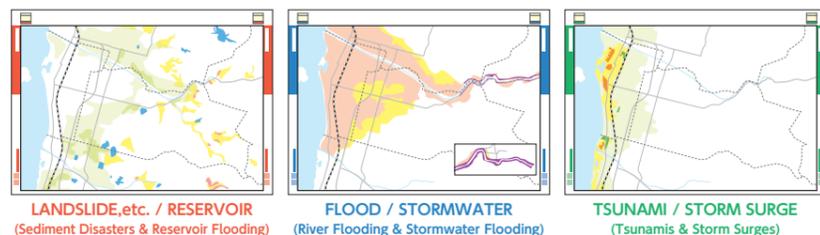


How to Read the Hazard Map

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

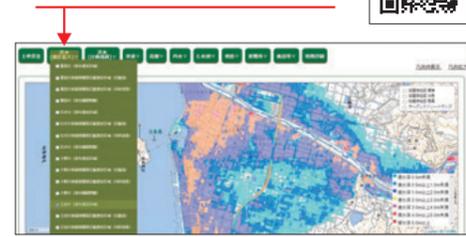
A Web edition of the Hazard Map is available on the Matsuyama City Disaster Management Portal. Use it to find more details on disaster risk.

① Access the Matsuyama City Disaster Management Portal

the Matsuyama City Disaster Management Portal Search

② Click on Matsuyama Hazard Map Web Edition

③ Select the type of disaster risk you wish to check

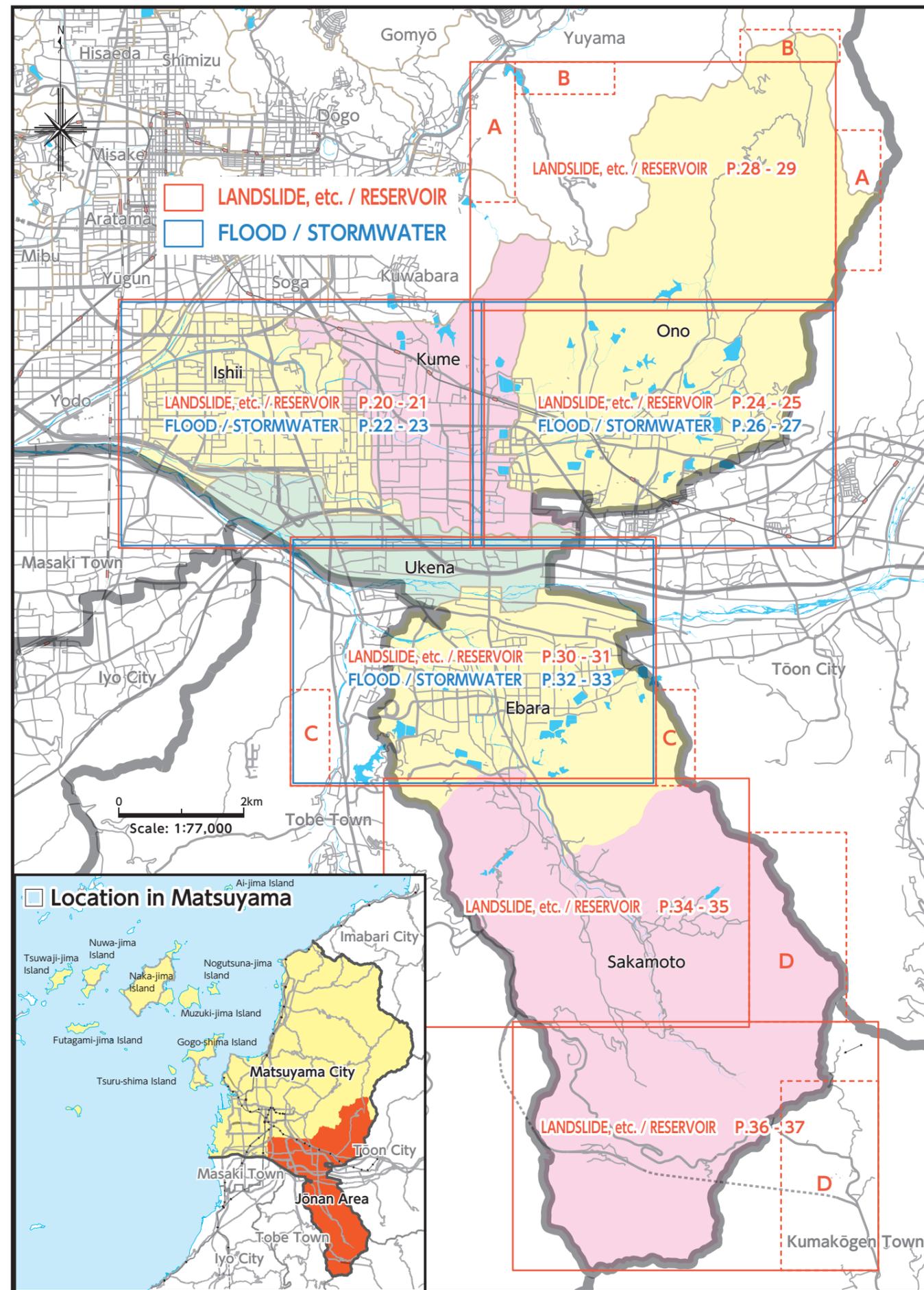


⚠ While all projections are made on the basis of current knowledge, disasters may potentially exceed projected levels.

