

# Ramsar Information Sheet

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# **Bulgaria**Shabla Lake



Designation date 13 March 1996 Site number 801 Coordinates 43°34'37"N 28°34'01"E Area 417,93 ha

https://rsis.ramsar.org/ris/801 Created by RSIS V.1.6 on - 14 February 2020

# 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

Shabla is a coastal freshwater lake in northeastern Bulgaria bordered by agricultural areas to the west and south. The Lake complex includes two closely located coastal limans, Shabla and Ezerets, which are connected by an artificial canal. They are situated near the Black Sea. To the east the Lake is separated from the sea by a 30-50 m sandbar. The waters of Lakes Shabla and Ezerets are fresh, hydrocarbonatic-chloride with a high concentration of total dissolved solid. Both lakes are eutrophic-hypertrophic, resulting in dramatic fluctuations in phytoplancton productivity. The Lake is fed exclusively by groundwater. The banks of the Lake are covered by large reedbeds with Narrow Leaf Cattail, Common Cattail, etc. The reedbeds constitute the main habitat in the complex. There are also considerably large open water surfaces. From plant species there is Hypecoum ponticum which is Balkan endemic. There are also species which are threatened in Bulgaria – Silene thymifolia, Cladium mariscus. Of the invertebrates there is a stable population of Danube Crayfish in the Lake. Fish – 23 species mainly of the carp /Cyprinidae/ and goby /Gobiidae/ families. The site is the only habitat in Bulgaria of Knipowitschia longicaudata. Amphibians and reptiles - 11 species of global conservation concern: Eastern Spadefoot, European Tree Frog, European Pond Turtle, Dice Snake, etc. On the territory of the Shabla Lake more than 240 bird species are recorded. The complex is of strategic importance to the globally threatened Red-Breasted Goose /Branta ruficollis/ in winter when together with Lake Durankulak hosts nearly the whole world population of the species. In this season there are also large concentrations of the White Fronted Goose /Anser albifrons/ and individuals of the threatened Lesser White-Fronted Goose /Anser erythropus/. This fact defines the site as one of the most significant wintering sites of these species worldwide. The waters of Shabla Lake are also of great importance in the cold months for many grebes, swans, ducks and gulls. Many egrets, herons, diving and dabbling ducks, waders and sometimes pelicans occur in the area during spring and autumn migrations. The Lake's waters are rich in fish and, combined with its large reedbeds and the mosaic vegetation of the nearby sandy dunes, provides ideal conditions for the presence of many water-associated birds during the nesting season (Grebes, Little Bitterns, Shelducks, Little Terns, etc.).

# 2 - Data & location

# 2.1 - Formal data

2.1	.1	-	Name	and	addre	ess of	f the	comp	iler of	this	RIS
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Compiler 1

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

From year 1996

To year 2019

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Shabla Lake

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A Changes to Site boundary Yes O No   O	
(Update) B. Changes to Site area the area has increased	
<sup>(Update)</sup> The Site area has been calculated more accurately <b>☑</b>	
(Update) The Site has been delineated more accurately □	
(Update) The Site area has increased because of a boundary extension □	
(Update) The Site area has decreased because of a boundary restriction □	

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?

Not evaluated

# 2.2 - Site location

# 2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded>

Former maps	0	

Boundaries description

The Republic of Bulgaria is a country in Southeast Europe. It is bordered by Romania to the North, Serbia and North Macedonia to the West, Greece and Turkey to the South, and the Black Sea to the East.

The Ramsar site Shabla Lake includes two closely located coastal limans, Shabla and Ezerets, which are connected by an artificial canal. They are situated near the Black Sea, 5 km northeast of the town of Shabla and east of the village of Ezerets. To the east the lake is separated from the sea by a 30-50 m sandbar.

The territory of the Ramsar site Shabla Lake falls within the boundaries of the Natura 2000 sites - BG0000621 "Ezero Shabla-Ezerets" designated under the Habitats Directive and within the Natura 2000 site BG0000156 "Shablenski ezeren complex" designated under the Birds Directive.

The territory of the Ramsar site Shabla Lake overlaps almost entirely with the protected area under National Protected Areas Act - Protected Site "Shablensko ezero" as boundaries are different only in the two small areas in the southeast part of the Protected Site and in the north part of the Protected Site which consist arable agricultural lands that are excluded from the boundaries of the Ramsar site Shabla Lake. Official data on the boundaries of the site are used for the process of defining the boundary and creating the digital map image.

