

Study about maintenance and reconstruction of river

[Point]

River has decreased as a result of artificial modification in recent year, and decrease in organisms, which have lived and grew by depending on rivers, has been reported, in association with the above modification. In this study, the following was considered for the purpose of contributing to maintenance as well as reconstruction of future rivers, with consideration to the above condition.

1. The relationship between land cover condition and flood frequency was analyzed with Shizukuishigawa as a target, in order to reveal flood conditions under which rivers were maintained. As a result, it was revealed that bare ground was maintained with flood frequency of 1 to 5 days or more per year in the case with Shizukuishigawa.
2. Impact of tree trimming and cutting down of flood channel for river reconstruction on habitat as well as organisms was predicted, with Tamagawa Nagata area as a target, in which reconstruction of river was conducted.
3. Aster Kantoensis Kitam that was reported of population decrease in Tamagawa and Kinugawa was paid attention, among other plants that depended on rivers. River conditions as a nursery ground were organized, fine particle sediment flew out by tail water, technique of forming watermark gravel on surface layer was suggested, and this technique was verified at Kinugawa site.

Keywords: river, maintenance, reconstruction, fan river