



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

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**FEDERAL FLOOD COMMISSION'S
DAILY WEATHER & FLOOD SITUATION REPORT
FRIDAY, AUGUST 30, 2024**

At present River Indus is experiencing “**Medium Flood**” at Kotri Barrage and “**Low Flood**” at Guddu Barrage. Meanwhile, the other major rivers in the Indus River System (Jhelum, Chenab, Ravi and Sutlej) are discharging normal flow. For detailed information on the inflows/outflows of these rivers at key control structures, as well as the storage positions of major reservoirs and the temperature at Skardu may be seen at **Annexure-I**.

2. Tarbela Reservoir has maintained its Maximum Conservation Level of 1550.00 feet since **August 19, 2024**. Mangla Reservoir is currently at an elevation of **1219.10 feet** compared to its Maximum Conservation Level of **1242 feet**. Combined live storage of the Tarbela, Chashma and Mangla Reservoirs stands at **11.589 MAF** which is **86.78%** of their total live storage capacity of **13.354 MAF**. Tarbela Dam Management is advised to remain vigilant and exercise utmost care in regulating the reservoir according to the approved SOPs and Dam Safety guidelines to protect downstream communities in the event of high inflows.

3. According to FFD, Lahore, the Deep Depression that was situated over Northwestern Gujrat (India) and adjoining Southeastern Sindh has moved Southwestward and is now located over the Northeastern Arabian Sea, approximately 120 km South of Thatta City. The trough associated with this deep depression extends up to Northern Punjab. Additionally, a new monsoon low-pressure area has developed over Southeastern Odisha (India). Westerly Wave trough continues to persist over the Northern Pakistan, while a weak seasonal low is present over Northwestern Balochistan. Light to moderate moist currents from the Bay of Bengal are penetrating into the upper catchments of all the major rivers while strong moist currents from both the Bay of Bengal and the Arabian Sea are penetrating into Southern Sindh and adjacent areas up to 10,000 feet at the reporting time.

4. For the ensuing 24 hours, FFD, Lahore has predicted scattered thunderstorm rain of **Moderate Intensity** with isolated **Heavy Falls** over Islamabad, Punjab (Rawalpindi, Sargodha, Gujranwala, Lahore, Faisalabad, Sahiwal, Multan & Bahawalpur Divisions), Sindh (Sukkur & Mirpur Khas Divisions) and Khyber Pakhtunkhwa including upper catchments of all major rivers of IRS. During the same period, **widespread** thunderstorm rain of **Heavy to Very Heavy** intensity with isolated **Extremely Heavy Falls** may occur over Punjab (D.G. Khan Division), Sindh (Karachi, Hyderabad, Larkana & Shaheed Benazirabad Divisions) and Balochistan (Zhob, Loralai, Sibbi, Makran, Nasirabad & Kalat Divisions). As a result, there is a potential for flash flooding in areas along the Kirthar Range (including Jacobabad, Qambar Shahdadkot, Dadu and Jamshoro Districts in Sindh) and the Sulaiman Range (including D.G. Khan and Rajanpur Districts in Punjab) as well as in the nullahs of Balochistan (Zhob, Loralai, Sibbi, Nasirabad and Kalat Divisions). Additionally, urban flooding is likely in the major cities of Sindh through **August 31, 2024**.

5. Good rainfall has been observed across the country during the past 24 hours (**Annexure-II**).

6. Over the next 48 hours, the wet spell is expected to decrease after 24 hours in Sindh and Southern Punjab. However, monsoon activity is likely to persist in Southern Balochistan for an additional 24 hours. From August 31st to September 6th, 2024, the wet spell is anticipated to diminish across most parts of the country. Nonetheless, scattered rainfall of moderate intensity with isolated Heavy Falls is still expected during this period.

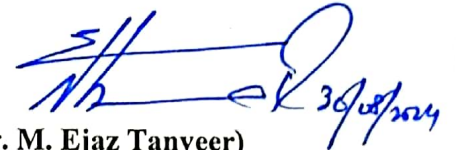
Potential Cyclonic Storm Over Northeast Arabian Sea

7. The deep depression (a very strong low-pressure area) over the Rann of Kutch (India) and adjoining regions has slowly moved West-southwestward over the last 12 hours and is currently located at approximately Latitude 23.5°N and Longitude 68.4°E about 200 Km East-Southeast of Karachi. The system is expected to continue moving West-southwestward in the Northeastern Arabian Sea along the Sindh coast and is likely to intensify into a Cyclonic Storm (CS) by this afternoon or evening, given the favorable environmental conditions, such as sea surface temperatures of 28-29°C, low to moderate vertical wind shear and strong upper-level outflow (**Source: PMD, Karachi**).

