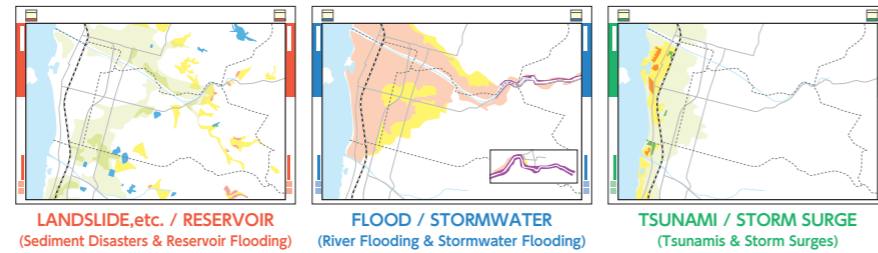


How to Read the Hazard Map

Color Coding by Category

Three types of hazard maps are included: **RED** for Sediment Disasters & Reservoir Flooding, **BLUE** for River Flooding & Stormwater Flooding, and **GREEN** for Tsunamis & Storm Surges. **BLUE/GREEN** maps are not included for zones where river/stormwater flood damage is not expected, or there is no tsunami/storm surge danger.



Projected Scenarios for Each Category

SEDIMENT DISASTER (Landslide, etc.) (Sediment Disaster Hazard Zones / Sediment Disaster Special Hazard Zones)

Boundaries of hazard zones designated by Ehime Prefecture in accordance with the Sediment Disaster Prevention Act are indicated for each category of sediment disaster. Sediment Disaster Hazard Zones (Yellow Zones) indicate areas where the lives and wellbeing of residents, etc. may be at risk in the event of a disaster such as the collapse of steeply sloped ground. Sediment Disaster Special Hazard Zones (Red Zones) indicate considerable risk to the lives and wellbeing of residents, etc. with buildings facing risks of damage or destruction.

RESERVOIR FLOODING (Key Reservoirs for Disaster Management / Expected Reservoir Flooding Inundation Zones)

Expected inundation zones in the event of reservoir collapse during times of flooding are overlaid, indicating zone boundaries and maximum inundation depths for key reservoirs for disaster management in 299 locations.
* To see inundation depths for specific reservoirs, check the Reservoir Hazard Map.

RIVER FLOOD (Expected Flood Inundation Zones / Maximum Inundation Depth)

Expected flood inundation zones in the event of rainfall at maximum expected levels (once-per-1,000-years levels) as announced by river administrators in accordance with the Flood Control Act are overlaid, indicating zone boundaries and maximum inundation depths.

River name	Shigenobu-gawa River	Ishite-gawa River	Ono-gawa River	Tateiwa-gawa River
River administrator	Japan Govt.	Japan Govt. Ehime Pref.	Ehime Pref.	Ehime Pref.
Expected 24-hr rainfall total	626mm	705mm	754mm	769mm

(Expl.) Expected Flood Zone with Destruction of Houses, etc.

Indicates zones where ordinary buildings are at high risk of being destroyed, swept away, etc. in the event embankments in the vicinity collapse due to an occurrence of the maximum expected level of rainfall. These zones fall into two categories: those due to direct risks of flowing flood waters, and those due to the erosion of riverbanks.

- Expected Flood Zone with Destruction of Houses, etc. (Due to Flood Flow) ... Zones where wooden houses are at risk of being swept away/destroyed due to flowing flood water
- Expected Flood Zone with Destruction of Houses, etc. (Due to Riverbank Erosion) ... Zones where houses are at risk of being swept away/destroyed due to flood-induced erosion of riverbanks

* To see detailed inundation depths and durations of inundation for specific rivers, check the Matsuyama Flood Hazard Map.

STORMWATER FLOODING (Expected Stormwater Inundation Zones / Maximum Inundation Depth)

Expected stormwater inundation zones in the event of an occurrence of heavy rain with total rainfall of 299 mm and maximum hourly rainfall of 83.5 mm are shown, indicating zone boundaries and maximum inundation depths.

* To see detailed inundation depths, check the Matsuyama Stormwater Hazard Map.

TSUNAMI DAMAGE (Tsunami Hazard Zones / Maximum Inundation Depth [Standard Water Level])

Tsunami hazard zones designated by Ehime Prefecture in accordance with the Act on Regional Development for Tsunami Disaster Prevention are shown, indicating zone boundaries and standard water levels.

STORM SURGE DAMAGE (Expected Storm Surge Inundation Zones)

Boundaries of expected inundation zones in the event of storm surges of the largest expected potential level as announced by Ehime Prefecture in accordance with the Flood Control Act are indicated.

* To see detailed inundation depths and durations of inundation, check the Matsuyama Storm Surge Hazard Map.

Projections Based on Largest Recorded Typhoons

- Central pressure 900 hPa (Equiv. to 1934 Muroto Typhoon)
- Radius & velocity Radius of maximum cyclostrophic wind: 75 km* (Equiv. to 1959 Isewan Typhoon/Typhoon Vera)
Velocity: 75 km/h (Equiv. to 1959 Isewan Typhoon/Typhoon Vera)

* Radius of maximum cyclostrophic wind: Distance from the center of a typhoon to the point near the typhoon with the highest wind speed

Check! View the Hazard Map Online

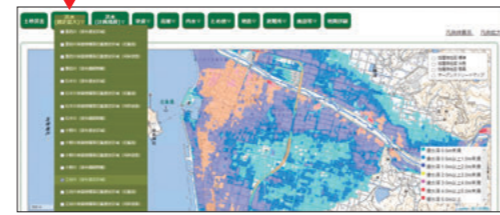
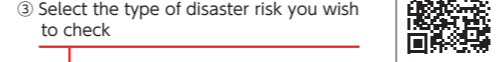
A Web edition of the Hazard Map is available on the Matsuyama City Disaster Management Portal. Use it to find more details on disaster risk.

