



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

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**FFC's
DAILY WEATHER & FLOOD SITUATION REPORT
TUESDAY AUGUST 23, 2022**

Rivers Hydrological Situation:

Continued torrential rains in the Koh-e-Suleman mountain ranges during past few days generated heavy flows causing high discharges in **River Indus**. At present it is flowing in “**High Flood**” at **Guddu Barrage** (the first control structure over River Indus in Sindh Province). Also it is in “**Medium Flood**” at **Taunsa** and **Sukkur** while in “**Low Flood**” at **Kalabagh, Chashma** and **Kotri**.

2. Further to above, **River Kabul** (a tributary of River Indus downstream Tarbela) earlier in **High Flood Category** (117,000 cusecs) has today receded to “**Medium Flood**” (94,000 cusses) at **Nowshera** (downstream Warsak) and in “**Low Flood**” at **Warsak**. Other main Rivers i.e. Jhelum, Chenab, Ravi & Sutlej are discharging Normal Flows. For main rivers inflows/ outflows at important control structures **Annexure-I** may be seen.

Reservoirs Storage Position:

3. **Tarbela** reservoir is being maintained at its **Maximum Conservation Level (MCL)** of **1550.00 feet** since **20th August 2022**, while **Mangla Dam** is at **El: 1177.85 feet** against its **MCL:1242 feet** due to deficient rainfalls in Jhelum River's catchments during current Monsoon Season. Present Combined Live Storage of Tarbela, Chashma & Mangla reservoirs is **8.948 MAF** (i.e. **66.47 %** of **13.461 MAF**) (**Annexure-I**). Tarbela Dam Management Authorities are advised to take utmost care and exercise extra vigilance in the reservoir operation and ensure realistic dam regulation with a view to manage high flows from Kabul and to reduce inflows at Taunsa.

Prevalent Meteorological Situation (Source: FFD, Lahore):

4. Yesterday's “**Depression**” over Northern Madhya Pradesh (India) and adjoining areas has moved in Westwards direction and today lies over Southeastern Rajasthan (India) while another **Monsoon Low-Pressure Area** over Southeastern Sindh has now become insignificant. Seasonal Low continues to prevail over Western Balochistan with Trough of Westerly Wave lies over Northwestern parts of Afghanistan. **Moderate to Strong Moist** currents from both Arabian Sea and Bay of Bengal are penetrating into Southern Punjab, Sindh and Eastern Balochistan upto 10000 feet.

Weather & Rainfall Forecast (Next 24 hours):

5. **Widespread thunderstorm/rain** of **Heavy to Very Heavy Intensity** at scattered places and **Extremely Heavy Falls** at isolated places are expected over **Lower & Central Sindh**. **Scattered to widespread thunderstorm/rain** of **Moderate to Heavy Intensity** with **Isolated Very Heavy Falls** may also occur over **Punjab (D.G. Khan, Multan & Sargodha Divisions), Khyber Pakhtunkhwa (Peshawar, D.I. Khan, Bannu & Kohat Divisions)** and **Eastern Balochistan** including upper catchments of Rivers Indus & Kabul.

6. Moreover, **Scattered thunderstorm/rain** of **Moderate Intensity** is expected over **Islamabad, Punjab (Rawalpindi & Gujranwala Divisions)** and **upper catchments of Rivers Jhelum, Chenab, Ravi & Sutlej** besides Isolated thunderstorm/ rain over rest of the country except Western Balochistan. Few rainfall events have been reported by FFD, Lahore for the past 24 hours. (**Annexure-II**).

Weather Outlook & Flood Forecast, 24th-30th August 2022:

7. A **Strong Monsoon Activity** is expected over **Punjab (Southern Punjab & Sargodha Division), Sindh, Khyber Pakhtunkhwa (Peshawar, Kohat, Bannu & D.I. Khan Divisions)** and **Balochistan** including upper catchments of Rivers Kabul and Indus from **24th to 26th August 2022**. Rainfall activity is likely to decrease significantly from **27th August 2022**.

As a consequence FFD, Lahore has predicated as under:

- **Very High to Exceptionally High Level Flooding** in the **Hill Torrents of D.G. Khan Division** and in **Rivers/Nullahs of Eastern Balochistan** from **23rd to 26th August 2022**.
- **Flows from Hill Torrents of D.G. Khan Division** may cause **High to Very High Flood Level** at **Taunsa** from **24th to 26th August 2022**.
- **Urban Flooding** in **Sindh** during the same period.
- **High to Very High Level Flooding** in **River Kabul** at **Nowshera** and **Tributaries of Rivers Kabul & Indus** from **24th to 26th August 2022**

Special Precautionary Measures By Concerned Organizations:


8. All concerned organizations including field formations of respective Irrigation Departments of **Punjab (in particular for Taunsa downstream)** and **Sindh (in particular from Guddu Barrage upto Kotri Barrage downstream)** are strictly advised to ensure unhalted flood fighting as and when needed and remain on **“High Alert”**, take all necessary precautionary measures as per the Contingency Plan and ensure round-the-clock patrolling of river embankments and training works including irrigation & drainage network.

Specific Directions For Dam/Reservoir/Barrages Management Organizations:

9. Further to above, Managers of major dams (**Tarbela & Chashma in particular**)/ reservoirs/ barrages/ headworks are strictly cautioned to remain on **“High Alert”** to effectively manage/ route forecasted river discharges to avoid any downstream flooding (**Taunsa Barrage on-wards**).

