



# Ramsar Information Sheet

## Ukraine

### Burshtyn Water Reservoir



Designation date	20 March 2019
Site number	2393
Coordinates	49°13'56"N 24°39'51"E
Area	1 260,00 ha

## Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

## 1 - Summary

### Summary

The Burshtyn Water Reservoir is the largest non-freezing water body in the western part of Ukraine, which provides an immense support for protection of large number wintering and migrating waterbirds. It was constructed in 1965, as a modification of the river mouth of Hnyla Lypa (the left tributary of the Dnister River) for the maintenance of the thermal power plant. The area of the Site is 1,260 ha, average depth is 4 m. It is an important feeding and shelter habitats for migrating and wintering waterbirds during their critical life cycle periods. The number of waterbird species is the highest for the western part of Ukraine during the spring migration, ranging from 7,000 to 22,300 individuals. The dominant species is *Anas platyrhynchos*, less numerous are *Bucephala clangula*, *Anas renelope*, *Aythya ferina*, *Anser fabalis*, *Mergus merganser*, *Anser albifrons*, *Anser anser*, *Mergus albellus*. The Site is an important area for the conservation of European and Black sea populations of *Mergus merganser* (over 4%), *Bucephala clangula* (more than 3%), *Mergellus albellus* (more than 1%), *Anser fabalis* (more than 1%).

The Site is an important regional biodiversity hotspot, supporting the protection of a number of red listed bats, fish and plants as well. The Site supports populations of 16 animal species of IUCN Red List and 10 animal species of the Red Data Book of Ukraine (2009), among them also two species, listed in the Appendices of the Bern Convention.

The Site is regional important area for the reproduction of hydrophilous animal species listed in the Red Data Book of Ukraine: *Anas strepera* L. (NT), *Aythya nyroca* (VU), *Sterna albifrons* (NT), and the IUCN Red Listed species: *Aythya ferina* (VU) and *Lutra lutra* (NT).

The main land user of the Site is "Burshtynska" Thermal Power Station (DTEK Company). The Site is part of the Halytskyi National Nature Park.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Compiler 1

Name	Bohdan Prots
Institution/agency	State Museum of Natural History, National Academy of Sciences of Ukraine; NGO "Danube-Carpathian Programme"
Postal address	Teatralna Str., 18, 79008, Lviv, Ukraine
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##### Compiler 2

Name	Volodymyr Buchko
Institution/agency	Halytskyi National Nature Park
Postal address	Halytskyi National Nature Park, 1 Halytska St., Krylos Village, Halych District, Ivano-Frankivsk Region, Post office box 29, 77162
E-mail	galych@iforestry.gov.ua
Phone	+380976746404
Fax	+380343122113

#### 2.1.2 - Period of collection of data and information used to compile the RIS

From year	2012
To year	2018

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Burshtyn Water Reservoir
Unofficial name (optional)	Бурштинське водосховище (Burshtynske Vodoshkovysche)

## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<2 file(s) uploaded>

Former maps	0
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#### Boundaries description

The Site is located in the western part of Ukraine in the basin of the upper Dnister in the north of Ivano-Frankivsk Region, in the channel of lower reaches of the Hnyla Lypa River (the left tributary of the Dnister). From the east, it is separated from agricultural lands by the Hnyla Lypa river channel, then – by a road, following the shore of the reservoir from the Korystovichi Village, country homes and forest stands of Halytskyi National Nature Park. In the south of the Site, the boundary line is located north of Bovshiv. It separates the Site by Reservoir dam and a melioration canal (straight line on the map). In the west, it borders on the territory of "Burshtynska" Thermal Power Station and separated from Demianiv and Burshtyn villages by discharge and melioration canals. In the north, it borders on oxbow lakes of the Hnyla Lypa River. All the mentioned settlements are located in the immediate vicinity to the reservoir. The area of the Water Reservoir is 1,260 ha, an average depth reaches up to 4 m. The Site is part of Halytskyi National Nature Park.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Halych District, Ivano-Frankivsk Region
b) What is the nearest town or population centre?	Burshtyn town

