

Sediment Disaster

Sediment Disasters

Hazard Map

The Sediment Disaster Hazard Map shows areas with a risk of sediment disasters due to heavy rain or earthquakes. It also provides information useful for evacuation, including evacuation sites. Please make use of it.

Issued September 2024



For the latest information on sediment disasters in the area, please check the Kanagawa Sediment Disaster Information Portal.



Residential Land Planning and Guidance Section, Supervision and Regulations Department,
Kawasaki City Urban Improvement Bureau 1 Miyamoto-cho, Kawasaki-ku, Kawasaki City / Phone: 044-200-3035



Disaster Memo for Your Family

Complete a disaster memo for your family using the hazard map!!

Find your home.

Check the map on the back to see if your home is in any of the sediment disaster alert areas, etc.

☐ Not in any of the areas ☐ Sediment disaster alert area ☐ Sediment disaster special alert area

Check evacuation sites and routes.

Check the evacuation method according to the situation.

- Evacuation to a safe place
- Evacuation to a nearby tall building, etc.
- Evacuation to a safe place indoors

Check the evacuation site and route according to the evacuation method.

Evacuation to a safe place

Evacuation actions according to the situation

Evacuation to a safe place
Evacuate to an evacuation center, higher ground, or an acquaintance's house outside the sediment disaster alert areas, etc.

Evacuation to a nearby tall building, etc.
Evacuate to the second floor or higher of a nearby sturdy building or to the upper floors of a tall building.

Evacuation to a safe place indoors
If evacuating outdoors is all the more dangerous, evacuate to a room on the opposite side of a cliff, on the highest floor possible.

All of these actions, not just evacuation to a shelter, are evacuation actions.

Check emergency pack

Inform every family member where the emergency pack is kept.

Storage location

Consider what to do in the event of a disaster with your family members and neighbors.

Write down the family rules and neighborhood rules,

Family rules

Neighborhood rules



Protect Yourself from a Landslide

Collapse of steep slopes (landslides)

There are three types of sediment disasters: collapse of steep slopes (landslides); avalanches of earth and rocks; and landslides. Most sediment disasters are caused by long or heavy rains or earthquakes. In the event of a long or heavy rain, large amounts of water seep into the ground, and the greater the amount, the weaker the resistance of the soil on the slope and the greater the risk of disaster.

Sediment disasters that may occur in Kawasaki City are the collapse of steep slopes (landslides).

A landslide is a phenomenon in which a cliff suddenly collapses due to a decrease in the strength of a cliff caused by water penetration into the cliff due to a heavy rain, typhoon, etc. Collapsed earth and sand can reach places farther than the height of a cliff. **It is important to evacuate immediately if you feel any danger, such as noticing precursory phenomena.**

Precursory phenomena

- Pebbles are falling down.
- There are cracks on slopes.
- Water gushes from slopes.

*As these phenomena continue, the stability of cliffs decreases and the risk of landslides increases.



Check the flow of information on weather and evacuation!

When the risk of disaster increases, "evacuation information" will be issued for the "sediment disaster alert areas"!

<Information about Evacuation>			<Severe weather terminology> (Alert Level Equivalent Information (examples))
Alert level	Evacuation actions, etc.	Evacuation information, etc.	
Alert Level 5	A disaster has already occurred or is imminent. Take the best possible action to save lives.	Emergency Safety Measures (Issued by Kawasaki City)	Alert Level 5 equivalent Heavy rain special warning (sediment disaster)
Alert Level 4	Evacuate everyone from hazardous areas. If moving to an evacuation site might be unsafe, evacuate to a nearby safe place or to a safer place in your home.	Evacuation Order (Issued by Kawasaki City)	Alert Level 4 equivalent Sediment disaster alert information, etc.
Alert Level 3	People who need time to evacuate (elderly, disabled, infants, etc.) and their assistants should evacuate from dangerous areas. Other people should be prepared to evacuate.	Evacuation of the Elderly, etc. (Issued by Kawasaki City)	Alert Level 3 equivalent Heavy rain warning (sediment disaster), etc.
Alert Level 2	Confirm your own evacuation actions using sediment disaster hazard maps, etc. in preparation for evacuation.	Heavy Rain Advisory, etc. (Issued by the Japan Meteorological Agency)	This information is for residents to use as a reference to take voluntary evacuation actions.
Alert Level 1	Increase your preparedness for disaster.	Early warning information (Issued by the Japan Meteorological Agency)	

*Evacuation information, etc. is as of October 2021.