① Access the Matsuyama City Disaster Management Portal

the Matsuyama City Disaster Management Portal

② Click on Matsuyama Hazard Map Web Edition

③ Select the type of disaster risk you wish to check

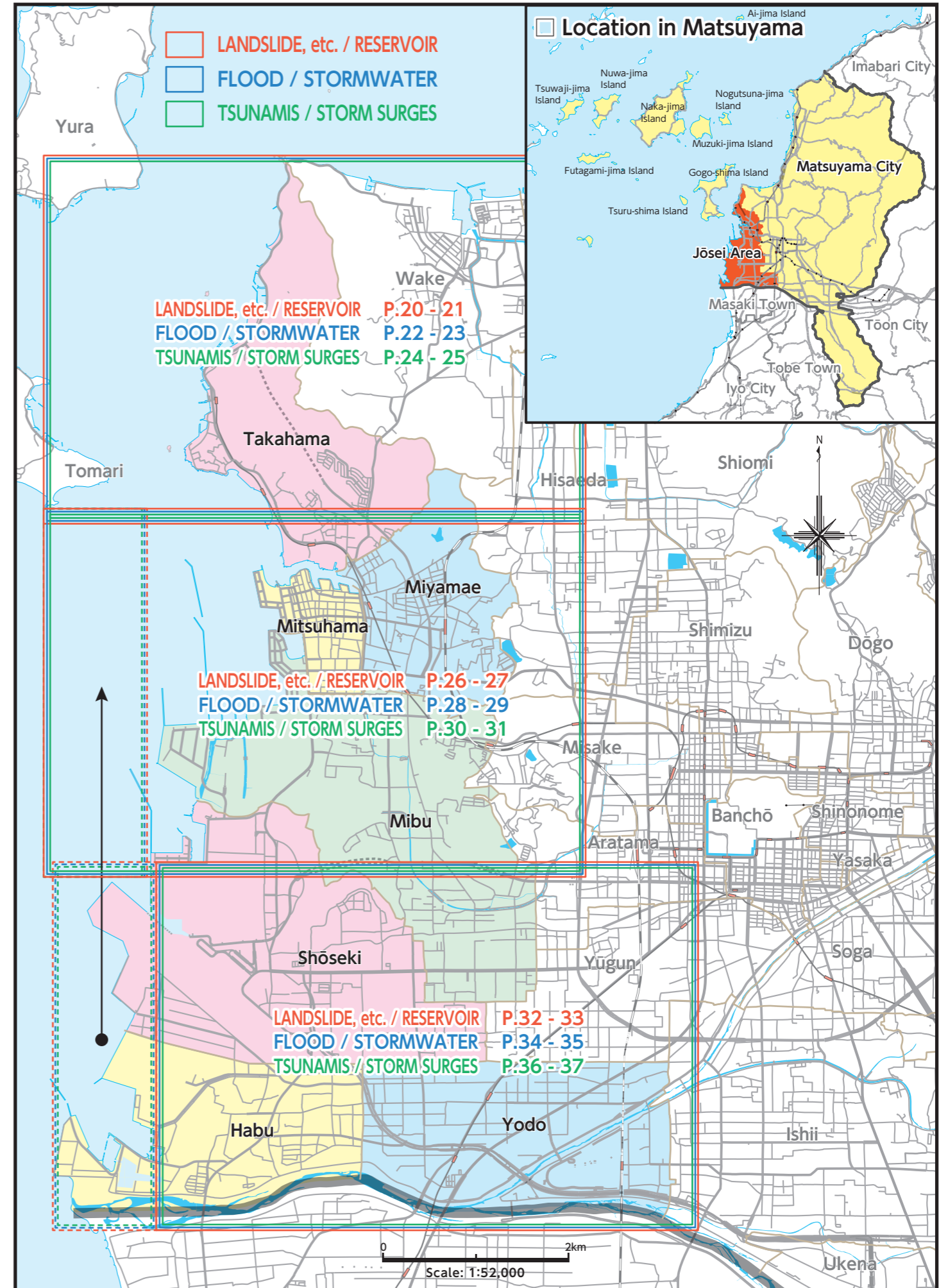


Warning: While all projections are made on the basis of current knowledge, disasters may potentially exceed projected levels.

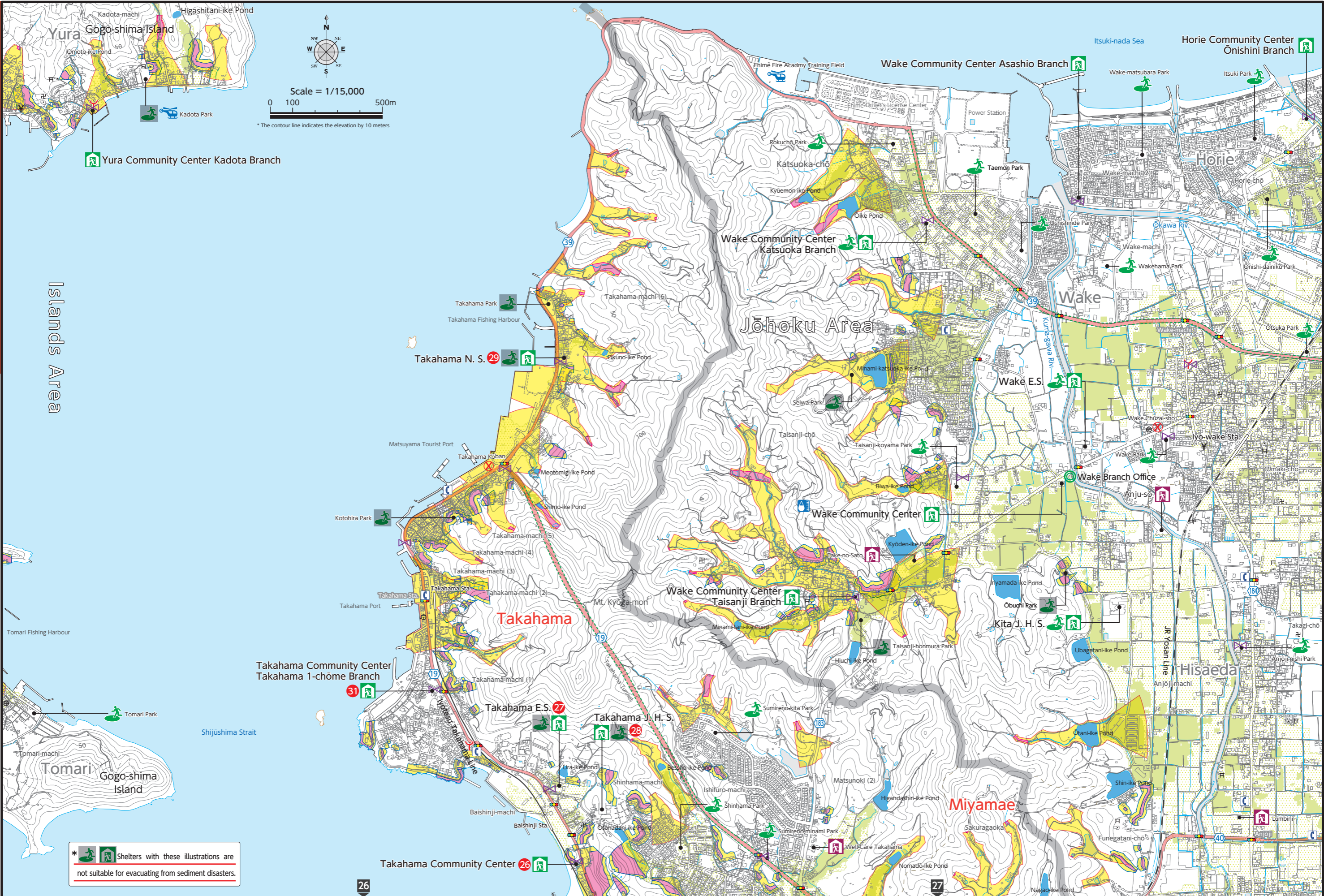
While this Hazard Map has been created based on the latest digital map data (basic national geospatial data) published by the Geospatial Information Authority of Japan (GSI), please be aware that certain locations may not correspond with actual current conditions due to changes over time. With regard to hazard information for sediment disasters, etc., the map is meant to serve as an approximate general reference only, and is by no means representative of exact or specific limits of the boundary, scope, etc. of hazard zones, etc. Please also note that listed disaster management information, including evacuation shelters, etc. is current as of Jan. 2022, and may be subject to change in the future. Please refrain from reproducing or reprinting this publication's cover, contents, or maps without the consent of Matsuyama City.