2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes  No
- b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes  No

2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Continental

Other biogeographic regionalisation scheme

Zoogeographic zones: European-Siberian boreal sub-region, European – West-Siberian forest province, Central European zone, Carpathian district, East-Hilly area (Shcherbak, 1988)  
 The site is located within the Low Opillia meso-ecoregion of the Western Podillia – rolling loess upland with the prevalence of oak-hornbeam forests (Kruhlov et al., 2008).

### 3 - Why is the Site important?

#### 3.1 - Ramsar Criteria and their justification

<no data available>

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

Justification

The Site supports the highest diversity of vertebrates in the basin of the upper Dniester. The wetland supports 20 fish species, 5 of them (*Rutilus rutilus*, *Carassius auratus gibelio*, *Cyprinus carpio*, *Aristichthys nobilis*, *Perca fluviatilis*) can be considered as massive, 8 (*Ctenopharyngodon idella*, *Pseudorasbora parva*, *Rhodeus amarus*, *Alburnus alburnus*, *Abramis brama*, *Hypophthalmichthys molitrix*, *Ictalurus punctatus*, *Sander lucioperca*, *Gymnocephalus cernuus* ) are common, and 7 (*Esox lucius*, *Leuciscus cephalus*, *Leuciscus leuciscus* (listed in the Red Data Book of Ukraine), *Petroleuciscus borysthenicus*, *Ictiobus cyprinellus*, *Silurus glanis*) are rare. Amphibians include *Bombina bombina*, *Bufo bufo*, *Hyla arborea*, *Pelophylax ridibundus*, *Pelophylax lessonae*, *Rana arvalis*, and *Rana temporaria*. Reptiles: *Natrix tessellata*, *Emys orbicularis*. The Site supports 153 bird species, of them 62 species breed regularly, 49 species occur only during winter and migration periods.

Criterion 4 : Support during critical life cycle stage or in adverse conditions

Criterion 5 : >20,000 waterbirds

Overall waterbird numbers

Start year

Source of data:

Criterion 6 : >1% waterbird population

#### 3.2 - Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Nuphar lutea</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
<i>Trapa natans</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Listed in the Red Data Book of Ukraine - NE.	

The vegetation is rather poor and typical for man-made water bodies. In the northern and north-eastern parts of the reservoir there are coastal communities, dominated by *Phragmitetum communis* of the class *Phragmito-Magnocaricetea*. Aquatic vegetation is found only within the shallow coastal zone and represented by communities of *Ceratophyllo-Hydrocharitetum* Pop 1962 of the class *Lemnetea* R. Tx. 1955, *Ceratophylletum demersi* of the class *Potametea* and *Potametum natantis* of the class *Potametea*. The coastal zone also houses communities of *Trapetum natantis* of the class *Potametea* listed in the Red Data Book of Ukraine. It should be noted that a regionally rare species *Najadetum marinae* of the class *Potametea* is widespread over all the water area of the reservoir.

