# **Information Sheet on Ramsar Wetlands**

(RIS) - 2006-2008 version

Available for download from http://www.ramsar.org/ris/key\_ris\_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).

# **Notes for compilers:**

- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2<sup>nd</sup> edition, as amended by COP9 Resolution IX.1 Annex B). A 3<sup>rd</sup> edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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# 2. Date this sheet was completed/updated:

03 May 2009

#### 3. Country:

Republic of Kazakhstan

#### 4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

FOR OFFICE USE ONLY	r.
Designation date	Site Reference Number

ZHARSOR-URKASH LAKE SYSTEM
5. Designation of new Ramsar site or update of existing site:
This DIC is for (tick one has only).
This RIS is for (tick one box only):
a) Designation of a new Ramsar site □; or
b) Updated information on an existing Ramsar site
6. For RIS updates only, changes to the site since its designation or earlier update:
a) Site boundary and area
The Ramsar site boundary and site area are unchanged: $\Box$
or
If the site boundary has changed:
i) the boundary has been delineated more accurately $\Box$ ; or
ii) the boundary has been extended $\Box$ ; or
iii) the boundary has been restricted** □
,
and/or
If the site area has changed:
i) the area has been measured more accurately $\square$ ; or
·
ii) the area has been extended $\square$ ; or
iii) the area has been reduced** □

\*\* Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

# 7. Map of site:

Refer to Annex III of the Explanatory Note and Guidelines, for detailed guidance on provision of suitable maps, including digital maps.

- a) A map of the site, with clearly delineated boundaries, is included as:
  - i) a hard copy (required for inclusion of site in the Ramsar List): ✓;
  - ii) an electronic format (e.g. a JPEG or ArcView image) ✓;

electronic format in PDF

iii) a GIS file providing geo-referenced site boundary vectors and attribute tables ✓.

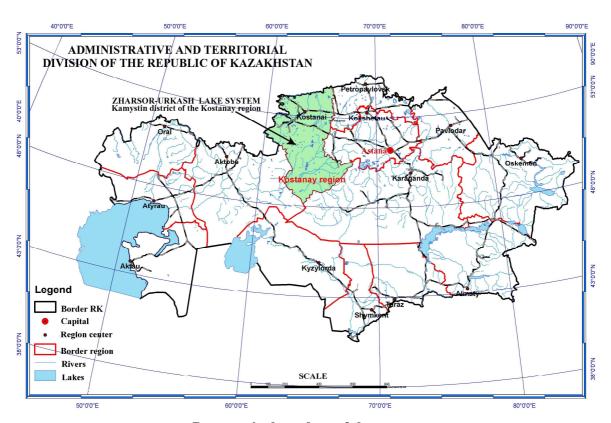
Vector format shape file Projection: Gauss- Kruger Datum: Pulkovo 1942 Spheroid Krassovsky 1940

#### b) Describe briefly the type of boundary delineation applied:

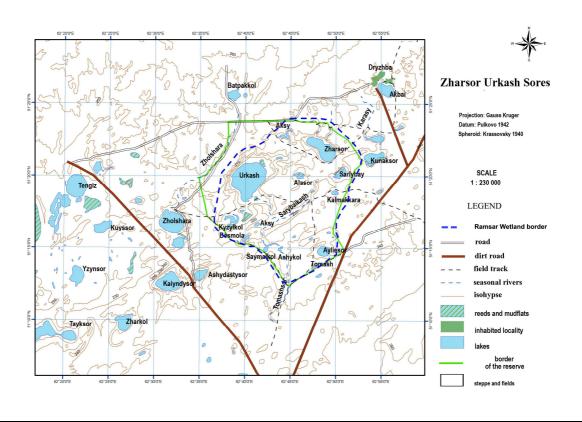
e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The borders stretch along dirt roads, high-voltage electrical transmission lines and dry riverbeds. Signboards with the information that these objects are non disturbance zones and hunting is prohibited are installed around Zharsor and Batpakkol lakes.

# Location map of the site within the territory of site in Kazakhstan



# Ramsar site boundary of the reserve



**8. Geographical coordinates** (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

Center: N 51°22', E 62°48'.

#### 9. General location:

Kamystin district of the Kostanay oblast, the nearest town is Lisakovsk, which is located at a distance of 130 km to the north, an administrative centre of the oblast, i.e. Kostanay city is at a distance of 210 km to the northeast.

Geographically the wetland is located in the west of the Northern Kazakhstan in the central part of Sapsynagash hollow (Tobol-Turgay watershed).

**10. Elevation:** (in metres: average and/or maximum & minimum)

The wetland is located on the surface with the height within 202-240 m above sea.

**11. Area:** (in hectares)

The total area of the site is 41250 ha. It includes the system of lakes, sores, karasus and interlake steppes with square of lakes – about 3700 ha.

#### 12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

This is a group of salty and fresh water lakes surrounded by typical landscapes of Sapsynagash hollow. It's a place of largest migratory concentration of Common Cranes (*Grus grus*), stay of the Siberian Crane (*Grus leucogeranus*), geese, including the Lesser White-fronted Goose (*Anser erythropus*) and the Red-breasted Goose (*Branta ruficollis*), and a great number of northern sandpipers during migration. The steppes are represented by well remained places of motley-grass sandy feather-grass and tyrso-sandy-feather-grass formations with clumps of bushes (*Spiraea hypericifolia, Cytisus ruthenicus, Rosa cinnamomea*) and halophyte vegetation, populated by typical fauna. Of rare species the Little Bustard (*Tetrax tetrax*) and, probably, the White-headed Duck (*Oxyura leucocephala*) and the Sociable Lapwing (*Vanellus gregarius*) nest there.

