



Miyako City Integrated Disaster Prevention **Hazard Map**

- 2018 -



Message to Residents

This booklet compiles broad information on disaster prevention, including estimated inundation area by tsunamis, areas at risk of flooding and sediment disasters due to heavy rain etc., and evacuation information in time of emergency. Let's get prepared for natural disasters, discuss with your family beforehand, and participate in local disaster prevention drills to increase your knowledge and awareness, so that we can minimize the damage.

3 Principles on Disaster Prevention



Discuss with your family

Discuss with your family beforehand. You should designate evacuation shelters and evacuation routes for various disasters such as earthquakes, tsunamis, flooding, and sediment disasters.



Evacuate first, then gather information

It may be too late if you wait for information through TV or radio. Evacuate first to an evacuation area or high ground, then gather information.



Be sure to bring your emergency bag when evacuating.

Food and daily items by public administrations may not be provided immediately. Be sure to bring your emergency bag to live without the relief for at least 3 days.



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Hazard Map

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My Family's Preparedness

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Cover Photos

Cover photos are taken from the Great East Japan Earthquake and tsunamis in 2011 and from Typhoon 10 in 2016. Through these photos, the Miyako City and its residents will remember the dreadful damage and continue working together on disaster management.

Top

Tsunami overtopping the levee along Hei River (Shinkawa-cho)

Bottom

Scraped National Road 106 (Kebaraichi)

Tsunami overtopping seawall in Taro

Inundated area (near Miyamachi)

Tsunami surging into Otobe fishing port

Driftwood and severely damaged Warabinosawa Bridge

Preparedness for Earthquakes

—Prior countermeasures are indispensable—

Major factor of fatalities by earthquakes is crushing. To prevent being killed by an earthquake, let's consider the arrangement of furnishings and take measures to prevent them toppling down.

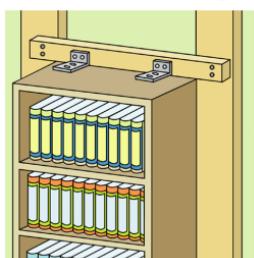
Ensure safe space at home

- Try to place as many furnishings as possible in a room you use in lower frequency, if there is one.
- If not, consider arranging furniture to ensure safe space.

Ensure doorway and escape routes clear

- Do not place topple-prone furniture along escape routes toward doorway.
- Objects around entrance could block doorway in time of emergency.

Prevent drawers, and bookshelves from toppling or sliding



- Use L-brackets or chains to secure furniture to the wall.
- Tension rods, which is placed between ceiling and a piece of furniture, should be placed in the back, close to the wall.

Prevent TVs from falling over



- Place TVs on low furniture. They can be thrown down by large-scale earthquakes.
- When using anti-quake sheet, make sure its withstand load and service life are appropriate.

Prevent stove fire



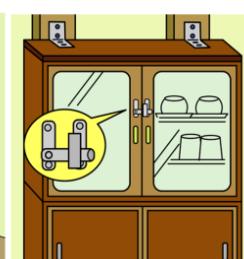
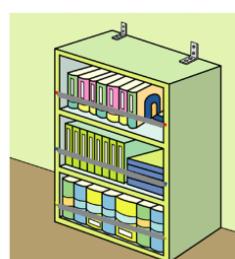
- Ensure stoves have an anti-quake automatic extinguishing system.
- Place stoves in a safe space to protect yourself. Sliding or toppling stoves can hurt you.

Pay attention to sleeping space and furnishing arrangement

- Do not sleep where furnishings can topple down in the case of earthquakes while asleep.
- Keep a flashlight at the bedside. You might have to react in the dark.



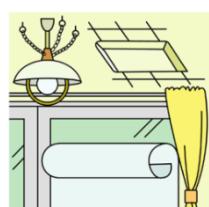
Prevent objects from falling out from cupboards or bookshelves



- Use ropes or elastic bands to prevent objects from flying out.
- Install safety latches on doors of cupboards to prevent dishes from falling out.

Protect against flying glass

- Apply transparent anti-shattering film firmly by following its instruction.
- When using sticky tape, apply also to sashes. Otherwise, the glass will fall down in lump.



Prevent lighting fixtures from falling down

- Install chains and anchorage in multiple positions to secure lighting fixtures.
- Secure fluorescent lighting tube by applying heat-resistant tape at its both ends.

Evacuation from Tsunamis

— Move immediately to high ground if an earthquake hits —

When in Danger of Tsunamis

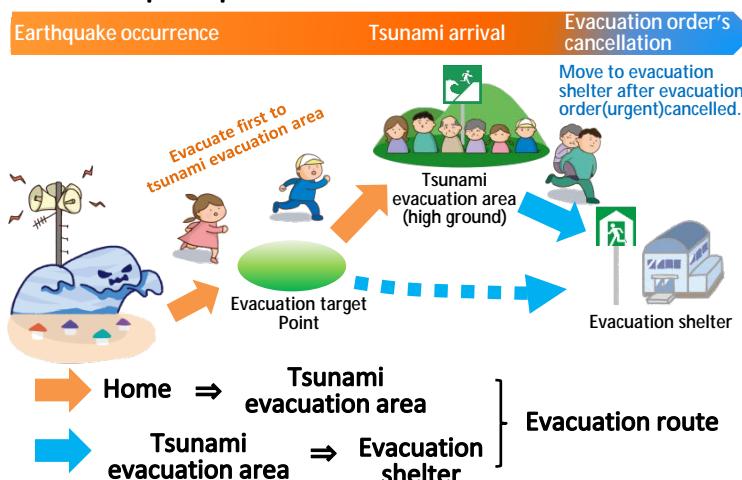
■ Evacuate first if an earthquake hits!

If you feel a strong earthquake (seismic intensity of around 4 or more), or weak but long and slow shake, immediately move away from coast and evacuate to evacuation area (high ground) etc.

■ Tsunamis hit repeatedly!

Tsunami waves are expected to hit repeatedly. Stay at tsunami evacuation area until tsunami warnings and advisories are cleared.

～principle of tsunami evacuation～



■ Too late to evacuate if you wait for information!

It may be too late if you wait for information through TV or radio.



Remember to evacuate first to tsunami evacuation area (high ground) etc., then gather information.

■ Protect yourself first!

Do not return home to take out valuables or go to see your boat. Protect yourself first unless you will be hit by tsunami.

■ Evacuate on foot in principle!

Evacuation by vehicles brings on traffic congestion which leads to evacuation failure. So, evacuate on foot in principle.



■ Cooperate with neighbors!

Be supportive of the elderly, those with disabilities, and others in need, so that every member of the community can evacuate.

Category of Tsunami Warning/Advisory

Three categories of tsunami forecasts are; major tsunami warning, tsunami warning, and tsunami advisory. In every forecast, estimated tsunami height, in meters, and estimated arrival time at the coast is attached.

Following the issuance of major tsunami warnings etc., Miyako City will issue evacuation order (urgent) as shown in the below table.

Category	Announced tsunami height		Coverage of evacuation order (urgent) area by Miyako City
	Announcement in numbers (range of estimated tsunami height)	Announcement in large-scale earthquakes	
Major tsunami warning	Over 10 m (10m < estimated height)	Huge	Area within 5 meters in elevation from inundated area by Great East Japan Earthquake tsunami
	10 m (5m < estimated height 10m)		
	5 m (3m < estimated height 5m)		
Tsunami warning	3 m (1m < estimated height 3m)	High	
Tsunami advisory	1 m (0.2m < estimated height 1m)	(no notation)	Seaside area from levees or seawalls

It takes time to determine the exact scale of earthquakes with a magnitude of 8 or more. In such cases, Japan Meteorological Agency (JMA) issues an initial warning based on the predefined maximum magnitude to avoid underestimation. When such values are used, estimated maximum tsunami heights are expressed in qualitative terms such as "Huge" and "High" in initial warnings to express the extraordinary situation.

Flooding

— Principles on evacuation from flooding —

Evacuate before inundation!

It is difficult to evacuate in inundation. Since flooding can be predicted, evacuate ahead of time if flooding risk becomes high.

Cooperate with those around you to evacuate people who need special care, including the elderly, those with sick, and children.

Watch your steps not to fall down!

When you evacuate in flooding, walk carefully while feeling your way with a searching stick etc. not to fall into a dip, gutter, or a manhole.

Wear comfortable shoes such as sneakers. Do not wear boots.

Boots are easily coming off once they get water inside.

It is dangerous to evacuate in flowing water!

Walking in flowing water is difficult even for adults if water depth is 50 cm or over. In such cases, it is safer to move to high ground and wait for rescue.



Sediment Disasters

— Do you know 3 types of sediment disasters and their signs? —

There are a few types of sediment disasters as shown below. For each category, there are signs of impending disasters. Although signs are not always observed, if you notice any unusual condition, immediately move to a safe place with people around you.

Types		Signs of impending disasters
Mudslide		<ul style="list-style-type: none"> River water becoming muddy and containing driftwood. River water level becoming lower despite continuous rainfall. Sounds of rumbling from the mountain.
Landslip		<ul style="list-style-type: none"> Small stones falling down from cliffs. Water welling up on cliffs. Cracks on cliffs.
Landslide		<ul style="list-style-type: none"> Water in wells and streams becoming cloudy or muddy. Cracks in the earth. Water spurting from cliffs and slopes.

* Source: NPO Sediment Disaster Prevention Publicity Center (SPC)

● What if too Late to Evacuate?

Evacuate to 2nd floor, as the next best measure.

In principle, evacuation in advance to a safe place is the best (**Horizontal Evacuation**). But, if it is too late for a safe evacuation, consider temporary evacuation to the 2nd or upper floor (**Vertical Evacuation**).



Vertical
Evacuation



Vertical
Evacuation

To evacuate from sediment disasters, move to 2nd or upper floor, and to the opposite side from mountain.

Disaster Prevention Information

— Various information is available for your evacuation and disaster reduction —

Evacuation Information in Time of Disaster

Evacuation information is issued by Miyako City in case of potential disasters. In the below table, lower rows are more urgent than upper ones. Note that they are not always issued in a sequence.

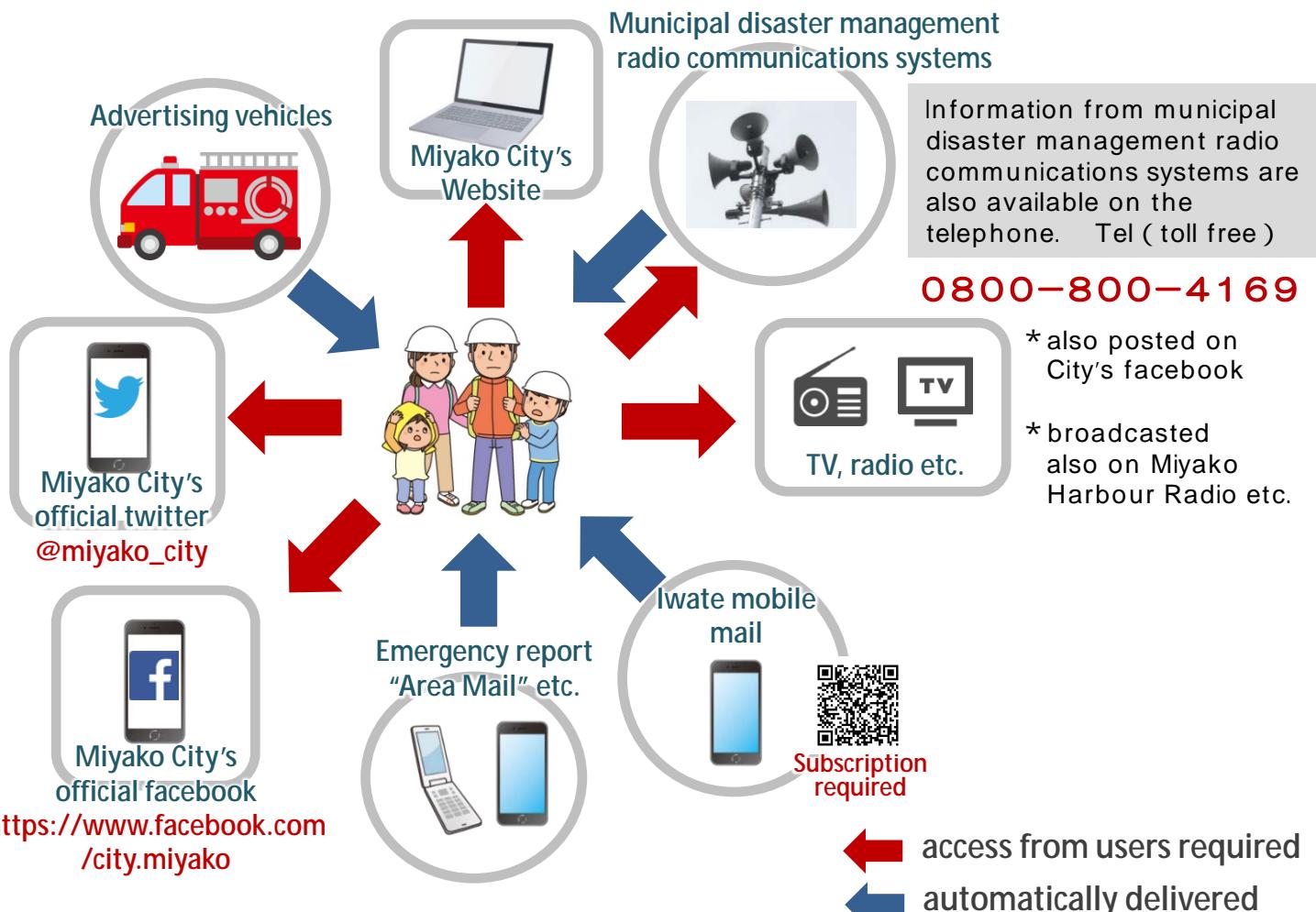
Evacuation Information	Actions to be taken
Notice to Prepare for Evacuation / Commence Evacuation for Elderly People etc.	People who take time to evacuate: commence evacuation. <u>Elderly or disabled people, infants, and others, as well as their accompanying persons</u> should commence evacuation, since special support is required or it takes a while for them to evacuate. Others: prepare to evacuate. Others should prepare to evacuate.
Evacuation Advisory	Commence evacuation immediately.
Evacuation Order (urgent)	Evacuate urgently as the risk of damage is imminent.

Level of Urgency

More Urgent

How to Get Disaster Prevention Information

Disaster management information issued by JMA or Iwate Prefectural government are emitted through city government or other measures. When you get tsunami forecast or evacuation information, please evacuate immediately.



Disaster Prevention Information

— Various information is available for your evacuation and disaster reduction —

How to Get Information through Data Broadcasting

Through digital data broadcasting, various disaster prevention information is available, including weather warnings and advisories, evacuation information issued areas, operating shelters, etc. Take time to learn how to obtain information to prepare for disasters.

【example】 How to obtain river water level information during flood through data broadcasting.

【steps】

Turn to NHK on TV, then push 「d」 button on TV remote controller.

From the top menu of NHK, select 「Disaster prevention and living information」.

Select 「River water level and rainfall」.

《water level information》

If the water level is over 「flood advisory level」, the names are shown in yellow.

Switch water level observatory sites by 「left/right」 button. Selected site is shown in orange.



《area displayed》

Displayed river names etc. is shown.

To switch to other areas, press 「up・down」 buttons on the remote controller.



《Legend for water level》

	Flood risk level (Reference for issuing evacuation advisory etc.)
	Evacuation decision level (Reference for issuing notice to prepare for evacuation / commence evacuation for elderly people etc.)
	Flood advisory level (Reference for flood fighting corps to take action)
	Flood fighting corps standby level (Water level for flood management authorities to stand by)

River name	Observatory name	Flood risk level	Evacuation decision level	Flood advisory level	Flood fighting corps standby level
Hei Riv.	Sentoku	3.90m	3.70m	3.10m	2.50m
Tsugaruishi Riv.	Shinmachi	3.00m	2.70m	2.70m	2.10m

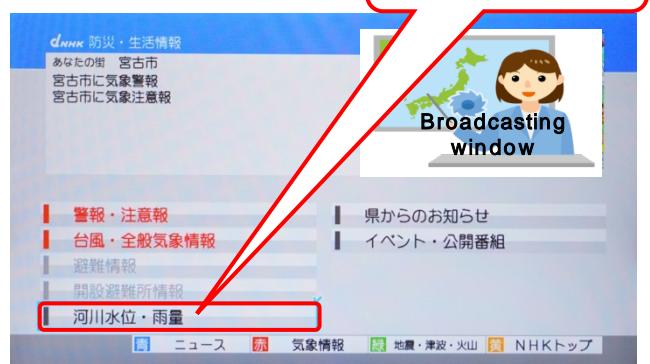


d button

Select 「Disaster prevention and living information」



Top menu of NHK data broadcasting



Top menu of 「Disaster prevention and living information」



Disaster Prevention Information

— Various information is available for your evacuation and disaster reduction —

Emergency Warning, Warning, and Advisory

Emergency warning, warning, and advisory, shown in the blow table, are issued by the Japan Meteorological Agency (JMA) to prevent or mitigate disasters. Please pay special attention to weather information when severe rain is predicted.

Types	Criteria for issuance	Actions to be taken
Heavy rain emergency warning	Act immediately to save lives. Heavy rainfall of an intensity observed only once every few decades is forecasted. There is a significant large risk of serious disaster occurring	
Heavy rain warning	Pay attention to disaster information, and prepare for evacuation. There is a risk that heavy rain will cause serious disasters.	
Heavy rain advisory	Pay attention to weather information There is the risk that heavy rain will cause disasters.	
Record-time heavy rain information	Heavy rain of 100 mm/hr or over is observed or analyzed.	
Sediment disaster alert bulletin	Commence evacuation immediately after evacuation advisory etc. is issued. A very high risk of sediment disaster arises according to observed rainfall and disaster records etc.	

Information Sources for Sediment Disasters and River Flooding

Information on Disaster Prevention and Disasters in Miyako City

Latest disaster conditions, associated information on weather and rivers, other various information on disaster management are available.

At 「Miyako City Website」, click 「**Disaster Information**」

(<http://www.city.miyako.iwate.jp/>)

Iwate Disaster Prevention Information Portal (Iwate Prefectural)

→ **Warnings and advisories**

→ **Real-time information**

Not only warnings and advisories, you can browse real-time information on weather, rivers, sediment disasters, traffic information etc. Iwate Disaster Prevention Information Portal <http://iwate.force.com/>

Layering Hazard Map (Ministry of Land, Infrastructure, Transport and Tourism (MLIT))

Estimated inundation areas, roads, hazardous areas, elevation etc. can be layered on a map or an aerial photo so that you can browse seamlessly.

In 「MLIT Hazard Map Portal」, click 「**Layering Hazard Map**」
(<https://disaportal.gsi.go.jp/>)

To Make the Best Use of Integrated Disaster Prevention Hazard Map

How to Use Hazard Maps

Add important information on this hazard map to create “Your Hazard Map”. You should include information such as “Where is the dangerous sites that I should know?”, “Where are the evacuation areas and evacuation centers for my family?”, “Who to contact?” etc.



Disaster Categories and Criteria of Area at Risk

Categories	Information shown in the map	Assumption etc.
tsunamis	<ul style="list-style-type: none">Estimated inundation area by assumed tsunamiActual inundation area by Great East Japan Earthquake tsunamis	<ul style="list-style-type: none">Simulation of 3 tsunamis (Meiji Sanriku Earthquake Tsunami, Showa Sanriku Earthquake Tsunami, and assumed Miyagiken-oki coupled earthquake).
flooding	<ul style="list-style-type: none">Estimated inundation area and depth when target rivers are floodedActual inundation area by Typhoon 10 in 2016	<ul style="list-style-type: none">Target rivers are Hei, Yagisawa, Tsugaruishi, Tashiro, Settai, Kanda, and Osanai Rivers.Simulation of estimated maximum depth by a heavy rainfall of an intensity observed only once every 100 years.For Settai River, rainfall same as Typhoon lone in 1948 is assumed.
Sediment Disasters	<ul style="list-style-type: none">Area at risk of mudslide, landslip, or landslide	<ul style="list-style-type: none">Estimated by field survey, topographic map, etc.

Estimated tsunami inundation area is created from “Simulation result of Iwate earthquake tsunami (H16(2004))”, and actual inundation area by Great East Japan Earthquake Tsunami from “Detailed Map of Great East Japan Earthquake Tsunami (Japan Society of Geoinformatics)”.

Inundation area and depth for Hei, Yagisawa, and Tsugaruishi Rivers are created from inundation estimation simulation by Iwate Prefecture. Those for other rivers are created from simulation result by Miyako City, which is consistent to river planning by Iwate Prefecture.

Area at risk of sediment disasters is created based on “Designation Map of Sediment Disaster Warning Area etc.”, “Disclosed Map of Basic Survey Result on Sediment Disasters”, and “Map of Sediment Disaster Warning Sites” by Iwate Prefecture.

◆These Hazard Maps are Only Estimation ! !

Estimated inundation areas and areas at risk shown in the Hazard Maps are identified based on a certain assumption. Although large-scale disasters are considered, disasters can happen in the area where any risk is not shown in the Hazard Maps. So, when evacuating, please not only obtain information on weather or disaster prevention, but also pay attention to the condition of evacuation routes.

Symbols in Integrated Disaster Prevention Hazard Maps

Evacuation Areas / Evacuation Shelter

	Tsunami Evacuation Area	Area for temporary evacuation to protect lives from tsunamis.
	Tsunami Evacuation Building	Building for temporary evacuation to protect lives from tsunamis, in case failing to evacuate to higher ground.
	Evacuation Area	Area for temporary evacuation to protect lives from flooding or sediment disasters.
	Evacuation Shelter	A place that accommodates evacuees in the case of prolonged evacuation.

Symbols

	Hospital		City Government
	Fire Station/ Branch		General Office/ Branch Office
	Firefighting Corps		Heliport
	Police Station		Sub Unit of Municipal Disaster Management Radio Communications Systems
	Police Box/ Substation		Main Road
	Post Office		City Boundary

Tsunami Map

Inundation Area by Tsunami

-  Estimated inundation area by tsunami
-  Actual inundation area by tsunami (Great East Japan Earthquake)
-  Evacuation direction from tsunami

Maximum height and arrival time of assumed tsunami in each district

Name of district
Maximum height of Meiji Sanriku Earthquake Tsunami (arrival time)
Maximum height of Showa Sanriku Earthquake Tsunami (arrival time)
Maximum height of assumed Miyagiken-oki coupled earthquake (arrival time)

min ...Starting time of the effect of tsunami.
The earliest estimation among 3 assumed tsunamis is shown.