Sign up for **Mail News Kawasaki**, which delivers evacuation and other information.

Mail News Kawasaki

Search

***Even in a situation where no evacuation information has been issued, do not hesitate to start evacuation actions if you feel any danger.**

Precautions for evacuation

When evacuating during a disaster, walk carefully because you are often unable to see your feet even on the roads you normally take. Also, be careful of falling or flying objects from overhead. In order not to panic in the event of an emergency, discuss with your family and neighbors on a regular basis where to go and which route to take for evacuation.

Putting out fires and locking up

Put out fires in the kitchen etc. and turn off heaters. Turn off breakers and the main gas valve before evacuating.



Check!

Leave a note for your family

When evacuating, leave a note for your family, including your contact information and safety information.



Evacuated

Do not go back to your home

Do not go back to your home to pick up things left behind, etc., as you may get caught in a landslide.



Help each other in case of evacuation

Those who have difficulty evacuating on their own need early evacuation. Help the elderly and children evacuate safely.



Act without panic

Act calmly while checking the safety of the evacuation route. Please note that evacuation sites designated by the city may not be open until evacuation information is issued. If you wish to voluntarily evacuate to an evacuation site, contact the ward office to check if the site is open. In case of emergency, temporary evacuation to a relative or acquaintance's house outside the area is also an effective evacuation method. In an emergency, do not panic and ensure your own safety.



If it is difficult to evacuate...

If it is difficult to evacuate to an evacuation site, take actions to protect your life, such as evacuating to the second floor or higher (a room on the opposite side of the slope) of a building (a solid building such as a reinforced concrete building) that is relatively higher than the surrounding buildings.



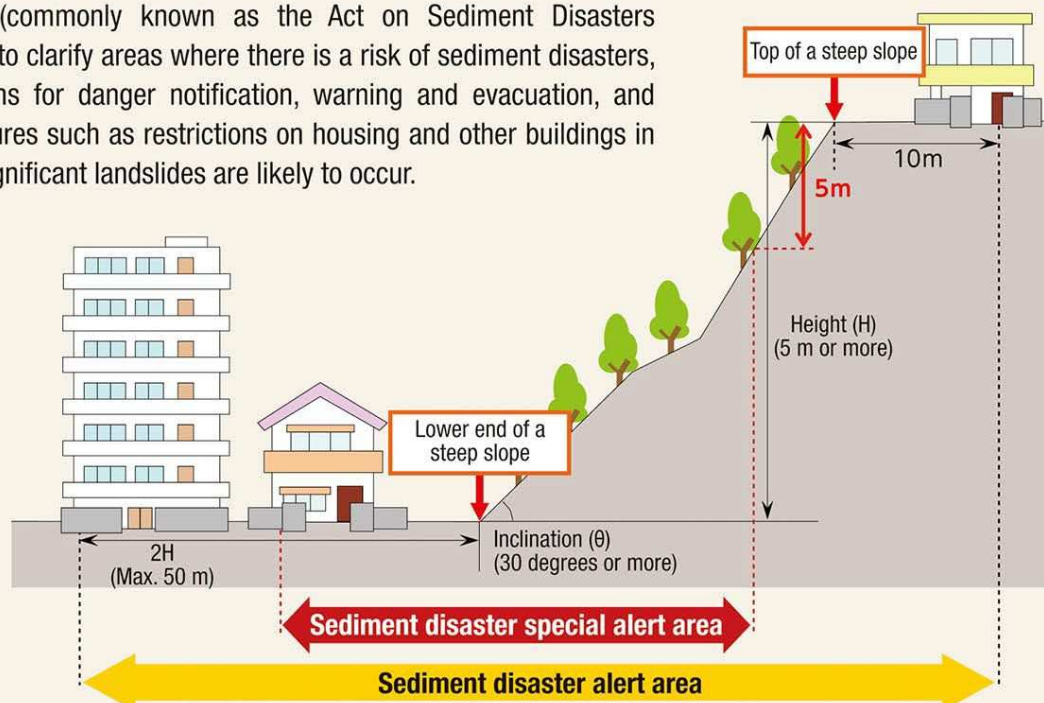
Connection between Rainfall and Natural Disasters