8. Under the influence of this system, widespread rain/wind-thunderstorms with scattered **Heavy/Very Heavy and isolated Extremely Heavy Falls** are expected in **Sindh (Karachi Division and Tharparkar, Badin, Thatta, Sujawal, Hyderabad, Tando Muhammad Khan, Tando Allahyar, Matiari, Umerkot, Mirpurkhas, Sanghar, Jamshoro, Dadu & Shaheed Benazirabad Districts)** until **August 31, 2024**. Also, widespread rain/wind-thunderstorms with scattered Heavy/Very Heavy Falls are also anticipated in **Balochistan (Hub, Lasbela, Awaran, Kech and Gwadar Districts)** from **August 30 to September 1, 2024** with occasional gaps. As a result, heavy rains may lead to waterlogging and rain-induced flooding in low-lying areas along the Sindh-Makran coast. Sea conditions are expected to remain Rough to Very Rough, with squally winds of 50-60 Km/h, gusting up to 70 Km/h. Fishermen in Sindh are advised to avoid venturing into the sea until August 31, 2024 and those in Balochistan until September 1, 2024.

9. All concerned organizations especially PDMA's and Provincial Irrigation Departments (PDMA Sindh, PID Sindh in particular) are advised to remain on **High Alert, Vigilant and in response mode**, ensure prompt action in response to warnings issued by relevant authorities. This is crucial to ensure the safety of communities in low-lying areas and to implement all necessary pre-emptive measures to protect public and private properties, as well as irrigation and drainage network and flood protection infrastructures.

10. Round-the-Clock monitoring of the prevailing weather conditions, particularly the **DEEP DEPRESSION** (over Northwestern Gujrat (India) and adjacent Southeastern Sindh, Pakistan), its further movement and potential impacts is being done by Pakistan Meteorological Department (PMD), through FFD, Lahore and is keeping all relevant organizations fully cognizant of the situation. Additionally, PMD's Cyclone Warning Center in Karachi is closely monitoring the situation and will issue updates accordingly.



(Dr. M. Ejaz Tanveer)
Chief Engineer (Floods)

For, Chairman, Federal Flood Commission

Distribution:

1. Chairman, Senate Standing Committee on Water Resources, Parliament House, Islamabad
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4. Minister for Climate Change & Environmental Coordination, Islamabad.
5. Secretary to the Prime Minister, Prime Minister's Office, Islamabad
6. Secretary, Ministry of Water Resources, Islamabad.
7. Secretary, Planning, Development & Special Initiatives Division, Islamabad.
8. Secretary, Ministry of Climate Change & Environmental Coordination, Islamabad.
9. Secretary, Ministry of National Food Security & Research, Islamabad.
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21. Chief Secretary, Government of the Punjab, Lahore.
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27. Secretary, Irrigation Department, Government of the Punjab, Lahore.
28. Secretary, Irrigation Department, Government of Sindh, Karachi.
29. Secretary, Irrigation Department, Government of Khyber Pakhtunkhwa, Peshawar.
30. Secretary, Irrigation Department, Government of Balochistan, Quetta.
31. Secretary, Irrigation and Water Management, Gilgit-Baltistan, Gilgit.
32. Secretary, Irrigation & Agriculture, Government of AJ&K, Muzaffarabad.
33. Chief Engineer (Merged Areas), Irrigation Department, Government of K.P, Peshawar.
34. Director General, Irrigation & Small Dams Organization, Govt. of AJ&K, Muzaffarabad.
35. General Manager, Tarbela Dam Project (TDP), WAPDA, Tarbela.
36. General Manager, Mangla Dam Organization (MDO), WAPDA, Mangla.
37. Director General, Provincial Disaster Management Authority, Government of the Punjab, Lahore.
38. Director General, Provincial Disaster Management Authority, Government of Sindh, Karachi.
39. Director General, Provincial Disaster Management Authority, Government of K.P, Peshawar.
40. Director General, Provincial Disaster Management Authority, Government of Balochistan, Quetta.
41. Director General, Gilgit Baltistan Disaster Management Authority, Gilgit.
42. Director General, State Disaster Management Authority, Govt. of AJ&K, Muzaffarabad.
43. Chief Commissioner, ICT, Islamabad.
44. Chairman, Capital Development Authority, Islamabad.
45. Commissioner, Rawalpindi.
46. Managing Director, WASA, Rawalpindi.
47. Principal Information Officer, Press Information Department, Islamabad.
48. Director (News), Associated Press of Pakistan, Islamabad.
49. Director (News), Pakistan Television, Islamabad.
50. Flood Cell, General Staff Branch, Engineers Directorate, GHQ, Rawalpindi.
51. Chief Executive Officer, National Disaster Risk Management Fund (NDRMF), Islamabad.

