

BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR BULLETIN OF 13.08.2015)

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 **13.08.2015**, live storage available in these reservoirs is **87.093 BCM** which is **55%** of total live storage capacity of these reservoirs. This storage is **87%** of the storage of corresponding period of last year and **96%** of storage of average of last ten years.

As per Table-01, the overall storage position is **less than the** corresponding period of last year in the country as a whole and is also **less 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 **15.91 BCM** which is **88%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **69%** and average storage of last ten years during corresponding period was **63%** 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 **8.37 BCM** which is **44%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **66%** and average storage of last ten years during corresponding period was **45%** 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.

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 **15.58 BCM** which is **58%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **61%** and average storage of last ten years during corresponding period was **63%** 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 **29.37 BCM** which is **69%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **69%** 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 equal to the storage of last year and is 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 **17.86 BCM** which is **35%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **58%** and average storage of last ten years during corresponding period was **65%** 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, Tapi, Mahi, Sabarmati, Rivers of Kutch. Close to Normal in Cauvery & neighbouring EFRs, Mahanadi & neighbouring East Flowing Rivers. Deficient in Godavari, Krishna and West Flowing rivers of South and NIL in Highly Deficient.
- Table on page 5: IMD has divided India in 36 meteorological sub-divisions. The data in respect of reservoir storage as compared with observed rainfall is given in the table.
- Table on page 6: Normal, Close to normal, Deficient and Highly Deficient having the same meaning as given at Bullet No.1.
- Table on page 7-9 of the bulletin. The numbers of reservoirs having storage more than last year are **33** and reservoirs having storage more than average of last ten years are **43**. The numbers of reservoirs having storage less than 20% with respect to last year is **4** and having storage less than 20% with reference to average of last ten years is **7**. The numbers of reservoirs having storage less than or equal to 50% with respect to last year are **13** and having storage less than or equal to 50% with reference to average of last ten years are **16**.

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

States having equal storage (in %) to last year for corresponding period: Nil

States having lesser storage (in %) than last year for corresponding period:
Odisha, Jharkhand, Maharashtra, Chhattisgarh, Uttar Pradesh, Tamil Nadu, AP&TG (2combined project in both states), Andhra Pradesh, Telangana, Karnataka and Kerala.

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 **13.08.2015** is **87.093** BCM (**55** percent of the live storage capacity at FRL). The current year's storage is nearly **87** percent of last year's storage and **96** 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.)	2	1	3	-	-	-	-	-	H.P.	34 %
									PUNJAB	52 %
									RAJASTHAN	54 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.))	1	-	2	3	1	1	3	4	JHARKHAND	24 %
									ODISHA	-10 %
									W. BENGAL	39 %
									TRIPURA	101 %
WEST (Guj. & Mah.), (27 Resv.)	1	3	2	5	3	4	-	9	GUJARAT	24 %
									MAH.	-37 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	2	1	2	4	1	-	2	U.P.	22 %
									UTTARAKHAND	49 %
									M.P.	58 %
									CHHATISGARH	-13 %
SOUTH (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.))	1	-	3	2	5	3	5	12	AP&TG	-91 %
									A,P	-46 %
									TG	-76 %
									KARNATAKA	-32 %
									KERALA	-22 %
									T.N.	-11 %
Status of 91 reservoirs	5	6	11	12	13	9	8	27		

4 Basin wise storage position:

Better than normal: Ganga, Indus, Narmada, Tapi, Mahi, Sabarmati, Rivers of Kutch.

Close to normal: Cauvery & neighbouring EFRS, Mahanadi & Neighbouring EFRS.

Deficient: Godavari, Krishna and West Flowing rivers of south.

