

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 <u>TUESDAY AUGUST 30, 2022</u>

<u>Rivers Hydrological situation:</u>

Flood flows generated in **River Swat** on 26th **August 2022** have completely receded and at present it is flowing in Normal Flows (**Annexure-I**). Flood Flows in **River Kabul** are also subsiding and it is flowing in "**Low Flood**" at **Warsak** (upstream Nowshera), however at **Nowshera** it is still flowing in "**Very High Flood**" with discharge of 212,000 cusecs. Kabul at Nowshera has experienced **Highest Flood Peak** of 336,000 cusecs on 28th **August 2022** at 1900 hours.

2. Combined flood flows of **Rivers Indus** and **Kabul** at **Khairabad** (junction point after merging River Kabul in the Indus) are also declining and recorded **425,000 cusecs** (**Medium Flood**) at 1000 hours today. Earlier at **Khairabad**, highest flood peak of **602,400 cusecs** was experienced on **August 27, 2022** (from 10:30 AM to 12:30 PM).

3. At present, River Indus is flowing in "High Flood" in Chashma–Taunsa–Guddu-Sukkur Reaches and in "Medium Flood" at Kalabagh & Kotri. Flood Flows in the Indus at Tarbela have receded and it is now discharging Normal Flows. Other main Rivers of Indus River System i.e Jhelum, Chenab, Ravi & Sutlej continue to flow in Normal Flow Conditions. Annexure-I, depicts main rivers inflows/outflows at important control structures, at 0600 hours today.

Reservoirs Storage Position:

4. Tarbela Reservoir is at its Maximum Conservation Level (MCL) of 1550.00 feet since 28th August 2022, whereas Mangla Dam is at El: 1185.30 feet against its MCL: 1242 feet (52.87 % storage still left). Chashma Reservoir is at an Elevation of 640.00 feet. Present Combined Live Storage of Tarbela, Chashma & Mangla Reservoirs is 9.352 MAF (i.e. 69.47 % of 13.461 MAF: reference Annexure-I). WAPDA Authorities both at Tarbela & Chashma and field formations of Punjab & Sindh Irrigation Departments are exercising utmost care and extra vigilance in the reservoir/ barrage operation for effective flood routing.

Prevalent Meteorological Situation (Source: FFD, Lahore):

5. Yesterday's trough of **Westerly Wave** over Northern parts of Afghanistan today lies over Northeastern parts of Afghanistan with **Weak Seasonal Low** lies over Western Balochistan. **Weak Moist** currents from the Arabian Sea are penetrating into Sindh (Pakistan) up to 3000 feet.

Weather & Rainfall Forecast (Next 24 hours):

6. According to FFD, Lahore, mainly dry weather is expected over most parts of the country, however isolated thunderstorm/rain is expected over **Punjab** (**Rawalpindi**, **Gujranwala**, **D.G. Khan & Lahore Divisions**), **Khyber Pakhtunkhwa** (**D.I. Khan Division**), **Southeastern Sindh** and **Northeastern Balochistan** including upper catchments of all the Major Rivers of Indus River System.

7. According to FFD, Lahore, **Very High Level Flooding** is likely to continue in **River Kabul** at **Nowshera** during next 24 hours. River Indus may also attain **Very High Flood Level** at **Taunsa** during next 24 hours. Significant rainfall events reported by FFD, Lahore during the past 24 hours are at **Annexure-II.**

Breaching in the Bund/Embankments:

8. Heavy rainfall in the Kirther Range generated high magnitude of flash floods caused breaches in the **Flood Protection (FP) Bund** (at RD-430 & 437) and **Superio Bund** (at RD-12, 28 & 58) in District Larkana Sindh on **28th August 2022**. High flows of hill torrents also caused breaches in **Larkana-Sehwan** (**LS**) **Bund** at RD 7 & 8 in a length of 120 feet and 150 feet. Irrigation Department Government of Sindh has been working on closing of the breaches in above said locations.

