

Water-Data Report 2011

10336700 Incline Creek near Crystal Bay, NV

Pyramid and Winnemucca Lakes Basin

LOCATION.--Lat 39°14'25", long 119°56'38" referenced to North American Datum of 1927, in SW ¼ NE ¼ sec.22, T.16 N., R.18 E., Washoe County, NV, Hydrologic Unit 16050101, on right bank, 500 ft upstream from culvert on Lakeshore Boulevard, 1,000 ft upstream from mouth, just below mouth of major tributary, and 3 mi east of Crystal Bay.

DRAINAGE AREA.--6.74 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1966 to September 1975, November 1987 to current year (low flow, partial record site only, October 1966 to September 1969, October 1973 to February 1975).

GAGE.--Water-stage recorder. Datum of gage is 6,246.90 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regular diversion above station. Possibly some light pumping or diversion of water for construction or irrigation. See schematic diagram of Pyramid and Winnemucca Lakes Basin available from the Nevada Water Science Center and Truckee River Basin available from the California Water Science Center.

10336700 Incline Creek near Crystal Bay, NV—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.6	3.8	4.5	e5.4	5.3	e4.9	17	17	21	39	15	8.0
2	2.8	3.7	4.6	5.0	e5.2	5.9	22	19	20	39	14	7.8
3	6.5	3.7	e4.6	4.6	e5.2	5.5	20	22	19	38	14	7.7
4	6.6	3.6	4.8	4.7	5.3	5.4	19	23	19	37	14	7.4
5	8.3	3.6	e4.8	4.6	5.3	5.5	20	26	29	36	13	7.2
6	6.1	3.5	e4.8	4.6	e5.2	5.8	20	29	38	36	13	7.1
7	4.3	4.2	4.9	4.6	e5.3	5.7	17	32	31	34	13	7.0
8	4.1	4.2	5.0	4.6	e5.3	5.5	14	31	32	33	13	7.0
9	3.9	4.0	e5.5	4.5	e5.3	5.8	12	27	33	31	12	6.8
10	3.5	4.1	e5.8	e4.4	e5.3	6.4	12	25	36	30	12	6.8
11	3.5	3.9	e5.8	4.4	5.2	e6.5	14	27	37	29	12	7.1
12	3.3	4.1	e5.8	4.5	5.3	e6.5	15	29	38	27	11	7.3
13	3.4	4.0	5.5	4.6	5.3	e6.6	13	32	41	27	11	7.5
14	3.3	4.4	e5.8	4.6	5.3	e7.1	12	31	44	26	11	7.4
15	3.2	4.6	5.6	4.7	5.3	e7.2	13	29	46	25	10	7.1
16	3.2	4.3	5.2	6.0	e5.5	e7.2	16	25	45	24	10	6.9
17	3.6	4.1	5.2	7.4	e5.7	e6.8	21	24	43	23	10	6.7
18	3.7	3.9	6.1	6.8	e5.9	e6.7	23	23	43	23	10	6.6
19	3.4	3.9	7.6	6.2	e6.1	e6.7	21	21	45	22	10	6.4
20	3.3	4.0	6.4	5.8	e6.1	e6.5	20	22	45	21	10	6.3
21	3.2	e4.4	5.5	5.9	e5.6	e6.3	19	26	46	20	10	6.2
22	e3.4	e4.9	5.3	6.1	6.1	e6.0	18	27	48	20	9.7	6.1
23	3.5	e5.0	5.1	5.9	5.8	e6.1	16	27	49	19	9.4	5.9
24	11	e4.9	5.1	5.8	5.1	e6.1	15	28	48	19	9.1	5.9
25	7.1	e4.9	5.0	5.9	e5.0	e6.6	14	27	46	18	9.0	6.0
26	5.0	e4.7	5.0	5.9	e5.0	6.4	14	25	44	17	8.7	5.9
27	4.6	4.6	4.8	5.9	e4.9	6.1	16	24	43	17	8.7	5.8
28	4.3	4.4	5.0	6.1	e4.9	6.3	18	22	43	16	8.4	5.8
29	4.1	e4.3	5.0	6.0	---	7.2	17	21	44	16	8.2	5.7
30	4.2	e4.5	e5.4	5.8	---	10	16	21	41	16	8.1	5.6
31	4.1	---	e5.4	5.5	---	14	---	22	---	15	8.0	---
Total	137.1	126.2	164.9	166.8	150.8	205.3	504	784	1,157	793	335.3	201.0
Mean	4.42	4.21	5.32	5.38	5.39	6.62	16.8	25.3	38.6	25.6	10.8	6.70
Max	11	5.0	7.6	7.4	6.1	14	23	32	49	39	15	8.0
Min	2.6	3.5	4.5	4.4	4.9	4.9	12	17	19	15	8.0	5.6
Ac-ft	272	250	327	331	299	407	1,000	1,560	2,290	1,570	665	399