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

[Kume / Ono / Ukena / Ishii / Ebara / Sakamoto]



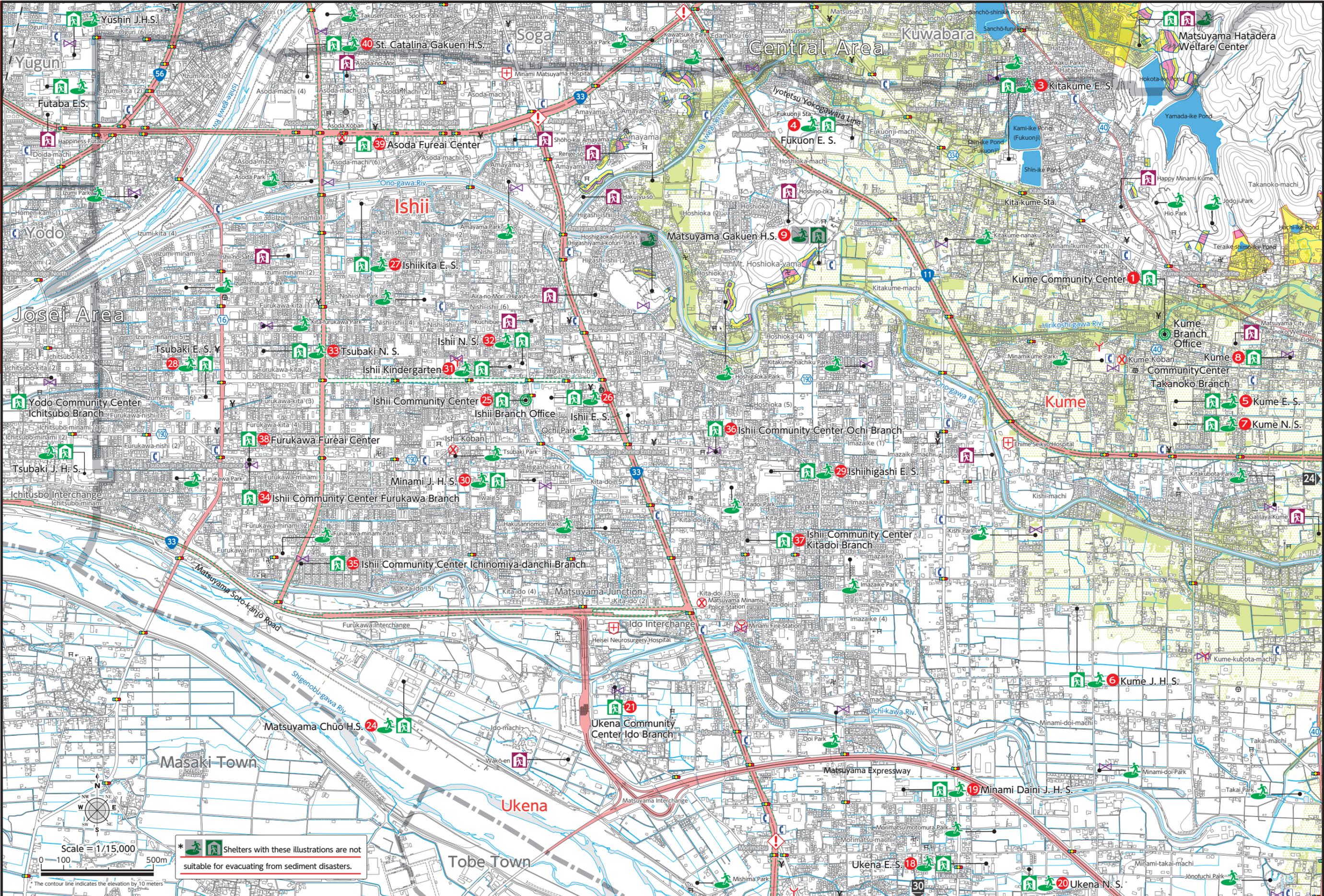
- Designated Emergency Evacuation Site*
- Designated Evacuation Shelter*
- Welfare Evacuation Shelter
- City Hall / Branch Office
- Fire Station / Branch
- Civilian Firefighters' Pump Storage
- Police Station Koban / Chuzai-sho
- Emergency Medical Facility
- Emergency Broadcast System (Announcement /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

