

Water-Data Report 2007

09217000 GREEN RIVER NEAR GREEN RIVER, WY

Upper Green Basin
Upper Green-Flaming Gorge Reservoir Subbasin

LOCATION.--Lat 41°30'59", long 109°26'54" referenced to North American Datum of 1927, in NW ¼ NE ¼ NE ¼ sec.26, T.18 N., R.107 W., Sweetwater County, WY, Hydrologic Unit 14040106, on right bank 0.1 mi downstream from Bitter Creek, 1.0 mi southeast of town of Green River, and 4.0 mi upstream from high-water line of Flaming Gorge Reservoir.

DRAINAGE AREA.--14,000 mi² of which 4,260 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1951 to current year.

REVISED RECORDS.--WSP 1713: 1957. WDR-76-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above NGVD of 1929, from topographic map. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Fontenelle Reservoir since August 1963. Natural flow of stream affected by transbasin diversions, storage reservoirs, power generation, and diversions for irrigation of about 223,000 acres upstream from station. Water quality records are also collected at this station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed, 22,200 ft³/s, June 19, 1918, at site 1.5 mi upstream.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	669	882	e800	e860	e880	e950	903	747	708	696	720	696
2	682	885	e850	e880	e880	e940	897	738	705	698	729	687
3	710	882	e900	e890	e900	e900	882	777	711	693	894	695
4	686	869	e920	e930	e940	e920	886	756	712	702	1,010	691
5	744	857	e900	e900	e970	e950	882	e755	710	711	939	743
6	794	855	e890	e890	e980	e990	889	e800	707	704	908	715
7	820	861	887	e880	e990	e980	893	e825	723	689	771	643
8	816	866	863	e900	e980	e980	888	768	749	686	720	618
9	819	893	852	e910	e980	e990	886	760	730	693	703	608
10	824	895	836	e940	e960	e980	882	750	718	683	690	609
11	827	871	878	e920	e960	e1,000	867	743	707	686	671	610
12	812	866	853	e910	e950	e1,000	871	732	715	e680	672	608
13	816	853	897	e920	e950	1,060	884	737	717	e675	670	601
14	809	869	873	e880	e960	1,060	886	729	704	e671	662	600
15	818	860	877	e860	e950	1,090	881	724	697	e670	671	609
16	818	853	821	e880	e960	1,090	875	737	696	e664	670	605
17	828	856	715	e880	e950	1,050	848	725	692	678	734	609
18	839	860	735	e900	e960	1,030	798	727	686	679	697	615
19	843	861	704	e920	e960	1,020	781	726	697	674	723	602
20	841	859	728	e920	e980	984	775	710	697	684	689	602
21	853	846	e800	e910	e960	953	776	733	701	686	679	594
22	842	850	e860	e900	e960	947	772	764	707	693	688	597
23	839	857	e900	e900	e990	925	776	741	711	681	716	646
24	841	852	e920	e900	e970	908	785	747	702	686	692	671
25	849	857	e900	e910	e960	895	774	736	694	680	695	732
26	868	885	e920	e920	e970	895	776	714	694	780	681	678
27	851	861	e900	e910	e960	889	779	713	693	864	676	641
28	841	917	e880	e880	e950	900	760	714	694	849	675	630
29	847	852	e900	e880	---	916	748	713	687	827	673	643
30	870	674	e900	e890	---	914	746	710	689	753	681	648
31	873	---	e890	e890	---	907	---	702	---	732	687	---
Total	25,189	25,804	26,549	27,860	26,760	30,013	25,046	22,953	21,153	21,947	22,486	19,246
Mean	813	860	856	899	956	968	835	740	705	708	725	642
Max	873	917	920	940	990	1,090	903	825	749	864	1,010	743
Min	669	674	704	860	880	889	746	702	686	664	662	594
Ac-ft	49,960	51,180	52,660	55,260	53,080	59,530	49,680	45,530	41,960	43,530	44,600	38,170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	949	849	746	767	833	1,032	1,568	2,455	4,520	3,019	1,497	1,093
Max	3,109	1,844	1,419	1,442	1,980	1,852	3,416	5,665	11,700	9,415	3,577	7,746
(WY)	(1983)	(1984)	(1972)	(1996)	(1974)	(1974)	(1962)	(1952)	(1986)	(1986)	(1982)	(1965)
Min	279	281	272	266	267	350	516	434	414	368	372	251
(WY)	(1989)	(1989)	(1989)	(1989)	(1989)	(1989)	(1968)	(1992)	(1977)	(1977)	(1977)	(1988)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1952 - 2007	
Annual total	436,038		295,006			
Annual mean	1,195		808		1,612	
Highest annual mean					3,089	1986
Lowest annual mean					576	2002
Highest daily mean	4,090	Jun 3	1,090	Mar 15 ^a	16,700	Sep 7, 1965
Lowest daily mean	649	Sep 27 ^b	594	Sep 21	170	Nov 16, 1955
Annual seven-day minimum	655	Sep 24	603	Sep 16	214	Dec 24, 1962
Maximum peak flow			^c 1,530	Jul 26	^d 16,800	Sep 7, 1965
Maximum peak stage			^e 4.20	Feb 2	8.53	Sep 7, 1965
Annual runoff (ac-ft)	864,900		585,100		1,168,000	
10 percent exceeds	1,740		951		3,470	
50 percent exceeds	960		827		1,040	
90 percent exceeds	817		675		470	

