



Ramsar Information Sheet

Published on 11 November 2002

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Bulgaria

Vaya Lake



Designation date	11 November 2002
Site number	1230
Coordinates	42°29'49"N 27°23'44"E
Area	2 900,00 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

Vaya is the largest Bulgarian Black Sea coastal lake, an open liman of Pleistocene origin. The lake is ca.20 million m³ in volume, with a surface area of 27.6 km². It is one of four lakes of the Burgas wetland complex that surrounds the city. The wetland is highly significant for biodiversity (especially avian). It is a shallow freshwater-brackish liman with associated marshy areas and extensive reedbeds (the largest in the country). Fish farm ponds, adjacent to the lake, are heavily overgrown by aquatic vegetation. Several rare species of animals (according to the International Union for Conservation of Nature (IUCN)) have been recorded at this site. Situated along the Via Pontica migration route, the site is an important stopover and staging site for a large number of waterbirds, raptors and passerines. Each year, during migration and wintering, more than 20,000 water birds congregate here.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

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

From year	2002
To year	2019

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Vaya Lake
Unofficial name (optional)	Burgasko Ezero

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 No

(Update) B. Changes to Site area No change to area

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

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. Burgas District is a province in southeastern Bulgaria, including southern Bulgarian Black Sea Coast.

Vaya Lake is situated on the Black Sea coast, west of the city of Burgas, between the Lakes Atanasovsko (Ramsar Site Atanasovsko Lake) and Mandra. It is the largest Bulgarian Black Sea coast lake and is ca.20 million m³ in volume, with a surface area of 27.6 km². Vaya Lake is bordered by the city of Burgas to the north, east and south. To the west it borders some agricultural lands.

The territory of the Ramsar site Vaya Lake falls within the boundaries of the Natura 2000 site BG0000273 "Burgasko ezero" designated both under the Birds and Habitats Directives.

Part of the territory of the Ramsar site Vaya Lake is designated as a protected area under National Protected Areas Act - Protected Site "Vaya". Protected Site covers the reed beds in the southwestern part of the lake and is designated for the protection of threatened bird species.

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 the site lie?
- b) What is the nearest town or population centre?

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	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

Other ecosystem services provided

Providing and maintaining of extremely high biodiversity and hosting of conservationally important (Incl. globally threatened) species.

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 Peninsula helps for their development as biodiversity hotspots.

Other reasons

Vaya is the largest Bulgarian Black Sea coastal lake.

- Criterion 2 : Rare species and threatened ecological communities

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

- Criterion 5 : >20,000 waterbirds

Overall waterbird numbers >74000

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
<i>Acanthus spinosus</i>	Spiny Bear's-breech	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Red Data Book of Bulgaria – EN, Appendix III of Biological Diversity Act of Bulgaria ("Protected species")	
<i>Aeluropus littoralis</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Red Data Book of Bulgaria - VU; Biological Biodiversity Act - III	
<i>Limonium gmelinii</i>	Siberian Statice	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Red Data Book of Bulgaria – EN, Appendix III of Biological Diversity Act of Bulgaria ("Protected species")	
<i>Phalaris aquatica</i>	Bulbous Canary-grass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Red Data Data Book of Bulgaria – "Endangered" species	
<i>Silene euxina</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Red Data Book of Bulgaria – EN, Appendix III of Biological Diversity Act of Bulgaria ("Protected species"),	

