

BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR BULLETIN OF 16.07.2015)

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 **16.07.2015**, live storage available in these reservoirs was **51.622 BCM** which is **33%** of total live storage capacity of these reservoirs. This storage is **133%** of the storage of corresponding period of last year and **112%** 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 **9.28 BCM** which is **52%** 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 **39%** 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 **7.66 BCM** which is **41%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **24%** and average storage of last ten years during corresponding period was **21%** 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.

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 **6.10 BCM** which is **23%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **21%** 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 but is 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 **15.10 BCM** which is **36%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **30%** and average storage of last ten years during corresponding period was **22%** 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 **13.48 BCM** which is **26%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **15%** and average storage of last ten years during corresponding period was **34%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year but is 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 4, better than normal storage is available in Ganga, Indus, Narmada, Godavari, Cauvery & neighbouring EFRs, Mahanadi & neighbouring East Flowing Rivers. Close to Normal in Mahi, Sabarmati and West Flowing rivers of South. Deficient in Tapi and Krishna and Highly Deficient in Rivers of Kutch.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are 60 and reservoirs having storage more than average of last ten years are 42. The numbers of reservoirs having storage less than 20% with respect to last year is 3 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 13 and having storage less than or equal to 50% with reference to average of last ten years are 14.

States having better storage (in %) than last year for corresponding period:
Himachal Pradesh, Punjab, Odisha, Tripura, Maharashtra, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, Karnataka, 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:
Rajasthan, Jharkhand, West Bengal, Gujarat, Andhra Pradesh, Telangana.

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 **16.07.2015** is **51.622** BCM (**33** percent of the live storage capacity at FRL). The current year's storage is nearly **133** percent of last year's storage and **112** percent of the average of last ten years.

3 Region wise storage status:-

REGION (Monitoring No. of Reservoirs) (States),	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	-	-	1	1	3	H.P. PUNJAB RAJASTHAN	38 % 70 % -26 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.))	-	-	-	1	-	1	7	6	JHARKHAND ODISHA W. BENGAL TRIPURA	-8 % 153 % 25 % 37 %
WEST (Guj. & Mah.), (27 Resv.)	-	-	-	-	-	2	5	20	GUJARAT MAH.	-23 % -36 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	-	-	1	1	2	-	8	U.P. UTTARAKHAND M.P. CHHATISGARH	106 % 107 % 60 % 34 %
SOUTH (Karnataka, TN, AP & TG, AP, TG, & Kerala), (31 Resv.))	-	1	1	4	2	3	3	17	AP & TG A, P TG KARNATAKA KERALA T.N.	-98 % -44 % -12 % 1 % 11 % 19 %
Status of 91 reservoirs	0	1	2	6	3	9	16	54		

4 Basin wise storage position:**Better than normal:**

Ganga, Indus, Narmada, Godavari, Cauvery & neighbouring EFRS, Mahanadi & Neighbouring EFRS.

Close to normal: Mahi, Sabarmati and West Flowing rivers of south.**Deficient:** Tapi and Krishna**Highly deficient:** Rivers of Kutch

- 5 Out of 91 reservoirs, **58** reservoirs reported more than 80% of normal storage & **33** reservoirs reported 80% or below of normal storage. Out of these **33** reservoirs **14** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
SRISAILAM	0	VANIVILAS SAGAR	44		
BHIMA(UJJANI)	0	DANTIWADA	48		
JAYAKWADI(PAITHON)	0	GIRNA	49		
NAGARJUNA SAGAR	3	RANA PRATAP SAGAR	50		
PANAM	11				
YELDARI	11				
SHETRUNJI	23				
MULA	24				
KHADAKVASLA	27				
BHADAR	28				

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

51% to 60%	61% to 70%	71% to 80%
6	4	9

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

11 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 :- 16.07.2015

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	11.401	40.58%	11.330	40.33%	6.501	23.14%	75.37
INDUS	14.730	8.337	56.60%	6.670	45.28%	5.775	39.21%	44.36
NARMADA	17.414	3.976	22.83%	2.317	13.31%	3.755	21.56%	5.89
TAPI	7.394	1.449	19.60%	1.563	21.14%	2.164	29.27%	-33.04
MAHI	4.012	1.302	32.45%	1.908	47.56%	1.567	39.06%	-16.91
SABARMATI	0.735	0.165	22.45%	0.086	11.70%	0.174	23.67%	-5.17
RIVERS OF KUTCH	0.887	0.057	6.43%	0.085	9.58%	0.200	22.55%	-71.50
GODAVARI	15.394	3.627	23.56%	4.175	27.12%	3.072	19.96%	18.07
KRISHNA	32.831	5.903	17.98%	2.150	6.55%	11.334	34.52%	-47.92
MAHANADI & NEIGHBOURING EFRS	13.181	6.093	46.23%	3.434	26.05%	3.205	24.32%	90.11
CAUVERY & NEIGHBOURING EFRS	8.359	4.232	50.63%	2.039	24.39%	3.348	40.05%	26.40
WEST FLOWING RIVERS OF SOUTH	14.766	5.080	34.40%	3.201	21.68%	5.111	34.61%	-0.61
TOTAL	157.799	51.622		38.958		46.206		
PERCENTAGE								11.72

