# BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 30.09.2015)

#### 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 30.09.2015, live storage available in these reservoirs is 95.693 BCM, which is 61% of total live storage capacity of these reservoirs. This storage is 77% of the storage of corresponding period of last year and 77% of storage of average of last ten years.

As per Table-01, 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 30.09.2015, the total live storage available in these reservoirs is 15.52 BCM which is 86% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 82% and average storage of last ten years during corresponding period was 84% 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 reservoirsunder CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated 30.09.2015, the total live storage available in these reservoirs is 13.28 BCM which is 71% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 82% and average storage of last ten years during corresponding period was 78% 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 27.07BCM. As per Reservoir Storage Bulletin dated 30.09.2015, the total live storage available in these reservoirs is 16.83 BCM which is 62% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 83% and average storage of last ten years during corresponding period was 83% 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 42.30BCM. As per Reservoir Storage Bulletin dated **30.09.2015**, the total live storage available in these reservoirs is **32.48** BCM which

is 77% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 84% and average storage of last ten years during corresponding period was 70% of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year but is better than the average storage of last ten years during the corresponding period.

# e) SOUTHERN REGION

The region includes Southern 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 30.09.2015, the total live storage available in these reservoirs is 17.59 BCM which is 34% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 71% and average storage of last ten years during corresponding period was 81% 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 6, better than normal storage is available in Ganga, Indus, Narmada, Sabarmati and Rivers of Kutch. Close to Normal in Tapi, Mahi and Mahanadi & neighbouring East Flowing Rivers. Deficient in Godavari, Cauvery& neighbouring EFRs and West Flowing rivers of South and Highly Deficient in Krishna basin.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are 17 and reservoirs having storage more than average of last ten years are 24. 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 5. 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 18.

States having better storage (in %) than last year for corresponding period: Himachal Pradesh and Tripura.

States having equal storage (in %) to last year for corresponding period:NIL

States having lesser storage (in %) than last year for corresponding period: Punjab, Rajasthan, Jharkhand, Odisha, West Bengal, Gujarat, Maharashtra, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, AP&TG (2combined project in both states), Andhra Pradesh, Telangana, Karnataka, Kerala and Tamil Nadu.

#### STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

- 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
   30.09.2015 is 95.693 BCM (61 percent of the live storage capacity at FRL). The current year's storage is nearly 77 percent of last year's storage and 77 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	3	1	1	1	1	-	-	H.P. PUNJAB RAJASTHAN	4 % -15 % 8 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal ( 15 Resv.)	2	1	4	-	1	6	1	1	JHARKHAND ODISHA W. BENGAL TRIPURA	-12 % -9 % -41 % 94 %
WEST (Guj.& Mah.), (27 Resv.)	3	3	5	4	2	3	-	7	GUJARAT MAH.	-6 % -43 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	1	2	2	3	3	-	-	1	U.P. UTTARAKHAND M.P. CHHATISGARH	-25 % 9 % 21 % -22 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), ( 31 Resv.)	-	-	1	1	4	6	6	13	AP&TG A,P TG KARNATAKA KERALA T.N.	-86 % -70 % -83 % -43 % -37 % -42 %
Status of 91 reservoirs	6	8	13	9	10	16	7	22		.= ,0

#### 4 Basin wise storage position:

Better than normal: Ganga, Indus, Narmada, Sabarmati, Rivers of Kutch.

Close to normal: Tapi, Mahi, Mahanadi & Neighbouring EFRS

**Deficient:** Godavari, Cauvery & neighbouring EFRS and West Flowing rivers of south.

Highly deficient: Krishna

5 Out of 91 reservoirs, 39 reservoirs reported more than 80% of normal storage & 52 reservoirs reported 80% or below of normal storage. Out of these 52 reservoirs 18 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	1	MANIKDOH	40		
BHIMA(UJJANI)	5	KHADAKVASLA	41		
JAYAKWADI(PAITHON)	7	VANIVILAS SAGAR	42		
SRIRAMSAGAR	14	KALLADA(PARAPPAR)	42		
GIRNA	20	GHATAPRABHA	42		
YELDARI	24	KANGSABATI	46		
SRISAILAM	25	VAIGAI	47		
LOWER MANAIR	28	HEMAVATHY	48		
SOMASILA	30				
MALAPRABHA(RENUKA	34				

<b>34</b> reservors								
having storage 51%								
to 80% of normal								
storage.								
51%	61%	71%						
to	to	to						
60%	70%	80%						
14	10	10						

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

25 reservoirs.

