

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 12.01.2017)

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 **12.01.2017**, live storage available in these reservoirs is **85.967 BCM**, which is **54%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **67.500 BCM** and the average of last 10 years live storage was **87.133 BCM**. Thus, the live storage available in 91 reservoirs **as per 12.01.2017 Bulletin** is **127%** of the live storage of corresponding period of last year and **99%** 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 but is **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 **12.01.2017**, the total live storage available in these reservoirs is **7.71 BCM** which is **43%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **50%** and average storage of last ten years during corresponding period was **51%** 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 **12.01.2017**, the total live storage available in these reservoirs is **14.29 BCM** which is **76%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **55%** 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.

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 **12.01.2017**, the total live storage available in these reservoirs is **17.97 BCM** which is **66%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **39%** 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 storage of last year and is also better 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 **12.01.2017**, the total live storage available in these reservoirs is **29.51 BCM** which is **70%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **53%** and average storage of last ten years during corresponding period was **51%** 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 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 **12.01.2017**, the total live storage available in these reservoirs is **16.49 BCM** which is **32%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **29%** and average storage of last ten years during corresponding period was **53%** 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 Narmada, Mahi, , Ganga, Sabarmati, Godavari, Tapi and Mahanadi & neighbouring East Flowing Rivers. NIL in Close to Normal and Deficient in Indus, Rivers of Kutch, West Flowing Rivers of South and Krishna and Highly Deficient in Cauvery & neighbouring EFRs Basin.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **58** 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 **5** and having storage less than 20% with reference to average of last ten years is **10**. The number 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 **17**.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 12.01.2017

- 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 **12.01.2017** is **85.967** BCM (**54** percent of the live storage capacity at FRL).The current year's storage is nearly **127** percent of last year's storage and **99** 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	1	-	-	4	H.P.	-24 %	
									PUNJAB	-9 %	
									RAJASTHAN	9 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	2	2	2	3	2	1	2	1	JHARKHAND	20 %	
									ODISHA	19 %	
									W. BENGAL	19 %	
									TRIPURA	113 %	
WEST (Guj.& Mah.), (27 Resv.)	-	1	1	7	9	3	-	6	GUJARAT	7 %	
									MAH.	4 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	1	2	1	5	1	2	-	U.P.	60 %	
									UTTARAKHAND	-13 %	
									M.P.	50 %	
									CHHATISGARH	14 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	2	1	3	3	21	AP&TG	-55 %	
									A,P	-29 %	
									TG	71 %	
									KARNATAKA	-38 %	
									KERALA	-37 %	
									T.N.	-81 %	
Status of 91 reservoirs	2	4	6	14	18	8	7	32			

4 Basin wise storage position:

Better than normal: Ganga,Sabarmati,Godavari,Mahi, Narmada ,Tapi and Mahanadi & Neighbouring EFRS.

Close to normal: NIL

Deficient: Indus ,Rivers of Kutch,West Flowing Rivers of South and Krishna.

Highly deficient: Cauvery & neighbouring EFRS.

- 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 **17** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
SHOLAYAR	0	DANTIWADA	26
ALIYAR	0	BHADRA	37
VAIGAI	9	HEMAVATHY	40
NAGARJUNA SAGAR	14	MALAMPUZHA	41
TUNGABHADRA	16	KALLADA(PARAPPAR)	49
BHADAR	16		
PERIYAR	16		
PARAMBIKULAM	19		
LOWER BHAWANI	20		
METTUR(STANLEY)	20		
VANIVILAS SAGAR	21		
KRISHNARAJA SAGRA	21		

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

51% to 60%	61% to 70%	71% to 80%
3	8	5

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

20 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 :- 12.01.2017

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	18.944	67.43%	13.601	48.41%	13.547	48.22%	39.84
INDUS	14.730	5.802	39.39%	7.406	50.28%	7.489	50.84%	-22.53
NARMADA	17.414	11.873	68.18%	9.643	55.37%	9.459	54.32%	25.52
TAPI	7.394	5.711	77.24%	3.599	48.67%	4.799	64.90%	19.00
MAHI	4.012	2.847	70.96%	1.971	49.13%	2.380	59.32%	19.62
SABARMATI	0.735	0.489	66.53%	0.423	57.55%	0.363	49.39%	34.71
RIVERS OF KUTCH	0.887	0.196	22.10%	0.435	49.04%	0.373	42.05%	-47.45
GODAVARI	15.394	10.405	67.59%	5.454	35.43%	8.410	54.63%	23.72
KRISHNA	32.831	10.280	31.31%	6.014	18.32%	17.229	52.48%	-40.33
MAHANADI & NEIGHBOURING EFRS	13.181	10.412	78.99%	7.043	53.43%	8.908	67.58%	16.88
CAUVERY & NEIGHBOURING EFRS	8.359	1.795	21.47%	4.142	49.55%	4.538	54.29%	-60.45
WEST FLOWING RIVERS OF SOUTH	14.766	7.213	48.85%	7.769	52.61%	9.638	65.27%	-25.16
TOTAL	157.799	85.967		67.500		87.133		
PERCENTAGE								-1.34