INDEX MAP

[Mibu / Shōseki / Habu / Miyamae / Mitsuhamma / Takahama / Yodo]



<p>Jōsei Area</p> <p>20</p> <p>LANDSLIDE, etc. / RESERVOIR</p>	<ul style="list-style-type: none"> Designated Emergency Evacuation Site Designated Evacuation Shelter Welfare Evacuation Shelter 	<ul style="list-style-type: none"> City Hall / Branch Office Fire Station / Branch Civilian Firefighters' Pump Storage 	<ul style="list-style-type: none"> Police Station Koban / Chūzai-sho Emergency Medical Facility Emergency Broadcast System (Announcement / Siren) 	<ul style="list-style-type: none"> Emergency Helicopter Landing-pad Underground Shopping Center / Underpass Payphone (outdoors) 	<ul style="list-style-type: none"> Emergency Transportation Route Major Evacuation Route Intersection Name 	<ul style="list-style-type: none"> National Road Bank / Shinkin Bank Shrine 	<ul style="list-style-type: none"> Prefectural Road Post Office Temple 	<p>(Sediment Disaster Hazard Zones / Sediment Disaster Special Hazard Zones)</p> <ul style="list-style-type: none"> Hazard zone (steep slope) Hazard zone (debris flow) Hazard zone (landslide) <p>(Not applicable)</p>	<p>(Caution Required Reservoirs / Expected Reservoir Flooding Inundation Zones)</p> <ul style="list-style-type: none"> Extreme hazard zone (steep slope) Extreme hazard zone (debris flow) 	<ul style="list-style-type: none"> Rain Gauge Caution Required Reservoir Reservoir that could flood homes, etc. in case of a breach 0.5m and over Under 0.5m 	<p>Jōsei Area</p> <p>21</p> <p>LANDSLIDE, etc. / RESERVOIR</p>
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Takahama

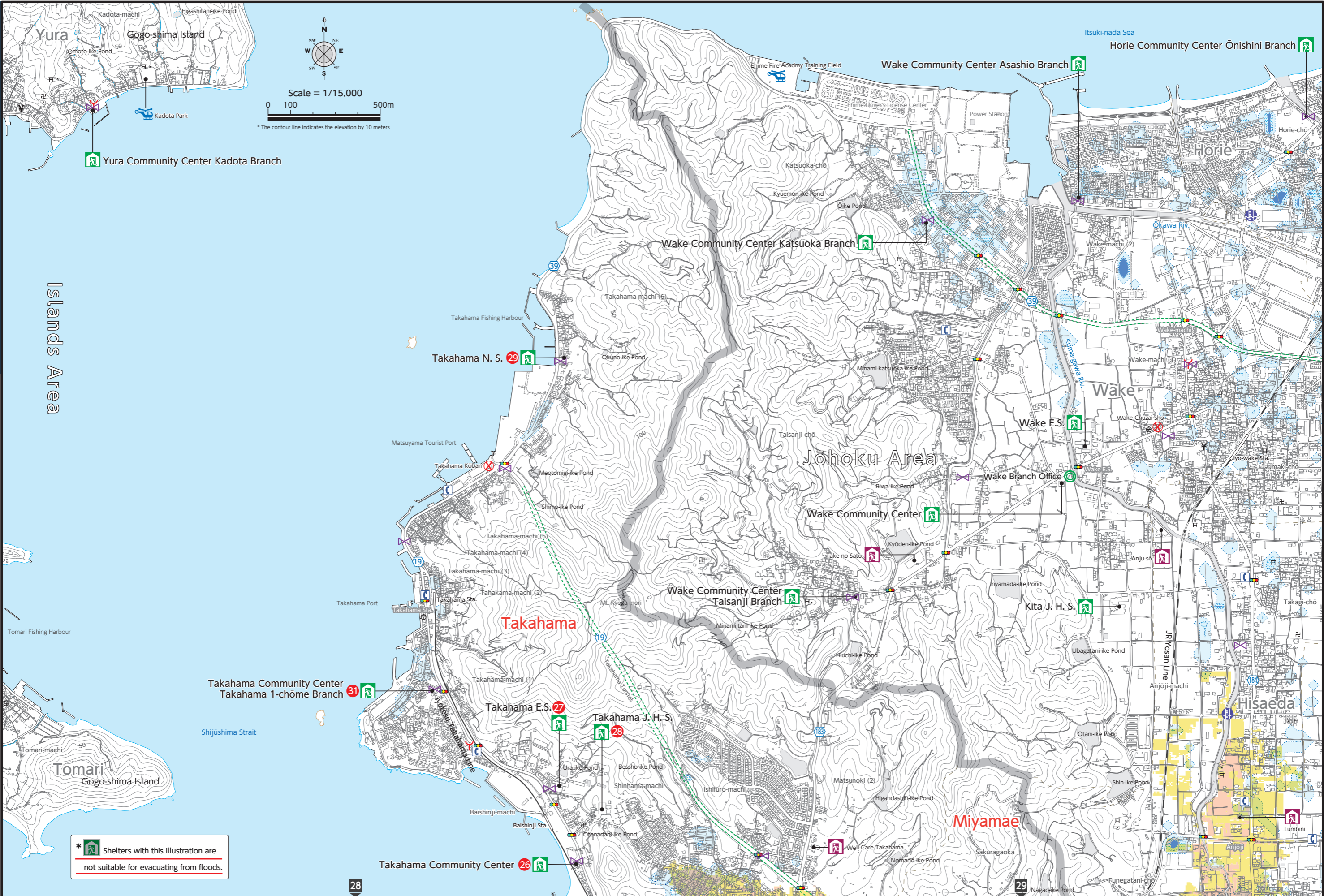
Miyamae / Takahama

Islands Area

Sediment Disasters / Reservoir Flooding

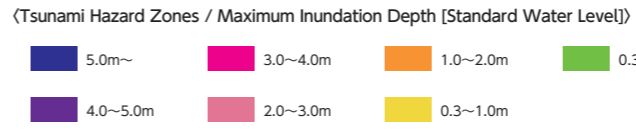
Sediment Disasters / Reservoir Flooding

* Shelters with these illustrations are not suitable for evacuating from sediment disasters.



