

Annual Water Fowl Estimations

Pong Dam Lake Wildlife Sanctuary

2015-16

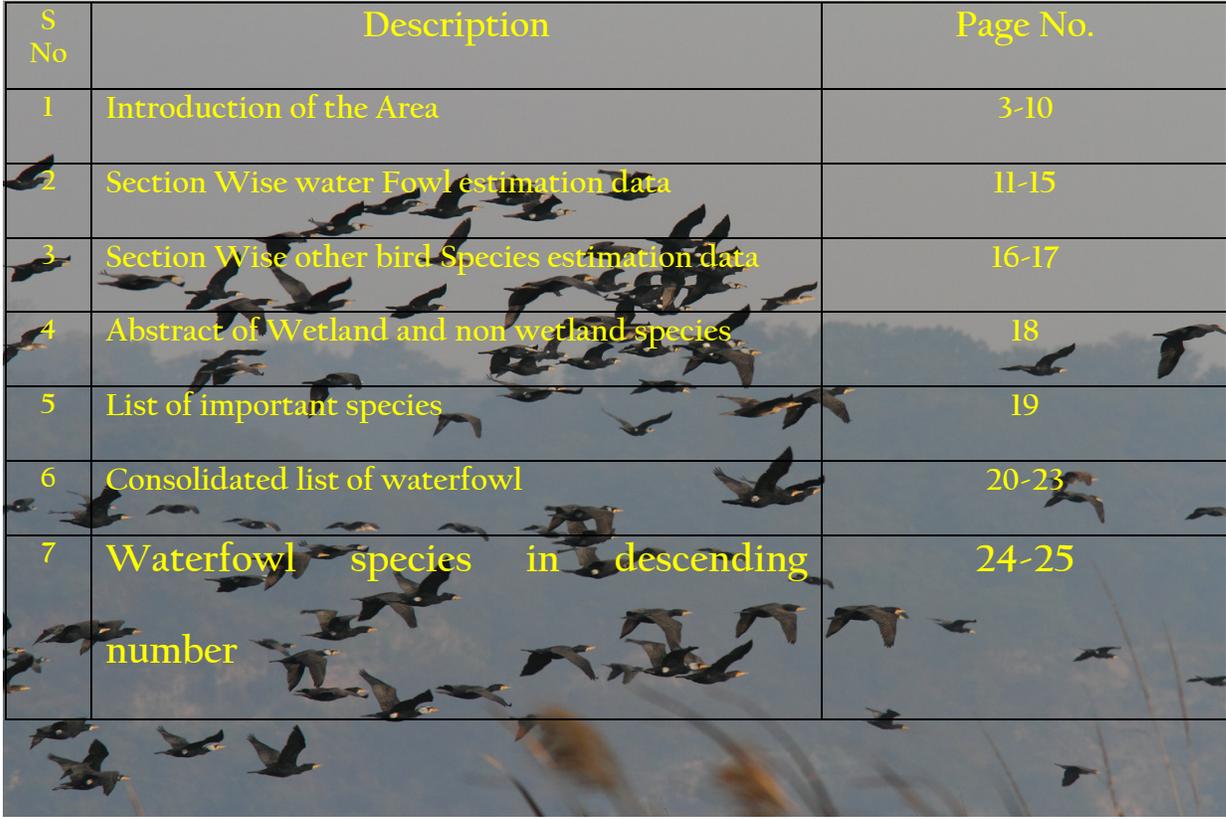
(03.02.2016)



(Report Edited, Compiled & got uploaded on HPFD Web site
by A R M Reddy IFS, CCF(WL), office of PCCF (WL) HP)

INDEX

| S No | Description | Page No. |
|------|---|----------|
| 1 | Introduction of the Area | 3-10 |
| 2 | Section Wise water Fowl estimation data | 11-15 |
| 3 | Section Wise other bird Species estimation data | 16-17 |
| 4 | Abstract of Wetland and non wetland species | 18 |
| 5 | List of important species | 19 |
| 6 | Consolidated list of waterfowl | 20-23 |
| 7 | Waterfowl species in descending number | 24-25 |