Flooding / Sediment Disaster Map

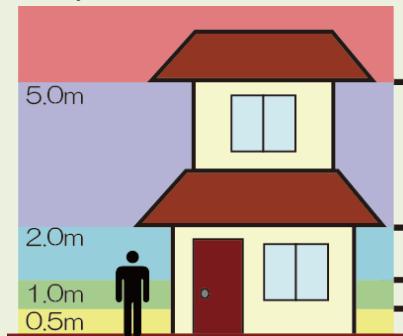
Inundation Area and Depth by Flooding

- | | | | |
|---|---|---|---------------|
|  | under 0.5m |  | 2.0 ~ 5.0m |
|  | 0.5 ~ 1.0m |  | 5.0m and over |
|  | 1.0 ~ 2.0m | | |
|  | Actual Inundation Area (Typhoon 10 in 2016) | | |

Warning Area by Sediment Disasters

-  Area at risk of extreme damage
-  Area at risk of damage
-  Area at risk of damage, and detailed study to be conducted.
-  Evacuation direction from sediment disasters

(reference) extent of inundation depth



Inundated to the ceiling of 2nd floor

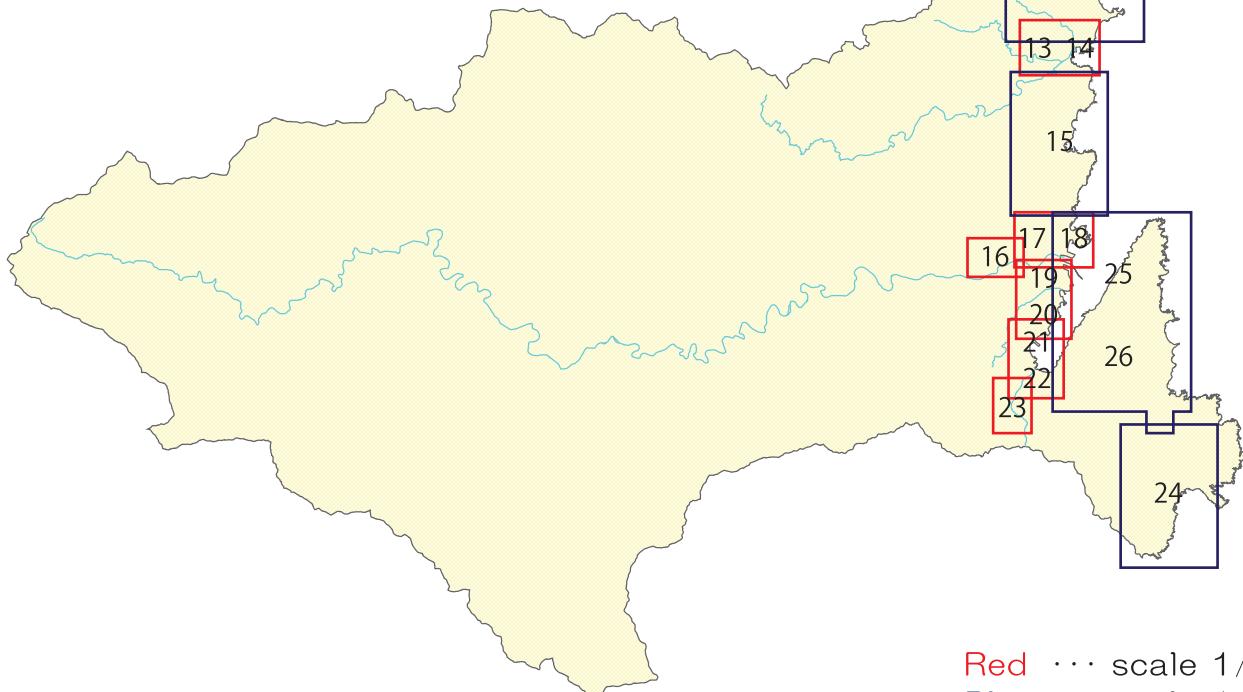
Inundated to the ceiling of 1st floor

Inundated to the height of adults' waist

Inundated to the height of adults' knees

Tsunami

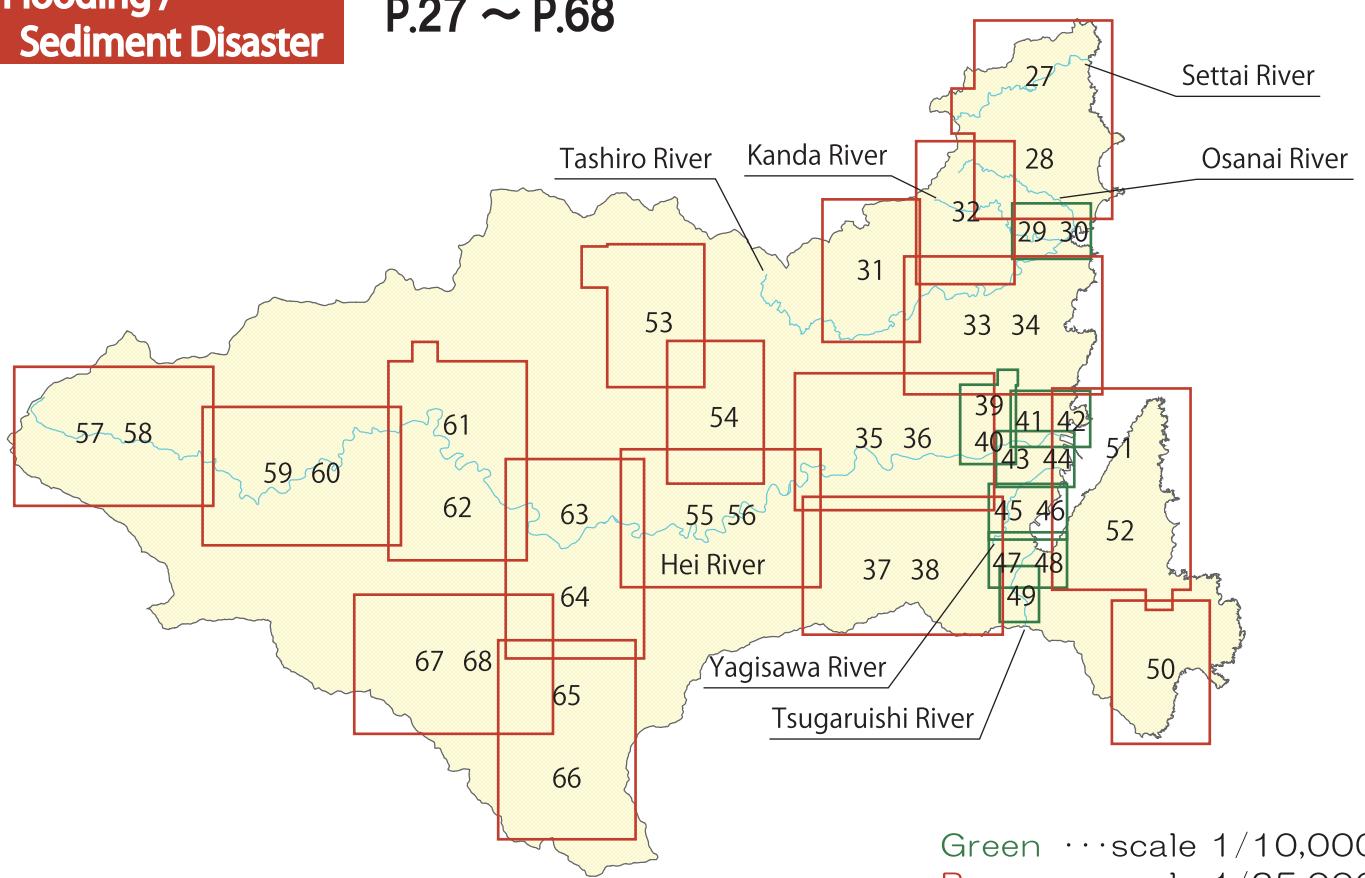
P.11 ~ P.26



Red … scale 1/10,000
Blue … scale 1/25,000

Flooding / Sediment Disaster

P.27 ~ P.68



Green … scale 1/10,000
Brown … scale 1/25,000

「この地図の作成に当たっては、国土地理院長の承認を得て、同院発行の数値地図（国土地理院）電子国土基本図（地図情報）を使用しています。
(承認番号 平29情使 第1152号)」

※This map is created based on the Digital Maps (Basic Geospatial Information) as of Jan. 31, 2018.

Numerals are page numbers.

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

Tsunami

12

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

12

Taro

Sakiyama

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Niisato

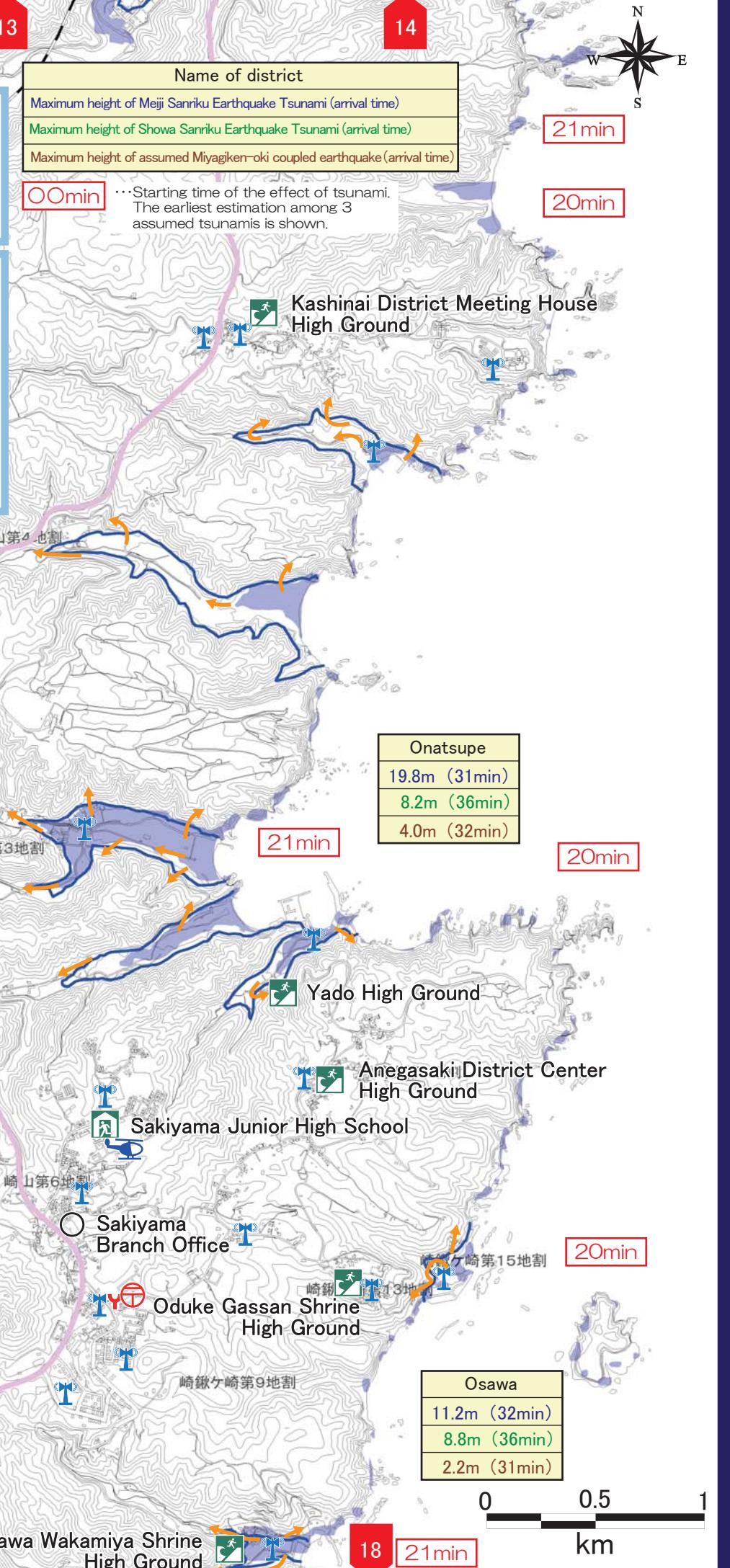
Kawai

«Inundation Area by Tsunami»

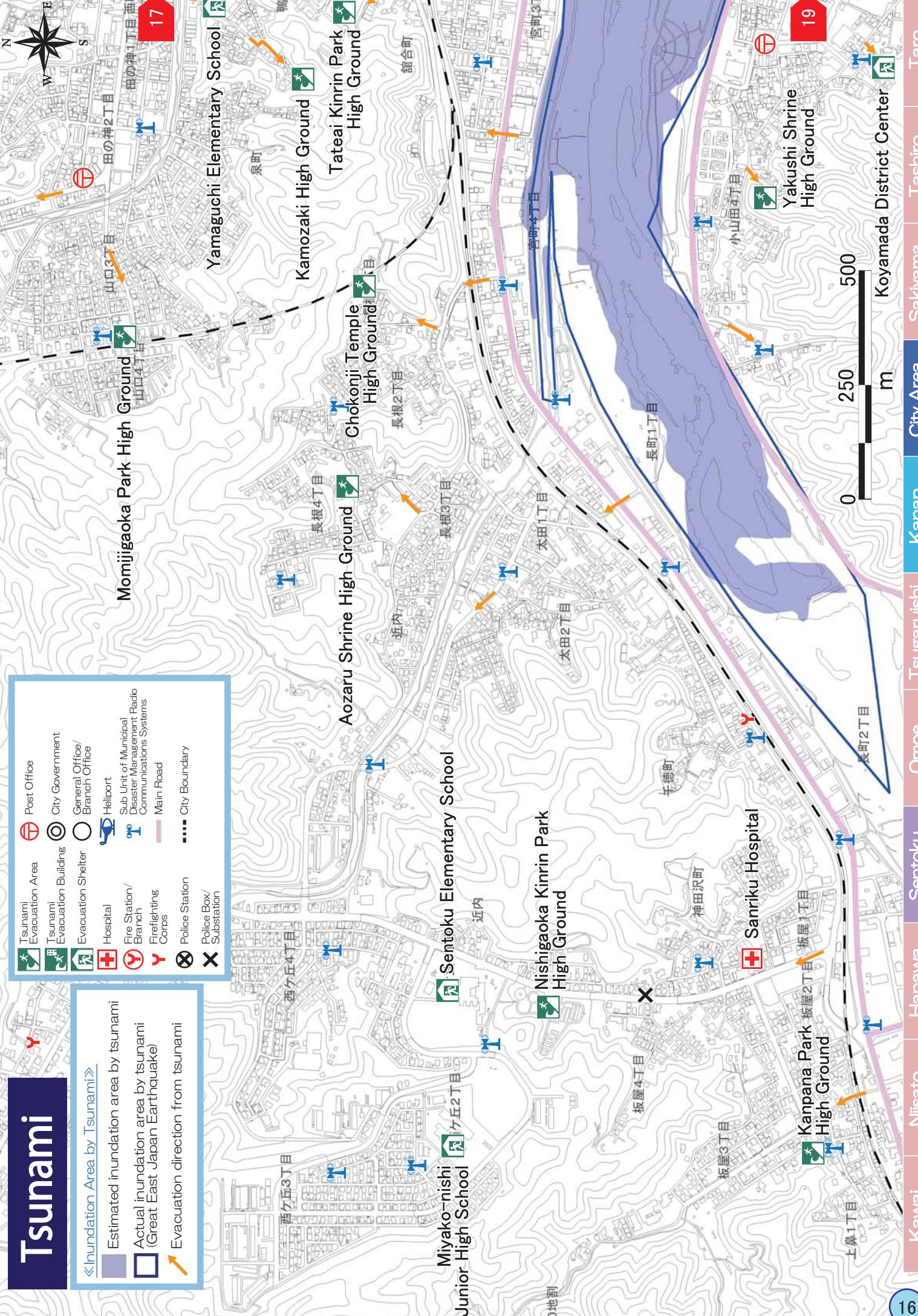
- Estimated inundation area by tsunami
- Actual inundation area by tsunami (Great East Japan Earthquake)
- Evacuation direction from tsunami

↑ Tsunami Evacuation Area	↑ Post Office
↑ Tsunami Evacuation Building	○ City Government
↑ Tsunami Evacuation Shelter	○ General Office/ Branch Office
+ Hospital	↑ Heliport
Y Fire Station/ Branch	↑ Sub Unit of Municipal Disaster Management Radio Communications Systems
Y Firefighting Corps	— Main Road
X Police Station	--- City Boundary
X Police Box/ Substation	

