Safety is your responsibility! Research rivers carefully! Assess your skills properly! Maintain your equipment! Consider your team! Respect team limitations! Confirm team procedures! Have fun!

The Down River Report

Vital Statistics, Analysis and Hyperlinks for Select Western Rivers

For Optimal Hyperlink Performance, Download PDF Report to your Computer

THE RIVER NIGHT SKY
1/5-new Moon; 1/14-¼ Moon; 1/21-full Moon; 1/22am Venus+Jupiter; 1/27-¾ Moon; 2/4-new Moon; 2/12-¼ Moon; 2/18am Venus+Saturn; 2/19-full Moon; 2/26-¾ Moon

NRCS Forecast Table 2018 Runoff 1 June 2018 Data Updated Early Each Month January - June | NOAA River Basin Forecast Centers | NRCS Water and Climate Update Jan 10, 2019 (Updated mid-day Thursdays) | NRCS Western Reservoir Current Summary | NRCS SWE Map West US | NRCS WYTD Map West US | NRCS Snow-to-Flow(beta) | 6-10 Day Outlook | 8-14 Day Outlook | Three Month Outlooks | 4-WW Raster Hydrograph | ECMWF | Wild Fires Map | Hyper-matrix (River/Weather/Snowpack Hyperlinks) (see Key to Symbols Below) | 1

