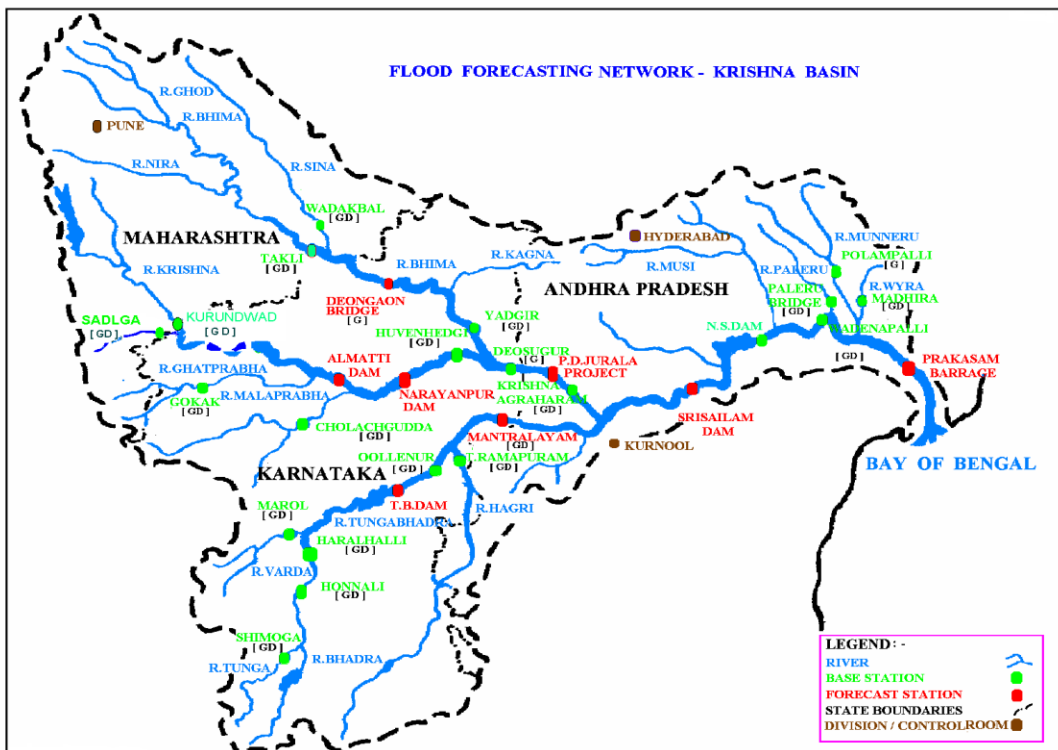


## Flood forecasting pertaining to Krishna Basin

Formulation and dissemination of Flood and Inflow Forecasts and warnings in Krishna, and Pennar river basins to the local authorities.

Regular flood forecasting was started in the year 1981. During the year of commencement, level forecasts were issued for Srisaillam dam and inflow forecasts for Prakasam Barrage. Presently, Inflow forecasts are being issued whenever the flood situation so warranted for the five reservoirs viz., Almatti Dam, Narayanpur Dam, T.B. Dam, P.D. Jurala Project, Srisaillam Dam and for Prakasam Barrage. Level forecasts are being issued for the Deongaon Bridge on river Bhima and for the pilgrim town of Mantralayam on river Tungabhadra. An index map and showing flood forecasting network in Krishna basin is shown in Figure below.



### The Flood Forecasting Set Up

At present, there are eight flood forecasting stations under Krishna basin, out of which four are in Karnataka and four are in Andhra Pradesh. Under the flood forecasting scheme, 30 Wireless stations were established in Krishna Basin for transmitting the gauge, discharge and rainfall data on real-time basis. The details of wireless stations are as follows:

**DETAILS OF WIRELESS STATIONS IN KRISHNA BASIN**

Sl. No.	Name	River	Geographical Location						Type	Date of Establishment
			Latitude			Longitude				
			Deg.	Min.	Sec.	Deg.	Min.	Sec.		
1	Kurundwad	Krishna	16	41	00	75	30	00	20 watt.	01/07/2001
2	Gokak	Ghataprabha	16	10	00	74	49	00	-do-	16/06/1987
3	Almatti Dam	Krishna	16	20	00	75	53	00	-do-	10/12/1986
4	Cholachguda	Malaprabha	15	52	00	75	43	00	-do-	11/12/1986
5	Narayanapur Dam	Krishna	16	11	00	76	11	00	-do-	14/12/1986
6	Huvinhedgi	Krishna	16	29	07	76	55	07	-do-	27/02/1989
7	Takali	Bhima	17	25	00	75	51	00	-do-	19/06/1984
8	Wadakbal	Sina	17	32	00	75	53	00	-do-	20/06/1984
9	Deongaon Bridge	Bhima	17	10	00	76	19	42	-do-	18/06/1984
10	Yadgir	Bhima	16	44	03	77	07	18	-do-	28/02/1989
11	Deosugur	Krishna	16	24	00	77	20	00	-do-	22/02/1979
12	P.D.Jurala Project	Krishna	16	15	00	77	51	00	20/100	21/03/1989
13	K.Agraharam	Krishna	16	15	00	77	51	00	20/100	13/09/1996
14	Shimoga	Tunga	13	56	08	75	34	41	20 watt.	30/01/1992
15	Honnali	Tungabhadra	14	14	18	75	39	30	-do-	11/03/1991
16	Harlahalli	Tungabhadra	14	49	50	75	40	33	-do-	29/05/1985
17	Marol	Varda	14	56	20	75	37	05	-do-	30/05/1984
18	T.B.Dam	Tungabhadra	15	14	43	76	21	18	-do-	23/02/1980
19	Oollenur/Bennur	Tungabhadra	15	29	31	76	43	03	-do-	09/07/1989
20	T.Ramapuram	Hagari	15	39	33	76	57	58	-do-	08/07/1989
21	Mantralayam	Tungabhadra	15	57	00	77	26	00	20/100	31/01/1979
22	Srisailam	Krishna	16	05	00	78	54	00	-do-	13/06/1979
23	N.S.Dam	Krishna	16	30	00	79	15	00	20 watt.	01/01/1980