* Shelters with this illustration are not suitable for evacuating from floods.

- Designated Emergency Evacuation Site*
- Designated Evacuation Shelter*
- Welfare Evacuation Shelter
- City Hall / Branch Office
- Fire Station / Branch
- Civilian Firefighters' Pump Storage
- Police Station / Chūzai-sho
- Emergency Medical Facility
- Emergency Broadcast System (Announcement / Siren)
- Emergency Helicopter Landing-pad
- Underground Shopping Center / Underpass
- Payphone (outdoors)
- Emergency Transportation Route
- Major Evacuation Route
- Intersection Name
- National Road
- Bank / Shinkin Bank
- Shrine
- Prefectural Road
- Post Office
- Temple



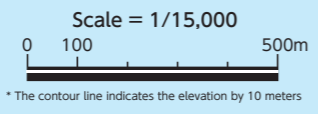
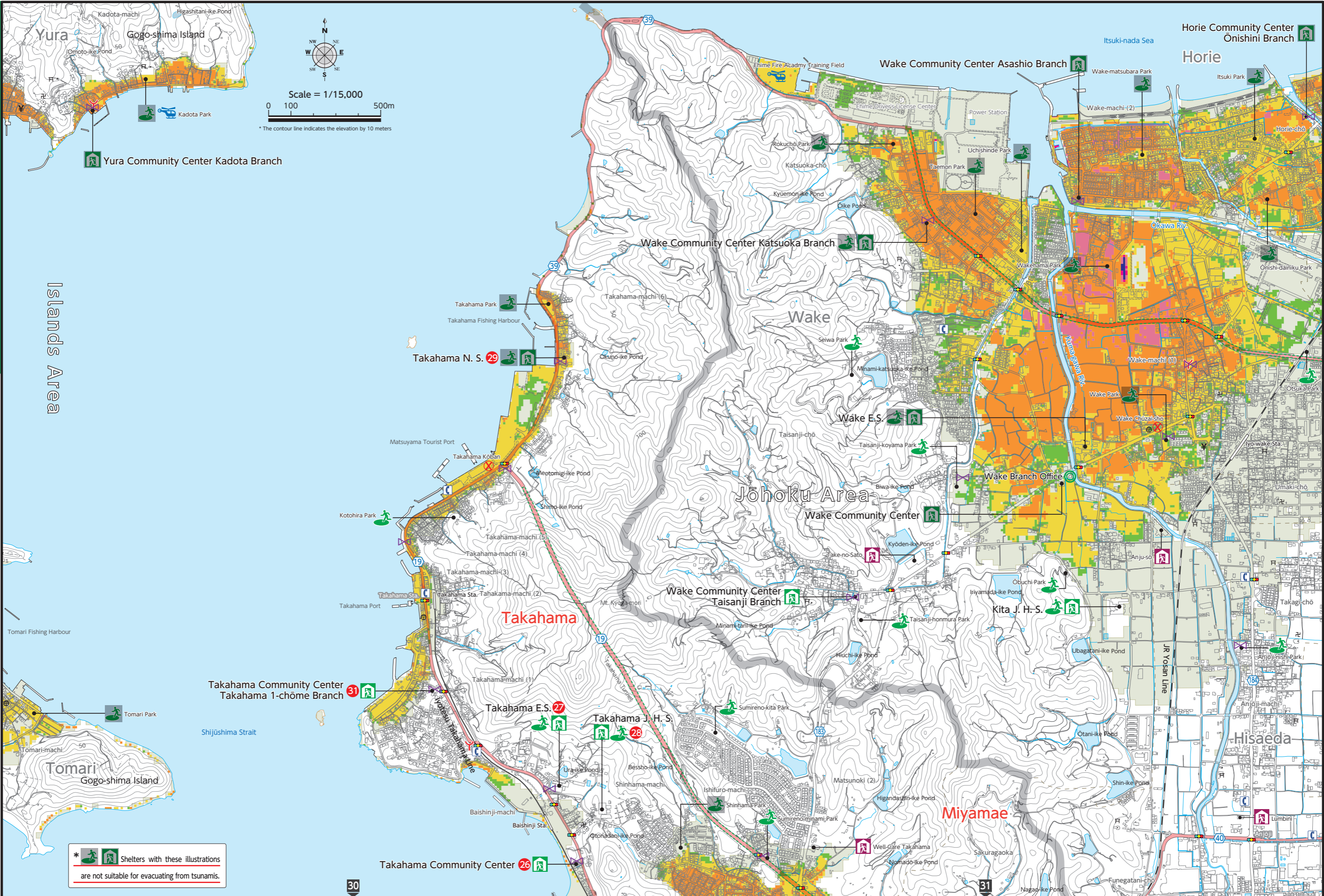
(Expected Storm Surge Inundation Zones)

To see details on expected storm surge inundation zones, etc., check the Matsuyama Storm Surge Hazard Map.



Takahama

Miyamae / Takahama



* Shelters with these illustrations are not suitable for evacuating from tsunamis.

Tsunamis / Storm Surges

Tsunamis / Storm Surges

Islands Area

Tsunamis / Storm Surges

- Designated Emergency Evacuation Site*
- Designated Evacuation Shelter*
- Welfare Evacuation Shelter
- City Hall / Branch Office
- Fire Station / Branch
- Civilian Firefighters' Pump Storage
- Police Station / Koban / Chūzai-sho
- Emergency Medical Facility
- Emergency Broadcast System (Announcement / Siren)
- Emergency Helicopter Landing-pad
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- National Road
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- Post Office
- Prefectural Road
- Shrine
- Temple

(Sediment Disaster Hazard Zones / Sediment Disaster Special Hazard Zones)

