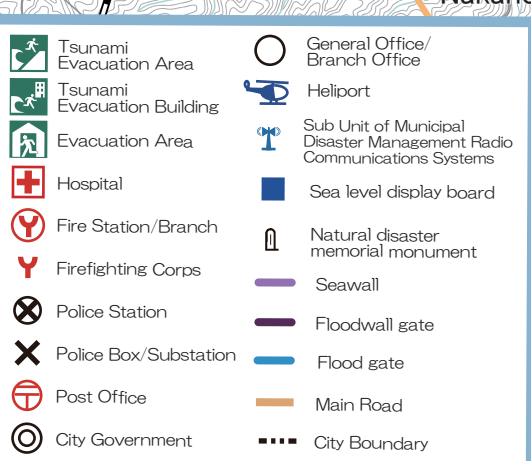
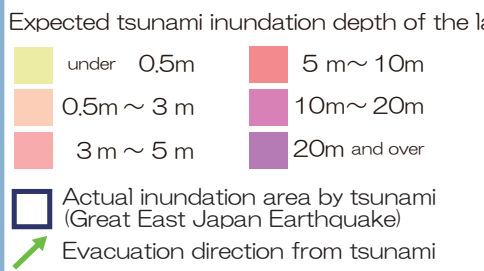


Earthquake / Tsunami

Expected tsunami inundation depth of the largest class



Maximum tsunami water level (T.P.,m)	Impact starting time (±20cm)	First wave	Maximum wave
15.6	4min	25min	34min

Maximum tsunami water level (T.P.,m)	Impact starting time (±20cm)	First wave	Maximum wave
13.3	3min	24min	33min

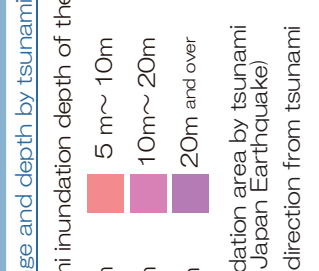
Maximum tsunami water level (T.P.,m)	Impact starting time (±20cm)	First wave	Maximum wave
20.7	7min	25min	36min

Maximum tsunami water level (T.P.,m)	Impact starting time (±20cm)	First wave	Maximum wave
21.7	6min	25min	35min



Earthquake / Tsunami

Expected tsunami inundation depth of the largest class



Earthquake / Tsunami



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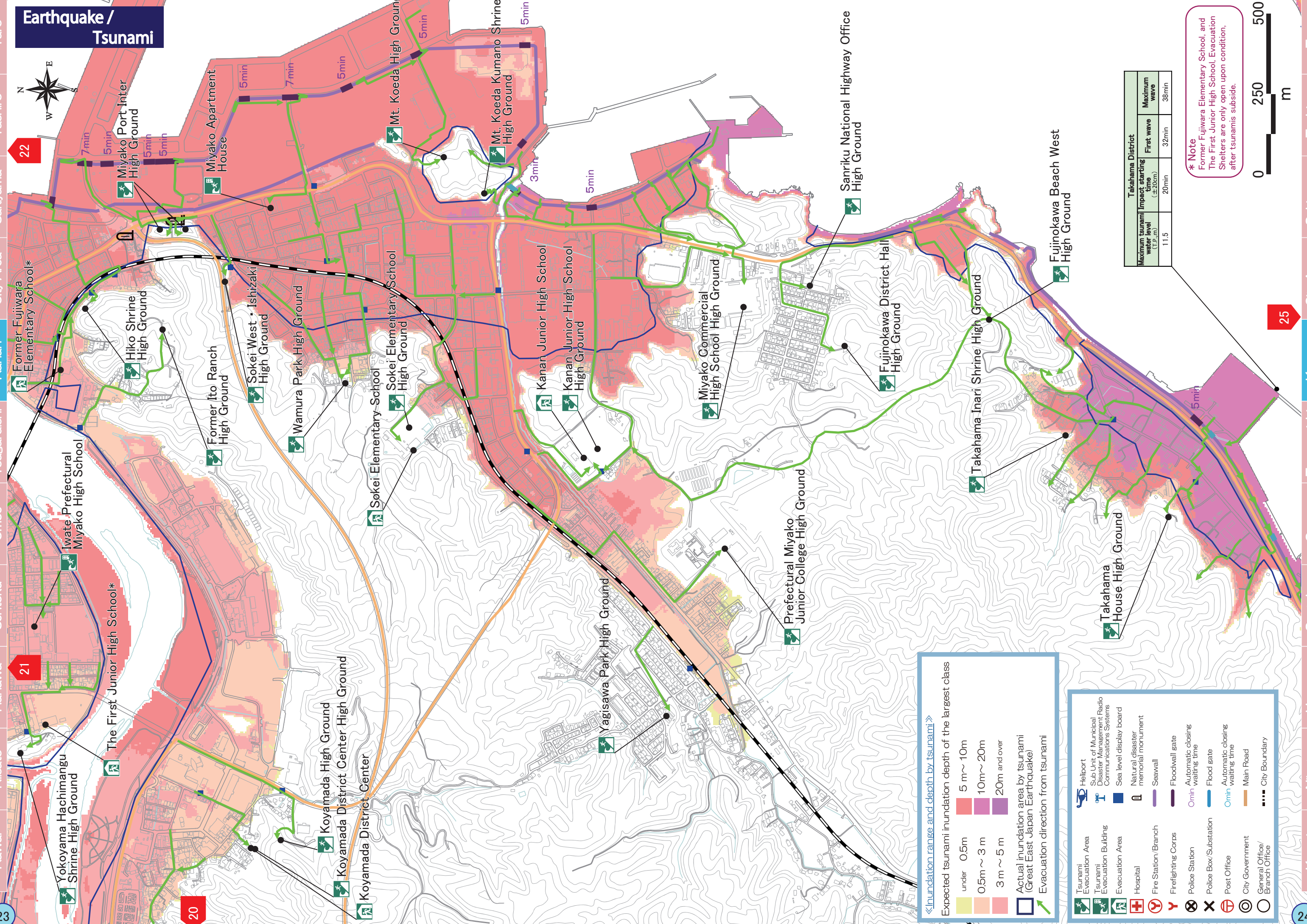
21

