

### 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 MONDAY SEPTEMBER 05, 2022

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

Flood Flows in **River Indus** are receding gradually. At present it is flowing in "**High Flood**" at **Kotri** (the last control structure on River Indus before Arabian Sea) and in "**Medium Flood**" in **Guddu-Sukkur Reach.** It is discharging **Normal Flows** at rest of its control structures (**Tarbela, Kalabagh, Chashma & Taunsa**). Other main Rivers of Indus River System i.e Jhelum, Chenab, Ravi & Sutlej continues to flow with Normal Flow Conditions. **Annexure-I** depicts the main rivers inflows/outflows at important control structures, at 0600 hours today.

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

2. Tarbela Reservoir Management authorities are maintaining it at its Maximum Conservation Level (MCL: 1550.00 feet) since 28<sup>th</sup> August 2022. At present water level in Mangla Dam is 1189.20 feet against its MCL: 1242 feet (49.92 % storage still left) whereas water level in Chashma Reservoir is 648.60 feet (Just 0.40 feet below its MCL: 649.00 feet). Present Combined Live Storage of Tarbela, Chashma & Mangla Reservoirs is 9.769 MAF (i.e. 72.57 % of 13.461 MAF. WAPDA Authorities both at Tarbela & Chashma and field formations of Sindh Irrigation Departments are continuing with their extra vigilance in the reservoir/ barrage operations for effective flood routing.

### **Prevalent Meteorological Situation** (Source: FFD, Lahore):

3. Trough of **Westerly Wave** continues to prevail over Northern parts of Pakistan with **Seasonal Low** lies over Northeastern Balochistan and adjoining areas. At present, **Moderate Moist Currents** from Arabian Sea are penetrating into upper parts of Pakistan upto 5000 feet.

#### Next 24 hours Weather, Rainfall & Flood Forecast:

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 Divisions) and Khyber Pakhtunkhwa including upper catchments of all Major Rivers of Indus River System. As a consequence, Low to Medium Level flooding is expected in the Nullahs of Rivers Ravi & Chenab including River Kabul & its Tributaries during next 24 hours. Significant rainfall events reported by FFD, Lahore during past 24 hours may be seen at Annexure-II.

# Weather Outlook & Flood Forecast (6<sup>th</sup> to 12<sup>th</sup> September 2022):

5. A fresh **Wet Spell** of **Moderate Intensity** is likely to start over the upper catchments of all the Major Rivers of Indus River System from 10<sup>th</sup> **September 2022**. **High Level Flooding** is likely to continue in **River Indus** at **Kotri** (Ref: FFD, Lahore, Bulletin No. C-083/22).

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

6. All concerned organizations including field formations of **Irrigation Department 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 **Guddu**, **Sukkur & Kotri** are advised to continue with present river Indus flood discharge management for effective flood routing.
- 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 Enginedring Advisor/
Chairman, Federal Flood Commission

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- 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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- 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 05-09-2022

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

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# **Rivers and Reservoir Positions September 05, 2022 at 0600 Hours**