Underlined Rivers Hyperlink to USGS WaterWatch Detailed Statistical Analysis	12/27 Thu	12/28 Fri	12/29 Sat	12/30 Sun	12/31 Mon	1/1 Tue	1/2 Wed	1/3 Thu	1/4 Fri	1/5 Sat	1/6 Sun	1/7 Mon	1/8 Tue	1/9 Wed	1/10 Thu	1/11 08:25
Colorado; North to South 114 Snotel Sites@10188'	665 3.7 0 21 9.7	666 4.7 -3 18 6.1	670 10.4 -5 21 8.0	676 5.5 8 32 18.7	683 16.5 0 17 8.5	705 13.5 -6 20 6.4	718 10.2 -5 29 9.7	724 10.8 8 36 21.4	722 4.4 19 43 28.3	736 7.3 21 42 30.7	745 27.6 18 32 25.9	778 24.9 14 27 20.8	812 6.6 15 37 24.3	813 4.0 20 42 29.6	817 8.4 21 41 29.5	Swe" Precip" MinF MaxF AvgF
Green River,Upper 13@8682'	83 89 149	81 88 141	78 86 142	80 87 136	83 88 143	79 85 145	79 85 136	80 86 134	80 86 135	80 85 137	80 85 128	* * 129	83 86 119	84 87 137	82 86 135	82 86 130
Green,Lodore[Greendale](III+,IV)Rs	2077	2074	2070	2069	2068	2070	2070	2065	2055	2063	2069	2067	2066	2067	2034	3040
Green,Echo Park(Jensen)(III+,IV)	2488	2425	2415	2476	2487	2484	2336	2468	2537	2614	2577	2564	2485	2479	2489	2150
Yampa and White 20@9222'	111 102 *	108 100 *	106 100 *	106 101 *	107 101 *	105 98 *	102 96 *	102 97 *	100 97 *	100 96 *	99 96 *	103* 95* *	106 98 *	102 98 *	102 98 *	101 97 *
White,Rangely(II)																Ice
Yampa,Cross Mtn(IV,V)																Ice
Yampa,Deerlodge(III,III+)																Ice
N Platte 12@9766'	109 112 *	106 109 *	105 108 *	105 108 *	106 108 *	104 104 *	103 104 *	103 106 *	101 104 *	100 104 *	99 103 *	106* 99* *	104 105 *	102 105 *	101 105 *	99 104 *
N Platte,Northgate(II,IV-)																Ice
Colorado 31@10059'	112 110 75	109 108 72	108 107 73	107 107 68	107 107 77	106 106 76	104 103 68	102 105 64	102 104 66	101 103 73	101 102 80	100* 99* 83	105 103 82	103 103 78	102 102 75	102 102 78
Eagle,Avon(Dowd Chute)(III,IV,V)	63	54	58	62	67	59	49	57	60	62	68	61	64	59	61	66
Eagle,Gypsum(II,III+)	160	147	137	126	156	151	115	111	130	153	170	196	166	150	145	149
Roaring Fk,Cemetary(II,III)	356	340	409	347	426	397	330	268	410	512	521	464	414	391	391	395
Blue,Blue River CG(II+,III,IV-)Đ	57	57	57	57	58	57	58	57	57	57	56	57	57	57	57	57
Blue,Green Mtn(III)Đ	158	174	175	173	176	181	180	167	151	152	150	152	156	165	169	170
Colorado,Pumphouse(II+,III)	425	430	433	449	435	440	447	462	436	426	426	414	425	448	444	429
Colorado,Rodeo[Catamount](III)																Ssn
Colorado,Shoshone[Dotsero](III-,IV,V)																Ice
Colorado,Ruby-Horsethief(I,II+)	2262	2196	2043	2004	1998	1909	1818	1608	1692	1676	1855	2307	2389	2341	2288	2070
Colorado,Westwater(III+,IV+)	2262	2196	2043	2004	1998	1909	1818	1608	1692	1676	1855	2307	2389	2341	2288	2070
Gunnison 16@10353'	92 98 53	90 97 54	90 97 50	89 97 48	90 97 49	91 97 51	91 96 48	90 97 50	90 97 49	89 95 48	89 94 50	92* 88* 51	96 98 51	95 95 51	94 97 54	94 96 54
Taylor,Lower(Almont)(II,III+)																Ice
Gunnison[Gunnison](II,III)																Ice
Gunnison, Gorge(III,IV)Đ	336	322	322	321	322	322	321	321	321	321	322	322	322	326	328	321
Gunnison,Delta(II-,III-)	505	504	478	472	476	476	423	423	437	422	462	487	496	483	487	482
Arkansas 9@10722'	109 101 *	115 95 *	108 97 *	108 98 *	109 97 *	113 94 *	114 97 *	112 97 *	113 100 *	113 99 *	112 98 *	73* 69* *	110 97 *	105 95 *	108 95 *	109 96 *
Arkansas,Numbers(III,IV)																Ssn
Arkansas,Browns(III,IV-)																Ssn
Arkansas,Gorge(III,IV)																Ssn
S Platte 22@10226'	117 118 44	114 116 39	113 115 34	113 115 48	112 114 55	111 114 60	112 114 66	111 113 59	111 113 51	110 112 41	109 110 44	110* 108* 41	112 111 43	110 110 65	109 110 44	109 110 65
S Platte,Union Chutes(III)Đ	10	12	14	22	23	25	26	14	8	0	0	1	22	29	20	37
S Platte,Confluence Pk(II,III)Đ	4	4	4	5	4	4	4	4	4	4	4	4	9	5	5	9
NF S Platte,Bailey[1](IV,V) Đ																Ssn
Bear Ck[1](III,IV,V)	11	12	19	14	10	20	26	40	32	18	14	11	7	7	7	Ice
Clear Ck,Golden(III,IV,V)	33	26	21	28	30	29	27	31	34	37	39	37	34	34	34	35
Boulder Ck, Lower(II,III,IV,V)	13	10	6	12	12	10	13	14	14	14	14	14	12	6	6	6
Poudre,Rock Report(feet)[3]																
Poudre,Lower[1](II,III,IV,V)																wtr op
W San Juan Mtns 18@10405'	63 77 61	63 77 65	63 77 72	63 78 79	62 78 65	67 80 72	71 82 81	70 83 92	69 84 135	68 82 144	69 81 127	72* 81* 121	79 85 164	79 85 67	78 85 61	78 85 61
Piedra(III,IV,V)																Ice
Animas,Silverton(IV,V)																Ice
Animas,Durango(III,III+)	130	128	146	145	123	131	162	209	306	149	137	131	127	125	125	128
San Juan,Archuletta(II)Đ	330	370	367	367	369	369	367	363	363	364	368	367	364	332	293	293
San Juan,Bluff,UT(II,III)	484	490	498	513	529	602	619	6								Ice
Dolores,McPhee[1](II+,III,IV)Đ	28.1	28.4	28.4	28.4	28.3	28.3	28.3	28.3	28.4	28.2	28.4	28.4	28.4	28.4	28.4	28.4
Doloras,[Placerville][Stateline](IV)																Ice
Arizona 39 Snotel Sites@8104'	29.8 2.4 16 31 24.3	32.4 3.6 7 27 17.5	34.9 .5 7 28 16.1	35.5 1.6 10 40 24.5	37.9 9.4 16 26 22.1	50.8 3.0 5 26 15.4	52.1 2.9 8 30 18.2	51. 2.4 11 45 28.7	52.6 .4 24 55 36.4	52.7 4.6 27 49 36.9	57.4 16.0 25 35 31.0	77.8 1.2 22 43 31.6	77.6 .7 26 50 36.7	77.9 1.3 31 50 38.6	78. .7 30 45 36.9	Swe" Precip" MinF MaxF AvgF
Verde River Basin	42 101 80	47 100* 81	46 97* 79	47 93 82	49 96 83	66 99 86	66 98* 86	59 100 84	63 98* 84	60 95 86	70 96 85	* * 93	99 102 92	99* 97* 91	94 101 90	93 101 87
Verde,Camp Verde(I-V)	178	178	178	180	181	183	183	184	184	184	190	193	196	188	184	181
Verde,Abv Horseshoe Reservoir(I-III)	225	228	225	228	230	237	237	236	237	238	255	283	276	275	262	252
Salt-White Mtns	45 83 68	44 82 71	50 86 74	50 85 65	53 85 64	82 93 60	86 96 57	88 97 49	86 96 39	83 94 53	84 94 78	* * 94	98 96 309	95 93 199	99 96 164	98 96 203
Salt(III,IV)	134	135	141	132	119	118	113	114	110	130	157	339	552	377	324	417
California(SNOTEL only) 75 Snotel Sites@7075'	219 .2 15 28 20.8	218 .7 11 27 18.2	217 .7 17 42 29.4	217 .0 22 44 32.9	216 .1 11 24 16.6	215 .6 7 30 18.4	215 1.9 19 42 28.2	210 .4 26 49 34.4	211 .7 28 46 35.4	212 18.5 25 38 31.5	232 42.8 22 32 25.7	283 12.5 28 36 31.8	293 2.2 32 42 36.5	296 13.2 30 37 33.3	312 1.9 23 41 30.3	Swe" Precip" MinF MaxF AvgF
Lake Tahoe	90 79 *	85 77 *	83 76 *	84 74 *	81 73 *	77 70 *	75 69 *	73 68 *	71 67 *	69 65 *	75 68 *	* * *	91 77 *	89 77 *	92 79 *	91 78 *
Idaho 82 Snotel Sites@7111'	504 4.8 13 24 18.3	507 2.5 8 23 14.9	509 27.6 16 29 23.3	538 26.6 14 29 22.7	572 .7 1 20 10.5	576 1.4 0 20 10.1	574 4.0 10 28 18.9	575 8.3 18 32 24.2	584 2.8 22 37 28.2	587 10.3 23 36 29.4	595 39.8 23 31 27.2	644 18.4 11 27 20.5	665 16.0 11 35 24.0	677 12.7 28 38 32.8	689 7.8 23 37 30.9	Swe" Precip" MinF MaxF AvgF
Jarbidge/Bruneau(II+,IV+)	74	56	65	79	85	57	35	38	54	74	103	105	91	88	92	91
Snake,Hell's Canyon(III,IV)Rs	12585	13651	12757	11433	13526	12792	12108	12467	12428	11734	10375	12334	11202	10795	12172	16200
Clearwater 16@5429'	104 105 115	103 104 111	102 102 105	106 103 112	108 104 116	104 102 106	102 101 103	101 102 136	100 102 125	98 101 115	96 98 109	* * 109	98 98 104	96 101 95	95 97 107	94 96 112
Lochsa(II-IV+)	791	766	749	826												828
Selway,Paradise(IV-,V)(feet)																
Selway,Selway Falls(IV-,V)	1139	1112	1097	1163	1078	807	904	1231	1143	1106	1072	1069	966	927	1062	1060
Salmon 22@7418'	75 76 94	74 75 97	72 74 86	74 74 97	76 76 96	73 73 73	73 73 95	73 73 111	72 74 115	70 73 107	70 73 103	87* 89* 102	75 75 91	75 75 89	75 76 103	74 75 102
