BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 24.08.2017)

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 24.08.2017, live storage available in these reservoirs is 79.925 BCM, which is 51% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 101.947 BCM and the average of last 10 years live storage was 99.131 BCM. Thus, the live storage available in 91 reservoirs as per 24.08.2017 Bulletin is 78% 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 24.08.2017, the total live storage available in these reservoirs is 14.78 BCM which is 82% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 72% and average storage of last ten years during corresponding period was 74% 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 reservoirsunder CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated 24.08.2017, the total live storage available in these reservoirs is 9.98 BCM which is 53% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 63% and average storage of last ten years during corresponding period was 54% 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 24.08.2017, the total live storage available in these reservoirs is 16.39 BCM which is 61% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 73% and average storage of last ten years during corresponding period was 64% 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 **24.08.2017**, the total live storage available in these reservoirs is **22.33 BCM** which is **53%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **82%** 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 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(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 24.08.2017, the total live storage available in these reservoirs is 16.44 BCM which is 32% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 44% 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 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 23 and reservoirs having storage more than average of last ten years are 34. The numbers of reservoirs having storage less than 20% with respect to last year is 4 and having storage less than 20% with reference to average of last ten years is 8. The number of reservoirs having storage less than or equal to 50% with respect to last year are 12 and having storage less than or equal to 50% with reference to average of last ten years are 20.

States having better storage (in %) than last year for corresponding period: Himachal Pradesh, Punjab, West Bengal and Tripura.

States having equal storage (in %) to last year for corresponding period: NIL

States having lesser storage (in %) than last year for corresponding period: Rajasthan, Jharkhand, Odisha, Gujarat, Maharashtra, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, AP&TG (Two combined projects in both states), Andhra Pradesh, Telangana, Karnataka, Kerala and Tamil Nadu.

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 24.08.2017

- 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 24.08.2017 BCM (51 percent of the live storage capacity at FRL). The current year's storage 79.925 **81** percent of the average of last ten years. is nearly 78 percent of last year's storage and

3 Region wise storage status:

5500	I	Filling	positio							
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	2	1	-	1	-	-	H.P. PUNJAB RAJASTHAN	11 % 20 % 6 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	2	1	1	2	1	1	4	3	JHARKHAND ODISHA W. BENGAL TRIPURA	-1 % -9 % 41 % 98 %
WEST (Guj.& Mah.), (27 Resv.)	2	5	2	4	4	3	3	4	GUJARAT MAH.	-9 % -3 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	2	3	2	1	4	U.P. UTTARAKHAND M.P. CHHATISGARH	36 % -15 % -23 % -14 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	2	-	2	-	2	6	19	AP&TG A,P TG KARNATAKA KERALA T.N.	-94 % -65 % -7 % -28 % -37 % -66 %
Status of 91 reservoirs	5	9	5	11	8	9	14	30		

4 Basin wise storage position:

Ganga, Mahi, Indus, Sabarmati, Rivers of Kutch. Better than normal: Close to normal: Godavari and Mahanadi & Neighbouring EFRS .

40

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

Highly deficient: NIL

KRISHNARAJA SAGRA INDIRA SAGAR

5 Out of 91 reservoirs, 51 reservoirs reported more than 80% of normal storage & reservoirs reported 80% or below of normal storage. Out of these 20 having storage upto 50% of normal 40 reservoirs

orage.				20	r		
ame of reservoir	%	Name of reservoir	%	having	js		
NAGARJUNA SAGAR	0	MALAPRABHA(RENUKA	41	to 80%	to 80% of norm		
SRISAILAM	10	PERIYAR	42	storag	storage.		
ISAPUR	14	MALAMPUZHA	47	51%	6		
ALIYAR	14			to			
VANIVILAS SAGAR	15	_		60%	70		
PENCH (TOTALADOH)	15	_		7			
VAIGAI	16				'		
YELDARI	16						
SHOLAYAR	23						
MAHANADI	24						
MATATILA	26						
SOMASILA	35						
METTUR(STANLEY)	36						
LOWER BHAWANI	36						
PARAMBIKULAM	36						

