

BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR BULLETIN OF 30.07.2015)

1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. Out of these reservoirs, 37 reservoirs have hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of the 91 reservoirs is 157.799 BCM which is about 62% of the live storage capacity of 253.388 BCM which is estimated to have been created in the country. As per reservoir bulletin of **30.07.2015**, live storage available in these reservoirs is **70.707 BCM** which is **45%** of total live storage capacity of these reservoirs. This storage is **102%** of the storage of corresponding period of last year and **108%** of storage of average of last ten years. The overall storage position is **better than the** corresponding period of last year in the country as a whole and is also **better than the** average storage of last ten years during the corresponding period.

2. REGION WISE STORAGE STATUS:

a) NORTHERN REGION

The northern region includes States of Himachal Pradesh, Punjab and Rajasthan. There are 6 reservoirs in this region having total live storage capacity of 18.01 BCM. The total live storage available in these reservoirs is **12.67 BCM** which is **70%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **56%** and average storage of last ten years during corresponding period was **49%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is also better than the average storage of last ten years during the corresponding period.

b) EASTERN REGION

The Eastern region includes States of Jharkhand, Odisha, West Bengal and Tripura. There are 15 reservoirs in this region having total live storage capacity of 18.83 BCM. The total live storage available in these reservoirs is **8.91 BCM** which is **47%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **47%** and average storage of last ten years during corresponding period was **31%** of live storage capacity of these reservoirs. Thus, storage during current year is equal to the corresponding period of last year and is better than the average storage of last ten years during the corresponding period.

c) WESTERN REGION

The Western region includes States of Gujarat and Maharashtra. There are 27 reservoirs in this region having total live storage capacity of 27.07 BCM. The total live storage available in these reservoirs is **10.59 BCM** which is **39%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **45%** and average storage of last ten years during corresponding period was **46%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and is also less than the average storage of last ten years.

d) CENTRAL REGION

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs in this region having total live storage capacity of 42.30 BCM. The total live storage available in these reservoirs is **22.50 BCM** which is **53%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **48%** and average storage of last ten years during corresponding period was **32%** of live storage capacity of

these reservoirs. Thus, storage during current year is better than the storage of last year and is also better than the average storage of last ten years.

e) SOUTHERN REGION

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG (2combined project in both states) Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs in this region having total live storage capacity of 51.59 BCM. The total live storage available in these reservoirs is **16.04 BCM** which is **31%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **35%** and average storage of last ten years during corresponding period was **48%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year and is also less than the average storage of last ten years during the corresponding period.

The region wise and reservoir wise details are given in the following pages of the bulletin.

BROAD ANALYSIS OF OTHER TABLES IN THE BULLETIN

- Normal storage means average storage of last ten years, Close to normal storage means where shortfall is upto 20% of normal, deficient storage is where shortfall is more than 20% of the normal and upto 60% of the normal, highly deficient means where shortfall is more than 60% of normal.
- In the table on page 6, better than normal storage is available in Ganga, Indus, Narmada, Sabarmati, Rivers of Kutch, Cauvery& neighbouring EFRs, Mahanadi & neighbouring East Flowing Rivers. Close to Normal in Mahi, Godavari, and West Flowing rivers of South. Deficient in Tapi and Krishna and NIL in Highly Deficient.
- Table on page 4: Normal, Close to normal, Deficient and Highly Deficient having the same meaning as given at Bullet No.1.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are 51 and reservoirs having storage more than average of last ten years are 45. The numbers of reservoirs having storage less than 20% with respect to last year is 2 and having storage less than 20% with reference to average of last ten years is 6. The numbers of reservoirs having storage less than or equal to 50% with respect to last year are 9 and having storage less than or equal to 50% with reference to average of last ten years are 13.

States having better storage (in %) than last year for corresponding period:
Himachal Pradesh, Punjab, Rajasthan, West Bengal, Tripura, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Kerala and Tamil Nadu.

States having equal storage (in %) to last year for corresponding period: AP&TG (2combined project in both states)

States having lesser storage (in %) than last year for corresponding period:
Jharkhand, Odisha, Gujarat, Maharashtra, Chhattisgarh, , Andhra Pradesh, Telangana, Karnataka.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

- 1 Central Water Commission is monitoring storage status of 91 important reservoirs spread all over the country, in which 37 reservoirs have hydropower benefit each with installed capacity of more than 60 MW. These reservoirs are identified thus(*) in the enclosed weekly report.
- 2 The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **30.07.2015** is **70.707** BCM (**45** percent of the live storage capacity at FRL). The current year's storage is nearly **102** percent of last year's storage and **108** percent of the average of last ten years.

