

BRIEF NOTE ON STORAGE STATUS OF 91 IMPORTANT RESERVOIRS IN THE COUNTRY(WITH REFERENCE TO RESERVOIR BULLETIN OF 23.04.2015)

1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 important reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. These reservoirs include 37 reservoirs having hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of these 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 23.04.2015, live storage available in these reservoirs was **49.247 BCM** which is **31%** of total live storage capacity of these reservoirs. This storage is **89%** of the storage of corresponding period of last year and **116%** of storage of average of last ten years. The present storage position during current year is less than the storage position of last year but is better than the storage of average of last ten years.

As per Table-01, the overall storage position is **less than** corresponding period of last year in the country as a whole but is 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 **6.78 BCM** which is **38%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **38%** and average storage of last ten years during corresponding period was **30%** of live storage capacity of these reservoirs. Thus, storage during current year is equal to the corresponding period of last year but is 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 **8.10 BCM** which is **43%** 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 **30%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year but 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 **9.21 BCM** which is **34%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **43%** and average storage of last ten years during corresponding period was **37%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and 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 42.30BCM. The total live storage available in these reservoirs is **16.24 BCM** which is **38%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **44%** and average storage of last ten years during corresponding period was **23%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year but 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 **8.92 BCM** which is **17%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **18%** and average storage of last ten years during corresponding period was **23%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year and 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, Mahi, Rivers of Kutch, Godavari, Mahanadi & neighbouring East Flowing Rivers, and West Flowing Rivers of South. Close to Normal in Tapi and Cauvery& neighbouring EFRs and Deficient in Sabarmati, and Krishna.
- 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 39 and reservoirs having storage more than average of last ten years are 47. 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 2. The numbers of reservoirs having storage less than 50% with respect to last year are 15 and having storage less than 50% with reference to average of last ten years are 13.

States having better storage than last year for corresponding period: Himachal Pradesh, Punjab, Tripura, Karnataka, Kerala and Tamil Nadu.

States having equal storage to last year for corresponding period: NIL

States having lesser storage than last year for corresponding period: Rajasthan, Jharkhand, Odisha, West Bengal, , Gujarat, Maharashtra, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chattisgarh, Andhra Pradesh, Telangana, AP&TG(2combined project in both states).

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 **23.04.2015** is **49.247** BCM (**31** percent of the storage capacity at FRL). The current year's storage is nearly **89** percent of last year's storage and **116** percent of the average of last ten years.

3 Region wise storage status:-

Region-wise storage status:		Filling position of 91 reservoirs w.r.t. FRL							Departure from Normal storage		
REGION (Monitoring No. of Reservoirs)	(States),	100%	91%-99%	81%-90%	71%-80%	61%-70%	51%-60%	41%-50%			40% & below
NORTH & Rajasthan), Resv.)	(HP,Punjab (6	-	-	-	-	1	-	-	5	H.P. PUNJAB RAJASTHAN	23 % 71 % -14 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)		-	-	-	-	2	3	3	7	JHARKHAND ODISHA W. BENGAL TRIPURA	7 % 48 % 30 % -67 %
WEST (Guj.& Mah.), Resv.)	(27	-	-	1	2	3	1	3	17	GUJARAT MAH.	-4 % -14 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)		-	-	1	1	2	-	-	8	U.P. UTTARAKHAND M.P. CHHATISGARH	31 % 68 % 90 % 39 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)		-	-	1	1	-	-	5	24	AP&TG A,P TG KARNATAKA KERALA T.N.	-95 % -61 % 36 % 13 % 33 % -23 %
Status of 91 reservoirs		0	0	3	4	8	4	11	61		

4 Basin wise storage position:

Better than normal: Ganga,Indus,Narmada,Mahi,,Rivers of Kutch,Godavari,Mahanadi & Neighbouring EFRS, and West Flowing rivers of south.

Close to normal: Tapi and Cauvery & neighbouring EFRS.

Deficient: Sabarmati and Krishna.

Highly deficient: NIL

- 5 Out of 91 reservoirs, **63** reservoirs reported more than 80% of normal storage & **28** reservoirs reported 80% or below of normal storage.