#### 13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1 •	2 •	<b>3</b> •	4 •	5 •	6 •	7 •	8 •	9
<b>n</b>	✓	П	П	✓	✓	П	П	П

## 14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

**Criterion 2.** The wetland is of great importance for protection of the western population of endangered Siberian Cranes (*Grus leucogeranus*) at the flyways. The area of Zharsor Lake is a place of regular stop of these birds. In 1998-2005 at least 5 cases of meeting them in the period of spring (1) and autumn passage are known here. The Siberian Cranes, single birds and pairs were watched both in flocks with common cranes and separately.

In the period of autumn migrations a considerable number of geese including Lesser White-fronted Geese (Anser erythropus) and Red-breasted Geese (Branta ruficollis) stop at the lakes of this

territory. The main water body stop is Batpakkol Lake. At the end of the 1990s the number of Lesser White-fronted Geese (*Anser erythropus*) in some days in September reached up to 620-740 birds (P.Tolvanen & P.Pynnonen. 1998; P.Tolvanen, K.Litvin & P.Lampila. 1999; P.Tolvanen, T.Eskelin, T.Aarvak, G.Eichhorn, I.Oien, & E.Gurtovaya. 2000), Red-breasted Geese – 1500 birds. In 2006 the number of Lesser White-fronted Geese (*Anser erythropus*) was 1217 and 197 of the Red-breasted Geese (*Branta ruficollis*) (UNEP/GEF project report), in 2007 – 269 (*Anser erythropus*) and 1285 (*Branta ruficollis*) individuals respectively.

A small number of White-headed Duck (*Oxyura leucocephala*) populates fresh water bodies of the wetland, 50 birds were registered at two lakes on 17-19 September 2005, as well as Bewick's Swans (*Cygnus columbianus*) and Ferruginous Ducks (*Aythya nyroca*). Besides, Sociable lapwing (*Vanellus gragarius*) populates the territory of the wetland, in 2002 they were registered in the area of Batpakkol Lake and 2 nesting pairs were found westward from Urkash Lake in 2003. The Little Bustard (*Tetrax tetrax*), Steppe Eagle (*Aquila nipalensis*) and Pallid Harrier (*Circus macrourus*) nest in the steppe areas, and in the period of passage big birds of prey are hunting at the lakes: the White-tailed See Eagle (*Haliaeetus albicila*), the Imperial Eagle (*Aquila heliaca*) and the Great Spotted Eagle (*Aquila clanga*).

Table 1
Species identified as vulnerable, endangered or critically endangered under national endangered species legislation/programs and international frameworks

	endangered species legislation/programs and international frameworks					
N	English Name	Scientific Name	IUCN	CITES	CMS	National
			Status	Status		Status
1	Whooper Swan	Cygnus cygnus	LC		II	II
2	Bewick's Swan	Cygnus columbianus	LC		II	V
3	Lesser White-fronted	Anser erythropus	VU		I/II	II
	Goose					
4	Red-breasted Goose	Branta ruficollis	EN	II	I/II	II
5	Ferruginous Duck	Aythya nyroca	NT		I/II	III
6	White-headed Duck	Oxyura leucocephala	EN	II	I	I
7	White-tailed Sea	Haliaeetus albicila		II	I/II	II
	Eagle					
8	Imperial Eagle	Aquila heliaca	VU	I	I/II	III
9	Greater Spotted Eagle	Aquila clanga	VU	II	I/II	
10	Steppe Eagle	Aquila nipalensis	LC	II	II	V
11	Saker Falcon	Falco cherrug	EN	II	II	I
12	Pallid Harrier	Circus macrourus	NT	II	II	
13	Siberian Crane	Grus leucogeranus	CR	I	I/II	I
14	Common Crane	Grus grus	LC	II	II	III
15	Demoiselle Crane	Anthropoides virgo	LC	II	II	V
16	Little Bustard	Tetrax tetrax	NT	II		II
17	Sociable Lapwing	Vanellus gragaria	CR		I/II	I
			•		•	•
18	Saiga	Saiga tatarica	CR	II	II	II

Criterion 5. In the period of seasonal migrations the lakes provide habitat for a great number of waterbirds. In spring, in the end of April – May, tens of thousands of northern Sandpipers species stop at the shores of salty lakes for feeding. Along 2 km of shore line on southern part of Zharsor Lake on 9 June 2000 were counted 1900 individuals of Little Stints (*Calidris minuta*), 650 Curlew Sandpipers (*Calidris ferruginea*), 400 Dunlins (*Calidris alpina*), 120 Temminck's Stints (*Calidris temminckii*) and 430 Ruffs (*Philomachus pugnax*). About 11000 of sandpipers, including 4000 individuals of Little Stint (*Calidris minuta*), 3000 Curlew Sandpiper (*Calidris ferruginea*), 3300 Rednecked Phalarope (*Phalaropus lobatus*), and tens of Sanderling (*Calidris alba*), Turnstone (*Arenaria*)

*interpress*), Terek Sandpiper (*Xenus cinereus*), Grey Plover (*Pluvialis squatarola*) and others, were registered at the end of May 2001 at the same place.

