Summary Table: Amount of streamflow needed in 2017 for adequate surface irrigation supplies.

Created November 8, 2016

Fall reservoir carryover storage is used to project spring reservoir storage levels based on current conditions and recent trends. Then, by knowing the adequate irrigation water supply needed in your basin, the projected spring reservoir volumes are subtracted from the adequate irrigation supply to determine the volume of streamflow to marginally meet adequate surface irrigation supplies in 2017.

Column 2 - Column 3 = Column 4 Col4/Col6 X 100= Col 5

Column 1 Basin	2 Amount needed for adequate irrigation water supply KAF	3 Projected end of month reservoir storage (Jan, Feb or Mar) KAF	**4 2017 streamflow volume needed for adequate water supply KAF**	**5 % of average streamflow to meet adequate irrigation supply in 2017 KAF**	6 1981-2010 average streamflow KAF	7 Streamflow runoff period used in the analysis	9 2016 Streamflow Runoff KAF	/ % of average
Boise	1500	800	**700**	**51%**	1360	Apr-Sep	1255	92%
Big Wood	275	105	**170**	**64%**	265	Apr-Sep	186	70%
Little Wood	60	24	**36**	**39%**	92	**Mar-Sep**	66.4	72%
Big Lost	180	40	**140**	**93%**	150	Apr-Sep	119.4	80%
Little Lost	40	---	**40**	**118%**	34	Apr-Sep	26.9	79%
Teton	85	---	**85**	**44%**	193	Apr-Sep	140	73%
Snake (Heise)	4,400	1300	**3100**	**82%**	3,780	Apr-Sep	3000	79%
Oakley	50	22	**28**	**90%**	31	**Mar-Sep**	27.4	88%
Salmon Falls	110	50	**60**	**71%**	85	**Mar-Sep**	109	128%
Owyhee	575	260	**315**	**47%**	665	**Feb-Sep**	545	82%
Bear River	280	500	**0**	**0%**	205	Apr-Sep	145.5	71%

As of November 8, 2016: Projected change in reservoir storage from Fall 2016 to target levels in Spring 2017 which is when the runoff period starts for the streamflow forecasts.

	Oct 31 storage KAF	**Nov 30 storage KAF**	**Dec 31 storage KAF**	**Projected Jan 31 Storage KAF**	**Projected Feb 28 storage KAF**	**Projected Mar 31 storage KAF**	**Estimated change in storage KAF**
Boise Reservoir System	**422.0**	---	---	---	---	**800**	378
Magic Reservoir	**65.0**	---	---	---	---	**105**	40
Little Wood Reservoir	**12.4**	---	---	---	**24**	---	12
Mackay Reservoir	**14.7**	---	---	---	---	**40**	25
Jackson & Palisades Reservoir System	**800.0**	---	---	---	---	**1300**	500
Oakley Reservoir	**11.5**	---	---	---	**22**	---	11
Salmon Falls Reservoir	**35.0**	---	---	---	**50**	---	15
Lake Owyhee	**179.0**	---	---	**260**	---	---	81
Bear Lake	**440.0**	---	---	---	---	**500**	60

Other basins, Spokane, Clearwater, Salmon, Weiser, Payette and Bruneau basins, the surface agricultural irrigation demand is not known or relevant. For the Henrys Fork basin, recent diversion data has not been loaded in our AWDB streamflow database.