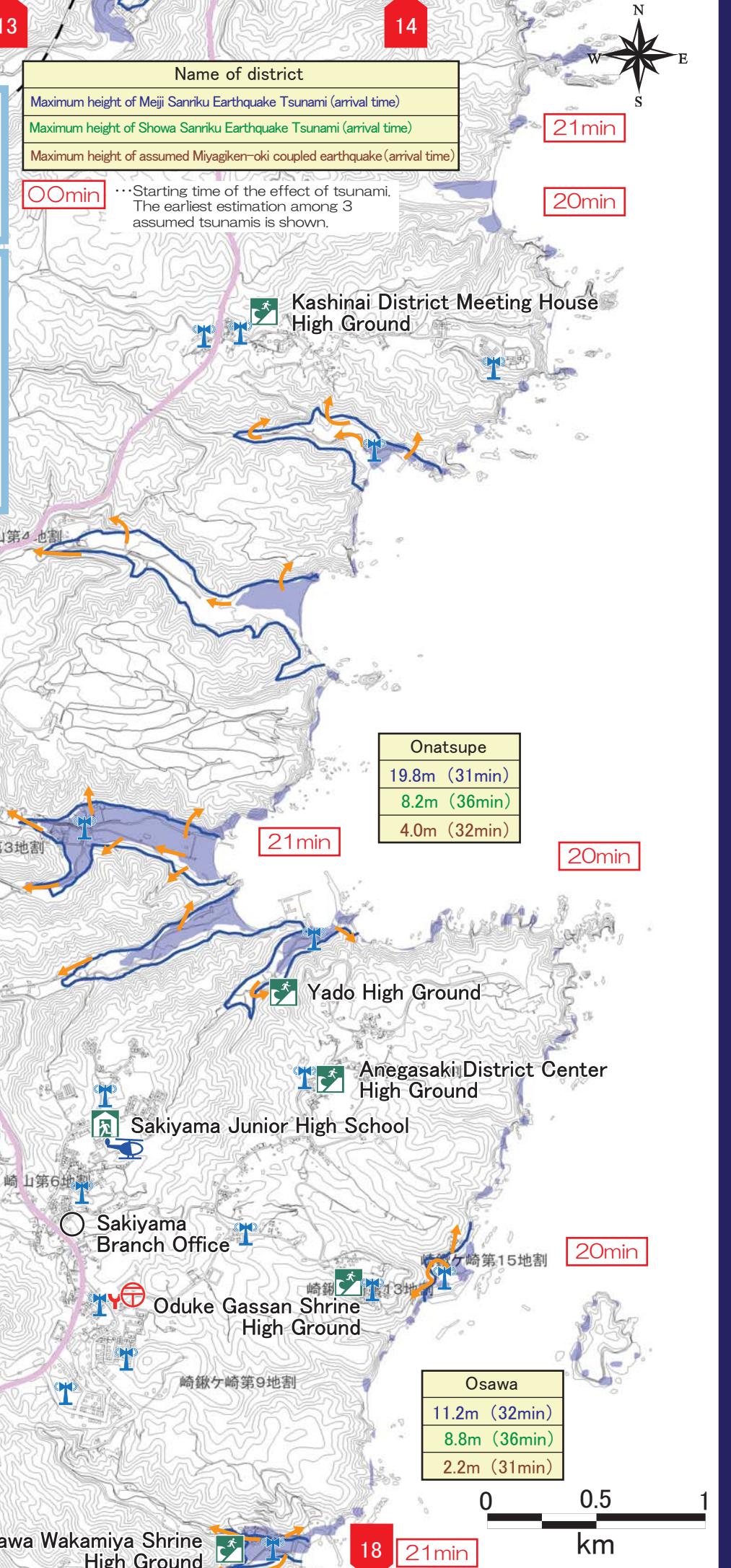
Tsunami



Tsunami



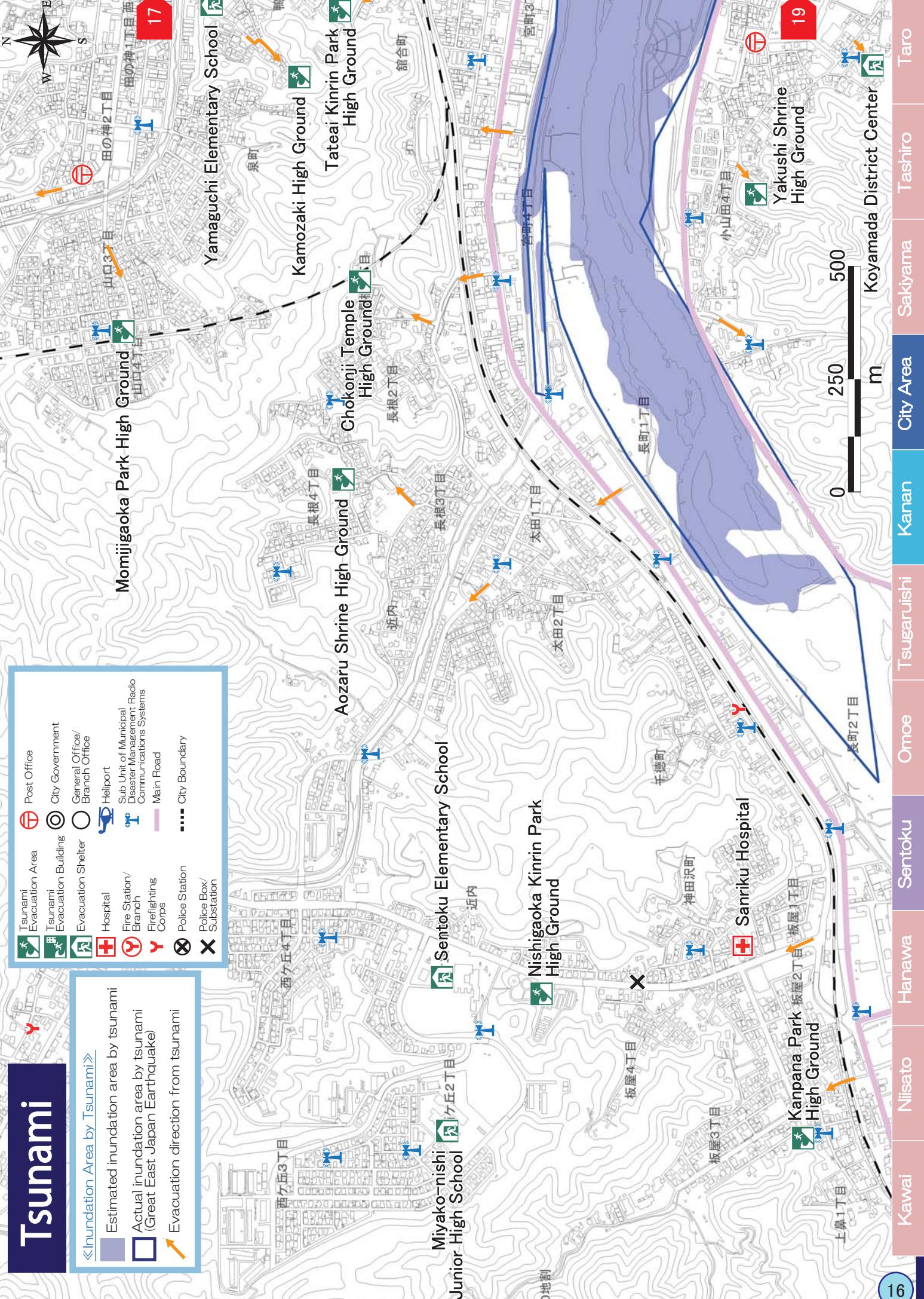
Tsunami



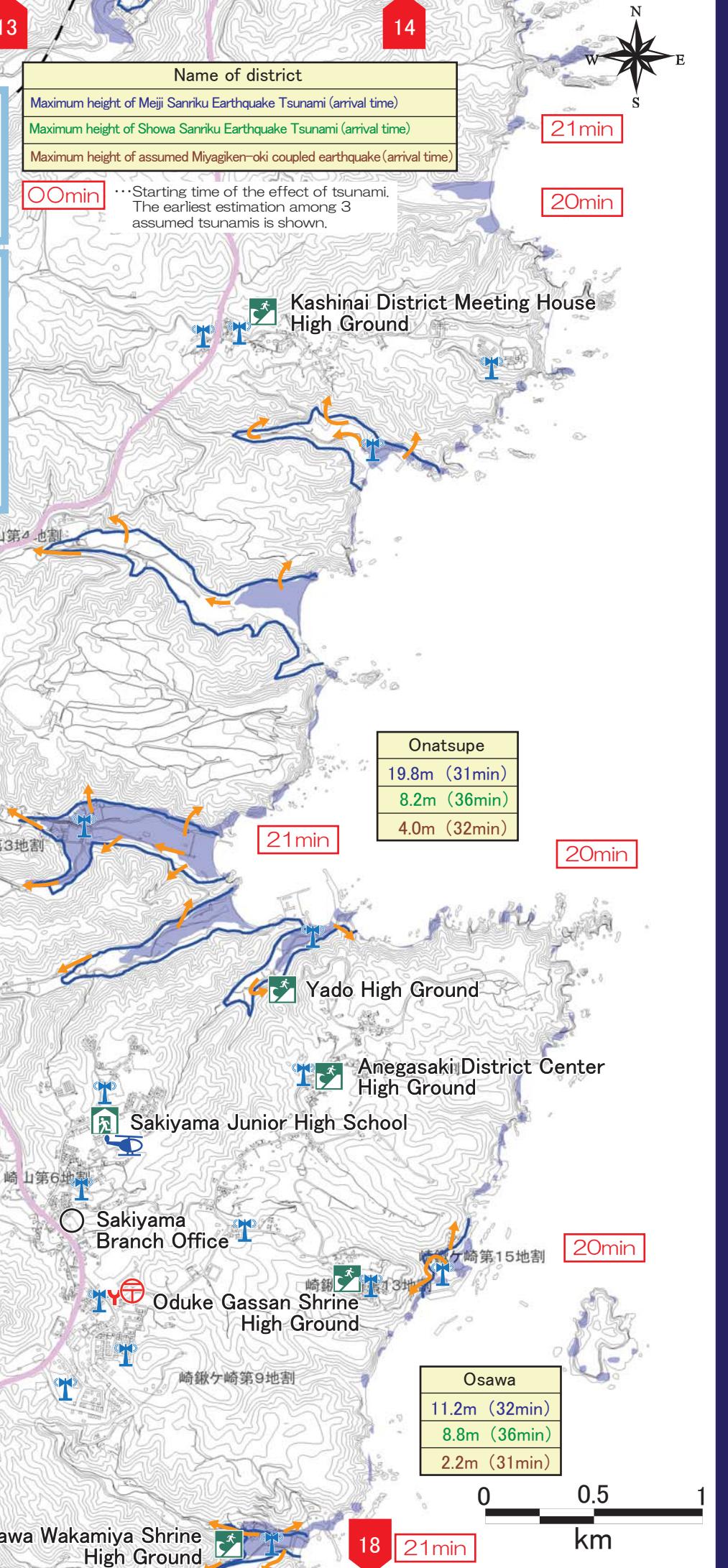
Tsunami

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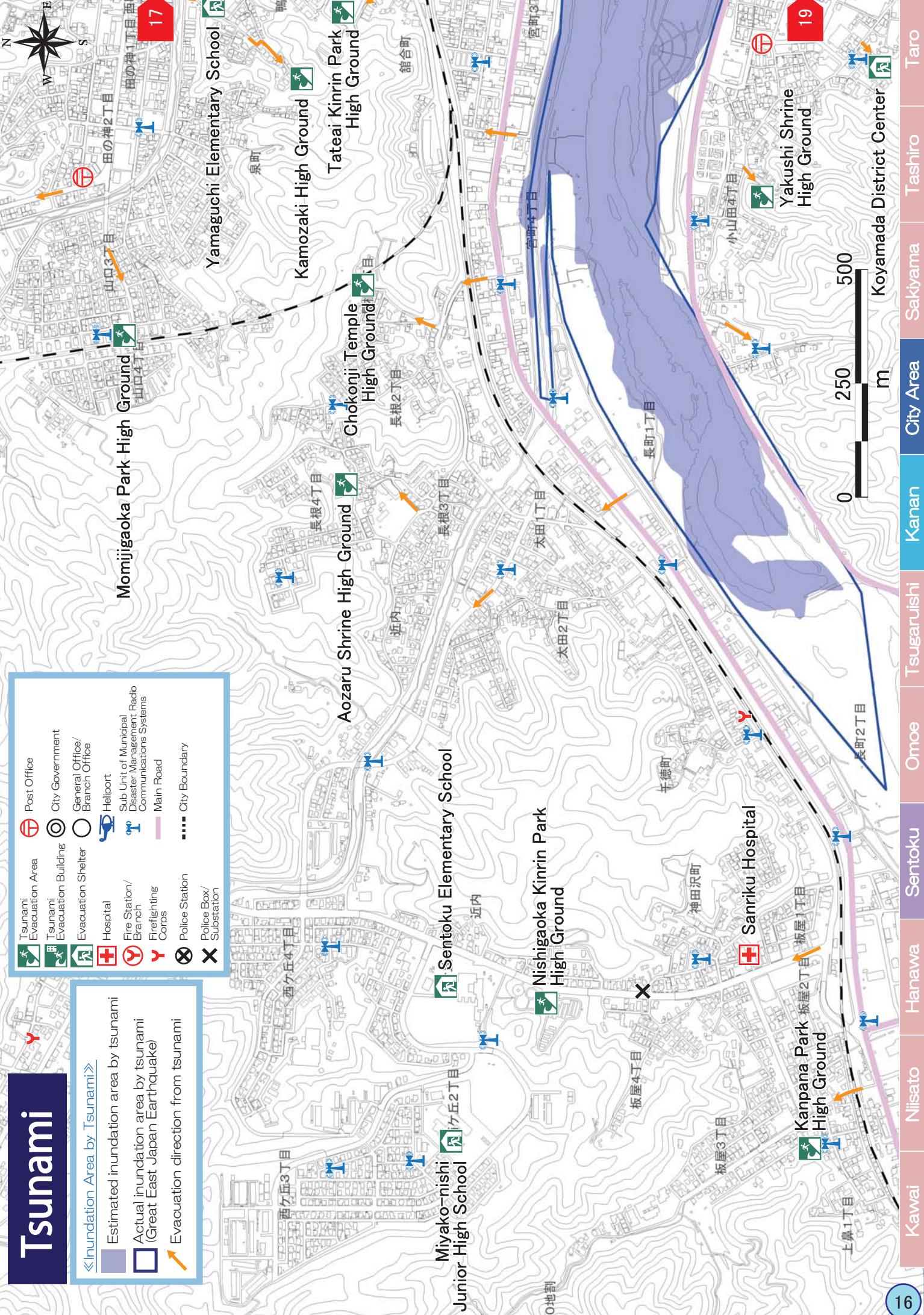
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Tsunami

«Inundation Area by Tsunami»

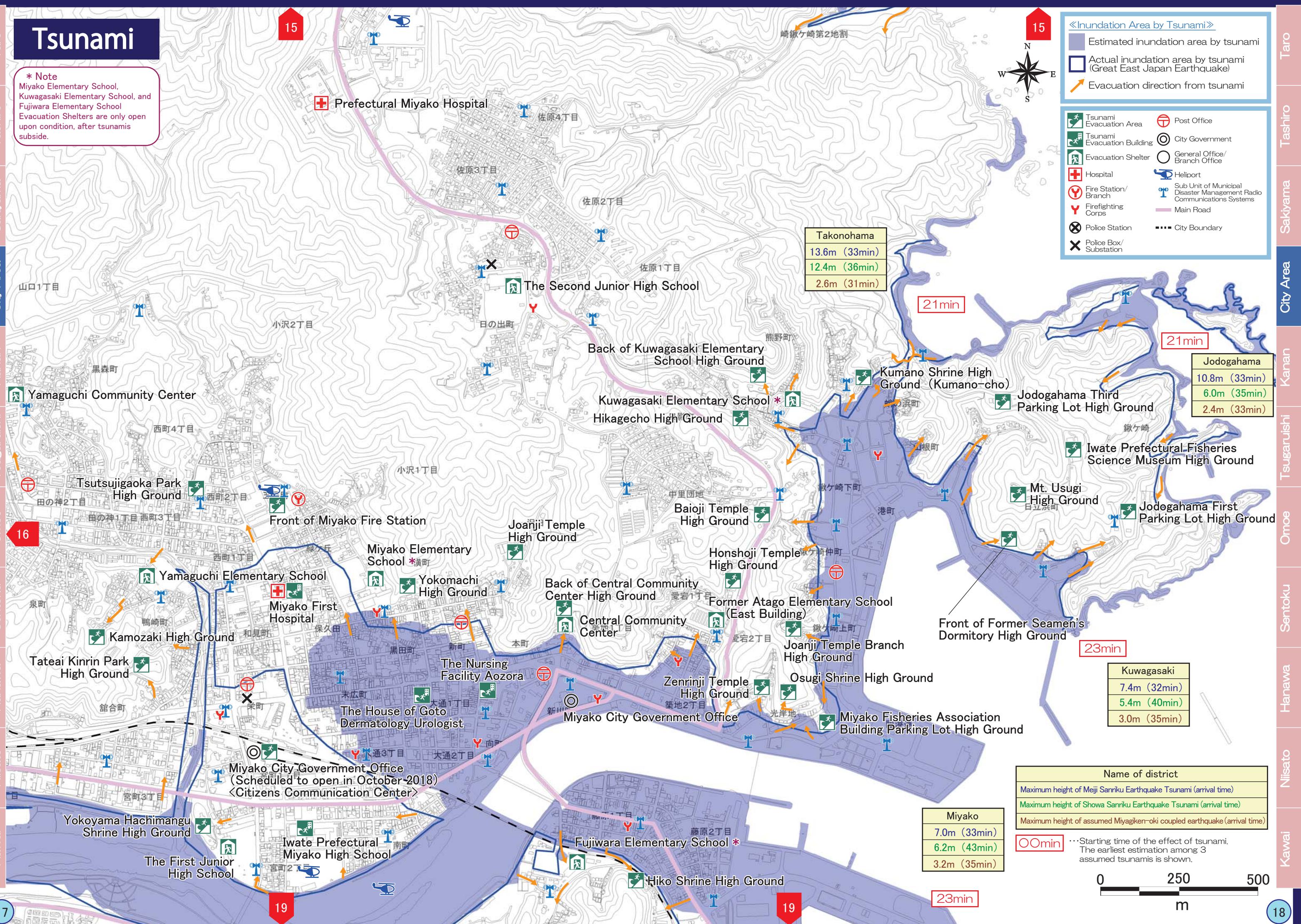
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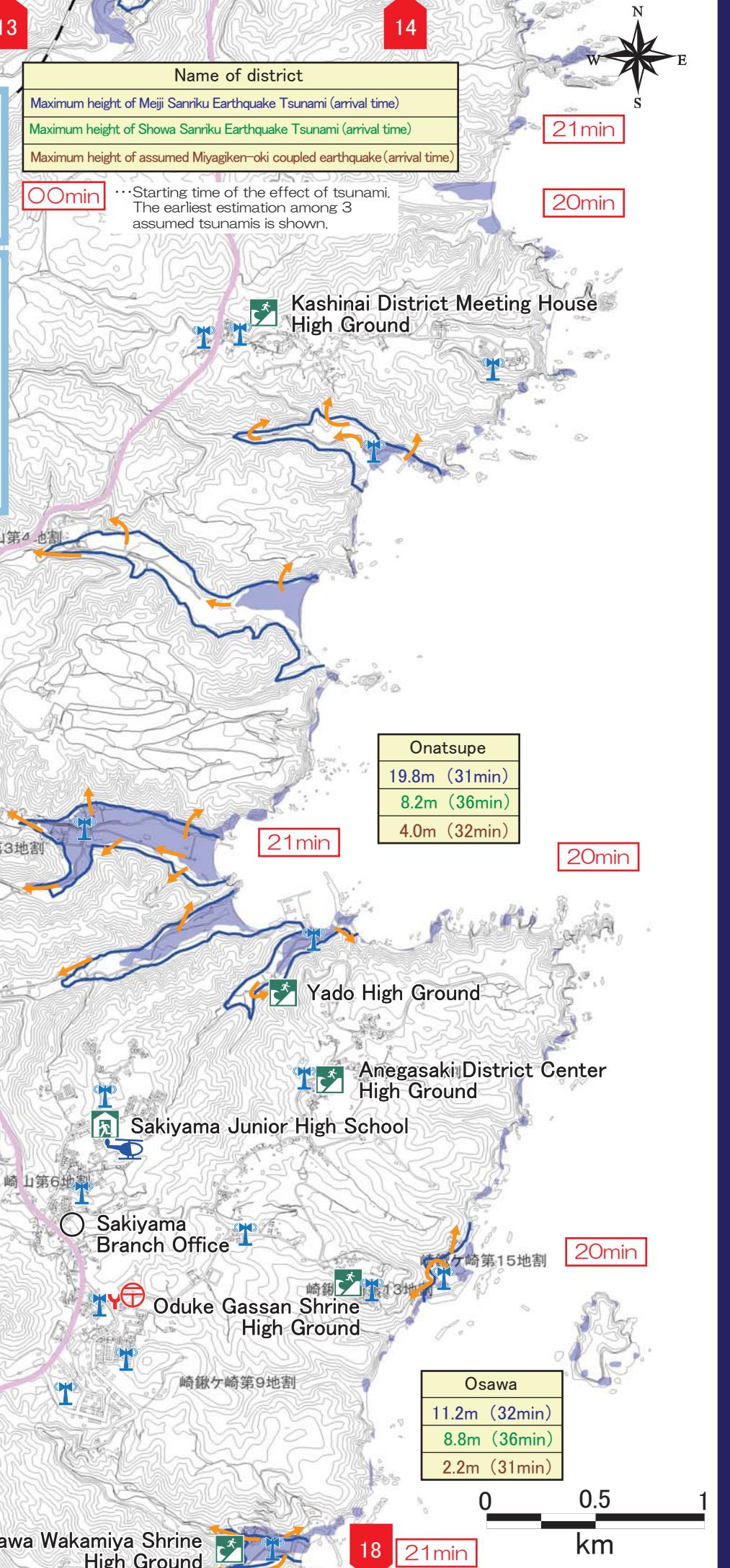
Tsunami

1

* Note
Miyako Elementary School,
Kuwagasaki Elementary School, an
Fujiwara Elementary School
Evacuation Shelters are only open
upon condition, after tsunamis
subside.



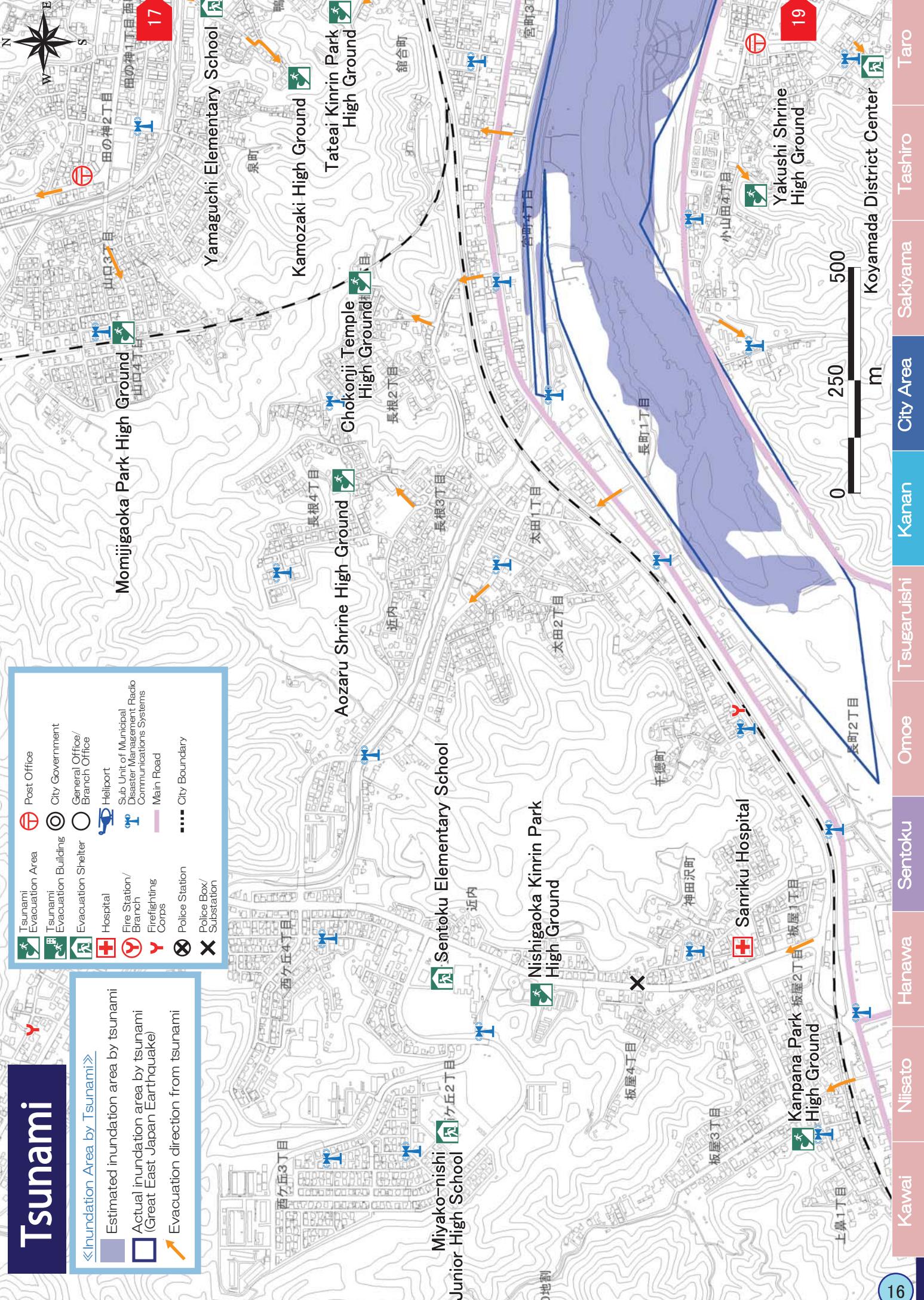
Tsunami



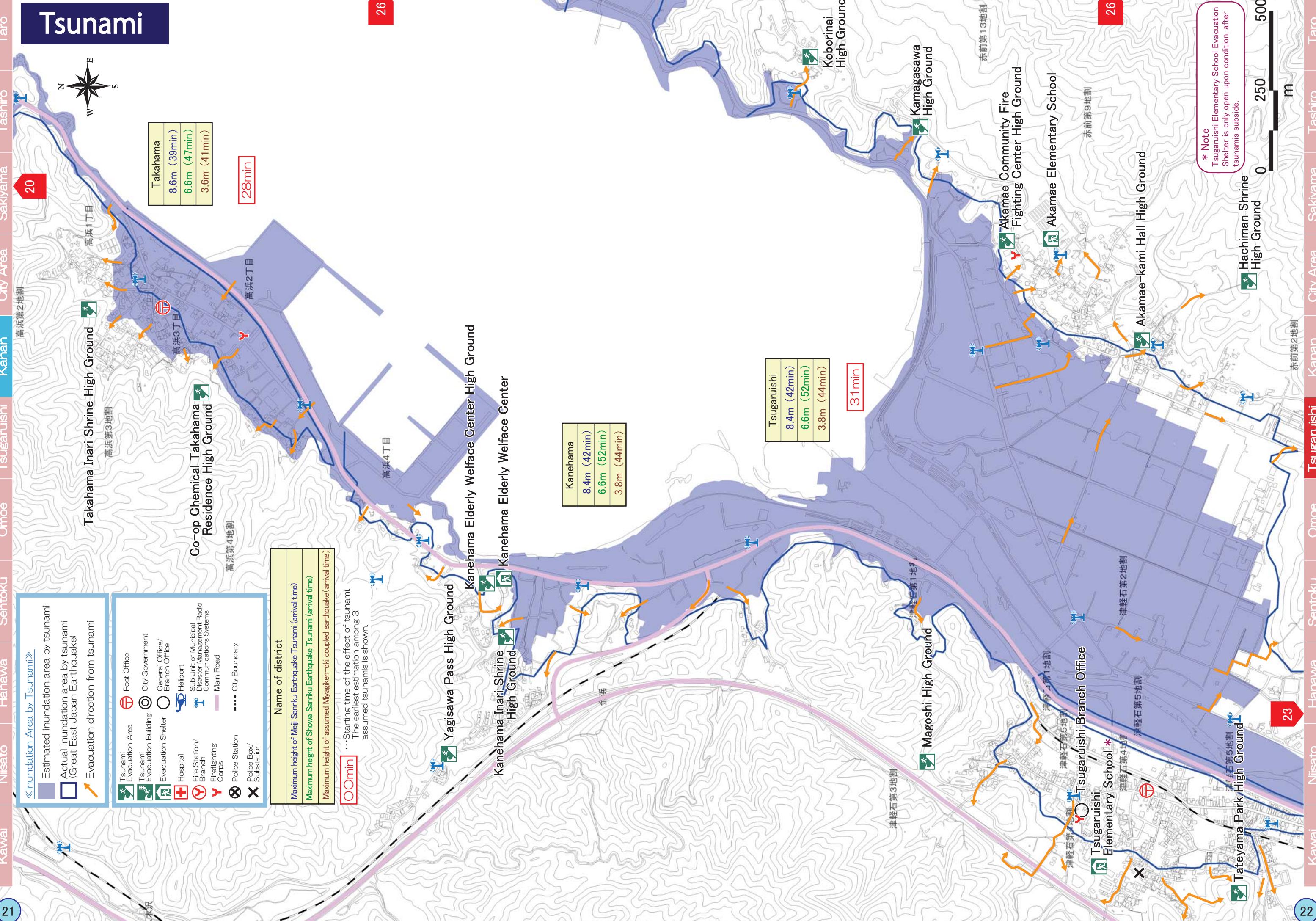
Tsunami

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Tsunami



Tsunami

Taro

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Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

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Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

