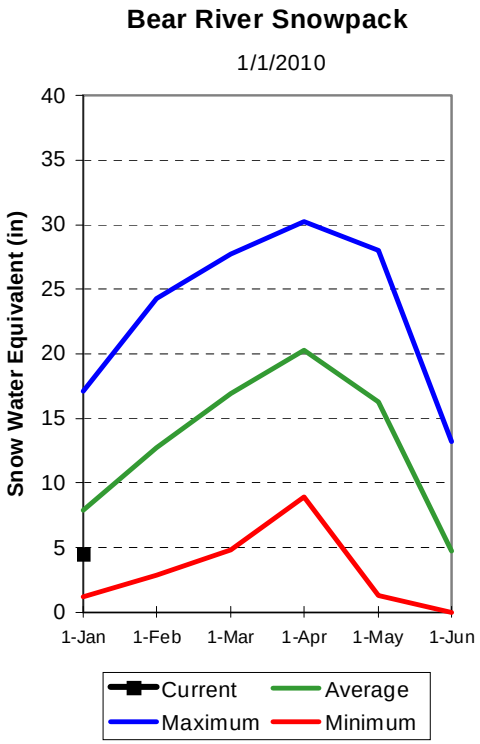
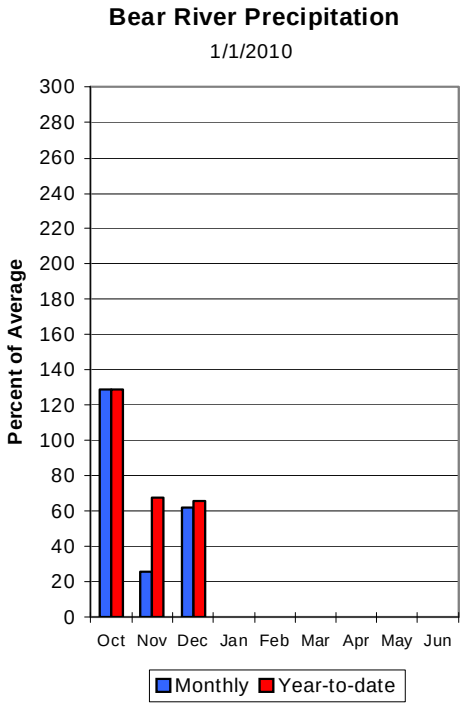
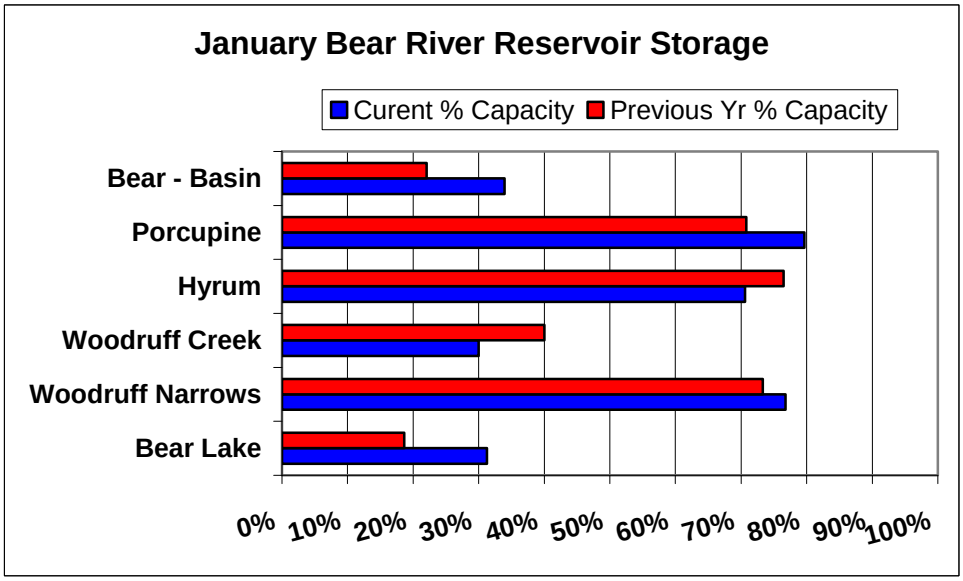
Bear River Basin
January 1, 2010

