12424000 HANGMAN CREEK AT SPOKANE, WA

Spokane Basin
Hangman Subbasin

LOCATION.--Lat 47°39′10″, long 117°26′55″ referenced to North American Datum of 1927, in NW ¼ sec.24, T.25 N., R.42 E., Spokane County, WA, Hydrologic Unit 17010306, on left bank 0.3 mi downstream from bridge on Interstate 90 in Spokane, and at mile 0.8.

DRAINAGE AREA.--689 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1948 to September 1977; October 1977 to September 1978 (discharges above 20 ft^3/s only), October 1978 to current year. Prior to October 1958, published as Latah Creek at Spokane.

Suspended sediment October 1997 to September 2001.

REVISED RECORDS.--WSP 1933: Drainage area. WSP 2133: 1965(P).

GAGE.--Water-stage recorder. Datum of gage is 1,717.42 ft above NGVD of 1929 (levels by Corps of Engineers). Prior to Nov. 22, 1948, nonrecording gage at site 0.5 mi upstream at different datum.

REMARKS.--Records fair. No regulation. Some diversions for irrigation upstream from station. U.S Geological Survey satellite telemeter and National Weather Service telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--57 years (water years 1949-77, 1979-2006), 229 ft^3/s, 4.53 in/yr, 166,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft^3/s, Jan. 1, 1997 (measured), gage height, 14.31 ft (from outside high-water mark); minimum discharge, 0.72 ft^3/s, Aug. 5, 2004, due to regulation from upstream pipeline construction.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 11	0915	*6,420	*8.86
Jan 15	0230	3,780	6.95
Jan 18	0500	3,130	6.38

Minimum discharge, 4.5 ft^3/s, part of each day Oct. 16-19, Aug. 29, 30.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	9.2	15	22	2,090	889	1,510	399	160	111	60	10	7.4
2	19	14	22	1,220	979	938	466	151	89	55	11	7.4
3	20	17	e20	875	1,210	706	457	143	78	51	11	6.3
4	13	19	e20	603	1,220	627	409	133	80	49	9.5	6.3
5	11	23	e17	612	993	529	862	124	79	45	10	5.9
6	9.9	32	e16	420	690	484	950	115	97	44	9.4	6.5
7	9.7	35	e14	362	553	676	792	113	103	42	10	6.1
8	8.4	40	e16	726	498	628	623	109	108	39	8.8	5.6
9	7.6	36	e17	564	439	615	671	99	89	37	8.8	6.7
10	6.9	31	e17	2,340	367	643	598	97	95	35	8.0	5.7
11	6.3	28	e16	5,070	302	612	634	93	144	33	8.4	5.9
12	5.7	27	e15	2,520	274	517	559	89	178	34	9.3	6.5
13	5.7	29	e13	1,420	259	427	463	89	111	35	8.4	6.4
14	5.5	27	e12	2,240	232	394	437	91	184	32	7.8	5.5
15	5.1	25	e12	3,010	208	400	666	86	301	30	8.7	6.3
16	5.0	24	e11	1,350	193	488	1,020	81	296	27	7.4	6.9
17	5.0	24	e10	1,260	150	532	713	81	293	25	7.9	6.8
18	4.9	26	e9.0	2,670	111	769	548	76	226	23	8.3	7.7
19	5.1	27	e10	1,640	e120	553	465	75	185	22	7.6	7.3
20	5.6	26	e12	1,140	e130	455	404	78	155	22	7.3	10
21	5.4	23	e15	1,370	131	398	361	78	135	21	6.8	11
22	5.6	22	e25	908	130	358	320	83	122	21	5.9	11
23	5.6	21	e780	720	141	322	289	81	108	18	6.2	12
24	5.6	20	e730	609	150	305	257	80	98	16	6.1	12
25	5.7	21	e420	579	145	327	230	74	90	15	6.0	13
26	6.4	21	265	536	150	836	220	71	83	15	6.9	12
27	6.9	21	225	480	163	741	213	70	76	13	6.1	11
28	9.8	20	278	448	668	564	193	71	70	13	6.0	13
29	10	21	1,020	610	---	493	177	78	64	11	5.4	13
30	11	22	612	923	---	430	172	97	61	12	6.3	12
31	12	---	1,170	1,140	---	386	---	103	---	10	7.0	---
Total	252.6	737	5,841.0	40,455	11,495	17,663	14,568	2,969	3,909	905	246.3	253.2
Mean	8.15	24.6	188	1,305	411	570	486	95.8	130	29.2	7.95	8.44
Max	20	40	1,170	5,070	1,220	1,510	1,020	160	301	60	11	13
Min	4.9	14	9.0	362	111	305	172	70	61	10	5.4	5.5
Ac-ft	501	1,460	11,590	80,240	22,800	35,030	28,900	5,890	7,750	1,800	489	502
Cfsm	0.01	0.04	0.27	1.89	0.60	0.83	0.70	0.14	0.19	0.04	0.01	0.01
In.	0.01	0.04	0.32	2.18	0.62	0.95	0.79	0.16	0.21	0.05	0.01	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	17.8	43.4	194	472	713	720	343	192	75.8	22.5	13.1	13.2
Max	48.5	216	1,251	2,097	1,776	1,914	928	1,925	434	77.7	47.3	46.2
(WY)	(1998)	(1997)	(1956)	(1997)	(1996)	(1969)	(1969)	(1948)	(1990)	(1948)	(1997)	(1997)
Min	2.30	10.4	10.9	24.0	39.5	44.1	27.0	15.1	6.21	2.43	1.29	1.01
(WY)	(1993)	(1988)	(1993)	(1979)	(1994)	(1977)	(1977)	(1992)	(1992)	(1973)	(1992)	(1992)