#### 2.2.2 - General location

a) In which large administrative region does	Shabla Municipality, Dobrich District of Bulgaria
the site lie:	
h) What is the nearest town or population	
b) What is the nearest town or population centre?	Shabla Village, Ezerets Village
centre?	

#### 2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries?
- b) Is the site adjacent to another designated Ramsar Site on the Yes O No (9) territory of another Contracting Party?

#### 2.2.4 - Area of the Site

Official area, in hectares (ha): 417.93 Area, in hectares (ha) as calculated from GIS boundaries 417.933

# 2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	The Black Sea Region

# 3 - Why is the Site important?

# 3.1 - Ramsar Criteria and their justification

☑ Criterion 1: Representative, rare or unique natural or near-natural wetland types

Coastal freshwater lagoons are unique because we have no real sea (Black Sea is brackish), in this sense the site provides unique biodiversity in terms of species combinations. Situation on Balkan Other ecosystem services provided Peninsula helps for their development as biodiversity hotspots. Situated near to arable lands these lakes help to prevent soil erosion and land slipes into the Black sea and function as water purification systems. Sand shores are representative, because there are only few remaining natural sand shores in Bulgaria.

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 3 : Biological diversity

The largest number of plant species of significance for conservation – 16, including the priority species Hypecoum ponticum, Bassia hirsuta, Silene thymifolia, and L. tauricum ssp. bulgaricum - have been found on the sand dunes. Five species of significance for conservation occur in the open water areas, three – among the hydrophilic vegetation, and four – among the xerophytic grass communities. Five invertebrate species are of conservation significance. Three fish species and 21 species of amphibian and reptiles included in Annex 2 and 3 of the Biodiversity Act of Bulgaria are frequently observed in the complex. The territory of the Shabla Lake Complex is frequented by 248 bird species, of which 96 are nesting, 88 are wintering and 69 are listed in Bulgaria's Red Data Book.

- ☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ☑ Criterion 5 : >20.000 waterbirds

Overall waterbird numbers | >23500

Start year 2010

Source of data: | Executive Environmental Agency of Bulgaria-Monitoring of Wintering birds

☑ 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
Astrodaucus littoralis		✓					Red Data Book of Bulgaria - CR; Biological Biodiversity Act - III	
Bupleurum apiculatum			<b></b>					Balkan endemic
Cladium mariscus	Swamp sawgrass; Great fen-sedge	V			LC		Red Data Book of Bulgaria - EN; Biological Diversity Act of Bulgaria - II	
Festuca vaginata		V					Red Data Book of Bulgaria - EN; Biological Diversity Act of Bulgaria - II	
Hippuris vulgaris		V			LC		Red Data Book of Bulgaria - CR; Biological Biodiversity Act - III	
Hypecoum procumbens procumbens		<b>2</b>	<b>2</b>				Red Data Book of Bulgaria - EN	Hypecoum ponticum - Balkan endemic
Linum tauricum bulgaricum			<b>2</b>					Balkan endemic
Nuphar lutea	Yellow water-lily, Brandy- bottle	V			LC		Red Data Book of Bulgaria - EN; Biological Diversity Act of Bulgaria - III	
Nymphaea alba	European white water lily, White water rose	V			LC		Red Data Book of Bulgaria - EN; Biological Diversity Act of Bulgaria - III	
Silene caliacrae		<b>2</b>	<b>2</b>				Red Data Book of Bulgaria - EN; Biological Biodiversity Act - III	Bulgarian endemic
Silene thymifolia		V	<b>2</b>				Red Data Book of Bulgaria - EN	The species is distributed only on the Black Sea coast of Bulgaria, Russia, Romania and Turkey.

Seseli rhodopaeum - bulgarian endemic, that is not included in the Catalogue of Life is observed in Shabla Lake Complex. Shabla lake complex is the only location of the species on the Bulgarian Black Sea coast.

Bassia hirsuta - the species contribute under Criterion 2 and Criterion 3, but is not included in the Catalogue of Life. The species is included in the Red Data Book of Bulgaria (EN) and in the Biological Diversity Act of Bulgaria (II, III).