U.O. No. FC-I (31)/2024, dated 30-08-2024

Rivers and Reservoir Positions
August 30, 2024 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	135,000	135,000	190,000	156,000	Normal	650,000
• Kalabagh	950,000	950,000	14-7-1942	169,000	161,000	205,000	201,000	Normal	650,000
• Chashma Reservoir	950,000	1,036,673	01-8-2010	203,000	185,000	248,000	225,000	Normal	650,000
• Taunsa	1,000,000	959,991	02-8-2010	214,000	190,000	216,000	199,000	Normal	650,000
• Guddu	1,200,000	1,199,672	15-8-1976	303,000	274,000	193,000	188,000	Normal	700,000
• Sukkur	900,000	1,161,000	16-8-1976	238,000	184,000	232,000	226,000	Low Flood (F)	700,000
• Kotri	875,000	981,000	14-8-1956	149,000	108,000	334,000	333,000	Med Flood (R)	650,000
River Kabul									
• Warsak	540,000				15,000		20,000	Normal	200,000
• Nowshera					25,000		32,000	Normal	200,000
River Swat									
• Chakdara Bridge					7,000		6,000	Normal	150,000
• Munda (H. Works)					6,000		6,000	Normal	150,000
• Charsadda Road	150,000				6,000		4,000	Normal	100,000
River Jhelum									
• Mangla Reservoir	1,060,000	1,090,000	10-9-1992	17,000	18,000	176,000	8,000	Normal	225,000
• Rasul	850,000	952,170	10-9-1992	13,000	5,000	6,000	5,000	Normal	225,000
River Chenab									
• Marala	1,100,000	1,100,000	26-8-1957	38,000	12,000	52,000	22,000	Normal	400,000
• Khanki	1,100,000	1,086,460	27-8-1959	29,000	21,000	37,000	30,000	Normal	400,000
• Qadirabad	900,000	948,530	11-9-1992	29,000	15,000	26,000	8,000	Normal	400,000
• Trimmu	875,000	943,225	08-7-1959	66,000	52,000	31,000	19,000	Normal	450,000
• Panjnad	865,000	802,516	17-8-1973	101,000	84,000	56,000	50,000	Normal	450,000
River Ravi									
• Jassar	275,000	680,000	05-10-1955		7,000		7,000	Normal	150,000
• Shahdara	250,000	680,000	22-9-1988		22,000		19,000	Normal	135,000
• Balloki	380,000	336,200	28-9-1988	29,000	6,000	51,000	29,000	Normal	135,000
• Sidhnai	150,000	330,210	02-10-1988	23,000	5,000	27,000	21,000	Normal	90,000
River Sutlej									
• Suleimanki	325,000	598,872	08-10-1955	95,000	81,000	16,000	11,000	Normal	175,000
• Islam	332,000	492,581	11-10-1955	83,000	81,000	6,000	5,000	Normal	175,000

B. Reservoir Storage Position:

Reservoir	Maximum Conservation Level (Feet-AMSL)	Minimum Operating Level (Feet-AMSL)	Water Level (Feet-AMSL)			Live Storage (MAF)			Present Storage (%age of total storage)
			2022	2023	2024	Maximum	Last Year	Today	
1	2	3	4	5	6	7	8	9	10
Tarbela	1550.00	1402.00	1550.00	1550.00	1550.00	5.766	5.809	5.766	100 %
Chashma	649.00	638.15	640.00	647.00	648.50	0.311	0.188	0.285	91.64 %
Mangla	1242.00	1050.00	1185.30	1242.00	1219.10	7.277	7.356	5.538	76.10 %
Total Live Storage						13.354	13.353	11.589	86.78 %

C. Skardu Temperature:

Skardu Temperature	Last year 2023	Today 2024	Difference (+ / -)
Maximum	25.6 °C	17.6 °C	- 8.0 °C
Minimum	10.2 °C	13.4 °C	+ 3.2 °C

NOTE-1: "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

NOTE-2: "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

NOTE-3: * 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.

NOTE-4: Maximum Live Storage Capacity has increased from 13.321 MAF to 13.354 MAF due to de-silting of Chashma Barrage causing increase in its Live Storage Capacity from 0.278 MAF to 0.311 MAF.

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FRIDAY AUGUST 30, 2024
Significant Rainfall Events during the Past 24 Hours

Sr. No.	City/Observatory	Rainfall (mm)
A Punjab		
1.	Mangla	147
2.	Gujranwala	104
3.	Mandibahauddin	98
4.	Faisalabad	87
5.	Hafizabad	78
6.	Jhelum	76
7.	Multan	63
8.	Islamabad	54
9.	Sialkot	48
10.	T.T. Singh	39
11.	Gujrat	35
12.	Lahore & Rahim Yar Khan	34 each
13.	Sargodha	31
14.	Kallar	24
15.	Kasur	22
B Sindh		
16.	Thatta	63
17.	Hyderabad	54
18.	Karachi	35
19.	Tando Jam	32
20.	Badin	24
21.	Mithi	22
22.	Jacobabad	20
C Khyber Pakhtunkhwa		
23.	Kakul	66
24.	Phulra	54
25.	Shinkiari	46
26.	Balakot	45
27.	Oghi	43
28.	Dir	33
D Balochistan		
29.	Loralai	58
30.	Ziarat	28
31.	Sibbi	26
32.	Khuzdar	17
E Gilgit-Baltistan		
33.	Hunza	30
34.	Astore	28
35.	Skardu	16
F AJ&K		
36.	Domel	140
37.	Muzaffarabad	80
38.	Palandri	37
39.	Kotli	34
40.	Bandi Abbaspur	33
41.	Rawalakot	28
42.	Garhi Dopatta & Chakothei	26 each
43.	Chattar Kallas	24

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