# WEEKLY REPORT - BASINWISE

# GOVERNMENT OF INDIA

# CENTRAL WATER COMMISSION

	WEEK EI	NDING :-	30.09.201	5				
NAME OF BASIN	LIVE CAP. AT FRL	_	/EAR'S RAGE	LAST Y STOR	_	LAST 10 AVG. ST	YEARS' ORAGE	% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	19.269	68.58%	20.755	73.87%	17.352	61.76%	11.05
INDUS	14.730	12.585	85.44%	11.463	77.82%	12.364	83.94%	1.79
NARMADA	17.414	15.647	89.85%	16.765	96.27%	14.362	82.47%	8.95
TAPI	7.394	5.445	73.64%	6.320	85.47%	6.315	85.41%	-13.78
MAHI	4.012	3.115	77.64%	3.554	88.58%	3.274	81.61%	-4.86
SABARMATI	0.735	0.666	90.61%	0.510	69.39%	0.543	73.88%	22.65
RIVERS OF KUTCH	0.887	0.806	90.87%	0.317	35.74%	0.570	64.26%	41.40
GODAVARI	15.394	7.121	46.26%	10.567	68.64%	10.747	69.81%	-33.74
KRISHNA	32.831	10.823	32.97%	23.740	72.31%	28.398	86.50%	-61.89
MAHANADI & NEIGHBOURING EFRS	13.181	9.497	72.05%	11.824	89.70%	11.507	87.30%	-17.47
CAUVERY& NEIGHBOURING EFRS	8.359	2.857	34.18%	5.689	68.06%	5.679	67.94%	-49.69
WEST FLOWING RIVERS OF SOUTH	14.766	7.862	53.24%	13.103	88.74%	12.534	84.88%	-37.27
TOTAL	157.799	95.693		124.607		123.645		
PERCENTAGE								-22.61

