BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 06.07.2017)

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 06.07.2017, live storage available in these reservoirs is 33.114 BCM, which is 21% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 27.961 BCM and the average of last 10 years live storage was 36.858 BCM. Thus, the live storage available in 91 reservoirs as per 06.07.2017 Bulletin is 118% of the live storage of corresponding period of last year and 90% 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 06.07.2017, the total live storage available in these reservoirs is 5.49 BCM which is 31% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 26% and average storage of last ten years during corresponding period was 33% 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.

b) EASTERN REGION

The Eastern region includes States of Jharkhand, Odisha, West Bengal and Tripura. There are 15 reservoirsunder CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated **06.07.2017**, the total live storage available in these reservoirs is **3.29 BCM** which is **17%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **19%** and average storage of last ten years during corresponding period was **20%** 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 **06.07.2017**, the total live storage available in these reservoirs is **6.82 BCM** which is **25%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **12%** and average storage of last ten years during corresponding period was **24%** 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 **06.07.2017**, the total live storage available in these reservoirs is **11.22 BCM** which is **27%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **22%** and average storage of last ten years during corresponding period was **19%** 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 06.07.2017, the total live storage available in these reservoirs is 6.30 BCM which is 12 % of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 14% and average storage of last ten years during corresponding period was 25% 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 Narmada, Mahi, Ganga, Tapi and Mahanadi & neighbouring East Flowing Rivers. Close to Normal in Indus, Sabarmati, Godavari, and West Flowing Rivers of South. Deficient in Rivers of Kutch and Krishna and Highly Deficient in Cauvery & neighbouring EFR basin.
- Table on page 5-7 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 **33**. 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 **7**. 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 **29**.

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 06.07.2017

- 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
 06.07.2017 is 33.114 BCM (21 percent of the live storage capacity at FRL). The current year's storage is nearly 118 percent of last year's storage and 90 percent of the average of last ten years.

3 Region wise storage status:

Region wise storage status:-											
DEGIGN (C: :)	Filling position of 91 reservoirs w.r.t. FRL										
REGION (States), (Monitoring No. of Reservoirs)	100%	91%- 99%	81%- 90%	71%- 80%	61%- 70%	51%- 60%	41%- 50%	40% & below	Departure fr stor		
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-1	-1	1	-	1	-	-	5	H.P. PUNJAB RAJASTHAN	-21 % 35 % -4 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	1	-	-	-	I 14	JHARKHAND ODISHA W. BENGAL TRIPURA	-22 % -15 % -5 % 102 %	
WEST (Guj.& Mah.), (27 Resv.)	1	-	-	-	-	2	2	23	GUJARAT MAH.	12 % -7 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	-	2	-	10	U.P. UTTARAKHAND M.P. CHHATISGARH	64 % -68 % 71 % 17 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	-	1	-	-	-	30	AP&TG A,P TG KARNATAKA KERALA T.N.	-84 % -62 % 33 % -34 % -30 % -81 %	
Status of 91 reservoirs	0	0	0	2	1	4	2	82			

4 Basin wise storage position:

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

Close to normal: Indus, Sabarmati, Godavari, and West Flowing Rivers of South.

Deficient: Rivers of Kutch and Krishna **Highly deficient:** Cauvery & neighbouring EFRS.

5 Out of 91 reservoirs, 46 reservoirs reported more than 80% of normal storage & 45 reservoirs reported 80% or below of normal storage. Out of these 45 reservoirs 29 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0	PARAMBIKULAM	31
BHIMA(UJJANI)	0	SRISAILAM	32
RAMGANGA	0	PANCHET HILL	36
BHADAR	0	BHADRA	36
METTUR(STANLEY)	13	SOMASILA	38
VANIVILAS SAGAR	16	NARAYANPUR	39
ISAPUR	18	MAITHON	41
UPPER TAPI	21	KRISHNARAJA SAGRA	41
MATATILA	22	HEMAVATHY	42
VAIGAI	23	MALAMPUZHA	45
PENCH (TOTALADOH)	24	RENGALI	45
LOWER BHAWANI	25	SHOLAYAR	46
TUNGABHADRA	26		
YELDARI	27	•	
MALAPRABHA(RENUKA	28	•	
ALIYAR	29	•	
PERIYAR	29	•	

