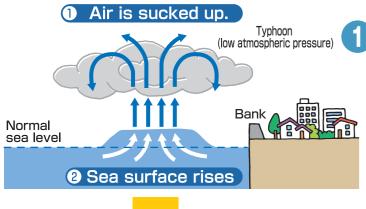
High tide disaster

Mechanism of the occurrence of high tide

High tide is a phenomenon in which seawater enters the inland due to an increase in the tide level caused by a typhoon or low atmospheric pressure and causes flood damage. Major causes of occurrence are as follows.



Sea surface is sucked up due to decreasing air pressure

When the air pressure drops, the sea surface is sucked up just like water is sucked up with a straw, and the tide rises rapidly in a short period of time. Since the central air pressure of a typhoon and low atmospheric pressure is lower than that of the surroundings, the air near the center inhales the sea surface and the tide rises. When the pressure drops by 1 hPa, the height of the tide rises by about 1 cm.



Blowing to the coast by strong wind

When a strong wind blows from the sea to the land side due to a typhoon, the seawater is blown to the coast, and the tide level around the coast rises abnormally. When the wind speed is doubled, the blowing effect is said to quadruple.

Dangerous places and times during high tide

You particularly need to be careful about the following locations and times. Always think about evacuation in such places.

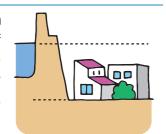
Low-lying areas near the coast

Sea surface

crosses the bank

Land at a lower altitude than the sea level at the time of full flood may experience damage because seawater flows in when the bank is washed away.

3 Seawater is blown



Full flood at spring tide

High tide is likely to occur when a typhoon approaches, and the tide level is the highest at the time of full floods at spring tide. The risk of high tide is the highest when both occur simultaneously.



The back of the bay and the mouth of the river

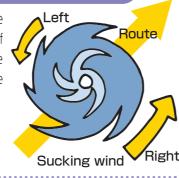
Blown seawater gathers at the back of the bay and the tide level rises. There is also a high risk of high tide and floods at the mouth of the rivers.





Relationship with the route of typhoon

The wind is stronger on the right side of the direction of the typhoon, and high tide is likely to occur due to the blowing effect by the wind.



Flood disaster

What is the probable flood zone?

The Kagawa Prefecture has published a list of areas that is swamped at the time of floods of Saita River and Kunita River (probable flood zone).

The probable flood zone and the degree of flood are only anticipated. Since the degree and range of floods vary depending on the severity of rainfall, land features, conditions of adjacent rivers, etc., the flood does not always occur like this disaster prevention map in the event of heavy rain.

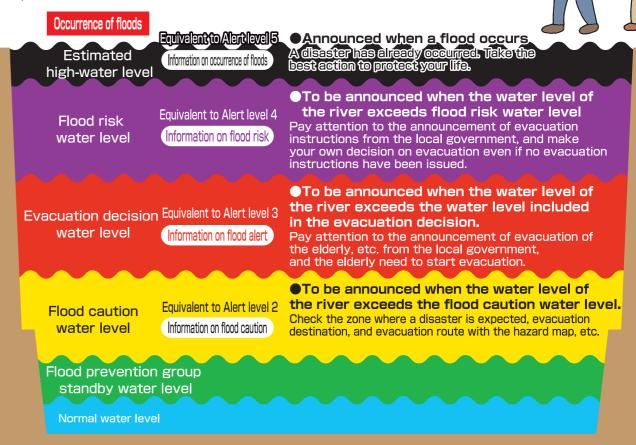
Be careful since floods may be larger or deeper than assumed and

flooding may occur in the zone not included in the probable flood zone.

Water level information and evacuation action

Flood forecast is essential and important information for citizens to protect themselves.

Complete evacuation before a flood occurs.



Observatory	Saita River	Kunita River
Water level information	Inazumi Bridge	Kurobuchi Bridge
Estimated high-water level	3.90m	4.60m
Flood risk water level	3.40m	3.65m
Evacuation decision water level	3.15m	3.35m
Flood caution water level	3.00m	2.80m
Flood prevention group standby water level	2.20m	2.20m

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