

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 17.01.2019)

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 **17.01.2019**, live storage available in these reservoirs is **77.171 BCM**, which is **48%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **77.317 BCM** and the average of last 10 years live storage was **82.692 BCM**. Thus, the live storage available in 91 reservoirs **as per 17.01.2019 Bulletin** is **100%** of the live storage of corresponding period of last year and **93%** 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 **17.01.2019**, the total live storage available in these reservoirs is **11.24 BCM** which is **62%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **47%** 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.

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 **17.01.2019**, the total live storage available in these reservoirs is **11.45 BCM** which is **61%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **69%** 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 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 **17.01.2019**, the total live storage available in these reservoirs is **11.41 BCM** which is **37%** 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 **52%** 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 **17.01.2019**, the total live storage available in these reservoirs is **22.06 BCM** which is **52 %** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **45%** and average storage of last ten years during corresponding period was **52%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year and is equal to 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 **17.01.2019**, the total live storage available in these reservoirs is **21.01 BCM** which is **41%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **41%** 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 equal to the corresponding period of last year and 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, and West Flowing Rivers of South. Close to Normal in Ganga, Godavari, Mahanadi & Neighbouring East Flowing Rivers and Cauvery & neighbouring EFRs, Deficient in Tapi, Sabarmati 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 **35** and reservoirs having storage more than average of last ten years are **31**. 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 **17** and having storage less than or equal to 50% with reference to average of last ten years are **17**.

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 17.01.2019

- 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.
- The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **17.01.2019** is **77.171** BCM (**48** percent of the live storage capacity at FRL).The current year's storage is nearly **100** percent of last year's storage and **93** percent of the average of last ten years.

3 Region wise storage status:-

REGION (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.	29 %	
									PUNJAB	66 %	
									RAJASTHAN	15 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	4	2	4	2	3	JHARKHAND	-21 %	
									ODISHA	-2 %	
									W. BENGAL	-29 %	
									TRIPURA	60 %	
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	3	4	2	3	15	GUJARAT	-30 %	
									MAH.	-28 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	2	4	1	-	5	U.P.	-9 %	
									UTTARAKHAND	-3 %	
									M.P.	4 %	
									CHHATISGARH	-3 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	3	5	3	1	4	15	AP&TG	-45 %	
									A,P	-47 %	
									TG	-19 %	
									KARNATAKA	-1 %	
									KERALA	7 %	
									T.N.	21 %	
Status of 91 reservoirs	0	0	3	15	15	10	9	39			

4 Basin wise storage position:

Better than normal: Indus, Narmada ,Mahi and West Flowing Rivers of South .

Close to normal: Ganga, Godavari and Mahanadi & Neighbouring EFRS and Cauvery & neighbouring EFRS.

Deficient: Tapi, Sabarmati and Krishna .

Highly deficient: Rivers of Kutch

- 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 **17** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0		
VANIVILAS SAGAR	17		
PENCH (TOTALADOH)	20		
TILAIYA	27		
SHETRANJI	34		
NARAYANPUR	35		
MANIKDOH	35		
MULA	37		
SRISAILAM	40		
DANTIWADA	40		
MATATILA	42		
UKAI	42		
UPPER WARDHA	42		
SABARMATI(DHAROI)	43		
BHADAR	43		
MAYURAKSHI	47		
JAYAKWADI(PAITHON)	47		

13 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
7	3	3

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

21 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 :- 17.01.2019

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	12.745	45.36%	13.990	49.79%	13.578	48.33%	-6.13
INDUS	14.730	9.522	64.64%	6.792	46.11%	7.129	48.40%	33.57
NARMADA	21.608	10.856	50.24%	6.813	31.53%	9.603	44.44%	13.05
TAPI	7.394	2.071	28.01%	3.017	40.80%	4.472	60.48%	-53.69
MAHI	4.012	2.511	62.59%	2.639	65.78%	2.319	57.80%	8.28
SABARMATI	0.735	0.141	19.18%	0.310	42.18%	0.330	44.90%	-57.27
RIVERS OF KUTCH	0.887	0.120	13.53%	0.483	54.45%	0.321	36.19%	-62.62
GODAVARI	15.394	6.868	44.61%	7.676	49.86%	7.980	51.84%	-13.93
KRISHNA	32.831	10.849	33.04%	14.759	44.95%	15.111	46.03%	-28.20
MAHANADI & NEIGHBOURING EFRS	13.181	8.012	60.78%	9.545	72.41%	9.129	69.26%	-12.24
CAUVERY& NEIGHBOURING EFRS	8.359	3.800	45.46%	2.918	34.91%	3.833	45.85%	-0.86
WEST FLOWING RIVERS OF SOUTH	14.766	9.676	65.53%	8.375	56.72%	8.887	60.19%	8.88
TOTAL	161.993	77.171		77.317		82.692		
PERCENTAGE								-6.68

