

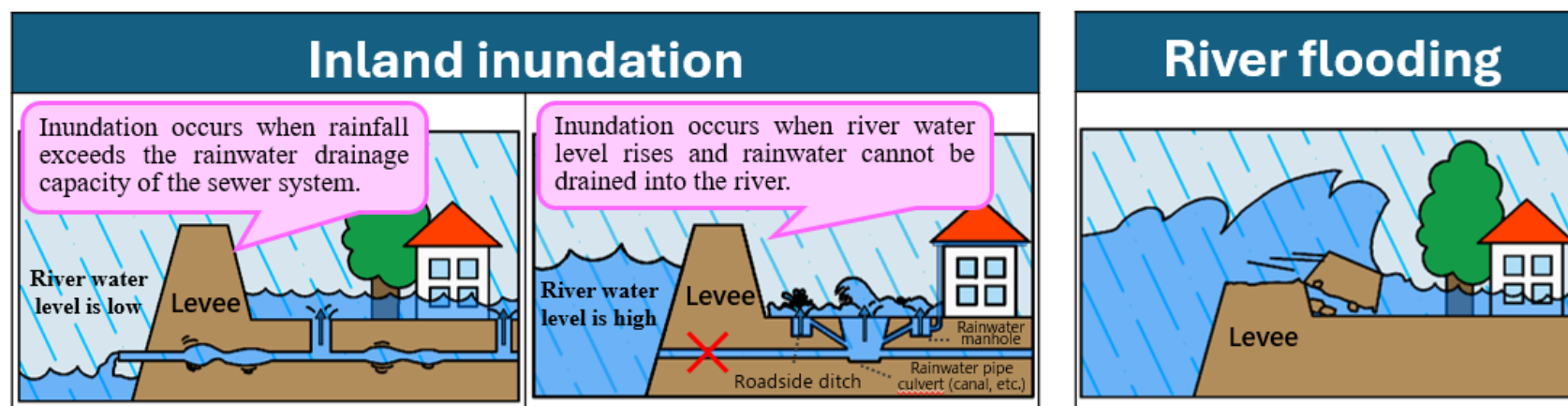
How to read “Inland Inundation Hazard Map” and “Flood Landslide Hazard Map”

■ Difference between inland inundation and river flooding

Inundation is broadly classified into “inland inundation” and “river flooding.”

Inland inundation occurs when rainfall exceeds the rainwater drainage capacity of the sewer system (rainwater drain) or when river water level rises and rainwater cannot be drained into the river. (The river water does not overflow.)

River flooding occurs when river water level rises and levees (dike / river bank) break. (The river water overflows.)



■ What is “Inland Inundation Hazard Map”?

The Inland Inundation Hazard Map shows the area that could possibly be inundated if the maximum possible rainfall (maximum possible rainfall: the amount of rainfall that occurs approximately once per 1,000 years) exceeds the drainage capacity of the sewer system (rainwater drain), based on the results of inundation simulation.

The inundation simulation assumes 130mm of rainfall in one (1) hour during the peak period and 156mm of rainfall in approximately 4 (four) hours including the peak period, and that the water level of the river (Class 1 River such as Chikuma River) to which rainwater is discharged is high.

■ What is “River Flooding and Landslide Hazard Map”?

The Flood and Landslide Hazard Map shows the area that could possibly be flooded and the depth of river flooding that could occur if a Class 1 River such as the Chikuma River were to overflow (break its levees/dikes/riverbanks) due to the maximum possible rainfall, based on inundation simulation.

The condition of the inundation simulation assumes that the Chikuma River, administered by the national government, receives a total rainfall of 396 mm over a two (2)-day period, and the Class 1 Rivers administered by the prefectural government receive 813 mm of rainfall over a 24-hour period in their basins.

※The Flood and Landslide Hazard Maps are partially revised and detailed from The Disaster Prevention Guidebook.

■ How to use the Hazard Map

Distinguish the "Inland Inundation Hazard Map" and the "River Flooding and Landslide Hazard Map" appropriately depending on the condition of the rain.