INTRODUCTION

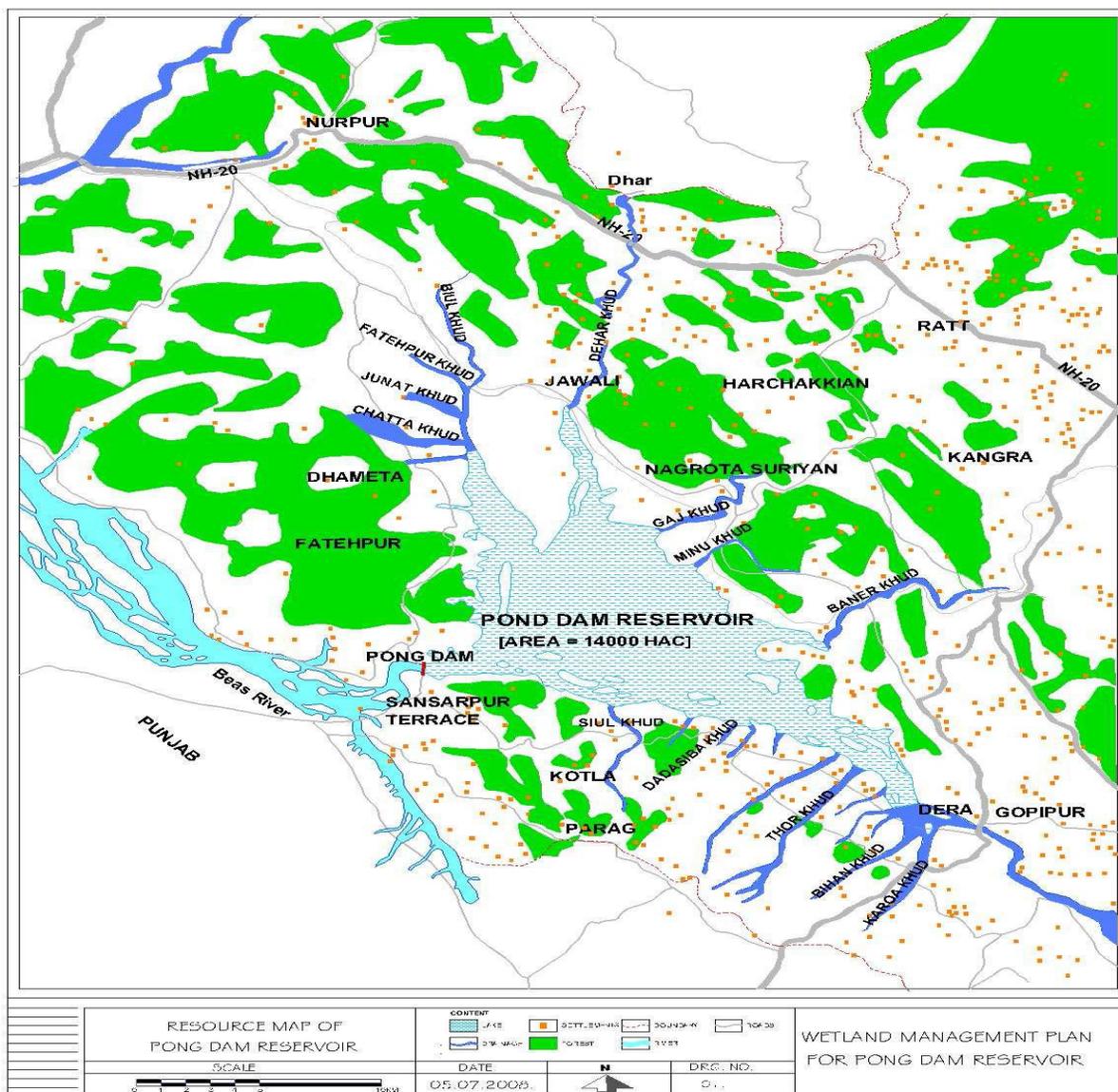
1.1 NAME, LOCATION, CONSTITUTION AND EXTENT OF AREA:

The Pong Wetland lies between Latitude $31^{\circ} 80'$ to $32^{\circ} 7'26''$ N and Longitudes $75^{\circ} 8'$ to $76^{\circ} 25'$ E is a manmade wetland. It is one of the highest earth core gravel shell dam in India, impounded across the River Beas in Kangra District of Himachal Pradesh. It was commissioned in 1974, primarily for power generation, irrigation and flood control. The Maharana Pratap Sagar reservoir that was created due to construction of dam has a catchment area of 12,562 km² having a total length of 41.8 km and maximum breadth of 19 km. a surface area of 24, 529 ha at Full Storage Level (FSL) and 6,312 ha at Dead Storage Level (DSL) averaging around 15,000 hectares. The elevation of the dam is 435.86 meters (1430feet). The mean water depth is 35.7 meters. The River Beas while meandering through the valley receives a number of tributaries, the principal ones being the Manalsu, the Parbati and the Sainj on the left bank and the Uhl on the right bank. The River also receives the whole drainage of the southern slopes of Dhauladhar range of mountains. The Beas and its principal tributaries are snowmelt or glacier fed, hence perennial, but the flow rate in the river fluctuates widely ranging from 13,6415 to 6,855 million m³ during the course of the year. The inflow rate increases with the influx of snowmelt water and continues till August-September due to the monsoon runoff. The reservoir is at its highest level during July and lowest in February, ranging from 8,215 to 15,335 million m³, but 7,290 million m³ is the live storage capacity. The reservoir water is clear almost throughout the year expect monsoon season. The approximate water surface altitude ranges from 330 to 430 meters.

Depending on the intensity of monsoon, there is sufficient land area that is left not submerged. This area is utilized by the Gujjar community during the monsoon season, as a transit point. Apart from this it is also utilised for agrarian purposes in Rabi season. The preferred Rabi crop is generally Wheat and Mustard, while in certain areas like Guler multiple crop varieties of vegetables like Cauliflower, Radish, Turnips, Ginger, Onion, Garlic, Tomatoes and Capsicum are reportedly grown. Nearly 4000 hectares of land that opens up in the post monsoon season is used for cultivation.

Pong Lake (reservoir) now called as Maharana Partap sagar lake came into existence with the construction of Earthen Management Dam at a place known as “Pong” across the river Beas which was completed during the year 1975-1976. This largest man made wet land of Northern India, located in the district Kangra of Himachal Pradesh (**Map No-1**) lies between latitude $31^{\circ} 49' 50''$ to

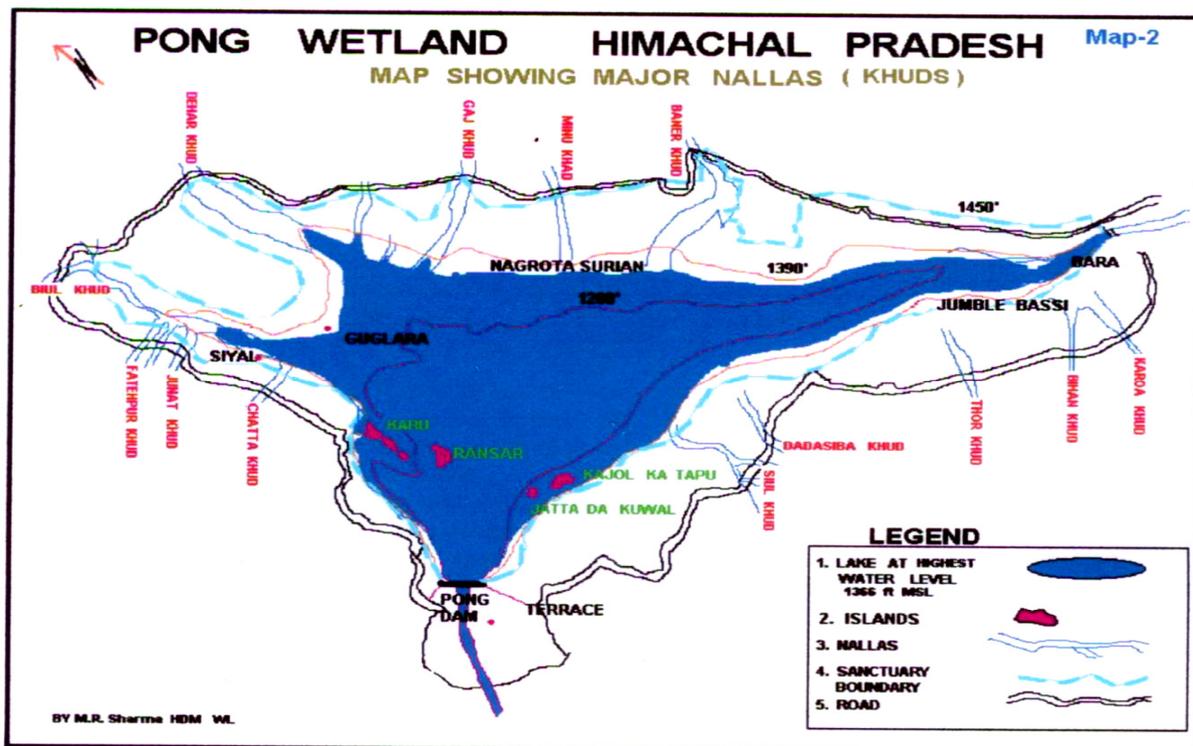
32° 14' 36" N and longitude 76° 53' 31" to 76° 17' 53" E. It comprises of a total geographical area of 207 sq. km mainly up to 1410 ft. mean sea level falling in Nurpur and Dehra Forest divisions. Its total catchments area of 12562 sq. km. is lying in Kangra, Mandi and Kullu districts with Himalayas in the back ground and Shiwalik foothills in fore front. (MAP No-1)