Ukena / Ishii

Kume / Ukena / Ishii

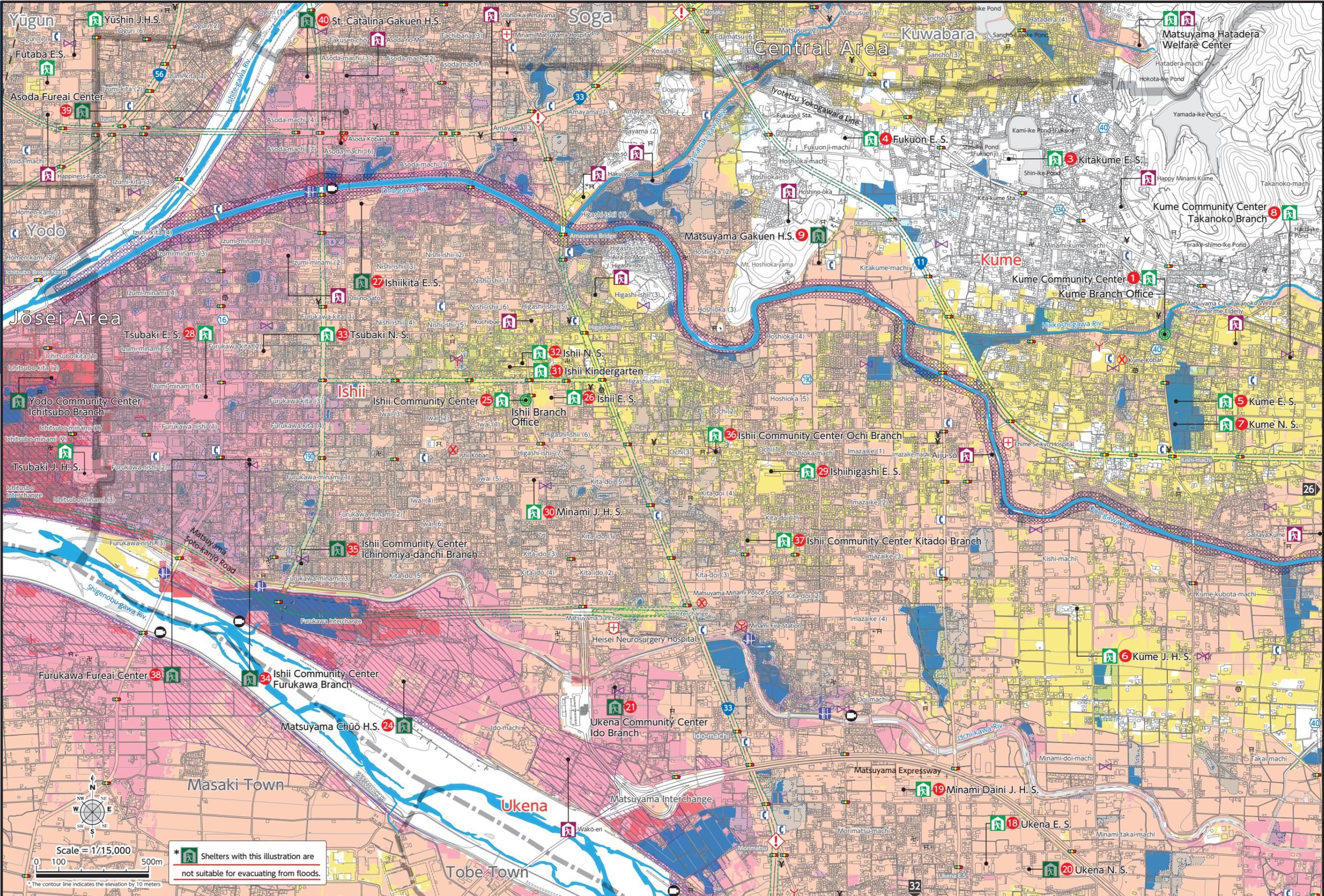


Sediment Disasters / Reservoir Flooding

Sediment Disasters / Reservoir Flooding

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

Jōnan Area 22 FLOOD / STORMWATER	Designated Evacuation Shelter* Welfare Evacuation Shelter <small>Please refer to page 20.21 for the designated emergency evacuation sites</small>	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 Underground Shopping Center / Underpass Payphone (outdoors)	Major Evacuation Route Intersection Name <small>Please refer to page 20.21 for the emergency transportation routes</small>	National Road Prefectural Road Bank / Shinkin Bank Post Office Shrine Temple	(Expected Flood Inundation Zones / Maximum Inundation Depth) Shigenobu-gawa River / Ishite-gawa River / Ono-gawa River 5.0m and over 3.0-5.0m 0.5-3.0m Under 0.5m Flooding zone with the risk of structures collapsing, etc. (flood flow) 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	Jōnan Area 23 FLOOD / STORMWATER
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Ukena / Ishii

Kume / Ukena / Ishii

River Flooding / Stormwater Flooding

River Flooding / Stormwater Flooding

* 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 Koban / 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

