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Streamflow Forecast Summary: April 1, 2013
(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	97	116	128	102%	140	159	126
	APR-SEP	105	127	141	101%	155	177	140
Libby Reservoir Inflow ¹	APR-JUL							
	APR-SEP							
Fisher R nr Libby	APR-JUL	111	139	158	77%	177	205	205
	APR-SEP	120	150	170	77%	190	220	220
Yaak R nr Troy	APR-JUL	320	375	415	99%	455	510	420
	APR-SEP	335	395	435	99%	475	535	440
Kootenai R at Leonia ^{1,2}	APR-JUL	5590	6320	6660	101%	7000	7730	6600
	APR-SEP	6550	7300	7640	101%	7980	8730	7590

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

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3) Median value used in place of average

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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	1490	1610	1690	110%	1770	1890	1540
	APR-SEP	1640	1780	1870	110%	1960	2100	1700
MF Flathead R nr West Glacier	APR-JUL	1400	1530	1620	108%	1710	1840	1500
	APR-SEP	1520	1660	1760	108%	1860	2000	1630
Sf Flathead R nr Hungry Horse	APR-JUL	1060	1150	1220	103%	1290	1380	1180
	APR-SEP	1110	1220	1290	102%	1360	1470	1260
Hungry Horse Reservoir Inflow ^{1,2}	APR-JUL	1590	1840	1960	105%	2080	2330	1860
	APR-SEP	1670	1950	2070	105%	2190	2470	1980
Flathead R at Columbia Falls ²	APR-JUL	4750	5140	5400	108%	5660	6050	5020
	APR-SEP	5110	5550	5850	107%	6150	6590	5450
Ashley Ck nr Marion ²	APR-JUL	3.7	5.1	6	92%	6.9	8.3	6.5
	APR	1.18	2	2.6	100%	3.2	4	2.6
Swan R nr Bigfork	APR-JUL	390	445	480	92%	515	570	520
	APR-SEP	445	510	550	92%	590	655	595
Flathead Lake Inflow ^{1,2}	APR-JUL	5200	5920	6250	108%	6580	7300	5810
	APR-SEP	5540	6360	6740	107%	7120	7940	6270
Mill Ck ab Bassoo ck nr Niarada	APR-JUL	1.53	2.3	2.8	70%	3.3	4.1	4
	APR-SEP	1.8	2.6	3.1	70%	3.6	4.4	4.4
South Crow Ck nr Ronan	APR-JUL	7.2	8.6	9.6	95%	10.6	12	10.1
	APR-SEP	8.3	9.9	11	95%	12.1	13.7	11.6
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								

NF Jocko R bl Tabor Feeder Canal	APR-JUL	23	27	30	91%	33	37	33
	APR-SEP	26	31	34	92%	37	42	37
	APR-JUL	24	26	28	90%	30	32	31
	APR-SEP	26	28	30	91%	32	34	33

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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	23	39	50	71%	61	77	70
	APR-SEP	26	44	56	73%	68	86	77
Flint Ck nr Southern Cross	APR-JUL	3.7	7.4	9.9	80%	12.4	16.1	12.4
	APR-SEP	3.7	8.3	11.5	79%	14.7	19.3	14.6
Flint Ck bl Boulder Ck	APR-JUL	19.4	33	43	83%	53	67	52
	APR-SEP	26	43	55	83%	67	84	66
Lower Willow Ck Reservoir Inflow ²	APR-MAY	1.56	3.7	5.1	70%	6.5	8.6	7.3
	APR-JUL	1.87	5.2	7.5	71%	9.8	13.1	10.6
MF Rock Ck nr Philipsburg	APR-JUL	31	41	47	81%	53	63	58
	APR-SEP	35.35929	45.86292	53	82%	60.13708	70.64071	65
Rock Ck nr Clinton	APR-JUL	123	169	200	80%	230	275	250
	APR-SEP	140.71109	190.89838	225	80%	259.10162	309.28891	280
Clark Fork R ab Milltown	APR-JUL	173	310	400	75%	490	625	530
	APR-SEP	217.96923	368.03335	470	76%	571.96665	722.03077	615
Nevada Ck nr Helmville	APR-JUL	1.76	6.9	10.4	73%	13.9	19	14.2
	APR-SEP							15.6
Blackfoot R nr Bonner	APR-JUL	370	475	545	76%	615	720	720
	APR-SEP	425	540	615	77%	690	805	800
Clark Fork R ab Missoula	APR-JUL	565	785	935	75%	1080	1300	1250
	APR-SEP	685	925	1090	77%	1250	1490	1420