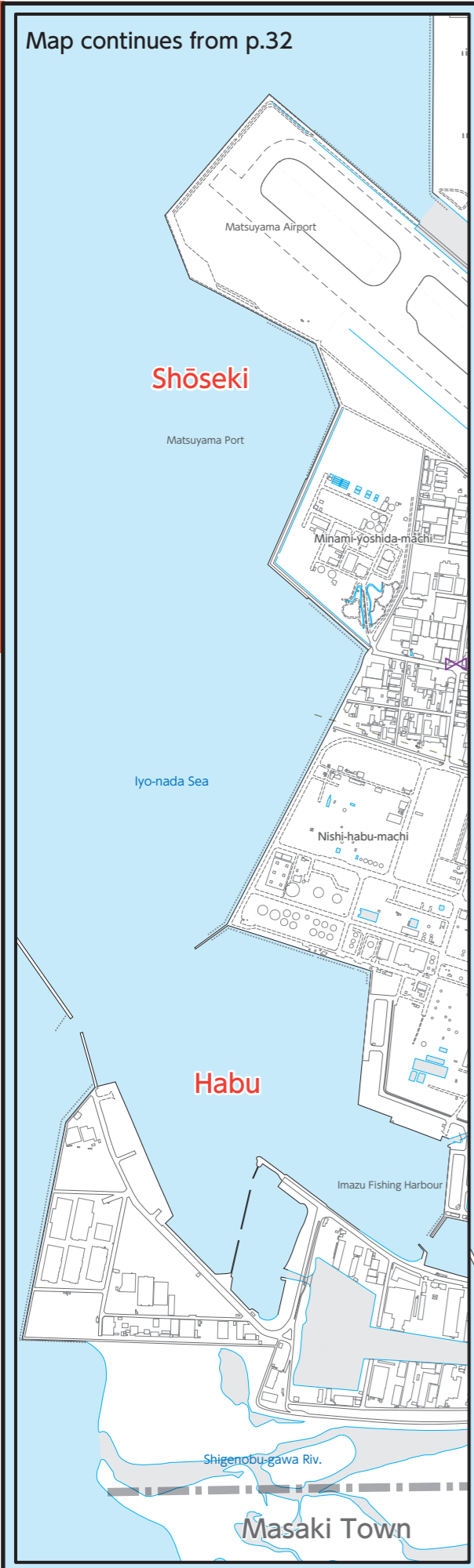
- Hazard zone (steep slope)
- Hazard zone (debris flow)
- Hazard zone (landslide) (Not applicable)
- Extreme hazard zone (steep slope)
- Extreme hazard zone (debris flow)

(Caution Required Reservoirs / Expected Reservoir Flooding Inundation Zones)

- Rain Gauge
- Caution Required Reservoir [Reservoir that could flood homes, etc. in case of a breach]
- 0.5m and over
- Under 0.5m

Mibu / Shōseki / Habu / Mitsuhamama / Takahama

Mibu / Miyamae / Mitsuhamama / Takahama



Sediment Disasters / Reservoir Flooding

Sediment Disasters / Reservoir Flooding

Map continues from p.32

Scale = 1/15,000

0 100 500m

* The contour line indicates the elevation by 10 meters

* Shelters with these illustrations are not suitable for evacuating from sediment disasters.

- Designated Evacuation Shelter*
- City Hall / Branch Office
- Fire Station / Branch
- Police Station / Chūzai-sho
- Emergency Medical Facility
- Emergency Broadcast System (Announcement / Siren)
- Emergency Helicopter Landing-pad
- Underground Shopping Center / Underpass
- Payphone (outdoors)
- Major Evacuation Route
- Intersection Name
- Please refer to pages 26.27, 30.31 for the emergency transportation routes
- National Road
- Bank / Shinkin Bank
- Shrine
- Prefectural Road
- Post Office
- Temple

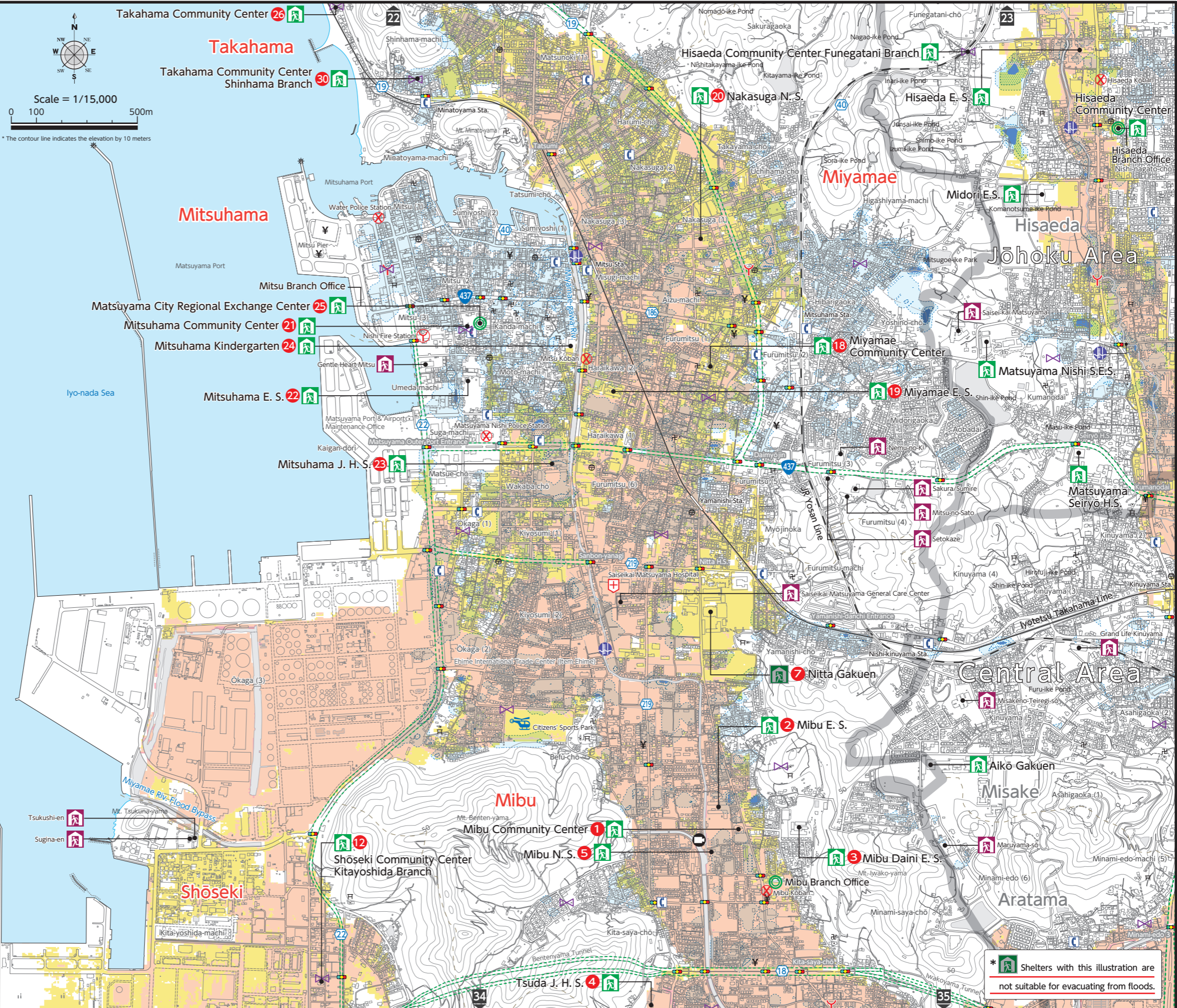
Please refer to pages 26.27, 30.31 for the designated emergency evacuation sites

- (Expected Flood Inundation Zones / Maximum Inundation Depth)
*Shigenobu-gawa River / Ishite-gawa River
- 5.0m and over
 - 3.0~5.0m
 - Flooding zone with the risk of structures collapsing, etc. (flood flow) (Not applicable)
 - 0.5~3.0m
 - Under 0.5m
 - Flooding zone with the risk of structures collapsing, etc. (bank erosion)

- (Expected Stormwater Inundation Zones / Maximum Inundation Depth)
- Normal Water Level Gauge
 - 3L Water Level Gauge
 - Live Camera
 - 0.5m and over
 - 0.3~0.5m
 - Under 0.3m

Mibu / Shōseki / Habu / Mitsuhamama / Takahama

Mibu / Miyamae / Mitsuhamama / Takahama



* Shelters with this illustration are not suitable for evacuating from floods.