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 :- 24.08.2017												
NAME OF BASIN	LIVE CAP. AT F	RI I	THIS YEAR'S STORAGE		LAST YEAR'S STORAGE		YEARS' ORAGE	% DEPARTURE W.R.T. AVE. OF 10 YEARS'				
GANGA	28.096	17.654	62.83%	22.710	80.83%	15.833	56.35%	11.50				
INDUS	14.730	12.213	82.91%	9.677	65.70%	10.865	73.76%	12.41				
NARMADA	17.414	7.639	43.87%	15.499	89.00%	12.618	72.46%	-39.46				
TAPI	7.394	2.977	40.26%	5.544	74.98%	4.609	62.33%	-35.41				
MAHI	4.012	3.406	84.90%	3.279	81.73%	2.735	68.17%	24.53				
SABARMATI	0.735	0.688	93.61%	0.574	78.10%	0.389	52.93%	76.86				
RIVERS OF KUTCH	0.887	0.606	68.32%	0.117	13.19%	0.362	40.81%	67.40				
GODAVARI	15.394	5.822	37.82%	9.049	58.78%	6.988	45.39%	-16.69				
KRISHNA	32.831	12.039	36.67%	16.912	51.51%	22.192	67.59%	-45.75				
MAHANADI & NEIGHBOURING EFRS	13.181	7.436	56.41%	7.920	60.09%	8.057	61.13%	-7.71				
CAUVERY& NEIGHBOURING EFRS	8.359	2.143	25.64%	2.824	33.78%	4.874	58.31%	-56.03				
WEST FLOWING RIVERS OF SOUTH	14.766	7.302	49.45%	7.842	53.11%	9.609	65.08%	-24.01				
TOTAL	157.799	79.925		101.947		99.131						
PERCENTAGE								-19.37				

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	24.08.2017	CENTRAL WATER CC 24.08.2017					
					-		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			•								
	HIMACHAL PRADESH											
*1	GOBIND SAGAR(BHAKRA)	512.06	507.58	6.229	5.257	24-08-2017	84	64	78	676	1200	
*2	PONG DAM	423.67	420.29	6.157	5.115	23-08-2017	83	65	73	-	360	
	PUNJAB											
*3	THEIN	527.91	521.45	2.344	1.841	24-08-2017	79	72	65	348	600	
	RAJASTHAN											
*4	MAHI BAJAJ SAGAR	280.75	280.35	1.711	1.674	24-08-2017	98	100	75	63	140	
5	JHAKAM	359.50	359.75	0.132	0.132	24-08-2017	100	100	73		-	
*6	RANA PRATAP SAGAR	352.81	349.13	1.436	0.763	23-08-2017	53	99	71	229	172	
	EASTERN REGION	•										
	JHARKHAND											
	TENUGHAT	269.14	257.74	0.821	0.334	24-08-2017	41	48	42		-	
8	MAITHON	146.3	144.64	0.471	0.352	24-08-2017	75	100	81	342	-	
*9	PANCHET HILL	124.97	125.78		0.184	24-08-2017	100	100	86	\$	80	
	KONAR	425.81	421.40		0.103	24-08-2017	59	92	76	\$	-	
11	TILAIYA ODISHA	368.81	369.02	0.142	0.142	24-08-2017	100	100	73	\$	4	
*12	HIRAKUD	192.02	188.08	5.378	2.579	23-08-2017	48	50	56	153	307	
	BALIMELA	462.08	449.58			24-08-2017	34	63	34	-	360	
	SALANADI	82.30	69.59		0.209	23-08-2017	37	41	41	42		
	RENGALI	123.50	120.17			24-08-2017	69	75	64	3	200	
	MACHKUND(JALPUT)	838.16	831.52		0.422	24-08-2017	47	66	60	-	115	
	UPPER KOLAB	858.00	850.67		0.326	24-08-2017	35	61	44	89	320	
	UPPER INDRAVATI	642.00	633.98		0.662	24-08-2017	45	62	61	128	600	
	WEST BENGAL											
19	MAYURAKSHI	121.31	119.60	0.480	0.412	24-08-2017	86	76	58	227	_	
20	KANGSABATI	134.14	131.29	0.914		24-08-2017	75	78	55	341	_	
	TRIPURA											
21	GUMTI	93.55	93.30	0.312	0.301	22-08-2017	96	54	49	-	15	
	WESTERN REGION	•										
	<u>GUJARAT</u>											
*22	UKAI	105.16	96.31	6.615	2.574	24-08-2017	39	76	65	348	300	
23	SABARMATI(DHAROI)	189.59	189.04	0.735	0.688	24-08-2017	94	78	53	95	1	
*24	KADANA	127.7	126.72	1.472	1.109	24-08-2017	75	74	62	200	120	
25	SHETRUNJI	55.53	52.82	0.300	0.131	24-08-2017	44	21	54	36	-	
26	BHADAR	107.89	105.79	0.188	0.110	24-08-2017	59	5	51	27	-	
27	DAMANAGANGA	79.86	75.55	0.502	0.296	24-08-2017	59	64	57	51	1	
28	DANTIWADA	184.1	183.46	0.399	0.365	24-08-2017	91	11	26	45	-	
29	PANAM	127.41	126.55	0.697	0.491	24-08-2017	70	50	62	36	2	
*30	SARDAR SAROVAR	121.92	122.44	1.566	1.566	24-08-2017	100	100	93	2120	1450	
31	KARJAN	115.25	110.04	0.523	0.398	24-08-2017	76	34	63	51	3	

