Water-Data Report 2011

10336580 Upper Truckee River At South Upper Truckee Road Near Meyers, CA

Truckee Basin
Lake Tahoe Subbasin

LOCATION.--Lat 38°47′47″, long 120°01′05″ referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.17, T.11 N., R.18 E., El Dorado County, CA, Hydrologic Unit 16050101, on left bank, 0.25 mi upstream from bridge, 0.5 mi upstream of confluence of Big Meadow and Grass Lake Creeks, 0.5 mi west of State Highway 89, and 4.0 mi south of Meyers, California.

DRAINAGE AREA.--14.09 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,490 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 01, 1991, at site 1,200 ft downstream at datum 2.54 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. See schematic diagram of Truckee River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft^3/s, Jan. 02, 1997, gage height, 11.31 ft; minimum daily, 0.76 ft^3/s, Sep. 01, 1990.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 24	2115	*721	*9.50
May 13	2130	234	7.51
Jun 29	0515	642	8.98

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 10336580, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/10336580.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated; &, affected value]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.6	11	13	18	14	9.9	40	64	91	296	59	9.5
2	1.9	11	13	18	14	11	62	77	81	313	52	9.1
3	3.2	12	16	17	13	11	60	103	76	322	47	8.8
4	6.4	12	15	15	13	11	47	119	83	311	43	8.6
5	6.3	11	15	&15	14	10	54	149	119	276	39	8.0
6	7.2	9.6	16	14	14	11	50	171	142	298	37	7.9
7	4.4	12	14	14	14	12	42	175	130	303	34	7.6
8	3.5	16	20	15	13	10	34	157	168	272	31	7.5
9	2.9	14	50	14	13	11	30	114	206	238	28	7.3
10	2.7	15	57	13	13	11	29	101	248	207	26	7.6
11	2.4	14	44	14	12	11	32	119	262	185	25	8.7
12	2.2	13	34	16	12	10	34	156	273	172	24	9.5
13	2.2	14	29	19	11	10	33	175	322	162	23	8.9
14	2.3	15	32	22	11	14	30	184	362	152	22	8.0
15	2.2	23	29	20	11	19	31	156	387	147	21	7.4
16	2.4	21	22	22	13	41	39	121	374	136	19	7.0
17	2.5	17	22	28	17	27	66	104	341	128	18	6.7
18	2.9	14	32	26	17	21	94	95	336	124	18	6.2
19	3.0	12	42	22	15	19	92	90	362	124	17	6.0
20	2.9	13	32	20	13	18	82	97	350	116	16	5.8
21	3.0	15	25	19	12	17	66	129	386	107	16	5.5
22	2.8	16	23	19	11	15	58	148	429	100	15	5.3
23	5.1	15	20	18	11	15	52	152	434	99	14	5.1
24	236	16	20	17	11	15	49	154	380	97	14	5.0
25	96	15	21	17	12	16	47	150	333	88	14	5.0
26	44	14	19	16	12	15	47	122	309	79	13	4.9
27	e36	17	18	16	10	15	51	117	327	72	13	4.8
28	e27	17	19	16	9.8	15	65	114	369	69	13	4.6
29	e18	14	22	16	---	15	66	97	489	68	11	4.6
30	11	13	18	16	---	18	61	88	297	68	10	4.5
31	11	---	17	14	---	25	---	91	---	65	9.8	---
Total	555.0	431.6	769	546	355.8	478.9	1,543	3,889	8,466	5,194	741.8	205.4
Mean	17.9	14.4	24.8	17.6	12.7	15.4	51.4	125	282	168	23.9	6.85
Max	236	23	57	28	17	41	94	184	489	322	59	9.5
Min	1.6	9.6	13	13	9.8	9.9	29	64	76	65	9.8	4.5
Ac-ft	1,100	856	1,530	1,080	706	950	3,060	7,710	16,790	10,300	1,470	407

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3.78	5.92	10.7	14.4	11.3	19.7	50.0	141	127	43.6	8.16	3.15
Max	17.9	20.7	58.8	120	39.2	41.3	102	264	329	220	45.9	10.4
(WY)	(2011)	(1997)	(2006)	(1997)	(1996)	(1995)	(1997)	(2006)	(1995)	(1995)	(1995)	(1998)
Min	1.62	2.13	1.69	1.57	2.95	6.64	15.1	51.2	12.1	3.40	1.64	1.29
(WY)	(2002)	(1991)	(1991)	(1991)	(2001)	(1991)	(1991)	(1992)	(1992)	(1994)	(1994)	(2008)

