BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 02.03.2017)

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 02.03.2017, live storage available in these reservoirs is 64.55 BCM, which is 41% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 49.079 BCM and the average of last 10 years live storage was 63.116 BCM. Thus, the live storage available in 91 reservoirs as per 02.03.2017 Bulletin is 132% of the live storage of corresponding period of last year and 102% 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 02.03.2017, the total live storage available in these reservoirs is 5.18 BCM which is 29% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 31% and average storage of last ten years during corresponding period was 36% 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 reservoirsunder CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated 02.03.2017, the total live storage available in these reservoirs is 11.93 BCM which is 63% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 46% and average storage of last ten years during corresponding period was 48% 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 **02.03.2017**, the total live storage available in these reservoirs is **14.64 BCM** which is **54%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **28%** and average storage of last ten years during corresponding period was **50%** 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 **02.03.2017**, the total live storage available in these reservoirs is **22.64 BCM** which is **54%** 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 **37%** 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 **02.03.2017**, the total live storage available in these reservoirs is **10.16 BCM** which is **20%** 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 **36%** 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, 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 Basin 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 57 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 3 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 13 and having storage less than or equal to 50% with reference to average of last ten years are 19.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 02.03.2017

- 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
 02.03.2017 is 64.550 BCM (41 percent of the live storage capacity at FRL). The current year's storage is nearly 132 percent of last year's storage and 102 percent of the average of last ten years.

3 Region wise storage status:-

		Filling	positio	n of 91	reserv	oirs w	.r.t. FR	L		
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	-	5	H.P. PUNJAB RAJASTHAN	-35 % 24 % 10 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	2	-	1	-	4	-	4	4	JHARKHAND ODISHA W. BENGAL TRIPURA	25 % 31 % 13 % 176 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	2	7	5	6	7	GUJARAT MAH.	15 % 2 %
CENTRAL (MP,UP,Uttarakhand & Chh.) (12 Resv)	-	-	-	2	2	2	2	4	U.P. UTTARAKHAND M.P. CHHATISGARH	72 % -26 % 61 % 20 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	-	-	2	4	24	AP&TG A,P TG KARNATAKA KERALA T.N.	-74 % -48 % 71 % -37 % -31 % -80 %
Status of 91 reservoirs	2	0	2	4	13	10	16	44	-	55,75

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, 56 reservoirs reported more than 80% of normal storage & 35 reservoirs reported 80% or below of normal storage. Out of these 35 reservoirs 19 having storage upto 50% of normal

storage.

LOWER BHAWANI METTUR(STANLEY)

PERIYAR

Name of reservoir	%	Name of reservoir	%
SHOLAYAR		KABINI	23
NAGARJUNA SAGAR	4	HEMAVATHY	32
DANTIWADA	8	BHADRA	32
PARAMBIKULAM	12	KRISHNARAJA SAGRA	34
VAIGAI	13	SRISAILAM	38
ALIYAR	14	ALMATTI	39
BHADAR	18	PENCH (TOTALADOH)	47
TUNGABHADRA	20		
VANIVILAS SAGAR	21		

16	reserve	ors							
having storage 51%									
to 80% of normal									
storage.									
51%	61%	71%							
to	to	to							
60%	70%	80%							
6	4	6							