24	Wadenpalli	Krishna	16	48	00	80	04	00	-do-	21/08/1999
25	Paleru	Paleru	16	57	00	80	03	00	-do-	22/02/1989
26	Madhira	Wyra	16	55	00	80	21	00	-do-	27/05/1986
27	Polampalli	Munneru	17	01	00	80	10	00	-do-	Seasonal
28	Prakasam Barrage	Krishna	16	32	00	80	37	00	20/100	17/01/1979
29	Hyderabad	Central Control	17	23	48	78	20	00	100 watt.	30/06/1981
30	Kurnool	Control	15	50	00	78	04	00	20 watt.	30/01/1979

Out of these 31 Wireless Stations, 17 Wireless Stations were established at gauge and discharge sites, 3 at gauge stations, 8 at forecasting stations and one each at Control Room at Lower Tungabhadra Sub Division, Kurnool and the Lower Krishna Division, Hyderabad. The field organisation consists of one Division Office, a Sub Division and 28 field stations. The field stations function under the control of Lower Tungabhadra Sub Division (LTSD), Kurnool. The flood forecasting activities are carried out by the LTSD, with the guidance of the Executive Engineer, Lower Krishna Division, Hyderabad under the directions of the Superintending Engineer, Krishna & Co-ordination Circle, CWC, Hyderabad and the Chief Engineer, Krishna & Godavari Basin Organisation, CWC, Hyderabad.

The technical control of all the Wireless stations rests with the Lower Tungabhadra Sub – Division at Kurnool (LTSD). During the season, the flood forecasts are formulated by LTSD for all the above forecasting stations and are transmitted to Division Office. The Division Office modifies the forecasts based on additional information received from the Flood Meteorological Office, Hyderabad. The final approved/modified forecasts are then transmitted to the LTSD for dissemination to the respective forecasting stations and user agencies.

## DETAILS OF FLOOD FORECASTING STATIONS IN KRISHNA BASIN

Sl. No	Forecast Station	River	Forecast Criteria		Forecast Methodology	Base Stations	Travel Time (in hours)	Type of Data used
			Warning Level ( m )	Danger Level ( m )				
<b>INFLOW</b>								
1	Almatti Dam	Krishna	Likely inflow 1415 cumec and above		Conventional	Kurundwad Sadalg Gokak	33 – 54 33 – 54 21 – 30	WL,Q. RF WL,Q. RF WL,Q. RF
2.	Narayanpur Dam	Krishna	Likely inflow 1415 cumec and above		Conventional	Almatti Dam Cholachguda	09 – 18 12 – 24	WL,Q. RF WL,Q. RF
3.	P D Jurala	Krishna	Likely inflow 1415 cumec and above		Conventional	Huvinahedgi Yadgir Deosugur	12 – 30 09 – 30 03 – 06	WL,Q. RF WL,Q. RF WL,RF
4	Tungabhadra Dam	Tungabhadra	Likely inflow 425 cumec and above		Conventional	Harlahalli Marol	12 – 27 12 – 27	WL,Q. RF WL,Q. RF
5	Srisailam Dam	Krishna	Likely inflow 1415 cumec and above		Conventional	Krishna Agraharam Mantralayam	09 – 24 12 – 30	WL,RF WL,Q. RF
6.	Prakasam Barrage	Krishna	Likely inflow 708 cumec and above		Conventional	Madhira Paleru Bridge Wadenapalli	09 – 15 09 – 18 09 – 21	WL,Q. RF WL,Q. RF WL,Q.

								RF
<b>LEVEL</b>								
1.	Mantralayam	Tungabhadra	310.00	312.00	Conventional	Ollenur T Ramapuram	18 – 30 09 – 18	WL,Q. RF WL,Q. RF
2.	Deongaon Bridge	Bhima	402.00	404.50	Conventional	Takli Wadakbal	12 – 27 15 – 27	WL,Q. RF WL,Q. RF