



Iran Water Resources Management  
Company (IWRM Co.)



Ministry of Energy

# Flood Management Constitution Ministry of Energy

**Risk Management and Passive Defense Office**

**M. Hajrasouliha, Managing Director, IWRM Co.**  
**A.R. Salamat, Head International Affairs.**



me nt	Activities	Responsible
1	Controlling flood in the main arteries	Ministry of Agriculture
2	Creating predictive flood systems	Ministry of Technology and Iran Meteorological Org.
3	Creating flood warning systems within cities	Municipalities
4	Creating flood warning systems outside the city and connecting them to the cities	Ministry of Energy
5	Preparing flood risk maps outside urban areas	Ministry of Energy
6	Determining the bed and the river boundaries	Ministry of Energy
7	Improving the status of vulnerable rivers within urban and rural areas	Municipalities
8	Estimating and compensating flood damage costs	Ministry of Interior
9	Training and public awareness	National Broadcasting TV
10	Providing necessary funding for preventive and reconstructive measures	Management and Planning Org.
11	Rescue and relief operation all over the country	Red Crescent
12	Executing flood insurance	Crisis Management Org.
13	Preventive measures	Provincial WGs



## Flood Management Constitution

### Objective:

**Defining, categorizing and determining the method of implementing tasks and responsibilities among stakeholders dealing with flood management at three phases “before issuing pre-information”, “from Pre-information to the end of the flood” and “after flood”**

### Prediction, Monitoring and Alerting Systems

- **National Flood Prediction and Alerting Systems**
- **The regional and national monitoring systems for meteorological data**

## **Crisis Management Room**

**A well-defined and pre-determined location that is under the management of Crisis Management and Passive Defense Office of IWRM Co. and performs the following services and facilities at the time of floods :**

- **video conference**
- **Monitoring the national flood early warning and alerting systems**
- **Real-time meteorological data system**
- **Map of water and wastewater and rivers structures**
- **Flood zones and flood distribution maps**
- **Safe points**
- **Guidelines and data banks of authorities inside and outside the Ministry of Energy**
- **Phone numbers and contacts**
- **Equipments and machineries**

## **Temporal Stages of the Implementation of the constitution**

- ❖ **before issuing pre-information**
- ❖ **from Pre-information to the end of the flood**
- ❖ **After the flood subsidence**

## **Responsibilities in different stages of the implementing the constitution**

**A set of 100 actions required for flood management are classified into five groups at three stages as follows:**

- **Prediction, monitoring and early warning**
- **River engineering**
- **Water and wastewater facilities**
- **Resources Management**
- **Coordination and crisis management**

## **Separation of Responsibilities before Issuing Pre-information and Flood Occurance**

### **1. Prediction, Monitoring and Alert**

- **Evaluate, equip and strengthening the monitoring, prediction and alerting system**
- **Investigating flood flows with different return periods**
- **Establishing the regional monitoring system of meteorological data**
- **Receive and analyze data from meteorological organization**
- **Temporal and spatial prediction of precipitation**
- **Investigate the probability of flooding**
- **Announcement of quantity and temporal alert**

## **Separation of Responsibilities before Issuing Pre-information and Flood Occurance**

### **2. River Engineering**

- **Identification of flood potential rivers**
- **Releasing the river's bed and fringe**
- **Preparation of flood zoning maps**
- **Preparation of flood risk maps**
- **Identification of safe points from flood zoning maps**
- **River control in terms of capacity of the flowing water**

## **Separation of Responsibilities before Issuing Pre-information and Occurring Flood**

### **3. Water and Wastewater facilities**

- **Classifying of important facilities from a risk-taking perspective**
- **Recognizing the behavior of dams and facilities**
- **Preparing guidelines for actions**
- **Determining the safety of the dam and equipments**
- **Ensuring the emergency power supply**

## **Separation of Responsibilities before Issuing Pre-information and Occurring Flood**

### **4. Reservoir Management**

- **Preparation and analysis of water consumption and energy production data**
- **Equipping and preparation reservoir monitoring system**
- **Observance of minimum and maximum operating levels**
- **Preparation and coordination for the maximum production of electrical units**
- **Depleting the dam reservoir to some extent according the predictions and discharging the sediment**

## **Separation of Responsibilities before Issuing Pre-information and Occurring Flood**

### **5. Coordination and Crisis Management**

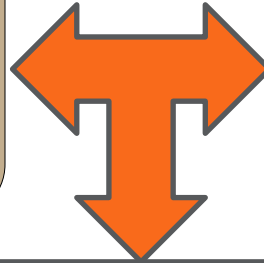
- **Preparation of national flood data bank**
- **Study and implementation of watershed plans**
- **Training and capacity building**
- **Implementing insurance plans**
- **Preparing data banks for personnel, buildings, machineries, etc.**
- **Determining the provinces for transferring people in risk**
- **Online information and communication and alert notification systems**
- **Equipping crisis management room**
- **Informing flood zoning maps and safe points**