Out of these 28 reservoirs		13 having storage upto 50% of normal storage			
Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
SRISAILAM	0	LOWER BHAWANI	49		
NAGARJUNA SAGAR	11	MULA	49		
SHOLAYAR	29	VAIGAI	50		
BHIMA(UJJANI)	29				
VANIVILAS SAGAR	32				
GUMTI	33				
JAYAKWADI(PAITHON)	34				
SOMASILA	39				
TUNGABHADRA	44				
PANCHET HILL	48				

15 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
3	7	5

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

14 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 :- 23.04.2015

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	10.851	38.62%	14.309	50.93%	6.375	22.69%	70.21
INDUS	14.730	5.881	39.93%	5.422	36.81%	4.412	29.95%	33.30
NARMADA	17.414	5.530	31.76%	4.819	27.67%	3.721	21.37%	48.62
TAPI	7.394	2.182	29.51%	3.728	50.42%	2.724	36.84%	-19.90
MAHI	4.012	1.804	44.97%	2.364	58.92%	1.598	39.83%	12.89
SABARMATI	0.735	0.112	15.24%	0.147	20.00%	0.174	23.67%	-35.63
RIVERS OF KUTCH	0.887	0.106	11.95%	0.184	20.74%	0.105	11.84%	0.95
GODAVARI	15.394	4.792	31.13%	7.025	45.63%	4.106	26.67%	16.71
KRISHNA	32.831	4.072	12.40%	3.350	10.20%	7.152	21.78%	-43.06
MAHANADI & NEIGHBOURING EFRS	13.181	6.630	50.30%	6.996	53.08%	4.883	37.05%	35.78
CAUVERY & NEIGHBOURING EFRS	8.359	2.113	25.28%	1.970	23.57%	2.637	31.55%	-19.87
WEST FLOWING RIVERS OF SOUTH	14.766	5.174	35.04%	5.073	34.36%	4.643	31.44%	11.44
TOTAL	157.799	49.247		55.387		42.530		
PERCENTAGE								15.79

