

In the Event of High Tide Flooding

Expected inundation area map

Expected inundation area map of high tide flooding (maximum expected scale) *Some modifications have been made

Assumed high tide: High tide flooding caused by a typhoon with a central pressure of 910 hPa at the time of landfall, maximum cyclostrophic wind speed radius of 75 km, and movement speed of 73 km/h

Created on: December 19, 2024

Created by: Tokyo Metropolitan Government (Bureau of Port and Harbor, Bureau of Construction)

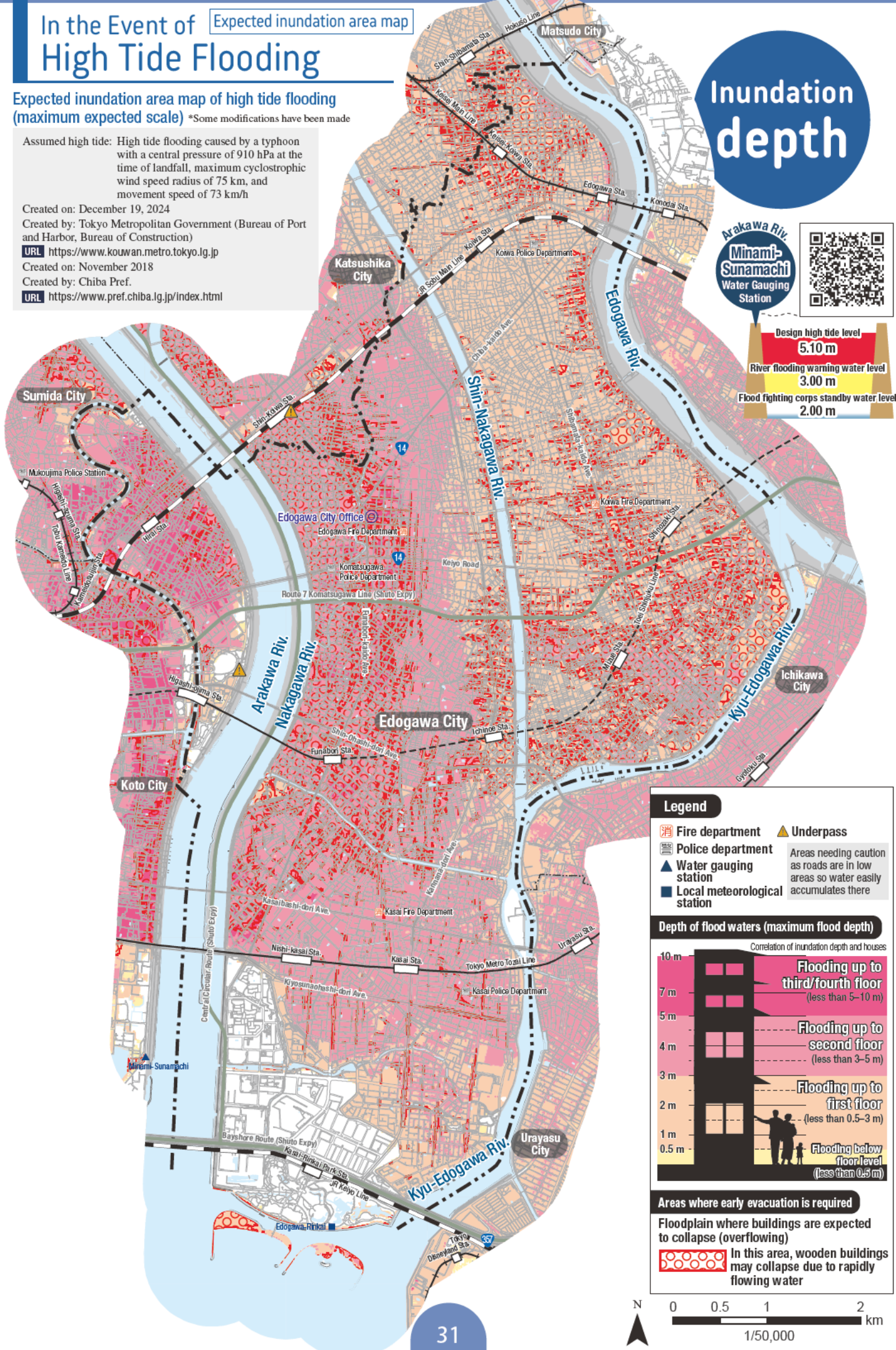
URL <https://www.kouwan.metro.tokyo.lg.jp>

Created on: November 2018

Created by: Chiba Pref.

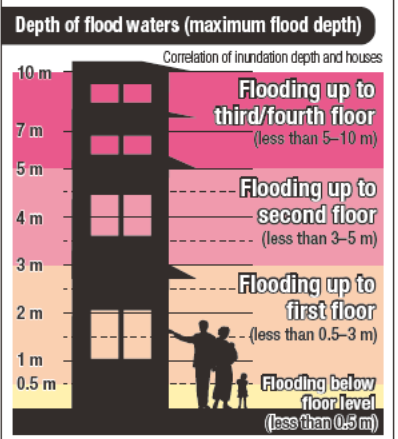
URL <https://www.pref.chiba.lg.jp/index.html>

Inundation depth



Legend

- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there



Areas where early evacuation is required

Floodplain where buildings are expected to collapse (overflowing)

