

FAQ for River Weather Forecast and Flash Flood Alert After Heavy Rain in Mountains

1. What are "River Weather Forecast and Flash Flood Alert After Heavy Rain in Mountains"?

Taiwan has steep terrains and the rivers run fast, especially upstream where a river is narrower. So when heavy rain (instant heavy rainfall over a short period of time) occurs, rivers and streams are often prone to swell, posing a danger to people nearby. Because heavy rain in Taiwan often occurs in spring and summer, when people are more likely to go to the mountains and rivers for recreational activities, a sudden surge of the river/stream often causes people to be trapped in the riverbed or swept away, an instance of which is the Hubao Pond incident of 2021. Therefore, after communicating with city governments, the CWA will begin in July 2023 to issue Flash Flood Alert After Heavy Rain in Mountains for 19 river areas in the form of text messages through the Public Warning System(PWS) to warn people when there is a storm upstream or in the mountains nearby. In addition, starting from the summer of 2023, River Weather Forecast, a trial weather forecast product for river areas will also be provided, will include 72-hour forecast updated every 3 hours, and 7-day forecast updated every 12 hours. A total of 19 riverside recreational areas will be included, making it convenient for the public to check the local forecast information on CWA's website, CWA Weather App in advance and make travel arrangements accordingly.

2. How is the Flash Flood Alert After Heavy Rain in Mountains different from the Severe Thunderstorm Alert that CWA

currently issues?

Severe Thunderstorm Alert is for both ground-level and mountain areas which are likely to be affected by heavy rain or other severe weather. However, sometimes when heavy rain occurs in the mountains near a recreational area, the area itself may not see significant rainfall even though there is a risk of the river or stream in the area suddenly surging. It is through this Flash Flood Alert that CWA hopes to alert people in recreational areas to such risk so that they can take precautions in time.

3. When is Flash Flood Alert After Heavy Rain in Mountains issued?

This Alert is issued when there is or may be heavy rain near or upstream the selected high-risk recreational area during daytime (6:00-18:00).

Since the main purpose of the Alert is to warn the people near a river or stream of the possibility of dangerous surge, and considering the duration of the high water level after a surge, the message is sent only once a day for each recreational area. Before going to recreational areas near a river or stream, it is advisable to first check the local situation and water level to stay safe.

4. What is the difficulty in issuing Flash Flood Alert After Heavy Rain in Mountains?

Taiwan's terrain is steep and rugged, and heavy rains are mostly caused by small-to-middle-scale weather systems, affecting relatively small areas with significant rainfall intensity, which makes forecasting and monitoring difficult.

In addition to rainfall, what causes sudden surge in rivers and streams has much to do with local landforms, hydrology, water resources and other environmental factors. Therefore, not only is the monitoring and forecasting of heavy rain challenging in meteorological terms, but also the prediction of subsequent effects, such as sudden surge of rivers and streams, must take into consideration many different factors in other fields of expertise for the Alert to be truly effective and useful. It is hoped that constant checks and adjustments in the trial period will help improve and refine the related operations.

5. Besides the warnings or advisories issued by CWA, what actions will local governments take to ensure people's safety near rivers and streams in case of heavy rainfall in mountain areas?

Take the Taipei City Government and the New Taipei City Government last year (2022) as examples, in summer, when most heavy rain occurred and most people went to mountains and riversides, personnel were stationed in the recreational areas near high-risk rivers and streams. When weather information indicated a high probability of heavy rain on a day, the city government reminded local tour operators and village chiefs to pay close attention to the water conditions. When CWA issue a Heavy Rainfall Advisory or Mountain Heavy Rain Alert through the PWS, relevant agencies such as police stations, village offices, and local operators would warn people near the dangerous rivers/streams. Now, with the addition of Flash Flood Alert After Heavy Rain in Mountains, CWA hopes to provide more useful forewarning for the general public and competent authorities

6. For which recreational areas will CWA issue Flash Flood Alert After Heavy Rain in Mountains this year?

CWA is now having 26 high-risk mountain areas and riverside recreational areas selected with the participation of different county/city governments this summer. The 26 areas include:

Taipei City: Shuangxi(Shuangxi Purification Plant to Shengren Waterfall)

New Taipei City: Dabao River, Hubao Pond, Nanshi River(Honghe Valley to Guiyandong and Baodao Lane area), Beishi River(Huliaotan and Yingxiang area), Daiyuku River, Yongding River(Shiding Wormhole), Shiding River(Danlan Suspension Bridge), Beigang River(Kezilin), Keelung River(Wangu Waterfall), Sanchakeng River(Qingshuikeng)

Taoyuan City: Xiayun River(Youxiayun Waterfall), Yunei River(Yunei Bridge)

Taichung City: Toubiankeng River(Xiannu Waterfall to Yijiang Bridge)

Hsinchu County: Youluo River(Jiyoushu Xia)

Nantou County: Talowan River

Chiayi County: Caoshan River(Gourd Canyon)

Pingtung County: Shamo River(Ocean God's Pools), Ailiaobei River(Flying Dragon Waterfall), Niujiowan River

Yilan County: Fanfan River(Bongbong Hot Spring), Dezikou River(Wufengqi Sabo Dam), Houdongkeng River

Hualien County: Shapodang River, Sanzhan River

Tainan City: Houku River(Thousand Stones Waterfall)

7. How will Flash Flood Alert After Heavy Rain in Mountains be issued?

When the Alert is issued, a text message will be sent to people near the targeted recreational area through the PWS. You can also find relevant information on CWA's official website (www.cwa.gov.tw), or CWA Weather App or by scanning QR code to subscribe for notifications.

8. What should I do when I receive Alert?

When you receive the Alert, it means that there may be heavy rain near or upstream the recreational area you are in, and that there is a risk of the river/stream swelling. So you need to be alert and pay attention to any change in the water level, avoid unnecessary activities near the riverbed, and comply if shore patrols ask you to leave the riverbed and evacuate to a safe area.

9. How do I use "River Weather Forecast"? And how do I use it in combination with Flash Flood Alert After Heavy Rain in Mountains?

"River Weather forecast" is specifically designed for the riverside recreational areas selected for trial, and includes 72-hour forecast updated every 3 hours, and 7-day forecast updated every 12 hours. Before going on a trip, you can check the weather in advance and make plans accordingly. When you arrive at one of those recreational areas, you can subscribe to get notifications through the CWA Weather App or by scanning a QR code, so that you can immediately receive the mobile PWS message if CWA issues a warning that day. Once you receive such a notification, prompt action is required and you should leave the dangerous water area to ensure your own safety.