



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
THURSDAY AUGUST 18, 2022

Various **Hill Torrents** in **D.G. Khan area** received heavy rains today (i.e. Sanghar-170,640 cusecs, Vehova-109,449 cusecs, Vidore-56,258 cusecs, Kaura-48,061 cusecs & Sori Lund-29,270 cusecs as reported by Punjab Irrigation Department), has resulted in **High Flood Situation** in **River Indus** at **Taunsa** (upstream of Guddu) where the outflow reported at 1200 hours today was **510,000 cusecs**. It was in "**Medium Flood**" at 0600 hours today (**Ref: Annexure-I**). Also, River Indus is in "**Low Flood**" in **Tarbela-Kalabagh, Kalabagh-Chashma** and **Guddu-Sukkur** reaches.

2. Further to above, **River Kabul** (a tributary of River Indus downstream Tarbela) is also in "**Medium Flood**" at **Nowshera** and in "**Low Flood**" at **Warsak**. Other main rivers of Indus River System (Jhelum, Chenab, Ravi & Sutlej) are flowing in Normal Flow Conditions. Main rivers inflows/outflows at important control structures, reservoirs storage position besides Skardu temperature at 0600 hour today may be seen at **Annexure-I**. Tarbela reservoir is just 1.30 feet below its Maximum Conservation Level (MCL:1550.00 feet). Present Combined Live Storage of country's three major reservoirs (Tarbela, Chashma & Mangla) is **8.646 MAF** (i.e. **64.23 %** of **13.461 MAF**).

3. Yesterday's **Depression** over Western parts of Rajasthan (India) has moved further in West-Northwestwards direction and today lies over **Southeastern Sindh (Pakistan)**. It is likely to move further in the same direction. Also a **Fresh Monsoon Low** is likely to develop over Northwestern Bay of Bengal (India) during next 24 hours. Trough of Westerly Wave continues to prevail over Northern parts of Afghanistan with Seasonal Low lies over Northwestern Balochistan. **Intense Moist currents** from the Arabian Sea are penetrating into **Southern Punjab, Sindh** and **Balochistan** upto 15000 feet. (Source: FFD, Lahore).

4. **Next 24 Hours Forecast:**

Widespread Thunderstorm/Rain with "**Heavy to Very Heavy Falls**" at scattered places and "**Extremely Heavy Falls**" at isolated places are expected over **Sindh & Eastern Balochistan**. **Scattered to widespread thunderstorm/rain** of **Moderate to Heavy Intensity** with "**Isolated Very Heavy Falls**" may also occur over **Punjab (Bahawalpur, D.G. Khan, Multan & Sargodha Divisions)** and **Khyber Pakhtunkhwa (D.I. Khan Division)** besides **Isolated Thunderstorm/Rain** of **Moderate Intensity** over rest of the country. **Heavy to Very Heavy Rainfall** has been experienced all over the country including the catchment areas of all rivers during the past 24 hours. Details may be seen at **Annexure-II** (Source: FFD, Lahore).

5. **FAIRLY WIDESPREAD** thunderstorm/ rain with **VERY HEAVY** falls at scattered places with **EXTREMELY HEAVY** falls at isolated places is expected over **EASTERN BALOCHISTAN** alongwith **Multan, D.G Khan Divisions (Punjab) & D.I Khan Division (Khyber Pakhtunkhwa)**. **Scattered thunderstorm/ rain** of **moderate intensity** with **isolated heavy falls** are also expected over **Sindh** and rest of the country during further 24 hours.

6. **Weather Outlook & Flood Forecast, 19th-25th August 2022**

- **Moderate to Strong Fresh Monsoon** activity is likely to start over **Southern Punjab, Sindh, Khyber Pakhtunkhwa (D.I. Khan Division)** and **Balochistan** from **22nd August 2022**.

As a result:

- ⇒ **Fairly Widespread thunderstorm/rain** with **Very Heavy Falls** at scattered places and **Extremely Heavy Falls** at **Isolated Places** are expected over **Punjab (Multan & D.G. Khan Divisions), Khyber Pakhtunkhwa (D.I. Khan Division)** and **Eastern Balochistan**.