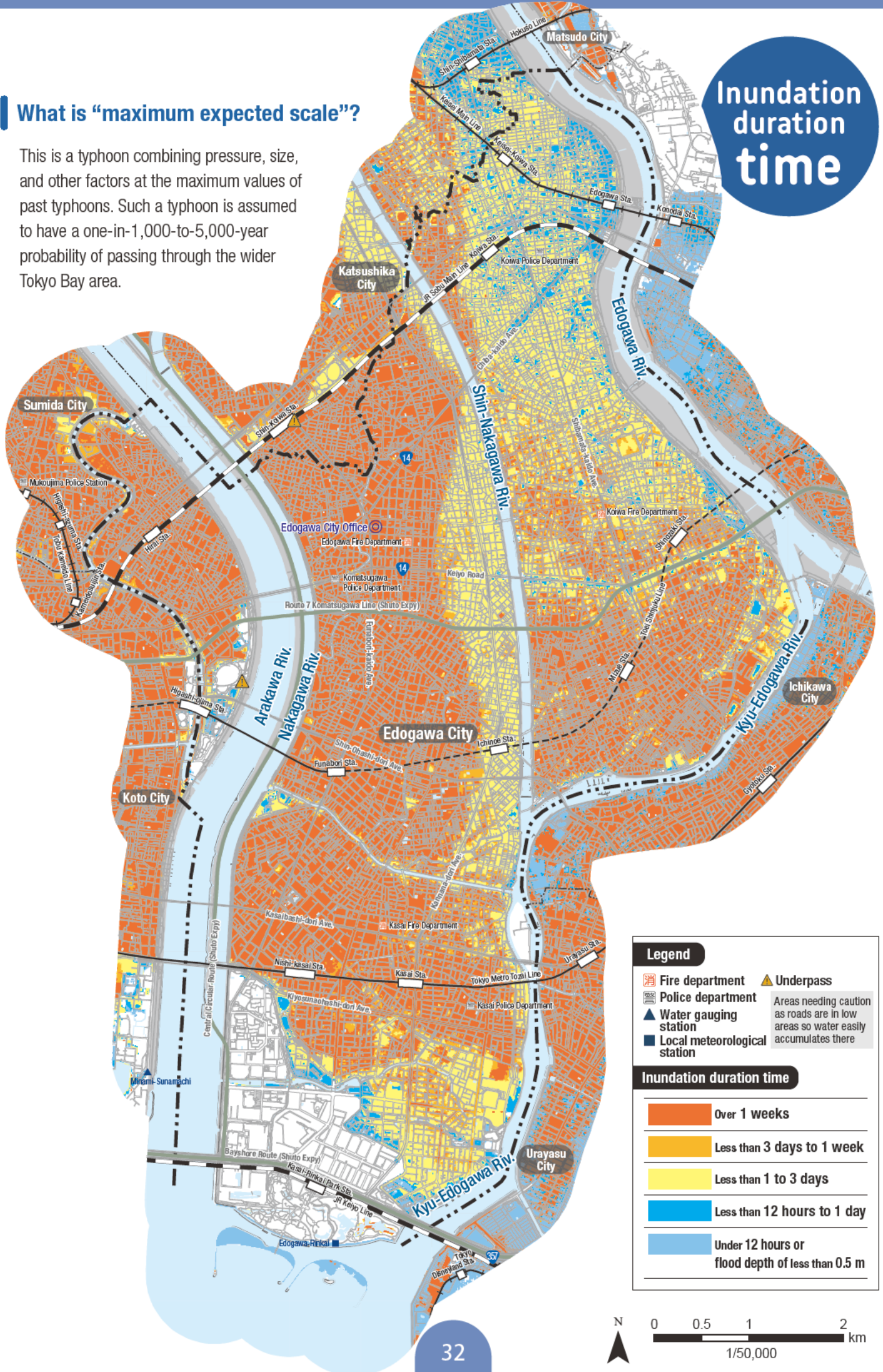
In this area, wooden buildings may collapse due to rapidly flowing water



What is “maximum expected scale”?

This is a typhoon combining pressure, size, and other factors at the maximum values of past typhoons. Such a typhoon is assumed to have a one-in-1,000-to-5,000-year probability of passing through the wider Tokyo Bay area.

Inundation duration time

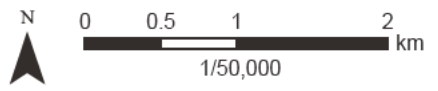


Legend

- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there

Inundation duration time

- Over 1 weeks
- Less than 3 days to 1 week
- Less than 1 to 3 days
- Less than 12 hours to 1 day
- Under 12 hours or flood depth of less than 0.5 m



In the Event of Arakawa River Flooding

Expected inundation area map

Expected inundation area map of Arakawa River flooding (maximum expected scale) *Some modifications have been made

Assumed rainfall for specification:
Total rainfall in the Arakawa river basin over 72 hours is 632 mm

Specified date: May 30, 2016


Created by: MLIT Arakawa Upstream River Office

URL <https://www.ktr.mlit.go.jp/arajo/>

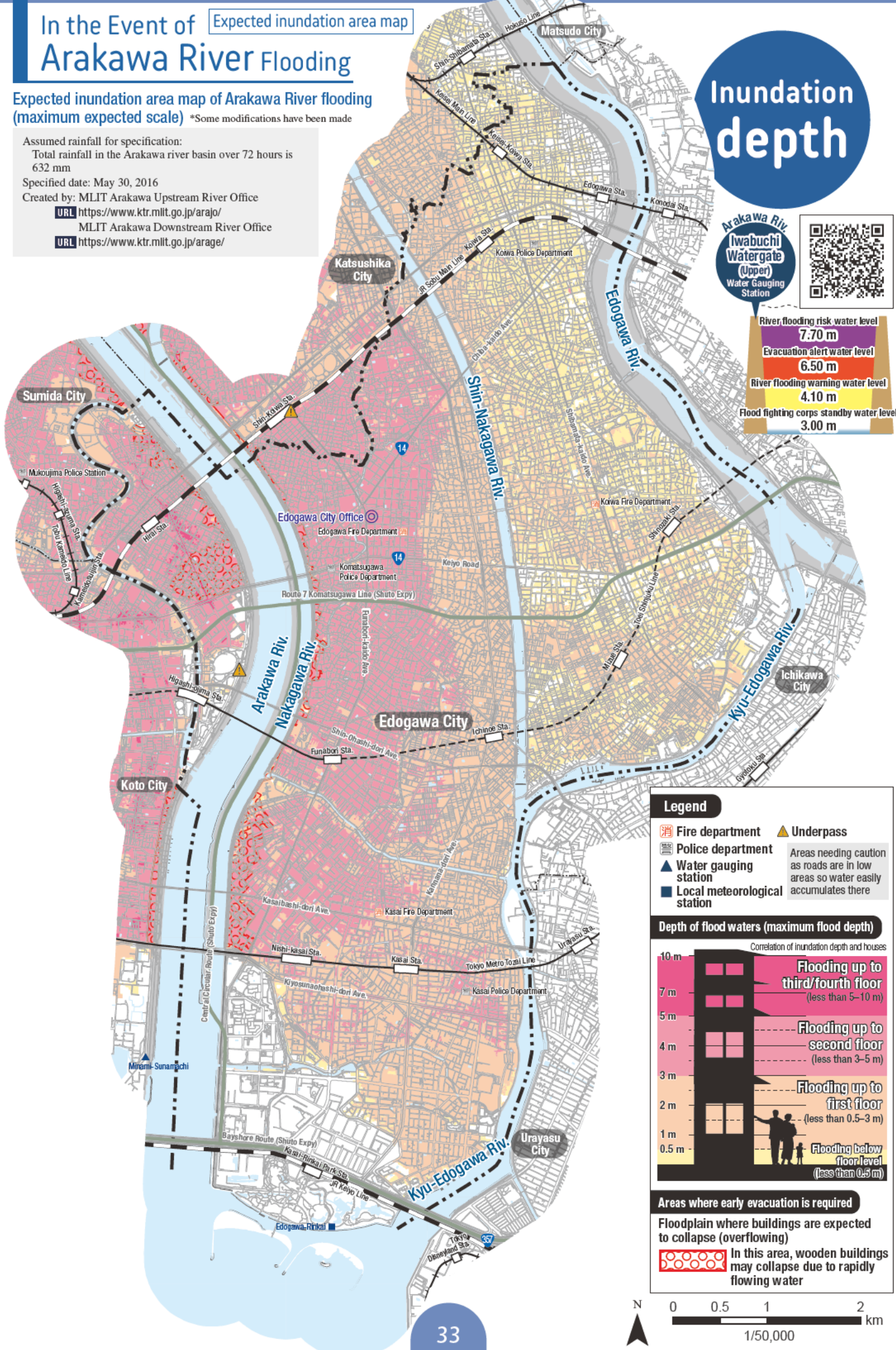
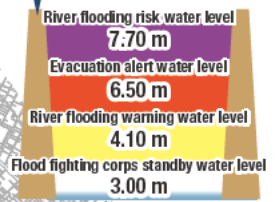
MLIT Arakawa Downstream River Office