Highly deficient: NIL

- 5 Out of 91 reservoirs, **54** reservoirs reported more than 80% of normal storage & **37** reservoirs reported 80% or below of normal storage. Out of these **37** reservoirs **16** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
BHIMA(UJJANI)	0	KALLADA(PARAPPAR)	39		
NAGARJUNA SAGAR	0	GHATAPRABHA	40		
YELDARI	5	MALAPRABHA(RENUKA)	41		
GIRNA	10	ISAPUR	41		
JAYAKWADI(PAITHON)	15	VANIVILAS SAGAR	43		
SRISAILAM	15	LOWER MANAIR	48		
SRIRAMSAGAR	19				
KHADAKVASLA	30				
MAHANADI	35				
UPPER INDRAVATI	38				

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

51% to 60%	61% to 70%	71% to 80%
5	6	10

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

17 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 :- 13.08.2015

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	19.281	68.63%	18.146	64.59%	11.559	41.14%	66.81
INDUS	14.730	12.688	86.14%	9.915	67.31%	9.276	62.97%	36.78
NARMADA	17.414	13.469	77.35%	12.898	74.07%	10.434	59.92%	29.09
TAPI	7.394	4.932	66.70%	4.446	60.13%	4.467	60.41%	10.41
MAHI	4.012	3.302	82.30%	2.515	62.69%	2.468	61.52%	33.79
SABARMATI	0.735	0.644	87.62%	0.181	24.63%	0.331	45.03%	94.56
RIVERS OF KUTCH	0.887	0.770	86.81%	0.172	19.39%	0.356	40.14%	116.29
GODAVARI	15.394	4.599	29.88%	7.592	49.32%	7.146	46.42%	-35.64
KRISHNA	32.831	9.690	29.51%	18.306	55.76%	22.717	69.19%	-57.34
MAHANADI & NEIGHBOURING EFRS	13.181	6.132	46.52%	10.019	76.01%	6.690	50.75%	-8.34
CAUVERY & NEIGHBOURING EFRS	8.359	4.558	54.53%	5.725	68.49%	5.210	62.33%	-12.51
WEST FLOWING RIVERS OF SOUTH	14.766	7.028	47.60%	10.443	70.72%	10.024	67.89%	-29.89
TOTAL	157.799	87.093		100.358		90.678		
PERCENTAGE								-3.95

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 13.08.2015

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	507.71	6.229	5.277	13/08/2015	85	84	70	676	1200
*2	PONG DAM	423.67	421.22	6.157	5.333	13/08/2015	87	49	57	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	524.50	2.344	2.078	13/08/2015	89	71	58	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	281.25	1.711	1.711	12/08/2015	100	66	64	63	140
5	JHAKAM	359.50	359.95	0.132	0.132	12/08/2015	100	58	59	28	-
*6	RANA PRATAP SAGAR	352.81	352.48	1.436	1.378	11/08/2015	96	92	64	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	259.61	0.821	0.401	13/08/2015	49	51	40	-	-
8	MAITHON	146.3	144.70	0.471	0.355	13/08/2015	75	69	63	342	-
*9	PANCHET HILL	124.97	124.24	0.184	0.149	13/08/2015	81	100	78	\$	80
10	KONAR	425.81	424.07	0.176	0.145	13/08/2015	82	100	66	\$	-
11	TILAIYA	368.81	368.95	0.142	0.142	13/08/2015	100	100	55	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	185.86	5.378	1.643	11/08/2015	31	59	43	153	307
*13	BALIMELA	462.08	451.84	2.676	1.159	11/08/2015	43	58	32	-	360
14	SALANADI	82.30	72.50	0.558	0.273	13/08/2015	49	82	37	42	-
*15	RENGALI	123.50	118.76	3.432	1.908	11/08/2015	56	84	44	3	200
*16	MACHKUND(JALPUT)	838.16	830.37	0.893	0.361	11/08/2015	40	49	58	-	115
*17	UPPER KOLAB	858.00	850.48	0.935	0.313	11/08/2015	33	53	39	89	320
*18	UPPER INDRAVATI	642.00	629.84	1.456	0.324	13/08/2015	22	84	58	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	118.83	0.480	0.373	13/08/2015	78	68	51	227	-
20	KANGSABATI	134.14	129.98	0.914	0.579	13/08/2015	63	54	48	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	92.20	0.312	0.249	11/08/2015	80	25	40	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	101.70	6.615	4.833	13/08/2015	73	64	63	348	300
23	SABARMATI(DHAROI)	189.59	188.60	0.735	0.644	12/08/2015	88	25	45	95	1
*24	KADANA	127.7	126.42	1.472	1.060	12/08/2015	72	61	59	200	120
25	SHETRUNJI	55.53	55.17	0.300	0.277	11/08/2015	92	27	60	36	-
26	BHADAR	107.89	106.86	0.188	0.144	11/08/2015	77	26	57	27	-
27	DAMANAGANGA	79.86	74.35	0.502	0.254	13/08/2015	51	50	42	51	1
28	DANTIWADA	184.1	182.96	0.399	0.349	12/08/2015	87	11	17	45	-
29	PANAM	127.41	124.95	0.697	0.399	12/08/2015	57	58	61	36	2
*30	SARDAR SAROVAR	121.92	121.92	1.566	1.566	13/08/2015	100	85	81	2120	1450
31	KARJAN	115.25	109.28	0.523	0.354	13/08/2015	68	67	62	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 13.08.2015