10. All concerned organizations including **PDMAs/DDMAs** are also advised to remain **Fully Alert & Vigilant**, take timely actions on warnings issued by the concerned organizations (**especially in the context of flood generating hill torrents in the forecasted areas of Punjab, Sindh & Balochistan**) to ensure safety of communities living in low lying areas, public & private property besides irrigation, drainage & flood protection infrastructure etc.

11. Pakistan Meteorological Department (PMD) is closely monitoring the present weather system over the country in the specific context of **Depression** over **Northern Madhya Pradesh (India)** and is keeping all concerned fully informed through FFD, Lahore.


(Ahmed Kamal)
Chief Engineering Advisor/
Chairman, Federal Flood Commission

Distribution:

1. Minister for Water Resources, Islamabad.
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3. Minister for Climate Change, Islamabad.
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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.
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20. Chief Secretary, Government of the Punjab, Lahore.
21. Chief Secretary, Government of Sindh, Karachi.
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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.
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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)/2022, Dated 23-08-2022

Copy for information to:

PS to CEA/ CFFC, Islamabad

Rivers and Reservoir Positions August 23, 2022 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 (VHF) 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	132,000	105,000	245,000	233,000	Normal	650,000
• Kalabagh	950,000	950,000	14-7-1942	106,000	99,000	261,000	256,000	Low Flood (F)	650,000
• Chashma Reservoir	950,000	1,036,673	01-8-2010	153,000	140,000	369,000	351,000	Low Flood (F)	650,000
• Taunsa	1,000,000	959,991	02-8-2010	146,000	126,000	436,000	436,000	Med Flood (F)	650,000
• Guddu	1,200,000	1,199,672	15-8-1976	124,000	93,000	550,000	550,000	High Flood (R)	700,000
• Sukkur	900,000	1,161,000	16-8-1976	87,000	35,000	474,000	474,000	Med Flood (R)	700,000
• Kotri	875,000	981,000	14-8-1956	31,000	NIL	258,000	258,000	Low Flood (R)	650,000
River Kabul									
• Warsak	540,000				16,000		51,000	Low Flood (F)	200,000
• Nowshera		450,000	29-07-2010		19,000		94,000	Med Flood (F)	200,000
River Swat									
• Chakdara Bridge		360,000	30-07-2010		9,000		21,000	Normal	150,000
• Munda(H. Works)		355,000	29-07-2010		3,000		18,000	Normal	150,000
• Charsadda Road	150,000	360,000	30-07-2010		5,000		15,000	Normal	100,000
River Jhelum									
• Mangla Reservoir	1,060,000	1,090,000	10-9-1992	22,000	24,000	29,000	12,000	Normal	225,000
• Rasul	850,000	952,170	10-9-1992	27,000	12,000	7,000	NIL	Normal	225,000
River Chenab									
• Marala	1,100,000	1,100,000	26-8-1957	48,000	13,000	66,000	38,000	Normal	400,000
• Khanki	1,100,000	1,086,460	27-8-1959	13,000	6,000	58,000	51,000	Normal	400,000
• Qadirabad	900,000	948,530	11-9-1992	23,000	6,000	46,000	30,000	Normal	400,000
• Trimmu	875,000	943,225	08-7-1959	21,000	4,000	74,000	61,000	Normal	450,000
• Panjnad	865,000	802,516	17-8-1973	14,000	NIL	101,000	95,000	Normal	450,000
River Ravi									
• Jassar	275,000	680,000	05-10-1955		4,000		17,000	Normal	150,000
• Shahdara	250,000	680,000	22-9-1988		19,000		24,000	Normal	135,000
• Balloki	380,000	336,200	28-9-1988	32,000	2,000	42,000	16,000	Normal	135,000
• Sidhnai	150,000	330,210	02-10-1988	14,000	NIL	14,000	2,000	Normal	90,000
River Sutlej									
• Suleimanki	325,000	598,872	08-10-1955	16,000	2,000	16,000	4,000	Normal	175,000
• Islam	300,000	492,581	11-10-1955	1,000	NIL	4,000	3,000	Normal	175,000

B. Reservoir Storage Position:

Reservoir	Maximum Conservation Level (Ft-AMSL)	Minimum Operating Level (Ft-AMSL)	Water Level (Feet-AMSL)			Live Storage (MAF)			Present Storage (%age of total storage)
			2020	2021	2022	Maximum	Last Year	Today	
1	2	3	4	5	6	7	8	9	10
Tarbela	1550.00	1398.00	1542.93	1543.92	1550.00	5.827	5.535	5.827	100 %
Chashma	649.00	638.15	648.50	647.30	642.00	0.278	0.198	0.058	20.86 %
Mangla	1242.00	1050.00	1238.35	1201.80	1177.85	7.356	4.446	3.063	41.64 %
Total Live Storage						13.461	10.179	8.948	66.47 %

C. Skardu Temperature:

Skardu Temperature	Last year 2021	Today 2022	Difference (+ / -)
Maximum	33.0 °C	27.3 °C	- 5.7 °C
Minimum	16.3 °C	14.4 °C	- 1.9 °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 freeboards

"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/ Historic Peak Floods: (applied on downstream discharge/Outflow)

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

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**DAILY WEATHER AND FLOOD SITUATION REPORT
TUESDAY AUGUST 23, 2022
Significant Rainfall Events during the Past 24 Hours**

Sr. No.	City/Observatory	Rainfall (mm)
A	Punjab	
1.	Bahawalpur	24
2.	Lahore	10
B	Sindh	
3.	Khairpur	31
4.	Mithi	30
5.	Chhor	29
6.	Badin	08

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