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 12.01.2017

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	486.29	6.229	2.505	11-01-2017	40	65	60	676	1200
*2	PONG DAM	423.67	406.94	6.157	2.480	12-01-2017	40	47	46	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	503.78	2.344	0.817	12-01-2017	35	21	38	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	277.80	1.711	1.336	12-01-2017	78	61	57	63	140
5	JHAKAM	359.50	354.30	0.132	0.086	12-01-2017	65	46	48	28	-
*6	RANA PRATAP SAGAR	352.81	347.34	1.436	0.487	11-01-2017	34	31	49	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	260.10	0.821	0.421	12-01-2017	51	42	44	-	-
8	MAITHON	146.3	148.61	0.471	0.471	12-01-2017	100	31	86	342	-
*9	PANCHET HILL	124.97	126.71	0.184	0.184	12-01-2017	100	21	84	\$	80
10	KONAR	425.81	424.89	0.176	0.160	12-01-2017	91	64	73	\$	-
11	TILAIYA	368.81	368.49	0.142	0.130	12-01-2017	92	51	61	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	191.23	5.378	4.320	11-01-2017	80	69	77	153	307
*13	BALIMELA	462.08	457.75	2.676	1.932	11-01-2017	72	63	56	-	360
14	SALANADI	82.30	68.68	0.558	0.190	12-01-2017	34	6	39	42	-
*15	RENGALI	123.50	122.39	3.432	3.072	11-01-2017	90	48	60	3	200
*16	MACHKUND(JALPUT)	838.16	834.85	0.893	0.626	11-01-2017	70	77	77	-	115
*17	UPPER KOLAB	858.00	856.30	0.935	0.774	11-01-2017	83	76	57	89	320
*18	UPPER INDRAVATI	642.00	638.90	1.456	1.126	12-01-2017	77	50	67	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	115.21	0.480	0.216	12-01-2017	45	20	43	227	-
20	KANGSABATI	134.14	128.37	0.914	0.457	12-01-2017	50	25	39	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	91.25	0.312	0.209	11-01-2017	67	72	31	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	102.32	6.615	5.145	09-01-2017	78	51	66	348	300
23	SABARMATI(DHAROI)	189.59	186.92	0.735	0.489	12-01-2017	67	58	49	95	1
*24	KADANA	127.7	125.91	1.472	1.009	12-01-2017	69	43	62	200	120
25	SHETRUNJI	55.53	53.37	0.300	0.157	12-01-2017	52	63	63	36	-
26	BHADAR	107.89	100.74	0.188	0.014	12-01-2017	7	28	46	27	-
27	DAMANAGANGA	79.86	77.70	0.502	0.381	09-01-2017	76	71	80	51	1
28	DANTIWADA	184.1	167.50	0.399	0.025	12-01-2017	6	48	24	45	-
29	PANAM	127.41	125.25	0.697	0.416	12-01-2017	60	33	62	36	2
*30	SARDAR SAROVAR	121.92	119.15	1.566	1.097	09-01-2017	70	37	77	2120	1450
31	KARJAN	115.25	107.31	0.523	0.308	09-01-2017	59	46	79	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 12.01.2017