Rainfall in one hour	How rain falls	Situation when a disaster occurs
10-20 mm	- Drizzle, a light shower	- Stay alert to constant rain even if it is not extremely heavy
20-30 mm	- Consistent rain - Hard to see ahead even if you move the windshield wipers of your car fast	- Ditches, sewers and small rivers get flooded, and small scale landslides could potentially occur
30-50 mm	- Pouring rain as if a bucket of water is being turned over and dumped out - Difficulty braking when driving at high speeds	- Cliffs become more likely to fall, and it is necessary to prepare for evacuation around the alert area(s)
50-80 mm	- Very heavy rain, similar to a running waterfall - Driving is not safe anymore at this point	- Water may start to burst out of manholes - Sedimentary disasters are likely to occur
80 mm or more	- An oppressive feeling that makes it difficult to breathe - A sense of fear	- You need to stay very alert to this kind of rainfall as it poses many risks such as flooding

*Even if the rainfall is not heavy, there may be a growing risk of landslides if the rain remains active for a long period of time.

What is the Sediment Disasters Prevention Act?

The "Act on Sediment Disaster Countermeasures for Sediment Disaster Prone Areas" (commonly known as the Act on Sediment Disasters Prevention) is to clarify areas where there is a risk of sediment disasters, develop systems for danger notification, warning and evacuation, and promote measures such as restrictions on housing and other buildings in areas where significant landslides are likely to occur.



Sediment disaster alert area (yellow zone)

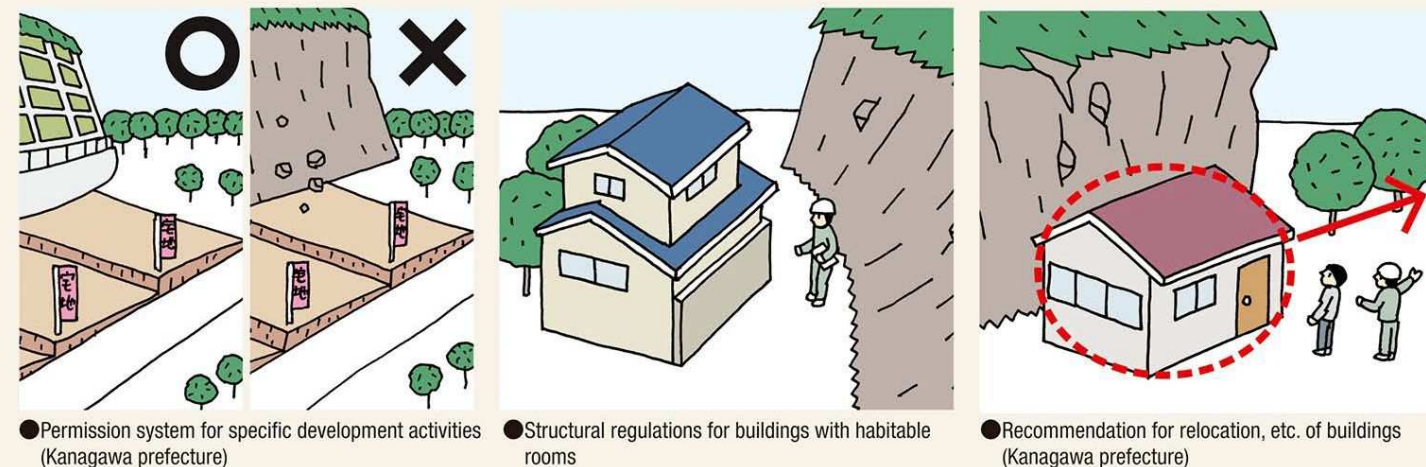
This is an area where it is recognized that there is a risk of harm to the lives or bodies of residents in the event of the collapse of a steep slope, etc., and systems for danger notification, warning and evacuation are developed.

Criteria for designation of sediment disaster alert areas

- Areas with an inclination of 30 degrees or more and a height of 5 meters or more
- Areas within 10 meters horizontally from the top of a steep slope
- Areas within a distance twice the height of a steep slope from the lower end of the steep slope (or 50 meters if it exceeds 50 meters)

Sediment disaster special alert area (red zone)

This is an area where it is recognized that there is a risk of serious harm to the lives or bodies of residents due to damage to buildings in the event of the collapse of a steep slope, etc., and a permission system for specific development activities and structural regulations for buildings are implemented.