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

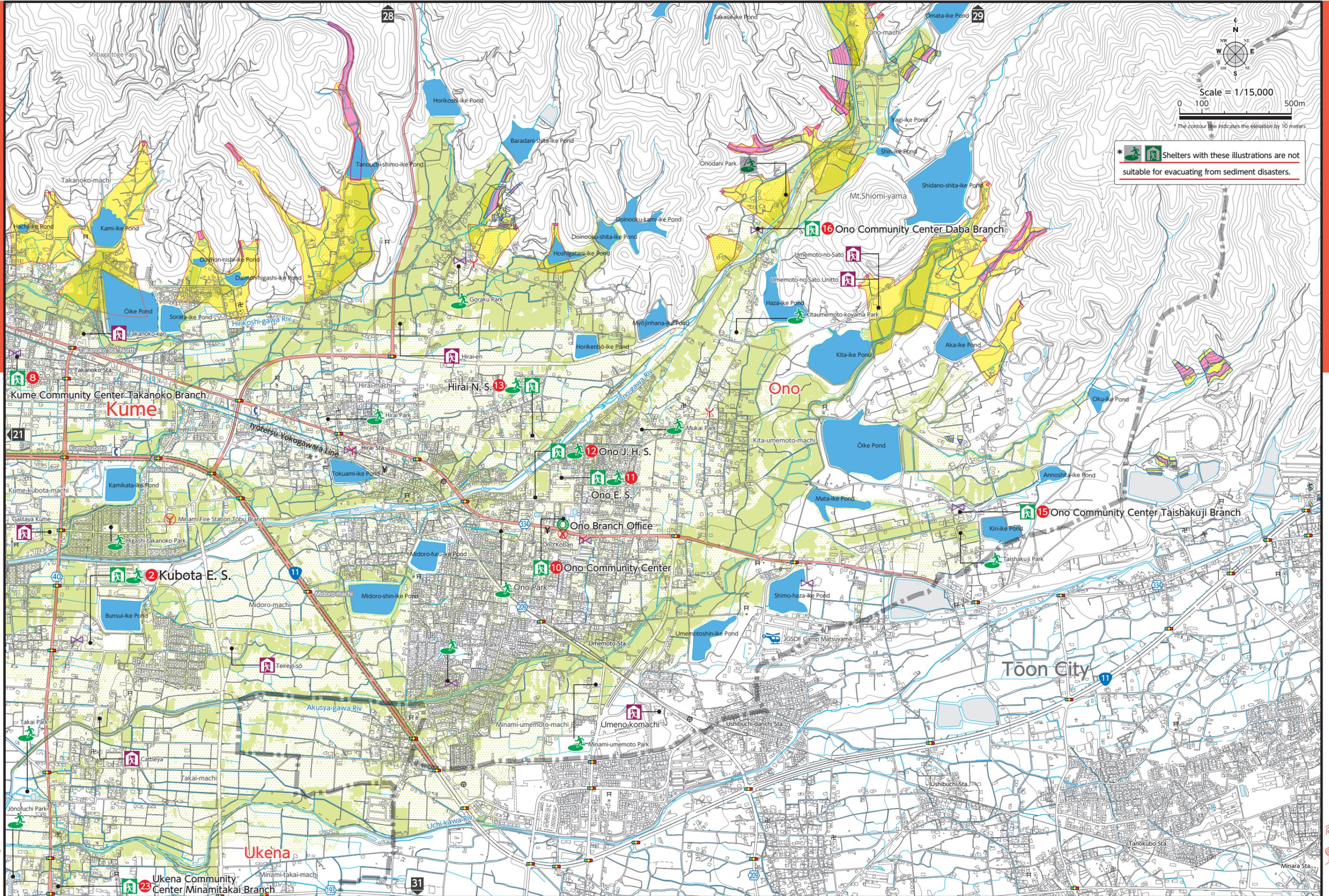
- Hazard zone (steep slope)
- Hazard zone (debris flow)
- Hazard zone (landslide) (Not applicable)
- Extreme hazard zone (steep slope)
- Extreme hazard zone (debris flow)

