

# Water Network

## 20-meter lake depth can be seen

Lake Shikotsu is one of the main attractions at this park. This lake, one of the most transparent in Japan, is surrounded by forests, and fascinates visitors with its deep blue water. The clarity of the water is due to low plankton levels, and a wide coverage of deep lakeside forests also minimizes runoff flowing into the lake. For this reason, it is valued as one of the rare freshwater diving spots in Japan. The transparency measurement

averaged 15-25m in the 1960s, and has decreased to an average of 15-20m in recent years. However, it was recorded to be 30.7m at one of the measurement spots in an investigation conducted in May, 2002. In order to maintain the blue water quality of Lake Shikotsu, the public sewer serving the lodging facilities in Lake Shikotsu Hot Spring has been diverted away from the lake.



Lake Okotanpe surrounded by primeval forests

### Spring Water at Mount Yotei

Volcanoes with porous lava accumulated often have springs at the bases, from which underground water emanate. There are over ten such spots known on Mount Yotei, and the one at the northeast base is known as "Yotei Spring Water". The volume of water emanating at this spring reaches 80,000 tons per day. It has been selected as one of the 100 best waters in Japan. Due to the water's extensive period of underground flow, it contains various minerals resulting in a high-quality mineral water. Many visitors from afar bring containers to take water home with them.

Spring water in Fukidashi Park



Diving in Lake Shikotsu



Kokanee in Lake Shikotsu

### The Northernmost Ice-Free Lake

Lake Shikotsu is a deep-water lake having a maximum depth of 363m, with an average depth of 265m. Among lakes in Japan, both of these values rank only second behind Lake Tazawa in Akita Prefecture. It holds a large volume of water due to its extreme depth. Compared to Lake Biwa, the largest lake in Japan (average depth 41.2m), Lake Shikotsu has only 12% of Lake Biwa's surface area, yet 75% of its water volume. Due to convection, the temperature of the surface water layer does not drop significantly, so it never freezes entirely, even in midwinter. This makes it the northernmost ice-free lake in Japan.

### Importation and Aquaculture of Kokanee Salmon

Kokanee is a landlocked variety of Sockeye Salmon, which was originally from Lake Akan and Lake Chimikeppu in eastern Hokkaido. It was introduced to Lake Shikotsu from Lake Akan in 1894, and after successful cultivation, it was transferred to many other lakes, such as Lake Toya in Hokkaido and Lake Towada in Honshu. During the summer season, the only time when fishing ban is lifted, the lake gets crowded with many anglers.

### Column

#### Water Flow which connects Lake Shikotsu, Chitose River and Lake Utonai

The Chitose River, the only outflow from Lake Shikotsu, runs northward from Chitose and converges with the Ishikari River, finally flowing into the Sea of Japan. The upstream section is surrounded by forests with crystal clear water currents where salmon migrate upstream. At the Ministry of Agriculture, Forestry, and Fisheries' hatchery of salmon and trout located here, an "Indian Water Wheel", which captures these fish, is still in use. The Ishikari River, which used to reach the Pacific Ocean, was obstructed by pyroclastic flow from a massive eruption of the Shikotsu



Chitose Naibetsu Spring

Volcano 40,000 years ago, causing the direction to change towards the north. Now the base region of Mt Tarumae is a zone of springs and the source of Bibi River, which flows south through Lake Utonai, and finally pours into the Pacific Ocean.