Snowpacks on the Bear River Basin are average at 54% of normal, about 61% of last year. Individual sites range from 37% of normal at Sedgwick Peak Snotel to 87% at Lily Lake Snotel. December precipitation was much below average at 62%, which brings the seasonal accumulation (Oct-Dec) to 66% of average. Soil moisture levels in runoff producing areas are at 47% of saturation in the upper 2 feet of soil compared to 53% last year. Forecast streamflows (April-July) range from much below to below average (57%-82%) volumes for this spring and summer. Bear Lake reservoir storage is low at 31% of capacity, which is up 12% from this time last year. The Surface Water Supply Index is at 29% for the Bear River Basin, in other words, 71% of years have had more total water available. This has been the worst snow accumulation in this basin for a decade. Water supply conditions are much below normal due to low reservoir storage in Bear Lake.







BEAR RIVER BASIN
Streamflow Forecasts - January 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Bear River nr UT-WY State Line	APR-JUL	54	77	93	82	109	132	113
Bear River ab Reservoir nr Woodruff	APR-JUL	38	75	100	74	125	162	136
Big Creek nr Randolph	APR-JUL	0.52	2.00	3.00	61	4.00	5.50	4.90
Smiths Fork nr Border	APR-JUL	40	62	77	75	92	114	103
Bear River at Stewart Dam	APR-JUL	5.0	65	140	60	215	325	234
Little Bear at Paradise, UT	APR-JUL	12.3	22	30	65	39	56	46
Logan R nr Logan, UT	APR-JUL	39	61	78	62	97	130	126
Blacksmith Fk Abv Up&L Dam Nr Hyrum	APR-JUL	13.3	22	30	63	39	53	48
Dunn Ck nr Park Valley	APR-JUL	0.20	1.30	2.00	65	2.70	3.80	3.1

BEAR RIVER BASIN
Reservoir Storage (1000 AF) - End of December

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BEAR LAKE	1302.0	406.7	242.9	---
HYRUM	15.3	10.8	11.7	10.2
PORCUPINE	11.3	9.0	8.0	3.9
WOODRUFF NARROWS	57.3	44.0	42.0	23.6
WOODRUFF CREEK	4.0	1.2	1.6	---

BEAR RIVER BASIN
Watershed Snowpack Analysis - January 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
BEAR RIVER, UPPER	8	70	62
BEAR RIVER, LOWER	9	56	48
LOGAN RIVER	4	60	49
RAFT RIVER	1	97	91
BEAR RIVER BASIN	17	61	54

