

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

> 6-Attaturk Avenue, G-5/1, Islamabad Fax No. 051-9244621 & www.ffc.gov.pk

FFC's DAILY WEATHER & FLOOD SITUATION REPORT <u>SUNDAY, SEPTEMBER 10, 2023</u>

The Indus River System's major rivers, including the Indus, Jhelum, Chenab, Ravi, and Sutlej, are all flowing "Normal" since September 05, 2023. Owing to less monsoon rains in its catchment areas, inflows coming into Tarbela reservoir today (101,000 cusecs) are less than the corresponding inflows of last year (157,000 cusecs), besides, Skardu Temperature today is also 2.2° C less than the Temperature value observed last year (Ref: Annexure-I).

2. At present, Mangla reservoir is at 1239.70 feet against Maximum Conservation Level (MCL) of 1242.00 feet whereas Tarbela reservoir is at 1547.90 feet against MCL of 1550.00 feet. Today's Combined Live Storage of country's three major reservoirs (Tarbela, Chashma & Mangla) is 12.963 MAF (i.e. 96.43 % of 13.443 MAF). Dam Management Authorities at Tarbela and Mangla are advised to operate the respective dams strictly in accordance with SOPs and safety guidelines.

3. Moderate **Moist Currents** from both Arabian Sea & Bay of Bengal are penetrating into upper parts of Pakistan upto 4,000 feet. Since last couple of days, **Seasonal Low** continues to persist over Northeastern Balochistan (Source: FFD, Lahore).

4. Scattered Wind Thunderstorm/ Rains of Moderate Intensity are expected over Islamabad and Punjab (Rawalpindi, Lahore and Gujranwala Divisions) including upper catchments of rivers Jhelum, Chenab, Ravi & Sutlej during the next 24 hours. Isolated Wind Thunderstorm/ Rain of Light to Moderate Intensity may also occur over upper catchments of rivers Indus & Kabul during the same period.

5. No significant rainfall event has been observed during the last 24 hours except for Islamabad (30 mm) and AJ&K (Barnala = 36 mm & Palandri = 16 mm). As per FFD Lahore's **Rainfall Outlook** (11th to 17th September, 2023) moderate rainfall activity, with isolated heavy falls, is expected over the upper catchments of all the Major Rivers from 15th September, 2023.

6. All concerned organizations including **Tarbela & Mangla Dam Management Authorities** are advised to remain **ALERT** and exercise necessary measures as per their respective SOPs, in case of any flood emergency.

7. Through its specialized forecasting arm (Flood Forecasting Division at Lahore), the **Pakistan Meteorological Department (PMD)** is keeping all concerned organizations fully updated on the current weather conditions prevailing around the country.

(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

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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 (Coord-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. Secretary, Irrigation Department, Government of the Punjab, Lahore.
- 27. Secretary, Irrigation Department, Government of Sindh, Karachi
- 28. Secretary, Irrigation Department, Government of Khyber Pakhtunkhwa, Peshawar.
- 29. Secretary, Irrigation Department, Government of Balochistan, Quetta.
- 30. Secretary (Works), Gilgit-Baltistan-PWD, Gilgit.
- 31. Secretary, Irrigation & Agriculture, Government of AJ&K, Muzaffarabad.
- 32. Chief Engineer Merged Areas, Irrigation Deptt., Govt. of Khyber Pakhtunkhwa, Peshawar.
- 33. General Manager, Tarbela Dam Project (TDP), WAPDA, Tarbela.
- 34. General Manager, Mangla Dam Organization (MDO), WAPDA, Mangla.
- 35. Director General, Provincial Disaster Management Authority, Govt. of the Punjab, Lahore.
- 36. Director General, Provincial Disaster Management Authority, Government of Sindh, Karachi.
- 37. Director General, Provincial Disaster Management Authority, Government of K.P, Peshawar.
- 38. Director General, Provincial Disaster Management Authority, Govt. of Balochistan, Quetta.
- 39. Director General, Gilgit Baltistan, Disaster Management Authority, Gilgit.
- 40. Director General, State Disaster Management Authority, Govt. of AJ&K, Muzaffarabad.
- 41. Director General, Irrigation & Small Dams Organization, Govt. of AJ&K, Muzaffarabad.
- 42. Chief Commissioner, ICT, Islamabad.
- 43. Chairman, Capital Development Authority, Islamabad.
- 44. Commissioner, Rawalpindi.
- 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)/2023, dated 10-09-2023