# The Workflow of Flood Management Constitution

## Before Issuing Pre-information

1- Water Research Institute, responsible for implementation of “national flood warning and flood alert system”

2- Iran Water and Power Resources Development Company, responsible for informing flood warning systems to relevant authorities up to 2 hours



3- Announce in writing to :

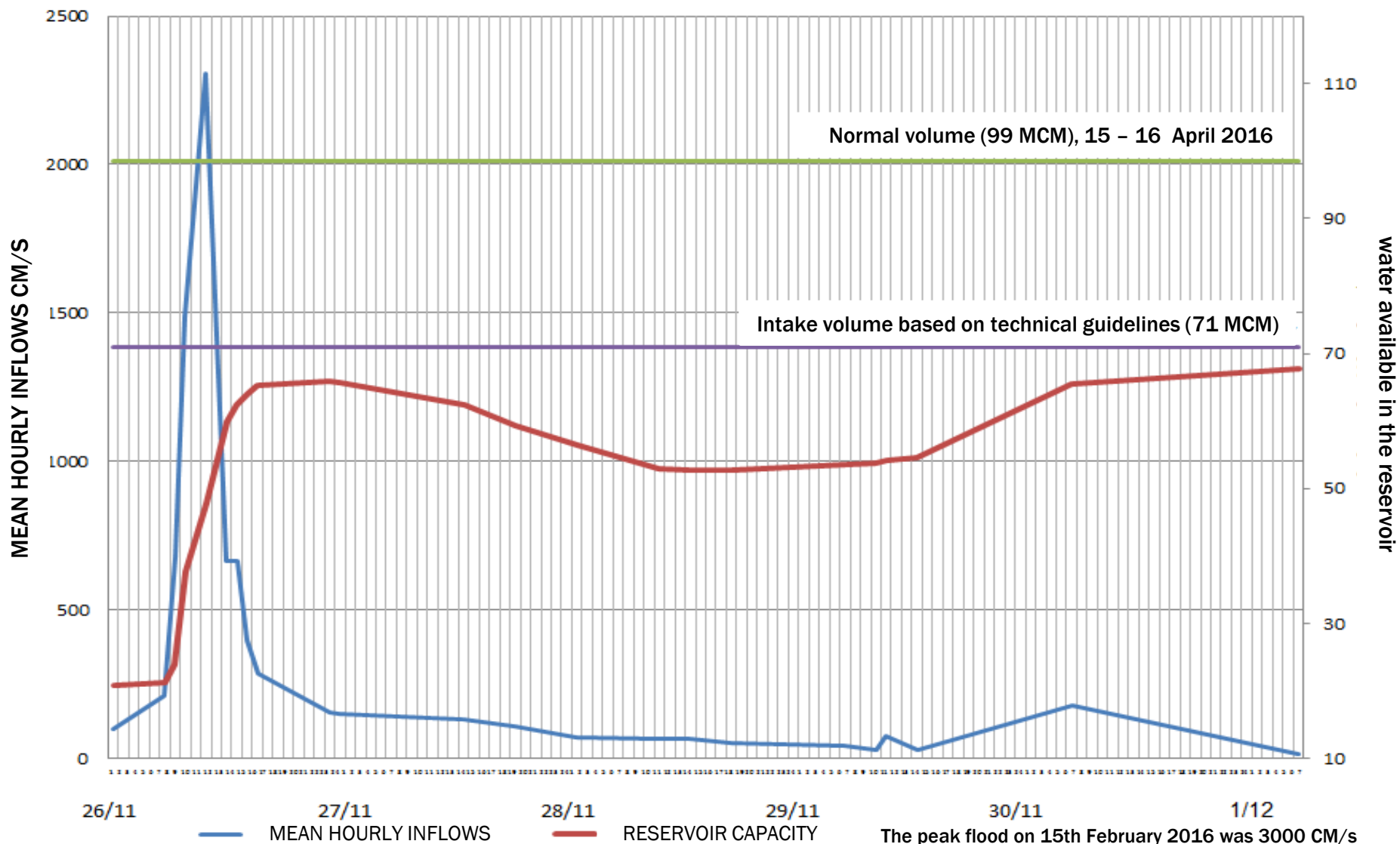
- Water and Wastewater Deputy, Ministry of Energy
- Managing Director of IWRM Co.
- Water Resources base study Bureau, Water Resources Management Company

