# Section 3 Act for Partial Amendment of the Act on Countermeasures against Flood Damage of Specified Rivers

# 3-1 Background and Necessity of Amendment

In recent years, flood disasters have become more severe and frequent throughout Japan, such as Typhoon Hagibis in 2019 (T1919) and the Heavy Rain Event of July 2020. Due to the effects of climate change, it is estimated that by the end of the 21st century, the national average rainfall will have increased by 1.1 times and the frequency of flooding will have doubled.

In light of these circumstances, in addition to accelerating and enhancing infrastructure development to cope with increased rainfall and reviewing flood control plans, there has become an urgent need to develop a legal framework to increase the effectiveness of "basin flood control" through having a bird's eye view of an entire river basin such as its upstream, downstream, the main river and tributary rivers, with all parties, including the national government, local governments in the basin, businesses, and residents working together.

Therefore, presenting amendments to the "Watershed Flood Control Bill," which consists of nine related acts such as the "Act on Countermeasures against Flood Damage of Specified Rivers (Act No. 77 of 2003)," the "Flood Control Act (Act No. 193 of 1949)," the "Sewerage Act (Act No. 79 of 1958)," the "River Act (Act No. 167 of 1964)," the "City Planning Act (Act No. 100 of 1968)" and the "Act on Special Financial Support for Promoting Group Relocation for Disaster Mitigation (Act No. 132 of 1972)" to the 204th Diet, the bill was passed in April 2021 after deliberations in both the House of Representatives and the House of Councilors, and it was promulgated as the "Act for Partial Amendment of the Act on Countermeasures against Flood Damage of Specified Rivers (Act No. 31 of 2021)" in May of the same year.

The Act provides for the following measures to be taken with the aim of enhancing the effectiveness of basin flood control:

- Strengthening plans and systems for basin flood control.
- Measures for as much flood prevention as possible.
- Measures to reduce the number of persons and things that fall victim to damage.
- Measures to mitigate damage and achieve early recovery.

The effective date of this Act shall be "the date specified by a Cabinet Order within a period not exceeding three months or six months from the date of promulgation" of this Act respectively, depending on each amendment. Therefore, the specific timing of implementation is currently under consideration.

The details of each revision are as follows.

Act for Partial Amendment of the Act on Countermeasures against Flood Damage of Specified Rivers (Act No. 31 of 2021) [Promulgation: May 10, 2021/Effective: Date specified by Cabinet Order v ths or 6 months from the date of promulgation <Budget-Related Acts> ithin 3 mo **Background and Necessity** o In recent years, water-related disasters have become more severe and frequent in many parts of Japan, such as the Typhoon Hagibis in 2019 (T1919) and the Heavy Rain Event of July 2020. Due to the effects of climate change, it is estimated that by the end of the 21st century, the average national rainfall will have increased by 1.1 times and the frequency of flooding will have doubled (compared to the end of the 20th century). In order to cope with the increase in rainfall, it is necessary to accelerate and enhance structural development, review flood control plans, and develop a legal framework, the "flood-control-related-laws," to enhance the effectiveness of "basin flood control," which is a collaborative effort among all parties involved, including the national government, local governments, businesses, and residents, by taking a bird's-eye view of the entire river basin, including upstream and downstream, main rivers and branch rivers. Outline of the Act 1. Enhancement of basin flood control plan and systems [Specified Urban River Act] Expand the number of rivers that use the basin flood control plan In addition to rivers where it is difficult to prevent damage through river maintenance due to the progress of urbanization, rivers where damage prevention is difficult due to natural conditions have been added to the list (expanded to all rivers in Japan) Creation of a council for watershed flood disaster management and enhancement of the plans Officials from the national, prefectural, and municipal governments gather to discuss
the enhancement of rainwater harvesting and infiltration measures by the public and private sectors, and land use in flooded areas. Incorporate the results of consultations into the basin flood control plan and implemented them without fail Basin flood control concept 2. Measures to prevent flooding as much as possible [River Act, Sewerage Act, Specified Urban River Act, City Planning Act, Urban Green Space Act] Enhance measures in rivers and sewerage systems oFurther promote structural measures such as embankment maintenance (budget) • Creation of a council (with participation of river administrators, water users such as electric power companies) to expand pre-release water discharge from water utilization dams (\*budget and taxation) • Position a target amount of rainfall in the plan where flooding damage can be prevented by the sewerage system, accelerate maintenance • Mandate the establishment of operation rules for sewer gutters to ensure the prevention of backflow from rivers, into urban areas Enhance rainwater harvesting measures in basin • Create storage function conservation areas to secure land with water retention and recreational functions along rivers • Preserve green space in urban areas and use them as green infrastructure with storage and infiltration functions • Support the development of municipal and private rainwater harvesting and infiltration facilities through certification systems, subsidies, and special taxation measures (\*budget related and taxation) 3. Measures to reduce subjects of damage [Specified Urban River Act, City Planning Act, Act on Sp dards Acti Collaboration with urban development and living arrangements that address flood prevention and disaster prevention