River Flooding / Stormwater Flooding

River Flooding / Stormwater Flooding

Jōsei Area
30
TSUNAMI / STORM SURGE

Designated Emergency Evacuation Site *	City Hall / Branch Office	Police Station Kōban / Chūzai-sho	Emergency Helicopter Landing-pad	Emergency Transportation Route	National Road	Prefectural Road	
Designated Evacuation Shelter *	Fire Station / Branch	Emergency Medical Facility	Underground Shopping Center / Underpass	Major Evacuation Route	Bank / Shinkin Bank	Post Office	
Welfare Evacuation Shelter	Civilian Firefighters' Pump Storage	Emergency Broadcast System (Announcement / Siren)	Payphone (outdoors)	Fire Station	Intersection Name	Shrine	Temple

(Tsunami Hazard Zones / Maximum Inundation Depth (Standard Water Level))

5.0m~	3.0~4.0m	1.0~2.0m	0.3m
4.0~5.0m	2.0~3.0m	0.3~1.0m	

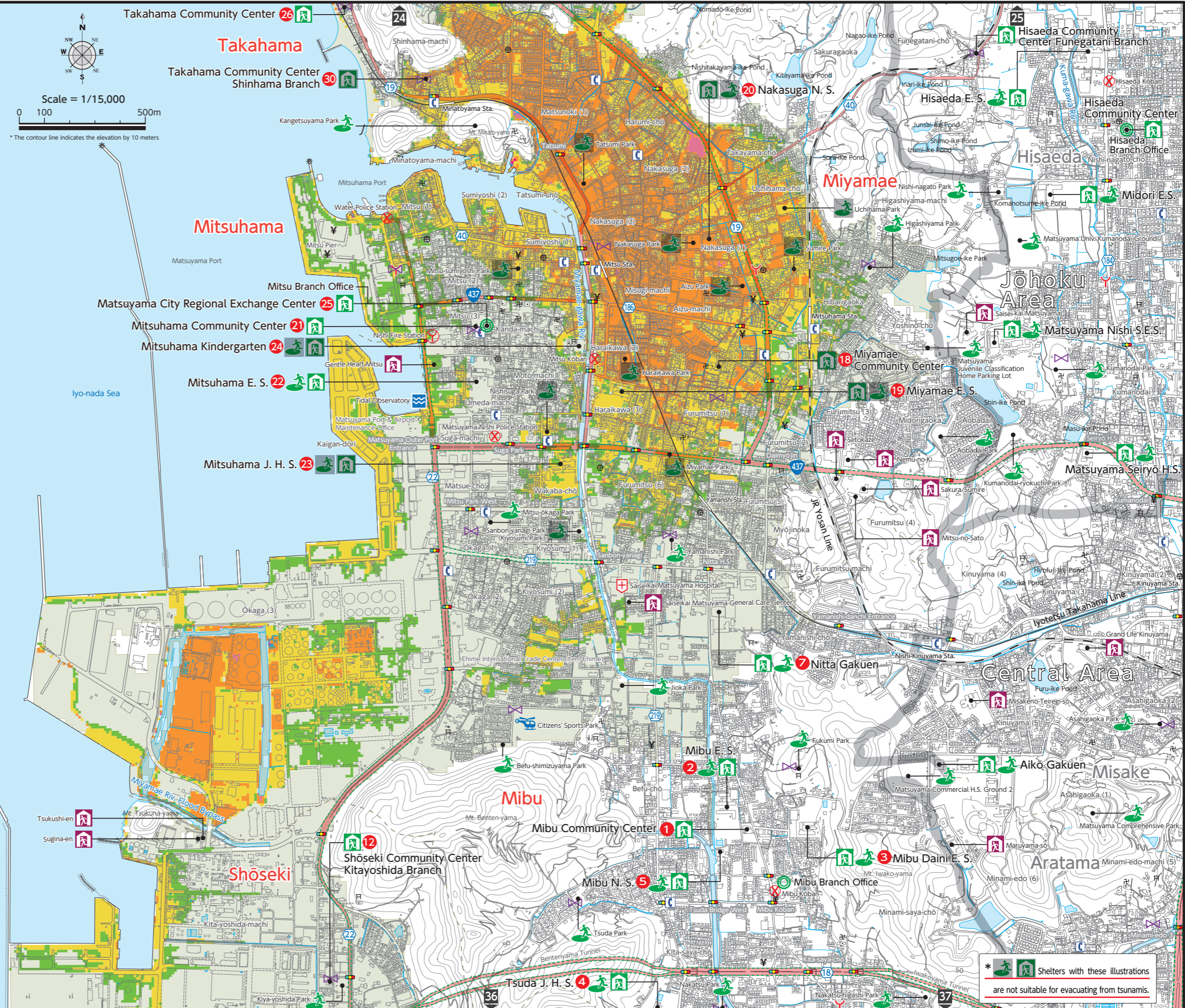
(Expected Storm Surge Inundation Zones)

To see details on expected storm surge inundation zones, etc., check the Matsuyama Storm Surge Hazard Map.