Map-1

The Government of Himachal Pradesh proclaimed this wetland as a Wildlife (Bird) sanctuary during 1983 vide Notification No. Fts. (f) 6-5/82 dated Shimla-2, the 01.06.1983. The final notifications of this wetland as a Wild life (Birds) sanctuary was issued vide Notification No. FEE-B-F(6)-8/99 dated Shimla, the 23.10.1999. This sanctuary was declared a wetland of National Importance by the Ministry of Environment and Forests, Govt. of India during 1994. This is the

first wetland in the state to have gained the distinction of the Status of a “Ramser Site” in an international forum of environmentalists gathered in Spain during 2002. Below Pong Dam, a barrage has been constructed during 1985-86 at “SATHANA”. From this barrage, “Shah Nehar” canal originates. The total distance from Pong Dam to Barrage is about 4 Km. This barrage constitutes a shallow water body enclosing about 3 sq. km. area, it is a harbor of wide variety of migratory birds.



1.2 THE STATEMENT OF SIGNIFICANCE:

This is the first major wetland which potentially offers a transitory wintering ground for the migratory birds such as Bar Headed Geese, Ruddy shell duck, Pintails, Coots, Pochards, Gulls, Red Necked Grebes, Cormorants, Mallards etc. coming from the trans Himalayan zone in the winter season when the wetlands in the Europe and North and central Asia become frozen due to onset of winters and there is a great scarcity of food for these birds. Thus, the flocks of migratory birds fly miles together to Pong Lake to spend winter in more congenial climatic conditions from October to March every year. These birds breed in their native land during succeeding summers.

The Rare species viz. Red Necked Grebes (first time recorded in 1992), White Fronted Goose, Whooper Swan, Indian Skimmer, White rumped Vultures, Black bellied Tern and many Ducks ,Waders species have been noticed every year during winters. Bar Headed Geese can be seen in the largest congregations of the world in this wetland, occupy more than 45% of the total

world population in Pong lake alone. The Pong reservoir has immense untapped potential for various activities such as bird watching, camping sites, water sports, trekking trails, thick forests, religious places, heritage villages and sites, conservation of rare and endangered species and mainly the tourism. This wetland possesses all the merits which the children, students, authors, poets, saints, environmentalists, anglers, tourists, adventurers and sportsmen require. This lake alone can be the best Birds Paradise and can yield the high amount of revenue to the GOHP.

Prior to the construction of the Pong dam, river Beas used to provide livelihood to a few fishermen and that is too of low income. But, now, a huge water body of lake provides employment to 2200 fishermen. During the first year, the total catch of fish in the Pong lake was only 98 MT, whereas now the catch touched the peak of 779 MT during 1987-88, it is now over 400MY a year. In the initial years while the dam and the storage were fresh, the fish species reared were Rahoo, Katlla, Mirgal, Mirror carps, silver carps, Mahaseer, Singhara etc. which were evenly distributed. Now the Singhara has occupied the top place of its total catch which, itself, is a fish - eater. This reservoir is famous for Mahaseer angling competition. The fisheries department is also on the toes for the welfare of poor fishermen. The four islands of the Pong Lake also contribute maximum attraction for the tourists and others due to their own unique qualities which at present have not been explored.