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

18 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 :- 02.03.2017

			<u></u>	-				
NAME OF BASIN	LIVE CAP. AT FRL	FRL THIS YEAR'S LAST YEAR'S LAST 10 YEARS' STORAGE STORAGE		% DEPARTURE W.R.T. AVE. OF 10 YEARS'				
GANGA	28.096	15.222	54.18%	10.191	36.27%	10.312	36.70%	47.61
INDUS	14.730	3.778	25.65%	4.415	29.97%	5.185	35.20%	-27.14
NARMADA	17.414	8.472	48.65%	6.386	36.67%	6.474	37.18%	30.86
TAPI	7.394	4.910	66.41%	2.697	36.48%	3.835	51.87%	28.03
MAHI	4.012	2.237	55.76%	1.308	32.60%	1.873	46.68%	19.43
SABARMATI	0.735	0.331	45.03%	0.273	37.14%	0.248	33.74%	33.47
RIVERS OF KUTCH	0.887	0.123	13.87%	0.258	29.09%	0.235	26.49%	-47.66
GODAVARI	15.394	7.815	50.77%	4.173	27.11%	6.119	39.75%	27.72
KRISHNA	32.831	5.675	17.29%	4.419	13.46%	11.114	33.85%	-48.94
MAHANADI & NEIGHBOURING EFRS	13.181	9.019	68.42%	6.084	46.16%	7.044	53.44%	28.04
CAUVERY& NEIGHBOURING EFRS	8.359	1.168	13.97%	2.707	32.38%	3.379	40.42%	-65.43
WEST FLOWING RIVERS OF SOUTH	14.766	5.800	39.28%	6.168	41.77%	7.298	49.42%	-20.53
TOTAL	157.799	64.550	•	49.079		63.116		
PERCENTAGE								2.27

