



ཆུ་དབྱེད་རིག་པ་དང་ཆུ་འོ་ཐོན་སྐྱོད་ཞབས་ཏྲལ་མེ་ཆོན།  
ཆུ་ལ་ཡོངས་ཆུ་དབྱེད་དང་གནམ་གཤིས་རིག་པའི་ལྷེ་བ།



HYDROLOGY & WATER RESOURCES SERVICES DIVISION  
NATIONAL CENTER FOR HYDROLOGY & METEOROLOGY  
THIMPHU: BHUTAN

Status and River Level Trends:  
Glacier Lake Outburst Flood (GLOF) Early Warning System

16 February, 2026

1. Punatshang Chhu Sub Basin

| Sl No. | River Basin Number | Basin Name      | Name of River | Station Name   | Highest Water Level Recorded | Alert Water Level | Alarm Water Level | Water Level (m) recorded at 9:00 AM Yesterday | Water Level (m) recorded at 9:00 AM Today | Water Level Rise (+)/Fall (-) in meters during last 24 Hrs ending at 9 AM Today | Downstream Areas Coverage  |
|--------|--------------------|-----------------|---------------|----------------|------------------------------|-------------------|-------------------|---|---|---|--|
| 1      | Basin II           | Punatshang Chhu | Pho Chhu      | Luggay Tsho    |                              | 7.80              | 10.00             | 6.23  | 6.23                                      | 0.00  | Thanza, Tenchey, Lhadi, Lunana area and downstream of Pho-Chu and Puna-Wangdue Valley.                                   |
| 2      |                    |                 |               | Thorhormi Tsho |                              | 7.50              | 5.00              | 5.44  | 5.43                                      | -0.01   |  |
| 3      |                    |                 |               | Rapstreng Tsho |                              | 7.40              | 5.00              | 6.08  | 6.08                                      | 0.00  |  |
| 4      |                    |                 |               | Bay Tsho       |                              | 7.40              | 5.00              | 6.15  | 6.14                                      | -0.01   |  |
| 5      |                    |                 |               | Thanza         |                              | 7.70              | 8.70              | 6.21  | 6.21                                      | 0.00  |  |
| 6      |                    |                 |               | Tarina Wachey  |                              | 8.50              | 10.50             | 5.93  | 5.92                                      | -0.01   |  |
| 7      |                    |                 | Mo Chhu       | Dangsa         |                              | 5.50              | 7.00              | 3.15  | 3.15                                      | 0.00  | Pho Chhu Valley (Tamidamchu, Wolathang, Samidingkha, Khawajara, Shengana, Khuruthang) Puna-Wangdue Valley and Downstream |
| 8      |                    |                 |               | Taksemakhang   |                              | 7.50              | 8.50              | 5.00  | 5.00                                      | 0.00  |  |
| 9      |                    |                 |               | Tashithang     |                              | 9.00              | 10.50             | 3.92  | 3.92                                      | 0.00  |  |
| 10     |                    |                 |               | Yebesa         |                              | 5.00              | 7.00              | 1.05  | 1.05                                      | 0.00  | Gasa, Mo Chhu Valley, Puna-Wangdue Valley and Downstream   |

| Approximate Lead Time for Evacuation after the detection of flood at Four lake Sensor |                          |   |   |   |  |                                       | Approximate Lead Time for Evacuation after the detection of flood at Dangsa Sensor |                          |   |  |                                       |
|---|--------------------------|---|---|---|--|---------------------------------------|--|--------------------------|---|--|---------------------------------------|
| Sl Nos  | Name of Place Downstream | Approx. Distance from Sensor (Bay Tsho) | Approx. Distance from Sensor (Rapstreng Tsho) | Approx. Distance from Sensor (Thorhormi Tsho) | Approx. Distance from Sensor (Luggey Tsho) | Approx. Time available for Evacuation | Sl Nos   | Name of Place Downstream | Approx. Distance from Sensor (Bay Tsho) | Approx. Time for Flood to reach at the Place | Approx. Time available for Evacuation |
| 1   | Thanza                   | 1.5 km                                  | 2.8 km  | 3.3 km  | 6.7 km                                     | 20-60 minutes                         | 1  | Wolathang                | 5.8 km                                  | 30 minutes                                   | 30 minutes                            |
| 2   | Tenchey                  | 2.9 km                                  | 4.1 km  | 4.6 km  | 8.2 km                                     |                                       | 2  | Samdingkha               | 12.0 km                                 | 55 minutes                                   | 55 minutes                            |
| 3   | Tshojo                   | 8.1 km                                  | 10.0 km                                       | 10.5 km                                       | 13.8 km                                    |                                       | 3  | Punakha Dzong            | 20 km                                   | 90 minutes                                   | 1 hours 30 minutes                    |
| 4   | Lhedi                    | 16.7 km                                 | 17.6 km                                       | 18.5 km                                       | 21.8 km                                    |                                       | 4  | Khuruthang Town          | 24 km                                   | 120 minutes                                  | 2 hours                               |
| 5   | Puna-Wangdue Valley      | 100 km                                  | 100 km  | 100 km  | 100 km                                     | 5-7 hours                             | 5  | Bajo Town                | 30.5 km                                 | 145 minutes                                  | 2 hours 25 minutes                    |
|   |                          |   |   |   |  |                                       | 6  | Wangdue Bridge           | 33 km                                   | 150 minutes                                  | 2 hours 30 minutes                    |