- ⇒ **Scattered thunderstorm/rain of Moderate Intensity with Isolated Heavy Falls** is expected over **Sindh** and rest of the country during next 48 hours.
- ⇒ **Heavy to Very Heavy Rainfall** activity is likely over the upper catchments of Rivers **Kabul & Indus including their Tributaries** from **20th to 22nd August 2022**.

As a consequence:

- **Severe Flash Flooding** is expected in the **Hill Torrents of D.G. Khan Division and Rivers/Nullahs of Eastern Balochistan** from **18th to 19th August 2022**.
- **Flows from Hill Torrents of D.G. Khan Division** may cause **Medium to High Level Flooding** in **River Indus at Taunsa, Guddu & Sukkur**.
- **High Level Flooding** is expected in **Rivers Kabul** at Nowshera including tributaries of Rivers **Kabul & Indus** from **21st to 23rd August 2022**.


7. **Specific Directions For Dam/Reservoir/Barrages Management Organizations:**

Mangers of major dams/ reservoirs/ barrages/ headworks including respective field formations of respective Irrigation Departments (especially of Punjab and Sindh) are strictly cautioned to remain on “**HIGH ALERT**” to effectively manage/ route forecasted river discharges without compromising structural safety, through well coordinated and round-the-clock patrolling of river embankments.

8. **Precautionary Measures By Concerned Organizations:**

All concerned organizations including PDMAs/DDMAs are strictly 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 areas of forecast) to ensure safety of communities living in low lying areas, public & private property besides irrigation, drainage & flood protection infrastructure etc.

9. Pakistan Meteorological Department (PMD) is closely monitoring the present weather system specifically with reference to the **Depression** (Presently lying over Southeastern Sindh), its further movement and impact over the country 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.
2. Minister for Planning, Development & Special Initiatives, Islamabad.
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.

Distribution:

14. Pakistan Commissioner for Indus Waters (PCIW), Islamabad.
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 16. Chairman PCRWR, Ministry of Water Resources, Islamabad.
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 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.
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 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)/2022, Dated 18-08-2022**

Copy for information to:

PS to CEA/ CFFC, Islamabad

Rivers and Reservoir Positions August 18, 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	118,000	143,000	302,000	284,000	Low Flood (S)	650,000
• Kalabagh	950,000	950,000	14-7-1942	144,000	137,000	271,000	266,000	Low Flood (R)	650,000
• Chashma Reservoir	950,000	1,036,673	01-8-2010	181,000	167,000	383,000	368,000	Low Flood (R)	650,000
• Taunsa	1,000,000	959,991	02-8-2010	161,000	133,000	439,000	439,000	Med Flood (R)	650,000
• Guddu	1,200,000	1,199,672	15-8-1976	121,000	90,000	330,000	330,000	Low Flood (F)	700,000
• Sukkur	900,000	1,161,000	16-8-1976	83,000	32,000	326,000	322,000	Low Flood (R)	700,000
• Kotri	875,000	981,000	14-8-1956	45,000	9,000	177,000	177,000	Normal	650,000
River Kabul									
• Warsak	540,000				20,000		42,000	Low Flood (R)	200,000
• Nowshera		450,000	29-07-2010		28,000		83,000	Med Flood (R)	200,000
River Swat									
• Chakdara Bridge		360,000	30-07-2010		9,000		16,000	Normal	150,000
• Munda (H. Works)		355,000	29-07-2010		6,000		21,000	Normal	150,000
• Charsadda Road	150,000	360,000	30-07-2010		6,000		21,000	Normal	100,000
River Jhelum									
• Mangla Reservoir	1,060,000	1,090,000	10-9-1992	21,000	15,000	35,000	9,000	Normal	225,000
• Rasul	850,000	952,170	10-9-1992	15,000		6,000	NIL	Normal	225,000
River Chenab									
• Marala	1,100,000	1,100,000	26-8-1957	41,000	6,000	94,000	82,000	Normal	400,000
• Khanki	1,100,000	1,086,460	27-8-1959	11,000	4,000	94,000	87,000	Normal	400,000
• Qadirabad	900,000	948,530	11-9-1992	10,000	NIL	99,000	83,000	Normal	400,000
• Trimmu	875,000	943,225	08-7-1959	22,000	9,000	116,000	108,000	Normal	450,000
• Panjnad	865,000	802,516	17-8-1973	15,000	NIL	94,000	87,000	Normal	450,000
River Ravi									
• Jassar	275,000	680,000	05-10-1955		4,000		23,000	Normal	150,000
• Shahdara	250,000	680,000	22-9-1988		21,000		19,000	Normal	135,000
• Balloki	380,000	336,200	28-9-1988	32,000	3,000	51,000	25,000	Normal	135,000
• Sidhnai	150,000	330,210	02-10-1988	16,000	NIL	18,000	11,000	Normal	90,000
River Sutlej									
• Suleimanki	325,000	598,872	08-10-1955	16,000	2,000	15,000	7,000	Normal	175,000
• Islam	300,000	492,581	11-10-1955	1,000	NIL	2,000	1,000	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	1532.93	1544.70	1548.70	5.827	5.581	5.752	98.71 %
Chashma	649.00	638.15	644.70	646.50	640.50	0.278	0.170	0.032	11.51 %
Mangla	1242.00	1050.00	1236.40	1203.20	1173.90	7.356	4.538	2.862	38.91 %
Total Live Storage						13.461	10.289	8.646	64.23 %