(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

Kume / Ono / Ukena

Ono



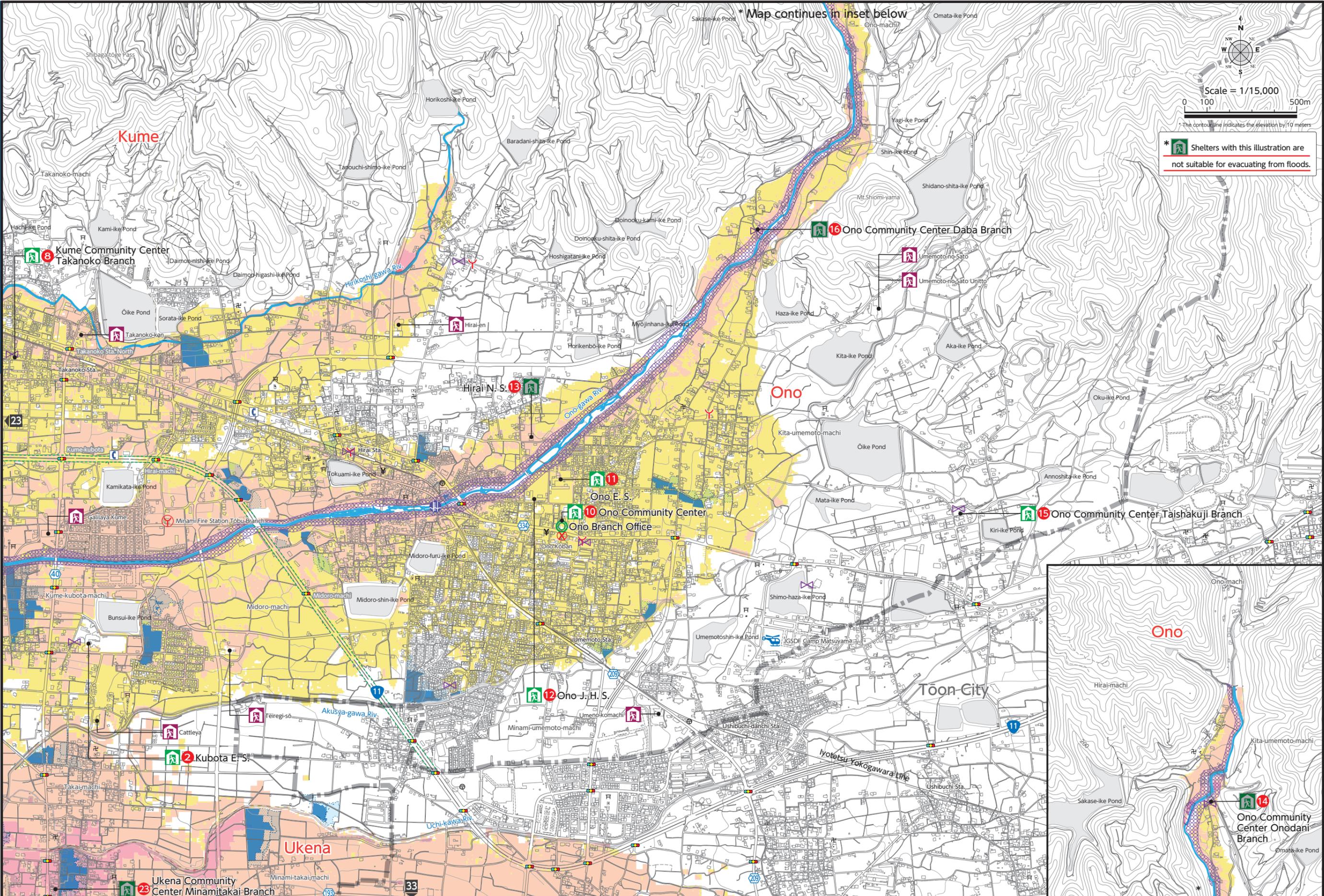
* Shelters with these illustrations are not suitable for evacuating from sediment disasters.

Sediment Disasters / Reservoir Flooding

Sediment Disasters / Reservoir Flooding

Kume / Ono / Ukena

Ono



River Flooding / Stormwater Flooding

River Flooding / Stormwater Flooding

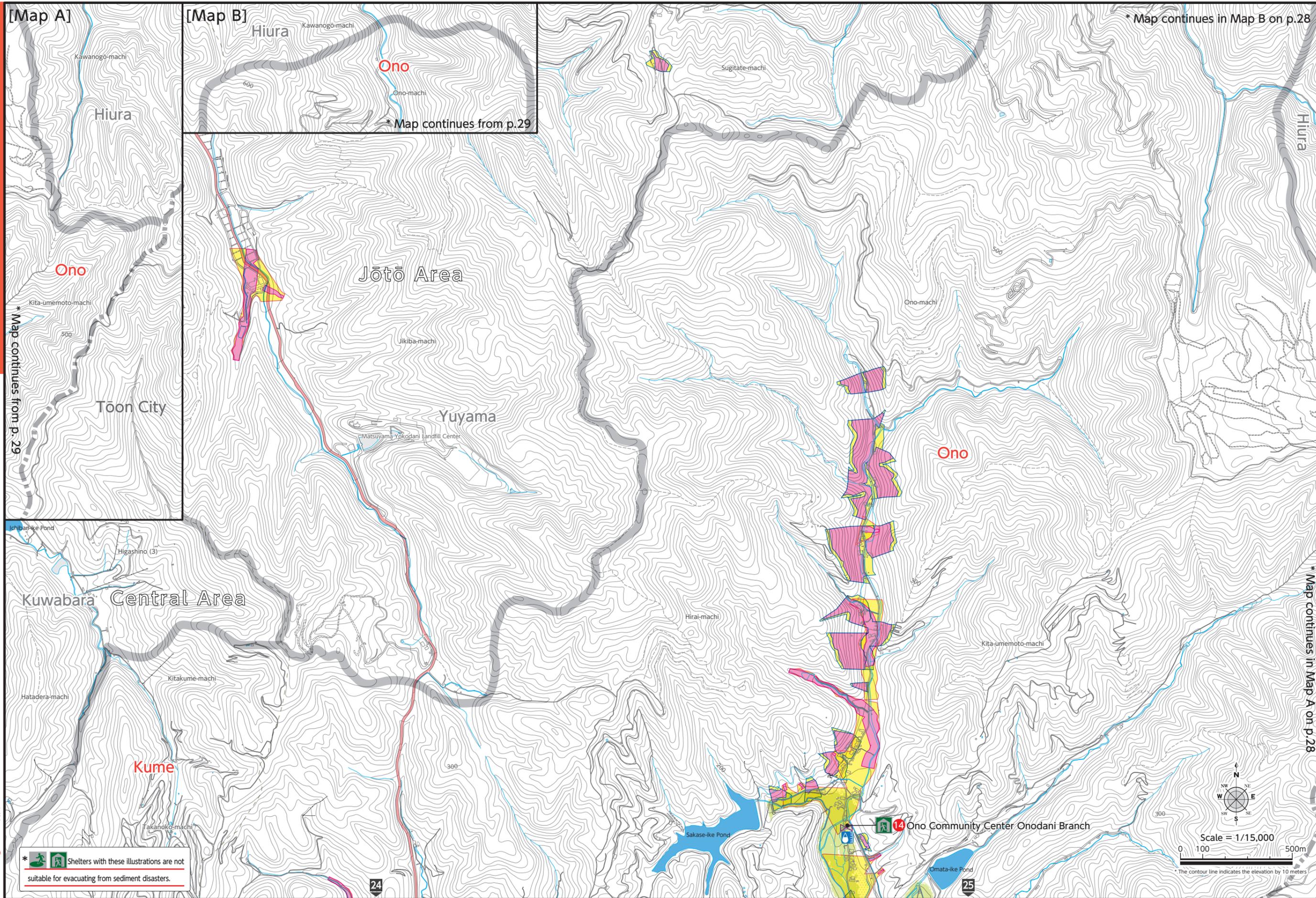
- Designated Emergency Evacuation Site *
- Designated Evacuation Shelter *
- Welfare Evacuation Shelter
- City Hall / Branch Office
- Fire Station / Branch
- Civilian Firefighters' Pump Storage
- Police Station Koban / Chūzai-sho
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- Emergency Broadcast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