Water Resources base study Bureau of IWRM Co. takes action to study and establish the real-time modeling of meteorological data interacting with regional monitoring and modeling systems

Water Resources base study Bureaus of Regional Water Authorities take action to establish and operate regional flood monitoring systems and real-time modeling of meteorological data

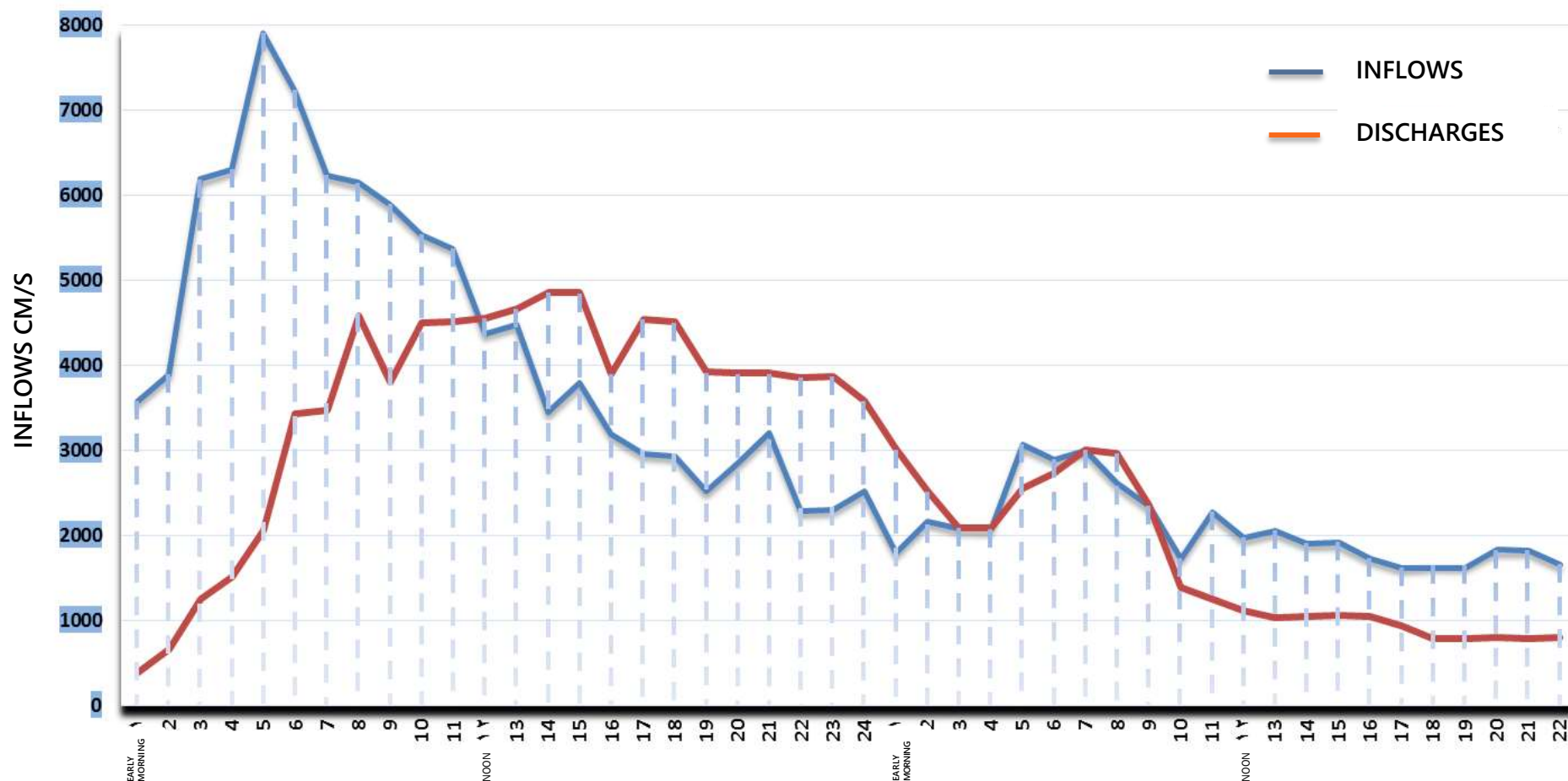


## Inflows by floods and the dams reservoirs water available (Shamil Dam)





## THE INFLOWS AND DISCHARGES OF DEZ DAM AT THE TIME OF FLOODS, 15-16 FEB. 2016





**THANK  
YOU**