Appendix A: Maximum Likely Inundation Maps

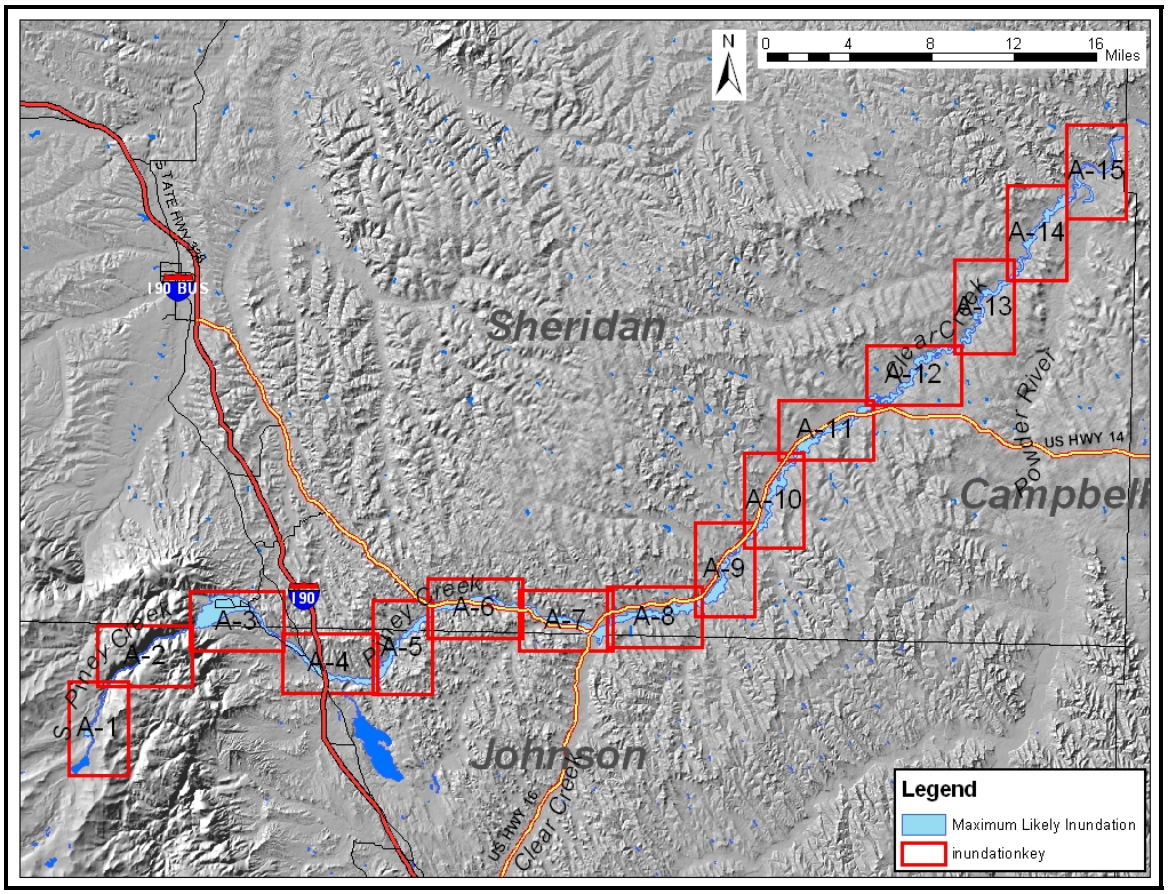
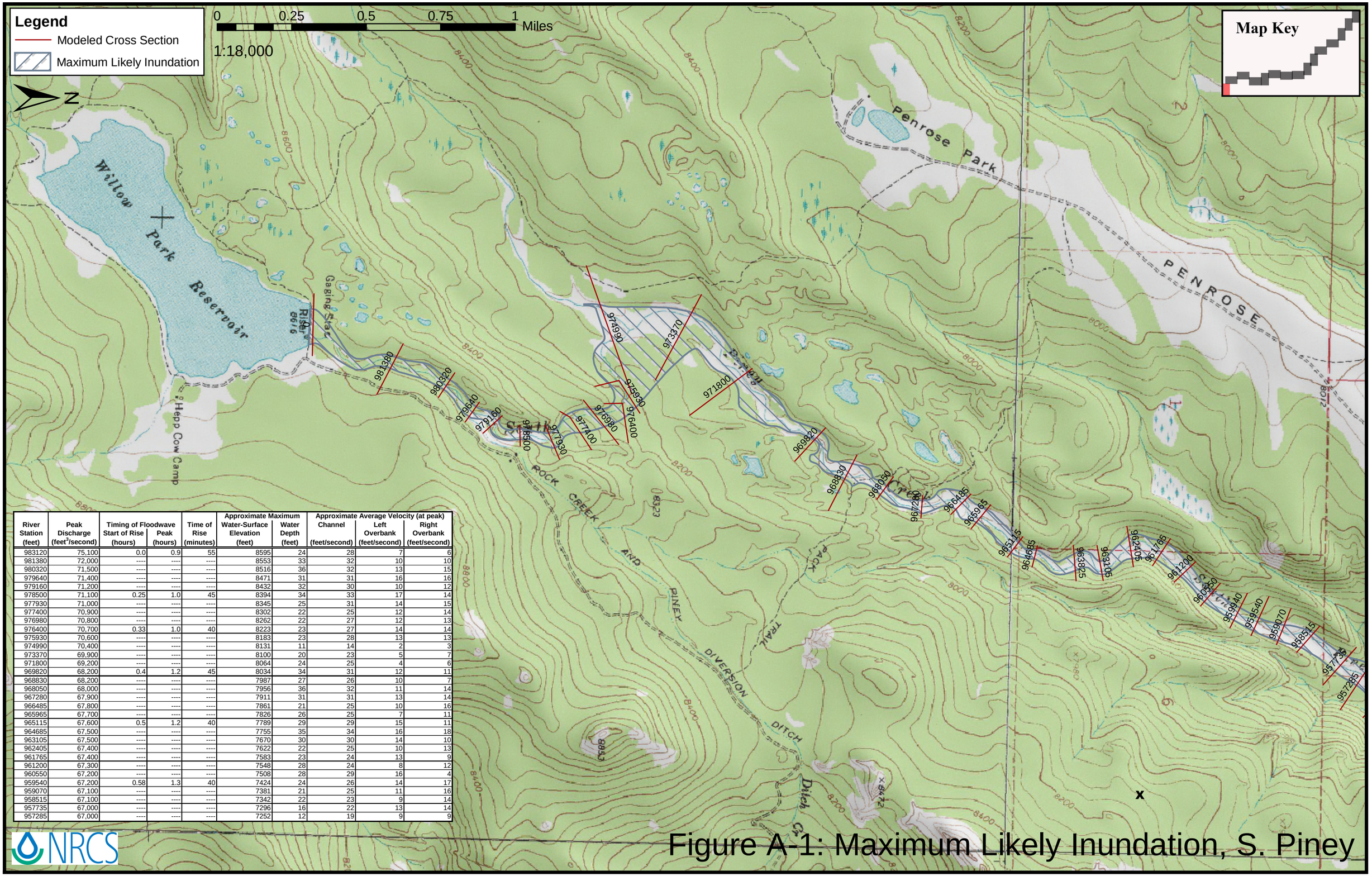


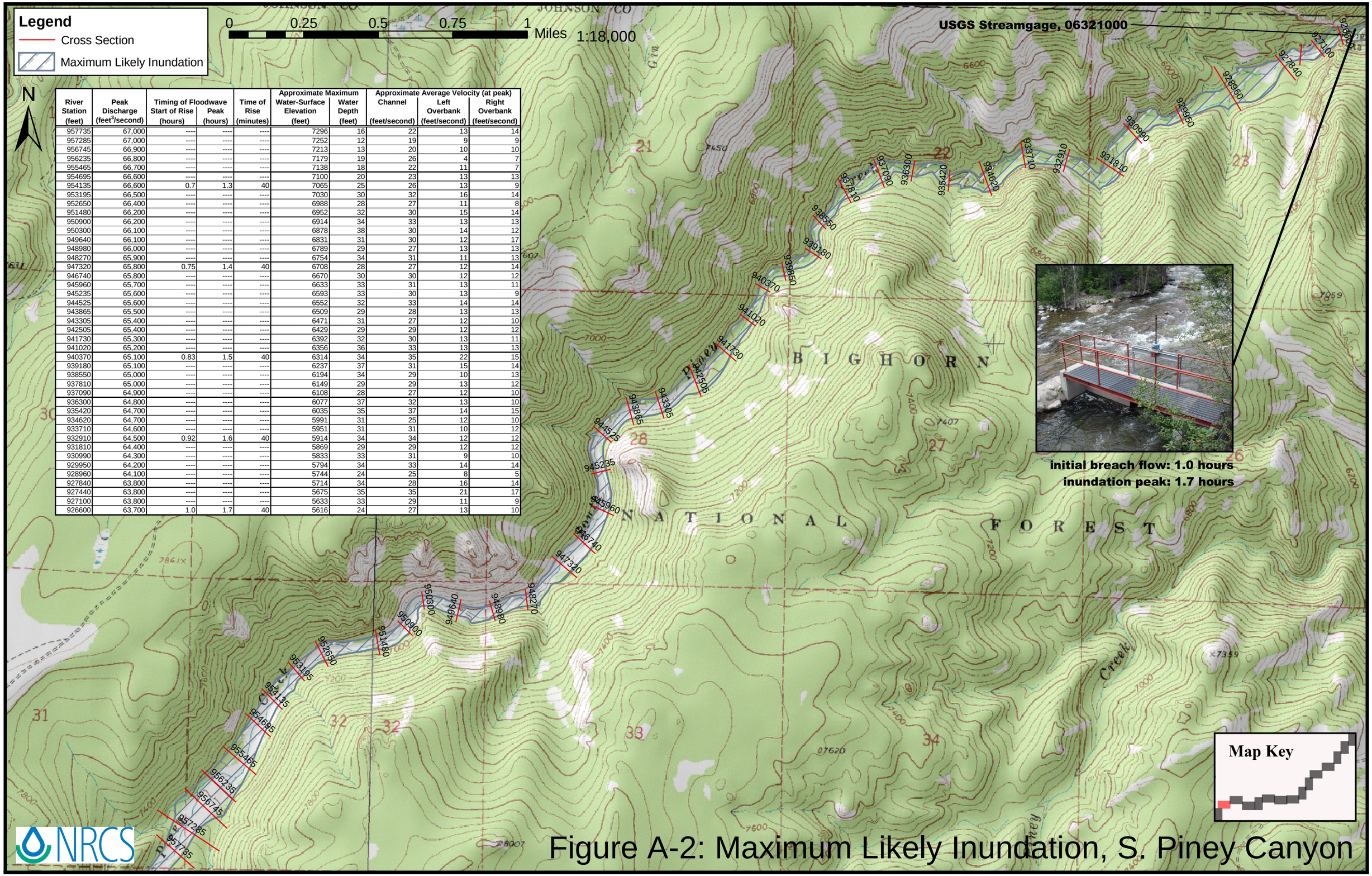
FIGURE KEY

Figure A-1: Maximum Likely Inundation, S. Piney.
A-2: Maximum Likely Inundation, S. Piney Canyon
A-3: Maximum Likely Inundation, Story
A-4: Maximum Likely Inundation, I-90
A-5: Maximum Likely Inundation, Piney Creek
A-6: Maximum Likely Inundation, Piney Creek
A-7: Maximum Likely Inundation, Lower Piney Creek
A-8: Maximum Likely Inundation, Clear Creek
A-9: Maximum Likely Inundation, Clear Creek
A-10: Maximum Likely Inundation, Clearmont
A-11: Maximum Likely Inundation, Clear Creek