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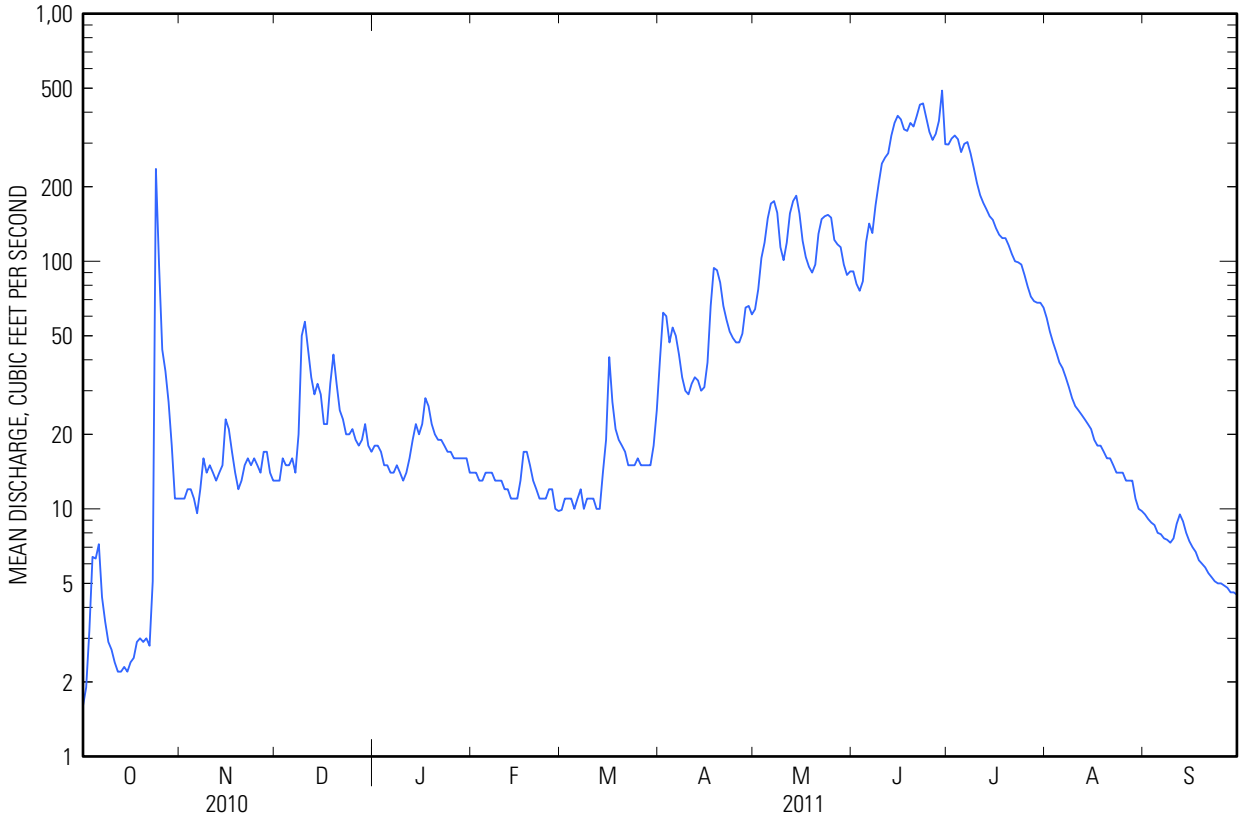
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1990 - 2011	
Annual total	13,756.7		23,175.5			
Annual mean	37.7		63.5		37.1	
Highest annual mean					72.3	1995
Lowest annual mean					14.1	1994
Highest daily mean	398	Jun 7	489	Jun 29	1,130	Jan 2, 1997
Lowest daily mean	1.5	Sep 25	1.6	Oct 1	0.76	Sep 1, 1990
Annual seven-day minimum	1.6	Sep 25	2.3	Oct 11	0.97	Aug 29, 1990
Maximum peak flow			721	Oct 24	2,010	Jan 2, 1997
Maximum peak stage			9.50	Oct 24	11.31	Jan 2, 1997
Annual runoff (ac-ft)	27,290		45,970		26,890	
10 percent exceeds	120		175		117	
50 percent exceeds	13		18		8.4	
90 percent exceeds	2.9		6.9		2.0	



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to Sept. 2011 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Sep. 1997 to Sep. 2003, discontinued.

INSTRUMENTATION.--Water temperature recorder Sep. 1997 to Sep. 2003, two times per hour.