SF Salmon(III-V)	124	121	120	130	112	66	168	206	180	167	139	125	115	138	133	128
MF Salmon,Lodge(III,IV,IV+)	522	486	480	549	431	334	494	554	563	528	560	533	428	507	580	514
MF Salmon,Lodge(III,IV,IV+)(feet)	1.50	1.45	1.44	1.54	1.37	1.22	1.46	1.54	1.56	1.51	1.55	1.52	1.37	1.48	1.58	1.49
MF Salmon,Mouth(III,IV,IV+)	882	973	897	986	974	735	781	1120	1182	1118	1084	1114	964	844	1087	1150
Panther Ck, Cobalt(III)																Ice
M Salmon,Shoup(III,IV)																Ice
M Salmon,Corn Ck(III,IV)	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice	Ice
M Salmon,White Bird(III,IV)	4138	4037	4060	3986	4042	3767	3269	2918	3492	3661	3810	4008	4182	4055	3762	3910
Henrys Teton 8@7683'	78 84 *	76 82 *	74 81 *	75 81 *	81 85 *	78 82 *	77 81 *	77 81 *	77 81 *	76 80 *	76 80 *	66* 76* *	81 84 *	81 84 *	79 82 *	79 82 *
Montana 90 Snotel Sites	514 2.6 10 21 15.6	518 5.7 10 20 13.7	508 24.9 18 31 24.8	536 27.9 8 29 19.8	569 2.3 -7 11 2.2	582 10.6 -4 19 9.4	575 10.0 15 31 23.8	583 8.4 25 35 30.1	591 3.8 26 37 31.4	588 2.6 25 39 30.9	591 9.7 22 33 27.3	604 15.5 14 25 20.3	625 7.7 9 31 19.9	632 10.1 25 40 33.0	640 4.3 24 38 31.7	Swe" Precip" MinF MaxF AvgF
Flathead	83 93 74	82 92 71	82 92 72	87 94 77	89 95 62	88 94 57	88 94 66	87 93 78	88 94 89	87 93 88	86 92 80	81* 87* 83	88 93 77	88 91 77	89 93 72	88 92 75
MF Flathead(III+,IV+)	459	444	448	486	395	346	393	460	503	491	468	469	438	451	449	447
Smith	89 94 *	88 93 *	87 93 *	91 94 *	91 92 *	88 90 *	90 93 *	91 95 *	90 94 *	88 93 *	88 93 *	79* 95* *	91 91 *	90 91 *	90 92 *	88 91 *
Smith(II)																Ice
Nevada 54 Snotel Sites	184 9.7 13 23 18.5	191 .6 6 19 12.8	191 2.1 10 33 22.9	192 6.6 17 35 27.1	198 2.0 5 19 12.6	198 1.2 1 21 11.0	199 1.7 11 33 21.4	201 1.0 21 42 29.8	202 .9 27 43 33.9	202 10.3 24 38 31.1	209 21.9 23 30 26.2	229 10.5 24 33 29.1	238 1.0 27 42 34.7	239 2.4 30 42 35.3	241 2.9 21 38 29.8	Swe" Precip" MinF MaxF AvgF
Lake Tahoe	90 79 *	85 77 *	83 76 *	84 74 *	81 73 *	77 70 *	75 69 *	73 68 *	71 67 *	69 65 *	75 68 *	* * *	91 77 *	89 77 *	92 79 *	91 78 *
New Mexico 27 Snotel Sites	78.4 4.7 15 27 20.9	83.8 5.8 3 19 11.6	87.3 1.2 1 25 11.4	87.9 1.8 9 32 19.2	89.8 6.5 12 25 18.9	99.5 6.2 10 23 16.3	106 2.3 9 29 16.7	107 5.0 8 37 23.3	109 1.2 25 48 33.6	110 1.3 29 48 35.9	111 6.4 23 37 30.8	118 1.4 20 34 26.9	119 1.1 25 46 32.8	119 1.2 29 46 35.2	120 2.4 29 45 34.7	Swe" Precip" MinF MaxF AvgF
San Francisco,Glenwood(II,III)	24.5	24.9	24.0	23.2	22.9	23.4	24.6	23.9	23.9	24.1	29.2	41.3	34.4	31.6	32.9	33.6
San Francisco,Clifton(II+)	61.0	62.8	61.5	59.9	58.1	58.8	59.1	60.4	59.3	59.3	63.3	114.4	110.6	90.1	84.1	85.7
Gila, Datile Volcanic Field	60 72 101	71 75 113	82 80 109	81 80 104	84 82 100	87 82 100	97 84 103	101 84 104	96 85 106	94 85 103	94 84 105	* * 262	87 87 275	87 86 267	85 86 250	87 86 288
Gila,Wilderness Run(II,III)	72.0	78.2	76.9	71.6	66.8	68.4	73.6	76.4	74.3	70.9	122.7	199.1	219.9	215.5	209.1	240.0
Gila, Middle Box(II,III+)	114	121	119	118	115	113	113	115	115	113	122	265	288	288	285	304
Chama	57 88 14	58 87 15	60 88 16	60 86 18	59 85 18	67 90 19	70 92 19	69 91 20	68 91 24	66 89 20	65 88 21	* * 21	73 92 20	71 92 21	70 91 21	71 92 21
Chama, El Vado(I,II,III)Đ	24	24	24	24	24	24	24	24	25	24	24	24	24	24	24	24
Rio Grande 16@10765'	67 82 68	66 81 68	66 81 69	72 83 60	66 80 73	72 84 80	76 86 75	76 87 78	74 86 82	73 86 71	72 84 59	78* 80* 62	75 86 63	75 86 63	74 86 65	75 86 69
NF Rio Grande, Wagon Wheel(II)[1]	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	Ice
Rio Grande, Birds of Prey(II,III)	193	191	201	205	238	235	235	233	232	200	167	171	175	181	193	196
Rio Grande, Lw Box(III,IV)	325	323	318	239	327	373	311	292	316	279	291	298	298	304	318	330
Oregon 81 Snotel SItes	400 11.0 22 31 26.8	411 13.1 20 34 27.2	421 38.7 30 39 34.1	428 27.4 23 36 29.9	451 1.1 15 28 21.7	452 2.0 14 36 24.6	452 4.6 23 39 30.0	453 7.3 28 39 33.5	454 6.1 30 40 34.2	454 9.5 28 39 34.0	459 48.3 26 32 29.3	509 10.3 21 32 26.7	516 15.6 28 39 34.0	526 19.4 33 41 36.6	528 2.6 31 42 35.9	Swe" Precip" MinF MaxF AvgF
Deschutes, Lower(III,III+)	5229	5098	5066	5221	5334	5199	5027	4976	4956	4907	4892	4877	4873	4713	4633	4610
Grande Ronde(II,III,+)	1024	980	976	1067	1148	1003	953	976	991	987	986	1036	937	913	987	1020
John Day 13@5462'	92 85 74	95 86 71	98 87 65	98 85 64	101 86 66	97 83 75	96 83 57	94 82 58	91 81 70	89 81 81	88 80 75	96* 83* 72	87 81 68	89 82 60	88 80 61	86 79 81
John Day(II,III)	490	462	441	476	482	454	360	370	426	472	484	504	473	454	494	664
Owyhee 8@6518'	131 97 96	132 94 101	126 92 99	125 92 93	124 93 94	117 90 80	115 90 88	112 89 40	111 89 76	109 88 81	107 88 82	* * 85	107 89 81	109 84 79	102 87 83	101 86 84
Owyhee(II-V)	192	200	178	181	179	165	148	114	142	163	170	169	171	174	175	178
Rogue,Umpqua 12@5268'	77 74 93	74 73 63	71 72 54	69 71 49	68 70 47	65 67 48	64 68 47	62 67 43	60 67 40	59 66 37	60 67 49	70 69 87	66 69 75	64 69 100	64 69 191	62 68 133
Illinois(IV,V)	1331	1008	817	714	644	573	516	472	436	413	870	1183	1104	2606	4056	2590
Rogue(II+,III,IV)	4469	3761	3336	3120	3016	3041	2829	2655	2536	2508	3252	3881	4141	5845	7761	6250
Utah 128 Snotel Sites	612 22.5 5 19 12.3	638 .7 -2 18 7.2	638 5.6 -1 26 14.4	644 15.3 11 32 22.2	660 11.5 -4 17 7.5	673 .1 -7 17 3.0	673 6.0 -1 29 14.6	666 3.4 15 40 26.3	670 2.0 22 45 31.4	672 17.9 22 39 30.5	691 66.2 17 30 24.3	734 43.5 20 31 25.6	822 3.8 20 40 28.9	822 1.5 25 42 32.4	821 4.7 21 40 29.7	Swe" Rain" MinF MaxF AvgF
Dirty Devil	101 124 120	103 124 111	98 124 91	98 126 75	99 123 75	98 123 123	97 122 99	95 122 39	95 121 50	90 120 61	93 119 118	* * 153	97 120 127	98 120 134	95 119 105	98 119 106
Muddy Ck(I,II,III)																Ice
Dirty Devil(I,I+)	97.00	96.90	81.65	77.98	82.12	98.43	75.36	36.22	38.55	59.10	108.88	118.81	111.53	115.32	103.50	99.40
Escalante	77 102 36	79 104 44	73 102 164	73 102 148	75 100 43	75 101 92	77 101 96	71 99 94	76 99 27	72 98 20	73 98 20	* * 31	74 99 41	75 99 43	74 98 42	75 97 43
Escalante(II,III)	1.99	2.24	6.74	4.91	2.07	4.01	4.13	3.22	1.13	0.96	1.07	1.88	2.17	2.22	2.27	2.18
Green River,Lower 11@	81 93 117	83 94 116	79 91 118	84 94 115	85 93 113	82 90 112	85 90 103	88 93 99	86 92 96	85 91 96	85 91 108	* * 115	89 92 111	89 92 107	88 91 110	88 90 110
Green,Flaming Gorge A,B,C,D(I,II,III)Rs	2077	2074	2070	2069	2068	2070	2070	2065	2055	2063	2069	2067	2066	2067	2034	3040
Green,Lodore[Greendale](III+,IV)Rs	2077	2074	2070	2069	2068	2070	2070	2065	2055	2063	2069	2067	2066	2067	2034	3040
Yampa,Deerlodge(III,III+)																Ice
Green,Echo Park[Jensen](III+,IV)	2488	2425	2415	2476	2487	2484	2336	2468	2537	2614	2577	2564	2485	2479	2489	2150
White,Rangely[Blw Boise Ck](II)																Ice
Green,Deso Gray(II+,III)	3009	2989	3067	2768	2078	2177	1867	1565	1234							Ice
Green,Labyrinth(I)	3033	3042	2964	3056	3009	2438	2085	1942	2271	2881	3055	3028	3311	3317	3724	4020
Green,Stillwater(I)	3033	3042	2964	3056	3009	2438	2085	1942	2271	2881	3055	3028	3311	3317	3724	4020
Colorado,Westwater(III+,IV+)	2262	2196	2043	2004	1998	1909	1818	1608	1692	1676	1855	2307	2389	2341	2288	2070
Colorado,Potash(I)	2243	2297	2265	2027	2197	1996	2195	2106	1931	1687	1900	2057	2526	2677	2519	2340
Colorado,Cataract(IV,V)	5276	5340	5229	5083	5206	4434	4280	4048	4202	4568	4955	5086	5837	5994	6243	6360