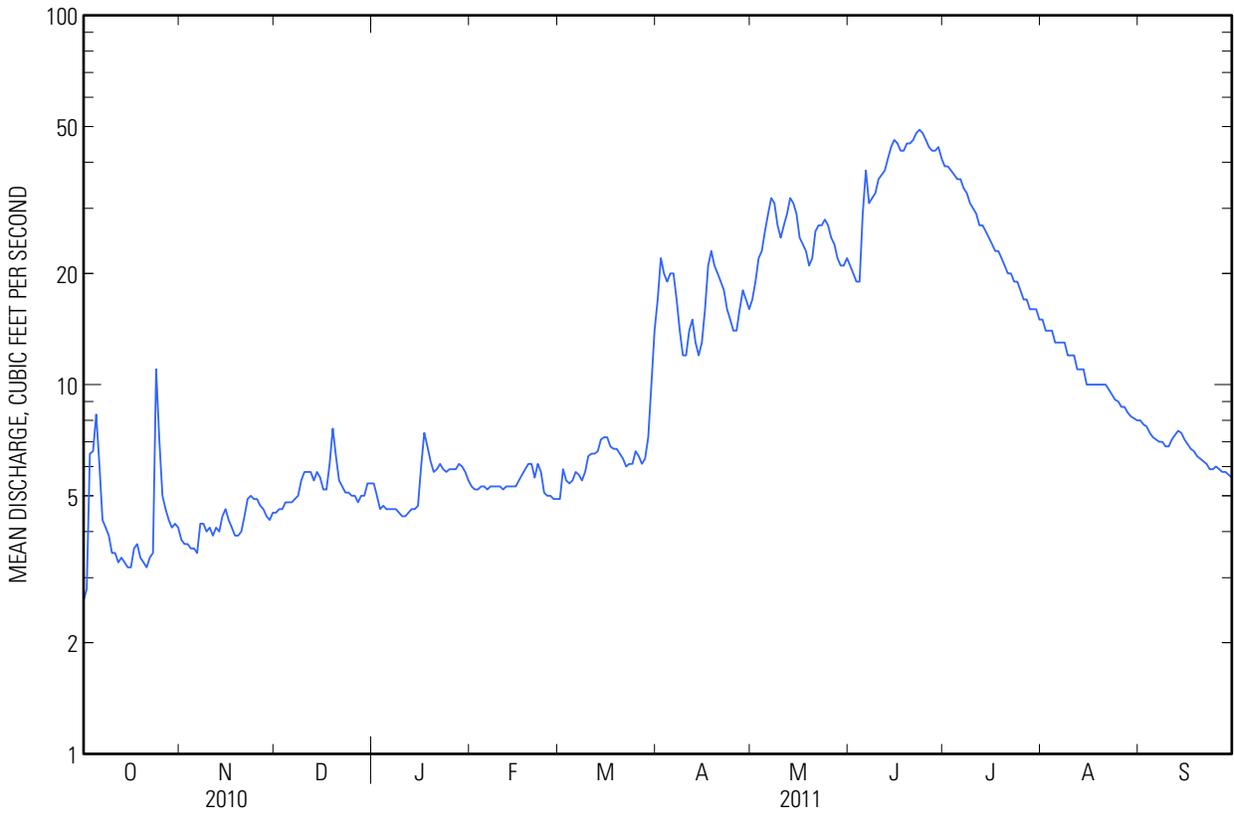
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3.71	3.92	4.29	5.01	5.02	7.50	10.8	16.7	15.0	7.92	4.42	3.45
Max	6.79	6.76	9.36	19.6	12.2	16.9	23.1	44.9	48.4	35.0	14.4	8.66
(WY)	(1996)	(1999)	(2006)	(1997)	(1996)	(1997)	(1997)	(2006)	(1995)	(1995)	(1995)	(1995)
Min	1.35	1.82	2.07	2.06	2.64	3.72	3.55	2.71	2.04	1.19	0.99	0.44
(WY)	(1989)	(1993)	(1993)	(1993)	(1991)	(1992)	(1988)	(1988)	(1988)	(1988)	(1988)	(1999)