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 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification	
			2	4	6	9	3	5	7									8
Birds																		
CHORDATA/AVES	<i>Anas clypeata</i>	Northern Shoveler	<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"/>	212	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Directive 2009/147/EO-II, III	
CHORDATA/AVES	<i>Anas crecca</i>	Green-winged Teal; Eurasian Teal	<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"/>	29	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Directive 2009/147/EO-II, III	
CHORDATA/AVES	<i>Anas penelope</i>	Eurasian Wigeon	<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"/>	23	2010-2019 (win)			<input type="checkbox"/>	<input type="checkbox"/>	Directive 2009/147/EO-II, III	
CHORDATA/AVES	<i>Anas strepera</i>	Gadwall	<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"/>	17	2010-2019 (win)			<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – CR, Biological Diversity Act of Bulgaria – III, Directive 2009/147/EO – I, BeC-II, CMS-II	Cr.4: During migration, wintering and also as breeding site
CHORDATA/AVES	<i>Anser albifrons</i>	Greater White-fronted Goose	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	55032	2010-2019 (win)	22.01	LC	<input type="checkbox"/>	<input type="checkbox"/>	Biological Diversity Act of Bulgaria – II; Directive 2009/147/EO-I, II	Criterion 6: Biogeographic region: Western Siberia/Black Sea & Turkey
CHORDATA/AVES	<i>Ardea alba</i>	Great Egret	<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"/>	32	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – CR; Biological Diversity Act of Bulgaria – II, III; Bern Convention – II; CMS – II; Directive 2009/147/EC - I	Cr.4: As staging and overnight place mainly during migration and wintering.
CHORDATA/AVES	<i>Ardea cinerea</i>	Grey Heron; Gray Heron	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – VU, Biological Diversity Act of Bulgaria – III, BeC-III	
CHORDATA/AVES	<i>Ardeola rallioides</i>	Squacco Heron	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – EN; Biological Diversity Act of Bulgaria – II, III; Bern Convention – II; CMS - II	
CHORDATA/AVES	<i>Aythya ferina</i>	Common Pochard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15197	2010-2019 (win)	2.53	VU	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – III; Directive 2009/147/EC – III/1, 2; Bern Convention – III; CMS – II	Criterion 4: The lake is very important place for during wintering. Criterion 6: Biogeographic region: Central & NE Europe/Black Sea & Mediterranean
CHORDATA/AVES	<i>Aythya fuligula</i>	Tufted Duck	<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"/>	352	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Directive 2009/147/EC - II, III	
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 type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – III; ECS-spec 1, vulnerable; Directive 2009/147/EC – I; Bern Convention – III; CITES-I; CMS - II	
CHORDATA/AVES	<i>Botaurus stellaris</i>	Eurasian Bittern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2013, 2015 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Book of Bulgaria – EN, Appendix II and III of Biological Diversity Act of Bulgaria ("Protected species"), Annex I of Directive 2009/147/EC, etc.	
CHORDATA/AVES	<i>Branta ruficollis</i>	Red-breasted Goose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	Vaya Lake is of crucial importance as wintering haunt for Red-breasted Goose (<i>Branta ruficollis</i>) (Criterion 4) during very cold winters.
CHORDATA/AVES	<i>Cettia cetti</i>	Cetti's Warbler	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	2010, 2016 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – EN, Biological Diversity Act of Bulgaria – III, BeC-I-III, CMS-II	
CHORDATA/AVES	<i>Chlidonias hybrida</i>	Whiskered Tern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – II, III; ECS-spec 3, decreased; Directive 2009/147/EC – I; Bern Convention – II	
CHORDATA/AVES	<i>Circus aeruginosus</i>	Western Marsh Harrier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	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	

