human activity	Water supply to settlements, industrial hubs, mining industry	
Chemical status	Poor (localised pollution with nitrogenous compounds, salts, heavy metals, phenols)	

Parameters	Characteristics	Lithological hydrogeological column
Quantitative status	Poor (operation with exceeding groundwater reserves)	
Reliability of information (high/low)	High	
Annual precipitation, mm	454	

Table 21. Characteristics of GWB in sandy-clayey sediments of the coal system (C3)

Parameters	Characteristics	Lithological hydrogeological column
GWB code	UAM6510C105	
Name of the GWB	GWB in sandy clay deposits of the coal system	
Area of distribution, km^2	568,3	
Geological index	C_3	
Lithology	Sandstones with alternating mudstones, siltstones, with thin limestone and coal beds	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Paleogene-Neogene sediments, mainly located in the weathering zone	
Thickness of the aquifer, m Min, Max, average	50 - 1200	
Filtration coefficient, Kf, m/day. Min, Max, average	0,5 - 150; 85	
Water permeability coefficient, T, m^2 /day. Min, Max, average	30 - 200; 100	
Absolute groundwater level, m, Min, Max, average	+43,7-+325	
Annual amplitude of level fluctuations, m	In press.	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Centralised and private water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Sulphate-hydrogen carbonate, sodium, sodium hydrogen carbonate-sulphate (NSO_3^- , SO_4^- Na^+); M - 0.5-2.13 g/dm^3	
Main power supply	Infiltration of precipitation and flows from overlying aquifers	
Relationship to surface water	In areas of access to the daytime surface	
Trend in level change (decreasing-increasing)	rising	
The predominant type of human activity	Water supply to settlements and industrial hubs, mining industry	
Chemical status	Poor (localised pollution with nitrogenous compounds, salts, heavy metals, phenols)	
Quantitative status	Poor (operation with exceeding groundwater reserves)	

Parameters	Characteristics	Lithological hydrogeological column
Reliability of information (high/low)	High	
Annual precipitation, mm	454	

Table 22. Characteristics of GWB in Cretaceous sediments, zone of influence of the Rubizhansky Dysklytel LLC industrial site

Parameters	Characteristics
GWB code	UAM6510K107
Name of the GWB	GWB in the Cretaceous sediments, the area of influence of the Rubizhne Dye LLC industrial site
Area of distribution, km^2	7,91
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure
Composition of rocks overlying the aquifer complex	Alluvial soils (man-made aquifer), alluvial sands of the Quaternary system
Absolute groundwater level, m Min, Max, average	+49 - +59
Annual amplitude of level fluctuations, m	-0,89 - +0,27
Chemical composition (main cations and anions)	Sodium bicarbonate-chloride; M - up to 2.8 g/dm^3
Relationship to surface water	Thus, the zone of active water exchange
Type of pollution	Salt, ammonium, phenolic, amino-nitrogen pollution
Chemical status	Bad
Quantitative status	Good

Table 23. Characteristics of GWB in Cretaceous sediments, area of influence of PJSC "Severodonetsk Azot Association"

Parameters	Characteristics
GWB code	UAM6510K108
Name of the GWB	GWB in Cretaceous sediments, area of influence PJSC Severodonetsk Azot Association
Area of distribution, km^2	11,72
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Alluvial soils (man-made aquifer), alluvial sands of the Quaternary system
Absolute groundwater level, m Min, Max, average	+44,21 - +50,65
Annual amplitude of level fluctuations, m	In press.
Chemical composition (main cations and anions)	Sulphate-hydrogen carbonate sulphate-chloride calcium-sodium; M - up to 4.1 g/dm^3 , sometimes up to 87.5 (by dry weight)
Relationship to surface water	Thus, the zone of active water exchange
Type of pollution	Ammonium, nitrite, nitrate, phenolic, formaldehyde, lead, manganese, lithium compounds
Chemical status	Bad
Quantitative status	Good

Table 24. Characteristics of the GWB in Cretaceous sediments, area of influence of RPE "Zarya" LLC

Parameters	Characteristics
GWB code	UAM6510K109
Name of the GWB	GWB in Cretaceous sediments, area of influence of RPE Zarya LLC
Area of distribution, km^2	11,72
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure
Composition of rocks overlying the aquifer complex	Alluvial soils (man-made aquifer), alluvial sands of the Quaternary system
Absolute groundwater level, m Min, Max, average	+49,62 - +60,14
Annual amplitude of level fluctuations, m	-0,42 - +0,13
Chemical composition (main cations and anions)	Sulfate-hydrogen carbonate calcium-sodium; M - up to 2.1 g/dm^3
Relationship to surface water	Thus, the zone of active water exchange
Type of pollution	Iron compounds, ammonium, phenolic, nitrate, amino products, salt
Chemical status	Bad
Quantitative status	Good

Table 25. Characteristics of the GWB in the Cretaceous sediments, the area of influence of Severodonetsk Glass Plastics LLC

Parameters	Characteristics
GWB code	UAM6510K110
Name of the GWB	GWB in Cretaceous sediments, area of influence of Severodonetsk Glass Plastics LLC
Area of distribution, km^2	1,2
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Alluvial sands of the Quaternary system
Absolute groundwater level, m Min, Max, average	In press. Relative position of the level - 3.73 - 4.5
Annual amplitude of level fluctuations, m	-0,8 - +0,6
Chemical composition (main cations and anions)	Sodium sulfate-chloride; M - 0.8 g/dm^3 (by dry residue)
Relationship to surface water	None
Type of pollution	Phenolic, heavy metal contamination
Chemical status	Bad
Quantitative status	Good

Table 26. Characteristics of the GWB in the Cretaceous sediments, the area of influence of the storage pond of LLC "Lisichanska Soda"

Parameters	Characteristics
GWB code	UAM6510K111
Name of the GWB	GWB in the Cretaceous sediments, the area of influence of the storage pond of Lisichanska Soda LLC
Area of distribution, km^2	7,45
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Alluvial sands of the Quaternary system
Absolute groundwater level, m Min, Max, average	+43,4 - +47,02
Annual amplitude of level fluctuations, m	-0,34 - +0,47
Chemical composition (main cations and anions)	Calcium-sodium hydrogen carbonate-sulfate-chloride; M - up to 84 g/dm^3 (by dry weight)
Relationship to surface water	Thus, the zone of active water exchange
Type of pollution	Ammonium, nitrate, phenolic, chloride, salt
Chemical status	Bad
Quantitative status	Good

Table 27. Characteristics of the GWB in Cretaceous sediments, the area of influence of the KUB-GAS LLC SWDS, Baranykivka village, Kreminna district

Parameters	Characteristics
GWB code	UAM6510K112
Name of the GWB	GWB in Cretaceous sediments, zone of influence of the KUB-GAS LLC solid waste storage facility, Baranykivka village, Kreminna district
Area of distribution, km^2	6,4
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Quaternary clays
Absolute groundwater level, m Min, Max, average	+74,32 - +74,5 м
Annual amplitude of level fluctuations, m	-0,34 - +0,47
Chemical composition (main cations and anions)	Chloride-sulphate, magnesium-sodium-calcium; M - 1.8-2.6 g/dm^3 (by dry residue)
Relationship to surface water	None
Type of pollution	Nitrogen compounds, salt, iron compounds
Chemical status	Bad
Quantitative status	Good

Table 28. Characteristics of the GWB in the Cretaceous sediments, zone of influence of the circulating and industrial water storage facilities of PJSC "LINIK"

Parameters	Characteristics
GWB code	UAM6510K113
Name of the GWB	GWB in the Cretaceous sediments, the area of influence of the circulating and industrial water storage facilities of PJSC "LINIK"
Area of distribution, km^2	25,0
Geological index	K $t\text{-}m_2$
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Alluvial sands of the Quaternary system
Absolute groundwater level, m Min, Max, average	+87,0 - +123,9
Annual amplitude of level fluctuations, m	-1,78 - +0,23
Chemical composition (main cations and anions)	Chloride-sulphate-hydrogen carbonate sodium-calcium, calcium chloride, calcium-sodium chloride-sulfate; M - up to 2.7 g/dm^3 (by dry weight)
Relationship to surface water	Thus, the zone of active water exchange
Type of pollution	Phenolic, ammonium, nitrite, nitrate, oil products, iron compounds
Chemical status	Bad
Quantitative status	Good

Table 29. Characteristics of the GWB in the Cretaceous sediments, area of influence of stormwater storage ponds and buffer ponds, PJSC "Rubizhne Cardboard and Packaging Plant"

Parameters	Characteristics
GWB code	UAM6510K114
Name of the GWB	GWB in the Cretaceous sediments, the area of influence of the stormwater storage pond and buffer ponds, PJSC "Rubizhne Cardboard and Packaging Plant"
Area of distribution, km^2	5,67
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Alluvial sands of the Quaternary system
Absolute groundwater level, m Min, Max, average	In press. Relative position of the level - 9.40 - 24.08
Annual amplitude of level fluctuations, m	-1,64 - +0,11
Chemical composition (main cations and anions)	calcium sulfate-chloride-hydrogen carbonate, calcium chloride-sulfate-hydrogen carbonate, calcium chloride-hydrogen carbonate; M - up to 1.0 g/dm^3 (by dry residue)
Relationship to surface water	Thus, the zone of active water exchange
Type of pollution	Phenolic
Chemical status	Bad
Quantitative status	Good

Table 30. Characteristics of the GWB in the Cretaceous aquifer sediments, DTEK Luhanska TPP

Parameters	Characteristics
GWB code	UAM6510K115
Name of the GWB	GWB in Cretaceous aquifer sediments, DTEK Luhanska TPP impact area
Area of distribution, km^2	18,4
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure
Composition of rocks overlying the aquifer complex	Quaternary sands, sandy loams, loams
Absolute groundwater level, m Min, Max, average	+33,23 - +41,25
Annual amplitude of level fluctuations, m	-0,5 - +0,4
Chemical composition (main cations and anions)	Sodium-calcium chloride-sulfate; M - 0.4-1.5 g/dm^3 (by dry residue)
Relationship to surface water	Thus, the zone of active water exchange
Type of pollution	Salts, nitrogen compounds, heavy metals, oil products, organic compounds (phenols)
Chemical status	Bad
Quantitative status	Good

Table 31. Characteristics of the GWB in the Cretaceous aquifer sediments, the zone of influence of float-tails and the clarification pond of the SE GZF "Luhanska"

Parameters	Characteristics
GWB code	UAM6510K116
Name of the GWB	GWB in the Cretaceous aquifer sediments, the area of influence of the flotillas and the clarification pond of the SE GOK Luhanska
Area of distribution, km^2	15,0
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Alluvial sands of the Quaternary system
Absolute groundwater level, m Min, Max, average	In press. Relative position of the level - 23.0 - 37.2
Annual amplitude of level fluctuations, m	-1,6 - +1,7
Chemical composition (main cations and anions)	Sodium-calcium chloride-sulfate-hydrogen carbonate, calcium chloride, calcium-sodium chloride-sulfate; M - up to 2.7 g/dm^3 (by dry weight)
Relationship to surface water	Thus, the zone of active water exchange
Type of pollution	Salt, phenolic, ammonium, lead, manganese compounds
Chemical status	Bad
Quantitative status	Good

Table 32. Characteristics of the GWB in the Cretaceous aquifer sediments, the area of influence of the landfill in the city of Luhansk

Parameters	Characteristics
GWB code	UAM6510K117
Name of the groundwater body	GWB in Cretaceous aquifer sediments, area of influence of the landfill in the city of Luhansk
Area of distribution, km^2	2,2
Geological index	K t-m_2
Lithology	Fractured marl and chalk deposits
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Quaternary sandy loam
Absolute groundwater level, m Min, Max, average	In press. Relative position of the level - 6.0 - 31.0 m
Annual amplitude of level fluctuations, m	-1,5 - +1,2
Chemical composition (main cations and anions)	Chloride-hydrogen carbonate, sodium-calcium; M - 0.8 - 1.5 g/dm^3 (by dry residue)
Relationship to surface water	None
Type of pollution	Nitrogen compounds, heavy metals, phenolic
Chemical status	Bad
Quantitative status	Good

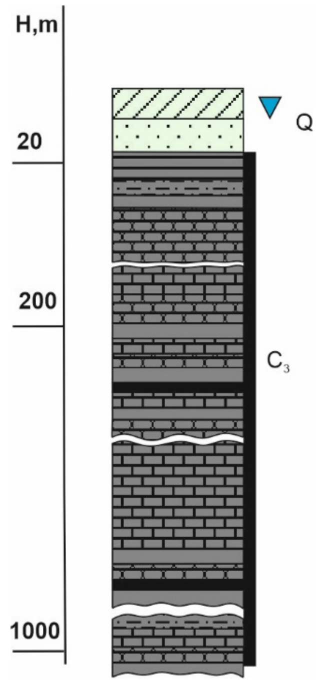
Table 33. Characteristics of the GWB in the sediments of the coal aquifer complex, the zone of influence of the Stakhanov Ferroalloy Plant storage facilities

Parameters	Characteristics
GWB code	UAM6510C102
Name of the GWB	GWB in the sediments of the coal aquifer complex, the zone of influence of the Stakhanov Ferroalloy Plant's storage facilities
Area of distribution, km^2	4,0
Geological index	C_2
Lithology	Sandy clay, clay shale, sandstone, limestone
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Quaternary loams
Absolute groundwater level, m Min, Max, average	In press. Relative position of the level - 1.03 - 15.33 m
Annual amplitude of level fluctuations, m	-2,7 - +4,42
Chemical composition (main cations and anions)	Chloride-sulphate-hydrogen carbonate-chloride-sulphate; M - 1.1-2.0 g/dm^3 (by dry weight)
Relationship to surface water	None
Type of pollution	Salt, heavy metals, phenolic
Chemical status	Bad
Quantitative status	Good

Table 34. Characteristics of the GWB in the sediments of the coal aquifer complex, the area of influence of the solid industrial waste landfill of PJSC "Alchevsk Coke Plant"

Parameters	Characteristics
GWB code	UAM6510C103
Name of the GWB	GWB in the sediments of the coal aquifer complex, the area of influence of the solid industrial waste landfill of PJSC "Alchevsk Coke Plant"
Area of distribution, km^2	2,0
Geological index	C_2
Lithology	Fractured sandstones, limestones, sandy shales
Type of aquifer	Pressure and non-pressure
Composition of rocks overlying the aquifer complex	Bulk soils
Absolute groundwater level, m Min, Max, average	+181,0 - +263,0
Annual amplitude of level fluctuations, m	-0,17 - +3,99
Chemical composition (main cations and anions)	Chloride-sulphate-hydrogen carbonate calcium-magnesium-sodium, magnesium-calcium chloride-sulphate; M - 1.2-4.8 g/dm^3 (by dry weight)
Relationship to surface water	None
Type of pollution	Salt, ammonium, heavy metals, iron compounds, organic compounds
Chemical status	Bad
Quantitative status	Good

Table 35. Characteristics of GWB in sandy clay deposits of the coal system (C1-C3)

Parameters	Characteristics	Lithological and hydrogeological column
GWB code	UAM6520C100	
Name of the GWB	GWB in sandy clay deposits of the coal system	
Area of distribution, km^2	366,5	
Geological index	C -C_{13}	
Lithology	Sandstones with alternating mudstones, siltstones, with thin limestone and coal beds	
Type of aquifer	Pressure and non-pressure	
Composition of rocks overlying the aquifer complex	Paleogene-Neogene sediments, mainly located in the weathering zone	
Thickness of the aquifer, m Min, Max, average	50 - 1200	
Filtration coefficient, Kf, m/day. Min, Max, average	0,5 - 150; 85	
Water permeability coefficient, T, m^2 /day. Min, Max, average	30 - 200; 100	
Absolute groundwater level, m, Min, Max, average	+43,7 - +325	
Annual amplitude of level fluctuations, m	In press.	
Used for water intake >10 m /day^3	yes	
It is used for drinking, agricultural and industrial water supply	Centralised and private water supply	
Flow rate of wells and springs, l/s	In press.	
Chemical composition (main cations and anions)	Sulphate-bicarbonate, sodium, sodium bicarbonate-sulphate (NSO_3^- , SO_4^- Na^+); M - 0.5-2.13 g/dm^3	
Main power supply	Infiltration of precipitation and flows from overlying aquifers	
Relationship to surface water	In areas of access to the daytime surface	
Trend of level change (decreasing-increasing)	rising	
The predominant type of human activity	Water supply to settlements and industrial hubs, mining industry	
Chemical status	Poor (localised pollution with nitrogenous compounds, salts, heavy metals, phenols)	
Quantitative status	Poor (operation with exceeding groundwater reserves)	
Reliability of information (high/low)	High	
Annual precipitation, mm	454	

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	Longitude	Latitude	Settlement	Territorial community	District	Oblast
1	25.02.2022	Dam on the Siverskyi Donets River	Hydraulic structures	Not defined	Environment + Population	Destruction of infrastructure	50.07	36.81	Staryi Saltiv	Starosaltovskaya	Chuguevsky	Kharkivska
2	26.02.2022	The dam of the Pecheneg reservoir	Hydraulic structures	Not defined	Environment + Population	Destruction of infrastructure	49.88	36.98	Pechenegs	Pechenizka	Chuguevsky	Kharkivska
3	02.03.2022	Stakhanov Ferroalloy Plant	Production of iron, steel and ferroalloys	Nitric acid	Environment + Population	Destruction of infrastructure	48.54	38.56	Diamond	Kadievska	Alchevsk	Luhansk
4	02.03.2022	Kharkiv Instrument-Making Plant	Mechanical engineering	Gallium arsenide	Environment + Population	Destruction of infrastructure	49.96	36.22	Kharkiv	Kharkivska	Kharkiv	Kharkivska
5	02.03.2022	Paper bag production workshop	Production of wood products	Chlorine	Environment + Population	Destruction of infrastructure	49.96	36.21	Kharkiv	Kharkivska	Kharkiv	Kharkivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
6	02.03.2022	Dam on the Oskil River	Hydraulic structures	Not defined	Environment + Population	Destruction of infrastructure	49.17	37.47	Oskil	Oskilska	Izyumsky	Kharkivska
7	03.03.2022	Kharkiv Instrument-Making Plant	Mechanical engineering	Gallium arsenide	Environment + Population	Destruction of infrastructure	49.96	36.22	Kharkiv	Kharkivska	Kharkiv	Kharkivska
8	06.03.2022	Philip Morris Ukraine tobacco factory in Leliuki village	Warehouse management	Not defined	Environment + Population	Disruption of work	49.88	36.39	Kharkiv	Kharkivska	Kharkiv	Kharkivska
9	10.03.2022	Neutron Source, a subcritical nuclear research facility	Nuclear power generation	Radioactive substances	Environment + Population	Destruction of infrastructure	50.08	36.24	Cherkasy Lozova	Malodanylivska	Kharkiv	Kharkivska
10	11.03.2022	Neutron Source, a subcritical nuclear research facility	Nuclear power generation	Radioactive substances	Environment + Population	Destruction of infrastructure	50.08	36.24	Cherkasy Lozova	Malodanylivska	Kharkiv	Kharkivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
11	12.03.2022	Rubizhne Cardboard and Packaging Mill	Production of wood products	Chlorine	Environment + Population	Destruction of infrastructure	49.02	38.39	Rubizhne	Rubizhanska	Sievierodonets k	Luhansk
12	23.03.2022	Amcor Speciality Cartons Ukraine	Production of wood products	Chlorine	Environment + Population	Disruption of work	50.08	36.15	Dergachi	Dergachivska	Kharkiv	Kharkivska
13	25.03.2022	ACC-Corrugated Packaging	Production of wood products	Chlorine	Environment + Population	Disruption of work	49.97	36.15	Kharkiv	Kharkivska	Kharkiv	Kharkivska
14	25.03.2022	Vostpak	Production of wood products	Chlorine	Environment + Population	Disruption of work	49.95	36.18	Kharkiv	Kharkivska	Kharkiv	Kharkivska
15	25.03.2022	Rubizhne Cardboard and Packaging Mill	Production of wood products	Chlorine	Environment + Population	Disruption of work	49.02	38.39	Rubizhne	Rubizhanska	Sievierodonets k	Luhansk
16	25.03.2022	Kharkiv Corrugated Board Plant	Production of wood products	Chlorine	Environment + Population	Disruption of work	49.91	36.43	Kharkiv	Kharkivska	Kharkiv	Kharkivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
17	26.03.2022	Neutron Source, a subcritical nuclear research facility	Nuclear power generation	Radioactive substances	Environment + Population	Destruction of infrastructure	50.08	36.24	Cherkasy Lozova	Malodanylivska	Kharkiv	Kharkivska
18	05.04.2022	Toretsk Phenolic Plant	Production of basic chemicals, fertilisers, nitrogen compounds, plastics and synthetic rubber	Nitric acid	Environment + Population	Destruction of infrastructure	48.33	37.83	New York	Toretsk	Bakhmutskyi	Donetsk
19	05.04.2022	RPE "Zarya"	Production of explosives	Nitric acid	Environment + Population	Destruction of infrastructure	48.98	38.41	Rubizhne	Rubizhanska	Sievierodonetsk	Luhansk
20	09.04.2022	RPE "Zarya"	Production of explosives	Nitric acid	Environment + Population	Destruction of infrastructure	48.98	38.41	Rubizhne	Rubizhanska	Sievierodonetsk	Luhansk
21	24.04.2022	Pumping station III of the Seversky Donets-Donbas Canal lift	Drinking water supply	Chlorine	Environment	Destruction of infrastructure	48.40	37.94	Northern	Toretsk	Bakhmutskyi	Donetsk
22	26.04.2022	Severodonetsk Research and Production Association Impulse	Mechanical engineering	Gallium arsenide	Environment + Population	Destruction of infrastructure	48.93	38.49	Sievierodonetsk	Sievierodonetsk	Sievierodonetsk	Luhansk

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
23	08.05.2022	Toretsk Phenolic Plant	Production of basic chemicals, fertilisers, nitrogen compounds, plastics and synthetic rubber	Nitric acid	Environment + Population	Destruction of infrastructure	48.33	37.83	New York	Toretsk	Bakhmutskyi	Donetsk
24	08.05.2022	Western filter station	Drinking water supply	Chlorine	Environment	Destruction of infrastructure	48.91	38.26	Belogoriv-ka	Lysychansk	Sievierodonetsk	Luhansk
25	11.05.2022	RPE "Zarya"	Production of explosives	Nitric acid	Environment + Population	Destruction of infrastructure	48.98	38.41	Rubizhne	Rubizhanska	Sievierodonetsk	Luhansk
26	12.05.2022	Toretsk Phenolic Plant	Production of basic chemicals, fertilisers, nitrogen compounds, plastics and synthetic rubber	Nitric acid	Environment + Population	Destruction of infrastructure	48.33	37.83	New York	Toretsk	Bakhmutskyi	Donetsk
27	14.05.2022	Myronivske Reservoir Dam	Hydraulic structures	Not defined	Environment + Population	Destruction of infrastructure	48.48	38.28	Vozdvizhenka	Svetlodarskaya	Bakhmuts	Donetsk
28	16.05.2022	Toretsk Phenolic Plant	Production of basic chemicals, fertilisers, nitrogen compounds, plastics and synthetic rubber	Nitric acid	Environment + Population	Destruction of infrastructure	48.33	37.83	New York	Toretsk	Bakhmutskyi	Donetsk

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
29	17.05.2022	Severodonetsk Research and Production Association Impulse	Mechanical engineering	Gallium arsenide	Environment + Population	Destruction of infrastructure	48.93	38.49	Sievierodonetsk	Sievierodonetsk	Sievierodonetsk	Luhansk
30	23.05.2022	Vuglegirska TPP dam	Hydraulic structures	Not defined	Environment + Population	Disruption of work	48.45	38.21	Luhanske	Svitlodarska	Bakhmutskyi	Donetsk
31	01.06.2022	Pumping station of the Mayatske water supply system	Drinking water supply	Chlorine	Environment	Power outage	48.94	37.67	Donetsk	Mykolaivska	Kramatorsk	Donetsk
32	01.06.2022	Philip Morris Ukraine tobacco factory in Leliuki village	Warehouse management	Not defined	Environment + Population	Disruption of work	49.88	36.39	Kharkiv	Kharkivska	Kharkiv	Kharkivska
33	06.06.2022	Pumping station of the Mayatske water supply system	Drinking water supply	Chlorine	Environment	Power outage	48.94	37.67	Donetsk	Mykolaivska	Kramatorsk	Donetsk
34	25.06.2022	Neutron Source, a subcritical nuclear research facility	Nuclear power generation	Radioactive substances	Environment + Population	Destruction of infrastructure	50.08	36.24	Cherkasy Lozova	Malodany-. left-wing	Kharkiv	Kharkivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
35	04.07.2022	Slavic filtering station	Drinking water supply	Chlorine	Environment	Destruction of infrastructure	48.80	37.63	Sloviansk	Slavic	Kramatorsk	Donetsk
36	09.07.2022	Konstantinovka Furniture Factory	Production of wood products	Formaldehyde	Environment + Population	Destruction of infrastructure	48.55	37.66	Konstantinovka	Konstantinovskaya	Kramatorsk	Donetsk
37	23.08.2022	Kharkiv Instrument-Making Plant	Mechanical engineering	Gallium arsenide	Environment + Population	Destruction of infrastructure	49.96	36.22	Kharkiv	Kharkivska	Kharkiv	Kharkivska
38	26.08.2022	Non-ferrous metals plant	Non-ferrous metal production	Nitric acid	Environment + Population	Destruction of infrastructure	48.61	37.99	Bakhmut	Bakhmutska	Bakhmutskyi	Donetsk
39	28.08.2022	Chance Agrofirm	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	49.41	38.17	Svatove	Svatovskaya	Svatovsky	Luhansk
40	04.09.2022	Richland Invest	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	49.34	36.74	Shevelivka	Balakliyska	Izyumsky	Kharkivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
41	20.09.2022	The dam of the Pecheneg reservoir	Hydraulic structures	Not defined	Environment + Population	Destruction of infrastructure	49.88	36.98	Pechenegs	Pechenizka	Chuguevsky	Kharkivska
42	24.09.2022	Svatovo branch of JV Nibulon LLC	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	49.40	38.18	Svatove	Svatovskaya	Svatovsky	Luhansk
43	06.10.2022	Dam in the village of Raygorodok	Hydraulic structures	Not defined	Environment + Population	Destruction of infrastructure	48.91	37.75	Raygorodok	Mykolaivska	Kramatorsk	Donetsk
44	07.10.2022	Kupyansk furniture factory	Production of wood products	Formaldehyde	Environment + Population	Destruction of infrastructure	49.71	37.60	Kupiansk	Kupianska	Kupyansky	Kharkivska
45	11.10.2022	A farm in Predtechyne village	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	48.51	37.81	Predecessor	Konstantinovska ya	Kramatorsk	Donetsk
46	11.01.2023	Farm in the village of Yakovlivka	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	48.70	38.14	Yakovlivka	Soledar ska	Bakhmut s	Donetsk

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
47	14.01.2023	Rubizhne Cardboard and Packaging Mill	Production of wood products	Chlorine	Environment + Population	Destruction of infrastructure	49.02	38.39	Rubizhne	Rubizhanska	Sievierodonetsk	Luhansk
48	19.01.2023	Farm in Novoselivske village	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	49.52	37.94	Novoselivske	Kolomyiachiska	Svatovsky	Luhansk
49	25.02.2023	Dam in Bakhmut	Hydraulic structures	Not defined	Environment + Population	Destruction of infrastructure	48.61	37.97	Bakhmut	Bakhmutska	Bakhmutskyi	Donetsk
50	09.03.2023	Pumping station in Lysychansk	Drinking water supply	Chlorine	Environment	Destruction of infrastructure	48.88	38.43	Lysychansk	Lisichan-.ska	Sievierodonetsk	Luhansk
51	01.04.2023	Non-ferrous metals plant	Non-ferrous metal production	Nitric acid	Environment + Population	Destruction of infrastructure	48.61	37.99	Bakhmut	Bakhmutska	Bakhmutskyi	Donetsk
52	23.04.2023	Zmiivska vegetable factory	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	49.91	36.27	Kharkiv	Kharkivska	Kharkiv	Kharkivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
53	01.05.2023	Farm "Promin"	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	50.38	36.20	Veterinarian is not	Dergachivska	Kharkiv	Kharkivska
54	01.05.2023	A farm in the village of Ostrovske	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	49.29	37.93	Novoyehorivka	Kolomyichyska	Svatovsky	Luhansk
55	12.05.2023	Poly-pack	Production of construction materials	Not defined	Environment + Population	Destruction of infrastructure	48.54	39.32	Luhansk	Luhansk	Luhansk	Luhansk
56	14.05.2023	Konstantinovka State Chemical Plant	Production of basic chemicals, fertilisers, nitrogen compounds, plastics and synthetic rubber	Nitric acid	Environment + Population	Destruction of infrastructure	48.53	37.69	Kostiantynivka	Konstantinovskaya	Kramatorsky	Donetsk
57	01.06.2023	Farm "Promin"	Crop production	Pesticides	Environment + Population	Destruction of infrastructure	50.38	36.20	Veterinary	Dergachivska	Kharkiv	Kharkivska

№	Date	Object name	Object type	A hazardous substance that has become a pollutant	Sphere of influence	Type of case	Longitude	Latitude	Settlement	Territorial community	District	Oblast
58	02.06.2023	Western filter station	Drinking water supply	Chlorine	Environment	Destruction of infrastructure	48.91	38.26	Bilohorivka	Lysychansk	Sievierodonetsk	Luhansk
59	15.06.2023	Toretsk Phenolic Plant	Production of basic chemicals, fertilisers, nitrogen compounds, plastics and synthetic rubber	Nitric acid	Environment + Population	Destruction of infrastructure	48.33	37.83	New York	Toretsk	Bakhmutskyi	Donetsk

Annex 4. List of the Emerald Network sites

№	River basin	River sub-basin	Name of the site	Code	Area, km^2
1	Don	Siverskyi Donets	Ukrainskyi Stepovyi Nature Reserve	UA0000019	3355
2	Don	Siverskyi Donets	Luhanskyi Nature Reserve	UA0000020	5417
3	Don	Siverskyi Donets	Sviati Hory	UA0000029	43437
4	Don	Siverskyi Donets	Gomilshanski Lisy National Nature Park	UA0000034	14404
5	Don	Siverskyi Donets	Kleban-Byk Regional Landscape Park	UA0000064	2912
6	Don	Siverskyi Donets	Nykanorivskyi	UA0000067	652
7	Don	Siverskyi Donets	Bilovodskyi Regional Landscape Park	UA0000068	14006
8	Don	Siverskyi Donets	Kreminski Lisy	UA0000069	18240
9	Don	Siverskyi Donets	Kreidiani Vidslonennia Zakaznyk	UA0000070	30
10	Don	Siverskyi Donets	Pechenizke Pole	UA0000071	5021
11	Don	Siverskyi Donets	Iziumska Luka Regional Landscape Park	UA0000073	5008
12	Don	Siverskyi Donets	Dvorichanskyi National Nature Park	UA0000074	3433
13	Don	Siverskyi Donets	Elba Zakaznyk	UA0000076	761
14	Don	Siverskyi Donets	Sukhodilskyi Regional Landscape Park	UA0000078	3058
15	Don	Siverskyi Donets	Dobrianski Hory Zakaznyk	UA0000079	117
16	Don	Siverskyi Donets	Kreidiani Skeli Zakaznyk	UA0000080	98
17	Don	Siverskyi Donets	Lisne Zakaznyk	UA0000081	272
18	Don	Siverskyi Donets	Pechenizka Lisova Dacha Zakaznyk	UA0000086	5329
19	Don	Siverskyi Donets	Siverskodonetskyi	UA0000088	4506
20	Don	Siverskyi Donets	Chervonooskilske Reservoir	UA0000104	10082
21	Don	Siverskyi Donets	Pechenizke Reservoir	UA0000105	27064
22	Don	Siverskyi Donets	Vedmezhanka	UA0000195	10124
23	Don	Siverskyi Donets	Balakyrivskyi	UA0000198	417
24	Don	Siverskyi Donets	Novobilskyi	UA0000199	3974
25	Don	Siverskyi Donets	Stanychno-Luhanskyi	UA0000209	12158
26	Don	Siverskyi Donets	Riznykivskyi	UA0000219	547
27	Don	Siverskyi Donets	Kamiansko-Dontsivskyi	UA0000220	3569
28	Don	Siverskyi Donets	Vitrohonskyi	UA0000221	756
29	Don	Siverskyi Donets	Oleksandropilskyi	UA0000225	1068
30	Don	Siverskyi Donets	Svativskyi	UA0000226	2833
31	Don	Siverskyi Donets	Nyzhnoduvanskyi	UA0000227	1595
32	Don	Siverskyi Donets	Byshkinski steppes	UA0000273	17051,98
33	Don	Siverskyi Donets	Milova	UA0000274	2211,74
34	Don	Siverskyi Donets	Spasiv Skyt	UA0000275	3723,38
35	Don	Siverskyi Donets	Murom	UA0000276	1785,05

№	River basin	River sub-basin	Name of the site	Code	Area, km^2
36	Don	Siverskyi Donets	Oleksandrivs'ki lakes	UA0000277	15200,89
37	Don	Siverskyi Donets	Roganka	UA0000278	2387,45
38	Don	Siverskyi Donets	Lyptsi	UA0000279	1665,31
39	Don	Siverskyi Donets	Kam`yanka izyums`ka	UA0000280	5223,2
40	Don	Siverskyi Donets	Izbytske	UA0000281	5100,09
41	Don	Siverskyi Donets	Dry and Wet Izyumtsi	UA0000282	6644,68
42	Don	Siverskyi Donets	Dergachivskyi forest	UA0000283	8860,32
43	Don	Siverskyi Donets	Chumatskyi way and Vilshanka river valley	UA0000284	3379,17
44	Don	Siverskyi Donets	Goryla valley	UA0000285	1116,43
45	Don	Siverskyi Donets	Upper part of Great Babka river	UA0000286	8332,54
46	Don	Siverskyi Donets	Bezruki	UA0000287	253,44
47	Don	Siverskyi Donets	Poligon	UA0000288	1764,06
48	Don	Siverskyi Donets	Balakliyky	UA0000289	7381,79
49	Don	Siverskyi Donets	Tsyrkunivskyi forest	UA0000290	11613,5
50	Don	Siverskyi Donets	Zavody	UA0000291	1068,32
51	Don	Siverskyi Donets	Upper part of Uda river valley	UA0000292	10550,58
52	Don	Siverskyi Donets	Lyman lake system	UA0000293	3151,52
53	Don	Siverskyi Donets	Lozovenka and Oleksiyivski forests	UA0000294	983,11
54	Don	Siverskyi Donets	Lower part of Uda river valley	UA0000295	13380,97
55	Don	Siverskyi Donets	Lysogirka izyumska	UA0000296	3340,77
56	Don	Siverskyi Donets	Protopopivka-Petrivs'ke	UA0000297	7235,08
57	Don	Siverskyi Donets	Petrivski creeks	UA0000298	2092,04
58	Don	Siverskyi Donets	Mozh river valley	UA0000299	12658,48
59	Don	Siverskyi Donets	Bilokuzmynivske	UA0000300	2241,67
60	Don	Siverskyi Donets	Barvinkivski steppes	UA0000301	10350,78
61	Don	Siverskyi Donets	Aidar river valley	UA0000313	117237,4
62	Don	Siverskyi Donets	Siverskyi Donets river valley in Luhansk oblast	UA0000315	134903,3
63	Don	Siverskyi Donets	Siverskyi Donets river valley in Kharkiv oblast - 1	UA0000316	39820
64	Don	Siverskyi Donets	Siverskyi Donets river valley in Kharkiv oblast - 2	UA0000317	81544,71