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Takahama District		
Maximum tsunami water level (T.P.,m)	11.5	
Impact starting time (±20cm)	20min	
First wave	32min	
Maximum wave	38min	

*** Note**
Former Fujiwara Elementary School, and The First Junior High School, Evacuation Shelters are only open upon condition, after tsunamis subside.



Expected tsunami inundation depth of the largest class

- under 0.5m
- 0.5m ~ 3 m
- 3 m ~ 5 m
- 5 m ~ 10m
- 10m ~ 20m
- 20m and over

Actual inundation area by tsunami (Great East Japan Earthquake)

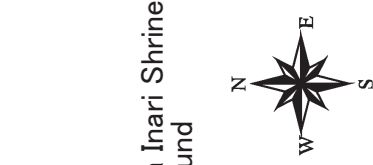
Evacuation direction from tsunami

- Tsunami Evacuation Area
- Tsunami Evacuation Building
- Evacuation Area
- Hospital
- Fire Station/Branch
- Firefighting Corps
- Police Station
- Police Box/Substation
- Post Office
- City Government
- General Office/Branch Office
- Heliport
- Sub Unit of Municipal Disaster Management Radio Communications Systems
- Sea level display board
- Natural disaster memorial monument
- Seawall
- Floodwall gate
- Automatic closing waiting time
- Flood gate
- Automatic closing waiting time
- Main Road
- City Boundary

Kawai Niisato Hanawa Sentoku Omoe Tsugaruishi Kanan City Area Sakiyama Tashiro Taro

Kawai Niisato Hanawa Sentoku Omoe Tsugaruishi Kanan City Area Sakiyama Tashiro Taro

Earthquake / Tsunami



Expected tsunami inundation depth of the largest class

under 0.5m	5 m ~ 10m
0.5m ~ 3 m	10m ~ 20m
3 m ~ 5 m	20m and over

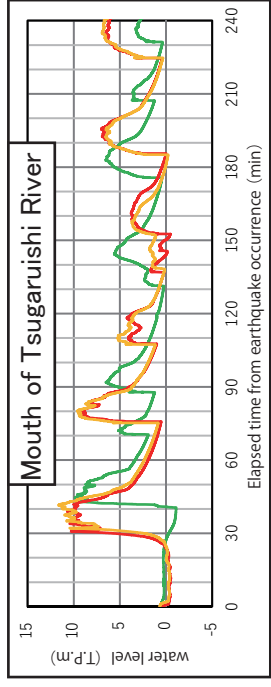
Actual inundation area by tsunami (Great East Japan Earthquake)

Evacuation direction from tsunami

Takahama District		
Maximum tsunami water level (T.P.,m)	Impact starting time (±20cm)	Maximum wave
11.5	20min	32min
		38min

Tsuraruishi Fishing Port		
Maximum tsunami water level (T.P.,m)	Impact starting time (±20cm)	Maximum wave
11.5	21min	33min
		38min