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 23.04.2015											
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	483.11	6.229	2.187	4/23/2015	35	34	25	676	1200
*2	PONG DAM	423.67	404.58	6.157	2.095	4/23/2015	34	29	31	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	518.12	2.344	1.599	4/23/2015	68	65	40	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	269.05	1.711	0.522	4/23/2015	31	43	26	63	140
5	JHAKAM	359.50	343.65	0.132	0.025	4/23/2015	19	36	17	28	-
*6	RANA PRATAP SAGAR	352.81	346.41	1.436	0.355	4/23/2015	25	40	40	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	257.97	0.821	0.341	4/23/2015	42	50	32	-	-
8	MAITHON	146.3	138.69	0.471	0.116	4/23/2015	25	59	39	342	-
*9	PANCHET HILL	124.97	120.93	0.184	0.033	4/23/2015	18	90	38	\$	80
10	KONAR	425.81	421.84	0.176	0.110	4/23/2015	63	64	41	\$	-
11	TILAIYA	368.81	366.41	0.142	0.064	4/23/2015	45	39	23	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	185.99	5.378	1.691	4/22/2015	31	41	36	153	307
*13	BALIMELA	462.08	454.24	2.676	1.467	4/23/2015	55	60	26	-	360
14	SALANADI	82.30	70.00	0.558	0.218	4/23/2015	39	80	24	42	-
*15	RENGALI	123.50	119.61	3.432	2.181	4/23/2015	64	44	29	3	200
*16	MACHKUND(JALPUT)	838.16	830.79	0.893	0.381	4/23/2015	43	55	44	-	115
*17	UPPER KOLAB	858.00	852.89	0.935	0.493	4/23/2015	53	45	30	89	320
*18	UPPER INDRAVATI	642.00	634.98	1.456	0.744	4/23/2015	51	51	30	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	109.43	0.480	0.070	4/23/2015	15	33	20	227	-
20	KANGSABATI	134.14	122.80	0.914	0.184	4/23/2015	20	50	11	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	84.30	0.312	0.009	4/22/2015	3	0	9	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	94.20	6.615	1.892	4/23/2015	29	52	38	348	300
23	SABARMATI(DHAROI)	189.59	180.51	0.735	0.112	4/23/2015	15	20	24	95	1
*24	KADANA	127.7	124.99	1.472	0.924	4/23/2015	63	78	54	200	120
25	SHETRUNJI	55.53	49.82	0.300	0.048	4/23/2015	16	28	15	36	-
26	BHADAR	107.89	102.51	0.188	0.034	4/23/2015	18	46	22	27	-
27	DAMANAGANGA	79.86	69.90	0.502	0.126	4/23/2015	25	32	47	51	1
28	DANTIWADA	184.1	162.82	0.399	0.024	4/23/2015	6	3	5	45	-
29	PANAM	127.41	123.70	0.697	0.333	4/23/2015	48	62	48	36	2
*30	SARDAR SAROVAR	121.92	119.68	1.566	1.172	4/23/2015	75	39	41	2120	1450
31	KARJAN	115.25	103.27	0.523	0.227	4/21/2015	43	60	59	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA
GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 23.04.2015											
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
<u>MAHARASHTRA</u>											
32	JAYAKWADI(PAITHON)	463.91	456.81	2.171	0.209	4/23/2015	10	13	28	227	-
*33	KOYANA	657.90	643.49	2.652	1.377	4/23/2015	52	22	44	-	1920
34	BHIMA(UJJANI)	496.83	491.52	1.517	0.100	4/23/2015	7	13	23	125	12
35	ISAPUR	441.00	431.41	0.965	0.257	4/22/2015	27	64	31	104	-
36	MULA	552.30	538.67	0.609	0.094	4/22/2015	15	41	31	139	-
37	YELDARI	461.77	450.96	0.809	0.090	4/22/2015	11	57	17	78	-
38	GIRNA	398.07	385.74	0.524	0.080	4/22/2015	15	16	21	79	-
39	KHADAKVASLA	582.47	581.41	0.056	0.042	4/22/2015	75	73	30	78	8
*40	UPPER VAITARNA	603.50	596.39	0.331	0.126	4/22/2015	38	63	46	-	61
41	UPPER TAPI	214.00	213.22	0.255	0.210	4/22/2015	82	78	41	45	-
*42	PENCH (TOTALADOH)	490.00	473.03	1.091	0.185	4/22/2015	17	54	25	127	160
43	UPPER WARDHA	342.50	337.35	0.564	0.197	4/23/2015	35	42	37	70	-
44	BHATSA	142.07	117.35	0.942	0.403	4/16/2015	43	49	45	29.378	15
45	DHOM	747.70	742.53	0.331	0.222	1/31/2015	67	71	60	36.2	2
46	DUDHGANGA	646.00	638.02	0.664	0.429	2/28/2015	65	57	65	2.441	24
47	MANIKDOH (KUKADI)	711.25	699.44	0.288	0.115	12/31/2014	40	66	49	2.2	6
48	BHANDARDARA	342.50	337.35	0.304	0.197	4/23/2015	35	42	37	70	-
<u>CENTRAL REGION</u>											
<u>UTTAR PRADESH</u>											
49	MATATILA	308.46	308.12	0.707	0.605	4/22/2015	86	45	39	-	30
*50	RIHAND	268.22	256.46	5.649	0.980	4/23/2015	17	31	16	-	300
<u>UTTRAKHAND</u>											
*51	RAMGANGA	365.30	353.85	2.196	1.390	4/23/2015	63	71	34	1897	198
*52	TEHRI	830.00	764.95	2.615	0.510	4/23/2015	20	18	15	2351	1000
<u>MADHYA PRADESH</u>											
*53	GANDHI SAGAR	399.90	392.24	6.827	2.755	4/23/2015	40	65	20	220	115
54	TAWA	355.40	344.91	1.944	0.640	4/23/2015	33	26	22	247	-
*55	BARGI	422.76	413.15	3.180	1.078	4/23/2015	34	34	25	157	90
*56	BANSAGAR	341.64	337.34	5.166	3.329	4/23/2015	64	69	24	488	425
*57	INDIRA SAGAR	262.13	250.65	9.745	2.303	4/23/2015	24	22	15	2380	1000
58	BARNA	348.55	342.12	0.456	0.110	4/23/2015	24	37	17	546	-
<u>CHHATTIS GARH</u>											
*59	MINIMATA BANGOI	359.66	356.28	3.046	2.330	4/23/2015	76	81	48	-	120
60	MAHANADI	348.70	341.18	0.767	0.210	4/23/2015	27	46	46	319	10
<u>SOUTHERN REGION</u>											
<u>A.P & TG</u>											
*61	SRISAILAM	269.75	245.93	8.288	0.000	4/23/2015	0	0	20	0	770
*62	NAGARJUNA SAGAR	179.83	156.55	6.841	0.175	4/23/2015	3	6	23	895	810
<u>ANDHRA PRADESH</u>											
63	SOMASILA	100.58	84.29	1.994	0.312	4/23/2015	16	48	40	168	0
<u>TELANGANA</u>											
64	SRIRAMSAGAR	332.54	322.84	2.300	0.361	4/23/2015	16	36	9	411	27
65	LOWER MANAIR	280.42	270.16	0.621	0.135	4/23/2015	22	49	27	199	60

