

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 06.09.2018)

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 161.993 BCM which is about 63% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated **06.09.2018**, live storage available in these reservoirs is **119.042 BCM**, which is **73%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **91.373 BCM** and the average of last 10 years live storage was **104.013 BCM**. Thus, the live storage available in 91 reservoirs **as per 06.09.2018 Bulletin** is **130%** of the live storage of corresponding period of last year and **114%** 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 under CWC monitoring having total live storage capacity of 18.01 BCM. As per Reservoir Storage Bulletin dated **06.09.2018**, the total live storage available in these reservoirs is **13.03 BCM** which is **72%** 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 **80%** 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 **06.09.2018**, the total live storage available in these reservoirs is **14.93 BCM** which is **79%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **62%** and average storage of last ten years during corresponding period was **61%** 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 31.26 BCM. As per Reservoir Storage Bulletin dated **06.09.2018**, the total live storage available in these reservoirs is **17.85 BCM** which is **57%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **62%** and average storage of last ten years during corresponding period was **60%** 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 **06.09.2018**, the total live storage available in these reservoirs is **30.71 BCM** which is **73%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **59%** and average storage of last ten years during corresponding period was **65%** 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 (2combined 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 **06.09.2018**, the total live storage available in these reservoirs is **42.53 BCM** which is **82%** 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 **62%** 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.

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, Krishna, Narmada, Godavari, Mahanadi & Neighbouring East Flowing Rivers, and West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Indus and Mahi and Deficient in Tapi, Sabarmati and Rivers of Kutch and NIL in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **50** and reservoirs having storage more than average of last ten years are **64**. The numbers of reservoirs having storage less than 20% with respect to last year is **0** and having storage less than 20% with reference to average of last ten years is **1**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **2** and having storage less than or equal to 50% with reference to average of last ten years are **4**.

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 06.09.2018

- 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 **06.09.2018** is **119.042** BCM (**73** percent of the live storage capacity at FRL).The current year's storage is nearly **130** percent of last year's storage and **114** percent of the average of last ten years.

3 Region wise storage status:-

REGION (States), (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.)	-	-	-	3	2	1	-	-	H.P.	-10 %	
									PUNJAB	9 %	
									RAJASTHAN	-18 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	5	4	2	1	-	3	-	JHARKHAND	9 %	
									ODISHA	36 %	
									W. BENGAL	-17 %	
									TRIPURA	59 %	
WEST (Guj.& Mah.), (27 Resv.)	4	4	2	4	2	1	5	5	GUJARAT	-15 %	
									MAH.	4 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	3	4	-	2	1	1	1	U.P.	19 %	
									UTTARAKHAND	-2 %	
									M.P.	9 %	
									CHHATISGARH	33 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	6	9	9	1	3	-	-	3	AP&TG	27 %	
									A,P	34 %	
									TG	92 %	
									KARNATAKA	25 %	
									KERALA	47 %	
									T.N.	80 %	
Status of 91 reservoirs	10	21	19	10	10	3	9	9			

4 Basin wise storage position:

- Better than normal:** Ganga, Krishna,Narmada , West Flowing Rivers of South,Godavari , Mahanadi & Neighbouring EFRS and Cauvery & neighbouring EFRS .
- Close to normal:** Indus and Mahi .
- Deficient:** Tapi, sabarmati and Rivers of Kutch.
- Highly deficient:** NIL

- 5 Out of 91 reservoirs, **79** reservoirs reported more than 80% of normal storage & **12** reservoirs reported 80% or below of normal storage. Out of these **12** reservoirs **4** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
VANIVILAS SAGAR	18		
YELDARI	30		
PENCH (TOTALADOH)	37		
SABARMATI(DHAROI)	41		

8 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
1	4	3

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

10 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 :- 06.09.2018

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	17.312	61.62%	19.109	68.01%	16.279	57.94%	6.35
INDUS	14.730	10.959	74.40%	12.892	87.52%	11.869	80.58%	-7.67
NARMADA	21.608	15.177	70.24%	9.511	44.02%	13.647	63.16%	11.21
TAPI	7.394	3.235	43.75%	3.458	46.77%	4.812	65.08%	-32.77
MAHI	4.012	2.877	71.71%	3.550	88.48%	2.887	71.96%	-0.35
SABARMATI	0.735	0.183	24.90%	0.704	95.78%	0.446	60.68%	-58.97
RIVERS OF KUTCH	0.887	0.304	34.27%	0.692	78.02%	0.410	46.22%	-25.85
GODAVARI	15.394	10.679	69.37%	7.327	47.60%	7.439	48.32%	43.55
KRISHNA	32.831	26.366	80.31%	14.335	43.66%	22.397	68.22%	17.72
MAHANADI & NEIGHBOURING EFRS	13.181	10.998	83.44%	8.569	65.01%	9.341	70.87%	17.74
CAUVERY& NEIGHBOURING EFRS	8.359	7.097	84.90%	2.805	33.56%	4.514	54.00%	57.22
WEST FLOWING RIVERS OF SOUTH	14.766	13.855	93.83%	8.421	57.03%	9.972	67.53%	38.94
TOTAL	161.993	119.042		91.373		104.013		
PERCENTAGE								14.45