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	30.09.2015		OLIVII VIL V	VATER CON		
			CURRENT	LIVE			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
	NORTHERN REGION			•							
	HIMACHAL PRADESH	•									
*1	GOBIND SAGAR(BHAKRA)	512.06	511.74	6.229	5.906	30-09-2015	95	92	89	676	1200
*2	PONG DAM PUNJAB	423.67	421.17	6.157	5.319	30-09-2015	86	69	85	-	360
*3	THEIN	527.91	514.13	2.344	1.360	27-09-2015	58	62	68	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	280.60	1.711	1.701	29-09-2015	99	100	87	63	140
5	JHAKAM	359.50	358.50	0.132	0.122	29-09-2015	92	94	83	28	-
*6	RANA PRATAP SAGAR	352.81	351.10	1.436	1.109	29-09-2015	77	98	79	229	172
	EASTERN REGION	•									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	260.25	0.821	0.427	30-09-2015	52	49	42	-	-
8	MAITHON	146.3	142.98	0.471	0.274	30-09-2015	58	99	96	342	-
*9	PANCHET HILL	124.97	123.28	0.184	0.108	30-09-2015	59	100	100	\$	80
10	KONAR	425.81	424.27	0.176	0.149	30-09-2015	85	100	88	\$	-
11	TILAIYA <b>ODISHA</b>	368.81	369.06	0.142	0.142	30-09-2015	100	100	80	\$	4
*12	HIRAKUD	192.02	192.02	5.378	4.823	29-09-2015	90	87	96	153	307
*13	BALIMELA	462.08	457.05	2.676	1.834	29-09-2015	69	76	56	-	360
14	SALANADI	82.30	71.10	0.558	0.240	30-09-2015	43	70	63	42	-
*15	RENGALI	123.50	119.24	3.432	2.059	29-09-2015	60	95	86	3	200
*16	MACHKUND(JALPUT)	838.16	837.68	0.893	0.758	29-09-2015	85	77	83	-	115
*17	UPPER KOLAB	858.00	856.30	0.935	0.774	29-09-2015	83	75	64	89	320
*18	UPPER INDRAVATI	642.00	636.15	1.456	0.858	29-09-2015	59	98	81	128	600
	WEST BENGAL										
19	MAYURAKSHI	121.31	116.25	0.480	0.255	30-09-2015	53	53	63	227	-
20	KANGSABATI	134.14	124.98	0.914	0.266	30-09-2015	29	53	63	341	-
	TRIPURA										
21	GUMTI WESTERN REGION	93.55	93.60	0.312	0.312	29-09-2015	100	43	52	-	15
*22	<b>GUJARAT</b> UKAI	105 16	100.00	6.615	E 140	20.00.2015	70	00	07	240	200
	SABARMATI(DHAROI)	105.16 189.59	102.32 188.82			30-09-2015 29-09-2015	78 91	88 69	87 74		300
	KADANA	127.7	125.05			29-09-2015	63	80	74		120
	SHETRUNJI	55.53	55.53			29-09-2015	100	47		36	-
	BHADAR	107.89	107.32			29-09-2015	87	48	80		
	DAMANAGANGA	79.86	79.38			30-09-2015	96	97	93		1
	DANTIWADA	184.1	182.80			29-09-2015	86	22			
	PANAM	127.41	124.30			29-09-2015	52	77			
	SARDAR SAROVAR	121.92	121.07			30-09-2015	90	92			1450
	KARJAN	115.25	109.38			30-09-2015	68	98	98		3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	30.09.2015		CENTRALV	VATER CON	IIVIISSIO	IN
			QUIDDENT				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	456.43	2.171	0.088	30-09-2015	4	45	62	227	-
*33	KOYANA	657.90	652.68	2.652	1.980	29-09-2015	75	96	99	-	1920
34	BHIMA(UJJANI)	496.83	491.34	1.517	0.062	29-09-2015	4	100	88	125	12
35	ISAPUR	441.00	433.08	0.965	0.343	29-09-2015	36	81	70	104	-
36	MULA	552.30	545.85	0.609	0.314	30-09-2015	52	95	87	139	-
37	YELDARI	461.77	451.57	0.809	0.114	29-09-2015	14	65	58	78	-
38	GIRNA	398.07	384.90	0.524	0.060	29-09-2015	11	47	58	79	-
39	KHADAKVASLA	582.47	579.36	0.056	0.019	29-09-2015	34	88	82	78	8
*40	UPPER VAITARNA	603.50	600.56	0.331	0.236	29-09-2015	71	100	95	-	61
	UPPER TAPI	214.00	213.81	0.255	0.243	29-09-2015	95	91	90	45	-
*42	PENCH (TOTALADOH)	490.00	488.48	1.091	0.901	29-09-2015	83	79	82	127	160
43	UPPER WARDHA	342.50	342.50	0.564	0.564	30-09-2015	100	100	92	70	-
44	BHATSA	142.07	135.10		0.762	29-09-2015	81	99		29.378	15
45	DHOM	747.70	737.00		0.177	29-09-2015	53	99	93	36.2	2
	DUDHGANGA	646.00	640.57	0.664	0.504	29-09-2015	76	103	101	2.441	24
	MANIKDOH (KUKADI) BHANDARDARA	711.25 342.50	693.56 342.50	0.288 0.304	0.078 0.229	29-09-2015 30-09-2015	27 100	68 100	67 92	2.2 70	6
40	CENTRAL REGION	342.30	342.30	0.304	0.229	30-09-2013	100	100	92	70	_
	UTTAR PRADESH	•									
49	MATATILA	308.46	307.42	0.707	0.531	30-09-2015	75	91	92	_	30
*50	RIHAND	268.22	259.57	5.649	2.073	29-09-2015	37	48	50	-	300
	<u>UTTRAKHAND</u>										
*51	RAMGANGA	365.30	357.64	2.196	1.628	30-09-2015	74	85	69	1897	198
*52	TEHRI	830.00	822.75	2.615	2.315	30-09-2015	89	91	81	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	399.26	6.827	6.232	29-09-2015	91	74	53	220	115
54	TAWA	355.40	355.43	1.944	1.944	30-09-2015	100	100	98	247	-
*55	BARGI	422.76	421.85	3.180	2.968	30-09-2015	93	98	93	157	90
*56	BANSAGAR	341.64	337.67	5.166	3.448	29-09-2015	67	88	63	488	425
*57	INDIRA SAGAR	262.13	260.78	9.745	8.603	30-09-2015	88	96	75	2380	1000
58	BARNA	348.55	347.15	0.456	0.364	29-09-2015	80	88	82	546	-
	CHHATTIS GARH										
	MINIMATA BANGOI	359.66	353.32	3.046	1.888	29-09-2015	62	91	78	-	120
	MAHANADI	348.70	345.41	0.767	0.487	30-09-2015	63	92	88	319	10
	SOUTHERN REGION	•									
	<u>A.P &amp; TG</u>										
	SRISAILAM	269.75	256.53		1.724	30-09-2015	21	34		0	770
*62	NAGARJUNA SAGAR	179.83	155.72	6.841	0.043	30-09-2015	1	74	81	895	810
	ANDHRA PRADESH	10				00.05.77					
63	SOMASILA TELANGANA	100.58	84.02	1.994	0.297	30-09-2015	15	54	50	168	0
0.4	TELANGANA	222.51	004.00	0.000	0.000	00.00.004=			-	44.	0=
	SRIRAMSAGAR	332.54	321.08		0.230	29-09-2015	10	38	69	411	27
co	LOWER MANAIR	280.42	269.40	0.621	0.114	29-09-2015	18	41	65	199	60

#### WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

**GOVERNMENT OF INDIA** 

#### CENTRAL WATER COMMISSION

				WEE	K ENDING :-	30.09.2015						
				QUEDENT				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	HYDEI IN MW	
1	2	4	6	5	7	8	9	10	11	3A	3B	
	KARNATAKA									•		
66	KRISHNARAJA SAGRA	752.50	745.82	1.163	0.588	28-09-2015	51	100	91	79		
*67	TUNGABHADRA	497.74	495.06	3.276	1.996	30-09-2015	61	87	89	529	7	
68	GHATAPRABHA	662.95	648.53	1.391	0.572	29-09-2015	41	100	97	317		
69	BHADRA	657.76	652.14	1.785	1.185	29-09-2015	66	100	97	106	;	
70	LINGANAMAKKI	554.43	546.20	4.294	2.195	30-09-2015	51	98	93	-	į	
71	NARAYANPUR	492.25	490.41	0.863	0.520	30-09-2015	60	76	90	425		
72	MALAPRABHA(RENUKA)	633.83	626.26	0.972	0.261	29-09-2015	27	75	79	215		
73	KABINI	696.16	692.11	0.444	0.232	28-09-2015	52	99	55	85		
74	HEMAVATHY	890.63	882.00	0.927	0.419	28-09-2015	45	100	94	265		
75	HARANGI	871.42	865.52	0.220	0.105	28-09-2015	48	100	93	53		
76	SUPA	564.00	540.30	4.120	1.782	30-09-2015	43	81	78	-		
77	VANIVILAS SAGAR	652.28	634.30	0.802	0.045	24-09-2015	6	4	13	123		
*78	ALMATTI	519.60	515.79	3.105	1.657	30-09-2015	53	100	97	@	2	
*79	GERUSOPPA	55.00	46.72	0.130	0.086	30-09-2015	66	61	82	83	2	
	KERALA											
80	KALLADA(PARAPPAR)	115.82	98.50	0.507	0.171	28-09-2015	34	91	80	62		
*81	IDAMALAYAR	169.00	149.90	1.018	0.513	28-09-2015	50	90	83	33		
*82	IDUKKI	732.43	719.14	1.460	0.786	28-09-2015	54	73	72	-	7	
*83	KAKKI	981.46	963.92	0.447	0.216	30-09-2015	48	75	83	23	3	
*84	PERIYAR	867.41	860.71	0.173	0.050	28-09-2015	29	77	54	84	14	
85	MALAPMUZHA	867.41	860.71	0.224	0.136	28-09-2015	29	77	54	84	1-	
	TAMIL NADU											
86	LOWER BHAWANI	278.89	268.72	0.792	0.272	28-09-2015	34	39	64	105		
*87	METTUR(STANLEY)	240.79	225.30	2.647	0.906	28-09-2015	34	58	65	122	3	
88	VAIGAI	279.20	271.09	0.172	0.038	28-09-2015	22	17	47	61		
89	PARAMBIKULAM	556.26	550.77	0.380	0.268	28-09-2015	71	100	90	101		
90	ALIYAR	320.04	317.98	0.095	0.082	28-09-2015	86	99	89	#		
*91	SHOLAYAR	1002.79	992.86	0.143	0.096	28-09-2015	67	100	99	-		
	TOTAL FOR 91 RESERVOIRS			157.799	95.693							

Sd/-

78

61

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

PERCENTAGE

Director W. M. , CWC

(At sl. 30th) 0.444 BCM, Live storage at FRL of Kabini reservoir is intrim

 $<sup>^{\</sup>star}$  HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

<sup>#</sup> TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

<sup>@&#</sup>x27;TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

 $<sup>\</sup>dagger$  SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

SI. No. 19th 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