



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

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DAILY WEATHER & FLOOD SITUATION REPORT
SUNDAY JULY 19, 2020

At present there is no riverine flood situation and all main rivers are flowing normal. Today's combined water storage position at Tarbela, Chashma and Mangla reservoirs is **7.789 MAF (57.21%** of the total existing Live Storage Capacity of **13.614 MAF**), which is quite healthy when compared with the corresponding value of last year i.e. **5.778 MAF**, as reflected in **Annexure-I**.


2. In view of higher level of **Mangla reservoir** (i.e. 1226.40 feet) as compared with the last year (i.e. 1170.75 feet) against the MCL of 1242.00 feet, extra vigilance both by the Mangla Dam Management, Flood Mitigation Committee (FMC), IRSA and FFD, Lahore is seen as an absolute necessity to ensure dam safety and to regulate any release as a consequence of any flood generating meteorological activity. As regards **Tarbela Dam**, this year there is much variance in the inflows at Tarbela owing to continuous fluctuations in temperature at Skardu. A 10-days comparison of this year's Skardu temperature and discharge of Indus River at Partab Bridge (1st Gauge Station at Indus River near Jaglote) with the corresponding observations of last year (2019) is attached at **Annexure-II**. It indicates significant variance in both weather parameters. Last year's Skardu temperature was 35° C as against today's value of 26.4 ° C indicating the maximum variation of 8.6° C whereas flow variation remained maximum for July 12 i.e. 126,900 Cusecs, as reported in yesterday's Daily Flood Situation Report as well.

3. Yesterday's trough of Westerly Wave over Northern Afghanistan today lies over Northeastern Afghanistan, however, yesterday upper air circulation over Arabian Sea has become insignificant. Weak Seasonal Low lies over Northern Balochistan with moist currents from Arabian Sea penetrating into upper parts of the Pakistan upto 5000 feet and are likely to intensify significantly during next 48 hours (**FFD, Lahore Daily Bulletin No. A-035/ 20 dated 19th July 2020**).

3. For the ensuing 24 hours, FFD, Lahore has predicted scattered wind thunderstorm/rain of moderate intensity with "**Isolated Heavy Falls**" over Punjab (Rawalpindi Gujranwala, Sargodha, Lahore, Faisalabad & Sahiwal Divisions), Khyber-Pakhtunkhwa, Gilgit Baltistan and Kashmir including upper catchments of all the major rivers. Isolated wind thunderstorm/rain has also been predicted over Southern Sindh, Coastal Balochistan and D.G. Khan Division during the same period. As a result of the forecasted rainfall, "**Urban Flooding**" is expected in Gujranwala, Lahore & Faisalabad from **20th July to 22nd July 2020**. Tributaries of Rivers Ravi & Chenab alongwith Hill Torrents of D.G. Khan Division may also experience "**Moderate Flooding**" during the same 72 hours period. Few rainfall events reported by FFD, Lahore for the past 24 hours may be seen at **Annexure-III**.

4. **Predicted Met Conditions (Next 72 hours):** Scattered to widespread wind thunderstorm/rain with "**Heavy Falls**" at isolated places and "**Very Heavy Falls**" at few places is expected over Gujranawala, Lahore, Sargodha, Sahiwal, Faisalabad, Bahawalpur, D.G. Khan & D.I. Khan Divisions including the upper catchments of Rivers Chenab, Ravi & Sutlej, besides, scattered wind thunderstorm/rain of **Moderate Intensity** with **few Heavy Falls** over Rawalpindi & Multan Divisions of Punjab, KP's Malakand, Hazara, Peshawar, Kohat & Bannu Divisions and Northeastern Balochistan in addition to the upper catchments of Rivers Indus & Jhelum during the next 72 hours.

5. Pakistan Meteorological Department (PMD) is actively monitoring the prevailing weather system with regards to its impact over Pakistan on Round-the-Clock basis and is keeping all concerned informed through its central Flood Forecasting Division in Lahore.


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

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14. Chairman, Indus River System Authority, Islamabad.
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29. Secretary (Works), Gilgit-Baltistan-PWD, Gilgit.
30. Director General, Provincial Disaster Management Authority, Government of the Punjab, Lahore.
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34. Director General, Gilgit Baltistan, Disaster Management Authority, Gilgit.
35. Director General, State Disaster Management Authority, Govt. of AJ&K, Muzaffarabad.
36. Director General, Irrigation & Small Dams Organization, Govt. of AJ&K, Muzaffarabad.
37. Principal Information Officer, Press Information Department, Islamabad.
38. Director (News), Associated Press of Pakistan, Islamabad.
39. Director (News), Pakistan Television, Islamabad.
40. Flood Cell, General Staff Branch, Engineer Directorate, GHQ, Rawalpindi.