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	24.08.2017					
							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	3A	3B
	MAHARASHTRA	l l		I.							
32	JAYAKWADI(PAITHON)	463.91	461.60	2.171	1.357	23-08-2017	63	66	31	227	-
*33	KOYANA	657.90	655.90	2.652	2.414	23-08-2017	91	100	94	-	1920
34	BHIMA(UJJANI)	496.83	495.17	1.517	0.997	24-08-2017	66	61	57	125	12
35	ISAPUR	441.00	427.47	0.965	0.069	23-08-2017	7	33	53	104	-
36	MULA	552.30	548.85	0.609	0.438	23-08-2017	72	98	67	139	-
37	YELDARI	461.77	448.88	0.809	0.032	23-08-2017	4	9	24	78	-
38	GIRNA	398.07	392.66	0.524	0.280	23-08-2017	53	66	29	79	-
39	KHADAKVASLA	582.47	581.99	0.056	0.049	23-08-2017	88	100	68	78	8
*40	UPPER VAITARNA	603.50	603.06	0.331	0.318	23-08-2017	96	94	81	-	61
41	UPPER TAPI	214.00	211.47	0.255	0.123	23-08-2017	48	58	58	45	-
*42	PENCH (TOTALADOH)	490.00	470.69	1.091	0.111	23-08-2017	10	74	66	127	160
43	UPPER WARDHA	342.50	338.44	0.564	0.259	24-08-2017	46	94	79	70	-
44	BHATSA	142.07	140.06	0.942	0.887	23-08-2017	94	88	82	29.378	15
45	DHOM	747.70	743.48	0.331	0.240	23-08-2017	73	100	79	36.2	2
46	DUDHGANGA	646.00	643.44	0.664	0.594	23-08-2017	89	92	91	2.441	24
	MANIKDOH (KUKADI)	711.25	705.18		0.189	23-08-2017	66	64	45	2.2	6
	BHANDARDARA CENTRAL REGION	744.91	744.73	0.304	0.304	23-08-2017	100	95	92	63.74	46
40	MATATILA	200.40	202.64	0.707	0.420	00 00 0047	20	04	70		20
	RIHAND	308.46 268.22	302.64 263.81	0.707 5.649	0.139 3.755	23-08-2017 24-08-2017	20 66	81 77	76 41	-	30 300
30	UTTRAKHAND	200.22	203.01	5.049	3.733	24-06-2017	00	77	41	-	300
*51	RAMGANGA	365.30	341.84	2.196	0.788	24-08-2017	36	43	57	1897	198
	TEHRI	830.00	811.60	2.615	1.887	23-08-2017	72	76	73	2351	1000
52	MADHYA PRADESH	030.00	011.00	2.013	1.007	25-00-2017	12	70	73	2551	1000
*53	GANDHI SAGAR	399.90	395.43	6.827	4.122	24-08-2017	60	88	52	220	115
	TAWA	355.40	348.26			24-08-2017	49	98	90	247	-
	BARGI	422.76	418.05			24-08-2017	62	95	76	157	90
	BANSAGAR	341.64	338.29			24-08-2017	71	94	62	488	425
	INDIRA SAGAR	262.13	251.30			24-08-2017	26	86	65	2380	1000
	BARNA	348.55	345.03			24-08-2017	52	95	75	546	_
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	355.10	3.046	2.147	21-08-2017	70	57	69	-	120
60	MAHANADI	348.70	339.50	0.767	0.130	24-08-2017	17	90	69	319	10
5	SOUTHERN REGION										
	A.P & TG	•									
*61	SRISAILAM	269.75	238.48	8.288	0.505	24-08-2017	6	50	62	0	770
