

Report Created:
9/30/2014 4:49:13 PM

Streamflow Forecast Summary: June 1, 2002
(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	MAY-JUL			130	118%			110
	MAY-SEP			145	117%			124
	JUN-JUL			75	121%			62
	JUN-SEP			90	118%			76
Libby Reservoir Inflow ¹	MAY-JUL			5290	103%			5121
	MAY-SEP			6290	103%			6117
	JUN-JUL			3810	115%			3310
	JUN-SEP			4895	114%			4310
Fisher R nr Libby	MAY-JUL			145	94%			155
	MAY-SEP			160	94%			170
	JUN-JUL			73	107%			68
	JUN-SEP			90	107%			84
Yaak R nr Troy	MAY-JUL			375	115%			325
	MAY-SEP			395	114%			345
	JUN-JUL			175	122%			144
	JUN-SEP			200	120%			166
Kootenai R at Leonia ^{1,2}	MAY-JUL			6160	100%			6167
	MAY-SEP			7260	100%			7250
	JUN-JUL			4334	114%			3790
	JUN-SEP			5505	113%			4880

- 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	MAY-JUL			1515	107%			1420
	MAY-SEP			1705	107%			1600
	JUN-JUL			910	110%			830
	JUN-SEP			1095	108%			1010
MF Flathead R nr West Glacier	MAY-JUL			1565	113%			1390
	MAY-SEP			1724	112%			1540
	JUN-JUL			1030	125%			825
	JUN-SEP			1195	123%			975
Sf Flathead R nr Hungry Horse								
Hungry Horse Reservoir Inflow ^{1,2}	MAY-JUL			1976	116%			1710
	MAY-SEP			2122	116%			1830
	JUN-JUL			1260	131%			960
	JUN-SEP			1400	128%			1090
Flathead R at Columbia Falls ²	MAY-JUL			5240	113%			4630
	MAY-SEP			5765	113%			5110
	JUN-JUL			3285	122%			2690
	JUN-SEP			3800	120%			3160

Ashley Ck nr Marion ²	MAY-JUL	2.75	69%	4
Swan R nr Bigfork	MAY-JUL	517	110%	470
	MAY-SEP	600	109%	550
	JUN-JUL	320	105%	305
	JUN-SEP	400	104%	385
Flathead Lake Inflow ^{1,2}	MAY-JUL	6075	114%	5330
	MAY-SEP	6680	114%	5850
	JUN-JUL	3765	121%	3110
	JUN-SEP	4340	120%	3620
Mill Ck ab Bassoo ck nr Niarada				
South Crow Ck nr Ronan				
Mission Ck nr St. Ignatius				
SF Jocko R nr Arlee				
NF Jocko R bl Tabor Feeder Canal				

- 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	MAY-JUL			40	63%			63
	MAY-SEP			45	64%			70
	JUN-JUL			26.2	82%			32
	JUN-SEP			33.2	85%			39
Flint Ck nr Southern Cross	MAY-JUL			8.7	73%			12
	MAY-SEP			10.4	74%			14
	JUN-JUL			5.85	73%			8
	JUN-SEP			7.7	77%			10
Flint Ck bl Boulder Ck	MAY-JUL			34	71%			48
	MAY-SEP			45	71%			63
	JUN-JUL			26	79%			33
	JUN-SEP			39	81%			48
Lower Willow Ck Reservoir Inflow ²	MAY-JUL			6.7	67%			10
	MAY-SEP			7.3	66%			11.1
	JUN-JUL			2.46	57%			4.3
	JUN-SEP			3.4	65%			5.2
MF Rock Ck nr Philipsburg	MAY-JUL			56.5	96%			59
	MAY-SEP			64	96%			67
	JUN-JUL			39	100%			39
	JUN-SEP			46	98%			47
Rock Ck nr Clinton	MAY-JUL			200	83%			240
	MAY-SEP			230	84%			275
	JUN-JUL			118	80%			148
	JUN-SEP			150	82%			183
Clark Fork R ab Milltown	MAY-JUL			430	84%			510

