

Flood

● The magnitude of rain and the amount of rainfall used for the production of the Flood Hazard Map

The Fukuroi City Flood Hazard Map is created for the target 16 rivers for which a river manager creates and publishes the “predicted inundation areas”* in Fukuroi City.

*Predicted inundation areas

The predicted inundation areas are areas in which inundation is predicted when the water level of rivers rises and overflow due to a planned scale of rainfall (the magnitude of rain and the amount of rainfall in the table below).

Name of Water System	Magnitude of rain	Amount of rainfall
Ota River Water System	Probability of once in 50 years	Amount of rainfall in 24 hours 355.1 mm
Benzaiten River Water System	Probability of once in 50 years	Amount of rainfall in 24 hours 305.0 mm

Source: Fukuroi City Flood Hazard Map

● Guidelines for rain

Floods are caused by rain. With the advancement of urbanization, a larger amount of rainwater now flows into rivers in a short period of time, increasing the risk of flooding. Also, intense rainfall causes loose ground and sediment disasters.

Slightly strong rain	Strong rain	Heavy rain	Very heavy rain	Violent rain
10 to 20 mm in 1 hour	20 to 30 mm in 1 hour	30 to 50 mm in 1 hour	50 to 80 mm in 1 hour	More than 80 mm in 1 hour
				
Hard rain that bounces off the ground and wets your feet. Caution should be exercised even when rain of this magnitude continues for a long period of time.	Downpours that wet you even when holding an umbrella. Storm drains and small rivers overflow, and small-scale cliff collapses begin to occur.	Torrential rains as if it is raining buckets and streets begin to resemble rivers. Landslides and cliff collapses are more likely to occur.	Rain falls as if it was a waterfall and umbrellas are completely useless. Disasters such as debris flow are more likely to occur.	Terrifyingly violent rain that makes it difficult to breath. Since there is great danger that such rain will cause a large-scale disaster, extra caution is required.

Source: Fukuroi City Flood Hazard Map

● Disasters caused by heavy rain

Flood

Overflow of rivers

Floods that are caused by the destruction of embankments or banks



Overflow of inland water

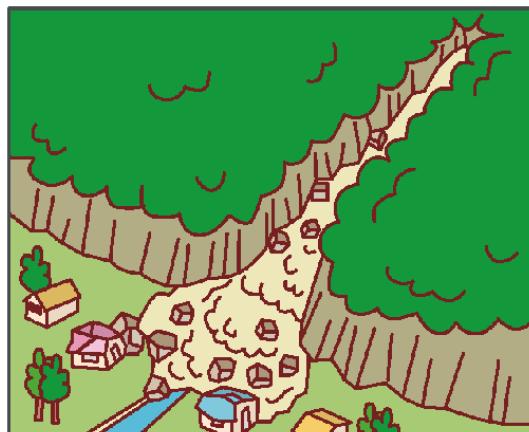
Floods that are caused because tributary water is prevented from being discharged into the main current



Sediment disaster

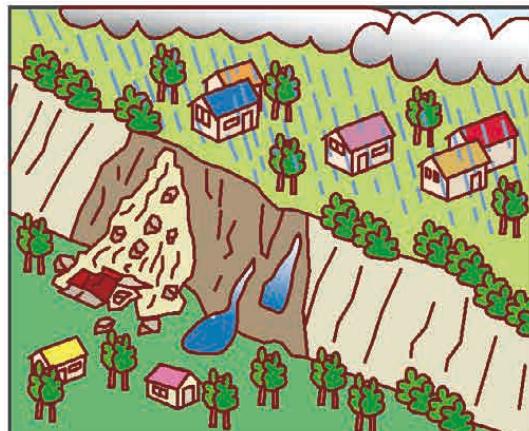
Debris flow

Debris flows are large amounts of water mixed with rocks and soil or sand from mountainsides and riverbeds that strike together like a tsunami.



Cliff collapse

Disasters in which a slope collapses suddenly



Source: Fukuroi City Flood Hazard Map

● Weather information/water level information

Weather information

Water level information

■ Fukuroi City weather observation information

It is possible to check information (including the amounts of rainfall, water levels, inundation and wind speeds) from devices installed at various points around the city.

<http://www.city.fukuroi.shizuoka.jp/kisho/pc.html>

Weather Water level



■ SIPOS-RADAR

(Shizuoka Prefecture Civil Engineering Disaster Prevention Information)

It is possible to check comprehensive disaster prevention information including weather information, weather forecasts, rivers (water levels) and typhoons.