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification	
			2	4	6	9	3	5	7									8
CHORDATA/AVES	<i>Circus cyaneus</i>	Northern Harrier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	2013, 2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	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	<i>Crex crex</i>	Corn Crane	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – II, III; Directive 2009/147/EC – I; Bern Convention – II; CMS – II	
CHORDATA/AVES	<i>Cygnus columbianus</i>	Tundra Swan	<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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – CR, Biological Diversity Act of Bulgaria – III; ECS-spec 3W, vulnerable; BeC-II, CMS-II, Directive 2009/147/EO – I	Cygnus columbianus bewickii Yarrell, 1830.
CHORDATA/AVES	<i>Cygnus cygnus</i>	Whooper Swan	<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"/>	102	2011-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – EN, Biological Diversity Act of Bulgaria – III; BeC-II, CMS-II, III	
CHORDATA/AVES	<i>Cygnus olor</i>	Mute Swan	<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"/>	131	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – VU, Biological Diversity Act of Bulgaria – III; BeC-II, CMS-II, III	Cr.4: As staging and overnight place mainly during migration and wintering.
CHORDATA/AVES	<i>Egretta garzetta</i>	Little Egret	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – II, III; Bern Convention – II; Directive 2009/147/EC - I	
CHORDATA/AVES	<i>Falco naumanni</i>	Lesser Kestrel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Red Book of Bulgaria – “Critically Endangered” species, included in Appendix II and III of Biological Diversity Act of Bulgaria, Annex I of Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009	
CHORDATA/AVES	<i>Fulica atra</i>	Eurasian Coot	<input 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"/>	1052	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Directive 2009/147/EO-II, III	Cr.4: As staging and overnight place mainly during migration and wintering.
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	White-tailed Eagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2017 (win)		LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – II; IUCN-NT; ECS-spec , rare; Directive 2009/147/EC – I; Bern Convention – II, CITES-I; CMS-II	
CHORDATA/AVES	<i>Mergellus albellus</i>	Smew	<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"/>	78	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Directive 2009/147/EO-I	
CHORDATA/AVES	<i>Mergus merganser</i>	Common Merganser	<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"/>	17	2015, 2017 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Microcarbo pygmeus</i>	Pygmy Cormorant	<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"/>	1865	2010-2019 (win)			<input type="checkbox"/>	<input type="checkbox"/>	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	The lake is important place for the wintering populations of Pygmy Cormorant (<i>Microcarbo pygmeus</i>) (Criterion 4) in the Eastern Mediterranean region.
CHORDATA/AVES	<i>Milvus milvus</i>	Red Kite	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009, Appendix II and III of Biological Diversity Act of Bulgaria (“Protected species”), Red Book of Bulgaria – “Critically Endangered”	
CHORDATA/AVES	<i>Nycticorax nycticorax</i>	Black-crowned Night-Heron; Black-crowned Night Heron	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – II, III; ECS-spec 3, decreased; Bern Convention – II; Directive 2009/147/EC – I	
CHORDATA/AVES	<i>Oxyura leucocephala</i>	White-headed Duck	<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"/>	62	2010-2019 (win)		EN	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Red Data Book of Bulgaria –EN; Biological Diversity Act of Bulgaria – II, III; ECS-spec 1, vulnerable; Directive 2009/147/EC – I; Bern Convention – II	Criterion 4: The lake is very important place for the wintering populations of White-headed Duck (<i>Oxyura leucocephala</i>) in the Eastern Mediterranean region. Cr. 6: East Mediterranean, Turkey & South-west Asia. The average individuals from 2010 to 2019 is 62, which is under the threshold of 70 birds but is really near. In 2017 (win) there are 130 individuals and in 2010 even 146.

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence ¹⁾	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification	
			2	4	6	9	3	5	7									8
CHORDATA/AVES	<i>Pelecanus crispus</i>	Dalmatian Pelican	<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 type="checkbox"/>	104	2010-2019 (win)	1.15	VU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	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	Criterion 4: Vaya Lake is of significant importance as a staging area for Dalmatian Pelicans during migration and as a wintering area. Criterion 6: Biogeographic region: Black Sea & Mediterranean (win)
CHORDATA/AVES	<i>Pelecanus onocrotalus</i>	Great White Pelican	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2016, 2018 (win)		LC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Red Data Book of Bulgaria – EX; Biological Diversity Act of Bulgaria – III; ECS-spec 3, rare; Directive 2009/147/EC – I; Berne Convention – II; CMS – I, II	Criterion 4: Lake Vaya is of significant importance as a staging area for White Pelican (<i>Pelecanus onocrotalus</i>) during migration.
CHORDATA/AVES	<i>Phalacrocorax carbo</i>	Great Cormorant	<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"/>	1010	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Platalea leucorodia</i>	Eurasian Spoonbill	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2010 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – CR; Biological Diversity Act of Bulgaria – II, III; CITES – II; ECS-spec 2, endangered; Bern Convention – II; Directive 2009/147/EC – I; CMS – II	
CHORDATA/AVES	<i>Podiceps cristatus</i>	Great Crested Grebe	<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"/>	313	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – VU; Biological Diversity Act of Bulgaria – III; BeC-III	
CHORDATA/AVES	<i>Podiceps grisegena</i>	Red-necked Grebe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2015, 2017 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – EN; Biological Diversity Act of Bulgaria – III; Bern Convention – II, CMS-II	
CHORDATA/AVES	<i>Podiceps nigricollis</i>	Eared Grebe; Black-necked Grebe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – CR; Biological Diversity Act of Bulgaria – III; BeC-II	
CHORDATA/AVES	<i>Remiz pendulinus</i>	Eurasian Penduline Tit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – III; BeC – III	Cr. 4: Breeding site
CHORDATA/AVES	<i>Tadorna tadorna</i>	Common Shelduck	<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"/>	15	2010-2019 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – III; Bern Convention – II, CMS-II	
CHORDATA/AVES	<i>Tringa totanus</i>	Common Redshank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2010, 2015 (win)		LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – CR; Biological Diversity Act of Bulgaria – II; ECS-spec 2; Directive 2009/147/EO – II; BeC-III; CMS-II	
Fish, Mollusc and Crustacea																		
CHORDATA/ACTINOPTERYGII	<i>Anguilla anguilla</i>	European eel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria - EN	
Others																		
CHORDATA/MAMMALIA	<i>Felis silvestris</i>	Wildcat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Bulgarian Red Data Book – EN; Biological Diversity Act of Bulgaria – III; BeC-II; CITES-II; Annex IV of Council Directive 92/43/EEC of 21 May 1992	
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 type="checkbox"/>	<input type="checkbox"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Appendix II and III of Biological Diversity Act of Bulgaria, Annex II of Council Directive 92/43/EEC of 21 May 1992, Red Book of Bulgaria – “Vulnerable species”	
CHORDATA/REPTILIA	<i>Pseudopus apodus</i>	European Glass Lizard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – VU; Biological Diversity Act of Bulgaria – III; Bern Convention – II; Council Directive 92/43/EEC – IV	
CHORDATA/REPTILIA	<i>Testudo graeca</i>	Common tortoise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – EN; Biological Diversity Act of Bulgaria – II, III; IUCN – VU; Bern Convention – II; CITES – II; Council Directive 92/43/EEC – II, IV	