Mass concentration of Common Cranes (*Grus grus*) is formed on the territory of the wetland during autumn passage. At the end of September 1998-1999 the number of cranes gathered for the night near Zharsor Lake was 8000-10000 birds, on 24-25 September 2002 – from 7000 to 9000 of birds, the estimated total number of concentrations in 1998-2001 was 15000-20000 birds.

The number of geese White-fronted Geese (*Anser albifrons*), Greylag Geese (*Anser anser*), Lesser White Fronted Goose (*Anser erythropus*) and Red-breasted Goose (*Branta ruficollis*) staying at the wetland lakes in the period of autumn passage reaches several tens of thousands. According to the record data, on 9 October 1996 - 22000 geese, on 6 October 1999 - 29960 birds, on 4-5 October 2000. – more than 20000 of birds. On 10 October 2005 – 10052 birds stayed at Batpakkol Lake. About 80% of the total number were White-fronted Geese (*Anser albifrons*) and 10-10.5% - Greylag Geese (*Anser anser*). There was a considerable number of ducks, coots and grebes. On 10 October 2005 10372 waterbirds were registered, if to take just only 1 square km of Batpakkol lake water area.

Table 2
Criterion 5

N	English Name	Scientific Name	Number of individuals (min-max)	Season Recorded e.g. winter, migration, breeding season
1	Greylag Goose	Anser anser	558-3750	Autumn migration 1996- 2007
2	White-fronted Goose	Anser albifrons	3956-24600	Autumn migration 1996- 2007
3	Lesser White Fronted Goose	Anser erythropus	20-1217	Autumn migration 1996- 2007
4	Red-breasted Goose	Branta ruficollis	197-1500	Autumn migration 1996- 2007
5	Shelduck	Tadorna tadorna	885-1500	Moulting June 2000, migration 2005
6	Common Crane	Grus grus	4200-12000	Autumn migration 1999- 2003
7	Demoiselle Crane	Anthropoids virgo	2800-8000	Autumn migration 1999- 2003

**Criterion 6.** The number of birds of the Western-Siberian population of the Siberian Cranes (*Grus leucogeranus*), according to the most optimistic estimation is no more than 10 (ten) of birds. So, a pair or several cranes regularly stops on the territory of the wetland and make considerably more than 1%.

Migration assemblage of Common Crane (*Grus grus*) counted 4200-12000 individuals, that is 6-17% of West Siberia and Kazakhstan Population.

The number of Lesser White-fronted Geese (*Anser erythropus*) during recording time at Batpakkol Lake in 1997-2007 in some days in September reached 1217 birds (P.Tolvanen & P.Pynnonen. 1998; P.Tolvanen, K.Litvin & P.Lampila. 1999; P.Tolvanen, T.Eskelin, T.Aarvak, G.Eichhorn, I.Oien, & E.Gurtovaya. 2000), that is more than 9% of the Siberian-Caspian population, the Red-breasted Geese – 1500 birds – more than 3% of the world population. (385 for *Branta ruficollis*) The number

of Grylag Goose (*Anser anser*), White-fronted Goose (*Anser albifrons*), Shelduck (*Tadorna tadorna*) in migration time exceed 1% threshold also (Table 3).

Table 3 Criterion 6.

N	English Name	Scientific Name	Subspecies/Population (if applicable)	Count (min-max)	1% Threshold
1	Greylag Goose	Anser anser	West Siberia rubrirostris	558-3750	2500
2	White-fronted Goose	Anser albifrons	North & West Siberia	3956-24600	150
3	Lesser White Fronted Goose	Anser erythropus	North Europa-West Siberia	20-1217	110
4	Red-breasted Goose	Branta ruficollis	World population	197-1500	385
5	Common Shelduck	Tadorna tadorna	South West Asia & Caspian Sea	885-1500	800
6	Siberian Crane	Grus leucogeranus	West Siberia	1-2	1
7	Common Crane	Grus grus	West Siberia & Kazakhstan lilfordi	4200-12000	700

# **15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

## a) biogeographic region:

The province of Pontiac steppes of the Palearctic area

#### b) biogeographic regionalisation scheme (include reference citation):

Udvardy scheme (M.D. Udvardy, 1975)

#### 16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

**Geology and Geomorphology.** The relief of Sypsynagash hollow is represented by wavy plains with the absolute marks of 180-230 m above sea level. The surface layers of Paleogene are formed by Middle Oligocene sediments: sands, ferrous sandstones and kaolinite clays. The quaternary sediments of alluvial origin are represented by sands. In the upper part of the hollow slopes alluvial-delluvial sediments prevail, mainly loams and clay sands.

**Soils.** The wetland area is within Kazakhstan arid steppe province with dark chesnut and chesnut soils. Light Ologocene sediments of Sypsynagash hollow are characterized by sandy ans loamy dark-cherstnut soils. In the hollows around the lakes and sors dark alkaline soils, saline soils and veadow complexes are widely developed.