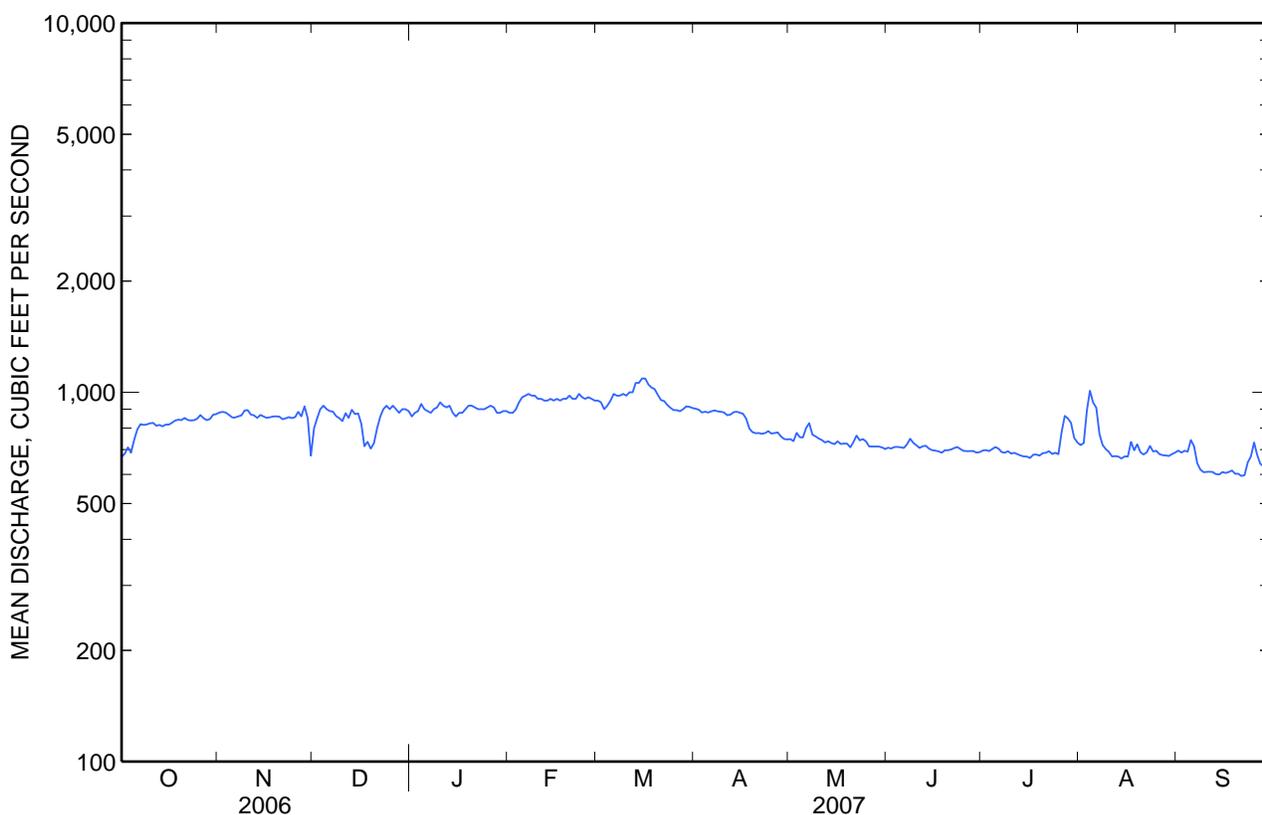
^a Also, March 16.