Rivers and Reservoir Positions September 10, 2023 at 0600 Hours

A. KIVEL FIOW SILUATION.	A. Rive	er Flow	Situation:
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V Situatior	1.					(Discna	arge in Cusecs)	
Designed experien		Last Year Flow		ar Flow	Today Actual Flow with Flood Classification		Comparative Danger (VHF)	
Capacity	Discharge	Date	Inflow	Outflow	Inflow	Outflow	Flood Classification*	Classification
2	3	4	5	6	7	8	9	10
1,500,000	604,000		157,000	155,000	101,000	125,000	Normal	650,000
950,000	950,000		153,000	· · · · ·	152,000	144,000	Normal	650,000
950,000	1,036,673	01-8-2010	214,000	196,000	163,000	150,000	Normal	650,000
1,000,000	959,991	02-8-2010	181,000	164,000	141,000	115,000	Normal	650,000
1,200,000	1,199,672	15-8-1976	165,000	159,000	153,000	126,000	Normal	700,000
900,000	1,161,000	16-8-1976	185,000	185,000	114,000	59,000	Normal	700,000
875,000	981,000	14-8-1956	626,000	600,000	75,000	33,000	Normal	650,000
540,000				20,000		15,000	Normal	200,000
				41,000		24,000	Normal	200,000
				8,000		5,000	Normal	150,000
				11.000		3.000	Normal	150.000
150,000				11,000		2,000	Normal	100,000
1.0.00.000	1 000 000	10-0-1002	18.000	14.000	13 000	36,000	Normal	225,000
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850,000	952,170	10-9-1992	13,000	NIL	35,000	16,000	Normal	225,000
	1 100 000	AC 0 1055	16.000	15 000	12 000	12 000	N7 7	100 000
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	· · ·			· ·		· · · · · · · · · · · · · · · · · · ·		450,000
865,000	802,516	17-8-1973	23,000	9,000	51,000	34,000	Normal	450,000
275,000	680,000	05-10-1955		6,000		7,000	Normal	150,000
250,000	680,000	22-9-1988		17,000		22,000	Normal	135,000
380,000	336,200	28-9-1988	30,000	5,000	33,000	7,000	Normal	135,000
150,000	330,210	02-10-1988	25,000	8,000	21,000	4,000	Normal	90,000
						4,122	Normal	
325,000	598,872	08-10-1955	14,000	1,000	19,000	4,000	Normal	175,000
332.000	, i i i i i i i i i i i i i i i i i i i	11-10-1955	2.000	1.000	8,000		Normal	175.000
	Capacity 2 1,500,000 950,000 950,000 950,000 950,000 950,000 1,000,000 1,200,000 900,000 875,000 1,060,000 850,000 1,100,000 900,000 875,000 275,000 250,000 380,000 150,000	Designed Capacity experience Discharge Discharge 2 3 1,500,000 604,000 950,000 950,000 950,000 1,036,673 1,000,000 959,991 1,200,000 1,199,672 900,000 1,161,000 875,000 981,000 540,000 1,090,000 1,060,000 952,170 1,00,000 1,090,000 1,100,000 1,086,460 900,000 948,530 875,000 802,516 275,000 680,000 250,000 336,200 380,000 336,200 325,000 598,872	Capacity Discharge Date 2 3 4 1,500,000 604,000 30-7-2010 950,000 950,000 14-7-1942 950,000 1,036,673 01-8-2010 1,000,000 959,991 02-8-2010 1,200,000 1,199,672 15-8-1976 900,000 1,161,000 16-8-1976 900,000 1,161,000 16-8-1976 540,000 1 14-8-1956 540,000 1,090,000 10-9-1992 1,060,000 1,090,000 10-9-1992 1,00,000 1,000,000 26-8-1957 1,100,000 1,086,460 27-8-1959 900,000 948,530 11-9-1992 875,000 943,225 08-7-1959 865,000 680,000 22-9-1988 380,000 336,200 28-9-1988 380,000 336,200 28-9-1988 325,000 598,872 08-10-1955	Designed Capacity experienced to-date Last Yea Discharge Date Inflow 2 3 4 5 1,500,000 604,000 30-7-2010 157,000 950,000 950,000 14-7-1942 153,000 950,000 1,036,673 01-8-2010 214,000 1,000,000 959,991 02-8-2010 181,000 1,200,000 1,199,672 15-8-1976 165,000 900,000 1,161,000 16-8-1976 185,000 540,000 1,090,000 10-9-1992 18,000 1,060,000 952,170 10-9-1992 18,000 1,000,000 952,170 10-9-1992 13,000 1,100,000 26-8-1957 46,000 13,000 1,100,000 1,086,460 27-8-1959 15,000 900,000 948,530 11-9-1992 22,000 875,000 680,000 05-10-1955 30,000 275,000 680,000 22-9-1988 30,000 380,000 </td <td>Last Year FlowLast Year FlowDischargeDateInflowOutflow234561,500,000604,00030-7-2010157,000155,000950,000950,00014-7-1942153,000145,000950,0001,036,67301-8-2010214,000145,0001,200,0001,199,67215-8-1976165,000159,0001,200,0001,199,67215-8-1976185,000185,000900,000981,00014-8-1956626,000600,000540,0001,090,00010-9-199218,00011,0001,060,0001,090,00010-9-199218,00014,0001,00,0001,090,00026-8-195746,00015,0001,100,0001,100,00027-8-195915,0007,000900,000948,53011-9-199222,0002,000875,000882,51617-8-197323,0009,000900,000948,53011-9-199231,00015,000275,000680,00005-10-19553,00017,000380,000330,21002-10-198830,0005,000325,000598,87208-10-195514,0001,000</td> <td>Designed Capacity experienced to-date Last Year Flow Discharge Date Inflow Outflow Inflow 2 3 4 5 6 7 1,500,000 604,000 30-7-2010 157,000 155,000 101,000 950,000 950,000 14-7-1942 153,000 145,000 152,000 950,000 1,036,673 01-8-2010 214,000 196,000 163,000 1,000,000 959,991 02-8-2010 181,000 164,000 153,000 