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 16.07.2015

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	495.66	6.229	3.586	16-07-2015	58	55	44	676	1200
*2	PONG DAM	423.67	408.52	6.157	2.752	15-07-2015	45	25	31	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	523.65	2.344	1.999	14-07-2015	85	72	50	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	269.70	1.711	0.572	16-07-2015	33	39	32	63	140
5	JHAKAM	359.50	343.15	0.132	0.023	16-07-2015	17	33	23	28	-
*6	RANA PRATAP SAGAR	352.81	346.33	1.436	0.343	16-07-2015	24	55	48	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	256.84	0.821	0.306	16-07-2015	37	51	38	-	-
8	MAITHON	146.3	141.17	0.471	0.201	16-07-2015	43	62	54	342	-
*9	PANCHET HILL	124.97	124.19	0.184	0.147	16-07-2015	80	64	70	\$	80
10	KONAR	425.81	417.70	0.176	0.055	16-07-2015	31	65	44	\$	-
11	TILAIYA	368.81	365.96	0.142	0.052	16-07-2015	37	77	39	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	186.60	5.378	1.934	16-07-2015	36	10	15	153	307
*13	BALIMELA	462.08	452.93	2.676	1.294	15-07-2015	48	41	11	-	360
14	SALANADI	82.30	70.90	0.558	0.235	16-07-2015	42	67	27	42	-
*15	RENGALI	123.50	117.11	3.432	1.462	15-07-2015	43	2	12	3	200
*16	MACHKUND(JALPUT)	838.16	830.99	0.893	0.391	15-07-2015	44	31	31	-	115
*17	UPPER KOLAB	858.00	851.26	0.935	0.371	15-07-2015	40	19	16	89	320
*18	UPPER INDRAVATI	642.00	630.85	1.456	0.405	16-07-2015	28	14	21	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	117.03	0.480	0.286	16-07-2015	60	68	43	227	-
20	KANGSABATI	134.14	127.09	0.914	0.380	16-07-2015	42	41	36	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	89.55	0.312	0.142	15-07-2015	46	31	33	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	91.51	6.615	1.348	13-07-2015	20	22	30	348	300
23	SABARMATI(DHAROI)	189.59	181.83	0.735	0.165	16-07-2015	22	12	24	95	1
*24	KADANA	127.7	122.00	1.472	0.673	16-07-2015	46	57	46	200	120
25	SHETRUNJI	55.53	55.12	0.300	0.027	16-07-2015	9	13	38	36	-
26	BHADAR	107.89	106.92	0.188	0.015	16-07-2015	8	19	29	27	-
27	DAMANAGANGA	79.86	69.80	0.502	0.123	13-07-2015	25	9	18	51	1
28	DANTIWADA	184.1	165.99	0.399	0.015	16-07-2015	4	3	8	45	-
29	PANAM	127.41	123.80	0.697	0.034	16-07-2015	5	52	45	36	2
*30	SARDAR SAROVAR	121.92	116.06	1.566	0.655	13-07-2015	42	25	35	2120	1450
31	KARJAN	115.25	99.90	0.523	0.170	13-07-2015	33	34	41	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 16.07.2015