URL <https://www.ktr.mlit.go.jp/arage/>

Inundation depth

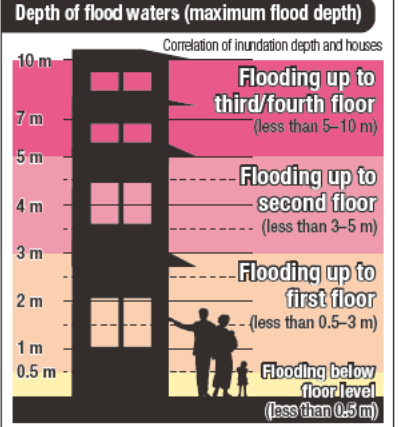


Arakawa Riv
Iwabuchi
Watergate
(Upper)
Water Gauging
Station



Legend

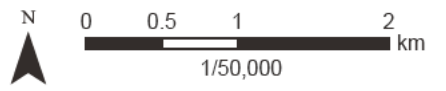
- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there



Areas where early evacuation is required

Floodplain where buildings are expected to collapse (overflowing)

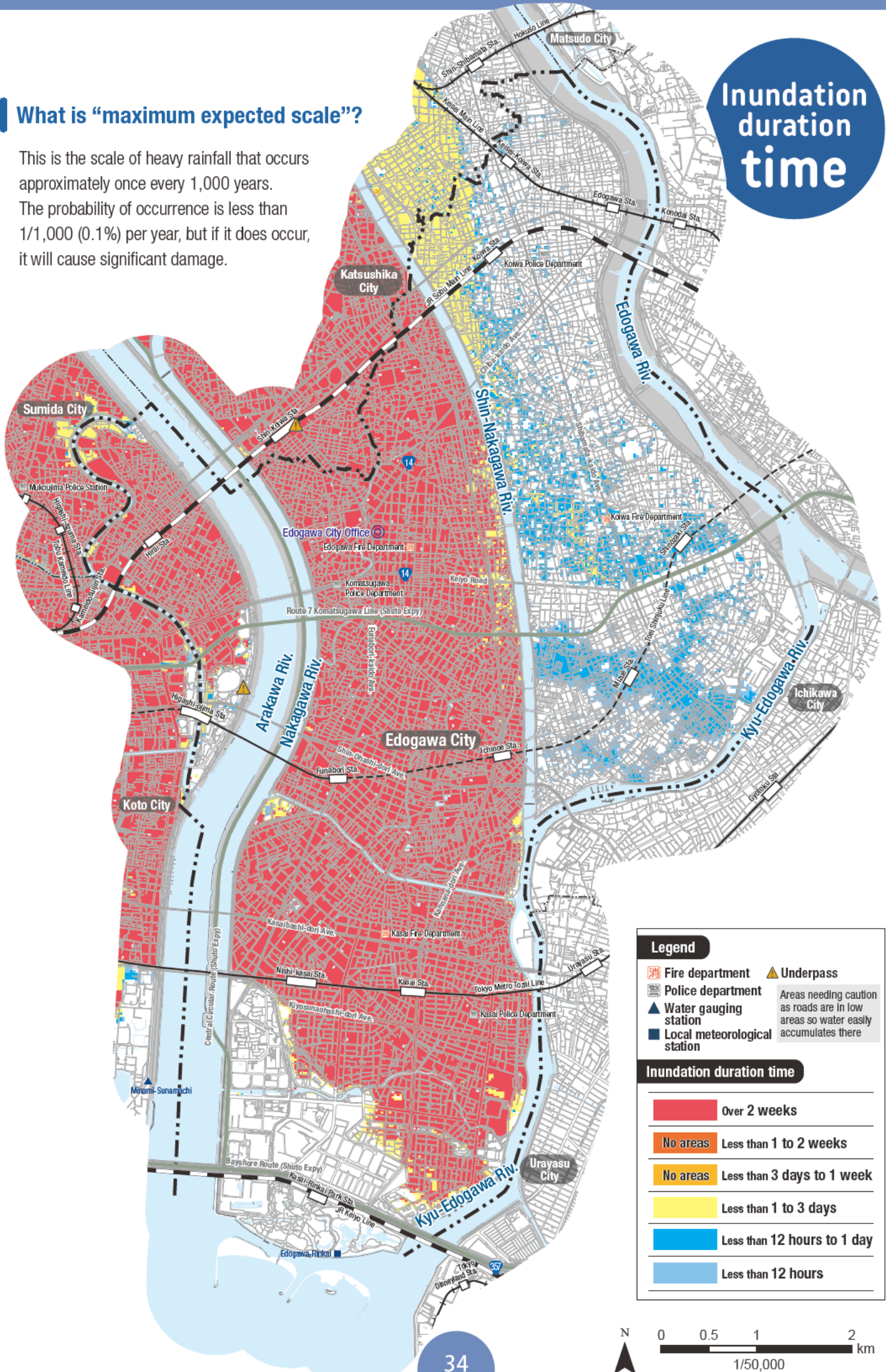
In this area, wooden buildings may collapse due to rapidly flowing water



What is “maximum expected scale”?