Criteria for designation of sediment disaster special alert areas


Areas where the magnitude of force acting on buildings due to the movement of earth, rocks, etc. caused by the collapse of a steep slope, etc. exceeds the force that a normal building can withstand against the movement of earth, rocks, etc. without causing damage that is likely to cause serious harm to the lives or bodies of residents.



Daily Preparation

Please Keep Sufficient Emergency Supplies at Home

In case of emergency, there is a high chance that the city will be unable to provide electricity, water or gas, etc. For this reason, we would recommend that every household keep at least three days (preferably seven) worth of emergency supplies in the case that it is unsafe to leave their house.

Drinking water	- An average person needs three liters of drinking water a day. - We recommend keeping this amount of water at home in plastic bottles or otherwise.	
Food	- Pack basic foods that is lasts such as rice, dry noodles and canned foods. - Purchase in surplus for daily life, and consume them based on their expiry date, restocking them regularly. This is called a "rolling stock" and it helps you ensure you always have fresh food with minimal effort.	
Others	- Pack a portable gas stove (with a gas container), portable toilet (disposal bags), etc.	

List of Items for Emergencies

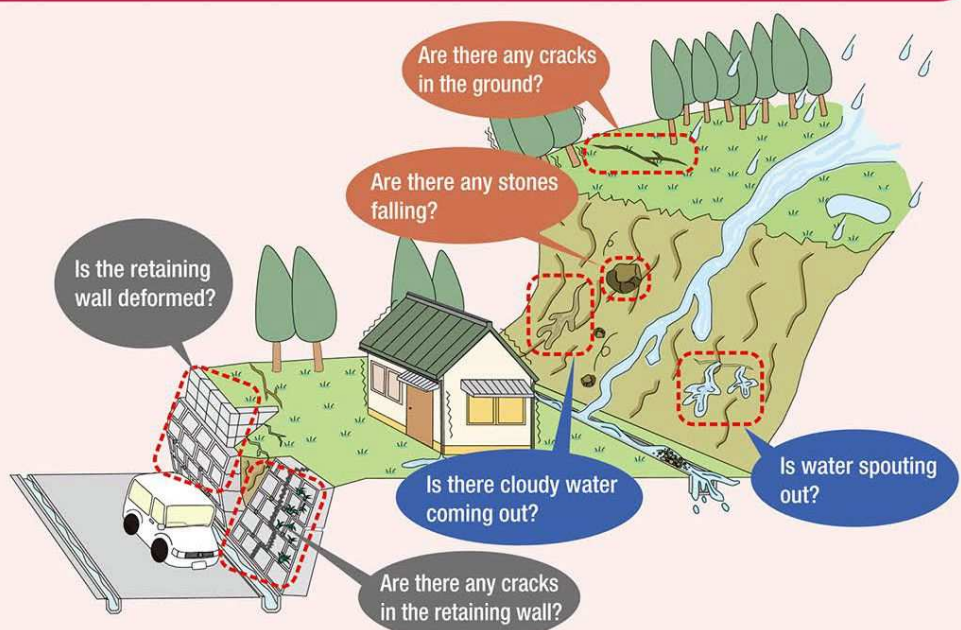
*Below are the typical items to be kept in the emergency pack. Please make a list which corresponds to your family's needs.

Water, Food	<input type="checkbox"/> Drinking water <input type="checkbox"/> Ready to Eat Meals, Emergency Rations "Biscuits, Canned Foods, etc.
Medical, Toiletries	<input type="checkbox"/> Current Medication <input type="checkbox"/> Emergency Medical Kit <input type="checkbox"/> Sanitary Towels, Tampons, etc. <input type="checkbox"/> Toothbrushes, Oral Care Items <input type="checkbox"/> Dust-proof Masks
Valuables	<input type="checkbox"/> Cash <input type="checkbox"/> Personal Seal (inkan) <input type="checkbox"/> Health Insurance Card, Bank Book "Or photo copies
Safety Items	<input type="checkbox"/> Helmets, Disaster Prevention Hood <input type="checkbox"/> Shoes with Thick Soles <input type="checkbox"/> Work Gloves
Tools	<input type="checkbox"/> Cell Phone, Charger <input type="checkbox"/> Portable Radio <input type="checkbox"/> Torches <input type="checkbox"/> Batteries <input type="checkbox"/> Candles <input type="checkbox"/> Pocket Warmers <input type="checkbox"/> Rope <input type="checkbox"/> Lighters, Matches <input type="checkbox"/> Can Openers <input type="checkbox"/> Knives <input type="checkbox"/> Dentures, Glasses, etc.
Clothes	<input type="checkbox"/> Jackets (or something to keep you warm), Underwear, Socks <input type="checkbox"/> Portable Raincoats <input type="checkbox"/> Slippers
Other Items	<input type="checkbox"/> Wet Wipes, Tissues <input type="checkbox"/> Towels <input type="checkbox"/> Garbage Bags, Plastic Bags
Measures to prevent disease	<input type="checkbox"/> Thermometer <input type="checkbox"/> Alcohol Disinfectant <input type="checkbox"/> Masks