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence ¹⁾	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
CHORDATA/ REPTILIA	<i>Testudo hermanni</i>	Hermann's tortoise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Bulgaria – EN; Biological Diversity Act of Bulgaria – II, III; Bern Convention – II; CITES – II; Council Directive 92/43/EEC – II, IV	

1) Percentage of the total biogeographic population at the site

The lake is part of the Burgas lake complex – one of the three most significant wetland complexes for waterfowl concentrating along the Bulgarian Black Sea coast. More than 240 bird species have been recorded in the area of the lake. The lake is of particular importance as a resting site during migration for the Dalmatian Pelican /*Pelecanus crispus*/, the Great White Pelican /*Pelecanus onocrotalus*/ and the Pygmy Cormorant / *Microcarbo pygmeus* /. Lake Vaya is of global importance to the wintering of a considerable number of waterfowl, mainly of the Pygmy Cormorant / *Microcarbo pygmeus* /, the Great Cormorant /*Phalacrocorax carbo*/, the Whooper Swan /*Cygnus cygnus*/, the White-Fronted Goose /*Anser albifrons*/, the Pochard /*Aythya ferina*/ and the Tufted Duck /*Aythya fuligula*/. Lake Vaya is the only place in Bulgaria supporting that % of the Black Sea population of the White-Headed Duck /*Oxyura leucocephala*/.

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

Vaya Lake is in the Moist Mid-Latitude climate with mild winters climatic region, Humid subtropical (Mild with no dry season, hot summer) subregion /using to the Köppen-Gieger Climate Classification System/. It is a coastal lake (Black Sea) and also in the lower part of the river basin of some rivers. This explains the variety of wetland types included in this Ramsar Site.

The water is alkaline with pH between 8,9 and 9,5. The water is with permanent present, with inputs from rainfall, surface waters and also from the sea. The huge coastal lake owes its salt content to the Black Sea, which is connected to the lake by a canal. This connection provides not only a steady inflow of salty water but also provides saltwater fish species with a passage into the lake. Lake Vaya is also filled with the waters of the Aitoska, Sandardere and Chukarska rivers, which inflow into its western part.

The salinity of Vaya Lake changes seasonally, with a maximum of about 200 mg/l Cl anions in August-early September. During the period between 1948-1962, the absolute fluctuations of Cl- were within 2,60 - 24,96 %. The salinity for the period of 1968-1970 is 1,63 ‰. For the period of 1971-1982 the salinity is 0,75 ‰. In 1980s, owing to the large supply of freshwater, coming from the town water treatment plant, the general salinity of the lake decreased. In 2001, after cleanups of the canal (with help of BSBCP) salinity is increasing again (because of easier inflow of seawater into the lake).

