

⑥ How to Obtain Information (information to be delivered and information to be corrected)

It is necessary to understand the situation and make the decision to evacuate based on the information available. It is important to know what information is available and how to get it.

In order to avoid panic in an emergency, it is important to familiarize yourself with the "information to be corrected" on a regular basis.



⑦ Designated emergency evacuation shelters



This is a facility or place for **emergency evacuation to save lives** from river flooding. In order to accommodate long-distance evacuation at an early stage, Evacuation centers will be opened in areas not expected to be flooded.

The evacuation shelters will be opened sequentially depending on the situation, but some may not be opened, so check the information available at the time before evacuating.

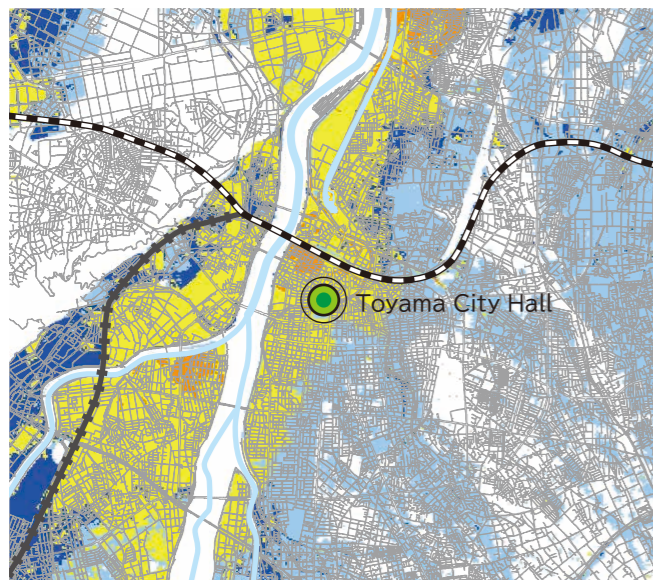
The list shows the available floors and other risk information for each assumption.

| School district | Name | Accessible floors | | Risks at the maximum assumption | | Address | Phone number (Area Code: 076) |
|-----------------|--|-----------------------|--------------------|---------------------------------|-----------------------------|-----------------------|-------------------------------|
| | | Basic Assumption | Maximum Assumption | House collapse | Flooding duration | | |
| Okuda | Okuda Elementary School | 2F or higher | 2F or higher | Floodwaters | 12 hours to less than 1 day | 10-18 Okuda-Futabacho | 441-3746 |
| | Okuda Junior High School | 2F or higher | 2F or higher | N/A | 12 hours to less than 1 day | 25-10 Okuimachi | 441-3628 |
| | Toyama Special Needs School for the Hearing Impaired | All floors accessible | 2F or higher | N/A | Less than 12 hours | 1-9-56 Shimo-Okui | 441-9172 |
| | Toyama prefectural Kyosei Center | 2F or higher | 2F or higher | Floodwaters | 1 day to less than 3 days | 6-7 Minatoirifunecho | 432-4500 |

Excerpt of evacuation shelters on the detailed area map ⑧

! Flooding duration

This is a calculation of the total time from when the depth of inundation exceeds 50 cm to when it falls below 50 cm, under certain conditions, under **the maximum assumption**. This information can be used to make decisions such as selecting an evacuation shelter or whether to staying at home.

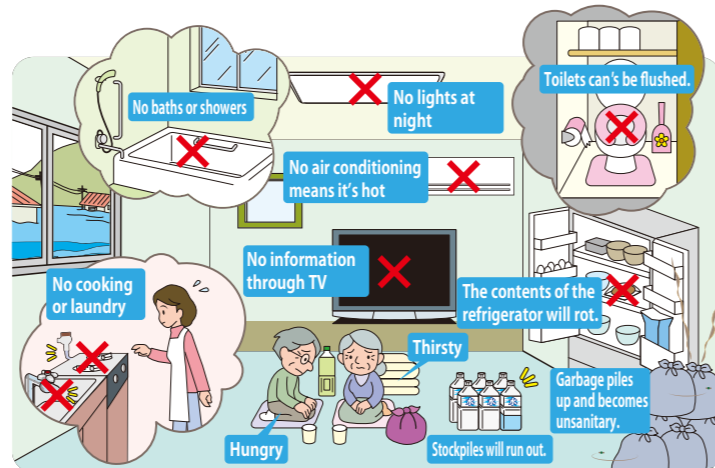


"The general map" is posted on the Toyama City website, so please check the area around your home.



富山市 洪水ハザードマップ

If you stay in your home and there is a power and / or water outage, **long term flooding can be life threatening!**



- 3 days to less than 1 week
- 1 day to less than 3 days
- 12 hours to less than 1 day
- Less than 12 hours

Two flood inundation assumptions (The basic assumption and the maximum assumption)

Basic Assumption

- In the city, the estimated flood inundation area for **rainfall (planned scale*1)**, which is the **basis for river maintenance**, is called the "**basic assumption**". It corresponds to rainfall that occurs relatively frequently.