A-12: Maximum Likely Inundation, Clear Creek
A-13: Maximum Likely Inundation, Lower Clear Creek
A-14: Maximum Likely Inundation, Lower Clear Creek
A-15: Maximum Likely Inundation, Powder River



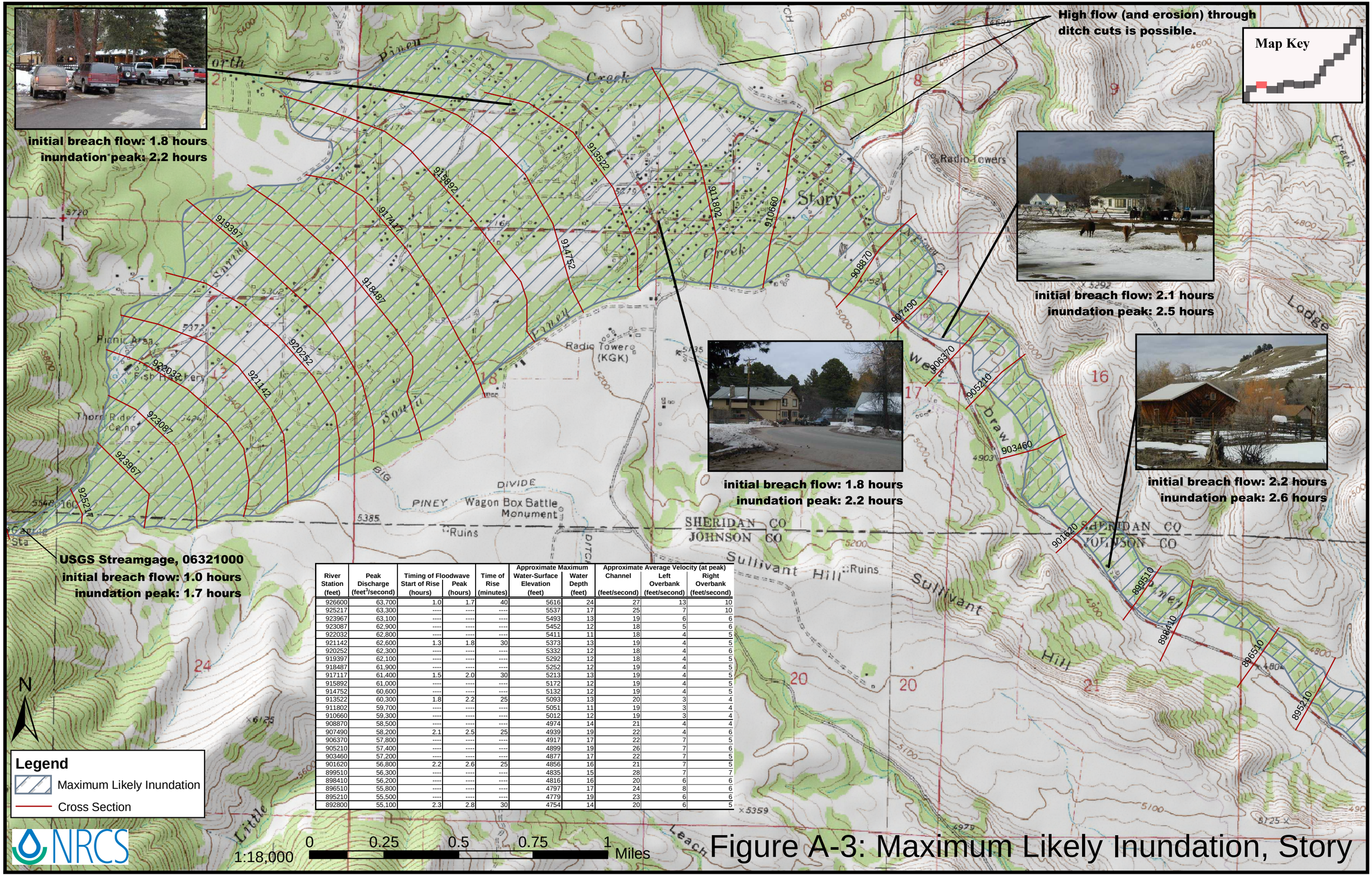
River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave: Start of Rise (hours)	Timing of Floodwave: Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak): Channel (feet/second)	Approximate Average Velocity (at peak): Left Overbank (feet/second)	Approximate Average Velocity (at peak): Right Overbank (feet/second)
983120	75,100	0.0	0.9	55	8595	24	28	7	6
981380	72,000	----	----	----	8553	33	32	10	10
980320	71,500	----	----	----	8516	36	32	13	15
