

Water-Data Report 2007

12389500 THOMPSON RIVER NEAR THOMPSON FALLS, MT

Pend Oreille Basin
Lower Clark Fork Subbasin

LOCATION.--Lat 47°35'31", long 115°13'43" referenced to North American Datum of 1927, in NW ¼ NE ¼ SE ¼ sec.7, T.21 N., R.28 W., Sanders County, MT, Hydrologic Unit 17010213, Lolo National Forest, on right bank 1.2 mi upstream from mouth and 5.5 mi east of Thompson Falls.

DRAINAGE AREA.--642 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March to September 1911, October 1911 to September 1916 (occasional gage heights, discharges, and discharge measurements), April 1956 to current year. Records for January and February 1911, published in Water Supply Paper (WSP) 916, have been found to be unreliable and should not be used.

REVISED RECORDS.-- Water Supply Paper 1246: 1911. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Elevation of gage is 2,429.97 ft, referenced to the National Geodetic Vertical Datum of 1929 (Bureau of Public Roads bench mark). October 1911 to September 1916, nonrecording gage at site 0.2 mi upstream at different elevation.

REMARKS.--Records are good. Minor diversions occur upstream from station for irrigation, acreage unknown. Diversion from headwaters of Alder Creek in SW¼ sec.16, T.23 N., R.25 W., supplement water supply for storage in Upper Dry Fork Reservoir in the Little Bitterroot River basin. U.S. Geological Survey satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May to June 1948 reached a discharge of 6,190 ft³/s, by slope-area measurement of peak flow at site 0.2 mi downstream.

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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	155	138	210	179	148	172	758	923	526	251	147	133
2	155	140	219	205	145	154	719	988	535	243	147	130
3	154	150	212	241	134	169	674	1,050	546	236	145	127
4	153	166	212	243	148	170	639	1,000	546	230	143	126
5	152	189	216	231	151	171	612	911	550	225	143	124
6	152	239	209	230	155	175	581	824	545	221	143	124
7	152	521	207	215	156	188	563	766	524	215	141	123
8	151	620	200	223	153	227	567	760	486	211	141	124
9	151	437	201	215	157	256	625	860	457	210	141	124
10	151	344	199	218	161	258	681	986	455	206	140	124
11	151	e300	197	174	164	276	669	1,010	444	202	138	124
12	151	e275	205	129	165	599	640	1,020	426	198	137	122
13	149	277	212	154	161	1,230	606	1,070	407	195	138	122
14	149	267	225	147	159	1,080	585	1,060	388	191	137	122
15	151	248	274	144	162	879	581	973	369	188	135	121
16	154	259	278	163	181	761	581	911	364	186	135	123
17	157	257	201	161	179	679	601	911	362	182	136	123
18	152	243	162	157	194	714	623	937	364	185	134	124
19	155	231	173	160	198	830	637	927	348	188	133	130
20	163	251	187	163	214	931	611	878	333	182	135	130
21	159	280	190	159	209	944	580	823	320	175	142	129
22	153	292	189	161	200	877	560	766	310	170	140	127
23	152	286	184	167	194	810	551	693	298	167	136	128
24	149	281	184	166	185	768	557	652	290	162	133	132
25	149	273	188	163	182	870	598	644	290	161	132	131
26	149	245	202	157	181	1,060	658	602	285	159	130	129
27	147	251	213	151	176	1,050	683	578	275	159	130	129
28	147	235	208	141	178	965	725	595	269	156	129	129
29	149	211	199	142	---	869	830	571	261	153	128	129
30	152	199	179	142	---	811	900	546	256	150	129	128
31	137	---	175	147	---	778	---	527	---	149	128	---
Total	4,701	8,105	6,310	5,448	4,790	19,721	19,195	25,762	11,829	5,906	4,246	3,791
Mean	152	270	204	176	171	636	640	831	394	191	137	126
Max	163	620	278	243	214	1,230	900	1,070	550	251	147	133
Min	137	138	162	129	134	154	551	527	256	149	128	121
Ac-ft	9,320	16,080	12,520	10,810	9,500	39,120	38,070	51,100	23,460	11,710	8,420	7,520
Cfs/m	0.24	0.42	0.32	0.27	0.27	0.99	1.00	1.29	0.61	0.30	0.21	0.20
In.	0.27	0.47	0.37	0.32	0.28	1.14	1.11	1.49	0.69	0.34	0.25	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	179	196	203	203	246	350	756	1,273	984	392	231	188
Max	343	501	880	719	1,226	1,344	1,674	3,154	2,369	724	382	288
(WY)	(1960)	(1996)	(1996)	(1974)	(1996)	(1972)	(1996)	(1997)	(1974)	(1974)	(1997)	(1997)
Min	112	115	101	109	103	120	238	374	244	140	113	105
(WY)	(1995)	(1988)	(1993)	(2004)	(1994)	(1964)	(1977)	(1977)	(1977)	(1977)	(1977)	(1994)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1957 - 2007	
Annual total	160,306		119,804			
Annual mean	439		328		434	
Highest annual mean					804	
Lowest annual mean					176	
Highest daily mean	2,230	May 20	1,230	Mar 13	5,360	Jun 9, 1964
Lowest daily mean	100	Feb 18	121	Sep 15	55	Dec 18, 2005
Annual seven-day minimum	138	Jan 3	122	Sep 11	73	Dec 31, 1994
Maximum peak flow			1,280	Mar 13	6,080	Jun 9, 1964
Maximum peak stage			4.37	Mar 13	8.53	Jun 9, 1964
Instantaneous low flow			^a 111	Feb 3	^b 48	Dec 4, 1992
Annual runoff (ac-ft)	318,000		237,600		314,300	
Annual runoff (cfs)	0.684		0.511		0.676	
Annual runoff (inches)	9.29		6.94		9.18	
10 percent exceeds	1,130		772		1,050	
50 percent exceeds	216		199		232	
90 percent exceeds	152		132		130	

^a Gage height, 2.32 ft.^b Gage height, 2.02 ft, result of freezeup.