*1: It is set by the river administrator for each river, taking into account the size of the river basin and other factors. The annual excess probability of the target rivers affecting the city range from 1/30 (Tsubono River) to 1/150 (Joganji River, Jinzu River, and Nishihasen River).

Maximum Assumption

- In order to cope with the frequent heavy rainfall, an estimated flood inundation area based on the maximum observed rainfall, which is **the maximum possible rainfall (estimated maximum*2)**, is called the "**maximum assumption**". Based on advance information such as the total amount of rainfall expected, it is necessary to prepare for rainfall that exceeds the planned scale and is of the assumed maximum scale.

*2: In general, the annual excess probability is about 1/1000.

What is annual excess probability?

It is the probability that a flood of that magnitude will occur each year.

If the annual excess probability is 1/50, the probability of rainfall exceeding that magnitude occurring in one year is 2.0%.

(There is an expression "rainfall that occurs about once every 50 years" and this expression is also used in the map. However, please note that this is not a regular occurrence in a 50-year cycle.)

! Total rainfall set for each target river

You can see the location of these rivers on page 13.

| Administrator | River system | River name | Total rainfall of planned scale (Subject to the basic assumption) | Assumed maximum total rainfall (Subject to the maximum assumption) |
|-------------------|----------------|----------------------------|---|--|
| MLIT | Shogawa River | Shogawa River | Total rainfall for 2 days: 368 mm (1/150) (No effect in the city) | Total rainfall in 48 hours: 655 mm |
| MLIT | Joganji River | Joganji River | Total rainfall for 2 days: 498 mm (1/150) | Total rainfall in 48 hours: 776 mm |
| MLIT | Jinzu River | Jinzu River | Total rainfall for 2 days: 264 mm (1/150) | Total rainfall in 48 hours: 537 mm |
| MLIT | Jinzu River | Nishihasen River | Total rainfall for 2 days: 264 mm (1/150) | Total rainfall in 48 hours: 537 mm |
| MLIT | Jinzu River | Ida River | Total rainfall for 2 days: 254 mm (1/100) | Total rainfall in 48 hours: 753 mm |
| MLIT | Jinzu River | Kumano River (Downstream*) | Total rainfall for 2 days: 276 mm (1/100) | Total rainfall in 48 hours: 872 mm |
| Toyama Prefecture | Jinzu River | Kumano River (Upstream*) | Total rainfall in 24 hours: 232 mm (1/50) | Total rainfall in 24 hours: 730.8 mm |
| Toyama Prefecture | Jinzu River | Itachi River | Total rainfall in 24 hours: 207.9 mm (1/50) | Total rainfall in 24 hours: 813 mm |
| Toyama Prefecture | Jinzu River | Dogawa River | Based on total rainfall of 161.1 mm in 24 hours (August 1914: peak flow rate 130 m ³ /s) | Total rainfall in 24 hours: 813 mm |
| Toyama Prefecture | Jinzu River | Yamada River | Total rainfall in 24 hours: 237 mm (1/50) | Total rainfall in 24 hours: 733.7 mm |
| Toyama Prefecture | Jinzu River | Tsubono River | Total rainfall in 24 hours: 177.3 mm (1/30) | Total rainfall in 24 hours: 813 mm |
| Toyama Prefecture | Kamiichi River | Kamiichi River | Total rainfall in 24 hours: 273.8 mm (1/50) | Total rainfall in 24 hours: 758 mm |
| Toyama Prefecture | Shiraiwa River | Shiraiwa River | Total rainfall in 24 hours: 233 mm (1/50) | Total rainfall in 24 hours: 723 mm |
| Toyama Prefecture | Shiraiwa River | Oiwa River | Total rainfall for 24 hours: 187 mm (1/50) (No effect in the city) | Total rainfall in 24 hours: 813 mm |
| Toyama Prefecture | Shiraiwa River | Tochizu River | Total rainfall in 24 hours: 166.1 mm (1/50) | Total rainfall in 24 hours: 807mm |

*Upstream of Kumano Bridge is managed by Toyama Prefecture, while downstream is managed by the Ministry of Land, Infrastructure, Transport and Tourism.

(Reference)

Rainfall during Typhoon No. 23 in 2004 (Oct. 19 - Oct. 21), which measured the highest water level in the Jinzu River in recorded history
 Takayama Observatory, Gifu Prefecture: 276mm/48h, 256.5mm/24h
 Inotani Observatory, Toyama Prefecture: 208mm/48h, 191mm/24h
 Toyama Observatory (Ishisaka): 116.5mm/48h, 106.5mm/24h