<http://sipos.pref.shizuoka.jp/>

Weather Water level



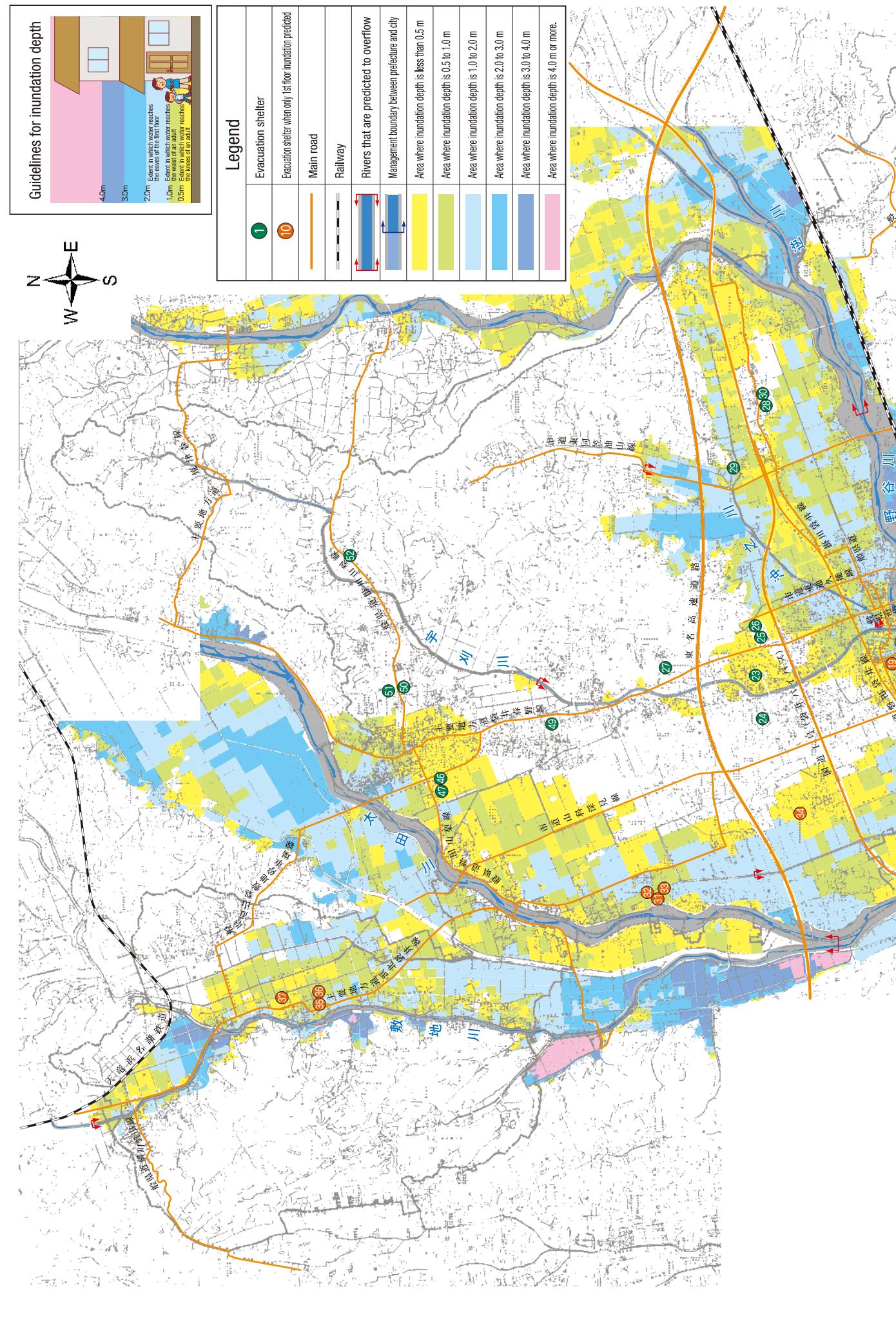
■ Japan Meteorological Agency website

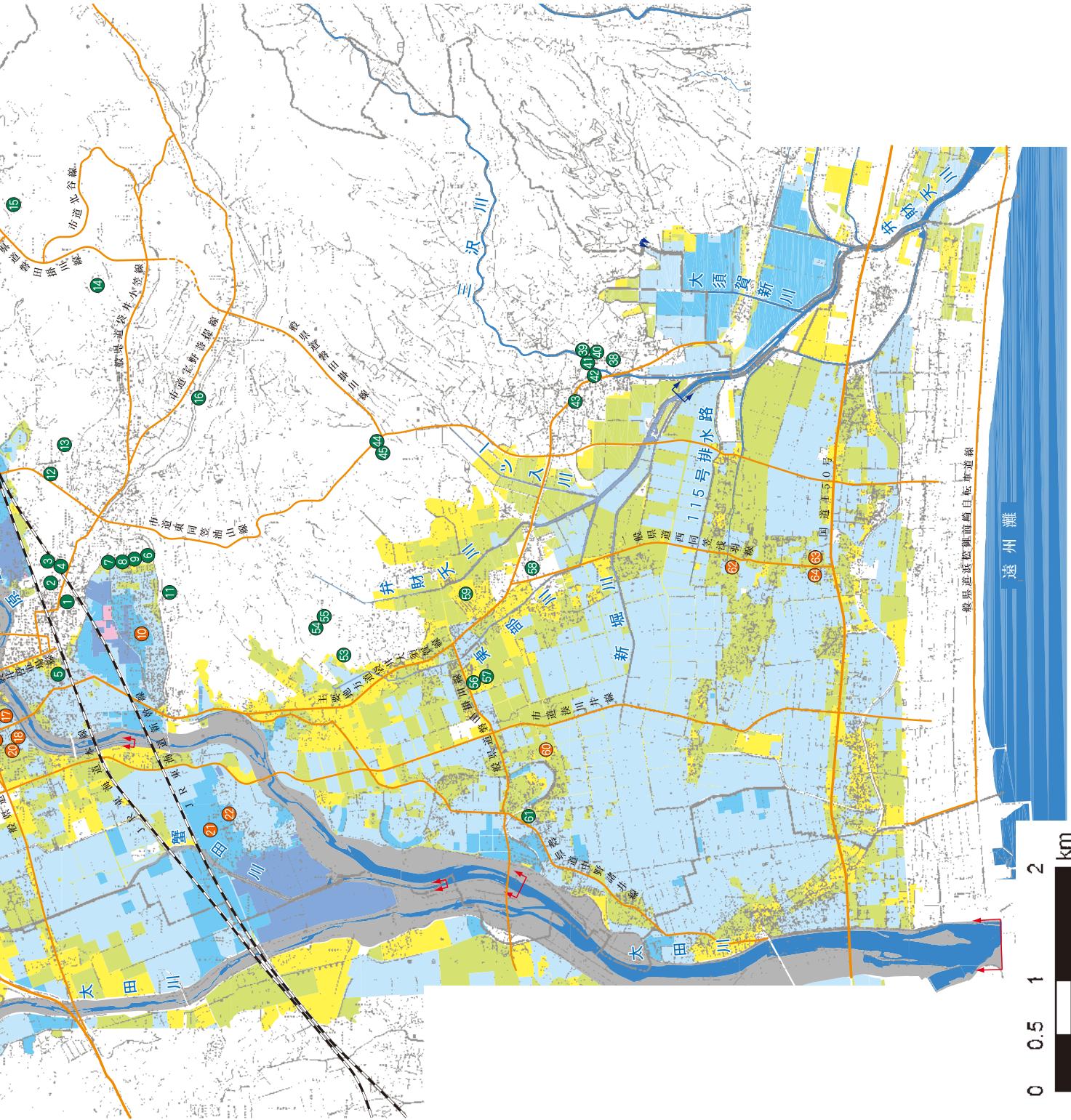
<http://www.jma.go.jp/jma/index.html>

Weather



Flood Inundation Map





Number	Evacuation shelter name
1	Central/Fukuroi Minami Public Hall
2	Fukuroi Minami Elementary School
3	Fukuroi Minami Kindergarten
4	Fukuroi Minami Nursery School
5	Tenrikyo Yamaia Great Church
6	Konan Elementary School
7	Konan Public Hall
8	Fukuroi Sports Center
9	Sun Life Fukuroi (old name: Youth Laborer Home)
10	Konan Kindergarten
11	Prefectural Fukuroi Special Support School (old name: Fukuroi Nursing School for the Disabled)
12	Fukuroi Minami Junior High School
13	Prefectural Fukuroi High School
14	Shizuoka Institute of Science and Technology
15	Ogasawara Sports Park
16	Toyosawa Fureai Hall
17	Fukuroi Nishi High School
18	Fukuroi Nishi Public Hall
19	Fukuroi Nishi Elementary School
20	Fukuroi Nishi Kindergarten
21	Tahara Kindergarten
22	Tahara Agricultural Community General Management Center
23	Fukuroi Kita Elementary School
24	Wakakusa Kindergarten
25	Fukuroi Kita Public Hall