Cliff disaster prevention measures

It is the duty of the owner, etc. to maintain and preserve his/her own residential land to prevent disasters from occurring. To this end, it is important to regularly check the condition of the cliff and take appropriate measures.

Early action can help prevent a disaster before it occurs. Please refer to the figure on the right and check the residential land you own.



How to Use This Hazard Map

1 Find your residence on the map.

Check to see if your home is in the sediment disaster alert area, etc.



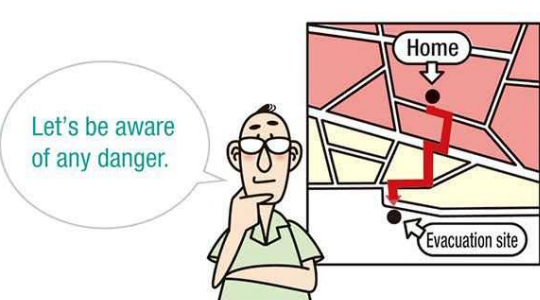
2 Check where the nearby evacuation sites are

Check how to evacuate from sediment disasters. Circle the appropriate evacuation site on your map and prepare for evacuation if necessary.



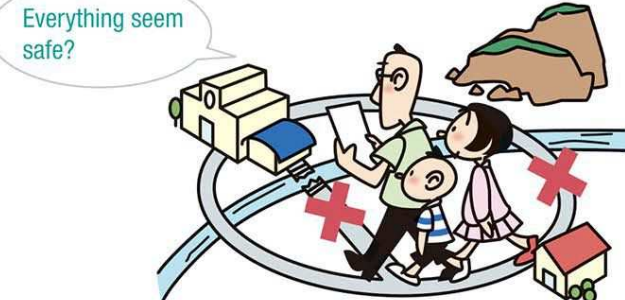
3 Find a safe evacuation route

Plan more than one evacuation route, as some roads may become impassable in the event of a disaster.



4 Run a practice evacuation

Walk your preferred evacuation route with your family and neighbors, and review any changes if necessary.



5 Discuss with your family what to do if a disaster were to occur

Discuss what to do in case of heavy rain or landslide and make sure everyone is clear on what to do should a disaster occur.



6 Discuss at school and with your neighbors about disasters and evacuation, and share your information

Discuss at school and with your neighbors about disasters and evacuation, and share your information. There may be residents who need you to support them when evacuating in your neighborhood, such as the elderly. Please discuss how you can all evacuate together safely.



7 Complete the disaster memo for families.



Useful Information in Times of Disaster

Kawasaki City Disaster Prevention Portal Site (from Kawasaki City Website)

This site provides emergency and evacuation information on disasters in the city, as well as useful information on how to prepare for disasters on a daily basis.

Kawasaki Disaster Prevention App

"Kawasaki Disaster Prevention App," the official app service of Kawasaki City, allows users to receive emergency and evacuation information in the event of a disaster via push notifications and to view the nearest evacuation center and various hazard maps.



Mail News Kawasaki "Disaster Prevention Weather Information"

Kawasaki City will send you emails with information on disaster prevention, weather, disasters, etc. in the city. To receive this information, please go to the below website and click [Send blank email] to send a blank email.

From computer <https://plus.sugumail.com/usr/kawasaki/home>

20 codes of Mail News Kawasaki for cell phones

Disaster Prevention Administrative Radio and Disaster Prevention Telephone Service

Disaster prevention administrative radio is used to inform citizens of evacuation information and disaster prevention weather information through outdoor speakers.

The content of the disaster prevention administration radio broadcasts can also be heard over the phone (during normal times, an educational broadcast is played).