Washington 115 Snotel Sites	718 5.0 23 31 26.7	720 44.0 24 34 29.0	761 87.2 30 39 35.1	793 25.2 23 32 28.4	814 2.1 19 30 22.7	812 3.2 22 34 27.5	818 9.8 27 37 31.9	826 76.9 33 39 36.1	848 24.0 31 37 34.1	854 8.3 31 38 34.2	859 36.1 26 34 29.3	899 13.4 21 30 25.5	913 33.2 22 32 27.6	947 41.5 30 37 33.8	973 19.5 32 39 35.3	Swe" Precip" MinF MaxF AvgF
Wenatchee Headwaters	96 99 *	94 98 *	95 98 *	99 103 *	98 102 *	95 101 *	94 100 *	93 100 *	98 103 *	96 103 *	95 101 *	* * *	93 99 *	94 100 *	95 100 *	95 100 *
Wyoming 89 Snotel Sites	508 .5 1 16 8.1	509 1.0 -4 14 4.5	509 8.8 1 24 15.0	518 22.6 9 26 18.9	545 2.1 -11 11 1.3	547 1.7 -12 18 2.4	549 6.7 3 30 16.8	554 5.5 16 36 25.6	559 2.5 20 39 28.7	561 5.0 21 38 29.5	565 19.3 16 31 24.9	575 14.6 10 24 17.6	603 7.7 8 32 19.0	610 5.7 21 40 29.5	613 7.9 22 37 28.4	Swe" Precip" MinF MaxF AvgF
Bighorn(I+)	3030	3030	3027	3029	3029	3027	3029	3026	3028	3031	3030	3030	3028	3029	2989	2900
Snake	83 87 108	81 86 103	79 84 98	80 84 110	85 87 115	81 84 99	80 84 117	81 84 125	80 83 133	80 83 144	80 82 141	76* 77* 135	83 85 126	84 85 136	81 84 146	82 84 143
Snake,Alpine Canyon(III)	1650	1645	1626	1777	1754	1595	1766	1878	2009	2109	2070	1983	1851	2084	2192	2180
Green River,Upper 13@8682'	83 89 *	81 88 *	78 86 *	80 87 *	83 88 *	79 85 *	79 85 *	80 86 *	80 86 *	80 85 *	80 85 *	* * *	83 86 *	84 87 *	82 86 *	82 86 *
Texas																
Rio Grande,Castolon	181	186	188	180	169	172	169	168	168	157	146	151	152	150	148	149
Rio Grande,Rio Grande Village(I-III)	209	207	206	208	212	203	202	204	201	203	199	186	183	179	177	181
Grande Canyon Rs	Oct 2017 7,300 13,000	Nov 2017 8,030 13,700	Dec 2017 7,300 14,000	Jan 2018 9,100 16,850	Feb 2018 10,500 13,900	Mar 2018 7,200 16,000	Apr 2018 8,650 15,000	May 2018 7,900 14,250 Bug Flow!	Jun 2018 8,850 16,450 Bug Flow!	Jul 2018 10,180 18,180 Bug Flow!	Aug 2018 10,500 18,500 Bug Flow!	Sep 2018 7,600 13,645	Oct 2018 7,070 12,700(M-F) 11,900(SS)	Nov 2018 6,500 9,000 HFE 40,000	Dec 2018 8,415 15,165	Jan 2019 8,500 16,240
Grand Canyon Rs									Bug Flow Experiment Document	Bug Flow Experiment Document	Bug Flow Experiment Document	Bug Flow Experiment Document				
1	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Row	Underlined states=>WW Map Underlined basins=>NRCS Map Underlined rivers=>Dreamgraphs	Boney!	Recommended	Reconsider!	Current Historic Median	Current Percent of Median	Yesterday's Two week change	Yesterday's two week up or down %	Yesterday's Two Week Trend units/day	NRCS Snow-to-Flow(beta) / Forecast / Precip / MELT / 4-WW / ECMWF / Aviation / NOAA / NCAR / NOAA / NICC / NRL / NOHRSC / SWE / WYTD / Stormsur / Permits / Permits / Permits / CRBFC / Drought / NOAA / NSIDC (Hyper-matrix links)
3	Colorado; North to South 114 Snotel Sites@10188'	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		152.2	18.6%	11.84 1.75	S-to-F Snotel SWE CoCoR CAIC NRCS COWSC CAIC WYTD CO DW 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch
4	Green River,Upper				Spring Creek Divide 9000' 9.8" 1.7" 88%				-0.03 | -0.27	0 Wunder ☼
5	Green,Lodore[Greendale](III+,IV)Rs				2010	151%	-43	-2%	-1.4	0 1 3 4 5 ☼ A G B @ C X R W ☺ P D D ® O Đ J ®
6	Green,Echo Park(Jensen)(III+,IV)				1960	110%	1	0%	6.3	1 3 4 5 ☼ A G B @ C X W ☺ P D D ® O Đ J ®
7	Yampa and White				Rabbit Ears 9400' 10.6" 1.1" 103%				-0.57 | -0.38	0 Wunder ☼ Q
8	White,Rangely(II)				391					0 2 3 4 5 ☼ A G B @ C 1 O O ☺ J
9	Yampa,Cross Mtn(IV,V)				264					0 1 3 4 5 ☼ A G B @ C ♓ O J
10	Yampa,Deerlodge(III,,III+)				408					2 3 4 5 ☼ A G B @ 1 X R W ☺ P D D ® O J
11	N Platte				Tower 10500' 22.1" 2.7" 106%				-0.43 | -0.55	0 Wunder ☼ N N N
12	N Platte,Northgate(II,IV-)				80					0 1 2 4 5 ☼ A G B @ C ♓ O
13	Colorado,Headwaters				Berthoud Summit 11300' 7.8" .2" 89%				-0.69 | -0.61	0 Wunder ☼ Q
14	Eagle,Avon(Redcliff)(III,IV,V)				68	98%	-2	-4%	0.2	2 3 4 5 ☼ A G B @ C 1 O
15	Eagle,Gypsum(II,III+)				180	83%	-15	-9%	1.4	0 1 3 4 5 ☼ A G B @ C O
16	Roaring Fk,Cemetary(II,III)				478	83%	35	10%	5.8	0 1 3 4 5 ☼ A G B @ C ♓
17	Blue,Blue River CG(II+,III,IV-)Đ				72	79%	0	0%	0.0	0 1 3 4 5 ☼ A G B @ C ♓ Đ O
18	Blue,Green Mtn(III)Đ				269	63%	11	7%	-1.1	0 1 3 4 5 ☼ A G B @ C V ♓ Đ
19	Colorado,Pumphouse(II+,III)				502	85%	19	4%	0.0	1 3 4 5 ☼ A G B @ C ♓ ♓ D D O O O O J
20	Colorado,Rodeo[Catamount](III)				---					5 ♓ J
21	Colorado,Shoshone[Dotsero](III-,IV,V)				869					0 1 3 4 5 ☼ A G B @ C J
22	Colorado,Ruby-Horsethief(I,II+)				3110	67%	25	1%	10.6	0 1 3 4 5 ☼ A G B @ C R D X P D ® ☺ J
23	Colorado,Westwater(III+,IV+)				3110	67%	25	1%	10.6	0 1 3 4 5 ☼ A G B @ C R D X P D ® ☺ J
24	Gunnison				Schofield Pass 10700' 14.5" 2.7" 98%				0.23 | -0.23	0 Wunder ☼ Q N
25	Taylor,Lower(II,III+)				115					0 1 3 4 5 ☼ A G B @ C ♓
26	Gunnison[Gunnison](II,III)				216					0 1 3 4 5 ☼ A G B @ C J
27	Gunnison, Gorge[Tunnel](III,IV)Đ				472	68%	-9	-3%	-0.1	1 3 4 5 ☼ A G B @ C O O Đ J
28	Gunnison,Delta(II-,III-)				1190	41%	-18	-4%	-0.9	0 1 3 4 5 ☼ A G B @ C O O @ J
29	Arkansas				Fremont Pass 11400' 9.5" 1" 120%				-0.60 | -0.54	0 Wunder ☼ Q N N N N N
30	Arkansas,Numbers(III,IV)				---					0 4 5 ☼ A G B @ C D O O J
31	Arkansas,Browns(III,IV-)				221					0 4 5 ☼ A G B @ C D O O O J
32	Arkansas,Parkdale(Gorge)(III,IV)				383					0 1 2 4 5 ☼ A G B @ C D ♓ O O J
33	S Platte				Hoosier Pass 11400' 8.9" 1" 120%				-0.46 | -0.60	0 Wunder ☼ Q
34	S Platte,Union Chutes(III)Đ				43	85%	10	106%	0.0	4 5 ☼ A G B @ C ♓ ♓ ♓ ♓ ♓ ♓
35	S Platte,Confluence Pk(II,III)Đ				12	74%	1	22%	0.1	4 5 ☼ A G B @ C ♓ ♓ ♓ ♓ ♓ ♓
36	NF S Platte,Bailey[1](IV,V)Đ									☼ A Q B @ C
37	Bear Ck[1](III,IV,V)						-4	-34%	-0.4	0 1 2 ☼ A Q B C
38	Clear Ck,Golden(III,IV,V)				41	85%	1	2%	0.7	0 1 4 5 ☼ A G N @ N B C
39	Boulder Ck, Lower(II,III,IV,V)				36	17%	-7	-51%	-0.1	0 4 5 ☼ A G B C
40	Poudre,Rock Report(feet)[3]						0			☼ A B @ C
41	Poudre,Lower[1](II,III,IV,V)									0 1 2 ☼ A Q B @ C
42	W San Juan Mtns				Molas Lake 10500' 6.6" 2.3" 74%				1.13 | 0.57	0 Wunder ☼ Q
43	Piedra(III,IV,V)				75					0 3 ☼ A G B @ C
44	Animas,Silverton(IV,V)				67					4 5 ☼ A G B @ C M
45	Animas,Durango(III,III+)				193	66%	-5	-4%	0.1	0 2 3 4 5 ☼ A G B @ C
46	San Juan,Archuletta(II)Đ				528	55%	-37	-11%	-1.8	1 2 5 ☼ A G C ♓ Đ Đ
47	San Juan,Bluff,UT(II,III)				835				-28.2	0 1 3 4 5 ☼ A G B @ C R O ☺ P D D ® ®
48	Dolores,McPhee[1](II+,III,IV)Đ						0	1%	0.0	0 1 3 ☼ A Q B @ C R D D ® ® Đ Đ
49	Doloras,[Placerville][Stateline](IV)				150					0 1 3 4 5 ☼ G B @ C D D ® ®
50	Arizona 39 Snotel Sites@8104'	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		48.2	61.8%	3.77 1.55	S-to-F Snotel SWE CoCoR NRCS AZWSC WYTD 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch Z
51	Verde River Basin				Mormon Mtn Summit 8500' 3.4" 1.5" *%				3.84 | -0.05	0 Wunder ☼
52	Verde,Camp Verde(I-V)				221	82%	5	3%	1.0	1 3 4 5 ☼ A G B @ C V K O T
53	Verde,Abv Horseshoe Reservoir(I-III)				274	92%	37	16%	3.9	0 1 3 4 5 ☼ A G B @ C V K O T
54	Salt-White Mtns				Hannagan Meadows 9020' 5.9" 3" 107%				4.31 | 1.03	0 Wunder ☼
55	Salt(III,IV)				205	203%	190	143%	20.7	0 1 3 4 5 ☼ A G B @ C X R ☺ P D ® ® T
56	California(SNOTEL only) 75 Snotel Sites@7075'	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		93.5	30.0%	6.43 0.89	S-to-F Snotel SWE CoCoR NRCS CAWSC WYTD Ventura 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch Z