Bear River Basin SWSI

Adequate Water Supply Greater than -3.9 SWSI or 280 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
10046500	Bear River at Stewart Dam	Apr-Sep	strm	1981-2016	36	Units KAF
10055500	Bear Lake	31-Mar	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Apr-Sep	Reservoir 31-Mar	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1986	N	667	1005	1671	97%	3.9
2	1983	SE	625	982	1608	95%	3.7
3	1984	N	650	937	1587	92%	3.5
4	1999	SL	396	976	1372	89%	3.3
5	1998	SE	403	960	1362	86%	3.0
6	1997	N	486	826	1313	84%	2.8
7	1985	N	293	927	1220	81%	2.6
8	1982	N	371	839	1210	78%	2.4
9	2011	SL	675	458	1133	76%	2.1
10	1987	N	108	967	1076	73%	1.9
11	2012	LN	40	1031	1071	70%	1.7
12	2000	N	55	992	1047	68%	1.5
13	1988	SE	55	946	1000	65%	1.2
14	1981	N	45	948	993	62%	1.0
15	1996	N	285	539	825	59%	0.8
16	2013	N	22	801	823	57%	0.6
17	2001	LN	18	792	810	54%	0.3
18	1989	SL	53	750	803	51%	0.1
19	2014	N	120	592	712	49%	-0.1
20	2016	SE	146	531	676	46%	-0.3
21	2015	EN	89	584	673	43%	-0.6
22	1990	N	18	628	646	41%	-0.8
23	2010	EN	122	449	571	38%	-1.0
24	2007	EN	39	490	530	35%	-1.2
25	2009	N	213	294	507	32%	-1.5
26	1995	SE	238	266	504	30%	-1.7
2017 Amount Needed		?	**0**	**500**	**500**	26%	-2.0
27	2002	N	10	486	496	27%	-1.9
28	2006	N	160	325	486	24%	-2.1
29	1991	N	81	399	481	22%	-2.4
30	1994	SE	25	447	472	19%	-2.6
31	1993	EN	276	153	429	16%	-2.8
32	2008	N	131	278	409	14%	-3.0
33	1992	EN	21	387	407	11%	-3.3
34	2005	EN	285	37	322	8%	-3.5
35	2003	EN	13	270	283	5%	-3.7
36	2004	N	22	62	83	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	440	
Projected Storage Change Oct 31 to Mar 31	**60**	
Projected Mar 31 storage	**500**	
Streamflow needed to reach combined reservoir and streamflow total of 280 KAF	0	0% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	280	
1981-2010 Apr-Sep average streamflow	205	
Reservoir Capacity	1302	

Big Lost River Basin SWSI

Adequate Water Supply Greater than 0.8 SWSI or 180 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13127000	Big Lost R blw Mackay Reservoir	Apr-Sep	strm	1981-2016	36	Units KAF
13126000	Mackay Reservoir	31-Mar	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Apr-Sep	Reservoir 31-Mar	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1984	N	321	37	358	97%	3.9
2	1983	SE	296	31	327	95%	3.7
3	1982	N	272	35	307	92%	3.5
4	1995	SE	272	24	296	89%	3.3
5	1986	N	239	38	277	86%	3.0
6	1997	N	244	16	260	84%	2.8
7	2006	N	216	34	249	81%	2.6
8	1998	SE	198	38	236	78%	2.4
9	1999	SL	196	30	226	76%	2.1
10	1981	N	176	44	220	73%	1.9
11	1996	N	171	37	208	70%	1.7
12	2011	SL	160	39	199	68%	1.5
13	1993	EN	169	27	196	65%	1.2
14	2009	N	166	29	195	62%	1.0
2017 Amount Needed		?	**140**	**40**	**180**	60%	0.8
15	1985	N	139	39	178	59%	0.8
16	2012	LN	134	43	177	57%	0.6
17	2010	EN	135	41	177	54%	0.3
18	2005	EN	142	25	168	51%	0.1
19	2016	SE	119	34	154	49%	-0.1
20	1987	N	101	39	140	46%	-0.3
21	2008	N	105	28	133	43%	-0.6
22	1991	N	106	26	132	41%	-0.8
23	2013	N	88	37	125	38%	-1.0
24	2000	N	89	35	124	35%	-1.2
25	2015	EN	89	34	123	32%	-1.5
26	2007	EN	83	35	118	30%	-1.7
27	1990	N	88	28	116	27%	-1.9
28	2003	EN	87	21	108	24%	-2.1
29	1989	SL	78	27	105	22%	-2.4
30	1994	SE	69	36	105	19%	-2.6
31	1988	SE	74	29	102	16%	-2.8
32	2014	N	67	32	99	14%	-3.0
33	2001	LN	68	27	96	11%	-3.3
34	2002	N	69	25	94	8%	-3.5
35	1992	EN	64	29	92	5%	-3.7
36	2004	N	66	24	90	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	15	
Projected Storage Change Oct 31 to Mar 31	25	
Projected Mar 31 storage	**40**	
Streamflow needed to reach combined reservoir and streamflow total of 180 KAF	**140**	94% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	**180**	
1981-2010 Apr-Sep average streamflow	150	
Reservoir Capacity	44	