The local people have been cultivating the draw down area since the inception of this pong lake as soon as water recedes. They not only earn their livelihood by doing so, but they also provide food to the migratory birds. The migratory birds also help the farmers in many ways such as manuring the fields by their excreta, yielding double or triple the production, when the succulents of the wheat and gram are eaten, further facilitating their sprouting twice or thrice.

1.3 BOUNDRIES:

The Government of Himachal Pradesh declared the Pong reservoir as Pong Dam sanctuary under section 18 of the Wildlife Protection Act, 1972 vide notification no. - Fts (F) 6-5/82 dated 1st June, 1983 (Copy annexed as Annexure - I) for the propagation and protection of the wildlife however, the final notification under section 26 of the said Act has been issued vide Notification No. - FEE-B-F-8 /99 dated 23rd Oct, 1999. The boundaries as per final notification are as under -

1. The area of the Pong Dam lake sanctuary shall lie between Pong Dam sites at Sansarpur Terrace (Talwara) to Road Bridge at Dehra on Hoshiarpur - Dehra Road,

all along Beas River and shall include all its tributaries on to both banks draining into the lake up to a reduced level of 1450 ft. above mean sea level.

2. All the islands in the lake shall form the sanctum sanctorum of the sanctuary.

New boundary-After Rationalization- New boundary after rationalization is retained mainly at 1410 feet MSL, except three points where the old boundary at 1450' MSL is retained. Detail is given in Annexure-3.

| Abstract Of Area after Rationalization | | | | | |
|--|-----------------|------------------------|--------------------------|--------------------------|---------------------------------|
| Name of WL Sanctuary | Type of Area | Area in existence (ha) | Area to be excluded (ha) | Area to be included (ha) | Area after rationalization (ha) |
| Pong Lake WLS | BBMB Up 1410 | 20200 | 0 | 0 | 20200 |
| | RF | 1.46 | 0 | 0 | 1.46 |
| | DPF | 143.94 | 0 | 0 | 143.94 |
| | UPF | 303.65 | 0 | 0 | 303.65 |
| | UCF | 53.41 | 0 | 0 | 53.41 |
| | Govt. Shamlat | 0 | 0 | 0 | 0 |
| | Private Land | 4687.16 | 4630.52 | 0 | 56.64 |
| | Private Ghasani | 0 | 0 | 0 | 0 |
| | G.Total | 25389.6 | 4630.52 | 0 | 20759.1 |

1.4 RANGE OF BIRDS / WILDLIFE- STATUS, DISTRIBUTION AND HABITATS:

1.4.1 The Bio-geography classification: Biogeographically, zone classification (WA Rodger and Pauer 1988 from Wildlife Institute of India, Dehradun) of this Pong lake Bird Sanctuary falls under Palaeo tropical African Bio geographical zone with Semi-Arid Biotic province and 4 A Sub Division.

1.4.1 (A) Forest type, cover and food for the birds and wildlife

The main forest type as per Champion and Seth classification is 5b/C2 Northern Dry Mixed Deciduous forests in and around the Pong wetland bird sanctuary. This type of forest is

characterized by *Anogeissus latifolia* in most of the area mixed with *Accacia catechu*, *Emblica officinalis*, *Albizzia Spc.*, *Pyrus pashia*, *Prunus species*. *Kydia calycina* with other fruit tree species such as *Mangifera indica*, *Syngium cuminii*, *Morus alba*, *Ficus species*, *Ziziphus species*. These fruit trees species provide food to the birds and wild animals. The area surrounding the Pong reservoir is most extensively occupied by shrubs and small trees.

