

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 14.09.2017)

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 **14.09.2017**, live storage available in these reservoirs is **92.51 BCM**, which is **59%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **107.271 BCM** and the average of last 10 years live storage was **114.464 BCM**. Thus, the live storage available in 91 reservoirs **as per 14.09.2017 Bulletin** is **86%** of the live storage of corresponding period of last year and **81%** of storage of average of last ten years.

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 **14.09.2017**, the total live storage available in these reservoirs is **15.48 BCM** which is **86%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **79%** and average storage of last ten years during corresponding period was **81%** 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 under CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated **14.09.2017**, the total live storage available in these reservoirs is **11.68 BCM** which is **62%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **78%** and average storage of last ten years during corresponding period was **71%** 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 **14.09.2017**, the total live storage available in these reservoirs is **19.15 BCM** which is **71%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **74%** and average storage of last ten years during corresponding period was **75%** 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 **14.09.2017**, the total live storage available in these reservoirs is **24.94 BCM** which is **59%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **86%** and average storage of last ten years during corresponding period was **71%** 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.

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 **14.09.2017**, the total live storage available in these reservoirs is **21.27 BCM** which is **41%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **42%** and average storage of last ten years during corresponding period was **70%** 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 4, better than normal storage is available in Indus, Sabarmati, Mahi, Rivers of Kutch and Ganga. Close to Normal in Godavari and Mahanadi & neighbouring East Flowing Rivers. Deficient in Narmada, Tapi, Cauvery & neighbouring EFRs and West Flowing Rivers of South and Krishna basin and NIL in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **44** and reservoirs having storage more than average of last ten years are **41**. The numbers of reservoirs having storage less than 20% with respect to last year is **1** and having storage less than 20% with reference to average of last ten years is **4**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **7** and having storage less than or equal to 50% with reference to average of last ten years are **13**.

Disclaimer: The Data contained in this Bulletin is as received from the State Government/Project Authorities.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 14.09.2017

- 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.
- The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **14.09.2017** is **92.510** BCM (**59** percent of the live storage capacity at FRL).The current year's storage is nearly **86** percent of last year's storage and **81** 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	-	2	1	-	1	-	-	H.P.	6 %
									PUNJAB	21 %
									RAJASTHAN	-5 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	1	2	1	3	2	2	3	1	JHARKHAND	8 %
									ODISHA	-19 %
									W. BENGAL	29 %
									TRIPURA	67 %
WEST (Guj.& Mah.), (27 Resv.)	5	6	6	3	2	1	1	3	GUJARAT	-14 %
									MAH.	3 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	1	2	4	2	1	2	U.P.	16 %
									UTTARAKHAND	-4 %
									M.P.	-25 %
									CHHATISGARH	-16 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	1	1	1	2	4	5	5	12	AP&TG	-86 %
									A,P	-49 %
									TG	-4 %
									KARNATAKA	-22 %
									KERALA	-20 %
									T.N.	-43 %
Status of 91 reservoirs	9	9	11	11	12	11	10	18		

4 Basin wise storage position:

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

Close to normal: Godavari and Mahanadi & Neighbouring EFRS .

Deficient: Narmada ,Tapi ,Krishna, Cauvery & neighbouring EFRS and West Flowing Rivers of South

Highly deficient: NIL

- Out of 91 reservoirs, **52** reservoirs reported more than 80% of normal storage & **39** reservoirs reported 80% or below of normal storage. Out of these **39** reservoirs **13** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0		
VANIVILAS SAGAR	14		
ISAPUR	15		
YELDARI	16		
SRISAILAM	22		
PENCH (TOTALADOH)	26		
MATATILA	28		
VAIGAI	29		
INDIRA SAGAR	38		
ALIYAR	43		
HEMAVATHY	44		
MALAPRABHA(RENUKA)	45		
PARAMBIKULAM	48		

26 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
6	7	13

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

23 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 :- 14.09.2017

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	19.146	68.14%	24.137	85.91%	17.899	63.71%	6.97
INDUS	14.730	12.876	87.41%	10.962	74.42%	11.922	80.94%	8.00
NARMADA	17.414	8.821	50.65%	15.686	90.08%	14.638	84.06%	-39.74
TAPI	7.394	3.511	47.48%	5.541	74.94%	5.462	73.87%	-35.72
MAHI	4.012	3.553	88.56%	3.445	85.87%	3.126	77.92%	13.66
SABARMATI	0.735	0.729	99.18%	0.712	96.87%	0.507	68.98%	43.79
RIVERS OF KUTCH	0.887	0.713	80.38%	0.200	22.55%	0.458	51.63%	55.68
GODAVARI	15.394	7.608	49.42%	9.442	61.34%	9.102	59.13%	-16.41
KRISHNA	32.831	15.036	45.80%	16.067	48.94%	24.612	74.97%	-38.91
MAHANADI & NEIGHBOURING EFRS	13.181	8.561	64.95%	10.116	76.75%	10.289	78.06%	-16.79
CAUVERY & NEIGHBOURING EFRS	8.359	3.177	38.01%	2.660	31.82%	5.069	60.64%	-37.32
WEST FLOWING RIVERS OF SOUTH	14.766	8.779	59.45%	8.303	56.23%	11.380	77.07%	-22.86
TOTAL	157.799	92.510		107.271		114.464		
PERCENTAGE								-19.18

