

Flood (river water) hazard map Higashiyama area

A (river water) flood hazard map is a map showing flooding conditions in the event that the river water level rises and overflows or breaches the levees. This map shows the areas that are expected to be inundated by maximum rainfall in the areas feeding the Sorachi, Nishitappu, Roseppu, Shoeizawa, and Kumanosawa rivers. The scale of the heavy rainfall is as follows:

- Sorachi River: Total rainfall of 385 mm in 72 hours (heavy rainfall that may occur approximately once in 1,000 years)
- Nishitappu River: Total rainfall of 474 mm in 24 hours (heavy rainfall that may occur approximately once in 1,000 years)
- Roseppu, Shoeizawa and Kumanosawa rivers: Maximum rainfall and inundation depths (that may occur approximately once in 1,000 years) are calculated using simplified software (RIC).

How to read the map

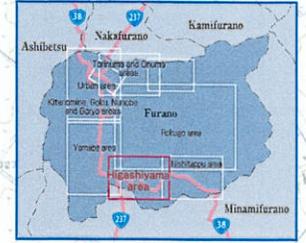
Legend of disaster management-related facilities	Legend of areas that may be flooded
Wide-area evacuation site	Water depth: 5.0 m – 10.0 m
Designated emergency evacuation site	Water depth: 3.0 m – 5.0 m
Designated evacuation shelter	Water depth: 0.5 m – 3.0 m
Welfare evacuation shelter	Water depth: 0.0 m – 0.5 m
City Hall/branch office	Underpass
Fire station/substation	Area where early evacuation is required
Police station/substation	Area at risk of house collapse due to flooding currents
Hospital	Area at risk of house collapse due to riverbank erosion
Heliport	
Water level observation station/crisis management water level gauge installation site*	
Live camera*	
Sediment disaster hazard area	
Emergency warning area	
Debris flow/steep slope	
Warning area	
Debris flow	
Steep slope	

*Water levels at water level observation stations and crisis management water level gauges and live camera images can be checked on the River Flood Information website of the Ministry of Land, Infrastructure, Transport and Tourism.

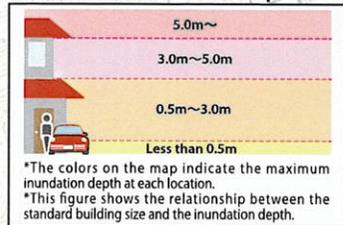
List of evacuation shelters

No.	Evacuation shelter name	Location	Response to flooding
14	Higashiyama Branch Office	Higashiyama Akashiya	
15	Nishitappu Omoto Hall	Nishitappu Omoto	
12	Jukai School	5007-1 Roseppu	○