The following main habitats are represented in Vaya Lake (CORINE Biotopes code): Lake connected with the sea (code 21.2); Eutrophic lake, Subemergent vegetation (*Potamogeton pectinatus*) - code 22.13; Communities of *Salix cinerea* (wooded part along the SW coast) - code 44.162; Open shallow waters with marsh vegetation along the banks (mainly *Typha angustifolia*, *Phragmites communis* – Corine 53.132; 53.111, etc.); Large areas in the western part of the wetland are covered by *Phragmites communis*, *Typha angustifolia*, *T. latifolia*, etc; Floating vegetation (code 22.41); Wet meadows and halophytic grass formations (dominated by *Puccinellia convoluta*), mesoxerothermic grass vegetation (mainly of *Poa bulbosa*, *Lolium perenne*, etc.). The surroundings are rather different, having greater urbanization or development, higher human population density and a significantly different land cover or habitat types.

Vaya Lake provides habitat for a variety of noteworthy plant and animal species, which are included in the Biological Diversity Act of Bulgaria, in the Red Book of Bulgaria or/and different International documents. Some of these plant species are the Siberian Statice (*Limonium gmelinii*), Spiny Bear's-breech (*Acanthus spinosus*), etc. Vaya Lake is also important for a variety of animal species from different phyla. The Corn Crane (*Crex crex*), Red Kite (*Milvus milvus*), Hermann's tortoise (*Testudo hermanni*) and the Common Tortoise (*Testudo graeca*) are some of them. Of course, we should not forget the rare species from Criterion 2 applied to the designation of the Ramsar Site Vaya Lake (see section "Why is the site important?").

With all its diversity, Vaya Lake provides a variety of ecosystem services/benefits, including wetland non-food products; regulating services such as erosion protection, pollution control and detoxification, etc.; cultural services such as recreation and tourism service, scientific and educational service, etc.

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
J: Coastal brackish / saline lagoons		1	2669.52	Unique

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> Mt Permanent rivers/ streams/ creeks		3	11.37	

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
1: Aquaculture ponds		2	75.03	

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Non-Ramsar type areas	142.42

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Halimione pedunculata</i>	Pedunculate Sea-purslane	Appendix III of Biological Diversity Act of Bulgaria (BDA, "Protected species")
<i>Halimione portulacoides</i>	Sea Purslane	Appendix III of Biological Diversity Act of Bulgaria (BDA, "Protected species")