Big Wood River Basin SWSI

Adequate Water Supply Greater than 0.1 SWSI or 275 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13142500	Big Wood R blw Magic Reservoir	Apr-Sep	strm	1981-2016	36	Units KAF
13142000	Magic Reservoir	31-Mar	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Apr-Sep	Reservoir 31-Mar	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1983	SE	747	114	861	97%	3.9
2	1982	N	622	108	729	95%	3.7
3	1997	N	605	118	724	92%	3.5
4	2006	N	636	78	714	89%	3.3
5	1984	N	545	149	694	86%	3.0
6	1986	N	432	186	618	84%	2.8
7	1998	SE	427	170	597	81%	2.6
8	1995	SE	518	77	595	78%	2.4
9	1999	SL	420	102	522	76%	2.1
10	1996	N	351	161	512	73%	1.9
11	2011	SL	322	111	433	70%	1.7
12	2012	LN	238	185	423	68%	1.5
13	1993	EN	355	38	393	65%	1.2
14	1985	N	242	144	386	62%	1.0
15	1981	N	153	146	299	59%	0.8
16	2000	N	165	132	298	57%	0.6
17	2016	SE	186	89	275	54%	0.3
2017 Amount Needed		?	**170**	**105**	**275**	49%	-0.1
18	2009	N	219	42	261	51%	0.1
19	2010	EN	167	92	259	49%	-0.1
20	1989	SL	200	42	242	46%	-0.3
21	2005	EN	194	36	230	43%	-0.6
22	2007	EN	60	153	213	41%	-0.8
23	1987	N	61	145	206	38%	-1.0
24	2008	N	178	28	206	35%	-1.2
25	2003	EN	140	36	176	32%	-1.5
26	2015	EN	79	81	160	30%	-1.7
27	2014	N	84	73	157	27%	-1.9
28	2002	N	120	26	146	24%	-2.1
29	1990	N	79	51	130	22%	-2.4
30	1994	SE	31	94	125	19%	-2.6
31	2004	N	66	45	110	16%	-2.8
32	2001	LN	38	65	104	14%	-3.0
33	1988	SE	64	40	104	11%	-3.3
34	1991	N	76	27	103	8%	-3.5
35	2013	N	66	27	93	5%	-3.7
36	1992	EN	24	34	58	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	65	
Projected Storage Change Oct 31 to Mar 31	40	
Projected Mar 31 storage	**105**	
Streamflow needed to reach combined reservoir and streamflow total of 275 KAF	**170**	64% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	**275**	
1981-2010 Apr-Sep average streamflow	265	
Reservoir Capacity	192	