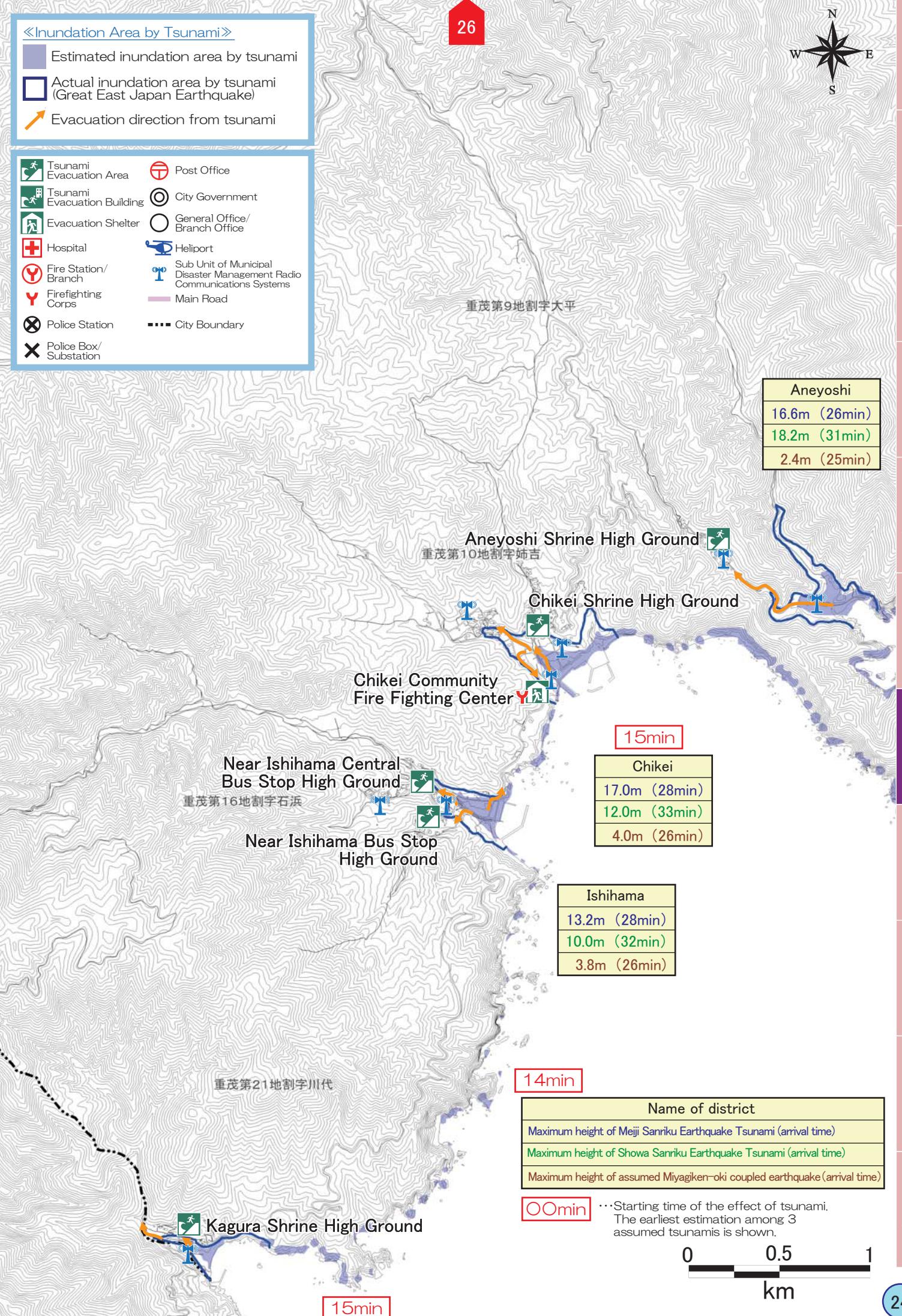
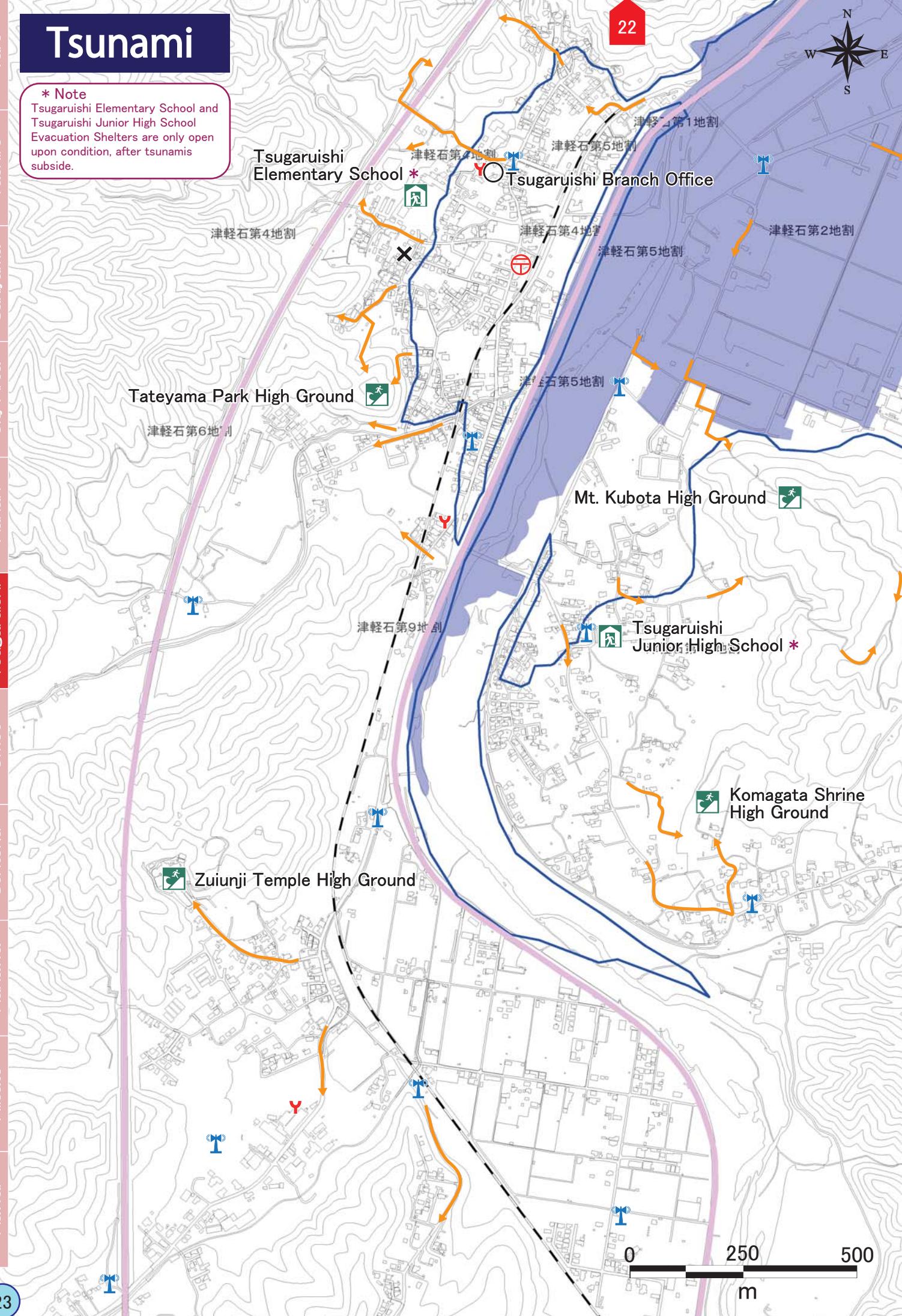
Sentoku

Hanawa

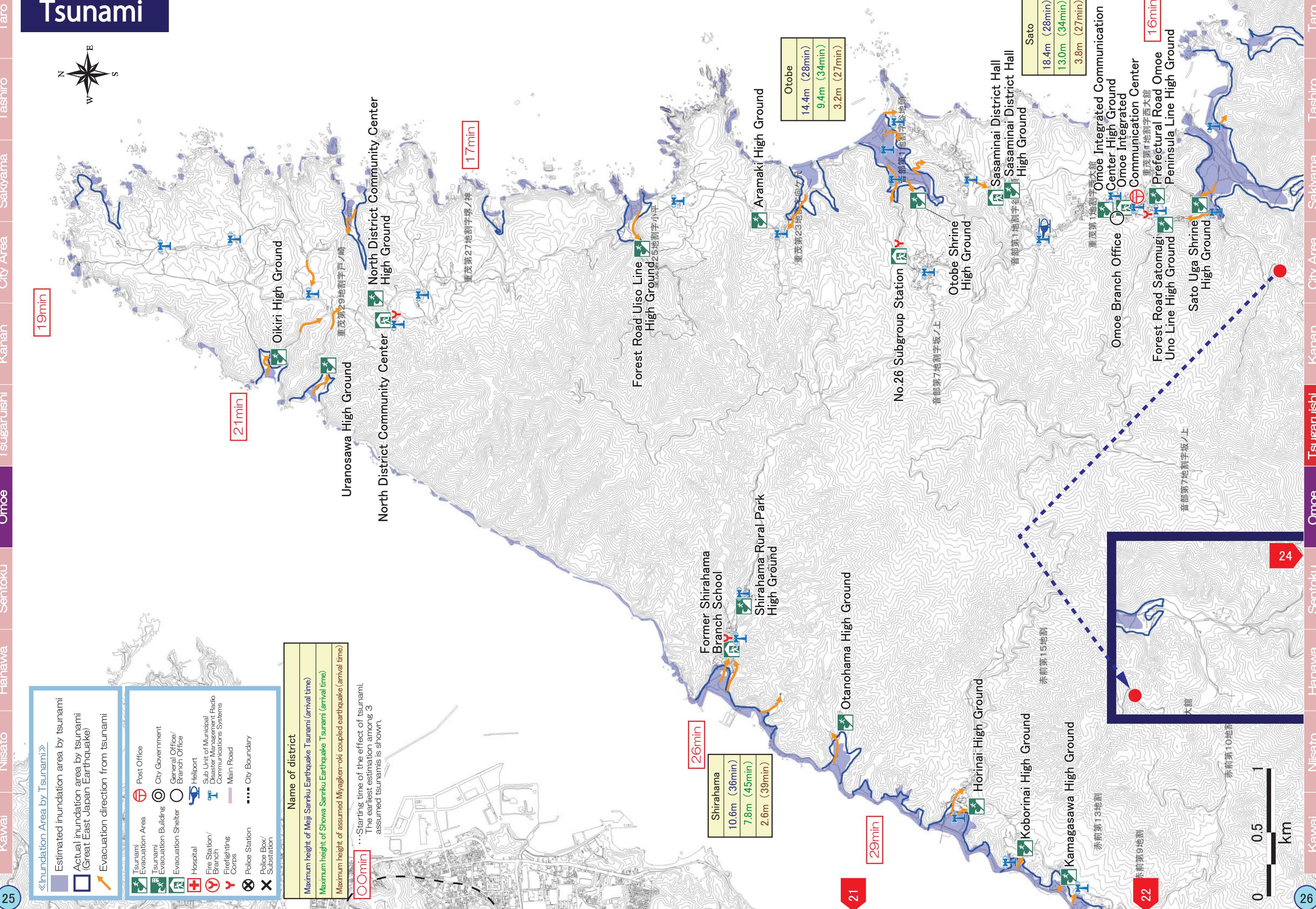
Niisato

Kawai

24



Tsunami



Tsunami

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

23

24

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

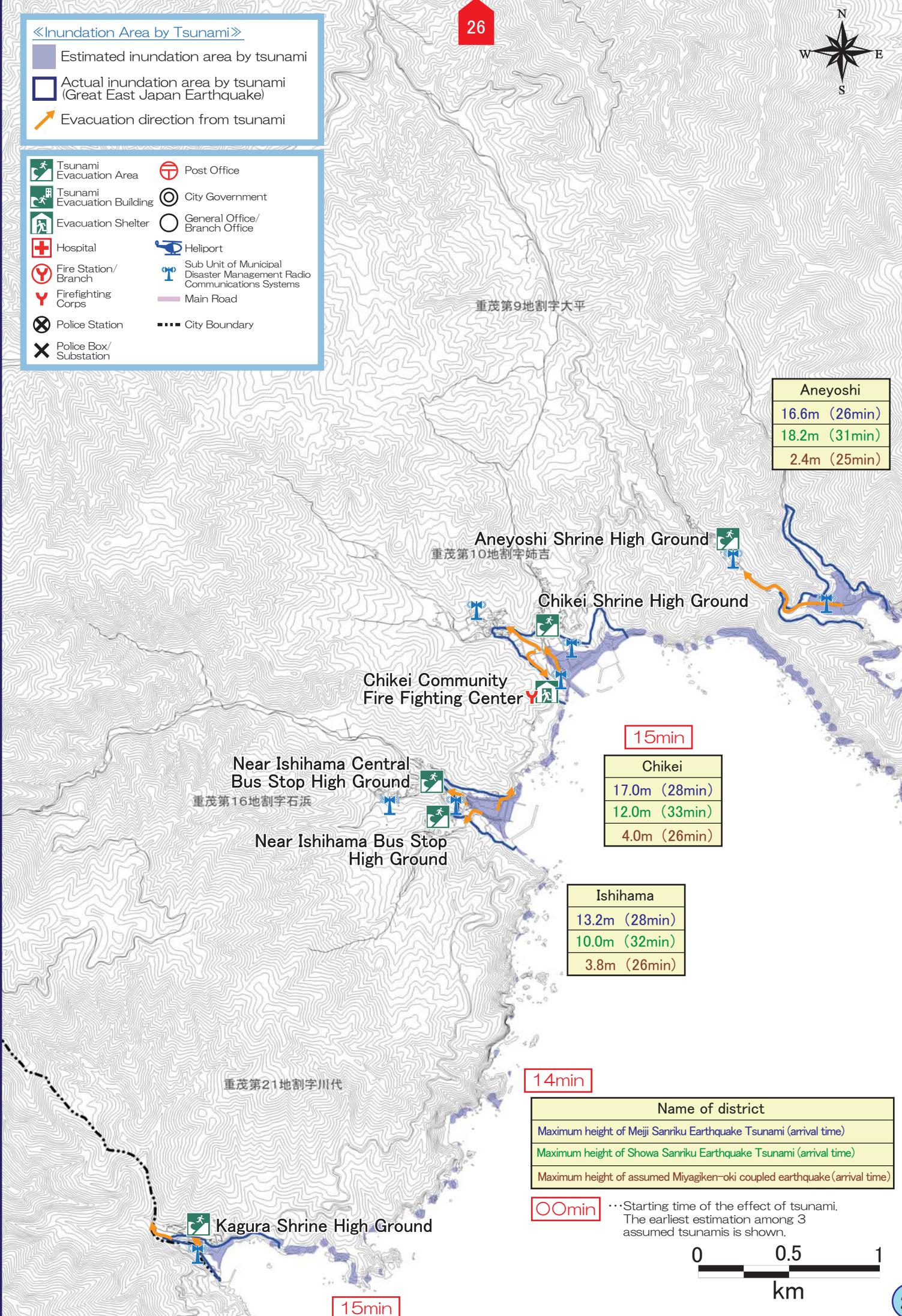
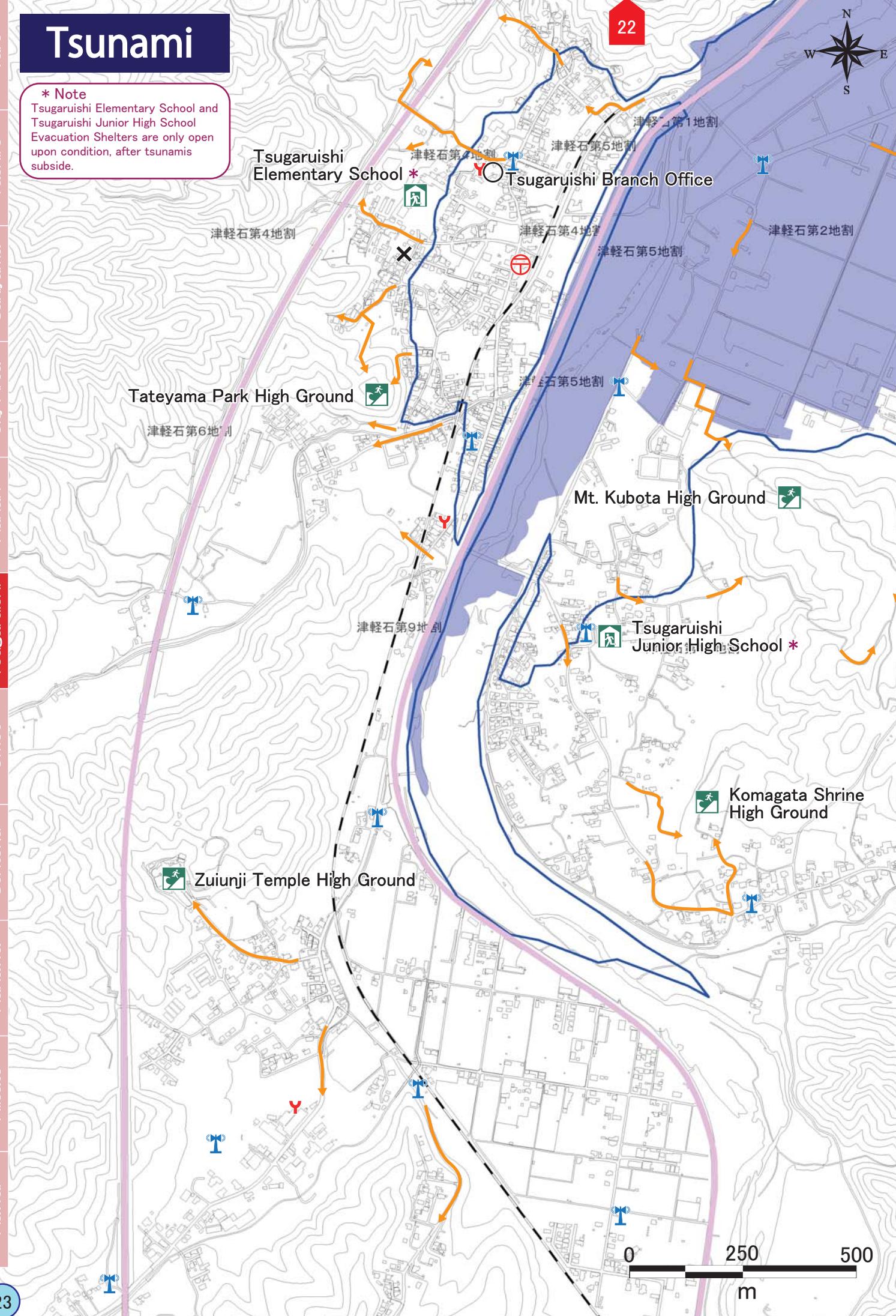
Sentoku

Hanawa

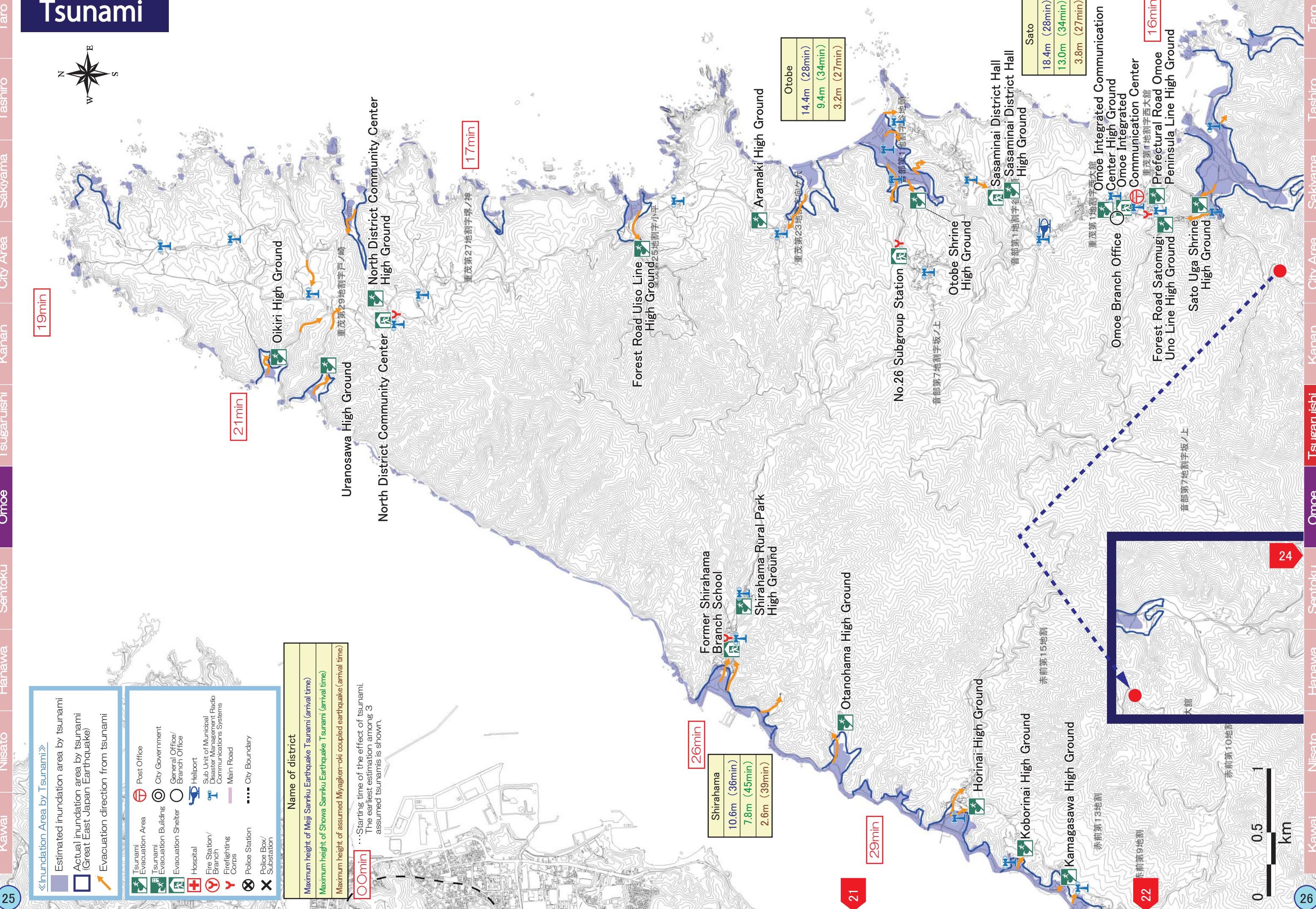
Niisato

Kawai

24



Tsunami



Flooding / Sediment Disaster

N
W
E
S

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

27

Taro

Greenpia Sanriku Miyako

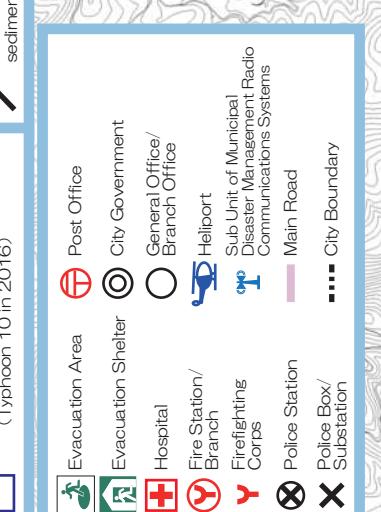
田老

田老

Taro

田老

Taro



(reference) extent of inundation depth

— Inundated to the ceiling of 1st floor
— Inundated to the height of adults, waist
— Inundated to the height of adults, knees

