

## **BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 10.03.2016)**

### **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 these 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 storage bulletin dated **10.03.2016**, live storage available in these reservoirs is **45.801 BCM**, which is **29%** of total live storage capacity of these reservoirs. This storage is **71%** of the storage of corresponding period of last year and **74%** 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 under CWC monitoring having total live storage capacity of 18.01 BCM. As per Reservoir Storage Bulletin dated **10.03.2016**, the total live storage available in these reservoirs is **4.89 BCM** which is **27%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **32%** 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 less than the corresponding period of last year and is also less 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 under CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated **10.03.2016**, the total live storage available in these reservoirs is **8.27 BCM** which is **44%** 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 **50%** 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 under CWC monitoring having total live storage capacity of 27.07 BCM. As per Reservoir Storage Bulletin dated **10.03.2016**, the total live storage available in these reservoirs is **6.97 BCM** which is **26%** 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 **50%** 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 during the corresponding period.

#### **d) CENTRAL REGION**

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs under CWC monitoring having total live storage capacity of 42.30 BCM. As per Reservoir Storage Bulletin dated **10.03.2016**, the total live storage available in these reservoirs is **15.30 BCM**

which is **36%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **46%** 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 less than the storage of last year but is better than the average storage of last ten years during the corresponding period.

e) **SOUTHERN REGION**

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG (2 combined projects in both states) Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs under CWC monitoring having total live storage capacity of 51.59 BCM. As per Reservoir Storage Bulletin dated **10.03.2016**, the total live storage available in these reservoirs is **10.37 BCM** which is **20%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **32%** and average storage of last ten years during corresponding period was **36%** 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.

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**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 **10.03.2016** is **45.801** BCM ( **29** percent of the live storage capacity at FRL ). The current year's storage is nearly **71** percent of last year's storage and **74** 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		
<b>NORTH</b> (HP, Punjab & Rajasthan), (6 Resv.)	-	-	-	-	-	-	-	6	H.P.	-19 %
									PUNJAB	-29 %
									RAJASTHAN	-12 %
<b>EAST</b> (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.)	-	-	-	-	-	4	3	8	JHARKHAND	-36 %
									ODISHA	-10 %
									W. BENGAL	-21 %
									TRIPURA	320 %
<b>WEST</b> (Guj. & Mah.), (27 Resv.)	-	-	-	-	-	-	5	22	GUJARAT	-39 %
									MAH.	-57 %
<b>CENTRAL</b> (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	-	-	-	-	2	2	8	U.P.	-15 %
									UTTARAKHAND	-46 %
									M.P.	33 %
									CHHATISGARH	-29 %
<b>SOUTH</b> (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.)	-	1	-	1	-	1	2	26	AP&TG	-81 %
									A,P	-1 %
									TG	-74 %
									KARNATAKA	-34 %
									KERALA	-4 %
									T.N.	-42 %
Status of 91 reservoirs	0	1	0	1	0	7	12	70		

**4 Basin wise storage position:**

**Better than normal:** Ganga, Narmada and Rivers of Kutch.

**Close to normal:** Sabarmati, Mahanadi & Neighbouring EFRS and West Flowing rivers of south.

**Deficient:** Indus, Tapi, Mahi, Godavari and Cauvery & neighbouring EFRS

**Highly deficient:** Krishna.

- 5 Out of 91 reservoirs, **29** reservoirs reported more than 80% of normal storage & **62** reservoirs reported 80% or below of normal storage. Out of these **62** reservoirs **30** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0	SRISAILAM	31	NARAYANPUR	42
BHIMA(UJJANI)	0	MULA	33	PANAM	43
JAYAKWADI(PAITHON)	3	MATATILA	35	BARNA	43
GIRNA	6	SARDAR SAROVAR	36	DUDHGANGA	44
SALANADI	13	VAIGAI	38	JHAKAM	44
YELDARI	21	TUNGABHADRA	39	ISAPUR	44
PANCHET HILL	23	BHANDARDARA	39	HARANGI	44
SRIRAMSAGAR	25	MAITHON	40	LOWER BHAWANI	45
LOWER MANAIR	28	ALIYAR	41	KARJAN	46
MANIKDOH	31	MALAPRABHA(RENUKA)	42	RAMGANGA	49