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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	58	83	100	78%	117	142	128
	APR-SEP	65	91	109	78%	127	153	139
Bitterroot R Nr Darby	APR-JUL	210	280	330	80%	380	450	410
	APR-SEP	260	330	380	81%	430	500	470
Como Reservoir Inflow ²	APR-JUL	50	57	62	82%	67	74	76
	APR-SEP	52	60	65	82%	70	78	79
Bitterroot R nr Missoula								

APR-JUL	665	815	920	80%	1020	1180	1150
APR-SEP	715	880	995	80%	1110	1270	1250

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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	1300	1660	1900	79%	2140	2500	2400
	APR-SEP	1450	1840	2100	79%	2360	2750	2670
Clark Fork R at St. Regis ¹	APR-JUL	1600	2230	2520	80%	2810	3440	3160
	APR-SEP	1800	2490	2800	80%	3110	3800	3510
Clark Fork R nr Plains ^{1,2}	APR-JUL	7020	8380	9000	98%	9620	11000	9200
	APR-SEP	7670	9200	9900	98%	10600	12100	10100
Thompson nr Thompson Falls	APR-JUL	80	113	135	75%	157	190	181
	APR-SEP	96	131	155	76%	179	215	205
Prospect Ck at Thompson Falls	APR-JUL	63	74	82	80%	90	101	102
	APR-SEP	68	80	88	80%	96	108	110
Clark Fork R at Whitehorse Rapids ^{1,2}	APR-JUL	8250	9660	10300	98%	10900	12400	10500
	APR-SEP	8970	10600	11300	98%	12000	13600	11500

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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	48	58	65	79%	72	82	82
	APR-SEP	49	61	69	78%	77	89	89
Clark Canyon Inflow ²	APR-JUL	5	34	61	60%	88	128	101
	APR-SEP	5.2	47	76	63%	105	147	120
Beaverhead R at Barretts ²	APR-JUL	29	48	90	70%	132	195	129
	APR-SEP	40	62	112	72%	162	235	156
Ruby R Reservoir Inflow ²	APR-JUL	34	48	57	74%	66	80	77
	APR-SEP	43	58	69	76%	80	95	91
Big Hole R at Wisdom	APR-JUL	7	46	72	71%	98	137	102
	APR-SEP	7	48	77	71%	106	148	108
Big Hole R nr Melrose	APR-JUL	205	295	360	70%	425	515	515
	APR-SEP	225	325	395	71%	465	565	560
Jefferson R nr Twin Bridges ²	APR-JUL	106	300	435	63%	570	765	690
	APR-SEP	96	320	470	64%	620	845	730
Boulder R nr Boulder	APR-JUL	24	38	48	70%	58	72	69
	APR-SEP	25	41	52	70%	63	79	74
Willow Ck Reservoir Inflow ²								

Jefferson R nr Three Forks ²	APR-JUL	2.5	7.1	10.2	61%	13.3	17.9	16.8
	APR-SEP	3.8	8.9	12.4	64%	15.9	21	19.3
	APR-JUL	108	310	450	61%	590	790	740
	APR-SEP	105	330	485	61%	640	865	800

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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	275	305	325	88%	345	375	370
	APR-SEP	355	390	415	88%	440	475	470
Ennis Reservoir Inflow ²	APR-JUL	410	480	530	85%	580	650	625
	APR-SEP	530	610	665	86%	720	800	775