1
0.5
0 km

29

32

Taro

Sanno District Residents' Association Learning Center

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

Taro

28

Flooding / Sediment Disaster

28

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

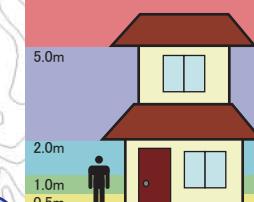
Sentoku

Hanawa

Niisato

Kawai

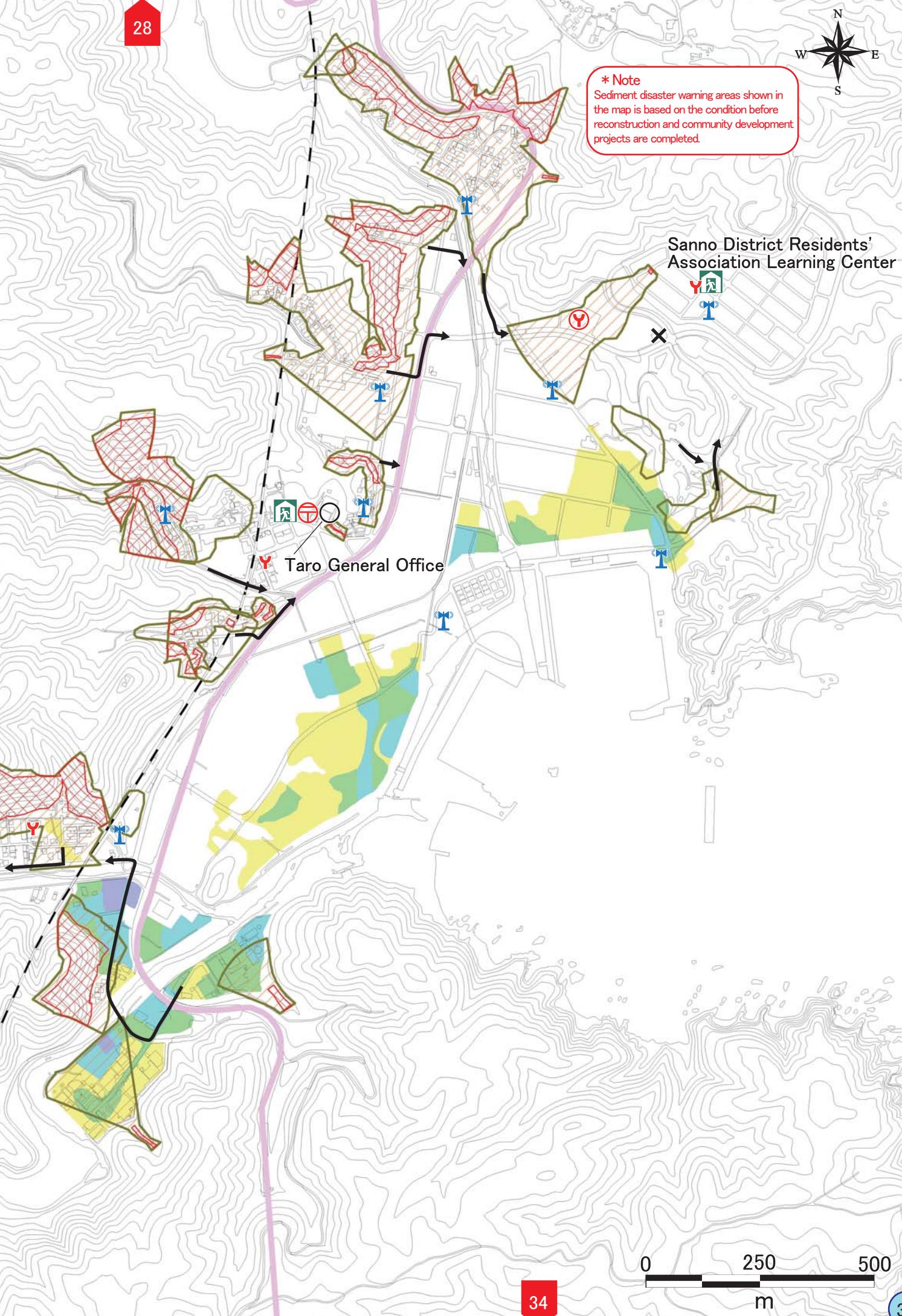
(reference) extent of inundation depth



29

28

30



34

0 250 500
m

34

30

Flooding / Sediment Disaster

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

Flooding / Sediment Disaster

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

Warning Area by Sediment Disasters

- Area at risk of extreme damage
- Area at risk of damage
- Area at risk of damage, and detailed study to be conducted.
- Evacuation direction from sediment disasters

- | | |
|---------------------------|--|
| Evacuation Area | Post Office |
| Evacuation Shelter | City Government |
| Hospital | General Office/
Branch Office |
| Fire Station/
Branch | Heliport |
| Firefighting
Corps | Sub Unit of Municipal
Disaster Management Radio
Communications Systems |
| Police Station | Main Road |
| Police Box/
Substation | City Boundary |



0 0.5 1 km

32

33

31

33

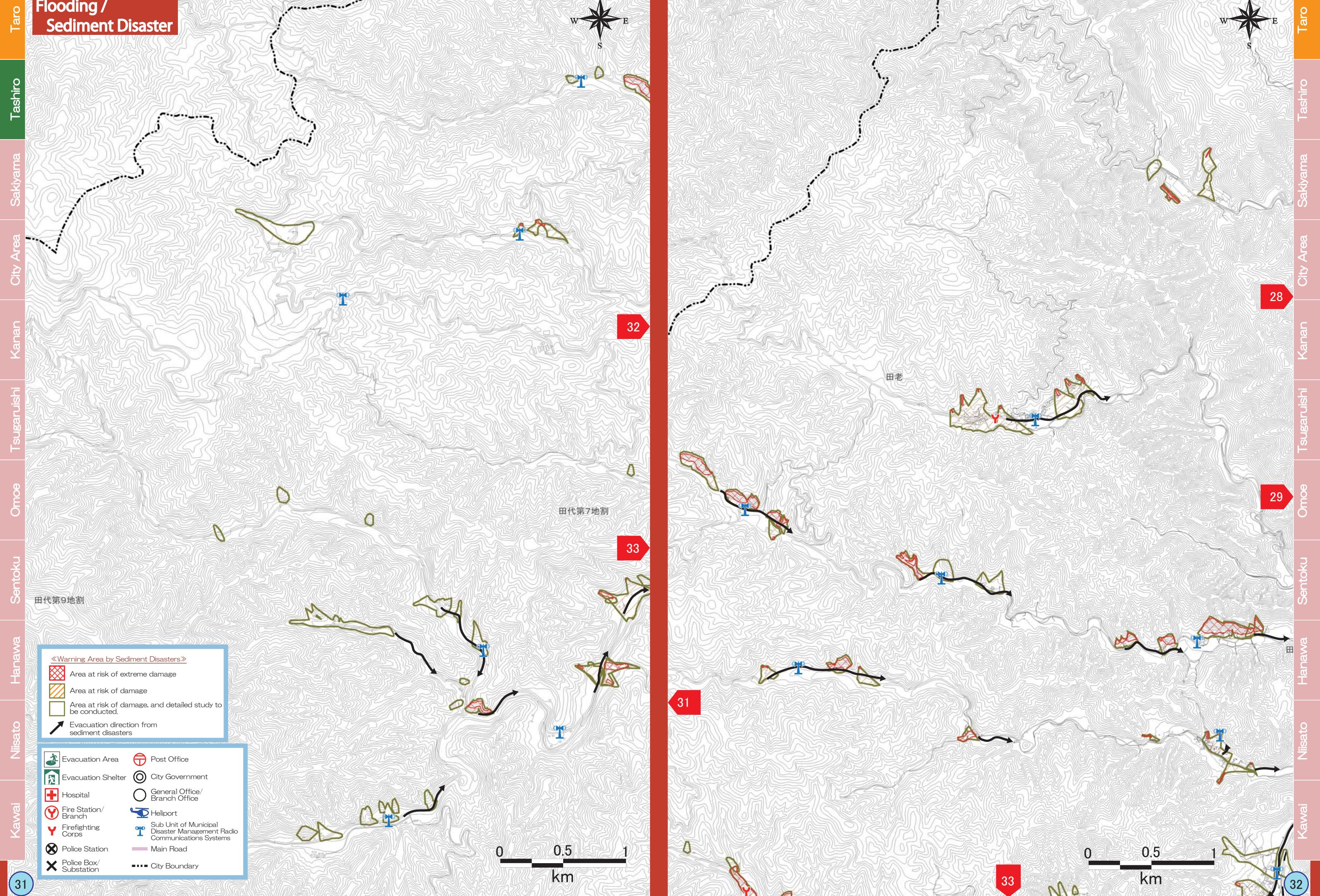
32

28

29

31

Flooding / Sediment Disaster



Flooding / Sediment Disaster



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

30

29

32

31

田代第19地割

山口

Prefectural Miyako Hospital

* Miyazono
District is also
shown in P.39.0 0.5 1
km

Taro

Tashiro

Sakiyama

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

34

«Warning Area by Sediment Disasters»

- Area at risk of extreme damage
- Area at risk of damage
- Area at risk of damage, and detailed study to be conducted.
- Evacuation direction from sediment disasters

Evacuation Area	Post Office
Evacuation Shelter	City Government
Hospital	General Office/ Branch Office
Fire Station/ Branch	Heliport
Firefighting Corps	Sub Unit of Municipal Disaster Management Radio Communications Systems
Police Station	Main Road
Police Box/ Substation	City Boundary

33

36

39

39

41

42

34

Flooding / Sediment Disaster

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

35

37

38

36

33

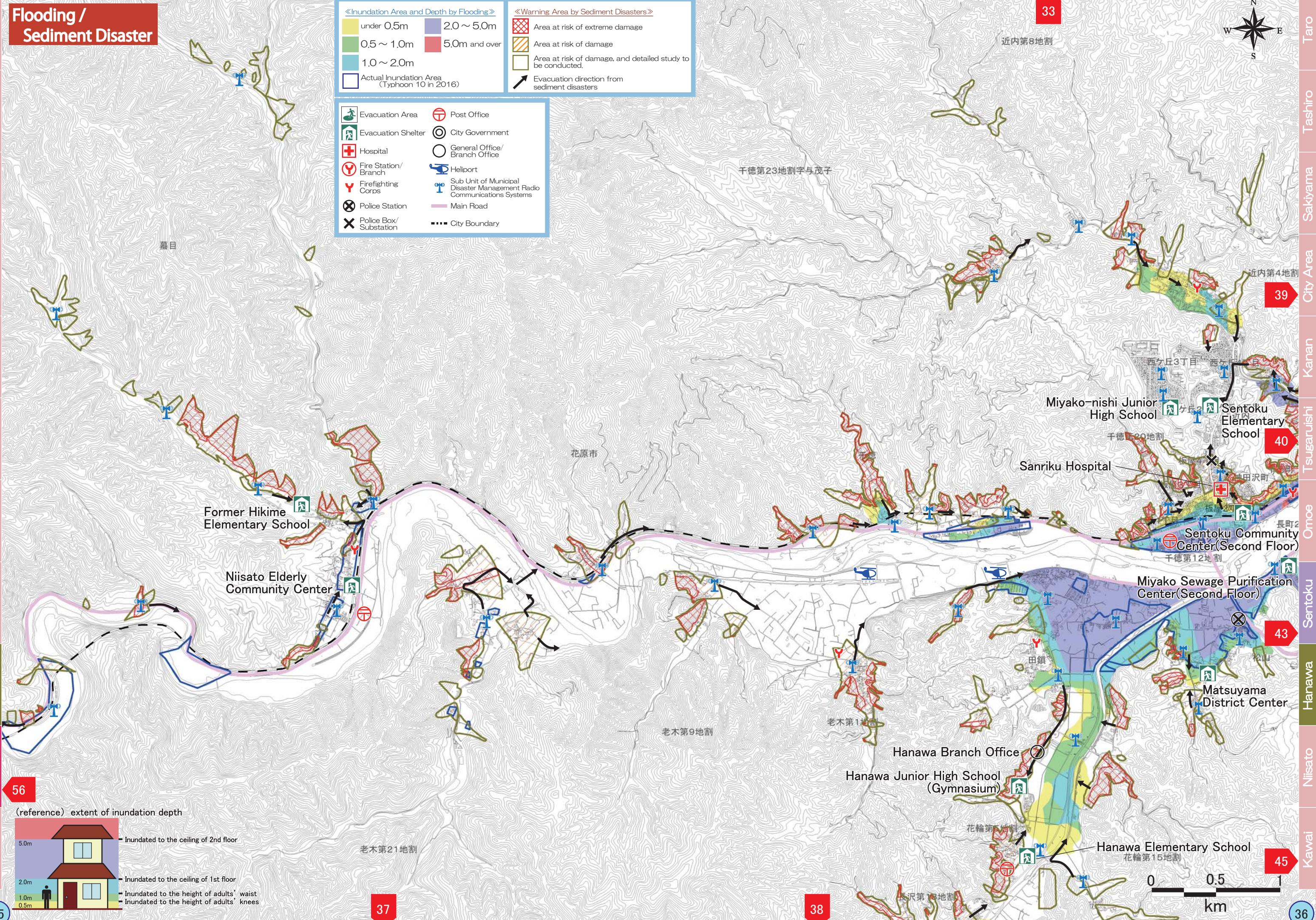
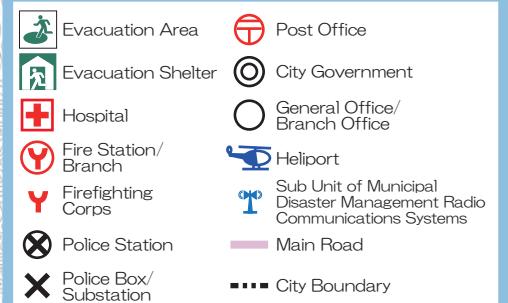
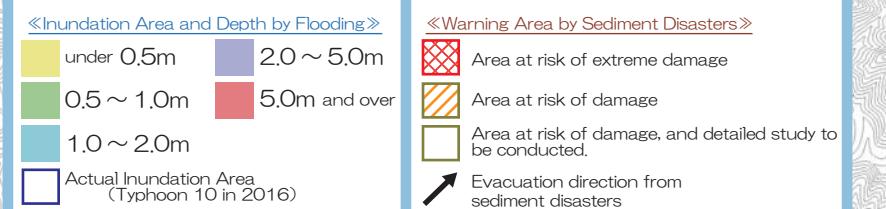
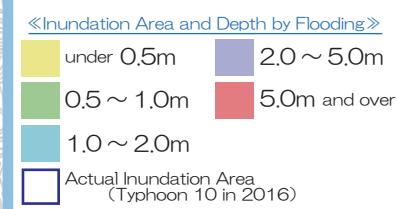
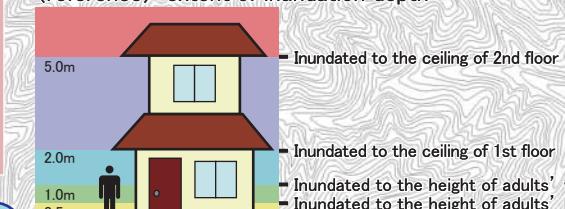
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40

43

45

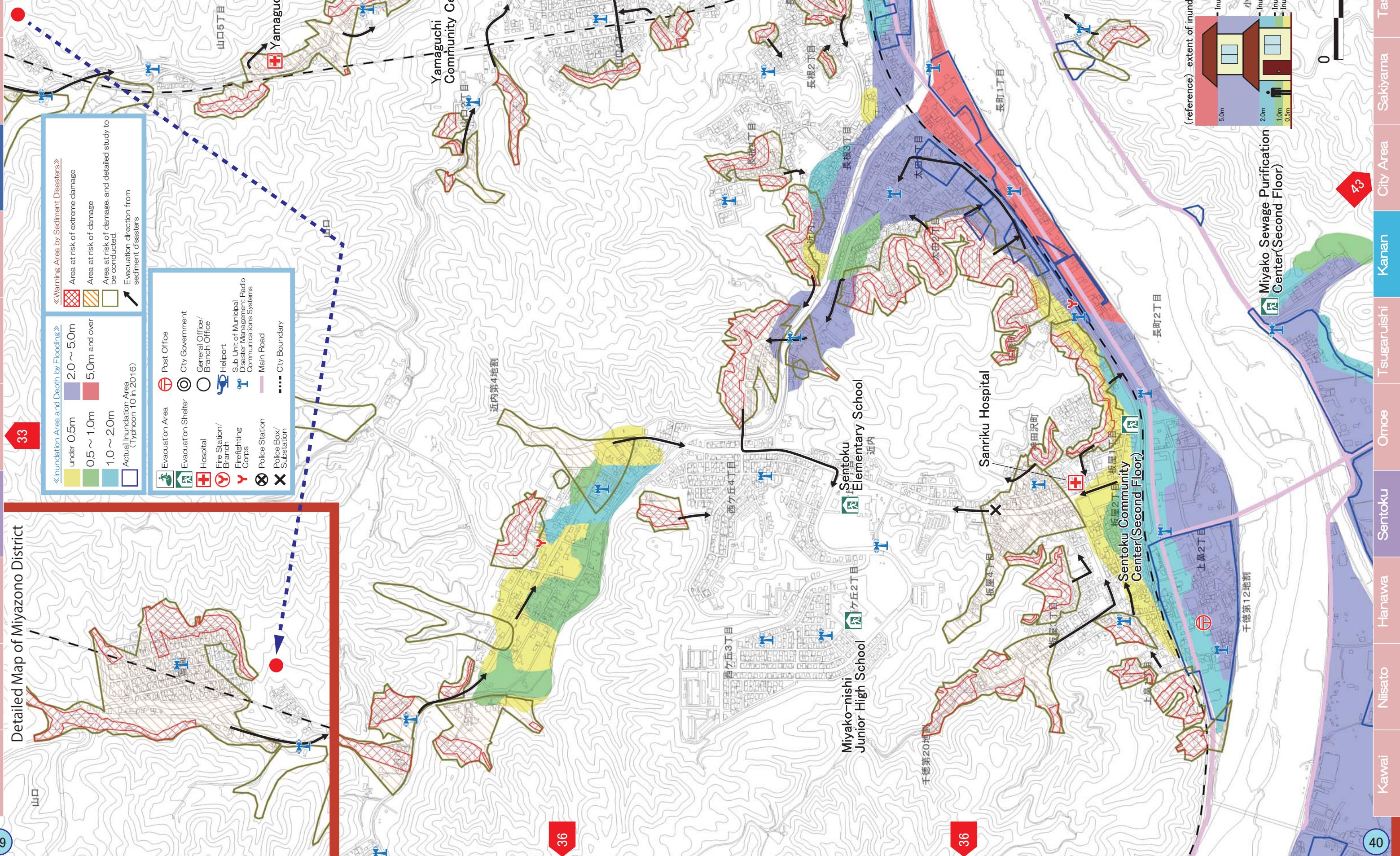
(reference) extent of inundation depth



Flooding / Sediment Disaster



41



Flooding / Sediment Disaster

laro

ashiro

Sakiyama

City Area

Kanan

Sugarushi

www.moe.gov.sg

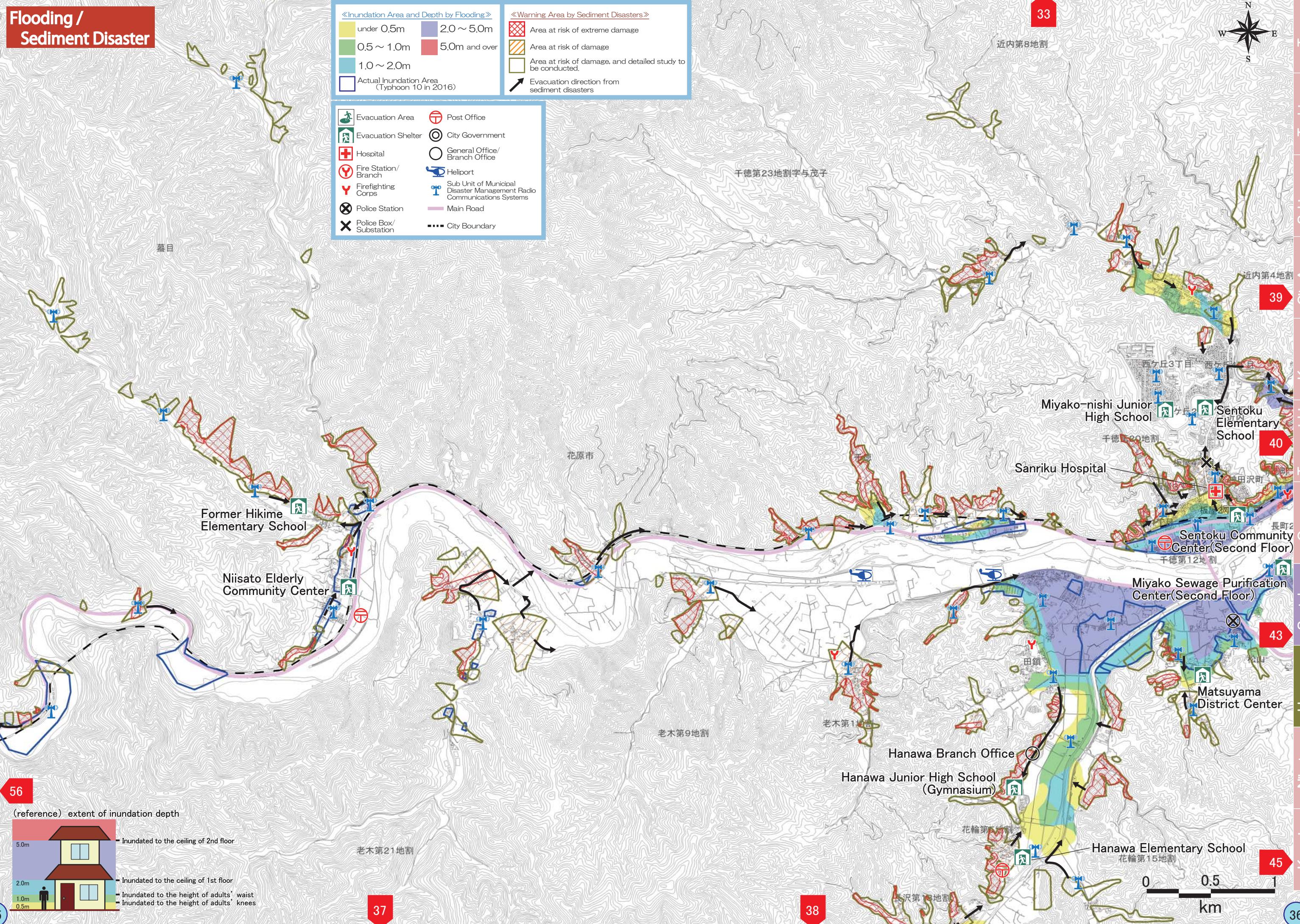
toku

awa

10

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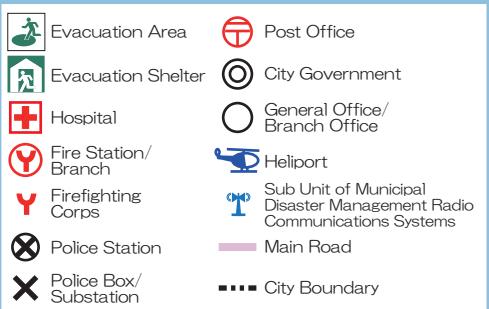
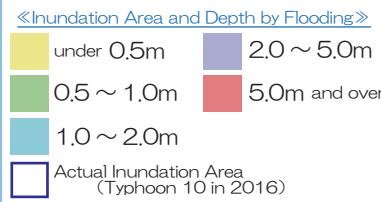
Ka