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

Phylum	Scientific name	Common name	Species qualifies under criterion	criterion		Period of pop. Est. occu	urrence F	UCN Red / List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds												
CHORDATA/ AVES		Green-winged Teal; Eurasian Teal			30	2011-2019 (win)		LC			Directive 2009/147/EO -II, III	
CHORDATA/ AVES	Anas penelope	Eurasian Wigeon			40	2013-2019 (win)					Biological Diversity Act of Bulgaria-IV; Directive 2009/147/EC-II, III	
CHORDATA/ AVES	Anas strepera	Gadwall			2	2016-2017 (win)					Bulgarian Red Data Book – CR, Biological Diversity Act of Bulgaria – III, Directive 2009/147/EO – I, BeC-II, CMS-II	Cr. 4: Wintering

Phylum	Scientific name	Common name	Species qualifie under criterio 2 4 6	es co	Species contribute under criterior	Pop Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Cther Status	Justification
CHORDATA/ AVES	Anser albifrons	Greater White- fronted Goose				960	7 2010-2019 (win)	3.84	LC			Biological Diversity Act of Bulgaria – II; Directive 2009/147/EO-I, II	Cr. 4: Wintering and during migration Cr. 6: Western Siberia/Black Sea & Turkey Region
CHORDATA/ AVES	Anser anser	Greylag Goose							LC			Red Data Book of Bulgaria – EN; Biological Diversity Act of Bulgaria-III; BeC-II; CMS-II	
CHORDATA/ AVES	Anser erythropus	Lesser White- fronted Goose	<b>I</b>						VU		V	Red Data Book of Bulgaria – CR; Biological Diversity Act of Bulgaria – II, III; ECS-spec 1, VU; BeC – II; CNS – I, II; Directive 2009/147/EO -I	Cr. 4: Wintering
CHORDATA/ AVES	Aquila clanga	Greater Spotted Eagle	770									Red Data Book of Bulgaria – CR; Biological Diversity Act of Bulgaria – II; ECS-spec 1; Directive 2009/147/EC – II; Bern Convention – II; CITES-II; CMS - II	Cr. 4: Wintering
CHORDATA/ AVES	Aythya ferina	Common Pochard				<u> </u>	2010-2019 (win)		VU			Bulgarian Red Data Book – VU, Biological Diversity Act of Bulgaria – III, Directive 2009/147/EO – III, BeC-III, CMS-II	
CHORDATA/ AVES	Aythya nyroca	Ferruginous Duck				2	2019 (win)		NT		V	Bulgarian Red Data Book – VU, Biological Diversity Act of Bulgaria – III, Directive 2009/147/EO – I, BeC-III, CMS-II	
CHORDATA/ AVES	Botaurus stellaris	Eurasian Bittern				2	2013-2019 (win)		LC			Appendix II and III of Biological Diversity Act of Bulgaria ("Protected species"), Annex I of Directive 2009/147/EC, Red Book of Bulgaria – EN, etc.	
CHORDATA/ AVES	Branta ruficollis	Red-breasted Goose	<b>I</b>			190	5 2011-2019 (win)	3.81	VU		V	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – II, III; ECS-spec 1, vulnerable; Directive 2009/147/EC – I; Bern Convention – II; CITES-II; CMS – I, II	Cr. 4: Wintering; Cr. 6: Northern Siberia/Black Sea & Caspian
CHORDATA/ AVES	Charadrius alexandrinus	Snowy Plover; Kentish Plover	990						LC			Red Data Book of Bulgaria – CR; Biological Diversity Act of Bulgaria – III; Bern Convention – II; CMS – II	Cr.3, Cr.4: One of five nesting sites in Bulgaria, Also during migration.
CHORDATA/ AVES	Circus aeruginosus	Western Marsh Harrier			100	13	2010-2019 (win)		LC			Red Data Book of Bulgaria – EN; Biological Diversity Act of Bulgaria – II, III; ECS-spec 2, rare; Bern Convention – II; Directive 2009/147/EC – II; CMS – II; CITES - II	
CHORDATA/ AVES	Circus cyaneus	Northern Harrier				<u> </u>	2010-2016 (win)		LC			Bulgarian Red Data Book – CR, Biological Diversity Act of Bulgaria – II, III; ECS-spec 2, decreased; BeC-II, CMS-II, Directive 2009/147/EO – II, CITES-II	
CHORDATA/ AVES	Cygnus columbianus	Tundra Swan	<b>2</b> 00						LC			Bulgarian Red Data Book – CR, Biological Diversity Act of Bulgaria – Ill; ECS-spec 3W, vulnerable; BeC-II, CMS-II, Directive 2009/147/EO – I	Cygnus columbianus bewickii Yarrell, 1830.
CHORDATA/ AVES	Cygnus cygnus	Whooper Swan				23	2013-2019 (win)		LC			Red Data Book of Bulgaria – EN; Biological Diversity Act of Bulgaria – III; BeC-II; CMS – II, III	
CHORDATA/ AVES	Cygnus olor	Mute Swan				38	2010-2019 (win)		LC			Red Data Book of Bulgaria – VU; BeC-III; CMS – II; Directive 2009/147/EC-II/2	
CHORDATA/ AVES	Fulica atra	Eurasian Coot				1444	1 2010-2019 (win)		LC			Directive 2009/147/EO-II, III	
CHORDATA/ AVES	Grus grus	Common Crane				1	2013 (win)		LC			Red Data Book of Bulgaria - EX; ECS-spec 1, VU; BeC-II; CMS-II; Directive2009/147/EC - I; CITES-II	
CHORDATA/ AVES	Haliaeetus albicilla	White-tailed Eagle				1	2013. 2018, 2019 (win)		LC	V	Ø	Red Data Book of Bulgaria-W; Biological Diversity Act of Bulgaria – II, III; ECS-spec 1; BeC-II; Directive 2009/147/EC-I	