Map scope



How to read the color-coded map

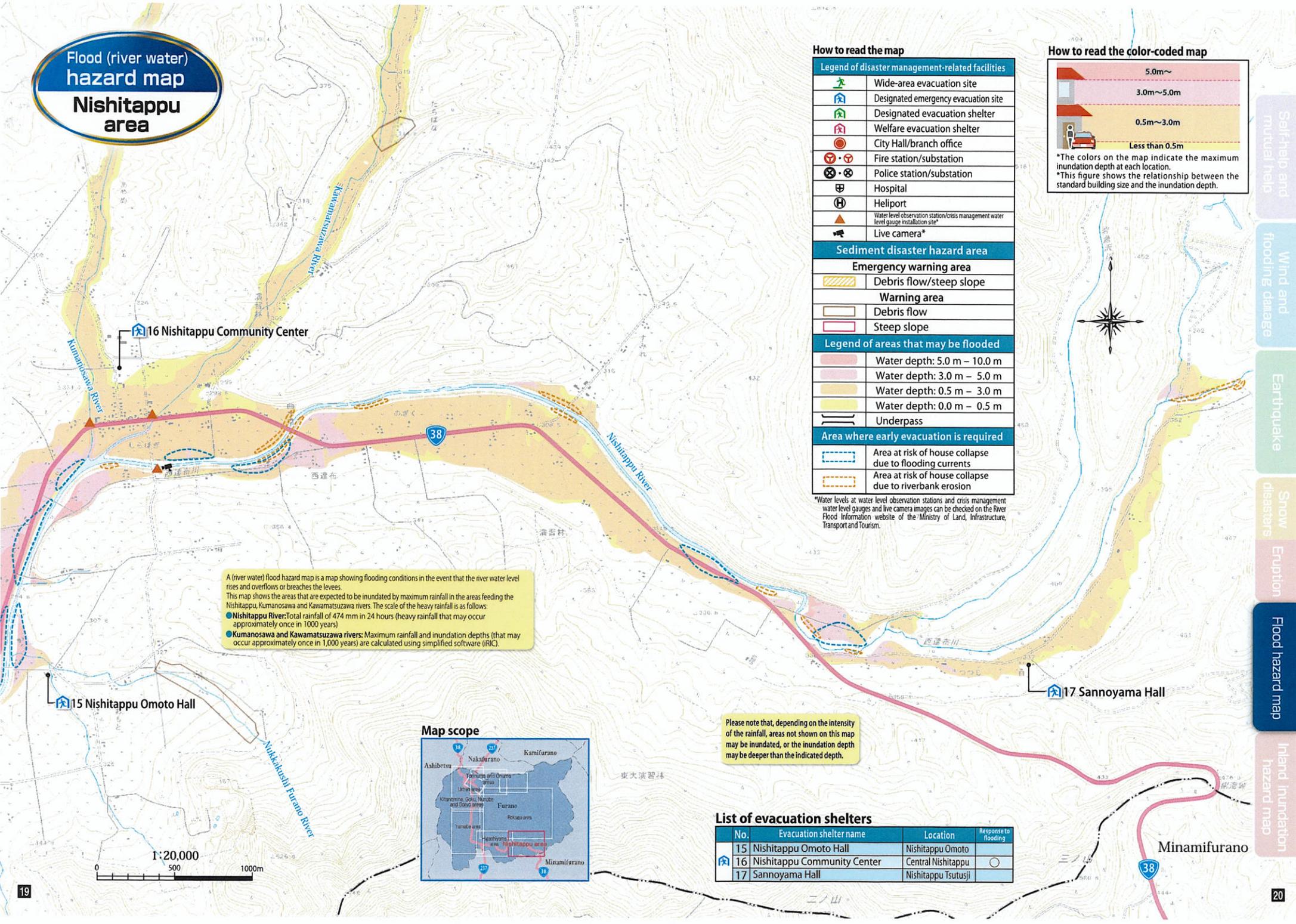


Please note that, depending on the intensity of the rainfall, areas not shown on this map may be inundated, or the inundation depth may be deeper than the indicated depth.

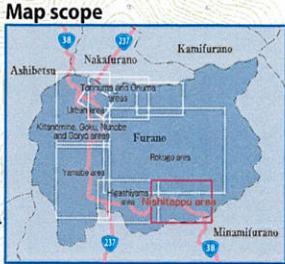


- Self-help and mutual help
- Wind and flooding damage
- Earthquake
- Snow disasters
- Eruption
- Flood hazard map
- Inland inundation hazard map

Flood (river water) hazard map Nishitappu area



A (river water) flood hazard map is a map showing flooding conditions in the event that the river water level rises and overflows or breaches the levees.
 This map shows the areas that are expected to be inundated by maximum rainfall in the areas feeding the Nishitappu, Kumonosawa and Kawamatsuzawa rivers. The scale of the heavy rainfall is as follows:
 ● **Nishitappu River**: Total rainfall of 474 mm in 24 hours (heavy rainfall that may occur approximately once in 1,000 years)
 ● **Kumonosawa and Kawamatsuzawa rivers**: Maximum rainfall and inundation depths (that may occur approximately once in 1,000 years) are calculated using simplified software (iRIC)



Please note that, depending on the intensity of the rainfall, areas not shown on this map may be inundated, or the inundation depth may be deeper than the indicated depth.

