

Report Created:
9/30/2014 11:10:02 PM

Streamflow Forecast Summary: February 1, 2012
(averages based on 1981-2010 reference period)

		Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast						
KOOTENAI RIVER BASIN in MONTANA	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Tobacco R nr Eureka	APR-JUL	82	99	110	81%	121	138	136
	APR-SEP	91	110	123	82%	136	155	150
Libby Reservoir Inflow ¹								
Fisher R nr Libby	APR-JUL	138	181	210	91%	240	280	230
	APR-SEP	145	190	220	90%	250	295	245
Yaak R nr Troy	APR-JUL	315	375	415	89%	455	515	465
	APR-SEP	335	395	435	89%	475	535	490
Kootenai R at Leona ^{1,2}	APR-JUL	5120	5770	6150	87%	6530	7230	7040
	APR-SEP	5900	6660	7030	87%	7400	8210	8120

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

		Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast						
FLATHEAD RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
NF Flathead R nr Columbia Falls	APR-JUL	1110	1250	1350	83%	1450	1600	1620
	APR-SEP	1260	1420	1520	84%	1630	1780	1800
MF Flathead R nr West Glacier	APR-JUL	1110	1270	1390	87%	1500	1660	1590
	APR-SEP	1260	1430	1550	89%	1670	1840	1740
Sf Flathead R nr Hungry Horse	APR-JUL	950	1080	1170	94%	1260	1390	1250
	APR-SEP	1010	1150	1240	93%	1330	1470	1330
Hungry Horse Reservoir Inflow ^{1,2}	APR-JUL	1000	1280	1400	70%	1530	1800	2000
	APR-SEP	1100	1390	1520	72%	1650	1940	2120
Flathead R at Columbia Falls ²	APR-JUL	3520	3980	4300	80%	4610	5070	5350
	APR-SEP	3900	4380	4710	81%	5040	5530	5820
Ashley Ck nr Marion ²	MAR	0.14	0.6	0.92	87%	1.24	1.7	1.06
	APR-JUL	3	4.4	5.4	75%	6.4	7.8	7.2
Swan R nr Bigfork	APR-JUL	390	445	485	86%	525	580	565
	APR-SEP	445	505	550	85%	595	655	645
Flathead Lake Inflow ^{1,2}	APR-JUL	3930	4460	4840	78%	5220	5740	6180
	APR-SEP	4000	4890	5300	79%	5710	6600	6700
Mill Ck ab Bassoo ck nr Niarada	APR-JUL	2.4	3.4	4.1	100%	4.8	5.8	4.1
	APR-SEP	2.8	3.8	4.5	102%	5.2	6.2	4.4
South Crow Ck nr Ronan	APR-JUL	7.4	8.8	9.8	97%	10.8	12.2	10.1
	APR-SEP	8.5	10.1	11.2	97%	12.3	13.9	11.5
Mission Ck nr St. Ignatius	APR-JUL	20	22	24	96%	26	28	25
	APR-SEP	24	27	29	97%	31	34	30