32 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
12	8	12

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

**28** 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 :- 10.03.2016

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	9.686	34.47%	12.194	43.40%	9.369	33.35%	<b>3.38</b>
INDUS	14.730	3.884	26.37%	4.514	30.64%	4.903	33.29%	<b>-20.78</b>
NARMADA	17.414	6.036	34.66%	7.285	41.83%	5.914	33.96%	<b>2.06</b>
TAPI	7.394	2.424	32.78%	3.324	44.96%	3.762	50.88%	<b>-35.57</b>
MAHI	4.012	1.202	29.96%	2.126	52.99%	1.880	46.86%	<b>-36.06</b>
SABARMATI	0.735	0.241	32.79%	0.155	21.09%	0.243	33.06%	<b>-0.82</b>
RIVERS OF KUTCH	0.887	0.227	25.59%	0.115	12.97%	0.214	24.13%	<b>6.07</b>
GODAVARI	15.394	3.942	25.61%	6.313	41.01%	6.309	40.98%	<b>-37.52</b>
KRISHNA	32.831	4.000	12.18%	9.622	29.31%	11.248	34.26%	<b>-64.44</b>
MAHANADI & NEIGHBOURING EFRS	13.181	5.860	44.46%	8.298	62.95%	7.289	55.30%	<b>-19.60</b>
CAUVERY & NEIGHBOURING EFRS	8.359	2.449	29.30%	2.911	34.82%	3.465	41.45%	<b>-29.32</b>
WEST FLOWING RIVERS OF SOUTH	14.766	5.850	39.62%	7.507	50.84%	7.132	48.30%	<b>-17.98</b>
<b>TOTAL</b>	<b>157.799</b>	<b>45.801</b>		<b>64.364</b>		<b>61.728</b>		
<b>PERCENTAGE</b>								<b>-25.80</b>

## WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 10.03.2016

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
<b><u>NORTHERN REGION</u></b>											
<b><u>HIMACHAL PRADESH</u></b>											
*1	GOBIND SAGAR(BHAKRA)	512.06	483.80	6.229	2.256	10-03-2016	36	33	36	676	1200
*2	PONG DAM	423.67	397.42	6.157	1.121	10-03-2016	18	26	32	-	360
<b><u>PUNJAB</u></b>											
*3	THEIN	527.91	496.68	2.344	0.507	10-03-2016	22	37	30	348	600
<b><u>RAJASTHAN</u></b>											
*4	MAHI BAJAJ SAGAR	280.75	269.85	1.711	0.585	09-03-2016	34	45	35	63	140
5	JHAKAM	359.50	338.40	0.132	0.011	09-03-2016	8	23	19	28	-
*6	RANA PRATAP SAGAR	352.81	346.81	1.436	0.412	09-03-2016	29	27	36	229	172
<b><u>EASTERN REGION</u></b>											
<b><u>JHARKHAND</u></b>											
7	TENUGHAT	269.14	257.16	0.821	0.315	10-03-2016	38	44	39	-	-
8	MAITHON	146.3	139.07	0.471	0.128	10-03-2016	27	45	67	342	-
*9	PANCHET HILL	124.97	120.80	0.184	0.030	10-03-2016	16	35	71	\$	80
10	KONAR	425.81	420.38	0.176	0.088	10-03-2016	50	71	57	\$	-
11	TILAIYA	368.81	365.19	0.142	0.033	10-03-2016	23	71	40	\$	4
<b><u>ODISHA</u></b>											
*12	HIRAKUD	192.02	188.49	5.378	2.773	10-03-2016	52	50	56	153	307
*13	BALIMELA	462.08	452.81	2.676	1.278	08-03-2016	48	70	46	-	360
14	SALANADI	82.30	54.95	0.558	0.026	10-03-2016	5	43	36	42	-
*15	RENGALI	123.50	117.22	3.432	1.490	08-03-2016	43	71	53	3	200
*16	MACHKUND(JALPUT)	838.16	833.28	0.893	0.522	08-03-2016	58	60	62	-	115
*17	UPPER KOLAB	858.00	853.26	0.935	0.521	08-03-2016	56	67	47	89	320
*18	UPPER INDRAVATI	642.00	633.06	1.456	0.586	08-03-2016	40	68	49	128	600
<b><u>WEST BENGAL</u></b>											
19	MAYURAKSHI	121.31	110.46	0.480	0.089	10-03-2016	19	17	34	227	-
20	KANGSABATI	134.14	123.90	0.914	0.225	10-03-2016	25	26	26	341	-
<b><u>TRIPURA</u></b>											
21	GUMTI	93.55	90.25	0.312	0.168	09-03-2016	54	0	13	-	15
<b><u>WESTERN REGION</u></b>											
<b><u>GUJARAT</u></b>											
*22	UKAI	105.16	95.55	6.615	2.308	10-03-2016	35	45	52	348	300
23	SABARMATI(DHAROI)	189.59	183.39	0.735	0.241	09-03-2016	33	21	33	95	1
*24	KADANA	127.7	118.54	1.472	0.440	09-03-2016	30	65	59	200	120
25	SHETRUNJI	55.53	51.87	0.300	0.098	09-03-2016	33	18	41	36	-
26	BHADAR	107.89	102.53	0.188	0.035	08-03-2016	19	24	29	27	-
27	DAMANAGANGA	79.86	73.60	0.502	0.229	10-03-2016	46	47	62	51	1
28	DANTIWADA	184.1	173.25	0.399	0.094	09-03-2016	24	4	10	45	-
29	PANAM	127.41	119.35	0.697	0.166	09-03-2016	24	53	56	36	2
*30	SARDAR SAROVAR	121.92	113.73	1.566	0.332	10-03-2016	21	71	59	2120	1450
31	KARJAN	115.25	99.86	0.523	0.169	10-03-2016	32	59	70	51	3

## WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 10.03.2016

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
<b>MAHARASHTRA</b>											
32	JAYAKWADI(PAITHON)	463.91	455.66	2.171	0.020	10-03-2016	1	17	35	227	-
*33	KOYANA	657.90	640.64	2.652	0.978	09-03-2016	37	68	64	-	1920
34	BHIMA(UJJANI)	496.83	488.81	1.517	0.000	09-03-2016	0	37	50	125	12
35	ISAPUR	441.00	429.89	0.965	0.183	09-03-2016	19	36	43	104	-
36	MULA	552.30	538.54	0.609	0.090	09-03-2016	15	29	44	139	-
37	YELDARI	461.77	449.50	0.809	0.049	09-03-2016	6	21	29	78	-
38	GIRNA	398.07	382.30	0.524	0.008	09-03-2016	2	21	27	79	-
39	KHADAKVASLA	582.47	580.06	0.056	0.026	09-03-2016	46	71	43	78	8
*40	UPPER VAITARNA	603.50	596.92	0.331	0.139	09-03-2016	42	60	65	-	61
41	UPPER TAPI	214.00	211.12	0.255	0.108	09-03-2016	42	89	64	45	-
*42	PENCH (TOTALADOH)	490.00	474.53	1.091	0.210	09-03-2016	19	19	35	127	160
43	UPPER WARDHA	342.50	337.02	0.564	0.180	10-03-2016	32	39	44	70	-
44	BHATSA	142.07	121.10	0.942	0.468	09-03-2016	50	58	57	29.378	15
45	DHOM	747.70	733.30	0.331	0.125	09-03-2016	38	67	49	36.2	2
46	DUDHGANGA	646.00	626.75	0.664	0.179	09-03-2016	27	63	62	2.441	24
47	MANIKDOH (KUKADI)	711.25	684.34	0.288	0.025	09-03-2016	9	40	28	2.2	6
48	BHANDARDARA	342.50	337.02	0.304	0.067	10-03-2016	32	39	44	70	-
<b>CENTRAL REGION</b>											
<b>UTTAR PRADESH</b>											
49	MATATILA	308.46	301.81	0.707	0.095	09-03-2016	13	34	38	-	30
*50	RIHAND	268.22	257.64	5.649	1.386	07-03-2016	25	29	26	-	300
<b>UTTRAKHAND</b>											
*51	RAMGANGA	365.30	334.33	2.196	0.493	10-03-2016	22	63	46	1897	198
*52	TEHRI	830.00	766.40	2.615	0.546	10-03-2016	21	36	35	2351	1000
<b>MADHYA PRADESH</b>											
*53	GANDHI SAGAR	399.90	394.12	6.827	3.516	10-03-2016	52	41	28	220	115
54	TAWA	355.40	341.71	1.944	0.366	07-03-2016	19	33	27	247	-
*55	BARGI	422.76	417.35	3.180	1.814	07-03-2016	57	53	44	157	90
*56	BANSAGAR	341.64	333.82	5.166	2.162	10-03-2016	42	70	37	488	425
*57	INDIRA SAGAR	262.13	252.96	9.745	3.314	10-03-2016	34	35	27	2380	1000
58	BARNA	348.55	339.83	0.456	0.041	10-03-2016	9	25	21	546	-
<b>CHHATTIS GARH</b>											
*59	MINIMATA BANGOI	359.66	348.47	3.046	1.269	09-03-2016	42	82	57	-	120
60	MAHANADI	348.70	342.71	0.767	0.302	10-03-2016	39	58	62	319	10
<b>SOUTHERN REGION</b>											
<b>A.P &amp; TG</b>											
*61	SRISAILAM	269.75	247.88	8.288	0.930	10-03-2016	11	30	36	0	770
*62	NAGARJUNA SAGAR	179.83	155.20	6.841	0.000	10-03-2016	0	10	27	895	810
<b>ANDHRA PRADESH</b>											
63	SOMASILA	100.58	92.83	1.994	0.979	10-03-2016	49	24	49	168	0
<b>TELANGANA</b>											
64	SRIRAMSAGAR	332.54	319.52	2.300	0.150	03-03-2016	7	18	26	411	27
65	LOWER MANAIR	280.42	268.19	0.621	0.086	03-03-2016	14	31	50	199	60

## WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 10.03.2016

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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
<b><u>KARNATAKA</u></b>											
66	KRISHNARAJA SAGRA	752.50	741.87	1.163	0.325	10-03-2016	28	56	43	79	-
*67	TUNGABHADRA	497.74	483.60	3.276	0.214	10-03-2016	7	17	17	529	72
68	GHATAPRABHA	662.95	638.68	1.391	0.176	09-03-2016	13	23	17	317	-
69	BHADRA	657.76	645.39	1.785	0.630	09-03-2016	35	63	62	106	39
70	LINGANAMAKKI	554.43	542.01	4.294	1.467	10-03-2016	34	44	46	-	55
71	NARAYANPUR	492.25	487.44	0.863	0.241	10-03-2016	28	61	66	425	-
72	MALAPRABHA(RENUKA)	633.83	621.28	0.972	0.049	09-03-2016	5	13	12	215	-
73	KABINI(Sancherla Tank)	696.16	689.03	0.444	0.105	10-03-2016	24	64	27	85	-
74	HEMAVATHY	890.63	873.99	0.927	0.122	10-03-2016	13	16	23	265	-
75	HARANGI	871.42	851.97	0.220	0.016	10-03-2016	7	9	16	53	-
76	SUPA	564.00	536.20	4.120	1.498	10-03-2016	36	53	46	-	-
77	VANIVILAS SAGAR	652.28	637.06	0.802	0.094	10-03-2016	12	7	15	123	-
*78	ALMATTI	519.60	508.67	3.105	0.333	10-03-2016	11	19	19	@	290
*79	GERUSOPPA	55.00	53.89	0.130	0.123	10-03-2016	95	77	85	83	240
<b><u>KERALA</u></b>											
80	KALLADA(PARAPPAR)	115.82	111.92	0.507	0.401	10-03-2016	79	69	57	62	-
*81	IDAMALAYAR	169.00	145.24	1.018	0.412	10-03-2016	40	59	47	33	75
*82	IDUKKI	732.43	715.01	1.460	0.618	10-03-2016	42	58	47	-	780
*83	KAKKI	981.46	968.23	0.447	0.259	10-03-2016	58	64	61	23	300
*84	PERIYAR	867.41	859.98	0.173	0.030	10-03-2016	17	15	24	84	140
85	MALAPMUZHA	867.41	859.98	0.224	0.033	10-03-2016	17	15	24	84	140
<b><u>TAMIL NADU</u></b>											
86	LOWER BHAWANI	278.89	265.45	0.792	0.170	10-03-2016	21	33	47	105	8
*87	METTUR(STANLEY)	240.79	222.74	2.647	0.715	10-03-2016	27	39	45	122	360
88	VAIGAI	279.20	268.22	0.172	0.017	10-03-2016	10	10	26	61	6
89	PARAMBIKULAM	556.26	543.37	0.380	0.133	10-03-2016	35	31	51	101	-
90	ALIYAR	320.04	306.16	0.095	0.018	10-03-2016	19	62	46	#	60
*91	SHOLAYAR	1002.79	964.06	0.143	0.022	10-03-2016	15	6	8	-	95
TOTAL FOR 91 RESERVOIRS				<b>157.799</b>	<b>45.801</b>						
PERCENTAGE							<b>29</b>	<b>41</b>	<b>39</b>		

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 &amp; ALIYAR

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

† SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

Sl. No. 30th 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