### 3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification	
			2	4	6	9	3	5	7									8
<b>Birds</b>																		
CHORDATA/AVES	<i>Anas penelope</i>	Eurasian Wigeon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1500	2012-2018		<input type="checkbox"/>	<input type="checkbox"/>	Mass migratory species, the highest number is observed in the first ten days of March.
CHORDATA/AVES	<i>Anas platyrhynchos</i>	Mallard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18000	2012-2018		LC	<input type="checkbox"/>	Mass migratory species, the highest number is observed in the last ten days of December – the first ten days of March.
CHORDATA/AVES	<i>Anas strepera</i>	Gadwall	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	50			<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT Scanty migratory species, rare wintering species, and common breeding species.
CHORDATA/AVES	<i>Anser albifrons</i>	Greater White-fronted Goose	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	400			LC	<input type="checkbox"/>	Mass migratory species, the highest number is observed in the first ten days of March.
CHORDATA/AVES	<i>Anser anser</i>	Greylag Goose	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	350	2012-2018		LC	<input type="checkbox"/>	Common breeding, summering and numerous migratory species, the highest number is observed in the first ten days of March.
CHORDATA/AVES	<i>Anser fabalis</i>	Bean Goose	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	500			LC	<input type="checkbox"/>	The Site supports the species during migrations.
CHORDATA/AVES	<i>Aythya ferina</i>	Common Pochard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1500	2012-2018		VU	<input type="checkbox"/>	Mass migratory species, the highest number is observed in the first ten days of March.
CHORDATA/AVES	<i>Aythya nyroca</i>	Ferruginous Duck	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20			NT	<input checked="" type="checkbox"/>	listed in the Red Data Book of Ukraine - VU Rare migratory and summering species, the most frequently recorded in autumn.
CHORDATA/AVES	<i>Bucephala clangula</i>	Common Goldeneye	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2000	2011-2016	6.6	LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT Mass regularly wintering birds from Western Siberian and North-Eastern European and Black Sea population.
CHORDATA/AVES	<i>Mergellus albellus</i>	Smew	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	350		1.4	LC	<input type="checkbox"/>	Appendix II of the Bern Convention Mass regularly wintering birds from North-Eastern European, Black Sea and Eastern Mediterranean population
CHORDATA/AVES	<i>Mergus merganser</i>	Common Merganser	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	480		2.3	LC	<input type="checkbox"/>	Mass migratory birds from the North-Eastern European and Black Sea population, the most frequently recorded in the first ten days of March
CHORDATA/AVES	<i>Mergus serrator</i>	Red-breasted Merganser	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10			LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU Rare migratory species, the most frequently recorded in the first ten days of March
CHORDATA/AVES	<i>Pandion haliaetus</i>	Western Osprey, Osprey	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2			LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN, Appendix II of the Bern Convention Rare migratory and summering species, the most frequently recorded in autumn.
CHORDATA/AVES	<i>Sterna albifrons</i>	Little Tern	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20			LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT, Appendix II of the Bern Convention Rare breeding species
<b>Fish, Mollusc and Crustacea</b>																		
CHORDATA/ACTINOPTERYGII	<i>Leuciscus leuciscus</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU
<b>Others</b>																		
CHORDATA/MAMMALIA	<i>Lutra lutra</i>	European Otter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10			NT	<input checked="" type="checkbox"/>	listed in the Red Data Book of Ukraine - NE, Appendix II of the Bern Convention

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
CHORDATA/ MAMMALIA	<i>Plecotus auritus</i>	brown big-eared bat; Brown Long-eared Bat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	Common species, which uses the area as a foraging habitat.

1) Percentage of the total biogeographic population at the site

### 3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
formation of Nuphareta luteae	<input checked="" type="checkbox"/>	The Nuphareta luteae projective cover is 40-80 %. The above-water layer is dominated by Potamogeton natans, underwater layer – Ceratophyllum demersum, Myriophyllum spicatum, Myriophyllum verticillatum.	listed in the Green Data Book of Ukraine (2009), category 3, which is relevant to IUCN category "Vulnerable"
Formation of Trapeta natantis	<input checked="" type="checkbox"/>	The Trapa natans projective cover - 15–60 %. Potamogeton natans, Nuphar lutea, occur in the above-water layer, Ceratophyllum demersum, Myriophyllum verticillatum, Potamogeton crispus - the underwater layer.	listed in the Green Data Book of Ukraine (2009), category 3, which is relevant to IUCN category "Vulnerable"

Optional text box to provide further information

The vegetation is typical for man-made and deep water bodies. It found only two rare plant communities, like Trapetum natantis of the class Potametea and Nuphareta luteae at coastal zone of the Site. These plant communities are listed in the Green Data Book of Ukraine (2009) (the national list of protected plant communities), category 3, which is relevant to IUCN category "Vulnerable". It should be noted that a regionally rare species Najadetum marinae of the class Potametea is widespread over all the water area of the Reservoir.