Continued Precautionary Measures By Concerned Organizations:

9. <u>All concerned organizations including field formations of **Irrigation Departments Punjab**, **Khyber Pakhtunkhwa** and **Sindh** are strictly advised to ensure unhalted flood fighting as and when needed to protect flood protection infrastructures 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 all along the river.</u>

Specific Directions For Dam/Reservoir/Barrages Management Organizations:

10. Managers of major reservoirs (**Tarbela & Chashma in particular including Taunsa**)/ reservoirs/ barrages/ headworks are advised to continue with present reservoir management measures for effective flood routing downstream keeping in view the Very High Flows of River Kabul at Nowshera.

11. Further to above office of Pakistan Commissioner for Indus Water (PCIW) may ensure availability of more latest **Flood/ Base Flow Data** on **Indian Structures/ Reservoirs** on **Rivers Sutlej, Beas** and **Ravi** as these structures are approaching close to their Maximum Conservation Level (MCL).

12. 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 Very High Flood Flows generated in River Kabul**) to ensure safety of communities living in low lying areas, public & private property besides irrigation, drainage & flood protection infrastructure etc.

13. Pakistan Meteorological Department (PMD) is closely monitoring the present weather system over the country and is keeping all concerned fully informed through FFD, Lahore.

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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.
- 14. Pakistan Commissioner for Indus Waters (PCIW), Islamabad.
- 15. Chairman, National Highway Authority, Islamabad.

Distribution:

- 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.
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- 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. <u>Chief Executive Officer, National Disaster Risk Management Fund (NDRMF), Islamabad.</u> U.O. No.FC-I (31)/2022, Dated 30-08-2022

Copy for information to:

PS to CEA/ CFFC, Islamabad

Rivers and Reservoir Positions August 30, 2022 at 0600 Hours

A. River Flow Situation:

(Discharge in	Cusecs)
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Structures	Designed	Historic Peak Floods experienced to-date*		Last Year Flow		Today Actual Flow with Flood Classification			Comparative Danger
Capa		Discharge	Date	Inflow	Outflow	Inflow	Outflow	Flood Classification*	(VHF) Classification
1	2	3	4	5	6	7	8	9	10
River Indus									
 Tarbela Reservoir 	1,500,000	604,000	30-7-2010	175,000	105,000	222,000	215,000	Normal	650,00
 Kalabagh 	950,000	950,000	14-7-1942	173,000	166,000	385,000	380,000	Med Flood (F)	650,00
Chashma Reservoir	950,000	1,036,673	01-8-2010	180,000	164,000	519,000	504,000	High Flood (R)	650,00
• Taunsa	1,000,000	959,991	02-8-2010	146,000	126,000	622,000	622,000	High Flood (R)	650,00
• Guddu	1,200,000	1,199,672	15-8-1976	103,000	77,000	513,000	513,000	High Flood (R)	700,00
• Sukkur	900,000	1,161,000	16-8-1976	67,000	26,000	531,000	531,000	High Flood (S)	700,00
• Kotri	875,000	981,000	14-8-1956	29,000	NIL	353,000	351,000	Med Flood (R)	650,00
River Kabul									
• Warsak	540,000				19,000		58,000	Low Flood (R)	200,00
• Nowshera		450,000	29-07-2010		25,000		212,000	V. High Flood (F)	200,00
River Swat								<u>_</u>	
• Chakdara Bridge		360,000	30-07-2010		9,000		22,000	Normal	150,00
• Munda(H. Works)		355,000	29-07-2010		3,000		35,000	Normal	150,0
Charsadda Road	150,000	360,000	30-07-2010		3,000		34,000	Normal	100,00
River Jhelum	•								·
Mangla Reservoir	1,060,000	1,090,000	10-9-1992	17,000	29,000	30,000	11,000	Normal	225,00
Rasul	1,000,000	952,170	10-9-1992	20.000	NIL	6,000	NIL	Normal	225,00
River Chenab	050,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10 / 1//2	20,000	THE	0,000	1112	Tormat	223,00
Marala	1,100,000	1,100,000	26-8-1957	48,000	13,000	55,000	28,000	Normal	400,00
Khanki	1,100,000	1,086,460	27-8-1959	23,000	15,000	38,000	31,000	Normal	400,00
Oadirabad	1,100,000 900,000	948,530	11-9-1992	36,000	14,000	36,000	16,000	Normal	400,00
• Qaarabaa • Trimmu	900,000 875,000	943,225	08-7-1959	27,000	10,000	37,000	25,000	Normal	450,00
 Panjnad 	865,000	802,516	17-8-1973	11,000	NIL	44,000	35,000	Normal	450,00
River Ravi	005,000	002,510	17-0-1775	11,000	THE	44,000	55,000	normai	450,00
• Jassar	275,000	680,000	05-10-1955		5,000		9,000	Normal	150,00
• Jassar • Shahdara	273,000 250,000	680,000	22-9-1988		19,000		14,000	Normal	135,00
• Snanaara • Balloki	230,000 380,000	336,200	28-9-1988	33,000	4,000	36,000	8,000	Normal	135,00
• Sidhnai	150,000	330,210	02-10-1988	16,000	NIL	24,000	9,000 9,000	Normal	90,00
River Sutlej	100,000			10,000		2.,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,
• Suleimanki	325,000	598,872	08-10-1955	17,000	3,000	20,000	8,000	Normal	175,00
• Sutetmankt • Islam	323,000	492,581	11-10-1955	17,000	NIL	20,000 6,000	5,000	Normal	175,00