Boise River Basin SWSI

Adequate Water Supply Greater than -2.1 SWSI or 1,500 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13202000	BOISE RIVER NEAR BOISE, ID	Apr-Sep	strm	1981-2016	36	Units KAF
13201500	LUCKY PEAK	31-Mar	resv	1981-2016	36	Units KAF
13194000	ARROWROCK	31-Mar	resv	1981-2016	36	Units KAF
13190000	ANDERSON RANCH	31-Mar	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Apr-Sep	Reservoir 31-Mar	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1983	SE	2495	656	3150	97%	3.9
2	1982	N	2460	516	2976	95%	3.7
3	1997	N	2491	347	2837	92%	3.5
4	1984	N	2161	630	2791	89%	3.3
5	2011	SL	1965	785	2750	86%	3.0
6	1986	N	1881	831	2712	84%	2.8
7	1996	N	2066	574	2640	81%	2.6
8	2006	N	2162	404	2566	78%	2.4
9	1998	SE	1701	837	2538	76%	2.1
10	1995	SE	1887	536	2423	73%	1.9
11	2012	LN	1611	801	2412	70%	1.7
12	1999	SL	1838	538	2376	68%	1.5
13	1993	EN	1656	422	2078	65%	1.2
14	2016	SE	1255	752	2007	62%	1.0
15	2009	N	1323	667	1990	59%	0.8
16	2008	N	1382	578	1960	57%	0.6
17	2000	N	1155	802	1956	54%	0.3
18	2010	EN	1224	697	1921	51%	0.1
19	1981	N	980	919	1899	49%	-0.1
20	1989	SL	1324	508	1832	46%	-0.3
21	1985	N	1166	664	1830	43%	-0.6
22	2014	N	1178	645	1824	41%	-0.8
23	2003	EN	1219	538	1757	38%	-1.0
24	2002	N	1178	472	1650	35%	-1.2
25	2015	EN	749	871	1621	32%	-1.5
26	2004	N	974	647	1621	30%	-1.7
27	2007	EN	736	860	1596	27%	-1.9
2017 Amount Needed		?	**700**	**800**	**1500**	24%	-2.2
28	2005	EN	931	517	1448	24%	-2.1
29	1990	N	841	579	1420	22%	-2.4
30	2013	N	704	682	1385	19%	-2.6
31	1987	N	562	785	1346	16%	-2.8
32	1994	SE	588	678	1266	14%	-3.0
33	1991	N	734	478	1212	11%	-3.3
34	1988	SE	746	451	1197	8%	-3.5
35	2001	LN	545	620	1164	5%	-3.7
36	1992	EN	471	412	883	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	422	
Projected Storage Change Oct 31 to Mar 31	378	
Projected Mar 31 storage	**800**	
Streamflow needed to reach combined reservoir and streamflow total of 1500 KAF	**700**	51% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	**1500**	
1981-2010 Apr-Sep average streamflow	1360	
Reservoir Capacity	1016	

Little Lost River Basin SWSI

Adequate Water Supply Greater than 1.5 SWSI or 40 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13118700	Little Lost R nr Howe	Apr-Sep	strm	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Apr-Sep	Reservoir 31-Mar	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1984	N	65	0	65	97%	3.9
2	1995	SE	55	0	55	95%	3.7
3	1997	N	48	0	48	92%	3.5
4	1982	N	48	0	48	89%	3.3
5	1998	SE	47	0	47	86%	3.0
6	1983	SE	47	0	47	84%	2.8
7	1986	N	45	0	45	81%	2.6
8	1999	SL	44	0	44	78%	2.4
9	1993	EN	44	0	44	76%	2.1
10	2011	SL	43	0	43	73%	1.9
11	2009	N	40	0	40	70%	1.7
12	2010	EN	38	0	38	68%	1.5
2017 Amount Needed		?	40	0	40	65%	1.3
13	1981	N	37	0	37	65%	1.2
14	1996	N	36	0	36	62%	1.0
15	1990	N	34	0	34	59%	0.8
16	2006	N	33	0	33	57%	0.6
17	2012	LN	33	0	33	54%	0.3
18	1985	N	29	0	29	51%	0.1
19	2005	EN	29	0	29	49%	-0.1
20	2008	N	29	0	29	46%	-0.3
21	1989	SL	28	0	28	43%	-0.6
22	1991	N	28	0	28	41%	-0.8
23	2016	SE	27	0	27	38%	-1.0
24	1987	N	27	0	27	35%	-1.2
25	2000	N	26	0	26	32%	-1.5
26	1988	SE	25	0	25	30%	-1.7
27	2015	EN	24	0	24	27%	-1.9
28	2014	N	23	0	23	24%	-2.1
29	2013	N	20	0	20	22%	-2.4
30	2007	EN	20	0	20	19%	-2.6
31	2001	LN	19	0	19	16%	-2.8
32	2003	EN	19	0	19	14%	-3.0
33	1992	EN	18	0	18	11%	-3.3
34	1994	SE	18	0	18	8%	-3.5
35	2002	N	16	0	16	5%	-3.7
36	2004	N	16	0	16	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage		
Projected Storage Change Oct 31 to Mar 31	0	
Projected Mar 31 storage	0	
Streamflow needed to reach combined reservoir and streamflow total of 40 KAF	40	119% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	40	
1981-2010 Apr-Sep average streamflow	34	
Reservoir Capacity	0	