0120-910-174 (toll free): Accessible on landlines, public phones and some IP telephone lines in the prefecture

044-245-8870 (charged call): Accessible on cellphones, PHSS, and landlines and public phones outside the prefecture

Kanagawa Sediment Disaster Information Portal

You can view information on the degree of risk of sediment disasters and the amount of rainfall in the prefecture.

From computer <https://dosyasaigai.pref.kanagawa.jp/website/kanagawa/gis/index.html>

URL for cell phones and smartphones <https://dosyasaigai.pref.kanagawa.jp/website/kanagawa/mobile/>



20 codes of Sediment Disaster Information Portal for cell phones

Others

You can view the forecasts of warning and advisory announcements of the Japan Meteorological Agency's website. Information is also made available on X (@kawasaki_bousai), emergency texting service, terrestrial digital broadcasting, cable TV, and Kawasaki FM (79.1 MHz).

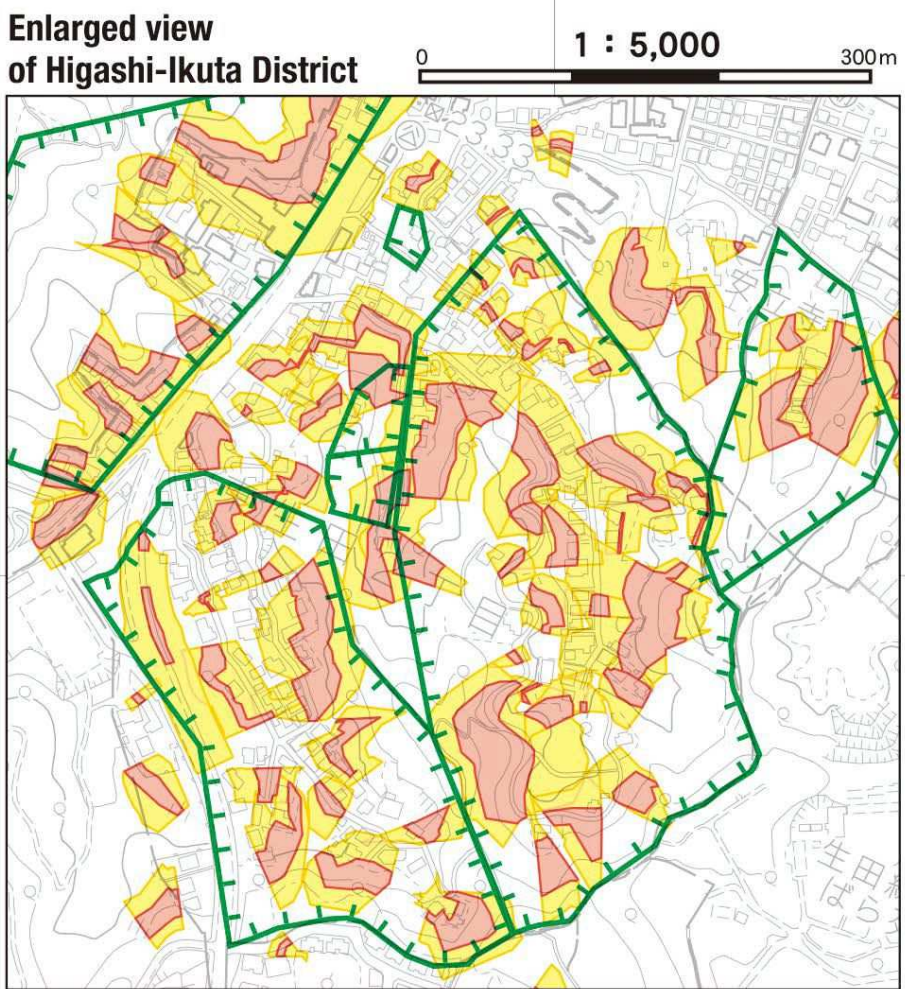
Inquiries

About evacuation	Crisis Management Headquarters	044-200-3682
	Crisis Management Unit, Tama Ward Office	044-935-3146
Matters related to sediment disaster alert areas, etc.	Kanagawa Prefectural Government Kawasaki Flood Control Center	044-932-7211
Matters related to preservation of cliffs	Residential Land Planning and Guidance Section, Supervision and Regulations Department, Urban Improvement Bureau	044-200-3035
Matters related to disaster prevention information	Crisis Management Headquarters	044-200-2857