How to read the map

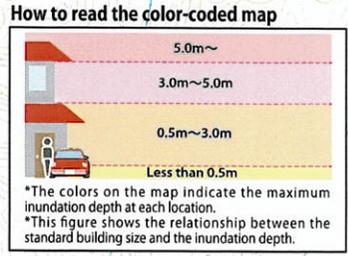
Legend of disaster management-related facilities	
	Wide-area evacuation site
	Designated emergency evacuation site
	Designated evacuation shelter
	Welfare evacuation shelter
	City Hall/branch office
	Fire station/substation
	Police station/substation
	Hospital
	Helicopter
	Water level observation station/crisis management water level gauge installation site*
	Live camera*

Sediment disaster hazard area	
Emergency warning area	
	Debris flow/steep slope
Warning area	
	Debris flow
	Steep slope

Legend of areas that may be flooded	
	Water depth: 5.0 m - 10.0 m
	Water depth: 3.0 m - 5.0 m
	Water depth: 0.5 m - 3.0 m
	Water depth: 0.0 m - 0.5 m
	Underpass

Area where early evacuation is required	
	Area at risk of house collapse due to flooding currents
	Area at risk of house collapse due to riverbank erosion

*Water levels at water level observation stations and crisis management water level gauges and live camera images can be checked on the River Flood Information website of the Ministry of Land, Infrastructure, Transport and Tourism.

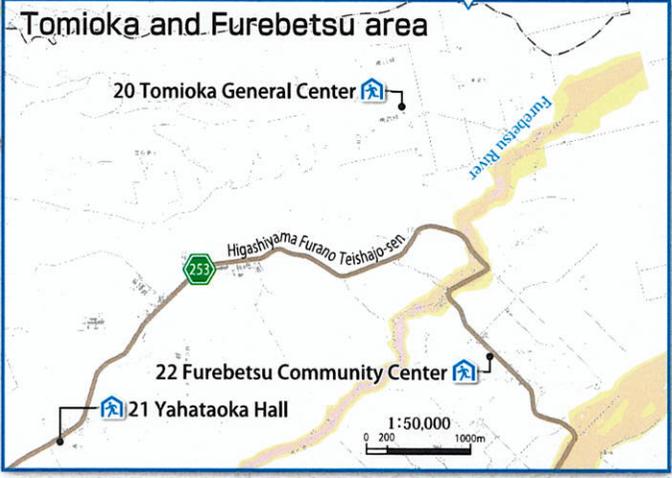
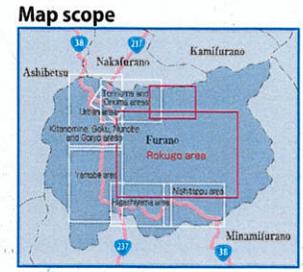
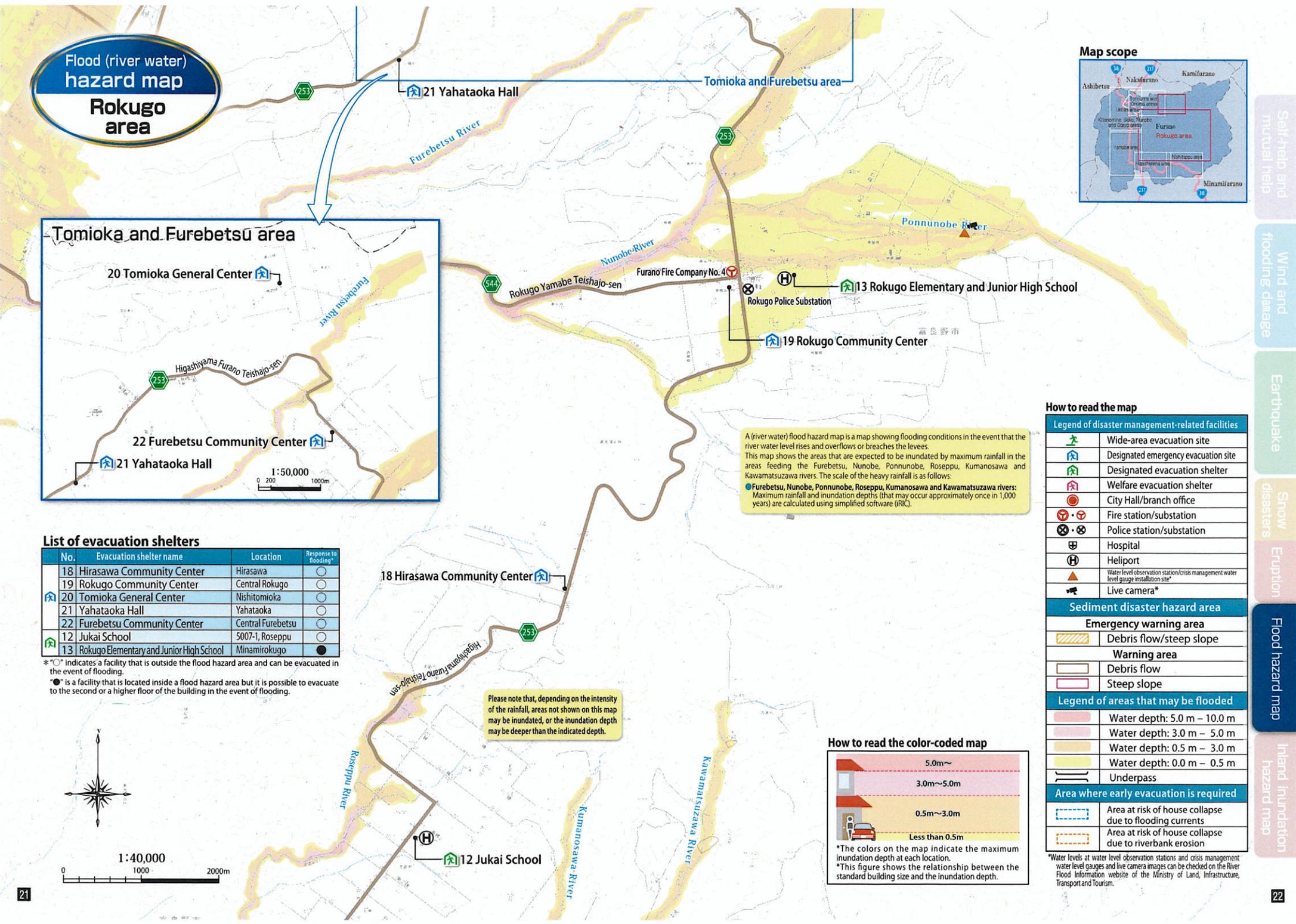