*62	NAGARJUNA SAGAR	179.83	152.43	6.841	0.000	24-08-2017	0	3	44	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	81.51	1.994	0.187	24-08-2017	9	11	27	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	325.65	2.300	0.735	24-08-2017	32	49	34	411	27
65	LOWER MANAIR	280.42	272.32	0.621	0.207	24-08-2017	33	25	38	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	24.08.2017					
							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	3A	3B
	KARNATAKA			•							
66	KRISHNARAJA SAGRA	752.50	742.20	1.163	0.344	23-08-2017	30	38	78	79	-
*67	TUNGABHADRA	497.74	493.58	3.276	1.601	24-08-2017	49	46	81	529	72
68	GHATAPRABHA	662.95	653.69	1.391	0.782	24-08-2017	56	84	86	317	-
69	BHADRA	657.76	648.08	1.785	0.829	24-08-2017	46	50	85	106	39
70	LINGANAMAKKI	554.43	545.10	4.294	1.984	24-08-2017	46	51	70	-	55
71	NARAYANPUR	492.25	491.49	0.863	0.643	24-08-2017	75	82	86	425	-
72	MALAPRABHA(RENUKA)	633.83	625.77	0.972	0.232	24-08-2017	24	38	58	215	-
73	KABINI(Sancherla Tank)	696.16	691.66	0.444	0.211	23-08-2017	48	74	60	85	-
74	HEMAVATHY	890.63	882.14	0.927	0.426	23-08-2017	46	62	86	265	-
75	HARANGI	871.42	870.92	0.220	0.213	23-08-2017	97	95	96	53	-
76	SUPA	564.00	544.95	4.120	2.142	24-08-2017	52	49	58	-	-
77	VANIVILAS SAGAR	652.28	631.93	0.802	0.013	22-08-2017	2	5	11	123	-
*78	ALMATTI	519.60	519.22	3.105	2.951	24-08-2017	95	100	93	@	290
*79	GERUSOPPA	55.00	50.03	0.130	0.102	24-08-2017	78	70	78	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	100.23	0.507	0.195	23-08-2017	38	47	59	62	-
*81	IDAMALAYAR	169.00	147.20	1.018	0.453	23-08-2017	44	52	63	33	75
*82	IDUKKI	732.43	711.93	1.460	0.501	23-08-2017	34	46	56	-	780
*83	KAKKI	981.46	958.90	0.447	0.173	23-08-2017	39	63	65	23	300
*84	PERIYAR	867.41	860.74	0.173	0.037	23-08-2017	21	28	51	84	140
85	MALAPMUZHA	115.06	106.70	0.224	0.073	24-08-2017	33	37	69	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	265.31	0.792	0.166	23-08-2017	21	23	58	105	8
*87	METTUR(STANLEY)	240.79	220.59	2.647	0.587	23-08-2017	22	32	62	122	360
88	VAIGAI	279.20	266.38	0.172	0.009	23-08-2017	5	5	33	61	6
89	PARAMBIKULAM	556.26	541.60	0.380	0.104	23-08-2017	27	40	75	101	-
90	ALIYAR	320.04	304.16	0.095	0.010	23-08-2017	11	18	77	#	60
*91	SHOLAYAR	1002.79	976.95	0.143	0.027	23-08-2017	19	55	83	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	79.925						
	PERCENTAGE						51	65	63		

Sd/-

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

Director W. M. , CWC

 $^{^{\}star}$ 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

 $[\]dagger$ 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