Nevada Ck nr Helmville	MAY-SEP	517	85%	610
	JUN-JUL	225	71%	315
	JUN-SEP	305	74%	410
Blackfoot R nr Bonner	MAY-JUL	7.4	53%	13.9
	MAY-SEP	8.7	56%	15.5
	JUN-JUL	4.85	69%	7
	JUN-SEP	6.2	73%	8.5
Clark Fork R ab Missoula	MAY-JUL	920	136%	675
	MAY-SEP	1028	134%	765
	JUN-JUL	440	116%	380
	JUN-SEP	540	115%	470
	MAY-JUL	1350	113%	1190
	MAY-SEP	1545	113%	1370
	JUN-JUL	665	96%	695
	JUN-SEP	845	96%	880

- 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	MAY-JUL			122	98%			125
	MAY-SEP			135	98%			138
	JUN-JUL			63	91%			69
	JUN-SEP			75	91%			82
Bitterroot R Nr Darby	MAY-JUL			395	98%			405
	MAY-SEP			445	97%			460
	JUN-JUL			235	98%			240
	JUN-SEP			308	104%			295
Como Reservoir Inflow ²	MAY-JUL			72	109%			66
	MAY-SEP			77	110%			70
	JUN-JUL			45	113%			40
	JUN-SEP			49	111%			44
Bitterroot R nr Missoula	MAY-JUL			1055	96%			1100
	MAY-SEP			1175	97%			1210
	JUN-JUL			690	100%			690
	JUN-SEP			830	104%			800

- 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	MAY-JUL			2405	105%			2290
	MAY-SEP			2720	105%			2580
	JUN-JUL			1355	98%			1380
	JUN-SEP			1675	100%			1680
Clark Fork R at St. Regis ¹								

Clark Fork R nr Plains ^{1,2}	MAY-JUL	3143	105%	2980
	MAY-SEP	3555	105%	3370
Thompson nr Thompson Falls	MAY-JUL	9527	111%	8620
	MAY-SEP	10635	111%	9600
	MAY-JUL	146	92%	159
	MAY-SEP	170	92%	185
Prospect Ck at Thompson Falls	JUN-JUL	88	107%	82
	JUN-SEP	115	106%	108
	MAY-JUL	107	123%	87
	MAY-SEP	117	122%	96
Clark Fork R at Whitehorse Rapids ^{1,2}	JUN-JUL	58	141%	41
	JUN-SEP	69	138%	50
	JUN-JUL	6265	105%	5984
	JUN-SEP	7510	105%	7166

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	MAY-JUL			67.5	96%			70
	MAY-SEP			75	96%			78
	JUN-JUL			32	82%			39
	JUN-SEP			39	83%			47
Clark Canyon Inflow ²	MAY-JUL			82	91%			90
	MAY-SEP			102	88%			116
	JUN-JUL			34	67%			51
	JUN-SEP			52	68%			76
Beaverhead R at Barretts ²	MAY-JUL			112	93%			120
	MAY-SEP			140	92%			153
	JUN-JUL			50	70%			71
	JUN-SEP			80	78%			103
Ruby R Reservoir Inflow ²	MAY-JUL			40	54%			74
	MAY-SEP			50	55%			91
	JUN-JUL			36	78%			46
	JUN-SEP			50	81%			62
Big Hole R at Wisdom	MAY-JUL			68	73%			93
	MAY-SEP			74	74%			100
	JUN-JUL			43	75%			57
	JUN-SEP			50	77%			65
Big Hole R nr Melrose	MAY-JUL			360	69%			520
	MAY-SEP			403	70%			575
	JUN-JUL			265	82%			325
	JUN-SEP			315	83%			380
Jefferson R nr Twin Bridges ²								
Boulder R nr Boulder	MAY-JUL			46	68%			68
	MAY-SEP			51	68%			75

