



ཆུ་དབྱེད་རིག་པ་དང་ཆུ་འོ་ཐོན་སྐྱོད་ཞབས་ཏྲལ་ལྷན་ཁག་  
ཆུ་ལ་ཡོངས་ཆུ་དབྱེད་དང་གནམ་གཤིས་རིག་པའི་ལྷན་ཁག་

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

20 December, 2025

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	6.28	6.28	0.00	Thanza, Tenchey, Lhadi, Lunana area and downstream of Pho-Chu and Puna-Wangdue Valley.
2				Thorhormi Tsho		7.50	5.00	5.46	5.46	0.00	
3				Rapstreng Tsho		7.40	5.00	6.13	6.14	0.01	
4				Bay Tsho		7.40	5.00	6.20	6.22	0.02	
5				Thanza		7.70	8.70	6.32	6.33	0.01	
6				Tarina Wachey		8.50	10.50	6.01	6.01	0.00	
7			Mo Chhu	Dangsa		5.50	7.00	3.35	3.36	0.01	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	4.25	4.26	0.01	
10				Yebesa		5.00	7.00	1.19	1.20	0.01	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	3.60	3.61	0.01	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	4.25	4.25	0.00	
3				Kurje	5.72	3.30	5.00	1.51	1.51	0.00	
4			Mangdue Chhu	Jongthang		5.90	7.00	4.19	4.18	-0.01	Bjizam Community, MHPA Dam, Power House and Downstream settlement of Trongsa and Zhemgang
5				Bjizam	5.60	4.20	5.50	2.05	2.05	0.00	

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						