Flooding / Sediment Disaster

35

老木第21地割



- Evacuation Area
- Post Office
- Evacuation Shelter
- Hospital
- City Government
- General Office/Branch Office
- Fire Station/Branch
- Heliport
- Sub Unit of Municipal Disaster Management Radio Communications Systems
- Main Road
- Police Station
- Police Box/Substation
- City Boundary

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

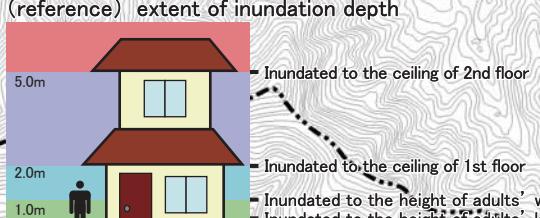
Sentoku

Hanawa

Niisato

Kawai

(reference) extent of inundation depth



37

36

Nagasawa Rural Center

45

47

49

38



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

花輪第15地割 Hanawa Elementary School

長沢第15地割

長沢第9地割

長沢第20地割

長沢第8地割

長沢第23地割

津軽石第20地割

津軽石第14地割

津軽石第16地割

津軽石第18地割

津軽石第1地割

花輪第1地割

花輪第15地割

花輪第21地割

花輪第18地割

花輪第19地割

花輪第20地割

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花輪第22地割

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花輪第141地割

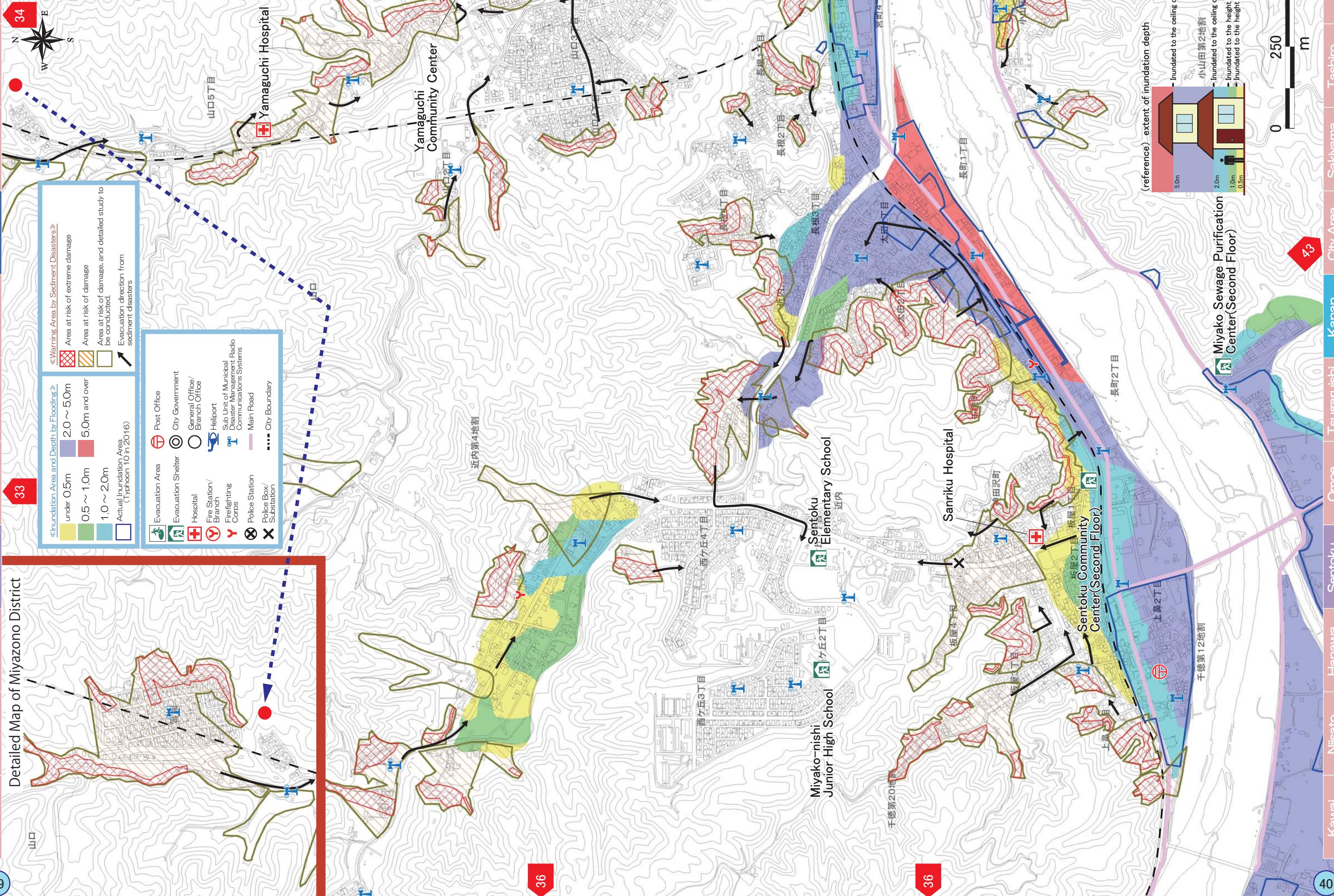
花輪第142地割

花輪第143地割

花輪第144地割

花輪第145地割

Flooding / Sediment Disaster



Flooding / Sediment Disaster

34

34

Prefectural Miyako Hospital

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

41

43

44

42

小山田1丁目
小山田2丁目小山田3丁目
小山田4丁目宮町1丁目
宮町2丁目宮町3丁目
宮町4丁目大通1丁目
大通2丁目大通3丁目
大通4丁目

南町

新町

未広町

和見町

鶴崎町

泉町

西町1丁目
西町2丁目
西町3丁目
西町4丁目田の神1丁目
田の神2丁目小沢1丁目
小沢2丁目佐原1丁目
佐原2丁目
佐原3丁目
佐原4丁目

横町

保久田

黒田町

新町

築地1丁目
築地2丁目鐵ヶ崎上町
鐵ヶ崎中町
鐵ヶ崎下町

銀町

日影町

熊野町

端の浜町

日立浜町

Kuwasaki Community Center

Former Atago Elementary School(East Building)

Miyako Elementary School(Gymnasium)

Miyako Elementary School(School Building)

Yamaguchi Elementary School

Miyako First Hospital

Miyako City Government Office
(Scheduled to open in October 2018)
<Citizens Communication Center>

The First Junior High School

Fujiwara Elementary School

藤原1丁目
藤原2丁目

藤原上町

佐原上町

佐原4丁目

佐原3丁目

佐原2丁目

佐原1丁目

日の出町

熊野町

端の浜町

銀町

日影町

鐵ヶ崎上町

鐵ヶ崎中町

鐵ヶ崎下町

日立浜町

Kuwasaki Community Center

Former Atago Elementary School(East Building)

Miyako Elementary School(Gymnasium)

Yamaguchi Elementary School

Miyako First Hospital

Miyako City Government Office
(Scheduled to open in October 2018)
<Citizens Communication Center>

The First Junior High School

Fujiwara Elementary School

藤原1丁目
藤原2丁目

藤原上町

佐原上町

佐原4丁目

佐原3丁目

佐原2丁目

佐原1丁目

日の出町

熊野町

端の浜町

銀町

日影町

鐵ヶ崎上町

鐵ヶ崎中町

鐵ヶ崎下町

日立浜町

Kuwasaki Community Center

Former Atago Elementary School(East Building)

Miyako Elementary School(Gymnasium)

Yamaguchi Elementary School

Miyako First Hospital

Miyako City Government Office
(Scheduled to open in October 2018)
<Citizens Communication Center>

The First Junior High School

Fujiwara Elementary School

藤原1丁目
藤原2丁目

藤原上町

佐原上町

佐原4丁目

佐原3丁目

佐原2丁目

佐原1丁目

日の出町

熊野町

端の浜町

銀町

日影町

鐵ヶ崎上町

鐵ヶ崎中町

鐵ヶ崎下町

日立浜町

Kuwasaki Community Center

Former Atago Elementary School(East Building)

Miyako Elementary School(Gymnasium)

Yamaguchi Elementary School

Miyako First Hospital

Miyako City Government Office
(Scheduled to open in October 2018)
<Citizens Communication Center>

The First Junior High School

Fujiwara Elementary School

藤原1丁目
藤原2丁目

藤原上町

佐原上町

佐原4丁目

佐原3丁目

佐原2丁目

佐原1丁目

日の出町

熊野町

端の浜町

銀町

日影町

鐵ヶ崎上町

鐵ヶ崎中町

鐵ヶ崎下町

日立浜町

Kuwasaki Community Center

Former Atago Elementary School(East Building)

Miyako Elementary School(Gymnasium)

Yamaguchi Elementary School

Miyako First Hospital

Miyako City Government Office
(Scheduled to open in October 2018)
<Citizens Communication Center>

The First Junior High School

Fujiwara Elementary School

藤原1丁目
藤原2丁目

藤原上町

佐原上町

佐原4丁目

佐原3丁目

佐原2丁目

佐原1丁目

日の出町

熊野町

端の浜町

銀町

日影町

鐵ヶ崎上町

鐵ヶ崎中町

鐵ヶ崎下町

日立浜町

Kuwasaki Community Center

Former Atago Elementary School(East Building)

Miyako Elementary School(Gymnasium)

Yamaguchi Elementary School

Miyako First Hospital

Miyako City Government Office
(Scheduled to open in October 2018)
<Citizens Communication Center>

The First Junior High School

Fujiwara Elementary School

藤原1丁目
藤原2丁目

藤原上町

佐原上町

佐原4丁目

佐原3丁目

佐原2丁目

佐原1丁目

日の出町

熊野町

端の浜町

銀町

日影町

鐵ヶ崎上町

鐵ヶ崎中町

鐵ヶ崎下町

日立浜町

Kuwasaki Community Center

Former Atago Elementary School(East Building)

Miyako Elementary School(Gymnasium)

Yamaguchi Elementary School

Miyako First Hospital

Miyako City Government Office
(Scheduled to open in October 2018)
<Citizens Communication Center>

The First Junior High School

Fujiwara Elementary School

藤原1丁目
藤原2丁目

藤原上町

佐原上町

佐原4丁目

佐原3丁目

佐原2丁目

佐原1丁目

日の出町

熊野町

端の浜町

銀町

日影町

鐵ヶ崎上町

鐵ヶ崎中町

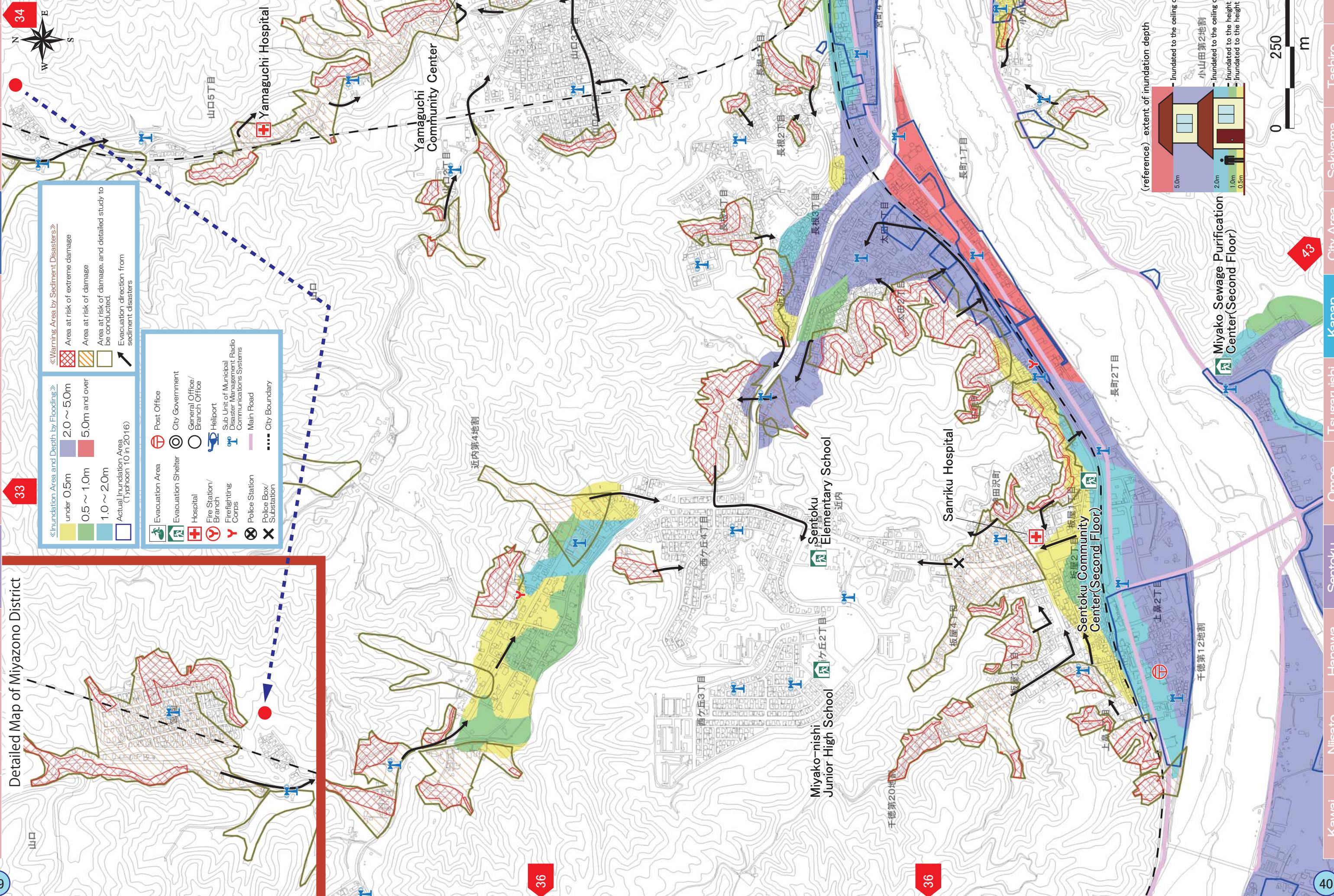
鐵ヶ崎下町

日立浜町

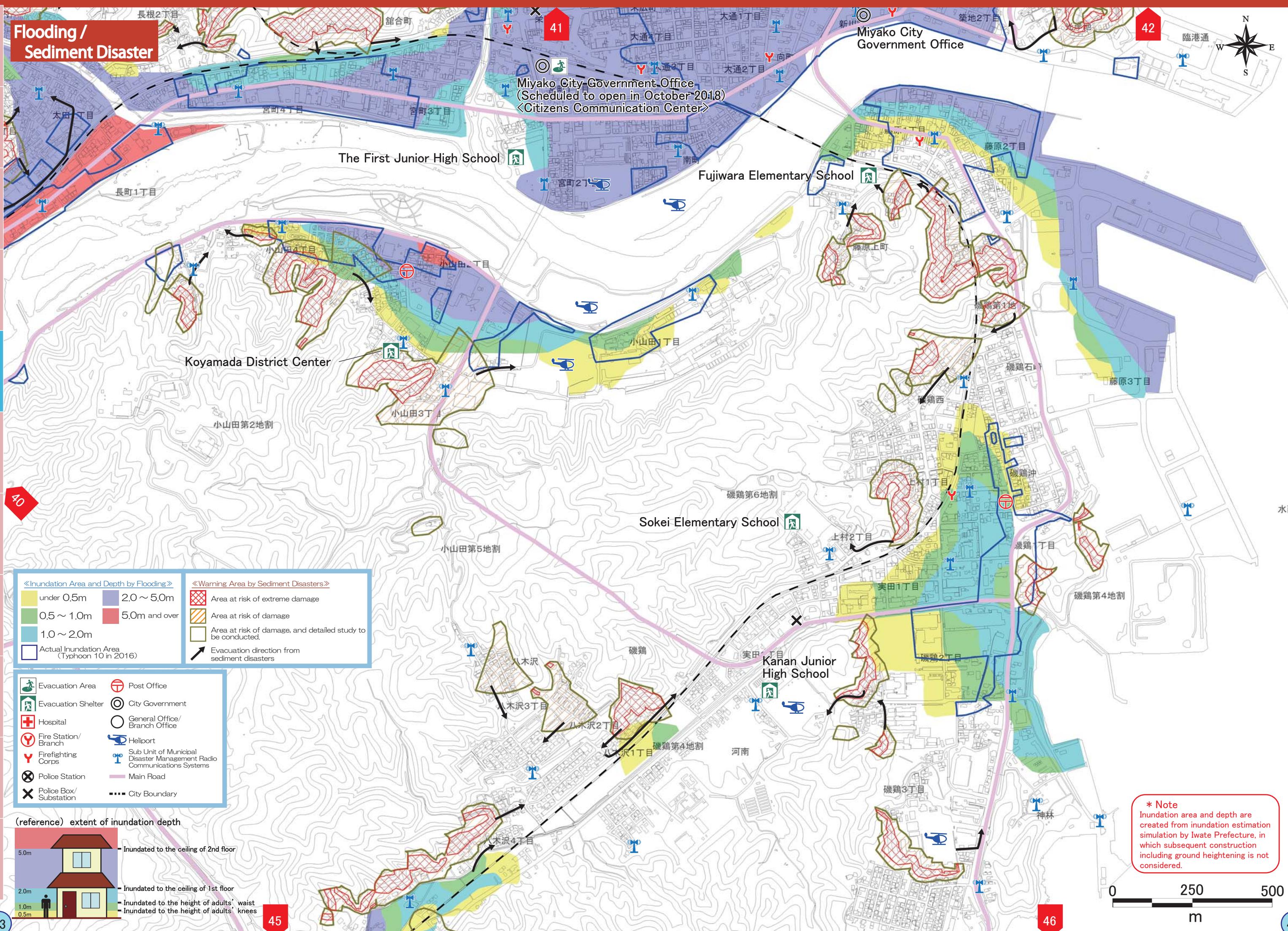
Kuwasaki Community Center

Former Atago Elementary School(East Building)

Flooding / Sediment Disaster



Flooding / Sediment Disaster



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

N
E
W
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41

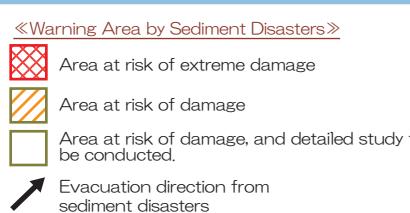
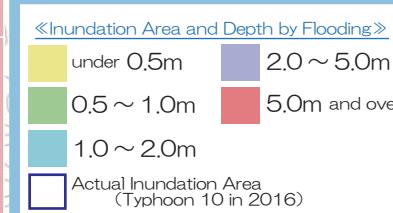
42