#### A. River Flow Situation:

#### (Discharge in Cusecs)

| Structures         | Designed<br>Capacity | Historic Peak Floods experienced to-date* |            | Last Year Flow |         | Today Actual Flow with Flood Classification |         |                          | Comparative<br>Danger       |
|--------------------|----------------------|---|------------|----------------|---------|---|---------|--------------------------|-----------------------------|
| Structures         |                      | Discharge                                 | Date       | Inflow         | Outflow | Inflow                                      | Outflow | Flood<br>Classification* | (VHF)<br>Classificatio<br>n |
| 1                  | 2                    | 3   | 4          | 5              | 6       | 7   | 8       | 9                        | 10                          |
| River Indus        |                      |   |            |                |         |   |         |                          |                             |
| Tarbela Reservoir  | 1,500,000            | 604,000                                   | 30-7-2010  | 90,000         | 158,000 | 161,000                                     | 155,000 | Normal                   | 650,000                     |
| Kalabagh           | 950,000              | 950,000                                   | 14-7-1942  | 181,000        | 174,000 | 181,000                                     | 173,000 | Normal                   | 650,000                     |
| Chashma Reservoir  | 950,000              | 1,036,673                                 | 01-8-2010  | 184,000        | 164,000 | 239,000                                     | 221,000 | Normal                   | 650,000                     |
| Taunsa             | 1,000,000            | 959,991                                   | 02-8-2010  | 155,000        | 136,000 | 215,000                                     | 201,000 | Normal                   | 650,000                     |
| Guddu              | 1,200,000            | 1,199,672                                 | 15-8-1976  | 125,000        | 95,000  | 390,000                                     | 390,000 | Med Flood (F)            | 700,000                     |
| Sukkur             | 900,000              | 1,161,000                                 | 16-8-1976  | 93,000         | 40,000  | 499,000                                     | 499,000 | Med Flood (F)            | 700,000                     |
| Kotri              | 875,000              | 981,000                                   | 14-8-1956  | 24,000         | NIL     | 599,000                                     | 584,000 | High Flood (R)           | 650,000                     |
| River Kabul        |                      |   |            |                |         |   |         |                          |                             |
| Warsak             | 540,000              |   |            |                | 16,000  |   | 26,000  | Normal                   | 200,000                     |
| Nowshera           |                      | 450,000                                   | 29-07-2010 |                | 12,000  |   | 51,000  | Normal                   | 200,000                     |
| River Swat         |                      |   |            |                |         |   |         |                          | I                           |
| Chakdara Bridge    |                      | 360,000                                   | 30-07-2010 |                | 9,000   |   | 13,000  | Normal                   | 150,000                     |
| • Munda( H. Works) |                      | 355,000                                   | 29-07-2010 |                | 2,000   |   | 17,000  | Normal                   | 150,000                     |
| Charsadda Road     | 150,000              | 360,000                                   | 30-07-2010 |                | 5,000   |   | 17,000  | Normal                   | 100,000                     |
| River Jhelum       |                      |   |            |                |         |   |         |                          | İ                           |
| Mangla Reservoir   | 1,060,000            | 1,090,000                                 | 10-9-1992  | 17,000         | 34,000  | 35,000                                      | 9,000   | Normal                   | 225,000                     |
| • Rasul            | 850,000              | 952,170                                   | 10-9-1992  | 30,000         | 8,000   | 3,000                                       | NIL     | Normal                   | 225,000                     |
| River Chenab       |                      |   |            |                |         | ĺ   |         |                          |                             |
| Marala             | 1.100.000            | 1,100,000                                 | 26-8-1957  | 33,000         | 5,000   | 69,000                                      | 38,000  | Normal                   | 400,000                     |
| Khanki             | 1,100,000            | 1,086,460                                 | 27-8-1959  | 8.000          | NIL     | 47,000                                      | 39,000  | Normal                   | 400,000                     |
| Qadirabad          | 900,000              | 948,530                                   | 11-9-1992  | 18,000         | NIL     | 30,000                                      | 10,000  | Normal                   | 400,000                     |
| • Trimmu           | 875,000              | 943,225                                   | 08-7-1959  | 16,000         | NIL     | 30,000                                      | 14,000  | Normal                   | 450,000                     |
| Panjnad            | 865,000              | 802,516                                   | 17-8-1973  | 15,000         | NIL     | 27,000                                      | 14,000  | Normal                   | 450,000                     |
| River Ravi         |                      |   |            |                |         | ,   |         |                          | l                           |
| • Jassar           | 275,000              | 680,000                                   | 05-10-1955 |                | 3,000   |   | 7,000   | Normal                   | 150,000                     |
| Shahdara           | 250,000              | 680,000                                   | 22-9-1988  |                | 15,000  |   | 16,000  | Normal                   | 135,000                     |
| Balloki            | 380,000              | 336,200                                   | 28-9-1988  | 28,000         | NIL     | 35,000                                      | 9,000   | Normal                   | 135,000                     |
| Sidhnai            | 150,000              | 330,210                                   | 02-10-1988 | 18,000         | 1,000   | 19,000                                      | 2,000   | Normal                   | 90,000                      |
| River Sutlej       |                      |   | <b></b>    |                |         |   |         |                          | <b></b>                     |
| Suleimanki         | 325,000              | 598,872                                   | 08-10-1955 | 15,000         | 2,000   | 16,000                                      | 3,000   | Normal                   | 175,000                     |
| • Islam            | 300,000              | 492,581                                   | 11-10-1955 | 1,000          | NIL     | 6,000                                       | 5,000   | Normal                   | 175,000                     |

