

## **BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 18.10.2018)**

### **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 **18.10.2018**, live storage available in these reservoirs is **115.668 BCM**, which is **71%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **111.500 BCM** and the average of last 10 years live storage was **115.573 BCM**. Thus, the live storage available in 91 reservoirs **as per 18.10.2018 Bulletin** is **104%** of the live storage of corresponding period of last year and **100%** 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 **equal to 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 **18.10.2018**, the total live storage available in these reservoirs is **16.31 BCM** which is **91%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **78%** and average storage of last ten years during corresponding period was **80%** 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 **18.10.2018**, the total live storage available in these reservoirs is **14.76 BCM** which is **78%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **79%** and average storage of last ten years during corresponding period was **76%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year but is 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 31.26 BCM. As per Reservoir Storage Bulletin dated **18.10.2018**, the total live storage available in these reservoirs is **17.66 BCM** which is **56%** 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 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 **18.10.2018**, the total live storage available in these reservoirs is **32.27 BCM** which is **76%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **64%** and average storage of last ten years during corresponding period was **72%** 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 **18.10.2018**, the total live storage available in these reservoirs is **34.68 BCM** which is **67%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **65%** 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 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, Ganga, Narmada, Mahi, and West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Godavari, Krishna and Mahanadi & Neighbouring East Flowing Rivers, Deficient in Tapi and Rivers of Kutch and Highly Deficient in Sabarmati.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **42** and reservoirs having storage more than average of last ten years are **49**. The numbers of reservoirs having storage less than 20% with respect to last year is **1** and having storage less than 20% with reference to average of last ten years is **1**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **9** and having storage less than or equal to 50% with reference to average of last ten years are **6**.

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**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 18.10.2018

- 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 **18.10.2018** is **115.668** BCM ( **71** percent of the live storage capacity at FRL ).The current year's storage is nearly **104** percent of last year's storage and **100** 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			
<b>NORTH</b> (HP,Punjab & Rajasthan), (6 Resv.)	2	2	1	-	1	-	-	-	H.P.	11	%
									PUNJAB	53	%
									RAJASTHAN	3	%
<b>EAST</b> (Jharkhand,Odisha, Tripura & W.Bengal ( 15 Resv.)	-	3	5	3	1	-	1	2	JHARKHAND	-9	%
									ODISHA	6	%
									W. BENGAL	-35	%
									TRIPURA	50	%
<b>WEST</b> (Guj.& Mah.), (27 Resv.)	1	5	3	5	2	-	4	7	GUJARAT	-21	%
									MAH.	-12	%
<b>CENTRAL</b> (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	3	3	1	2	1	2	-	U.P.	15	%
									UTTARAKHAND	2	%
									M.P.	5	%
									CHHATISGARH	-2	%
<b>SOUTH</b> (Karnataka,TN,AP&TG,AP, TG, & Kerala), ( 31 Resv.)	2	5	8	6	5	2	-	3	AP&TG	-30	%
									A,P	2	%
									TG	-21	%
									KARNATAKA	6	%
									KERALA	14	%
									T.N.	72	%
Status of 91 reservoirs	5	18	20	15	11	3	7	12			

## 4 Basin wise storage position:

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

**Close to normal:** Godavari, Krishna and Mahanadi & Neighbouring EFRS

**Deficient:** Tapi, and Rivers of Kutch.

**Highly deficient:** sabarmati

- Out of 91 reservoirs, **70** reservoirs reported more than 80% of normal storage & **21** reservoirs reported 80% or below of normal storage. Out of these **21** reservoirs **6** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
VANIVILAS SAGAR	20		
YELDARI	21		
PENCH (TOTALADOH)	24		
SABARMATI(DHAROI)	36		
DANTIWADA	38		
SRISAILAM	44		

<b>15</b> reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
6	3	6

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

**14** 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

CENTRAL WATER COMMISSION

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## WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 18.10.2018