Phylum	Scientific name	Common name	qu u cri	pecies ualifies under riterion 4 6 9	Specie contribu under criterio	Po Siz	p. Period of pop.	% occurrence		CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Microcarbo pygmeus	Pygmy Cormorant	<b></b>			32	2 2010-2019 (wir	n)				Red Data Book of Bulgaria –EN; Biological Diversity Act of Bulgaria – II; IUCN – NT; ECS-spec 2, vulnerable; Directive 2009/147/EC – I; Bern Convention – II; CMS – II	
CHORDATA/ AVES	Oxyura Ieucocephala	White-headed Duck	<b>V</b>						EN		V	Red Data Book of Bulgaria - EN; Biological Diversity Act of Bulgaria – II, III; ECS-spec 1, VU; BeC-II; Directive2009/147/EC – I	
CHORDATA/ AVES	Pelecanus crispus	Dalmatian Pelican	<b>V</b>			□ 23	3 2010-2019 (wir	1)	NT	Ø	V	Red Data Book of Bulgaria – CR; Biological Diversity Act of Bulgaria – II, III; ECS-spec 1, rare; Directive 2009/147/EC – I; Bern Convention – II; CMS – I, II	
CHORDATA/ AVES	Phalacrocorax aristotelis	European Shag				<u> </u>	2010-2019 (wir	1)				Directive 2009/147/EO-I	
CHORDATA/ AVES	Podiceps auritus	Horned Grebe	<b>2</b> 0		ممم				W			Directive 2009/147/EC-I	
CHORDATA/ AVES	Podiceps cristatus	Great Crested Grebe				<u> </u>	9 2010-2019 (wir	n)	LC			Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria-III; BeC-II	
CHORDATA/ AVES	Podiceps nigricollis	Eared Grebe; Black-necked Grebe	<b>2</b>			□ 39	9 2010-2019 (wir	1)	LC			Red Data Book of Bulgaria – CR; Biological Diversity Act of Bulgaria-III; BeC-II	
CHORDATA/ AVES	Porzana parva	Little Crake	<b>V</b>									Red Data Book of Bulgaria - EN; Biological Diversity Act of Bulgaria - II; BeC-II; CMS - II; Directive2009/147/EC - I	
CHORDATA/ AVES	Tadorna tadorna	Common Shelduck	<b>V</b>			□ 30	2014-2019 (wir	n)	LC			Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – III; BeC-II; CMS - II	
Fish, Mollusc	and Crustacea												
CHORDATA/ ACTINOPTERYGI	Clupeonella Cultriventris	Black and Caspian Sea sprat	<b>V</b>		000				LC			Red Data Book of Bulgaria - EN	
CHORDATA/ ACTINOPTERYGI	Cyprinus carpio	Amur carp	<b>V</b>		<b>2</b> 00				W			Red Data Book of Bulgaria - CR	Its natural population is threatened and probably extinct in the result of the assimilation from the cultural forms with which the water basins are fed. They're lately captured specimens that phenotypically resemble the wild form. To confirm genotypically the existence of the wild population requires further experimental research.
CHORDATA/ ACTINOPTERYGI	Gasterosteus Il aculeatus	Twospine stickleback; European stickleback; New York stickleback; Saw-finned stickleback; Banstickle; Eastern stickleback	<b>Ø</b>						LC			Bulgarian Red Data Book - VU	
CHORDATA/ ACTINOPTERYGI		Longtail goby, Longtail dwarf goby	<b>V</b>		<b>2</b> 00				LC			Red Data Book of Bulgaria - CR	Ponto-Caspian relict. It is spread in the western and northwestern parts of the Black Sea as well as in the eastern part of the Azov and Caspian Sea.
CHORDATA/ ACTINOPTERYGI	Misgurnus fossilis	Mud loach	<b>V</b>		<b>2</b> 00				LC			Red Data Book of Bulgaria-EN; Biological Diversity Act of Bulgaria – II; BeC-III; Council Directive 92/43/EEC-II	Natural inhabitant of the water basins with decreasing of number of populations. The significance of Shabla and Ezeretsko Lake for the preservation of European fish fauna.