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

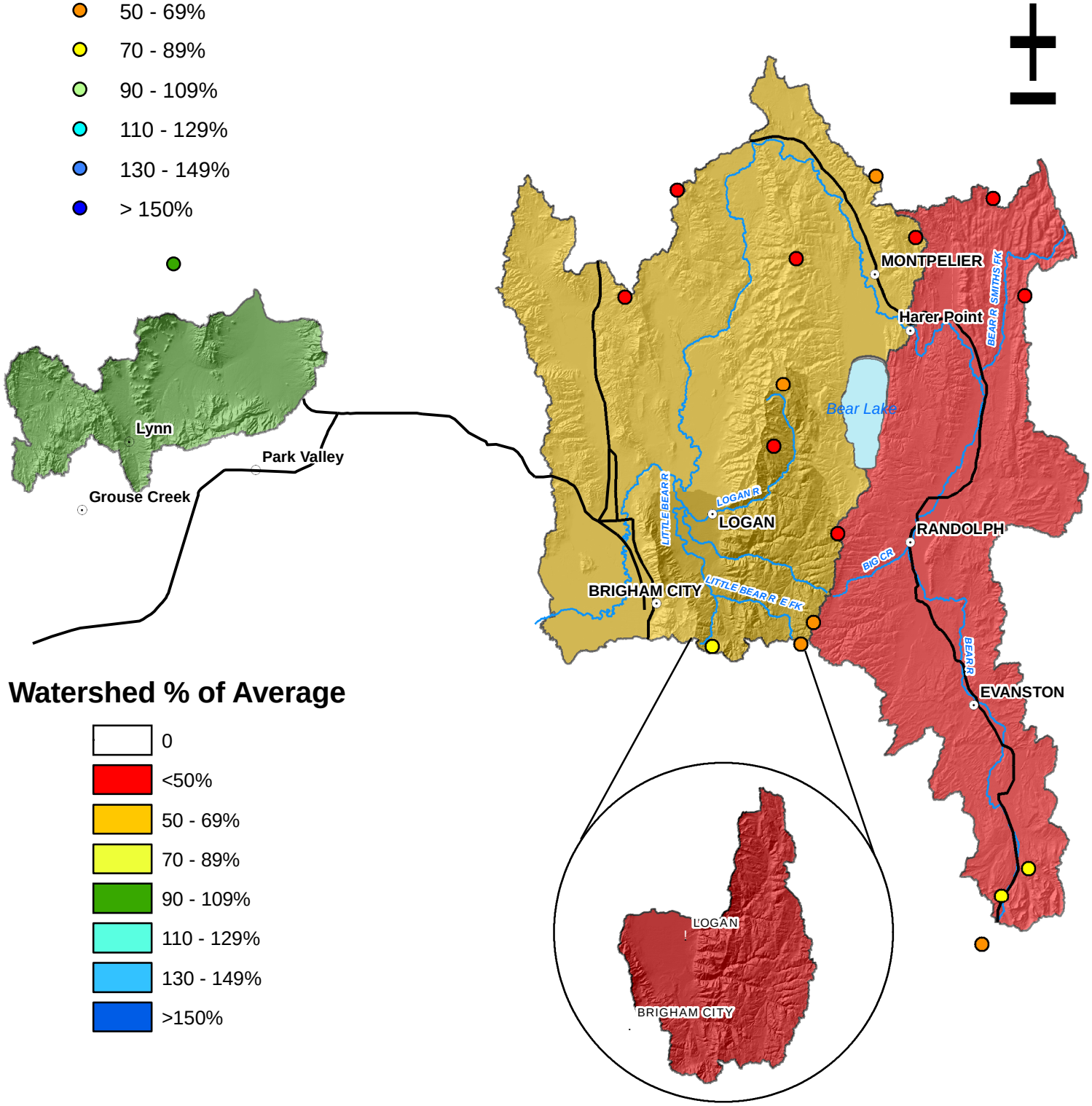
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Bear River & Raft River Basins

