



Government of Pakistan
Ministry of Water Resources
Office of Chief Engineering Adviser/
Chairman, Federal Flood Commission

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FFC's
DAILY WEATHER & FLOOD SITUATION REPORT
SUNDAY, JULY 23, 2023

Presently, River Indus in Kalabagh-Chashma & Chashma-Taunsa reaches and River Chenab at Marala-Khanki reach, besides, River Ravi at Balloki are flowing in "Low Flood" with rising trend. Similarly, River Kabul (a tributary of River Indus) is flowing in "Low Flood" at Warsak-Nowshera reach. Others main rivers i.e. River Jhelum & Sutlej are discharging Normal Flows. Inflows/ Outflows of major rivers at important control structures, storage position of reservoirs including Skardu temperature at 0600 Hrs today may be seen at Annexure-I. Present Combined Live Storage of the country's major reservoirs (Tarbela, Mangla & Chashma) as of today is 9.833 MAF i.e. 73.15% of the total 13.443 MAF.

2. As per present meteorological situation, yesterday's trough of Westerly Wave over Northern parts of the Pakistan has moved away Eastwards. Yesterday's Monsoon Low over Southwestern Chattisgarh (India) moved West-Northwestwards and today lies over southwestern Madhya Pradesh & adjoining Rajasthan (India). Moderate to Strong Moist Currents from Bay of Bengal and Arabian Sea are penetrating into lower half of Pakistan up to 7000 feet. Seasonal Low lies over Northwestern Balochistan.

3. For the next 24 hours, FFD, Lahore has predicted Scattered to Widespread Wind Thunderstorm/Rain of Moderate to Heavy Intensity with Isolated Very Heavy Falls over South & Southeastern Sindh including Punjab (D.G. Khan Division), Khyber Pakhtunkhwa (D.I. Khan, Bannu & Kohat Divisions) and Balochistan (Zhob, Loralai, Kalat, Sibbi, Makran & Nasirabad Divisions). Scattered Thunderstorm Rain of Moderate Intensity with Isolated Heavy Falls over the Upper Catchments of all the Major Rivers including Islamabad, rest of Punjab, rest of Sindh and rest of Khyber Pakhtunkhwa during the same period. As a consequence, Flash flooding of Moderate to Heavy Intensity is expected in the Nullahs of Balochistan (Loralai, Kalat, Sibbi, Makran & Nasirabad Divisions) including Hill Torrents of D.G Khan Division.

4. Considerable rainfall activity has been generated during the past 24 hours in Punjab, Sindh. Khyber Pakhtunkhwa, Balochistan, GB & AJ&K. Annexure-II is referred for details.

5. For the next 48 hours, according to FFD Lahore, Monsoon activity over South and Southeastern Sindh is likely to decrease with no change over rest of the country.

6. Weather Outlook for next week (24th to 30th July 2023):

According to FFD Lahore, Monsoon activities over the Upper Catchments of all the Major Rivers will remain subside up to 26th July 2023. A fresh Monsoon Spell of Moderate Intensity is likely to start over the Upper Catchments of Rivers Sutlej, Ravi, Chenab and Jhelum from 27th July 2023.

7. All concerned organizations especially Flood Mitigation Committee (FMC) at Mangla, PDMA Punjab, Sindh, Khyber Pakhtunkhwa & Balochistan, Provincial Irrigation Departments of Punjab, Sindh, Khyber Pakhtunkhwa & Balochistan and relevant district administrations are advised to remain Alert & Vigilant, take prompt actions on warnings issued, to ensure safety of communities living in low lying areas, public & private property besides irrigation, drainage, flood protection & river training infrastructure etc.

8. Round-the-Clock monitoring of the current weather situation is being ensured by Pakistan Meteorological Department (PMD) through FFD, Lahore, being the Apex Flood Forecasting Agency at the National level, and is keeping all fully informed.