**Hydrology.** The wetland includes 14 salty and fresh water lakes and a number of small water bodies including artificial ones. The largest salty lakes are Urkash Lake with the square of 1150 ha, and Zharsor – 600 ha. The water of salty lakes is a saturated solution with saltiness of 39.0-39.9 ppt. By the end of summer, after evaporation of considerable water amount, sedimentation of salts begins and some lakes dry up completely. Urkash Lake contains NaCl salts. Salty lakes located in deep hollows are

characterized by low absolute water marks -0.7 and more meters below the ground water level. Therefore in the lower part of salty lakes hollows springs with fresh water are coming out (0.38-0.44 ppt).

Fresh water lakes: Batpakkol – 350 ha, Akbay – 315 ha, Kyzylkol – 206 ha, Saumolkol -160 ha, Karasor – 150 ha, Aksu– 130 ha, Yegizbay -50 ha and others are located considerably higher the ground water level. They are filled by surface flow exclusively during the flood period. Therefore due to moisture-provision there are fluctuations for many years, and summer evaporation preconditions seasonal water level fluctuation. From the water collection area thaw water is collected in ravines, some of which are deeply cut in and keep water in summer as well due to ground filling. The ravines coming to Zharsor Lake and Zholshra ravine were blocked by soil dams in the 1980s. The largest formed water body is Batpakkol Lake. In salty lakes the water depth even in spring does not exceed 0, 5 m, and in fresh water ones – from 0.5 to 1.5 meters. The total square of the water bodies is about 3700 ha. Besides, temporary fresh water and salty small swamps are formed in spring at many hollows.

**Climate.** It is related to semi-arid continental type with cold winter, hot summer and strong winds. The average annual amount of precipitations is 233 mm, 75% of which fall in warm season. The average annual air temperature is  $+2.4^{\circ}$ C with fluctuation amplitude of 85°C (from  $-40^{\circ}$ C to  $+45^{\circ}$ C).

#### 17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

#### Geology and Geomorphology.

Sypsynagash latitude hollow is located within Trsek-Adayev plateau and stretches for 160 km from hilly Zauralye plateau to meridian Turgay hollow. It is a denudation-accumulative slope-wave plain with the absolute heights of 180- 230 m (Gvozdetskiy, Nikolayev). In the North and South it is framed by clay layer plains of the Western – Turgay plateau (Tersek – Adayev in the North and Ulkayak in the South). The hollow is characterized by not clear outline in relation to the plateau surface, wave sloping hillsides and a great number of lake hollows of suffusion origin. The hollow bed is formed mainly by loamy and sandy sediments of the Middle Oligocene, which were intensively processed by wind at the beginning of Holocene. The lake hollows deeply cut in have been formed just in them.

#### Soils.

The territory of the region is within Kazakhstan arid steppe province of dark-chesnut and chesnut soils. Dark chesnut loamy and heavy-loamy soils, mainly carbonate and sometimes dark alkiline soils prevail on flat watersheds. Dark chestnut and chestnut sandy and loamy soils have been formed on light Oligocene sediments in Sapsynagash hollow. Due to low content of humus and intensive deflation after plowing mainly they have remained in virgin condition. In the hollows around the lakes and sors dark alkaline soils, saline soils and veadow complexes are widely developed.

#### Hydrography.

The wetland is located in Tobol-Turgay interfluvial area without flows. The slopes and the bed of Syposynagash hollow is slightly drained by short seasonal water streams, the major number of them completely dries up after spring flood. The largest water stream is Tomashsor stream, which stretches for about 10 km, in the South it flows into Ashikol and Saumalkol lakes. Sarybalkash stream flows from Saumalkol into Urkash Lake. A dry Zholshara stream begins flowing from the northern slopes of the hollow.

All the lakes both salty and fresh water ones are filled by thaw waters, and therefore due to moistureprovision there are many years fluctuations and summer evaporation preconditions seasonal fluctuation of the water level. On the shores of salty lakes and in some hollows are ground waters are coming out, but they play inconsiderable role in the water balance, however they are of great importance for waterbirds. Urkash and Zharsor lakes are the largest ones among a great number of salty lake and they are located in deep hollows with steep and at some places precipitous slopes. The dimensions of Urkash lake circular hollow are 5.5 x 3.5 km with the square about 11.5 square km. The hollow of the Zharsor salty lake has dimensions of 4 x 1.5 km, the square of it is about 6 square km, the height of the shore precipices is up to 15 m. Besides, about ten of small lakes and fresh water lakes and small swamps are scattered on the territory (Aksu, Akbay, Kunaksor, Egizbay, Kyzylkol and others). Also there are short karasus with constant stretches of open water. In the northern part of the wetland at the foot of the slope, there is Batpakkol Lake that was formed at the place of construction of a propping up dam. Typical thick reeds of border and mosaic type are growing at fresh water lakes. Small fresh water bodies are located in deep ravines blocked by soil dams in the northern and eastern side of Zharsor.

#### Climate.

The territory of the wetland is within Western-Siberian climatic area of moderate zone. The climate of the area is arid, that is preconditioned by its location in opographic corridor between the South Ural and Kazakh Upland (Gvozdetskiy, Nikolayev, 1971). The average annual amount of precipitations is 230-240 mm, 75% of which fall in warm season. Droughts are periodical here. The period without frosts lasts for 130 - 140 days, 70 days of which are atmospheric drought days with relative air humidity less than 30%. The greatest deficit of humidity is in July – August.