Emergency Contact

Police station
110
Fire Department
119

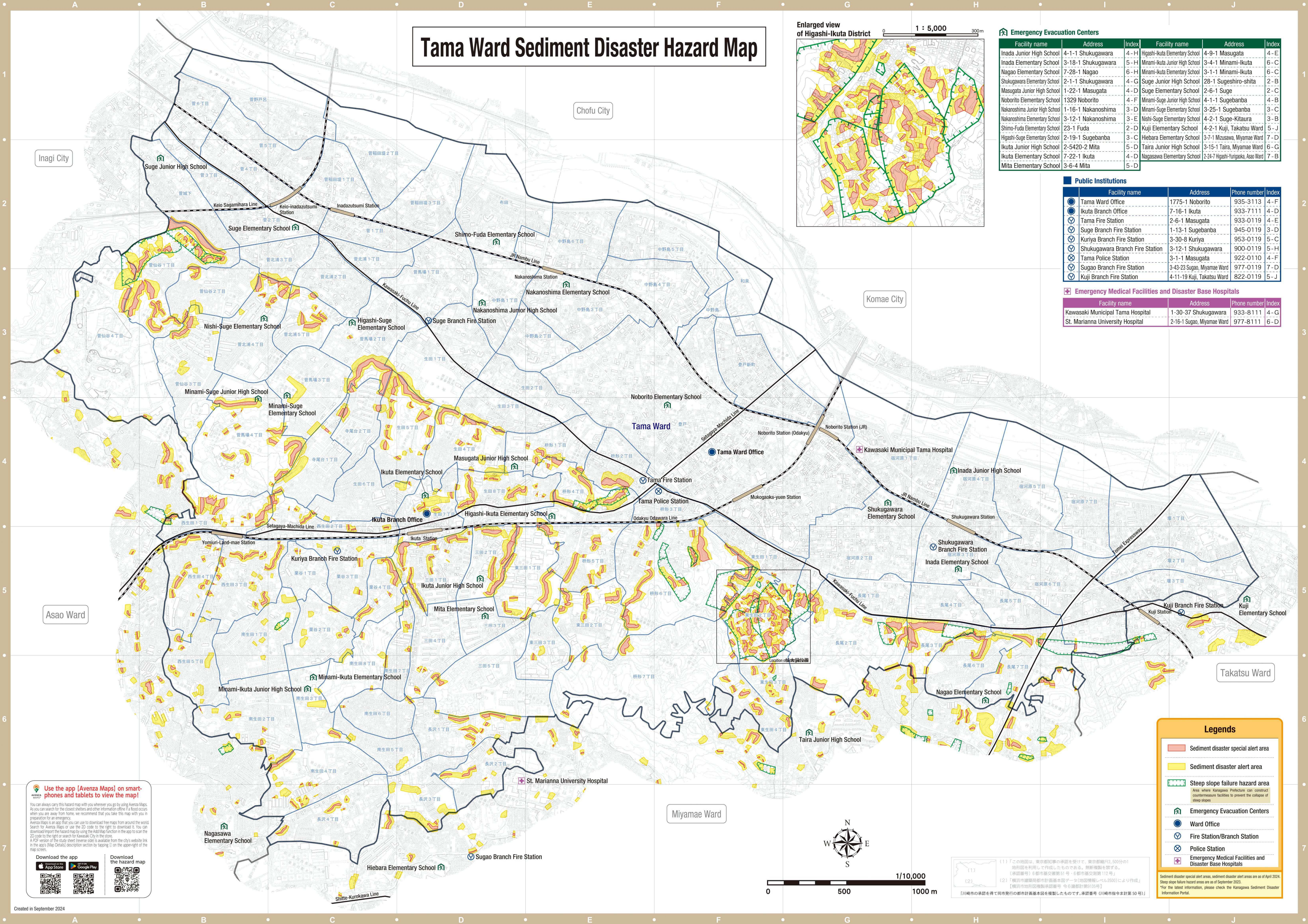
Tama Ward Sediment Disaster Hazard Map



Emergency Evacuation Centers					
Facility name	Address	Index	Facility name	Address	Index
Inada Junior High School	4-1-1 Shukugawara	4-H	Higashi-Ikuta Elementary School	4-9-1 Masugata	4-E
Inada Elementary School	3-18-1 Shukugawara	5-H	Minami-Ikuta Junior High School	3-4-1 Minami-Ikuta	6-C
Nagao Elementary School	7-28-1 Nagao	6-H	Minami-Ikuta Elementary School	3-1-1 Minami-Ikuta	6-C
Shukugawara Elementary School	2-1-1 Shukugawara	4-G	Suge Junior High School	28-1 Sugeshiro-shita	2-B
Masugata Junior High School	1-22-1 Masugata	4-D	Suge Elementary School	2-6-1 Suge	2-C
Noborito Elementary School	1329 Noborito	4-F	Minami-Suge Junior High School	4-1-1 Sugebanba	4-B
Nakanoshima Junior High School	1-16-1 Nakanoshima	3-D	Minami-Suge Elementary School	3-25-1 Sugebanba	3-C
Nakanoshima Elementary School	3-12-1 Nakanoshima	3-E	Nishi-Suge Elementary School	4-2-1 Suge-Kitaura	3-B
Shimo-Fuda Elementary School	23-1 Fuda	2-D	Kuji Elementary School	4-2-1 Kuji, Takatsu Ward	5-J
Higashi-Suge Elementary School	2-19-1 Sugebanba	3-C	Hiebara Elementary School	3-7-1 Mizusawa, Miyamae Ward	7-D
Ikuta Junior High School	2-5420-2 Mita	5-D	Taira Junior High School	3-15-1 Taira, Miyamae Ward	6-G
Ikuta Elementary School	7-22-1 Ikuta	4-D	Nagasawa Elementary School	2-24-7 Higashi-Ikuta, Asao Ward	7-B
Mita Elementary School	3-6-4 Mita	5-D			

Public Institutions			
Facility name	Address	Phone number	Index
Tama Ward Office	1775-1 Noborito	935-3113	4-F
Ikuta Branch Office	7-16-1 Ikuta	933-7111	4-D
Tama Fire Station	2-6-1 Masugata	933-0119	4-E
Suge Branch Fire Station	1-13-1 Sugebanba	945-0119	3-D
Kuriya Branch Fire Station	3-30-8 Kuriya	953-0119	5-C
Shukugawara Branch Fire Station	3-12-1 Shukugawara	900-0119	5-H
Tama Police Station	3-1-1 Masugata	922-0110	4-F
Sugao Branch Fire Station	3-43-23 Sugao, Miyamae Ward	977-0119	7-D