^b Also, September 29.

^c Gage height, 2.34 ft.

^d Emergency release from Fontenelle Reservoir.

^e Backwater from ice.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1951 to September 1992, April 2007 to present (seasonal).

WATER TEMPERATURE: May 1951 to September 1992, April 2007 to present (seasonal).

SUSPENDED-SEDIMENT DISCHARGE: May 1951 to September 1992.

INSTRUMENTATION.--Water-quality monitor for specific conductance and water temperature.

REMARKS.--

Specific conductance records considered excellent April 12 to June 12, July 17 to August 1, September 19-24; good June 13 to July 16, August 2 to September 10 and September 25-30; and fair September 11-18.

Water temperature records considered excellent. Water temperature records represent water temperature at sensor within 0.2°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,870 microsiemens per centimeter at 25°C (µS/cm), November 24, 1985; minimum recorded, 212 µS/cm, November 23, 1983.

WATER TEMPERATURE: Maximum recorded, 29.0°C, July 1, 1977; minimum recorded, 0.0°C, on many days during winter period each year.

SEDIMENT CONCENTRATION: Maximum daily mean, 15,000 mg/L, August 11, 1963; minimum daily mean, 0 mg/L, September 18, 1962.

SEDIMENT LOADS: Maximum daily, 110,000 tons, March 28, 1962; minimum daily, 0 ton, September 18, 1962.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 991 µS/cm, August 3; minimum recorded, 396 µS/cm, August 17, 25.

WATER TEMPERATURE: Maximum recorded, 26.5°C, July 30; minimum recorded, 5.1°C, April 20.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Residue on evap. at 180degC wat flt mg/L (70300)
Nov										
07...	1430	748	612	--	--	--	470	18.0	8.3	312
Dec										
20...	1315	564	609	11.4	98	8.5	483	-6.0	.0	318
Mar										
28...	0920	842	602	9.1	95	8.2	587	2.5	6.7	391
May										
30...	1430	716	--	--	--	--	508	18.0	17.0	330
Jul										
16...	1445	660	--	--	--	--	422	34.0	23.3	308
Aug										
30...	1000	697	614	7.1	95	8.4	426	22.0	18.8	272

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	570	567	569
2	---	---	---	---	---	---	---	---	---	570	564	568
3	---	---	---	---	---	---	---	---	---	570	556	564
4	---	---	---	---	---	---	---	---	---	571	562	565
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	819	---	---
8	---	---	---	---	---	---	---	---	---	876	709	779
9	---	---	---	---	---	---	---	---	---	734	620	652
10	---	---	---	---	---	---	---	---	---	620	596	606
11	---	---	---	---	---	---	---	---	---	598	577	589
12	---	---	---	---	---	---	---	---	---	584	576	581
13	---	---	---	---	---	---	564	552	558	578	574	576
14	---	---	---	---	---	---	573	559	565	574	569	571
15	---	---	---	---	---	---	567	560	563	574	561	569
16	---	---	---	---	---	---	564	557	560	571	557	565
17	---	---	---	---	---	---	559	553	557	566	560	563
18	---	---	---	---	---	---	568	559	564	569	564	567
19	---	---	---	---	---	---	570	564	568	574	569	571
20	---	---	---	---	---	---	572	568	570	575	571	573
21	---	---	---	---	---	---	570	566	568	576	561	571
22	---	---	---	---	---	---	570	567	568	571	566	568
23	---	---	---	---	---	---	571	568	569	581	571	575
24	---	---	---	---	---	---	572	567	569	583	576	578
25	---	---	---	---	---	---	569	563	565	576	566	570
26	---	---	---	---	---	---	576	568	572	573	565	568
27	---	---	---	---	---	---	576	569	572	572	564	567
28	---	---	---	---	---	---	571	565	568	564	551	560
29	---	---	---	---	---	---	571	567	569	557	551	554
30	---	---	---	---	---	---	570	567	569	551	546	549
31	---	---	---	---	---	---	---	---	---	551	539	548
Month	---	---	---	---	---	---	---	---	---	---	---	---