This is the scale of heavy rainfall that occurs approximately once every 1,000 years. The probability of occurrence is less than 1/1,000 (0.1%) per year, but if it does occur, it will cause significant damage.

Inundation duration time



Legend

- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there

Inundation duration time

- Over 2 weeks
- No areas Less than 1 to 2 weeks
- No areas Less than 3 days to 1 week
- Less than 1 to 3 days
- Less than 12 hours to 1 day
- Less than 12 hours

In the Event of Edogawa River Flooding

Expected inundation area map

Expected inundation area map of Edogawa River flooding (maximum expected scale)

*Some modifications have been made

Assumed rainfall for specification:

Total rainfall over 72 hours in the Tonegawa river basin and Yattajima upper river basin is 491 mm

Specified date: July 20, 2017

Created by: MLIT Edogawa River Office

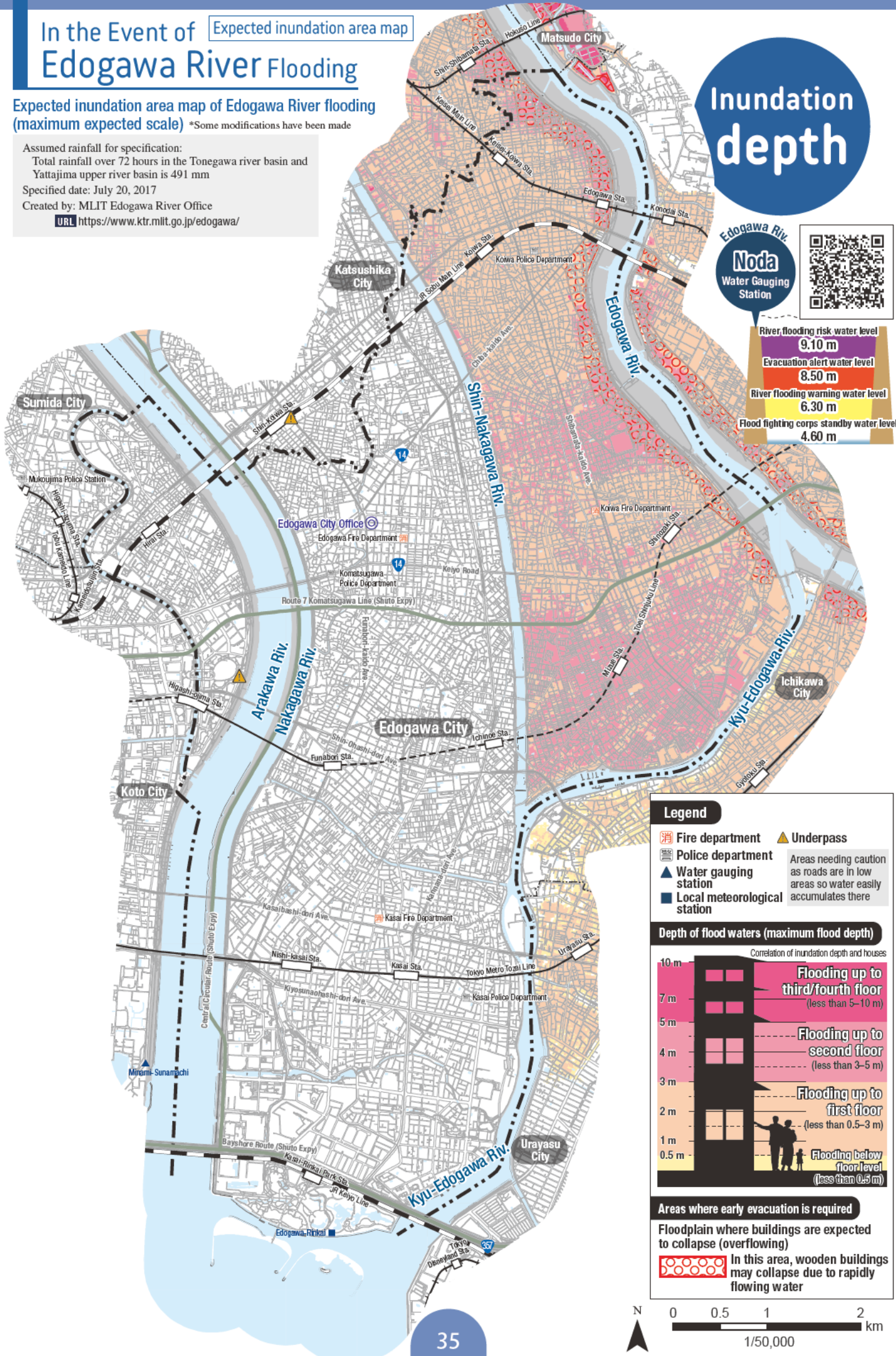
URL <https://www.ktr.mlit.go.jp/edogawa/>

Inundation depth

Edogawa Riv.
Noda
Water Gauging Station

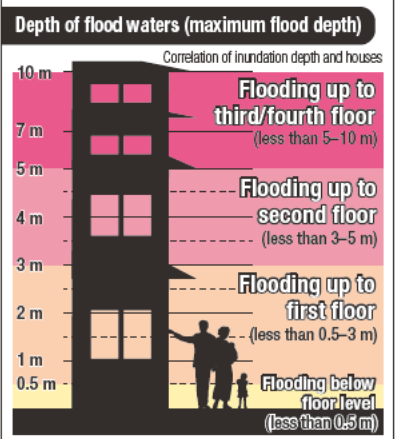


River flooding risk water level	9.10 m
Evacuation alert water level	8.50 m
River flooding warning water level	6.30 m
Flood fighting corps standby water level	4.60 m



Legend

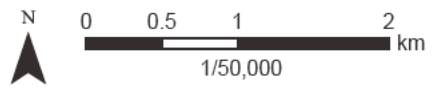
- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there



Areas where early evacuation is required

Floodplain where buildings are expected to collapse (overflowing)

In this area, wooden buildings may collapse due to rapidly flowing water



What is “maximum expected scale”?

