

## Pre-Flood Arrangements for Monsoon-2021

Sr. No.	Arrangements to be Made	Action Taken
a.	Issue instructions to the gauge readers and arrange for them to reside at site & activate communication channels	HF Radio Communication Network remains activated round the year and is working satisfactorily for communication of rainfall & flood discharge data during flood season
b.	Activate wireless communication center at Sunny View	Wireless communication center at sunny view Lahore is already working & during flood season it will work round the clock for effective communication with all the stakeholders
c.	Nominate representatives / Liaison Officers to Provincial Flood Warning Centre	Mr. Haroon Pervaiz, Sub Engineer, Hydrology & Research Directorate, WAPDA.
d.	Update inventory of machinery / equipment showing type, distribution & location	Necessary machinery/equipment is ready at Tarbela, Mangla and Chashma Reservoirs to meet with any emergency situation during floods. Inventory of machinery/equipment are being maintained/updated by respective projects
e.	Regulate water supply through Mangla & Tarbela Dams	Mangla, Tarbela & Chashma reservoirs will be operated to accommodate and pass the flood according to approved SOP's keeping in view the safety of the structure
f.	Carry out Post Flood Survey of Damages & issue flood report	Post Flood Survey of Damages & flood report Will be carried out by the respective projects
g.	Update the existing flood fighting plans optimizing the available resources to meet any eventuality due to the ensuing flood / heavy rains	Updated pre-flood arrangements / contingency plan monsoon-2021 is enclosed as <b>Annex-A</b> .

## **Pre-Flood Arrangements / Contingency Plan for Monsoon-2021**

WAPDA reinforces flood impact mitigation through operational management of major water reservoirs i.e. Tarbela, Mangla & Chashma and also Monitors River flows through deployment of Flood Forecasting Telemetry System & High Frequency (HF) Radio Telecommunication Network.

### **Role of WAPDA during Flood Season**

Major roles of WAPDA During flood season are:

1. Collection and transmission of rainfall & flood discharge data to Flood Forecasting Division (FFD) Lahore.
2. Regulation of Tarbela, Mangla and Chashma reservoirs for flood mitigation.

#### **1. Data Collection & Transmission**

Flood data is collected & transmitted by following two systems:

- A. High Frequency (HF) Radio Telecommunication Network
- B. Flood Forecasting Telemetry Network

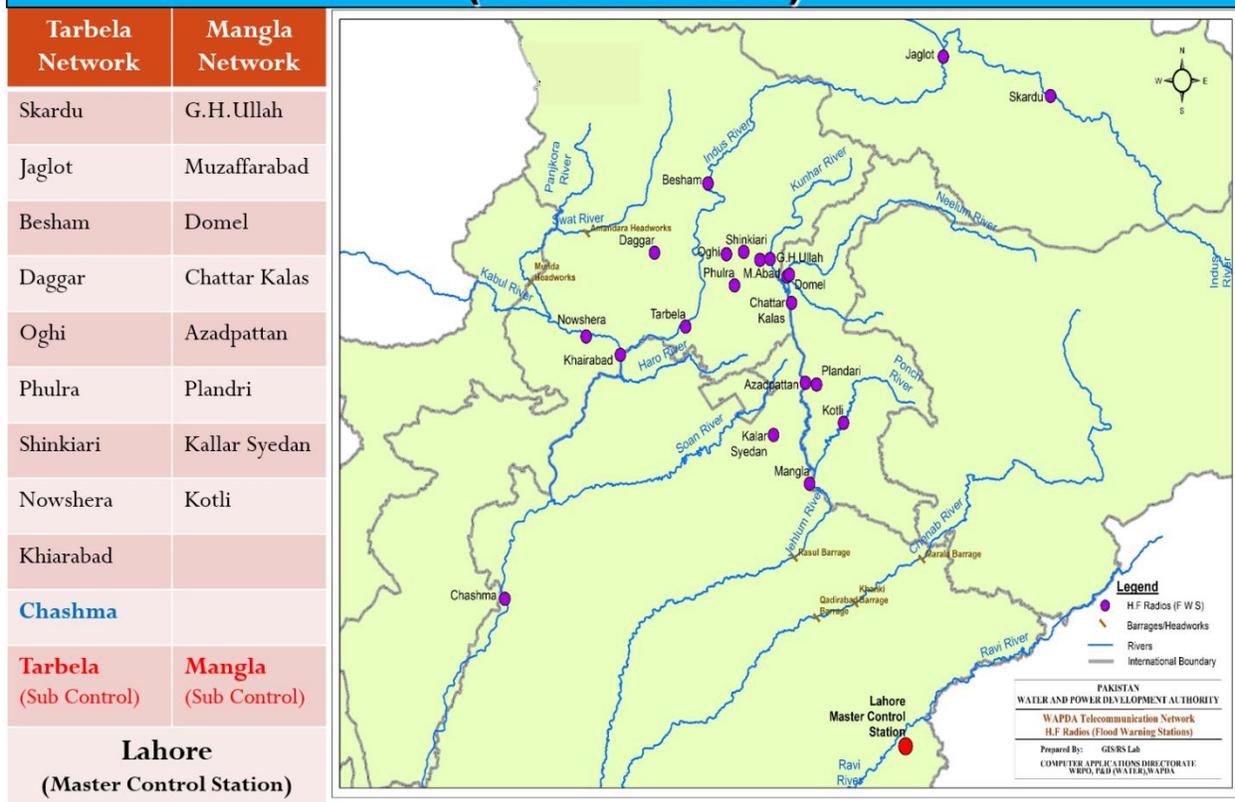
##### **A. High Frequency (HF) Radio Telecommunication Network**