1.4.1 (B) FLORISTIC:

Top storey: - *Accacia catechu*, *Anogeissus latifolia*, *Leannea coromendelica*, *Eagle marmolose*, *Kydia calycian*, *Dalbergia sisoo*, *Ougenia*, *Bombax ceiba*, *Flacourtia indica*, *Syngium cuminii*, *Mangifera indica*, *Bauhinia veriegata*, *Terminalia tomentosa*, *Terminalia balarica*, *Terminalia chebula*, *Ficus bengalensis*, *Eucalyptus*, *Albizzia labbek*, *Leannea Sps.*, *Pinus roxburgii* (scattered), *Luceana leucocephela*, *Holoptelea sp.*

Middle Storey: - *Mallotus phillipinansis*, *Nyctenthes sp.*, *Dendrocalamus strictus* (grass), *Pyrus pashia* etc.

Shrubs: - *Carrissa opaca*, *Dedonea viscosa*, *Wood fordia floribanda*, *Adhatoda vesica*, *Maurraya, conighii*, *Zizyphus sp.* *Agave*, *Euphorbia*, *Rubus sp.* etc.

Grasses: - *Saccharum munja*, *Dendrocalamus sp.* *Cymbopogan*, *Arundioaria sp.* *Cynadon*.

Climbers: - *Bauhinia*

Weeds: - *Lantana camera* is the major weed, besides *Parthenium* (congress grass), and *Ageratum conizoides* are also found sporadically.

1.4.1 (C) ANIMALS :-

(a) BIRDS: The Pong wetland harbors more than 420 species of the birds belonging to about 56 bird families out of 77 families of the birds recorded in India. Avifauna includes the resident birds of jangle fowls, peafowl, Grey partridges, Black Partridges etc. Among the waterfowls main species are Bar headed geese, Pintails, common pochards, coots, Grebes, Cormorants, Herons, Storks, Ruddy shell duck, common Teal, Shovellers, Moorhen, Stints, Lapwing, Plovers, Shank, Snipe, Gull, Terns, Kingfishers, Kites, Mallards, Gadwall, Egrets, Marsh Harriers etc.



Common Pochard (*Aythya ferina*)

(b) FISHES: A variety of fish such as Mahaseer, Katla, Rahoo, Mirgal, Malli, Singhara, Carps, Mirror Carps etc. are found in the lake and its tributaries. A total of 27 fish species belonging to five families have been recorded.

(c) MAMMALS:

24 species of Mammals have been recorded in Pong. Common species being Common Leopard, Sambhar, Wild Boar, Porcupine, Mongoose-Small Indian Mongoose, Common Indian Mongoose, Jungle Cat, Civets -Common Palm civet, Small Indian civet, Blue Bull, Indian Smooth Otter, Jackals, Monkeys and Langoors, Three Striped Squirrels, Rodents – many species of rats, mice are recorded.

(d) AMPHIBIANS AND REPTILES

Frogs- 4 Species, Snakes-18 species, Lizards-4 Species. Turtles- 4 Species

Venomous Snakes- 1. Spectacled Cobra 2. Common Krait 3. Common Indian Krait, 4. Russel's Viper 5. Saw Scaled Viper.

During the census of Pong Dam wildlife Sanctuary, more than 143 species of water fowls were recorded the photographs of some of which trapped by camera by our field staff (Santosh FG) is depicted below



Conglomeration of various water fowls



Mallard (*Anas platyrhynchos*)



River lapwing





Pied Kingfisher



Painted stork



Oriental magpie robin



Little egret (*Egretta garzetta*)





Northern pintail



Little Ringed Plover



Greylag Goose



Grey Heron



Grey Bushchat





Great cormorant



Common Teal



Bluethroat



Black Winged Stilt



Black headed Gull



Black kite





Brahmini starling



Bank Myna



Woolly necked stork



Long tailed shrike



Eurasian spoonbill

Note: If you are a bird lover/watcher or nature lover, you can join us in the Water Fowl Estimations to be carried on in June-July 2016. All logistic support will be extended by the HP Wildlife Wing.

For further details contact

Subhash Prashar HPFS
Divisional Forest Officer (WL)
Hamirpur-177001
Dist Hamirpur

SD Sharma IFS
Chief Conservator of Forests (WL)
Dharamshala
Dist Kangra

A R M REDDY IFS
Chief Conservator of Forests (WL)
Office of PCCF (WL) HP
Shimla
Phone: 0177-2623540