NOTE: The above distance were Calculated from basic tools in the Google Earth Map, thus distance were approximate only

Glacier Lake Outburst Flood (GLOF) & Rainstorm Flood Early Warning System.  
2. Chamkhar Chhu and Mangdue Chhu Sub Basin

| Sl No. | River Basin Number | Basin Name | Name of River | Station Name | Highest Water Level Recorded (m) | Alert Water Level (m) | Alarm Water Level (m) | Water Level (m) recorded at 9:00 AM Yesterday | Water Level (m) recorded at 9:00 AM Today | Water Level Rise (+)/Fall (-) in meters during last 24 Hrs ending at 9 AM Today | Downstream Areas Coverage   |
|--------|--------------------|------------|---------------|--------------|----------------------------------|-----------------------|-----------------------|---|---|---|---|
| 1      | Basin III          | Manas      | Chamkhar Chhu | Tsampa       |                                  | 5.00                  | 6.50                  | 3.48  | 3.44                                      | -0.04   | Chokhortoe Primary School, Kurje Valley, Wangdue Choling, Chamkhar Town, Gangrithang Primary School, Gyelkhar Village and downstream settlement under Zhemgang. |
| 2      |                    |            |               | Khagthang    |                                  | 5.50                  | 6.00                  | 4.16  | 4.16                                      | 0.00  |   |
| 3      |                    |            |               | Kurje        | 5.72                             | 3.30                  | 5.00                  | 1.35  | 1.34                                      | -0.01   |   |
| 4      |                    |            | Mangdue Chhu  | Jongthang    |                                  | 5.90                  | 7.00                  | 4.19  | 4.19                                      | 0.00  | Bjizam Community, MHPA Dam, Power House and Downstream settlement of Trongsa and Zhemgang   |
| 5      |                    |            |               | Bjizam       | 5.60                             | 4.20                  | 5.50                  | 1.94  | 1.93                                      | -0.01   |   |

| Approximate Lead Time for Evacuation of Chamkhar Chhu Sub Basin |                          |  |   |           |                   | Approximate Lead Time for Evacuation after the detection of Flood at the Tshampa AWLS |                          |  |   |           |                   |
|---|--------------------------|--|---|-----------|-------------------|---|--------------------------|--|---|-----------|-------------------|
| Sl Nos  | Name of Place Downstream | Approx. Distance from the Tshampa AWLS | Approx. Cumulative Distance from Tshampa AWLS | Elevation | Approx. Lead Time | Sl Nos  | Name of Place Downstream | Approx. Distance from the Jongthang AWLS | Approx. Cumulative Distance from Jongthang AWLS | Elevation | Approx. Lead Time |
| 1   | Khagthang                | 20.3 km                                | 20.3 km                                       | 3704 m    | 27 minutes        | 1   | Bjizam                   | 18.5 km                                  | 18.5 km   | 2223 m    | 34 minutes        |
| 2   | Chokhortoe PS            | 4.5 km                                 | 24.8 km                                       | 2904 m    | 34 minutes        | 2   | Dam Site                 | 7.8 km                                   | 26.3 km   | 1848 m    | 50 minutes        |
| 3   | Kurje                    | 12.4 km                                | 37.2 km                                       | 2771 m    | 60 minutes        | 3   | Power Plant              | 20.4 km                                  | 46.7 km   | 1024 m    | 88 minutes        |
| 4   | Wangdicholling           | 5.7 km                                 | 42.9 km                                       | 2600 m    | 79 minutes        |   |                          |  |   |           |                   |
| 5   | Bumthang                 | 1 km                                   | 43.9 km                                       | 2562 m    | 83 minutes        |   |                          |  |   |           |                   |
| 6   | Gangrithang PS           | 0.3 km                                 | 44.2 km                                       | 2552 m    | 84 minutes        |   |                          |  |   |           |                   |
| 7   | Gyelkhar                 | 1.7 km                                 | 45.9 km                                       | 2538 m    | 91 minutes        |   |                          |  |   |           |                   |