Jōsei Area
31
TSUNAMI / STORM SURGE

Mibu / Shōseki / Habu / Mitsuhamama / Takahama

Mibu / Miyamae / Mitsuhamama / Takahama



Tsunamis / Storm Surges

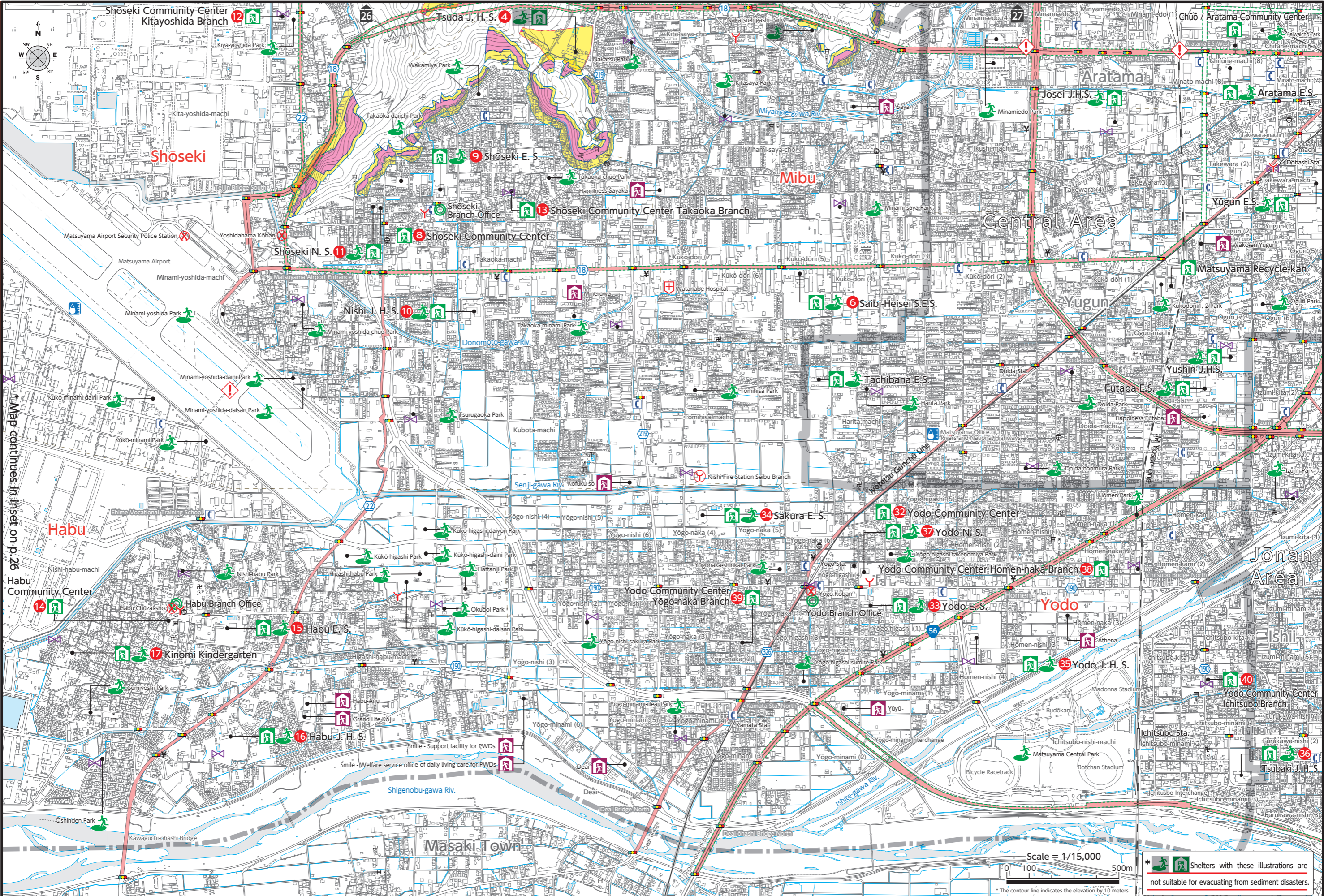
Tsunamis / Storm Surges

* Shelters with these illustrations are not suitable for evacuating from tsunamis.

Jōsei Area 32 LANDSLIDE, etc. / RESERVOIR	Designated Emergency Evacuation Site*	City Hall / Branch Office	Police Station Koban / Chūzai-sho	Emergency Helicopter Landing-pad	Emergency Transportation Route	National Road	Prefectural Road	(Sediment Disaster Hazard Zones / Sediment Disaster Special Hazard Zones)	(Caution Required Reservoirs / Expected Reservoir Flooding Inundation Zones)	Jōsei Area 33 LANDSLIDE, etc. / RESERVOIR		
	Designated Evacuation Shelter*	Fire Station / Branch	Emergency Medical Facility	Underground Shopping Center / Underpass	Major Evacuation Route	Bank / Shinkin Bank	Post Office	Hazard zone (steep slope)	Extreme hazard zone (steep slope)		Rain Gauge	Caution Required Reservoir [Reservoir that could flood homes, etc. in case of a breach]
	Welfare Evacuation Shelter	Civilian Firefighters' Pump Storage	Emergency Broadcast System (Announcement / Siren)	Payphone (outdoors)	Intersection Name	Shrine	Temple	Hazard zone (debris flow)	Extreme hazard zone (debris flow)			