16 reservors								
having storage 51%								
to 80% of normal								
storage	storage.							
51%	71%							
to	to	to						
60%	70%	80%						
4	4	8						

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

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION WEEK ENDING:- 06.07.2017

WEEK ENDING :- 06.07.2017											
NAME OF BASIN	LIVE CAP. AT FR	_	THIS YEAR'S STORAGE		LAST YEAR'S STORAGE		YEARS' TORAGE	% DEPARTURE W.R.T. AVE. OF 10 YEARS'			
GANGA	28.096	8.707	30.99%	7.737	27.54%	6.201	22.07%	40.41			
INDUS	14.730	4.435	30.11%	3.541	24.04%	4.838	32.84%	-8.33			
NARMADA	17.414	3.040	17.46%	2.843	16.33%	2.674	15.36%	13.69			
TAPI	7.394	1.990	26.91%	0.614	8.30%	1.627	22.00%	22.31			
MAHI	4.012	1.572	39.18%	0.810	20.19%	1.375	34.27%	14.33			
SABARMATI	0.735	0.140	19.05%	0.161	21.90%	0.143	19.46%	-2.10			
RIVERS OF KUTCH	0.887	0.056	6.31%	0.075	8.46%	0.129	14.54%	-56.59			
GODAVARI	15.394	2.637	17.13%	2.420	15.72%	2.813	18.27%	-6.26			
KRISHNA	32.831	3.066	9.34%	2.460	7.49%	7.620	23.21%	-59.76			
MAHANADI & NEIGHBOURING EFRS	13.181	2.791	21.17%	1.656	12.56%	2.775	21.05%	0.58			
CAUVERY& NEIGHBOURING EFRS	8.359	0.880	10.53%	1.765	21.11%	2.779	33.25%	-68.33			
WEST FLOWING RIVERS OF SOUTH	14.766	3.800	25.73%	3.879	26.27%	3.884	26.30%	-2.16			
TOTAL	157.799	33.114		27.961		36.858					
PERCENTAGE								-10.16			

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	06.07.2017	CENTRAL WATER COMMISSION				
							STORAGE A	S % OF LIVE C	APACITY AT	BENE	FITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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			I.							
	HIMACHAL PRADESH	1)									
*1	GOBIND SAGAR(BHAKRA)	512.06	480.26	6.229	1.924	06-07-2017	31	32	36	676	1200
*2	PONG DAM	423.67	396.94	6.157	1.065	05-07-2017	17	13	25	-	360
	<u>PUNJAB</u>										
*3	THEIN	527.91	515.77	2.344	1.446	05-07-2017	62	34	46	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	269.45	1.711	0.550	06-07-2017	32	22	25	63	140
5	JHAKAM	359.50	346.50	0.132	0.037	06-07-2017	28	7	17	28	-
*6	RANA PRATAP SAGAR	352.81	347.20	1.436	0.472	05-07-2017	33	56	45	229	172
	EASTERN REGION	•									
	JHARKHAND										
7	TENUGHAT	269.14	257.54	0.821	0.327	06-07-2017	40	47	37	-	-
8	MAITHON	146.3	137.15		0.076	06-07-2017	16	20	40	342	-
*9	PANCHET HILL	124.97	121.23		0.041	06-07-2017	22	30	61	\$	80
	KONAR	425.81	417.61	0.176	0.054	06-07-2017	31	28	36	\$	-
11	TILAIYA	368.81	365.90	0.142	0.050	06-07-2017	35	19	25	\$	4
	<u>ODISHA</u>										
	HIRAKUD	192.02	182.41	5.378	0.581	05-07-2017	11	8	13	153	307
	BALIMELA	462.08	446.53	2.676	0.599	05-07-2017	22	38	22	-	360
	SALANADI	82.30	67.31	0.558	0.163	05-07-2017	29	5	28	42	
	RENGALI	123.50	110.76			05-07-2017	4	1	8	3	200
	MACHKUND(JALPUT)	838.16	826.16		0.186	05-07-2017	21	26	34	-	115
	UPPER KOLAB	858.00	848.61	0.935	0.209	05-07-2017	22	24	19	89	320
*18	UPPER INDRAVATI	642.00	628.88	1.456	0.260	04-07-2017	18	27	19	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	112.43	0.480	0.132	06-07-2017	28	31	32	227	-
20	KANGSABATI	134.14	124.88	0.914	0.261	06-07-2017	29	21	28	341	-
0.4	TRIPURA	00.55	04.70	0.040	0.000	04.07.0047	70	50	00		45
21	GUMTI WESTERN REGION	93.55	91.70	0.312	0.228	04-07-2017	73	53	36	-	15
	GUJARAT	•									
*22	UKAI	105.16	93.90	6.615	1.838	06-07-2017	28	9	23	348	300
	SABARMATI(DHAROI)	189.59	181.24			06-07-2017	19	22	19	95	1
	KADANA	127.7	123.19			06-07-2017	52	19	42		120
	SHETRUNJI	55.53	49.17			06-07-2017	13	20	23		-
	BHADAR	107.89	96.63			06-07-2017	0	4	23		-
	DAMANAGANGA	79.86	71.00			06-07-2017	31	24	16	51	1
	DANTIWADA	184.1	166.53			06-07-2017	5	2		45	
	PANAM	127.41	120.90			06-07-2017	31	21	43	36	2
	SARDAR SAROVAR	121.92	115.61	1.566		06-07-2017	38	34	39	2120	1450
	KARJAN	115.25	103.12			06-07-2017	43	7		51	3
-											-