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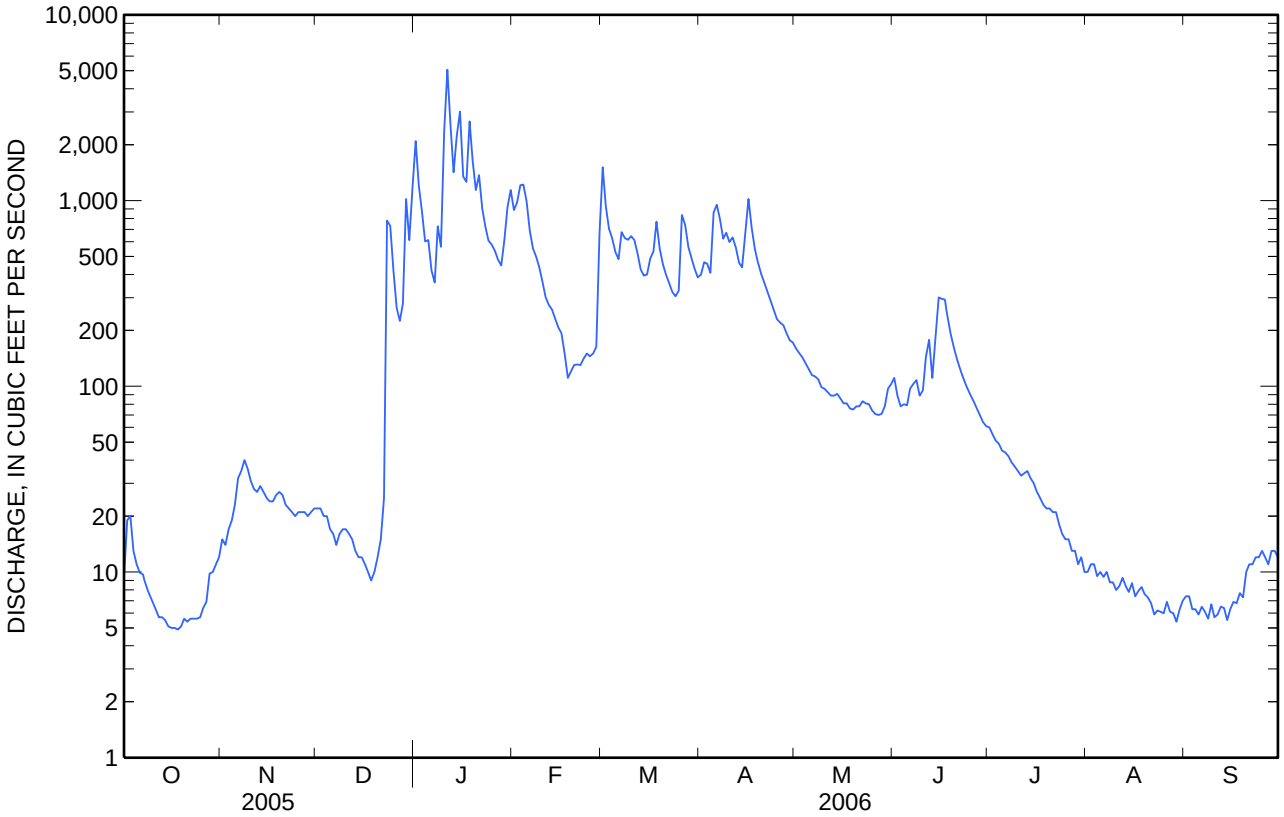
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1948 - 2006	
Annual total	30,702.0		99,294.1			
Annual mean	84.1		272		229	
Highest annual mean					629	1997
Lowest annual mean					27.3	1977
Highest daily mean	1,260	Mar 28	5,070	Jan 11	18,000	Jan 1, 1997
Lowest daily mean	1.3	Sep 2	4.9	Oct 18	0.81	Sep 5, 1992
Annual seven-day minimum	1.5	Sep 4	5.2	Oct 15	0.92	Sep 14, 1992
Annual runoff (ac-ft)	60,900		196,900		166,200	
Annual runoff (cfsm)	0.122		0.395		0.333	
Annual runoff (inches)	1.66		5.36		4.53	
10 percent exceeds	225		728		571	
50 percent exceeds	27		75		42	
90 percent exceeds	2.7		6.6		8.6