Little Wood River Basin SWSI

Adequate Water Supply Greater than -1.5 SWSI or 60 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13148500	LITTLE WOOD RIVER NR CAREY, ID	Mar-Sep	strm	1981-2016	36	Units KAF
13148200	LITTLE WOOD	28-Feb	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Mar-Sep	Reservoir 28-Feb	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1983	SE	232	17	248	97%	3.9
2	1995	SE	196	14	210	95%	3.7
3	1982	N	185	17	202	92%	3.5
4	1986	N	171	22	193	89%	3.3
5	1997	N	183	5	188	86%	3.0
6	2006	N	177	9	186	84%	2.8
7	1984	N	158	22	180	81%	2.6
8	1998	SE	130	20	149	78%	2.4
9	1999	SL	126	21	147	76%	2.1
10	1993	EN	122	13	135	73%	1.9
11	2011	SL	109	22	131	70%	1.7
12	1996	N	93	22	115	68%	1.5
13	2005	EN	98	16	114	65%	1.2
14	2012	LN	79	26	105	62%	1.0
15	1985	N	71	27	98	59%	0.8
16	2009	N	82	13	95	57%	0.6
17	1981	N	66	24	90	54%	0.3
18	2010	EN	64	24	88	51%	0.1
19	1989	SL	70	12	83	49%	-0.1
20	2016	SE	66	14	80	46%	-0.3
21	2000	N	55	22	77	43%	-0.6
22	2003	EN	61	12	74	41%	-0.8
23	2008	N	55	11	66	38%	-1.0
24	2004	N	46	14	60	35%	-1.2
2017 Amount Needed		?	**36**	**24**	**60**	32%	-1.5
25	1990	N	43	16	58	32%	-1.5
26	2007	EN	30	28	58	30%	-1.7
27	1987	N	34	24	58	27%	-1.9
28	1991	N	46	12	57	24%	-2.1
29	2013	N	38	19	57	22%	-2.4
30	1994	SE	28	26	53	19%	-2.6
31	2002	N	39	11	51	16%	-2.8
32	2001	LN	33	17	49	14%	-3.0
33	1988	SE	32	16	48	11%	-3.3
34	2015	EN	31	17	48	8%	-3.5
35	2014	N	32	14	47	5%	-3.7
36	1992	EN	31	15	46	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	12.4	
Projected Storage Change Oct 31 to Feb 28	**11.6**	
Projected Feb 28 storage	**24**	
Streamflow needed to reach combined reservoir and streamflow total of 60 KAF	**36**	44% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	60	
1981-2010 Mar-Sep average streamflow	82	
Reservoir Capacity	30	

Oakley Basin SWSI

Adequate Water Supply Greater than 0.1 SWSI or 50 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13083500	Oakley Reservoir Inflow	Mar-Sep	strm	1981-2016	36	Units KAF
13083500	Oakley Reservoir	28-Feb	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Mar-Sep	Reservoir 28-Feb	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1984	N	102	45	148	97%	3.9
2	1986	N	55	44	99	95%	3.7
3	1998	SE	46	44	90	92%	3.5
4	2006	N	54	34	88	89%	3.3
5	1983	SE	53	31	84	86%	3.0
6	1999	SL	39	45	84	84%	2.8
7	1985	N	35	44	79	81%	2.6
8	1997	N	46	33	79	78%	2.4
9	2011	SL	52	22	74	76%	2.1
10	1996	N	37	27	64	73%	1.9
11	2007	EN	18	43	61	70%	1.7
12	1982	N	43	17	60	68%	1.5
13	2000	N	18	40	57	65%	1.2
14	2005	EN	40	15	55	62%	1.0
15	2012	LN	17	37	54	59%	0.8
16	1995	SE	38	15	52	57%	0.6
17	2009	N	31	21	52	54%	0.3
2017 Amount Needed		**?**	**28**	**22**	**50**	51%	0.1
18	2008	N	22	27	49	51%	0.1
19	2010	EN	21	26	47	49%	-0.1
20	2016	SE	27	19	46	46%	-0.3
21	1987	N	15	31	45	43%	-0.6
22	1993	EN	35	10	45	41%	-0.8
23	1981	N	14	29	43	38%	-1.0
24	2013	N	19	22	42	35%	-1.2
25	1989	SL	27	12	40	32%	-1.5
26	2001	LN	13	26	38	30%	-1.7
27	2002	N	24	14	38	27%	-1.9
28	2014	N	19	18	37	24%	-2.1
29	2015	EN	16	20	36	22%	-2.4
30	2004	N	24	11	35	19%	-2.6
31	1988	SE	16	13	29	16%	-2.8
32	1994	SE	13	15	28	14%	-3.0
33	1990	N	14	14	27	11%	-3.3
34	1991	N	15	11	26	8%	-3.5
35	2003	EN	10	15	25	5%	-3.7
36	1992	EN	7	11	19	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	11.5	
Projected Storage Change Oct 31 to Feb 28	10.5	
Projected Feb 28 storage	**22**	
Streamflow needed to reach combined reservoir and streamflow total of 50 KAF	**28**	90% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	**50**	
1981-2010 Mar-Sep average streamflow	31	
Reservoir Capacity	76	