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 06.07.2017											
			OURRENT				STORAGE A	S % OF LIVE C FRL	APACITY AT	BENE	FITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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	ЗА	3B
	MAHARASHTRA			I.							
32	JAYAKWADI(PAITHON)	463.91	457.83	2.171	0.401	29-06-2017	18	0	10	227	-
*33	KOYANA	657.90	635.15	2.652	0.819	05-07-2017	31	10	36	-	1920
34	BHIMA(UJJANI)	496.83	489.22	1.517	0.000	03-07-2017	0	0	8	125	12
35	ISAPUR	441.00	426.93	0.965	0.048	05-07-2017	5	3	27	104	-
36	MULA	552.30	537.42	0.609	0.066	05-07-2017	11	5	9	139	-
37	YELDARI	461.77	448.62	0.809	0.024	05-07-2017	3	0	11	78	-
38	GIRNA	398.07	387.94	0.524	0.137	05-07-2017	26	0	9	79	-
39	KHADAKVASLA	582.47	578.66	0.056	0.012	05-07-2017	21	43	36	78	8
*40	UPPER VAITARNA	603.50	596.89	0.331	0.138	05-07-2017	42	27	31	-	61
41	UPPER TAPI	214.00	208.29	0.255	0.015	05-07-2017	6	17	28	45	-
*42	PENCH (TOTALADOH)	490.00	467.75	1.091	0.053	05-07-2017	5	7	20	127	160
43	UPPER WARDHA	342.50	337.35	0.564	0.197	06-07-2017	35	29	36	70	-
44	BHATSA	142.07	122.14	0.942	0.486	05-07-2017	52	38	34	29.378	15
45	DHOM	747.70	731.56	0.331	0.054	05-07-2017	16	26	28	36.2	2
46	DUDHGANGA	646.00	628.80	0.664	0.215	05-07-2017	32	9	31	2.441	24
	MANIKDOH (KUKADI)	711.25	691.40	0.288	0.041	05-07-2017	14	9	7	2.2	6
48	BHANDARDARA CENTRAL REGION	744.91	730.55	0.304	0.122	05-07-2017	40	15	21	63.74	46
_	UTTAR PRADESH										
49	MATATILA	308.46	300.99	0.707	0.058	05-07-2017	8	17	38	_	30
	RIHAND	268.22	257.25		1.241	06-07-2017	22	12	9	_	300
	UTTRAKHAND										
*51	RAMGANGA	365.30	306.04	2.196	0.000	06-07-2017	0	11	27	1897	198
*52	TEHRI	830.00	755.75	2.615	0.306	06-07-2017	12	18	14	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	394.29	6.827	3.597	05-07-2017	53	36	19	220	115
54	TAWA	355.40	343.48	1.944	0.518	06-07-2017	27	17	28	247	-
*55	BARGI	422.76	409.80	3.180	0.652	06-07-2017	21	28	16	157	90
*56	BANSAGAR	341.64	332.79	5.166	1.864	05-07-2017	36	36	25	488	425
*57	INDIRA SAGAR	262.13	246.68	9.745	0.931	05-07-2017	10	10	8	2380	1000
58	BARNA	348.55	342.57	0.456	0.125	05-07-2017	27	9	17	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	352.69	3.046	1.800	05-07-2017	59	31	46	-	120
60	MAHANADI	348.70	339.40	0.767	0.125	05-07-2017	16	25	31	319	10
	SOUTHERN REGION	•									
	A.P & TG										
*61	SRISAILAM	269.75	237.68	8.288	0.478	06-07-2017	6	7	18	0	770
*62	NAGARJUNA SAGAR	179.83	152.80	6.841	0.000	06-07-2017	0	0	22	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	82.18	1.994	0.210	06-07-2017	11	22	28	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	321.53	2.300	0.261	29-06-2017	11	6	9	411	27
