# Additional information about the Flood Hazard Map

### Flooding

This hazard map shows the levels of flooding anticipated during a flood. A flood may involve a river bursting its banks, where heavy rain swells the level of water in a river and it overflows its banks or breaks flood defences so that water flows into houses and fields. This is in contrast to inland flooding, where water builds up in land around the river area so far that it can no longer be carried away by rivers (this hazard map does not take this into account).





# Anticipated conditions

This hazard map is based on the flooding estimated by Aichi Prefecture as likely to occur with the maximum anticipated rainfall on rivers in the Handa City area.

(Secondary rivers) Agui River system: 821mm of rainfall in a 24 hour period (Agui River, Juka River, Yakachi River, Maeda River, Kusaki River, Fukuyama River, Ebi River regions)

(Secondary Rivers) Hieda River system, Godo River system, Ishikawa River system, Suga River system: 836mm of rainfall in a 24 hour period.

This level of flooding would cause the river to burst its banks in several places, and the simulation assumes water escaping the river for the surrounding area, showing the maximum flood area and the maximum flood depth.

The scope and depth of the anticipated flooding shown on the map is entirely estimated, and areas not shown as flooding on the map may in fact flood, or the flood depth may be deeper than indicated in a real water disaster. Please see the the Aich Prefecture website for further information and a map of the areas expected to flood in the case of a water disaster.

https://www.pref.aichi.jp/soshiki/kasen/shinsuiyoso-05.html

#### Previous disasters

This hazard map was created in reference to previous disaster information, including the inland flooding occurring in 1990, 1991, 1994 and 2000 (the Tokai Floods). The hazard map only covers the areas shown in detail on p.13-30. Please see the Handa City website for more detailed information about flooding city-wide.

https://www.city.handa.lg.jp/kotsu/bosai/bosai/map/map.html

#### Vertical evacuation

Vertical evacuation is the act of moving to a higher floor of a building in order to ensure safety. If you are at risk from rising water, you should evacuate to an evacuation center before it becomes dangerous, but if water levels are already high or there is sudden heavy rain it may be safer to implement vertical evacuation.

## ■ Below-floor water damage

Floods occurring below the floor are different to floods occurring above floor-level for the following reasons. Please take care in these circumstances.

Be aware of the situation above floor. There may be limited access to evacuation routes.

Doors may not open due to water pressure.

There is no time to waste once flooding occurs.

Area in which it is anticipated that flooding may cause buildings to collapse (deterioration of riverbanks)

If a river bank is eroded, the buildings behind it may be washed away or destroyed.







**Hazard Map** 

# for Tsunamis

This map displays the areas that may be affected by a tsunami in (multiple cases of) an earthquake with significant impact on Aichi Prefecture and shows the results of flooding simulations in terms of the maximum possible flood area / depth of flooding.

[Designated evacuation centers where part of the area is expected to flood during a disaster] Mizuho Kinenkan (Hall)

Please confirm whether or not an evacuation center is open using the internet before evacuation \*Further explanation is given on the last page of the Tsunami section (p.75)