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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	275	330	365	91%	400	455	400
	APR-SEP	320	385	425	90%	465	530	470
Hyalite Reservoir Inflow ²	APR-JUL	14.6	16.6	18	90%	19.4	21	20
	APR-SEP	16.5	18.6	20	87%	21	23	23
Gallatin R at Logan	APR-JUL	220	315	380	86%	445	540	440
	APR-SEP	255	365	440	87%	515	625	505

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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	9.1	12.3	14.5	94%	16.7	19.9	15.5
	APR-SEP	10.7	14.6	17.3	94%	20	24	18.4
Smith R bl Eagle Ck ²	APR-JUL	47	78	99	93%	120	151	106
	APR-SEP	50	87	113	97%	139	176	116
NF Musselshell R nr Delpine	APR-JUL	2	3.1	3.9	115%	4.7	5.8	3.4
	APR-SEP	2.4	3.7	4.6	115%	5.5	6.8	4
SF Musselshell R ab Martinsdale	APR-JUL	2.2	14	25	71%	36	52	35
	APR-SEP	2.5	16	28	74%	40	58	38
Musselshell R at Harlowton ²	APR-JUL	0	14.5	35	61%	55	86	57
	APR-SEP	0	12.6	35	59%	57	90	59

Musselshell R nr Roundup²

APR-JUL	-20	3	26	39%	68	131	67
APR-SEP	-20	1.2	22	33%	64	126	66

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SUN-TETON-MARIAS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gibson Reservoir Inflow								
	APR-JUL	270	315	350	89%	385	430	395
	APR-SEP	295	350	385	88%	420	475	440
Two Medicine R nr Browning ²								
	APR-JUL	129	152	168	92%	184	205	183
	APR-SEP	138	162	179	92%	196	220	194
Badger Ck nr Browning								
	APR-JUL	55	68	77	88%	86	99	88
	APR-SEP	65	80	90	87%	100	115	103
Swift Reservoir Inflow ²								
	APR-JUL	36	47	54	95%	61	72	57
	APR-SEP	43	55	64	96%	73	85	67
Dupuyer Ck nr Valier								
	APR-JUL	1.5	5.8	10.6	95%	15.4	22	11.1
	APR-SEP	1.8	6.5	11.8	93%	17.1	25	12.7
Cut Bank Ck nr Browning								
	APR-JUL	46	58	66	96%	74	86	69
	APR-SEP	49	62	71	95%	80	93	75
Marias R nr Shelby ²								
	APR-JUL	166	265	330	96%	395	495	345
	APR-SEP	155	260	335	93%	410	515	360
Teton R nr Dutton								
	APR-JUL	5	18.4	36	86%	54	80	42
	APR-SEP	5.2	23	42	88%	61	89	48

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ST. MARY & MILK BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Lake Sherburne Inflow								
	APR-JUL	88	96	102	105%	108	116	97
	APR-SEP	104	113	120	107%	127	136	112
St. Mary R nr Babb ²								
	APR-JUL	330	370	395	107%	420	460	370
	APR-SEP	385	430	460	108%	490	535	425
St. Mary R at Intl Boundary ²								
	APR-JUL	370	425	465	107%	505	560	435
	APR-SEP	435	495	535	106%	575	635	505
Milk R at Western Crossing of Intl Bndry, AB								
	APR-JUL	1.06	14.7	24	96%	33	47	25
	APR-SEP	1	14.9	25	96%	35	50	26
Milk R at Eastern Crossing of Intl Bndry								
	APR-JUL	1.5	20	43	96%	66	100	45
	APR-SEP	10	26	52	95%	78	116	55