This is the scale of heavy rainfall that occurs approximately once every 1,000 years. The probability of occurrence is less than 1/1,000 (0.1%) per year, but if it does occur, it will cause significant damage.

Inundation duration time

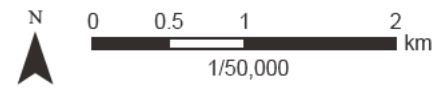


Legend

- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there

Inundation duration time

- Less than 1 to 2 weeks
- Less than 3 days to 1 week
- Less than 1 to 3 days
- Less than 12 hours to 1 day
- Less than 12 hours



In the Event of Tonegawa River Flooding

Expected inundation area map

Expected inundation area map of Tonegawa River flooding (maximum expected scale)

*Some modifications have been made

Assumed rainfall for specification:

Total rainfall over 72 hours in the Tonegawa river basin and

Yattajima upper river basin is 491 mm

Specified date: July 20, 2017

Created by: MLIT Tonegawa Upstream River Office

[URL https://www.ktr.mlit.go.jp/tonej/](https://www.ktr.mlit.go.jp/tonej/)

MLIT Tonegawa Downstream River Office

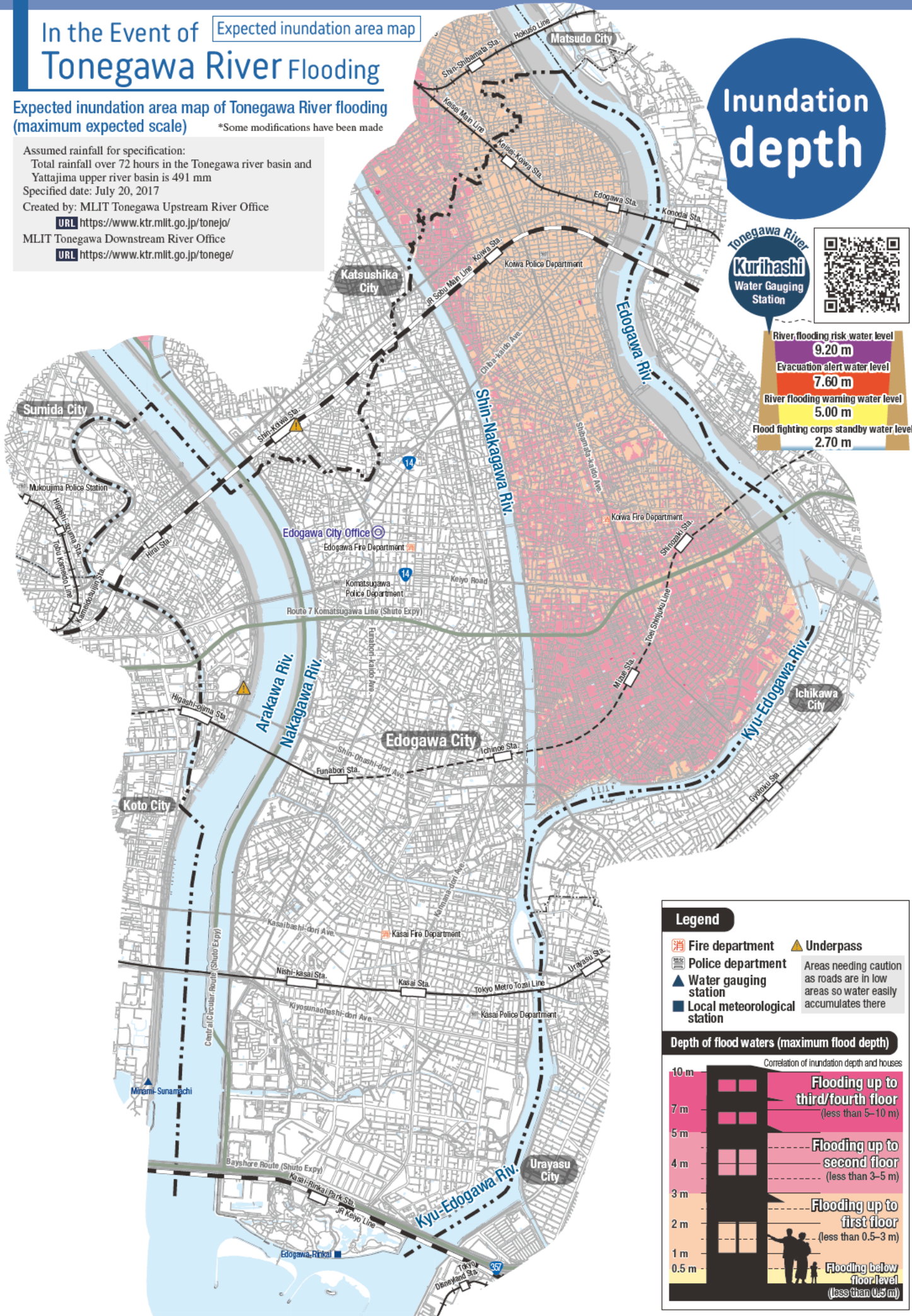
[URL https://www.ktr.mlit.go.jp/tonege/](https://www.ktr.mlit.go.jp/tonege/)

Inundation depth

Tonegawa River
Kurihashi
Water Gauging Station

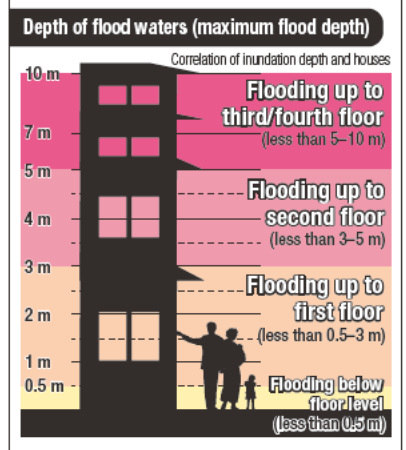


River flooding risk water level	9.20 m
Evacuation alert water level	7.60 m
River flooding warning water level	5.00 m
Flood fighting corps standby water level	2.70 m