900,000 1,161,000 16-8-1976 185,000 185,000 153,000 900,000 1,161,000 14-8-1956 626,000 600,000 75,000 540,000 1.0-9-1992 18,000 14,000 13,000 11,000 150,000 1,090,000 10-9-1992 18,000 14,000 13,000 1,060,000 952,170 10-9-1992 18,000 11,000 14,000 1,000,000 1,086,460 27-8-1959 15</td> <td>Designed Capacity experienced to-date Last Year Flow Classificati Discharge Date Inflow Outflow Inflow Outflow 2 3 4 5 6 7 8 1,500,000 604,000 30-7-2010 157,000 155,000 101,000 125,000 950,000 950,000 14-7-1942 153,000 145,000 152,000 144,000 1,000,000 959,991 02-8-2010 181,000 164,000 155,000 156,000 1,200,000 1,99,672 15-8-1976 165,000 153,000 152,000 156,000 900,000 1,161,000 16-8-1976 185,000 185,000 153,000 126,000 540,000 981,000 10-9-1992 18,000 14,000 3,000 2,000 150,000 1,990,000 10-9-1992 18,000 14,000 3,000 2,000 1,000,000 10-9-1992 18,000 14,000 35,000 16,000 1,000,000<td>Designed Capacity experienced to-date Last Year Flow Classification Discharge Date Inflow Outflow Inflow Outflow Classification* 2 3 4 5 6 7 8 9 1,500,000 950,000 950,000 147-1942 153,000 155,000 101,000 125,000 Normal 950,000 950,000 147-1942 153,000 145,000 152,000 Normal 1,000,000 959,991 02-8-2010 181,000 164,000 152,000 Normal 1,000,000 1,161,000 16-8-1976 185,000 153,000 126,000 Normal 900,000 981,000 14-8-1956 626,000 600,000 75,000 Normal 540,000 981,000 10-9-1992 18,000 14,000 13,000 Normal 1,000,000 19,90,000 19-9192 18,000 14,000 13,000 Normal 1,000,000 1,009,000 27-81959 15</td></td>	Last Year FlowLast Year FlowDischargeDateInflowOutflow234561,500,000604,00030-7-2010157,000155,000950,000950,00014-7-1942153,000145,000950,0001,036,67301-8-2010214,000145,0001,200,0001,199,67215-8-1976165,000159,0001,200,0001,199,67215-8-1976185,000185,000900,000981,00014-8-1956626,000600,000540,0001,090,00010-9-199218,00011,0001,060,0001,090,00010-9-199218,00014,0001,00,0001,090,00026-8-195746,00015,0001,100,0001,100,00027-8-195915,0007,000900,000948,53011-9-199222,0002,000875,000882,51617-8-197323,0009,000900,000948,53011-9-199231,00015,000275,000680,00005-10-19553,00017,000380,000330,21002-10-198830,0005,000325,000598,87208-10-195514,0001,000	Designed Capacity experienced to-date Last Year Flow Discharge Date Inflow Outflow Inflow 2 3 4 5 6 7 1,500,000 604,000 30-7-2010 157,000 155,000 101,000 950,000 950,000 14-7-1942 153,000 145,000 152,000 950,000 1,036,673 01-8-2010 214,000 196,000 163,000 1,000,000 959,991 02-8-2010 181,000 164,000 153,000 900,000 1,161,000 16-8-1976 185,000 185,000 153,000 900,000 1,161,000 14-8-1956 626,000 600,000 75,000 540,000 1.0-9-1992 18,000 14,000 13,000 11,000 150,000 1,090,000 10-9-1992 18,000 14,000 13,000 1,060,000 952,170 10-9-1992 18,000 11,000 14,000 1,000,000 1,086,460 27-8-1959 15	Designed Capacity experienced to-date Last Year Flow Classificati Discharge Date Inflow Outflow Inflow Outflow 2 3 4 5 6 7 8 1,500,000 604,000 30-7-2010 157,000 155,000 101,000 125,000 950,000 950,000 14-7-1942 153,000 145,000 152,000 144,000 1,000,000 959,991 02-8-2010 181,000 164,000 155,000 156,000 1,200,000 1,99,672 15-8-1976 165,000 153,000 152,000 156,000 900,000 1,161,000 16-8-1976 185,000 185,000 153,000 126,000 540,000 981,000 10-9-1992 18,000 14,000 3,000 2,000 150,000 1,990,000 10-9-1992 18,000 14,000 3,000 2,000 1,000,000 10-9-1992 18,000 14,000 35,000 16,000 1,000,000 <td>Designed Capacity experienced to-date Last Year Flow Classification Discharge Date Inflow Outflow Inflow Outflow Classification* 2 3 4 5 6 7 8 9 1,500,000 950,000 950,000 147-1942 153,000 155,000 101,000 125,000 Normal 950,000 950,000 147-1942 153,000 145,000 152,000 Normal 1,000,000 959,991 02-8-2010 181,000 164,000 152,000 Normal 1,000,000 1,161,000 16-8-1976 185,000 153,000 126,000 Normal 900,000 981,000 14-8-1956 626,000 600,000 75,000 Normal 540,000 981,000 10-9-1992 18,000 14,000 13,000 Normal 1,000,000 19,90,000 19-9192 18,000 14,000 13,000 Normal 1,000,000 1,009,000 27-81959 15</td>	Designed Capacity experienced to-date Last Year Flow Classification Discharge Date Inflow Outflow Inflow Outflow Classification* 2 3 4 5 6 7 8 9 1,500,000 950,000 950,000 147-1942 153,000 155,000 101,000 125,000 Normal 950,000 950,000 147-1942 153,000 145,000 152,000 Normal 1,000,000 959,991 02-8-2010 181,000 164,000 152,000 Normal 1,000,000 1,161,000 16-8-1976 185,000 153,000 126,000 Normal 900,000 981,000 14-8-1956 626,000 600,000 75,000 Normal 540,000 981,000 10-9-1992 18,000 14,000 13,000 Normal 1,000,000 19,90,000 19-9192 18,000 14,000 13,000 Normal 1,000,000 1,009,000 27-81959 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B. Reservoir Storage Position:

D .			Water Level (Feet-AMSL)			Live Storage (MAF)			Present Storage
Reservoir	Conservation Level (Ft-AMSL)	Operating Level (Ft-AMSL)	2021	2022	2023	Maximum	Last Year	Today	(%age of total storage)
1	2	3	4	5	6	7	8	9	10
Tarbela	1550.00	1402.00	1531.50	1550.00	1547.90	5.809	5.827	5.688	97.92 %
Chashma	649.00	638.15	646.40	648.60	644.20	0.278	0.258	0.105	37.77 %
Mangla	1242.00	1050.00	1192.25	1191.40	1239.70	7.356	3.812	7.170	97.47 %
Total Live Storage				13.443	9.897	12.963	96.43 %		

C. Skardu Temperature:

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	Skardu Temperature	Last year 2022	Difference (+ /-)		
	Maximum	31.4 °C	29.2 °C	- 2.2 °C	
	Minimum	19.4 °C	9.3 °C	- 10.1 °C	

NOTES: "Mild" Categories Low Flood: Medium Flood:

High Flood:

River flowing within deep (winter) channel(s) but about to spill threatening only river islands/belas River partly inundating river islands/belas

River almost fully submerging islands/belas and flowing upto high banks/bunds but without encroachment on the freeboard

"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: (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.