SF Jocko R nr Arlee

APR-JUL	25	30	33	110%	36	41	30
APR-SEP	28	33	37	109%	41	46	34

NF Jocko R bl Tabor Feeder Canal

APR-JUL	26	29	31	100%	33	36	31
APR-SEP	28	31	33	100%	35	38	33

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

UPPER CLARK FORK RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Little Blackfoot nr Garrison	APR-JUL	42	60	72	95%	84	102	76
	APR-SEP	47	66	79	94%	92	111	84
Flint Ck nr Southern Cross	APR-JUL	6.2	10.1	12.7	93%	15.3	19.2	13.7
	APR-SEP	6.7	11.6	14.9	92%	18.2	23	16.2
Flint Ck bl Boulder Ck	APR-JUL	28	43	53	95%	63	78	56
	APR-SEP	37	55	67	94%	79	97	71
Lower Willow Ck Reservoir Inflow ²	APR-MAY	4.1	6.5	8.1	99%	9.7	12.1	8.2
	APR-JUL	6	9.7	12.2	98%	14.7	18.4	12.5
MF Rock Ck nr Philipsburg	APR-JUL	44	54	61	95%	68	78	64
	APR-SEP	50	61	68	94%	75	86	72
Rock Ck nr Clinton	APR-JUL	179	230	265	98%	300	350	270
	APR-SEP	205	260	300	98%	340	395	305
Clark Fork R ab Milltown	APR-JUL	320	465	565	93%	665	810	605
	APR-SEP	390	550	660	94%	770	930	705
Nevada Ck nr Helmville	APR-MAY	6	9.3	11.5	112%	13.7	17	10.3
	APR-JUL	10.1	15.5	19.1	110%	23	28	17.3
Blackfoot R nr Bonner	APR-JUL	610	730	810	101%	890	1010	805
	APR-SEP	680	810	895	101%	980	1110	890
Clark Fork R ab Missoula	APR-JUL	970	1220	1390	99%	1560	1810	1410
	APR-SEP	1120	1390	1570	98%	1750	2020	1600

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

BITTERROOT RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
WF Bitterroot R Nr Conner ²	APR-JUL	90	119	138	97%	157	186	143
	APR-SEP	97	129	151	96%	173	205	157
Bitterroot R Nr Darby	APR-JUL	295	380	440	96%	500	585	460
	APR-SEP	355	440	500	97%	560	645	515
Como Reservoir Inflow ²	APR-JUL	68	75	80	103%	85	92	78

Bitterroot R nr Missoula	APR-SEP	72	79	84	102%	89	96	82
	APR-JUL	950	1130	1250	100%	1370	1550	1250
	APR-SEP	1040	1230	1360	99%	1490	1680	1370

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

LOWER CLARK FORK RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Clark Fork R bl Missoula	APR-JUL	1940	2350	2630	99%	2910	3320	2660
	APR-SEP	2180	2620	2920	99%	3220	3660	2960
Clark Fork R at St. Regis ¹	APR-JUL	2810	3220	3550	101%	3880	4260	3520
	APR-SEP	3100	3570	3920	100%	4270	4760	3910
Clark Fork R nr Plains ^{1,2}	APR-JUL	6930	7950	8670	86%	9390	10400	10100
	APR-SEP	7840	8920	9680	87%	10400	11500	11100
Thompson nr Thompson Falls	APR-JUL	91	128	153	75%	178	215	205
	APR-SEP	106	146	173	75%	200	240	230
Prospect Ck at Thompson Falls	APR-JUL	59	76	87	75%	98	115	116
	APR-SEP	64	81	93	75%	105	122	124
Clark Fork R at Whitehorse Rapids ^{1,2}	APR-JUL	7890	9100	9880	87%	10700	11900	11300
	APR-SEP	8990	10200	11000	88%	11800	13300	12500

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

JEFFERSON RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Lima Reservoir Inflow ²	APR-JUL	29	49	62	65%	75	95	96
	APR-SEP	27	49	65	63%	81	103	104
Clark Canyon Inflow ²	APR-JUL	30	44	75	57%	110	162	131
	APR-SEP	36	52	89	57%	127	184	156
Beaverhead R at Barretts ²	APR-JUL	42	63	106	63%	156	230	168
	APR-SEP	50	74	126	63%	184	270	200
Ruby R Reservoir Inflow ²	APR-JUL	37	52	63	75%	74	89	84
	APR-SEP	46	64	76	75%	88	106	101
Big Hole R at Wisdom	APR-JUL	33	45	83	69%	110	151	121
	APR-SEP	36	48	89	68%	119	162	130
Big Hole R nr Melrose	APR-JUL	260	380	460	75%	540	660	610
	APR-SEP	285	415	505	77%	595	725	660
Jefferson R nr Twin Bridges ²	APR-JUL	220	415	550	70%	685	880	785
	APR-SEP	225	450	600	68%	750	975	880

Boulder R nr Boulder	APR-JUL	47	63	74	95%	85	101	78
	APR-SEP	51	68	80	94%	92	109	85
Willow Ck Reservoir Inflow ²	APR-JUL	5.1	8.5	12.9	72%	17.3	24	17.9
	APR-SEP	5.7	9.6	14.4	72%	19.2	26	20
Jefferson R nr Three Forks ²	APR-JUL	235	460	610	78%	760	985	780
	APR-SEP	235	485	655	76%	825	1080	860

