

Restoration of Kushiro River

Kushiro Swamp, at the downstream of Kushiro River, has precious natural environment. Its dimension has decreased due to economic activities around the area; the vegetation has shifted from reeds that live in wet environment to alder that live in wet and dry environment. Growth of alder is said to be caused by: increasing sediment inflow to the swamp area due to surrounding land development and straightened streams; and lowered groundwater level. Kushiro Swamp's natural environment deterioration is unfavorable for people, as well as for the wild animals, and certain measures to conserve and restore the original environment are required. Based on the river law revision, Hokkaido Regional Development Bureau has started various efforts in coordination with the related organizations. This is the first case in the country of river administrator's positive involvement in swamp conservation.

◆ Key to Restoration

- Winding stream restoration
- Swamp vegetation control experiment
- Measures against sediment inflow

◆ Overview of the River

Kushiro River, a class A river originating in Kussharo Lake in Akan National Park in eastern Hokkaido, flows gently winding through the big Kushiro Swamp area in Kushiro Plain, into the Pacific Ocean. Its total length is 154 km and the basin dimension is 2510 km². The population is 0.18 million, and the estimated flood area population is 71000. Since salmon and trout run the river and salmon artificial hatching is operated, it is an important river for natural resource conservation and reproduction. Kushiro Swamp, located in Kushiro River downstream, is the biggest swamp in Japan. Its dimension is 20000 ha, 5500 ha of which is registered as a natural monument and as a designated wetland under the Ramsar Convention.

Located near to urban area, the swamp serves as a flood adjuster as well as scenic and tourism resources. In these fifty years, however, its dimension has decreased by twenty percent and alder is rapidly expanding.

Ministry of Land, Infrastructure and Transport, together with Hokkaido prefectural government, is investigating multiple concrete measures for: preventing sediment inflow by waterfront forests and sediment-control pond; enhancing sediment inflow preventive function by forestation; reviving the swamp; controlling vegetation; and restoring winding river.



◆ Project Efforts for Restoration

[Winding stream restoration]

In Kayanuma area along Kushiro River, multiple researches and preparatory work are underway aiming at restoring the original winding river and at restoring the natural habitat.

[Swamp vegetation control experiment]

For conserving the swamp vegetation from the expanding alder, water storage experiment is conducted. The groundwater level in Yukirihimon area, southwest of Kushiro drainage basin, has been increased in order to research its effect on alder.

[Measures against sediment inflow]

In order to prevent sediment inflow into Kushiro Swamp, research and investigation regarding possible measures in Kuchoro River is in progress, e.g., sediment-control pond and stabilizing river courses.