Snotel % of Average

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%

Basinwide Average 54 %



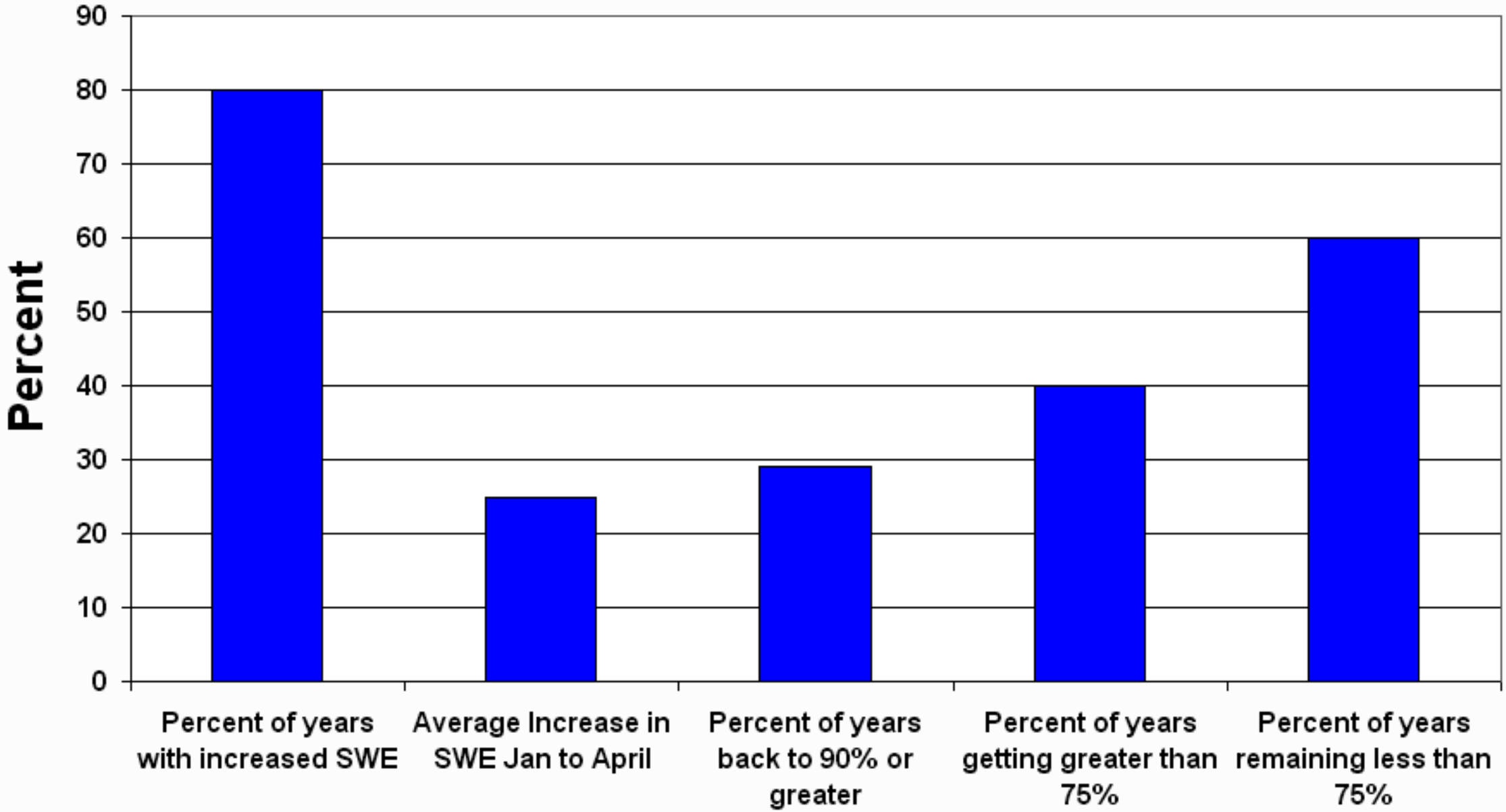
Watershed % of Average

- 0
- <50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- >150%

