BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 07.02.2019)

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 **07.02.2019**, live storage available in these reservoirs is **68.359 BCM**, which is **42%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **67.001 BCM** and the average of last 10 years live storage was **72.488 BCM**. Thus, the live storage available in 91 reservoirs **as per 07.02.2019 Bulletin** is **102%** of the live storage of corresponding period of last year and **94%** of storage of average of last ten years.

The overall storage position is **more than the** corresponding period of last year in the country as a whole and 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 07.02.2019, the total live storage available in these reservoirs is 10.11 BCM which is 56% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 39% and average storage of last ten years during corresponding period was 41% 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 **07.02.2019**, the total live storage available in these reservoirs is **10.35 BCM** which is **55%** 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 **58%** 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 31.26 BCM. As per Reservoir Storage Bulletin dated 07.02.2019, the total live storage available in these reservoirs is 9.87 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 47% 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 **07.02.2019**, the total live storage available in these reservoirs is **19.69 BCM** which is **47%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **40%** and average storage of last ten years during corresponding period was **45%** 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 **07.02.2019**, the total live storage available in these reservoirs is **18.34 BCM** which is **36%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **34%** and average storage of last ten years during corresponding period was **40%** 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.

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, Narmada, Mahi, West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Ganga, Godavari and Mahanadi & Neighbouring East Flowing Rivers Deficient in Tapi, Sabarmati Rivers of Kutch, and Krishna and Nil in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are 33 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 3 and having storage less than 20% with reference to average of last ten years is 3. The number of reservoirs having storage less than or equal to 50% with respect to last year are 17 and having storage less than or equal to 50% with reference to average of last ten years are 22.

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 07.02.2019

- 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
 07.02.2019 is 68.359 BCM (42 percent of the live storage capacity at FRL). The current year's storage is nearly 102 percent of last year's storage and 94 percent of the average of last ten years.

3 Region wise storage status:-

	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	-	rom Normal rage	
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	1	1	1	1	2	2	1	1	H.P. PUNJAB RAJASTHAN	32 % 111 % 14 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	2	5	2	2	4	JHARKHAND ODISHA W. BENGAL TRIPURA	-20 % -4 % -20 % 125 %	
WEST (Guj.& Mah.), (27 Resv.)	1	-	-	2	2	5	1	17	GUJARAT MAH.	-36 % -29 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	1	2	3	1	5	U.P. UTTARAKHAND M.P. CHHATISGARH	-14 % -8 % 11 % -3 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	1	8	2	1	18	AP&TG A,P TG KARNATAKA KERALA T.N.	-44 % -51 % -21 % 3 % 8 % 26 %	
Status of 91 reservoirs	0	0	1	6	19	14	6	45		=3 / 0	

4 Basin wise storage position:

Better than normal: Indus, Narmada, Mahi, and West Flowing Rivers of South and Cauvery & neighbouring EFRs..

Close to normal: Ganga, Godavari and Mahanadi & Neighbouring East Flowing Rivers

Deficient: Tapi, Sabarmati, Rivers of Kutch and Krishna.

Highly deficient:

5 Out of 91 reservoirs, 60 reservoirs reported more than 80% of normal storage & 31 reservoirs reported 80% or below of normal storage. Out of these 31 reservoirs 22 having storage upto 50% of normal

storage.			
Name of reservoir	%	Name of reservoir	%
YELDARI	0	UPPER WARDHA	46
ALIYAR	13	SABARMATI(DHAROI)	46
VANIVILAS SAGAR	17	DANTIWADA	48
PENCH (TOTALADOH)	21	SOMASILA	49
TILAIYA	29	RENGALI	49

ALIYAR	13	9)
VANIVILAS SAGAR	17	
PENCH (TOTALADOH)	21	0)
TILAIYA	29	F
TAWA	33	
NARAYANPUR	37	
SHETRUNJI	37	
MULA	38	
JAYAKWADI(PAITHON)	40	
BHIMA(UJJANI)	41	
MANIKDOH	42	
SRISAILAM	43	
BARNA	44	
UKAI	44	
BHADAR	45	
GANDHI SAGAR	46	