(Ahmed Kamal)

Chief Engineering Adviser/
Chairman, Federal Flood Commission

Distribution:

1. Minister for Water Resources, Islamabad.
2. Minister for Planning, Development & Special Initiatives, Islamabad.

Distribution:

3. Minister for Climate Change, Islamabad.
4. Secretary to the Prime Minister, Prime Minister's Office, Islamabad
5. Secretary, Ministry of Water Resources, Islamabad.
6. Secretary, Planning, Development & Special Initiatives Division, Islamabad.
7. Secretary, Ministry of Climate Change, Islamabad.
8. Secretary, Ministry of National Food Security & Research, Islamabad.
9. Director General (Coordination-III), President's Secretariat (Public), Aiwan-E-Sadr, Islamabad.
10. Chairman, National Disaster Management Authority, Prime Minister's Office, Islamabad.
11. Chairman, WAPDA, WAPDA House, Lahore.
12. Chief Executive Officer, Pakistan Railways, Lahore.
13. Chairman, Indus River System Authority, Islamabad.
14. Pakistan Commissioner for Indus Waters (PCIW), Islamabad.
15. Chairman, National Highway Authority, Islamabad.
16. Chairman PCRWR, Ministry of Water Resources, Islamabad.
17. Director General, Pakistan Meteorological Department, Islamabad.
18. Member (Water), WAPDA, WAPDA House, Lahore.
19. Member (Infrastructure), Planning Commission, Islamabad.
20. Chief Secretary, Government of the Punjab, Lahore.
21. Chief Secretary, Government of Sindh, Karachi.
22. Chief Secretary, Government of Khyber Pakhtunkhwa, Peshawar.
23. Chief Secretary, Government of Balochistan, Quetta
24. Chief Secretary, Government of Gilgit-Baltistan, Gilgit.
25. Chief Secretary, Government of Azad Jammu & Kashmir, Muzaffarabad.
26. Chief Commissioner, ICT, Islamabad.
27. Chairman, Capital Development Authority, Islamabad.
28. Commissioner, Rawalpindi.
29. Secretary, Irrigation Department, Government of the Punjab, Lahore.
30. Secretary, Irrigation Department, Government of Sindh, Karachi
31. Secretary, Irrigation Department, Government of Khyber Pakhtunkhwa, Peshawar.
32. Secretary, Irrigation Department, Government of Balochistan, Quetta.
33. Secretary (Works), Gilgit-Baltistan-PWD, Gilgit.
34. Chief Engineer Merged Areas, Irrigation Department, Government of K.P, Peshawar.
35. Secretary, Irrigation & Agriculture, Government of AJ&K, Muzaffarabad.
36. General Manager, Tarbela Dam Project (TDP), WAPDA, Tarbela.
37. General Manager, Mangla Dam Organization (MDO), WAPDA, Mangla.
38. Director General, Provincial Disaster Management Authority, Government of the Punjab, Lahore.
39. Director General, Provincial Disaster Management Authority, Government of Sindh, Karachi.
40. Director General, Provincial Disaster Management Authority, Government of K.P, Peshawar.
41. Director General, Provincial Disaster Management Authority, Government of Balochistan, Quetta.
42. Director General, Gilgit Baltistan, Disaster Management Authority, Gilgit.
43. Director General, State Disaster Management Authority, Govt. of AJ&K, Muzaffarabad.
44. Director General, Irrigation & Small Dams Organization, Govt. of AJ&K, Muzaffarabad.
45. Managing Director, WASA, Rawalpindi.
46. Principal Information Officer, Press Information Department, Islamabad.
47. Director (News), Associated Press of Pakistan, Islamabad.
48. Director (News), Pakistan Television, Islamabad.
49. Flood Cell, General Staff Branch, Engineers Directorate, GHQ, Rawalpindi.
50. Chief Executive Officer, National Disaster Risk Management Fund (NDRMF), Islamabad.