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	456.28	2.171	0.122	13/08/2015	6	16	39	227	-
*33	KOYANA	657.90	652.07	2.652	1.929	13/08/2015	73	93	94	-	1920
34	BHIMA(UJJANI)	496.83	490.51	1.517	0.000	13/08/2015	0	52	63	125	12
35	ISAPUR	441.00	430.72	0.965	0.222	13/08/2015	23	44	56	104	-
36	MULA	552.30	543.74	0.609	0.240	13/08/2015	39	63	66	139	-
37	YELDARI	461.77	448.19	0.809	0.012	13/08/2015	1	39	33	78	-
38	GIRNA	398.07	382.97	0.524	0.020	13/08/2015	4	24	36	79	-
39	KHADAKVASLA	582.47	578.78	0.056	0.013	13/08/2015	23	89	79	78	8
*40	UPPER VAITARNA	603.50	599.24	0.331	0.200	13/08/2015	60	86	82	-	61
41	UPPER TAPI	214.00	210.45	0.255	0.079	13/08/2015	31	42	38	45	-
*42	PENCH (TOTALADOH)	490.00	486.70	1.091	0.778	13/08/2015	71	64	56	127	160
43	UPPER WARDHA	342.50	342.05	0.564	0.524	12/08/2015	93	88	66	70	-
44	BHATSA	142.07	128.08	0.942	0.603	13/08/2015	64	86	81	29.378	15
45	DHOM	747.70	739.25	0.331	0.183	11/08/2015	55	87	67	36.2	2
46	DUDHGANGA	646.00	639.00	0.664	0.457	13/08/2015	69	91	91	2.441	24
47	MANIKDOH (KUKADI)	711.25	694.38	0.288	0.084	13/08/2015	29	50	50	2.2	6
48	BHANDARDARA	342.50	342.05	0.304	0.234	12/08/2015	93	88	66	70	-
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	308.15	0.707	0.609	12/08/2015	86	77	68	-	30
*50	RIHAND	268.22	259.14	5.649	1.914	12/08/2015	34	40	28	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	358.81	2.196	1.712	13/08/2015	78	67	40	1897	198
*52	TEHRI	830.00	809.40	2.615	1.808	13/08/2015	69	68	56	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	399.24	6.827	6.220	11/08/2015	91	65	34	220	115
54	TAWA	355.40	354.57	1.944	1.888	13/08/2015	97	70	84	247	-
*55	BARGI	422.76	417.70	3.180	1.887	13/08/2015	59	97	69	157	90
*56	BANSAGAR	341.64	337.11	5.166	3.247	11/08/2015	63	82	41	488	425
*57	INDIRA SAGAR	262.13	259.49	9.745	7.457	13/08/2015	77	65	48	2380	1000
58	BARNA	348.55	346.41	0.456	0.317	11/08/2015	70	90	68	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	354.80	3.046	2.102	13/08/2015	69	91	68	-	120
60	MAHANADI	348.70	341.10	0.767	0.206	12/08/2015	27	94	76	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	244.73	8.288	0.765	13/08/2015	9	38	61	0	770
*62	NAGARJUNA SAGAR	179.83	155.48	6.841	0.005	13/08/2015	0	13	52	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	83.10	1.994	0.250	13/08/2015	13	15	23	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	320.41	2.300	0.194	13/08/2015	8	29	45	411	27
65	LOWER MANAIR	280.42	269.44	0.621	0.116	13/08/2015	19	42	39	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 13.08.2015