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	552	536	544	453	447	450	484	447	456	429	410	421
2	551	534	544	453	437	446	495	438	462	435	416	427
3	535	528	533	454	443	450	991	452	617	441	418	432
4	535	528	531	451	440	446	929	561	722	459	441	449
5	535	521	527	445	431	438	749	495	587	473	459	466
6	526	519	521	435	423	429	564	473	500	538	473	503
7	526	516	521	436	425	430	483	464	475	535	525	529
8	521	516	518	435	425	430	506	469	483	567	534	548
9	531	515	520	438	429	433	486	462	472	534	517	525
10	544	531	538	441	428	434	484	438	453	517	507	512
11	544	533	540	431	419	425	469	429	445	508	498	503
12	542	537	540	---	---	---	452	434	445	501	494	497
13	547	538	542	---	---	---	475	419	442	495	485	491
14	547	526	540	---	---	---	458	408	432	486	478	482
15	530	518	525	---	---	---	442	418	430	478	470	474
16	518	483	495	---	---	---	465	416	434	470	467	469
17	490	482	486	455	440	447	535	396	437	471	467	469
18	492	477	484	455	441	449	447	408	425	468	464	467
19	479	469	475	462	446	454	458	406	423	473	467	470
20	476	464	470	462	446	454	464	412	431	477	467	472
21	471	464	468	465	447	456	433	402	419	472	468	470
22	471	454	464	461	448	454	435	415	424	474	469	471
23	464	456	460	465	442	454	428	401	416	473	465	469
24	463	447	458	457	446	451	428	406	417	477	464	472
25	458	452	455	467	451	463	433	396	415	487	469	474
26	461	450	457	521	459	469	423	403	412	579	487	529
27	459	446	455	592	521	564	425	406	414	550	512	522
28	459	445	454	574	492	531	432	414	425	513	510	512
29	455	443	449	628	463	518	434	414	426	514	501	510
30	456	443	450	475	451	464	433	412	427	505	501	503
31	---	---	---	497	429	461	430	403	418	---	---	---
Month	552	443	499	---	---	---	991	396	458	579	410	485

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	17.5	13.7	15.8
2	---	---	---	---	---	---	---	---	---	15.6	13.1	14.5
3	---	---	---	---	---	---	---	---	---	14.3	10.2	12.1
4	---	---	---	---	---	---	---	---	---	11.5	8.3	10.1
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	13.2	---	---
8	---	---	---	---	---	---	---	---	---	16.9	10.6	13.6
9	---	---	---	---	---	---	---	---	---	18.5	13.3	15.9
10	---	---	---	---	---	---	---	---	---	19.6	14.5	17.1
11	---	---	---	---	---	---	---	---	---	20.4	15.1	17.8
12	---	---	---	---	---	---	8.9	---	---	18.8	15.7	17.6
13	---	---	---	---	---	---	10.9	6.3	8.4	18.0	15.6	16.8
14	---	---	---	---	---	---	12.5	7.0	9.7	18.3	14.5	16.4
15	---	---	---	---	---	---	12.6	9.2	10.8	19.1	12.9	16.0
16	---	---	---	---	---	---	12.5	8.6	10.4	19.5	14.6	17.2
17	---	---	---	---	---	---	13.3	8.2	10.8	19.2	14.8	17.2
18	---	---	---	---	---	---	12.1	8.2	10.4	19.4	15.0	17.3
19	---	---	---	---	---	---	9.5	5.7	7.6	19.6	14.9	17.4
20	---	---	---	---	---	---	7.9	5.1	6.7	19.5	15.1	17.4
21	---	---	---	---	---	---	10.6	5.6	8.0	17.6	13.4	15.5
22	---	---	---	---	---	---	9.8	7.3	8.7	13.4	10.7	12.0
23	---	---	---	---	---	---	10.6	6.9	8.7	14.0	8.7	11.2
24	---	---	---	---	---	---	12.8	8.3	10.4	14.6	9.7	12.3
25	---	---	---	---	---	---	14.7	9.5	12.0	14.6	11.3	13.0
26	---	---	---	---	---	---	14.5	10.7	12.6	15.9	11.4	13.8
27	---	---	---	---	---	---	15.0	9.6	12.3	18.2	13.3	15.9
28	---	---	---	---	---	---	17.1	11.1	14.1	17.3	15.2	16.3
29	---	---	---	---	---	---	17.9	13.1	15.6	17.6	12.1	14.9
30	---	---	---	---	---	---	18.2	13.3	15.8	17.5	13.1	15.5
31	---	---	---	---	---	---	---	---	---	17.9	13.4	15.7
Month	---	---	---	---	---	---	---	---	---	---	---	---