57	Lake Tahoe				Echo Peak 7653' 16.1" 5.5" 99%				-0.11 | -0.22	Wunder ☼
58	Idaho 82 Snotel Sites@7111'	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		185.7	26.9%	12.93 1.03	S-to-F Snotel SWE CoCoR NRCS IDWSC IPOWE WYTD 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch Z
59	Jarbidge/Bruneau(II+,IV+)				122	74%	18	25%	2.4	0 1 2 4 5 ☼ A G B @ R V O T Z M
60	Snake,Hell's Canyon(III,IV)Rs				---		-413	-3%	-126.6	I 4 5 ☼ A G B @ X R ☺ P D ® O Đ
61	Clearwater				Lolo Pass 5240' 13.2" 3.3" 94%				-0.73 | -0.46	0 Wunder ☼
62	Lochsa(II-IV+)				765	108%			8.9	0 1 2 4 5 ☼ A G B @
63	Selway,Paradise(IV-,V)(feet)									☼ A B @ X R ☺ V P D ® T
64	Selway,Selway Falls(IV-,V)				916	116%	-77	-7%	-6.7	0 1 2 4 5 ☼ A G B @ X V P D ® T
65	Salmon				Deadwood Summit 6860' 12.9" 4" 62%				0.08 | 0.13	0 Wunder ☼
66	SF Salmon(III-V)				152	84%	8	7%	1.5	0 1 4 5 ☼ A G B @ V T Z M
67	MF Salmon,Lodge(III,IV,IV+)				500	103%	58	11%	3.8	0 1 2 4 5 ☼ A G B @ X R W ☺ D P D L ® ® T Z Z
68	MF Salmon,Lodge(III,IV,IV+)(feet)				500		0.08	5%	0.0	1 2 4 5 ☼ A G B @ X R W ☺ D P D L ® ® T Z Z
69	MF Salmon,Mouth(III,IV,IV+)				926	124%	205	23%	10.8	4 5 ☼ A G B @ X R W ☺ D P D L ® ® T Z Z
70	Panther Ck, Cobalt(III)				27					4 5 ☼ A G @ Z
71	M Salmon,Shoup(III,IV)				1600					0 1 2 4 5 ☼ A G B @ ® ® O Z
72	M Salmon,Corn Ck(III,IV)				2526					☼ A B @ X R W ☺ D P ® ® O Z
73	M Salmon,White Bird(III,IV)				4030	97%	-376	-9%	-9.0	0 1 2 4 5 ☼ A G B @ X R D ® O O
74	Henrys Teton				Grand Targhee 9260' 21" 21" 102%				-0.02 | -0.15	0 Wunder ☼
75	Montana 90 Snotel Sites	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		126.4	19.7%	8.99 1.19	S-to-F Snotel SWE CoCoR NRCS MTWSC WYTD 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch
76	Flathead				Noisy Basin 6040' 17.3" 4.7" 88%				0.29 | -0.13	0 Wunder ☼
77	MF Flathead(III+,IV+)				600	75%	-10	-2%	1.7	0 1 2 4 5 ☼ A G B @ O M
78	Smith				Spur Park 8100' 10" 2.2" 96%				-0.13 | -0.13	0 Wunder ☼
79	Smith(II)				100					0 1 4 5 ☼ A G B @ R W K ☺ P O ®
80	Nevada 54 Snotel Sites	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		57.3	23.8%	3.98 1.34	S-to-F Snotel SWE CoCoR NVWSC WYTD Water Watch
81	Lake Tahoe				Echo Peak 7653' 16.1" 5.5" 99%				-0.11 | -0.22	Wunder ☼
82	New Mexico 27 Snotel Sites	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		41.6	34.7%	3.10 1.67	S-to-F Snotel SWE CoCoR NRCS NMWSC Dist 5 Dist 6 WYTD 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch
83	San Francisco,Glenwood(II,III)				34	99%	8	34%	0.9	0 1 3 4 5 ☼ A G C K
84	San Francisco,Clifton(II+)				78	110%		38%	2.9	1 3 4 5 ☼ A G C K
85	Gila				Silver Creek Divide 9000' 5.6" 2.4" 130%				2.22 | 0.99	0 Wunder ☼
86	Gila,Wilderness Run(II,III)				75	320%	137	191%	11.4	0 1 3 4 5 ☼ A G @ C K T M
87	Gila, Middle Box(II,III+)				119	255%	171	151%	13.1	0 1 3 4 5 ☼ A G @ C R
88	Chama				Chamita 8400' 3.9" 2.2" 80%				1.08 | 0.33	0 Wunder ☼
89	Chama, El Vado(I,II,III)Đ				116	21%	0	0%	0.0	0 1 4 5 ☼ A G B @ D ☺ P ® ®
90	Rio Grande				Wolf Creek Summit 11000' 12.9" 3.9" 79%				0.67 | 0.30	0 Wunder ☼
91	NF Rio Grande, Wagon Wheel(II)[1]						0	0%	0.0	☼ A Q @ C
92	Rio Grande, Birds of Prey(II,III)				292	67%	0	0%	-2.2	0 1 4 5 ☼ A G @
93	Rio Grande, Lw Box(III,IV)				470	70%	-7	-2%	-1.2	0 1 2 4 5 ☼ A G B @
94	Oregon 81 Snotel SItes	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		127.6	24.2%	8.63 0.55	S-to-F Snotel SWE CoCoR NRCS ORWSC WYTD 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch Z
95	Deschutes, Lower(III,III+)				5990	77%	-596	-11%	-38.6	0 1 2 4 5 ☼ A G B @ R ® Z
96	Grande Ronde(II,III,+)				1190	86%	-37	-4%	-5.2	0 1 2 4 5 ☼ A G B @ R Z
97	John Day				Arbuckle Mtn 5770' 7.5" 2" 79%				-0.41 | -0.36	Wunder ☼
98	John Day(II,III)				824	81%	4	1%	1.3	0 1 2 4 5 ☼ A G @ R Z
99	Owyhee				South Mtn. 6500' 6.6" 1" 81%				-2.10 | -0.63	0 Wunder ☼
100	Owyhee(II-V)				212	84%	-17	-9%	-1.4	0 1 4 5 ☼ A G B @ T T Z
101	Rogue,Umpqua				Summit Lake 5610' 13.7" 2.8" 69%				-0.88 | -0.38	0 Wunder ☼
102	Illinois(IV,V)				1570	165%	2726	205%	115.2	0 1 2 4 5 ☼ A G B @ R T Z M
103	Rogue(II+,III,IV)				6140	102%	3291	74%	149.8	0 1 4 5 ☼ A G B @ O ® X ☺ R P ® D D T T Z
104	Utah 128 Snotel Sites	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		208.5	25.4%	14.05 1.72	S-to-F Snotel SWE CoCoR NRCS UTWSC Site Basin UoU WYTD 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch
105	Dirty Devil				Dills Camp 9228' 5" .7" 96%				-0.53 | -0.45	0 Wunder ☼
106	Muddy Ck(I,II,III)				8					0 3 ☼ A B C
107	Dirty Devil(I,I+)				94	106%	6	7%	1.5	3 4 5 ☼ A G B K
108	Escalante				Clayton Springs 10049' 4.2" .8" 74%				-0.22 | -0.34	Wunder ☼
109	Escalante(II,III)				5	43%	0	14%	-0.2	3 4 5 ☼ A G B K O T
110	Green River,Lower				Indian Creek 9425' 8.6" 2" 75%				0.46 | -0.19	0 Wunder ☼
111	Green,Flaming Gorge A,B,C,D(I,II,III)Rs				2010	151%	-43	-2%	-1.4	0 1 3 4 5 ☼ A G B @ O O D J Đ
112	Green,Lodore(III+,IV)Rs				2010	151%	-43	-2%	-1.4	0 1 3 4 5 ☼ A G B @ X R W ® P D J ® O Đ ☺
113	Yampa,Deerlodge(III,,III+)				408					1 2 3 4 5 ☼ A G B @ X R W P D D ® O J ☺
114	Green,Echo Park[Jensen](III+,IV)				1960	110%	1	0%	6.3	1 3 4 5 ☼ A G B @ X W ® P D J ® O Đ ☺
115	White,Rangely[Blw Boise Ck](II)				391					0 1 2 3 4 5 ☼ A G B @ C O O ☺ J
116	Green,Deso Gray(II+,III)				1930				-239.3	0 1 3 4 5 ☼ A G B @ X R W P D D D ® O J ☺
117	Green,Labyrinth(I)				3670	110%	691	23%	33.3	1 4 5 ☼ A G B @ X R D P D D D ® J
118	Green,Stillwater(I)				3670	110%	691	23%	33.3	1 4 5 ☼ A G B @ X R D P D D D ® J
119	Colorado,Westwater(III+,IV+)				3110	67%	25	1%	10.6	0 1 3 4 5 ☼ A G B @ C R D X P D ® ☺ J
120	Colorado,Potash(I)				3300	71%	276	12%	13.8	4 5 ☼ A G B @ X D D D ® J
121	Colorado,Cataract(IV,V)				6970		967	18%	47.1	0 ☼ A B @ X R D P D ® D ® J ☺
122	Washington 115 Snotel Sites	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		255.4	26.2%	16.36 0.27	S-to-F Snotel SWE CoCoR NRCS WAWSC WYTD 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch Z
123	Wenatchee				Stevens Pass 3950' 18.8" 4" 96%				-0.10 | 0.07	0 Wunder ☼
124	Wyoming 89 Snotel Sites	AWA	Dream	USGS	NRCS Forecast 2018 Runoff		105.0	17.1%	7.63 1.59	S-to-F Snotel SWE CoCoR NRCS WYWSC WYTD 514(NSIDC) 524(NSIDC) 548(NSIDC) Water Watch
125	Bighorn(I+)				2620	111%	-41	-1%	-1.0	1 4 5 ☼ G ♓ Đ
126	Snake				Lewis Lake Divide 7850' 10.6" 2.2" 69%				-0.14 | -0.33	0 Wunder ☼
127	Snake,Alpine Canyon(III)				1520	143%	542	33%	37.8	0 1 4 5 ☼ A G B @ O
128	Green River,Upper				Spring Creek Divide 9000' 9.8" 1.7" 88%				-0.03 | -0.27	0 Wunder ☼
129	Texas	AWA		USGS						CoCoR TXWSC Water Watch
130	Rio Grande,Castolon				258	58%	-32	-18%		M M ☼ A G C N ®
131	Rio Grande,Rio Grande Village(I-III)				302	60%	-32	-15%	-2.3	1 M M 4 5 ☼ A G B C ® ®
132										
133										
134	Grand Canyon, Lee's Ferry Rs				Bureau of Reclamation Glen Canyon Dam Operations Report December 12th, 2018(Updated mid-month)					0 1 4 5 ☼ A B @ R W SWE D D D D D C Đ X
135	Grand Canyon,Abv Diamond Ck Rs				Sep 2018 7,600 13,645	Oct 2018 7,070 12,700(M-F) 11,900(SS)	Nov 2018 6,500 9,000 HFE 40,000	Dec 2018 8,415 15,165	Jan 2019 8,500 16,240	G G G ☼ ☼ ☼ G G RRFW G GCPBA P ® ®
136	21	22	23	24	25	26	27	28	29	31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54