65	LOWER MANAIR	280.42	272.42	0.621	0.211	29-06-2017	34	11	22	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	06.07.2017					
			OURDENT				STORAGE A	S % OF LIVE C FRL	APACITY AT	BENE	EFITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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	737.53	1.163	0.131	05-07-2017	11	23	28	79	-
*67	TUNGABHADRA	497.74	484.12	3.276	0.245	06-07-2017	7	19	29	529	72
68	GHATAPRABHA	662.95	639.56	1.391	0.201	04-07-2017	14	4	16	317	-
69	BHADRA	657.76	638.40	1.785	0.233	04-07-2017	13	18	36	106	39
70	LINGANAMAKKI	554.43	536.48	4.294	0.786	04-07-2017	18	24	23	-	55
71	NARAYANPUR	492.25	485.84	0.863	0.135	06-07-2017	16	17	40	425	-
72	MALAPRABHA(RENUKA)	633.83	620.68	0.972	0.032	04-07-2017	3	0	12	215	-
73	KABINI(Sancherla Tank)	696.16	689.57	0.444	0.125	05-07-2017	28	29	38	85	-
74	HEMAVATHY	890.63	874.16	0.927	0.128	05-07-2017	14	29	33	265	-
75	HARANGI	871.42	861.60	0.220	0.078	05-07-2017	35	62	50	53	-
76	SUPA	564.00	532.90	4.120	1.272	04-07-2017	31	22	22	-	-
77	VANIVILAS SAGAR	652.28	632.09	0.802	0.015	29-06-2017	2	6	12	123	-
*78	ALMATTI	519.60	510.60	3.105	0.586	06-07-2017	19	7	27	@	290
*79	GERUSOPPA	55.00	48.85	0.130	0.096	06-07-2017	74	73	76	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	95.38	0.507	0.132	05-07-2017	26	54	33	62	-
*81	IDAMALAYAR	169.00	134.66	1.018	0.215	05-07-2017	21	25	26	33	75
*82	IDUKKI	732.43	705.40	1.460	0.281	05-07-2017	19	26	27	-	780
*83	KAKKI	981.46	947.33	0.447	0.097	04-07-2017	22	37	32	23	300
*84	PERIYAR	867.41	859.80	0.173	0.022	05-07-2017	13	20	43	84	140
85	MALAPMUZHA	115.06	102.89	0.224	0.034	03-07-2017	15	17	34	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	261.27	0.792	0.080	05-07-2017	10	17	41	105	8
*87	METTUR(STANLEY)	240.79	210.49	2.647	0.121	05-07-2017	5	15	36	122	360
88	VAIGAI	279.20	265.46	0.172	0.007	05-07-2017	4	5	17	61	6
89	PARAMBIKULAM	556.26	537.59	0.380	0.043	05-07-2017	11	15	36	101	-
90	ALIYAR	320.04	304.47	0.095	0.012	05-07-2017	13	25	43	#	60
*91	SHOLAYAR	1002.79	978.90	0.143	0.032	05-07-2017	22	31	49	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	33.114						
	PERCENTAGE						21	18	23		

Sd/-

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

Director W. M., CWC

^{*} HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

[#] TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

^{@&#}x27; TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

[†] SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

SI. 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 $\,$