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GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

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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	741.99	1.163	0.332	4/23/2015	29	26	19	79	-
*67	TUNGABHADRA	497.74	480.01	3.276	0.065	4/22/2015	2	2	5	529	72
68	GHATAPRABHA	662.95	639.34	1.391	0.195	4/23/2015	14	5	8	317	-
69	BHADRA	657.76	647.20	1.785	0.764	4/23/2015	43	35	37	106	39
70	LINGANAMAKKI	554.43	538.95	4.294	1.057	4/23/2015	25	24	27	-	55
71	NARAYANPUR	492.25	486.79	0.863	0.192	4/23/2015	22	26	35	425	-
72	MALAPRABHA(RENUKA)	633.83	622.87	0.972	0.102	4/23/2015	10	4	7	215	-
73	KABINI	696.16	691.81	0.444	0.218	4/23/2015	49	39	7	85	-
74	HEMAVATHY	890.63	873.83	0.927	0.118	4/23/2015	13	13	12	265	-
75	HARANGI	871.42	853.26	0.220	0.022	4/23/2015	10	17	15	53	-
76	SUPA	564.00	539.16	4.120	1.701	4/23/2015	41	45	30	-	-
77	VANIVILAS SAGAR	652.28	633.77	0.802	0.037	4/23/2015	5	4	14	123	-
*78	ALMATTI	519.60	507.97	3.105	0.257	4/23/2015	8	8	8	@	290
*79	GERUSOPPA	55.00	50.13	0.130	0.103	4/23/2015	79	93	92	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	101.44	0.507	0.209	4/23/2015	41	26	32	62	-
*81	IDAMALAYAR	169.00	143.32	1.018	0.373	4/23/2015	37	34	29	33	75
*82	IDUKKI	732.43	716.12	1.460	0.663	4/23/2015	45	36	29	-	780
*83	KAKKI	981.46	959.61	0.447	0.179	4/23/2015	40	22	36	23	300
*84	PERIYAR	867.41	860.01	0.173	0.039	4/23/2015	23	14	28	84	140
85	MALAPMUZHA	867.41	860.01	0.224	0.039	4/23/2015	23	14	28	84	140
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	264.51	0.792	0.146	4/23/2015	18	10	38	105	8
*87	METTUR(STANLEY)	240.79	225.74	2.647	0.941	4/23/2015	36	12	42	122	360
88	VAIGAI	279.20	269.30	0.172	0.024	4/23/2015	14	3	28	61	6
89	PARAMBIKULAM	556.26	539.37	0.380	0.069	4/23/2015	18	18	35	101	-
90	ALIYAR	320.04	317.08	0.095	0.077	4/23/2015	81	28	45	#	60
*91	SHOLAYAR	1002.79	955.82	0.143	0.002	4/23/2015	1	1	5	-	95
TOTAL FOR 91 RESERVOIRS				157.799	49.257						
PERCENTAGE							31	35	27		

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