The average annual air temperature is +2.4 C, while the annual amplitude is 75°C. Summer is dry and hot, the average temperature in July is 22-23°C, the average maximum temperature in July is 28°C. The winter is cold - the temperature in January is -18°C and lower, while the absolute minimum is -42°C.

Stable snow cover appears in the middle of November and remains from 4 to 5 months. The maximum depth in February reaches 30 cm. Spring snow melting starts at the temperatures below zero due to sun radiation, 25-35% of winter snow stock disappears during this period. The snow cover disappears completely in the first ten days of April.

The whole year is chatacretized by strong winds.

#### 18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

# 19. Wetland Types

# a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K • Zk(a)

Inland: L • M • N • O • P • Q • R • Sp • Ss • Tp Ts • U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

#### b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

Q, R, P, O, Ss, Sp, Ts, N, 2

#### 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

There are the following types of wetlands: salty lakes, fresh water lakes, steppe karasu rivers, drying up swamps and marshy meadows.

Salty lakes occupy the greatest area - about 21 square km. They are characterized by deep hollows with steep and at some places precipitous slopes, thick loamy bed and coming out of ground waters in the lower part of the slopes. Drying up places of salty lakes are occupied by annual saltwort (Petrosimonia triandra), Ofaiston (Ofaiston monandrum) and common reed (Phragmites australis), annual saltwort (Petrosimonia triandra), seepweed (Suaeda corniculata) associations, which in the upper part are alternating with Podorozhnik solonchakoviy (Plantago salsa), marsh-rosemary (Limonium gmelinii) groups and saline soil glades, at some places there are Halimion borodavchatiy (Halimione verrucifera) associations and Roth-weed grass (Puccinellia tenuifolia), Hauptian alkaligrass (P. hauptiana) meadows. On the first terrace there are various meadow associations with domination of meadow barley (Hordeum brevisubulatum), quick grass (Elytrigia repens), chee reedgrass (Calamagrostis epigeios), Altai wildrye (Leymus angustus). The second terrace is characterized by Volga fescue (Festuca valesiaca), bridal veil (Stipa capillata) associations with plenty of Sophora root (Pseudosophora alopecuroides) and feather grass (Stipa pennata). On steep hollow slopes there are desert halophyte semi-bushes silver sagebrush (Atriplex cana), sea-lavender (Limonium suffruticosum).

Along the shores of Urkash Lake glasswort (Salicornia europaea), halophytic succulent semi-shrubs (Halimione verrucifera and Halocnemum strobilaceum) associations prevail in combination with perennial Roth-weed grass (Puccinella tenuiflora) meadows, low reed and halophytic wormgrass (Artemisia nitrosa), Saussurea solonchakovaya (Saussurea salsa). On the first terrace a complex of Roth-weed grass (Puccinelia tenuiflora), halophytic wormgrass (Artemisia nitrosa), and camforosma (Camphorosma monspeliaca) associations is represented, feather grass (Achnatherum splendens) is usual. At higher places there are Volga fescue (Festuca valesiaca), halophytic wormgrass (Artemisia nitrosa) steppes. On soils where clay comes out, there is usually perennial saltwart (Anabasis salsa) and Levant wormseed (Artemisia pauciflora).

On the second terrace of lake hollows Bridal veil (*Stipa capillata*) steppes on sandy loams prevail. Sometimes there is licorice (*Glycyrrhiza uralensis*). In the streams formed by springs there are 10 weed species but there is none of them in the lakes.

Small fresh water lakes and marshy meadows, in comparison with salty lakes occupy higher geomorphologic levels and they are characterised by not deep hollows with sloping sides, lack of springs and poor development of low meadow flood plain. The lake depth is varying from 0.5 to 1-1.5 m. Reed with bulrush and cattail form thick vegetation of border, border-curtain and mosaic type. There is plenty of water vegetation. Short river beds are cut deeply; their banks are framed by a narrow border of reed, bulrush and cattail. In deep hollows flooded in the spring by thaw water swamps both fresh water and salty ones, marshy meadows are being created, but by the middle – end of June they usually dry up. On flat sloppy places filled by ground waters in salty lake hollows there are also marshy sedge meadows.

On the watersheds main vegetation types are presented by feather grass (*Stipa pennata*), bridal veil (*St. capillata*), wheatgrass (*Agropyron fragile*), blue hair grass (*Koeleria glauca*), dwarf everlast (*Helichryzum arenarium*) steppes and plenty of psamophyte motley-grasses (dwarf everlast -

Helichryzum arenarium, Chertopoloh (Centauria sibirica), Greater Knapweed - C. scabiosa, cinquefoil - Potentilla arenaria, Astragal kamnelomniy (Astragalus rupifragus), Astragal puzirchatiy (A. physodes), broomleaf toadflax - Linaria genistifolia). Not deep flat hollows and hollow slopes are characterized by thick bushes: Iberian spirea (Spiraea hypericifolia), Rakitnik Russkiy Cytisus ruthenicus, cinnamon rose (Rosa cinnamomea).

