

## 1. Introduction

Hydrology and Water Resources Services Division (HWRSD) is one of the four Divisions of the Center, responsible for generating and disseminating information and services related to hydrology and water resources.

The Division collects and archives daily data from the river gauging station located across the country, to keep updated on the status of the flow, the Division is coming up with Monthly Flow Monitoring Report in selected hydrological stations located in different river basins. Currently, following stations (figure 1) are selected for monthly monitoring of the flow;

1. Lungtenphu station in Wangchu,
2. **Kerabaristaion in Punatsangchhu basin and**
3. Bjizam station in Mangdechhu basin.

The main objective of the report is to understand and keep updated flow status of the river and further provide information on the abnormal data observation while comparing with the historical flow data.

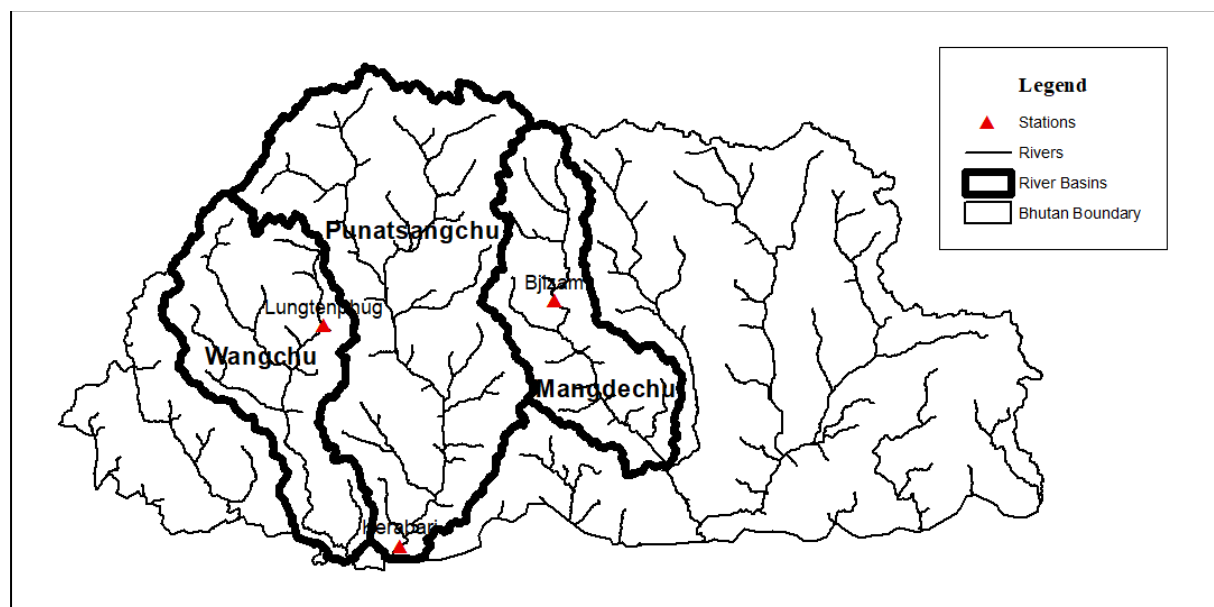


Figure 1 Map showing the selected stations for Flow monitoring

## 2. Methodology

The flow of May 2020 is compared to the flow of historical May months. The historical flow data is available from 2008 to 2018. The measures of dispersion such as mean, maximum and minimum flows are computed to make comparison.

### 3. Observation

The minimum flow recorded for the month of May 2020 was 174.92m<sup>3</sup>/s. It is the highest minimum flow compared to the past historical record (2008-2018) during the May months. Overall, the average flow has been higher than the normal. The Maximum flow of May 2020 was observed to be lesser than the maximum flow observed in the past for May months.

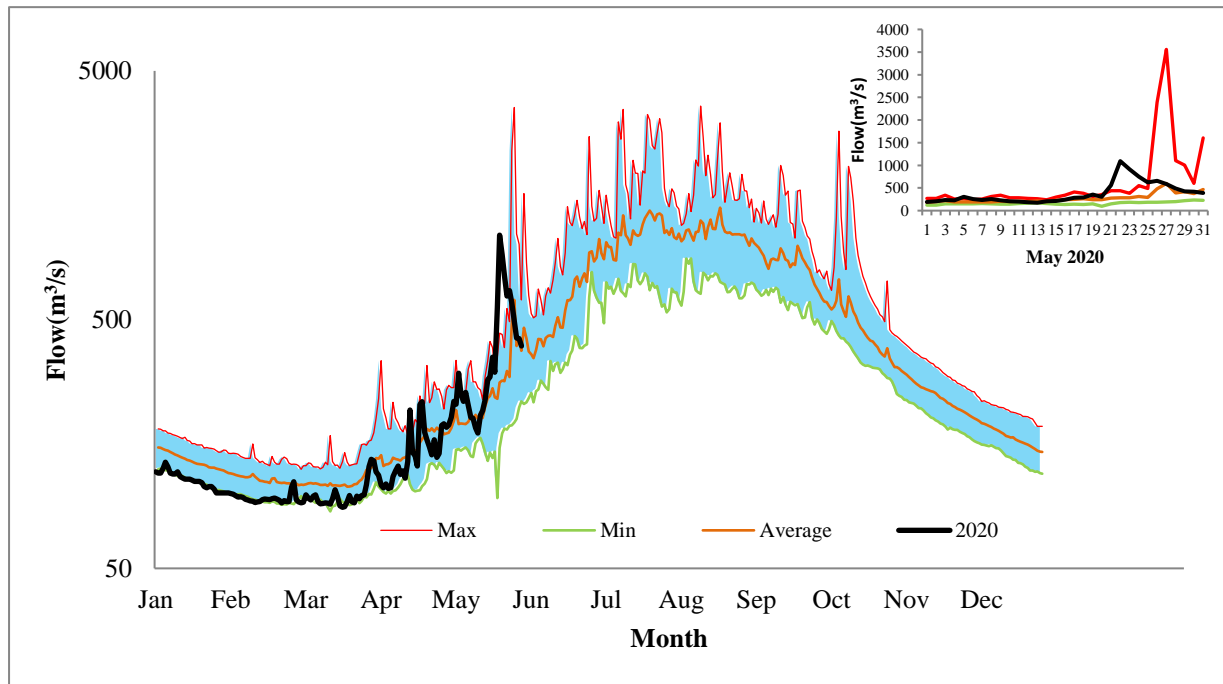


Figure 2 Daily flow status of May 2020 as compared to historical daily flow data of May months

Table 1 Table of flow statistics comparison between May of 2020 and historical May (2008-2018).

Statistics	May 2020 (m <sup>3</sup> /s)	Historical May (2008-2018)m <sup>3</sup> /s
Mean flow	377.28	271.37
Max flow	1093.05	3558.56
Min flow	174.92	95.96

### 4. Summary

1. The mean flow of May 2020 is observed to be 105.91 m<sup>3</sup>/s higher compared to the mean of Normal flow (Historical May).
2. The minimum flow is observed to be higher by 78.96m<sup>3</sup>/s for May 2020 compared to the minimum flow observed in the past for May months.
3. The Maximum flow of May 2020 was observed to be lesser than the maximum flow observed in the past for May months.