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 06.09.2018

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	501.58	6.229	4.376	06-09-2018	70	90	85	676	1200
*2	PONG DAM	423.67	418.80	6.157	4.783	05-09-2018	78	88	80	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	521.04	2.344	1.800	06-09-2018	77	79	70	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	277.85	1.711	1.134	05-09-2018	66	100	82	63	140
5	JHAKAM	359.50	356.60	0.132	0.103	05-09-2018	78	100	82	28	-
*6	RANA PRATAP SAGAR	352.81	349.53	1.436	0.830	06-09-2018	58	54	69	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	259.81	0.821	0.409	05-09-2018	50	45	45	-	-
8	MAITHON	146.3	146.52	0.471	0.454	05-09-2018	96	81	85	342	-
*9	PANCHET HILL	124.97	124.78	0.184	0.175	05-09-2018	95	100	83	\$	80
10	KONAR	425.81	422.82	0.176	0.125	05-09-2018	71	66	76	\$	-
11	TILAIYA	368.81	367.76	0.142	0.107	05-09-2018	75	100	76	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	190.32	5.378	3.752	06-09-2018	70	61	74	153	307
*13	BALIMELA	462.08	461.22	2.676	2.511	05-09-2018	94	41	35	-	360
14	SALANADI	82.30	79.76	0.558	0.478	06-09-2018	86	45	40	42	-
*15	RENGALI	123.50	122.34	3.432	3.048	05-09-2018	89	78	68	3	200
*16	MACHKUND(JALPUT)	838.16	837.59	0.893	0.836	05-09-2018	94	65	66	-	115
*17	UPPER KOLAB	858.00	856.56	0.935	0.799	05-09-2018	85	44	40	89	320
*18	UPPER INDRAVATI	642.00	640.43	1.456	1.281	05-09-2018	88	53	62	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	115.29	0.480	0.219	05-09-2018	46	81	57	227	-
20	KANGSABATI	134.14	128.23	0.914	0.447	05-09-2018	49	86	58	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	92.95	0.312	0.285	04-09-2018	91	99	57	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	96.86	6.615	2.772	06-09-2018	42	44	68	348	300
23	SABARMATI(DHAROI)	189.59	182.31	0.735	0.183	05-09-2018	25	96	61	95	1
*24	KADANA	127.7	126.34	1.472	1.105	05-09-2018	75	78	62	200	120
25	SHETRUNJI	55.53	52.77	0.300	0.129	05-09-2018	43	60	59	36	-
26	BHADAR	107.89	105.32	0.188	0.096	05-09-2018	51	78	55	27	-
27	DAMANAGANGA	79.86	76.90	0.502	0.348	06-09-2018	69	76	74	51	1
28	DANTIWADA	184.1	172.39	0.399	0.079	05-09-2018	20	92	32	45	-
29	PANAM	127.41	127.15	0.697	0.535	05-09-2018	77	79	67	36	2
*30	SARDAR SAROVAR	138.68	124.40	5.760	2.015	06-09-2018	35	39	27	2120	1450
31	KARJAN	115.25	112.47	0.523	0.436	06-09-2018	83	82	73	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 06.09.2018