Start Time: 8:25:42 AM End Time: 9:02:34 AM Elapsed time: 36.86666 Hyperlinks: 1933 | 137

American Whitewater	American Canoe Association	High Country River Rafters	River Management Society	GCPBA Grand Canyon Private Boaters Association	Grand Canyon River Guides	Mountain Buzz	Pikes Peak Whitewater Club	Poudre Paddlers Canoe and Kayak Club	Colorado Whitewater Association	Adobe Whitewater Club of New Mexico	Utah Whitewater Club	Water Trail Nebraska	Rocky Mountain Sea Kayak Club	Rocky Mountain Canoe Club	138
Steve Rekuc, Rivermaps.co Interactive map of Whitewater River of West US	Paddling.com	GCPBA links	Tom Martin RRFW	Grand Canyon River Outfitters Association	PaddleOn Southwest Boating Guide	Rivergeek	Marek Uliasz Mountain Wayfarer	Colorado Plateau River Guides	Bill Herring The Ozark Whitewater Page	Mark Zen's Hypothermia Fundamentals	Idaho Whitewater Association	Front Range Paddle Sports Meetup	Canoe Colorado	Colorado Fishing Atlas	139
Colorado River District	CO-Northern Water	Denver Water	Colorado Park and Wildlife	National Wildfire Coordinatiog Group	Recreation.gov	Western Regional Climate Center	PRISM Climate Group	Colorado Division of Water Resources	New Mexico Real-Time Water Measurement	Arizona Water Science Center	Sierra Rescue		Willamette Kayak and Canoe Club	Fish Explorer	140
Chris Shackleton Dreamflows	Brad Goettemoeller AllAboutRivers	Dwain Whitis Rivermaps.net	Marc McCord Southwest Paddler	RiverBrain	Jerry Nolan's Local River Guide	Canoe & Kayak	Will Hansen Rafting the West	Will Hansen Whitewater Campsites	Bill Tuthill California(and other) Creeks	Bob Foot Online	Marty Bell Poudre Rock Report	Jeffrey Creamer Videos aka Buzzer MT4Runner	Friends of the Yampa	California Forum Boof.com	141
Bill Tuthill California(and other) Creeks	Gary Valle' S. California Creek'in	Jason Rackley Oregon(other)	Rocky Contos Rivers of Mexico	Chris Bidwell Riverlogs	Riley Adams Vimeo	Todd Martin's Desert Hiking Guide			Darin Mcquoid Rivers of the World(and more!)	Darin Mcquoid Whitewater Photography Tutorial	Wet State Daniel Brasuell	Whitewater Guidebook Zach Collier	SouthwestGuideBook.com River_gear.html	Georgia Water Trails	142
Community Collaborative Rain, Hail & Snow Network (CoCoRaHS)	Stream Tracker Project	Colorado Avalanche Information Center	Southeast Arizona Wildflowers		Spaceweather.com auroras and more	StarDate.org Nightsky	Astronomy.com Observing the Sky	Eastern Colorado Wildflowers	Colorado Birding Society Rare Bird Alerts	USGS National Geologic Map Database	Trout Unlimited	Mayan Whitewater.com	Idaho Canoe Kayak Sup Club	Michael Lanza The Big Outside	143