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
<b>NORTHERN REGION</b>											
<b><u>HIMACHAL PRADESH</u></b>											
*1	GOBIND SAGAR(BHAKRA)	512.06	508.79	6.229	5.446	18-10-2018	87	84	84	676	1200
*2	PONG DAM	423.67	423.40	6.157	5.852	17-10-2018	95	77	81	-	360
<b><u>PUNJAB</u></b>											
*3	THEIN	527.91	526.56	2.344	2.237	16-10-2018	95	64	62	348	600
<b><u>RAJASTHAN</u></b>											
*4	MAHI BAJAJ SAGAR	280.75	280.95	1.711	1.711	18-10-2018	100	100	87	63	140
5	JHAKAM	359.50	359.55	0.132	0.132	18-10-2018	100	100	86	28	-
*6	RANA PRATAP SAGAR	352.81	350.13	1.436	0.936	18-10-2018	65	45	76	229	172
<b><u>EASTERN REGION</u></b>											
<b><u>JHARKHAND</u></b>											
7	TENUGHAT	269.14	259.87	0.821	0.411	18-10-2018	50	51	47	-	-
8	MAITHON	146.3	144.40	0.471	0.340	18-10-2018	72	100	93	342	-
*9	PANCHET HILL	124.97	123.82	0.184	0.131	18-10-2018	71	100	93	\$	80
10	KONAR	425.81	424.05	0.176	0.145	18-10-2018	82	84	90	\$	-
11	TILAIYA	368.81	368.49	0.142	0.130	18-10-2018	92	80	87	\$	4
<b><u>ODISHA</u></b>											
*12	HIRAKUD	192.02	191.52	5.378	4.511	17-10-2018	84	91	92	153	307
*13	BALIMELA	462.08	461.56	2.676	2.575	18-10-2018	96	48	59	-	360
14	SALANADI	82.30	78.09	0.558	0.424	11-10-2018	76	41	50	42	-
*15	RENGALI	123.50	120.22	3.432	2.386	18-10-2018	70	96	83	3	200
*16	MACHKUND(JALPUT)	838.16	837.59	0.893	0.836	18-10-2018	94	95	89	-	115
*17	UPPER KOLAB	858.00	856.69	0.935	0.811	18-10-2018	87	61	64	89	320
*18	UPPER INDRAVATI	642.00	640.41	1.456	1.279	18-10-2018	88	60	73	128	600
<b><u>WEST BENGAL</u></b>											
19	MAYURAKSHI	121.31	114.04	0.480	0.177	18-10-2018	37	95	59	227	-
20	KANGSABATI	134.14	126.16	0.914	0.329	18-10-2018	36	80	54	341	-
<b><u>TRIPURA</u></b>											
21	GUMTI	93.55	92.65	0.312	0.270	09-10-2018	87	97	58	-	15
<b><u>WESTERN REGION</u></b>											
<b><u>GUJARAT</u></b>											
*22	UKAI	105.16	96.64	6.615	2.694	18-10-2018	41	53	80	348	300
23	SABARMATI(DHAROI)	189.59	182.53	0.735	0.196	18-10-2018	27	98	75	95	1
*24	KADANA	127.7	126.44	1.472	1.063	18-10-2018	72	76	70	200	120
25	SHETRUNJI	55.53	52.52	0.300	0.119	18-10-2018	40	60	73	36	-
26	BHADAR	107.89	104.48	0.188	0.073	18-10-2018	39	92	68	27	-
27	DAMANAGANGA	79.86	78.10	0.502	0.398	18-10-2018	79	95	98	51	1
28	DANTIWADA	184.1	171.69	0.399	0.070	18-10-2018	18	96	46	45	-
29	PANAM	127.41	127.30	0.697	0.545	18-10-2018	78	76	71	36	2
*30	SARDAR SAROVAR	138.68	127.43	5.760	2.624	18-10-2018	46	55	27	2120	1450
31	KARJAN	115.25	112.83	0.523	0.445	18-10-2018	85	94	92	51	3

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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
<b>MAHARASHTRA</b>											
32	JAYAKWADI(PAITHON)	463.91	459.51	2.171	0.774	17-10-2018	36	100	51	227	-
*33	KOYANA	657.90	656.49	2.652	2.483	17-10-2018	94	100	96	-	1920
34	BHIMA(UJJANI)	496.83	496.65	1.517	1.457	17-10-2018	96	100	83	125	12
35	ISAPUR	441.00	437.52	0.965	0.634	17-10-2018	66	16	58	104	-
36	MULA	552.30	548.09	0.609	0.404	17-10-2018	66	100	84	139	-
37	YELDARI	461.77	450.41	0.809	0.075	18-10-2018	9	13	45	78	-
38	GIRNA	398.07	391.71	0.524	0.248	17-10-2018	47	71	47	79	-
39	KHADAKVASLA	582.47	581.22	0.056	0.040	15-10-2018	71	100	73	78	8
*40	UPPER VAITARNA	603.50	603.21	0.331	0.323	17-10-2018	98	100	92	-	61
41	UPPER TAPI	214.00	214.00	0.255	0.255	17-10-2018	100	100	100	45	-
*42	PENCH (TOTALADOH)	490.00	473.56	1.091	0.182	17-10-2018	17	35	70	127	160
43	UPPER WARDHA	342.50	338.85	0.564	0.284	18-10-2018	50	100	93	70	-
44	BHATSA	142.07	138.48	0.942	0.846	17-10-2018	90	100	94	29.378	15
45	DHOM	747.70	745.54	0.331	0.282	17-10-2018	85	98	89	36.2	2
46	DUDHGANGA	646.00	645.09	0.664	0.648	17-10-2018	98	100	97	2.441	24
47	MANIKDOH (KUKADI)	711.25	707.01	0.288	0.216	17-10-2018	75	83	60	2.2	6
48	BHANDARDARA	744.91	743.64	0.304	0.279	17-10-2018	92	100	96	63.74	46
<b>CENTRAL REGION</b>											
<b>UTTAR PRADESH</b>											
49	MATATILA	308.46	308.09	0.707	0.602	16-10-2018	85	82	89	-	30
*50	RIHAND	268.22	263.32	5.649	3.553	18-10-2018	63	61	53	-	300
<b>UTTRAKHAND</b>											
*51	RAMGANGA	365.30	354.59	2.196	1.434	17-10-2018	65	62	71	1897	198
*52	TEHRI	830.00	827.25	2.615	2.508	18-10-2018	96	91	88	2351	1000
<b>MADHYA PRADESH</b>											
*53	GANDHI SAGAR	399.90	392.65	6.827	2.911	18-10-2018	43	68	58	220	115
54	TAWA	355.40	352.84	1.944	1.579	18-10-2018	81	79	96	247	-
*55	BARGI	422.76	421.10	3.180	2.758	18-10-2018	87	88	91	157	90
*56	BANSAGAR	341.64	341.00	5.166	4.885	18-10-2018	95	72	73	488	425
*57	INDIRA SAGAR	262.13	261.52	9.745	9.190	16-10-2018	94	40	78	2380	1000
58	BARNA	348.55	344.44	0.456	0.204	18-10-2018	45	51	79	546	-
<b>CHHATTIS GARH</b>											
*59	MINIMATA BANGOI	359.66	355.60	3.046	2.224	15-10-2018	73	68	72	-	120
60	MAHANADI	348.70	344.54	0.767	0.418	10-10-2018	54	31	67	319	10
<b>SOUTHERN REGION</b>											
<b>A.P. &amp; TG</b>											
*61	SRISAILAM	269.75	260.21	8.288	2.409	18-10-2018	29	70	66	0	770
*62	NAGARJUNA SAGAR	179.83	177.21	6.841	4.400	18-10-2018	64	43	63	895	810
<b>ANDHRA PRADESH</b>											
63	SOMASILA	100.58	94.52	1.994	1.174	18-10-2018	59	67	58	168	0
<b>TELANGANA</b>											
64	SRIRAMSAGAR	332.54	328.18	2.300	1.245	18-10-2018	54	66	64	411	27
65	LOWER MANAIR	280.42	272.60	0.621	0.218	18-10-2018	35	34	59	199	60