9 reservors								
having storage 51%								
to 80% of normal								
storage.								
51%	61%	71%						
to	to	to						
60%	70%	80%						
3	4	2						

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

20 reservoirs

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION WEEK ENDING:- 07.02.2019

WEEK ENDING :- 07.02.2019										
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	11.296 40.21%	12.357 43.98%	11.980 42.64%	-5.71					
INDUS	14.730	8.618 58.51%	5.596 37.99%	6.110 41.48%	41.05					
NARMADA	21.608	9.332 43.19%	5.666 26.22%	8.155 37.74%	14.43					
TAPI	7.394	1.952 26.40%	2.837 38.37%	4.114 55.64%	-52.55					
MAHI	4.012	2.190 54.59%	2.323 57.90%	2.088 52.04%	4.89					
SABARMATI	0.735	0.128 17.41%	0.250 34.01%	0.277 37.69%	-53.79					
RIVERS OF KUTCH	0.887	0.110 12.40%	0.385 43.40%	0.266 29.99%	-58.65					
GODAVARI	15.394	6.257 40.65%	6.732 43.73%	7.081 46.00%	-11.64					
KRISHNA	32.831	9.442 28.76%	11.846 36.08%	12.695 38.67%	-25.62					
MAHANADI & NEIGHBOURING EFRS	13.181	7.097 53.84%	9.056 68.70%	8.487 64.39%	-16.38					
CAUVERY& NEIGHBOURING EFRS	8.359	3.303 39.51%	2.276 27.23%	3.292 39.38%	0.33					
WEST FLOWING RIVERS OF SOUTH	14.766	8.634 58.47%	7.677 51.99%	7.943 53.79%	8.70					
TOTAL	161.993	68.359	67.001	72.488						
PERCENTAGE					-5.70					