[Map A]

[Map B]

* Map continues in Map B on p.28

* Map continues from p.29

* Map continues from p. 29

* Map continues in Map A on p.28

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

Scale = 1/15,000

0 100 500m

* The contour line indicates the elevation by 10 meters

- 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
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- Emergency Helicopter Landing-pad
- Underground Shopping Center / Underpass
- Payphone (outdoors)
- Emergency Transportation Route
- Major Evacuation Route
- Fire Station
- Intersection Name
- National Road
- Bank / Shinkin Bank
- Post Office
- Shrine
- Temple
- Prefectural Road

- (Sediment Disaster Hazard Zones / Sediment Disaster Special Hazard Zones)
- Hazard zone (steep slope)
 - Hazard zone (debris flow)
 - Hazard zone (landslide)
 - Extreme hazard zone (steep slope)
 - Extreme hazard zone (debris flow)
 - (Not applicable)

- (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



Ukena / Ebara

Ukena / Ebara / Sakamoto

Sediment Disasters / Reservoir Flooding

Sediment Disasters / Reservoir Flooding

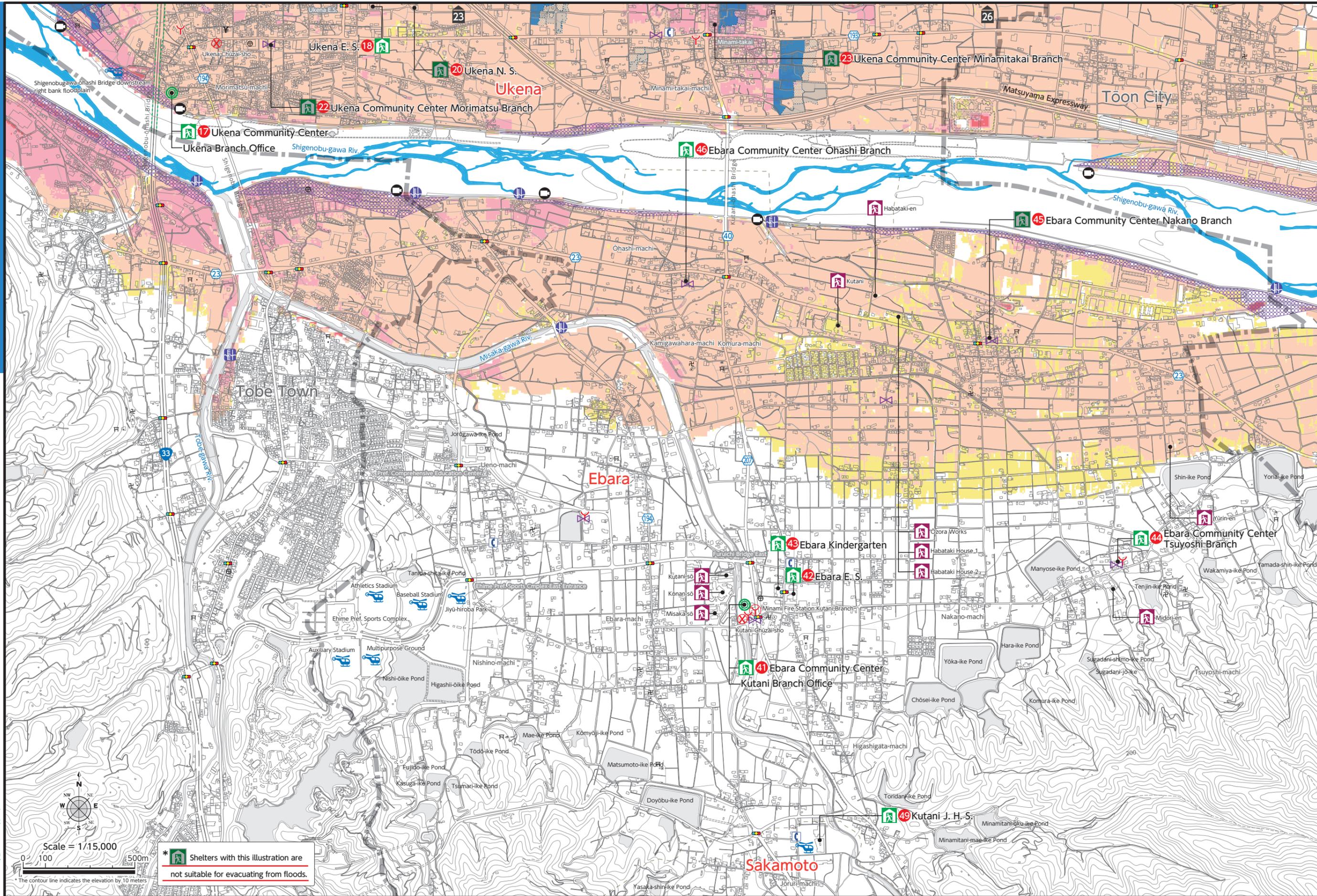
* Map continues from p. 31

Map continues in inset on p.30

* Map continues from p. 35

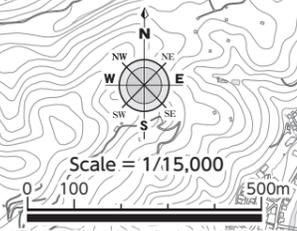
Ukena / Ebara

Ukena / Ebara / Sakamoto



River Flooding / Stormwater Flooding

River Flooding / Stormwater Flooding



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

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

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

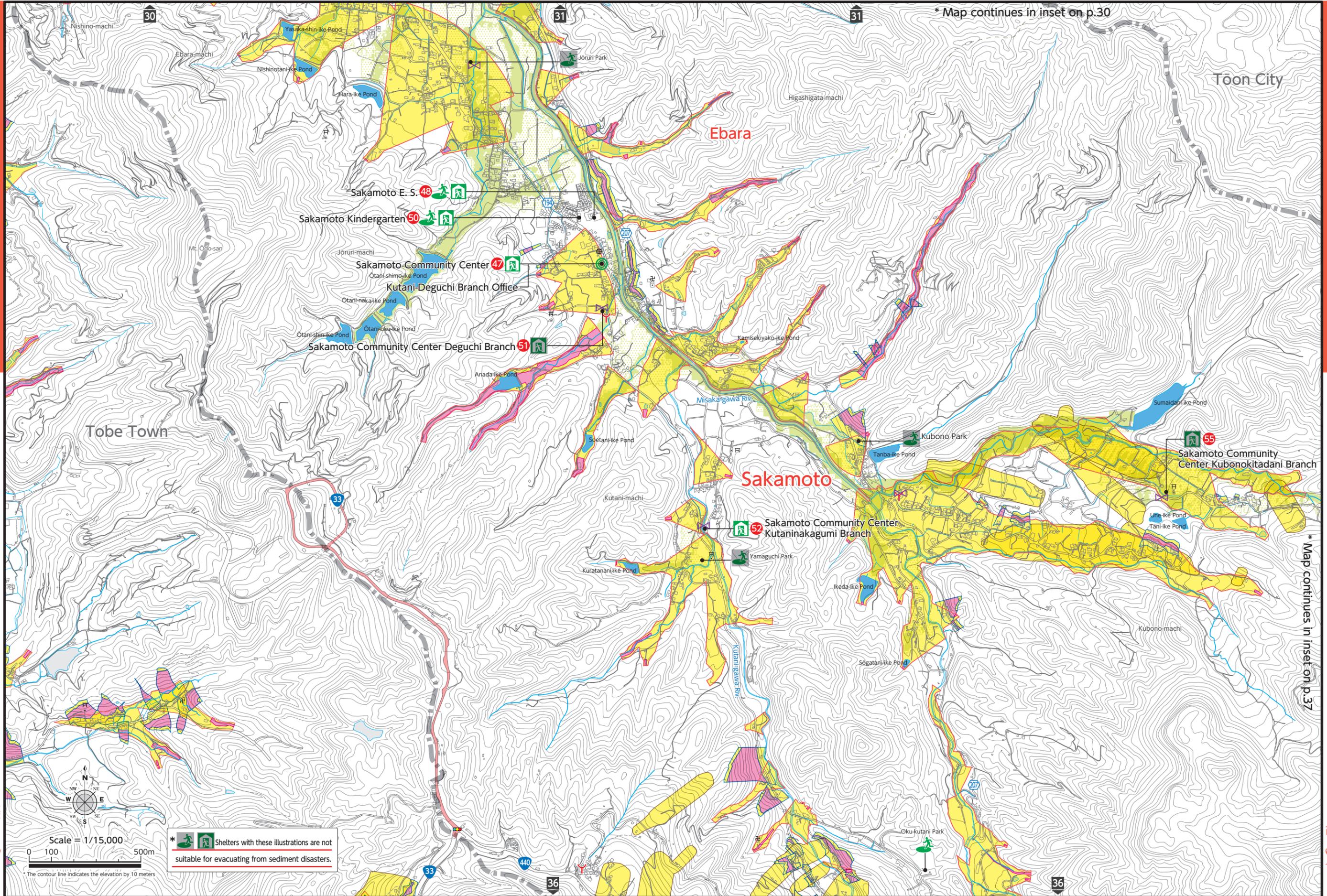
- Hazard zone (steep slope)
- Hazard zone (debris flow)
- Hazard zone (landslide)
- Extreme hazard zone (steep slope)
- Extreme hazard zone (debris flow)