09217000 GREEN RIVER NEAR GREEN RIVER, WY—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	19.3	13.6	16.3	24.4	19.3	21.9	24.6	21.2	22.9	22.6	18.0	20.4
2	20.0	14.7	17.4	24.6	19.2	21.9	22.7	20.0	21.3	22.1	18.5	20.5
3	20.5	16.3	18.5	24.8	19.3	22.1	22.2	20.5	21.3	22.9	18.5	20.7
4	20.9	16.3	18.7	25.8	20.1	22.8	23.9	18.8	21.2	22.5	18.5	20.7
5	19.8	16.7	18.4	24.9	20.5	22.4	23.8	20.2	21.9	20.6	17.3	18.5
6	18.0	12.5	15.4	25.3	20.0	22.6	23.5	19.4	21.6	18.2	16.0	17.1
7	12.5	9.4	10.5	23.6	20.4	22.4	23.4	19.6	21.6	19.7	15.2	17.4
8	15.1	8.9	11.9	22.9	19.1	21.1	22.7	18.4	20.7	20.1	15.9	18.0
9	18.7	11.9	15.1	22.7	18.7	20.8	22.3	17.8	20.3	18.0	13.9	15.9
10	20.1	14.7	17.5	22.7	17.6	20.3	22.8	18.5	20.7	17.8	12.3	15.0
11	21.1	16.4	18.8	23.6	18.0	20.7	22.5	17.5	20.0	18.1	13.4	15.9
12	21.4	16.9	19.1	---	---	---	23.7	18.5	21.0	18.5	14.3	16.5
13	21.2	16.0	18.6	---	---	---	23.7	20.3	22.1	18.6	14.4	16.6
14	21.4	16.9	19.3	---	---	---	22.8	20.0	21.5	17.7	13.6	15.9
15	22.2	17.1	19.8	---	---	---	23.8	19.5	21.6	19.2	14.8	17.0
16	23.3	18.1	20.7	---	---	---	24.0	19.3	21.7	18.7	15.5	17.2
17	21.2	17.5	19.1	23.6	19.0	21.3	23.5	18.4	21.7	17.3	14.2	15.8
18	18.7	14.5	16.6	24.8	20.0	22.4	22.5	19.2	20.8	15.9	12.9	14.6
19	20.9	14.6	17.7	24.1	20.6	22.5	22.7	18.7	20.8	16.0	12.3	14.3
20	22.6	16.7	19.7	23.5	20.1	21.8	21.7	18.1	20.0	17.1	12.5	14.8
21	23.5	18.5	21.1	25.0	19.8	22.4	21.7	17.2	19.5	17.1	12.9	15.1
22	24.6	19.3	21.9	25.4	20.3	23.0	22.0	18.0	19.9	16.3	13.2	15.1
23	23.5	19.3	21.6	24.7	21.3	23.2	21.6	17.0	19.3	15.7	13.5	14.5
24	23.5	18.2	20.9	26.1	21.2	23.5	21.1	17.0	19.1	13.5	9.6	11.5
25	23.4	19.0	21.2	25.1	21.4	23.2	21.2	16.3	18.8	12.3	8.4	10.2
26	23.4	17.9	20.7	23.6	20.7	22.1	19.8	16.9	18.7	12.8	9.2	11.1
27	22.7	18.6	20.7	23.6	19.5	21.4	21.9	17.7	19.5	14.5	10.1	12.9
28	25.1	18.6	21.5	24.9	19.9	22.5	22.3	18.1	20.3	14.0	11.8	13.0
29	24.9	19.9	22.4	25.3	21.0	23.1	22.9	17.6	20.4	12.8	10.8	12.1
30	24.5	19.2	21.9	26.5	20.9	23.6	23.3	18.9	21.2	12.3	8.4	10.4
31	---	---	---	26.2	21.6	23.9	21.9	19.1	20.5	---	---	---
Month	25.1	8.9	18.8	---	---	---	24.6	16.3	20.7	22.9	8.4	15.6