

- 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			36.5	48%			76
	APR-SEP			41	49%			84
Flint Ck nr Southern Cross	APR-JUL			8	57%			14
	APR-SEP			9	56%			16
Flint Ck bl Boulder Ck	APR-JUL			29	52%			56
	APR-SEP			39	55%			71
Lower Willow Ck Reservoir Inflow ²	APR-JUL			8	64%			12.5
	APR-SEP			9	67%			13.5
MF Rock Ck nr Philipsburg	APR-JUL			40	63%			64
	APR-SEP			45	63%			72
Rock Ck nr Clinton	APR-JUL			160	59%			270
	APR-SEP			188	62%			305
Clark Fork R ab Milltown	APR-JUL			450	74%			605
	APR-SEP			530	75%			705
Nevada Ck nr Helmville	APR-JUL			12	71%			17
	APR-SEP			13.3	70%			19
Blackfoot R nr Bonner	APR-JUL			675	84%			805
	APR-SEP			750	84%			892
Clark Fork R ab Missoula	APR-JUL			1125	80%			1415
	APR-SEP			1280	80%			1595

- 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			120	84%			143
	APR-SEP			130	83%			157
Bitterroot R Nr Darby	APR-JUL			405	88%			460
	APR-SEP			455	89%			514
Como Reservoir Inflow ²	APR-JUL			74	95%			78
	APR-SEP			79	96%			82
Bitterroot R nr Missoula	APR-JUL			1070	86%			1250
	APR-SEP			1175	86%			1364

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

APR-JUL	32	32%	99
APR-SEP	30	29%	102

- 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

SUN-TETON-MARIAS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gibson Reservoir Inflow	APR-JUL			260	57%			460
	APR-SEP			295	58%			505
Two Medicine R nr Browning ²	APR-JUL			150	73%			205
	APR-SEP			160	74%			215
Badger Ck nr Browning	APR-JUL			76	77%			99
	APR-SEP			90	78%			115
Swift Reservoir Inflow ²	APR-JUL			42	66%			64
	APR-SEP			53	69%			77
Dupuyer Ck nr Valier	APR-JUL			10.5	75%			14
	APR-SEP			11.8	75%			15.7
Cut Bank Ck nr Browning								
Marias R nr Shelby ²	APR-JUL			255	61%			415
	APR-SEP			270	61%			440
Teton R nr Dutton	APR-JUL			23	45%			51
	APR-SEP			28	47%			59

- 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

ST. MARY & MILK BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Lake Sherburne Inflow								
St. Mary R nr Babb ²	APR-JUL			310	81%			385
	APR-SEP			365	81%			450
St. Mary R at Intl Boundary ²	APR-JUL			325	75%			435
	APR-SEP			395	77%			515
Milk R at Western Crossing of Intl Bndry, AB	MAR-JUL			15	37%			41
	MAR-SEP			15.9	37%			43
Milk R at Eastern Crossing of Intl Bndry	MAR-JUL			29.3	35%			83
	MAR-SEP			31.2	35%			88

- 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

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			1380	67%			2050
	APR-SEP			1615	68%			2390
Dearborn R nr Craig	APR-JUL			85	70%			121
	APR-SEP			90	72%			125
Missouri R at Fort Benton ²	APR-JUL			2175	73%			2990
	APR-SEP			2643	74%			3570
Missouri R nr Virgelle ²	APR-JUL			2500	72%			3450
	APR-SEP			2990	74%			4060
Missouri R nr Landusky ²	APR-JUL			2520	68%			3690
	APR-SEP			3040	70%			4350
Missouri R bl Fort Peck Dam ²	APR-JUL			2700	72%			3740
	APR-SEP			3100	72%			4330
Lake Sakakawea Inflow ²	APR-JUL			6690	69%			9740
	APR-SEP			7616	68%			11200

- 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 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			480	81%			590
	APR-SEP			630	78%			805
Yellowstone R at Corwin Springs	APR-JUL			1255	76%			1650
	APR-SEP			1510	77%			1970
Yellowstone R at Livingston	APR-JUL			1440	76%			1900
	APR-SEP			1740	76%			2280
Shields R nr Livingston	APR-JUL			62	43%			145
	APR-SEP			71	44%			162
Boulder R at Big Timber	APR-JUL			200	70%			285
	APR-SEP			215	68%			315
Mystic Lake Inflow ²	APR-JUL			42.5	72%			59
	APR-SEP			55	72%			76
Stillwater R nr Absarokee ²	APR-JUL			330	67%			495
	APR-SEP			390	67%			585
Clarks Fk Yellowstone R nr Belfry	APR-JUL			365	68%			540
	APR-SEP			390	66%			595
Cooney Reservoir Inflow	APR-JUL			28	60%			47
	APR-SEP			36	63%			57

Yellowstone R at Billings	APR-JUL	2650	75%	3510
	APR-SEP	3220	78%	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			750	47%			1610
	APR-SEP			935	53%			1760
Little Bighorn R nr Hardin	APR-JUL			60	47%			128
	APR-SEP			70	49%			144
Tongue R nr Dayton ²	APR-JUL			49	51%			96
	APR-SEP			59	54%			109
Big Goose Ck nr Sheridan								
Little Goose Ck nr Bighorn								
Tongue River Reservoir Inflow ²	APR-JUL			110	50%			220
	APR-SEP			130	52%			250
Yellowstone R at Miles City ²	APR-JUL			3500	65%			5360
	APR-SEP			4095	66%			6210
Powder R at Moorehead	MAR-JUL			85	35%			240
	MAR-SEP			98	37%			265
	APR-JUL			55	27%			205
	APR-SEP			68	30%			230
Powder R nr Locate	MAR-JUL			95	31%			310
	MAR-SEP			110	33%			335
	APR-JUL			50	21%			235
	APR-SEP			65	25%			260
Yellowstone R nr Sidney ²	APR-JUL			3400	62%			5480
	APR-SEP			4015	64%			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