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

MADISON RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Hebgen Reservoir Inflow ²	APR-JUL	270	310	340	86%	370	410	395
	APR-SEP	350	400	435	86%	470	520	505
Ennis Reservoir Inflow ²	APR-JUL	395	485	545	80%	605	695	680
	APR-SEP	505	610	680	80%	750	855	850

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

GALLATIN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gallatin R nr Gateway	APR-JUL	265	320	360	82%	400	455	440
	APR-SEP	310	375	420	82%	465	530	515
Hyalite Reservoir Inflow ²	APR-JUL	16.2	18.5	20	91%	22	24	22
	APR-SEP	19.1	21	23	92%	25	27	25
Gallatin R at Logan	APR-JUL	240	340	410	83%	480	580	495
	APR-SEP	285	400	475	83%	550	665	570

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

SMITH-JUDITH-MUSSELSHELL	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Sheep Ck nr White Sulphur Springs	APR-JUL	10.6	13.8	16	94%	18.2	21	17.1
	APR-SEP	12.6	16.3	18.8	94%	21	25	20
Smith R bl Eagle Ck ²	APR-JUL	72	104	125	94%	146	178	133
	APR-SEP	76	112	137	92%	162	198	149
NF Musselshell R nr Delpine	APR-JUL	2.4	3.7	4.5	98%	5.3	6.6	4.6
	APR-SEP	2.9	4.3	5.3	98%	6.3	7.7	5.4

	APR-JUL	186	225	255	89%	285	325	285
	APR-SEP	192	240	270	86%	300	350	315
Mystic Lake Inflow ²								
	APR-JUL	45	50	53	88%	56	61	60
	APR-SEP	57	64	68	88%	72	79	77
Stillwater R nr Absarokee ²								
	APR-JUL	325	385	425	86%	465	525	495
	APR-SEP	385	455	500	85%	545	615	585
Clarks Fk Yellowstone R nr Belfry								
	APR-JUL	455	510	545	101%	580	635	540
	APR-SEP	500	555	595	100%	635	690	595
Cooney Reservoir Inflow								
Yellowstone R at Billings								
	APR-JUL	2430	2880	3190	91%	3500	3950	3510
	APR-SEP	2870	3400	3760	91%	4120	4650	4120

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

LOWER YELLOWSTONE RIVER BASIN (Wyoming)	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Bighorn R nr St. Xavier ²								
	APR-JUL	855	1220	1470	91%	1720	2080	1610
	APR-SEP	900	1310	1580	90%	1850	2260	1760
Little Bighorn R nr Hardin								
	APR-JUL	95	124	143	112%	162	191	128
	APR-SEP	111	143	164	114%	185	215	144
Tongue R nr Dayton ²								
	APR-JUL	75	93	106	110%	119	137	96
	APR-SEP	88	108	121	111%	134	154	109
Big Goose Ck nr Sheridan								
	APR-JUL	42	53	61	117%	69	80	52
	APR-SEP	50	62	70	117%	78	90	60
Little Goose Ck nr Bighorn								
	APR-JUL	28	35	40	118%	45	52	34
	APR-SEP	36	44	49	117%	54	62	42
Tongue River Reservoir Inflow ²								
	APR-JUL	153	215	260	118%	305	365	220
	APR-SEP	178	245	290	116%	335	400	250
Yellowstone R at Miles City ²								
	APR-JUL	3500	4260	4770	89%	5280	6040	5360
	APR-SEP	3930	4960	5550	89%	6140	7170	6210
Powder R at Moorehead								
	APR-JUL	115	174	215	105%	255	315	205
	APR-SEP	142	205	245	107%	285	350	230
Powder R nr Locate								
	APR-JUL	121	195	245	104%	295	370	235
	APR-SEP	147	225	280	108%	335	415	260
Yellowstone R nr Sidney ²								
	APR-JUL	3500	4350	4930	90%	5510	6360	5480
	APR-SEP	3930	4950	5650	90%	6350	7370	6280

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average