U.O. No. FC-I (31)/2020, dated 19-07-2020

**Discharges at Important River Sites
July 19, 2020 at 0600 Hours**

(Figures in Cusecs)

Structures	Designed Capacity	Actual Flow		Comparative Danger (VHF) Classification	Actual Flood
		In Flow	Out Flow		
River Indus					
▪ Tarbela Reservoir	1,500,000	164,000	152,000	650,000	Normal
▪ Kalabagh	950,000	219,000	211,000	650,000	Normal
▪ Chashma Reservoir	1,000,000	215,000	208,000	650,000	Normal
▪ Taunsa [^]	1,000,000	221,000	197,000	650,000	Normal
▪ Guddu	1,200,000	179,000	143,000	700,000	Normal
▪ Sukkur ^{^^}	900,000	131,000	74,000	700,000	Normal
▪ Kotri	875,000	55,000	18,000	650,000	Normal
River Kabul					
▪ Warsak	540,000		35,000	200,000	Normal
▪ Nowshera			53,000	200,000	Normal
River Swat (Tributary of Kabul)					
▪ Chakdara Bridge			16,000	150,000	Normal
▪ Munda Head Works ^{^^^}	150,000		11,000	150,000	Normal
▪ Charsadda Road Bridge			11,000	100,000	Normal
River Jhelum					
▪ Mangla Reservoir	1,060,000	32,000	19,000	225,000	Normal
▪ Rasul	850,000	20,000	12,000	225,000	Normal
River Chenab					
▪ Marala	1,100,000	57,000	24,000	400,000	Normal
▪ Khanki	1,100,000	27,000	19,000	400,000	Normal
▪ Qadirabad	900,000	25,000	3,000	400,000	Normal
▪ Trimmu	645,000	18,000	3,000	450,000	Normal
▪ Panjnad	700,000	22,000	6,000	450,000	Normal
River Ravi					
▪ Jassar	275,000		11,000	150,000	Normal
▪ Shahdara	250,000		29,000	135,000	Normal
▪ Balloki	225,000	47,000	15,000	135,000	Normal
▪ Sidhnai	150,000	21,000	5,000	90,000	Normal
River Sutlej					
▪ Suleimanki	325,000	20,000	7,000	175,000	Normal
▪ Islam	300,000	8,000	6,000	175,000	Normal

Live Storage (MAF) ⁺

Reservoir Elevation (in Feet Above Mean Sea Level)	2020	2019	2018	Maximum	Today	Last Year
Tarbela: Maximum Conservation Level: 1550.00	1455.48	1490.17	1442.02	5.980	1.422	2.959
Minimum Operating Level: 1392.00						
Chashma: Maximum Conservation Level: 649.00	647.70	644.70	646.30	0.278	0.215	0.118
Minimum Operating Level: 637.00						
Mangla: Maximum Conservation Level: 1242.00	1226.40	1170.75	1128.40	<u>7.356</u>	<u>6.152</u>	<u>2.701</u>
Minimum Operating Level: 1050.00						
Total Live Storage				13.614	7.789	5.778

Skardu Temperature	Today 2020	Last year 2019
Maximum	26.4 °C	35.0 °C
Minimum	14.3 °C	22.0 °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 freeboard

"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:** (applied on downstream discharge/Outflow)

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

+ Based on IRSA's Daily Hydrological Data

^^ PID, Sindh vide letter No. DR/4-17/2015/839 dated 22-04-2015 informed that design discharge capacity of Sukkur Barrage has decreased from 1,500,000 cusecs to 900,000 cusecs due to closing of its ten (10) gates as a result of model study carried out in Poona during 1941-42 to control silting problem in right bank canals.

^ As per PID, Punjab's letter No. IWT&R/14/1108/04/97 dated 17-09-2014

^^^ As per PID, KP's letter No. 1271GSG-II/ dated 11-06-2018

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**2019-2020 Comparison of Discharges of Indus River
at Partab Bridge
(10th July to 19th July)**

Sr. No.	Date	Maximum Skardu Temperature (°C)			Discharge (Cusecs)		
		2019	2020	Variance	2019	2020	Variance
1	10-Jul	34.6	29.6	5.0	246,700	156,400	90,300
2	11-Jul	33.6	29.3	4.3	271,600	155,000	116,600
3	12-Jul	32.4	30.8	1.6	280,400	153,500	126,900
4	13-Jul	34.5	26.6	7.9	275,300	151,600	123,700
5	14-Jul	32.3	27.3	5.0	274,300	152,100	122,200
6	15-Jul	32.0	28.8	3.2	260,200	140,400	119,800
7	16-Jul	33.6	31.1	2.5	258,400	139,300	119,100
8	17-Jul	33.2	27.7	5.5	239,200	142,300	96,900
9	18-Jul	34.3	28.8	5.5	225,000	156,400	68,600
10	19-Jul	35.0	26.4	8.6	226,600	155,900	70,700

Source: For Discharge values, Surface Water Hydrology, WAPDA, Lahore and for temperature, FFD, Lahore

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Significant Rainfall Events during the Past 24 Hours

Sr. No.	City/Observatory	Rainfall (mm)
A	Punjab	
1.	Narowal	49
2.	Sialkot	15
3.	Lahore	8
B	Sindh	
1.	Dadu	22
2.	Padidan	16

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