Legend

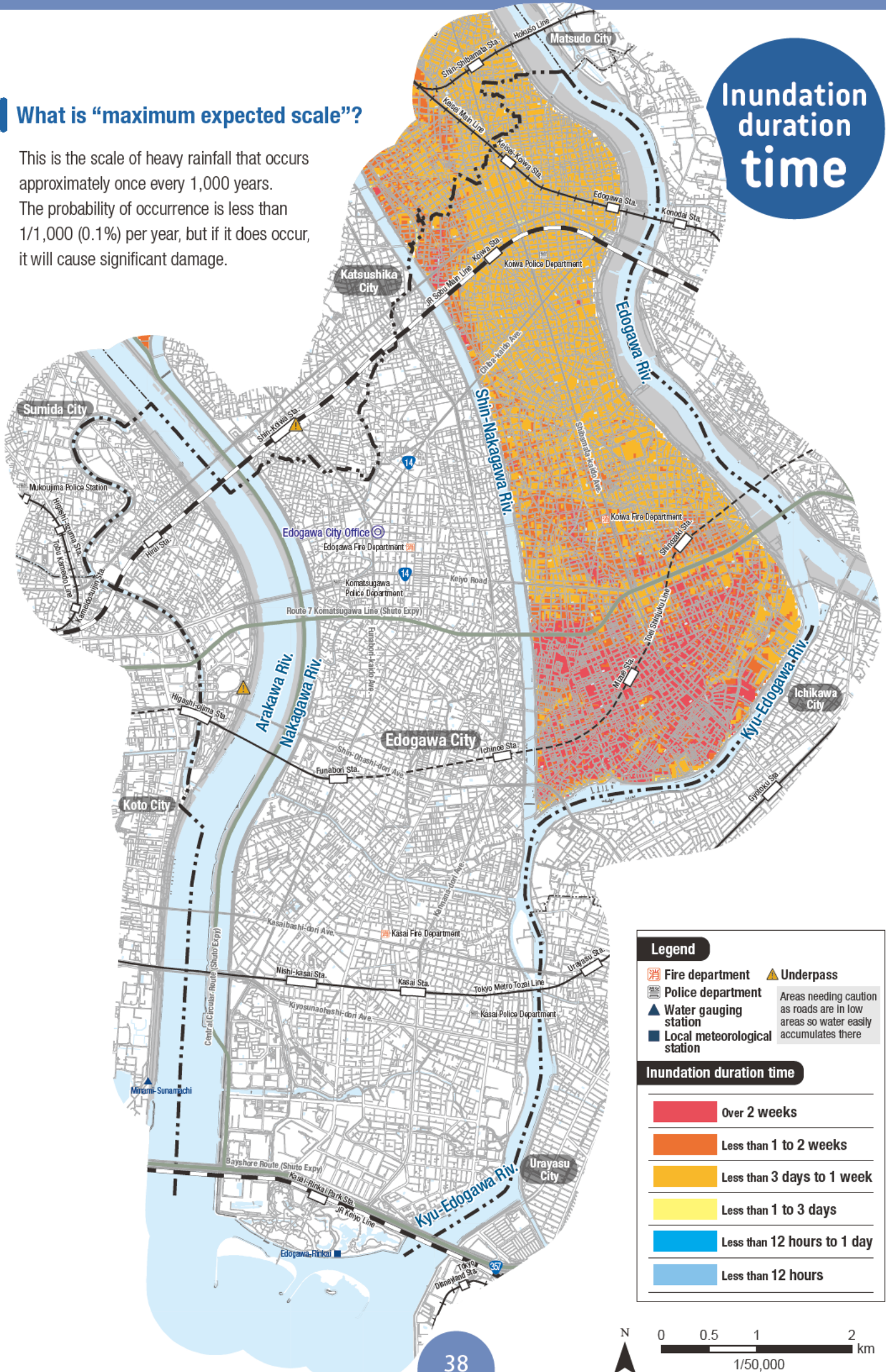
- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there



What is “maximum expected scale”?

This is the scale of heavy rainfall that occurs approximately once every 1,000 years. The probability of occurrence is less than 1/1,000 (0.1%) per year, but if it does occur, it will cause significant damage.

Inundation duration time



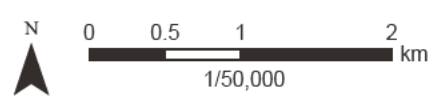
Expected Inundation Area Map In the Event of Tonegawa River Flooding

Legend

- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there

Inundation duration time

- Over 2 weeks
- Less than 1 to 2 weeks
- Less than 3 days to 1 week
- Less than 1 to 3 days
- Less than 12 hours to 1 day
- Less than 12 hours



In the Event of Nakagawa River Flooding

Expected inundation area map

Government controlled section

Nakagawa Riv
Yoshikawa
Water Gauging
Station



Expected inundation area map of Nakagawa River flooding (maximum expected scale)

*Some modifications have been made

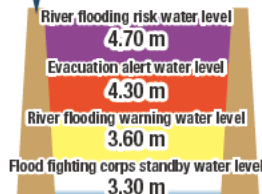
Assumed rainfall for specification:

Total rainfall over 48 hours in the Nakagawa and Ayasegawa river basin is 596 mm

Specified date: July 20, 2017

Created by: MLIT Edogawa River Office

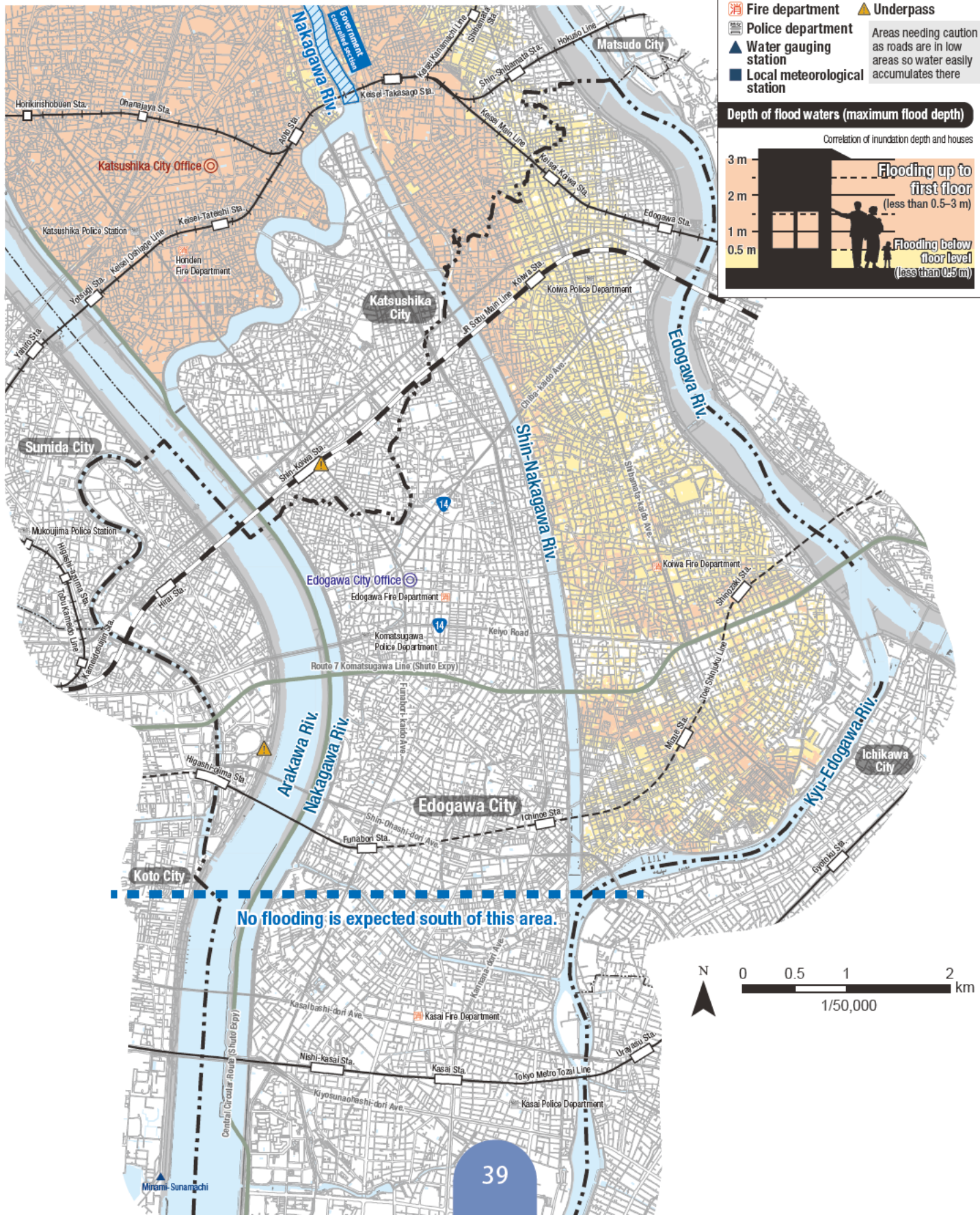
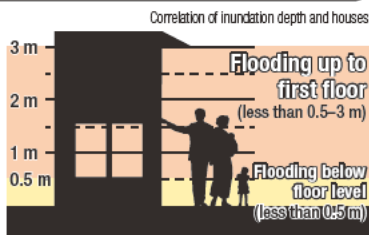
URL <https://www.ktr.mlit.go.jp/edogawa/>



Legend

- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass
- Areas needing caution as roads are in low areas so water easily accumulates there

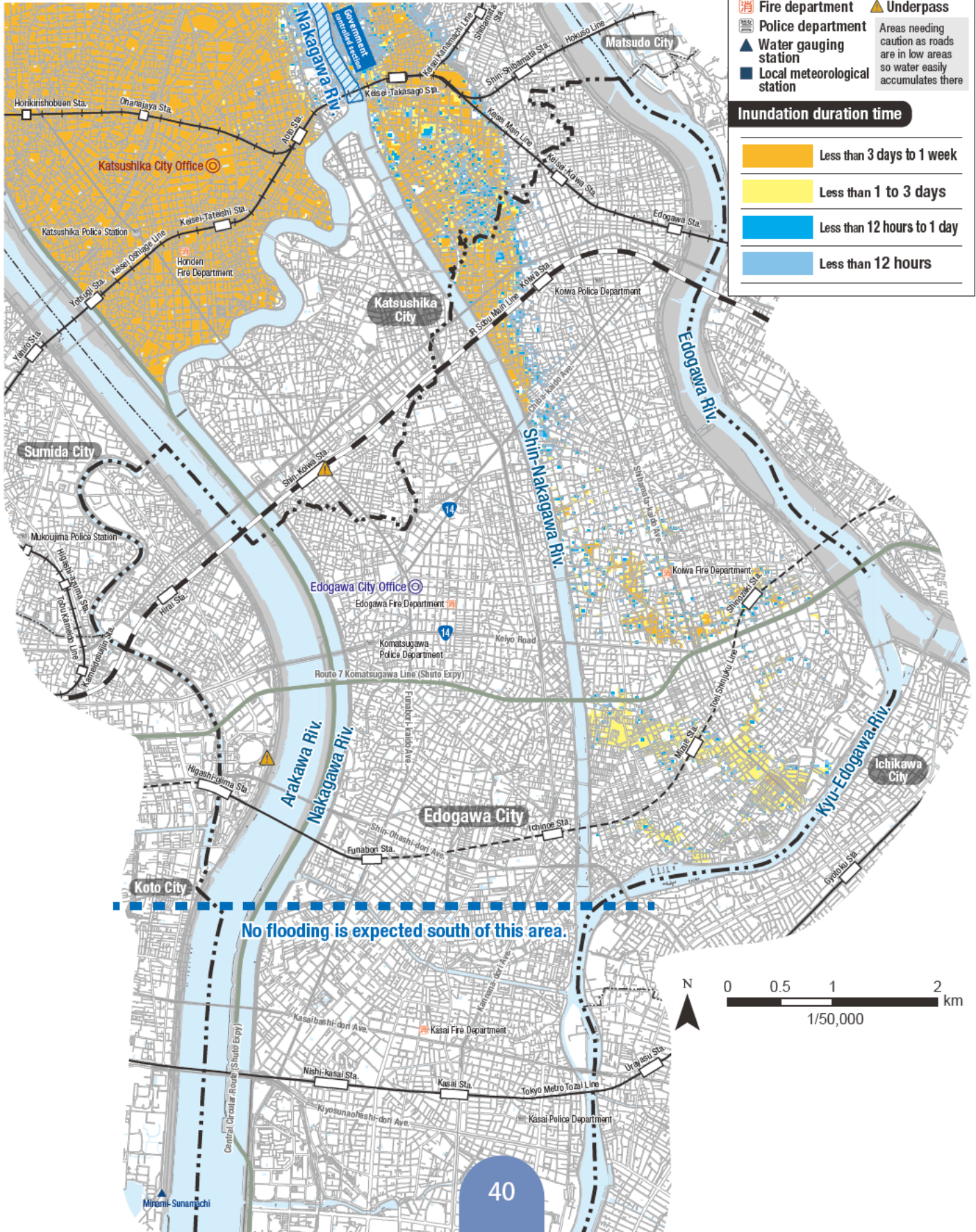
Depth of flood waters (maximum flood depth)



Inundation duration time

What is “maximum expected scale”?