HF Radio Telecommunication System comprises of:

- 18 flood warning stations,
- 2 sub data receiving / transmitting stations
- 1 main data receiving and dissemination station

From all these stations data is manually collected and transmitted through HF Radio Communication System. At each Flood Warning station, provision of at least three wireless operators has been made to keep the H.F. Radio communication system in operation round the clock.

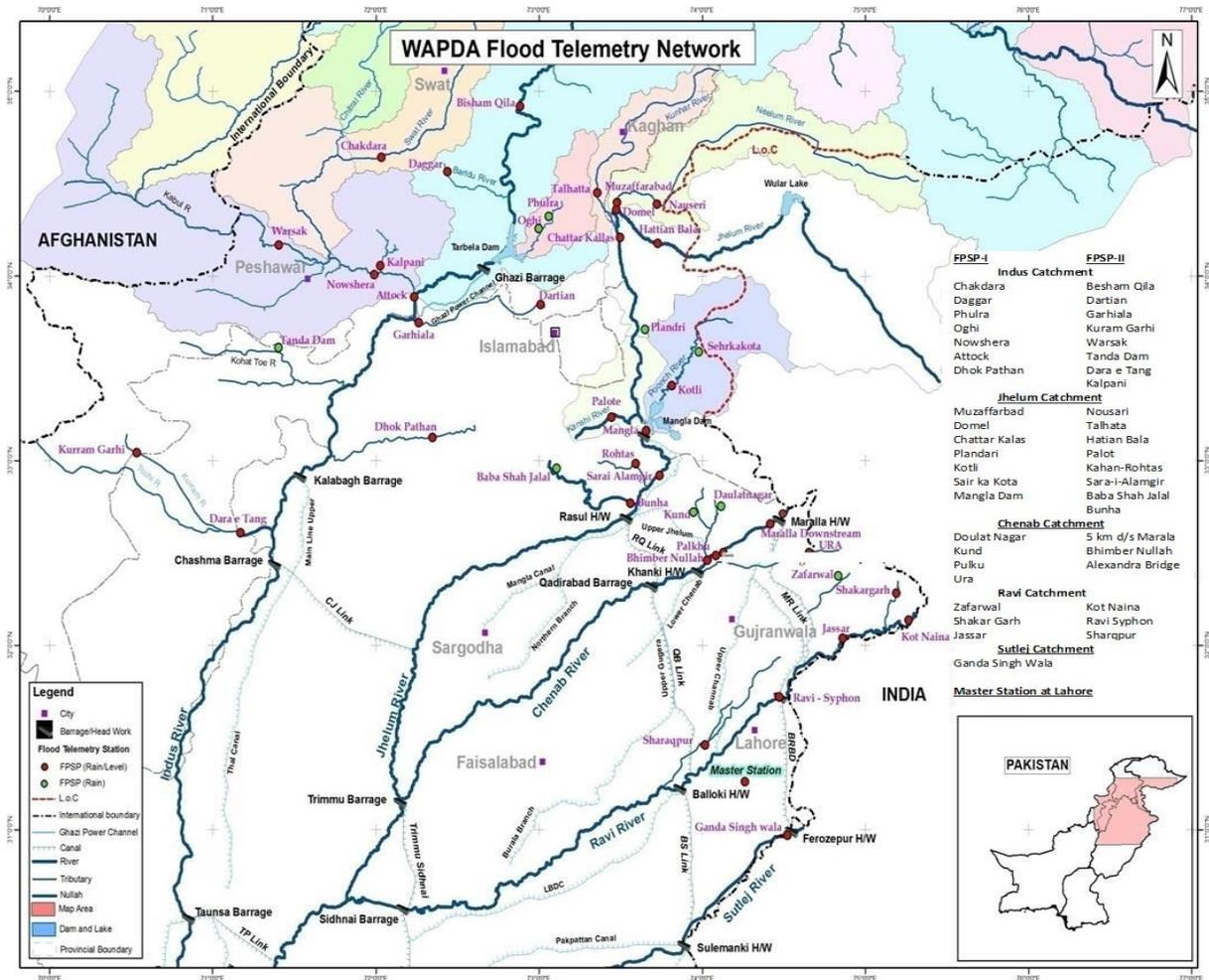
# WAPDA TELECOMMUNICATION NETWORK (H.F. RADIOS)