U.O. No. FC-I (31)/2023, dated 23-07-2023

Rivers and Reservoir Positions July 23, 2023 at 0600 Hours

A. River Flow Situation:

(Discharge in Cusecs)

Structures	Designed Capacity	Historic Peak Floods experienced to-date		Last Year Flow		Today Actual Flow with Flood Classification			Comparative Danger (VHIF) Classification
		Discharge	Date	Inflow	Outflow	Inflow	Outflow	Flood Classification*	
1	2	3	4	5	6	7	8	9	10
River Indus									
• Tarbela Reservoir	1,500,000	604,000	30-7-2010	222,000	107,000	315,000	163,000	Normal	650,000
• Kalabagh	950,000	950,000	14-7-1942	167,000	162,000	310,000	303,000	Low Flood (R)	650,000
• Chashma Reservoir	950,000	1,036,673	01-8-2010	272,000	261,000	347,000	345,000	Low Flood (R)	650,000
• Taunsa	1,000,000	959,991	02-8-2010	189,000	168,000	273,000	261,000	Low Flood (R)	650,000
• Guddu	1,200,000	1,199,672	15-8-1976	151,000	124,000	192,000	161,000	Normal	700,000
• Sukkur	900,000	1,161,000	16-8-1976	135,000	107,000	147,000	98,000	Normal	700,000
• Kotri	875,000	981,000	14-8-1956	103,000	71,000	63,000	26,000	Normal	650,000
River Kabul									
• Warsak	540,000				34,000		50,000	Low Flood (R)	200,000
• Nowshera					52,000		66,000	Low Flood (F)	200,000
River Swat									
• Chakdara Bridge					14,000		18,000	Normal	150,000
• Munda (H. Works)					8,000		34,000	Normal	150,000
• Charsadda Road	150,000				11,000		22,000	Normal	100,000
River Jhelum									
• Mangla Reservoir	1,060,000	1,090,000	10-9-1992	30,000	9,000	78,000	10,000	Normal	225,000
• Rasul	850,000	952,170	10-9-1992	9,000	NIL	18,000	16,000	Normal	225,000
River Chenab									
• Marala	1,100,000	1,100,000	26-8-1957	75,000	66,000	138,000	128,000	Low Flood (R)	400,000
• Khanki	1,100,000	1,086,460	27-8-1959	68,000	62,000	137,000	131,000	Low Flood (R)	400,000
• Qadirabad	900,000	948,530	11-9-1992	89,000	70,000	97,000	87,000	Normal	400,000
• Trimmu	875,000	943,225	08-7-1959	31,000	21,000	116,000	105,000	Normal	450,000
• Panjnad	865,000	802,516	17-8-1973	41,000	34,000	40,000	31,000	Normal	450,000
River Ravi									
• Jassar	275,000	680,000	05-10-1955		13,000		46,000	Normal	150,000
• Shahdara	250,000	680,000	22-9-1988		15,000		22,000	Normal	135,000
• Balloki	380,000	336,200	28-9-1988	44,000	23,000	71,000	46,000	Low Flood (R)	135,000
• Sidhnai	150,000	330,210	02-10-1988	17,000	14,000	26,000	15,000	Normal	90,000
River Sutlej									
• G.S. Wala						Gauge 19.40	62,000	Normal	
• Suleimanki	325,000	598,872	08-10-1955	19,000	12,000	57,000	46,000	Normal	175,000
• Islam	332,000	492,581	11-10-1955	13,000	13,000	28,000	27,000	Normal	175,000

B. Reservoir Storage Position:

Reservoir	Maximum Conservation Level (FL-AMSL)	Minimum Operating Level (FL-AMSL)	Water Level (Feet-AMSL)			Live Storage (MAF)			Present Storage (%age of total storage)
			2021	2022	2023	Maximum	Last Year	Today	
1	2	3	4	5	6	7	8	9	10
Tarbela	1550.00	1402.00	1487.91	1503.86	1525.89	5.809	3.380	4.467	76.90 %
Chashma	649.00	638.15	646.40	644.00	640.80	0.278	0.100	0.037	13.31 %
Mangla	1242.00	1050.00	1176.25	1135.40	1214.95	7.356	1.247	5.329	72.44 %
Total Live Storage						13.443	4.727	9.833	73.15 %