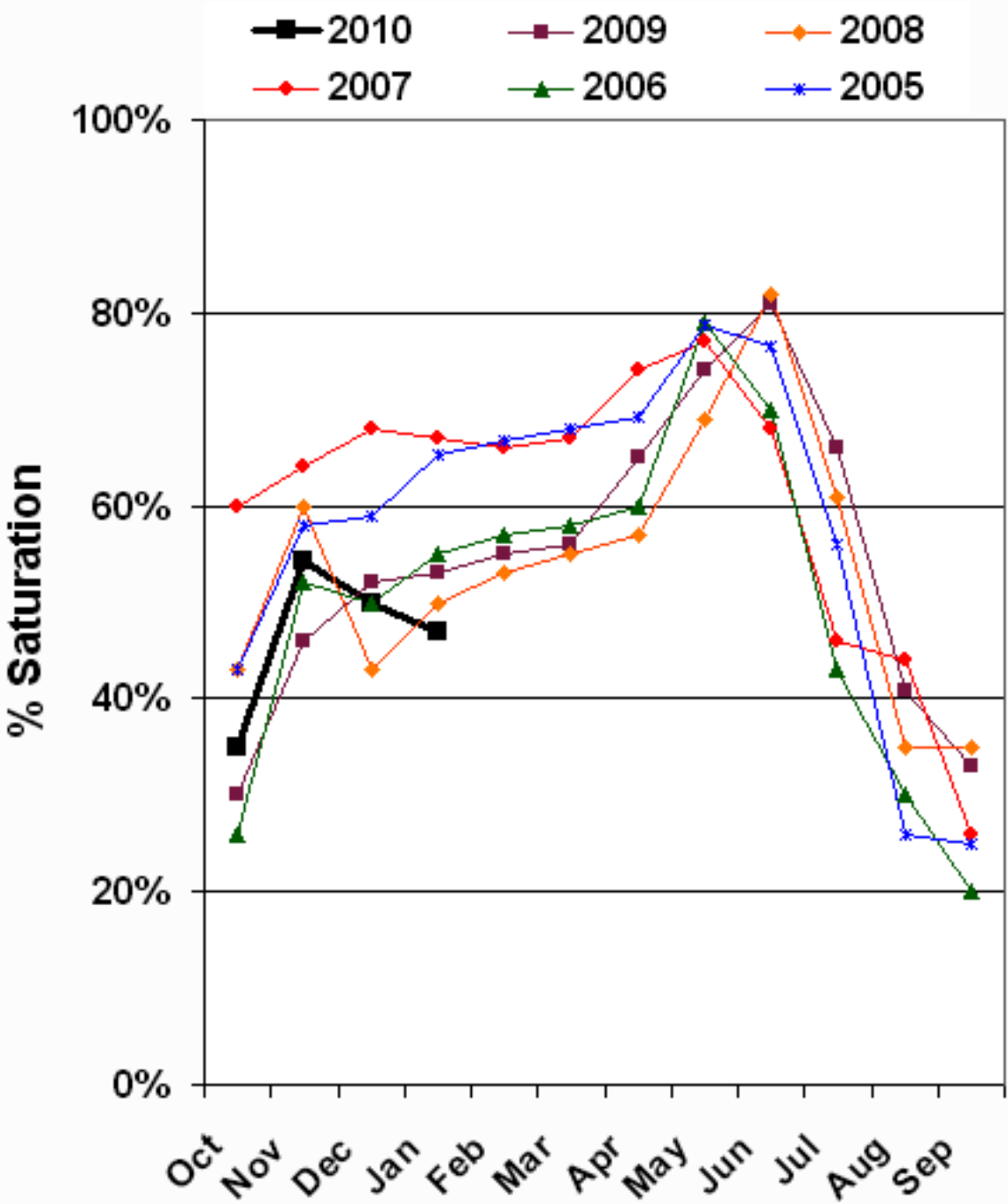
Provisional Data Subject to Revision

Miles
0 5 10 20 30 40 50

Bear River Low Snow Analysis - April 1 outcome if Jan 1 is less than 75% of average