44

45

46

Flooding / Sediment Disaster



43



36

Kanan

Tsugaruishi

38

Omoe

Sentoku

Hanawa

Niisato

Kawai

44

44

Taro

N

W

E

S

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

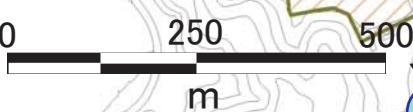
Niisato

Kawai

45

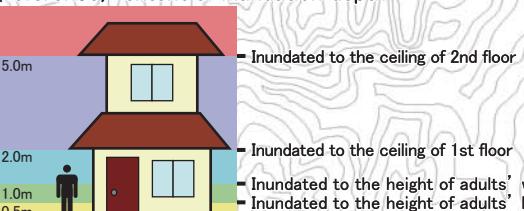
47

48

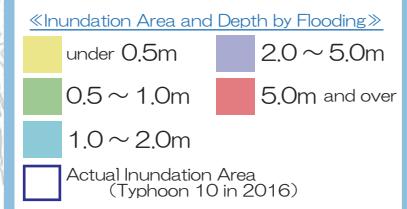


46

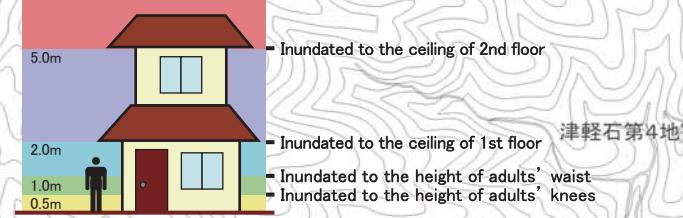
(reference) extent of inundation depth



Flooding / Sediment Disaster



(reference) extent of inundation depth



38

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

45

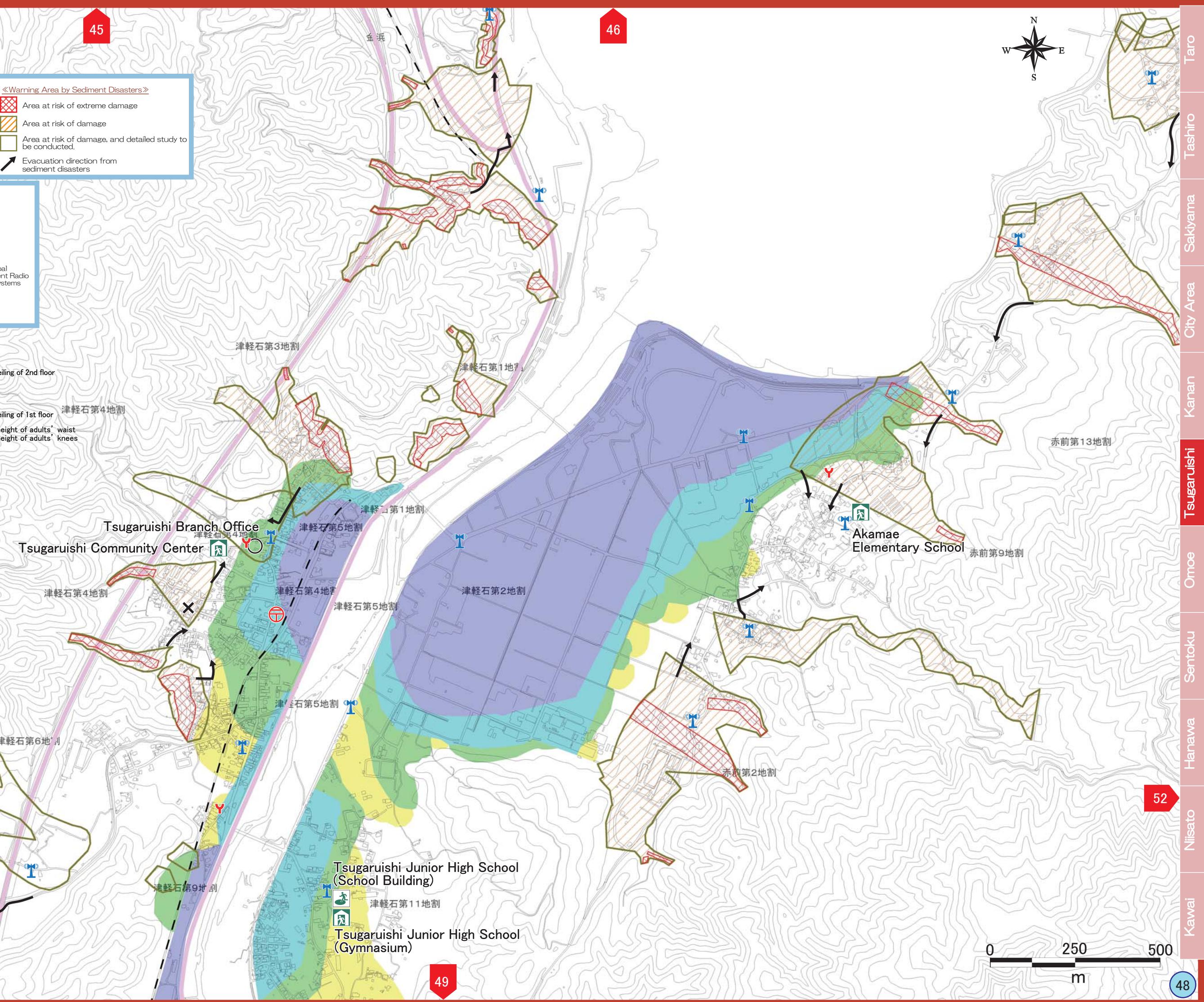
46

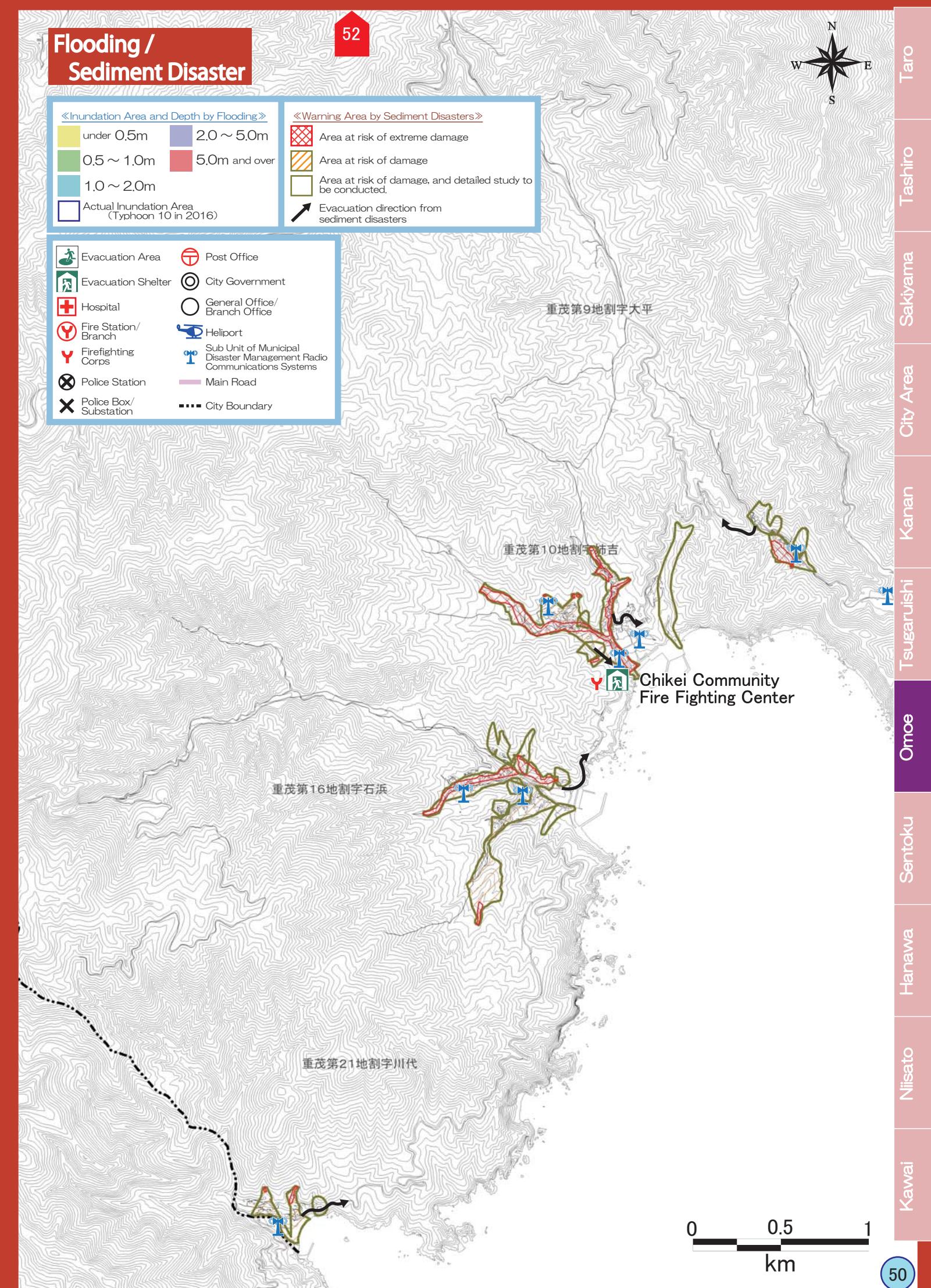
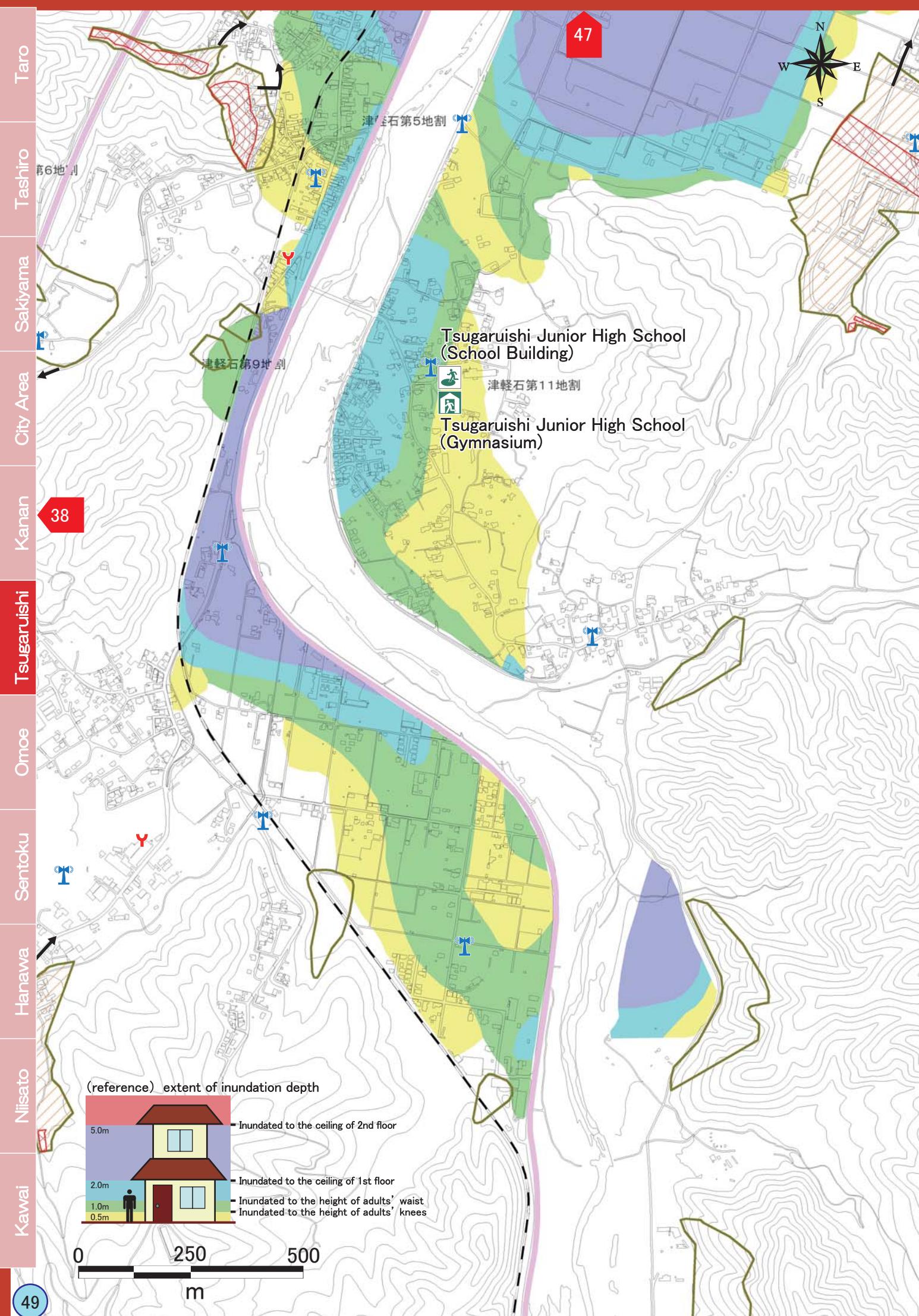
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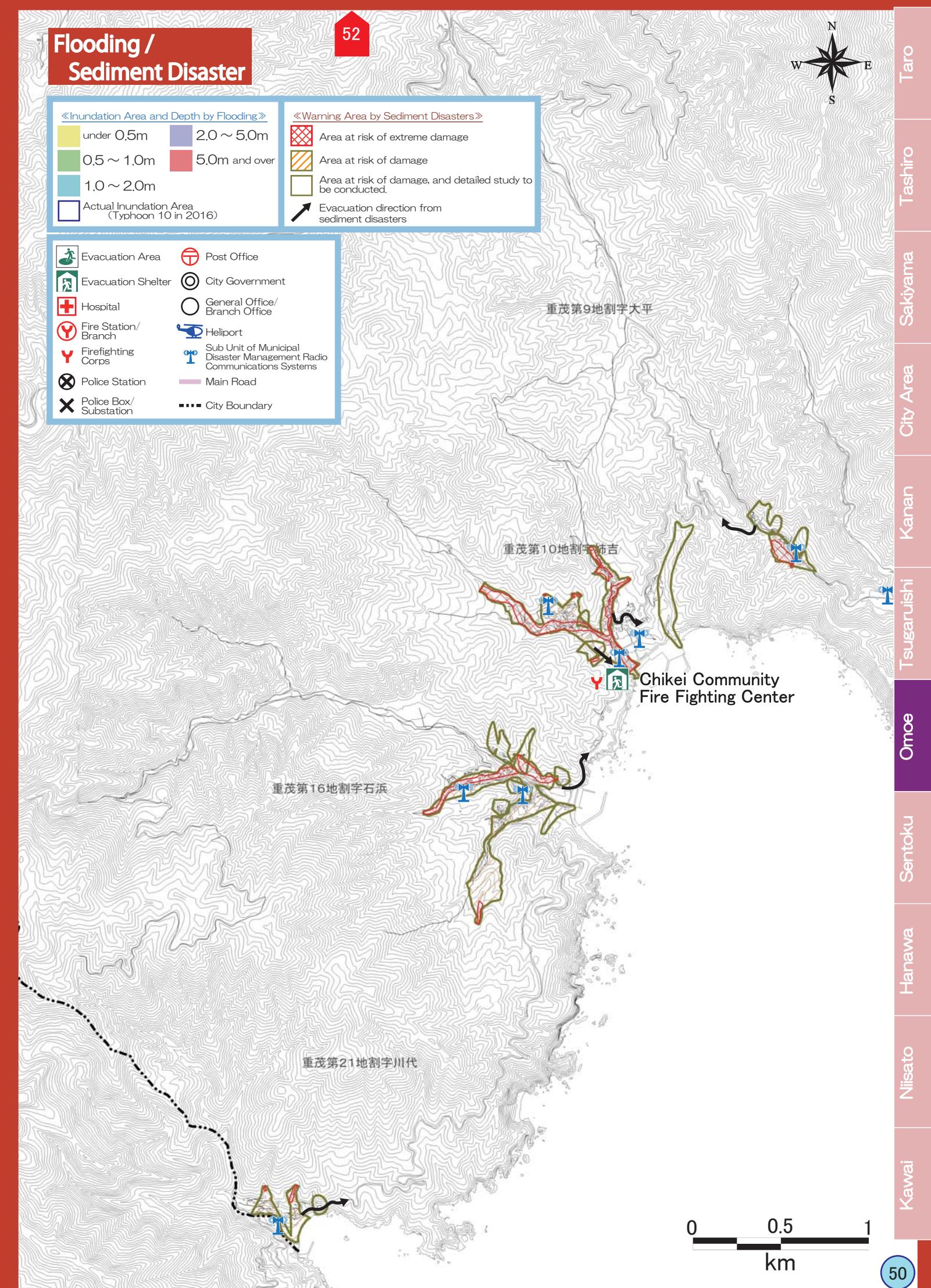
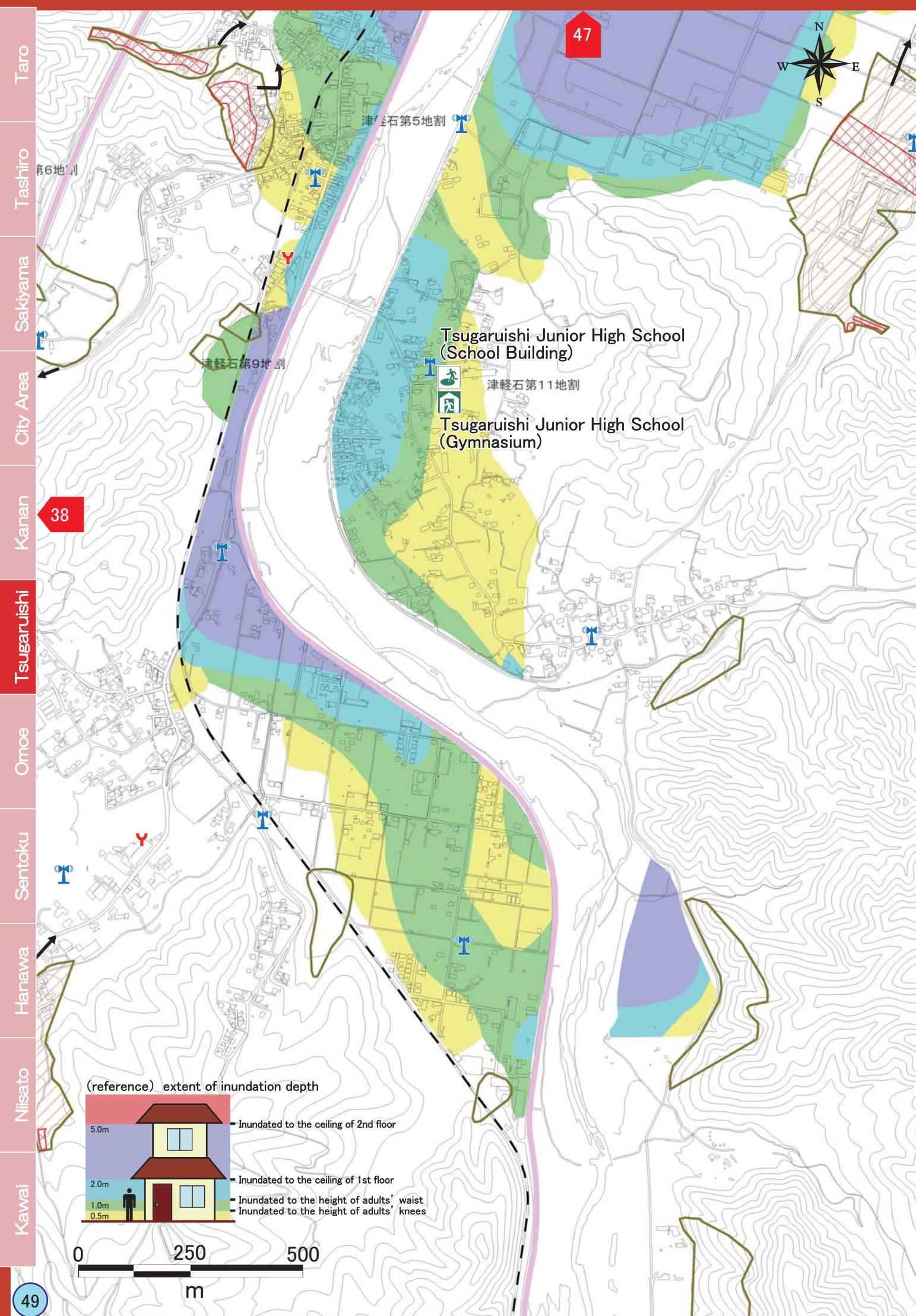


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m

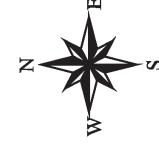
48







Flooding / Sediment Disaster



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

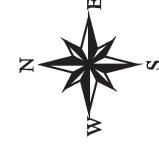
Niihato

Kawai



51

Flooding / Sediment Disaster



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

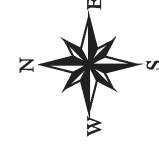
Hanawa

Niihato

Kawai

52

Flooding / Sediment Disaster



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

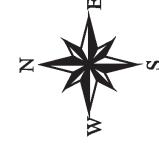
Hanawa

Niihato

Kawai

52

Flooding / Sediment Disaster



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Tashiro

Sakiyama

City Area

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Tsugaruishi

Omoe

Sentoku

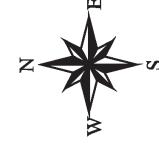
Hanawa

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Kawai

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Flooding / Sediment Disaster



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Sakiyama

City Area

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Tsugaruishi

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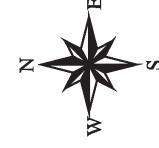
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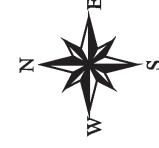
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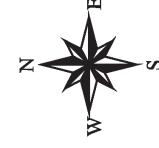
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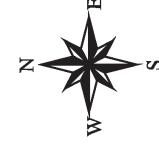
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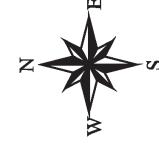
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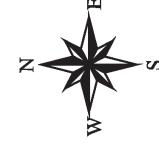
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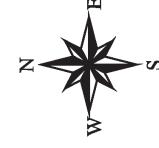
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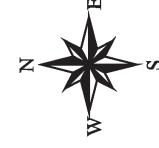
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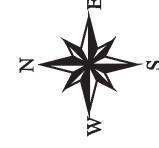
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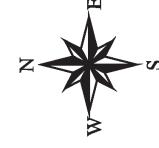
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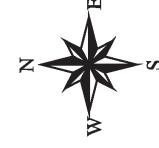
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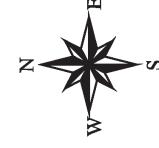
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Niihato

Kawai

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Sakiyama

City Area

Kanan

Tsugaruishi

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Flooding / Sediment Disaster

Flooding / Sediment Disaster

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Tashiro

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City Area

Kanan

Tsugaruishi

Omoe

Sentoku

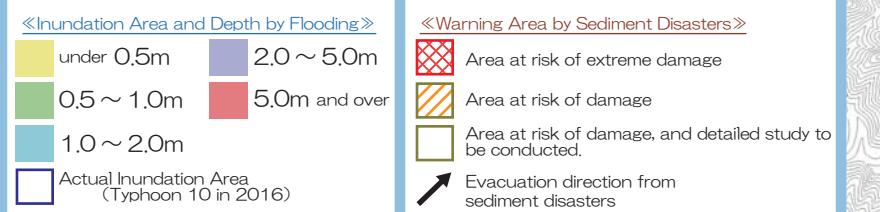
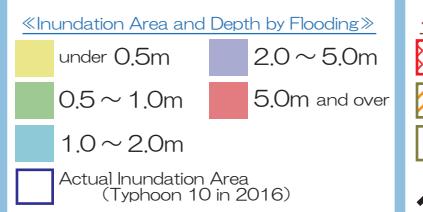
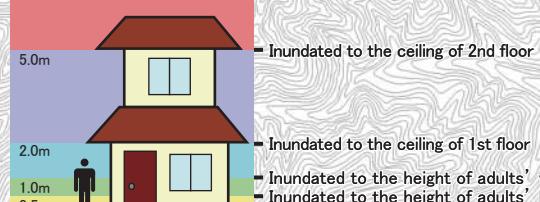
Hanawa

Niisato

Kawai



(reference) extent of inundation depth



Evacuation Area	Post Office
Evacuation Shelter	City Government
Hospital	General Office/ Branch Office
Fire Station/ Branch	Heliport
Firefighting Corps	Sub Unit of Municipal Disaster Management Radio Communications Systems
Police Station	Main Road
Police Box/ Substation	City Boundary

35

37

38

36

33

39

40

43

45

近内第8地割

千德第23地割字与茂子

Miyako-nishi Junior High School

Sanriku Hospital

Sentoku Community Center(Second Floor)

Miyako Sewage Purification Center(Second Floor)

Matsuyama District Center

Hanawa Branch Office

Hanawa Junior High School (Gymnasium)