C. Skardu Temperature:

Skardu Temperature	Last year 2022	Today 2023	Difference (+ / -)
Maximum	36.8 °C	21.0 °C	- 15.8 °C
Minimum	21.4 °C	14.3 °C	- 7.1 °C

NOTES: "Mild" Categories

- Low Flood: River flowing within deep (winter) channel(s) but about to spill threatening only river islands/belas
- Medium Flood: River partly inundating river islands/belas
- High Flood: River almost fully submerging islands/belas and flowing upto high banks/bunds but without encroachment on the freeboard

"Danger" Categories

- Very High Flood (VHF): River flowing between high banks/bunds with encroachment on the freeboard
- Exceptionally High Flood (EHF): Imminent danger of overtopping/breaching, or the high bank areas have become inundated

* Flood Classification: (applied on downstream discharge/Outflow)

* (R) Signifies "Rising" Flood, (F) Signifies "Falling" Flood, (S) Signifies "Stable" Flow Condition & NR stands for "Not Received"

* Flood Classification for today is w.r.t. yesterday's Flood Classification at 0600 hours.

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Significant Rainfall Events during the Past 24 Hours

Sr. No.	City/Observatory	Rainfall (mm)
A Punjab		
1.	Lahore	[Airport=206, Taj Pura=186, Township=179, Johar Town=175, Qurtba chock=165, Gulshan e Ravi=162, Mughal Pura=160, Shahdara=153, Iqbal Town=150, Luckshami=149, Shahi Qilla=146, Upper Mall=123, Misri Shah=121, Gulburg=109, Jail Road=106 & Samanabad=92]
2.	Jhelum	99
3.	Narowal	65
4.	Mandibahauddin	47
5.	Murree	46
6.	Kot Addu	45
7.	Qilla Rohtas	44
8.	Ravi Syphon	40
9.	Mangla	36
10.	D. G Khan & Kasur	27 each
11.	Noorpur Thal	24
12.	Islamabad	[Saidpur=23, New Airport=10, Zeropoint=09, Golra & Bokra=06 (each)]
13.	Bhakkar	19
14.	Chunian & Bahawalpur	18 each
15.	Haraman	17
16.	Chakwal	12
B Sindh		
17.	Shaheed Benazirabad	55
18.	Badin	35
19.	Sakrand	32
20.	Dadu	30
21.	Chhor	29
22.	Sanghar	27
23.	Mithi	23
24.	Hyderabad	14
25.	Khairpur	13
26.	Padidan	12
27.	Mirpur Khas & Tando Jam	08 each
C Khyber Pakhtunkhwa		
28.	Shinkiari	104
29.	Lower Dir	65

30.	Malam Jabba	63
Sr. No.	City/Observatory	Rainfall (mm)
31.	Kurrum Garhi	60
32.	Kakul	47
33.	Pashat-Bajaur	45
34.	Oghi	31
35.	Pattan	30
36.	Balakot	21
37.	Saidu Sharif	16
38.	Kalam	11
39.	Dir	09
40.	D.I.Khan	07
41.	Besham	06
D	Balochistan	
42.	Ziarat	40
43.	Barkhan	16
44.	Lasbela	14
45.	Khuzdar	11
46.	Zhob	09
E	GB	
47.	Skardu & Bagrote	10 each
F	AJ & K	
48.	Garhi Dopatta	26
49.	Chattar Kallas	22
50.	Rawalakot	21
51.	Muzaffarabad	17
52.	Kotli	16
53.	Palandri	12

Source: FFD, Lahore (Phone No. 042 99200139)