(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

Ebara / Sakamoto

Ebara / Sakamoto



* Map continues in inset on p.30

* Map continues in inset on p.37

Sediment Disasters / Reservoir Flooding

Sediment Disasters / Reservoir Flooding

Scale = 1/15,000
0 100 500m

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

The contour line indicates the elevation by 10 meters

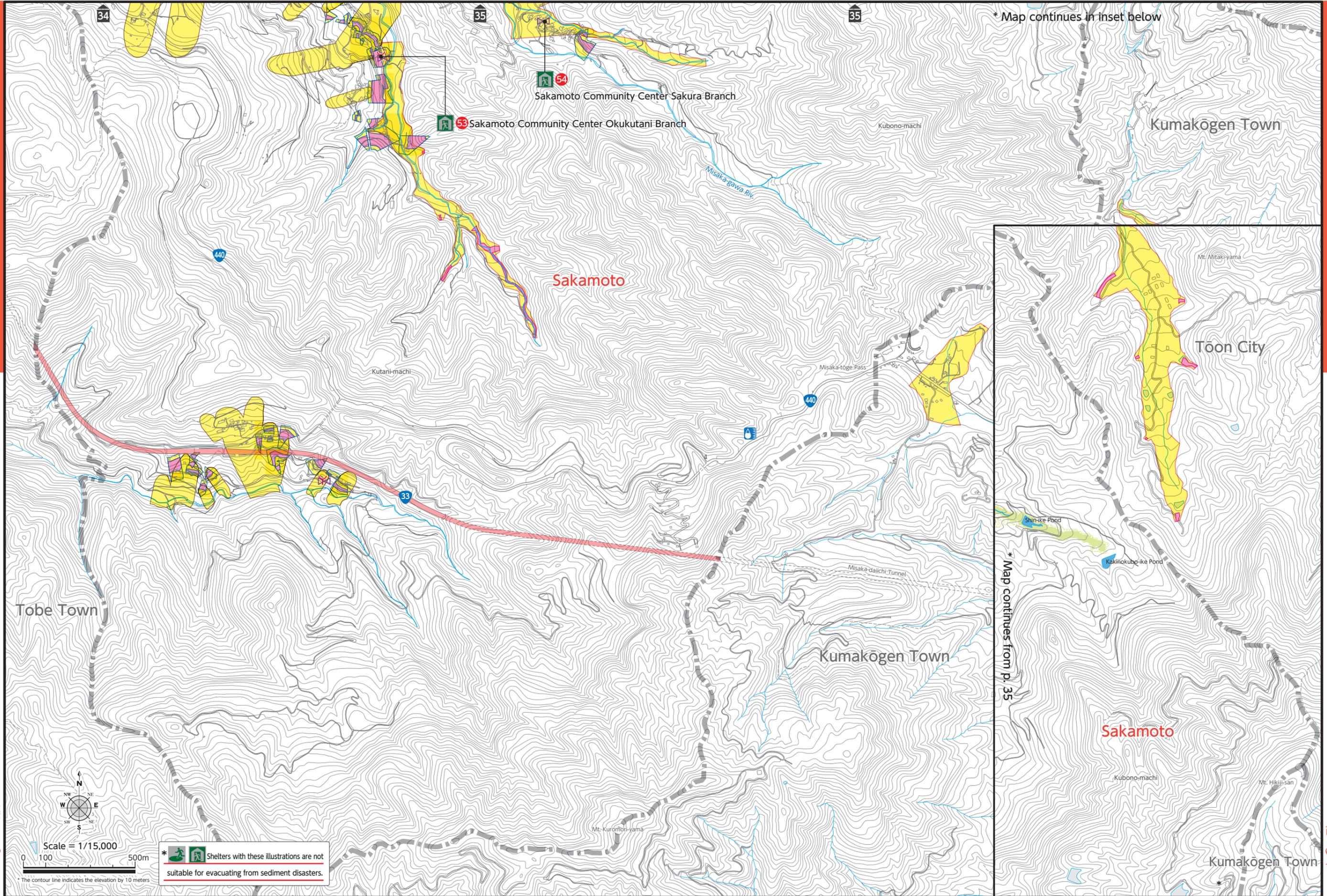
- Designated Emergency Evacuation Site
- City Hall / Branch Office
- Police Station Koban / Chūzai-sho
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 - Hazard zone (landslide)
 - Extreme hazard zone (steep slope)
 - Extreme hazard zone (debris flow)

- (Caution Required Reservoirs / Expected Reservoir Flooding Inundation Zones)
- Rain Gauge
 - Caution Required Reservoir
 - 0.5m and over
 - Under 0.5m
- Reservoir that could flood homes, etc. in case of a breach

Sakamoto

Sakamoto



* Map continues in inset below

* Map continues from p. 35

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.

Sediment Disasters / Reservoir Flooding

Sediment Disasters / Reservoir Flooding