

実効性ある流域治水に向けた浸水ハザードエリアの 土地利用規制・誘導方策に関する研究

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[SYNOPSIS]

In this study, we analyzed the population change and residential induction by land use regulation in the assumed inundation area (maximum assumed scale). As a result, the population of inundation hazard areas in city planning areas from 2010 to 2020, after the population peak out in Japan, decreased by 719,000 in the no-inundation area, but increased by 289,000 in the inundation hazard area.

Next, the analysis of population change in watersheds with flood risk, and found that there are three types: watersheds dotted with population growth meshes, watersheds with continuous population growth meshes associated with residential land development, and watersheds with significant population growth meshes associated with frequent residential land development.

On the other hand, considering the sustainability of city management in each municipality, it became clear that future land use control needs to be considered according to the types of municipalities in which "there is room for residential guidance within the expected inundation area where the population is decreasing," "there is room for residential guidance if the expected inundation area less than 3m where the population is decreasing is included," and "there is little room for residential guidance in the expected inundation area where the majority is 3m or more."

Finally, as an ideal way of land use control for effective watershed flood control and residential guidance in the future, based on the quantitative population change analysis of inundation hazard areas carried out in this study, this paper considers the idea of re-zoning taking into account the situation of the room for residential guidance in each municipality.