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 17.01.2019

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
NORTHERN REGION											
<u>HIMACHAL PRADESH</u>											
*1	GOBIND SAGAR(BHAKRA)	512.06	502.21	6.229	4.466	17-01-2019	72	56	56	676	1200
*2	PONG DAM	423.67	413.34	6.157	3.640	17-01-2019	59	43	45	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	514.76	2.344	1.416	17-01-2019	60	28	36	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	276.15	1.711	1.157	16-01-2019	68	72	57	63	140
5	JHAKAM	359.50	353.55	0.132	0.080	16-01-2019	61	63	49	28	-
*6	RANA PRATAP SAGAR	352.81	347.29	1.436	0.479	17-01-2019	33	27	32	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.65	0.821	0.365	17-01-2019	44	49	46	-	-
8	MAITHON	146.3	142.61	0.471	0.258	17-01-2019	55	100	86	342	-
*9	PANCHET HILL	124.97	124.11	0.184	0.143	17-01-2019	78	100	85	\$	80
10	KONAR	425.81	422.39	0.176	0.118	17-01-2019	67	62	76	\$	-
11	TILAIYA	368.81	364.49	0.142	0.019	17-01-2019	13	41	50	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	190.16	5.378	3.665	17-01-2019	68	73	75	153	307
*13	BALIMELA	462.08	458.81	2.676	2.084	16-01-2019	78	34	52	-	360
14	SALANADI	82.30	73.84	0.558	0.305	17-01-2019	55	42	27	42	-
*15	RENGALI	123.50	117.57	3.432	1.579	16-01-2019	46	90	70	3	200
*16	MACHKUND(JALPUT)	838.16	835.59	0.893	0.678	16-01-2019	76	89	77	-	115
*17	UPPER KOLAB	858.00	853.51	0.935	0.539	16-01-2019	58	58	56	89	320
*18	UPPER INDRAVATI	642.00	638.44	1.456	1.081	16-01-2019	74	56	65	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	111.22	0.480	0.104	17-01-2019	22	95	46	227	-
20	KANGSABATI	134.14	126.26	0.914	0.333	17-01-2019	36	80	43	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	90.60	0.312	0.182	16-01-2019	58	80	37	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	93.28	6.615	1.723	17-01-2019	26	39	62	348	300
23	SABARMATI(DHAROI)	189.59	181.27	0.735	0.141	16-01-2019	19	42	45	95	1
*24	KADANA	127.7	123.88	1.472	0.826	16-01-2019	56	60	61	200	120
25	SHETRUNJI	55.53	50.32	0.300	0.057	16-01-2019	19	48	56	36	-
26	BHADAR	107.89	102.28	0.188	0.031	16-01-2019	16	47	38	27	-
27	DAMANAGANGA	79.86	74.20	0.502	0.249	17-01-2019	50	80	76	51	1
28	DANTIWADA	184.1	168.43	0.399	0.032	16-01-2019	8	63	20	45	-
29	PANAM	127.41	125.80	0.697	0.448	16-01-2019	64	63	56	36	2
*30	SARDAR SAROVAR	138.68	122.35	5.760	1.644	17-01-2019	29	9	20	2120	1450
31	KARJAN	115.25	109.45	0.523	0.359	17-01-2019	69	76	72	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 17.01.2019