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

| Maximum            |                                 | Minimum                      | Water Level ( Feet-AMSL) |         |         | Live Storage (MAF) |           |       | Present Storage         |  |
|--------------------|---------------------------------|------------------------------|--------------------------|---------|---------|--------------------|-----------|-------|-------------------------|--|
|                    | Conservation<br>Level (Ft-AMSL) | Operating<br>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                  | 1541.30 | 1550.00 | 5.827              | 5.385     | 5.827 | 100 %                   |  |
| Chashma            | 649.00                          | 638.15                       | 640.00                   | 644.30  | 648.60  | 0.278              | 0.108     | 0.258 | 92.81 %                 |  |
| Mangla             | 1242.00                         | 1050.00                      | 1242.00                  | 1194.95 | 1189.20 | 7.356              | 4.025     | 3.684 | 50.08 %                 |  |
| Total Live Storage |                                 |                              |                          | 13.461  | 9.518   | 9.769              | 72.57 %   |       |                         |  |

#### C. Skardu Temperature:

| Skardu Temperature | Last year 2021 | Today 2022 | Difference ( + /- ) |
|--------------------|----------------|------------|---------------------|
| Maximum            | 31.3 °C        | 32.6 °C    | + 1.3 °C            |
| Minimum            | 10.5 °C        | 13.4 °C    | + 2.9 °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\ Received"\ Received "Stable"\ Flow\ Condition\ Received "Stable"\ Flow\  

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# Significant Rainfall Events during the Past 24 Hours

| Sr. No. | City/Observatory                             | Rainfall (mm) |  |  |  |  |
|---------|--|---------------|--|--|--|--|
| A       | Punjab                                       |               |  |  |  |  |
| 1.      | Islamabad                                    | 51            |  |  |  |  |
| 2.      | Daulatnagar                                  | 49            |  |  |  |  |
| 3.      | Sialkot                                      | 47            |  |  |  |  |
| 4.      | Kallar                                       | 39            |  |  |  |  |
| 5.      | Gujrat                                       | 37            |  |  |  |  |
| 6.      | Attock                                       | 33            |  |  |  |  |
| 7.      | Mangla                                       | 34            |  |  |  |  |
| 8.      | Kamra & Haraman                              | 18 each       |  |  |  |  |
| 9.      | Rohtas & Jhelum                              | 12 each       |  |  |  |  |
| 10.     | Murree & Marala                              | 06 each       |  |  |  |  |
| В       | Khyber Pakhtunkhwa                           |               |  |  |  |  |
| 11.     | Kakul  | 92            |  |  |  |  |
| 12.     | Daggar                                       | 43            |  |  |  |  |
| 13.     | Buner  | 34            |  |  |  |  |
| 14.     | Phulra                                       | 29            |  |  |  |  |
| 15.     | Pashat-Bajaur                                | 17            |  |  |  |  |
| 16.     | Tirah-Khyber                                 | 15            |  |  |  |  |
| 17.     | Tarbela                                      | 13            |  |  |  |  |
| 18.     | Saidu Sharif                                 | 12            |  |  |  |  |
| 19.     | Risalpur                                     | 09            |  |  |  |  |
| 20.     | Peshawar & Takht Bai                         | 07 each       |  |  |  |  |
| 21.     | Malam Jabba & Mardan                         | 06 each       |  |  |  |  |
| C       | AJ&K   |               |  |  |  |  |
| 22.     | Domel  | 61            |  |  |  |  |
| 23.     | Rawalakot                                    | 46            |  |  |  |  |
| 24.     | Kotli  | 40            |  |  |  |  |
| 25.     | Muzaffarabad & Bandi Abbaspur                | 36 each       |  |  |  |  |
| 26.     | Chakothi                                     | 07            |  |  |  |  |
| 27.     | Garhi Dopatta                                | 05            |  |  |  |  |
| Source: | Source: FFD, Lahore (Phone No. 042 99200139) |               |  |  |  |  |