Invasive alien plant species

Scientific name	Common name	Impacts	Changes at RIS update
<i>Ambrosia artemisiifolia</i>	Common Ragweed	Potentially	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
CHORDATA/AVES	<i>Anas acuta</i>	Northern Pintail	3	2010-2019 (win)		Directive 2009/147/EO-III
CHORDATA/AMPHIBIA	<i>Bombina bombina</i>	Fire-bellied Toad				Annex II of Council Directive 92/43/EEC of 21 May 1992 and Biological Diversity Act of Bulgaria
CHORDATA/AVES	<i>Calidris alba</i>	Sanderling	50	2015 (win)		Biological Diversity Act of Bulgaria - III
CHORDATA/AVES	<i>Calidris alpina</i>	Dunlin	40	2015 (win)		Biological Biodiversity Act of Bulgaria - III
CHORDATA/AVES	<i>Charadrius hiaticula</i>	Common Ringed Plover	15	2015 (win)		Biological Biodiversity Act of Bulgaria - III
CHORDATA/REPTILIA	<i>Emys orbicularis</i>	European Pond Turtle				Appendix II and III of Biological Diversity Act of Bulgaria ("Protected species") and Annex II of Council Directive 92/43/EEC of 21 May 1992
CHORDATA/AVES	<i>Gavia arctica</i>	Black-throated Loon; Arctic Loon	12	2015 (win)		Directive 2009/147/EO-I
CHORDATA/AMPHIBIA	<i>Hyla arborea</i>	European Tree Frog				Appendix III of Biological Diversity Act of Bulgaria ("Protected species")
CHORDATA/AVES	<i>Larus canus</i>	Mew Gull	52	2010-2019 (win)		Directive 2009/147/EO-II
CHORDATA/AVES	<i>Larus fuscus</i>	Lesser Black-backed Gull	30	2017 (win)		Directive 2009/147/EO-II
CHORDATA/AVES	<i>Larus michahellis</i>	Yellow-legged Gull	2055	2010-2019 (win)		
CHORDATA/AVES	<i>Larus minutus</i>	Little Gull	3	2018 (win)		Directive 2009/147/EO-I
ARTHROPODA/INSECTA	<i>Maculinea arion</i>	Large Blue				Appendix III of Biological Diversity Act of Bulgaria ("Protected species")
CHORDATA/MAMMALIA	<i>Martes martes</i>	European Pine Marten				Appendix II and III of Biological Diversity Act of Bulgaria ("Protected species") and Annex II of Council Directive 92/43/EEC of 21 May 1992,
CHORDATA/AVES	<i>Mergus serrator</i>	Red-breasted Merganser	9	2015, 2017 (win)		Directive 2009/147/EO-II
CHORDATA/MAMMALIA	<i>Myotis myotis</i>	Greater mouse-eared bat				Annex II of Council Directive 92/43/EEC of 21 May 1992, Appendix II and III of Biological Diversity Act of Bulgaria ("Protected species")
CHORDATA/AVES	<i>Numenius arquata</i>	Eurasian Curlew	2	2015 (win)		Biological Diversity Act of Bulgaria - III
CHORDATA/MAMMALIA	<i>Nyctalus noctula</i>	Noctule				Appendix III of Biological Diversity Act of Bulgaria ("Protected species")
CHORDATA/AMPHIBIA	<i>Pelobates syriacus</i>	Eastern Spadefoot, Syrian Spadefoot				Appendix III of Biological Diversity Act of Bulgaria ("Protected species")
CHORDATA/AVES	<i>Pluvialis squatarola</i>	Black-bellied Plover	5	2015, 2017 (win)		Directive 2009/147/EO-II
CHORDATA/AMPHIBIA	<i>Triturus karelinii</i>	Southern Crested Newt				Appendix II and III of Biological Diversity Act of Bulgaria ("Protected species")
CHORDATA/REPTILIA	<i>Vipera ammodytes</i>	Long-nosed Viper				Appendix III of Biological Diversity Act of Bulgaria ("Protected species")
CHORDATA/REPTILIA	<i>Zamenis longissimus</i>	Aesculapean Snake				Appendix III of Biological Diversity Act of Bulgaria ("Protected species")

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	Changes at RIS update
CHORDATA/MAMMALIA	<i>Myocastor coypus</i>	Coypu	Potentially	unknown

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)

According to Köppen-Gieger Climate Classification System, in Ramsar site Vaya Lake there are two subregions - BSk (Mid-latitude steppe/ Arid, steppe, cold - predominant type) and Cfa (Temperate, no dry season, hot summer) - https://upload.wikimedia.org/wikipedia/commons/c/c0/Koppen-Geiger_Map_BGR_present.svg

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.

Vaya Lake is 20 million m3 in volume, with a surface area of 27.6 km2. The catchment area (1,050 km2) includes the valleys of three rivers: Aitoska (32 km), Chukarska (25 km) and Sandardere (12 km), all of which flow into the western part of the lake. Vaya Lake is coastal for the Black Sea (Black Sea River Basin District of Bulgaria).

4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change Increase Decrease Unknown

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)

Alluvial and Deluvial Fluvisols soils along the lakeshore.

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

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

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
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.

Vaya Lake is separated from the Black Sea by a large sand strip, built over nowadays by city suburb. A canal in the eastern part connects the lake with the Black Sea. In some cases sea water from the Black Sea inflows into the lake through the canal and changes the salinity, especially in the eastern part of the lake.

4.4.5 - Sediment regime

Sediment regime unknown

(EOD) Water temperature

4.4.6 - Water pH

Alkaline (pH>7.4)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

Please provide further information on pH (optional):

The alkalinity is on average 5.45-6.70 mgekvl/l; pH is 8.9-9.5. Water acidity is relatively high - monthly, seasonal and yearly changes depends on the quantity and the quality of the water inflow, the evaporation, the bottom mud, the algae bloom and the rotting processes.

