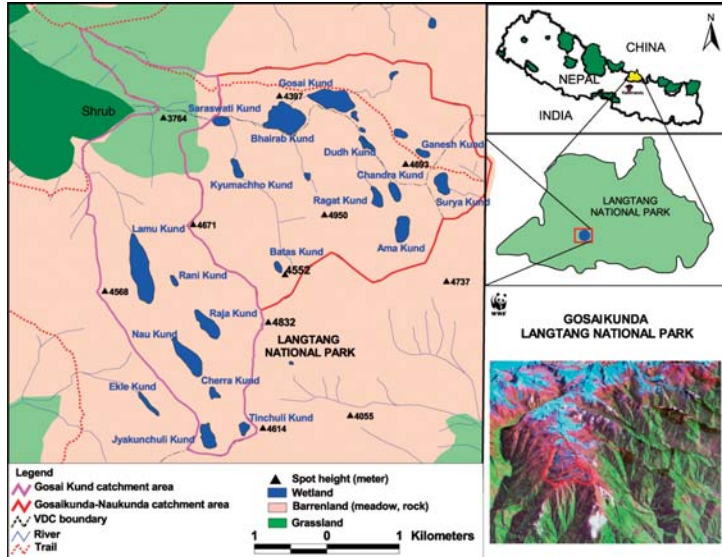


Gosaikunda Wetland Series Langtang National Park



Devighat), on which a large downstream population including that of Kathmandu valley depends.

■ HYDROLOGICAL VALUE:

The water volume is 1.472 million cubic meter and discharge in outlet is 60 Lit/sec whereas the inlet discharge is 35 Lit/sec.

■ BIODIVERSITY VALUES:

Flora: About 100 species of flowering plants have been recorded from the Gosaikunda catchment. It also holds endemic species of plants like *Meconopsis dhwojii*, *M.taylorii*, *Heracleum lallii*, *Primula aureata*, *P.sharmae*, *Pedicularis pseudoregeliana*, *Rhododendron cowanianum*. Other threatened species according to IUCN category are *Aconitum spicatum* (Vulnerable), *Heracleum lallii* (Endangered), *Jurinea dolomiaea* (Near Threatened), *Meconopsis dhwojii* (Near Threatened), *Nardostachys grandiflora* (Vulnerable), *Neopicrorhiza scrophulariifolia* (Vulnerable), *Rheum australe* (Vulnerable), *Rheum moorcroftianum* (Near Threatened), *Swertia multicaulis* (Data Deficit). Gosaikunda is one of the most important sites for collection of type specimens of plants for botanical purpose.

Fauna: Phytoplankton 1,548 units/ml. (6 m. depth) with higher *Merismopedia* sp. followed by *Chlorobotrys* sp., *Ankistrodmus* sp., *Dinobryon* sp., *Glenodium* sp., *Aphanotheca* sp., and *Planktosphaeria* sp.

Zooplankton were found 6.4×10^6 ind./m³ (20 m depth) - *Daphnia* sp. 52%, *Cyclops* sp. 35%, and *Napular larvae of Cyclops* 11%.

Coordinates: 28° 5.00' E
85° 24.96' N

Area: 13.80 ha

Length: 625.55m

Elevation: 4000m-4700m

■ OVERVIEW:

Gosaikunda, relating to saint and wetland, is an alpine freshwater oligotrophic lake series with alpine meadows, bogs, lakes/ponds, streams, wet steep slopes creating a unique and representative wetland in the high Himalayan Paleartic biogeographical region. It is one of the world's highest freshwater lake system, is an important source of water for Trisuli River originating from *trishul dhara* in gosaikunda. It produces 20 MW electricity (from 2 power houses at Trishuli and





Wetlands birds recorded in Gosaikunda are Brahminy Duck (*Tadorna ferruginea*) and common teal (*Anas crecca*). Potential wetland birds listed on that area are Bar-headed Goose (*Anser indicus*), Tufted duck (*Aythya fuligula*), Common merganser (*Mergus merganser*), Northern Pintail (*Anas acuta*) and Brown Dipper (*Cinclus pallasii*).

Other birds dependent on water in the catchment includes Brown dipper (*Cinclus pallasii*), white-capped water redstart (*Chaimarrornis leucocephalus*) and Plumbeous water redstart (*Rhyacornis fuliginosus*). The lower section of the catchment is the winter habitat of red panda and musk deer.

■ SOCIO-CULTURAL AND RELIGIOUS VALUES:

Hindu mythology mentions Gosaikunda as a residing place of Hindu deities like Lord Shiva and Goddess Gauri. Hindu scriptures like Bhagawat and Bishnu Puran and hindu epics like Ramayan and Mahabharat mentions *Samundra Manthan* (Sea exploring) which is directly related to the origin of Gosaikunda. The holy water of Gosaikunda is used during *Gangadashahara* and *Janai purnima* (sacred thread festival) by thousands of people visiting the place from Nepal and India to celebrate the festival. The meandering river Trishuli is

also significant for economy of the country not only due to hydroelectricity but also for adventure tourism.

■ THREATS:

- Water pollution and waste disposal due to pilgrimage during the festivals and peak tourist seasons
- Over grazing by livestock, sheep and horses
- Over harvesting of NTFPs for domestic use during the grazing and festival period
- Unsustainable use of fuel wood for subsistence and other religious purposes during festive and touristic seasons



■ CONSERVATION MEASURES:

Gosaikunda wetland series falls within Langtang National Park and is under the management of the Department of National Parks and Wildlife Conservation of HMG/Nepal. The Park management has delineated the Gosaikunda area as a religious site. Therefore, animal slaughter and grazing in the upper catchment is prohibited. There is a Gosaikunda Area Management Committee, a registered NGO, for overall development and management during the festivals, under which, sub-committees together with hotel/lodge owners are responsible for tourism management. The Goth (herders) Committees are responsible for management in the lower catchment area of Gosaikunda.