3 Region wise storage status:-

REGION (Monitoring No. of Reservoirs)	Filling position of 91 reservoirs w.r.t. FRL								Departure from Normal storage	
	100%	91%-99%	81%-90%	71%-80%	61%-70%	51%-60%	41%-50%	40% & below		
NORTH (HP, Punjab & Rajasthan), (6 Resv.)	-	1	2	1	1	-	1	-	H.P. PUNJAB RAJASTHAN	42 % 64 % 41 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.)	1	-	-	3	3	-	4	4	JHARKHAND ODISHA W. BENGAL TRIPURA	23 % 56 % 73 % 73 %
WEST (Guj. & Mah.), (27 Resv.)	1	1	1	2	2	6	3	11	GUJARAT MAH.	6 % -33 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	-	1	2	1	3	1	4	U.P. UTTARAKHAND M.P. CHHATISGARH	64 % 73 % 79 % 15 %
SOUTH (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.)	-	3	2	1	4	5	4	12	AP&TG A.P TG KARNATAKA KERALA T.N.	-99 % -42 % -66 % -21 % -1 % 11 %
Status of 91 reservoirs	2	5	6	9	11	14	13	31		

4 Basin wise storage position:

Better than normal: Ganga, Indus, Narmada, Sabarmati, Rivers of Kutch, Cauvery & neighbouring EFRS, Mahanadi & Neighbouring EFRS.

Close to normal: Mahi, Godavari, and West Flowing rivers of south.

Deficient: Tapi and Krishna

Highly deficient: NIL

- 5 Out of 91 reservoirs, **64** reservoirs reported more than 80% of normal storage & **27** reservoirs reported 80% or below of normal storage. Out of these **27** reservoirs **13** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
SRISAILAM	0	MULA	46		
BHIMA(UJJANI)	0	ISAPUR	49		
NAGARJUNA SAGAR	2	MAHANADI	50		
YELDARI	6				
JAYAKWADI(PAITHON)	7				
PANAM	11				
SRIRAMSAGAR	27				
GIRNA	34				
VANIVILAS SAGAR	42				
GHATAPRABHA	43				

14 reservoirs having storage 51% to 80% of normal storage.

51% to 60%	61% to 70%	71% to 80%
6	3	5

- 6 Out of 37 reservoirs with significant(*) hydropower generation, the storage build up is less than or equal to normal in

16 reservoirs.

NOTE : **Normal:** Average of previous ten years, **Close to normal:** Where shortfall is up to 20% of the normal, **Deficient:** Where shortfall is more than 20% of the normal and up to 60% of the normal, **Highly deficient:** Where shortfall is more than 60% of the normal

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 30.07.2015

NAME OF BASIN	LIVE CAP. AT FRL	THIS YEAR'S STORAGE		LAST YEAR'S STORAGE		LAST 10 YEARS' AVG. STORAGE		% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	17.693	62.97%	13.037	46.40%	8.349	29.72%	111.92
INDUS	14.730	10.441	70.88%	8.305	56.38%	7.166	48.65%	45.70
NARMADA	17.414	7.914	45.45%	8.902	51.12%	6.588	37.83%	20.13
TAPI	7.394	1.908	25.80%	4.017	54.33%	3.110	42.06%	-38.65
MAHI	4.012	1.904	47.46%	2.104	52.44%	1.925	47.98%	-1.09
SABARMATI	0.735	0.648	88.16%	0.148	20.14%	0.224	30.48%	189.29
RIVERS OF KUTCH	0.887	0.738	83.20%	0.117	13.19%	0.263	29.65%	180.61
GODAVARI	15.394	3.695	24.00%	5.545	36.02%	4.518	29.35%	-18.22
KRISHNA	32.831	7.753	23.61%	9.976	30.39%	16.562	50.45%	-53.19
MAHANADI & NEIGHBOURING EFRS	13.181	6.747	51.19%	7.181	54.48%	4.928	37.39%	36.91
CAUVERY & NEIGHBOURING EFRS	8.359	4.686	56.06%	3.885	46.48%	4.216	50.44%	11.15
WEST FLOWING RIVERS OF SOUTH	14.766	6.580	44.56%	6.145	41.62%	7.541	51.07%	-12.74
TOTAL	157.799	70.707		69.362		65.390		
PERCENTAGE								8.13