## 4 - What is the Site like? (Ecological character description)

### 4.1 - Ecological character

The Site is located in a wide valley. The water is supplied by the Hnyla Lypa River. The length of the reservoir is 6.5 km, and the average width is 3.5 km. The depth varies between 2-4 m. The right bank is high and steep, and the left one is more gradual. The water table surface area is 12.6 km<sup>2</sup>. The shores are covered with willow thickets and fruit-bearing plants. The mean water temperature in winter is 6-8°C. About 5 % of its surface (close to the western shore) is occupied by reed beds. In January and February, the closer part to the dam of the reservoir is partially frozen , and the ice melts in spring. There is a channel stretching along the right bank for 5 km, which drains warm water from the Thermal Power Station into the reservoir.

The Hnyla Lypa catchment area is about 800 km<sup>2</sup> with elevations of 220-460 m above sea level. It encompasses loess hills of the High and Low Opilia, which are occupied, respectively, by natural oak-hornbeam and beech-hornbeam forests located on grey forest soils and chernozem podzolized soils.

The Site is located within Atlantic-continenta l region of the temperate climate zone. The climate of the area is temperate with moderate air temperature differences between summer and winter, and is moderately humid (600-700 mm annually).

The natural vegetation of the basin is substituted, to a great extent, by agricultural land, settlements and planted tree stands (Kruhlov et al., 2008).

### 4.2 - What wetland type(s) are in the site?

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
6: Water storage areas/Reservoirs		1	1260	

(ECD) Habitat connectivity

The wetland is a part of regional ecological network. The Site is a core zone of this network. The Site has got a high level of habitat connectivity within the Water Reservoir, but limited for Hnyla Lypa river habitats due to constructed dam and channels

### 4.3 - Biological components

#### 4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Najas marina</i>		Regionally rare species

#### 4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	
CHORDATA/ACTINOPTERYGII	<i>Ctenopharyngodon idella</i>		Potentially	No change
CHORDATA/ACTINOPTERYGII	<i>Hypophthalmichthys molitrix</i>		Potentially	No change
CHORDATA/ACTINOPTERYGII	<i>Ictalurus punctatus</i>	Channel catfish;Channel catfish;Channel catfish;Channel catfish;Channel catfish;Channel catfish	Potentially	No change
CHORDATA/ACTINOPTERYGII	<i>Ictiobus cyprinellus</i>	Bigmouth buffalo;Bigmouth buffalo;Bigmouth buffalo;Bigmouth buffalo	Potentially	No change
CHORDATA/ACTINOPTERYGII	<i>Pseudorasbora parva</i>	Stone morokos	Potentially	No change
CHORDATA/REPTILIA	<i>Trachemys scripta elegans</i>		Potentially	No change

### 4.4 - Physical components

#### 4.4.1 - Climate



Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfb: Humid continental (Humid with severe winter, no dry season, warm summer)

The climate of the area is temperate moderately continental with moderate air temperature differences between summer and winter. The summer is warm and rainy. Excessive precipitation falls in August, which is also the hottest month. The climate is moderately humid (600-700 mm annually). The spring is rainy, and autumn is usually dry and warm; the winter moderately cold, not snowy. The winter is mild, with an average January temperature of -5°C, summer warm with an average July temperature of + 18°C. The coldest month is January. The first frosts are observed in the second decade of October, the last - in the first decade of May. The snow cover is formed in most cases already on frozen ground in the second half of December and goes back to the third decade of March. In December-January the snow cover is even, dense, and in November and February - uneven. In the summer, the frequent winds and thunderstorms are frequent.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

The Dniester River Basin

4.4.3 - Soil

- Mneral
- Organic
- No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes  No

Please provide further information on the soil (optional)

In the basin of the Hnyla Lypa River the following types of soil are common: grey forest podzolized soils, chernozem podzolized soils, deep chernozem soils, sod-podzolized soils, sod soils, meadow soils, meadow-marshy and marshy soils, peaty soils.