List of evacuation shelters

No.	Evacuation shelter name	Location	Response to flooding
15	Nishitappu Omoto Hall	Nishitappu Omoto	○
16	Nishitappu Community Center	Central Nishitappu	○
17	Sannoyama Hall	Nishitappu Tsutusji	○

- Self-help and mutual help
- Wind and flooding damage
- Earthquake
- Snow disasters
- Eruption
- Flood hazard map
- Inland inundation hazard map

Flood (river water) hazard map Rokugo area



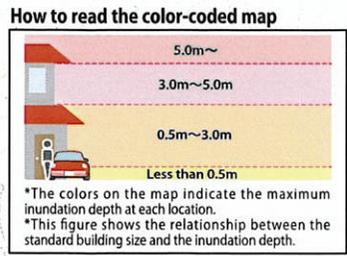
A (river water) flood hazard map is a map showing flooding conditions in the event that the river water level rises and overflows or breaches the levees. This map shows the areas that are expected to be inundated by maximum rainfall in the areas feeding the Furebetsu, Nunobe, Ponnunobe, Roseppu, Kumanosawa and Kawamatsuzawa rivers. The scale of the heavy rainfall is as follows:
 ● Furebetsu, Nunobe, Ponnunobe, Roseppu, Kumanosawa and Kawamatsuzawa rivers: Maximum rainfall and inundation depths (that may occur approximately once in 1,000 years) are calculated using simplified software (IRIC).