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 30.07.2015

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
NORTHERN REGION											
<u>HIMACHAL PRADESH</u>											
*1	GOBIND SAGAR(BHAKRA)	512.06	502.01	6.229	4.438	29-07-2015	71	69	55	676	1200
*2	PONG DAM	423.67	415.36	6.157	4.044	30-07-2015	66	38	41	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	523.22	2.344	1.959	28-07-2015	84	72	51	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	280.05	1.711	0.770	29-07-2015	45	49	44	63	140
5	JHAKAM	359.50	357.80	0.132	0.115	29-07-2015	87	36	39	28	-
*6	RANA PRATAP SAGAR	352.81	352.28	1.436	1.339	30-07-2015	93	66	54	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.27	0.821	0.352	30-07-2015	43	50	39	-	-
8	MAITHON	146.3	144.28	0.471	0.334	30-07-2015	71	68	53	342	-
*9	PANCHET HILL	124.97	125.22	0.184	0.184	30-07-2015	100	73	78	\$	80
10	KONAR	425.81	422.64	0.176	0.122	30-07-2015	69	78	53	\$	-
11	TILAIYA	368.81	366.65	0.142	0.070	30-07-2015	49	85	44	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	185.86	5.378	1.643	29-07-2015	31	49	32	153	307
*13	BALIMELA	462.08	452.69	2.676	1.259	29-07-2015	47	50	15	-	360
14	SALANADI	82.30	72.20	0.558	0.265	29-07-2015	47	72	27	42	-
*15	RENGALI	123.50	120.25	3.432	2.397	29-07-2015	70	40	27	3	200
*16	MACHKUND(JALPUT)	838.16	829.18	0.893	0.305	29-07-2015	34	42	38	-	115
*17	UPPER KOLAB	858.00	850.94	0.935	0.317	29-07-2015	34	30	31	89	320
*18	UPPER INDRAVATI	642.00	630.68	1.456	0.391	25-07-2015	27	37	28	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	118.67	0.480	0.364	30-07-2015	76	66	52	227	-
20	KANGSABATI	134.14	131.52	0.914	0.706	30-07-2015	77	44	40	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	91.00	0.312	0.199	29-07-2015	64	29	37	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	93.49	6.615	1.761	30-07-2015	27	59	44	348	300
23	SABARMATI(DHAROI)	189.59	188.64	0.735	0.648	30-07-2015	88	20	30	95	1
*24	KADANA	127.7	125.60	1.472	0.980	30-07-2015	67	56	53	200	120
25	SHETRUNJI	55.53	55.25	0.300	0.277	30-07-2015	92	18	49	36	-
26	BHADAR	107.89	106.92	0.188	0.150	29-07-2015	80	20	43	27	-
27	DAMANAGANGA	79.86	73.20	0.502	0.217	30-07-2015	43	37	35	51	1
28	DANTIWADA	184.1	182.57	0.399	0.311	30-07-2015	78	6	9	45	-
29	PANAM	127.41	124.75	0.697	0.039	30-07-2015	6	56	49	36	2
*30	SARDAR SAROVAR	121.92	121.92	1.566	1.566	30-07-2015	100	89	59	2120	1450
31	KARJAN	115.25	107.60	0.523	0.315	30-07-2015	60	46	54	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 30.07.2015

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
MAHARASHTRA											
32	JAYAKWADI(PAITHON)	463.91	455.77	2.171	0.038	30-07-2015	2	1	25	227	-
*33	KOYANA	657.90	648.01	2.652	1.739	29-07-2015	66	54	72	-	1920
34	BHIMA(UJJANI)	496.83	489.68	1.517	0.000	29-07-2015	0	0	41	125	12
35	ISAPUR	441.00	429.61	0.965	0.171	29-07-2015	18	44	36	104	-
36	MULA	552.30	538.12	0.609	0.081	23-07-2015	13	11	29	139	-
37	YELDARI	461.77	448.06	0.809	0.009	29-07-2015	1	39	18	78	-
38	GIRNA	398.07	384.02	0.524	0.041	29-07-2015	8	6	23	79	-
39	KHADAKVASLA	582.47	579.58	0.056	0.021	29-07-2015	38	93	71	78	8
*40	UPPER VAITARNA	603.50	598.02	0.331	0.164	30-07-2015	50	55	65	-	61
41	UPPER TAPI	214.00	210.09	0.255	0.106	29-07-2015	42	25	32	45	-
*42	PENCH (TOTALADOH)	490.00	477.10	1.091	0.295	29-07-2015	27	54	38	127	160
43	UPPER WARDHA	342.50	339.16	0.564	0.304	30-07-2015	54	88	54	70	-
44	BHATSA	142.07	125.47	0.942	0.550	30-07-2015	58	54	64	29.378	15
45	DHOM	747.70	737.19	0.331	0.181	29-07-2015	55	44	58	36.2	2
46	DUDHGANGA	646.00	635.52	0.664	0.363	30-07-2015	55	61	73	2.441	24
47	MANIKDOH (KUKADI)	711.25	691.60	0.288	0.062	30-07-2015	22	28	28	2.2	6
48	BHANDARDARA	342.50	339.16	0.304	0.205	30-07-2015	54	88	54	70	-
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	306.51	0.707	0.437	29-07-2015	62	17	46	-	30
*50	RIHAND	268.22	258.50	5.649	1.676	30-07-2015	30	11	17	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	356.98	2.196	1.583	30-07-2015	72	58	31	1897	198
*52	TEHRI	830.00	792.55	2.615	1.250	29-07-2015	48	45	37	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	398.98	6.827	6.061	30-07-2015	89	59	23	220	115
54	TAWA	355.40	349.55	1.944	1.105	30-07-2015	57	58	65	247	-
*55	BARGI	422.76	414.20	3.180	1.222	30-07-2015	38	48	44	157	90
*56	BANSAGAR	341.64	336.47	5.166	3.016	30-07-2015	58	57	29	488	425
*57	INDIRA SAGAR	262.13	253.45	9.745	3.442	30-07-2015	35	44	26	2380	1000
58	BARNA	348.55	345.52	0.456	0.264	30-07-2015	58	80	46	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	355.72	3.046	2.242	29-07-2015	74	78	57	-	120
60	MAHANADI	348.70	340.96	0.767	0.200	22-07-2015	26	51	52	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	244.65	8.288	0.000	29-07-2015	0	0	39	0	770
*62	NAGARJUNA SAGAR	179.83	155.72	6.841	0.043	29-07-2015	1	0	33	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	83.37	1.994	0.265	29-07-2015	13	19	23	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	320.62	2.300	0.205	30-07-2015	9	29	33	411	27
65	LOWER MANAIR	280.42	269.41	0.621	0.115	30-07-2015	19	42	28	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 30.07.2015