As shown in the figure below, when river water levels are expected to rise rapidly from the beginning of the rainfall, the possibility of inland flooding is high, so please check the "Inland Inundation Hazard Map" and if the rainfall continues for a long time and there is a risk of river flooding, please check the "River Flooding and Landslide Hazard Map".

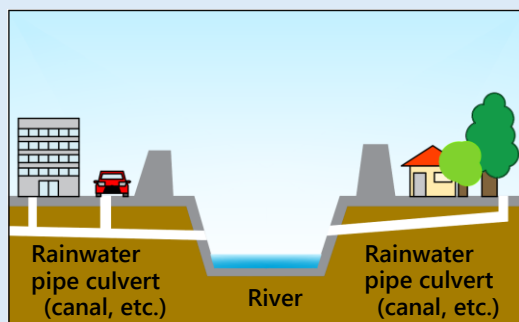
※ Precautions when checking the Inundation Hazard Map

The expected inundation area and depth will vary depending on factors such as rainfall patterns, land topography, and the condition of rivers and rainwater drainage systems.

Therefore, please note that even areas that are not expected to be inundated may be inundated depending on the conditions, not as shown in the map.

1. Normally

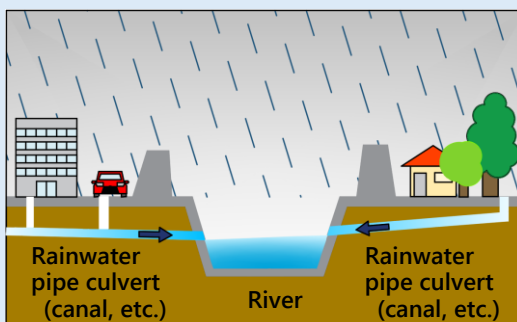
Normally, please be aware of the expected inundation and nearby evacuation centers, etc., and confirm safe evacuation routes.



● Check the **Inland Inundation Hazard Map** and the **River Flooding and Landslide Hazard Map** regularly!

2. When it starts to rain,

When it starts to rain, water levels in rivers and canals will gradually begin to rise.

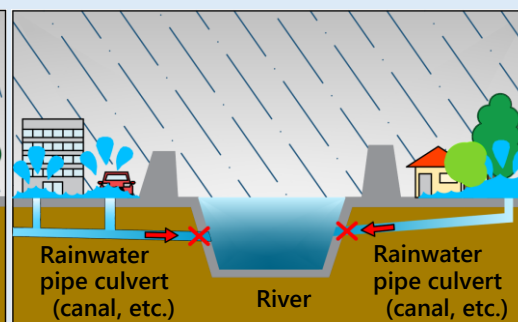


● When it starts to rain, firstly check the **Inland Inundation Hazard Map**!

3. If the rainfall continues to be heavy

If the rainfall continues to be heavy and exceeds the capacity of canals, drainage and/or pump stations, there is a risk of inundation (inland inundation) in depressed areas of land, etc.

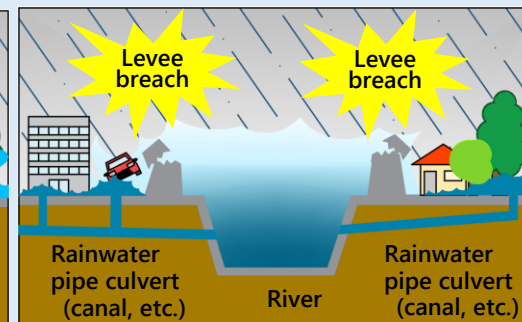
The risk of inundation increases further when rainwater cannot be drained from canals due to rise of river levels, etc.



● If heavy rain continues and the river water level is expected to rise, check the **Inland Inundation Hazard Map**!

4. If the rainfall continues,

If the rainfall continues, the river levee (dikes / river banks) may break, resulting in river flooding.



● If there is a risk of river overflow, check the **River Flooding and Landslide Hazard Map**!