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from rainfall	<input type="checkbox"/>	No change
Water inputs from surface water	<input checked="" type="checkbox"/>	No change

Water destination

Presence?	
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels largely stable	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

The Bushtyn reservoir is located on the Hnyla Lypa River (the left tributary of the Dniester) and is fed by this watercourse. The speed of the river course does not exceed 0.2-0.3 m/sec. The river width varies between 2-5 m, the depth ranges from 0.5 to 1.5 m. As a consequence of spring flooding, the water level raises by 1-2.5 m. However, in 2008, the rise of water level during the flood reached 3 m. In winter, the river freezes for 2-3 weeks. The Burshtyn Reservoir plays a crucial role in the regulation of flood regime since it allows the regulation of water level.

#### 4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site
- Significant accretion or deposition of sediments occurs on the site
- Significant transportation of sediments occurs on or through the site
- Sediment regime is highly variable, either seasonally or inter-annually
- Sediment regime unknown

Please provide further information on sediment (optional):

Comparison of depths of Burshtyn Reservoir gives evidence that the volume of mud accumulation in it for circa 10 years is about 3 mln m<sup>3</sup>, i.e. the annual silting intensity is 300,000 m<sup>3</sup>.

(ECD) Water turbidity and colour Average water turbidity – to 500 mg/L

#### 4.4.6 - Water pH

- Acid (pH<5.5)
- Circumneutral (pH: 5.5-7.4)
- Alkaline (pH>7.4)
- Unknown

Please provide further information on pH (optional):

pH ranges between 8.1-8.2

#### 4.4.7 - Water salinity

- Fresh (<0.5 g/l)
- Mixohaline (brackish)/Mixosaline (0.5-30 g/l)
- Euhaline/Eusaline (30-40 g/l)
- Hyperhaline/Hypersaline (>40 g/l)
- Unknown

#### 4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic
- Mesotrophic
- Oligotrophic
- Dystrophic
- Unknown

#### 4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar  ii) significantly different

- Surrounding area has greater urbanisation or development
- Surrounding area has higher human population density
- Surrounding area has more intensive agricultural use
- Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

The wetland is characterized by an significant d anthropogenic pressure: along the shores of the reservoir there are settlements Korystovychi, Bovshiv and Demianiv villages, Burshtyn Town and Burshtyn Thermal Power Station. The shores are embanked with concrete slabs. Only the northern and partially the eastern shore of the reservoir are covered by reed and willow thickets.

### 4.5 - Ecosystem services

#### 4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	High
Fresh water	Water for industry	High
Wetland non-food products	Reeds and fibre	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	High
Erosion protection	Soil, sediment and nutrient retention	Medium
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	High
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Water sports and activities	Low
Recreation and tourism	Nature observation and nature-based tourism	Medium
Spiritual and inspirational	Inspiration	Low
Scientific and educational	Educational activities and opportunities	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Major scientific study site	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	High

Within the site:

Outside the site:

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes  No  Unknown

4.5.2 - Social and cultural values

- i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland
- ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland
- iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

Description if applicable

The Water Reservoir was created for human purposes to lower temperature of equipment for the "Burshtynska" Thermal Power Station during electricity production (starts 1969), and that both are dependant on each other. The water temperature in the lake is higher by a few degrees from the expected, due to the heating of the power plant, an acquaintance therefore there are competitions even for swimming on open water in winter. In the reservoir there is a fish that is the object of attention of fishermen, as the fish faster gaining weight in warm water. More than 1,000 amateur fishermen from Ivano-Frankivsk and neighboring administrative regions visit the Site for fishing. The Reservoir creates a unique microclimate near its shores. Nowhere near, namely, on the banks of the Reservoir, mature apricots, as well as peaches.