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							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
KARNATAKA											
66	KRISHNARAJA SAGRA	752.50	747.56	1.163	0.734	27-07-2015	63	73	65	79	-
*67	TUNGABHADRA	497.74	494.37	3.276	1.804	30-07-2015	55	73	69	529	72
68	GHATAPRABHA	662.95	644.73	1.391	0.375	27-07-2015	27	43	62	317	-
69	BHADRA	657.76	651.19	1.785	1.097	27-07-2015	61	71	68	106	39
70	LINGANAMAKKI	554.43	543.41	4.294	1.688	30-07-2015	39	44	57	-	55
71	NARAYANPUR	492.25	490.38	0.863	0.517	29-07-2015	60	66	73	425	-
72	MALAPRABHA(RENUKA)	633.83	625.24	0.972	0.204	27-07-2015	21	21	37	215	-
73	KABINI	696.16	695.96	0.444	0.431	27-07-2015	97	81	51	85	-
74	HEMAVATHY	890.63	888.01	0.927	0.793	27-07-2015	86	81	71	265	-
75	HARANGI	871.42	870.93	0.220	0.213	27-07-2015	97	91	83	53	-
76	SUPA	564.00	539.30	4.120	1.710	30-07-2015	42	38	43	-	-
77	VANIVILAS SAGAR	652.28	634.18	0.802	0.043	23-07-2015	5	3	13	123	-
*78	ALMATTI	519.60	514.45	3.105	1.304	29-07-2015	42	89	75	@	290
*79	GERUSOPPA	55.00	49.21	0.130	0.098	30-07-2015	75	79	87	83	240
KERALA											
80	KALLADA(PARAPPAR)	115.82	96.33	0.507	0.142	27-07-2015	28	37	53	62	-
*81	IDAMALAYAR	169.00	147.86	1.018	0.468	27-07-2015	46	43	47	33	75
*82	IDUKKI	732.43	719.11	1.460	0.783	27-07-2015	54	32	41	-	780
*83	KAKKI	981.46	961.46	0.447	0.195	29-07-2015	44	35	53	23	300
*84	PERIYAR	867.41	863.12	0.173	0.092	27-07-2015	53	39	55	84	140
85	MALAPMUZHA	867.41	863.12	0.224	0.113	27-07-2015	53	39	55	84	140
TAMIL NADU											
86	LOWER BHAWANI	278.89	274.75	0.792	0.548	27-07-2015	69	35	58	105	8
*87	METTUR(STANLEY)	240.79	233.00	2.647	1.638	27-07-2015	62	39	54	122	360
88	VAIGAI	279.20	273.41	0.172	0.064	27-07-2015	37	9	22	61	6
89	PARAMBIKULAM	556.26	544.17	0.380	0.147	27-07-2015	39	31	65	101	-
90	ALIYAR	320.04	318.73	0.095	0.087	27-07-2015	92	28	62	#	60
*91	SHOLAYAR	1002.79	999.45	0.143	0.126	27-07-2015	88	86	78	-	95
TOTAL FOR 91 RESERVOIRS				157.799	70.707						
PERCENTAGE							45	44	41		

Sd/-

* HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

Director

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

W. M. , CWC

TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

@ TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

† SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

Sl. No. 19th The FRL of S.S.P. 138.38 M and Live capacity at FRL will be 5.760 BCM. However at present the lowest block of the dam is at the level of 121.92 M. and the live capacity at this level is 1.566 BCM

(At sl. 30th) 0.444 BCM, Live storage at FRL of Kabini reservoir is intrim