BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 03.01.2019)

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 **03.01.2019**, live storage available in these reservoirs is **86.646 BCM,** which is **53%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **84.579 BCM** and the average of last 10 years live storage was **89.527 BCM**. Thus, the live storage available in 91 reservoirs **as per 03.01.2019 Bulletin** is **102%** of the live storage of corresponding period of last year and **97%** 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 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 **03.01.2019**, the total live storage available in these reservoirs is **12.14 BCM** which is **67%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **53%** 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 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 **03.01.2019**, the total live storage available in these reservoirs is **12.06 BCM** which is **64%** 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 **68%** 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 **03.01.2019**, the total live storage available in these reservoirs is **12.41 BCM** which is **40%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **53%** 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 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 **03.01.2019**, the total live storage available in these reservoirs is **27.02 BCM** which is **64 %** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **50%** and average storage of last ten years during corresponding period was **56%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year and is 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 **03.01.2019**, the total live storage available in these reservoirs is **23.02 BCM** which is **45%** 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 **51%** 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, Narmada, Mahi, and West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Sabarmati, Ganga,Godavari and Mahanadi & Neighbouring East Flowing Rivers, Deficient in Tapi and Krishna and Highly Deficient in Rivers of Kutch.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **38** 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 **2** 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 **15** and having storage less than or equal to 50% with reference to average of last ten years are **14.**

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 3.1.2019

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 **3.1.2019** is **86.646** BCM (**53** percent of the live storage capacity at FRL).The current year's storage is nearly **102** percent of last year's storage and **97** 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.)	1	-	-	2	2	-	-	1	H.P. PUNJAB RAJASTHAN	25 % 57 % 12 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	2	4	2	2	2	3	JHARKHAND ODISHA W. BENGAL TRIPURA	-21 % -3 % -27 % 54 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	2	4	2	3	4	12	GUJARAT MAH.	-26 % -27 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	1	1	2	2	1	1	4	U.P. UTTARAKHAND M.P. CHHATISGARH	-1 % -1 % 22 % -3 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	5	4	4	2	5	11	AP&TG A,P TG KARNATAKA KERALA T.N.	-45 % -42 % -24 % -2 % 5 % 23 %
Status of 91 reservoirs	1	1	10	16	12	8	12	31		

4 **Basin wise storage position:**

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

Close to normal: Ganga, sabarmati, Godavari and Mahanadi & Neighbouring EFRS

Deficient: Tapi and Krishna .

Highly deficient: Rivers of Kutch

5 Out of 91 reservoirs, **61** reservoirs reported more than 80% of normal storage & **30** reservoirs reported 80% or below of normal storage. Out of these **30** reservoirs **14** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
VANIVILAS SAGAR	17		
PENCH (TOTALADOH)	20		
YELDARI	20		
SHETRUNJI	34		
NARAYANPUR	35		
DANTIWADA	35		
MANIKDOH	35		
MULA	36		
TILAIYA	38		
SRISAILAM	38		
UPPER WARDHA	41		
BHADAR	41		
UKAI	42		
JAYAKWADI(PAITHON)	50		

16 reservors having storage 51% to 80% of normal storage.

51% to 60%	61% to 70%	71% to 80%
7	5	4

6 Out of **37** reservoirs with significant(*) hydropower generation, the storage build up is less than or equal to normal in **19** 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