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	OOVERNMENT OF INDIA			WEE	K ENDING :-	02.03.2017		CLIVITAL			
			CURRENT	LIVE			STORAGE AS	BENE	EFITS		
S. NO	NAME OF RESERVOIR	FRL (m)	RESERVOIR LEVEL (m)	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	474.33	6.229	1.448	28-02-2017	23	44	39	676	1200
*2	PONG DAM PUNJAB	423.67	400.21	6.157	1.464	02-03-2017	24	20	33	-	360
*3	THEIN	527.91	505.16	2.344	0.866	02-03-2017	37	20	30	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	274.45	1.711	0.997	01-03-2017	58	38	38	63	140
5	JHAKAM	359.50	348.65	0.132	0.047	01-03-2017	36	13	22	28	-
*6	RANA PRATAP SAGAR	352.81	346.45	1.436	0.360	28-02-2017	25	31	42	229	172
	EASTERN REGION										
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	259.78	0.821	0.408	02-03-2017	50	39	41	-	-
8	MAITHON	146.3	147.17	0.471	0.471	02-03-2017	100	29	69	342	-
*9	PANCHET HILL	124.97	126.04	0.184	0.184	02-03-2017	100	17	71	\$	80
10	KONAR	425.81	420.37	0.176	0.088	02-03-2017	50	52	62	\$	-
11	TILAIYA	368.81	365.82	0.142	0.048	02-03-2017	34	24	39	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	189.59	5.378	3.345	01-03-2017	62	54	56	153	307
*13	BALIMELA	462.08	456.16	2.676	1.715	01-03-2017	64	50	43	-	360
14	SALANADI	82.30	67.75	0.558	0.171	01-03-2017	31	5	33	42	-
*15	RENGALI	123.50	121.74	3.432	2.853	01-03-2017	83	45	48	3	200
*16	MACHKUND(JALPUT)	838.16	831.94	0.893	0.446	01-03-2017	50	61	63	-	115
*17	UPPER KOLAB	858.00	854.88	0.935	0.642	01-03-2017	69	58	44	89	320
*18	UPPER INDRAVATI	642.00	636.88	1.456	0.929	01-03-2017	64	45	51	128	600
	WEST BENGAL										
19	MAYURAKSHI	121.31	114.12	0.480	0.179	02-03-2017	37	19	35	227	-
20	KANGSABATI	134.14	125.70	0.914	0.305	02-03-2017	33	25	29	341	-
	TRIPURA										
21	GUMTI	93.55	89.75	0.312	0.149	01-03-2017	48	57	17	-	15
	WESTERN REGION	•									
	<u>GUJARAT</u>										
*22	UKAI	105.16	101.04	6.615	4.517	27-02-2017	68	39	53	348	300
	SABARMATI(DHAROI)	189.59	184.83		0.331	01-03-2017	45	37	34		
	KADANA	127.7	124.26			01-03-2017	58	31	56		
	SHETRUNJI	55.53	52.22			01-03-2017	36	39	43		
	BHADAR	107.89	100.10		0.010	01-03-2017	5	20	30		
	DAMANAGANGA	79.86	75.05			27-02-2017	55	53	64		
	DANTIWADA	184.1	163.27		0.004	01-03-2017	1	26	13		
	PANAM	127.41	123.90		0.343	01-03-2017	49	25	53		
	SARDAR SAROVAR	121.92	120.19		1.252	27-02-2017	80	25	64		
31	KARJAN	115.25	105.06	0.523	0.261	27-02-2017	50	35	68	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	02.03.2017			VATER CON		
							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			I.							
32	JAYAKWADI(PAITHON)	463.91	460.78	2.171	1.112	02-03-2017	51	2	30	227	-
*33	KOYANA	657.90	644.53	2.652	1.309	01-03-2017	49	39	65	-	1920
34	BHIMA(UJJANI)	496.83	494.64	1.517	0.847	01-03-2017	56	0	46	125	12
35	ISAPUR	441.00	432.57	0.965	0.315	01-03-2017	33	20	44	104	-
36	MULA	552.30	546.62	0.609	0.344	28-02-2017	56	15	45	139	-
37	YELDARI	461.77	452.34	0.809	0.146	02-03-2017	18	6	29	78	-
38	GIRNA	398.07	391.31	0.524	0.234	01-03-2017	45	2	25	79	-
39	KHADAKVASLA	582.47	580.74	0.056	0.034	01-03-2017	61	39	45	78	8
*40	UPPER VAITARNA	603.50	600.09	0.331	0.222	01-03-2017	67	42	65	-	61
41	UPPER TAPI	214.00	212.23	0.255	0.159	01-03-2017	62	45	65	45	-
*42	PENCH (TOTALADOH)	490.00	473.92	1.091	0.192	01-03-2017	18	20	37	127	160
43	UPPER WARDHA	342.50	338.85	0.564	0.284	02-03-2017	50	33	43	70	-
44	BHATSA	142.07	127.29	0.942	0.587	01-03-2017	62	51	58	29.378	15
45	DHOM	747.70	738.56	0.331	0.203	02-03-2017	61	38	46	36.2	2
46	DUDHGANGA	646.00	637.86	0.664	0.425	01-03-2017	64	31	61	2.441	24
47	MANIKDOH (KUKADI)	711.25	692.37	0.288	0.048	01-03-2017	17	9	25	2.2	6
