

Ex. 3 Comprehensive Sediment Control Course (Participants: 16)

This excursion may be cancelled if there are few participants.

1. Overview of the Inspection Course

The Kurobe River is characterized by remarkable discharge of sediments from the upstream denuded land and a well-developed alluvial fan with discharged sediments. It is one of Japan's steepest rivers, with a gradient of about 1/5 to 1/80 in the mountainous area and about 1/100 in the alluvial area.

The course involves a field inspection of the sabo projects in the upstream reach of the Kurobe River (Kuronagi River basin) (which has the aforementioned features), dams along the Kurobe River, and general sediment control covering those facilities and coastal areas.

2. Visit Locations

(1) Major visit locations

- Sabo project (Kuronagi River basin: Kuronagi River No. 2 Downstream Sabo Dam work site): Sabo work at a river basin with great sediment production. The construction conditions are very severe. For example, since the steep topography means there is no transport road, materials could only be transported by the Kurobe Valley Railroad or by helicopter. A concrete plant was set up in the catchment area of the Kuronagi River, and it supplies concrete using locally generated aggregate.
- Unazuki Dam: A multi-purpose dam equipped with sediment discharging equipment. In the Kurobe River, which has great sediment run-off, coordinated sediment discharge control is conducted with the upstream Dashidaira Dam (Kansai Electric Power Com.) for three purposes: retaining dam function, preventing the lowering of downstream riverbed, and controlling the coastal erosion progress.
- River project (steep river management measures: a site in Fukushima, Nyuzen Town): A type of open levee characterized by discontinuously constructed dams that is often constructed in torrential rivers. In August of 1969, a flood destroyed a river levee in Nyuzen Town, but the local open levee proved its flood control function when water overflowing due to levee breach returned to the river channel through the open parts of the levee.
- Coastal project (coastal erosion measures: A site in Aramata, Kurobe City): The performance of coordinated sediment removal is apparent as it is effective in recovering the sandy beach in the estuary of the Kurobe River.

(2) Other

- Walk along freshwater channels in Ikuji: Visiting this area will give participants the chance to experience the natural riches and history of the underflow water in the alluvial fan of the Kurobe River.

3. Notes

- The walk to the Kuronagi River will be about 30 minutes, so participants should wear appropriate clothing and shoes.
- There are no restrooms in the Torokko carriages.

- In the case of bad weather or if the Torokko railroad is not operating, the course will shift to visiting other places such as the Kurobe River, Aramata Beach, or Unazuki Dam.



Kuronagi-River No.2 Downstream Sabo Dam (under construction)

Unazuki Dam



Aramata Coast