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

4.6 - Ecological processes

<no data available>

## 5 - How is the Site managed? (Conservation and management)

### 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

##### Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

##### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

The owner of the water bodies is the state, but the users are DTEK Company and the state fish-farming company "Halytskyi". The users of the ponds are the Burshtyn Association of Hunters and Fishermen and the state fish-farming company "Halytskyi".

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Burshtynska Thermal Power Station (DTEK)

Provide the name and title of the person or people with responsibility for the wetland:

Denis Schmigal

Postal address:

4 Sichovykh Striltsiv St., Burshtyn, Ivano-Frankivsk Region, 77111, Ukraine

E-mail address:

br-mrada@ukr.net

## 5.2 - Ecological character threats and responses (Management)

### 5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

#### Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Commercial and industrial areas	Medium impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Housing and urban areas	Medium impact	Medium impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tourism and recreation areas	Medium impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	Medium impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Canalisation and river regulation	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Marine and freshwater aquaculture	Medium impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Livestock farming and ranching	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Annual and perennial non-timber crops	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Renewable energy	High impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Utility and service lines (e.g., pipelines)	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fishing and harvesting aquatic resources	High impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Medium impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Dams and water management/use	High impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species	Medium impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Garbage and solid waste	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Industrial and military effluents	Low impact	Medium impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air-borne pollutants	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Temperature extremes	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Please describe any other threats (optional):

The major threats of the Site are (1) dams and water management/use, (2) overfishing and (3) energy production. The water temperature in the lake is higher by a few degrees from the expected, due to the heating of the power plant. Since 1969 it is established a stable water regime. However, the Site is partly dependant on human interactions. In case of changing water regime, like Power station termination, the Reservoir will be able to continue a maintenance of the biodiversity values, regional climate change importance and flash flood regulation. Now at the expense of its vast water surface area, the Reservoir is able to regulate the flood regime of the Hnyla Lypa River which is formed in spring and causes 1-2.5 m increase in the water level being therefore dangerous for Bovshiv, Bilshivtsi and Halych villages.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Park	Halytskyi	<a href="http://www.halychpark.if.ua">http://www.halychpark.if.ua</a>	partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Burshtyn Reservoir	<a href="http://birdlife.org.ua">http://birdlife.org.ua</a>	partly

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

VI Managed Resource Protected Area: protected area managed mainly  for the sustainable use of natural ecosystems

### 5.2.4 - Key conservation measures

#### Legal protection

Measures	Status
Legal protection	Partially implemented

#### Habitat

Measures	Status
Improvement of water quality	Partially implemented
Habitat manipulation/enhancement	Proposed
Hydrology management/restoration	Partially implemented
Land conversion controls	Partially implemented

#### Species

Measures	Status
Threatened/rare species management programmes	Partially implemented

#### Human Activities

Measures	Status
Fisheries management/regulation	Implemented
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented
Management of water abstraction/takes	Implemented
Research	Partially implemented

### 5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site? Yes  No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes  No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

Halytskyi National Nature Park

URL of site-related webpage (if relevant):

### 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but a plan is being prepared

#### Further information

The plan of making an artificial island (instead of that lost in 1980) is under preparation. The island will serve for breeding and roosting areas during migration and wintering of birds. The project will be implemented in 2019.

### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Implemented
Birds	Implemented
Plant species	Proposed
Plant community	Proposed
Animal species (please specify)	Proposed

Since 2005, the employers of Halytskyi National Nature Park have been carrying out monitoring of migrations and wintering of waterbirds as well as studies of fauna in the reproduction period.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Abelentsev V. I., Podoplychko I. G., Popov B. M. Insectivorous animals and bats. - Kyiv: Academy of Sciences of the USSR, 1956. - 448 p. - (Fauna of Ukraine; Vol. 1, Iss. 1). [in Ukrainian]

Bashta A.-T. Bats (Chiroptera) of Halytskyi National Nature Park: preliminary analysis // Bulletin of the Carpathian National University named after Vasyl Stefanyk. Series: Biology. - 2007. - Iss. 7-8. - P. 165-167. [in Ukrainian]

Buchko V. Burshtyn Reservoir // IBA of Ukraine: areas important for the preservation of species diversity and abundance of birds. - Kyiv: SoftART, 1999. - P. 146-147. [in Ukrainian]

Buchko V. V. Assessment of the status of bird communities in terms of biodiversity conservation (case study of Halytskyi NNP) // Scientific Bulletin of Uzhgorod University. Series: Biology. - Issue 23. - 2008.-C. 26-32. [in Ukrainian]

Buchko V. V. Birds of Halytskyi Regional Landscape Park and its environs. Communication 1. Gaviiformes, Podicipediformes, Procellariiformes, Pelecaniformes, Ciconiiformes, Anseriformes // Zapovidna Sprava v Ukraini. - 1998a. - Vol. 4, vp. 2. - P. 32-41. [in Ukrainian]

Buchko V.V. Birds of Halytskyi Regional Landscape Park and its environs, included in the Red Book of Ukraine // The Role of Protected Natural Territories in the Conservation of Biodiversity. - Kaniv, 1998b. - P. 159-161. [in Ukrainian]

Kyiko A.O. Winter avifauna of Burshtyn Reservoir and its conservation // Avifauna of western regions of Ukraine and its conservation. - Lutsk, 1990. - P. 102-105. [in Ukrainian]

Mykytiuk O. IBA of Ukraine: areas important for the preservation of species diversity and abundance of birds. - Kyiv: SoftArt, 1999. - 324 pp. [in Ukrainian]

Tatarynov K. A. Vertebrate fauna of western Ukraine: Ecology, Importance, Conservation. - Lviv: Lviv University Press, 1973. - 257 pp. [in Ukrainian]

Red Data Book of Ukraine. Fauna. - Kyiv: Ukrainian Encyclopedia Press, 1994. - 464 pp. [in Ukrainian]

Shcherbak N.N. Zoogeographic division of the Ukrainian SSR // Vestnik Zoologii. - 1988. - Iss. 3. - P. 22-31. [in Ukrainian]

[IUCN, 2008]. 2008 IUCN Red List of Threatened Species. Gland, IUCN

Birds in Europe: population estimates, trends and conservation status. – Cambridge, UK: BirdLife International. – 2004. – BirdLife Conservation Series № 12 – 374 p.

Kruhlov, I., Mukha, B., & Senchyna, B. (2008). Natural geoecosystems. In M. Roth, R. Nobis, V. Stetsuk & I. Kruhlov (Eds.), Transformation processes in the Western Ukraine. Concepts for a sustainable land use (pp. 81–98). Berlin Wiessensee Verlag.)

#### 6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

<no data available>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



View of the south-western part of the reservoir and Burshtyn thermal power station ( *Mikhail Popel, 28-10-2018* )



A view of the pond for commercial fishery (in the background – Kuropatnyky Village). ( *Peter Moroz, 19-08-2018* )



A view of the north-eastern bank of the reservoir (in the background – country cottages, a forest, and Kasova Mountain (Halytskyi NNP). ( *Peter Moroz, 18-08-2018* )



Flocks of birds in winter. ( *Andriy Bokotey, 09-01-2016* )



Flocks of birds in winter. ( *Andriy Bokotey, 08-02-2014* )



Flocks of birds in winter. ( *Andriy Bokotey, 28-01-2012* )



Flocks of swans. ( *Andriy Bokotey, 12-02-2012* )

#### 6.1.4 - Designation letter and related data

Designation letter

<2 file(s) uploaded>

Date of Designation