4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Mxohaline (brackish)/Mxosaline (0.5-30 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Euhaline/Eusaline (30-40 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

Please provide further information on salinity (optional):

A huge coastal lake owes the salt in it to the Black Sea, which is connected by a canal. This connection provides not only a steady inflow of salty water but also saltwater fish species into the lake. When long east winds from the sea happens, additional salting of a part of the lake-liman is done. Lake Vaya is also filled with the waters of the Aitosk, Sunderere and Chukarska rivers, which flow into its western part. The salinity of Vaya Lake changes seasonally, with a maximum of about 200 mg/l Cl- in August-early September. For the period of 1948-1962 the absolute fluctuations of the Cl- are within 2,60 - 24,96 ‰. The salinity for the period of 1968-1970 is 1,63 ‰. For the period of 1971-1982 the salinity is 0,75 ‰. In 1980s, of the large stock of freshwater, coming from the Town Plant Station, the general salinity of the lake is decreased. In 2001, after cleanups of the canal (with help of BSBCP), the salinity is in increase again (of the seawaters entering easier into the lake).

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

(Update) Changes at RIS update No change Increase Decrease Unknown

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 i) broadly similar ii) significantly different site itself.

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

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)	Medium
Wetland non-food products	Other	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	Medium
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium
Hazard reduction	Flood control, flood storage	Medium

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	Medium
Scientific and educational	Educational activities and opportunities	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

Other ecosystem service(s) not included above:

- Vaya Lake supports the biodiversity in critical life cycle stage or in adverse conditions. It is a habitat for rare species. (See section "Why is the site important?").

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

Local people use the lake for fishing, irrigation and hunting. The commercial and illegal fishing that takes place in the lake, as well as the hunting cause disturbance to the birds and sometimes even their capture in the fishing nets.

- 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

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

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"/>
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Foundation/non-governmental organization/trust	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Religious body/organization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Other

Category	Within the Ramsar Site	In the surrounding area
No information available	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unspecified mixed ownership	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

Almost all of the territory of Ramsar Site Vaya Lake is owned by the national government – approx. 2669,16 ha or 92.1 %. 127,1 ha (4,4 %) within the site are owned by private owner(s), 96,5 ha (3,3%) are owned by the municipality, 1,07 ha (0,04%) are owned by non-governmental organization, 3,57 ha (0,12%) are owned by Religious body/organization, 0,13 ha or approx. 0,004 % are with unspecified mixed ownership and for 0,81 ha (0,03%) there is no information available.

5.1.2 - Management authority

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

Regional Inspectorate of Environment and Water (RIEW) - Burgas

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

Detelina Ivanova, Head of Department

Postal address:

67 Perushtitsa Str., floor 3, Lazur residential area, Burgas 8000, BULGARIA
tel.: +359 56 813 208; +359 887 302348; +359 888 363151;
fax: +35956 813 200
e-mail: riosvbs@unacs.bg, bioriosv_bs@abv.bg

E-mail address:

riosvbs@unacs.bg

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	Changes	In the surrounding area	Changes
Housing and urban areas	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Commercial and industrial areas	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Water releases	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Canalisation and river regulation	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Renewable energy		Medium impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Utility and service lines (e.g., pipelines)	Medium impact	Medium impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	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	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Fishing and harvesting aquatic resources	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Unspecified/others	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Vegetation clearance/land conversion	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	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	High impact	<input checked="" type="checkbox"/>	unknown	<input type="checkbox"/>	unknown

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Household sewage, urban waste water	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Industrial and military effluents	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Garbage and solid waste	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

The most important changes in the state of the lake are result from the operation of a huge petrol refinery a few km NW of the lake, in the beginning of 1960s. This had seriously polluted the lake waters as well a thick part of the bottom mud in the early stages of operation of the refinery, the wastewater was entering into Lake Vaya directly through the Aytoska river, because of lack of a water treatment. Construction of Bourgas' waste water treatment station has led to significant changes in the hydrological regime and the physical and chemical characteristics of the lake. The huge stock of freshwater flowing into the lake changed significantly the state of the waters, respectively the lake fauna and flora.