REMARKS.--In Nov. 1989, station was incorporated into the expanded Lake Tahoe Interagency Monitoring Program to monitor tributary contributions of nutrients and sediment to Lake Tahoe. Nutrient samples were analyzed by the University of California, Davis, Tahoe Research Group. Water temperature data for Sep. 1997 are unpublished but are available from U.S. Geological Survey, Carson City, NV. Quality assurance samples associated with the entire Lake Tahoe Interagency Monitoring Program are listed under station numbers 103366769999 and 103367309999. The original hydrazine method used to determine nitrate plus nitrite concentrations (parameters 00631 and 00630) was found to have interferences caused by calcium and magnesium in stream water samples. The nitrate plus nitrite concentrations under parameters 99911 and 99910 are based on a laboratory method that uses pyrophosphate to remove interferences caused by calcium and magnesium. This method has replaced the original hydrazine method as of December 2008. Parameter code 00623, filtered ammonia plus organic nitrogen (dissolved Kjeldahl nitrogen) was discontinued in April 2011.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 17.0°C, Jul. 2, 3, 2001, Jul. 14, 2002, Jul. 21, 22, 24, 2003; minimum, freezing point on many days.

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 3

[%, percent; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than; E, estimated]

Date	Sample start time	Medium name	Sample type	Discharge, instantaneous, ft³/s (00061)	Temperature, air, °C (00020)	Temperature, water, °C (00010)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	pH, water, unfiltered, field, standard units (00400)
10-06-2010	**1455**	Surface water	Regular	6.9	8.0	6.0	41	--
10-08-2010	**1350**	Surface water	Regular	4.0	13.5	6.5	44	--
10-24-2010	**1315**	Surface water	Regular	169	7.5	6.0	18	--
11-03-2010	**1100**	Surface water	Regular	11	7.5	4.0	34	--
11-08-2010	**1300**	Surface water	Regular	15	1.0	1.5	30	--
12-06-2010	**1545**	Surface water	Regular	16	.0	1.4	31	7.4
12-09-2010	**1435**	Surface water	Regular	56	2.0	1.5	20	--
01-05-2011	**0945**	Surface water	Regular	15	-10.0	.0	31	--
02-15-2011	**1050**	Surface water	Regular	11	6.0	1.5	36	--
03-07-2011	**1335**	Surface water	Regular	12	-.5	1.4	32	7.1
03-16-2011	**1715**	Surface water	Regular	47	-1.0	.5	24	--
04-05-2011	**1310**	Surface water	Regular	55	7.0	2.5	22	--
04-18-2011	**1250**	Surface water	Regular	90	6.5	2.5	19	--
05-05-2011	**0930**	Surface water	Regular	117	11.5	2.0	19	--
05-26-2011	**0940**	Surface water	Regular	120	4.0	2.0	22	--
06-01-2011	**0925**	Surface water	Regular	92	5.0	2.5	25	7.3
06-05-2011	**1345**	Surface water	Regular	106	5.5	9.5	22	--
06-06-2011	**0925**	Surface water	Regular	145	2.5	2.0	19	--
06-13-2011	**1135**	Surface water	Regular	248	16.5	4.5	19	--
06-15-2011	**1210**	Surface water	Regular	299	20.5	5.0	19	--
06-17-2011	**1835**	Surface water	Regular	384	12.0	4.0	17	--
06-17-2011	***1840***	*QC sample - Surface water*	*Replicate*	--	--	--	--	--
06-21-2011	**1630**	Surface water	Regular	414	22.0	7.0	16	--
06-23-2011	**1225**	Surface water	Regular	333	21.0	6.0	18	--
06-27-2011	**0850**	Surface water	Regular	274	15.0	4.0	19	--
06-29-2011	**1250**	Surface water	Regular	458	10.0	6.0	17	--
07-08-2011	**1320**	Surface water	Regular	224	21.5	9.0	19	--
07-19-2011	**0950**	Surface water	Regular	112	20.0	7.0	23	--
08-10-2011	**1315**	Surface water	Regular	26	22.0	10.0	29	--
09-06-2011	**1050**	Surface water	Regular	8.3	16.5	8.0	38	7.7