Annex 5. List of places of recreation and leisure within the Don RBD

№	Name	Addresses	Territorial community	Region	Coordinates of the place
1	Liakhivka River	Balaklia, Zalymanska Street	Balakliiska	Iziumskyi	49.457459 36.816948
2	Balakliyka River, city (children's) beach	Nyzhnia Sadova Street	Balakliiska	Iziumskyi	49.453425 36.830902
3	Oskil River, Oskilske reservoir, Baidykivka health and recreation center for children	Oskil village	Iziumska	Iziumskyi	49.175945 37.486446
4	Berestova River, recreation zone	Krasnograd	Krasnogradska	Krasnogradskyi	49.370976 35.486268
5	Oskil River, central beach	Dvoriche village	Dvorichanska	Kupianskyi	49.848514 37.698883
6	Oskil River, public beach	Kupiansk, Mi-churina Street, 98	Kupianska	Kupianskyi	49.725469 37.617997
7	Oskil River, Oskilske reservoir	Krugliakivka, Zarichna Street, 71	Kurylivska	Kupianskyi	49.535033 37.698296
8	Brytai River, Brytaiske reservoir, Rosinka recreation facility	Bratoliubivka village	Lozivska	Lozovskyi	48.926641 36.453756
9	Nagorivske artificial reservoir, private beach “Agat”	Bezliudivka village	Bezliudivska	Lozovskyi	49.849847 36.276500
10	Pidborivske artificial reservoir, private beach “Viacheslav”	Bezliudivka village	Bezliudivska	Lozovskyi	49.881413 36.262367
11	Pidborivske artificial reservoir	Bezliudivka village	Bezliudivska	Lozovskyi	49.878035 36.251837
12	Pidborivske artificial reservoir, private beach “Viavis”	Bezliudivka village	Bezliudivska	Lozovskyi	49.881033 36.263842
13	Siversky Donets, Budivelnyk recreation center	Vovchansk, Zhovtneva Street	Novopokrovska	Chuguivskyi	49.808474 36.674630
14	Vovcha, city beach (not open)	Vovchansk, Zhovtneva Street	Vovchanska	Chuguivskyi	50.284712 36.934211
15	Vovcha, Blue Bay	Bugaivka village, Blakytna Zatoka Street, 1	Vovchanska	Chuguivskyi	50.151406 36.845077
16	Vovcha, recreation center “Gold Coast”	Verkhnia Pysarivka village	Vovchanska	Chuguivskyi	50.201499 36.856597
17	Vovcha, recreation center “Sosnovyi Bir”	Verkhnia Pysarivka village, Hrafska Street	Vovchanska	Chuguivskyi	50.204449 36.857073
18	Vovcha, recreation center “Sosnova Hirka”	Verkhnia Pysarivka village	Vovchanska	Chuguivskyi	50.204649 36.856470
19	Vovcha, recreation center “Prolisok”	Bugaivka village	Vovchanska	Chuguivskyi	50.151406 36.845077
20	p. Siverskyi Donets, Pechenizkyi Reservoir, village beach	Staryi Saltiv, Velyka Street	Strosaltivska	Chuguivskyi	50.083857 36.799256
21	Lake Bile	Zadonetske village, Kurortna Street	Zmiivska	Chuguivskyi	49.618893 36.340383
22	Siversky Donets, city beach	Zmiiv	Zmiivska	Chuguivskyi	49.671887 36.365913
23	PJSC “Regional investment projects”	Martove village	Pechenizka	Chuguivskyi	49.926232 36.983912
24	Lake Svitlychne, Children's health camp “Chaika”	Lyman village	Slobozhanska	Chuguivskyi	49.595071 36.455155
25	Lopan, Alekseevsky meadow park “Lot Service XXI”	Kharkiv	Kharkivska	Kharkivskyi	50.035001 36.186885
26	Kharkiv, Zhuravlivskyi hydro park “Contract Plus”	Kharkiv	Kharkivska	Kharkivskyi	50.017540 36.295896
27	PE “BUDSTIL BAMIR”	Cherkaska Tyshky village	Tsyrkunivska	Kharkivskyi	50.097255 36.430679
28	Bilenka, Kazennyi Torets River basin, Bilenke reservoir	Vasylivska Pustosh village	Kramatorska	Kramatorskyi	48.770264 37.704481

№	Name	Addresses	Territorial community	Region	Coordinates of the place
29	Belenka - II, Kazennyi Torets River basin	Vesele village	Kramatorska	Kramatorskyi	48.686803 37.606675
30	City beach "Blizhnyi", Blue Lakes, northern reservoir	Lyman	Lymanska	Kramatorskyi	48.991163 37.741793
31	City beach "Poluostrov", Blue Lakes, northern reservoir	Lyman	Lymanska	Kramatorskyi	48.995097 37.722265
32	City beach "Kazkovyi", Blue Lakes, northern water body	Lyman	Lymanska	Kramatorskyi	48.993713 37.708952
33	City beach "Dalniy", ME "Limansky 'Zelenbud', Blue Lakes, southern reservoir near the beach "Malibu"	Lyman	Lymanska	Kramatorskyi	48.980626 37.698215
34	City beach "Central", Blue Lakes, southern water body along the Liman city public organization "Solarium" and the hotel and entertainment complex "Riviera"	Lyman	Lymanska	Kramatorskyi	48.981002 37.706749
35	City beach "Bombay"	Lyman, Shchurove village, Bombay cafe area	Lymanska	Kramatorskyi	48.953730 37.721745
36	Beach of Lomonosovske Lake	Lyman	Lymanska	Kramatorskyi	48.962011 37.815288
37	The beach on the pond in the Dovha beam (Shanghai)	Kostiantynivka	Kostiantynivska	Kramatorskyi	48.521733 37.756310
38	Beach on the Dovhenka beam (1 pond)	Kostiantynivka	Kostiantynivska	Kramatorskyi	48.522820 37.663407
39	LLC "Staryi Zamok" for the maintenance of a water body (reservoir) for resort and recreational purposes	Sviatogirsk, Shevchenko Street, 125 A	Sviatogirska	Kramatorskyi	49.040505 37.573923
40	"Zolota Kupil"	Sviatogirsk, Naberezhna Street, 8	Sviatogirska	Kramatorskyi	49.031714 37.570638
41	LLC "Sports and recreation base of Olympic training "Chaika"	Sviatogirsk, Naberezhna Street, 20	Sviatogirska	Kramatorskyi	49.038218 37.581475
42	"Time Out"	Sviatogirsk, Naberezhna Street, 22	Sviatogirska	Kramatorskyi	49.038823 37.582204
43	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.041197 37.593164
44	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.035666 37.578622
45	Beach	Pryshyb, Naberezhna Street	Sviatogirska	Kramatorskyi	49.019874 37.655182
46	Beach	Pryshyb, Naberezhna Street	Sviatogirska	Kramatorskyi	49.020675 37.654013
47	Beach	Pryshyb, Naberezhna Street	Sviatogirska	Kramatorskyi	49.026040 37.655511
48	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.041666 37.594529
49	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.042705 37.597437
50	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.038234 37.584545
51	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.037245 37.581972
52	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.040970 37.593364
53	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.041383 37.593767
54	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.041067 37.592778

№	Name	Addresses	Territorial community	Region	Coordinates of the place
55	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.042227 37.595956
56	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.037632 37.582618
57	Beach	Tetianivka, Naberezhna Street	Sviatogirska	Kramatorskyi	49.042705 37.597437
58	Lake Ripynne, northern shoreline, climatic treatment zone of the sanatoriums “Yubileiny”, “Donbass”, “Slovianske”	Sloviansk	Slovianska	Kramatorskyi	48.873190 37.639210
59	Lake Veysove, Rapny lane, northern shoreline	Sloviansk	Slovianska	Kramatorskyi	48.869617 37.626578
60	Lake Garyache, eastern part of the coastal strip, beach “Little Cuba”	Sloviansk, Geologichna Street, 1a	Slovianska	Kramatorskyi	48.871892 37.617602
61	beach of the pond of the 2nd production of PJSC “Lysychansk glass factory ”Proletary”	Lysychansk	Lysychanska	Severodonetskyi	48.883829 38.411696
62	City beach on the Aidar river	Starobilsk	Starobilska	Starobilskyi	49.276284 38.881700
63	pond at the recreation center “Aqua-Land Katrin”, PE Chegrynets M.S.	Stanytsia Luhanska village	Stanychno Luhanska	Starobilskyi	48.658523 39.513443
64	place of mass recreation on the Lake Pisochne	Rubizhne	Rubizhanska	Severodonetskyi	51.566167 23.899814
65	the left bank of the Aidar River along Aidarska Street	Novopskov village	Novopskovska	Starobilskyi	49.533808 39.085278

Annex 6. List of SWB monitoring sites in the Don RBD

№	SWB code	Name of the SWB	Name of the monitoring point	Code of the monitoring point	Geographical coordinates		River basin area	Sub-basin	SWB category	Type of SWB
					Length	Latitude				
Diagnostic monitoring										
1	UA_M6.5.1_0046	Lebyazha	River mouth, Leb'yazhe village	UA_M6.5.1_0006_01	36°54'23.94 "E	49°48'10.36 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_SI
2	UA_M6.5.1_0149	Bereka	River mouth, Grushevakha village	UA_M6.5.1_0148_01	36°54'12.6 "E	49°07'32.9 "N	Don	Siverskyi Donets	HMWB	no
3	UA_M6.5.1_0182	Iziumets	River mouth, Izium	UA_M6.5.1_0182_01	37°16'24.5 "E	49°13'09.1 "N	Don	Siverskyi Donets	HMWB	no
4	UA_M6.5.1_0185	Sukhyi Iziumets	River mouth, Izium	UA_M6.5.1_0185_01	37°16'37.25 "E	49°13'19.91 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_SI
5	UA_M6.5.1_0188	Oskil	Downstream the Kupyansk[72]	UA_M6.5.1_0188_02	37°37'32.0 "E	49°39'50.0 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
6	UA_M6.5.1_0353	Sorishchi	River mouth, Sloviansk	UA_M6.5.1_0353_01	37°38'23.07 "E	48°50'34.08 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_SI
Operational monitoring										
1	UA_M6.5.1_0001	Siverskyi Donets	Ogirtseve village, border with the Russian Federation	UA_M6.5.1_0001_01	36°51'32.3 "E	50°17'51.9 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
2	UA_M6.5.1_0002	Siverskyi Donets	Pechenizke water reservoir, Pechenyhy village [59]	UA_M6.5.1_0002_01	36°58'49.8 "E	49°52'56.0 "N	Don	Siverskyi Donets	HMWB	no
3	UA_M6.5.1_0003	Siverskyi Donets	Kochetok village, water intake of Kharkivvodokanal[72]	UA_M6.5.1_0003_01	36°45'0.208 "E	49°52'27.947 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
4	UA_M6.5.1_0004	Siverskyi Donets	Downstream the mouth of the Udy River, Eskhar village	UA_M6.5.1_0004_01	36°35'37.4 "E	49°47'17.5 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
5	UA_M6.5.1_0004	Siverskyi Donets	Zadonetske village	UA_M6.5.1_0004_02	36°20'27.9 "E	49°38'56.8 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
6	UA_M6.5.1_0004	Siverskyi Donets	Downstream the channel Dnipro-Donbas	UA_M6.5.1_0004_04	37°0'52.542 "E	49°10'21.236 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
7	UA_M6.5.1_0004	Siverskyi Donets	Bohorodychne village	UA_M6.5.1_0004_03	37°30'45.802 "E	49°1'21.527 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
8	UA_M6.5.1_0005	Siverskyi Donets	water intake of Municipal Enterprise "Slovmiskvodokanal"	UA_M6.5.1_0005_01	37°38'13.666 "E	48°56'53.386 "N	Don	Siverskyi Donets	HMWB	no

[59] research monitoring is also carried out at the monitoring points

№	SWB code	Name of the SWB	Name of the monitoring point	Code of the monitoring point	Geographical coordinates		River basin area	Sub-basin	SWB category	Type of SWB
					Length	Latitude				
9	UA_M6.5.1_0005	Siverskyi Donets	water intake of the Slaviansk District Water Management Unit of the Water of Donbass Company	UA_M6.5.1_0005_02	37°41'32.939 "E	48°56'34.842 "N	Don	Siverskyi Donets	HMWB	no
10	UA_M6.5.1_0005	Siverskyi Donets	Rayhorod dam, water intake of ME "Water of Donbass"	UA_M6.5.1_0005_03	37°45'3.879 "E	48°54'56.038 "N	Don	Siverskyi Donets	HMWB	no
11	UA_M6.5.1_0006	Siverskyi Donets	below the confluence of the Kazenniy Torets River	UA_M6.5.1_0006_01	37°46'53.256 "E	48°53'12.491 "N	Don	Siverskyi Donets	HMWB	no
12	UA_M6.5.1_0007	Siverskyi Donets	Kryva Luka village	UA_M6.5.1_0007_01	37°54'24.836 "E	48°52'40.667 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
13	UA_M6.5.1_0007	Siverskyi Donets	downstream the mouth of the Bakhmutka River	UA_M6.5.1_0007_02	38°2'29.712 "E	48°55'42.537 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
14	UA_M6.5.1_0007	Siverskyi Donets	Bilohorivka village, water intake of the Popasna District Water Utility	UA_M6.5.1_0007_03	38°14'4.129 "E	48°56'34.126 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
15	UA_M6.5.1_0007	Siverskyi Donets	Downstream the Lysychansk	UA_M6.5.1_0007_04	38°30'7.385 "E	48°51'53.195 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
16	UA_M6.5.1_0009	Vovcha	Zemlianky village, border with the Russian Federation	UA_M6.5.1_0009_01	37°26'30.1 "E	50°23'33.6 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
17	UA_M6.5.1_0010	Vovcha	River mouth, Gatyshche village[72]	UA_M6.5.1_0010_01	36°52'27.059 "E	50°17'38.623 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
18	UA_M6.5.1_0028	Khotomlya	Novooleksandrivka village	UA_M6.5.1_0028_01	37°15'08.5 "E	50°08'48.1 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Si
19	UA_M6.5.1_0055	Tetleha	River mouth, Kochetok village	UA_M6.5.1_0055_01	36°44'8.761 "E	49°52'18.635 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Si
20	UA_M6.5.1_0056	Udy	Okop village, border with the Russian Federation	UA_M6.5.1_0056_01	36°08'56.4 "E	50°25'19.1 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
21	UA_M6.5.1_0058	Udy	upstream the Kharkiv	UA_M6.5.1_0058_01	35°58'34.9 "E	50°00'46.0 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
22	UA_M6.5.1_0059	Udy	River mouth, Eskhar village[72]	UA_M6.5.1_0059_01	36°36'47.235 "E	49°47'58.705 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
23	UA_M6.5.1_0071	Lopan	Kazacha Lopan village, border with Russia	UA_M6.5.1_0071_01	36°11'52.7 "E	50°20'47.1 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
24	UA_M6.5.1_0072	Lopan	River mouth, Kharkiv[72]	UA_M6.5.1_0072_01	36°12'26.485 "E	49°56'27.193 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
25	UA_M6.5.1_0076	Kharkiv	Strileche village,	UA_M6.5.1_0076_01	36°22'31.8 "E	50°17'16.1 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si

№	SWB code	Name of the SWB	Name of the monitoring point	Code of the monitoring point	Geographical coordinates		River basin area	Sub-basin	SWB category	Type of SWB
					Length	Latitude				
			border with the Russian Federation							
26	UA_M6.5.1_0079	Kharkiv	River mouth, Kharkiv[72]	UA_M6.5.1_0079_01	36°14'34.4 "E	49°59'17.5 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
27	UA_M6.5.1_0086	Murom	River mouth	UA_M6.5.1_0086_01	36°25'08.4 "E	50°08'45.5 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
28	UA_M6.5.1_0097	Rohan	River mouth	UA_M6.5.1_0097_01	36°26'42.4 "E	49°49'08.9 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
29	UA_M6.5.1_0090	Nemyshlya	River mouth, Kharkiv	UA_M6.5.1_0090_01	36°16'35.0 "E	49°59'16.1 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Si
30	UA_M6.5.1_0104	Mozh	Upstream the Merefa	UA_M6.5.1_0104_01	35°54'27.0 "E	49°47'12.3 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
31	UA_M6.5.1_0105	Mozh	River mouth, Zmiiv[72]	UA_M6.5.1_0105_01	36°21'23.2 "E	49°41'02.3 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
32	UA_M6.5.1_0112	Kniazhna	Brazhniki village	UA_M6.5.1_0112_01	35°52'48.7 "E	49°39'16.9 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Si
33	UA_M6.5.1_0127	Balakliika	River mouth, Balakliya	UA_M6.5.1_0127_01	36°51'04.5 "E	49°26'44.5 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
34	UA_M6.5.1_0140	Chepel	Husarivka village	UA_M6.5.1_0140_01	36°48'19.8 "E	49°21'29.1 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
35	UA_M6.5.1_0162	Dnipro-Donbas Canal	215 km, upper reaches of the Krasnopavlivske reservoir	UA_M6.5.1_0162_01	36° 30' 3,43 "E	49° 6' 49,76 "N	Don	Siverskyi Donets	HMWB	no
36	UA_M6.5.1_0188	Oskil	Topoli village, border with the Russian Federation	UA_M6.5.1_0188_01	37°54'33.7 "E	50°00'13.77 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
37	UA_M6.5.1_0189	Oskil	Oskilske reservoir	UA_M6.5.1_0189_01	37°28'21.4 "E	49°10'32.8 "N	Don	Siverskyi Donets	HMWB	no
38	UA_M6.5.1_0190	Oskil	River mouth	UA_M6.5.1_0190_01	37°26'11.6 "E	49°10'12.0 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
39	UA_M6.5.1_0217	Kupianka	Moskovka village	UA_M6.5.1_0217_01	37°34'31.8 "E	49°43'32.3 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Si
40	UA_M6.5.1_0246	Nitrius	River mouth, Drobysheve village	UA_M6.5.1_0246_01	37°41'08.0 "E	49°02'26.8 "N	Don	Siverskyi Donets	HMWB	no
41	UA_M6.5.1_0249	Kazennyi Torets	upstream the Druzhkivka	UA_M6.5.1_0249_01	37°28'29.2 "E	48°35'57.2 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
42	UA_M6.5.1_0250	Kazennyi Torets	Downstream the Druzhkivka (downstream the confluence with the Kryvyi Torets River)	UA_M6.5.1_0250_01	37°31'39.9 "E	48°38'55.3 "N	Don	Siverskyi Donets	HMWB	no

№	SWB code	Name of the SWB	Name of the monitoring point	Code of the monitoring point	Geographical coordinates		River basin area	Sub-basin	SWB category	Type of SWB
					Length	Latitude				
43	UA_M6.5.1_0251	Kazennyi Torets	River mouth, Rayhorodok village	UA_M6.5.1_0251_01	37°44'36.834 "E	48°54'8.701 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
44	UA_M6.5.1_0251	Kazennyi Torets	Sloviansk (downstream the discharge of Kramatorsk and Sloviansk enterprises)	UA_M6.5.1_0251_02	37°37'12.053 "E	48°50'42,877 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
45	UA_M6.5.1_0264	Krivyi Torets	downstream the discharge of the Phenol Plant (Toretsk)	UA_M6.5.1_0264_01	37°49'8.323 "E	48°21'29.429 "N	Don	Siverskyi Donets	HMWB	no
46	UA_M6.5.1_0264	Krivyi Torets	Upstream of Zalizna	UA_M6.5.1_0264_02	37°49'50.4 "E	48°20'08.1 "N	Don	Siverskyi Donets	HMWB	no
47	UA_M6.5.1_0265	Krivyi Torets	upstream the Kostiantynivka	UA_M6.5.1_0265_01	37°44'18.4 "E	48°30'04.4 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
48	UA_M6.5.1_0266	Krivyi Torets	downstream Kostyantynivka (Oleksiyevo-Druzhkivka village)	UA_M6.5.1_0266_01	37°36'40.6 "E	48°34'40.2 "N	Don	Siverskyi Donets	HMWB	no
49	UA_M6.5.1_0267	Krivyi Torets	River mouth, Karlivka dam	UA_M6.5.1_0267_01	37°32'2.609 "E	48°38'12.258 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
50	UA_M6.5.1_0291	Zalizna	River mouth, Nelepivka village	UA_M6.5.1_0291_01	37°50'13.0 "E	48°20'55.8 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Ca
51	UA_M6.5.1_0299	Bychok	the lower section of the Kleban-Byk park	UA_M6.5.1_0299_01	37°46'18.627 "E	48°26'12.5 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
52	UA_M6.5.1_0321	Bilenka	River mouth, Kramatorsk	UA_M6.5.1_0321_01	37°33'30.9 "E	48°42'54.8 "N	Don	Siverskyi Donets	HMWB	no
53	UA_M6.5.1_0328	Mayachka	River mouth, Kramatorsk	UA_M6.5.1_0328_01	37°32'44.1 "E	48°43'59.0 "N	Don	Siverskyi Donets	HMWB	no
54	UA_M6.5.1_0338	Sukhyi Torets	Barvenkovo	UA_M6.5.1_0338_01	37°01'22.9 "E	48°54'23.0 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
55	UA_M6.5.1_0339	Sukhyi Torets	River mouth	UA_M6.5.1_0339_01	37°34'37.2 "E	48°49'07.9 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
56	UA_M6.5.1_0358	Bakhmutka (Bakhmut)	upatream the Bakhmut	UA_M6.5.1_0358_01	38°1'25.832 "E	48°33'36.583 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
57	UA_M6.5.1_0360	Bakhmutka (Bakhmut)	downstream the Bakhmut	UA_M6.5.1_0360_01	38°00'28.7 "E	48°38'46.4 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
58	UA_M6.5.1_0361	Bakhmutka (Bakhmut)	River mouth, Dronivka village	UA_M6.5.1_0361_01	38°02'33.6 "E	48°55'28.6 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
59	UA_M6.5.1_0379	Mokra Plotva	River mouth, Soledar	UA_M6.5.1_0379_01	38°02'41.9 "E	48°41'52.3 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
60	UA_M6.5.1_0407	Zherebets	River mouth, Torske village	UA_M6.5.1_0407_01	37°57'09.6 "E	49°01'17.7 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Si

№	SWB code	Name of the SWB	Name of the monitoring point	Code of the monitoring point	Geographical coordinates		River basin area	Sub-basin	SWB category	Type of SWB
					Length	Latitude				
61	UA_M6.5.1_0410	Krasna	River mouth	UA_M6.5.1_0410_01	38°15'4.668 "E	49°1'24.123 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
62	UA_M6.5.1_0421	Khoryna	section from Pavlivka village to Travneve village	UA_M6.5.1_0421_01	38°22'9.21 "E	49°30'57.17 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Si
63	UA_M6.5.1_0427	Borova	River mouth	UA_M6.5.1_0427_01	38°24'19.624 "E	48°57'57.658 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
64	UA_M6.5.1_0445	Khvyliova Plotva	Nova Astrakhan village	UA_M6.5.1_0445_01	38°37'27.9 "E	49°07'17.9 "N	Don	Siverskyi Donets	river	UA_R_16_S_1_Si
65	UA_M6.5.1_0458	Upper Belenka	upstream the discharges of Lysychansk enterprises	UA_M6.5.1_0458_01	38°23'35.2 "E	48°50'58.8 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Ca
66	UA_M6.5.1_0459	Upper Belenka	River mouth	UA_M6.5.1_0459_01	38°28'11.665 "E	48°53'11.638 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
67	UA_M6.5.1_0465	Aidar	Novoaidar	UA_M6.5.1_0465_01	38°59'08.2 "E	48°57'32.2 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
68	UA_M6.5.1_0488	Yevsug	Oleksiivka village	UA_M6.5.1_0488_01	39°10'25.2 "E	49°00'44.2 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
69	UA_M6.5.1_0593	Derkul	Belovodsk	UA_M6.5.1_0593_01	39°34'46.6 "E	49°12'13.6 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Ca
Investigative monitoring										
1	UA_M6.5.1_0004	Siverskyi Donets	Balakliya	UA_M6.5.1_0004_05	36°50'20,983 "E	49°25'25,775 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
2	UA_M6.5.1_0004	Siverskyi Donets	Izum	UA_M6.5.1_0004_06	37°17'22,445 "E	49°12'24,404 "N	Don	Siverskyi Donets	river	UA_R_16_XL_1_Si
3	UA_M6.5.1_0043	Velykyi Burluk	River mouth, Bazalivka village	UA_M6.5.1_0043_01	37°00'04.4 "E	49°50'04.1 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
4	UA_M6.5.1_0056	Udy	Zolochiv village	UA_M6.5.1_0056_02	35°58'04.42 "E	50°17'36.39 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
5	UA_M6.5.1_0071	Lopan	Kharkiv	UA_M6.5.1_0071_02	36°09'17.172 "E	50°02'44.340 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si
6	UA_M6.5.1_0079	Kharkiv	Kharkiv (Isaevsky Bridge)	UA_M6.5.1_0079_02	36°17'34.75 "E	50° 0'24.13 "N	Don	Siverskyi Donets	river	UA_R_16_L_1_Si
7	UA_M6.5.1_0081	Lypets	Lyptsi village	UA_M6.5.1_0071_01	36.°25'21.792 "E	50°12'24.408 "N	Don	Siverskyi Donets	river	UA_R_16_M_1_Si

Annex 7. Integrated table for assessing the status of the SWBs for 2021-2023

№us	SWB				Biological elements of quality						Hydromorphological indicators - high status (Yes/No)	Chemical and physicochemical parameters	Basin specific		Ecological status	Assessment reliability level	Artificial and heavily modified SWB			Chemical status	
	Name of the SWB	Code	Type	Length of the pipeline, km / Area, m2	Phytoplankton	Microphytobenthos	Vascular plants	Bottom macroinvertebrates	The status of the SWB by biological indicators	Assessment reliability level			Basin specific	Assessment reliability level			Artificial SWB (Yes/No)	Heavily modified (Yes/Preliminary)	Ecological potential	Chemical status	Assessment reliability level
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Siverskyi Donets	UA_M6.5.1_0001	UA_R_16_L_1_Si	12,4	n/a	n/a	n/a	n/a	n/a		no	3	3	M						+	M
2	Siverskyi Donets	UA_M6.5.1_0002	no	72,2	A/A	-	-	-	2	M	-	2	3	M				pHMWB	2	-	M
3	Siverskyi Donets	UA_M6.5.1_0003	UA_R_16_L_1_Si	31,7	A/A	-	-	-	3	M		3	3	M	3	M				-	M
4	Siverskyi Donets	UA_M6.5.1_0004	UA_R_16_XL_1_Si	322,6	3	3	3	2	2	M	no	3	3	M	2	M				-	M
5	Siverskyi Donets	UA_M6.5.1_0005	no	2,5	3	2	3	2	2	M	-	3	2	M				pHMWB	2	-	M
6	Siverskyi Donets	UA_M6.5.1_0006	no	7,7	3	3	2	3	3	M	-	n/a	3	M				pHMWB	3	-	M
7	Siverskyi Donets	UA_M6.5.1_0007	UA_R_16_XL_1_Si	222,2	3	3	3	3	3	M	no	3	3	M	3	M				-	M
8	Vovcha	UA_M6.5.1_0009	UA_R_16_M_1_Si	26,9	n/a	n/a	n/a	n/a	n/a		yes	2	3	M						+	M
9	Vovcha	UA_M6.5.1_0010	UA_R_16_L_1_Si	37,3	2	2	2	2	2	M	yes	2	3	M	2	M				+	M
10	Khotomlya	UA_M6.5.1_0028	UA_R_16_S_1_Si	10,6	n/a	3	3	2	3	M	yes	3	3	M	3	M				-	M
11	Lebyazha	UA_M6.5.1_0046	UA_R_16_S_1_SI	12,4	n/a	n/a	n/a	n/a	n/a		-	3	3	M						-	M

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
12	Tetliha	UA_M6.5.1_0055	UA_R_16_S_1_Si	18,0	n/a	3	3	5	5	M	yes	3	3	M	5	M				-	M
13	Udy	UA_M6.5.1_0056	UA_R_16_M_1_Si	47,7	n/a	n/a	n/a	n/a	n/a		no	3	3	M						+	M
14	Udy	UA_M6.5.1_0058	UA_R_16_M_1_Si	24,3	-	B/A	A/B	A/A	2	M	yes	3	3	M	2	M				-	M
15	Udy	UA_M6.5.1_0059	UA_R_16_L_1_Si	83,5	A/A	-	-	-	-		yes	3	3	M						+	M
16	Lopan	UA_M6.5.1_0071	UA_R_16_M_1_Si	64,2	n/a	n/a	n/a	n/a	n/a		no	3	3	M						+	M
17	Lopan	UA_M6.5.1_0072	UA_R_16_L_1_Si	8,4	A/A	A/A	A/B	B/A	2	M	no	3	3	M	2	M				-	M
18	Kharkiv	UA_M6.5.1_0076	UA_R_16_M_1_Si	1,6	n/a	n/a	n/a	n/a	n/a		yes	3	3	M						-	M
19	Kharkiv	UA_M6.5.1_0079	UA_R_16_L_1_Si	8,4	A/A	B/A	USED	B/A	4	M	no	3	3	M	4	M				-	M
20	Murom	UA_M6.5.1_0086	UA_R_16_M_1_Si	5,7	n/a	n/a	n/a	n/a	n/a		no	3	2	M						-	M
21	Nemyshlya	UA_M6.5.1_0090	UA_R_16_S_1_Si	24,6	-	B/A	USED	A/A	2	M	no	3	2	M	2	M				-	M
22	Rohan	UA_M6.5.1_0097	UA_R_16_M_1_Si	17,7	n/a	n/a	n/a	n/a	n/a		no	3	3	M						-	M
23	Mozh	UA_M6.5.1_0104	UA_R_16_M_1_Si	29,6	-	A/A	A/B	A/A	2	M	yes	3	2	M	2	M				-	M
24	Mozh	UA_M6.5.1_0105	UA_R_16_L_1_Si	46,0	A/B	B/A	A/B	B/A	2	M	yes	3	2	M	2	M				-	M
25	Kniazhna	UA_M6.5.1_0112	UA_R_16_S_1_Si	13,6	second--	A/A	USED	A/A	2	M	yes	3	3	M	2	M				-	M
26	Balakliika	UA_M6.5.1_0127	UA_R_16_M_1_Si	10,2	n/a	n/a	n/a	n/a	n/a		yes	3	3	M						+	M
27	Chepel	UA_M6.5.1_0140	UA_R_16_M_1_Si	25,6	n/a	n/a	n/a	n/a	n/a		yes	3	3	M						-	M
28	Bereka	UA_M6.5.1_0149	no	19,5	n/a	n/a	n/a	n/a	n/a			n/a	n/a							+	M
29	Krasnopavlivske reservoir	UA_M6.5.1_0162	no	27,3	B/A	B/A	USED	B/A	3	M	-	n/a	2	M				pHMWB	3	-	M
30	Iziumets	UA_M6.5.1_0182	UA_R_16_M_1_Si	28,2	3	2	1	2	2	M		n/a	n/a		2	M				-	M
31	Sukhyi Iziumets	UA_M6.5.1_0185	UA_R_16_M_1_SI	2,0	n/a	n/a	n/a	n/a	n/a		-	3	3	M						-	M
32	Oskil	UA_M6.5.1_0188	UA_R_16_XL_1_Si	92,3	3	3	2	1	2	M		3	n/a		2	M				+	M
33	Oskil	UA_M6.5.1_0189	no	91,2	3	2	3	3	3	M	-	3	2	M				pHMWB	3	-	M

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
34	Oskil	UA_M6.5.1_0190	UA_R_16_XL_1_Si	13,8	3	3	2	2	2	M	no	3	2	M	2	M				+	M
35	Kupianka	UA_M6.5.1_0217	UA_R_16_S_1_Si	13,9	n/a	3	2	3	3	M	yes	3	3	M	3	M				-	M
36	Nitrius	UA_M6.5.1_0246	no	14,7	3	3	3	4	4	M	-	n/a	3	M				pHMWB	4	-	M
37	Kazennyi Torets	UA_M6.5.1_0249	UA_R_16_L_1_Si	6,8	3	3	3	3	3	M	yes	n/a	2	M	3	M				-	M
38	Kazennyi Torets	UA_M6.5.1_0250	no	29,9	3	3	3	4	4	M	-	n/a	2	M				pHMWB	4	-	M
39	Kazennyi Torets	UA_M6.5.1_0251	UA_R_16_L_1_Si	25,3	3	3	3	4	4	M	no	n/a	3	M	4	M				-	M
40	Kryvyi Torets	UA_M6.5.1_0264	no	15,1	3	2	3	4	4	M	-	n/a	3	M		M		pHMWB	4	-	M
41	Kryvyi Torets	UA_M6.5.1_0265	UA_R_16_L_1_Si	30,1	3	3	4	4	4	M	yes	n/a	3	M	4	M				-	M
42	Kryvyi Torets	UA_M6.5.1_0266	no	8,5	3	3	4	4	4	M	-	n/a	3	M		M		pHMWB	4	-	M
43	Kryvyi Torets	UA_M6.5.1_0267	UA_R_16_L_1_Si	4,0	3	3	3	3	3	M	no	n/a	2	M	3	M				+	M
44	Zalizna	UA_M6.5.1_0291	UA_R_16_S_1_Ca	11,3	n/a	-	2	3	3	M	yes	n/a	3	M	3	M				-	M
45	Kleban-Byk reservoir	UA_M6.5.1_0298	no	5,3	n/a	n/a	n/a	n/a	n/a			n/a	3	M						-	M
46	Bychok	UA_M6.5.1_0299	UA_R_16_M_1_Si	2,3	n/a	n/a	n/a	n/a	n/a		no	n/a	3	M						+	M
47	Bila	UA_M6.5.1_0321	no	11,8	3	3	3	3	3	M	-	n/a	2	M				pHMWB	3	+	M
48	Mayachka	UA_M6.5.1_0328	no	8,9	3	3	3	3	3	M	-	n/a	2	M				pHMWB	3	-	M
49	Sukhyi Torets	UA_M6.5.1_0338	UA_R_16_M_1_Si	46,8	n/a	3	4	4	4	M	yes	n/a	3	M	4	M				-	M
50	Sukhyi Torets	UA_M6.5.1_0339	UA_R_16_L_1_Si	43,8	n/a	n/a	n/a	n/a	n/a		yes	n/a	3	M						+	M
51	Soryshchi	UA_M6.5.1_0353	UA_R_16_S_1_SI	14,2	n/a	n/a	n/a	n/a	n/a		-	n/a	n/a							+	M
52	Bakhmutka	UA_M6.5.1_0358	UA_R_16_M_1_Si	16,8	n/a	n/a	n/a	n/a	n/a		yes	n/a	3	M						+	M
53	Bakhmutka	UA_M6.5.1_0360	UA_R_16_M_1_Si	24,9	n/a	n/a	n/a	n/a	n/a		yes	n/a	3	M						+	M
54	Bakhmutka	UA_M6.5.1_0361	UA_R_16_L_1_Si	37,5	3	3	-	4	4	M	yes	n/a	3	M	4	M				+	M
55	Mokra Plotva	UA_M6.5.1_0379	UA_R_16_M_1_Si	12,4	n/a	3	4	5	5	M	no	n/a	3	M	5	M				+	M

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
56	Zherebets	UA_M6.5.1_0407	UA_R_16_S_1_Si	81,4	n/a	2	3	3	3	M	yes	n/a	3	M	3	M				+	M
57	Krasna	UA_M6.5.1_0410	UA_R_16_L_1_Si	96,2	n/a	n/a	n/a	n/a	n/a		yes	n/a	3	M						+	M
58	Khoryna	UA_M6.5.1_0421	UA_R_16_S_1_Si	5,4	n/a	n/a	n/a	n/a	n/a		yes	n/a	3	M						+	M
59	Borova	UA_M6.5.1_0427	UA_R_16_L_1_Si	44,0	n/a	n/a	n/a	n/a	n/a		yes	n/a	3	M						+	M
60	Khvylova Plotva	UA_M6.5.1_0445	UA_R_16_S_1_Si	7,3	n/a	2	3	3	3	M	no	n/a	3	M	3	M				+	M
61	Upper Belenka	UA_M6.5.1_0458	UA_R_16_M_1_Ca	11,7	n/a	2	3	3	3	M		n/a	3	M	3	M				+	M
62	Upper Belenka	UA_M6.5.1_0459	UA_R_16_M_1_Si	2,1	n/a	n/a	n/a	n/a	n/a		yes	n/a	3	M						+	M
63	Aidar	UA_M6.5.1_0465	UA_R_16_L_1_Si	146,4	3	2	2	1	2	M	yes	n/a	3	M	2	M				+	M
64	Yevsug	UA_M6.5.1_0488	UA_R_16_M_1_Si	72,1	n/a	2	2	2	2	M	yes	n/a	3	M	2	M				-	M
65	Derkul	UA_M6.5.1_0593	UA_R_16_L_1_Ca	16,3	2	2	2	1	2	M	yes	n/a	3	M	2	M				+	M

Notes:

- not applicable, without assessment

n/a no monitoring was carried out

Level of reliability of the assessment

H high
M medium
L low

Assessment of ecological status/potential

1	High
2	good
3	moderate
4	poor
5	bad

Assessment of the chemical status

+	good
-	failure to achieve the good

Annex 8. Achievement of environmental objectives for the Don RBD SWBs in 2030

Table 1. Achievement of the environmental objectives of the SWBs in 2030

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
SWBs not at risk								
1	Krepka	UA_M6.5.1_0685	NR	risk-free	Not at risk	yes	yes	
4% (7.5% of the SWBs in the Government-controlled area)								
1	Siverskyi Donets	UA_M6.5.1_0001	NR	at risk	Not at risk	yes	yes	
2	Siverskyi Donets	UA_M6.5.1_0004	NR	at risk	at risk	yes	yes	
3	Rayhorodske Reservoir	UA_M6.5.1_0005	HMWB	at risk	Not at risk	yes	yes	
4	Siverskyi Donets	UA_M6.5.1_0006	HMWB	at risk	Not at risk	yes	yes	
5	Tagged.	UA_M6.5.1_0055	NR	at risk	at risk	yes	yes	
6	Oudy	UA_M6.5.1_0059	NR	at risk	at risk	yes	yes	
7	Lopan	UA_M6.5.1_0072	NR	at risk	at risk	yes	yes	
8	Rohan	UA_M6.5.1_0097	NR	at risk	at risk	yes	yes	
9	Studenok	UA_M6.5.1_0100	NR	at risk	Not at risk	yes	yes	
10	Can.	UA_M6.5.1_0104	NR	at risk	Not at risk	yes	yes	
11	Can.	UA_M6.5.1_0105	NR	at risk	at risk	yes	yes	
12	Voloska Balakliika	UA_M6.5.1_0136	NR	at risk	Not at risk	yes	yes	
13	Rot	UA_M6.5.1_0213	NR	at risk	Not at risk	yes	yes	

[60] NR - SWBs of natural categories (rivers, lakes, transitional, coastal), HMWB/AWB – heavily modified or artificial SWBs

[61] NC - natural causes, TC - technical causes (lack of a technical solution, technical impracticality or impracticability), DC - disproportionately high cost, MO - reasons related to military operations, temporary occupation of the territory, NA - reasons unknown

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
14	Treasury end	UA_M6.5.1_0248	NR	at risk	at risk	yes	yes	
15	Treasury end	UA_M6.5.1_0249	NR	at risk	at risk	yes	yes	
16	Treasury end	UA_M6.5.1_0250	HMWB	at risk	at risk	yes	yes	
17	Treasury end	UA_M6.5.1_0251	NR	at risk	at risk	yes	yes	
18	Curved End	UA_M6.5.1_0264	HMWB	at risk	Not at risk	yes	yes	
19	Curved End	UA_M6.5.1_0265	NR	at risk	at risk	yes	yes	
20	Curved End	UA_M6.5.1_0266	HMWB	at risk	at risk	yes	yes	
21	Curved End	UA_M6.5.1_0267	NR	at risk	at risk	yes	yes	
22	Gruzka	UA_M6.5.1_0309	NR	at risk	at risk	yes	yes	
23	Gruzka	UA_M6.5.1_0310	HMWB	at risk	Not at risk	yes	yes	
all other SWBs								
1	Pecheneg reservoir	UA_M6.5.1_0002	HMWB	at risk	Not at risk	no	yes	TC
2	Siverskyi Donets	UA_M6.5.1_0003	NR	at risk	Not at risk	no	yes	TC
3	Siverskyi Donets	UA_M6.5.1_0007	NR	at risk	at risk	no	no	MO, TC
4	Siverskyi Donets	UA_M6.5.1_0008	NR	at risk	at risk	no	no	MO, NA
5	Wolf	UA_M6.5.1_0009	NR	at risk	Not at risk	no	yes	NA
6	Wolf	UA_M6.5.1_0010	NR	at risk	at risk	no	no	TC
7	Flesh	UA_M6.5.1_0011	NR	possibly at risk	Not at risk	no	yes	NA
8	Flesh	UA_M6.5.1_0012	NR	at risk	at risk	no	no	TC
9	Karaechnyi Yar	UA_M6.5.1_0013	NR	possibly at risk	Not at risk	no	yes	NA
10	Karaechnyi Yar	UA_M6.5.1_0014	HMWB	at risk	Not at risk	no	yes	TC
11	Karaechnyi Yar	UA_M6.5.1_0015	NR	at risk	Not at risk	no	yes	TC

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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)	
12	Yar Bilyi	UA_M6.5.1_0016	HMWB	at risk	Not at risk	no	yes	TC
13	Staritsa	UA_M6.5.1_0017	NR	at risk	Not at risk	no	yes	TC
14	Polna	UA_M6.5.1_0018	NR	at risk	Not at risk	no	yes	NA
15	Polna	UA_M6.5.1_0019	HMWB	at risk	Not at risk	no	yes	TC
16	Polna	UA_M6.5.1_0020	NR	at risk	Not at risk	no	yes	TC
17	Polna	UA_M6.5.1_0021	NR	at risk	Not at risk	no	yes	NA
18	Gryvkiv Yar	UA_M6.5.1_0022	NR	possibly at risk	Not at risk	no	yes	NA
19	Gryvkiv Yar	UA_M6.5.1_0023	HMWB	at risk	Not at risk	no	yes	TC
20	Gryvkiv Yar	UA_M6.5.1_0024	NR	possibly at risk	Not at risk	no	yes	NA
21	Torn	UA_M6.5.1_0025	NR	at risk	at risk	no	no	TC
22	Hotomlya	UA_M6.5.1_0026	NR	at risk	Not at risk	no	yes	TC
23	Hotomlya	UA_M6.5.1_0027	HMWB	at risk	Not at risk	no	yes	TC
24	Hotomlya	UA_M6.5.1_0028	NR	at risk	Not at risk	no	yes	TC
25	Hotomlya	UA_M6.5.1_0029	NR	at risk	Not at risk	no	yes	TC
26	Khotomelka	UA_M6.5.1_0030	NR	at risk	Not at risk	no	yes	TC
27	Rot	UA_M6.5.1_0031	NR	at risk	Not at risk	no	yes	TC
28	Rot	UA_M6.5.1_0032	NR	at risk	Not at risk	no	yes	TC
29	Srednyi Burluk	UA_M6.5.1_0033	NR	at risk	Not at risk	no	yes	NA
30	Srednyi Burluk	UA_M6.5.1_0034	HMWB	at risk	Not at risk	no	yes	TC
31	Dry Burluk	UA_M6.5.1_0035	NR	at risk	Not at risk	no	yes	NA
32	Dry Burluk	UA_M6.5.1_0036	NR	at risk	Not at risk	no	yes	TC
33	Velichkiv Yar	UA_M6.5.1_0037	NR	possibly at risk	Not at risk	no	yes	NA

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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)	
34	Velichkiv Yar	UA_M6.5.1_0038	HMWB	at risk	Not at risk	no	yes	TC
35	Velichkiv Yar	UA_M6.5.1_0039	NR	possibly at risk	Not at risk	no	yes	NA
36	Great Burluk	UA_M6.5.1_0040	NR	at risk	Not at risk	no	yes	NA
37	Great Burluk	UA_M6.5.1_0041	NR	at risk	Not at risk	no	yes	TC
38	Great Burluk	UA_M6.5.1_0042	HMWB	at risk	Not at risk	no	yes	TC
39	Great Burluk	UA_M6.5.1_0043	NR	at risk	at risk	no	no	TC
40	Goose	UA_M6.5.1_0044	HMWB	at risk	Not at risk	no	yes	TC
41	Goose	UA_M6.5.1_0045	HMWB	at risk	Not at risk	no	yes	TC
42	Lebyazha	UA_M6.5.1_0046	NR	at risk	Not at risk	no	yes	TC
43	Taganka	UA_M6.5.1_0047	NR	at risk	Not at risk	no	yes	TC
44	Taganka	UA_M6.5.1_0048	HMWB	at risk	Not at risk	no	yes	TC
45	Taganka	UA_M6.5.1_0049	NR	at risk	Not at risk	no	yes	NA
46	Dragonfly	UA_M6.5.1_0050	HMWB	at risk	Not at risk	no	yes	TC
47	Dragonfly	UA_M6.5.1_0051	NR	at risk	Not at risk	no	yes	NA
48	Oleg	UA_M6.5.1_0052	NR	at risk	Not at risk	no	yes	NA
49	Oleg	UA_M6.5.1_0053	HMWB	at risk	Not at risk	no	yes	TC
50	Oleg	UA_M6.5.1_0054	NR	at risk	Not at risk	no	yes	NA
51	Oudy	UA_M6.5.1_0056	NR	at risk	at risk	no	no	TC
52	Rogozyansky reservoir	UA_M6.5.1_0057	HMWB	at risk	Not at risk	no	yes	TC
53	Oudy	UA_M6.5.1_0058	NR	at risk	Not at risk	no	yes	TC
54	Rogozyanka	UA_M6.5.1_0060	NR	at risk	Not at risk	no	yes	TC
55	Rogozyanka	UA_M6.5.1_0061	NR	at risk	Not at risk	no	yes	TC

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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)	
56	Kryvorotivka	UA_M6.5.1_0062	NR	possibly at risk	Not at risk	no	yes	NA
57	Kryvorotivka	UA_M6.5.1_0063	HMWB	at risk	Not at risk	no	yes	TC
58	Kryvorotivka	UA_M6.5.1_0064	NR	possibly at risk	Not at risk	no	yes	NA
59	Kryvorotivka	UA_M6.5.1_0065	HMWB	at risk	Not at risk	no	yes	TC
60	Kryvorotivka	UA_M6.5.1_0066	NR	possibly at risk	Not at risk	no	yes	NA
61	Kryvorotivka	UA_M6.5.1_0067	HMWB	at risk	Not at risk	no	yes	TC
62	Kryvorotivka	UA_M6.5.1_0068	NR	at risk	Not at risk	no	yes	TC
63	Kryvorotivka	UA_M6.5.1_0069	NR	at risk	Not at risk	no	yes	TC
64	Untitled	UA_M6.5.1_0070	HMWB	at risk	Not at risk	no	yes	TC
65	Lopan	UA_M6.5.1_0071	NR	at risk	at risk	no	yes	TC
66	Lozovenka	UA_M6.5.1_0073	NR	at risk	Not at risk	no	yes	TC
67	Lozovenky reservoir	UA_M6.5.1_0074	HMWB	at risk	Not at risk	no	yes	TC
68	Lozovenka	UA_M6.5.1_0075	NR	at risk	at risk	no	no	NA
69	Kharkiv	UA_M6.5.1_0076	NR	at risk	Not at risk	no	yes	MO, TC
70	Travianske reservoir	UA_M6.5.1_0077	HMWB	at risk	Not at risk	no	yes	TC
71	Kharkiv	UA_M6.5.1_0078	NR	at risk	at risk	no	no	TC
72	Kharkiv	UA_M6.5.1_0079	NR	at risk	at risk	no	no	TC
73	Lipetsk	UA_M6.5.1_0080	NR	at risk	Not at risk	no	yes	TC
74	Lipetsk	UA_M6.5.1_0081	NR	at risk	Not at risk	no	yes	TC
75	Lipchik	UA_M6.5.1_0082	NR	possibly at risk	Not at risk	no	yes	NA
76	Moore	UA_M6.5.1_0083	NR	at risk	at risk	no	no	TC
77	Moore	UA_M6.5.1_0084	NR	at risk	Not at risk	no	yes	TC

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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)	
78	Murom reservoir	UA_M6.5.1_0085	HMWB	at risk	Not at risk	no	yes	TC
79	Moore	UA_M6.5.1_0086	NR	at risk	Not at risk	no	yes	TC
80	Flabby	UA_M6.5.1_0087	NR	possibly at risk	Not at risk	no	yes	NA
81	Vyalivske Reservoir	UA_M6.5.1_0088	HMWB	at risk	Not at risk	no	yes	TC
82	Flabby	UA_M6.5.1_0089	NR	possibly at risk	Not at risk	no	yes	NA
83	Nemyshlya	UA_M6.5.1_0090	NR	at risk	Not at risk	no	yes	TC
84	Studenok	UA_M6.5.1_0091	NR	possibly at risk	Not at risk	no	yes	NA
85	Studenok	UA_M6.5.1_0092	HMWB	at risk	Not at risk	no	yes	TC
86	Studenok	UA_M6.5.1_0093	NR	at risk	at risk	no	no	TC
87	Rohan	UA_M6.5.1_0094	NR	at risk	Not at risk	no	yes	TC
88	Rohan	UA_M6.5.1_0095	HMWB	at risk	Not at risk	no	yes	TC
89	Rohan	UA_M6.5.1_0096	NR	possibly at risk	Not at risk	no	yes	TC
90	Studenok	UA_M6.5.1_0098	NR	possibly at risk	Not at risk	no	yes	NA
91	Studenok	UA_M6.5.1_0099	HMWB	at risk	Not at risk	no	yes	TC
92	Rot	UA_M6.5.1_0101	HMWB	at risk	Not at risk	no	yes	TC
93	Rot	UA_M6.5.1_0102	HMWB	at risk	at risk	no	no	TC
94	Can.	UA_M6.5.1_0103	HMWB	at risk	Not at risk	no	yes	TC
95	Bulgarian	UA_M6.5.1_0106	HMWB	at risk	at risk	no	no	TC
96	Bird cherry	UA_M6.5.1_0107	HMWB	at risk	Not at risk	no	yes	TC
97	Bird cherry	UA_M6.5.1_0108	NR	at risk	Not at risk	no	yes	TC
98	Chernecha	UA_M6.5.1_0109	HMWB	at risk	Not at risk	no	yes	TC
99	Turtleneck	UA_M6.5.1_0110	NR	at risk	Not at risk	no	yes	TC

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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)	
100	Turtleneck	UA_M6.5.1_0111	NR	at risk	Not at risk	no	yes	TC
101	Princess	UA_M6.5.1_0112	NR	at risk	Not at risk	no	yes	TC
102	Jun	UA_M6.5.1_0113	NR	at risk	Not at risk	no	yes	TC
103	Jun	UA_M6.5.1_0114	NR	at risk	Not at risk	no	yes	TC
104	Merefa	UA_M6.5.1_0115	NR	at risk	at risk	no	no	TC
105	Merefa	UA_M6.5.1_0116	HMWB	at risk	Not at risk	no	yes	TC
106	Merefa	UA_M6.5.1_0117	NR	at risk	Not at risk	no	yes	TC
107	Merefa	UA_M6.5.1_0118	HMWB	at risk	at risk	no	no	TC
108	Borovenka	UA_M6.5.1_0119	HMWB	at risk	Not at risk	no	yes	TC
109	Olshanka	UA_M6.5.1_0120	HMWB	at risk	at risk	no	no	TC
110	Gomulsha	UA_M6.5.1_0121	HMWB	at risk	Not at risk	no	yes	TC
111	Gomulsha	UA_M6.5.1_0122	NR	at risk	Not at risk	no	yes	TC
112	Byshkin	UA_M6.5.1_0123	NR	at risk	Not at risk	no	yes	NA
113	Byshkin	UA_M6.5.1_0124	HMWB	at risk	Not at risk	no	yes	TC
114	Byshkin	UA_M6.5.1_0125	NR	at risk	Not at risk	no	yes	TC
115	Shabelinka	UA_M6.5.1_0126	NR	at risk	Not at risk	no	yes	TC
116	Balakleya	UA_M6.5.1_0127	NR	at risk	Not at risk	no	yes	TC
117	Balakleya	UA_M6.5.1_0128	NR	at risk	Not at risk	no	yes	TC
118	Kraynaya Balakleyka	UA_M6.5.1_0129	NR	at risk	Not at risk	no	yes	TC
119	Kraynaya Balakleyka	UA_M6.5.1_0130	HMWB	at risk	Not at risk	no	yes	TC
120	Srednyaya Balakliyka	UA_M6.5.1_0131	NR	at risk	Not at risk	no	yes	NA
121	Srednyaya Balakliyka	UA_M6.5.1_0132	NR	at risk	Not at risk	no	yes	NA

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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)	
122	Srednyaya Balakliyka	UA_M6.5.1_0133	NR	at risk	Not at risk	no	yes	NA
123	Serednyaya Balakliyka	UA_M6.5.1_0134	NR	at risk	at risk	no	no	TC
124	Voloska Balakliika	UA_M6.5.1_0135	NR	at risk	Not at risk	no	yes	TC
125	Greenhouse	UA_M6.5.1_0137	HMWB	at risk	Not at risk	no	yes	TC
126	Greenhouse	UA_M6.5.1_0138	NR	at risk	Not at risk	no	yes	TC
127	Chepil	UA_M6.5.1_0139	HMWB	at risk	Not at risk	no	yes	TC
128	Chepil	UA_M6.5.1_0140	NR	at risk	Not at risk	no	yes	TC
129	Window	UA_M6.5.1_0141	NR	at risk	Not at risk	no	yes	TC
130	Kruhle tract	UA_M6.5.1_0142	HMWB	at risk	Not at risk	no	yes	TC
131	Berechka	UA_M6.5.1_0143	NR	at risk	Not at risk	no	yes	NA
132	Berechka	UA_M6.5.1_0144	NR	at risk	Not at risk	no	yes	TC
133	Bereka	UA_M6.5.1_0145	NR	at risk	at risk	no	no	NA
134	Bereka	UA_M6.5.1_0146	NR	at risk	Not at risk	no	yes	TC
135	Bereka	UA_M6.5.1_0147	HMWB	at risk	at risk	no	no	TC
136	Bereka	UA_M6.5.1_0148	NR	at risk	Not at risk	no	yes	TC
137	Bereka	UA_M6.5.1_0149	HMWB	at risk	Not at risk	no	yes	TC
138	Kisil	UA_M6.5.1_0150	HMWB	at risk	Not at risk	no	yes	TC
139	Kisil	UA_M6.5.1_0151	NR	at risk	Not at risk	no	yes	NA
140	Lozovenka	UA_M6.5.1_0152	NR	at risk	at risk	no	no	TC
141	Britai	UA_M6.5.1_0153	NR	at risk	Not at risk	no	yes	NA
142	Britai	UA_M6.5.1_0154	NR	at risk	Not at risk	no	yes	NA
143	Britai	UA_M6.5.1_0155	HMWB	at risk	Not at risk	no	yes	TC

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
144	Britai	UA_M6.5.1_0156	NR	at risk	Not at risk	no	yes	TC
145	Britai	UA_M6.5.1_0157	HMWB	at risk	Not at risk	no	yes	TC
146	Britai	UA_M6.5.1_0158	HMWB	at risk	Not at risk	no	yes	TC
147	Lozova	UA_M6.5.1_0159	NR	at risk	Not at risk	no	yes	TC
148	Mare	UA_M6.5.1_0160	NR	at risk	Not at risk	no	yes	TC
149	Popilnaya	UA_M6.5.1_0161	HMWB	at risk	Not at risk	no	yes	TC
150	Krasnopavlivka reservoir	UA_M6.5.1_0162	HMWB	at risk	Not at risk	no	yes	TC
151	Popilnaya	UA_M6.5.1_0163	HMWB	at risk	at risk	no	no	TC
152	Wide	UA_M6.5.1_0164	HMWB	at risk	Not at risk	no	yes	TC
153	Samarka	UA_M6.5.1_0165	NR	possibly at risk	Not at risk	no	yes	NA
154	Samarka	UA_M6.5.1_0166	HMWB	at risk	Not at risk	no	yes	TC
155	Samarka	UA_M6.5.1_0167	NR	possibly at risk	Not at risk	no	yes	NA
156	Samarka	UA_M6.5.1_0168	HMWB	at risk	Not at risk	no	yes	TC
157	Samarka	UA_M6.5.1_0169	NR	at risk	Not at risk	no	yes	TC
158	Length	UA_M6.5.1_0170	NR	possibly at risk	Not at risk	no	yes	NA
159	Length	UA_M6.5.1_0171	HMWB	at risk	Not at risk	no	yes	TC
160	Length	UA_M6.5.1_0172	NR	possibly at risk	Not at risk	no	yes	NA
161	Length	UA_M6.5.1_0173	NR	possibly at risk	Not at risk	no	yes	NA
162	Bolshaya Komyshuvakha	UA_M6.5.1_0174	NR	at risk	Not at risk	no	yes	NA
163	Bolshaya Komyshuvakha	UA_M6.5.1_0175	HMWB	at risk	Not at risk	no	yes	TC
164	B. Komyshuvakha	UA_M6.5.1_0176	HMWB	at risk	Not at risk	no	yes	TC
165	B. Komyshuvakha	UA_M6.5.1_0177	HMWB	at risk	Not at risk	no	yes	NA

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
166	Izyumets	UA_M6.5.1_0178	NR	at risk	Not at risk	no	yes	TC
167	Izyumets	UA_M6.5.1_0179	HMWB	at risk	Not at risk	no	yes	TC
168	Izyumets	UA_M6.5.1_0180	NR	at risk	Not at risk	no	yes	TC
169	Izyumets	UA_M6.5.1_0181	HMWB	at risk	Not at risk	no	yes	TC
170	Izyumets	UA_M6.5.1_0182	NR	at risk	Not at risk	no	yes	TC
171	Kunene	UA_M6.5.1_0183	NR	at risk	Not at risk	no	yes	TC
172	Dry Izyumets	UA_M6.5.1_0184	NR	at risk	Not at risk	no	yes	TC
173	Dry Izyumets	UA_M6.5.1_0185	NR	at risk	Not at risk	no	yes	TC
174	Grekivka	UA_M6.5.1_0186	HMWB	at risk	Not at risk	no	yes	TC
175	Grekivka	UA_M6.5.1_0187	NR	at risk	Not at risk	no	yes	TC
176	Oskil	UA_M6.5.1_0188	NR	at risk	at risk	no	no	MO
177	Oskilskoye reservoir	UA_M6.5.1_0189	HMWB	at risk	Not at risk	no	yes	TC
178	Oskil	UA_M6.5.1_0190	NR	at risk	Not at risk	no	yes	NA
179	Uraza	UA_M6.5.1_0191	NR	possibly at risk	Not at risk	no	yes	MO, NA
180	Uraza	UA_M6.5.1_0192	NR	at risk	Not at risk	no	yes	MO, TC
181	Demin	UA_M6.5.1_0193	NR	at risk	Not at risk	no	yes	MO, NA
182	Kamennyi Yar	UA_M6.5.1_0194	NR	at risk	Not at risk	no	yes	MO, NA
183	Kamennyi Yar	UA_M6.5.1_0195	HMWB	at risk	Not at risk	no	yes	MO, TC
184	Kamennyi Yar	UA_M6.5.1_0196	NR	at risk	Not at risk	no	yes	MO, NA
185	B. Deck	UA_M6.5.1_0197	NR	at risk	Not at risk	no	yes	MO, NA
186	B. Tavolzhanka	UA_M6.5.1_0198	NR	at risk	Not at risk	no	yes	MO, NA
187	B. Tavolzhanka	UA_M6.5.1_0199	HMWB	at risk	Not at risk	no	yes	MO, TC

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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)	
188	B. Tavolzhanka	UA_M6.5.1_0200	NR	at risk	Not at risk	no	yes	MO, NA
189	Upper Biennial	UA_M6.5.1_0201	NR	at risk	Not at risk	no	yes	NA
190	Upper Biennial	UA_M6.5.1_0202	HMWB	at risk	Not at risk	no	yes	TC
191	Lower Biennial	UA_M6.5.1_0203	NR	at risk	Not at risk	no	yes	TC
192	Lower Biennial	UA_M6.5.1_0204	HMWB	at risk	Not at risk	no	yes	TC
193	Lower Biennial	UA_M6.5.1_0205	NR	possibly at risk	Not at risk	no	yes	NA
194	Lower Biennial	UA_M6.5.1_0206	NR	at risk	Not at risk	no	yes	TC
195	Alder	UA_M6.5.1_0207	NR	at risk	Not at risk	no	yes	MO, NA
196	Alder	UA_M6.5.1_0208	HMWB	at risk	Not at risk	no	yes	MO, TC
197	Alder	UA_M6.5.1_0209	NR	at risk	at risk	no	no	MO, NA
198	Alder	UA_M6.5.1_0210	NR	at risk	Not at risk	no	yes	MO, NA
199	Rot	UA_M6.5.1_0211	NR	at risk	Not at risk	no	yes	MO, NA
200	Rot	UA_M6.5.1_0212	HMWB	at risk	Not at risk	no	yes	MO, TC
201	Rot	UA_M6.5.1_0214	NR	at risk	Not at risk	no	yes	MO, NA
202	Kupianka	UA_M6.5.1_0215	NR	at risk	Not at risk	no	yes	NA
203	Kupianka	UA_M6.5.1_0216	HMWB	at risk	Not at risk	no	yes	TC
204	Kupianka	UA_M6.5.1_0217	NR	at risk	Not at risk	no	yes	TC
205	Kupianka	UA_M6.5.1_0218	NR	at risk	Not at risk	no	yes	TC
206	Osynivka	UA_M6.5.1_0219	NR	at risk	Not at risk	no	yes	TC
207	Osynivka	UA_M6.5.1_0220	NR	at risk	Not at risk	no	yes	TC
208	Sandy	UA_M6.5.1_0221	NR	at risk	Not at risk	no	yes	TC
209	Sandy	UA_M6.5.1_0222	NR	at risk	Not at risk	no	yes	TC

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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)	
210	Sinha	UA_M6.5.1_0223	NR	at risk	Not at risk	no	yes	TC
211	Sinha	UA_M6.5.1_0224	HMWB	at risk	Not at risk	no	yes	TC
212	Sinha	UA_M6.5.1_0225	NR	at risk	Not at risk	no	yes	TC
213	Sinha	UA_M6.5.1_0226	HMWB	at risk	Not at risk	no	yes	TC
214	Lozova	UA_M6.5.1_0227	NR	at risk	at risk	no	no	TC
215	Lozova	UA_M6.5.1_0228	HMWB	at risk	Not at risk	no	yes	TC
216	Lozova	UA_M6.5.1_0229	NR	at risk	Not at risk	no	yes	NA
217	B. Lymanska	UA_M6.5.1_0230	NR	possibly at risk	Not at risk	no	yes	NA
218	B. Lymanska	UA_M6.5.1_0231	HMWB	at risk	Not at risk	no	yes	TC
219	B. Lymanska	UA_M6.5.1_0232	NR	possibly at risk	Not at risk	no	yes	NA
220	Borova	UA_M6.5.1_0233	NR	at risk	Not at risk	no	yes	NA
221	Borova	UA_M6.5.1_0234	NR	at risk	Not at risk	no	yes	NA
222	Borova	UA_M6.5.1_0235	HMWB	at risk	Not at risk	no	yes	TC
223	Pea weevil	UA_M6.5.1_0236	NR	at risk	Not at risk	no	yes	TC
224	Salty	UA_M6.5.1_0237	NR	possibly at risk	Not at risk	no	yes	NA
225	Salty	UA_M6.5.1_0238	HMWB	at risk	Not at risk	no	yes	TC
226	Salty	UA_M6.5.1_0239	NR	at risk	Not at risk	no	yes	TC
227	Karachova	UA_M6.5.1_0240	NR	at risk	Not at risk	no	yes	TC
228	Bakhtin	UA_M6.5.1_0241	NR	possibly at risk	Not at risk	no	yes	NA
229	Bakhtin	UA_M6.5.1_0242	HMWB	at risk	Not at risk	no	yes	TC
230	Bakhtin	UA_M6.5.1_0243	NR	at risk	Not at risk	no	yes	TC
231	Bakhtin	UA_M6.5.1_0244	NR	possibly at risk	Not at risk	no	yes	NA

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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)	
232	Netrius (Nitrius)	UA_M6.5.1_0245	HMWB	at risk	Not at risk	no	yes	TC
233	Netrius (Nitrius)	UA_M6.5.1_0246	HMWB	at risk	Not at risk	no	yes	TC
234	Treasury end	UA_M6.5.1_0247	HMWB	at risk	at risk	no	no	TC
235	Crane	UA_M6.5.1_0252	NR	at risk	Not at risk	no	yes	TC
236	Poltava	UA_M6.5.1_0253	HMWB	at risk	Not at risk	no	yes	TC
237	Rusynoyarivske reservoir	UA_M6.5.1_0254	HMWB	at risk	Not at risk	no	yes	TC
238	Poltava	UA_M6.5.1_0255	NR	possibly at risk	Not at risk	no	yes	NA
239	Sofiyivka Reservoir	UA_M6.5.1_0256	HMWB	at risk	Not at risk	no	yes	TC
240	Poltava	UA_M6.5.1_0257	NR	at risk	Not at risk	no	yes	TC
241	Gruzka	UA_M6.5.1_0258	NR	at risk	at risk	no	no	TC
242	Gruzka	UA_M6.5.1_0259	HMWB	at risk	Not at risk	no	yes	TC
243	Gruzka	UA_M6.5.1_0260	NR	at risk	Not at risk	no	yes	NA
244	Gruzka	UA_M6.5.1_0261	NR	at risk	Not at risk	no	yes	NA
245	Curved End	UA_M6.5.1_0262	NR	at risk	Not at risk	no	yes	MO, TC
246	Curved End	UA_M6.5.1_0263	HMWB	at risk	at risk	no	no	MO, TC
247	B. Wide	UA_M6.5.1_0268	HMWB	at risk	Not at risk	no	yes	TC
248	B. Wide	UA_M6.5.1_0269	NR	at risk	at risk	no	no	MO, NA
249	Makiivka (Yasynivka) reservoir	UA_M6.5.1_0270	HMWB	at risk	Not at risk	no	yes	MO, TC
250	B. Wide	UA_M6.5.1_0271	NR	possibly at risk	Not at risk	no	yes	MO, NA
251	B. The second	UA_M6.5.1_0272	NR	possibly at risk	Not at risk	no	yes	MO, NA
252	B. The second	UA_M6.5.1_0273	NR	at risk	Not at risk	no	yes	MO, NA
253	Reed	UA_M6.5.1_0274	NR	at risk	at risk	no	no	MO, NA

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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	Reed	UA_M6.5.1_0275	NR	possibly at risk	Not at risk	no	yes	MO, NA
255	Reed	UA_M6.5.1_0276	HMWB	at risk	Not at risk	no	yes	MO, TC
256	Reed	UA_M6.5.1_0277	NR	at risk	Not at risk	no	yes	MO, NA
257	Reed	UA_M6.5.1_0278	HMWB	at risk	Not at risk	no	yes	MO, TC
258	Reed	UA_M6.5.1_0279	HMWB	at risk	Not at risk	no	yes	MO, TC
259	Skotovata	UA_M6.5.1_0280	HMWB	at risk	Not at risk	no	yes	MO, TC
260	Skotovata	UA_M6.5.1_0281	HMWB	at risk	Not at risk	no	yes	MO, TC
261	Skotovata	UA_M6.5.1_0282	HMWB	at risk	Not at risk	no	yes	MO, TC
262	B. Batmanka	UA_M6.5.1_0283	NR	at risk	Not at risk	no	yes	MO, NA
263	Б. Iron	UA_M6.5.1_0284	NR	possibly at risk	Not at risk	no	yes	MO, NA
264	Б. Iron	UA_M6.5.1_0285	NR	at risk	at risk	no	no	MO, TC
265	Б. Iron	UA_M6.5.1_0286	HMWB	at risk	Not at risk	no	yes	TC
266	B. Wide	UA_M6.5.1_0287	NR	possibly at risk	Not at risk	no	yes	MO, NA
267	Horlivka Reservoir	UA_M6.5.1_0288	HMWB	at risk	Not at risk	no	yes	TC
268	B. Wide	UA_M6.5.1_0289	NR	at risk	Not at risk	no	yes	MO, NA
269	Iron	UA_M6.5.1_0290	NR	possibly at risk	Not at risk	no	yes	NA
270	Iron	UA_M6.5.1_0291	NR	at risk	Not at risk	no	yes	MO, TC
271	Sukhoi Yar	UA_M6.5.1_0292	HMWB	at risk	Not at risk	no	yes	TC
272	Bull	UA_M6.5.1_0293	HMWB	at risk	Not at risk	no	yes	TC
273	Pervomaiskoye Reservoir	UA_M6.5.1_0294	HMWB	at risk	Not at risk	no	yes	TC
274	Bull	UA_M6.5.1_0295	NR	possibly at risk	Not at risk	no	yes	NA
275	Bull	UA_M6.5.1_0296	HMWB	at risk	Not at risk	no	yes	TC

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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)	
276	Bull	UA_M6.5.1_0297	NR	at risk	Not at risk	no	yes	NA
277	Kleban-Byk reservoir	UA_M6.5.1_0298	HMWB	at risk	Not at risk	no	yes	TC
278	Bull	UA_M6.5.1_0299	NR	at risk	at risk	no	no	TC
279	Kalynivka	UA_M6.5.1_0300	NR	possibly at risk	Not at risk	no	yes	NA
280	Kalynivka	UA_M6.5.1_0301	HMWB	at risk	Not at risk	no	yes	TC
281	Kalynivka	UA_M6.5.1_0302	NR	possibly at risk	Not at risk	no	yes	NA
282	Kalynivka	UA_M6.5.1_0303	HMWB	at risk	Not at risk	no	yes	TC
283	Kalynivka	UA_M6.5.1_0304	NR	at risk	Not at risk	no	yes	TC
284	Neumyha (Naumyha)	UA_M6.5.1_0305	NR	at risk	Not at risk	no	yes	TC
285	Neumyha (Naumyha)	UA_M6.5.1_0306	HMWB	at risk	Not at risk	no	yes	TC
286	Balamutka	UA_M6.5.1_0307	NR	at risk	Not at risk	no	yes	TC
287	Balamutka	UA_M6.5.1_0308	NR	at risk	Not at risk	no	yes	TC
288	Gruzka	UA_M6.5.1_0311	NR	at risk	Not at risk	no	yes	TC
289	Lozova	UA_M6.5.1_0312	NR	at risk	Not at risk	no	yes	NA
290	Lozova	UA_M6.5.1_0313	HMWB	at risk	Not at risk	no	yes	TC
291	Garden pond	UA_M6.5.1_0314	HMWB	at risk	Not at risk	no	yes	TC
292	Lozova	UA_M6.5.1_0315	NR	at risk	Not at risk	no	yes	NA
293	Markivske Reservoir	UA_M6.5.1_0316	HMWB	at risk	Not at risk	no	yes	TC
294	Lozova	UA_M6.5.1_0317	NR	at risk	Not at risk	no	yes	NA
295	Bull	UA_M6.5.1_0318	HMWB	at risk	Not at risk	no	yes	TC
296	Bull	UA_M6.5.1_0319	NR	at risk	Not at risk	no	yes	TC
297	White	UA_M6.5.1_0320	NR	at risk	Not at risk	no	yes	TC

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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)	
298	White	UA_M6.5.1_0321	HMWB	at risk	Not at risk	no	yes	TC
299	Chasiv Yar	UA_M6.5.1_0322	NR	at risk	at risk	no	no	TC
300	Chasiv Yar	UA_M6.5.1_0323	HMWB	at risk	Not at risk	no	yes	TC
301	Chasiv Yar	UA_M6.5.1_0324	NR	at risk	Not at risk	no	yes	TC
302	Mayachka	UA_M6.5.1_0325	HMWB	at risk	at risk	no	no	TC
303	Mayachka	UA_M6.5.1_0326	HMWB	at risk	Not at risk	no	yes	TC
304	Mayachkivske Reservoir (Kramatorskoye)	UA_M6.5.1_0327	HMWB	at risk	Not at risk	no	yes	TC
305	Mayachka	UA_M6.5.1_0328	HMWB	at risk	at risk	no	no	TC
306	White	UA_M6.5.1_0329	NR	at risk	Not at risk	no	yes	NA
307	White	UA_M6.5.1_0330	HMWB	at risk	Not at risk	no	yes	TC
308	White	UA_M6.5.1_0331	NR	at risk	Not at risk	no	yes	TC
309	White	UA_M6.5.1_0332	HMWB	at risk	Not at risk	no	yes	TC
310	Dry Torets	UA_M6.5.1_0333	NR	at risk	Not at risk	no	yes	NA
311	Dry Torets	UA_M6.5.1_0334	HMWB	at risk	Not at risk	no	yes	TC
312	Dry Torets	UA_M6.5.1_0335	NR	at risk	Not at risk	no	yes	TC
313	Dry Torets	UA_M6.5.1_0336	HMWB	at risk	Not at risk	no	yes	TC
314	Dry Torets	UA_M6.5.1_0337	NR	at risk	Not at risk	no	yes	NA
315	Dry Torets	UA_M6.5.1_0338	NR	at risk	Not at risk	no	yes	TC
316	Dry Torets	UA_M6.5.1_0339	NR	at risk	at risk	no	no	TC
317	Luknovakha	UA_M6.5.1_0340	NR	possibly at risk	Not at risk	no	yes	NA
318	Luknovakha	UA_M6.5.1_0341	NR	at risk	Not at risk	no	yes	TC
319	Kurulka	UA_M6.5.1_0342	NR	possibly at risk	Not at risk	no	yes	NA