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	461.00	2.171	1.029	04-09-2018	47	81	38	227	-
*33	KOYANA	657.90	657.99	2.652	2.652	06-09-2018	100	100	97	-	1920
34	BHIMA(UJJANI)	496.83	497.11	1.517	1.517	04-09-2018	100	100	69	125	12
35	ISAPUR	441.00	437.70	0.965	0.648	06-09-2018	67	8	48	104	-
36	MULA	552.30	549.02	0.609	0.445	06-09-2018	73	85	71	139	-
37	YELDARI	461.77	450.40	0.809	0.075	06-09-2018	9	4	31	78	-
38	GIRNA	398.07	391.87	0.524	0.253	06-09-2018	48	62	31	79	-
39	KHADAKVASLA	582.47	582.47	0.056	0.056	06-09-2018	100	95	75	78	8
*40	UPPER VAITARNA	603.50	603.12	0.331	0.320	06-09-2018	97	99	89	-	61
41	UPPER TAPI	214.00	213.22	0.255	0.210	06-09-2018	82	86	68	45	-
*42	PENCH (TOTALADOH)	490.00	476.50	1.091	0.279	06-09-2018	26	19	70	127	160
43	UPPER WARDHA	342.50	338.59	0.564	0.268	06-09-2018	48	60	84	70	-
44	BHATSA	142.07	141.04	0.942	0.914	06-09-2018	97	97	90	29.378	15
45	DHOM	747.70	747.08	0.331	0.317	06-09-2018	96	84	82	36.2	2
46	DUDHGANGA	646.00	645.24	0.664	0.653	06-09-2018	98	100	96	2.441	24
47	MANIKDOH (KUKADI)	711.25	706.85	0.288	0.213	06-09-2018	74	75	52	2.2	6
48	BHANDARDARA	744.91	744.73	0.304	0.304	06-09-2018	100	100	95	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	307.97	0.707	0.589	05-09-2018	83	24	79	-	30
*50	RIHAND	268.22	263.13	5.649	3.478	06-09-2018	62	68	50	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	349.78	2.196	1.165	06-09-2018	53	49	61	1897	198
*52	TEHRI	830.00	820.90	2.615	2.242	05-09-2018	86	87	81	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	391.03	6.827	2.321	05-09-2018	34	65	40	220	115
54	TAWA	355.40	351.04	1.944	1.302	06-09-2018	67	55	91	247	-
*55	BARGI	422.76	422.50	3.180	3.125	06-09-2018	98	73	85	157	90
*56	BANSAGAR	341.64	340.07	5.166	4.466	05-09-2018	86	75	68	488	425
*57	INDIRA SAGAR	262.13	260.05	9.745	8.072	06-09-2018	83	33	70	2380	1000
58	BARNA	348.55	344.87	0.456	0.227	05-09-2018	50	60	80	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	358.02	3.046	2.982	06-09-2018	98	68	76	-	120
60	MAHANADI	348.70	348.39	0.767	0.738	05-09-2018	96	40	64	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	269.02	8.288	5.624	06-09-2018	68	10	64	0	770
*62	NAGARJUNA SAGAR	179.83	178.83	6.841	4.879	06-09-2018	71	0	43	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	90.80	1.994	0.783	06-09-2018	39	18	29	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	331.23	2.300	2.046	06-09-2018	89	45	39	411	27
65	LOWER MANAIR	280.42	270.91	0.621	0.158	06-09-2018	25	33	41	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
KARNATAKA											
66	KRISHNARAJA SAGRA	752.50	752.50	1.163	1.163	03-09-2018	100	44	73	79	-
*67	TUNGABHADRA	497.74	497.55	3.276	2.788	06-09-2018	85	62	78	529	72
68	GHATAPRABHA	662.95	662.94	1.391	1.387	06-09-2018	100	66	85	317	-
69	BHADRA	657.76	657.48	1.785	1.760	06-09-2018	99	58	82	106	39
70	LINGANAMAKKI	554.43	554.16	4.294	4.212	06-09-2018	98	55	73	-	55
71	NARAYANPUR	492.25	492.22	0.863	0.736	06-09-2018	85	85	83	425	-
72	MALAPRABHA(RENUKA)	633.83	631.20	0.972	0.663	05-09-2018	68	27	55	215	-
73	KABINI(Sancherla Tank)	696.16	696.01	0.444	0.434	03-09-2018	98	72	59	85	-
74	HEMAVATHY	890.63	890.15	0.927	0.927	03-09-2018	100	45	79	265	-
75	HARANGI	871.42	870.32	0.220	0.194	03-09-2018	88	99	95	53	-
76	SUPA	564.00	562.74	4.120	3.963	06-09-2018	96	56	60	-	-
77	VANIVILAS SAGAR	652.28	632.16	0.802	0.016	06-09-2018	2	1	11	123	-
*78	ALMATTI	519.60	519.60	3.105	3.105	06-09-2018	100	100	92	@	290
*79	GERUSOPPA	55.00	47.28	0.130	0.088	06-09-2018	68	83	80	83	240
KERALA											
80	KALLADA(PARAPPAR)	115.82	113.68	0.507	0.444	03-09-2018	88	47	60	62	-
*81	IDAMALAYAR	169.00	165.28	1.018	0.910	03-09-2018	89	57	65	33	75
*82	IDUKKI	732.43	729.65	1.460	1.306	03-09-2018	89	44	56	-	780
*83	KAKKI	981.46	978.38	0.447	0.393	03-09-2018	88	51	68	23	300
*84	PERIYAR	867.41	867.07	0.173	0.160	03-09-2018	92	36	47	84	140
85	MALAPMUZHA	115.06	114.09	0.224	0.200	06-09-2018	89	42	68	21	3
TAMIL NADU											
86	LOWER BHAWANI	278.89	279.50	0.792	0.792	03-09-2018	100	28	49	105	8
*87	METTUR(STANLEY)	240.79	240.85	2.647	2.647	03-09-2018	100	28	54	122	360
88	VAIGAI	279.20	278.57	0.172	0.157	03-09-2018	91	8	34	61	6
89	PARAMBIKULAM	556.26	556.04	0.380	0.375	03-09-2018	99	33	71	101	-
90	ALIYAR	320.04	319.55	0.095	0.092	03-09-2018	97	19	71	#	60
*91	SHOLAYAR	1002.79	1002.99	0.143	0.130	03-09-2018	91	37	79	-	95
TOTAL FOR 91 RESERVOIRS				161.993	119.042						
PERCENTAGE							73	56	64		

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.