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 14.09.2017

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	509.78	6.229	5.600	12-09-2017	90	73	86	676	1200
*2	PONG DAM	423.67	421.49	6.157	5.396	14-09-2017	88	75	81	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	521.73	2.344	1.880	14-09-2017	80	77	66	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	281.50	1.711	1.711	14-09-2017	100	100	86	63	140
5	JHAKAM	359.50	359.75	0.132	0.132	14-09-2017	100	100	83	28	-
*6	RANA PRATAP SAGAR	352.81	349.13	1.436	0.763	14-09-2017	53	99	81	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	259.54	0.821	0.399	14-09-2017	49	46	43	-	-
8	MAITHON	146.3	145.53	0.471	0.471	14-09-2017	100	100	88	342	-
*9	PANCHET HILL	124.97	124.59	0.184	0.166	14-09-2017	90	100	82	\$	80
10	KONAR	425.81	422.21	0.176	0.115	14-09-2017	65	99	85	\$	-
11	TILAIYA	368.81	368.68	0.142	0.136	14-09-2017	96	100	84	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	189.33	5.378	3.208	13-09-2017	60	75	83	153	307
*13	BALIMELA	462.08	450.98	2.676	1.055	14-09-2017	39	73	55	-	360
14	SALANADI	82.30	71.01	0.558	0.238	13-09-2017	43	53	49	42	-
*15	RENGALI	123.50	121.27	3.432	2.719	14-09-2017	79	94	79	3	200
*16	MACHKUND(JALPUT)	838.16	834.78	0.893	0.628	14-09-2017	70	76	75	-	115
*17	UPPER KOLAB	858.00	851.97	0.935	0.424	14-09-2017	45	73	59	89	320
*18	UPPER INDRAVATI	642.00	635.18	1.456	0.763	14-09-2017	52	74	70	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	118.45	0.480	0.352	14-09-2017	73	81	58	227	-
20	KANGSABATI	134.14	131.43	0.914	0.697	14-09-2017	76	88	59	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	93.45	0.312	0.308	12-09-2017	99	81	59	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	97.31	6.615	2.936	14-09-2017	44	75	77	348	300
23	SABARMATI(DHAROI)	189.59	189.44	0.735	0.729	14-09-2017	99	97	69	95	1
*24	KADANA	127.7	127.38	1.472	1.158	14-09-2017	79	80	71	200	120
25	SHETRANJI	55.53	53.77	0.300	0.179	14-09-2017	60	21	63	36	-
26	BHADAR	107.89	107.13	0.188	0.155	14-09-2017	82	5	58	27	-
27	DAMANAGANGA	79.86	78.90	0.502	0.433	14-09-2017	86	81	82	51	1
28	DANTIWADA	184.1	183.85	0.399	0.379	14-09-2017	95	32	40	45	-
29	PANAM	127.41	127.40	0.697	0.552	14-09-2017	79	60	73	36	2
*30	SARDAR SAROVAR	121.92	127.75	1.566	1.566	14-09-2017	100	89	93	2120	1450
31	KARJAN	115.25	112.86	0.523	0.452	14-09-2017	86	42	82	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 14.09.2017

