Table 1. Meteorological Stations in and Around the MF Basina

Station Name	Elevation (m)	Cell Aspect (deg)
SNOTEL		
Badger Pass	2103	332
Emery Creek	1326	336
Flattop Mtn	1921	56
Many Glacier	1494	158
Noisy Basin	1841	354
Pike Creek	1808	173
Dupuyer Creek	1753	345
Mt. Lockhart	1951	173
Waldron 1707	214	
NCDC		
West Glacier	961	268
Hungry Horse	963	164
Creston 896	177	
Whitefish	945	331
St. Mary	1390	22
East Glacier	1465	230

aSNOTEL sites are used for temperature and SWE; NCDC sites are used for temperature. Cells are the 500 x 500 m cells used for modeling.

Table 2. SAM Results and NOHRSC Average Basin SWE on Date of Maximum SWEa

Year	Total Basin SWE (x 109 m3)	Total SWE above 1760 m (%)	SWE Lapse 1200-2100 m (x 10-4 m/m)	Average Basin SWE (m)	
				SAM	NOHRSC
2000	1.7616	69.6	6.68	0.5077	-
2001	1.5934	69.0	6.17	0.4593	-
2002	2.0825	70.9	8.00	0.6002	-
2003	1.7138	73.0	7.74	0.4940	-
2004	2.1772	67.9	8.18	0.6275	0.6452
2005	1.9946	77.0	10.41	0.5751	0.5080
2006	1.7396	69.9	7.25	0.5014	0.7493
2007	1.8204	74.0	8.19	0.5247	0.5153
2008	2.4409	69.4	8.30	0.7035	0.8280

aSAM, Snow Accumulation Model; NOHRSC, National Operational Hydrologic Remote Sensing Center; SWE, snow water equivalent.

Table 3. Simulation Results of Characteristic Noise Scenarios for the Low-Snow and High-Snow Seasonsa

	Modern Mean	Future sigmab	Days Spreadc	Earlierd Mean	Overlape (%) sigmab	Spreadc		
Individual Percentile PDFs								
Low Snow								
25%	104.7	5.80	23.2	78.7	8.92	35.7	26	7.5
50%	118.8	6.45	25.8	97.5	6.79	27.2	21.3	10.8
75%	131.8	6.12	24.5	112.2	6.38	25.5	19.6	11.7
Mean		6.12	24.5		7.36	29.5	22.3	10.0
High Snow								
25%	104.0	8.91	35.6	83.0	9.84	39.4	21	26.2
50%	125.1	9.89	39.6	103.4	8.95	35.8	21.7	24.9
75%	145.6	8.23	32.9	126.5	7.45	29.8	19.1	22.3
Mean		9.01	36.0		8.75	35.0	20.6	24.5
Overall Mean			7.57	30.3		8.06	32.3	21.5
Combined PDFsf								
Low Snow		0	6.11	24.4	-21.29	7.43	29.7	21.3	11.5
High Snow		0	9.00	36.0	-21.66	8.77	35.1	21.7	22.3
Mean		7.56	30.2		8.10	32.4	21.5	

aNumbers in italic are the mean of the above column, while bold values are the overall mean.
bOne standard deviation of 100 simulation runs.
cThe total number of days within +/-2 sigma of the mean.
dThe difference in the mean day of the modern and future pdf.
e"Overlap" is a measure of the number of days the future probability distribution functions occupy in common with the modern probability distribution functions (pdfs).
fCombined pdf results displays the variability and overlap of all three percentiles in one pdf with the mean of the modern-day scenario centered at zero.