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	455.53	2.171	0.001	16-07-2015	0	3	21	227	-
*33	KOYANA	657.90	642.62	2.652	1.154	15-07-2015	44	5	51	-	1920
34	BHIMA(UJJANI)	496.83	489.83	1.517	0.000	15-07-2015	0	0	22	125	12
35	ISAPUR	441.00	430.54	0.965	0.213	15-07-2015	22	44	29	104	-
36	MULA	552.30	535.74	0.609	0.032	16-07-2015	5	2	22	139	-
37	YELDARI	461.77	448.13	0.809	0.011	15-07-2015	1	39	12	78	-
38	GIRNA	398.07	384.19	0.524	0.044	15-07-2015	8	7	17	79	-
39	KHADAKVASLA	582.47	578.05	0.056	0.007	15-07-2015	13	32	46	78	8
*40	UPPER VAITARNA	603.50	594.91	0.331	0.089	15-07-2015	27	21	44	-	61
41	UPPER TAPI	214.00	209.82	0.255	0.057	15-07-2015	22	30	33	45	-
*42	PENCH (TOTALADOH)	490.00	472.03	1.091	0.142	09-07-2015	13	40	24	127	160
43	UPPER WARDHA	342.50	338.88	0.564	0.286	16-07-2015	51	35	41	70	-
44	BHATSA	142.07	110.80	0.942	0.307	15-07-2015	33	26	46	29.378	15
45	DHOM	747.70	734.91	0.331	0.147	15-07-2015	44	11	37	36.2	2
46	DUDHGANGA	646.00	631.90	0.664	0.277	15-07-2015	42	20	45	2.441	24
47	MANIKDOH (KUKADI)	711.25	684.87	0.288	0.027	15-07-2015	9	4	13	2.2	6
48	BHANDARDARA	342.50	338.88	0.304	0.286	16-07-2015	51	35	41	70	-
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	305.68	0.707	0.359	15-07-2015	51	9	37	-	30
*50	RIHAND	268.22	257.80	5.649	1.427	15-07-2015	25	10	11	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	356.06	2.196	1.521	15-07-2015	69	46	23	1897	198
*52	TEHRI	830.00	770.15	2.615	0.636	16-07-2015	24	19	21	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	392.08	6.827	2.699	15-07-2015	40	57	19	220	115
54	TAWA	355.40	345.06	1.944	0.653	16-07-2015	34	15	39	247	-
*55	BARGI	422.76	412.50	3.180	0.989	16-07-2015	31	14	24	157	90
*56	BANSAGAR	341.64	336.00	5.166	2.847	15-07-2015	55	52	23	488	425
*57	INDIRA SAGAR	262.13	248.07	9.745	1.404	16-07-2015	14	8	14	2380	1000
58	BARNA	348.55	341.98	0.456	0.105	15-07-2015	23	51	28	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	355.90	3.046	2.270	15-07-2015	75	74	48	-	120
60	MAHANADI	348.70	340.81	0.767	0.192	15-07-2015	25	24	47	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	244.53	8.288	0.000	16-07-2015	0	0	25	0	770
*62	NAGARJUNA SAGAR	179.83	155.94	6.841	0.077	16-07-2015	1	2	33	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	83.52	1.994	0.272	14-07-2015	14	23	24	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	321.81	2.300	0.280	16-07-2015	12	30	13	411	27
65	LOWER MANAIR	280.42	269.50	0.621	0.117	16-07-2015	19	43	23	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 16.07.2015

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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
<u>KARNATAKA</u>											
66	KRISHNARAJA SAGRA	752.50	747.66	1.163	0.743	15-07-2015	64	23	44	79	-
*67	TUNGABHADRA	497.74	491.43	3.276	1.129	16-07-2015	34	15	41	529	72
68	GHATAPRABHA	662.95	642.83	1.391	0.307	16-07-2015	22	4	38	317	-
69	BHADRA	657.76	648.80	1.785	0.867	16-07-2015	49	36	50	106	39
70	LINGANAMAKKI	554.43	540.29	4.294	1.224	16-07-2015	29	19	35	-	55
71	NARAYANPUR	492.25	488.38	0.863	0.320	09-07-2015	37	32	53	425	-
72	MALAPRABHA(RENUKA)	633.83	624.68	0.972	0.177	16-07-2015	18	2	23	215	-
73	KABINI	696.16	695.78	0.444	0.421	15-07-2015	95	75	44	85	-
74	HEMAVATHY	890.63	886.52	0.927	0.686	15-07-2015	74	28	48	265	-
75	HARANGI	871.42	869.17	0.220	0.166	15-07-2015	75	61	65	53	-
76	SUPA	564.00	535.90	4.120	1.472	16-07-2015	36	21	29	-	-
77	VANIVILAS SAGAR	652.28	634.21	0.802	0.044	16-07-2015	5	3	13	123	-
*78	ALMATTI	519.60	514.72	3.105	1.370	09-07-2015	44	6	42	@	290
*79	GERUSOPPA	55.00	48.74	0.130	0.096	16-07-2015	74	87	84	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	94.60	0.507	0.124	15-07-2015	24	27	41	62	-
*81	IDAMALAYAR	169.00	142.50	1.018	0.358	15-07-2015	35	25	34	33	75
*82	IDUKKI	732.43	715.91	1.460	0.655	15-07-2015	45	22	30	-	780
*83	KAKKI	981.46	955.57	0.447	0.147	15-07-2015	33	18	37	23	300
*84	PERIYAR	867.41	863.46	0.173	0.098	15-07-2015	57	31	45	84	140
85	MALAPMUZHA	867.41	863.46	0.224	0.098	15-07-2015	57	31	45	84	140
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	274.50	0.792	0.533	15-07-2015	67	14	50	105	8
*87	METTUR(STANLEY)	240.79	230.28	2.647	1.349	15-07-2015	51	17	43	122	360
88	VAIGAI	279.20	273.28	0.172	0.062	15-07-2015	36	3	19	61	6
89	PARAMBIKULAM	556.26	541.51	0.380	0.103	15-07-2015	27	21	49	101	-
90	ALIYAR	320.04	317.66	0.095	0.080	15-07-2015	84	14	45	#	60
*91	SHOLAYAR	1002.79	994.52	0.143	0.103	15-07-2015	72	35	59	-	95
TOTAL FOR 91 RESERVOIRS				157.799	51.821						
PERCENTAGE							33	25	29		

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