Mibu / Shōseki / Habu / Yodo

Mibu / Yodo



Map continues in inset on p.26

Sediment Disasters / Reservoir Flooding

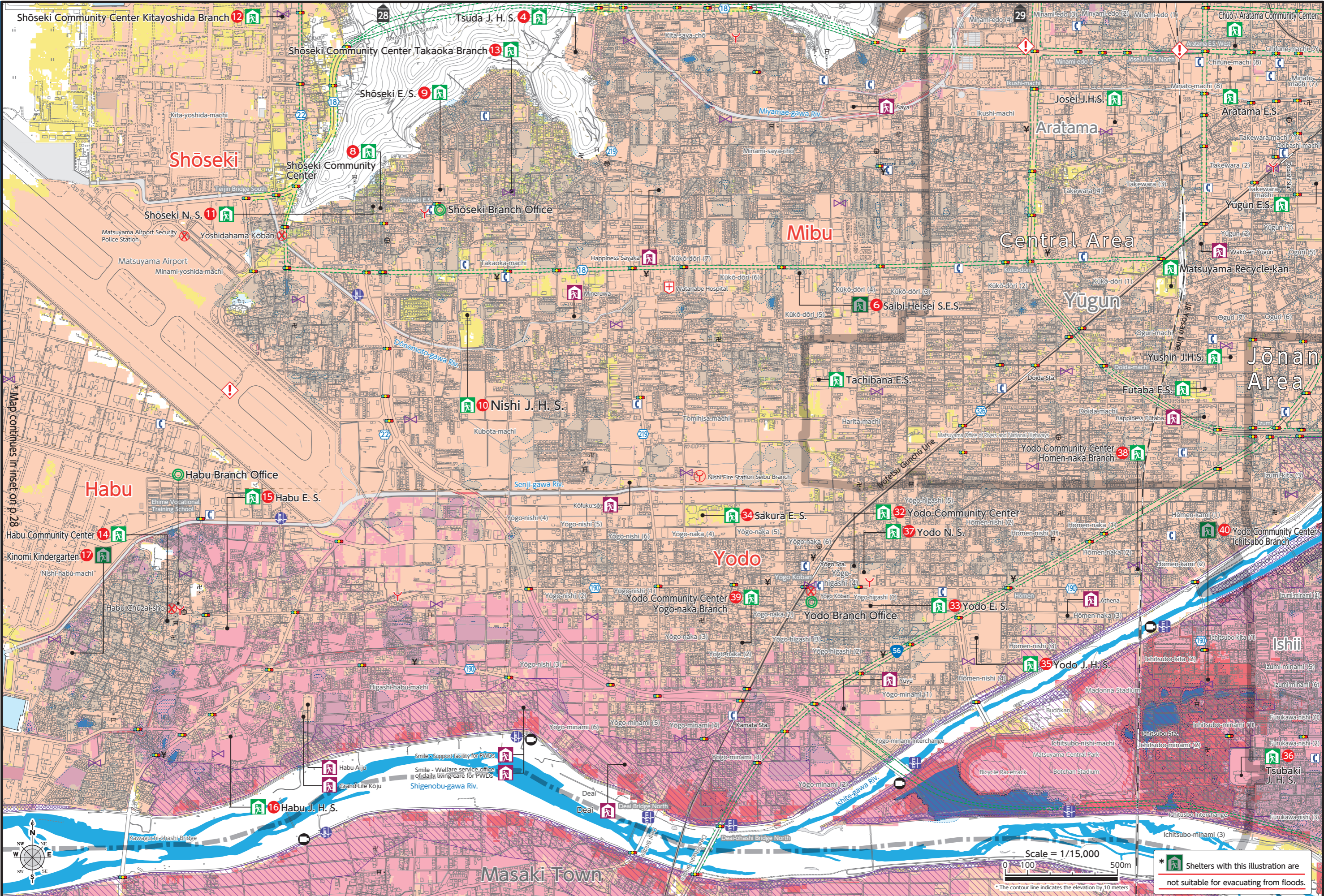
Sediment Disasters / Reservoir Flooding

Scale = 1/15,000
 0 100 500m
 * The contour line indicates the elevation by 10 meters

* Shelters with these illustrations are not suitable for evacuating from sediment disasters.

Mibu / Shōseki / Habu / Yodo

Mibu / Yodo



River Flooding / Stormwater Flooding

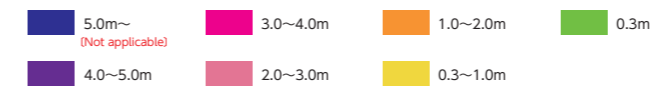
River Flooding / Stormwater Flooding

* Shelters with this illustration are not suitable for evacuating from floods.

Scale = 1/15,000
0 100 500m
The contour line indicates the elevation by 10 meters

- Designated Emergency Evacuation Site
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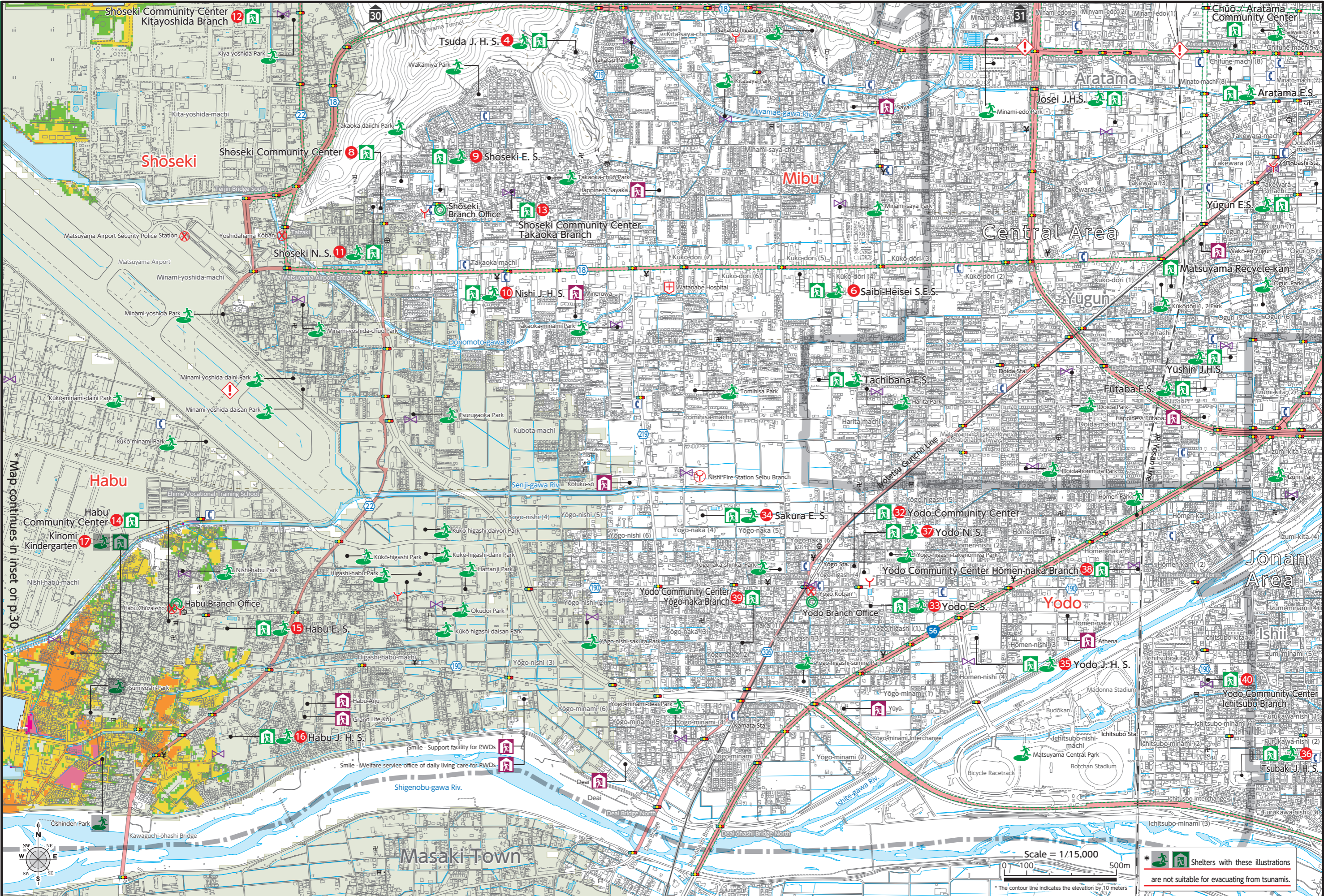
(Tsunami Hazard Zones / Maximum Inundation Depth [Standard Water Level])



(Expected Storm Surge Inundation Zones)



To see details on expected storm surge inundation zones, etc., check the Matsuyama Storm Surge Hazard Map.



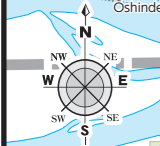
Mibu / Shōseki / Habu / Yodo

Mibu / Yodo

Tsunamis / Storm Surges

Tsunamis / Storm Surges

* Map continues in inset on p.30



Scale = 1/15,000
0 100 500m

* Shelters with these illustrations are not suitable for evacuating from tsunamis.