List of evacuation shelters

No.	Evacuation shelter name	Location	Response to flooding*
18	Hirasawa Community Center	Hirasawa	○
19	Rokugo Community Center	Central Rokugo	○
20	Tomioka General Center	Nishitomioka	○
21	Yahataoka Hall	Yahataoka	○
22	Furebetsu Community Center	Central Furebetsu	○
12	Jukai School	5007-1, Roseppu	○
13	Rokugo Elementary and Junior High School	Minamirokugo	●

*"○" indicates a facility that is outside the flood hazard area and can be evacuated in the event of flooding.
 ● is a facility that is located inside a flood hazard area but it is possible to evacuate to the second or a higher floor of the building in the event of flooding.

Please note that, depending on the intensity of the rainfall, areas not shown on this map may be inundated, or the inundation depth may be deeper than the indicated depth.



How to read the map

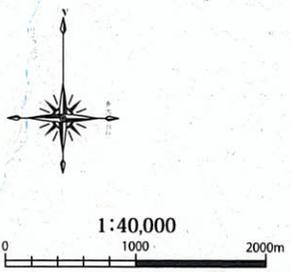
Legend of disaster management-related facilities	
	Wide-area evacuation site
	Designated emergency evacuation site
	Designated evacuation shelter
	Welfare evacuation shelter
	City Hall/branch office
	Fire station/substation
	Police station/substation
	Hospital
	Heliport
	Water level observation station/crisis management water level gauge installation site*
	Live camera*

Sediment disaster hazard area	
	Emergency warning area
	Debris flow/steep slope
	Warning area
	Debris flow
	Steep slope

Legend of areas that may be flooded	
	Water depth: 5.0 m – 10.0 m
	Water depth: 3.0 m – 5.0 m
	Water depth: 0.5 m – 3.0 m
	Water depth: 0.0 m – 0.5 m
	Underpass

Area where early evacuation is required	
	Area at risk of house collapse due to flooding currents
	Area at risk of house collapse due to riverbank erosion

*Water levels at water level observation stations and crisis management water level gauges and live camera images can be checked on the River Flood Information website of the Ministry of Land, Infrastructure, Transport and Tourism.



Self-help and mutual help

Wind and flooding damage

Earthquake

Snow disasters

Eruption

Flood hazard map

Inland inundation hazard map

Inland inundation hazard map

Urban area

An inland inundation hazard map is a map showing expected flooding conditions in the event of an overflow of rainwater that exceeded the capacity of the drainage facilities due to heavy rainfall (inland inundation). This map shows simulated inundation depths that may be expected in the event of inland inundation in the urban area. The calculation method is as follows:

- (1) Assumed heavy rainfall of that may occur approximately once in 1000 years (1-hour maximum: 135.5 mm, 12-hour total rainfall: 502 mm)
- (2) The flood volume is derived by calculating the area where the rainfall is collected (watershed area), the amount of rain that falls over that area (rainfall), and the rate at which the rainfall runs off without infiltrating the ground (runoff rate). Formula: Flood volume = watershed area × rainfall × runoff rate
- (3) The inundation volume is calculated by subtracting the amount of water drained by sluiceways and sluice pipes installed in the river from the flood volume determined in (2) above.
- (4) The water level (inundation level) at the inundation volume obtained in (3) is calculated, and the inundation depth is set at four levels.

Map scope



How to read the map

Legend of disaster management-related facilities	
	Wide-area evacuation site
	Designated emergency evacuation site
	Designated evacuation shelter
	Welfare evacuation shelter
	City Hall/branch office
	Fire station/substation
	Police station/substation
	Hospital
	Heliport
	Water level observation station/crisis management water level gauge installation site*
	Live camera*