Willow Ck Reservoir Inflow ²	JUN-JUL	30	83%	36
	JUN-SEP	36	84%	43
Jefferson R nr Three Forks ²	MAY-JUL	9	60%	15
	MAY-SEP	10.5	60%	17.5
	JUN-JUL	5.5	50%	11
	JUN-SEP	6.6	50%	13.1
	MAY-JUL	375	63%	600
	MAY-SEP	425	63%	680
	JUN-JUL	315	85%	370
	JUN-SEP	390	87%	450

- 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	MAY-JUL			290	88%			330
	MAY-SEP			390	89%			440
	JUN-JUL			155	78%			200
	JUN-SEP			250	81%			310
Ennis Reservoir Inflow ²	MAY-JUL			500	86%			580
	MAY-SEP			650	87%			750
	JUN-JUL			270	72%			375
	JUN-SEP			420	78%			540

- 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	MAY-JUL			335	83%			405
	MAY-SEP			400	83%			480
	JUN-JUL			195	68%			285
	JUN-SEP			245	68%			360
Hyalite Reservoir Inflow ²	MAY-JUL			14	70%			20
	MAY-SEP			16.2	70%			23
	JUN-JUL			10	67%			14.9
	JUN-SEP			12	67%			18
Gallatin R at Logan	MAY-JUL			325	76%			425
	MAY-SEP			390	77%			505
	JUN-JUL			185	66%			280
	JUN-SEP			240	67%			360

- 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	MAY-JUL			12.3	81%			15.1
	MAY-SEP			15	83%			18.1
	JUN-JUL			6.5	71%			9.1
	JUN-SEP			9	75%			12
Smith R bl Eagle Ck ²	MAY-JUL			130	87%			150
	MAY-SEP			165	89%			185
	JUN-JUL			70	78%			90
	JUN-SEP			90	72%			125
NF Musselshell R nr Delpine	MAY-JUL			3.28	89%			3.7
	MAY-SEP			4.04	81%			5
	JUN-JUL			1.7	85%			2
	JUN-SEP			2.4	80%			3
SF Musselshell R ab Martinsdale	MAY-JUL			30	65%			46
	MAY-SEP			33	66%			50
	JUN-JUL			14	56%			25
	JUN-SEP			17	59%			29
Musselshell R at Harlowton ²	MAY-JUL			43	66%			65
	MAY-SEP			45	65%			69
	JUN-JUL			20	54%			37
	JUN-SEP			22	54%			41
Musselshell R nr Roundup ²	MAY-JUL			42	53%			80
	MAY-SEP			42.5	52%			82
	JUN-JUL			13	28%			47
	JUN-SEP			14	28%			50

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	MAY-JUL			427	103%			415
	MAY-SEP			474	102%			465
	JUN-JUL			310	122%			255
	JUN-SEP			360	118%			305
Two Medicine R nr Browning ²	MAY-JUL			231	133%			174
	MAY-SEP			245	131%			187
	JUN-JUL			136	143%			95
	JUN-SEP			150	140%			107
Badger Ck nr Browning	MAY-JUL			108	123%			88
	MAY-SEP			126	121%			104
	JUN-JUL			70	132%			53
	JUN-SEP			87	126%			69
Swift Reservoir Inflow ²	MAY-JUL			66	116%			57
	MAY-SEP			79.3	115%			69
	JUN-JUL			42	120%			35
	JUN-SEP			55	117%			47
Dupuyer Ck nr Valier								

Missouri R at Fort Benton ²	MAY-JUL	85	80%	106
	MAY-SEP	90	82%	110
	JUN-JUL	53	84%	63
	JUN-SEP	58	87%	67
Missouri R nr Virgelle ²	JUN-JUL	1175	74%	1580
	JUN-SEP	1668	77%	2170
Missouri R nr Landusky ²	JUN-JUL	1250	69%	1820
	JUN-SEP	1756	72%	2430
Missouri R bl Fort Peck Dam ²	JUN-JUL	1375	71%	1950
	JUN-SEP	1932	74%	2610
Lake Sakakawea Inflow ²	JUN-JUL	1315	67%	1960
	JUN-SEP	1729	68%	2550
	JUN-JUL	3800	66%	5800
	JUN-SEP	4743	66%	7240

