

Historical and current conditions of oblique weirs in Kumamoto

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Abstract

This study conducted a literature survey on weirs in the Shirakawa River and Midorikawa River to reveal differences between their current and past conditions. Especially, change in types of the weirs between the past and the present was examined.

The weirs that existed in the past described in this sentence are the one at the time of construction or at the time when it was described in the picture of the past. Effects of a weir on sandbar is important for river management. Therefore, we examined the interaction between the weirs and the sand bar with the past and the present using the past pictorial drawings of Shirakawa and Midorikawa and the current aerial photographs.

Many of the weirs described in past drawings were built with emphasis on water use surface rather than flood control surface. While the ratio of oblique weir to all types of weir was large in the past, the ratio of the right angle weir has recently increased. This is considered to be due to the fact that, from the past to the present, the structural material of weirs has been changed from wood and stone to concrete and the strength of weirs has increased.