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	461.90	2.171	1.453	10-01-2017	67	8	41	227	-
*33	KOYANA	657.90	650.72	2.652	1.818	11-01-2017	69	52	79	-	1920
34	BHIMA(UJJANI)	496.83	495.59	1.517	1.121	11-01-2017	74	0	66	125	12
35	ISAPUR	441.00	433.89	0.965	0.390	11-01-2017	40	21	56	104	-
36	MULA	552.30	549.55	0.609	0.470	11-01-2017	77	19	62	139	-
37	YELDARI	461.77	453.89	0.809	0.211	12-01-2017	26	7	41	78	-
38	GIRNA	398.07	394.83	0.524	0.363	11-01-2017	69	3	38	79	-
39	KHADAKVASLA	582.47	580.80	0.056	0.034	11-01-2017	61	39	52	78	8
*40	UPPER VAITARNA	603.50	602.09	0.331	0.286	11-01-2017	86	50	80	-	61
41	UPPER TAPI	214.00	213.09	0.255	0.203	11-01-2017	80	69	84	45	-
*42	PENCH (TOTALADOH)	490.00	478.12	1.091	0.334	11-01-2017	31	40	51	127	160
43	UPPER WARDHA	342.50	340.32	0.564	0.385	12-01-2017	68	53	64	70	-
44	BHATSA	142.07	133.17	0.942	0.716	11-01-2017	76	63	72	29.378	15
45	DHOM	747.70	742.32	0.331	0.217	11-01-2017	66	40	62	36.2	2
46	DUDHGANGA	646.00	641.41	0.664	0.530	11-01-2017	80	47	78	2.441	24
47	MANIKDOH (KUKADI)	711.25	699.53	0.288	0.116	11-01-2017	40	7	40	2.2	6
48	BHANDARDARA	744.91	743.77	0.304	0.281	11-01-2017	92	29	73	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	305.32	0.707	0.328	11-01-2017	46	54	53	-	30
*50	RIHAND	268.22	263.10	5.649	3.465	12-01-2017	61	31	35	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	344.99	2.196	0.925	12-01-2017	42	53	62	1897	198
*52	TEHRI	830.00	803.90	2.615	1.617	12-01-2017	62	54	61	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	398.23	6.827	5.622	12-01-2017	82	69	45	220	115
54	TAWA	355.40	349.90	1.944	1.150	12-01-2017	59	52	57	247	-
*55	BARGI	422.76	418.85	3.180	2.137	12-01-2017	67	72	63	157	90
*56	BANSAGAR	341.64	339.59	5.166	4.252	12-01-2017	82	48	52	488	425
*57	INDIRA SAGAR	262.13	258.66	9.745	6.874	12-01-2017	71	55	46	2380	1000
58	BARNA	348.55	346.25	0.456	0.307	09-01-2017	67	43	48	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	354.72	3.046	2.091	10-01-2017	69	44	63	-	120
60	MAHANADI	348.70	348.40	0.767	0.739	12-01-2017	96	46	76	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	261.79	8.288	2.803	12-01-2017	34	17	55	0	770
*62	NAGARJUNA SAGAR	179.83	157.58	6.841	0.345	12-01-2017	5	0	36	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	92.84	1.994	0.980	12-01-2017	49	79	69	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	330.83	2.300	1.929	12-01-2017	84	8	45	411	27
65	LOWER MANAIR	280.42	277.89	0.621	0.494	12-01-2017	80	15	62	199	60

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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	738.67	1.163	0.174	11-01-2017	15	54	71	79	-
*67	TUNGABHADRA	497.74	483.80	3.276	0.225	12-01-2017	7	14	44	529	72
68	GHATAPRABHA	662.95	650.61	1.391	0.626	11-01-2017	45	25	42	317	-
69	BHADRA	657.76	644.59	1.785	0.575	11-01-2017	32	55	86	106	39
70	LINGANAMAKKI	554.43	545.12	4.294	1.987	12-01-2017	46	49	66	-	55
71	NARAYANPUR	492.25	490.69	0.863	0.551	12-01-2017	64	38	82	425	-
72	MALAPRABHA(RENUKA)	633.83	624.58	0.972	0.171	11-01-2017	18	13	34	215	-
73	KABINI(Sancherla Tank)	696.16	688.75	0.444	0.095	11-01-2017	21	36	34	85	-
74	HEMAVATHY	890.63	873.25	0.927	0.104	11-01-2017	11	15	28	265	-
75	HARANGI	871.42	859.35	0.220	0.062	11-01-2017	28	4	10	53	-
76	SUPA	564.00	544.21	4.120	2.082	12-01-2017	51	43	58	-	-
77	VANIVILAS SAGAR	652.28	633.29	0.802	0.031	12-01-2017	4	13	19	123	-
*78	ALMATTI	519.60	513.60	3.105	1.117	12-01-2017	36	14	47	@	290
*79	GERUSOPPA	55.00	49.49	0.130	0.099	12-01-2017	76	83	81	83	240
KERALA											
80	KALLADA(PARAPPAR)	115.82	100.81	0.507	0.201	12-01-2017	40	88	80	62	-
*81	IDAMALAYAR	169.00	152.46	1.018	0.572	12-01-2017	56	55	66	33	75
*82	IDUKKI	732.43	713.09	1.460	0.542	12-01-2017	37	57	64	-	780
*83	KAKKI	981.46	965.74	0.447	0.233	12-01-2017	52	74	77	23	300
*84	PERIYAR	867.41	859.25	0.173	0.014	12-01-2017	8	80	50	84	140
85	MALAPMUZHA	115.06	104.23	0.224	0.046	12-01-2017	21	35	50	21	3
TAMIL NADU											
86	LOWER BHAWANI	278.89	262.07	0.792	0.094	12-01-2017	12	50	59	105	8
*87	METTUR(STANLEY)	240.79	215.01	2.647	0.279	12-01-2017	11	44	52	122	360
88	VAIGAI	279.20	265.42	0.172	0.007	12-01-2017	4	45	43	61	6
89	PARAMBIKULAM	556.26	538.35	0.380	0.054	12-01-2017	14	64	74	101	-
90	ALIYAR	320.04	301.02	0.095	0.000	12-01-2017	0	72	71	#	60
*91	SHOLAYAR	1002.79	955.06	0.143	0.000	12-01-2017	0	4	34	-	95
TOTAL FOR 91 RESERVOIRS				157.799	85.967						
PERCENTAGE							54	43	55		

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. 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