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	457.84	2.171	0.403	17-01-2019	19	80	39	227	-
*33	KOYANA	657.90	652.60	2.652	2.118	17-01-2019	80	89	78	-	1920
34	BHIMA(UJJANI)	496.83	493.54	1.517	0.556	17-01-2019	37	100	66	125	12
35	ISAPUR	441.00	434.17	0.965	0.395	17-01-2019	41	7	44	104	-
36	MULA	552.30	540.41	0.609	0.138	17-01-2019	23	77	61	139	-
37	YELDARI	461.77	447.57	0.809	0.000	17-01-2019	0	5	32	78	-
38	GIRNA	398.07	389.42	0.524	0.178	17-01-2019	34	46	35	79	-
39	KHADAKVASLA	582.47	580.58	0.056	0.032	17-01-2019	57	75	61	78	8
*40	UPPER VAITARNA	603.50	601.17	0.331	0.256	17-01-2019	77	83	78	-	61
41	UPPER TAPI	214.00	212.48	0.255	0.170	17-01-2019	67	72	80	45	-
*42	PENCH (TOTALADOH)	490.00	470.11	1.091	0.098	17-01-2019	9	18	44	127	160
43	UPPER WARDHA	342.50	336.36	0.564	0.147	17-01-2019	26	66	62	70	-
44	BHATSA	142.07	128.48	0.942	0.612	17-01-2019	65	75	71	29.378	15
45	DHOM	747.70	739.44	0.331	0.166	17-01-2019	50	69	61	36.2	2
46	DUDHGANGA	646.00	639.47	0.664	0.471	15-01-2019	71	81	77	2.441	24
47	MANIKDOH (KUKADI)	711.25	691.07	0.288	0.039	17-01-2019	14	63	39	2.2	6
48	BHANDARDARA	744.91	730.78	0.304	0.123	17-01-2019	40	97	76	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	302.79	0.707	0.148	16-01-2019	21	21	50	-	30
*50	RIHAND	268.22	259.87	5.649	2.185	17-01-2019	39	41	39	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	349.79	2.196	1.165	16-01-2019	53	48	59	1897	198
*52	TEHRI	830.00	805.85	2.615	1.685	17-01-2019	64	59	63	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	388.32	6.827	1.496	17-01-2019	22	43	42	220	115
54	TAWA	355.40	344.27	1.944	0.585	17-01-2019	30	27	51	247	-
*55	BARGI	422.76	418.15	3.180	1.983	17-01-2019	62	73	66	157	90
*56	BANSAGAR	341.64	339.17	5.166	4.065	17-01-2019	79	58	56	488	425
*57	INDIRA SAGAR	262.13	257.57	9.745	6.171	17-01-2019	63	30	49	2380	1000
58	BARNA	348.55	342.24	0.456	0.114	17-01-2019	25	27	48	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	353.56	3.046	1.922	17-01-2019	63	62	65	-	120
60	MAHANADI	348.70	346.10	0.767	0.541	16-01-2019	71	55	73	319	10
SOUTHERN REGION											
A.P & TG											
*61	SRISAILAM	269.75	255.21	8.288	1.543	17-01-2019	19	43	47	0	770
*62	NAGARJUNA SAGAR	179.83	164.53	6.841	1.593	17-01-2019	23	18	26	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	89.73	1.994	0.680	17-01-2019	34	48	64	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	326.53	2.300	0.896	17-01-2019	39	46	48	411	27
65	LOWER MANAIR	280.42	274.21	0.621	0.286	17-01-2019	46	58	58	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 17.01.2019

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							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
<u>KARNATAKA</u>											
66	KRISHNARAJA SAGRA	752.50	749.00	1.163	0.872	17-01-2019	75	47	60	79	-
*67	TUNGABHADRA	497.74	488.30	3.276	0.631	17-01-2019	19	26	35	529	72
68	GHATAPRABHA	662.95	650.73	1.391	0.632	17-01-2019	45	59	41	317	-
69	BHADRA	657.76	654.82	1.785	1.447	17-01-2019	81	65	75	106	39
70	LINGANAMAKKI	554.43	548.66	4.294	2.719	17-01-2019	63	47	60	-	55
71	NARAYANPUR	492.25	487.28	0.863	0.228	17-01-2019	26	64	76	425	-
72	MALAPRABHA(RENUKA)	633.83	624.69	0.972	0.211	17-01-2019	22	18	27	215	-
73	KABINI(Sancherla Tank)	696.16	693.79	0.444	0.314	17-01-2019	71	61	38	85	-
74	HEMAVATHY	890.63	876.97	0.927	0.204	17-01-2019	22	22	24	265	-
75	HARANGI	871.42	856.17	0.220	0.038	17-01-2019	17	29	16	53	-
76	SUPA	564.00	552.02	4.120	2.787	17-01-2019	68	53	54	-	-
77	VANIVILAS SAGAR	652.28	632.72	0.802	0.023	17-01-2019	3	2	17	123	-
*78	ALMATTI	519.60	513.80	3.105	1.159	17-01-2019	37	48	44	@	290
*79	GERUSOPPA	55.00	52.77	0.130	0.117	17-01-2019	90	91	85	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	113.96	0.507	0.446	17-01-2019	88	96	76	62	-
*81	IDAMALAYAR	169.00	153.92	1.018	0.607	17-01-2019	60	67	63	33	75
*82	IDUKKI	732.43	724.60	1.460	1.038	17-01-2019	71	63	58	-	780
*83	KAKKI	981.46	971.21	0.447	0.294	17-01-2019	66	84	74	23	300
*84	PERIYAR	867.41	861.87	0.173	0.056	17-01-2019	32	29	37	84	140
85	MALAPMUZHA	115.06	107.73	0.224	0.086	17-01-2019	38	29	42	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	275.76	0.792	0.606	17-01-2019	77	30	42	105	8
*87	METTUR(STANLEY)	240.79	226.50	2.647	1.003	17-01-2019	38	23	39	122	360
88	VAIGAI	279.20	274.69	0.172	0.083	17-01-2019	48	22	36	61	6
89	PARAMBIKULAM	556.26	552.63	0.380	0.305	17-01-2019	80	28	59	101	-
90	ALIYAR	320.04	310.06	0.095	0.037	17-01-2019	39	9	53	#	60
*91	SHOLAYAR	1002.79	989.10	0.143	0.067	17-01-2019	47	0	20	-	95
TOTAL FOR 91 RESERVOIRS				161.993	77.171						
PERCENTAGE							48	48	51		

* 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