

Chapter 22 WATER ENVIRONMENT CONSERVATION PLANNING OF NAGANO PREFECTURE

1. Topography of the Prefecture

As shown in Fig. 1-1, Nagano Prefecture is located in the central part of Honshu Island, extending approximately 120km from east to west, 210km from south to north, with total area of 13,585 sq. km., being the fourth largest prefecture after Hokkaido, Iwate and Fukushima.

The topography consists of a mountain area, so-called "Roof of Japan", with 16 peaks rising over 3,000m height, a level of Nagano Basin, Saku-Ueda Basin, Matsumoto Basin and others basins surrounded by the mountain area, and intermediate area connecting the mountain and the level. The major rivers are Chikuma and Sai Rivers which flow northward to the Japan Sea Japan, (two rivers connect into Chikuma River, changing the name to Shinano River after entering Niigata Prefecture), Tenryu River and Kiso River which flow southward into the Pacific Ocean and other rivers. Their drift is shown in Fig. 1-2. These rivers are multi-purposely used for drinking water, industrial water and agricultural water in not only Nagano Prefecture, but also in the downstream prefectures, as used in the Aichi irrigation etc. The level is characterized by river terrace, as in Tenryu and other rivers, slope of which plays a role of "green belt".

The climate in the whole prefecture is inland climate with considerable annual and daily ranges of temperature difference. The northern part and the southern part are influenced by climate of Japan Sea and the Pacific Ocean respectively, which, together with geographical and topological features of the each region, causes a most diversified characteristics of climate. In particular, the difference of climate is presented by the snow depth in the winter season. As for the amount of precipitation, in the eastern part, Ueda-Saku Basin, and the northern part, Nagano Basin, of the prefecture the precipitation amounts to around 1,000mm a year, one of the smallest in Japan, while on the other hand, in the western and southern parts of the prefecture there are Mt. Ontake with annual precipitation of over 3,000mm and Nagiso Town with over 2,000mm rainfall and other areas (Fig. 1-3).

Forest accounts for about 80% of the territory of the prefecture, presenting a diversified ecological system due to complicated topography and geography, as well as variety of the climatic conditions.

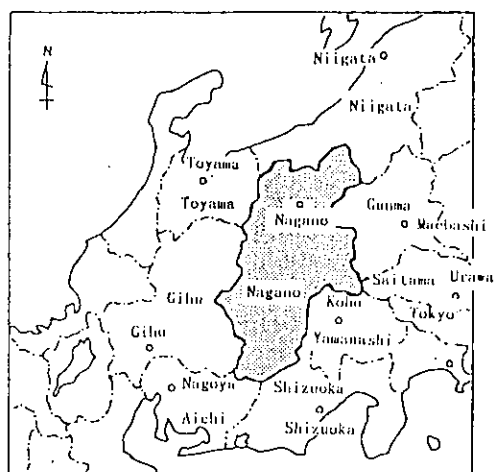


Fig. 1-1 Location of Nagano Prefecture

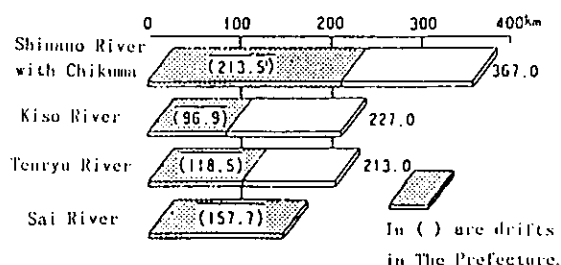


Fig. 1-2 Drift of Major River