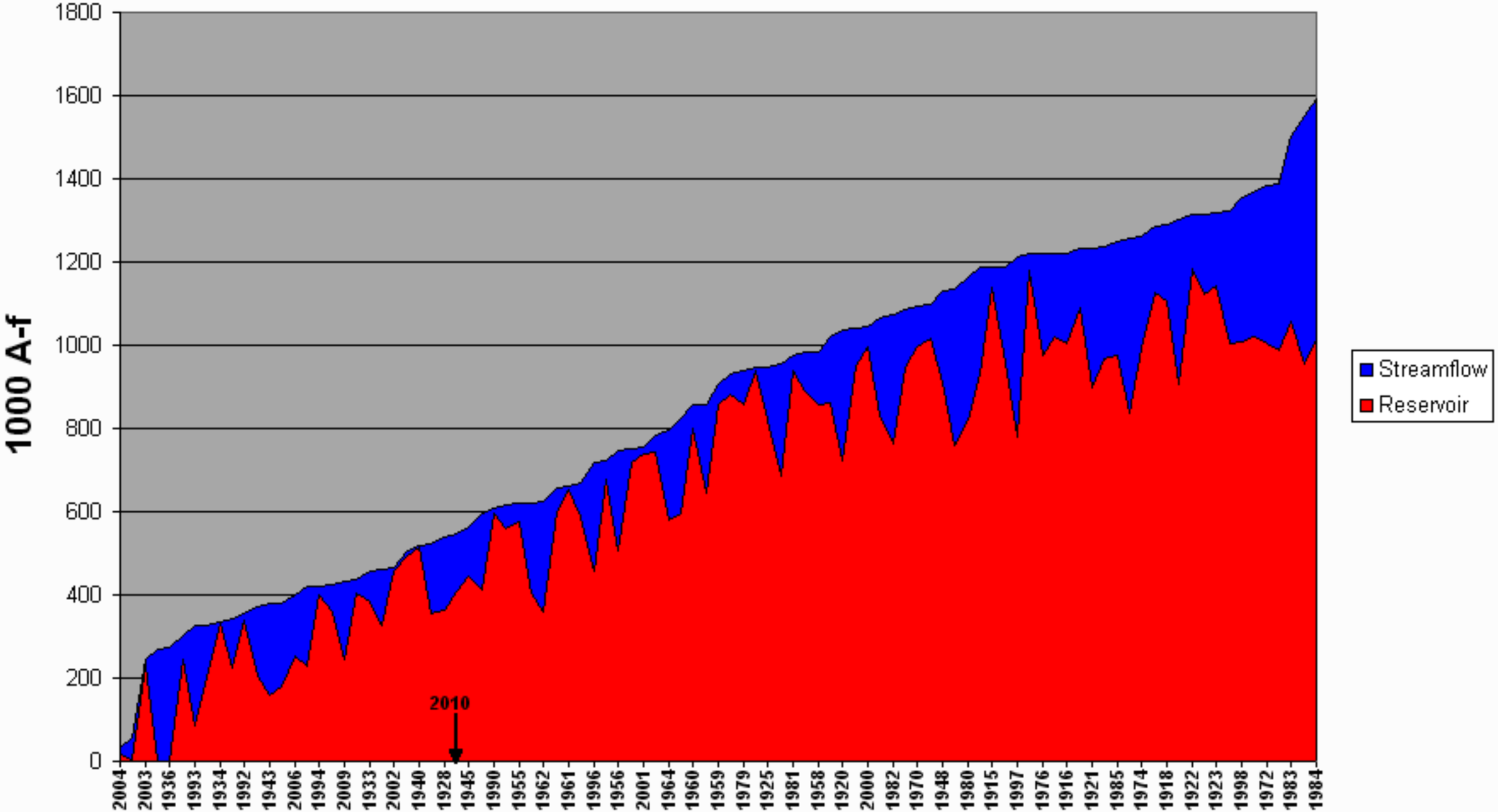
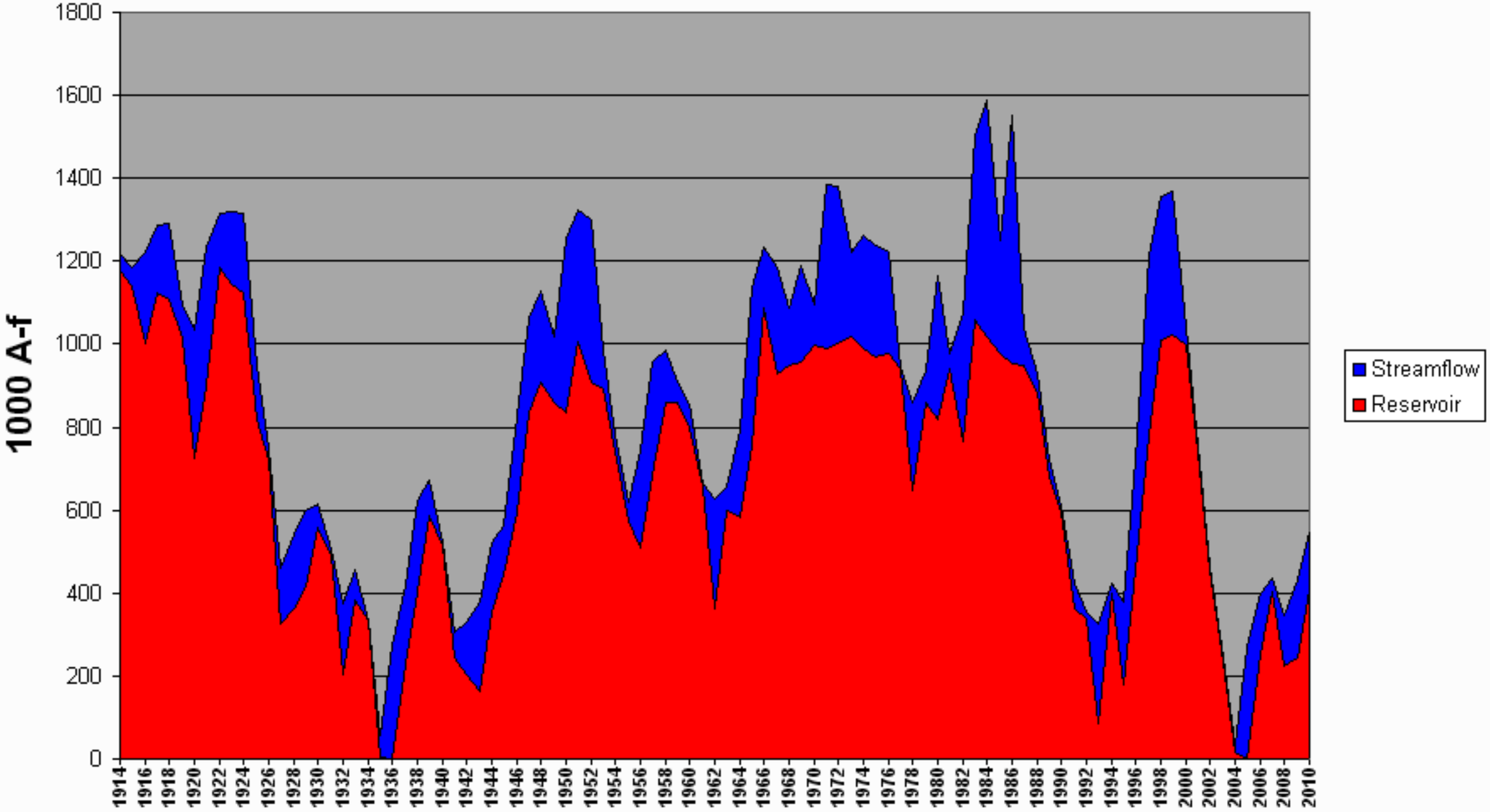
Bear River Soil Moisture