## B. Flood Forecasting Telemetry Network

Hydrology and Research Directorate (H&RD) WAPDA is responsible for acquisition of hydro-meteorological data through Telemetric and Hydromet Networks and dissemination of the same to the national institutions such as PMD, FFC, Provincial Irrigation Departments and Research Institutions etc. This data is then processed and supplied to Flood Forecasting Division of Pakistan Meteorological Department (PMD) Lahore for use in computer models for flood forecasting and timely issuance of flood warnings.

- Concerned staff working with flood telemetric stations has been directed to remain vigilant before and during the monsoon 2021.
- One No. officer has been nominated to work as Liaison Officer during the monsoon 2021 at the Provincial Flood Warning Centre.
- About 07 FFT stations out of 44 are not functioning. Their upgradation is under progress which is delayed due to COVID-19 Pandemic situation. Hopefully the network will be fully functional before the monsoon season 2021.



## 2. Regulation of Tarbela, Mangla and Chashma Reservoirs

Following points are kept in mind while regulation of the reservoirs:

- Reservoirs operation is carried out as per approved procedures
- Safety of structures is kept at prime importance
- Synchronization of flood peaks are avoided through continuous monitoring
- All flood related activities are monitored vigilantly & effectively throughout the flood season

## Preparedness of WAPDA for Monsoon Season 2021

WAPDA has undertaken following preparedness measures for monsoon season 2021:

- HF Radio Network & gauges are fully functional whereas Flood Telemetry Network is partially functional and data on River Levels & Catchment Rainfall is being received regularly without any interruption for issuance of early warnings. Moreover the staff at flood warning stations has been directed to be more vigilant.
- All safety measures have been taken to route all type of floods through Tarbela, Mangla and Chashma reservoirs.
- Experiences of past floods for reservoir operation will be kept in focus while combating future floods.

4. Heavy Machinery at dams and Chashma Barrage is available to meet with any emergent situation arising during the flood.
5. Instrumentation of the dams is being monitored continuously and is working properly.
6. Flood control rooms at Tarbela, Mangla and Chashma Reservoirs will be established to work round the clock during the flood season.
7. Following Flood Information Centers will also work round the clock during the flood season:
  - a. Flood Information center at Lahore in Room No. 227 Wapda House Lahore, Phone No. 042-99202483
  - b. Wireless Communication Center Sunny View Lahore, Phone No. 042-99202783
  - c. Flood Information Center at 27-Jail Road Lahore, Phone No. 042-99201500