10336700 Incline Creek near Crystal Bay, NV—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1970 - 2011	
Annual total	2,151.5		4,725.4			
Annual mean	5.89		12.9		7.44	
Highest annual mean					15.4	1995
Lowest annual mean					2.51	1992
Highest daily mean	23	Jun 6	49	Jun 23	112	Jan 2, 1997
Lowest daily mean	2.5	Sep 27	2.6	Oct 1	0.18	Sep 1, 1999
Annual seven-day minimum	2.5	Sep 25	3.3	Oct 10	0.21	Aug 30, 1999
Maximum peak flow			61	Jun 6	179	Jan 2, 1997
Maximum peak stage			2.96	Jun 6	3.87	Jan 2, 1997
Annual runoff (ac-ft)	4,270		9,370		5,390	
10 percent exceeds	11		31		16	
50 percent exceeds	4.4		6.7		4.9	
90 percent exceeds	2.9		4.2		2.1	



10336700 Incline Creek near Crystal Bay, NV—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1978-79, 1988 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 1998 to November 2000.

INSTRUMENTATION.--Water temperature recorder April 1998 to November 2000, two times per hour.

REMARKS.--In November 1987, 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. 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, 16.0°C, Sept. 7, 10, 11, 15, 1999; minimum, freezing point many days during winter months.

10336700 Incline Creek near Crystal Bay, NV—Continued

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, ft ³ /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)
10-04-2010	0950	Surface water	Regular	9.3	9.0	8.5	82	--
10-05-2010	1520	Surface water	Regular	6.5	8.5	7.0	88	--
10-06-2010	1145	Surface water	Regular	5.6	8.5	6.0	99	--
10-24-2010	1725	Surface water	Regular	20	8.5	7.0	82	--
11-04-2010	1100	Surface water	Regular	3.8	10.0	6.0	93	--
12-07-2010	1425	Surface water	Regular	5.0	4.0	2.7	112	7.7
01-06-2011	1135	Surface water	Regular	4.6	1.0	1.0	111	--
02-22-2011	1150	Surface water	Regular	9.0	3.0	.0	122	--
03-08-2011	1430	Surface water	Regular	5.6	7.5	2.8	135	7.8
03-16-2011	1300	Surface water	Regular	E 7.2	.5	1.0	169	--
04-08-2011	1450	Surface water	Regular	14	.5	2.5	144	--
04-18-2011	1815	Surface water	Regular	21	6.0	4.0	123	--
05-09-2011	1535	Surface water	Regular	26	2.5	4.0	92	--
05-13-2011	1720	Surface water	Regular	38	14.5	7.0	71	--
05-23-2011	1705	Surface water	Regular	30	10.0	6.5	70	--
06-03-2011	1255	Surface water	Regular	19	11.0	5.0	77	7.8
06-05-2011	1030	Surface water	Regular	28	6.5	4.5	74	--
06-06-2011	0905	Surface water	Regular	36	2.0	2.5	78	--
06-10-2011	1525	Surface water	Regular	38	18.0	8.5	61	--
06-14-2011	1730	Surface water	Regular	50	20.0	8.0	46	--
06-15-2011	1825	Surface water	Regular	53	16.5	7.0	44	--
06-15-2011	1830	<i>QC sample - Surface water</i>	<i>Replicate</i>	--	--	--	--	--
06-17-2011	0740	Surface water	Regular	41	9.5	4.0	55	--
06-21-2011	1740	Surface water	Regular	49	23.5	8.5	43	--
06-23-2011	2000	Surface water	Regular	52	12.0	6.5	40	--
06-24-2011	0845	Surface water	Regular	47	11.5	5.0	47	--
06-28-2011	1655	Surface water	Regular	43	17.5	8.5	44	--
07-06-2011	1345	Surface water	Regular	34	23.0	10.0	49	--
07-06-2011	1635	Surface water	Regular	47	--	--	50	--
07-18-2011	0855	Surface water	Regular	24	15.0	6.0	65	--
07-27-2011	1430	Surface water	Regular	16	22.0	10.5	68	--
08-09-2011	1855	Surface water	Regular	11	18.0	10.0	75	--
09-09-2011	1540	Surface water	Regular	6.2	23.5	10.5	81	8.0