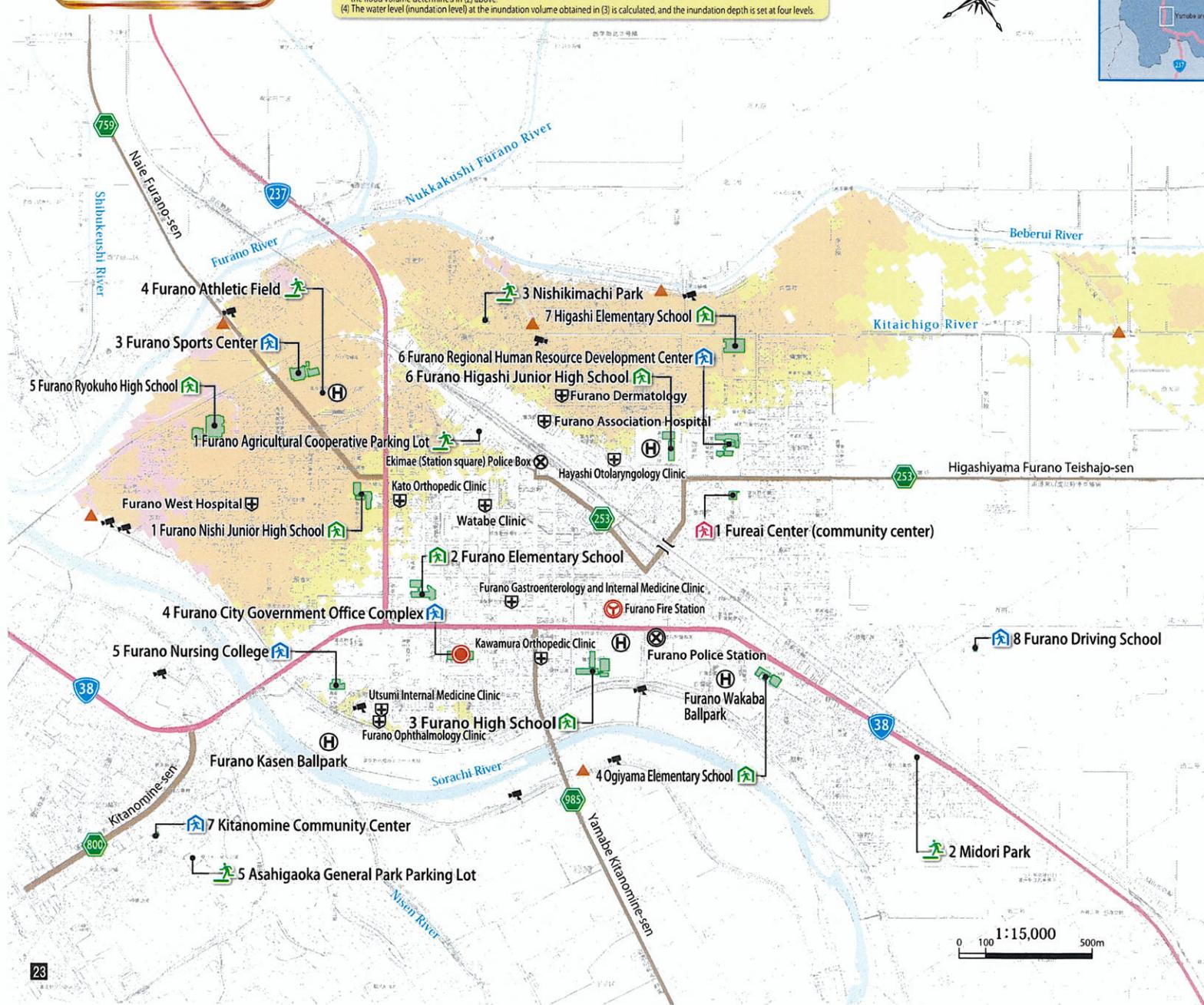
Legend of areas that may be flooded	
	Water depth: 5.0 m – 10.0 m
	Water depth: 3.0 m – 5.0 m
	Water depth: 0.5 m – 3.0 m
	Water depth: 0.0 m – 0.5 m
	Underpass

*Water levels at water level observation stations and crisis management water level gauges and live camera images can be checked on the River Flood Information website of the Ministry of Land, Infrastructure, Transport and Tourism.

How to read the color-coded map

	5.0m~
	3.0m~5.0m
	0.5m~3.0m
	Less than 0.5m

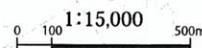
*The colors on the map indicate the maximum inundation depth at each location.
*This figure shows the relationship between the standard building size and the inundation depth.