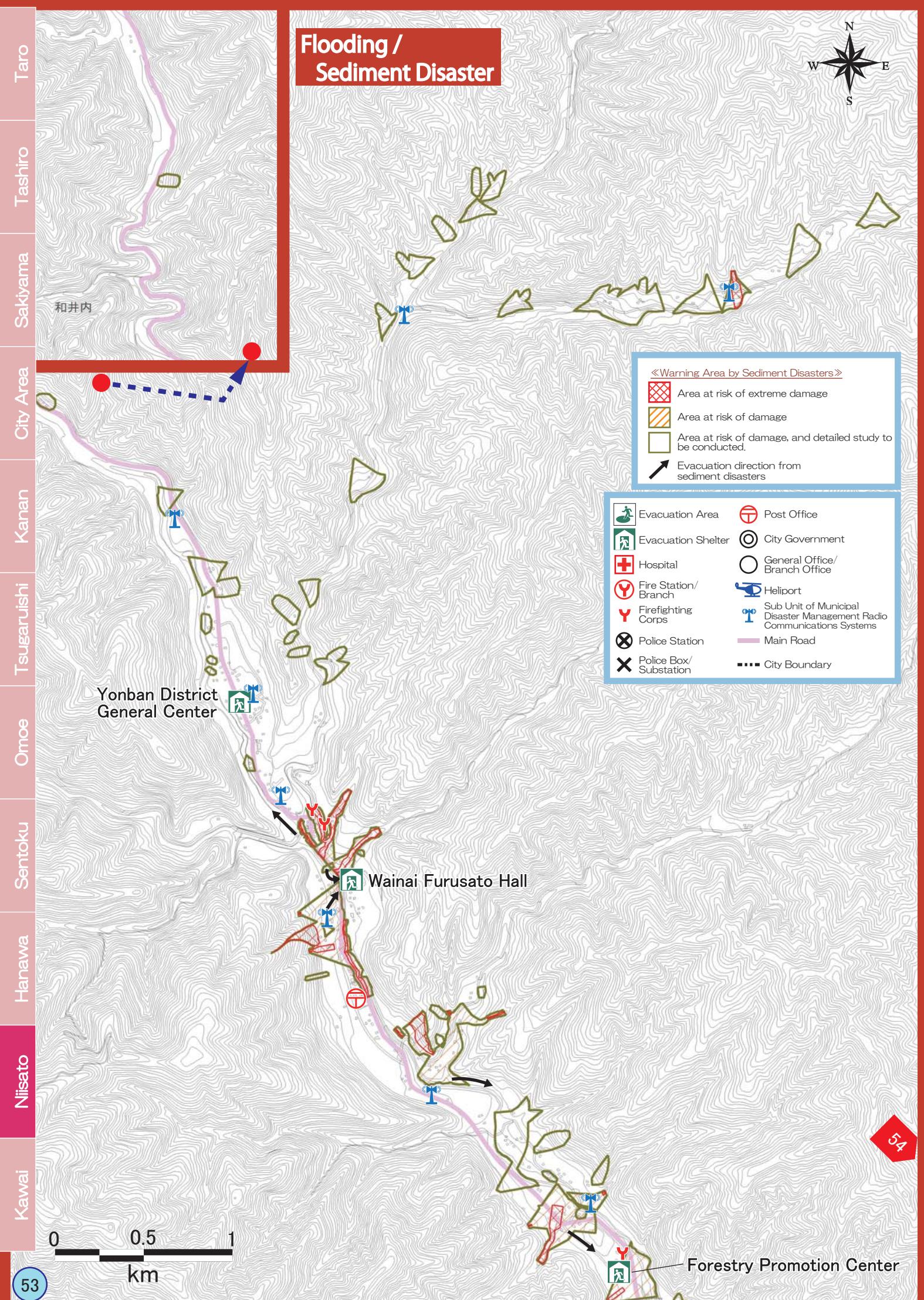
Hanawa Elementary School

花輪第15地割

km

38

36



Flooding / Sediment Disaster

54

54



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

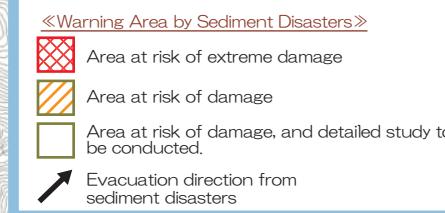
Hanawa

Niisato

Kawai

35

37

Futta Community
Fire Fighting CenterHoroiwa
Meeting House

Haratai Life Improvement Center

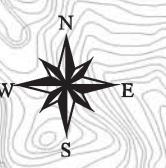
Haratai District Community
Fire Fighting Center

腹帶

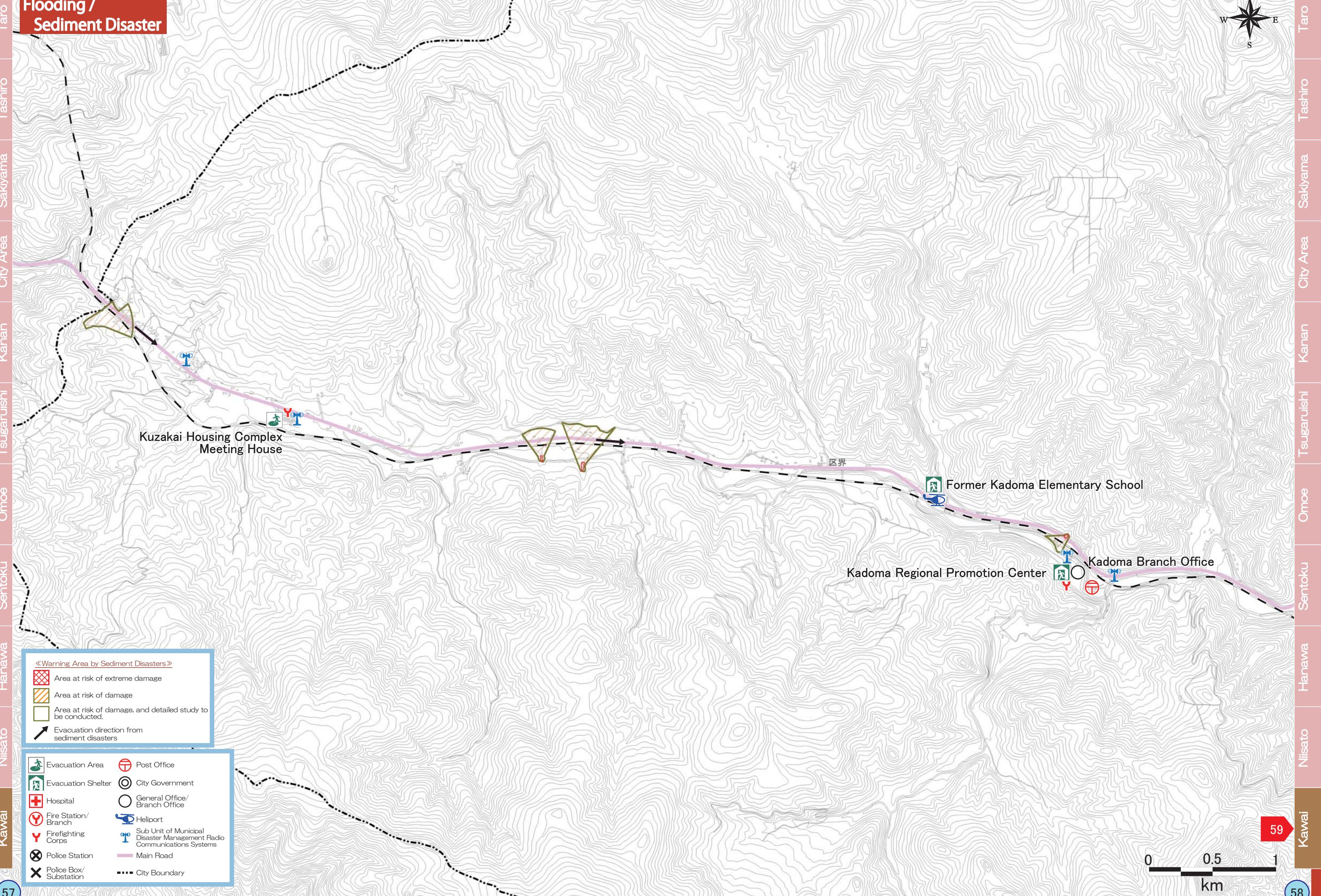
55

0 0.5 1 km

56



Flooding / Sediment Disaster



Flooding / Sediment Disaster



«Warning Area by Sediment Disasters»

- Area at risk of extreme damage
- Area at risk of damage
- Area at risk of damage, and detailed study to be conducted.
- Evacuation direction from sediment disasters

- | Evacuation Area | Post Office |
|------------------------|--|
| Evacuation Shelter | City Government |
| Hospital | General Office/ Branch Office |
| Fire Station/ Branch | Heliport |
| Firefighting Corps | Sub Unit of Municipal Disaster Management Radio Communications Systems |
| Police Station | Main Road |
| Police Box/ Substation | City Boundary |

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

58

Sentoku

Hanawa

Niisato

Kawai

61

62

Hiratsuto Meeting House

平津戸

0 0.5 1
km

59

60

Flooding / Sediment Disaster



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Hanawa

Sentoku

Niisato

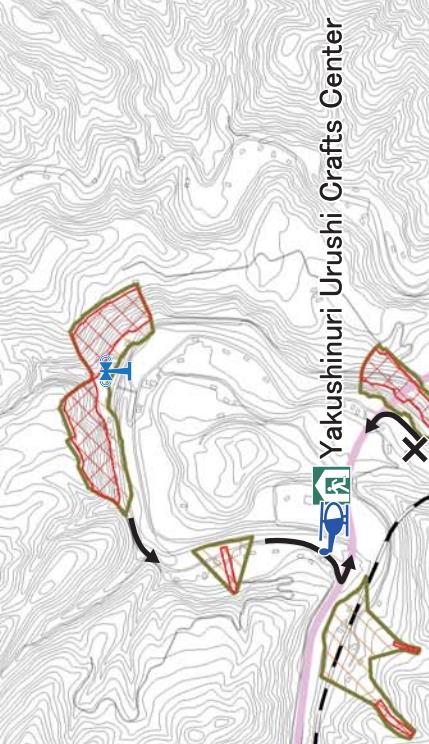
Kawai

61

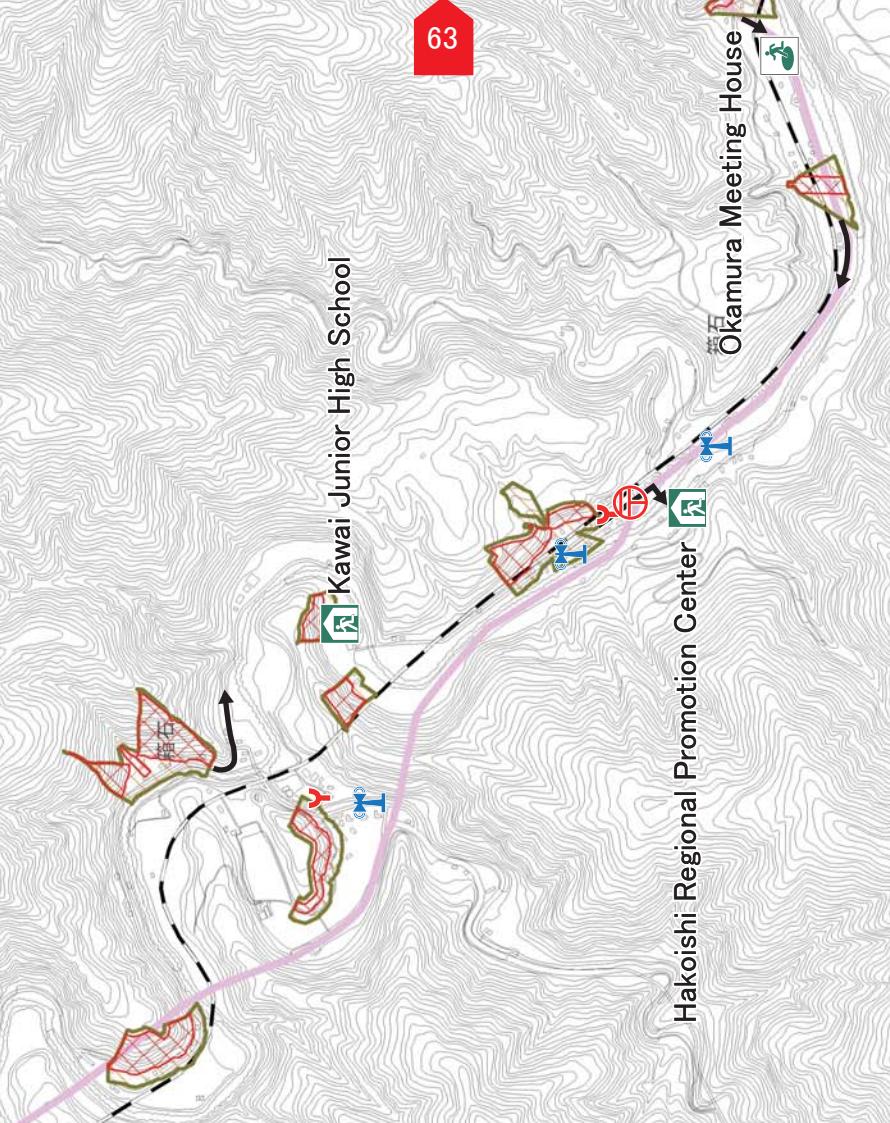
- « Warning Area by Sediment Disasters »
- Area at risk of extreme damage
- Area at risk of damage
- Area at risk of damage, and detailed study to be conducted
- Evacuation direction from sediment disasters

- Evacuation Area
- Evacuation Shelter
- +■ Hospital
- Fire Station/ Branch
- Y Firefighting Corps
- X Police Station
- X Police Box/ Substation
- Post Office
- City Government
- General Office/ Branch Office
- Helibot
- Sub Unit of Municipal Disaster Management Radio Communications Systems
- Main Road
- City Boundary

60



Kawauchi Branch Office



60

63

0 0.5 1 km

片栗

鎌久名

Taro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Hanawa

Sentoku

Niisato

62

Flooding / Sediment Disaster

10

10

三

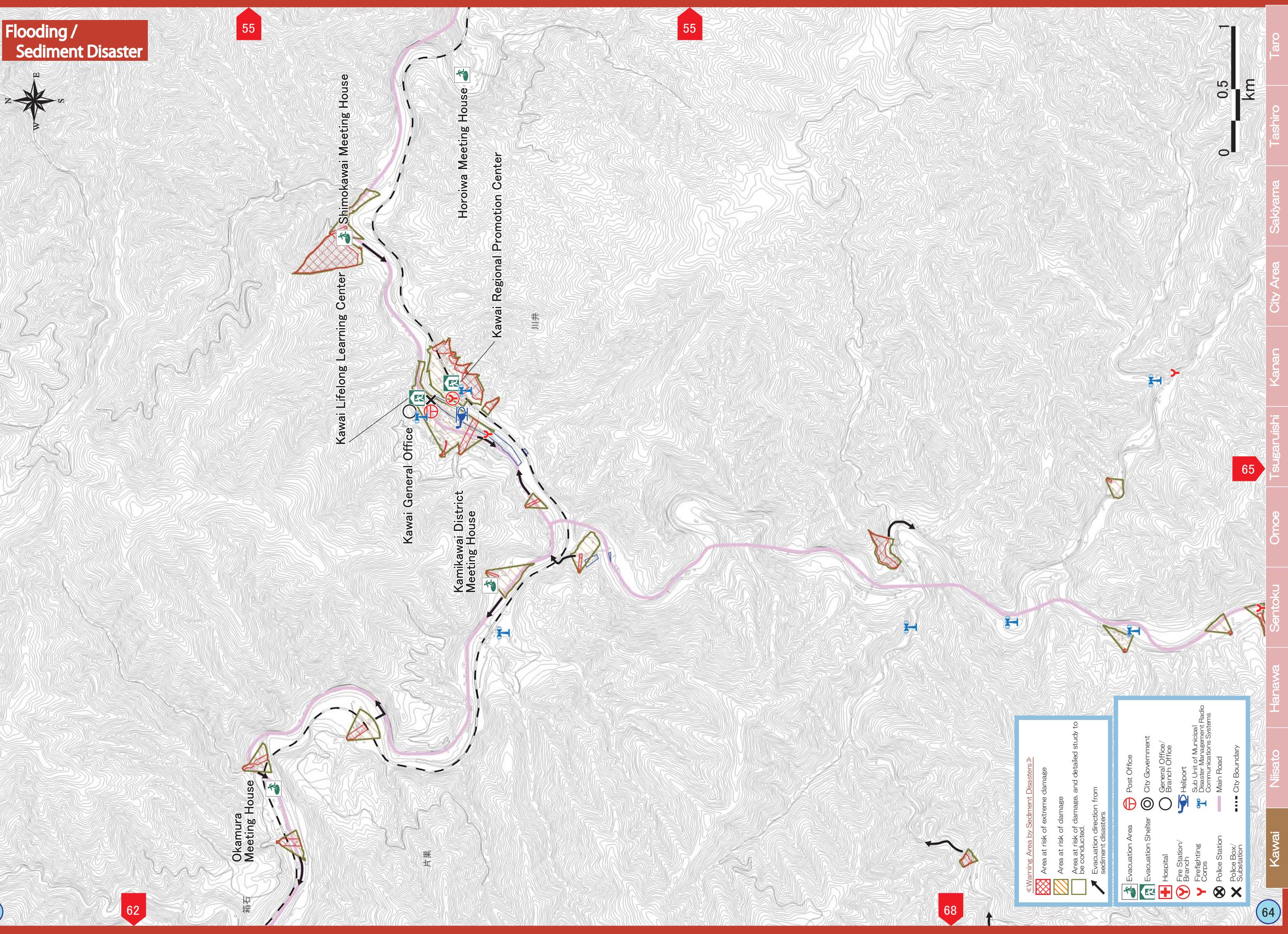
卷之三

10

55

9

3



Flooding / Sediment Disaster



Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

64

Sentoku

Omoe

Hanawa

Niihato

Kawai

65

Etsunagi Regional
Promotion Center

Akazawa Meeting House

Oguni Branch Office

Oguni Regional Promotion Center

Kamiyuzawa Meeting House

小国

T

«Warning Area by Sediment Disasters»

- Evacuation Area
- Evacuation Shelter
- Post Office
- City Government
- Hospital
- General Office /
Branch Office
- Fire Station /
Firefighting Corps
- Heliport
- Sub Unit of Municipal
Disaster Management Radio
Communications Systems
- Main Road
- - - City Boundary

Area at risk of extreme damage

Area at risk of damage

Area at risk of damage, and detailed study to
be conducted.

Evacuation direction from
sediment disasters

Police Station

Police Box /
Substation

■ X

Kawai

Niihato

Hanawa

Sentoku

Omoe

Tsugaruishi

66

68

Flooding / Sediment Disaster



64

65

66

68

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai

Taro

Tashiro

Sakiyama

City Area

Kanan

Tsugaruishi

Omoe

Sentoku

Hanawa

Niisato

Kawai



Safety Confirmation

In time of large-scale disasters, it is often difficult to make phone calls to the affected areas. In such cases, Disaster Emergency Message Dial and Disaster Message Board are available to confirm the safety. You can practice using either of the services on designated days, so please take your time to try.

 Disaster Emergency Message Dial Tel. 171	 web171 Disaster Message Board https://www.web171.jp/	
 NTT docomo Disaster Message Board http://dengon.docomo.ne.jp/top.cgi	 au Disaster Message Board http://dengon.ezweb.ne.jp/	
 Softbank Disaster Message Board http://dengon.softbank.ne.jp/	 Y! mobile Disaster Message Board http://dengon.ymobile.jp/info/	

Disaster Prevention Notebook of All

Being distributed to all households in October, 2014, "Disaster Prevention Notebook of All" compiles helpful information to perform prior preparation for disasters. To be prepared, please discuss with your family and make the best use of it.

Discuss with your family and write down important information

In the introductory section, you can write down your family's information. Discuss with your family on the suggested items, and write down important information that has to be kept in mind in time of disasters.



Bring your notebook to the local meetings

When participating in local disaster meetings etc., bring your "Disaster Prevention Notebook of All" and write down local information on disaster prevention and disaster risk in the memorandum field.



Pass Down the Story and Act

「Do not build any homes below this point.」

This clause is a part of writing on a stone monument, shown in the right picture, entitled "Mega Tsunami Memorial" in Omoeaneyoshi district. Since a number of residents were killed by Meiji Sanriku Earthquake Tsunami and Showa Sanriku Earthquake Tsunami in this district, the survived people erected this stone at tsunami reaching point. Like these predecessors, we must pass down our dreadful suffering experience and learned lessons to the next generations, and build resilient cities and communities. It is crucial for all of us that we continue working to be able to act for disaster prevention .

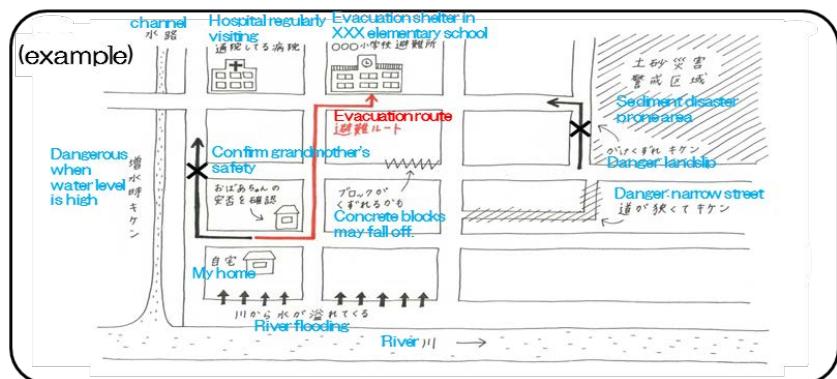


Mega Tsunami Memorial (Omoeaneyoshi district)

Stone monuments and remains of tsunami disasters that are scattered across the City are planned to be exhibited in the disaster prevention exhibition space in City Activity Center after October, 2018(expected).

Let's create Family's Disaster Prevention Map !

Take a walk around your home to confirm the location of dangerous areas, evacuation areas, and evacuation shelters, as well as the routes. You should confirm multiple evacuation routes for some routes might be unavailable. By compiling those information with illustrations etc., create "my family's disaster prevention map".



family's disaster management map

<You should write the information such as...>

meeting place with your family evacuation area and evacuation shelter
evacuation routes places where may be at risk

A large grid for drawing a family disaster management map. The grid consists of a 20x20 grid of small squares, providing a scale for mapping out a residential area or neighborhood.

Emergency Items

Prepare an emergency bag beforehand to be prepared for emergency. You should keep emergency stockpile items to live without relying anyone for around 3 days.

Discuss with your family on meeting point and contact information and create an emergency contact card etc.



Emergency food and water

emergency food
water



clothes

underwear
towel
blanket
gloves
winter clothing



Valuables

ID card such as driver's license or health insurance card
Cash (coins)
bankbook
emergency contact information

tools

portable radio



mobile phone



flashlight (batteries)

candles, lighter, match



tissue paper



knife, can opener



rope



work gloves



plastic bags

Safety goods and first aid goods

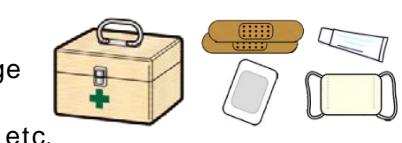
protective hood
sanitary napkins
medicine



first aid goods (should be kept in a container etc.)

disinfectant
ointment
compress

digestive
eye-drop
masks



etc.

Major Contacts in Disasters

City Government, General Office, and Branch Office

【area code 0193】

Miyako City Government	62-2111
Taro General Office	87-2111
Niisato General Office	72-2111
Kawai General Office	76-2111
Sakiyama Branch Office	62-6036
Tsugaruishi Branch Office	67-2111
Omoe Branch Office	68-2111
Hanawa Branch Office	69-2111
Oguni Branch Office	78-2111
Kadoma Branch Office	77-2111
Kawauchi Branch Office	75-2111

Police Stations, Fire Stations, Emergency Services, Hospitals, and Utilities

【area code 0193】

Miyako Police Station	64-0110
Miyako Fire Station (Taro Branch (Niisato Branch (Kawai Branch	62-5533 87-2545) 72-2011) 76-2110)

Prefectural Miyako Hospital	62-4011
Sanriku Hospital	62-7021
Miyako First Hospital	62-3737
Yamaguchi Hospital	62-3945
Miyako City Dept. of Water and Wastewater Service	63-1115
NTT East(contact for repairs)	113
Tohoku-Electric Power Co. (contact in case of power outage)	0120-175-366