Owyhee Basin SWSI

Adequate Water Supply Greater than -2.6 SWSI or 575 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13183000	Owyhee R blw Owyhee Dam	Feb-Sep	strm	1981-2016	36	Units KAF
13182500	Lake Owyhee nr Nyssa	31-Jan	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Feb-Sep	Reservoir 31-Jan	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1984	N	2416	591	3007	97%	3.9
2	1983	SE	1468	618	2086	95%	3.7
3	1986	N	1442	470	1912	92%	3.5
4	2006	N	1161	594	1755	89%	3.3
5	2011	SL	1347	356	1702	86%	3.0
6	1982	N	1095	420	1515	84%	2.8
7	1997	N	784	596	1380	81%	2.6
8	1998	SE	897	468	1365	78%	2.4
9	1996	N	825	526	1351	76%	2.1
10	1985	N	605	580	1185	73%	1.9
11	1999	SL	662	512	1174	70%	1.7
12	1993	EN	1097	60	1157	68%	1.5
13	1989	SL	962	81	1043	65%	1.2
14	1995	SE	825	147	972	62%	1.0
15	2005	EN	660	173	833	59%	0.8
16	2000	N	349	448	797	57%	0.6
17	2012	LN	257	517	773	54%	0.3
18	1981	N	243	525	768	51%	0.1
19	1990	N	304	421	725	49%	-0.1
20	2007	EN	241	467	708	46%	-0.3
21	1987	N	209	490	699	43%	-0.6
22	2008	N	504	192	696	41%	-0.8
23	2009	N	442	207	649	38%	-1.0
24	2016	SE	545	98	643	35%	-1.2
25	2010	EN	425	186	611	32%	-1.5
26	2004	N	524	78	602	30%	-1.7
27	2002	N	459	136	595	27%	-1.9
28	1994	SE	152	441	593	24%	-2.1
29	2001	LN	316	271	587	22%	-2.4
2017 Amount Needed		?	**315**	**260**	**575**	18%	-2.7
30	1991	N	291	221	512	19%	-2.6
31	2013	N	198	281	479	16%	-2.8
32	1988	SE	198	188	386	14%	-3.0
33	2003	EN	220	138	358	11%	-3.3
34	2015	EN	179	120	299	8%	-3.5
35	2014	N	185	78	263	5%	-3.7
36	1992	EN	129	113	242	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	179	
Projected Storage Change Oct 31 to Jan 31	81	
Projected Jan 31 storage	**260**	
Streamflow needed to reach combined reservoir and streamflow total of 575 KAF	**315**	47% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	575	
1981-2010 Feb-Sep average streamflow	665	
Reservoir Capacity	715	