Phylum	Scientific name	Common name	Species qualifies under criterion	Species contributes under criterion 3 5 7 8	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ ACTINOPTERYGII		Aral stickleback						LC			Red Data Book of Bulgaria – CR; Bern Convention – III	
CHORDATA/ ACTINOPTERYGII	Silurus glanis	Som catfish						LC				Natural inhabitants of the water basins with decreasing of number of populations. The significance of Shabla and Ezeretsko Lake for the preservation of European fish fauna.

<sup>1)</sup> Percentage of the total biogeographic population at the site

Provided information about the population size is from the Monitoring of Wintering birds for the period 2010-2019 (Executive Environmental Agency of Bulgaria).

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

<no data available>

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

# 4.1 - Ecological character

The lake complex includes two closely located coastal lakes - Shabla and Ezerets, which are connected by an artificial canal. To the east the lake is separated from the Black sea by a 30-50 m sandbar.

The waters of Lakes Shabla and Ezerets are fresh, hydrocarbonatic-chloride, with a high concentration of total dissolved solids /0.724-0.915 g/l. Both lakes are eutrophic-hypertrophic, according to the quantities of nutrients and organic matter in the waters, resulting in dramatic fluctuations in phytoplankton productivity. The lake is fed exclusively by groundwater.

The site includes the following types that contribute to the international importance of the ramsar site: E: Sand, shingle or pebble shores (Representative); K: Coastal freshwater lagoons (Unique).

The banks of the lake are covered by large reedbeds /Phragmites australis/ with Narrow Leaf Cattail /Typha angustifolia/, Common Cattail /Typha latifolia/, Carex riparia etc. The reedbeds constitute the main habitat in the complex. There are also considerably large open water surfaces.

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

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
E: Sand, shingle or pebble shores		2	10.5	Representative
K: Coastal freshwater lagoons	Liman	1	270.4	Unique

Human-made wetlands

Tullial Fillade Welfalids				
Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
9: Canals and drainage channels or ditches		3	0.27	

Other non-wetland habitat

Other not - Wedand habitat				
Other non-wetland habitats within the site	Area (ha) if known			
Non-Ramsar type areas	136.6			

# 4.3 - Biological components

#### 4.3.1 - Plant species

Invasive alien plant species

invasive diferiplent operico			
Scientific name	Common name	Impacts	Changes at RIS update
Elaeagnus angustifolia	Russian olive	Actually (minor impacts)	unknown
Fraxinus americana	American ash	Actually (minor impacts)	unknown

#### 4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATAVAVES	Anas clypeata	Northern Shoveler	4	2014 (win)		Biological Diversity Act of Bulgaria-IV; Directive 2009/147/EC-II, III
CHORDATA/AVES	Aythya fuligula	Tufted Duck	27	2016-2019 (win)		Biological Diversity Act of Bulgaria-IV, Directive 2009/147/EC-II, III
CHORDATA/AVES	Calidris alba	Sanderling	3	2015-2016 (win)		Biological Diversity Act of Bulgaria - III
CHORDATA/AVES	Gavia arctica	Black-throated Loon;Arctic Loon	13	2011-2019 (win)		Directive 2009/147/EO-I
CHORDATA/AMPHIBIA	Hyla arborea	European Tree Frog				Appendix III of Biological Diversity Act of Bulgaria ("Protected species")
CHORDATA/AVES	Mergus serrator	Red-breasted Merganser	6	2011-2019 (win)		Directive 2009/147/EO -II
CHORDATA/REPTILIA	Natrix tessellata	Dice Snake				Bern Convention - II, Council Directive 92/43/EEC – III
CHORDATA/AMPHIBIA	Pelobates fuscus	Common Spadefoot				Council Directive 92/43/EEC - O
CHORDATA/AMPHIBIA	Pelobates syriacus	Eastern Spadefoot				Pelobates syriacus balcanicus/Bern Convention – II
CHORDATA/AVES	Phalacrocorax carbo	Great Cormorant				
CHORDATA/ACTINOPTERYGII	Rhodeus amarus	Bitterling				Biological Diversity Act of Bulgaria - II; Council Directive 92/43/EEC - II
CHORDATA/AVES	Somateria mollissima	Common Eider				Biological Diversity Act of Bulgaria-III; IUCN-NT; Directive2009/147/EC – II, III