GOVERNMENT OF INDIA

WEEKLY REPORT - BASINWISE

CENTRAL WATER COMMISSION

WEEK ENDING :- 3.1.2019

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	14.034	49.95%	15.443	54.97%	14.729	52.42%	**-4.72**
INDUS	14.730	10.249	69.58%	7.715	52.38%	7.965	54.07%	**28.68**
NARMADA	21.608	14.775	68.38%	7.692	35.60%	10.525	48.71%	**40.38**
TAPI	7.394	2.136	28.89%	3.142	42.49%	4.627	62.58%	**-53.84**
MAHI	4.012	2.713	67.62%	2.820	70.29%	2.453	61.14%	**10.60**
SABARMATI	0.735	0.328	44.63%	0.380	51.70%	0.362	49.25%	**-9.39**
RIVERS OF KUTCH	0.887	0.130	14.66%	0.527	59.41%	0.362	40.81%	**-64.09**
GODAVARI	15.394	7.426	48.24%	8.227	53.44%	8.457	54.94%	**-12.19**
KRISHNA	32.831	11.911	36.28%	16.663	50.75%	16.683	50.81%	**-28.60**
MAHANADI & NEIGHBOURING EFRS	13.181	8.272	62.76%	9.841	74.66%	9.698	73.58%	**-14.70**
CAUVERY& NEIGHBOURING EFRS	8.359	4.339	51.91%	3.274	39.17%	4.199	50.23%	**3.33**
WEST FLOWING RIVERS OF SOUTH	14.766	10.333	69.98%	8.855	59.97%	9.467	64.11%	**9.15**
TOTAL	**161.993**	**86.646**		**84.579**		**89.527**		
PERCENTAGE								**-3.22**

GOVERNMENT OF INDIA

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

WEEK ENDING :- 3.1.2019

CENTRAL WATER COMMISSION

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											
	HIMACHAL PRADESH										
*1	GOBIND SAGAR(BHAKRA)	512.06	504.26	6.229	4.759	03-01-2019	76	63	62	676	1200
*2	PONG DAM	423.67	415.07	6.157	3.983	03-01-2019	65	48	51	-	360
	PUNJAB										
*3	THEIN	527.91	516.25	2.344	1.507	03-01-2019	64	35	41	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	277.05	1.711	1.252	03-01-2019	73	79	63	63	140
5	JHAKAM	359.50	354.50	0.132	0.132	03-01-2019	100	66	54	28	-
*6	RANA PRATAP SAGAR	352.81	347.46	1.436	0.503	03-01-2019	35	27	38	229	172
EASTERN REGION											
	JHARKHAND										
7	TENUGHAT	269.14	258.82	0.821	0.371	03-01-2019	45	50	47	-	-
8	MAITHON	146.3	142.55	0.471	0.256	03-01-2019	54	100	86	342	-
*9	PANCHET HILL	124.97	124.17	0.184	0.146	03-01-2019	79	100	84	$	80
10	KONAR	425.81	422.61	0.176	0.122	03-01-2019	69	72	78	$	-
11	TILAIYA	368.81	365.19	0.142	0.033	03-01-2019	23	52	62	$	4
	ODISHA										
*12	HIRAKUD	192.02	190.47	5.378	3.834	03-01-2019	71	78	82	153	307
*13	BALIMELA	462.08	459.60	2.676	2.215	03-01-2019	83	38	52	-	360
14	SALANADI	82.30	74.16	0.558	0.314	03-01-2019	56	43	35	42	-
*15	RENGALI	123.50	117.77	3.432	1.628	03-01-2019	47	90	74	3	200
*16	MACHKUND(JALPUT)	838.16	836.15	0.893	0.722	03-01-2019	81	91	77	-	115
*17	UPPER KOLAB	858.00	855.23	0.935	0.673	27-12-2018	72	60	61	89	320
*18	UPPER INDRAVATI	642.00	638.66	1.456	1.103	27-12-2018	76	58	69	128	600
	WEST BENGAL										
19	MAYURAKSHI	121.31	111.77	0.480	0.116	03-01-2019	24	95	44	227	-
20	KANGSABATI	134.14	126.26	0.914	0.333	03-01-2019	36	88	44	341	-
	TRIPURA										
21	GUMTI	93.55	90.80	0.312	0.191	02-01-2019	61	81	40	-	15
WESTERN REGION											
	GUJARAT										
*22	UKAI	105.16	93.50	6.615	1.764	03-01-2019	27	40	64	348	300
23	SABARMATI(DHAROI)	189.59	181.46	0.735	0.328	03-01-2019	45	52	49	95	1
*24	KADANA	127.7	124.33	1.472	0.865	03-01-2019	59	63	62	200	120
25	SHETRUNJI	55.53	50.52	0.300	0.062	03-01-2019	21	51	61	36	-
26	BHADAR	107.89	102.54	0.188	0.035	03-01-2019	19	54	45	27	-
27	DAMANAGANGA	79.86	75.00	0.502	0.276	03-01-2019	55	85	81	51	1
28	DANTIWADA	184.1	168.52	0.399	0.033	03-01-2019	8	68	24	45	-
29	PANAM	127.41	126.05	0.697	0.464	03-01-2019	67	66	58	36	2
*30	SARDAR SAROVAR	138.68	123.46	5.760	1.845	03-01-2019	32	16	20	2120	1450
31	KARJAN	115.25	109.93	0.523	0.370	03-01-2019	71	79	75	51	3

