

### 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 FRIDAY SEPTEMBER 02, 2022

#### **Rivers Hydrological Situation:**

River high flows are gradually receding. At present, **River Indus** is flowing in "**High Flood**" in **Guddu-Sukkur Reaches** and in "**Medium Flood**" at **Taunsa** & **Kotri. Normal Flow Conditions** prevail upstream **Chashma** on **Indus.** Flood flows in **River Kabul** (a tributary of River Indus) at **Nowshera** have receded considerably where it is flowing in "**Low Flood**" at the time of reporting today.

2. Other main Rivers of Indus River System i.e Jhelum, Chenab, Ravi & Sutlej continues to flow with Normal discharges. For main main rivers inflows/outflows at important control structures, at 0600 hours today **Annexure-I** is referred.

#### **Reservoirs Storage Position:**

3. Tarbela Reservoir Management authorities are maintaining it at its Maximum Conservation Level (MCL) of 1550.00 feet since 28<sup>th</sup> August 2022. Water level in Mangla Dam at present is at an El: 1187.45 feet against its MCL: 1242 feet (51.24 % storage still left), whereas Chashma Reservoir is at an Elevation of 648.10 feet. Present Combined Live Storage of Tarbela, Chashma & Mangla Reservoirs is 9.646 MAF (i.e. 71.646 % of 13.461 MAF. WAPDA Authorities both at Tarbela & Chashma and field formations of Punjab & Sindh Irrigation Departments are continuing with their extra vigilance in the reservoir/ barrage operations for effective flood routing and for the overall protection of river flood infrastructure down the line which remained in heavy pressure.

#### Prevalent Meteorological Situation and Next 24 hours Weather & Rainfall Forecast:

4. **Weak Seasonal Low** continues to prevail over Northeastern Balochistan and adjoining areas while **Weak Moist currents** from Arabian Sea are penetrating into upper parts of Pakistan upto 3000 feet. For the ensuing 24 hours, FFD, Lahore has predicted mainly dry weather over most parts of the country, however has also predicted isolated thunderstorm/rain over upper catchments of all the Major Rivers of Indus River System. No significant rainfall events has been reported for the past 24 hours except for Khyber Pakhtunkhwa (Daggar=19 mm).

# Weather Outlook & Flood Forecast (3<sup>rd</sup> to 9<sup>th</sup> September 2022):

5. According to FFD, Lahore, **Scattered Thunderstorm /Rain** with **Isolated Heavy Falls** is expected over the upper catchments of all the Major Rivers from **4**<sup>th</sup> to **6**<sup>th</sup> **September 2022.** During the same time period, **Medium** to **High Level Flooding** is likely to continue in **River Indus** (downstream Taunsa).

#### **Continued Precautionary Measures By Concerned Organizations:**

6. All concerned organizations including field formations of **Irrigation Departments Punjab** and **Sindh** are continuing with their unhalted watch and patrolling of flood embankments especially those which are sustaining high water pressure. Prompt flood fighting as and when needed to protect flood protection infrastructures is also being exercised. Further they are advised to remain on "**High Alert**", take all necessary precautionary measures as per their respective flood fighting and Contingency Plans.

#### Specific Directions For Dam/Reservoir/Barrages Management Organizations:

- 7. Managers of major reservoirs/barrages, in particular of **Taunsa**, **Guddu** & **Sukkur** are advised to continue with present river Indus flood discharge management for effective flood routing downstream.
- 8. O/o Pakistan Commissioner for Indus Water (PCIW) is to 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 Levels (MCLs) as the monsoon season is still ongoing.
- 9. All concerned organizations including **PDMAs/DDMAs** are also advised to remain **Fully Alert & Vigilant**, take timely actions on warnings issued by the concerned organizations to ensure safety of communities living in low lying areas, public & private property besides irrigation, drainage & flood protection infrastructure etc.
- 10. Pakistan Meteorological Department (PMD) is closely monitoring the present weather system over the country and is keeping all concerned fully informed through FFD, Lahore.

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

#### **Distribution:**

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- 9. Director General (Coordination-III), President's Secretariat (Public), Aiwan-E-Sadr, Islamabad.
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- 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.
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- 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. Chief Commissioner, ICT, Islamabad.
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- 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.
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- 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 02-09-2022

#### **Copy for information to:**

PS to CEA/ CFFC, Islamabad

## **Rivers and Reservoir Positions September 02, 2022 at 0600 Hours**

#### A. River Flow Situation:

(Discharge in Cusecs)

