

Restoration of the Shibetsu River

Shibetsu River has experienced constructions to straighten its winding stream to lower its underground water level, aiming at preventing flood and at better drainage of the basin, which was originally a peat district. Changes of the times have changed Shibetsu River's requirements. With the local people's voice asking for a better environment, Hokkaido Regional Development Bureau is working on a nature-restoring river development plan, aiming at restoring the nature-abundant original river conditions. In order to research the effect of straightened streams, the winding streams are partially restored as an experiment.

◆ Key to Restoration

- Winding streams restoration
- Riverside forests conservation and growing

◆ Overview of the River

Shibetsu River is a class B river in eastern Hokkaido. Its total length is 77.9 km and the basin dimension is 671 km². In the river law, a class B river is administered by the prefectural governor. However, as the designated river system set in the law applies to Shibetsu River downstream, the Minister of Land, Infrastructure and Transport is responsible for improvement, maintenance, and repair works. The basin population is 25000, and their key industry is the primary industry. The river is a nation-representative salmon and trout reproduction place. Shibetsu City and Nakashibetsu City, which are related communities, have 50000 dairy cows. The development started at the end of the Meiji Period, and postwar straightening of the streams changed the wetland into meadows. Downstream wetland grass and midstream native grassland have mostly converted to meadows.



◆ Project Efforts for Restoration

[Winding streams restoration]

Hokkaido Regional Development Bureau, together with Ministry of Land, Infrastructure and Transport, started a new type of river project to restore the winding streams of Shibetsu River, which is famous for salmon and trout reproduction, in Shibetsu City, in Nemuro jurisdiction. The construction has partially started in 2002 as a model case of environment conserving and creating public project. It reexamines the conventional stream-straightening works, and is positioned as a large-scaled nature-restoring improvement.

[Riverside forests conservation and growing]

Semi-natural construction method has been adopted, for example, hilly banks are created outside the left bank along the closed winding stream; riverside and waterfront forests are naturally conserved and grown; and bank protection is done with planted willow rather than with concrete.



Shibetsu River nature restoration experiment

Source: Hokkaido Regional Development Bureau (<http://www.ks.hkd.mlit.go.jp/kasen/sizensai/>) "River Restoration" seminar textbook. Foundation for Riverfront Improvement and Restoration.