

**Mobile Application for  
Jal Shakti (Irrigation & Flood Control)  
Jammu & Kashmir Government  
Version 1.0  
(2021)**

**Flood Early Warning Monitoring System (FEWS)**

Realtime Monitoring of River water levels  
at different Guage sites

**Submitted by:-**

**National informatics Centre  
District Centre Srinagar  
Ministry of Communications & Information Technology  
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## **1. Introduction**

### **1.1 Background**

Jal Shakti (Irrigation & Flood Control) department monitors the guage & discharge stations of River Jehlum. The data regarding the guage levels is being provided manually from each site to the department by the concerned officials deputed at various sites. Importance of Guage readings have increased post September 2014 Floods. The timely information regarding the levels is very crucial for the department to monitor the situation and to provide the same information to general public.

### **1.2 Objectives of the Mobile App**

The department has installed Automatic Water Level Recorders (AWLR) which provide the data in realtime to designated officials through SMS. The department desires to provide the same data to general public through Mobile App instead of consolidating the hourly / site wise data manually and sharing through App/ email / social media etc.

### **1.3 Drawback of existing System to collect information from field level departments**

- The present system to collect the information is manual.
- Hourly data collected from different sites has to be entered manually and there are higher chances of incorrect data being updated.
- Department has to keep record of all the Hydraulic data manually.

## 2. Proposed System

### 2.1 Features of proposed Mobile App

- The data updated by the concerned officials through Mobile app will be updated in realtime.
- The mobile app will be configured with the AWLRs to get the realtime data automatically.
- The Mobile App will enable the department to maintain the real time data from each site for official use.
- The data regarding the water levels at different sites can be shared with general public to keep them updated in case of any emergency arising out of heavy rainfall / breach etc.
- The data collected can be related with weather forecast and correlated with the previous weather history for better decision making.

## 3. Role & Responsibility.

### 3.1 Role of NIC District Centre Srinagar, J&K

1. NIC District Centre Srinagar will develop the Mobile Application in Flutter / Dart / SQLite once it is approved by the SIO NIC J&K.
2. The proposed Mobile App will be hosted at NIC Mini Data Centre Jammu after getting approval from SIO, NIC J&K.
3. NIC District Centre Srinagar will implement the Mobile App in collaboration with department of Irrigation & Flood Control (Jal Shakti) department Srinagar.
4. NIC District Centre Srinagar will provide necessary training to the concerned officials for smooth implementation of the Mobile App.

### 3.2 Role of District Administration Srinagar

1. Chief Engineer, Irrigation & Flood Control (Jal Shakti) department Srinagar will provide information about the Guage sites , AWLRs, mechanism to monitor the levels and other information.
2. updation of Information through Mobile App and its monitoring will be the responsibility of concerned officers / officials.

### Team members:

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