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	07.02.2019		CENTICAL	.,		
			CURRENT	LIVE			STORAGE AS	S % OF LIVE C FRL	APACITY AT	BENE	FITS
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	498.40	6.229	3.939	07-02-2019	63	47	47	676	1200
*2	PONG DAM PUNJAB	423.67	411.04	6.157	3.202	06-02-2019	52	35	40	-	360
*3	THEIN	527.91	515.84	2.344	1.477	07-02-2019	63	20	30	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	274.10	1.711	0.960	07-02-2019	56	62	48	63	140
5	JHAKAM	359.50	350.80	0.132	0.060	07-02-2019	45	46	36	28	-
*6	RANA PRATAP SAGAR	352.81	347.27	1.436	0.476	07-02-2019	33	26	31	229	172
	EASTERN REGION	i									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	258.47	0.821	0.359	07-02-2019	44	48	45	-	-
8	MAITHON	146.3	141.92	0.471	0.230	07-02-2019	49	100	79	342	-
*9	PANCHET HILL	124.97	123.97	0.184	0.137	07-02-2019	74	100	78	\$	80
10	KONAR	425.81	421.69	0.176	0.108	07-02-2019	61	49	70	\$	-
11	TILAIYA	368.81	364.39	0.142	0.017	07-02-2019	12	25	41	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	189.59	5.378	3.335	07-02-2019	62	67	67	153	307
*13	BALIMELA	462.08	457.79	2.676	1.938	07-02-2019	72	23	45	-	360
14	SALANADI	82.30	73.70	0.558	0.302	07-02-2019	54	42	32	42	-
*15	RENGALI	123.50	117.03	3.432	1.112	07-02-2019	32	87	66	3	200
*16	MACHKUND(JALPUT)	838.16	834.70	0.893	0.617	07-02-2019	69	86	69	-	115
*17	UPPER KOLAB	858.00	854.00	0.935	0.576	07-02-2019	62	53	52	89	320
*18	UPPER INDRAVATI	642.00	637.76	1.456	1.015	07-02-2019	70	52	62	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	111.05	0.480	0.101	07-02-2019	21	92		227	-
20	KANGSABATI	134.14	126.25	0.914	0.334	07-02-2019	37	74	38	341	-
	TRIPURA										
21	GUMTI WESTERN REGION	93.55	90.15	0.312	0.164	06-02-2019	53	74	23	-	15
	GUJARAT	•									
*22	UKAI	105.16	92.98	6.615	1.667	07-02-2019	25	38	57	348	300
	SABARMATI(DHAROI)	189.59	180.94	0.735		07-02-2019	17	34	38		1
	KADANA	127.7	123.01	1.472		07-02-2019	51	53	58	200	120
	SHETRUNJI	55.53	50.12			07-02-2019	18	35	48	36	-
	BHADAR	107.89	101.94	0.300		07-02-2019	14	34	32		
	DAMANAGANGA	79.86	73.10			07-02-2019	43	72			1
	DANTIWADA	184.1	168.26		0.030	07-02-2019	8	54	16		
	PANAM	127.41	125.25			07-02-2019	60	60	52		
	SARDAR SAROVAR	138.68	118.65			07-02-2019	18	2		2120	1450
	KARJAN	115.25	108.63			07-02-2019	65	69	67	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	WEEK ENDING :- 07.02.2019												
			CURRENT	LIVE			STORAGE A	S % OF LIVE C FRL	APACITY AT	BENE	EFITS		
S. NO	NAME OF RESERVOIR	FRL (m)	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 .	I								
32	JAYAKWADI(PAITHON)	463.91	457.32	2.171	0.298	07-02-2019	14	73	35	227	_		
	KOYANA	657.90	651.41	2.652	2.020	07-02-2019	76	84	72	-	1920		
34	BHIMA(UJJANI)	496.83	492.71	1.517	0.363	07-02-2019	24	80	58	125	12		
35	ISAPUR	441.00	433.47	0.965	0.363	07-02-2019	38	6	40	104	-		
36	MULA	552.30	539.98	0.609	0.126	07-02-2019	21	75	55	139	-		
37	YELDARI	461.77	446.40	0.809	0.000	06-02-2019	0	5	27	78	-		
38	GIRNA	398.07	388.50	0.524	0.153	07-02-2019	29	34	28	79	-		
39	KHADAKVASLA	582.47	580.52	0.056	0.031	07-02-2019	55	55	57	78	8		
*40	UPPER VAITARNA	603.50	600.56	0.331	0.235	06-02-2019	71	73	73	-	61		
41	UPPER TAPI	214.00	211.69	0.255	0.132	07-02-2019	52	64	73	45	-		
*42	PENCH (TOTALADOH)	490.00	469.91	1.091	0.094	07-02-2019	9	16	40	127	160		
43	UPPER WARDHA	342.50	336.17	0.564	0.138	07-02-2019	24	59	53	70	-		
44	BHATSA	142.07	126.13	0.942	0.563	06-02-2019	60	69	65	29.378	15		
45	DHOM	747.70	737.21	0.331	0.130	07-02-2019	39	67	49	36.2	2		
46	DUDHGANGA	646.00	637.37	0.664	0.411	07-02-2019	62	75	69	2.441	24		
47	MANIKDOH (KUKADI)	711.25	690.76	0.288	0.037	07-02-2019	13	60	31	2.2			
48	BHANDARDARA CENTRAL REGION	744.91	730.67	0.304	0.123	07-02-2019	40	87	72	63.74	46		
		•											
40	MATATILA	308.46	202.76	0.707	0.209	06 02 2010	30	32	44		30		
	RIHAND	268.22	303.76 258.74		1.767	06-02-2019 07-02-2019	31	34	35	-	300		
30	UTTRAKHAND	200.22	230.74	3.049	1.707	07-02-2019	31	34	33	_	300		
*51	RAMGANGA	365.30	347.50	2.196	1.048	07-02-2019	48	38	58	1897	198		
	TEHRI	830.00	796.97		1.391	07-02-2019	53	48	53	2351	1000		
32	MADHYA PRADESH	000.00	730.37	2.013	1.551	07 02 2015	55	40	33	2001	1000		
*53	GANDHI SAGAR	399.90	386.00	6.827	1.017	07-02-2019	15	35	33	220	115		
	TAWA	355.40	339.40			07-02-2019	12	9	37	247			
	BARGI	422.76	417.50			07-02-2019	58	68	60	157			
	BANSAGAR	341.64	338.88			07-02-2019	76	54	52	488			
	INDIRA SAGAR	262.13	256.99			07-02-2019	60	28	41	2380	1000		
58	BARNA	348.55	340.95			07-02-2019	16	19	36	546	_		
	CHHATTIS GARH												
*59	MINIMATA BANGOI	359.66	353.14	3.046	1.862	07-02-2019	61	61	63	-	120		
60	MAHANADI	348.70	345.40	0.767	0.486	06-02-2019	63	54	66	319	10		
;	SOUTHERN REGION												
	A.P & TG												
*61	SRISAILAM	269.75	254.14	8.288	1.420	07-02-2019	17	32	40	0	770		
	NAGARJUNA SAGAR	179.83	162.58		1.223	07-02-2019	18	12	21	895			
	ANDHRA PRADESH												
63	SOMASILA	100.58	87.71	1.994	0.523	07-02-2019	26	38	54	168	0		
	<u>TELANGANA</u>												
64	SRIRAMSAGAR	332.54	325.74	2.300	0.750	07-02-2019	33	39	39	411	27		
65	LOWER MANAIR	280.42	274.05	0.621	0.219	07-02-2019	35	50	52	199	60		