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	462.98	2.171	1.826	14-09-2017	84	64	45	227	-
*33	KOYANA	657.90	657.94	2.652	2.652	13-09-2017	100	100	98	-	1920
34	BHIMA(UJJANI)	496.83	497.26	1.517	1.517	14-09-2017	100	56	72	125	12
35	ISAPUR	441.00	427.82	0.965	0.083	13-09-2017	9	34	58	104	-
36	MULA	552.30	550.78	0.609	0.530	13-09-2017	87	92	76	139	-
37	YELDARI	461.77	449.48	0.809	0.049	14-09-2017	6	11	38	78	-
38	GIRNA	398.07	393.47	0.524	0.323	13-09-2017	62	67	38	79	-
39	KHADAKVASLA	582.47	582.38	0.056	0.055	13-09-2017	98	80	79	78	8
*40	UPPER VAITARNA	603.50	603.43	0.331	0.329	13-09-2017	99	99	91	-	61
41	UPPER TAPI	214.00	213.95	0.255	0.252	13-09-2017	99	83	72	45	-
*42	PENCH (TOTALADOH)	490.00	475.20	1.091	0.231	13-09-2017	21	70	80	127	160
43	UPPER WARDHA	342.50	340.14	0.564	0.372	14-09-2017	66	99	90	70	-
44	BHATSA	142.07	141.25	0.942	0.920	13-09-2017	98	97	93	29.378	15
45	DHOM	747.70	745.52	0.331	0.282	13-09-2017	85	100	86	36.2	2
46	DUDHGANGA	646.00	645.84	0.664	0.664	12-09-2017	100	98	96	2.441	24
47	MANIKDOH (KUKADI)	711.25	707.14	0.288	0.218	13-09-2017	76	67	53	2.2	6
48	BHANDARDARA	744.91	744.73	0.304	0.304	13-09-2017	100	95	96	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	303.22	0.707	0.174	13-09-2017	25	86	88	-	30
*50	RIHAND	268.22	263.69	5.649	3.704	14-09-2017	66	78	48	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	349.59	2.196	1.156	14-09-2017	53	51	66	1897	198
*52	TEHRI	830.00	823.75	2.615	2.361	14-09-2017	90	91	84	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	396.13	6.827	4.469	14-09-2017	65	92	58	220	115
54	TAWA	355.40	350.09	1.944	1.171	14-09-2017	60	100	97	247	-
*55	BARGI	422.76	419.95	3.180	2.436	14-09-2017	77	93	89	157	90
*56	BANSAGAR	341.64	338.73	5.166	3.875	14-09-2017	75	100	70	488	425
*57	INDIRA SAGAR	262.13	252.28	9.745	2.905	14-09-2017	30	89	78	2380	1000
58	BARNA	348.55	346.00	0.456	0.291	14-09-2017	64	99	86	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	354.32	3.046	2.032	13-09-2017	67	66	74	-	120
60	MAHANADI	348.70	343.77	0.767	0.364	13-09-2017	47	72	79	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	253.75	8.288	1.377	14-09-2017	17	48	74	0	770
*62	NAGARJUNA SAGAR	179.83	152.64	6.841	0.000	14-09-2017	0	3	57	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	85.56	1.994	0.383	14-09-2017	19	20	37	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	327.72	2.300	1.138	14-09-2017	49	41	47	411	27
65	LOWER MANAIR	280.42	272.28	0.621	0.205	14-09-2017	33	23	51	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 14.09.2017

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
<u>KARNATAKA</u>											
66	KRISHNARAJA SAGRA	752.50	746.17	1.163	0.615	14-09-2017	53	25	81	79	-
*67	TUNGABHADRA	497.74	495.25	3.276	2.050	14-09-2017	63	36	81	529	72
68	GHATAPRABHA	662.95	657.01	1.391	0.977	14-09-2017	70	83	90	317	-
69	BHADRA	657.76	651.31	1.785	1.106	14-09-2017	62	51	89	106	39
70	LINGANAMAKKI	554.43	547.18	4.294	2.392	14-09-2017	56	55	87	-	55
71	NARAYANPUR	492.25	492.25	0.863	0.740	14-09-2017	86	52	83	425	-
72	MALAPRABHA(RENUKA)	633.83	626.56	0.972	0.280	14-09-2017	29	36	64	215	-
73	KABINI(Sancherla Tank)	696.16	694.61	0.444	0.356	14-09-2017	80	54	59	85	-
74	HEMAVATHY	890.63	880.44	0.927	0.337	14-09-2017	36	26	83	265	-
75	HARANGI	871.42	870.83	0.220	0.210	14-09-2017	95	58	91	53	-
76	SUPA	564.00	546.55	4.120	2.278	14-09-2017	55	52	69	-	-
77	VANIVILAS SAGAR	652.28	631.91	0.802	0.013	14-09-2017	2	5	11	123	-
*78	ALMATTI	519.60	519.60	3.105	3.105	14-09-2017	100	100	91	@	290
*79	GERUSOPPA	55.00	49.97	0.130	0.102	14-09-2017	78	88	81	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	106.15	0.507	0.286	14-09-2017	56	36	66	62	-
*81	IDAMALAYAR	169.00	155.65	1.018	0.648	14-09-2017	64	56	74	33	75
*82	IDUKKI	732.43	717.28	1.460	0.710	14-09-2017	49	47	64	-	780
*83	KAKKI	981.46	967.43	0.447	0.250	14-09-2017	56	63	74	23	300
*84	PERIYAR	867.41	863.37	0.173	0.083	14-09-2017	48	19	49	84	140
85	MALAPMUZHA	115.06	108.57	0.224	0.098	13-09-2017	44	39	76	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	269.55	0.792	0.302	14-09-2017	38	19	54	105	8
*87	METTUR(STANLEY)	240.79	227.79	2.647	0.955	14-09-2017	36	45	62	122	360
88	VAIGAI	279.20	268.29	0.172	0.019	14-09-2017	11	5	38	61	6
89	PARAMBIKULAM	556.26	544.18	0.380	0.147	14-09-2017	39	39	80	101	-
90	ALIYAR	320.04	309.31	0.095	0.033	14-09-2017	35	7	80	#	60
*91	SHOLAYAR	1002.79	989.89	0.143	0.070	14-09-2017	49	48	90	-	95
TOTAL FOR 91 RESERVOIRS				157.799	92.510						
PERCENTAGE							59	68	73		

* 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. 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

Sd/-

Director

W. M. , CWC