B. Reservoir Storage Position:

D .	Maximum Minimum		Water Level (Feet-AMSL)			Live Storage (MAF)			Present Storage	
Reservoir	Conservation Level (Ft-AMSL)	Operating Level (Ft-AMSL)	2020	2021	2022	Maximum	Last Year	Today	(%age of total storage)	
1	2	3	4	5	6	7	8	9	10	
Tarbela	1550.00	1398.00	1550.00	1547.68	1550.00	5.827	5.749	5.827	100 %	
Chashma	649.00	638.15	639.00	643.60	640.00	0.278	0.091	0.058	20.86 %	
Mangla	1242.00	1050.00	1241.45	1199.40	1185.30	7.356	4.292	3.467	47.13 %	
	Total Live Storage					13.461	10.132	9.352	<i>69.47 %</i>	

C. Skardu Temperature:

Skardu Temperature	Last year 2021	Today 2022	Difference (+/-)
Maximum	21.8 °C	25.7 °C	+ 3.9 °C
Minimum	9.5 °C	13.5 °C	+ 4.0 °C

NOTES: "Mild" Categories

Low Flood:	River flow
Medium Flood:	River partl
High Flood:	River almo

wing within deep (winter) channel(s) but about to spill threatening only river islands/belas tly inundating river islands/belas ost fully submerging islands/belas and flowing upto high banks/bunds but without encroachment on the freeboards

"Danger" Categories Very High Flood (VHF): Exceptionally High Flood (EHF):

River flowing between high banks/bunds with encroachment on the freeboard 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 30, 2022

Significant Rainfall Events during the Past 24 Hours

Sr. No.	City/Observatory	Rainfall (mm)			
Α	Punjab	I			
1.	Lahore	97			
2.	Okara	30			
3.	Sialkot	17			
4.	Khanewal	15			
5.	Sahiwal	14			
6.	Daulatnagar	13			
7.	Gujranwala	12			
8.	Ravi Syphon	08			
В	Khyber Pakhtunkhwa				
9.	Buner	13			
С	Balochistan	L			
10.	Barkhan	23			
D	AJ&K	L			
11.	Rawalakot	05			
Source:	Source: FFD, Lahore (Phone No. 042 99200139)				