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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	747.09	1.163	0.693	12/08/2015	60	100	86	79	-
*67	TUNGABHADRA	497.74	495.12	3.276	2.012	13/08/2015	61	87	87	529	72
68	GHATAPRABHA	662.95	647.91	1.391	0.504	12/08/2015	36	80	90	317	-
69	BHADRA	657.76	652.11	1.785	1.185	12/08/2015	66	98	89	106	39
70	LINGANAMAKKI	554.43	544.55	4.294	1.884	13/08/2015	44	86	78	-	55
71	NARAYANPUR	492.25	490.65	0.863	0.546	13/08/2015	63	79	80	425	-
72	MALAPRABHA(RENUKA)	633.83	626.23	0.972	0.261	12/08/2015	27	53	66	215	-
73	KABINI	696.16	695.29	0.444	0.393	12/08/2015	89	92	59	85	-
74	HEMAVATHY	890.63	887.73	0.927	0.772	12/08/2015	83	100	92	265	-
75	HARANGI	871.42	871.23	0.220	0.220	12/08/2015	100	95	95	53	-
76	SUPA	564.00	541.10	4.120	1.841	13/08/2015	45	62	61	-	-
77	VANIVILAS SAGAR	652.28	634.07	0.802	0.041	13/08/2015	5	3	12	123	-
*78	ALMATTI	519.60	515.95	3.105	1.705	13/08/2015	55	96	82	@	290
*79	GERUSOPPA	55.00	48.86	0.130	0.096	12/08/2015	74	78	85	83	240
KERALA											
80	KALLADA(PARAPPAR)	115.82	94.73	0.507	0.125	12/08/2015	25	57	63	62	-
*81	IDAMALAYAR	169.00	148.36	1.018	0.479	12/08/2015	47	71	62	33	75
*82	IDUKKI	732.43	719.38	1.460	0.795	12/08/2015	54	52	54	-	780
*83	KAKKI	981.46	961.14	0.447	0.192	12/08/2015	43	57	63	23	300
*84	PERIYAR	867.41	861.63	0.173	0.066	12/08/2015	38	57	60	84	140
85	MALAPMUZHA	867.41	861.63	0.224	0.120	12/08/2015	38	57	60	84	140
TAMIL NADU											
86	LOWER BHAWANI	278.89	274.48	0.792	0.532	12/08/2015	67	49	69	105	8
*87	METTUR(STANLEY)	240.79	233.02	2.647	1.641	12/08/2015	62	86	69	122	360
88	VAIGAI	279.20	272.86	0.172	0.057	12/08/2015	33	26	31	61	6
89	PARAMBIKULAM	556.26	545.83	0.380	0.176	12/08/2015	46	75	81	101	-
90	ALIYAR	320.04	318.32	0.095	0.084	12/08/2015	88	76	80	#	60
*91	SHOLAYAR	1002.79	996.78	0.143	0.113	12/08/2015	79	100	86	-	95
TOTAL FOR 91 RESERVOIRS				157.799	87.093						
PERCENTAGE							55	64	57		

Sd/-

Director

W. M. , CWC

* HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

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