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	Burgasko ezero, BG0000273	http://natura2000.moew.government.bg/Home/ProtectedSite/?code=BG0000273&layerId=4	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Protected Site	Vaya	http://eea.government.bg/zpo/en/area.jsp?NEM_Partition=1&categoryID=6&areaID=135	partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Burgasko Lake	https://www.birdsinbulgaria.org/ovm.php?l=en&pageNum_Ovm_All=0&totalRows_Ovm_All=114&id=35	whole

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	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Habitat manipulation/enhancement	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented

Human Activities

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

Other:

- LIFE16 NAT/BG/000847 Life for safe flight - Conservation of the Red-breasted Goose along the Global Flyway - www.savebranta.org

- LIFE08NAT/BG/000277 Life for the Bourgas lakes - Ensured the long-term conservation of the protected sites from the ecological network Natura 2000 – “Mandra-Poda”, “Atanasovsko ezero” and “Burgasko ezero” which are important for the survival of priority bird species – Dalmatian Pelican, Pygmy Cormorant, Bittern, White-headed Duck and Ferruginous Duck. Maintain and enhance feeding, breeding and roosting habitats for priority bird species. Reduced the impact of direct and indirect threats on priority bird species. Enhanced public understanding of and support for the conservation of priority bird species, their habitats and the wider Natura 2000 sites that are crucial for their long-term protection. - <http://bspb.org/en/completed-projects/preview/74.html>

National Action Plans for Dalmatian Pelican (*Pelecanus crispus*), Bittern (*Botaurus stellaris*), Ferruginous Duck (*Aythya nyroca*) and White-headed Duck (*Oxyura leucocephala*) - <https://www.moew.government.bg/bg/priroda/biologichno-raznoobrazie/zastiteni-vidove/planove-za-dejstvие/> (Only in Bulgarian)

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

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:

There is only the National Action Plan for Conservation of Wetlands of High Significance in Bulgaria, 2013 - 2022.

5.2.6 - Planning for restoration

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

Further information

Pollution with petroleum products, chemical preparations and solid household waste has been found in the lake. The connection of the lake with the sea also needs a periodic improvement.

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-knjika.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-s-mejdunarodno-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-Bulgaria.pdf
10. AGAFONOVA, Ina I. Hydro-chemical study of the waters of Burgas Lake and its inflowing rivers Chakarliyka and Aytoska (Bulgarian Black Sea coast). Acta Zoologica Bulgarica, Supplement, 2018, 11: 111-117.
11. DIMITROV, Milko & Michev, Tanyo & Profirov, Lyubomir & Nyagolov, Konstantin. Waterbirds of Bourgas Wetlands: Results and Evaluation of the Monthly Waterbirds Monitoring 1996 – 2002. , 2005
12. DIMITROVA, R. E., et al. Phytoplankton composition of Vaya Lake (2004-2006). Bulg. J. Agric. Sci, 2014, 20: 165-172.
13. DIMITROVA, Ralits, et al. Phytoplankton abundance and structural parameters of the critically endangered protected area Vaya Lake (Bulgaria). Biotechnology & Biotechnological Equipment, 2014, 28.5: 871-877.
14. GEORGIEVA, S. K.; PETEVA, Zl V. Assessment of several priority pollutants in fish from selected lakes in Bulgaria. BULGARIAN CHEMICAL COMMUNICATIONS, 2017, 49: 205-211.
15. MILCHEV, BOYAN; KOVACIEV, ANTON. STORK (CICONIA CICONIA (L.)) ALONG THE BULGARIAN.
16. MLADENOV, Vladimir R., et al. Burgas Wetlands, Bulgaria: a Conservation Area of European Priority for Roosting of the Pygmy Cormorant, *Microcarbo pygmeus* (Pallas, 1773). ACTA 17. ZOOLOGICA BULGARICA, 2015, 67.3: 435-442.
18. PANDOURSKI, Ivan. Bats (Mammalia, Chiroptera) of the Burgas Wetlands, Bulgarian Black Sea Coast. Acta zoologica bulgarica, 2004, 56.3: 283-298.
19. PEYCHEVA, Katya, et al. ASSESSMENT OF MERCURY CONTENT IN FISH TISSUES FROM SELECTED LAKES IN BULGARIA AND BULGARIAN BLACK SEA. Journa

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

<1 file(s) uploaded>

vi. other published literature

<12 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Vaya Lake, Waterfowl (Ivan Yanchev, 30-08-2010)



Vaya lake at the background of Burgas town (Blagoy Uzunov, 01-06-2019)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation