Information Sheet on Waterbird Network Sites (SIS)

Categories approved by Second Meeting of the Partners Partnership for the East Asian-Australasian Flyway Beijing, China 13-14 November 2007

Paper 3.13

Part 1: Essential Information

1. Name and contact details of the compiler of this form:

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2. Date this sheet was completed:

10th February 2008

3. Country:

Republic of Korea

4. Name of the Flyway Network site:

Junam Reservoir

5. Map of site included:

Yes

6. Geographical coordinates (latitude/longitude, in decimal degrees):

Latitude: 35^{O} 18’

Longitude: 128^{O} 41’

7. Elevation: (in meters: average and/or maximum & minimum)

Average: 5 m

Maximum: 7 m

Minimum: 3 m

8. Area:

Total area of Ramsar Site: 602 ha

- Junam Reservoir: 285 ha
- Dongpan Reservoir: 242 ha
- Sannam Reservoir: 75 ha

9. General overview of the site:

Junam Reservoir is made up of three reservoirs (Junam, Dongpan, Sannam) and this is why the wetlands are collectively known as Junam Reservoir. Originally, it was a riverine wetland in the lower part of the Nakdong River and situated in the inner part of the Daesan Plain. The reservoirs were constructed at a natural riverine marsh by installing dike in the 1920's for water supply to rice paddies. The three reservoirs are characterized as large population of wintering waterfowl, shallow water depth (ca, 30~200 cm), various aquatic plants, diverse fishes and invertebrates reside.

In this area, more than 200 kinds of various birds, amounting to 20,000 to 50,000, are spotted. This wetland is the one of the most important wintering habitat for waterbird and various kind of summer migratory birds use the area as breeding ground. In addition, many Baikal Teals, which are registered in the red data list of the International Union of the Conservation of Nature and Natural Resources (IUCN), stay here every year, amounting to 10,000 to 20,000, making this place an international hot spot for migratory birds. Moreover, internationally important waterbirds (Black-faced Spoonbill, White-naped Crane, Swan Goose, Falcated Teal etc.) use the wetland during the wintering season.

10. Justification of Flyway Site Network criteria

- **Refer to Annex Ⅰ**
- **a 2, a5, a6**

11. Wetland Types:

O(Refer to Annex Ⅱ)

12. Jurisdiction:

Changwon City, Korea Rural Community & Agriculture Corporation

13. Management authority:

Changwon City, Chanwon branch of the Korea Rural Community & Agriculture Corporation

14. Bibliographical references:

Jin-Young Park, 1993. Research on the ecology of bean goose and white-fronted goose in Junam Reservoir. Kyunghee Univ., Master course dissertation, 57 pp

Jae-Pyeong Yu and Gyu-Hang Ham, 1994. Field guide of birds in Junam Reservoir from 1989 to 1994. Kor. J. Orni., 1:95-103

Gyu-Hang Ham, 1998. Research on the condition of Natural Monuments (1988-1996) in Junam Reservoir. Kor. J. Orni., 6(1):63-71

Gyu-hang Ham, Chang-Suk Kim and In-Gyu Kim, 1999. Research on the species and number of birds in Junam Reservoir. Kor. J. Orni., (62):127-132

Gyu-hang Ham and Tae-Jwa Kim, 2001. Population Fluctuations of *Cygrus cygnus* and *C. columbianucs* During 11Years, on Junam Reservoir of Kyungsangnam - do 1989 – 1999. Kor. J. Orni., Vol 8. No 1:47-53

Ministry of Environment in, 2000. A census on winter birds. Pp. 131~132

Ministry of Environment in, 2001. A census on winter birds. Pp. 155~160

Changwon City, 2002. An environmental white paper

Part 2: Optional

15. Physical features of the sites:

Geographically, the reservoirs are located in the middle part of East Asian - Australian Flyway. Originally, these areas were formed after the glacial period, due to the accumulation of sediment by the rise of sea level.

Include this reservoir and Daesan Plain nearby the reservoir was just natural riverine marsh before the construction of embankment in Nakdong River. Therefore, the ecosystem of the wetland is close to natural marsh wetland. Water level of the reservoir is regulated for water supply in the rice paddy.

16. Physical features of the catchment area:

Surface area: 602 ha

Average air temperature: 15.18 □

Precipitation: 1,508 mm

17. Hydrological values:

Water supply for the rice paddy

Water regulation: pumping facilities

18. General ecological features:

Plant: 233 species include unique aquatic plants

- *Euryale ferox, Nymphoides peltata, Nymphoides indica, Hydrocharis dubia, Trapa japonica, Acorus calamus var. angustatus, Salix koreensis, Monochoria korsakowi* etc.

Insect: 298 species

- Hemiptera, Coleoptera, Odonata, Hymenoptera, Orthoptera, Lepidoptera and Dermaptera etc.

Fish: 29 species

- *Hemiculter eigenmanni, Squalidus chankaensis tsuchigae, Micropterus salmoides, Carassius cuvieri, Lepomis macrochirus* etc.

21. Social and cultural values:

Social values: Junam Reservoi is located in Changwon City which will host RAMSAR COP 10 2008. It is the place where human beings and nature come together. With its convenient access from nearby cities such as Busan, Gimhae and Masan, Junam Reservoir becomes a famous place for experiencing ecological environment. Annually people visit the wetlands in order to observe migratory birds and aquatic plants, and visiting to Junam Wetlands Eco-learning Center.

Cultural values: Besides the natural environment, there are cultural and natural properties such as Grove of *Kalopanax pictus*(Natural Monument No. 164), Daho-ri Ancient Tomb site, Habsan Shell Mount and Junam Stone Bridge.

Wise use: Ministry of Environment has established two conservation methods

- Regulation of water level in the Dongpan Reservoir for waterbird
- Winter barely fields as a waterfowl food source as a Biodiversity Management Plan nearby Junam Reservoir from 1999

22. Land tenure/ownership:

a) Within the Flyway Network site: Government

b) In the surroundings: private

23. Current land (including water) use:

a) Within the Flyway Network site: water supply in the rice paddy

b) In the surroundings: farming

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

Visitor centre: Local people and student education, Information service, Ecological research etc.

Annex 1: Criteria for the inclusion of sites in the Flyway Site Network

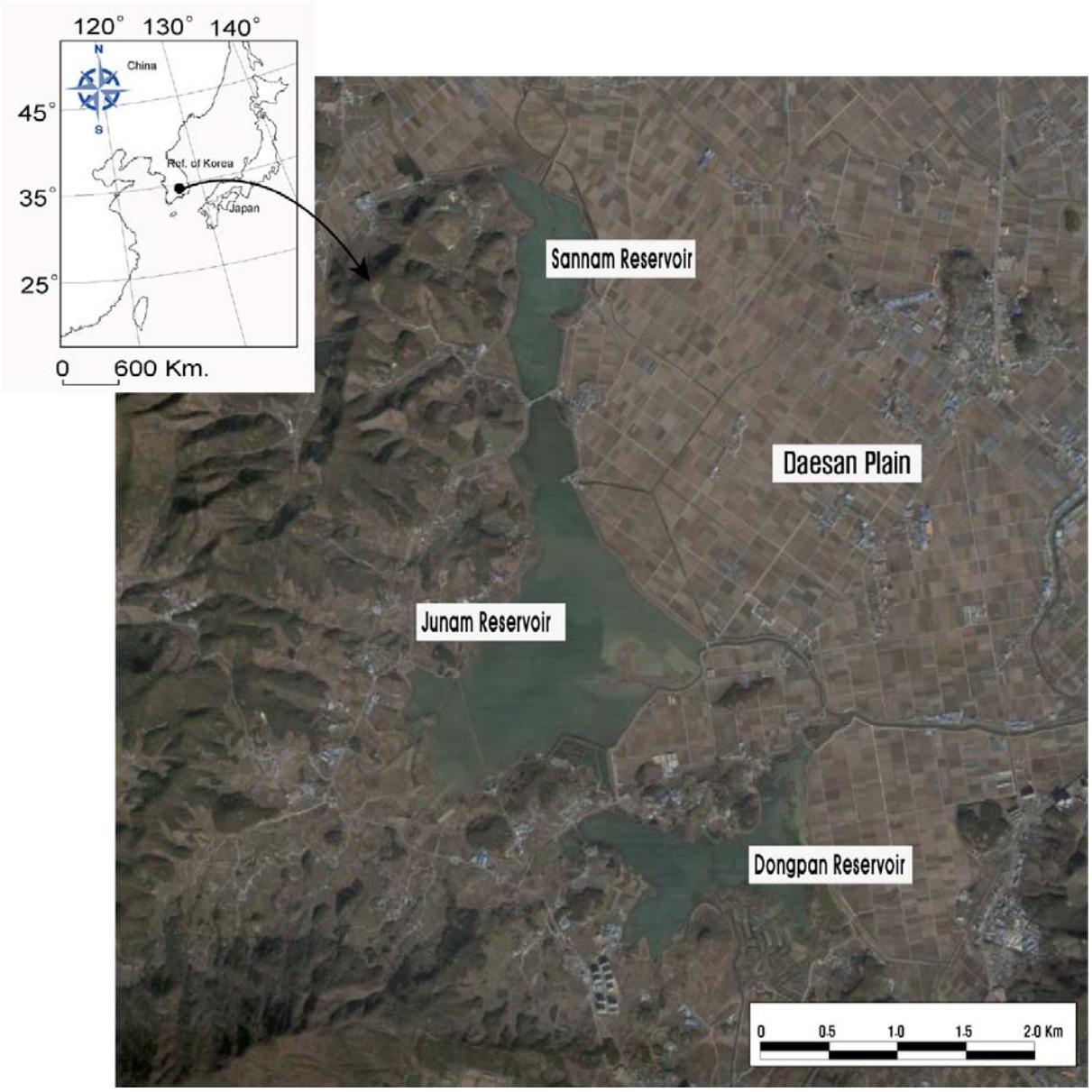
※ Major Reference: Monitoring result from waterbird manager in the Junam Reservoir Eco-learning Centre

- It regularly supports 50,000 or more waterbirds (about 50,000 Ind.).
- It regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

Scientific name	Common name	Population		1% individual		Peak count	Year	Ratio (%)	
		world	route	world	route			world	route
Anser fabalis	Tundra Bean Goose		80,000		800	2,587	2007.12		3
Anas formosa	Baikal Teal	500,000		5,000		50,450	2006.12	11	
Anas falcate	Falcated Teal	35,000		350		400	2007.1	7	
Grus vipio	White-naped Crane	7,500	3,500	75	35	223	200.6.11	3	7
Grus monacha	Hooded Crane	10,160	8,700	100	85	253	2005.11	2.5	3

- It supports appreciable number of an endangered or vulnerable population of migratory waterbird.

Scientific name	Common name	Registered IUCN Red Data Book			Count	Year
		VU	EN	NT		
Platalea minor	Black-faced Spoonbill		◎		1	2007.12
Anser cygnoides	Swan Goose		◎		20	2006
Ciconia ciconia	White Stock		◎		1	2006.12
Anas formosa	Baikal Teal	◎			50,450	2006.12
Anas falcata	Falcated Teal			◎	400	2007.1
Aythya baeri	Baer`s Pochard	◎			1	2006.12
Grus japonensis	Red-crowned Crane		◎		1	2004.1
Grus monacha	Hooded Crane	◎			253	2005.11
Grus vipio	White-naped Crane	◎			223	2006.11



- **Map of the Junam Reservoir**