Salmon Falls Creek Basin SWSI

Adequate Water Supply Greater than -0.8 SWSI or 110 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13105000	Salmon Falls Creek nr San Jacinto	Mar-Sep	strm	1981-2016	36	Units KAF
13106500	Salmon Falls Reservoir	28-Feb	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Mar-Sep	Reservoir 28-Feb	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1984	N	288	82	370	97%	3.9
2	1985	N	99	135	234	95%	3.7
3	1986	N	116	108	224	92%	3.5
4	2011	SL	164	49	214	89%	3.3
5	1997	N	132	60	192	86%	3.0
6	2006	N	143	46	190	84%	2.8
7	1998	SE	113	76	189	81%	2.6
8	1983	SE	135	47	182	78%	2.4
9	1999	SL	92	81	172	76%	2.1
10	1996	N	107	59	165	73%	1.9
11	1982	N	117	24	140	70%	1.7
12	1995	SE	115	25	140	68%	1.5
13	2016	SE	108	26	134	65%	1.2
14	1993	EN	118	16	134	62%	1.0
15	2009	N	106	24	130	59%	0.8
16	1987	N	33	95	128	57%	0.6
17	2012	LN	36	89	125	54%	0.3
18	2007	EN	46	78	124	51%	0.1
19	2010	EN	73	46	120	49%	-0.1
20	2005	EN	97	21	118	46%	-0.3
21	1989	SL	91	24	115	43%	-0.6
2017 Amount Needed		?	**60**	**50**	**110**	40%	-0.8
22	2000	N	48	59	107	41%	-0.8
23	1988	SE	56	39	95	38%	-1.0
24	2008	N	61	32	92	35%	-1.2
25	1981	N	27	60	87	32%	-1.5
26	1994	SE	33	46	79	30%	-1.7
27	2004	N	61	17	77	27%	-1.9
28	2002	N	62	15	76	24%	-2.1
29	2013	N	42	33	75	22%	-2.4
30	2015	EN	42	28	70	19%	-2.6
31	1990	N	42	28	70	16%	-2.8
32	1991	N	46	18	64	14%	-3.0
33	2014	N	41	20	61	11%	-3.3
34	2003	EN	35	16	51	8%	-3.5
35	2001	LN	30	20	50	5%	-3.7
36	1992	EN	19	18	37	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	35	
Projected Storage Change Oct 31 to Feb 28	15	
Projected Feb 28 storage	**50**	
Streamflow needed to reach combined reservoir and streamflow total of 110 KAF	**60**	71% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	**110**	
1981-2010 Mar-Sep average streamflow	85	
Reservoir Capacity	183	

Snake River Near Heise SWSI

Adequate Water Supply Greater than -1.7 SWSI or 4,400 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13037500	Snake River near Heise	Apr-Sep	strm	1981-2016	36	Units KAF
13010500	Jackson Lake	31-Mar	resv	1981-2016	36	Units KAF
13032450	Palisades Reservoir	31-Mar	resv	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Apr-Sep	Reservoir 31-Mar	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1997	N	7009	949	7958	97%	3.9
2	2011	SL	6343	1493	7836	95%	3.7
3	1986	N	6054	962	7016	92%	3.5
4	1996	N	5584	1314	6898	89%	3.3
5	1982	N	5772	1064	6836	86%	3.0
6	1983	SE	5008	1740	6748	84%	2.8
7	1984	N	5046	1654	6700	81%	2.6
8	2009	N	4610	1759	6368	78%	2.4
9	1999	SL	4947	1311	6258	76%	2.1
10	1998	SE	4495	1632	6127	73%	1.9
11	1995	SE	4442	1041	5483	70%	1.7
12	2014	N	4594	864	5458	68%	1.5
13	2006	N	4076	1264	5340	65%	1.2
14	2008	N	4286	989	5275	62%	1.0
15	2012	LN	3384	1780	5164	59%	0.8
16	2015	EN	3204	1896	5101	57%	0.6
17	2010	EN	3106	1880	4986	54%	0.3
18	2000	N	3057	1846	4903	51%	0.1
19	1981	N	2912	1955	4867	49%	-0.1
20	1993	EN	4113	735	4848	46%	-0.3
21	1985	N	3490	1335	4825	43%	-0.6
22	1989	SL	3866	889	4755	41%	-0.8
23	1990	N	2806	1755	4561	38%	-1.0
24	2016	SE	3009	1550	4559	35%	-1.2
25	1991	N	3354	1131	4485	32%	-1.5
2017 Amount Needed		?	**3100**	**1300**	**4400**	31%	-1.6
26	1994	SE	2318	2023	4341	30%	-1.7
27	2007	EN	2309	1815	4124	27%	-1.9
28	2005	EN	3193	864	4057	24%	-2.1
29	2013	N	2719	1327	4046	22%	-2.4
30	1987	N	2547	1482	4029	19%	-2.6
31	2003	EN	2923	924	3847	16%	-2.8
32	1988	SE	2647	1060	3707	14%	-3.0
33	1992	EN	1998	1684	3682	11%	-3.3
34	2004	N	2833	793	3626	8%	-3.5
35	2002	N	2774	743	3517	5%	-3.7
36	2001	LN	1964	1414	3378	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage	800	
Projected Storage Change Oct 31 to Mar 31	**500**	
Projected Mar 31 storage	**1300**	
Streamflow needed to reach combined reservoir and streamflow total of 4400 KAF	**3100**	82% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	4400	
1981-2010 Apr-Sep average streamflow	3780	