GOVERNMENT OF INDIA

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 3.1.2019

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	458.11	2.171	0.457	02-01-2019	21	83	42	227	-
*33	KOYANA	657.90	653.21	2.652	2.169	03-01-2019	82	94	81	-	1920
34	BHIMA(UJJANI)	496.83	493.85	1.517	0.635	03-01-2019	42	100	69	125	12
35	ISAPUR	441.00	435.08	0.965	0.455	02-01-2019	47	11	46	104	-
36	MULA	552.30	540.62	0.609	0.144	03-01-2019	24	87	65	139	-
37	YELDARI	461.77	449.75	0.809	0.056	02-01-2019	7	6	34	78	-
38	GIRNA	398.07	389.91	0.524	0.192	02-01-2019	37	53	38	79	-
39	KHADAKVASLA	582.47	580.77	0.056	0.034	03-01-2019	61	63	63	78	8
*40	UPPER VAITARNA	603.50	601.80	0.331	0.276	25-12-2018	83	94	85	-	61
41	UPPER TAPI	214.00	212.71	0.255	0.180	02-01-2019	71	83	85	45	-
*42	PENCH (TOTALADOH)	490.00	470.47	1.091	0.105	02-01-2019	10	20	49	127	160
43	UPPER WARDHA	342.50	336.49	0.564	0.154	03-01-2019	27	71	67	70	-
44	BHATSA	142.07	130.95	0.942	0.665	27-12-2018	71	81	77	29.378	15
45	DHOM	747.70	740.58	0.331	0.186	28-12-2018	56	79	69	36.2	2
46	DUDHGANGA	646.00	640.38	0.664	0.498	03-01-2019	75	86	81	2.441	24
47	MANIKDOH (KUKADI)	711.25	691.42	0.288	0.042	02-01-2019	15	76	42	2.2	6
48	BHANDARDARA	744.91	730.90	0.304	0.124	01-01-2019	41	98	78	63.74	46
	CENTRAL REGION										
	UTTAR PRADESH										
49	MATATILA	308.46	304.50	0.707	0.239	01-01-2019	34	39	55	-	30
*50	RIHAND	268.22	260.70	5.649	2.517	03-01-2019	45	47	42	-	300
	UTTRAKHAND										
*51	RAMGANGA	365.30	352.34	2.196	1.307	03-01-2019	60	55	64	1897	198
*52	TEHRI	830.00	812.09	2.615	1.905	02-01-2019	73	68	70	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	389.34	6.827	1.788	03-01-2019	26	48	48	220	115
54	TAWA	355.40	346.44	1.944	0.770	03-01-2019	40	38	60	247	-
*55	BARGI	422.76	418.70	3.180	2.104	03-01-2019	66	77	70	157	90
*56	BANSAGAR	341.64	339.49	5.166	4.207	03-01-2019	81	60	58	488	425
*57	INDIRA SAGAR	262.13	261.84	9.745	9.542	03-01-2019	98	31	54	2380	1000
58	BARNA	348.55	343.11	0.456	0.144	03-01-2019	32	34	55	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	353.73	3.046	1.946	03-01-2019	64	62	65	-	120
60	MAHANADI	348.70	346.21	0.767	0.550	03-01-2019	72	56	75	319	10
	SOUTHERN REGION										
	A.P & TG										
*61	SRISAILAM	269.75	255.64	8.288	1.598	03-01-2019	19	47	50	0	770
*62	NAGARJUNA SAGAR	179.83	166.09	6.841	1.898	03-01-2019	28	24	31	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	90.85	1.994	0.779	03-01-2019	39	54	68	168	0
	TELANGANA										
64	SRIRAMSAGAR	332.54	326.69	2.300	0.926	03-01-2019	40	52	53	411	27
65	LOWER MANAIR	280.42	274.35	0.621	0.292	03-01-2019	47	66	61	199	60