#### 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.* 

The flora was not especially studied, during short-term study of the territory surrounding Zharsor and Urkash lakes in 2000, 119 vascular plant species representing 25 families were registered. In the lake hollows at some places there are thick valuable medical herbs - European Licorice (*Glycyrrhiza glabra*) and Chinese Licorice (*Glycyrrhiza uralensis*), Rakitnik Russkiy (*Cytisus ruthenicus*) species rare for Kazakhstan were registered, which are located at the eastern border of its area. In tyrso steppes on lake terraces there is *Ornithagalium fisherianum*, and at saline lake places and at precipice perennial saltwort (*Anabasis salsa*) grows. In the ravine of Zharsor Lake there are clumps of aspens (*Populus tremula*), which are exclusively rare in the steppe landscapes of this area.

Watershed places of motley-grass sand-feather grass and tyrso-sand-feather grass steppes had slight anthropogenic impact and they may serve as standards of this vegetation type.

#### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.* 

146 species are known in the bird fauna of this territory, including 65-69 nesting ones. 79 species have been registered on the wetlands: Podicipediformes – 5, Pelecaniformes – 1, Ciconiiformes – 5, Anseriformes – 24, cranes and Rallidae – 6, Limicolae – 29, Laridae and terns – 9. The bird fauna of fresh water lakes is of greatest diversity, where the following species are nesting: the coot (Fulica atra), the Greylag Goose (Anser anser), the Mute Swan (Cygnus olor), river ducks and divers (the Mallard (Anas platyrhynchos), the Gadwall (Anas strepera), the Pintail (Anas acuta), the Shoveler (Anas clypeata), the Graganey (Anas querquedula), the Common Pochard (Aythya ferina), the Tufted Duck (Aythya fuligula), the Shelduck (Tadorna tadorna), the Great Crested Grebe, Red-necked Grebe and Black-necked Grebe (Podiceps cristatus, P. griseigena, P. nigricolis), sandpipers – the Black-winged Stilt (Himantopus himantopus), the Avocet (Recurvirostra avosetta), the Lapwing (Vanellus vanellus), the Marsh Sandpiper (Actitis hypoleucos), the Black-tailed Godwit (Limosa limosa), the Curlew (Numenius arquata), the Black-headed Gull and the Little Gull (Larus ridibundus, L. minutus), the Common Tern, the White-winged Tern and the Black Tern (Sterna hirundo, Chlidonias leucoptera, Ch. niger), the Little Crake (Porzana parva) and the Bailton's Crake (Porzana pusilla). Sometimes there are rambling Great Ergets and Grey Herons (Egretta alba, Ardea cinerea) and the Cormorants (Phalacrocorax carbo).

The fauna of salty lakes in nesting period is not numerous: there are usually Common Gulls (*Larus canus*) and Shelducks (*Tadorna tadorna*), of sandpipers – Avocet (*Recurvirostra avocetta*). There is a great number of Shelducks in moulting period.

In the period of seasonal migrations the most numerous species are Anseriformes and Limicolae. Besides ducks, swans (Cygnus olor, C. cygnus, C. bewickii) and geese (Anser albifrons, A. anser, A. erythropus, Branta ruficollis) stop at small fresh water lakes. Salty lakes attract a great number of northern sandpiper species, among witch the most numerous species are the Little Stint, the Curlew Sandpiper, the Dunlin (Calidris minuta, C. ferruginea, C. alpina), the Ruff (Phylomachus pugnax),

there is a less number of: the Temminck's Stint (*Calidris temminckii*), the Sanderling (*Calidris alba*), the Turnstone (*Arenaria interpress*), the Terek Sandpiper (*Xenus cinereus*), the Grey Plover (*Pluvialis squatarola*) and others.

In the steppe area there are usually small *Passeriformes* species: Tawny Pipit (*Anthus campestris*), Skylark (*Alauda arvensis*), White-winged Lark (*Melanocorypha leucoptera*), Black Lark (*M. yeltoniensis*) and Wheatear (*Oenanthe oenanthe*). Grey partridge (*Perdix perdix*), Quail (*Coturnix coturnix*), Little Bustard (*Tetrax tetrax*), Demoiselle Crane (*Anthropoides virgo*), Montagu's Harrier (*C. pygargus*), Pallid Harrier (*Cyrcus macrourus*), Curlew (*Numenius arquata*) also nest here.

The following species nest here: the Little Bustard (*Tetrax tetrax*), the Demoiselle Crane (*Anthropoides virgo*), the Pallid Harrier (*Cyrcus macroururs*) and, probably, the White-headed Duck (*Oxyura leucocephala*) and the Sociable Lapwing (*Vanellus gregarius*). The following species were registered in the period of migrations: the Whooper Swan (*Cygnus cygnus*), the Bewick Swan (*C. colunbianus*), the Red-breasted Goose (*Branta ruficollis*), the Lesser White-fronted Goose (*Anser erythropus*), Ferruginous Duck (*Aythya nyroca*), the White-tailed See Eagle (*Haliaeetus albicila*), the Imperial Eagle (*Aquila heliaca*), the Great Spotted Eagle (*Aquila clanga*), the Steppe Eagle (*Aquila nipalensis*), the Saker (*Falco cherrug*), the Common Crane (*Grus grus*) and the Siberian Crane (*Grus leucogeranus*).

The fish fauna includes three species. In the fresh water lakes and karasus there are Crucian carps (*Carassius carasius, Carassius auratus*) and Lake Minnows (*Phoxinus percnurus*).

The fauna of mammals is represented by 26-27 species, the background ones are small rodents: Russet Souslik (Spermophilus major), Southern Birch Mouse (Sicista subtilis), Eversman's Hamsters (Allocricetulus eversmanni) and Common Vole (Microtus arvalis), at some places there are Great jerboas (Allactaga major), Steppe Lemming (Lagurus lagurus), Little Souslik (Spermophilus pygmeus). In tyrso-feather-grass steppes of the northern area of the wetland there are marmots (Marmota bobac). In the riverbeds of karasu rivers, lake hollows and at fresh water springs and swamps there are Badgers (Meles meles), Common Hamsters (Cricetus cricetus), European Water Vole (Arvicola terrestrus), Root Vole (Microtus oeconomus), Narrow-skulled Vole (Microtus gregalis), Wood Mouse (Apodemus sylvaticus) and Harvest Mouse (Micromys minutus), Steppe Pika (Ochotona pusila). There is a great number of Northern Mole-Vole (Ellobius talpinus), Long-eared Hedgehogs (Erinaceus auritus), European Hares (Lepus europaeus), and also predatory animals: Least Weasels (Mustela nivalis), Stoats (Mustela erminea), Steppe Polecats (Mustela eversmanni), Corsac Fox (Vulpes corsac), Red Foxes (Vulpes vulpes), and Wolfes (Canis lupus). In summer the Siberian Roe Deer (Capreolus pygargus) comes here.

The fauna of amphibians and reptiles are presented by four species: Moor Frog (*Rana arvalis*), Green Toads (*Bufo viridis*), Sand Lizards (*Lacerta agilis*) and Orsin's Vipers (*Vipera ursini*).

#### 23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

In the steppe areas the local population is occupied with cattle grazing and hay making. Commercial development of salt at Urkash Lake is exclusively of local importance. At some lakes inhabitants of Druzhba village fish for their own consumption.

**b**) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box  $\square$  and describe this importance under one or more of the following categories:

- i) sites which provide 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) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where 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:

#### 24. Land tenure/ownership:

a) within the Ramsar site:

It is state-owned, along with that about 48.5% of lands are used by agricultural enterprises and farms with the right of long-term use, 51.5% are in the state land reserve. Within Zharsor-Urkash zakaznik of 29344,1 ha, which is being organized, 19.5% of lands are in the long-term use (lease) of agricultural enterprises (Ltd), the rest 80.5% are related to the category of state reserve lands.

b) in the surrounding area:

State-owned. About 85% of lands on the plains of Sypsynagash hollow are related to the category of state reserve, on the plateau all the lands are delivered for long-term use (lease) agricultural enterprises (Ltd) and farms.

#### 25. Current land (including water) use:

a) within the Ramsar site:

The lands in the northern part of the wetland are used as hayfields and to a less degree as pastures. Small plots of several tens of hectares are plowed every year for melon fields.

Lake resources: commercial salt development is conducted at Urkash Lake – works are implemented after drying up of water, in August – September, by a small team by hand. At Batpakkol Lake fishing in small amount is usual and the water is used for watering kitchen gardens. The wetland is located on the territory of Batpakkol hunting economic unit of the Oblast Society of Hunters and Fishermen, but at Zharsor and Batpakkol Lakes, which are non disturbance zones, no hunting is conducted.

#### b) in the surroundings/catchment:

The territory is located within Sypsynagash hollow, is used mainly for hay making. Cattle grazing, in connection with a low number of the live-stock is developed on limited territory in radius of 8-12 km from Druzhba and Zholshara villages. The surface of the plateau at a distance of 4 km northward from the wetland is completely ploughed for grain cultivation, mainly wheat.

# 26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

The main threat to ecological condition of the wetland territory is made by steppe fires, annually occurring in the region from spring time to late autumn, and poaching, including cranes. Plowing of

land plots for melon fields is of local importance that reduces the square of virgin steppes and habitats of aboriginal fauna species.

#### b) in the surrounding area:

For the last years fires have become the main factor of negative impact on natural ecosystems of the region. Every year they spread on greater area of the steppes, cover vegetation along riverbeds and lake hollows. As a result of annual burning-out of vegetation, its character is changing; fires make direct impact on animal population as well. Live-stock grazing in case of significant increase of heads, as well as using pesticides on grain fields may become a potential threat.

There is a project of the development of bauxite deposits, located at a distance of 5-7 km westward from Batpakkol and Urkash lakes. Its realization planned since 2012, may cause a number of additional threats, related to development of opened quarries, technogenic pollution of water and others.

#### 27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

In 2007 the site was included in the West-Central Asian Site Network (WCASN) for Siberian Crane. In 2008 - the site was included in the list of Important Bird's Area of Kazakhstan.

Most area 29344,1 ha of the site included in the territory of Zharsor-Urkash zakaznik, established July 07 2008 (Statement of Government # 570)

According to the proposal of the working group of WWF project implemented in 1998-1999, the water bodies were included into the list of the most significant wetlands of the oblast by the order of the Kostanay Oblast Territorial Department on Forestry and Bioresources (# 12 dated 14.03.2001). On the order the Kostanay Oblast Society of Hunters and Fishermen, to which hunting lands of this territory were delivered for use (as a hunting economic unit) established non disturbance zones prohibited for hunting at Zharsor and Batpakkol with 500 meters strip around the shoreline.