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MISSOURI MAINSTEM BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Missouri R at Toston ²	APR-JUL	830	1170	1400	78%	1630	1970	1790
	APR-SEP	935	1340	1620	78%	1900	2310	2070
Dearborn R nr Craig	APR-JUL	29	58	77	87%	96	125	89
	APR-SEP	32	63	83	87%	103	134	95
Missouri R at Fort Benton ²	APR-JUL	1180	1690	2040	78%	2390	2900	2610
	APR-SEP	1380	2010	2440	78%	2870	3500	3110
Missouri R nr Virgelle ²	APR-JUL	1400	1990	2390	80%	2790	3380	3000
	APR-SEP	1570	2300	2790	79%	3280	4010	3520
Missouri R nr Landusky ²	APR-JUL	1510	2100	2510	79%	2920	3510	3160
	APR-SEP	1700	2440	2940	79%	3440	4180	3720
Missouri R bl Fort Peck Dam ²	APR-JUL	1360	2040	2500	77%	2960	3640	3240
	APR-SEP	1320	2200	2790	75%	3380	4260	3700
Lake Sakakawea Inflow ²	APR-JUL	3670	5320	6440	77%	7560	9210	8310
	APR-SEP	3660	5770	7200	77%	8630	10700	9400

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UPPER YELLOWSTONE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Yellowstone R at Yellowstone Lake Outlet	APR-JUL	395	450	490	85%	530	585	575
	APR-SEP	515	590	640	83%	690	765	770
Yellowstone R at Corwin Springs	APR-JUL	1120	1290	1400	88%	1510	1680	1590
	APR-SEP	1290	1500	1640	87%	1780	1990	1880
Yellowstone R at Livingston	APR-JUL	1240	1450	1600	89%	1750	1960	1800
	APR-SEP	1450	1710	1880	88%	2050	2310	2140
Shields R nr Livingston	APR-JUL	21	61	88	68%	115	155	129
	APR-SEP	21	66	97	68%	128	173	143
Boulder R at Big Timber	APR-JUL	188	230	255	91%	280	320	280
	APR-SEP	197	245	275	92%	305	355	300
Mystic Lake Inflow ²	APR-JUL	41	45	48	81%	51	55	59
	APR-SEP	51	58	62	84%	66	73	74
Stillwater R nr Absarokee ²	APR-JUL	275	330	370	83%	410	465	445
	APR-SEP	315	385	430	83%	475	545	520
Clarks Fk Yellowstone R nr Belfry	APR-JUL	365	415	450	88%	485	535	510
	APR-SEP	390	445	485	88%	525	580	550
Cooney Reservoir Inflow	APR-JUL	4.7	16.2	24	63%	32	43	38
	APR-SEP	10.8	23	32	67%	41	53	48

Yellowstone R at Billings

APR-JUL	1870	2370	2710	84%	3050	3550	3230
APR-SEP	2080	2690	3100	83%	3510	4120	3730

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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	390	755	1000	72%	1250	1610	1380
	APR-SEP	360	780	1060	73%	1340	1760	1460
Little Bighorn R nr Hardin	APR-JUL	19.3	44	61	62%	78	103	98
	APR-SEP	25	52	71	64%	90	117	111
Tongue R nr Dayton ²	APR-JUL	44	60	71	83%	82	98	86
	APR-SEP	52	70	82	84%	94	112	98
Big Goose Ck nr Sheridan	APR-JUL	15.1	25	31	67%	37	47	46
	APR-SEP	23	32	39	72%	46	55	54
Little Goose Ck nr Bighorn	APR-JUL	12.1	18	22	71%	26	32	31
	APR-SEP	18.2	25	29	74%	33	40	39
Tongue River Reservoir Inflow ²	APR-JUL	32	91	131	68%	171	230	193
	APR-SEP	46	109	151	70%	193	255	215
Yellowstone R at Miles City ²	APR-JUL	2360	3210	3790	79%	4370	5220	4780
	APR-SEP	2490	3570	4310	79%	5050	6130	5450
Powder R at Moorehead	APR-JUL	31	99	146	82%	193	260	177
	APR-SEP	47	118	166	85%	215	285	196
Powder R nr Locate	APR-JUL	26	108	164	82%	220	300	199
	APR-SEP	37	125	185	84%	245	335	220
Yellowstone R nr Sidney ²	APR-JUL	2090	3090	3770	78%	4450	5450	4830
	APR-SEP	2070	3340	4200	77%	5060	6330	5430

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