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GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

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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
<b><u>KARNATAKA</u></b>											
66	KRISHNARAJA SAGRA	752.50	752.50	1.163	1.163	16-10-2018	100	75	77	79	-
*67	TUNGABHADRA	497.74	495.60	3.276	2.153	17-10-2018	66	77	76	529	72
68	GHATAPRABHA	662.95	660.41	1.391	1.203	17-10-2018	86	89	86	317	-
69	BHADRA	657.76	657.20	1.785	1.720	17-10-2018	96	72	84	106	39
70	LINGANAMAKKI	554.43	553.17	4.294	3.907	17-10-2018	91	62	80	-	55
71	NARAYANPUR	492.25	491.02	0.863	0.588	18-10-2018	68	80	85	425	-
72	MALAPRABHA(RENUKA)	633.83	631.00	0.972	0.644	17-10-2018	66	41	62	215	-
73	KABINI(Sancherla Tank)	696.16	695.92	0.444	0.429	16-10-2018	97	91	49	85	-
74	HEMAVATHY	890.63	887.28	0.927	0.740	16-10-2018	80	31	68	265	-
75	HARANGI	871.42	869.42	0.220	0.171	16-10-2018	78	99	72	53	-
76	SUPA	564.00	560.94	4.120	3.751	17-10-2018	91	61	66	-	-
77	VANIVILAS SAGAR	652.28	632.91	0.802	0.026	17-10-2018	3	3	16	123	-
*78	ALMATTI	519.60	517.33	3.105	2.163	18-10-2018	70	100	93	@	290
*79	GERUSOPPA	55.00	52.53	0.130	0.116	17-10-2018	89	83	78	83	240
<b><u>KERALA</u></b>											
80	KALLADA(PARAPPAR)	115.82	112.10	0.507	0.405	16-10-2018	80	77	72	62	-
*81	IDAMALAYAR	169.00	158.86	1.018	0.728	11-10-2018	72	74	74	33	75
*82	IDUKKI	732.43	727.56	1.460	1.192	15-10-2018	82	63	64	-	780
*83	KAKKI	981.46	974.86	0.447	0.342	15-10-2018	77	74	75	23	300
*84	PERIYAR	867.41	866.14	0.173	0.140	16-10-2018	81	42	39	84	140
85	MALAPMUZHA	115.06	113.68	0.224	0.191	18-10-2018	85	67	79	21	3
<b><u>TAMIL NADU</u></b>											
86	LOWER BHAWANI	278.89	279.50	0.792	0.792	16-10-2018	100	55	42	105	8
*87	METTUR(STANLEY)	240.79	235.72	2.647	1.961	16-10-2018	74	67	44	122	360
88	VAIGAI	279.20	277.78	0.172	0.140	16-10-2018	81	40	33	61	6
89	PARAMBIKULAM	556.26	555.36	0.380	0.361	16-10-2018	95	51	75	101	-
90	ALIYAR	320.04	317.34	0.095	0.078	16-10-2018	82	36	72	#	60
*91	SHOLAYAR	1002.79	1002.16	0.143	0.126	16-10-2018	88	76	83	-	95
TOTAL FOR 91 RESERVOIRS				161.993	115.668						
PERCENTAGE							71	69	71		

Sd/-

\* HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

Director

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

W. M. , CWC

# 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.