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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)	
320	Kurulka	UA_M6.5.1_0343	NR	possibly at risk	Not at risk	no	yes	NA
321	Bull	UA_M6.5.1_0344	HMWB	at risk	Not at risk	no	yes	TC
322	Bull	UA_M6.5.1_0345	NR	at risk	Not at risk	no	yes	NA
323	Bull	UA_M6.5.1_0346	HMWB	at risk	Not at risk	no	yes	TC
324	Bull	UA_M6.5.1_0347	NR	at risk	Not at risk	no	yes	TC
325	Cherkassy	UA_M6.5.1_0348	NR	possibly at risk	Not at risk	no	yes	NA
326	Cherkasy reservoir	UA_M6.5.1_0349	HMWB	at risk	Not at risk	no	yes	TC
327	Cherkassy	UA_M6.5.1_0350	NR	at risk	Not at risk	no	yes	TC
328	Naked Valley	UA_M6.5.1_0351	HMWB	at risk	Not at risk	no	yes	TC
329	Naked Valley	UA_M6.5.1_0352	HMWB	at risk	at risk	no	no	TC
330	Sorishchi	UA_M6.5.1_0353	NR	at risk	Not at risk	no	yes	TC
331	Bessarabivka	UA_M6.5.1_0354	NR	at risk	Not at risk	no	yes	TC
332	Bakhmutka (Bakhmut)	UA_M6.5.1_0355	NR	at risk	Not at risk	no	yes	MO, NA
333	Bakhmutka (Bakhmut)	UA_M6.5.1_0356	NR	at risk	Not at risk	no	yes	MO, TC
334	Bakhmutka (Bakhmut)	UA_M6.5.1_0357	NR	at risk	Not at risk	no	yes	MO, NA
335	Bakhmutka (Bakhmut)	UA_M6.5.1_0358	NR	at risk	at risk	no	no	MO, NA
336	Bakhmutka (Bakhmut)	UA_M6.5.1_0359	HMWB	at risk	Not at risk	no	yes	MO, TC
337	Bakhmutka (Bakhmut)	UA_M6.5.1_0360	NR	at risk	at risk	no	no	MO, TC
338	Bakhmutka (Bakhmut)	UA_M6.5.1_0361	NR	at risk	at risk	no	no	MO, TC
339	Kodyma	UA_M6.5.1_0362	NR	possibly at risk	Not at risk	no	yes	MO, NA
340	Kodyma	UA_M6.5.1_0363	HMWB	at risk	Not at risk	no	yes	MO, TC
341	Kodyma	UA_M6.5.1_0364	NR	at risk	at risk	no	no	MO, TC

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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)	
342	Zaitseva	UA_M6.5.1_0365	NR	at risk	Not at risk	no	yes	MO, NA
343	Untitled	UA_M6.5.1_0366	NR	at risk	Not at risk	no	yes	MO, NA
344	Big Mortar	UA_M6.5.1_0367	HMWB	at risk	Not at risk	no	yes	MO, TC
345	Big Mortar	UA_M6.5.1_0368	NR	possibly at risk	Not at risk	no	yes	MO, TC
346	Big Mortar	UA_M6.5.1_0369	HMWB	at risk	Not at risk	no	yes	MO, TC
347	Big Mortar	UA_M6.5.1_0370	NR	at risk	Not at risk	no	yes	MO, NA
348	Medium Mortar	UA_M6.5.1_0371	NR	at risk	Not at risk	no	yes	MO, NA
349	Artemivske (Berkhivske) reservoir	UA_M6.5.1_0372	HMWB	at risk	Not at risk	no	yes	MO, TC
350	Medium Mortar	UA_M6.5.1_0373	NR	at risk	at risk	no	yes	MO, TC
351	Medium Mortar	UA_M6.5.1_0374	NR	at risk	Not at risk	no	yes	MO, TC
352	Wet Flesh	UA_M6.5.1_0375	NR	at risk	at risk	no	no	MO, TC
353	Wet Flesh	UA_M6.5.1_0376	HMWB	at risk	Not at risk	no	yes	MO, TC
354	Wet Flesh	UA_M6.5.1_0377	NR	at risk	Not at risk	no	yes	MO, NA
355	Wet Flesh	UA_M6.5.1_0378	NR	at risk	Not at risk	no	yes	MO, TC
356	Wet Flesh	UA_M6.5.1_0379	NR	at risk	at risk	no	no	MO, TC
357	Cool	UA_M6.5.1_0380	NR	possibly at risk	Not at risk	no	yes	MO, NA
358	Cool	UA_M6.5.1_0381	NR	at risk	Not at risk	no	yes	MO, NA
359	Burnt Stump	UA_M6.5.1_0382	NR	at risk	Not at risk	no	yes	MO, NA
360	Burnt Stump	UA_M6.5.1_0383	NR	at risk	Not at risk	no	yes	MO, NA
361	Burnt Stump	UA_M6.5.1_0384	NR	at risk	Not at risk	no	yes	MO, NA
362	Untitled	UA_M6.5.1_0385	NR	possibly at risk	Not at risk	no	yes	MO, NA
363	Untitled	UA_M6.5.1_0386	NR	at risk	Not at risk	no	yes	MO, NA

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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)	
364	Vasyukivka	UA_M6.5.1_0387	NR	at risk	Not at risk	no	yes	MO, NA
365	Vasyukivka	UA_M6.5.1_0388	NR	at risk	Not at risk	no	yes	MO, NA
366	Kopanka	UA_M6.5.1_0389	NR	at risk	Not at risk	no	yes	MO, NA
367	Dry Flesh	UA_M6.5.1_0390	NR	at risk	at risk	no	no	MO, TC
368	Dry Flesh	UA_M6.5.1_0391	NR	at risk	Not at risk	no	yes	MO, NA
369	Dry	UA_M6.5.1_0392	NR	possibly at risk	Not at risk	no	yes	MO, NA
370	Dry	UA_M6.5.1_0393	NR	possibly at risk	Not at risk	no	yes	MO, TC
371	B. Yama (Dry Flesh)	UA_M6.5.1_0394	NR	possibly at risk	Not at risk	no	yes	MO, NA
372	Ivanodarya reservoir	UA_M6.5.1_0395	HMWB	at risk	Not at risk	no	yes	MO, TC
373	B. Yama (Dry Flesh)	UA_M6.5.1_0396	NR	possibly at risk	Not at risk	no	yes	MO, NA
374	Zvanivske Reservoir	UA_M6.5.1_0397	HMWB	at risk	Not at risk	no	yes	MO, TC
375	B. Yama (Dry Flesh)	UA_M6.5.1_0398	NR	possibly at risk	Not at risk	no	yes	MO, NA
376	B. Berestova	UA_M6.5.1_0399	NR	at risk	Not at risk	no	yes	MO, NA
377	Kamenka	UA_M6.5.1_0400	NR	at risk	Not at risk	no	yes	MO, NA
378	Verkhnekamenskoye reservoir	UA_M6.5.1_0401	HMWB	at risk	Not at risk	no	yes	MO, TC
379	Kamenka	UA_M6.5.1_0402	NR	at risk	Not at risk	no	yes	MO, TC
380	Stallion	UA_M6.5.1_0403	NR	at risk	Not at risk	no	yes	MO, NA
381	Stallion	UA_M6.5.1_0404	HMWB	at risk	Not at risk	no	yes	MO, TC
382	Stallion	UA_M6.5.1_0405	NR	at risk	Not at risk	no	yes	MO, NA
383	Stallion	UA_M6.5.1_0406	HMWB	at risk	Not at risk	no	yes	MO, TC
384	Stallion	UA_M6.5.1_0407	NR	at risk	at risk	no	no	MO, NA
385	Current	UA_M6.5.1_0408	NR	possibly at risk	Not at risk	no	yes	MO, NA

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
386	Red	UA_M6.5.1_0409	NR	at risk	Not at risk	no	yes	MO, NA
387	Red	UA_M6.5.1_0410	NR	at risk	at risk	no	no	MO, TC
388	Naugolna	UA_M6.5.1_0411	NR	possibly at risk	Not at risk	no	yes	MO, NA
389	Naugolna	UA_M6.5.1_0412	HMWB	at risk	Not at risk	no	yes	MO, TC
390	Naugolna	UA_M6.5.1_0413	NR	at risk	Not at risk	no	yes	MO, TC
391	Rotten	UA_M6.5.1_0414	NR	at risk	Not at risk	no	yes	MO, TC
392	Duvanka	UA_M6.5.1_0415	NR	possibly at risk	Not at risk	no	yes	MO, NA
393	Duvanka	UA_M6.5.1_0416	HMWB	at risk	Not at risk	no	yes	MO, TC
394	Mare	UA_M6.5.1_0417	HMWB	at risk	Not at risk	no	yes	MO, TC
395	Mare	UA_M6.5.1_0418	NR	possibly at risk	Not at risk	no	yes	MO, NA
396	Mare	UA_M6.5.1_0419	HMWB	at risk	Not at risk	no	yes	MO, TC
397	Mare	UA_M6.5.1_0420	NR	at risk	Not at risk	no	yes	MO, NA
398	Khorina	UA_M6.5.1_0421	NR	possibly at risk	Not at risk	no	yes	MO, NA
399	Khorina	UA_M6.5.1_0422	HMWB	at risk	Not at risk	no	yes	MO, TC
400	Mosque	UA_M6.5.1_0423	NR	possibly at risk	Not at risk	no	yes	MO, NA
401	Mosque	UA_M6.5.1_0424	NR	possibly at risk	Not at risk	no	yes	MO, NA
402	Borova	UA_M6.5.1_0425	HMWB	at risk	Not at risk	no	yes	MO, TC
403	Borova	UA_M6.5.1_0426	HMWB	at risk	Not at risk	no	yes	MO, TC
404	Borova	UA_M6.5.1_0427	NR	at risk	Not at risk	no	yes	MO, NA
405	Wet Baglay	UA_M6.5.1_0428	NR	possibly at risk	Not at risk	no	yes	MO, NA
406	Wet Baglay	UA_M6.5.1_0429	HMWB	at risk	Not at risk	no	yes	MO, TC
407	Wet Baglay	UA_M6.5.1_0430	NR	possibly at risk	Not at risk	no	yes	MO, NA

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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)	
408	Wet Baglay	UA_M6.5.1_0431	NR	at risk	Not at risk	no	yes	MO, NA
409	Rotten Flesh	UA_M6.5.1_0432	NR	at risk	Not at risk	no	yes	MO, NA
410	Rotten Flesh	UA_M6.5.1_0433	NR	at risk	Not at risk	no	yes	MO, NA
411	Boletus	UA_M6.5.1_0434	NR	possibly at risk	Not at risk	no	yes	MO, NA
412	Boletus	UA_M6.5.1_0435	HMWB	at risk	Not at risk	no	yes	MO, TC
413	Boletus	UA_M6.5.1_0436	NR	possibly at risk	Not at risk	no	yes	MO, NA
414	Boletus	UA_M6.5.1_0437	HMWB	at risk	Not at risk	no	yes	MO, TC
415	Boletus	UA_M6.5.1_0438	NR	at risk	Not at risk	no	yes	MO, NA
416	Boletus	UA_M6.5.1_0439	NR	at risk	Not at risk	no	yes	MO, NA
417	Flesh	UA_M6.5.1_0440	NR	at risk	Not at risk	no	yes	MO, NA
418	Flesh	UA_M6.5.1_0441	HMWB	at risk	Not at risk	no	yes	MO, TC
419	Flesh	UA_M6.5.1_0442	NR	at risk	Not at risk	no	yes	MO, NA
420	Wave Raft	UA_M6.5.1_0443	NR	at risk	Not at risk	no	yes	MO, NA
421	Wave Raft	UA_M6.5.1_0444	HMWB	at risk	Not at risk	no	yes	MO, TC
422	Wave Raft	UA_M6.5.1_0445	NR	at risk	Not at risk	no	yes	MO, NA
423	Konoplyaniy Yar	UA_M6.5.1_0446	NR	possibly at risk	Not at risk	no	yes	MO, NA
424	Konoplyaniy Yar	UA_M6.5.1_0447	NR	possibly at risk	Not at risk	no	yes	MO, NA
425	Sukhoi Yar	UA_M6.5.1_0448	NR	at risk	Not at risk	no	yes	MO, NA
426	Eric	UA_M6.5.1_0449	HMWB	at risk	Not at risk	no	yes	MO, TC
427	Eric	UA_M6.5.1_0450	HMWB	at risk	Not at risk	no	yes	MO, TC
428	Erik	UA_M6.5.1_0451	NR	at risk	Not at risk	no	yes	MO, NA
429	Eric	UA_M6.5.1_0452	NR	at risk	Not at risk	no	yes	MO, NA

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
430	Spare	UA_M6.5.1_0453	HMWB	at risk	Not at risk	no	yes	MO, TC
431	Upper Belenka	UA_M6.5.1_0454	NR	at risk	Not at risk	no	yes	MO, NA
432	Upper Belenka	UA_M6.5.1_0455	NR	at risk	Not at risk	no	yes	MO, NA
433	Upper Belenka	UA_M6.5.1_0456	HMWB	at risk	Not at risk	no	yes	MO, TC
434	Upper Belenka	UA_M6.5.1_0457	NR	at risk	Not at risk	no	yes	MO, NA
435	Upper Belenka	UA_M6.5.1_0458	NR	at risk	Not at risk	no	yes	MO, TC
436	Upper Belenka	UA_M6.5.1_0459	NR	at risk	Not at risk	no	yes	MO, NA
437	Lower Belenka	UA_M6.5.1_0460	NR	at risk	Not at risk	no	yes	MO, TC
438	Lower Belenka	UA_M6.5.1_0461	NR	at risk	Not at risk	no	yes	MO, NA
439	Alder	UA_M6.5.1_0462	NR	at risk	Not at risk	no	yes	MO, NA
440	Aydar	UA_M6.5.1_0463	NR	at risk	Not at risk	no	yes	MO, TC
441	Aydar	UA_M6.5.1_0464	HMWB	at risk	Not at risk	no	yes	MO, TC
442	Aydar	UA_M6.5.1_0465	NR	at risk	Not at risk	no	yes	MO, TC
443	Lozova	UA_M6.5.1_0466	NR	at risk	Not at risk	no	yes	MO, NA
444	Lozna	UA_M6.5.1_0467	NR	at risk	Not at risk	no	yes	MO, NA
445	Lozna	UA_M6.5.1_0468	NR	at risk	Not at risk	no	yes	MO, NA
446	Untitled	UA_M6.5.1_0469	NR	at risk	Not at risk	no	yes	MO, NA
447	Untitled	UA_M6.5.1_0470	NR	at risk	Not at risk	no	yes	MO, NA
448	White	UA_M6.5.1_0471	NR	at risk	at risk	no	no	MO, NA
449	Untitled	UA_M6.5.1_0472	NR	at risk	Not at risk	no	yes	MO, NA
450	Kamenka	UA_M6.5.1_0473	NR	at risk	Not at risk	no	yes	MO, NA
451	Kamenka	UA_M6.5.1_0474	NR	at risk	Not at risk	no	yes	MO, NA

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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)	
452	Kamenka	UA_M6.5.1_0475	HMWB	at risk	Not at risk	no	yes	MO, TC
453	Kamenka	UA_M6.5.1_0476	NR	at risk	Not at risk	no	yes	MO, NA
454	Kamenka	UA_M6.5.1_0477	HMWB	at risk	Not at risk	no	yes	MO, TC
455	Kamenka	UA_M6.5.1_0478	NR	at risk	Not at risk	no	yes	MO, TC
456	White	UA_M6.5.1_0479	NR	at risk	Not at risk	no	yes	MO, NA
457	White	UA_M6.5.1_0480	HMWB	at risk	Not at risk	no	yes	MO, TC
458	White	UA_M6.5.1_0481	NR	at risk	Not at risk	no	yes	MO, TC
459	Kozynka	UA_M6.5.1_0482	HMWB	at risk	Not at risk	no	yes	MO, TC
460	Kozynka	UA_M6.5.1_0483	NR	possibly at risk	Not at risk	no	yes	MO, NA
461	Kozynka	UA_M6.5.1_0484	NR	at risk	Not at risk	no	yes	MO, NA
462	Lefty	UA_M6.5.1_0485	NR	possibly at risk	Not at risk	no	yes	MO, NA
463	Lefty	UA_M6.5.1_0486	HMWB	at risk	Not at risk	no	yes	MO, TC
464	Yevsyug	UA_M6.5.1_0487	HMWB	at risk	Not at risk	no	yes	MO, TC
465	Yevsyug	UA_M6.5.1_0488	NR	at risk	Not at risk	no	yes	MO, TC
466	Yevsyug	UA_M6.5.1_0489	NR	at risk	Not at risk	no	yes	MO, NA
467	Rattlesnake	UA_M6.5.1_0490	NR	at risk	Not at risk	no	yes	MO, NA
468	Crane	UA_M6.5.1_0491	NR	possibly at risk	Not at risk	no	yes	MO, NA
469	Crane	UA_M6.5.1_0492	HMWB	at risk	at risk	no	no	MO, TC
470	Crane	UA_M6.5.1_0493	NR	possibly at risk	Not at risk	no	yes	MO, NA
471	Kovsyug	UA_M6.5.1_0494	NR	at risk	Not at risk	no	yes	MO, NA
472	Kovsyug	UA_M6.5.1_0495	NR	at risk	Not at risk	no	yes	MO, NA
473	Kovsyug	UA_M6.5.1_0496	HMWB	at risk	Not at risk	no	yes	MO, TC

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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)	
474	Kovsyug	UA_M6.5.1_0497	NR	at risk	Not at risk	no	yes	MO, NA
475	Kovsyug	UA_M6.5.1_0498	NR	at risk	Not at risk	no	yes	MO, NA
476	Medvezha	UA_M6.5.1_0499	NR	possibly at risk	Not at risk	no	yes	MO, NA
477	Medvezha	UA_M6.5.1_0500	HMWB	at risk	Not at risk	no	yes	MO, TC
478	Medvezha	UA_M6.5.1_0501	NR	at risk	Not at risk	no	yes	MO, NA
479	Long	UA_M6.5.1_0502	NR	at risk	Not at risk	no	yes	MO, NA
480	Land	UA_M6.5.1_0503	NR	at risk	Not at risk	no	yes	MO, NA
481	Warmth	UA_M6.5.1_0504	NR	at risk	Not at risk	no	yes	MO, NA
482	Warmth	UA_M6.5.1_0505	NR	at risk	Not at risk	no	yes	MO, TC
483	Plotinnaya	UA_M6.5.1_0506	HMWB	at risk	Not at risk	no	yes	MO, TC
484	Luganka (Lugan)	UA_M6.5.1_0507	NR	at risk	Not at risk	no	yes	MO, NA
485	Luganka (Lugan)	UA_M6.5.1_0508	HMWB	at risk	Not at risk	no	yes	MO, TC
486	Vuglegirske reservoir	UA_M6.5.1_0509	HMWB	at risk	Not at risk	no	yes	MO, TC
487	Luganka (Lugan)	UA_M6.5.1_0510	NR	at risk	Not at risk	no	yes	MO, NA
488	Myronivske Reservoir	UA_M6.5.1_0511	HMWB	at risk	Not at risk	no	yes	MO, TC
489	Luganka (Lugan)	UA_M6.5.1_0512	NR	at risk	at risk	no	no	MO, NA
490	Luganka (Lugan)	UA_M6.5.1_0513	NR	at risk	Not at risk	no	yes	MO, NA
491	Luganka (Lugan)	UA_M6.5.1_0514	NR	at risk	Not at risk	no	yes	MO, NA
492	Luganka (Lugan)	UA_M6.5.1_0515	NR	at risk	Not at risk	no	yes	MO, NA
493	Groups	UA_M6.5.1_0516	NR	possibly at risk	Not at risk	no	yes	MO, NA
494	Groups	UA_M6.5.1_0517	NR	possibly at risk	Not at risk	no	yes	MO, NA
495	Lozova	UA_M6.5.1_0518	NR	at risk	Not at risk	no	yes	MO, NA

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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)	
496	Lozova	UA_M6.5.1_0519	NR	at risk	Not at risk	no	yes	MO, NA
497	Karapulka	UA_M6.5.1_0520	NR	possibly at risk	Not at risk	no	yes	MO, NA
498	Karapulka	UA_M6.5.1_0521	NR	possibly at risk	Not at risk	no	yes	MO, NA
499	Karapulka	UA_M6.5.1_0522	HMWB	at risk	Not at risk	no	yes	MO, TC
500	Karapulka	UA_M6.5.1_0523	NR	possibly at risk	Not at risk	no	yes	MO, NA
501	Luhansk reservoir	UA_M6.5.1_0524	HMWB	at risk	Not at risk	no	yes	MO, TC
502	Karapulka	UA_M6.5.1_0525	NR	possibly at risk	Not at risk	no	yes	MO, NA
503	Karapulka	UA_M6.5.1_0526	NR	at risk	Not at risk	no	yes	MO, NA
504	Rocky	UA_M6.5.1_0527	NR	possibly at risk	Not at risk	no	yes	MO, NA
505	Rocky	UA_M6.5.1_0528	NR	at risk	Not at risk	no	yes	MO, NA
506	Kartomysha	UA_M6.5.1_0529	NR	at risk	Not at risk	no	yes	MO, NA
507	Б. West	UA_M6.5.1_0530	NR	possibly at risk	Not at risk	no	yes	MO, NA
508	Б. West	UA_M6.5.1_0531	NR	possibly at risk	Not at risk	no	yes	MO, NA
509	Sanzharivka	UA_M6.5.1_0532	NR	possibly at risk	Not at risk	no	yes	MO, NA
510	Sanzharivka	UA_M6.5.1_0533	NR	at risk	Not at risk	no	yes	MO, NA
511	Sanzharivka	UA_M6.5.1_0534	NR	at risk	Not at risk	no	yes	MO, NA
512	Scraper	UA_M6.5.1_0535	NR	at risk	Not at risk	no	yes	MO, NA
513	Scraper	UA_M6.5.1_0536	NR	at risk	Not at risk	no	yes	MO, NA
514	B. Komyshuvakha	UA_M6.5.1_0537	NR	at risk	at risk	no	yes	MO, NA
515	B. Komyshuvakha	UA_M6.5.1_0538	HMWB	at risk	Not at risk	no	yes	MO, TC
516	B. Komyshuvakha	UA_M6.5.1_0539	NR	at risk	at risk	no	no	MO, TC
517	B. Komyshuvakha	UA_M6.5.1_0540	NR	at risk	at risk	no	no	MO, TC

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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)	
518	Orikhova	UA_M6.5.1_0541	NR	at risk	Not at risk	no	yes	MO, NA
519	Komyshuvakha	UA_M6.5.1_0542	NR	possibly at risk	Not at risk	no	yes	MO, NA
520	Komyshuvakha	UA_M6.5.1_0543	NR	at risk	Not at risk	no	yes	MO, NA
521	Komyshuvakha	UA_M6.5.1_0544	NR	at risk	Not at risk	no	yes	MO, NA
522	Komyshuvakha	UA_M6.5.1_0545	NR	at risk	Not at risk	no	yes	MO, NA
523	Lozova (Lozenka)	UA_M6.5.1_0546	NR	at risk	Not at risk	no	yes	MO, NA
524	Lozova (Lozenka)	UA_M6.5.1_0547	HMWB	at risk	Not at risk	no	yes	MO, TC
525	Lozova (Lozenka)	UA_M6.5.1_0548	NR	at risk	Not at risk	no	yes	MO, NA
526	Lozova (Lozenka)	UA_M6.5.1_0549	NR	at risk	Not at risk	no	yes	MO, NA
527	Lozova (Lozenka)	UA_M6.5.1_0550	NR	at risk	Not at risk	no	yes	MO, NA
528	Lozova (Lozenka)	UA_M6.5.1_0551	NR	at risk	Not at risk	no	yes	MO, NA
529	White (Bila Lugan)	UA_M6.5.1_0552	HMWB	at risk	Not at risk	no	yes	MO, TC
530	White (Bila Lugan)	UA_M6.5.1_0553	NR	at risk	Not at risk	no	yes	MO, NA
531	White (Bila Lugan)	UA_M6.5.1_0554	NR	at risk	Not at risk	no	yes	MO, NA
532	Isakovske reservoir	UA_M6.5.1_0555	HMWB	at risk	Not at risk	no	yes	MO, TC
533	White (Bila Lugan)	UA_M6.5.1_0556	NR	at risk	Not at risk	no	yes	MO, NA
534	B. Gorodna	UA_M6.5.1_0557	HMWB	at risk	Not at risk	no	yes	MO, TC
535	B. Gorodna	UA_M6.5.1_0558	NR	at risk	Not at risk	no	yes	MO, NA
536	Chernushina	UA_M6.5.1_0559	NR	possibly at risk	Not at risk	no	yes	MO, NA
537	Chernushina	UA_M6.5.1_0560	HMWB	at risk	Not at risk	no	yes	MO, TC
538	Chernushina	UA_M6.5.1_0561	NR	possibly at risk	Not at risk	no	yes	MO, NA
539	Chernushina	UA_M6.5.1_0562	NR	at risk	Not at risk	no	yes	MO, NA

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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)	
540	Utkin	UA_M6.5.1_0563	NR	at risk	Not at risk	no	yes	MO, NA
541	Utkin	UA_M6.5.1_0564	NR	at risk	Not at risk	no	yes	MO, NA
542	Long	UA_M6.5.1_0565	HMWB	at risk	Not at risk	no	yes	MO, TC
543	Long	UA_M6.5.1_0566	NR	at risk	Not at risk	no	yes	MO, NA
544	Komyshuvakha	UA_M6.5.1_0567	NR	at risk	Not at risk	no	yes	MO, NA
545	Olkhovyna	UA_M6.5.1_0568	NR	at risk	Not at risk	no	yes	MO, NA
546	Olkhovyna	UA_M6.5.1_0569	NR	at risk	Not at risk	no	yes	MO, NA
547	Olkhovyna	UA_M6.5.1_0570	HMWB	at risk	Not at risk	no	yes	MO, TC
548	Olkhovyna	UA_M6.5.1_0571	NR	at risk	Not at risk	no	yes	MO, NA
549	Vasyukova	UA_M6.5.1_0572	NR	at risk	Not at risk	no	yes	MO, NA
550	Vasyukova	UA_M6.5.1_0573	NR	at risk	Not at risk	no	yes	MO, NA
551	B. Yulina	UA_M6.5.1_0574	NR	at risk	Not at risk	no	yes	MO, NA
552	B. Yulina	UA_M6.5.1_0575	NR	at risk	Not at risk	no	yes	MO, NA
553	Orikhivka	UA_M6.5.1_0576	NR	possibly at risk	Not at risk	no	yes	MO, NA
554	Orikhivka	UA_M6.5.1_0577	NR	possibly at risk	Not at risk	no	yes	MO, NA
555	Dry	UA_M6.5.1_0578	HMWB	at risk	Not at risk	no	yes	MO, TC
556	Dry	UA_M6.5.1_0579	NR	at risk	Not at risk	no	yes	MO, NA
557	Dry	UA_M6.5.1_0580	HMWB	at risk	Not at risk	no	yes	MO, TC
558	Dry	UA_M6.5.1_0581	NR	possibly at risk	Not at risk	no	yes	MO, NA
559	Verkhne-Olkhovaya	UA_M6.5.1_0582	NR	at risk	Not at risk	no	yes	MO, NA
560	Verkhne-Olkhovaya	UA_M6.5.1_0583	NR	at risk	Not at risk	no	yes	MO, NA
561	Brodok	UA_M6.5.1_0584	NR	at risk	Not at risk	no	yes	MO, NA

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
562	Luganchik	UA_M6.5.1_0585	NR	at risk	Not at risk	no	yes	MO, NA
563	Luganchik	UA_M6.5.1_0586	NR	at risk	Not at risk	no	yes	MO, NA
564	Luganchik	UA_M6.5.1_0587	NR	at risk	Not at risk	no	yes	MO, NA
565	Orikhova	UA_M6.5.1_0588	NR	at risk	Not at risk	no	yes	MO, NA
566	Orikhova	UA_M6.5.1_0589	NR	at risk	Not at risk	no	yes	MO, NA
567	Derkul	UA_M6.5.1_0590	HMWB	at risk	Not at risk	no	yes	MO, TC
568	Derkul	UA_M6.5.1_0591	HMWB	at risk	Not at risk	no	yes	MO, TC
569	Derkul	UA_M6.5.1_0592	NR	at risk	Not at risk	no	yes	MO, NA
570	Derkul	UA_M6.5.1_0593	NR	at risk	Not at risk	no	yes	MO, TC
571	Derkul	UA_M6.5.1_0594	NR	at risk	Not at risk	no	yes	MO, NA
572	Derkul	UA_M6.5.1_0595	NR	at risk	Not at risk	no	yes	MO, NA
573	Derkul	UA_M6.5.1_0596	NR	at risk	Not at risk	no	yes	MO, NA
574	Derkul	UA_M6.5.1_0597	NR	at risk	Not at risk	no	yes	MO, NA
575	White	UA_M6.5.1_0598	NR	at risk	Not at risk	no	yes	MO, NA
576	White	UA_M6.5.1_0599	HMWB	at risk	Not at risk	no	yes	MO, TC
577	White	UA_M6.5.1_0600	NR	at risk	Not at risk	no	yes	MO, NA
578	White	UA_M6.5.1_0601	NR	at risk	Not at risk	no	yes	MO, NA
579	Lizna	UA_M6.5.1_0602	NR	at risk	Not at risk	no	yes	MO, NA
580	Lizna	UA_M6.5.1_0603	HMWB	at risk	Not at risk	no	yes	MO, TC
581	Lizna	UA_M6.5.1_0604	NR	at risk	Not at risk	no	yes	MO, NA
582	Crane	UA_M6.5.1_0605	NR	at risk	Not at risk	no	yes	MO, NA
583	Byshkin	UA_M6.5.1_0606	NR	at risk	Not at risk	no	yes	MO, NA

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
584	Byshkin	UA_M6.5.1_0607	NR	at risk	Not at risk	no	yes	MO, NA
585	Skorodna	UA_M6.5.1_0608	NR	possibly at risk	Not at risk	no	yes	MO, NA
586	Skorodna	UA_M6.5.1_0609	NR	possibly at risk	Not at risk	no	yes	MO, NA
587	Skorodna	UA_M6.5.1_0610	NR	possibly at risk	Not at risk	no	yes	MO, NA
588	Skorodna	UA_M6.5.1_0611	HMWB	at risk	Not at risk	no	yes	MO, TC
589	Skorodna	UA_M6.5.1_0612	NR	possibly at risk	Not at risk	no	yes	MO, NA
590	Dubovets	UA_M6.5.1_0613	NR	possibly at risk	Not at risk	no	yes	MO, NA
591	Dubovets	UA_M6.5.1_0614	HMWB	at risk	Not at risk	no	yes	MO, TC
592	Dubovets	UA_M6.5.1_0615	NR	possibly at risk	Not at risk	no	yes	MO, NA
593	Cast iron	UA_M6.5.1_0616	NR	possibly at risk	Not at risk	no	yes	MO, NA
594	Cast iron	UA_M6.5.1_0617	NR	at risk	Not at risk	no	yes	MO, NA
595	Full	UA_M6.5.1_0618	NR	possibly at risk	Not at risk	no	yes	MO, NA
596	Full	UA_M6.5.1_0619	NR	possibly at risk	Not at risk	no	yes	MO, NA
597	Bagel	UA_M6.5.1_0620	NR	possibly at risk	Not at risk	no	yes	MO, NA
598	B. Komyshuvakha	UA_M6.5.1_0621	NR	at risk	Not at risk	no	yes	MO, NA
599	Komishna	UA_M6.5.1_0622	NR	at risk	Not at risk	no	yes	MO, NA
600	Komishna	UA_M6.5.1_0623	NR	at risk	Not at risk	no	yes	MO, NA
601	Komishna	UA_M6.5.1_0624	NR	at risk	Not at risk	no	yes	MO, NA
602	Milova	UA_M6.5.1_0625	NR	at risk	Not at risk	no	yes	MO, TC
603	Milova	UA_M6.5.1_0626	NR	at risk	Not at risk	no	yes	MO, NA
604	Turtle	UA_M6.5.1_0627	NR	at risk	Not at risk	no	yes	MO, NA
605	Turtle	UA_M6.5.1_0628	NR	at risk	Not at risk	no	yes	MO, NA

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
606	Berezovy	UA_M6.5.1_0629	NR	at risk	Not at risk	no	yes	MO, NA
607	Berezovy	UA_M6.5.1_0630	NR	possibly at risk	Not at risk	no	yes	MO, NA
608	Berezovy	UA_M6.5.1_0631	HMWB	at risk	Not at risk	no	yes	MO, TC
609	Berezovy	UA_M6.5.1_0632	NR	at risk	Not at risk	no	yes	MO, NA
610	Gerasimova (Tsapova)	UA_M6.5.1_0633	NR	at risk	Not at risk	no	yes	MO, NA
611	Matyakina	UA_M6.5.1_0634	NR	at risk	Not at risk	no	yes	MO, NA
612	White (Wet)	UA_M6.5.1_0635	NR	at risk	Not at risk	no	yes	MO, NA
613	White (Wet)	UA_M6.5.1_0636	NR	at risk	Not at risk	no	yes	MO, NA
614	Bolshaya Kamenka	UA_M6.5.1_0637	NR	at risk	Not at risk	no	yes	MO, NA
615	Bolshaya Kamenka	UA_M6.5.1_0638	NR	at risk	Not at risk	no	yes	MO, NA
616	Bolshaya Kamenka	UA_M6.5.1_0639	NR	at risk	Not at risk	no	yes	MO, NA
617	Bolshaya Kamenka	UA_M6.5.1_0640	HMWB	at risk	Not at risk	no	yes	MO, NA
618	Bolshaya Kamenka	UA_M6.5.1_0641	NR	at risk	Not at risk	no	yes	MO, NA
619	Bolshaya Kamenka	UA_M6.5.1_0642	NR	at risk	Not at risk	no	yes	MO, NA
620	Mala Kamenka	UA_M6.5.1_0643	NR	at risk	Not at risk	no	yes	MO, NA
621	Mala Kamenka	UA_M6.5.1_0644	NR	at risk	Not at risk	no	yes	MO, NA
622	Mosque	UA_M6.5.1_0645	NR	at risk	Not at risk	no	yes	MO, NA
623	Mosque	UA_M6.5.1_0646	NR	at risk	Not at risk	no	yes	MO, NA
624	Medvizhka	UA_M6.5.1_0647	NR	at risk	Not at risk	no	yes	MO, NA
625	Medvizhka	UA_M6.5.1_0648	NR	at risk	Not at risk	no	yes	MO, NA
626	Medvizhka	UA_M6.5.1_0649	NR	possibly at risk	Not at risk	no	yes	MO, NA
627	Medvizhka	UA_M6.5.1_0650	HMWB	at risk	Not at risk	no	yes	MO, TC

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
628	Medvizhka	UA_M6.5.1_0651	NR	at risk	Not at risk	no	yes	MO, NA
629	Kamenka	UA_M6.5.1_0652	NR	at risk	Not at risk	no	yes	MO, NA
630	Kamenka	UA_M6.5.1_0653	NR	at risk	Not at risk	no	yes	MO, NA
631	Length	UA_M6.5.1_0654	NR	possibly at risk	Not at risk	no	yes	MO, NA
632	Length	UA_M6.5.1_0655	NR	at risk	Not at risk	no	yes	MO, NA
633	Length	UA_M6.5.1_0656	HMWB	at risk	Not at risk	no	yes	MO, TC
634	Length	UA_M6.5.1_0657	NR	possibly at risk	Not at risk	no	yes	MO, NA
635	Length	UA_M6.5.1_0658	NR	at risk	Not at risk	no	yes	MO, NA
636	Trees	UA_M6.5.1_0659	NR	possibly at risk	Not at risk	no	yes	MO, NA
637	Trees	UA_M6.5.1_0660	NR	possibly at risk	Not at risk	no	yes	MO, NA
638	Trees	UA_M6.5.1_0661	NR	possibly at risk	Not at risk	no	yes	MO, NA
639	B. Trees	UA_M6.5.1_0662	NR	possibly at risk	Not at risk	no	yes	MO, NA
640	B. Trees	UA_M6.5.1_0663	NR	possibly at risk	Not at risk	no	yes	MO, NA
641	Verkhnye Provolye	UA_M6.5.1_0664	NR	possibly at risk	Not at risk	no	yes	MO, NA
642	Verkhnye Provolye	UA_M6.5.1_0665	NR	possibly at risk	Not at risk	no	yes	MO, NA
643	Verkhnye Provolye	UA_M6.5.1_0666	NR	possibly at risk	Not at risk	no	yes	MO, NA
644	Nyzhnye Provolye	UA_M6.5.1_0667	NR	possibly at risk	Not at risk	no	yes	MO, NA
645	Milova	UA_M6.5.1_0668	NR	possibly at risk	Not at risk	no	yes	MO, NA
646	Milova	UA_M6.5.1_0669	NR	possibly at risk	Not at risk	no	yes	MO, NA
647	Milova	UA_M6.5.1_0670	HMWB	at risk	Not at risk	no	yes	MO, TC
648	Milova	UA_M6.5.1_0671	NR	possibly at risk	Not at risk	no	yes	MO, NA
649	Kundryucha	UA_M6.5.1_0672	NR	at risk	Not at risk	no	yes	MO, NA