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	MAY-JUL			465	84%			555
	MAY-SEP			640	83%			770
	JUN-JUL			385	79%			485
	JUN-SEP			565	81%			695
Yellowstone R at Corwin Springs	MAY-JUL			1350	87%			1550
	MAY-SEP			1640	88%			1870
	JUN-JUL			905	79%			1140
	JUN-SEP			1170	80%			1460
Yellowstone R at Livingston	MAY-JUL			1465	83%			1770
	MAY-SEP			1792	83%			2150
	JUN-JUL			1045	80%			1310
	JUN-SEP			1360	80%			1700
Shields R nr Livingston	MAY-JUL			91	75%			121
	MAY-SEP			121	88%			138
	JUN-JUL			46	67%			69
	JUN-SEP			54	63%			86
Boulder R at Big Timber	MAY-JUL			270	98%			275
	MAY-SEP			300	100%			300
	JUN-JUL			198	97%			205
	JUN-SEP			212	92%			230
Mystic Lake Inflow ²	MAY-JUL			53	93%			57
	MAY-SEP			69	93%			74
	JUN-JUL			44	92%			48
	JUN-SEP			60	91%			66
Stillwater R nr Absarokee ²	MAY-JUL			380	81%			470
	MAY-SEP			455	81%			560
	JUN-JUL			270	74%			365

Clarks Fk Yellowstone R nr Belfry	JUN-SEP	340	74%	460
	MAY-JUL	390	76%	515
	MAY-SEP	425	75%	570
	JUN-JUL	295	76%	390
	JUN-SEP	330	74%	445
Cooney Reservoir Inflow				
	MAY-JUL	21.3	56%	38
	MAY-SEP	29.4	60%	49
	JUN-JUL	7.3	32%	23
	JUN-SEP	15.3	45%	34
Yellowstone R at Billings				
	MAY-SEP	3120	81%	3850
	JUN-JUL	1930	81%	2380
	JUN-SEP	2450	82%	2990

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								
	MAY-JUL			820	56%			1470
	MAY-SEP			875	54%			1630
	JUN-JUL			515	47%			1090
	JUN-SEP			555	45%			1240
Little Bighorn R nr Hardin								
	MAY-JUL			60	55%			110
	MAY-SEP			70	56%			126
	JUN-JUL			28	42%			67
	JUN-SEP			38	46%			83
Tongue R nr Dayton ²								
	MAY-JUL			55	61%			90
	MAY-SEP			67	65%			103
	JUN-JUL			29	50%			58
	JUN-SEP			40	56%			71
Big Goose Ck nr Sheridan								
Little Goose Ck nr Bighorn								
Tongue River Reservoir Inflow ²								
	MAY-JUL			135	68%			199
	MAY-SEP			158	70%			225
	JUN-JUL			54	43%			126
	JUN-SEP			75	49%			153
Yellowstone R at Miles City ²								
	MAY-JUL			3450	71%			4890
	MAY-SEP			4080	71%			5740
	JUN-JUL			2450	68%			3600
	JUN-SEP			2906	65%			4450
Powder R at Moorehead								
	MAY-JUL			97	54%			178
	MAY-SEP			115	58%			200
	JUN-JUL			42	40%			105
	JUN-SEP			57	45%			128
Powder R nr Locate								
	MAY-JUL			95	49%			195
	MAY-SEP			115	52%			220
	JUN-JUL			36	31%			116
	JUN-SEP			53	38%			141

Yellowstone R nr Sidney²

MAY-JUL	3650	74%	4950
MAY-SEP	4272	74%	5760
JUN-JUL	2485	68%	3650
JUN-SEP	2920	65%	4460

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