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 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th 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, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd 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.

1. Name and address of the compiler of this form:

FOR OFFICE USE ONLY.

DD MM YY | Designation date | Site Reference Number

The State Committee for Nature Protection of the Republic of Uzbekistan (Administrative Authority, Responsible for Implementation of the Convention in the Republic of Uzbekistan).
Mr. Bory ALIKHANOV – Chairman of the State Committee for Nature Protection;
Mr. Mukhammady MAMANAZAROV – Head, Main Department on Water and Land Resources Protection of the State Committee for Nature Protection;
Mr. Gennadiy GOCHAROV – Head, Fauna Protection Department of the State Inspection on Biodiversity Control under the State Committee for Nature Protection;
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2. Date this sheet was completed/updated:
27 June 2008

3. Country:
The Republic of Uzbekistan

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.
Aydar Arnasay Lakes System

5. Designation of new Ramsar site or update of existing site:

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: ❑
or
If the site boundary has changed:
i) the boundary has been delineated more accurately ❑; or
ii) the boundary has been extended ❑; or
iii) the boundary has been restricted** ❑

and/or

If the site area has changed:
i) the area has been measured more accurately ❑; or
ii) the area has been extended ❑; 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:

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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) ☑;

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

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.

AALS is located in the middle stream of Syrdarya river, southward of Chardara water reservoir, on the joint of Golodnostepskoe plateau with Kyzylkum desert. A hollow of Aydar lake which is the largest among the lakes of AALS, reaches in east and southeast directions along the submountane part of Nuratau ridge more than 130 km, passing then in a hollow of Tuzkan lake. From Chardara water basins in southwest direction to them adjoins the circuit of East Arnasay lakes, stretched almost on 70 kms and collecting water of the basic collectors of Golodnaya steppe.

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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.

	Latitude	Longitude
1	40⁰ 57’ 19” N	66⁰ 35’ 41” E
2	40⁰ 35’ 43”	67⁰ 29’ 28”
3	40⁰ 55’ 30”	68⁰ 56’ 13”

9. General location:

AALS is located in the eastern part of Uzbekistan, near to the frontier of the Republic of Kazakhstan on two administrative territories: Dzhizak and Navoi Regions. The nearest settlements are Jangikishlak and Gagarin cities.

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

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

Average elevation – 245 m above the sea level, maximum – 247 m above the sea level

11. Area: (in hectares)

Area of AALS is 363000.00 hectares;
Area of the Ramsar site is 527100 hectares

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12. General overview of the site:

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

AALS represents the waste type reservoir located in southeast Kyzylkum desert (saline soil Aydar), formed as a result of emergency dump of water from Chardara water basins in 1969 (20.1 km^3), at the moment it has about 42 km^3 of water, at the expense of collector-drainage waters.

It is the largest in Uzbekistan habitat with more than 100 species of waterbirds. Among them 24 species are included in the Red Book of the Republic of Uzbekistan and 12 species of which are included in IUCN International Red List Being in the center of a migratory flyway of waterbirds, AALS plays extremely important role as a place of mass wintering of waterbirds.

The basic migration flyways of waterbird species in Uzbekistan pass through the main waterways - Syrdarya and Amudarya rivers. Aydar Arnasay Lakes System is located on the flyway of birds and now it is one of the largest reservoirs of Uzbekistan and the largest reservoir of the Central Asia.

Uzbekistan is at the cross-roads of two migratory birds flyways: the Afro-Euroasian and the Central - Asian Flyways which include tens of European, Asian and African countries.

The Central - Asian flyway of migratory birds covers the big continental zone of Eurasia and the Arctic open spaces up to Indian ocean, unites some important migratory routes of waterbirds, the majority from which reaches from northern regions of Russia up to the most southern wintering territories in the Western and Southern Asia, in Maldives and the British territories in Indian ocean. The region of a flyway includes more than 30 countries of Northern, Central and Southern Asia and Transcaucasia. Uzbekistan is located in the Central Asia and is in the center of a migratory way. The Central - Asian flyway unites 274 populations of the migrating waterbirds belonging to 175 species, including 26 global endangered and threatened species.

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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	3	4	5	6	7	8	9
❑	☑	❑	☑	☑	❑	☑	☑	❑

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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 table below provides the threatened list of species in the site:

Species			[1] IUCN Threatened status	[2] CMS status	[3] National Status
English name	**Scientific name**	**Vernacular name**			
White-headed Duck	*(Oxyura leucocephala)*	Savka	En	-	En
Ferruginous Duck	*(Aythya nyroca)*	Beloglaziy nyrok	NT	I/II	En
White-tailed Sea-eagle	*(Haliaetus albicilla);*	Orlan-blojhvost	LC	I/II	En
Siberian White Grane	*(Grus leucogeranus)*	Sterkh	-	-	En
Pallid Harrier	*(Circus macrourus)*	Stepnoy lune	NT	-	En
Sociable Lapwing	*(Chettusia gregaria)*	Krechetka	CR	I/II	En
Little Bustard	*(Tetrax tetrax)*	Strepet	-	-	En
Asian Dowitcher	*(Limnodromus semipalmatus)*	Aziatskiy bekasovidniy veretennik	-	-	En
Dalmatian Pelican	*(Pelecanus crispus)*	Kudryaviy Pelikan	Vu	I/II	Vu
White Pelican	*(Pelecanus onocrotalus)*	Rozoviy Pelikan	-	-	Vu
Pygmy Cormorant	*(Phalacrocorax pygmaeus)*	Maliy Baklan	LC	I/II	Vu
White Spoonbill	*(Platalea leucorodia)*	Kolpitsa	-	-	Vu
Mute Swan	*(Cygnus olor)*	Lebed-shipun	-	-	Vu
Whooper Swan	*(Cygnus cygnus)*	Lebed-klikun	-	-	Vu
Red-breasted goose	*(Rufibrenta ruficollis)*	Krasnozobaya Kazarka	En	I/II	Vu
Lesser White-fronted goose	*(Anser erytropus)*	Piskulka	Vu	I/II	Vu
Osprey	*(Pandion haliaetus)*	Skopa	-	-	Vu
Imperial Eagle	*(Aquila heliaca)*	Mogilnik	Vu	I/II	Vu
Pallas Sea-eagle	*(Haliaetus leucoryphus)*	Orlan Dolgokhvost	Vu	I	Vu
Black Vulture	*(Aegypius monachus)*	Cherniy Grif	NT	-	Vu
Spotted Eagle	*(Aguila clanga)*	Bolshoy Podorlik	-	-	Vu
Black-winged Pratincole	*(Glareola nordmanni)*	Stepnaya Tirkushka	-	-	Vu
Corn Crake	*(Crex crex)*	Korostel	-	-	Vu
Turkestan Barbel	*(Barbus capito cjnjcephalus)*	Turkestanskiy usac	-	-	Vu

[1] = IUCN Red List of Threatened Animals (Abbreviations: CR = Critically endangered; EN = Endangered; VU = Vulnerable; NT = Near-threatened; LC = Least Concern)
[2] = Convention on Migratory Species (CMS) (Abbreviations: I = Appendix I species; II = Appendix II species).
[3] = National Red Book of Threatened Species (Abbreviations: EN = Endangered; VU = Vulnerable;).

Criterion 4: The reservoir and its shallow water areas are habitat of many species of flora and fauna. A reservoir is a habitat of following waterbirds: Grebs *(Podicipediformes)*, Totimplate *(Pelrcaniformes)*, Ciconiformes *(Ciconiformes)*, Swans, Geese, Ducks *(Anseriformes)*, Rails *(Rallidae)*, Shorebirds *(Charadriiformes)* and other species.

The species around the reservoir are : Wild Boar *(Sus scrofa)*, Badger *(Meles meles)*, Jungle Cat *(Felis chaus),* Golden or Indian Jackal *(Canis aureus)*, Muskrat *(Ondatra zibethicus)*, Nutria *(Myocastor coypus)*, Ciconiformes *(Ciconiformes)*, Rails *(Rallidae)*, Pheazant *(Phasianus colchicus)*, Diesed Snake *(Natrix tessellate)*, Marsh Frog *(Rana ridibunda)*. Many species of animals, as a rule, in the distance from a reservoir do not meet, or are not numerous: Jungle Cat *(Felis chaus)*. The coastal vegetation consists of mainly reed associations and habitat for above specified animals. The grassy vegetation is a forage for wild and pets.

The site is habitat for more than 100 species waterbirds.

Criterion 5: according to the wintering waterfowl counts since 1989, the total number of wintering waterfowl have met, or exceeded 20,000 waterbirds. Other species of waterbirds were not taken into account. During the 2003 international winter waterfowl count, some 96,600 birds of 37 species were recorded. In January 2004 was identified 61,000 of birds of 45 species:

4 species of grebe (Podicipediformes): Dalmatian Pelican *(Pelecanus crispus)* – Kudryaviy Pelikan, White Pelican *(Pelecanus onocrotalus)* – Rozoviy Pelikan, Pygmy Cormorant (*Phalacrocorax pygmaeus*) – Maliy Baklan, Grey Heron (*Ardea cinerea)* – Seraya Tsaplya, Great Egret *(Egretta alba*) – Belaya Tsaplya, Little Heron *(Egretta garzetta*) – Malaya Belaya Tsaplya;

19 species of Anseriformes *(Anseriformes*): Common Crane (*Grus grus*) – Seriy Juravl, Common Coot (*Filica atra)* – Lysukha, Redshank *(Tringa totanus*) – Travnik;

6 species of birds of prey (*Falconiformes*), Marsh Owl (*Asto flammeus*) – Bolotnaya Sova, Pheasant (*Phasinus colchicus*) – Phasan:

4 species of gulls *(Laridae*) and others.

Criterion 7: The site harbors 28 species of fish, including 14 food fishes. Pickerel (*Esox lucius*) – Shuka, Carpbream (*Abramis brama*) – Lesh, Zherekh (*Aspius aspius*) – Jerekh, Crucian Carp (*Carassius auratus)* – Karas, Grass Carp (*Ctenopharyngogon idella*) – Beliy Amur, Carp (*Cyprinus carpio*) – Sazan, Silver Carp (*Hypophthalmichthys molitrix)* – Tolstolobik, Spotted Silver Carp *(Aristichthys nobilis)* – Pestriy Tolstolobik, Sabrefish (*Pelecus cultratus*) – Chekhon, Roach *(Rutilus rutilus*) – Plotva, Redeye *(Scardinius erythrophthalmus)* – Krasnoperka, Wels *(Silurus glanis*) – Som, Zander *(Ctizostedion lucioperca*) – Sudak, Mudfish (*Channa argus)* – Zmeegolov.

Turkestan Barbell *(Barbus capito*) – Turkestanskiy Usach is included in the Red book of Uzbekistan.

Criterion 8: On the reservoir 14 species of fishes are constantly live and reproduce.

The site is an important source of food species for fishes, spawning ground, nursery and migration path on which fish stocks.

Pickerel (*Esox lucius*) – Shuka, Carpbream (*Abramis brama*) – Lesh, Zherekh (*Aspius aspius*) – Jerekh, Crucian Carp (*Carassius auratus)* – Karas, Grass Carp (*Ctenopharyngogon idella*) – Beliy Amur, Carp (*Cyprinus carpio*) – Sazan, Silver Carp (*Hypophthalmichthys molitrix)* – Tolstolobik, Spotted Silver Carp *(Aristichthys nobilis)* – Pestriy Tolstolobik, Sabrefish (*Pelecus cultratus*) – Chekhon, Roach *(Rutilus rutilus*) – Plotva, Redeye *(Scardinius erythrophthalmus)* – Krasnoperka, Wels *(Silurus glanis*) – Som, Zander *(Ctizostedion lucioperca*) – Sudak, Mudfish (*Channa argus)* – Zmeegolov.

7 species of these fishes have commercial importance, such as:
Carp (*Cyprinus carpio*) – Sazan, Silver Carp (*Hypophthalmichthys molitrix)* – Tolstolobik, Wels *(Silurus glanis*) – Som, Mudfish (*Channa argus)* – Zmeegolov, Zherekh (*Aspius aspius*) – Jerekh, Crucian Carp (*Carassius auratus)* – Karas, Carpbream (*Abramis brama*) – Lesh.
The other species are produced in few amounts.

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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:

Paleartic zone

b) biogeographic regionalisation scheme (include reference citation):

- Udvardy, M. D. F. (1975). *A classification of the biogeographical provinces of the world*. IUCN Occasional Paper no. 18. Morges, Switzerland: IUCN.

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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: Aydar Arnasay Lakes System is located on the irrigated massive of Golodnaya steppe and Kyzylkum desert.

Origin (natural or artificial): It is formed as a result of emergency dump of water from Chardara water basin in 1969.

Hydrology: the area is 3478,7 km^2, the total area is 199,38 km^2, length is 160,36 km, average width is 21,78 km, the maximal width is 34,86 km, average depth is 12,54 m, the maximal depth is 33,64 m.

Since 1993 year in the lake system annually dump water from the Syrdarya river. Total volume of dumped water from 1993 to 2006 is 38.6 km^3. (Annex I).

Type of soil: light gray soils, serozem-meadow ground with transition to deserted soils. Pedogenic soil on the basic part of territory of Golodnaya steppe is loess like silty loams covering with a cover by capacity of 1-2 m, layered adjournment lieing under it. Character of soil salification is various, take place as sulphatic, and chloridinum types of salification. AALS territory is located on West of Navoi region in southern part of Kyzylkum desert, mainly ridged, fixed by vegetation.

Water quality : AALS in a modern condition concern to medium and strongly saltish, to II type of sodic group of sulphate class, with a high contents of chloride ions. At the end of 2006 the mineralization of waters has made 7.4 g/l. In summertime thermal mode renders a major effect on water quality.

Nowadays collectors have become the main systems of desalinization of the lakes by forming low mineralized zones where they confluence. But even the main desalters are annual dumps from Syrdarya river.

Thermal mode of the lakes during summer period mainly influences the quality of the water in the lakes. Steady thermal stratification of the summer period prevents strong vertical circulation and water exchange of superficial waters with deep layers that is a principal cause of formation of oxygen deficiency. Long thermal stratification can be result of formation an anaerobic conditions and occurrence of hydrogen sulphide in the depth water.

During the spring period concentration of polluting substances on the most part of a reservoir is below maximum-permissible concentration (MPC). This allows the use of the reservoir for development of a fish farming.

Depth and constancy of water: The analysis of modern condition of AALS has shown, that in case of the discontinuance of receipt fresh water in volume 1.5 км3 there will be a threat of sharp falling of a water level in lakes, that in turn can lead to:

- reduction of water area, as a result of evaporation;
- increase a mineralization of water;
- reduction of fish resources;
- degradations and drying or disappearance of a vegetative cover in
- reduction amount of species of migrating birds;
- transmission of dust and salt on the big distances from the drained bottom of a reservoir.
- Changes of a water level – in 1970 - 18.6 km^3, in 2006-42.7 km^3. Depth up to 30 m, average depth of 8-10 m.
- Ebb-tide variations are not present
- The area of the bottom stream not present
- A climate sharply continental with cold pure snow winter and dry hot summer. Difference makes temperature of air 3-4C^o, and humidity - 4-5 millibar.

In the region significant gradients of meteorological characteristics are mentioned and at the same time it is mentioned that the continentality of the climate increases from East to West.

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17. Physical features of the catchment area:

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

Eolian relief forms occupy the basic part of the territory, composing extensive sandy plain of east surburb of Kyzylkum desert. Ridge sand is advanced only in the south of the territory and represents linearly extended ridges in a northwest direction and interridge lowerings. Their height reaches 8-14 m,

width of 300-600 m, extent up to 10 kms. Northeast slopes are abrupt (up to 45^0), southwest are canopy ($10\text{-}15^0$). Sand are fixed by grassy vegetation. Hilly-ridge relief is advanced in western and east part of the territory and represents the merged ridges of the various form in height of 10-30 m. Width of hillocks up to 400 m. Extent of ridges up to 1-8 kms. The ridge-cellular relief is advanced in the central part of territory and has meridional extended form. Width of ridges of 200-300 m, extent of 600-700 m. The height reaches to 14-20 m. Slopes are symmetric and also have a steepness of $20\text{-}30^0$, and settle down from each other on distance of 300-500 m, depth of interridge cells of 6-8 m, boards are abrupt (up to 40^0).

The soils of the Dzhizak region are light gray and serozem-meadow with transition to deserted.

Pedogenic soil on the basic part of territory of Golodnaya steppe is loesslike silty loams covering with a cover by capacity of 1-2 m, layered adjournment lieing under it. Character of soil salification is various, take place as sulphate, and chloride types of salification.

AALS is located on the West of Navoi region in southern part of Kyzylkum desert, mainly ridged, fixed by vegetation.

Aydar Arnasay Lakes System is located on a joint territory of two climatic subdistricts with distinguished hydrometeorological characteristics - an irrigated massive of Golodnaya steppe and Kyzylkum desert. In the territory are marked significant gradients of meteorological characteristics, thus is traced strengthening of continentality of a climate from East to West

Along hollows of Aydar and Tuzkan lakes, reaching on 180 km in a western - northwest direction, drop of air temperature reaches $3\text{-}4^0$C, and humidity - 4-5 mbar. Continentality of a climate increases with promotion to the West.

The air humidity measured on continental meteorological stations during summer period, is lower on 2-4 mbar, than observable above lakes water aquatory. Drop of air temperature above a land and a reservoir reaches 1-3 degrees.

Lakes thermal mode is characteristic for southern shallow reservoirs with intensive warming up during the spring period, with high maximum reaching on urgent supervision of 30 °, and long ice-free period. Last years were marked the ice phenomena with duration made 10-30 days, but, whereas climatic duration of ice stay does not exceed 5-10 days. On the average the steady ice phenomena is observed once per 10-11 years. For additional information (Annex II).

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18. Hydrological values:

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

AALS feed by drainage and waste river waters and it is a buffer zone for prevention of destructions from flooding on territory of The Republic of Kazakhstan. The reservoir represents the store of collector-drainage waters which cannot be used for needs of an agriculture without additional clearing. It is used for emergency dump of water from Chardara water basins during a spring high water in Syrdarya river.

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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.

Inland:
Q – major part of reservoir
R – small part of reservoir
P – some part of the territory between Arnasay and Tuzkan lakes
O – some part of Arnasay lake(approximately 2-3 thousand hectares)
Human-made:
1 – all territory
5 – major part of territory
6 – small part of territory

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.

The whole territory of the wetland are a habitat of animals and plants. The reservoir comprises of communities of animals and plants and vegetation is deserted with fixed and half fixed sand, low barchans.

The vegetation is submitted basically by reed communities, saltworts, tamarisk.

Being in the center of a migratory flyway for waterbirds, AALS plays extremely important role as a place of rest of birds during seasonal migrations, breeding, mass winterings.

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*.

Flora is represented basely by reed vegetation: Reed grass *(Phragmites communis)* – Trostnik, Blackamoor *(Typha latifolia)* – Rogoz Shirokolistniy, Glassworts *(Salsola)* – Solyanka, Tamarisk (*Tamarix hispida)* – Grebenshik and others.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. 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*.

The wetland supports about 100 species of waterbirds.

In addition to the above mentioned 24 species, which are included in the Red Book of the Republic of Uzbekistan and in the IUCN International Red List the territory is habitat of many species of waterbirds, few of which are presented below:

Cormorant or Great Cormorant *(Phalacrocorax carbo)* – Bolshoy Baklan, Great Egret *(Egretta alba)* – Bolshaya Belaya Tsaplya, Greylag Goose (*Anser anser)* – Seriy gus, Mallard (*Anas platyrhynchos)* – Kryakva, Green-winged Teal (*Anas crecca)* – Chirok-Svistunok, Gadwall (*Anas strepera)* – Seraya Utka, Garganey (*Anas querquedula)* – *Chirok-Trestunok*, Red-Crested Pochard *(Netta rufina)* – Krasnonosiy Nirok, White-tailed Sea-eagle (*Haliaeetus albicilla)* – Orlan Belokhvost, Eurasian Coot (*Fulica atra)* – Lisukha, Black-Winged Stilt (*Himantopus himantopus)* – Khodolochnik, Yellow-legged Gull (*Larus cachinnans)* – Yujnaya Khokhotunya, Little Tern (*Sterna albifrons)* – Malaya Krachka, Pallas's Sandgrouse (*Syrrhaptes paradoxus)* – Sadja

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:

Wetland includes hunting and fish farm facilities. . In the wetlands, actions are taken continuously to improve habitat and farming efficiency and actions directed to protect of species of biodiversity. The reservoir is used for the recreational purposes.

AALS is used by population for getting food stuffs (meat of wild animals, fish), reed vegetation is also used by local people for building temporary constructions

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 ☑ 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:

- State property. It is located in two administrative territories: on Dzhizak and Navoi regions.

b) in the surrounding area:

- State property. It is located in two administrative territories: on Dzhizak and Navoi regions.

25. Current land (including water) use:

a) within the Ramsar site:

The AALS is rented for aquaculture and industrial fishing purposes. In AALS territory, fishing accounted in 1987 - 51,4 %; in 1988 - 56,7 %; in 2002 - 75,1 %; in 2003 - 73,5 %; and in 2005 - 41,6 % of the total amount of fish got by fishing from natural reservoirs in territory of the Republic of Uzbekistan.

By acceptance of actions on stable maintenance of water at certain level, on excluding the incensement of the water mineralization, and taking actions in high level on protection, reproduction and rational use of fish resources, in the nearest years it is possible to reach fishering to 5 - 10 thousand tons annually.

b) in the surroundings/catchment:

The territory is used basically as pastures.

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:

Instability of water inflow, increase of a mineralization of water.

b) in the surrounding area:

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.

The most part of the AALS territory is located in territory which is planned for Nuratau-Kyzylkum biosphere reserve (I) (project UNDP/GEF/Government of the Republic of Uzbekistan).

. In 1983 under the decision of the Government there was created Arnasay ornithological zakaznik (type of protected area) which unites three reservoirs - Tuzkan, Arnasay and Aydar. This zakaznik is rich for waterbirds and there are many bird colonies.

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

Ia ❑;Ib ❑; II ❑; III ❑; IV ☑; V ❑; VI ❑

On the territory of AALS is located the State "Arnasay" ornithological zakaznik (type of protected area), covering 63,000 hectares.

The site was designated on the 09/09/1983/

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

«Action Plan for maintenance of stability of ecological conditions and effective use of Aydar Arnasay Lakes System (AALS) for the Republic of Uzbekistan for 2008-2015 years» was developed in Governmental level and approved by the Government in the aim of preservation and maintenance of a stable condition of water ecosystem Aydar Arnasay Lakes System as a reservoir, which has fishery and social economic value for Uzbekistan,.

d) Describe any other current management practices:

AALS territory is a fishery reservoir where industrial fishing is conducted. It has hunting farms. Water area of the reservoir is in competence of natural resources users, who are at the same time carry out protection of territory and reproducing actions. The territory is under protection of the state bodies of nature protection.

28. Conservation measures proposed but not yet implemented:

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

The wetland's management plan for a site is being prepared . AALS is under the protection of the state bodies of nature protection and at the same time it is carried out departmental protection by nature users.