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
650	Kundryucha	UA_M6.5.1_0673	HMWB	at risk	Not at risk	no	yes	MO, TC
651	Kundryucha	UA_M6.5.1_0674	NR	at risk	Not at risk	no	yes	MO, NA
652	Kundryucha	UA_M6.5.1_0675	HMWB	at risk	Not at risk	no	yes	MO, TC
653	Kundryucha	UA_M6.5.1_0676	HMWB	at risk	Not at risk	no	yes	MO, TC
654	B. Talova	UA_M6.5.1_0677	NR	possibly at risk	Not at risk	no	yes	MO, NA
655	B. Talova	UA_M6.5.1_0678	HMWB	at risk	Not at risk	no	yes	MO, TC
656	Velyka Burgustka	UA_M6.5.1_0679	NR	possibly at risk	Not at risk	no	yes	MO, NA
657	Velyka Burgustka	UA_M6.5.1_0680	NR	possibly at risk	Not at risk	no	yes	MO, NA
658	Right Tuzlov	UA_M6.5.1_0681	NR	at risk	Not at risk	no	yes	MO, TC
659	Srednyi Tuzlov	UA_M6.5.1_0682	HMWB	possibly at risk	Not at risk	no	yes	MO, NA
660	Leftist Tuzlov	UA_M6.5.1_0683	HMWB	at risk	Not at risk	no	yes	MO, TC
661	Krepka	UA_M6.5.1_0684	HMWB	at risk	Not at risk	no	yes	MO, NA
662	Krepka	UA_M6.5.1_0686	HMWB	at risk	Not at risk	no	yes	MO, TC
663	Krepka	UA_M6.5.1_0687	NR	at risk	Not at risk	no	yes	MO, NA
664	Dnipro-Donbas Canal	UA_M6.5.1_0688	AWB	at risk	Not at risk	no	yes	TC
665	Siverskyi Donets - Donbass canal	UA_M6.5.1_0689	AWB	at risk	Not at risk	no	yes	MO, TC
666	Dry Liman	UA_M6.5.1_0690	HMWB	at risk	Not at risk	no	yes	TP
667	Reed Reservoir	UA_M6.5.1_0691	HMWB	at risk	Not at risk	no	yes	TP
668	Chaika reservoir	UA_M6.5.1_0692	HMWB	at risk	Not at risk	no	yes	TP
669	Liman	UA_M6.5.1_0693	HMWB	at risk	Not at risk	no	yes	TC
670	Untitled (Liman)	UA_M6.5.1_0694	NR	possibly at risk	Not at risk	no	yes	TC
671	Sump	UA_M6.5.1_0695	AWB	at risk	Not at risk	no	yes	TC

№	SWB name	SWB code	Category. (NR, HMWB/ AWB)[60]	Risk assessment failure to achieve good status (completed in 2020)		Environmental objectives, 2030		Reason for postponement of the date of achievement of environmental objectives (NC, TC, DC, MO, NA)[61]
				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)	
672	Sump	UA_M6.5.1_0696	AWB	at risk	Not at risk	no	yes	TC
673	Sump	UA_M6.5.1_0697	AWB	at risk	Not at risk	no	yes	TC
674	Luhanska TPP's water coolers	UA_M6.5.1_0698	AWB	at risk	Not at risk	no	yes	MO, TC
675	Sumps	UA_M6.5.1_0699	AWB	at risk	Not at risk	no	yes	MO, TC

Table 2: Achievement of environmental objectives by GWBs and their groups

№	GWB code	Name of the GWB	Quantitative status		Chemical status		Reason for postponement[62]	Reasons for setting less stringent objectives[63]	Notes[64]
			Objective	Timeframe for achievement	Objective	Timeframe for achievement			
1	UAM6510Q101 UAM6510Q102 UAM6510Q103 UAM6510Q104 UAM6510Q105 UAM6510Q106	GWB in alluvial deposits quaternary system	Good status	2030	Good status	2042	T,S	NA	EA
2	UAM6510N100	GWB in alluvial deposits of Pliocene terraces	Good status	2030	Good status	2030			EA
3	UAM651PG100	GWB in Eocene-Miocene sediments	Good status	2030	Good status	2030			EA
4	UAM651PG200	GWB in the Kyiv-Kharkiv, Beretsky and Novopetrovsky sediments	Good status	2030	Good status	2030			EA
5	UAM6510K101 UAM6510K103 UAM6510K104 UAM6510K105 UAM6510K106 UAM6510K108 UAM6510K110 UAM6510K111 UAM6510K112 UAM6510K113 UAM6510K114 UAM6510K116 UAM6510K117	GWB in Upper Cretaceous sediments	Good status	2042	Good status	2030	T,S	NA	EA

62 T - technical reasons, H - disproportionately high cost, S - existing natural state

63 Not applicable (NA) in the first cycle of the 2025-2030 RBMP

64 AR - risk assessment of failure to achieve good status, ES - ecological status according to monitoring data, CS - chemical status according to monitoring data, EA - expert assessment

№	GWB code	Name of the GWB	Quantitative status		Chemical status		Reason for postponement[62]	Reasons for setting less stringent objectives[63]	Notes[64]
			Objective	Timeframe for achievement	Objective	Timeframe for achievement			
6	UAM6510P100	GWB in Lower Permian sediments	Good status	2030	Good status	2030			EA
7	UAM6520C100 UAM6510C101 UAM6510C102 UAM6510C103 UAM6510C104 UAM6510C105	GWB in sandy-clay deposits of the coal system	Good status	2042	Good status	2042	T,S	NA	EA
8	UAM6510K200	GWB in the Cretaceous Alb-Cenomanian deposits	Good status	2030	Good status	2030			EA
9	UAM6510K102 UAM6510K107 UAM6510K109 UAM6510K115	GWB in Upper Cretaceous sediments	Good status	2030	Good status	2030			EA
10	UAM651PG300	GWB in the Kaniv-Buchatsky Eocene sediments	Good status	2030	Good status	2030			EA
11	UAM6510J100	GWB in the Oxford and Kimeridzh deposits of the Upper Jurassic	Good status	2030	Good status	2030			EA
12	UAM6510J200	GWB in Middle-Upper Jurassic sediments	Good status	2030	Good status	2030			EA
13	UAM6510T100	GWB in Upper Triassic sediments	Good status	2030	Good status	2030			EA
14	UAM6510T200	GWB in Lower-Middle-Upper Triassic sediments	Good status	2030	Good status	2030			EA

Annex 9.1. Dynamics of Gross Value Added by economic sectors, main users of water in the Don RBD, UAH million

Indicators	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
GVA in actual prices, UAH million	167057,2	172084,6	214633,3	248428,3	301222,4	307913,9
Share of river basin GVA in total GVA of Ukraine, %.	12,1	10,2	10,6	9,9	10,0	9,9
growth rate of river basin GVA, % compared to the previous year	100	103	125	116	121	102
GVA of water-dependent economic activities, UAH million	75252,3	82313,1	112360,0	119159,8	145862,9	145185,4
Share of GVA of water-dependent economic activities in the river basin GVA, %.	45,0	47,8	52,3	48,0	48,4	47,2
Agriculture, forestry and fisheries, UAH million	13495,6	16711,3	19833,3	20755,3	23014,1	24984,1
- Share of agriculture, forestry and fisheries in the river basin in the total GVA of Ukraine, %.	1,0	1,0	1,0	0,8	0,8	0,8
Mining and quarrying, UAH million	11442,8	18559,8	27665,7	31857,3	43595,9	42714,5
- Share of the extractive industry and quarrying in the river basin in the total GVA of Ukraine, %.	0,8	1,1	1,4	1,3	1,4	1,4
Processing industry, UAH million	28451,4	26957,9	39668,1	38722,4	46815,3	47027,6
- Share of the river basin's processing industry in the total GVA of Ukraine, %.	2,1	1,6	2,0	1,5	1,6	1,5
of the basin in the total GVA of Ukraine,%.						
Supply of electricity, gas, steam and air conditioning, UAH million	7340,5	4991,7	8595,5	10353,9	13792,0	12781,4
- Share of electricity, gas, steam and conditioned air supply from the river basin in the total GVA of Ukraine, %.	0,5	0,3	0,4	0,4	0,5	0,4
Water supply, sewerage and waste management, UAH million	1109,6	1118,1	1052,0	1210,5	1442,0	1409,1
- Share of water supply, sewerage, and waste management in the river basin in the total GVA of Ukraine,%.	0,08	0,07	0,05	0,05	0,05	0,05
Transport, warehousing, postal and courier services, million UAH	13412,4	13974,2	15545,4	16260,4	17203,6	16268,6
- Share of transport, warehousing, postal and courier activities in the river basin in the total GVA of Ukraine, %.	1,0	0,8	0,8	0,6	0,6	0,5
The total share of water-dependent economic activities of the regions within the river basin in the total GVA of Ukraine, %.	5,4	4,9	5,6	4,7	4,8	4,7

Annex 9.2 Characteristics of water use in the Don RBD[65]

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, %
Industry	**629,9**	**652**	**43,5**
including: - energy - ferrous metallurgy - food industry - coal industry - forestry woodworking - pulp and paper - chemical and petrochemical - chemical industry - fuel industry - oil refining industry - gas industry	583,0 28,37 2,794 37,79 3,875 3,806 3,575 3,522 0,936 0,304 0,632	588,1 43,29 5,062 3,974 3,875 3,809 3,008 2,629 1,036 0,54 0,495	
Housing and utilities	**758,5**	**223,9**	**52,4**
Agriculture	**55,95**	**38,74**	**3,9**
including: - fisheries - irrigation - agricultural enterprises (ksp)	43,63 3,467 2,791	24,92 3,468 4,418	
Transport	**1,668**	**2,091**	**0,1**
Forestry	**0,016**	**0,018**	**<0,001**
Other	1,966	6,751	<0,1
Total for the Don RBD	**1448,0**	**923,5**	**100%**

[65] Data source: State water cadastre data, section "Water use", 2019, State Agency of Water Resources of Ukraine

Annex 10.3. Wastewater discharges to water bodies by categories of discharged water

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 cleaned at facilities	
Industry	**584,5**	**11,43**	**525,1**	**12,12**	**70,4**
including:					
- energy	538,3	1,174	497,0	6,574	
- ferrous metallurgy	28,07	0,098	27,54	0,379	
- food industry	1,072	0,829	0,044	0,199	
- coal industry	33,68	0,052	-	-	
- Forestry, woodworking and pulp and paper	2,961	2,745	-	0,216	
- chemical and petrochemical	5,888	5,853	-	0,035	
- chemical industry	5,801	5,766	-	0,035	
- fuel industry	0,15	0,112	-	0,038	
- oil refining industry	0,112	0,112	-	-	
- gas industry	0,038	-	-	0,038	
Housing and utilities	**229,2**	**32,37**	**0,001**	**196,9**	**27,6**
Agriculture	**16,39**	**2,725**	**13,66**	**-**	**2,0**
including:					
- fisheries	16,39	2,725	13,66	-	
- irrigation	-	-	-	-	
- agricultural enterprises (farms)	-	-	-	-	
Transport	**0,294**	**0,006**	**-**	**0,287**	**-**
Forestry	**-**	**-**	**-**	**-**	**-**
Other	0,416	0,379	0,039	-	-
Total for the Don RBD	**830,8**	**46,91**	**538,8**	**209,3**	**100**

Annex 9.4. Calculation of the socio-economic weight of water users

Sectors of the economy		**The volume of the airborne troops**	**Water intake, million m^3**	**Water capacity industries**	**Dependence on water quality[66]**	**Discharge volume contaminated wastewater, million m^3**	**Social and economic value**
Electro energy	Electro energy	12781,43	654,86	51,23	low	1,175	significant
Ferrous metallurgy	Processing	47027,59	9,72	0,74	low	2,092	moderate
Chemical industry	Processing		11,72		low	13,67	significant
Mechanical engineering and metalworking	Processing		9,86		low	5,311	moderate
Food industry	Processing		3,66		high	1,068	significant
Coal industry	Extractive	42714,53	149,68	3,5	low	54,312	significant
Housing and utilities	Water supply	1409,14	962,11	682,76	high	57,63	high
Fisheries	agricultural	24984,1	69,22	3,43	moderate	2,709	low
Irrigation	agricultural		7,23		low	0	low
Other types of agriculture (including livestock and crop production)	agricultural		3,06		high	0	moderate
Transport	Transport	16268,63	2,77	0,17	low	0,06	minor
Recreation and healthcare	-	-	0,79	-	high	0,261	moderate

66 https://ec.europa.eu/environment/blue2_study/pdf/BLUE2%20Task%20A2%20Final%20Report_CLEAN.pdf

Annex 9.5. Calculation of projected water withdrawals until 2030

Indicator	Odes lower dimensions	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2024	2027	2030
A realistic scenario														
Volume of water withdrawn (Don RBD)	million m^3	1471	1160	1072	1094	975,3	1266	1448	1014,1	1128,4	1125,2	1127,4	1179,2	1279,5
Volume of water withdrawn (TOT)	million m^3	-	261,3	306,5	312,8	278,9	362,0	414,0	389,2	407,1	424,6	464,5	524,4	574,7
GDP index	%	100	93,4	90,2	102,4	102,5	103,4	103,2	94,0	104,6	104,3	104,5	103,1	103,1
Optimistic scenario														
Volume of water withdrawn (Don RBD)	million m^3	-	-	-	-	-	-	-	1033,5	1140,3	1126,3	1132,5	1187,1	1287,5
GDP index	%	-	-	-	-	-	-	-	95,8	105,7	104,4	105,0	104,0	104,0
Pessimistic scenario														
Volume of water withdrawn (Don RBD)	million m^3	-	-	-	-	-	-	-	990,0	1091,0	1100,0	1111,2	1156,1	1256,4
GDP index	%	-	-	-	-	-	-	-	91,8	101,1	102,0	103,0	101,0	101,0
Water intake forecast by economic sectors														
Industry	million m^3	410,6	315,5	251,2	282,6	194,8	453,1	629,9	303,2	337,4	336,5	337,1	352,6	382,6
Housing and utilities	million m^3	961,6	761,6	769,3	755,2	721,6	749,4	758,5	654,5	728,3	726,2	727,6	761,0	825,8
Transport	million m^3	3,413	3,104	2,413	2,298	2,109	1,823	1,668	2,011	2,238	2,231	2,236	2,338	2,537
Agriculture	million m^3	91,72	76,49	46,07	50,94	54,35	59,75	55,95	52,01	57,88	57,71	57,82	60,48	65,63

Annex 9.6. Capital and current expenditures on water resources restoration and protection in the Don RBD in 2019, UAH thousand[67]

Indicator	**Donetsk region**		**Luhansk region**		**Kharkiv region**	
	Capital investments	**Current costs**	**Capital investments**	**Current costs**	**Capital investments**	**Current costs**
The total amount spent on environmental programmes, including:	2589085,9	2352966,6	17536,7	452360,8	**472800,0**	1235800,5
- Waste water treatment	104255,3	1432198,7	9246,9	297865,9	108656,1	512089,1
- Protection and rehabilitation of soil, groundwater and surface water	15809,6	103914,1	-	1337,0	806,7	1188,1
Together to clean and protect	120064,9 / **36 019,5**	1536112,8	9246,9 / **9 246,9**	299202,9	109462,8 / **76 623,9**	513277,2
Total	1656177,7 / **500165,**7*		308449,8 / **308449,8** *		622740 / **434672,5**	
Total by RBD	2 587367,5 / **1 243 288** *					

* *The indicator is adjusted according to the share of the oblast territory in the Don RBD*

[67] Source: According to the Main Statistical Department in Donetsk Oblast http://donetskstat.gov.ua/statinform1/ekonomichna-statystyka/ekonomichna-diialnist/navkolyshnie-seredovyshche/vytraty-na-okhoronu-ta-ratsionalne-vykorystannia-pryrodnykh-resursiv-za-napriamamy-pryrodookhoronnykh-vytrat/;
Main Statistical Office in Luhansk region http://lg.ukrstat.gov.ua/sinf/osreda/vonavksered2019_01.php.htm;
Main Statistical Office in Kharkiv region http://kh.ukrstat.gov.ua/vytraty-na-okhoronu-navkolyshnoho-pryrodnoho-seredovyshcha-za-vydamy-pryrodookhoronnykh-zakhodiv

Annex 9.7 Revenues to the state and local budgets

Table 1. Actual revenues from rent for special water use to the state and local budgets of Ukraine, 2019, UAH million[68,69]

Indicator	State budget			Local budgets at all levels		Together
	General fund	Special fund	Together	General fund	Special fund	
Rent for special water use, including:	730,4	162,3	892,7	730,4		1623,5
Rent (except for rent for special use of water of local water bodies)	524,4	116,5	640,9	524,4		1165,3
Rent for special use of water of local water bodies				0,27		0,27
for the use of water for hydropower needs	83,7	18,6	102,3	83,7		186,0
for the use of water from utility companies	114,7	25,5	140,2	114,7		255,0
for the use of water for water transport needs	7,6	1,7	9,3	7,6		16,9
Revenues from tax on pollutant discharges directly into water bodies	70,1	-	70,1		85,6	155,7

68 Source: Budget Code of Ukraine. Article 24-4. State Fund for Water Management Development.

69 Source: Section I "Revenues" of the Report on the Execution of the Consolidated Budget of Ukraine for 2019.

Table 2: Revenues to local budgets in the oblasts from pollutant discharges into SWB in the Don RBD in 2019, UAH thousand

Oblasts	TOTAL	including oblast ones	urban (oblast significance)	district	urban (urban district)	village	rural	territorial community
Donetsk	7098,6	3872,0	1814,3	-	62,4	311,3	951,9	86,7
Luhansk	971,1	529,7	324,7	-	50,1	65,7		0,9
Kharkiv	9844,3	5369,6	4004,8	-	131,2	254,0	57,3	27,4
Total by Don RBD oblasts	17914,0 / 9 935,7*	9771,3	6143,8	-	243,7	631,0	1009,2	115,0
Together across Ukraine	85649,9	50453,4	17171,8	21,6	846,0	2873,6	6311,3	7972,2

* *The indicator is adjusted according to the share of the oblast territory in the Don River basin*

Table 3: Dynamics of revenues from the lease of water bodies to local budgets in the regions where the RBD Don is located, UAH thousand

Oblasts	2017	2018	2019
Donetsk	853,0	872,1	1049,5
Luhansk	162,9	123,3	137,4
Kharkiv	69,7	79,0	80,8
Total by Don RBD oblasts	1085,7 / 460,7*	1074,4 / 435,4*	1267,7 / 503,6*
Together across Ukraine	10 018,4	10323,8	13546,7

* *The indicator is adjusted according to the share of the oblast territory in the Don River basin*

Annex 11. List of national targeted programmes, regional and local programmes, funds, state investment projects, international technical assistance projects, regional and local infrastructure projects

Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the period up to 2021**
Name of the environmental protection measure of the national target programme or fund	Ensuring the development of land reclamation and improvement of the ecological condition of irrigated and drained lands. Implemented within the budget programme "Operation of the State Water Management Complex and Water Resources Management"
Consistency of the environmental measure with the main water and environmental problems	Pollution by nutrients and hazardous substances from diffuse sources within the basin
Implementation of the environmental measure and its financing	The general indicators of the Programme are presented. Funding for the TWA structural units within the basin was provided through the relevant regional programmes and will be provided in them. Since the beginning of the Programme's implementation, 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 5,115.383 million (17%), which led to a significant failure to complete its tasks and activities on time. In 2019-2020, the event will be implemented primarily at the expense of the state budget. The amount of funds envisaged by the Programme in 2019 was UAH 3,651,600.78 thousand. UAH 3,288,472.44 thousand was allocated for the implementation of the measure, which is 90%, including funds: - the state budget - UAH 2,006,499.08 thousand (93.7%); - local budget UAH 87,009.75 thousand (46.4%); - other sources UAH 1,194,963.61 thousand (90.2%). In 2020, UAH 2,342,759.07 thousand was allocated for the implementation of the measures, which is 89.5% of the funding provided by the Programme, including cash: - the state budget - UAH 2,199,831.61 thousand (151.5%), - local budget - UAH 8,543.66 thousand (1.83%), - other sources - UAH 134,383.81 thousand (19.2%).
Achievement of the set goals	The target was partially achieved due to insufficient funding, especially from the local budget and other sources. As a result of the measure implementation, the state inter-farm irrigation network, pumping stations, hydraulic structures, canals for water supply for irrigation, and drainage systems were maintained within the Siverskyi Donets sub-basin, while measures to prevent water pollution from diffuse sources were not funded at all.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the period up to 2021**
Name of the environmental protection measure of the national target programme or fund	Improving the regulatory framework and organisational structure of the water sector to ensure water management and water monitoring It is implemented within the budget programme "Operation of the state water management complex and water resources management"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter, nutrients and hazardous substances

Implementation of the environmental measure and its financing	The general indicators of the Programme are presented, while financial indicators by basin cannot be separated. During 2017-2021, the Programme envisaged the implementation of an integrated water resources management system based on the basin principle through the development and implementation of river basin management plans (9 basins in total). In accordance with this goal, the Programme's passport for 2019-2020 included the task of developing RBMPs and performing water monitoring in accordance with the CMU Resolution No. 758 "On Water Monitoring". This task was financed only from the state budget and in 2019 was fulfilled by 70.8% (UAH 7,600 thousand) against the funding envisaged by the Programme. In 2020, a similar trend was observed. The programme envisaged UAH 11,010.0 thousand, while the actual implementation amounted to UAH 7,599.9 thousand (69%). To fulfil the Programme's task of monitoring the state of water resources, 145.4 thousand measurements of water quality indicators in terms of physical and chemical parameters were carried out in river basins.
Achievement of the set goals	The target was partly achieved due to insufficient funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the period up to 2021**
Name of the environmental protection measure of the national target programme or fund	Protecting rural settlements and agricultural land from the harmful effects of water Implemented within the budget programme KPKVK 2407070 "Protection of rural settlements and agricultural land from harmful effects of water, including in the Tisza river basin in Zakarpattia oblast "
Consistency of the environmental measure with the main water and environmental problems	Hydromorphological changes, pollution with nutrients and hazardous substances from diffuse sources
Implementation of the environmental measure and its financing	The general indicators of the Programme are presented. The programme included bank protection and river channel regulation, construction and reconstruction of hydraulic structures, protective dams, polders, flood control reservoirs, river channel clearing, and improvement of water protection zones and coastal protection strips. In 2019, the Programme planned to allocate UAH 188,600.0 thousand for the task "Protection of rural settlements and agricultural land from the harmful effects of water", and actually financed UAH 91,831.19 thousand (48.7%), in 2020 - UAH 213,400.0 thousand is planned, and UAH 44,716.82 thousand (21%) was executed. The lion's share of funds came from the state budget. At the same time, such planned measures as the construction of contour reclamation systems in watersheds, water drainage systems from urbanised rural areas and reforestation of coastal protection strips, and the implementation of agrotechnical, agroforestry and erosion control measures were not implemented at all. Local authorities funded measures to revive small rivers and water bodies in the amount of UAH 13,268,031 thousand (41.5% of the need). In 2020, the funding amounted to UAH 8,153.2 thousand (32.6% of the need) .
Achievement of the set goals	The target was partly achieved due to insufficient funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the period up to 2021**

Name of the environmental protection measure of the national target programme or fund	Improving the regulatory framework and organisational structure of the water sector to ensure water management and water monitoring Implemented within the budget programme "Operation of the State Water Management Complex and Water Resources Management"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter, nutrients and hazardous substances
Implementation of the environmental measure and its financing	The general indicators of the Programme measure are presented. During 2017-2021, the Programme envisaged the implementation of an integrated water resources management system based on the basin principle through the development and implementation of river basin management plans (9 basins in total). In accordance with this goal, the Programme passport for 2019-2020 included the task of developing RBMPs and performing water monitoring in accordance with the CMU Resolution No. 758 "On Water Monitoring". This task was financed only from the state budget and in 2019 was fulfilled by 70.8% (UAH 7,600 thousand) against the funding envisaged by the Programme. In 2020, a similar trend was observed. The programme envisaged UAH 11,010.0 thousand, while the actual implementation amounted to UAH 7,599.9 thousand (69%).
Achievement of the set goals	The target was partly achieved due to insufficient funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the period up to 2021**
Name of the environmental protection measure of the national target programme or fund	Priority provision of centralised water supply to rural settlements that use imported water. Implemented under the budget programme "Priority provision of rural settlements with centralised water supply"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances, biogenic elements
Implementation of the environmental measure and its financing	General indicators of the Programme measure are presented. The measure is aimed at improving the technological level of water use, introducing low-water and waterless technologies, developing more rational water use standards, and constructing, reconstructing and modernising water supply and sewage systems. In 2019, UAH 216,000.0 thousand was planned to be spent on the implementation of these tasks, and UAH 195,059.22 thousand (92%) was actually financed, in 2020, the plan was UAH 230,000.0 thousand, and the actual work was performed by UAH 77,356.11 thousand (33.6%). The event included the construction of sewerage networks implemented by local authorities. In 2019, the target was exceeded by 224%, and the actual funds spent amounted to UAH 31,352.77 thousand. In 2020, UAH 4,584.61 thousand (18%) of the planned UAH 25,940.8 thousand was actually completed.
Achievement of the set goals	The target was partly achieved due to insufficient funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The National Target Programme for the Development of Water Management and Environmental Rehabilitation of the Dnipro River Basin for the period up to 2021**

Name of the environmental protection measure of the national target programme or fund	Purchase of equipment and facilities to implement measures to improve the hydrological regime in the Dnipro-Donbas Canal and Krasnopavlivka Reservoir Implemented within the budget programme "Operation of the State Water Management Complex and Water Resources Management"
Consistency of the environmental measure with the main water and environmental problems	Pollution by hazardous substances from diffuse sources, hydromorphological changes in the UA_M6.5.1_0162
Implementation of the environmental measure and its financing	The event is scheduled for 2020. The approved funding from the general fund of the state budget is UAH 43,727.5 thousand. Cash expenses in 2020 amounted to UAH 43,727.5 thousand. The event was fully implemented.
Achievement of the set goals	The goal has been partially achieved. Increased water exchange will enhance intra-watershed processes and stimulates interfacial redistribution of substances. This measure does not affect the hydromorphological changes noted.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The National Target Programme "Drinking Water of Ukraine" for 2011-2020**
Name of the environmental protection measure of the national target programme or fund	**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.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter and nutrients

Implementation of the environmental measure and its financing	General description of the Programme The last time funds were allocated for the implementation of the Programme activities was in 2018 - UAH 200 million (15% of the need). According to the state audit, the effectiveness of the programme was 13.6%, which was caused by the imperfect management of the Ministry of Communities and Territories Development. In this regard, further implementation of the Programme was suspended. In 2021, the Concept of the National Targeted Social Programme "Drinking Water of Ukraine" for 2022-2026 was adopted, approved by the CMU Resolution No. 388-r dated 28.04.2021. The Ministry of Community and Territorial Development, together with the interested central executive authorities, was instructed to develop and submit a relevant draft Law of Ukraine to the Cabinet of Ministers of Ukraine.
Achievement of the set goals	The target was not achieved due to inadequate organisation by the Ministry of Communities and Territories Development and lack of funds
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Budget programme "Preservation Nature Reserve Fund"**
Name of the environmental protection measure of the national target programme or fund	Preservation and expansion of the country's nature reserve fund. The presence of protected areas is important in terms of studying reference conditions and their temporal changes. Development of Section 3 of the RBMP "Areas (territories) to be protected and their mapping”
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter, nutrients, hazardous substances
Implementation of the environmental measure and its financing	The NRF does not have a separate target programme, but is funded from the budget programme of the Ministry of Ecology and Natural Resources "Conservation of the Nature Reserve Fund". In 2019, the number of nature reserve fund (NRF) sites and territories 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, and 3 were reduced in area, status 1 was cancelled and the category of 13 objects was changed. Last year, the following funds were spent on protected areas conservation and expansion UAH 403734.6 thousand, of which the share of the general fund was UAH 403,734.6 thousand. The performance indicators under this Programme were met, and the area of protected areas in Ukraine was increased by 1%. In the Siverskyi Donets sub-basin, the Programme envisages the development of forest management materials for the Sviati Hory National Nature Park (Donetsk Oblast) - the total cost was UAH 1341.7 thousand, including UAH 569.0 thousand for 2020.
Achievement of the set goals	The goal has been achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**"Forestry and hunting management, protection and defence of forests in the forest fund»**
Name of the environmental protection measure of the national target programme or fund	Implementation of forest management and reforestation measures, creation of protective forest plantations

Consistency of the environmental measure with the main water and environmental problems	Reducing pollution with organic matter, nutrients and hazardous substances
Implementation of the environmental measure and its financing	Reduced forest cover leads to a deterioration in the water balance of soils, contributes to their desertification, changes water flow and increases water pollution from diffuse sources. The scope of the Programme was approved: 2019 - the general fund - UAH 145,481.3 thousand and the special fund at the expense of rent for special use of forest resources - UAH 316,533.3 thousand. In 2020 - UAH 156,791.4 thousand from the general fund and UAH 288,183.7 thousand from the special fund. The approved amounts from the general budget were significantly lower and amounted to 14.3% of the need in 2019 and 23.4% in 2020. Funds from the special fund accounted for 41% of the need in 2019, while in 2020 their amount was lower compared to the previous year. All the money from the special fund was used to support enterprises in the southeastern region where forest plantations were destroyed by large fires
Achievement of the set goals	Afforestation of the territory helps to improve the structure of land use and reduce the load from diffuse sources. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Concept of the State Target Programme for the Development of Land Relations in Ukraine for the period up to 2020**
Name of the environmental protection measure of the national target programme or fund	Protection and rational use of land
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter, nutrients and hazardous substances from diffuse sources
Implementation of the environmental measure and its financing	There is an unbalanced level of land use in the Siverskyi Donets basin. The share of agricultural land reaches 77% in Donetsk Oblast, 76.4% in Luhansk Oblast, and 76.8% in Kharkiv Oblast. This degree of land use causes erosion and degradation, and increases the likelihood of diffuse water pollution. The condition of forest belts for on-farm and other land use is also unsatisfactory .
Achievement of the set goals	The target was not achieved. As this document remained a concept, no funding was provided. The task was not fulfilled. The Ministry of Agrarian Policy has developed a draft Order "On Approval of the Rules for Ensuring Soil Fertility and the Use of Certain Agrochemicals", which is currently being approved by the relevant central executive bodies .
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The State Fund for Stimulation and Financing of Environmental Protection Measures** (State Fund for Environmental Protection - SFEP)
Name of the environmental protection measure of the national target programme or fund	Financing of environmental protection measures, the list of which is set out in the Resolution of the Cabinet of Ministers of Ukraine No. 1147 dated 17.09.1996
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter, pollution by nutrients, pollution by hazardous substances, hydromorphological changes

Implementation of the environmental measure and its financing	In accordance with the Law of Ukraine "On Environmental Protection" dated 25.06.1991 No. 1264-XII (as amended on 18.12.2019), the financing of environmental protection measures, including water resources, is carried out at the expense of the State Budget of Ukraine, local budgets, funds from enterprises, institutions and organisations, the ONPS funds, voluntary contributions and other funds. The CMU Resolution "On Approval of the Regulation on the State Environmental Protection Fund" of 7.05.1998 No. 634 (as amended by the Resolution of the Cabinet of Ministers of Ukraine No. 1065 dated 04.12.2019) The State Fund of the National Health Insurance Fund became part of the State Budget of Ukraine. The mechanism of using the funds allocated in the state budget for targeted programmes is approved by the Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Procedure for Using the Funds Allocated in the State Budget for Environmental Protection Measures" No. 163 dated 28.02.2011 (as amended on 14.05.2019). The environmental tax collected for emissions, discharges of pollutants and waste disposal is distributed as follows: 45% is allocated to the general fund of the state budget; 55% - to the special fund of local budgets (except for the tax levied on radioactive waste generation). In turn, the special fund of local budgets is directed to: 25% - village, settlement, city budgets, budgets of amalgamated territorial communities established in accordance with the law and the perspective plan for the formation of community territories; 30% - regional budgets and the budget of the Autonomous Republic of Crimea. The special fund of the budgets of Kyiv and Sevastopol receives 55% of the environmental tax. Of the UAH 52 billion collected in 2018, only UAH 4.2 billion (8%) was allocated to implement environmental protection measures. The rest of the funds were spent for other purposes.
Achievement of the set goals	The target was not achieved, in fact, all the collected environmental tax is dissipated within the general and special funds State and local budgets.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**State Fund for Regional Development** (SFRD**)**
Name of the environmental protection measure of the national target programme or fund	Financing of regional development projects on a competitive basis and in accordance with regional development strategies and action plans for their implementation.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter, pollution by nutrients, pollution by hazardous substances, hydromorphological changes

Implementation of the environmental measure and its financing	The amount of funds from the SFRD should be at least 1 percent of the projected revenues of the general fund of the draft State Budget of Ukraine for the relevant budget period. The allocation of the SFRD funds by administrative-territorial units and investment programmes and regional development projects is approved by the Cabinet of Ministers of Ukraine in consultation with the Verkhovna Rada Committee on Budget. In the Siverskyi Donets basin, the project **"Reconstruction of sewage treatment facilities in Malynivka village, Kharkiv region (Adjustment)" was selected through a** competitive selection process and started to be funded, which was approved by a CMU act and will be implemented in 2019-2021. The project is being implemented by the SFRD on the basis of co-financing from the local budget. In 2019-2020, both the SFRD and the regional environmental protection fund fulfilled their financial obligations in full. The total cost of the project is UAH 68323.87 thousand, of which UAH 40 016.2203 thousand came from the state budget and UAH 28 307.653 thousand from the local budget. Funding in 2019 amounted to UAH 12,066,423 thousand from the state budget and UAH 1,348.5 thousand from the local budget. In 2020, the funding figures were UAH 12,206,577 thousand and UAH 3,000.0 thousand, respectively For 2021, UAH 15,743,220 thousand is planned from the state budget and UAH 23959.153 thousand from the local. In 2021, the SFRD will finance a project to restore the hydrological and sanitary condition of the Borova River, which was approved by the CMU Resolution No. 297-p of 12.04.2021.
Achievement of the set goals	The goal will be achieved upon completion of the event.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Comprehensive Environmental Protection Programme in Kharkiv Oblast for 2009-2013 and for the period up to 2020**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage treatment plant in Liubotyn, Dergachiv district, on Schmidt Street
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances, pollution by nutrients UA_M6.5.1_0117
Implementation of the environmental measure and its financing	The event is scheduled for implementation in 2019-2020. 2019 - funding approved UAH 3,000.0 thousand, financed - UAH 2,991.0 thousand (99%), disbursed - UAH 2,991.0 thousand, savings in sales due to competitive bidding. 2020 - funding approved UAH 4074,996 thousand, financed UAH 3,899.97 thousand. The difference in funding from the approved amounts is explained by savings due to competitive bidding.
Achievement of the set goals	It does not solve, in the MEM pollution by organic substances, pollution by nutrients is determined by industrial sources.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Comprehensive security programme of the environment in the Kharkiv region for 2009-2013 and for the period up to 2020**
Name of the environmental protection measure of the national target programme or fund	Purchase of equipment and facilities to implement water exchange measures in the Krasnopavlivka reservoir