This is the scale of heavy rainfall that occurs approximately once every 1,000 years. The probability of occurrence is less than 1/1,000 (0.1%) per year, but if it does occur, it will cause significant damage.



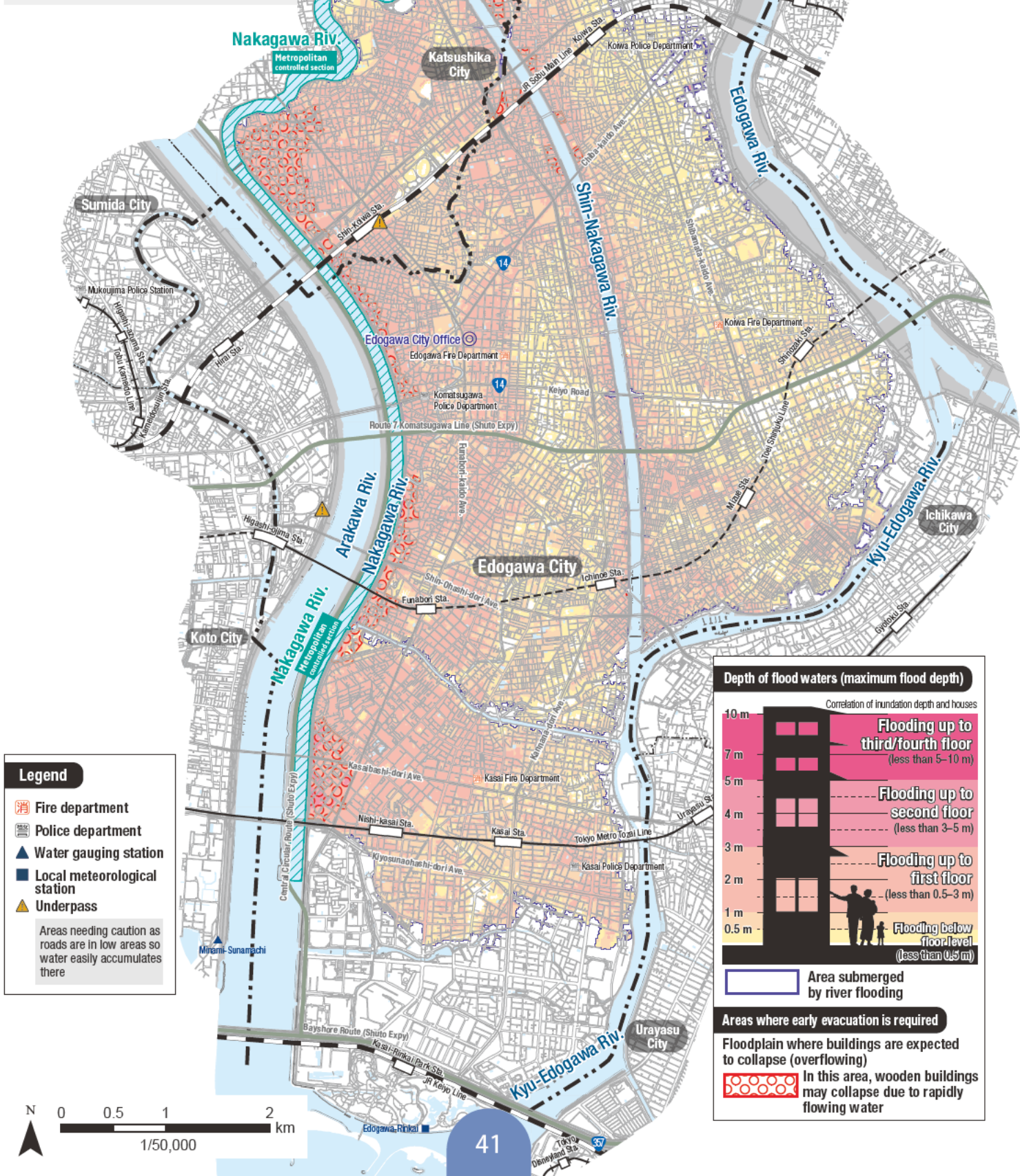
Such as Nakagawa River Metropolitan controlled section or Shin-Nakagawa River

Expected inundation area map of Nakagawa River/Ayasegawa River areas (maximum expected scale) *Some modifications have been made

Assumed rainfall for specification:
 Maximum rainfall over one hour in the Nakagawa River/Ayasegawa River areas is 153 mm
 Total rainfall over 24 hours is 690 mm
 Target area in the City: area east of the Arakawa Riv.
 Target rivers in the City: Nakagawa Riv., Shin-Nakagawa Riv., Kyu-Edogawa Riv., Shinkawa Riv.
 Specified date: February 15, 2024
 Created by: Tokyo Metropolitan Government

URL <https://www.kensetsu.metro.tokyo.lg.jp/>

Inundation depth



Legend

- Fire department
- Police department
- Water gauging station
- Local meteorological station
- Underpass

Areas needing caution as roads are in low areas so water easily accumulates there

Depth of flood waters (maximum flood depth)

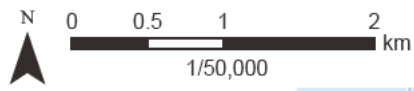
Correlation of inundation depth and houses

10 m		Flooding up to third/fourth floor (less than 5-10 m)
7 m		
5 m		Flooding up to second floor (less than 3-5 m)
4 m		
3 m		Flooding up to first floor (less than 0.5-3 m)
2 m		
1 m		Flooding below floor level (less than 0.5 m)
0.5 m		

Area submerged by river flooding

Areas where early evacuation is required

Floodplain where buildings are expected to collapse (overflowing)
 In this area, wooden buildings may collapse due to rapidly flowing water



What is “maximum expected scale”?

This is the scale of heavy rainfall that occurs approximately once every 1,000 years.

The probability of occurrence is less than 1/1,000 (0.1%) per year, but if it does occur, it will cause significant damage.

Inundation duration time

Expected Inundation Area Map In The Event of Flooding at Small and Medium-Sized Rivers such as Nakagawa River (Metropolitan Controlled Section) or Shin-Nakagawa River