Bear Lake SWSI						
January 1						
#	Year	EOM December Reservoir KAF	Apr-Jul Streamflow KAF	Reservoir + Streamflow KAF	Probability	SWSI
1	2004	16	15	31	1	-4.08
2	1935	4	52	56	2	-4.00
3	2003	233	10	243	3	-3.91
4	2005	0	270	270	4	-3.83
5	1936	0	272	272	5	-3.74
6	1941	246	57	303	6	-3.66
7	1993	87	240	327	7	-3.57
8	1942	202	126	328	8	-3.49
9	1934	332	3	335	9	-3.40
10	2008	226	119	345	10	-3.32
11	1992	338	16	354	11	-3.23
12	1932	203	170	373	12	-3.15
13	1943	161	219	380	13	-3.06
14	1995	180	200	380	14	-2.98
15	2006	252	147	399	15	-2.89
16	1937	227	194	420	16	-2.81
17	1994	400	21	422	17	-2.72
18	1991	360	64	425	18	-2.64
19	2009	243	190	432	19	-2.55
20	2007	404	31	435	20	-2.47
21	1933	384	72	456	21	-2.38
22	1927	327	133	460	22	-2.30
23	2002	456	8	464	23	-2.21
24	1931	494	11	506	24	-2.13
25	1940	515	5	519	26	-2.04
26	1944	355	167	522	27	-1.96
27	1928	364	177	541	28	-1.87
28	**2010**	**407**	**140**	**547**	**29**	**-1.79**
29	1945	443	119	561	30	-1.70
30	1929	414	183	597	31	-1.62
31	1990	596	13	609	32	-1.53
32	1930	559	58	617	33	-1.45
33	1955	576	45	621	34	-1.36
34	1938	403	219	622	35	-1.28
35	1962	360	265	626	36	-1.19
36	1963	598	57	655	37	-1.11
37	1961	655	7	662	38	-1.02
38	1939	588	82	670	39	-0.94
39	1996	457	262	719	40	-0.85
40	1989	678	43	721	41	-0.77
41	1956	508	237	745	42	-0.68
42	1926	720	31	751	43	-0.60
43	2001	740	16	756	44	-0.51