Kuji Branch Fire Station	4-11-19 Kuji, Takatsu Ward	822-0119	5-J

Emergency Medical Facilities and Disaster Base Hospitals			
Facility name	Address	Phone number	Index
Kawasaki Municipal Tama Hospital	1-30-37 Shukugawara	933-8111	4-G
St. Marianna University Hospital	2-16-1 Sugao, Miyamae Ward	977-8111	6-D



Legends

- Sediment disaster special alert area
- Sediment disaster alert area
- Steep slope failure hazard area
- Emergency Evacuation Centers
- Ward Office
- Fire Station/Branch Station
- Police Station
- Emergency Medical Facilities and Disaster Base Hospitals

Sediment disaster special alert areas, sediment disaster alert areas are as of April 2024. Steep slope failure hazard areas are as of September 2023. *For the latest information, please check the Kanagawa Sediment Disaster Information Portal.

Use the app [Avenza Maps] on smartphones and tablets to view the map!

You can always carry this hazard map with you wherever you go by using Avenza Maps. As you can search for the closest shelters and other information offline if a flood occurs when you are away from home, we recommend that you take this map with you in preparation for an emergency.

Avenza Maps is an app that you can use to download free maps from around the world. Search for Avenza Maps or use the QR code to the right to download it. You can download/import the hazard map by using the Add Map function in the app to scan the QR code to the right or search for Kawasaki City in the store.

A PDF version of the study sheet (reverse side) is available from the city's website link in the app's (Map Details) description section by tapping on the upper-right of the map screen.

Download the app





Download the hazard map





(1) この地図は、東京都知事の承認を受けて、東京都編入(2,500分の1)地形図を利用して作成したものである。無断複製を禁ずる。(承認番号) 6都市基交審第51号・6都市基交審第112号

(2) 「横浜市建築局都市計画基本図データ(地図情報レベル2500)により作成」【横浜市地形図複製承認番号 令和3年度計第105号】

【川崎市の承認を得て同市発行の都市計画基本図を複製したものです。承認番号(川崎市指令計画第51号)】