29. Current scientific research and facilities:

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

There have been conducted on the cadastres of flora and flora, published scientific publications about wetland, including of international value of the site , including national and international editions. In 2000-2003 , international counts of wintering waterbirds were conducted.

The State Committee for Nature Protection and Academy of Sciences of the Republic of Uzbekistan has prepared projects on scientific researching, management and protection for AALS. The additional financing is required for the additional funding of these projects.

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.

The Information Centre was created within the framework of the project UNDP/GEF/Government of Republic of Uzbekistan "Creation of Nuratau Kyzykkum Biosphere reserve as a model of preservation of a biodiversity of Uzbekistan" in the territory of Tuzkan and Aydar lakes.

The State Nature Protection bodies, societies of hunters and fishers continuously held meetings with local population and inform them on importance of wetland, and distribute posters. The special determinant of waterbirds for hunters, and also a field determinant of waterbirds of Uzbekistan and Central Asia reservoirs for students, experts and wide audience of the population were published.

31. Current recreation and tourism:

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

AALS is widely used for the recreational purposes. Rest zones for workers, hunters and fishers are established.

32. Jurisdiction:

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

In the state level: the Government of the Republic of Uzbekistan.

In the territorial level: Dzhizak and Navoi regions mayoralties.

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.

1. Navoi region Khokimiyat (Municipality): 77 a, Khalklar dustligi str., Navoi city.
   Mr. Bakhretdin RUZIEV, Mayor.
2. Dzhizak region Khokimiyat (Municipality): 64, Sharaf Rashidov main str., Dzhizak city.
   Mr. Musa ANARBAYEV, Mayor.

34. Bibliographical references:

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

Annex I

Monthly volumes of dumps in Arnasay for the period 1993-2006

Year \ month	I	II	III	IV	V	VI	VII	YIII	IX	XII	Σкм^3
1993			1390	242		1019					2,651
1994	2281	3218	2619	982	185						9,285
1995	1044	2066	895								4,005
1996			1208								1,208
1997		762	482								1,244
1998		172	1937	109		918					3,136
1999	1508	946	644								3,098
2000	1118	1074									2,192
2001		351									0,351
2002				643	190	60	12	278	12		1,195
2003	569	1041	1222	1443	408					74	4,757
2004	923	994	463	485							2,865
2005	83	976	1216	4							2,279
2006		155	214								0,369
Total											38,635

Annex II

Intraannual course of temperature and air humidity above various areas of Aidar-Arnasay lake system

Reservior	I	II	III	IV	V	VI	VII	VIII	IX	X	XII	XII	Год
	Average long-term air temperature (°C)												
Eastern Arnasay	-3,1	-0,5	7,9	15,2	22,0	27,1	28,8	25,0	19,7	12,8	6,4	0,1	13,4
Tuzkan lake	-2,1	0,2	8,0	14,6	22,2	26,8	29,4	26,5	21,0	13,0	7,0	1,0	14,0
Eastern Aydar	-2,5	0,1	7,8	14,0	22,1	26,6	29,7	26,7	21,2	12,8	6,9	0,5	13,8
Western Aydar	-1,1	0,6	7,6	13,6	22,2	27,1	30,1	27,6	21,4	12,8	7,1	1,0	14,2
	Average long-term air humidity (mbar)												
Eastern Arnasay	4,2	4,8	7,3	10,9	12,3	13,0	14,2	12,5	9,8	7,8	6,9	4,9	9,0
Tuzkan lake	4,3	4,9	7,2	10,4	11,1	11,5	11,4	10,5	8,5	7,2	6,7	5,1	8,2
Eastern Aydar	4,2	4,7	7,1	10,2	10,4	10,6	10,8	9,7	8,0	6,9	6,7	5,0	7,9
Western Aydar	4,2	4,8	6,9	9,8	9,8	10,3	10,5	9,2	7,5	6,5	6,6	5,1	7,6