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 3

[%, percent; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than; E, estimated]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (99911)	Orthophos-phate, water, filtered, mg/L as P (00671)	Phos-phorus, water, filtered, mg/L as P (00666)
10-06-2010	**1455**	--	--	--	.09	.16	.005	.003	.016	.023
10-08-2010	**1350**	--	--	--	.05	.12	.004	.003	.016	.022
10-24-2010	**1315**	--	--	--	.27	.65	.005	.041	.012	.019
11-03-2010	**1100**	--	--	--	--	.11	.005	< .002	.008	.013
11-08-2010	**1300**	--	--	--	.07	.09	< .003	.003	.007	.021
12-06-2010	**1545**	609	11.2	100	.12	.13	< .003	.012	.007	.007
12-09-2010	**1435**	--	--	--	.09	.13	.003	.010	.005	.011
01-05-2011	**0945**	--	--	--	--	.08	.004	.023	.011	.019
02-15-2011	**1050**	--	--	--	--	.10	.003	.012	.009	.016
03-07-2011	**1335**	601	11.0	99	--	.06	.004	.020	.009	.015
03-16-2011	**1715**	--	--	--	.10	.15	.004	.021	.006	.012
04-05-2011	**1310**	--	--	--	--	.09	.004	.010	.005	.009
04-18-2011	**1250**	--	--	--	--	.12	< .003	.011	.004	.007
05-05-2011	**0930**	--	--	--	--	.12	.003	.016	.002	.008
05-26-2011	**0940**	--	--	--	--	.10	.004	.007	.008	.015
06-01-2011	**0925**	603	10.9	101	--	.04	.006	.006	.007	.011
06-05-2011	**1345**	--	--	--	--	.04	< .003	.004	.006	.020
06-06-2011	**0925**	--	--	--	--	.04	.003	.006	.006	.020
06-13-2011	**1135**	--	--	--	--	.09	< .003	.008	.006	.013
06-15-2011	**1210**	--	--	--	--	.08	< .003	.008	.007	.020
06-17-2011	**1835**	--	--	--	--	.12	< .003	.006	.008	.009
06-17-2011	***1840***	--	--	--	--	*.11*	*.004*	*.005*	*.008*	*.012*
06-21-2011	**1630**	--	--	--	--	.11	< .003	.005	.008	.007
06-23-2011	**1225**	--	--	--	--	.15	< .003	.004	.009	.010
06-27-2011	**0850**	--	--	--	--	.08	.004	.012	.011	.013
06-29-2011	**1250**	--	--	--	--	.11	.005	.016	.006	.014
07-08-2011	**1320**	--	--	--	--	.12	.003	< .002	.007	.013
07-19-2011	**0950**	--	--	--	--	.09	.003	.004	.008	.019
08-10-2011	**1315**	--	--	--	--	< .04	.003	.010	.014	.022
09-06-2011	**1050**	612	9.5	100	--	.04	< .003	.026	.019	.030

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 3

[%, percent; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than; E, estimated]

Date	Sample start time	Phosphorus, water, unfiltered, mg/L as P (00665)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	Suspended sediment concen-tration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
10-06-2010	**1455**	.032	--	3	.06
10-08-2010	**1350**	.026	--	1	.01
10-24-2010	**1315**	.069	55	48	22
11-03-2010	**1100**	.019	--	1	.03
11-08-2010	**1300**	.021	--	1	.04
12-06-2010	**1545**	.007	--	1	.04
12-09-2010	**1435**	.016	--	5	.76
01-05-2011	**0945**	.035	--	1	.04
02-15-2011	**1050**	.021	--	2	.06
03-07-2011	**1335**	.017	--	1	.03
03-16-2011	**1715**	.017	--	5	.63
04-05-2011	**1310**	.012	--	3	.45
04-18-2011	**1250**	.016	--	9	2.2
05-05-2011	**0930**	.017	--	5	1.6
05-26-2011	**0940**	.020	--	3	.97
06-01-2011	**0925**	.017	--	E 1	E .25
06-05-2011	**1345**	.026	--	5	1.4
06-06-2011	**0925**	.025	--	4	1.6
06-13-2011	**1135**	.025	--	14	9.4
06-15-2011	**1210**	.044	47	17	14
06-17-2011	**1835**	.036	41	22	23
06-17-2011	***1840***	*.038*	--	--	--
06-21-2011	**1630**	.030	37	26	29
06-23-2011	**1225**	.032	55	16	14
06-27-2011	**0850**	.021	--	9	6.7
06-29-2011	**1250**	.048	37	31	38
07-08-2011	**1320**	.022	--	8	4.8
07-19-2011	**0950**	.023	--	3	.91
08-10-2011	**1315**	.022	--	1	.07
09-06-2011	**1050**	.032	--	1	.02