GOVERNMENT OF INDIA

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

WEEK ENDING :- 3.1.2019

CENTRAL WATER COMMISSION

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
	KARNATAKA										
66	KRISHNARAJA SAGRA	752.50	749.37	1.163	0.910	03-01-2019	78	51	62	79	-
*67	TUNGABHADRA	497.74	489.57	3.276	0.807	03-01-2019	25	36	43	529	72
68	GHATAPRABHA	662.95	653.75	1.391	0.757	01-01-2019	54	69	50	317	-
69	BHADRA	657.76	655.32	1.785	1.543	01-01-2019	86	71	79	106	39
70	LINGANAMAKKI	554.43	549.60	4.294	2.948	03-01-2019	69	50	64	-	55
71	NARAYANPUR	492.25	487.31	0.863	0.231	03-01-2019	27	67	78	425	-
72	MALAPRABHA(RENUKA)	633.83	625.84	0.972	0.235	01-01-2019	24	20	34	215	-
73	KABINI(Sancherla Tank)	696.16	693.90	0.444	0.319	03-01-2019	72	64	34	85	-
74	HEMAVATHY	890.63	877.79	0.927	0.234	03-01-2019	25	22	27	265	-
75	HARANGI	871.42	855.68	0.220	0.035	03-01-2019	16	28	14	53	-
76	SUPA	564.00	553.66	4.120	2.954	03-01-2019	72	54	56	-	-
77	VANIVILAS SAGAR	652.28	632.90	0.802	0.025	20-12-2018	3	2	18	123	-
*78	ALMATTI	519.60	514.23	3.105	1.253	03-01-2019	40	60	51	@	290
*79	GERUSOPPA	55.00	52.74	0.130	0.117	03-01-2019	90	89	85	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	114.08	0.507	0.448	01-01-2019	88	94	79	62	-
*81	IDAMALAYAR	169.00	155.05	1.018	0.633	01-01-2019	62	70	67	33	75
*82	IDUKKI	732.43	725.47	1.460	1.079	01-01-2019	74	66	61	-	780
*83	KAKKI	981.46	972.01	0.447	0.305	01-01-2019	68	87	77	23	300
*84	PERIYAR	867.41	862.83	0.173	0.073	03-01-2019	42	37	49	84	140
85	MALAPMUZHA	115.06	109.06	0.224	0.105	03-01-2019	47	41	53	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	276.78	0.792	0.669	03-01-2019	84	36	47	105	8
*87	METTUR(STANLEY)	240.79	229.89	2.647	1.310	03-01-2019	49	28	47	122	360
88	VAIGAI	279.20	274.71	0.172	0.083	03-01-2019	48	26	43	61	6
89	PARAMBIKULAM	556.26	553.21	0.380	0.316	03-01-2019	83	37	64	101	-
90	ALIYAR	320.04	313.97	0.095	0.058	03-01-2019	61	20	63	#	60
*91	SHOLAYAR	1002.79	992.42	0.143	0.080	03-01-2019	56	0	34	-	95
	TOTAL FOR 91 RESERVOIRS			**161.993**	**86.646**						
	PERCENTAGE						**53**	**52**	**55**		

* 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.

Sd/-

Director

W. M. , CWC