26	Wakaba Kindergarten
27	Prefectural Fukuroi Commercial High School
28	Fukuroi Higashi Elementary School
29	Fukuroi Higashi Kindergarten
30	Fukuroi Higashi Public Hall
31	Imai Elementary School
32	Imai Public Hall
33	Imai Kindergarten
34	Shizuoka Prefecture Greenhouse Agricultural Cooperative, Association Crown Melon Office
35	Mitsukawa Elementary School
36	Mitsukawa Kindergarten
37	Mitsukawa Public Hall
38	Kasahara Elementary School
39	Kasahara Kindergarten
40	Kasahara Public Hall
41	Community Disaster Prevention Center
42	Kasahara Nursery School
43	Okazaki Hall
44	Chuuen Ocean Center (Sansara Igooka)
45	Kazami Hill
46	Yamana Public Hall
47	Tsukuminosato Workshop Center
48	-----
49	Shunian Junior High School
50	Yamana Elementary School
51	Yamanashi Kindergarten
52	Ugan Iki-Iki Center
53	Asaba Kita Public Hall
54	Asaba Higashi Elementary School
55	Asaba Higashi Kindergarten
56	Asaba Kita Elementary School
57	Asaba Kita Kindergarten
58	Asaba Junior High School
59	Mellow Plaza
60	Asaba Nishi Public Hall
61	Asaba Nishi Kindergarten
62	Asaba Higashi Public Hall
63	Asaba Minami Elementary School
64	Asaba Minami Kindergarten