Consistency of the environmental measure with the main water and environmental problems	Hydromorphological changes (disruption of continuity, accumulation) UA_M6.5.1_0162
Implementation of the environmental measure and its financing	The event is scheduled for 2019. The approved amount of funding is UAH 170.0 thousand, UAH 170.0 thousand (100%) was financed, disbursed - UAH 170.0 thousand.
Achievement of the set goals	The goal has been partially achieved. Increased water exchange will enhance intra-water processes and stimulate interfacial redistribution of substances. The hydromorphological changes noted in the SWB. This measure has no effect.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Comprehensive security programme of the environment in the Kharkiv region for 2009-2013 and for the period up to 2020**
Name of the environmental protection measure of the national target programme or fund	Adjustment of design and estimate documentation and clearing of the Vovcha riverbed within the city of Vovchansk with the subsequent possibility of arranging recreation areas
Consistency of the environmental measure with the main water and environmental problems	Hydromorphological changes in the UA_M6.5.1_0010
Implementation of the environmental measure and its financing	The event is scheduled for 2019-2020. 2019 - UAH 1,500.0 thousand was approved for financing, UAH 441.8 thousand (29.5%) was financed, and UAH 441.8 thousand was disbursed. The reason for the underfunding is that the work will continue in 2020). 2020 - approved - UAH 750.0 thousand , disbursed - UAH 750.0 thousand.
Achievement of the set goals	Not achieved. No risks from hydromorphological changes in the MPV have been identified.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Comprehensive Environmental Protection Programme in Kharkiv Oblast for 2009-2013 and up to 2020**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of treatment facilities in the Eskhar village, Chuhuiv district, Kharkiv region
Consistency of the environmental measure with the main water and environmental problems	Pollution from point sources by organic matter, nutrients, hazardous substances from point sources UA_M6.5.1_0004
Implementation of the environmental measure and its financing	The event is scheduled for implementation in 2019-2020. 2019 - the amount of funding is UAH 500.0 thousand, financed - UAH 0.0 thousand (0%), disbursed - UAH 0.0 thousand. Due to the unregistered land plot, the work could not be completed. The measure has been cancelled.
Achievement of the set goals	The target was not achieved due to the unregistered land plot and, consequently, the lack of funding for the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Comprehensive security programme of the environment in the Kharkiv region for 2009-2013 and for the period up to 2020**

Name of the environmental protection measure of the national target programme or fund	Development of design and estimate documentation and reconstruction of sewage treatment facilities in Malynivka village (adjustment)
Consistency of the environmental measure with the main water and environmental problems	Pollution from point sources of organic matter, nutrients, hazardous substances from municipal point sources of Wastewater UA_M6.5.1_0004
Implementation of the environmental measure and its financing	The event is being implemented on the basis of co-financing from the state budget of the SFRD during 2019-2021. Amount of funding - UAH 12,066,423 thousand. 100% funded; region - UAH 1,500.0 thousand, financed - UAH 1,479.9 thousand, disbursed - UAH 1,479.9 thousand, savings due to competitive bidding. 2020 - the SFRD - UAH 12,206,577 thousand, 100% funded; region - UAH 3,000.0 thousand; fulfilment - UAH 3,000.0 thousand - 100% Completion of the event execution is expected in 2021.
Achievement of the set goals	The target was partially achieved. In the SWB, there is a high load from many point sources. The contribution of Malynivka village is insignificant.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Comprehensive Environmental Protection Programme in Kharkiv Oblast for 2009-2013 and up to 2020**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the sewerage collector in Chuhuiv, Kharkiv region (adjustment)
Consistency of the environmental measure with the main water and environmental problems	Pollution from point sources of organic matter, nutrients, hazardous substances from municipal point sources of water UA_M6.5.1_0004
Implementation of the environmental measure and its financing	The event is scheduled for implementation in 2019-2020. 2019 - funding approved UAH 2,000.0 thousand, financed - UAH 1,999.0 thousand, savings due to competitive procedures. 2020 - funding approved UAH 5,000.0 thousand , UAH 5,000.0 thousand financed.
Achievement of the set goals	The goal has been partially achieved. There are many other point sources in the SWB
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Comprehensive security programme natural environment in the Kharkiv region for 2009-2013 and for the period up to 2020**
Name of the environmental protection measure of the national target programme or fund	Construction of modular wastewater treatment plants on S. Gogorishvili Street, Peresichne village, Dergachiv district Kharkiv region
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients from municipal point sources of UA_M6.5.1_0059

Implementation of the environmental measure and its financing	The event is scheduled for 2019-2020. 2019 - funding approved UAH 4,359.0 thousand, UAH 2,531.5 thousand (58%) was financed, disbursed - UAH 2,531.5 thousand. The work has been postponed to 2020. 2020 - UAH 2,531.5 thousand approved, disbursed - UAH 1493.2 thousand, the overall efficiency of the measure is 92.4%. The difference is explained by underfunding from the regional environmental protection fund.
Achievement of the set goals	The target is partially achieved, the facility is not a priority polluter.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Programme of economic and social development of Kharkiv region in 2019**
Name of the environmental protection measure of the national target programme or fund	Construction of STP No. 1, STP No. 2 of gravity and pressure sewage in Vovchansk, Kharkiv region, STP No. 2 (Rubizhanske highway) of the gravity pressure sewage network (adjustment)
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter and nutrients from point sources in the UA_M6.5.1_0010
Implementation of the environmental measure and its financing	2019 - approved funding amount of UAH 3,000.0 thousand, cash expenses - UAH 2,997.4 thousand (99%). The event was fully implemented
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 and was not a priority source.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Programme of economic and social development of Kharkiv region in 2019**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the sewage pumping station at 20A Abrikosova Street in Feski village Zolochiv district, Kharkiv region
Consistency of the environmental measure with the main water and environmental problems	Organic pollution and biogenic elements from point sources in the UA_M6.5.1_0058
Implementation of the environmental measure and its financing	2019 - approved funding amounted to UAH 1,420.2 thousand, cash expenses - UAH 1,235.8 thousand. The event was fully implemented. Savings due to tender procedures.
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 and was not a priority source.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Programme of economic and social development of Kharkiv region in 2019**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of a gravity sewerage collector on Sadova Street from Davydova-Luchytskoho Street to KPS-1 L=2809 m Kupiansk, Kharkiv region

Consistency of the environmental measure with the main water and environmental problems	Organic pollution and biogenic elements from point sources in the UA_M6.5.1_0188
Implementation of the environmental measure and its financing	2019 - approved funding amounted to UAH 5,038.2 thousand, cash expenses - UAH 866.2 thousand. The event needs to be revised, and its implementation has been extended. The allocation of funds for 2020 does not include the event.
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 and was not a priority source.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Programme of economic and social development of Kharkiv region in 2019**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of section II of the Ordzhonikidze collector (Kharkivvodokanal), which is in a state of emergency
Consistency of the environmental measure with the main water and environmental problems	Organic pollution and biogenic elements from point sources in the UA_M6.5.1_0059
Implementation of the environmental measure and its financing	the amount of financing was UAH 6,510.7 thousand, and UAH 6,181.3 thousand was financed, disbursed - UAH 6,181.3 thousand.
Achievement of the set goals	The event facilitated the collection of municipal wastewater and its delivery to the treatment plant. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Programme of economic and social development of Kharkiv region in 2019**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage treatment facilities of Malodanylivka village council, Dergachiv district, Kharkiv region (adjustment)
Consistency of the environmental measure with the main water and environmental problems	In the UA_M6.5.1_0075, the possibility of risk of pollution by organic substances, pollution by nutrients is noted from municipal sources.
Implementation of the environmental measure and its financing	The reconstruction began in 2013, The total cost was UAH 38,510.4 thousand. In 2014, the following works were performed for UAH 12,000.0 thousand. Under the contractor agreement criminal proceedings were opened. In 2018, a new contract was signed to continue the work, which is valid until the end of 2020. The financing requirement for 2019, according to the Contractor Agreement, was UAH 34,941.8 thousand. The approved amount of funding from the regional environmental protection fund in 2019 was UAH 19,000.0 thousand, while the actual amount financed and disbursed was UAH 15,842.7 thousand. Differences between the planned and actual financing arose due to the impossibility of technological performance of works in winter. The contract was extended for 2020. The funding requirement under the additional agreement is UAH 19,595,484 thousand. For 2020, the approved funding amounted to UAH 21422.16 thousand. There is no report on the implementation of the activity. The degree of project readiness at the end of 2020 is 72%.

Achievement of the set goals	In the UA_M6.5.1_0075, only the possibility of risk from municipal sources was expected, and the main load was caused by hazardous substances from industrial sources. As of the end of 2020, the measure was implemented at 72%. It is obvious that the commissioning of the municipal sewage treatment plant will help reduce the load from municipal sources and lead to the achievement of the target.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Waste Management Programme for Donetsk Oblast for 2016-2020**
Name of the environmental protection measure of the national target programme or fund	Reclamation of the landfill in Sloviansk. Sloviansk.
Consistency of the environmental measure with the main water and environmental problems	Pollution of surface waters with nitrogen, phosphorus, organic matter and other hazardous substances from diffuse sources.
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - no information is available; - 2020 - no information is available. Actual funding of the event: - 2019 - no information is available. - 2020 - no information available. At the expense of the regional nature protected fund, a project was developed and reclamation of the landfill in Sloviansk was started. Sloviansk. In total, since the beginning of the reclamation in 2018-2019, the following amounts have been spent from the regional nature protected fund UAH 94,733,974 thousand. The works were completed in 2020.
Achievement of the set goals	The target has been achieved. The implementation of the measure will improve the indicators characterising the pollution of the UA_M6.5.1_0251 with nitrogen, phosphorus and other hazardous substances, which were assigned a score of "3" when determining the main anthropogenic pressure.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional industrial waste management programme in Donetsk Oblast for 2018-2020**
Name of the environmental protection measure of the national target programme or fund	Improvements in chemical waste treatment are being implemented by Avdiivka Coke Plant.
Consistency of the environmental measure with the main water and environmental problems	Pollution of surface water by industrial point sources (hazardous and other specific substances).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not expected; - 2020 was not expected. Actual funding of the event: - 2019 - UAH 2,404.50 thousand (the company's own funds). - 2020 - UAH 136.4 thousand (the company's own funds). The measure was implemented.

Achievement of the set goals	The target has been achieved. The implementation of the measure is aimed at improving the indicator characterising the pollution of the UA_M6.5.1_0282 from industrial point sources (hazardous and other specific substances). However, when determining the main anthropogenic pressures on the specified SWB, the indicator was assigned a score of "1", which indicates the absence of pollution.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional programme "Forests of Donetsk Region" for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Implementation of works on the creation of protective forest plantations and field protection forest strips on lands not occupied by forests (degraded, low-productive, etc.).
Consistency of the environmental measure with the main water and environmental problems	Pollution of surface waters with nitrogen and phosphorus compounds from diffuse agricultural sources (crop and livestock production).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 776.00 thousand; - 2020 - UAH 826.00 thousand. Actual funding of the event: - 2019 - UAH 635.90 thousand (81.9%); - 2020 - UAH 2309.00 thousand (280%, The contractor's own funds were used). The company created 50 hectares of protective forest plantations, maintained forest crops on 284 hectares, replanted forest crops on 26 hectares, and cultivated 107 hectares of soil, including 63 hectares for 2020 forest crops. Subordinate enterprises of the Donetsk Regional Forestry and Hunting Range Administration planted 158 hectares of forest crops, maintained forest crops on 24 hectares, added forest crops on 72 hectares, and cultivated 136 hectares, including 109 hectares for forest crops in 2020.
Achievement of the set goals	This goal has been achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional programme for the formation and development of the ecological network in Donetsk Oblast for the period 2019-2022**
Name of the environmental protection measure of the national target programme or fund	Development and implementation of projects for the reclamation of disturbed land, conservation of degraded and contaminated land and restore their natural state.
Consistency of the environmental measure with the main water and environmental problems	Pollution of surface waters with nitrogen and phosphorus compounds from diffuse agricultural sources (crop and livestock production).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - UAH 500 thousand. No information is available on the implementation of the measure.
Achievement of the set goals	
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional programme for the formation and development of an ecological network in Donetsk Oblast for the period 2019-2022**

Name of the environmental protection measure of the national target programme or fund	Implementation of works on the creation and restoration of protective forest plantations and shelterbelts on lands that are not occupied by forests (degraded, unproductive, etc.).
Consistency of the environmental measure with the main water and environmental problems	Pollution of surface water by nitrogen compounds and phosphorus from diffuse agricultural sources (crop and livestock production).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 0.776 thousand; - 2020 - UAH 0.826 thousand. Information on the implementation of the measure is provided in the register of the "Forests of Donetsk Region" programme. Obviously, the same measure was planned and implemented in two programmes (the Regional Programme for the Formation and Development of the Ecological Network in Donetsk Oblast for the period 2019-2022 and the Regional Programme "Forests of Donetsk Oblast").
Achievement of the set goals	This goal has been achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Cleaning up the Kazennyi Torets River and its tributaries, including project development.
Consistency of the environmental measure with the main water and environmental problems	Partially refers to the problem of "hydromorphological changes".
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - UAH 2,000 thousand. The event did not materialise.
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Clean-up of the Bakhmutka River and its tributaries, including the development of design and estimate documentation.
Consistency of the environmental measure with the main water and environmental problems	Partially refers to the problem of "hydromorphological changes".
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - not planned. The event did not materialise.
Achievement of the set goals	Target not achieved due to non-implementation of the measure

Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Measures to restore and maintain a favourable hydrological regime and sanitary condition of rivers, clearing the Gruzka River channel.
Consistency of the environmental measure with the main water and environmental problems	Partially refers to the problem of "hydromorphological changes".
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 12,886.60 thousand; - 2020 - not planned. The measure was not implemented
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the Kleban-Byk reservoir hydroelectric power station.
Consistency of the environmental measure with the main water and environmental problems	Partially refers to the problem of "hydromorphological changes".
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - not planned. The event did not materialise.
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Development of design and estimate documentation "Construction of sewage treatment facilities in Soledar for a block-modular biological sewage treatment plant for the Deconka and Belokamenka microdistricts of Soledar. Power supply to STP 1,2".
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 1,000.00 thousand; - 2020 - not planned. The event did not materialise.
Achievement of the set goals	Target not achieved due to non-implementation of the measure

Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage facilities in Krasnohorivka, including development of design and estimate documentation.
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - not planned. The event did not materialise.
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage treatment facilities in Sloviansk (adjustment).
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 16,800.11 thousand; - 2020 - UAH 4,000.00 thousand. Actual funding of the event: -2019 - UAH 2,677.83 thousand (16%); - 2020 - UAH 1,134.47 thousand (28.4%). The measure was partially implemented. In 2019, the funds were allocated from the regional fund of the National Emergency Service. Funds in the amount of UAH 2,677.83 thousand (16%) were disbursed.
Achievement of the set goals	The target was partially achieved. The implementation of the measure will contribute to the improvement of the indicator "Point sources - wastewater discharges (total phosphorus, total nitrogen, BOD, COD)", which when determining the main anthropogenic loads on SWB UA_M6.5.1_0251 was given a score of 3.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the Myrnohrad wastewater treatment plant, including development of design and estimate documentation.

Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 253.72 thousand; - 2020 - UAH 253.72 thousand. Actual funding of the event: -2019 - did not stand out; - 2020 - UAH 10.56 thousand (4.2%). The measure was not implemented due to the contractor's failure to fulfil its contractual obligations.
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage treatment facilities in Toretsk, including development of design and estimate documentation.
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 535.46 thousand; - 2020 - UAH 535.46 thousand. Actual funding of the event: -2019 - did not stand out; - 2020 - UAH 10.56 thousand (2%). The measure was not implemented due to the contractor's failure to fulfil its contractual obligations.
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage treatment facilities in Chas Yar. Chasiv Yar, including the development of design and estimate documentation.
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).

Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 30,024.55 thousand; - 2020 - UAH 49,990.58 thousand. Actual funding of the event: -2019 - UAH 29,051.38 thousand (96.7%); - 2020 - UAH 42,158.08 thousand (84.3%). The event was implemented almost in full.
Achievement of the set goals	The goal has been achieved. The implementation of the measure will contribute to the improvement of the indicator "Point sources - wastewater discharges (total phosphorus, total nitrogen, BOD, COD)", which, when determining the main anthropogenic loads on the UA_M6.5.1_0309 was given a score of 3.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage treatment facilities in Lyman, including development of design and estimate documentation.
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 40,000.00 thousand; - 2020 - UAH 569.24 thousand. Actual funding of the event: -2019 - UAH 15,971.73 thousand (40.0%); - 2020 - UAH 56.64 thousand (10.0%). The measure was partially implemented.
Achievement of the set goals	The target was partially achieved. Implementation of the measure will improve the indicator "Point sources - wastewater discharges (total phosphorus, total nitrogen, BOD, COD)" for the UA_M6.5.1_0005.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage treatment facilities in Selydove, including project development.
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - not planned. The event did not materialise.

Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage treatment facilities in Kleban Byk village, including project development.
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - not planned. The event did not materialise.
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Strengthening banks and clearing channels Kazennyi Torets within the city of Kramatorsk (near Bernatsky's Garden).
Consistency of the environmental measure with the main water and environmental problems	It refers to the problem of "hydromorphological changes".
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 17,749.04 thousand; - 2020 - UAH 9,832.48 thousand. Actual funding of the event: -2019 - UAH 3,789.81 thousand (21.3%); - 2020 - UAH 8,794.84 thousand (89.4%). The measure has been largely implemented.
Achievement of the set goals	The implementation of the measure partially led to an improvement in the indicator "Disruption of the continuity of water and environmental flows", which, when determining the impacts and pressures a score of "3" was assigned to the UA_M6.5.1_0250.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Strengthening banks and clearing channels 2nd Belenka street in Kramatorsk (near Bernatsky's Garden).
Consistency of the environmental measure with the main water and environmental problems	It refers to the problem of "hydromorphological changes".

Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not available; - 2020 - UAH 29,068.11 thousand. Actual funding of the event: -2019 - did not stand out; - 2020 - UAH 29,068.11 thousand (100%). The event was implemented in 2020.
Achievement of the set goals	The implementation of the measure partially led to an improvement in the indicator "Disruption of the continuity of water flow and environments", which was identified as a score of "3" was assigned to the UA_M6.5.1_0321.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Construction of block treatment facilities and sewage networks in Yakovlivka village, Bakhmut district.
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 14.88 thousand; - 2020 - UAH 11,866.08 thousand. Actual funding of the event: -2019 - UAH 14.88 thousand (100%); - 2020 - not available. The measure has been partially implemented.
Achievement of the set goals	The target was partially achieved. The implementation of the measure will contribute to the improvement of the indicator "Point sources - wastewater discharges (total phosphorus, total nitrogen, BOD, COD)", which is used to determine the main anthropogenic pressures on the UA_M6.5.1_0390 was given a score of 3.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Construction of domestic wastewater treatment facilities with the construction of sewerage supply networks in the village of Ocheretyno, Yasynuvata district, Donetsk region.
Consistency of the environmental measure with the main water and environmental problems	It relates to the problem of "Pollution by organic, biogenic and hazardous substances" (point sources - wastewater discharges).

Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - UAH 16,596.87 thousand; - 2020 - UAH 3,353.39 thousand. Actual funding of the event: -2019 - UAH 12,739.33 thousand (76.7%); - 2020 - UAH 2,698.37 thousand (80.5%). The measure is almost fully implemented.
Achievement of the set goals	The goal has been achieved. The implementation of the measure will improve the indicator "Point sources - wastewater discharges (total phosphorus, total nitrogen, BOD, COD)", which was assigned a score of "3" when determining the main anthropogenic pressures on the UA_M6.5.1_0300.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional target programme for clearing and regulating river channels for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Measures to restore and maintain a favourable hydrological regime and sanitary condition of the Kazennyi Torets River (Dyakonov Yar and Vodyana beams, which flow into the Kazennyi Torets River channel) in Novoekonomichne village, Pokrovsk district, Donetsk region.
Consistency of the environmental measure with the main water and environmental problems	It refers to the problem of "hydromorphological changes".
Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - UAH 60.00 thousand. Actual funding of the event: -2019 - not available; - 2020 - not available. The event was not implemented.
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Target Programme for Clearing and Regulating Riverbeds for 2018-2022**
Name of the environmental protection measure of the national target programme or fund	Development of design and estimate documentation for the reconstruction of hydraulic structures: Ivanivske village, Khromove village, Berkhivka village (Ivanivske starosta district).
Consistency of the environmental measure with the main water and environmental problems	It refers to the problem of "hydromorphological changes".

Implementation of the environmental measure and its financing	Planned financing of the event: - 2019 - not planned; - 2020 - UAH 50.00 thousand. Actual funding of the event: -2019 - not available; - 2020 - not available. The event was not implemented.
Achievement of the set goals	Target not achieved due to non-implementation of the measure
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of municipal wastewater treatment facilities No. 3 of Lysychanskvodokanal in Privilege. Pryvillia".
Consistency of the environmental measure with the main water and environmental problems	Pollution of organic matter and nutrients from municipal sources in the UA_M6.5.1_0007
Implementation of the environmental measure and its financing	2019 - approved from the regional budget UAH 314.4 thousand. UAH 314.4 thousand was financed. Project documentation was developed and the event was completed.
Achievement of the set goals	In the IPP, the load is observed from 6 priority municipal sources, which includes Lysychanskvodokanal. Once the reconstruction is complete, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development " Reconstruction of municipal wastewater treatment plant No. 4 (neighbourhood of the rubber goods plant) Lysychansk".
Consistency of the environmental measure with the main water and environmental problems	Pollution of organic matter and nutrients from municipal sources in the UA_M6.5.1_0007
Implementation of the environmental measure and its financing	2019 - UAH 366.854 thousand planned. Financed - UAH 366,854 thousand (100%). Project documentation has been developed, the event is completed.
Achievement of the set goals	In the SWB, the load is observed from 6 priority municipal sources, which includes Lysychanskvodokanal. After the reconstruction is completed, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of sewage treatment facilities in Toshkivka-1 village, Popasna district".

Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter and nutrients in the UA_M6.5.1_0460
Implementation of the environmental measure and its financing	2019 - UAH 15,944 thousand planned. UAH 15,944 thousand (100%) was financed. Project documentation has been developed. The event has been completed.
Achievement of the set goals	Popasna Vodokanal is the only priority municipal polluter. After the reconstruction is completed, the target may be partially achieved, as there are also industrial pollutants
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development " Reconstruction of sewage treatment facilities in Hirske, Popasna district "
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter and nutrients in the UA_M6.5.1_0460
Implementation of the environmental measure and its financing	2019 - UAH 218,436 thousand planned. UAH 218,436 thousand (100%) was financed. The event has been completed.
Achievement of the set goals	After the reconstruction of the treatment plant is completed, the load from municipal point sources may be reduced. However, Hirske is not a priority municipal polluter. The target can be partially achieved, as the priority polluter is the Popasna District Water Supply Company, and there are also industrial pollutants.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of the Michurina Sewage Pumping Station with replacement of the pressure collector in Popasna"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0537
Implementation of the environmental measure and its financing	2019 - UAH 71.75 thousand planned. Financed - UAH 71.75 thousand (100%) Project documentation has been developed. The event has been completed.
Achievement of the set goals	The measure will facilitate the collection of wastewater from Popasna, which is the only priority municipal pollutant. The objective is partially achieved, as the collected wastewater will be treated at the wastewater treatment plant to reduce the anthropogenic load.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**

Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of the sewage pumping station from the neighbourhood to the Popasna sewage treatment plant"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0537
Implementation of the environmental measure and its financing	2019 - UAH 126.05 thousand planned. UAH 126.05 thousand (100%) was financed. Project documentation was developed and the event was completed.
Achievement of the set goals	The measure will facilitate the collection of wastewater from Popasna, which is the only priority municipal pollutant. The target is partially achieved, to reduce the anthropogenic load, the collected wastewater should be treated at wastewater treatment plants.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of design and estimate documentation for the "Reconstruction of treatment facilities in Polovynkyne village, Starobilsk district, Luhansk region".
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0465
Implementation of the environmental measure and its financing	2019 - UAH 15.12 thousand planned. UAH 15.12 thousand (100%) was financed. The event has been completed.
Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. There are no priority sources, but there are many small sources. After the reconstruction is completed, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Construction of treatment facilities in Valuyske village, Stanychno-Luhansk district, Luhansk region
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0584
Implementation of the environmental measure and its financing	2019 - UAH 205, 689 thousand planned. Funded - 205, 689 thousand UAH . (100%) The event has been completed.
Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. There are no priority sources, but there are many small sources. After the reconstruction is completed, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**

Name of the environmental protection measure of the national target programme or fund	Development of the project "Construction of a sewage pumping station with built-in block-modular treatment facilities for the Teplivskyi Regional Psychoneurological Boarding School"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0505
Implementation of the environmental measure and its financing	2019 - UAH 495.0 thousand planned. UAH 484,868 thousand was financed. The event has been completed. Savings due to the tender.
Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. There are no priority sources, but there are many small sources. After the reconstruction is completed, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Construction of a sewage pumping station with built-in block-modular treatment facilities for the Starobilsk Regional Psychoneurological Boarding School"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0465
Implementation of the environmental measure and its financing	2019 - UAH 650.0 thousand is planned. UAH 639,635 thousand was financed. The event has been completed. Savings due to the tender procedure.
Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. There are no priority sources, but there are many small sources. After the reconstruction is completed, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Construction of a sewage pumping station with built-in block-modular treatment facilities at the Popasna Regional Psychoneurological Boarding School"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0537
Implementation of the environmental measure and its financing	2019 - UAH 660.0 thousand planned. UAH 649,233 thousand was financed. The event has been completed. Savings due to the tender procedure.
Achievement of the set goals	The measure will contribute to the treatment of wastewater from Popasna, which is the only priority municipal pollutant. The objective is partially achieved, as all wastewater from Popasna is to be treated at the wastewater treatment plant to reduce the anthropogenic load.

Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Construction of a sewage pumping station with built-in block-modular treatment facilities at the Novoastrakhan Regional Psychoneurological Boarding School"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0427
Implementation of the environmental measure and its financing	2019 - UAH 390.0 thousand planned. UAH 378.115 thousand was financed. The measure has been implemented. Savings due to the tender procedure
Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. There are no priority sources, but there are many small sources. After the reconstruction is completed, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Construction of a sewage pumping station with built-in block-modular treatment facilities at the Nyzhnyansky Regional Psychoneurological Boarding School"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0007
Implementation of the environmental measure and its financing	2019 - UAH 630.0 thousand planned. UAH 620,206 thousand was financed. The event has been completed. Savings due to the tender procedure.
Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. The facility is not a priority pollutant. However, after the construction is completed, the load will be slightly reduced. The target has been partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Construction of a sewage pumping station with built-in block-modular treatment facilities at the Troitsky Regional Psychoneurological Boarding School"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0192
Implementation of the environmental measure and its financing	2019 - UAH 360.0 thousand planned. UAH 348,132 thousand was financed. The event has been completed. Savings due to the tender procedure.

Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. The facility is not a priority pollutant. However, after the construction is completed, the load will be slightly reduced. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Construction of a sewage pumping station with built-in block-modular treatment facilities of the Svativsky Regional Nursing Home for the Elderly"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0410
Implementation of the environmental measure and its financing	2019 - UAH 410.0 thousand is planned. UAH 403,029 thousand was financed. The event was carried out with savings due to the tender.
Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. The facility is not a priority pollutant. However, after the construction is completed, the lad will be somewhat reduced. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Construction of a sewage pumping station with built-in block-modular treatment facilities at the Belokurakyno Regional Nursing Home for the Elderly and Disabled"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0480
Implementation of the environmental measure and its financing	2019 - UAH 370.0 thousand planned. Financed - UAH 361,705 thousand. The measure has been completed. Savings due to the tender.
Achievement of the set goals	The SWB notes the risk of pollution from municipal point sources. There are no priority sources, but there are many small sources. After the reconstruction is completed, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of design and estimate documentation "Reconstruction of the existing sewage pumping station located at 166 Michurina Street, Lysychansk, for modular wastewater treatment facilities.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	2019 - UAH 18,228 thousand planned. Funded - 0. Payment according to the schedule of work. Project development (expert review) is underway. 2020 - UAH 18,228 thousand. The measure has been implemented.

Achievement of the set goals	The WSS is subject to significant pollution from many municipal and industrial sources. Implementation of the measure will improve the collection of wastewater that will be transported to the wastewater treatment plant. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development " Reconstruction of municipal wastewater treatment plant No. 5 of Lysychanskvodokanal in Novodruzhesk. Novodruzhesk "
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0004
Implementation of the environmental measure and its financing	2019 - UAH 254,221 thousand planned. UAH 69,137 thousand was financed. Payment is made according to the work schedule. Project development (expert review) is underway 2020 - UAH 185,088 thousand; The event has been completed.
Achievement of the set goals	The SWB is subject to significant pollution from many municipal and industrial sources. This source is not a priority. The reconstruction will partially reduce the impact of wastewater from municipal sources. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of treatment facilities in Zolote-1 village, Popasna district"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0540
Implementation of the environmental measure and its financing	2019 - UAH 204, 852 thousand planned. UAH 189,1340 thousand (92%) was financed. Payment is made according to the work schedule. Project development (expert review) is underway 2020 - not funded.
Achievement of the set goals	Municipal and industrial sources are a risk in the SWB. There are no priority municipal sources. The load comes from many small sources. After reconstruction, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of the treatment facilities in Popasna".
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0537

Implementation of the environmental measure and its financing	2019 - UAH 198,032 thousand planned. UAH 183,986 thousand was financed. Payment according to the schedule of work. Project development (expert review) is underway. 2020 - UAH 14,046 thousand was financed. The event has been completed.
Achievement of the set goals	The Popasna District Water Utility is a priority polluter in the SWB. Reconstruction of the treatment facilities will reduce the load from municipal sources. At the same time, the SWB notes the load from industrial sources of organic and hazardous substances and nutrients. The target has been partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Construction of a sewage pumping station with built-in block-modular treatment facilities at the Luhansk Regional Tuberculosis Dispensary at 285 Krasna Street, Lysychansk
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0004
Implementation of the environmental measure and its financing	2019 - UAH 1,000.0 thousand is planned. Funded - 0. The event was not funded due to lack of funds. 2020 - UAH 1,000.0 thousand planned. UAH 840,378 thousand was financed. The event was carried out with savings due to tender procedures.
Achievement of the set goals	UA_M6.5.1_0004 is heavily loaded by many municipal and industrial point sources. The planned measure is not a priority source of pollution and its implementation will not significantly reduce the load on the SWB. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project " Construction of block-modular wastewater treatment plants in Kreminna, Luhansk Oblast"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients in the UA_M6.5.1_0410
Implementation of the environmental measure and its financing	2019 - UAH 817.0 thousand planned. 2019 - UAH 784.8350 thousand was financed. The procedure for obtaining an expert report on the review of project documentation is underway. The final payment will be made in accordance with the schedule of work.
Achievement of the set goals	The SWB is subject to a significant load from municipal and industrial point sources. Among them, the city of Kreminna is not a priority polluter. The construction of the Kreminna wastewater treatment plant will partially reduce the load of organic matter and nutrients. The goal has been partially achieved.

Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Construction of a sewage pumping station with sewerage networks of the Olimp LFC, Kreminna
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients in the UA_M6.5.1_0410
Implementation of the environmental measure and its financing	2019 - UAH 1,000.0 thousand is planned. 2019 - funded - 0. The event has been postponed to 2020. 2020 - funded - 0. The activity was not implemented due to lack of funds. Targets were not met due to planning deficiencies.
Achievement of the set goals	Implementation of the measure could have partially reduced the load on the SWB. Non-implementation of the measure did not allow partial achievement of the target.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of sewage pumping station No. 1 at Starobilsk, 10 Zarichna St.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0465
Implementation of the environmental measure and its financing	2019 - UAH 500.0 thousand. Funded - 0. The event has been postponed to 2020. 2020 - UAH 500.0 thousand. Funded - 0. The activity was not implemented due to lack of funds. The output indicators were not achieved due to planning shortcomings.
Achievement of the set goals	The SWB notes the risk of not achieving the target due to the impact of municipal point sources. Starobilsk is not a priority source of pollution, but implementation of the measure could lead to a partial reduction of the load. The target is not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of sewage pumping station No. 3 at Starobilsk, 9-A Geologicheskaya str.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0465

Implementation of the environmental measure and its financing	2019 - UAH 500.0 thousand. Funded - 0. The event has been postponed to 2020. 2020 - UAH 500.0 thousand. Funded - 0. The activity was not implemented due to lack of funds. The output indicators were not achieved due to planning shortcomings.
Achievement of the set goals	The SWB notes the risk of not achieving the target due to the impact of municipal point sources. m. Starobilsk is not a priority source of pollution, but implementation of the measure could lead to a partial reduction of the load. The target is not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of sewage pumping station No. 1 at Belokurakino village, 28-A Tsentralnaya str.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0480
Implementation of the environmental measure and its financing	2019 - UAH 500.0 thousand. Funded - 0. The event has been postponed to 2020. 2020 - UAH 500.0 thousand. Funded - 0. The activity was not implemented due to lack of funds. The output indicators were not achieved due to planning shortcomings.
Achievement of the set goals	The SWB notes the risk of not achieving the target due to the impact of municipal point sources. Among them, Bilokurakine is not a priority source of pollution, but implementation of the measure could lead to a partial reduction of the load. The target is not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Project development "Reconstruction of the sewage pumping station No. 1 at Markivka village, 93-A Vyshneva Street"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0591
Implementation of the environmental measure and its financing	2019 - UAH 500.0 thousand. Funded - 0. The event has been postponed to 2020. 2020 - UAH 500.0 thousand. Funded - 0. The activity was not implemented due to lack of funds. The output indicators were not achieved due to planning shortcomings.

Achievement of the set goals	The SWB only notes the possibility of a risk of not achieving the target due to the impact of municipal point sources. Among them, Markivka is not a priority source of pollution, but the implementation of the measure could lead to a partial reduction in the load. The target is not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of sewage pumping station No. 1 at Novopskov village, 1-A Slobozhanskaya str.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0464
Implementation of the environmental measure and its financing	2019 - UAH 500.0 thousand. Funded - 0. The event has been postponed to 2020. 2020 - UAH 500.0 thousand. Funded - 0. The activity was not implemented due to lack of funds. The output indicators were not achieved due to planning shortcomings.
Achievement of the set goals	The SWB notes the risk of not achieving the target due to the impact of municipal point sources. Among them, Novopskov is not a priority source of pollution, but implementation of the measure could lead to a partial reduction of the load. The target was not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Reconstruction of sewage pumping station No. 3 at Novopskov village, 3-A Slobozhanskaya str.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0464
Implementation of the environmental measure and its financing	2019 - UAH 500.0 thousand. Funded - 0. The event has been postponed to 2020. 2020 - UAH 500.0 thousand. Funded - 0. The activity was not implemented due to lack of funds. The output indicators were not achieved due to planning shortcomings.
Achievement of the set goals	The SWB notes the risk of not achieving the target due to the impact of municipal point sources. Among them, Novopskov is not a priority source of pollution, but implementation of the measure could lead to a partial reduction of the load. The target was not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**

Name of the environmental protection measure of the national target programme or fund	Project development "Reconstruction of sewage treatment facilities in Svatove, Luhansk region"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0410
Implementation of the environmental measure and its financing	2019 - UAH 1,000.0 thousand. Funded - 0. The event has been postponed to 2020. 2020 - UAH 1,000.0 thousand. Funded - 0. The activity was not implemented due to lack of funds. The output indicators were not achieved due to planning shortcomings.
Achievement of the set goals	The SWB notes the risk of not achieving the target due to the impact of municipal and industrial point sources that generate pollution with organic and hazardous substances. biogenic elements. Among them, Svativsky Vodokanal is a priority source of pollution. Implementation of the measure could lead to a decrease in the load. The target was not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a gravity sewage collector from Myru Street to the treatment plant Milove village.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0625
Implementation of the environmental measure and its financing	Regional budget - 2019 plan - UAH 4,847.18 thousand. 2019 - UAH 3,910,910 thousand. Payment in accordance with the schedule of works. The work has been extended to 2020. 2020 - UAH 3,023,262 thousand planned; UAH 3,001,471 thousand financed. Savings due to tender procedures. The event has been completed.
Achievement of the set goals	The risk from municipal point sources is noted in the SWB, but there are no priority sources in the SWB. The construction of a collector will allow to transport wastewater to the treatment plant and thus reduce the load on the SWB. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of gravity collectors in Popasna
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0537

Implementation of the environmental measure and its financing	The event is planned on the basis of co-financing from the state budget. 2019 - State budget - UAH 1,155,982 thousand; regional budget - UAH 478.04 thousand. The project was submitted to the working group of the Ministry of Ecology and Natural Resources for funding in accordance with the Procedure and Conditions for Providing Subventions from the State Budget to Local Budgets for Environmental Protection Measures at Communal Property (CMU Resolution No. 228 of 20.03.2019). Based on the results of the review, the measures were not included in the list of projects to be funded in 2019 in accordance with the said Procedure. The event was not implemented due to lack of funding, which was caused by poor planning.
Achievement of the set goals	The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a local treatment plant in Baranykivka village, Kreminna district, Luhansk region.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0624
Implementation of the environmental measure and its financing	2019 - UAH 3452.7 thousand. Funded - 0. The event has been postponed to 2020. 2020 - UAH 3452.7 thousand. Funded - 0. The activity was not implemented due to lack of funds. The output indicators were not achieved due to planning shortcomings.
Achievement of the set goals	The SWB notes the risk from municipal point sources. The target was not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station with built-in modular treatment facilities at the Teplivsky Regional Psychoneurological Hospital.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0505
Implementation of the environmental measure and its financing	The total cost of the project is UAH 8,917,697 thousand. 2019 - UAH 4000.0 thousand planned. Funded - 0 due to lack of funding. 2020 - UAH 8,917,697 thousand planned, UAH 6,696,757 thousand (75%) of the planned amount was financed. The event has been extended to 2021.
Achievement of the set goals	Risks from municipal point sources are noted in the SWB. There are no priority sources in the SWB. Implementation of the measure will partially reduce the load from municipal point sources. The target is partially achieved.

Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage and pumping station with built-in modular treatment facilities at the Troitsk Regional Psychoneurological Institution.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0192
Implementation of the environmental measure and its financing	2019 - UAH 7,472,052 thousand planned. Funded - UAH 0 due to lack of funding. 2020 - UAH 7,472,052 thousand planned. UAH 5,650.223 thousand (76%) was financed. Implementation of the measure has been extended to 2021.
Achievement of the set goals	The SWB notes the risk from municipal sources, but there are no priority sources. The construction of a sewage pumping station with built-in modular treatment facilities at the Troitske Regional Psychoneurological Institution will partially reduce the load. The target has been partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station with built-in block-modular treatment facilities at the Starobilsk Regional Psychoneurological Facility
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0465
Implementation of the environmental measure and its financing	Regional budget 2019 - UAH 5,400.0 planned. Funded - 0. Lack of funding due to planning shortcomings.
Achievement of the set goals	The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station with built-in modular treatment facilities at the Popasna Regional Psychoneurological Institution
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0537
Implementation of the environmental measure and its financing	UAH 8,074,081 thousand is planned from the regional budget. 2019 - UAH 5,400.0 thousand planned; UAH 0 financed due to lack of funds. 2020 - UAH 8,074,081 thousand planned; UAH 5,764,412 thousand (71%) financed against the plan. The event has been extended to 2021.

Achievement of the set goals	The SWB notes the risk of pollution with organic substances and nutrients from municipal and industrial sources. The planned measure does not address priority sources of pollution and its implementation will only partially reduce the load. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station with built-in modular treatment facilities at the Nyzhnyansky Regional Psychoneurological Boarding School
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0007
Implementation of the environmental measure and its financing	Regional budget 2019 - UAH 390.0 thousand planned; UAH 0 financed. There is no funding.
Achievement of the set goals	Implementation of the measure would only partially reduce the load from municipal sources in the SWB. The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station with built-in modular treatment facilities at the Novoastrakhan Regional Psychoneurological Boarding School.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0427
Implementation of the environmental measure and its financing	Regional budget: 2019 - planned - UAH 4000.0 thousand. Funded - 0 due to lack of funding. 2020 - UAH 6,547,790 thousand was financed against the planned UAH 7,572,190 thousand. The event was carried out with savings due to tender procedures.
Achievement of the set goals	The SWB notes the risk from municipal point sources. There are no priority sources. Implementation of the measure will partially achieve the target.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station with built-in block-modular treatment facilities at the Svativsky Regional Nursing Home for the Elderly
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0410

Implementation of the environmental measure and its financing	UAH 7,623,052 thousand is planned from the regional budget. 2019 - funded - 0. No funding available 2020 - UAH 6,302,690 thousand (83% of the planned amount) was financed. Under the terms of the contract, the implementation of the measure was extended to 2021.
Achievement of the set goals	The SWB notes the risk from municipal and industrial point sources. The measure does not address priority sources. Implementation of the measure will partially achieve the target.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station with built-in block-modular treatment facilities at the Belokurakyno Regional Nursing Home for the Elderly and Disabled
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0480
Implementation of the environmental measure and its financing	2019 - UAH 7,212.512 thousand planned. Funded - 0. No funding available 2020 - UAH 5,743,758 thousand (80%) financed Under the terms of the contract, the event was extended to 2021.
Achievement of the set goals	In the SWB, the risk from municipal point sources is noted. There are no priority sources in the Municipal Water Supply Company. Implementation of the measure will partially achieve the target.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station with sewerage networks of the Olimp LFC, Kreminna
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0410
Implementation of the environmental measure and its financing	The event is funded from the regional budget 2019 - UAH 5,400.0 thousand planned. Financed - 0 The event was not implemented
Achievement of the set goals	In the SWB, there is a risk from municipal and industrial point sources. The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of facilities for wastewater treatment in Krasnorichenske village, Kreminna district, Luhansk region, using the Bioplato technology (adjustment).
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients UA_M6.5.1_0410

Implementation of the environmental measure and its financing	Regional budget: 2019 - UAH 810,726 thousand planned. Financed - 0 Lack of funding due to planning shortcomings.
Achievement of the set goals	Municipal and industrial point sources are at risk in the SWB. Target not achieved due to lack of funding
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Construction of a sewage pumping station and a pressure collector from the neighbourhood to the Popasna treatment plant
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0537
Implementation of the environmental measure and its financing	Regional budget: 2020 - UAH 7,952,212 thousand is planned; actual expenses - UAH 6,843,509 thousand. The measure has been completed. It is necessary to obtain a certificate of commissioning of the completed construction of the facility
Achievement of the set goals	There is a risk from municipal and industrial point sources in the SWB. Implementation of the measure will allow to transport wastewater to the treatment plant and reduce the load. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Drinking Water of** Luhansk Region Programme for 2006-2020,
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the sewerage collector Avtomobilistiv street, Druzhby Narodiv square Lysychansk
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	Regional budget 2019 - UAH 6011,592 thousand. The event was fully funded. The state of completion is 100%.
Achievement of the set goals	The SWB notes the risk of load from municipal and industrial sources. Implementation of the measure allows to transport wastewater to the treatment facilities and reduce the load on the SWB. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the existing sewage pumping station located at 6a Militseiska Street, Lysychansk for modular wastewater treatment plants

Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	2019 - planned - UAH 11,080 thousand. 2020 - UAH 8,837 thousand financed. The savings are due to the tender procedure. The measure has been completed. A certificate of conformity of the completed facility with the design documentation and readiness for operation was obtained.
Achievement of the set goals	The SWB notes the risk of load from municipal and industrial sources. Implementation of the measure allows to transport wastewater to treatment facilities and reduce the load on the SWB. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the 1st and 2nd stages of the gravity sewer L=2700 m along Pivdenna, Luhanska, Mala Sadova, Kotsiubynskoho, Sadova, Butkova, Zarichna streets to the SPT No. 1 in Starobilsk, Luhansk region (adjustment).
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0465
Implementation of the environmental measure and its financing	2019 - planned financing: UAH 34483,152 thousand. Funded - UAH 11,327,834 thousand. Payment in accordance with the work schedule. The works were extended to 2020 in accordance with the contractor agreement. 2020 - UAH 22,721,067 thousand (98%) financed. The works have been completed. The cost savings are due to tender procedures, adjustments to the scope of work and materials.
Achievement of the set goals	The SWB shows the load from municipal point sources. There are no priority sources in the array. Implementation of the measure allows to transport wastewater to the treatment plant and reduce the load on the SWB. The objective is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Preparation of land management documentation for establishing the boundaries of water protection zones and river coastal protection strips within Novoaidar district
Consistency of the environmental measure with the main water and environmental problems	Pollution with nutrients and hazardous substances in the SWB within Novoaydar district
Implementation of the environmental measure and its financing	Regional budget 2019 - UAH 4,664.125 thousand planned. Financed - 0 The event is not being implemented due to lack of funds.

Achievement of the set goals	Target not achieved due to lack of funding
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Preparation of land management documentation on establishing the boundaries of water protection zones and coastal protection strips of rivers within Svatove district
Consistency of the environmental measure with the main water and environmental problems	Pollution with nutrients and hazardous substances in the Svatove district
Implementation of the environmental measure and its financing	Regional budget 2019 - UAH 4,664.125 thousand. Financed - 0 The measure is not implemented due to lack of funds
Achievement of the set goals	The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the sewerage collector on Respublikanska Street, Shchastya.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	Regional budget 2019 - UAH 283,801 thousand approved. UAH 39,398 thousand was financed. The work has been extended to 2020. Due to the need to adjust the project documentation in 2020, there is no funding.
Achievement of the set goals	There are many point municipal and industrial sources in the SWB. m Happiness is not a priority source. Implementation of the measure allows to transport wastewater to the treatment plant and reduce the load on the SWB. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the sewerage system pumping station No. 4 with optimisation of the drainage scheme for houses in blocks 21, Shchastya.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004

Implementation of the environmental measure and its financing	Regional budget In 2019, UAH 1,888,094 thousand was approved. UAH 670,613 thousand was financed. The work has been extended to 2020. Due to the need to adjust the project documentation in 2020, there is no funding.
Achievement of the set goals	There are many point municipal and industrial sources in the SWB. m Happiness is not a priority source. Implementation of the measure allows to transport wastewater to the treatment plant and reduce the load on the SWB. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewage pumping station No. 3 with optimisation of the drainage scheme for buildings in blocks 2 and 3, Shchastya.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	Regional budget 2019 - UAH 3,863,288 thousand. In 2020, it was not funded due to the need to adjust the project documentation.
Achievement of the set goals	There are many point municipal and industrial sources in the SWB.Happiness is not a priority source. Implementation of the measure allows to transport wastewater to the treatment plant and reduce the load on the SWB. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the sewage pumping station from the neighbourhood to the treatment plant Popasna.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0537
Implementation of the environmental measure and its financing	Co-financing from the state budget is planned: State budget: UAH 7952, 212 thousand, The regional budget is UAH 7952.212 thousand. 2019 - 0 (2 open tenders were held (all tender proposals were rejected). According to the order No. 690 dated 03.09.2019, the procurement procedure was terminated. In 2020, UAH 6,843,509 thousand was financed. Cost savings are due to tender procedures, adjustments to the scope of work and materials. The activity has been completed. It is necessary to obtain a certificate of commissioning of the completed construction of the facility.

Achievement of the set goals	Popasna District Water Utility is a priority source of pollution from municipal sources. Implementation of the measure will allow to transport wastewater to the treatment plant and reduce the load. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of treatment facilities in Hirske, Popasna district .
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0460
Implementation of the environmental measure and its financing	State budget: Planned: 2019 - UAH 6,370.38 thousand. 2020 - UAH 14864.221 thousand. Regional budget: Planned: 2019 - UAH 1,794,050 thousand. 2020 - UAH 4186.118 thousand. Funded - 0. The project was submitted to the working group of the Ministry of Ecology for funding in accordance with the Procedure and Conditions for Providing Subventions from the State Budget to Local Budgets for Environmental Protection Measures at Communal Property Objects (CMU Resolution No. 228 of 20.03.2019). Based on the results of the review, the measures were not included in the list of projects to be funded in 2019 in accordance with the said Procedure. 2020 - The project was submitted for participation in the SFRD competition for 2020. No funds were allocated. Lack of funding The measure was not implemented.
Achievement of the set goals	Hirske is not a priority source. Target not achieved due to lack of funding
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the sewage pumping station "Michurina" Du-250 mm with a length of 300 m and replacement of the pressure collector in Popasna.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0537

Implementation of the environmental measure and its financing	State budget: 2019 - 2082, 182 thousand UAH. Regional budget 2019 - UAH 1084, 926 thousand. Financed - 0 The project was submitted to the working group of the Ministry of Ecology and Natural Resources for funding in accordance with the Procedure and Conditions for Providing Subventions from the State Budget to Local Budgets for Environmental Protection Measures at Communal Property (CMU Resolution No. 228 of 20.03.2019). Based on the results of the review, the measures were not included in the list of projects to be funded in 2019 in accordance with the said Procedure. The measure was not implemented.
Achievement of the set goals	The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the treatment facilities in Rubizhne.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	Planned: State budget: 2019 - UAH 33397.41 thousand. Local budget 2019 - UAH 33397.41 thousand. Financed - 0 The event was not implemented
Achievement of the set goals	There are a lot of point municipal and industrial sources in the SWB. Rubizhne is not a priority source. Implementation of the measure will allow for wastewater treatment and reduce the load on the SWB. The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the treatment facilities in the village of Bilokurakino to replace outdated equipment.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0480

Implementation of the environmental measure and its financing	Planned: State budget: 2019 - UAH 5,289,424 thousand. 2020 - UAH 12341,989 thousand. 2019 - funded - 0. The project was submitted to the working group of the Ministry of Ecology for funding in accordance with the Procedure and Conditions for Providing Subventions from the State Budget to Local Budgets for Environmental Protection Measures at Communal Property Objects (CMU Resolution No. 228 of 20.03.2019). Based on the results of the review, the measures were not included in the list of projects to be funded in 2019 in accordance with the said Procedure. 2020 - No funding available
Achievement of the set goals	Target not achieved due to lack of funding
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewerage networks in Novoaydar settlement
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter and nutrients SWB UA_M6.5.1_0465
Implementation of the environmental measure and its financing	State budget: 2019 - UAH 4439.954 thousand, 2020 - UAH 1902,838 thousand. Regional budget: 2019 - UAH 1,893,204 thousand, 2020 - UAH 811,373 thousand. Funded - 0. The project was submitted to the working group of the Ministry of Ecology and Natural Resources for funding in accordance with the Procedure and Conditions for Providing Subventions from the State Budget to Local Budgets for Environmental Protection Measures at Communal Property (CMU Resolution No. 228 of 20.03.2019). Based on the results of the review, the measures were not included in the list of projects to be funded in 2019 in accordance with the said Procedure.
Achievement of the set goals	The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the gravity sewerage collector in Baranykivka village, Kreminna district, Luhansk region.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic matter and nutrients SWB UA_M6.5.1_0624

Implementation of the environmental measure and its financing	Regional budget: 2019 - UAH 669.0 thousand. Financed - 0 The event was not implemented due to lack of funding.
Achievement of the set goals	The target was not achieved due to lack of funding.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of treatment facilities in Polovynkyne village, Starobilsk district, Luhansk region.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0465
Implementation of the environmental measure and its financing	2020 Planned funding - UAH 38,620 thousand. 2020 - 0. No funding is available. The event has been postponed to 2021.
Achievement of the set goals	Target not achieved due to lack of funding
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the control gate on the Aidar River in Starobilsk, Luhansk region.
Consistency of the environmental measure with the main water and environmental problems	Hydromorphological changes in the SWB UA_M6.5.1_0465
Implementation of the environmental measure and its financing	2020 - planned - UAH 6,033,909 thousand. 2020 - UAH 3,936,180 thousand (65%) The event has been extended for 2021
Achievement of the set goals	Upon completion of the measure, the target will be partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewer collector D 800 on Nauky-Vilesova Street, 433 m long in Sievierodonetsk.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	2020 - UAH 5,993,495 thousand planned. 2020 - UAH 3,554.125 thousand (59%) financed The event has been extended for 2021

Achievement of the set goals	The SWB is subject to a significant load from municipal and industrial point sources. The implementation of the measure will improve the transportation of wastewater to the treatment plant and partially reduce the load. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewer collector D800 m and 433 m of Kurchatova Street in Sievierodonetsk.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	2020 - UAH 11,286,216 thousand planned. Financed - UAH 9,347,210 thousand (83%) against the plan. The event has been extended for 2021
Achievement of the set goals	The SWB is subject to a significant load from municipal and industrial point sources. The implementation of the measure will improve the transportation of wastewater to the treatment plant and partially reduce the load. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of sewer collector D300 mm on V. Sosiura street (from house 407) to Baltiyska Street (building 6), Lysychansk. Lysychansk.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	State budget: 2020 - UAH 11,369,587 thousand planned; UAH 9,503,318 thousand (84%) financed against the plan. The event has been extended for 2021
Achievement of the set goals	The SWB is subject to a significant load from municipal and industrial point sources. The implementation of the measure will improve the transportation of wastewater to the treatment plant and partially reduce the load. The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the municipal wastewater treatment plant No. 4 (neighbourhood of the rubber goods plant) in Lysychansk.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0004

Implementation of the environmental measure and its financing	UAH 97566.3 thousand is planned for 2020 (state budget); 2020 - UAH 10840.7 thousand (regional budget); 2020 - no funding is available. The measure was not implemented.
Achievement of the set goals	The SWB is subject to a significant load from municipal and industrial point sources. Implementation of the measure will allow wastewater to be treated at the treatment plant and partially reduce the load. The target is not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the pressure sewerage network 10-b Myru Square, 44-a Nezalezhnosti (Proletarska) Street, Novoaydar.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0465
Implementation of the environmental measure and its financing	The event is scheduled for 2020. State budget: 2020 p. - 2790. 589 thousand UAH. Local budget 2020 - UAH 310,065 thousand. The event was not implemented due to lack of funding.
Achievement of the set goals	The target was not achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**
Name of the environmental protection measure of the national target programme or fund	Development of the project "Protection measures from the flooding of the Zolote mine SE Pervomaiskugol
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients and biogenic elements of the SWB UA_M6.5.1_0539
Implementation of the environmental measure and its financing	2019 - UAH 1480.0 thousand planned. Financed - UAH 759,043 thousand. In connection with improper performance of works under the contract for the development of the project "Measures to protect against flooding of the Zolote mine of Pervomaiskvuhillya SE" no funding was provided in 2020. Further development of the project is ongoing
Achievement of the set goals	Target partially achieved
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**The Regional Environmental Protection Programme for Luhansk Oblast for 2019-2025**

Name of the environmental protection measure of the national target programme or fund	Development of design and estimate documentation for the construction of a solid waste landfill in Popasna district
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0537
Implementation of the environmental measure and its financing	2020 - UAH 1,000 thousand is planned, Cash expenses amounted to UAH 997 thousand. savings amounted to UAH 23 thousand due to tender procedures.
Achievement of the set goals	The SWB notes the possibility of water pollution risk from diffuse sources. The target has been partially achieved. A landfill needs to be constructed.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Drinking Water of Luhansk Region Programme for 2006-2020**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the sewerage collector along Studentska Street from Medeleeva Street to Pomeranchuk Street in Rubizhne.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic substances and nutrients SWB UA_M6.5.1_0007
Implementation of the environmental measure and its financing	Regional budget - planned financing - UAH 30,000.0 thousand. 2019 - UAH 18,984,264 thousand financed. Contractor works are in progress 2020 - funding of UAH 10,397,312 thousand. against the planned UAH 12,412,012 thousand. Construction is completed, savings due to tender procedures.
Achievement of the set goals	The target is partially achieved. There are many priority municipal sources in the SWB.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Drinking Water of Luhansk Region Programme for 2006-2020**
Name of the environmental protection measure of the national target programme or fund	Development of design and estimate documentation for the reconstruction of the hydraulic structure of the Western Filter Station 1 section of the ascent to improve the hydrological regime and ensure the vital activity of river fauna.
Consistency of the environmental measure with the main water and environmental problems	Hydromorphological changes in the SWB UA_M6.5.1_0537
Implementation of the environmental measure and its financing	Regional budget 2019 - UAH 12,000.0 thousand planned. UAH 12,097 thousand was financed. The event has been completed.
Achievement of the set goals	The target can be expected to be achieved after the reconstruction. The target is partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Regional Solid Waste Management Programme for** Luhansk Oblast Terms of the Programme implementation: 2017-2020

Name of the environmental protection measure of the national target programme or fund	Development of a sanitation scheme for Novopskov village
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients UA_M6.5.1_0464
Implementation of the environmental measure and its financing	2019 - the event was implemented at the expense of the Novopskov village council in the amount of UAH 159.98 thousand.
Achievement of the set goals	Partially achieved. The measure will reduce the flow of pollutants from diffuse sources.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Programme for the development and reform of housing and communal services in Kharkiv for 2011-2020**
Name of the environmental protection measure of the national target programme or fund	Measures to maintain stormwater drainage facilities and water reduction systems; - maintenance of hydraulic structures, water bodies and water reduction facilities; - Cleaning of drainage ditches and distribution ponds
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients and biogenic elements of the SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	The measures were implemented as part of the city's budget programme and are aimed at maintaining budgetary institutions.
Achievement of the set goals	Partially achieved. The measure will reduce the flow of pollutants from diffuse sources.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Investment project of** the **World Bank (IBRD) and the Clean** Technology **Fund**
Name of the environmental protection measure of the national target programme or fund	"Improvement of the sludge management system of the sewage treatment plant in Kharkiv"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients and biogenic elements of the SWB UA_M6.5.1_0004
Implementation of the environmental measure and its financing	The impact of Kharkiv's wastewater is critical for the Siverskyi Donets sub-basin. the completion of this project will significantly improve the ecological status of the basin's waters. The total cost of the project is USD 75.8 million (USD 60.2 million from the IBRD and USD 15.6 million from the Clean Technology Fund), of which USD 51.8 million is for sludge disposal and USD 24.0 million for the reconstruction of the treatment plant. The project includes five stages, including a complete reconstruction of the treatment facilities, construction of a duplicate sewer and reconstruction of the existing one, selection of the optimal option for sludge disposal, and introduction of new nitri-denitrification technologies that will allow for in-depth wastewater treatment of nitrogen and phosphorus compounds. It is also planned to build a sludge processing complex and produce biogas from it, which will subsequently generate electricity. This technology will cover at least 70% of the complex's energy consumption and solve the issue of sludge storage and disposal. At the same time, sludge will be processed only at treatment plant No. 2, while sludge from treatment plant No. 1 will be supplied here. A reconstruction project was developed and construction work began.

Achievement of the set goals	To be achieved after project implementation.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Investment project of** the **World Bank (IBRD) and the Clean** Technology **Fund**
Name of the environmental protection measure of the national target programme or fund	"Construction of a solid waste processing complex with a landfill gas collection system and electricity generation in Dergachi, Kharkiv region"
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients and biogenic elements of the SWB UA_M6.5.1_0071
Implementation of the environmental measure and its financing	The total cost of the project is USD 43.9 million. The project is aimed at introducing separate collection of solid waste, its subsequent sorting, and creating a system for the collection and utilisation of landfill gas with electricity generation. The project includes 6 stages, including the construction of a modern landfill in accordance with the requirements of Ukrainian and European environmental legislation; reclamation of the existing landfill; installation of a landfill gas collection and transportation system at the new landfill and at adjacent landfills; installation of a landfill gas utilisation system with electricity generation and a system for transferring the generated energy to the grid of the National Energy Company Ukrenergo; construction of a separate waste collection line; construction of a Construction work on the new landfill is at the final stage, and reclamation of the existing landfill has begun, which is being carried out by the Turkish company Goksin Insaat Gida Turizm Bilisim Tuketim Mallari Pazarlama Madencilik ve Proje Musavirlik Hiz. San. Ve Tic. Ltd. (Bursa, Turkey)
Achievement of the set goals	To be achieved after project implementation.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Project with the European Investment Bank "Emergency Credit Programme for the Recovery of Ukraine"**
Name of the environmental protection measure of the national target programme or fund	Reconstruction of the drinking water disinfection system at the filtration station with the introduction of electrolysis plants for the production of sodium hypochlorite in Kramatorsk.
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients in the basin's SWB UA_M6.5.1_0250
Implementation of the environmental measure and its financing	The agreement is aimed at overcoming the consequences of the geopolitical events in Eastern Ukraine, facilitating and accelerating the speedy restoration of housing, administrative buildings, educational and healthcare facilities and other social infrastructure in the territories, controlled by the Government of Ukraine. In 2021, a tender was held, the winner was Kramiskbud Construction Company Limited Liability Company, the contract value was UAH 74,089,226.40.
Achievement of the set goals	To be partially achieved after project implementation
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**Project with the European Investment Bank "Emergency Credit Programme for the Recovery of Ukraine"**

Name of the environmental protection measure of the national target programme or fund	A comprehensive project of the Svativskyi Vodokanal municipal utility company to overhaul emergency areas and facilities located at the following addresses: Budivelnykiv Quarter, Pryvokzalna Street, Chelyuskintsi Street, Mirnyi Quarter, 1 Vodopianova Street, Poleva Street, Zaliznychnykiv Quarter, 72a Druzhby Street, 74 Sadova Street, 6a Budivelnykiv Quarter, 8a Dokuchaeva Street in Svatove, Luhansk Oblast (adjustments). The cost is UAH 8481,756 thousand. The amount of the subvention from the local budget is UAH 3053,368 thousand (special fund - UAH 2544,473 thousand), general fund - UAH 508,895 thousand).
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients in the basin's SWB UA_M6.5.1_0250
Implementation of the environmental measure and its financing	The agreement is aimed at overcoming the consequences of the geopolitical events in Eastern Ukraine, facilitating and accelerating the speedy restoration of housing, administrative buildings, educational and healthcare facilities and other social infrastructure in the territories, controlled by the Government of Ukraine. The cost is UAH 8481,756 thousand. The amount of the subvention from the local budget is UAH 3,053,368 thousand (special fund - UAH 2,544,473 thousand, general fund - UAH 508,895 thousand).
Achievement of the set goals	To be partially achieved after project implementation
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**A project of the Food and Agriculture Organisation of the United Nations (FAO) and the Global Environment Facility (GEF)**
Name of the environmental protection measure of the national target programme or fund	"Integrated management of natural resources in degraded landscapes in the forest-steppe and steppe zones of Ukraine".
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, biogenic elements of the basin's SWB
Implementation of the environmental measure and its financing	The main objectives of the project are to support the leading public authorities in developing environmental monitoring and achieving a neutral level of soil degradation in the forest-steppe and steppe zones. Project implementation is focused on raising awareness of sustainable natural resource management. The project's main activities were: - Creating favourable conditions for integrated natural resource management (INRM) through the establishment of the Ukrainian Soil Partnership. - Strengthening the institutional, legal and policy environment by empowering key national actors. - Demonstration of soil conservation and climate-smart agriculture practices on pilot plots in Kharkiv region (90 hectares). - Holding a Farmer's Field School in four regions of Ukraine. - Improved sustainable land management on 30,000 hectares of arable land in the forest-steppe and steppe zones. In particular, in 2019, we implemented practices to restore and reconstruct shelterbelts, whose functionality is diverse and versatile. The project's educational platform was created at https://healthy-soils.org.ua/.

Achievement of the set goals	In order to create a system of incentives for the care of forest strips, in cooperation with the Ukrainian Research Institute of Forestry and Agroforestry A methodological approach to the creation and reconstruction of shelterbelts was developed at the Vysotsky National Research Institute. On 25 March 2021, under the auspices of the Food and Agriculture Organisation of the United Nations (FAO) A practical part of the training was held "Best agroforestry practices.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	International Committee of the Red Cross
Name of the environmental protection measure of the national target programme or fund	Repair of one reservoir of the pumping station of the Popasna District Water Utility, which was damaged as a result of hostilities
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients
Implementation of the environmental measure and its financing	The total amount of funding in 2019 was UAH 1809.00 thousand.
Achievement of the set goals	The goal was partially achieved.
Name of the national programme or fund (indicate the name of the programme/fund, by whom and when it was approved)	**United Nations Children's Fund (UNICEF) in Ukraine**
Name of the environmental protection measure of the national target programme or fund	Restoration of water supply in Popasna
Consistency of the environmental measure with the main water and environmental problems	Pollution by organic and hazardous substances, nutrients
Implementation of the environmental measure and its financing	In 2019, the Group financed the reconstruction of the 1-metre main water pipeline at the Volzhsky branch. Reserve in the amount of UAH 3,752.76 thousand. In total, 3000 metres of pipe were replaced. The status of the measure is 30%. The total length of the water pipeline is 9000 m Purchase of a crane for UAH 4509.00 thousand.
Achievement of the set goals	The goal was partially achieved.

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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
1	Reconstruction of sewage treatment facilities and sewerage networks in Vovchansk, Vovchansk Municipal District, Chuhuiv Region, Kharkiv Oblast	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	8,7	1	69,6	3	50.28774	36.85451
3	Restoration of the damaged Pechenizka Reservoir hydroelectric power unit on the Siverskyi Donets River Pechenizka TSG, Chuhuiv district, Kharkiv region	+	**very high**	SWMI 12	1	1	2000,0	5	198,1	3	49.882496	36.980413
5	Restoration of sewerage system in Sviatohirsk, Sviatohirsk COMMUNITY, Kramatorsk district, Donetsk region, by purchasing and connecting modular sewage treatment plants	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	4,2	1	33,6	2	49.04520	37.61430
26	Reconstruction of sewage treatment facilities and sewerage networks in Rubizhne, Rubizhne COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and de-mining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	54,2	3	975,6	4	49.02582	38.36963

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
28	Reconstruction or construction of sewage treatment plants and sewerage networks in Sievierodonetsk, Sievierodonetsk COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	99,1	3	1783,8	5	48.94366	38.47356
30	Project "Construction of block-modular wastewater treatment plants in Kreminna, Luhansk region" in Kreminna, Kreminna COMMUNITY, Sievierodonetsk district, Luhansk region (after the full completion of hostilities, de-occupation and demining of the territory)	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	19,0	2	129,8	3	49.06364	38.27100
34	Prevention of pollution by hazardous substances from storage tanks through research and monitoring of the condition of storage tanks of the Private Joint Stock Company "Sievierodonetsk Azot Association" Sievierodonetsk COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	+	**very high**	SWMI 12	1	1	0,0	1	10,0	2	49.002378	38.369677

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
35	Prevention of pollution by hazardous substances from storage tanks through research and monitoring of the condition of storage tanks of the former Open Joint Stock Company "Lysychansk Soda", Lysychansk COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	+	**very high**	SWMI 12	1	1	0,0	1	10,0	2	48.926797	38.475014
37	Reconstruction of sewage treatment facilities and sewerage networks in Lysychansk, Lysychansk COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	93,3	3	1679,4	5	48.88665	38.44627
126	Prevention of pollution by hazardous substances from storage tanks through research and monitoring of the condition of storage tanks of the Private Joint Stock Company "Avdiivka Coke Plant" Avdiivka COMMUNITY, Pokrovsky district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory,	+	**very high**	SWMI 3, SWMI 12	2	1	0,0	1	20,0	2	49.587488	36.576851

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	determination of the technical condition of the facilities)											
129	Prevention of pollution by hazardous substances from storage facilities through research and monitoring of the state of storage facilities of the Private Joint Stock Company "Central Processing Plant "Dzerzhynska", Ocheretynska COMMUNITY, Pokrovskyi district, Donetsk region	+	**very high**	SWMI 3, SWMI 12	2	1	0,0	1	10,0	2	49.587488	36.576851
130	Project "Reconstruction of the Kleban-Bykske Reservoir Hydroelectric Power Station" within Illinivska COMMUNITY, Kramatorsk district, Donetsk region	+	**very high**	SWMI 3, SWMI 12	2	1	1000,0	4	40,4	2	48.436290	37.769110
132	Reconstruction of sewage treatment facilities and sewerage networks in Chas Yar. Chasiv Yar, Chasovoyarsky COMMUNITY, Bakhmut district, Donetsk region	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	11,8	2	283,2	3	48.56156	37.82721
157	Reconstruction of sewage treatment facilities and sewage networks in Novoluhanske village. Novoluhanske, Svitlodarsk COMMUNITY, Bakhmut district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for its restoration)	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,2	1	25,6	2	48.42295	38.09052

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
159	Reconstruction of industrial wastewater treatment facilities after water treatment at the Chasovoyarsk Regional Production Department of the ME "Water of Donbass" Company" Bakhmutskaya COMMUNITY, Bakhmut district, Donetsk region	+	**very high**	SWMI 3, SWMI 12	2	1	22,0	2	1,3	1	48.58410	37.85602
160	Reconstruction of industrial wastewater treatment facilities after water treatment of the Chasovoyarsk Regional Production Department of the Municipal Enterprise "Water of Donbass" Bakhmut district, Donetsk region"	+	**very high**	SWMI 3, SWMI 12	2	1	71,0	3	100,0	3	48.62598	37.95470
161	Reconstruction of sewage treatment facilities and sewerage networks in Popasna, Popasna ATC, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	11,4	2	205,2	3	48.68209	38.31780
162	Reconstruction of sewage treatment facilities and sewerage networks in Soledar. Soledar, Soledar ATC, Bakhmut district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	10,5	2	304,7	3	48.68638	38.05555

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	receipt of recommendations for restoration)											
166	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in Siversk. Siversk, Siversk COMMUNITY, Bakhmut district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for its restoration)	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	7,2	1	100,8	3	48.88374	38.09098
172	Reconstruction of sewage treatment facilities and sewerage networks in Hirske, Hirske COMMUNITY, Sievierodonetsk district, Luhansk region (after the full completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	+	**very high**	SWMI 3, SWMI 12	2	5	9,1	1	72,8	3	48.75918	38.48414
191	Reconstruction of sewage treatment plants and sewerage networks in Zolote, Hirske COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	+	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,8	1	46,4	2	48.68988	38.52653

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
58	Construction and reconstruction of stormwater drainage networks and treatment facilities on the territory of Kharkiv city in Kharkiv COMMUNITY, Kharkiv district, Kharkiv region	4,75	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	1150,0	5	1581,0	5	49.98652	36.23843
64	Reconstruction of sewage treatment plants, sewage pumping stations and sewage networks in the city of Kharkiv. Kharkiv, Kharkiv COMMUNITY, Kharkiv district, Kharkiv region	4,75	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	1150,0	5	7923,0	5	49.94967 49.88141	36.21140 36.21656
128	Reconstruction of sewage treatment plants and sewerage networks in Horlivka, Horlivka COMMUNITY, Horlivka district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	4,50	**very high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	245,7	4	2486,5	5	48.345091	37.933972
93	Reconstruction of sewage treatment facilities and sewerage networks in Myrnohrad. Myrnohrad, Myrnohrad COMMUNITY, Pokrovske District, Donetsk Oblast	4,25	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	80,7	3	1452,6	5	48.292211	37.258237

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
117	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in Toretsk. Toretsk, Toretsk COMMUNITY, Bakhmut district, Donetsk region	4,25	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	59,0	3	1062,0	5	48.36998	37.82735
33	Prevention of pollution by hazardous substances from the storage facility by utilising waste from the Rubizhne Water and Sewerage Utility (storage facility of the former Rubizhne Dye LLC) in Rubizhne COMMUNITY, Sievierodonetsk District, Luhansk Oblast (after the complete completion of hostilities, de-occupation and demining of the territory)	3,50	**high**	SWMI 1. SWMI 2, SWMI 3, SWMI 12	4	3	500,0	5	10,0	2	48.345445	37.869748
36	Prevention of pollution by hazardous substances from storage facilities through the disposal of waste from the former Open Joint Stock Company "Lysychansk Soda", Lysychansk COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	3,75	**high**	SWMI 1. SWMI 2, SWMI 3, SWMI 6, SWMI 12	5	3	500,0	5	10,0	2	48.894326	38.4890141
91	Reconstruction of sewage treatment facilities and sewerage networks in Kupiansk. Kupiansk, Kupiansk COMMUNITY, Kupiansk district, Kharkiv region	4,00	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	52,8	3	950,4	4	49.71960	37.70242

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
100	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in Kramatorsk. Kramatorsk, Kramatorsk COMMUNITY, Kramatorsk district, Donetsk region	4,00	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	183,9	3	841,9	4	48.77580	37.57600
10	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in the city of Izium, Izium Municipal District, Kharkiv Region	3,75	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	38,3	2	689,4	4	49.18841	37.25530
21	Reconstruction of sewage treatment plants, sewage pumping stations and sewage networks in the city of Lyman, Lyman Municipal Territorial Community, Kramatorsk District, Donetsk Region	3,75	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	41,1	2	739,8	4	48.901112	37.934660
42	"Construction of treatment facilities for industrial wastewater after water treatment of the municipal enterprise "Kharkivvodokanal" of Kharkiv COMMUNITYof Kharkiv district of Kharkiv region"	3,75	**high**	SWMI 3, SWMI 12	2	5	1420,0	5	72,0	3	49.87249	36.73304
99	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in Druzhkivka. Druzhkivka, Druzhkivka COMMUNITY, Kramatorsk district, Donetsk region	3,75	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	28,8	2	518,4	4	48.63885	37.51379
113	Reconstruction of sewage treatment facilities, sewage pumping stations, sewage networks and construction of sewage	3,75	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	47,6	2	636,3	4	48.810450	37.639291