**b)** If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia $\square$ ; Ib $\square$ ;	II □;	III □;	IV √;	V <b>□</b> ;	VI ☐ (In relation to Zharsor and Batpakkol
lakes)					

May, 2007

c) Does an officially approved management plan exist; and is it being implemented?:

No.

**d)** Describe any other current management practices:

The territory is controlled through episodic raids of the rayon inspector of the society of hunters and fishermen. In 2005 two rangers were additionally hired in Druzhba village to strengthen protection of this territory. Zharsor-Urkashskyi zakaznik managed by Naurzum National Nature Reserve since 2008 and there are the staff with employed two rangers.

# 28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

Within the framework of UNEP/GEF "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Waterbirds in Asia" project activity on establishment of the National Natural Zharsor-Urkash zakaznik is being implemented, 70% of the wetland territory have been included within the boundaries of it. As of December 2006 all necessary documents, including the map (land draft) have been prepared and agreed. In July 07 2008 the Zharso-Urkashskyi zakaznik was established (Statement of Government # 570).

#### 29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Since 2005 to 2009, monitoring of the state of lakes and passage of waterbirds has been implemented within the framework of UNEP/GEF "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Waterbirds in Asia"

Accounting of geese in the period of autumn migration in Kostanay oblast, including Batpakkol Lake has been conducted on regular basis since 1997 by the specialist of the Institute of Zoology RK and Finnish ornithologists. The first observations of crane passage were made in autumn 1998. Later the monitoring was made also in September - October 1999 and 2000-2004, and in June 2000 brief observations of nesting fauna and description of ecological conditions were made.

# 30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

A cycle of training workshops in proper identification of especially protected wetland bird species of Kostanay region including game project site was organized for inspectors and the members of the society of huntsman and fishermen within the framework of GEF/UNEP/ICF "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Waterbirds in Asia" project implementation **from 2006 to 2008** in Kostanay region.

The goal of the training: improvement of the skill of ranges, huntsmen and inspectors at the project sites in the field of identification especially protected, globally threatened wetland birds species of the project sites, informing about the activity under the project, global significance of the project sites, preventive measures and ways of identification of animals taken by avian flue. Informational materials on 46 especially protected species were prepared.

The program on Environmental Education (2005-2009) for teachers, students, 3-4, 5-8 and 9-11 forms of general schools, lectures of higher educational institutions and inspectors of protected territories has been developed within the framework of Kazakhstan Coordination Unit of **GEF/UNEP/ICF** "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Waterbirds in Asia" International Project.

Since 2005 schoolchildren of site villages have been involved in the annual celebration of "Crane Day" organized under the aegis of the UNEP/GEF project «Development of flyways and wetlands for conservation of Siberian Crane and other waterbirds in Asia»

In 1999- 2008 TV programs on wetlands in the Kostanai oblast were organised. Several booklets on "Key Wetlands of the Northern Kazakhstan" (2005-2009)

The book on the "Most Significant Wetlands of the Northern Kazakhstan" were published (Moscow: Russian University, WWF, edition 5, 2002).

In 2007-2008., within the framework of UNEP/GEF/ICF "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Waterbirds in Asia" regional project, a training program on education, public awareness raising, alternative livelihoods, including development of ecotourism, is being realized in the surrounding areas of the wetland.

The information on importance of the wetlands for waterbirds is presented in "Key Wetlands of the Northern Kazakhstan» booklet published in 2005. Full description of the wetlands is presented in "The Most Significant Wetlands of the Northern Kazakhstan" book (edited by T.Bragina and Y.Bragin - M.:

Russian University, 2002). Since 2005 within the framework of implementation UNEP/GEF "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Waterbirds in Asia" project Zharsor-Urkash system lake system is one of 4 project sites; a special program on awareness raising of the population and executive authorities is being realized.

#### 31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

At present practically it is not used. Exception is the hunters, coming to shoot geese in the fields and near Batpakkol Lake and Druzhba village in the period of autumn passage. Probably, inclusion of wetland lakes in major tourist routes along natural places of the Kostanay Oblast is possible.

#### 32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Kazakhstan, Kostanay Oblast, Kamystin District

The Forestry and Hunting Committee of the Ministry of Agriculture of the Republic of Kazakhstan 010000, Astana city, 35/2 street, Ministry House,

entrance №5, 6 floor, office 608

Tel.: +7(7172)742834 Secretary: +7(7172) 743326 email:emussabayev@minagri.kz

#### 33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Oblast Society of Hunters and Fishermen: Gogol str., 181, Kostanay, tel./fax(3142) 535617.

Chairman -A.Kovalenko.

Responsible organization for Zharsor-Urkashskyi zakaznik – Naurzum National Nature Reserve: Karamendi, Naurzumskyi raion, Kostanai Obl., tel/fax (71454) 21141,

E-mail: naurzum zapoopt@mail.ru

Supervising body: Kostanay Territorial Department on Forestry and Hunting. Gagarin str., 85,

Kostanay city. E-mail: <a href="leskst@mail.ru">leskst@mail.ru</a>; The head – M. Begimbetov

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Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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