10336700 Incline Creek near Crystal Bay, NV—Continued

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)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L as P (00666)
10-04-2010	0950	--	--	--	.23	.69	.007	.037	.035	.044
10-05-2010	1520	--	--	--	.22	.26	.005	.030	.031	.041
10-06-2010	1145	--	--	--	.25	.45	.007	.031	.023	.030
10-24-2010	1725	--	--	--	.31	1.7	.011	.052	.057	.070
11-04-2010	1100	--	--	--	--	.23	.004	.003	.010	.027
12-07-2010	1425	612	10.7	98	.06	.10	.005	.024	.011	.028
01-06-2011	1135	--	--	--	--	.10	.009	.051	.008	.021
02-22-2011	1150	--	--	--	--	.19	.003	.048	.008	.021
03-08-2011	1430	613	10.9	100	.07	.12	.008	.065	.010	.020
03-16-2011	1300	--	--	--	.13	.22	.012	.061	.017	.028
04-08-2011	1450	--	--	--	--	.15	.009	.077	.015	.028
04-18-2011	1815	--	--	--	--	.18	.006	.079	.014	.023
05-09-2011	1535	--	--	--	--	.21	.005	.057	.011	.019
05-13-2011	1720	--	--	--	--	.46	.011	.046	.012	.029
05-23-2011	1705	--	--	--	--	.14	.004	.036	.012	.021
06-03-2011	1255	608	10.5	103	--	.08	< .003	.024	.011	.024
06-05-2011	1030	--	--	--	--	.37	< .003	.048	.015	.025
06-06-2011	0905	--	--	--	--	.38	.007	.070	.017	.034
06-10-2011	1525	--	--	--	--	.10	.007	.031	.016	.022
06-14-2011	1730	--	--	--	--	.17	.005	.031	.015	.029
06-15-2011	1825	--	--	--	--	.19	.005	.035	.016	.034
06-15-2011	1830	--	--	--	--	.26	.005	.035	.017	.046
06-17-2011	0740	--	--	--	--	.10	< .003	.033	.015	.037
06-21-2011	1740	--	--	--	--	.68	< .003	.023	.016	.016
06-23-2011	2000	--	--	--	--	.54	.004	.025	.013	.020
06-24-2011	0845	--	--	--	--	.15	.149	.023	.015	.019
06-28-2011	1655	--	--	--	--	.19	.004	.014	.015	.021
07-06-2011	1345	--	--	--	--	.20	.003	.010	.010	.034
07-06-2011	1635	--	--	--	--	1.8	.004	.074	.018	.021
07-18-2011	0855	--	--	--	--	.09	.006	.014	.010	.021
07-27-2011	1430	--	--	--	--	.10	.004	.011	.011	.024
08-09-2011	1855	--	--	--	--	.11	.005	.015	.012	.019
09-09-2011	1540	612	8.8	98	--	.13	.004	.018	.013	.025

10336700 Incline Creek near Crystal Bay, NV—Continued

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 concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
10-04-2010	0950	.185	89	67	1.7
10-05-2010	1520	.110	82	46	.81
10-06-2010	1145	.073	55	66	1.0
10-24-2010	1725	.133	67	269	15
11-04-2010	1100	.031	--	3	.03
12-07-2010	1425	.028	--	2	.03
01-06-2011	1135	.022	--	2	.02
02-22-2011	1150	.054	--	12	.29
03-08-2011	1430	.032	--	E 3	E .05
03-16-2011	1300	.065	31	32	E .62
04-08-2011	1450	.040	--	4	.15
04-18-2011	1815	.052	--	14	.79
05-09-2011	1535	.042	--	15	1.1
05-13-2011	1720	.047	43	84	8.6
05-23-2011	1705	.051	--	23	1.9
06-03-2011	1255	.033	--	3	.15
06-05-2011	1030	.091	53	40	3.0
06-06-2011	0905	.102	24	81	7.9
06-10-2011	1525	.106	32	82	8.4
06-14-2011	1730	.131	37	141	19
06-15-2011	1825	.172	31	185	26
06-15-2011	1830	.211	--	--	--
06-17-2011	0740	.063	--	46	5.1
06-21-2011	1740	.093	39	86	11
06-23-2011	2000	.108	35	75	11
06-24-2011	0845	.048	--	27	3.4
06-28-2011	1655	.040	--	17	2.0
07-06-2011	1345	.531	49	10	.92
07-06-2011	1635	.037	85	557	71
07-18-2011	0855	.034	--	6	.39
07-27-2011	1430	.035	--	16	.69
08-09-2011	1855	.029	--	4	.12
09-09-2011	1540	.038	--	4	.07