Teton River Basin SWSI

Adequate Water Supply Greater than -3.9 SWSI or 85 KAF

Station ID	Station Name	Period	Data Type	Years	# of Years	
13052200	Teton R nr Driggs	Apr-Sep	strm	1981-2016	36	Units KAF

ENSO Classification

SE Strong El Nino - EN Mild El Nino - N Neutral - LN Mild La Nina - SL Strong La Nina

Rank	Year	Enso	Stream Flow Apr-Sep	Reservoir 31-Mar	Streamflow + Reservoir Sum	Non-Exceedance Probability	SWSI
1	1997	N	394	0	394	97%	3.9
2	2011	SL	336	0	336	95%	3.7
3	1982	N	290	0	290	92%	3.5
4	1983	SE	289	0	289	89%	3.3
5	1984	N	287	0	287	86%	3.0
6	1986	N	267	0	267	84%	2.8
7	1996	N	259	0	259	81%	2.6
8	1999	SL	256	0	256	78%	2.4
9	1995	SE	255	0	255	76%	2.1
10	1993	EN	247	0	247	73%	1.9
11	1998	SE	246	0	246	70%	1.7
12	2008	N	236	0	236	68%	1.5
13	2009	N	233	0	233	65%	1.2
14	2006	N	210	0	210	62%	1.0
15	2014	N	206	0	206	59%	0.8
16	1989	SL	183	0	183	57%	0.6
17	2010	EN	177	0	177	54%	0.3
18	1985	N	174	0	174	51%	0.1
19	1991	N	173	0	173	49%	-0.1
20	2005	EN	168	0	168	46%	-0.3
21	2015	EN	158	0	158	43%	-0.6
22	1981	N	147	0	147	41%	-0.8
23	2004	N	144	0	144	38%	-1.0
24	2012	LN	143	0	143	35%	-1.2
25	2002	N	142	0	142	32%	-1.5
26	2016	SE	140	0	140	30%	-1.7
27	1987	N	138	0	138	27%	-1.9
28	2013	N	136	0	136	24%	-2.1
29	2000	N	128	0	128	22%	-2.4
30	1988	SE	128	0	128	19%	-2.6
31	2003	EN	124	0	124	16%	-2.8
32	1990	N	117	0	117	14%	-3.0
33	1994	SE	110	0	110	11%	-3.3
34	1992	EN	93	0	93	8%	-3.5
35	2007	EN	91	0	91	5%	-3.7
2017 Amount Needed		?	**85**	0	**85**	4%	-3.8
36	2001	LN	78	0	78	3%	-3.9

To estimate amount needed for next year	KAF	
Current Oct 31, 2016 storage		
Projected Storage Change Oct 31 to Mar 31	0	
Projected Mar 31 storage	0	
Streamflow needed to reach combined reservoir and streamflow total of 85 KAF	**85**	44% of average flow needed for Apr-Sep period
Adequate Irrigation Needs	85	
1981-2010 Apr-Sep average streamflow	193	
Reservoir Capacity	0	