48	BHANDARDARA CENTRAL REGION	744.91	739.91	0.304	0.219	01-03-2017	72	22	58	63.74	46
	UTTAR PRADESH	•									
40	MATATILA	200.46	204 F2	0.707	0.265	01 02 2017	27	15	20		20
	RIHAND	308.46 268.22	304.53 261.70	0.707 5.649	0.265 2.912	01-03-2017 02-03-2017	37 52	15 25	38 28	_	30 300
30	UTTRAKHAND	200.22	201.70	3.049	2.912	02-03-2017	52	23	20	_	300
*51	RAMGANGA	365.30	337.10	2.196	0.599	02-03-2017	27	27	47	1897	198
	TEHRI	830.00	780.75		0.911	28-02-2017	35	27	39	2351	1000
52	MADHYA PRADESH	000.00	700.73	2.013	0.511	20 02 2017	55	21	33	2001	1000
*53	GANDHI SAGAR	399.90	396.49	6.827	4.654	01-03-2017	68	53	33	220	115
	TAWA	355.40	343.66			02-03-2017	27	19	29	247	-
	BARGI	422.76	416.40			02-03-2017	51	58	48	157	90
	BANSAGAR	341.64	338.29			01-03-2017	71	43	41	488	425
*57	INDIRA SAGAR	262.13	255.41	9.745		02-03-2017	47	36	30	2380	1000
58	BARNA	348.55	344.12			01-03-2017	41	12		546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	354.49	3.046	2.057	01-03-2017	68	42	57	-	120
60	MAHANADI	348.70	346.76	0.767	0.593	02-03-2017	77	41	61	319	10
;	SOUTHERN REGION	_									
	A.P & TG	_									
*61	SRISAILAM	269.75	251.03	8.288	1.138	02-03-2017	14	13	37	0	770
*62	NAGARJUNA SAGAR	179.83	155.87	6.841	0.068	02-03-2017	1	0	23	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	87.90	1.994	0.536	02-03-2017	27	54	52	168	0
	TELANGANA										
64	SRIRAMSAGAR	332.54	327.69	2.300	1.131	02-03-2017	49	7	25	411	27
65	LOWER MANAIR	280.42	275.30	0.621	0.340	02-03-2017	55	14	47	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	CENTRAL WATER COMMISSION					
			QUEDENT	1075		02.03.2017	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	738.94	1.163	0.185	27-02-2017	16	33	46	79	-
*67	TUNGABHADRA	497.74	481.80	3.276	0.126	02-03-2017	4	7	19	529	72
68	GHATAPRABHA	662.95	641.12	1.391	0.249	02-03-2017	18	19	18	317	-
69	BHADRA	657.76	640.89	1.785	0.354	02-03-2017	20	38	63	106	39
70	LINGANAMAKKI	554.43	541.37	4.294	1.373	02-03-2017	32	36	47	-	55
71	NARAYANPUR	492.25	490.20	0.863	0.498	02-03-2017	58	29	66	425	-
72	MALAPRABHA(RENUKA)	633.83	623.07	0.972	0.108	02-03-2017	11	5	13	215	-
73	KABINI(Sancherla Tank)	696.16	686.79	0.444	0.033	27-02-2017	7	30	32	85	-
74	HEMAVATHY	890.63	871.27	0.927	0.066	27-02-2017	7	14	23	265	-
75	HARANGI	871.42	856.54	0.220	0.041	27-02-2017	19	7	14	53	-
76	SUPA	564.00	541.23	4.120	1.851	02-03-2017	45	37	46	-	-
77	VANIVILAS SAGAR	652.28	632.96	0.802	0.026	02-03-2017	3	12	16	123	-
*78	ALMATTI	519.60	507.82	3.105	0.242	02-03-2017	8	11	20	@	290
*79	GERUSOPPA	55.00	51.60	0.130	0.110	02-03-2017	85	90	77	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	98.58	0.507	0.172	27-02-2017	34	84	64	62	-
*81	IDAMALAYAR	169.00	147.52	1.018	0.460	27-02-2017	45	44	51	33	75
*82	IDUKKI	732.43	710.83	1.460	0.462	27-02-2017	32	46	49	-	780
*83	KAKKI	981.46	963.42	0.447	0.212	27-02-2017	47	62	64	23	300
*84	PERIYAR	867.41	858.89	0.173	0.009	27-02-2017	5	23	23	84	140
85	MALAPMUZHA	115.06	102.82	0.224	0.033	02-03-2017	15	16	25	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	260.90	0.792	0.074	01-03-2017	9	28	43	105	8
*87	METTUR(STANLEY)	240.79	213.76	2.647	0.228	01-03-2017	9	27	39	122	360
88	VAIGAI	279.20	264.77	0.172	0.005	27-02-2017	3	18	23	61	6
89	PARAMBIKULAM	556.26	536.36	0.380	0.025	01-03-2017	7	41	53	101	-
90	ALIYAR	320.04	302.79	0.095	0.006	01-03-2017	6	24	44	#	60
*91	SHOLAYAR	1002.79	955.01	0.143	0.000	27-02-2017	0	0	6	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	64.550						
	PERCENTAGE						41	31	40		

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

 $^{@^{\}scriptscriptstyle |}$ 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