Bear Lake SWSI						
January 1						
#	Year	EOM December Reservoir KAF	Apr-Jul Streamflow KAF	Reservoir + Streamflow KAF	Probability	SWSI
44	1954	742	40	783	45	-0.43
45	1964	581	213	794	46	-0.34
46	1946	596	229	825	47	-0.26
47	1960	798	59	857	48	-0.17
48	1978	646	212	857	49	-0.09
49	1959	858	50	908	50	0.00
50	1988	882	47	929	51	0.09
51	1979	858	79	937	52	0.17
52	1977	941	5	945	53	0.26
53	1925	820	128	948	54	0.34
54	1957	686	270	956	55	0.43
55	1981	940	36	976	56	0.51
56	1953	891	93	984	57	0.60
57	1958	859	126	985	58	0.68
58	1949	860	159	1019	59	0.77
59	1920	724	313	1036	60	0.85
60	1987	950	89	1040	61	0.94
61	2000	996	47	1043	62	1.02
62	1947	834	230	1065	63	1.11
63	1982	764	309	1074	64	1.19
64	1968	947	139	1086	65	1.28
65	1970	998	97	1094	66	1.36
66	1919	1015	81	1096	67	1.45
67	1948	909	221	1129	68	1.53
68	1965	759	376	1136	69	1.62
69	1980	819	344	1163	70	1.70
70	1967	930	256	1186	71	1.79
71	1915	1140	47	1187	72	1.87
72	1969	957	232	1190	73	1.96
73	1997	778	434	1213	74	2.04
74	1914	1178	41	1220	76	2.13
75	1976	976	245	1221	77	2.21
76	1973	1019	203	1222	78	2.30
77	1916	1003	219	1222	79	2.38
78	1966	1088	144	1232	80	2.47
79	1921	899	335	1234	81	2.55
80	1975	969	268	1237	82	2.64
81	1985	976	272	1248	83	2.72
82	1950	837	419	1256	84	2.81
83	1974	991	270	1261	85	2.89
84	1917	1126	161	1287	86	2.98
85	1918	1108	181	1290	87	3.06
86	1952	907	393	1301	88	3.15
87	1922	1185	129	1314	89	3.23
88	1924	1124	192	1316	90	3.32
89	1923	1142	175	1318	91	3.40
90	1951	1005	317	1322	92	3.49
91	1998	1008	347	1355	93	3.57
92	1999	1021	346	1367	94	3.66
93	1972	1003	379	1382	95	3.74
94	1971	989	397	1386	96	3.83
95	1983	1058	445	1503	97	3.91
96	1986	955	598	1553	98	4.00
97	1984	1017	573	1590	99	4.08

Bear River Surface Water Supply Index
January



Bear River Surface Water Supply Index
January