List of evacuation shelters

No.	Evacuation shelter name	Location	Response to internal inundation*
1	Furano Agricultural Cooperative Parking Lot	1 Asahimachi	
2	Midori Park	13 Midorimachi	
3	Nishikimachi Park	12 Nishikimachi	
4	Furano Athletic Field	5 Katsuragi-cho	
5	Asahigaoka General Park Parking Lot	Shimogoryo	
3	Furano Sports Center	5-10 Katsuragi-cho	●
4	Furano City Government Office Complex	1-1 Yayoi-cho	○
5	Furano Nursing College	5-1 Yayoi-cho	○
6	Furano Regional Human Resource Development Center	1-1 Nishiasamachi	○
7	Kitanomine Community Center	8-1 Kitanomine-cho	○
8	Furano Driving School	2 Nishiogiyama	○
1	Furano Nishi Junior High School	1-1 Katsuragi-cho	●
2	Furano Elementary School	10-1 Wakamatsu-cho	○
3	Furano High School	1-1 Suehiro-cho	○
4	Ogiyama Elementary School	2-20 Midorimachi	○
5	Furano Ryokuho High School	1-1 Nishimachi	●
6	Furano Higashi Junior High School	1-30 Mizuho-cho	○
7	Higashi Elementary School	8-1 Kitaasamachi	●
1	Fureai Center (community center)	12-5 Kasuga-cho	○

*○ indicates a facility that is outside the flood hazard area and can be evacuated in the event of internal inundation.
*● is a facility that is located in a flood hazard area but can be evacuated by evacuating to the second or a higher floor of the building in the event of internal inundation.



Inland inundation hazard map Yamabe area

Map scope



An inland inundation hazard map is a map showing expected flooding conditions in the event of an overflow of rainwater that exceeded the capacity of the drainage facilities due to heavy rainfall (inland inundation). This map shows simulated inundation depths that may be expected in the event of inland inundation in the Yamabe area. The calculation method is as follows:

- (1) Assumed heavy rainfall of that may occur approximately once in 1000 years (1-hour maximum: 135.5 mm, 12-hour total rainfall: 502 mm)
- (2) The flood volume is derived by calculating the area where the rainfall is collected (watershed area), the amount of rain that falls over that area (rainfall), and the rate at which the rainfall runs off without infiltrating the ground (runoff rate). Formula: Flood volume = watershed area × rainfall × runoff rate
- (3) The inundation volume is calculated by subtracting the amount of water drained by sluiceways and sluice pipes installed in the river from the flood volume determined in (2) above.
- (4) The water level (inundation level) at the inundation volume obtained in (3) is calculated, and the inundation depth is set at four levels.

How to read the map

Legend of disaster management-related facilities

	Wide-area evacuation site
	Designated emergency evacuation site
	Designated evacuation shelter
	Welfare evacuation shelter
	City Hall/branch office
	Fire station/substation
	Police station/substation
	Hospital
	Heliport
	Water level observation station/crisis management water level gauge installation site*
	Live camera*

Legend of areas that may be flooded

	Water depth: 5.0 m - 10.0 m
	Water depth: 3.0 m - 5.0 m
	Water depth: 0.5 m - 3.0 m
	Water depth: 0.0 m - 0.5 m
	Underpass

*Water levels at water level observation stations and crisis management water level gauges and live camera images can be checked on the River Flood Information website of the Ministry of Land, Infrastructure, Transport and Tourism.

How to read the color-coded map

	5.0m~
	3.0m~5.0m
	0.5m~3.0m
	Less than 0.5m

*The colors on the map indicate the maximum inundation depth at each location.
*This figure shows the relationship between the standard building size and the inundation depth.

List of evacuation shelters

No.	Evacuation shelter name	Location	Response to internal inundation*
7	Yamabe Chuo Park	8 Yamabe Higashimachi	○
10	Yamabe Elementary School	8-64 Yamabe Higashimachi	○
11	Lifelong Learning Center	12 Yamabe Higashi 21-sen	○

*○ indicates a facility that is outside the flood hazard area and can be evacuated in the event of internal inundation.

● is a facility that is located in a flood hazard area but can be evacuated by evacuating to the second or a higher floor of the building in the event of internal inundation.