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	treatment facilities (storm sewerage) in the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region											
122	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in Konstantinovka. Kostyantynivka, Kramatorsk district, Donetsk region	3,75	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	33,0	2	594,0	4	48.55882	37.64634
125	Reconstruction or construction of sewage treatment facilities and sewerage networks in Avdiivka. Avdiivka, Avdiivka COMMUNITY, Pokrovsky district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,50	**high**	SWMI 1, SWMI 2, SWMI 3	3	5	31,7	2	570,6	4	48.164546	37.781681
11	Reconstruction of sewage treatment facilities and sewerage networks in Slobozhanske village of Slobozhanska SCOMMUNITY, Chuhuiv district, Kharkiv region	3,50	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	14,8	2	266,4	3	49.54280	36.46830
20	Project "Reconstruction of wastewater treatment facilities in Mykolaivka, Sloviansk district, Donetsk region. Reconstruction of the building of the mechanical sludge dewatering section and the sodium hypochlorite dosing section. Reconstruction of trays in Mykolaivka.	3,50	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	10,7	2	143,1	3	48.87770	37.77670

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	Mykolaivka, Kramatorsk district, Donetsk region"											
27	Reconstruction of sewage treatment plants and sewerage networks in the town of Schastya, Schastya COMMUNITY, Schastya district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,50	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	11,4	2	205,2	3	48.75456	39.27103
31	Construction of sewage treatment plants and sewerage networks in Stanytsia Luhanska village, Stanychno-Luhanska COMMUNITY, Shchastia district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	3,50	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	12,2	2	219,6	3	48.65627	39.46337
152	Reconstruction of sewage treatment facilities and sewerage networks in Bakhmut. Bakhmut in Bakhmut ATC, Bakhmut district, Donetsk region (after the full completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,75	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	48,4	2	871,2	4	48.62360	37.99449
72	Reconstruction of sewage treatment facilities and sewerage networks in Chuhuiv. Chuhuiv,	3,50	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	26,4	2	475,2	3	49.83727	36.60793

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	Chuhuiv COMMUNITY, Chuhuiv district, Kharkiv region											
84	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in the city of Balakliya in Balakliya COMMUNITY, Izyum district, Kharkiv region and	3,50	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	14,6	2	262,8	3	49.48457	36.94232
167	Reconstruction of sewage treatment plants and sewerage networks in Svatove, Svatove COMMUNITY, Svatove district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,50	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	16,7	2	300,6	3	49.415439	38.127566
176	Reconstruction of sewage treatment plants and sewerage networks in Starobilsk, Starobilsk UTC, Starobilsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,50	**high**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	15,9	2	286,2	3	49.27619	38.92366
155	Prevention of livestock waste contamination from the storage facility of the Private Joint Stock Company "Bakhmut Agrarian Union" Svitlodarska COMMUNITY, Bakhmut district, Donetsk	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	2	600,0	5	10,0	2	48.425104	38.122863

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	region (after the complete completion of hostilities, de-occupation and demining of the territory)											
18	Reconstruction of industrial wastewater treatment facilities after water treatment at the Slavic Regional Production Department of the Water of Donbass Company (Kramatorsk district, Donetsk region)	3,25	**average**	SWMI 3	1	5	260,0	4	250,0	3	48.94066	37.65524
115	Reconstruction of industrial wastewater treatment facilities after water treatment at the Donetsk Regional Production Department of the Water of Donbas Company, Donetsk District, Donetsk Region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,25	**average**	SWMI 3	1	5	294,0	4	224,5	3	48.151288	37.863601
127	Reconstruction of industrial wastewater treatment facilities after water treatment at the Regional Canal Operation Department of the Water of Donbass Company, Donetsk District, Donetsk Region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,25	**average**	SWMI 3	1	5	347,0	4	398,6	3	48.312097	37.946799

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
187	Reconstruction or construction of sewage treatment facilities and sewerage networks in Svitlodarsk. Svitlodarsk, Svitlodarska COMMUNITY, Bakhmut district, Donetsk region (after the full completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	11,8	2	212,4	3	48.48522	38.23629
6	Reconstruction of sewage treatment facilities and sewerage networks in Donets village, Izyum district, Kharkiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	8,9	1	71,2	3	49.48680	36.58252
8	Reconstruction of sewage treatment facilities and sewerage networks in the village of Andriivka, Donetsk SCOMMUNITY, Izyum district, Kharkiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	8,3	1	66,4	3	49.53016	36.61908
22	Reconstruction of industrial wastewater treatment facilities after water treatment at the Popasna District Water Utility of Popasna COMMUNITY, Sievierodonetsk District, Luhansk Oblast (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,00	**average**	SWMI 3	1	5	50,0	3	290,5	3	48.935139	38.232096

№	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	Name of the measure	
							thousand people		million UAH		Latitude	Longitude
	1	2	3	4	5	7	8	9	10	11	12	13
24	Reconstruction of sewage treatment facilities and sewerage networks in Pryvillia, Lysychansk COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	6,5	1	52,0	3	48.98814	38.25216
25	Reconstruction of sewage treatment facilities and sewerage networks in Novodruzhesk, Lysychansk COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	6,7	1	53,6	3	48.97259	38.25395
62	Reconstruction of sewage treatment plants and sewerage networks in Dergachi, Dergachivska COMMUNITY, Kharkiv district, Kharkiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	8,0	1	64,0	3	50.09973	36.14709
68	Construction of sewage treatment plants and sewerage networks in Tsyrkunivska COMMUNITY, Kharkiv district, Kharkiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	9,0	1	72,0	3	50.105283	36.376853

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
71	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in Dokuchaevske village of Rohanska COMMUNITY, Kharkiv district, Kharkiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	6,8	1	54,4	3	49.89434	36.46125
75	Project "Reconstruction of treatment facilities in Valky town" Valky, Valky COMMUNITY, Bohodukhiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	2,6	1	56,4	3	49.83361	35.65749
77	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in the city of Zmiyiv, Zmiyivska COMMUNITY, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	7,0	1	56,0	3	49.68457 49.68496	36.35413 36.35226
78	Project "Reconstruction of sewage treatment facilities in Nova Vodolaha village" Nova Vodolaha village, Novovodolaha COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	3,0	1	76,1	3	49.73666	35.90323
80	Project "Reconstruction of sewage treatment facilities Kharkiv oblast, Kharkiv rayon, Budy village, 44 Shevchenka str." Budy village, Pivdenomysl COMMUNITY, Kharkiv rayon, Kharkiv oblast	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,8	1	56,6	3	49.88352	36.02536

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
82	Construction of sewage treatment plants and sewerage networks in the city of Pivdenne of the Pivdenne municipal district of Kharkiv region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	7,4	1	59,2	3	49.88510	36.06833
90	Reconstruction of sewage treatment facilities and sewerage networks in Troitske village, Troitske COMMUNITY, Svatove district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	7,1	1	56,8	3	49.91121	38.29037
118	Reconstruction of sewage treatment facilities and sewerage networks in New York village, Toretsk COMMUNITY, Bakhmut district, Donetsk region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	9,7	1	77,6	3	48.33151	37.81313
133	Reconstruction of sewage treatment facilities (storm water drainage) in the town of Konstantinivka, Konstantinivska COMMUNITY, Kramatorsk district, Donetsk region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	49,0	2	71,7	2	48.541841	37.672334
143	Project "Construction of sewerage networks and treatment facilities in Cherkaske village" Cherkaske village, Cherkaska COMMUNITY, Kramatorsk district, Donetsk region	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,2	1	60,0	3	48.825697	37.389350

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
151	Reconstruction of sewage treatment facilities and sewerage networks in Holmivskyi village, Horlivka COMMUNITY, Horlivka district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	6,8	1	54,4	3	48.397380	38.059697
153	Reconstruction of sewage treatment facilities (storm water drainage) in Bakhmut. Bakhmut, Bakhmut COMMUNITY, Bakhmut district, Donetsk region (after the full completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	48,4	2	42,0	2	48.59389	38.00889
154	"Construction of a sewerage collector in the village of Paraskoviivka, Bakhmut COMMUNITY, Bakhmut district, Donetsk region, to the sewage treatment plant in Bakhmut, reconstruction of the sewage pumping station (after the complete completion of hostilities, de-occupation and demining of the territory)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,8	1	5,0	3	48.62360	37.99449

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
177	Reconstruction of sewage treatment plants and sewerage networks in Novoaidar village of Novoaidar COMMUNITY, Shchastia COMMUNITY, Shchastia district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	9,4	1	75,2	3	48.96697	39.00569
180	Reconstruction of sewage treatment plants and sewerage networks in Bilokurakyne village, Bilokurakyne COMMUNITY, Svatove district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	6,3	1	50,4	3	49.53752	38.72553
188	Reconstruction of sewage treatment plants and sewerage networks (including drainage) in Myronivskyi village, Svitlodarsk COMMUNITY, Bakhmut district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	3,25	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	9,2	1	73,6	3	48.478873	38.282404

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
2	Reconstruction of sewage treatment facilities and sewerage networks in Staryi Saltiv village of Starosaltivska TSG, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16	2	50.07674	36.80270
4	Project "Construction of modular wastewater treatment plants in Pechenyhy village, Pechenizky district, Kharkiv region, with a capacity of 200 m3/day" Pechenyhy village, Pechenizky COMMUNITY, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,2	1	30,8	2	49.87148	36.93486
7	Reconstruction of sewage treatment facilities and sewerage networks in Pyatigirske village, Donetsk SCOMMUNITY, Izyum district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	49.42711	36.62917
9	Reconstruction of sewage treatment facilities and sewerage networks in Savintsy village, Savinska TSG, Izyum district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	49.40306	37.05440
12	Reconstruction of sewage treatment facilities and sewerage networks in Donets village of Slobozhanska SCOMMUNITY, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	1,0	1	8,0	2	49.49353	36.59026
13	Construction of sewage treatment plants and sewerage networks in the villages of Sheludkivka and Geniivka, Slobozhanska rural settlement	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,0	1	40,0	2	49.66094	36.53980

№	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	Name of the measure	
							thousand people		million UAH		Latitude	Longitude
	1	2	3	4	5	7	8	9	10	11	12	13
	community, Chuhuiv district, Kharkiv region											
19	Reconstruction of sewage treatment facilities and sewerage networks in Donetske village, Mykolaiv Municipal District, Kramatorsk Region, Donetsk Oblast	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,6	1	4,8	2	48.92815	37.68737
23	Reconstruction of sewage treatment plants and sewerage networks in Nyzhne Hirske settlement of Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	1,0	1	8,0	2	48.79957	38.54458
29	Construction of sewage treatment plants and sewerage networks in Borivske village, Sievierodonetske COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,6	1	44,8	2	48.86613	38.55296
38	Reconstruction of sewage treatment facilities and sewerage networks in Prykolotne village, Vilkhuvata COMMUNITY, Kupiansk district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	50.22673	37.35320
39	Construction of sewage treatment facilities and sewerage	3,00	**average**	SWMI 1, SWMI 2,	4	5	2,5	1	20,0	2	50.06195	37.38170

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	networks in Velykyi Burluk village, Velykyi Burluk COMMUNITY, Kupiansk district, Kharkiv region			SWMI 3, SWMI 12								
40	Reconstruction of sewage treatment facilities, sewage pumping stations and sewage networks in Shevchenkove village, Shevchenkivska COMMUNITY, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,2	1	25,6	2	49.71065	37.18430
43	Reconstruction of sewage treatment plants and sewerage networks in Kochetok village, Chuhuiv COMMUNITY, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	1,2	1	9,6	2	49.87267	36.73281
44	Reconstruction of sewage treatment facilities and sewerage networks in Zolochiv village of Zolochiv COMMUNITY, Bohodukhiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	1,6	1	12,8	2	50.26319	35.97946
45	Construction of sewage treatment facilities and sewerage networks in Peresichne village of Solonitsynivka COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	50.02706	35.98189
46	Construction of sewage treatment plants and sewerage networks in Vilshany village, Solonitsynivska COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	50.05407	35.88095

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
47	Reconstruction of sewage treatment facilities and sewerage networks in Khorosheve village, Bezlyudivska COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	1,0	1	8,0	2	49.85882	36.23265
48	Reconstruction of sewage treatment facilities and sewerage networks in the Eskhar village of Novopokrovska COMMUNITY, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,5	1	44,0	2	49.81611	36.58860
49	Reconstruction of sewage treatment facilities and sewerage networks in Novopokrovka village, Novopokrovska COMMUNITY, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	49.83352	36.55600
50	Reconstruction of sewage treatment facilities and sewerage networks in Rai-Olenivka village of Pisochyn COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,4	1	3,2	2	49.94002	36.07835
51	Construction of sewage treatment plants and sewerage networks in Korotych village, Pisochyn COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	49.94841	36.03473
52	Construction of a sewerage collector in Vysokyi village of Vysochesky COMMUNITY, Kharkiv district, Kharkiv region, to the sewage treatment plant in Kharkiv	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	9,0	1	30,0	2	49.88141	36.21656

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
53	Construction of sewage treatment plants and sewerage networks in Babai village, Vysochenska AH, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,0	1	40,0	2	49.90274	36.19093
54	Reconstruction of sewage treatment facilities and sewerage networks in Kotlyari village, Bezlyudivska COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	49.91416	36.29757
59	Reconstruction of sewage treatment plants, sewage pumping stations and sewage networks in the town of Liubotyn of Liubotyn COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,8	1	46,4	2	49.95679 49.92546	35.93432 35.93256
60	Construction of sewage treatment plants and sewerage networks in Kozacha Lopan village of Dergachivska COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	4,9	1	39,2	2	50.33193	36.18373
61	Construction of sewage treatment facilities and sewerage networks in Slatyno village, Dergachiv COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	6,0	1	48,0	2	50.20520	36.16708
63	Construction of a sewerage collector in the village of Mala Danilivka, Malodanylivka COMMUNITY, Kharkiv district, Kharkiv region, to the sewage treatment plant of Kharkiv	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	8,0	1	30,0	2	49.94967	36.21140

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
65	Construction of sewage treatment plants and sewerage networks in the village. Ruska Lozova, Dergachivska COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,0	1	40,0	2	50.14231	36.28244
66	Construction of sewage treatment plants and sewerage networks in Cherkaska Lozova village of Malodanylivka COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,5	1	28,0	2	50.10533	36.22304
67	Reconstruction of sewage treatment facilities and sewerage networks in the village of Strilecha, Lipetska COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	1,6	1	12,8	2	50.28569	36.38079
69	Construction of sewage treatment facilities and sewerage networks in Vilkhivka village (with connection to Elitne, Zernove, Blahodatne villages) of Vilkhivka COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,4	1	19,2	2	49.98598	36.51173
70	Construction of sewage treatment plants and sewerage networks in the village. Mala Rohan, Vilkhivska COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,4	1	19,2	2	49.93302	36.48865
73	Construction of sewage treatment plants and sewerage networks in Chkalovske village, Chkalovska COMMUNITY, Chuhuiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	4,5	1	36,0	2	49.71673	36.92713

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
76	Construction of sewage treatment plants and sewerage networks in the village. Snizhkiv, Valkivska COMMUNITY, Bohodukhiv district, Kharkiv region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	0,5	1	4,0	2	49.79233	35.51546
79	Construction of sewage treatment plants and sewerage networks in the village. Novoselivka, Novovodolazka COMMUNITY, Kharkiv district, Kharkiv region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3	3	5	2,8	1	22,4	2	49.67903	35.84420
81	Reconstruction of sewage treatment facilities and sewerage networks in Merefa. Merefa in Merefianska COMMUNITY, Kharkiv district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,4	1	43,2	2	49.85191	36.05161
83	Reconstruction of sewage treatment facilities, sewerage networks and sewage pumping stations in Pokrovske village of Donetsk COMMUNITY, Izium district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,8	1	6,4	2	49.52260	36.73230
88	Construction of sewage treatment plants and sewerage networks in Dvorichna village, Kupyansk district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,0	1	24,0	2	49.85226	37.67585
89	Construction of sewage treatment plants and sewerage networks in Kurylivka village, Kurylivska COMMUNITY, Kupiansk district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	49.66181	37.70959

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							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
92	Reconstruction of sewage treatment facilities and sewerage networks in Borova village, Borivska COMMUNITY, Izium district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,1	1	16,8	2	49.38149	37.59931
94	Construction of sewage treatment plants and sewerage networks in Shakhivska COMMUNITY, Pokrovsky district, Donetsk region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,7	1	29,6	2	48.453732	37.349324
116	Construction of sewage treatment facilities and sewerage networks in Verkhnyotoretske village of Ocheretynska COMMUNITY, Pokrovsky district, Donetsk region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,5	1	28,0	2	48.233492	37.865447
119	Reconstruction of sewage treatment facilities and sewerage networks in Kleban-Byk village, Illinivska COMMUNITY, Kramatorsk district, Donetsk region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,4	1	3,2	2	48.42825	37.77760
123	Construction of a pressure sewerage collector in the village of Novodmitrivka, Konstantynivka COMMUNITY, Kramatorsk district, Donetsk region, to the sewage treatment plant in Konstantynivka	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,4	1	36,0	2	48.55882	37.64634
134	Reconstruction of sewage treatment facilities and sewerage networks in the village. Serhiivka, Andriyivska COMMUNITY, Kramatorsk district, Donetsk region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,4	1	3,2	2	48.67093	37.37533

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							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
141	Reconstruction of sewage treatment plants and sewerage networks in Barvinkove, Barvinkivska COMMUNITY, Izium district, Kharkiv region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,1	1	16,8	2	48.88841	37.00621
156	Construction of sewage treatment plants and sewerage networks at Zvanivska COMMUNITY, Bakhmut district, Donetsk region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,9	1	23,2	2	48.814977	38.063082
158	Reconstruction of sewage treatment plants and sewerage networks in Ivanivske village of Bakhmut COMMUNITY, Bakhmut district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,5	1	4,0	2	48.56694	37.90686
163	Construction of a sewerage collector in Bakhmutske village of Soledar COMMUNITY, Bakhmut district, Donetsk region, to the sewage treatment plant in Soledar, reconstruction of the sewage pumping station (after the complete completion of hostilities, de-occupation and demining of the territory)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,6	1	40,8	2	48.68638	38.05555

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
164	Construction of sewage treatment plants and sewerage networks in Yakovlivka village, Soledar COMMUNITY, Bakhmut district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	0,9	1	7,2	2	48.737568	38.146964
168	Construction of sewage treatment plants and sewerage networks in Krasnorichenske village of Krasnorichenske COMMUNITY, Svatove district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,8	1	30,4	2	49.20587	38.20178
173	Reconstruction of sewage treatment plants and sewerage networks in Toshkivka village, Hirske COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	2,50	**average**	SWMI 3, SWMI 12	2	5	2,0	1	16,0	2	48.79259	38.47986
174	Construction of sewage treatment plants and sewerage networks in Bilolutsk, Bilolutsk COMMUNITY, Starobilsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	2,50	**average**	SWMI 3, SWMI 12	2	5	3,7	1	29,6	2	49.68258	39.02708

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
178	Construction of sewage treatment facilities and sewerage networks in Chmyrivka village, Chmyrivka COMMUNITY, Starobilsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	4,2	1	33,6	2	49.30125	38.91840
179	Reconstruction of sewage treatment plants and sewerage networks in Novopskovsk village, Novopskovsk COMMUNITY, Starobilsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,0	1	40,0	2	49.53567	39.12099
183	Construction of sewage treatment plants and sewerage networks in Petropavlivka, Shchastya COMMUNITY, Shchastya district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	4,5	1	36,0	2	48.80976	39.24962

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
185	Reconstruction of sewage treatment facilities and sewerage networks in the village of Nyzhnyoteple, Nyzhnyoteplivska COMMUNITY, Shchastynskyi district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,1	1	16,8	2	48.78434	39.34718
190	Construction of sewage treatment plants and sewerage networks in Komyshuvakha village, Popasna COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	2,0	1	16,0	2	48.69652	38.43395
192	Reconstruction of sewage treatment plants and sewerage networks in Markivka village, Markivka COMMUNITY, Starobilsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,5	1	44,0	2	49.51959	39.55912
193	Reconstruction of sewage treatment plants and sewerage networks in Bilovodsk village, Bilovodsk COMMUNITY, Starobilsk district, Luhansk region	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	3,7	1	29,6	2	49.19778	39.58009

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	(after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)											
169	Reconstruction of the treatment facilities of the State Enterprise Ukrshakhcommunityidroz-akhyst at the drainage complex of the Kreminna mine, Kreminska COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	2,50	**average**	SWMI 3, SWMI 12	2	3	18,6	2	140,2	3	49.05291	38.21687
194	Reconstruction of sewage treatment facilities and sewerage networks in Milove village, Milovske COMMUNITY, Starobilsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for reconstruction)	3,00	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	5,7	1	45,6	2	49.37472	40.14346

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
96	Reconstruction of the treatment facilities of the State Enterprise "Myrnohradvuhillya" of the Separate Subdivision "Capital" Myrnohradska COMMUNITYof Pokrovskyi district of Donetsk region"	2,50	**average**	SWMI 3	1	3	80,7	3	87,6	3	48.34494	37.29370
97	Reconstruction of the treatment facilities of the State Enterprise "Myrnohradvuhillya" of the Separate Subdivision "Central" of the Myrnohradska COMMUNITYof the Pokrovskyi district of Donetsk region"	2,50	**average**	SWMI 3	1	3	80,7	3	216,8	3	48.31152	37.27037
171	Reconstruction of the treatment facilities of the State Enterprise Ukrshakhcommunityidrozakhyst at the drainage complex of the Chornomorka mine, Lysychansk COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	2,75	**average**	SWMI 3, SWMI 12	2	3	93,3	3	109,7	3	48.89041	38.43507
95	Reconstruction of treatment facilities of the State Enterprise "Mirnogradvuhillya" of the Separate Subdivision "Mine 5/6" Myrnogradskaya COMMUNITYof Pokrovsky district of Donetsk region"	2,50	**average**	SWMI 3	1	3	80,7	3	136,9	3	48.27629	37.30231

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
57	Reconstruction of sewage treatment facilities of the Municipal Institution "Khoroshevsky Geriatric Nursing Home", Bezlyudivska COMMUNITY, Kharkiv district, Kharkiv region	2,75	**average**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	5	4,2	1	1,9	1	49.85197	36.20502
140	Revitalisation of the Sukhyi Torets River (Kazennyi Torets River basin) with the installation of coastal protection strips within the Blyzniukivska COMMUNITYof Lozova district, Kharkiv region	1,50	**low**	SWMI 4	1	1	14,0	2	6,8	2	48.887938	36.726305
165	"Revitalisation of the Sukha River (Bakhmutka river basin) with the establishment of coastal protection strips within the Siverska COMMUNITYof Bakhmut district, Donetsk region, and with the elimination of the dam within the village of Svyato-Pokrovske (after the complete completion of hostilities, de-occupation and demining of the territory)	1,50	**low**	SWMI 4	1	1	13,5	2	21,0	2	48.845399	37.937336
170	"Remanding of the Duvanka riverbed (Krasna river basin) with the establishment of coastal protection strips within the boundaries of the Nyzhnoduvanska COMMUNITYof Svativskyi district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	1,50	**low**	SWMI 4	1	1	23,5	2	19,5	2	49.589986	38.153038

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
175	"Revitalisation of the Aidar riverbed with the establishment of coastal protection strips (sub-basin of the Siverskyi Donets River) within Novopskov COMMUNITY, Starobilsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	1,50	**low**	SWMI 4	1	2	0,1	1	7,1	2	49.506074	39.033324
184	Remanding of the Yevsyug riverbed (Siverskyi Donets sub-basin) with the establishment of coastal protection strips within Bilovodske COMMUNITY, Starobilsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	1,50	**low**	SWMI 4	1	1	10	2	3,8	2	49.203171	39.306388
16	"Project "Reconstruction of the reservoir with improvement of its technical condition and improvement in the village of Donets" within the Slobozhanska COMMUNITYof Chuhuiv district of Kharkiv region"	1,50	**low**	SWMI 4	1	1	17,5	2	6,2	2	49.587488	36.576851
17	Revitalisation of sections of the Siverskyi Donets River with the establishment of coastal protection strips within the Slobozhanska COMMUNITYof Chuhuiv district, Kharkiv region	1,50	**low**	SWMI 4	1	1	26,0	2	4,9	2	49.740288	36.540751

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							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
147	Revitalisation of the Sukhyi Torets River (Kazenyi Torets River basin) with the establishment of coastal protection strips within the Slavic COMMUNITYof Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	115,0	3	20,1	2	48.825079	37.543007
107	Installation of coastal protection strips for Lake Haryachne, Lake Repne, Lake Slipne, Lake Levadne-1, Lake Levadne-2 and Lake Chervone within the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 2, SWMI 4	2	1	115,0	3	0,7	1	48.871525	37.616142
149	Revitalisation of the Bakai River channel (Sorishchi River) (Kazennyi Torets River basin) with the establishment of coastal protection strips within the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	115,0	3	8,0	2	48.832821	37.659206
150	Project "Clearing of the Kolontaivka riverbed in Sloviansk with restoration of its water capacity (overhaul), including adjustment of the design and construction methodology" within the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	115,0	3	5,2	2	48.894191	37.584456

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							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
15	Reconstruction of treatment facilities of DV Oil and Gas Production Company Limited Liability Company, Teploelektrocentral branch, Novopokrovska SCOMMUNITY, Chuhuiv district, Kharkiv region	2,25	**low**	SWMI 3	1	4	5,3	1	67,5	3	49.79838	36.61175
142	Revitalisation of the Sukhyi Torets River (Kazennyi Torets River basin) with the installation of coastal protection strips within Barvinkivska COMMUNITY, Izium district, Kharkiv region	1,75	**low**	SWMI 4	1	1	23,4	2	209,8	3	48.878520	37.191987
136	Revitalisation of the Bilenka River II (Kazennyi Torets River basin) with the installation of coastal protection strips within the Kramatorsk COMMUNITYof Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	147,0	3	23,7	2	48.66174	37.65904
139	Revitalisation of the Bilenka River (Kazennyi Torets River basin) with the installation of coastal protection strips within the Kramatorsk COMMUNITYof Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	147,0	3	25,0	2	48.75023	37.67543
135	Revitalisation of the Bychok River (Kazennyi Torets River basin) with the installation of coastal protection strips within the city of Kramatorsk, Kramatorsk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	147,0	3	15,8	2	48.69770	37.47420
131	Revitalisation of the Naumykha River (Neumykha) (Kryvyi Torets River basin) with the	1,75	**low**	SWMI 4	1	1	87,3	3	12,7	2	48.499731	37.743861

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							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	installation of coastal protection strips and removal of dams within the town of Kostiantynivka, Kostiantynivka COMMUNITY, Kramatorsk district, Donetsk region											
112	Revitalisation of the Kazennyi Torets riverbed (old river) (sub-basin of the Siverskyi Donets River) with the establishment of coastal protection strips within the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	115,0	3	40,2	2	48.833084	37.620041
146	Revitalisation of the Sukhyi Torets River (Kazenyi Torets River basin) with the establishment of coastal protection strips within Cherkasy COMMUNITY, Kramatorsk district, Donetsk region	2,00	**low**	SWMI 4	1	1	147,3	3	91,0	3	48.875856	37.191477
108	Revitalisation of Lake Lyman-1 with the installation of coastal protection strips within the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	115,0	3	12,7	2	48.844828	37.565576
109	Revitalisation of Lake Lyman-2 with the installation of coastal protection strips within the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	115,0	3	10,7	2	48,846314	37,579006

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
110	Revitalisation of Shovkovychne Lake with the installation of coastal protection strips (northern part of the coastal strip) along Lozanovycha Street within the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	115,0	3	13,7	2	48.852244	37.596458
111	Revitalisation of Lake Mykhailivske with the installation of coastal protection strips within the city of Sloviansk, Sloviansk COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	115,0	3	12,5	2	48.828258	37.553461
138	Project "Clearing the beds of small rivers in Kramatorsk (Mayachka River)" within Kramatorsk COMMUNITY, Kramatorsk district, Donetsk region	2,00	**low**	SWMI 4	1	1	147,0	3	101,9	3	48.75301	37.45285
103	Elimination of two dams on the Kazennyi Torets River (subbasin of the Siverskyi Donets River) after conducting channel surveys within the town of Druzhkivka, Druzhkivka COMMUNITY, Kramatorsk district, Donetsk region	2,00	**low**	SWMI 4	1	1	233,2	4	3,0	2	48.610123	37.505063
137	Reconstruction of hydraulic structures of the Mayachka Reservoir (Mayachka River) with the development of new operating rules within the Kramatorsk COMMUNITYof the Kramatorsk district of Donetsk region	2,25	**low**	SWMI 4	1	3	304,5	3	48,0	2	48.752220	37.449777

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
98	Reconstruction of treatment facilities of the State Enterprise "Krasnolimanskaya Coal Company" Myrnogradskaya COMMUNITY, Pokrovsky district, Donetsk region"	2,25	**low**	SWMI 3	1	3	10,0	2	337,5	3	48.35478	37.27023
114	Reconstruction of the treatment facilities of the State Enterprise "Selydivuhillya", Separate Subdivision "Mine 1-3 "Novogrodovskaya", Novogrodovskaya COMMUNITY, Pokrovsky district, Donetsk region"	2,25	**low**	SWMI 3	1	3	14,1	2	158,4	3	48.229183	37.342821
120	Reconstruction of the treatment facilities of the State Enterprise Toretskugol of the Separate Subdivision Toretska Mine of Toretska COMMUNITY, Bakhmut District, Donetsk Region	2,25	**low**	SWMI 3	1	3	32,0	2	97,6	3	48.41016	37.85642
121	Reconstruction of treatment facilities of the State Enterprise Toretskugol of the Separate Subdivision Tsentralna Mine of Toretska COMMUNITY, Bakhmut District, Donetsk Region	2,25	**low**	SWMI 3	1	3	32,0	2	100,0	3	48.39327	37.84327

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
189	Reconstruction of the treatment facilities of Myronivska Heat and Power Plant, Svitlodarsk COMMUNITY, Bakhmut district, Donetsk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the facilities and receipt of recommendations for restoration)	2,25	**low**	SWMI 3, SWMI 12	2	4	10,0	1	8,6	2	48.48972	38.29416
124	Elimination of the dam on the Kryvyi Torets River (Kazenyi Torets River basin) after conducting channel surveys within the town of Druzhkivka, Druzhkivka COMMUNITY, Kramatorsk district, Donetsk region	1,75	**low**	SWMI 4	1	1	233,2	4	1,0	1	48.633329	37.536718
14	Reconstruction of treatment facilities of Zmiivska Paper Mill Limited Liability Company Zmiivska Municipal Paper Mill, Chuhuiv district, Kharkiv region	2,00	**low**	SWMI 3	1	2	14,2	2	109,5	3	49.67701	36.37517
32	Reconstruction of the treatment facilities of the Private Joint Stock Company "Rubizhne Cardboard and Packaging Plant", Rubizhne COMMUNITY, Sievierodonetsk district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory, determination of the technical condition of the	2,25	**low**	SWMI 3	1	2	54,2	3	365,0	3	48.98387	38.36937

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	facilities and receipt of recommendations for restoration)											
55	"Construction of treatment facilities of the State Enterprise "Enterprise of the State Criminal Executive Service of Ukraine (No. 100) Bezlyudivska COMMUNITYof Kharkiv District, Kharkiv Region"	2,25	**low**	SWMI 1, SWMI 2, SWMI 3, SWMI 12	4	1	44,0	2	5,5	2	49.795472	36.34350
101	Reconstruction of treatment facilities of the Private Joint Stock Company "Novokramatorsk Machine-Building Plant" Kramatorsk COMMUNITY, Kramatorsk district, Donetsk region"	2,25	**low**	SWMI 3	1	2	183,9	3	170,5	3	48.75753	37.56438
181	Elimination of the gateway regulators of the Bilokurakyno drainage system on the Bila River (Aidar River basin) within the Bilokurakyno COMMUNITYof Svatove district, Luhansk region (after the complete completion of hostilities, deoccupation and demining of the territory)	1,50	**low**	SWMI 4	1	1	33,6	2	4,0	2	49.596055	38.697759
182	Elimination of the gateway regulators of the Bila drainage system on the Bila River (Aidar River basin) within the Bilokurakyno COMMUNITYof Svatove district, Luhansk region (after the complete	1,50	**low**	SWMI 4	1	1	33,6	2	10,0	2	49.502411	38.744034

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
	completion of hostilities, de-occupation and demining of the territory)											
56	Construction of treatment facilities by New Systems AM Limited Liability Company Kharkiv COMMUNITY, Kharkiv district, Kharkiv region	2,25	**low**	SWMI 3, SWMI 12	2	1	60,0	3	153,3	3	49.91595	36.29980
102	Reconstruction of treatment facilities of the Public Joint Stock Company "Energomashspetsstal" Kramatorsk COMMUNITY, Kramatorsk district, Donetsk region"	2,00	**low**	SWMI 3	1	2	183,9	3	41,3	2	48.77429	37.58749
144	Reconstruction of treatment facilities of the Private Joint Stock Company "Slavic Chalk and Lime Plant" Slavic COMMUNITYof Kramatorsk District, Donetsk Region	1,75	**low**	SWMI 3	1	2	115,0	3	1,8	1	48.82942	37.37264
195	Improving state accounting of water use in the Don River basin within Kharkiv, Donetsk and Luhansk oblasts	2,25	**low**	SWMI 4, SWMI 6, SWMI 9	3	3	0,0	1	30,7	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
145	Reconstruction of treatment facilities of the Limited Liability Company "Production Association Slavic Plant of High Voltage Insulators" Slavyanskaya COMMUNITYof Kramatorsk district, Donetsk region	1,75	**low**	SWMI 3	1	2	11,5	2	26,7	2	48.83542	37.59013
148	Elimination of the dam on Tkachova Balka (Soryshche River basin) outside the city of Sloviansk, within Mykolaivska COMMUNITY, Kramatorsk district, Donetsk region	1,25	**very low**	SWMI 4	1	1	36,5	2	0,2	1	48.823089	37.671164
106	Elimination of the dam on the Mazaniv Yar gully (b. Orikhova) (Kazennyi Torets river basin) outside the city of Sloviansk, Mykolaivska COMMUNITY, Kramatorsk district, Donetsk region	1,25	**very low**	SWMI 4	1	1	36,5	2	0,2	1	48.799406	37.653136
41	Remanding of the Babka River channel (sub-basin of the Siverskyi Donets River) with the installation of coastal protection strips within the Starosaltivska COMMUNITYof Chuhuiv district, Kharkiv region	1,25	**very low**	SWMI 4	1	1	0,1	1	4,1	2	50.071742	36.686834
186	Remanding of the Plotynna riverbed (Tepla river basin) with the establishment of coastal protection strips within Stanychno-Luhanska COMMUNITY, Shchastia district, Luhansk region (after the complete completion of hostilities, de-occupation and demining of the territory)	1,25	**very low**	SWMI 4	1	1	2,9	1	11,5	2	48.801541	39.441903

№	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	Name of the measure	
							thousand people		*million UAH*		*Latitude*	*Longitude*
	1	2	3	4	5	7	8	9	10	11	12	13
105	Establishment of water protection zones and coastal protection strips for water bodies in the Don River basin within Kharkiv, Donetsk and Luhansk oblasts	**1,25**	**very low**	SWMI 2, SWMI 4	2	1	0,0	1	1,0	1		
74	Remanding of the Hnylytsia River channel (Siverskyi Donets River sub-basin) with the installation of coastal protection strips within Chkalovska COMMUNITY, Chuhuiv district, Kharkiv region	1,25	**very low**	SWMI 4	1	1	1,6	1	3,0	2	49.684686	36.913475
87	Reconstruction of the treatment facilities of the Panyutyn Carriage Repair Plant Branch of the Lozova COMMUNITYof the Lozova District of the Kharkiv Region of the Joint Stock Company Ukrzaliznytsia	1,25	**very low**	SWMI 3	1	1	10,0	1	30,7	2	48.93357	36.30097
104	Elimination of the dam on the Karpivska beam (Bessarabivka river basin) outside the village of Karpivka, Mykolaiv COMMUNITY, Kramatorsk district, Donetsk region	1,00	**very low**	SWMI 4	1	1	7,7	1	0,2	1	48.904592	37.635439
85	Elimination of the dam on the Bez Nazyka beam (Bereka river basin) outside Kartamysh and Stepove villages of Oleksiyivka COMMUNITY, Lozova district, Kharkiv region	1,00	**very low**	SWMI 4	1	1	0,3	1	0,2	1	49.26043	36.55961
86	Elimination of the dam on the Bez Nazimykyi beam (Bereka river basin) outside the village of Bereka, Oleksiyivka COMMUNITY, Lozova district, Kharkiv region	1,00	**very low**	SWMI 4	1	1	0,5	1	0,2	1	49.45667	36.16059