Designed Capacity	Historic Peak Floods experienced to-date*		Last Year Flow		Today Actual Flow with Flood Classification			Comparative Danger
	Discharge	Date	Inflow	Outflow	Inflow	Outflow	Flood Classification*	(VHF) Classificatio n
2	3	4	5	6	7	8	9	10
1,500,000	604,000		. ,		162,000	154,000	Normal	650,000
950,000	950,000	14-7-1942	,	117,000	194,000	187,000	Normal	650,000
950,000	1,036,673	01-8-2010	140,000	136,000	124,000	104,000	Normal	650,000
1,000,000	959,991	02-8-2010	158,000	138,000	417,000	417,000	Med Flood (F)	650,000
1,200,000	1,199,672	15-8-1976	129,000	99,000	558,000	558,000	High Flood (R)	700,000
900,000	1,161,000	16-8-1976	84,000	34,000	532,000	532,000	High Flood (R)	700,000
875,000	981,000	14-8-1956	25,000	NIL	447,000	440,000	Med Flood (R)	650,000
540,000				18,000		34,000	Normal	200,000
	450,000	29-07-2010		19,000		71,000	Low Flood (F)	200,000
	360,000	30-07-2010		10,000		14,000	Normal	150,000
	355,000	29-07-2010		2,000		17,000	Normal	150,000
150,000	360,000	30-07-2010		3,000		17,000	Normal	100,000
1.060.000	1,090,000	10-9-1992	15,000	37,000	28,000	8,000	Normal	225,000
850,000	952,170	10-9-1992	31,000	12,000	6,000	NIL	Normal	225,000
					ĺ			
1.100.000	1,100,000	26-8-1957	40,000	5,000	52,000	22,000	Normal	400,000
1,100,000	1,086,460	27-8-1959	9,000	2,000	34,000	26,000	Normal	400,000
900,000	948,530	11-9-1992	17,000	NIL	22,000	2,000	Normal	400,000
875,000	943,225	08-7-1959	29,000	13,000	40,000	25,000	Normal	450,000
865,000	802,516	17-8-1973	11,000	NIL	38,000	26,000	Normal	450,000
275,000	680,000	05-10-1955		3,000		6,000	Normal	150,000
250,000	680,000	22-9-1988		19,000		15,000	Normal	135,000
380,000	336,200	28-9-1988	35,000	7,000	36,000	8,000	Normal	135,000
150,000	330,210	02-10-1988	17,000	NIL	18,000	2,000	Normal	90,000
325,000	598,872	08-10-1955	16,000	2,000	19,000	7,000	Normal	175,000
·	<i>′</i>		í í	NIL	· /			175,000
	2 1,500,000 950,000 1,000,000 1,200,000 875,000 540,000 1,060,000 850,000 1,100,000 900,000 875,000 275,000 250,000 380,000 150,000	Designed Capacity         experience           Discharge         2           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         360,000           540,000         355,000           355,000         360,000           1,060,000         1,090,000           850,000         952,170           1,100,000         1,086,460           900,000         948,530           875,000         943,225           865,000         802,516           275,000         680,000           380,000         336,200           380,000         336,200           325,000         598,872	Designed Capacity         experienced to-date*           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           875,000         981,000         14-8-1956           540,000         29-07-2010           360,000         30-07-2010           355,000         29-07-2010           150,000         360,000         30-07-2010           1,060,000         1,090,000         10-9-1992           1,100,000         1,090,000         10-9-1992           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         802,516         17-8-1973           275,000         680,000         22-9-1988           380,000         336,200         28-9-1988           150,000 <td>Designed Capacity         experienced to-date*         Last Y           2         3         4         5           1,500,000         604,000         30-7-2010         117,000           950,000         950,000         14-7-1942         124,000           950,000         1,036,673         01-8-2010         140,000           1,000,000         959,991         02-8-2010         158,000           1,200,000         1,199,672         15-8-1976         129,000           900,000         1,161,000         16-8-1976         84,000           875,000         981,000         14-8-1956         25,000           540,000         29-07-2010         355,000         30-07-2010           150,000         360,000         30-07-2010         31,000           1,060,000         1,090,000         10-9-1992         15,000           850,000         952,170         10-9-1992         17,000           1,100,000         1,086,460         27-8-1959         9,000           1,100,000         1,086,460         27-8-1959         9,000           875,000         943,225         08-7-1959         29,000           865,000         802,516         17-8-1973         11,000</td> <td>  Designed Capacity   Discharge   Date   Inflow   Outflow    </td> <td>  Designed Capacity</td> <td>  Designed Capacity</td> <td>  Designed Capacity</td>	Designed Capacity         experienced to-date*         Last Y           2         3         4         5           1,500,000         604,000         30-7-2010         117,000           950,000         950,000         14-7-1942         124,000           950,000         1,036,673         01-8-2010         140,000           1,000,000         959,991         02-8-2010         158,000           1,200,000         1,199,672         15-8-1976         129,000           900,000         1,161,000         16-8-1976         84,000           875,000         981,000         14-8-1956         25,000           540,000         29-07-2010         355,000         30-07-2010           150,000         360,000         30-07-2010         31,000           1,060,000         1,090,000         10-9-1992         15,000           850,000         952,170         10-9-1992         17,000           1,100,000         1,086,460         27-8-1959         9,000           1,100,000         1,086,460         27-8-1959         9,000           875,000         943,225         08-7-1959         29,000           865,000         802,516         17-8-1973         11,000	Designed Capacity   Discharge   Date   Inflow   Outflow	Designed Capacity	Designed Capacity	Designed Capacity

#### **B.** Reservoir Storage Position:

ъ .	Maximum	Minimum Operating Level (Ft-AMSL)	Water Level ( Feet-AMSL)			Live Storage (MAF)			Present Storage
Reservoir	Conservation 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	1548.55	1550.00	5.827	5.799	5.827	100 %
Chashma	649.00	638.15	638.15	638.15	648.10	0.278	0.000	0.232	83.45 %
Mangla	1242.00	1050.00	1242.00	1197.35	1187.45	7.356	4.169	3.587	48.76 %
Total Live Storage					13.461	9.968	9.646	71.66 %	

# C. Skardu Temperature:

Skardu Temperature	Last year 2021	Today 2022	Difference ( + /- )
Maximum	23.6 °C	28.8 °C	+ 5.2 °C
Minimum	13.3 °C	12.4 °C	- 0.9 °C

NOTES: "Mild" Categories

Low Flood: Medium 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 freeboards High Flood:

"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"\ And the condition\ Barrier (\ Rising)\ Flood, (\ F\ )\ Signifies\ "Stable"\ Flow\ Condition\ Barrier (\ Flow\ Condition\$