#### Optional text box to provide further information

Provided information about the population size is from the Monitoring of Wintering birds for the period 2010-2019 (Executive Environmental Agency of Bulgaria).

# 4.4 - Physical components

# 4.4.1 - Climate

Climatic region	Subregion
B: Dry climate	BSk: Mid-latitude steppe (Mid-latitude dry)

#### 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
Mddle part of river basin ☐
Lower part of river basin
More than one river basin $\Box$
Not in river basin $\square$
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.

Black Sea coast (Black Sea River Basin District of Bulgaria)	

4.4.3 - Soil

Mineral 🗹

No available information  $\Box$ 

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

# 4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

#### Source of water that maintains character of the site

Course of Water tractificant of the office				
Presence?	Predominant water source	Changes at RIS update		
Water inputs from groundwater	<b>2</b>	No change		
Water inputs from rainfall		No change		

#### Water destination

Presence?	Changes at RIS update	
Marine	No change	

#### Stability of water regime

Presence?	Changes at RIS update
Unknown	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 lake is fed exclusively by groundwater.

The average depth of the Shabla lake is 4.6 m and the maximum 9.5 m, the corresponding numbers for the Ezeretc lake are 3.5 m and 9m.

#### 4.4.5 - Sediment regime

Sediment regime unknown

#### 4.4.6 - Water pH

Alkaline (pH>7.4)

(Update) Changes at RIS update No change 

● Increase 

O Decrease 

O Unknown 

O

Unknown

Please provide further information on pH (optional):

The average pH is 8,6.

#### 4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change 

Increase 

Decrease 

Unknown 

O

Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☑

(Update) Changes at RIS update No change 

● Increase O Decrease O Unknown O

Unknown

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

Eutrophic 🗹

Unknown

Please provide further information on dissolved or suspended nutrients (optional):

Shabla and Ezerets lakes (both in the ramsar site Shabla Lake) are eutrophic to hypertrophic according to the amounts of nutrients and organic matter in the water. The reasons for the advanced eutrophication process are as follows:

1 / Reduction of water exchange in the lake (due to intensive water abstraction and due to

interruption of the direct connection to the sea).

2/ Continuous pollution of underground and surface water flowing into the lakes, with nutrients

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

Please describe whether, and if so how, the landscape and ecological  $% \left( 1\right) =\left( 1\right) \left( 1\right$ 

characteristics in the area surrounding the Ramsar Site differ from the  $\,$  i) broadly similar  $\,$  O ii) significantly different  $\,$   $\,$   $\,$ 

site itself:

Surrounding area has greater urbanisation or development  $\square$ 

Surrounding area has higher human population density 🗹

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types  $\ \square$ 

# 4.5 - Ecosystem services

# 4.5.1 - Ecosystem services/benefits

#### Provisioning Services

1 To Wolloring Got Wood				
	Ecosystem service	Examples	Importance/Extent/Significance	
	Fresh water	Water for irrigated agriculture	Medium	
	Wetland non-food products	Livestock fodder	Medium	

#### Regulating Services

Regulating Services							
	Ecosystem service	Examples	Importance/Extent/Significance				
	Hazard reduction	Flood control flood storage	Madium				

# Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Nature observation and nature-based tourism	High
Scientific and educational	Major scientific study site	High
Scientific and educational	Long-term monitoring site	Medium

Supporting Services

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

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

# 4.5.2 - Social and cultural values

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

<no data available>

# 4.6 - Ecological processes

(ECD) Notable aspects concerning migration	Bird Migratory Route Via Pontica
(ECD) Pressures and trends concerning any	
of the above, and/or concerning ecosystem	Human intrusions and disturbance
integrity	