Create flood damage prevention zones and check the safety of houses and facilities for persons requiring special care in advance (approval basis)
 Promote relocation from dangerous areas by expanding the area requirements for the project for promoting group relocation for disaster prevention (\*budget related)

• Enhance the safety of urban areas through the development of evacuation centers and district-based flood control measures in the event of a disaster (\*budget related)

4. Measures for mitigation of damage and early recovery [Flood Control Act, Act on Sediment Disaster Countermeasures for Sediment Disaster Prone Area

Expand the preparation of hazard maps for floods, to small and medium-sized rivers as a way to eliminate gaps in risk information
 Ensure the effectiveness of evacuation by providing advice and recommendation form municipalities on evacuation plans and drills to facilities used by persons requiring special care

• Expanded the scope of authority delegating to the Minister of Land, Infrastructure, Transport and Tourism to include removal of sediment deposited by disasters and secondary rivers

**Objectives and Effects:** Basin flood control to cope with increased rainfall due to climate change (KPI) Number of rivers with probable inundation areas: 2,092 rivers (FY2020)  $\rightarrow$  approx. 17,000 rivers (FY2025)

Source: Ministry of Land, Infrastructure, Transport and Tourism

## 3-2 Regarding Each Amendment

## (1) Strengthening Plans and Systems for Basin Flood Control

As a measure to increase the effectiveness of basin flood control, the first step is to expand the number of rivers (specified rivers) that utilize the Watershed Flood Disaster Management Measures, which takes a position in the

Act on Countermeasures against Flood Damage of Specified Rivers. Specifically, in addition to rivers where damage prevention is difficult by river maintenance due to the progress of urbanization or natural conditions can be designated as specified rivers.

Also, a decision was made to create an environment in which measures can be assuredly implemented by creating a council by people from the national government, prefectures and municipalities gathering together. The council is to discuss Watershed Flood Disaster Management Measures, including strengthening rainwater harvesting and infiltration measures and land use in flooded areas by public and private sectors, and it is positioned in the Watershed Flood Disaster Management Measures Plan.

# (2) Measures for as Much Flood Prevention as Possible

Secondly, as part of the strengthening of measures in rivers, a decision was made to create a council to expand pre-release water discharge at water utilization dams, with the participation of river administrators and power companies.

In addition, as part of strengthening measures in the sewerage systems, a decision was made that a target amount of rainfall where inundation damage becomes a concern in the sewerage system should be positioned in the plan, and that measures should be taken to accelerate maintenance. A decision was also made to take measures to ensure the prevention of backflow from rivers into urban areas by the establishment of rules for the operation of sewerage sluice gates.

Furthermore, as a part of measures to strengthen rainwater storage measures in watershed zones, a decision was made to support the development of rainwater harvesting and infiltration facilities of local governments and the private sector through certification systems, subsidies, and special taxation. Additional measures include securing lands with water retention and control functions along rivers by creating a storage function conservation area, and preserving green spaces in urban areas, utilizing those lands as green infrastructure with storage and filtration functions.

#### (3) Measures to Reduce the Number of Persons or Things that Fall Victim to Damage

Thirdly, from the perspective of promoting coordination with urban development and ways of living that respond to water disasters, a decision was made to create flood damage prevention zones, establish a system of development and building permissions to be checked in advance regarding safety against flooding of homes in areas with significant risk of flooding damage and facilities for persons requiring special care, promote the relocation of families from areas at risk from flooding by expanding the area requirements for project for promoting group relocation for disaster prevention, and to strengthen the safety of city areas by building evacuation centers in the event of disasters and taking measures against inundation at the district level.

## (4) Measures to Mitigate Damage and Achieve Early Recovery

Fourthly, from the perspective of mitigating damage, a decision was made to eliminate gaps in risk information by expanding the scope of hazard map preparation with small and medium-sized rivers as flood corresponding areas, and to ensure the effectiveness of evacuation by establishing a system for municipalities to provide advice and recommendations on evacuation plans and evacuation drills for facilities used by persons requiring special care during floods.

Additionally, from the perspective of promoting early recovery from disasters, a decision was made to expand the authority of the Minister of Land, Infrastructure, Transport and Tourism in the River Act, expand the scope where the National Government may act as an authority for river construction from Second Class Rivers to locally designated rivers, and to remove sediment deposited in rivers at the time of disaster by the national government on behalf of prefectures.