Data Hyperlinks and acknowledgements: 0, NRCS SWE-Q(Snow-to-Flow) graph; 1, NOAA hydrograph and river forecast; 2, NOAA long-range river forecast; 3, NOAA Basin Forecast Center river forecast; 4, USGS Waterwatch Raster Hydrograph; 5, USGS Waterwatch Average Daily Flow for life of gage; ☼, Gaging location weather from weather.gov; A, American Whitewater Association; G, United States Geological Survery; Q, State Division of Water Resources(Colorado Division of Water Resources); N, NOAA River Forecast Hydrograph; @, All About Rivers, Brad Goettemoeller; R, Rafting the West-Will Hansen; W, White Water Campsites-Will Hansen; X, GPX waypoints downloadable into handheld GPS, mostly from Rivermaps(contact me if you need assistence); C, SouthWest Paddler-Marc W. McCord; T, CA Creeks-Bill Tuthill; P, Poudre Rock Report; I, Idaho Power; F, US Forest Service; O, Official website where information, permits and maps may be obtained; M, Miscellaneous map, guide or trip report of significance; D, Guidebook or map available from Downriver Equipment; V, Various other sources of information; K, Canoe and Kayak Magazine; B, RiverBrain website; ®, Regulations; J, Local River Guide, Jerry Nolan; ♓, Fishing Info; Đ, Dam Release Info; Z, Whitewater Guidebook, Zach Collier.