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

# 5.1 - Land tenure and responsibilities (Managers)

# 5.1.1 - Land tenure/ownership

ı ub	lic owners	u III

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<b>&gt;</b>	<b>&gt;</b>
Local authority, municipality, (sub)district, etc.	<b>2</b>	<b>Ø</b>

Private ownership

i iivate owneranip		
Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<b>✓</b>	✓
Foundation/non- governmental organization/trust		V

# 5.1.2 - Management authority

-	Regional Inspectorate of Environment and Water (RIEW) - Varna
agency or organization responsible for	
managing the site:	
Provide the name and title of the person or	A. Bakalov - Senior Expert and M. Ivanova - Chief Expert, Preventive Activity Directorate
people with responsibility for the wetland:	
Postal address:	4 Yan Palah Str, Varna 9000, BULGARIA
Fostal address.	Tel.: +359 52 678 850
E-mail address:	riosv-vn@riosv-varna.org

# 5.2 - Ecological character threats and responses (Management)

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

Water regulation

Factors adversely

affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Water abstraction	High impact	High impact	✓	No change		No change
Agriculture and aquacultur	re					
The Control of the Control						

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Medium impact	Medium impact	✓	No change		No change

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Mining and quarrying	Low impact	Low impact	✓	No change		No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	High impact	High impact	✓	No change	✓	No change
Logging and wood harvesting	Medium impact	Medium impact		No change	<b>2</b>	No change
Fishing and harvesting aquatic resources	High impact	High impact	<b>2</b>	No change		No change

#### Human intrusions and disturbance

iuman intrusions and disturbance						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
(Para)military activities	Medium impact	Medium impact	✓	No change		No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Medium impact	Medium impact	<b>&gt;</b>	No change		No change
Introduced genetic material	Medium impact	Medium impact	<b>&gt;</b>	No change		No change

#### Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes	
Agricultural and forestry effluents	High impact	High impact	<b>2</b>	No change		No change	
Household sewage, urban waste water	High impact	High impact	<b>2</b>	No change		No change	
Garbage and solid waste		High impact		No change	✓	No change	

# Please describe any other threats (optional):

- Development Plan of the municipality of Shabla provide expansion of urban areas affecting the territory of Ramsar site "Lake Shabla";
- The lakes (Shabla and Ezerets, both part of the Ramsar site Shabla Lake) are polluted with nutrients (ammonia salts, nitrites, nitrates and phosphates) and with organic matter resulting from intensive agriculture and animal breeding in the region from the neighboring agricultural lands. That increases the content of nutrients in the water ecosystems and the eutrophication in the lakes.

Also the current water abstraction from surface and ground water for drinking and for irrigation is not controlled and that affects the eutrophication too.

#### 5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Ezero Shabla – Ezerets, BG0000621	http://natura2000.moew.governmen t.bg/Home/ProtectedSite?code=BG0 000621&siteType=HabitatDirective	partly
EU Natura 2000	Shablenski ezeren kompleks, BG0000156	http://natura2000.moew.governmen t.bg/Home/ProtectedSite?code=BG0 000156&siteType=BirdsDirective	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Protected Site	Shablensko ezero	http://eea.government.bg/zpo/en/ area.jsp?NEM_Partition=1&categor ylD=6&arealD=118	partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Shabla Lake Complex, BG 049	https://www.birdsinbulgaria.org/ ovm.php?l=en&pageNum_Ovm_All=2&t otalRows_Ovm_All=114&id=49	whole
Other non-statutory designation	Prime Butterfly Area Shabla	http://www.nmnhs.com/butterfly_a reas_bg/area.php?q=34_shabla	whole

# 5.2.3 - IUCN protected areas categories (2008)

la 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 of roconservation 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	Implemented

#### Habitat

Measures	Status
Habitat manipulation/enhancement	Proposed
Improvement of water quality	Proposed
Re-vegetation	Proposed

#### **Human Activities**

Measures	Status			
Research	Partially implemented			
Communication, education, and participation and awareness activities	Implemented			

#### Other

- Green Balkans NGO Regulary provides CEPA activities for Red-breasted geese at Durankulak and Shabla lakes.
- LIFE16 NAT/BG/000847 Life for safe flight Conservation of the Red-breasted Goose along the Global Flyway www.savebranta.org

# 5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

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

No 

O

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No 

processes with another Contracting Party?