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	07.02.2019		CENTRAL V	VATER CON	VIIVIISSIO	'IN
			QUEENT	10.75			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	747.81	1.163	0.757	06-02-2019	65	40	52	79	-
*67	TUNGABHADRA	497.74	487.26	3.276	0.509	07-02-2019	16	18	26	529	72
68	GHATAPRABHA	662.95	649.45	1.391	0.571	07-02-2019	41	49	31	317	-
69	BHADRA	657.76	652.80	1.785	1.249	07-02-2019	70	52	68	106	39
70	LINGANAMAKKI	554.43	547.06	4.294	2.366	07-02-2019	55	41	52	-	55
71	NARAYANPUR	492.25	487.31	0.863	0.231	07-02-2019	27	59	73	425	-
72	MALAPRABHA(RENUKA)	633.83	624.41	0.972	0.164	07-02-2019	17	16	19	215	-
73	KABINI(Sancherla Tank)	696.16	693.54	0.444	0.301	06-02-2019	68	57	37	85	-
74	HEMAVATHY	890.63	875.65	0.927	0.163	06-02-2019	18	20	21	265	-
75	HARANGI	871.42	856.61	0.220	0.041	06-02-2019	19	29	17	53	-
76	SUPA	564.00	549.44	4.120	2.538	07-02-2019	62	51	49	-	-
77	VANIVILAS SAGAR	652.28	632.62	0.802	0.022	06-02-2019	3	2	16	123	-
*78	ALMATTI	519.60	513.32	3.105	1.061	07-02-2019	34	38	32	@	290
*79	GERUSOPPA	55.00	48.89	0.130	0.096	07-02-2019	74	93	84	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	113.10	0.507	0.425	06-02-2019	84	93	72	62	-
*81	IDAMALAYAR	169.00	151.32	1.018	0.546	06-02-2019	54	61	57	33	75
*82	IDUKKI	732.43	722.94	1.460	0.960	06-02-2019	66	59	53	-	780
*83	KAKKI	981.46	969.44	0.447	0.273	06-02-2019	61	81	70	23	300
*84	PERIYAR	867.41	861.06	0.173	0.042	06-02-2019	24	17	27	84	140
85	MALAPMUZHA	115.06	105.22	0.224	0.056	07-02-2019	25	17	27	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	274.37	0.792	0.526	06-02-2019	66	17	36	105	8
*87	METTUR(STANLEY)	240.79	225.67	2.647	0.935	06-02-2019	35	15	33	122	360
88	VAIGAI	279.20	272.81	0.172	0.057	06-02-2019	33	14	26	61	6
89	PARAMBIKULAM	556.26	550.51	0.380	0.263	06-02-2019	69	19	51	101	-
90	ALIYAR	320.04	302.68	0.095	0.005	06-02-2019	5	0	41	#	60
*91	SHOLAYAR	1002.79	984.90	0.143	0.052	06-02-2019	36	0	8	-	95
	TOTAL FOR 91 RESERVOIRS			161.993	68.359						
	PERCENTAGE						42	41	45		

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

 $^{@^{\}scriptscriptstyle |}$ TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

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