The Down River Report summarizes the two most recent weeks vital statistics of weather, snowpack and river flow data of interest to Western River runners(California and Washington only minimally represented). The data is color coded to optimize rapid assimilation of the information. Historical comparisons of snow pack and flows are included. With little imagination, the data permits near future empirical predictions of flows across the Western US. Runnability determinations are based on in-depth research and personal experience. Enhancements to the report are nearly daily with many features planned for future releases. Feedback is welcomed and will be properly acknowledged.

Increase in flow	>0%	>10%	>20%	>30%	from previous day or long term average
Decrease in flow	>0%	>10%	>20%	>30%	

"Runnability" is based on extensive research of published/online sources and personal experience. "Runnability" has not yet been completely automated and determinations are still evolving. Feedback is welcomed. The color codes in three columns attempts to express as broad a range of status as possible. Black indicates too low. Green indicates runnable. Red indicates to high for average fun; or flows considered unsafe except for true experts or the suicidal. If you wonder if you are a true expert or want to be, this is not the right time to roll the dice; or, it is the right time if you are suicidal. Combinations of colors express fringes of runnable. A special status of "Too Low-Runnable" with an "S" means "scratchy or self-support or sucks" depending on who your are. While many people have considered it a desparate act to have fun(probably), but I or others have had delightful times on almost all of the rivers denoted "S" at the current low flow.

The Hyper-matrix is a matrix of hyper links designed to provide instant access to the best available on-line information concerning the river on which a link appears.

Snotel data from high-country and headwaters is summarized by state for the last two weeks. Green colors are Snotel Snow Water Equilivent, blue colors are Snotel precipitation and red colors are Snotel temperature values that contribute to the understanding and forecasting of rising or dropping down distance flows. The top line left value is total inches of water in the snow pack for all Snotel sites in the state. The right top line value is total inches of rain falling on all snotel sites on a date. The middle line left value is the average minimum temperature and the right value is the average maximum temperature for all snotel sites in the state. The bottom line value is the average average temperature for all Snotel sites in the state. Accessment of these values permit determination of thermal(if snow water content is present) versus rainfall runoff events(monsoonal generally).

Higher resolution Snotel data for specific river basin areas are percentages relative to average for the snow water equivalent, precipitation and river flow in the current water year. The snow water equivalent(SWE, pronounced "swee") is the number of inches of water in the snow pack. The water year begins on October 1st. * indicates that greater than 50% of the snotel sites in the basin are not reporting, essentially insufficient data to properly determine the SWE.

All daily river flow data except the current date are averages reported in CFS unless otherwise noted(feet; Selway,Paradise,MF Salmon,Lodge,Poudre Rock Report). The current data is the instantaneous flow at the time indicated. River flow was sourced from the USGS unless noted [1]Colorado Division of Water Resources, [2]US Forest Service, [3]Poudre Rock Report. Colorado rivers are catagorized north to south(west to east) to help, as possible, assist the analysis of weather systems that either add rain or temperature to runoff events.

Suffix symbol Đ indicates that a dam upstream strongly controls the flow. Suffix symbol Rs indicates an upstream dam with a ramping release scheduled according to hydroelectric demands.

The Hyper-matrix is a matrix of hyper links designed to provide instant access to best available on-line information concerning the river on which a link appears.

Grateful for feedback, support and commiseration from: Chris Shackleton at Dreamflows.com; Beau Uriona NRCS SLC-Utah Data Collection Office; Rashawn Tama NRCS Portland-Water and Climate Center; Susan Novak Behery BOR Durango-Western Colorado Area Office; Paula Galloway CSU/NPS; Carter Freericks DRE; Cori Peter DRE; Zach Svoboda DRE; Peg Young; Alisa Mast USGS; Andrew Halperin; Logan Gill and many others including Mountain Buzz contributors AndyH, KayakingKate and F.A.A.C. Slim, WaterDude.

© Ron Radzieta ronradzieta@mindspring.com staff@downriverequip.com