# 5.2.6 - Planning for restoration

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

# Further information

There is need of: restoration of the natural characteristics of most of the grass communities by regular grazing, cleaning of litter and controlling of the ruderal vegetation and invasive species; management of hydrophilic vegetation – increasing of the area of open water spaces, rotation cutting, grazing of cattle aimed to decelerate eutrophication and to improve the conditions of biodiversity; conservation measured to minimizing of eutrophication in the lake by means of measures to reduce the content of nutrients in the water ecosystems and restoration of a close-to-natural water regime in the lake.

# 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented
Water quality	Implemented

# 6 - Additional material

# 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

- 1. Biological Biodiversity Act (in Bugarian) https://www.lex.bg/laws/ldoc/2135456926
- 2. Bulgarian Ramsar Sites https://www.moew.government.bg/static/media/ups/tiny/Press/Ramsar-knijka.pdf
- 3. Information on the Black Sea wetlands protected by the BlackSeaWet Regional Initiative -

https://www.moew.government.bg/static/media/ups/tiny/filebase/Nature/Natura%202000/RAMSAR/Black Sea Wet Catalog-Final.pdf

4. National Action Plan for Conservation of Wetlands of High Significance in Bulgaria (2013 - 2022) -

https://www.researchgate.net/publication/283017200\_National\_action\_plan\_for\_conservation\_of\_wetlands

of high significance in Bulgaria 2013-2022

- 5. Ramsar Sites in Bulgaria ( only in Bulgarian) https://www.moew.government.bg/bg/priroda/zastiteni-teritorii/zastiteni-teritorii-smeidunarodno-zna chenie/ramsarski-mesta/
- 6. Red Book of Bulgaria, 2011, Vol I Animals http://e-ecodb.bas.bg/rdb/en/vol2/texts.html
- 7. Red Book of Bulgaria, 2011, Vol I Plants http://e-ecodb.bas.bg/rdb/en/vol1/
- 8. Trichkova T., V. Vladimirov, R. Tomov, M. Todorov (Eds.), 2017. Guide to invasive alien species of European Union concern. IBER-BAS, ESENIAS, Sofia, 184 pp. - https://www.esenias.org/files/ESENIAS Atlas WEB.pdf
- 9. Wetlands of international importance for Bulgaria, 2010 -

https://www.researchgate.net/profile/Delcho Solakov/publication/283349852 Wetlands of international

importance for Bulgaria/links/56362f9d08ae88cf81bd0fb0/Wetlands-of-international-importance-for-Bulg aria.pdf

- 10. Important Bird Areas in Bulgaria and Natura 2000, BSPB /BirdLife Bulgaria/, 2007 -http://bspb.org/media/files/IBA\_a
- 11. Management Plan od Protected Site Shablensko ezero, 2004-2013 with comprehensive reference list
- 12. Cheshmedjiev, S., et al. "Phytoplankton based assessment of the ecological status and ecological potential of lake types in Bulgaria." Biotechnology & Biotechnological Equipment24.sup1 (2010): 14-25.
- 13. Cogălniceanu, Dan, et al. "Amphibians and reptiles from the Black Sea coast area between Cape Midia and Cape Kaliakra." Studii comparative privind biodiversitatea habitatelor costiere, impactul antropic și posibilitățile de conservare și restaurare a habitatelor de importanță europeană dintre Capul Midia și Capul Kaliakra. Edit. Ex Ponto, Constanța (2008): 71-89.
- 14. Harrison, A. L., and G. M. Hilton. "Fine-scale distribution of geese in relation to key landscape elements in coastal Dobrudzha, Bulgaria." Preliminary report, WWT Slimbridge, UK (2014): 28.
- 15. Kalchev, R. K., L. Z. Pehlivanov, and M. B. Beshkova. "Trophic relations in two lakes from the Bulgarian Black Sea coast and possibilities for their restoration." Water science and technology 46.8 (2002): 1-8.
- 16. Mateo, Rafael, et al. "Risk assessment of lead poisoning and pesticide exposure in the declining population of red-breasted goose (Branta ruficollis) wintering in Eastern Europe." Environmental research 151 (2016): 359-367.

# 6.1.2 - Additional reports and documents

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

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

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

iv. relevant Article 3.2 reports

v. site management plan

vi. other published literature

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

Please provide at least one photograph of the site



Shabla Lake ( Ivan Yanchev



Black Sea, Shabla (with the house) and Ezerets ( Blagov Uzunov. 01-06-2018 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1996-03-13