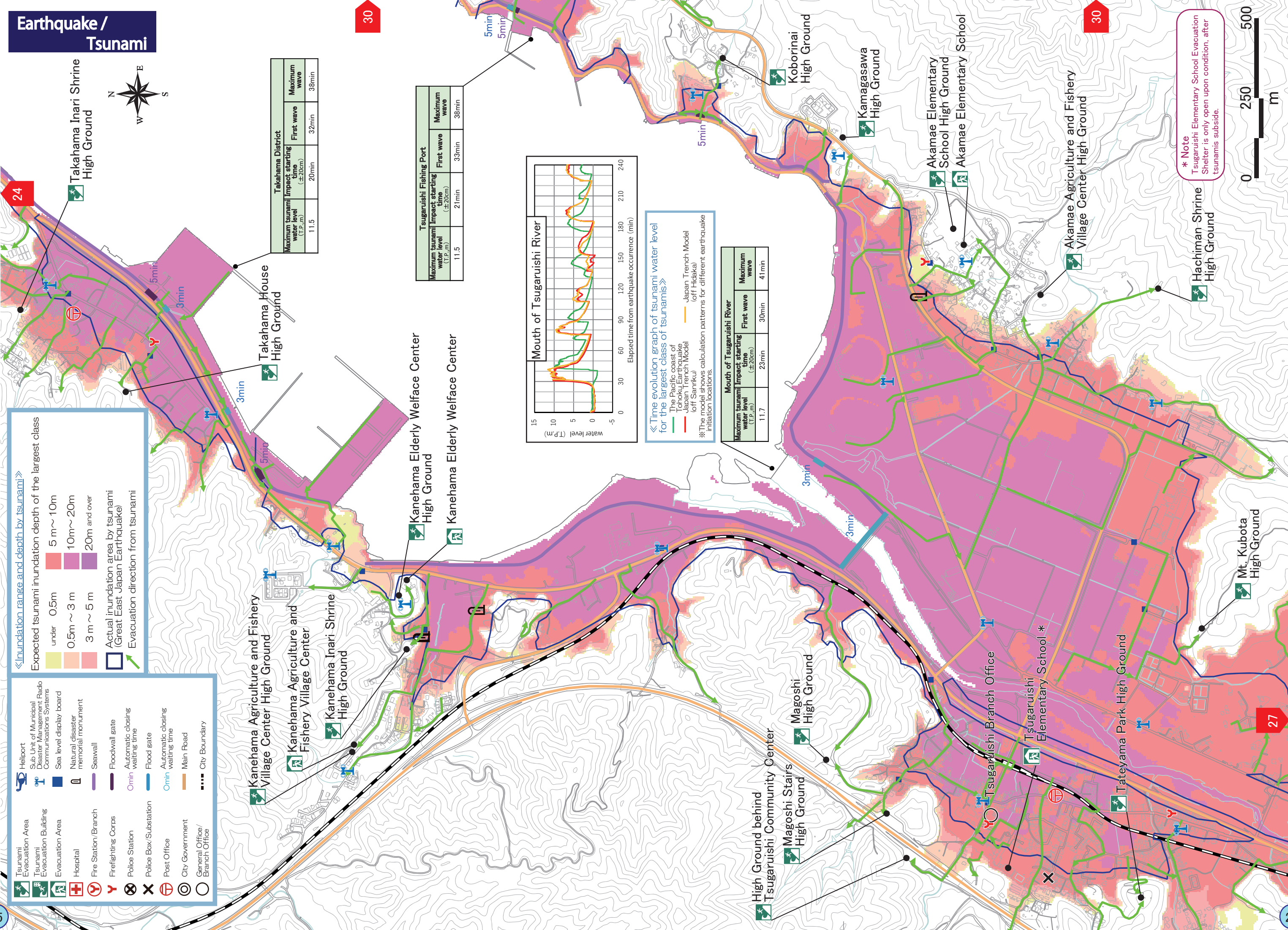
Mouth of Tsuraruishi River		
Maximum tsunami water level (T.P.,m)	Impact starting time (±20cm)	Maximum wave
11.7	23min	30min
		41min



Time evolution graph of tsunami water level for the largest class of tsunamis

The Pacific coast of Tohoku Earthquake (off Hiakata)
 Japan Trench Model (off Sanriku)

* The model shows calculation patterns for different earthquake initiation locations.



* Note
 Tsuraruishi Elementary School Evacuation Shelter is only open upon condition, after tsunamis subside.



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