C. Skardu Temperature:

Skardu Temperature	Last year 2021	Today 2022	Difference (+/-)
Maximum	29.6 °C	25.4 °C	- 4.2 °C
Minimum	8.3 °C	16.4 °C	+ 8.1 °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 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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Significant Rainfall Events during the Past 24 Hours

Sr. No.	City/Observatory	Rainfall (mm)
A	Punjab	
1.	Bhakkar	166
2.	Layyah	128
3.	DG Khan	104
4.	Bahawalpur	58
5.	Kot Addu	51
6.	Attock	43
7.	Noorpur Thal	42
8.	Multan	37
9.	Bahawalnagar	32
10.	Kamra & Joharabad	24 (each)
11.	Bhandu Wala	22
12.	Khanpur	21
13.	T.T. Singh	17
14.	Shorkot	14
15.	Khanewal	13
16.	Murree	11
17.	Islamabad & Sargodha	10
18.	Jhang & Sahiwal	09 (each)
B	Sindh	
19.	Chhor	131
20.	Moin-Jo-Daro	104
21.	Karachi	102
22.	Tando Jam	99
23.	Larkana	78
24.	Badin	70
25.	Mithi	67
26.	Khairpur	62
27.	Thatta	61
28.	Padidan, Hyderabad & Sukkur	54 each
29.	Mirpur Khas	49
30.	Sakrand	45
31.	Shaheed Benazirabad	35
32.	Jacobabad	22
33.	Dadu	19
34.	Rohri	12
35.	Sargodha & Islamabad	10 each
C	Balochistan	
36.	Barkhan	40
37.	Zhob	24
38.	Lasbela	22
39.	Pishin	21
40.	Kalat	18
D	Khyber Pakhtunkhwa	
41.	D.I.Khan	66
42.	Cherat	54
43.	Risalpur	41
44.	Peshawar	29
45.	Kohat & Pashat-Bajaur	24 each
46.	Bannu	23
47.	Mamad Gut, Khaar-Bajaur & Phulra	16 each
48.	Tarbela	14
49.	Tirah-Khyber & Kakul	11 each
50.	Landi Kotal & Parachinar	10 each
E	Gilgit-Baltistan	
51.	Chilas	10
52.	Bunji	09
F	AJ&K	
53.	Kotli	28
54.	Palandri	20
55.	Rawalakot	08

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