979640	71,400	----	----	----	8471	31	31	16	16
979160	71,200	----	----	----	8432	32	30	10	12
978500	71,100	0.25	1.0	45	8394	34	33	17	14
977930	71,000	----	----	----	8345	25	31	14	15
977400	70,900	----	----	----	8302	22	25	12	14
976980	70,800	----	----	----	8262	22	27	12	13
976400	70,700	0.33	1.0	40	8223	23	27	14	14
975930	70,600	----	----	----	8183	23	28	13	13
974990	70,400	----	----	----	8131	11	14	2	3
973370	69,900	----	----	----	8100	20	23	5	7
971800	69,200	----	----	----	8064	24	25	4	6
969820	68,200	0.4	1.2	45	8034	34	31	12	11
968830	68,200	----	----	----	7987	27	26	10	7
968050	68,000	----	----	----	7956	36	32	11	14
967280	67,900	----	----	----	7911	31	31	13	14
966485	67,800	----	----	----	7861	21	25	10	16
965965	67,700	----	----	----	7826	26	25	7	11
965115	67,600	0.5	1.2	40	7789	29	29	15	11
964685	67,500	----	----	----	7755	35	34	16	18
963105	67,500	----	----	----	7670	30	30	14	10
962405	67,400	----	----	----	7622	22	25	10	13
961765	67,400	----	----	----	7583	23	24	13	9
961200	67,300	----	----	----	7548	28	24	8	12
960550	67,200	----	----	----	7508	28	29	16	4
959540	67,200	0.58	1.3	40	7424	24	26	14	17
959070	67,100	----	----	----	7381	21	25	11	16
958515	67,100	----	----	----	7342	22	23	9	14
957735	67,000	----	----	----	7296	16	22	13	14
957285	67,000	----	----	----	7252	12	19	9	9

Figure A-1: Maximum Likely Inundation, S. Piney



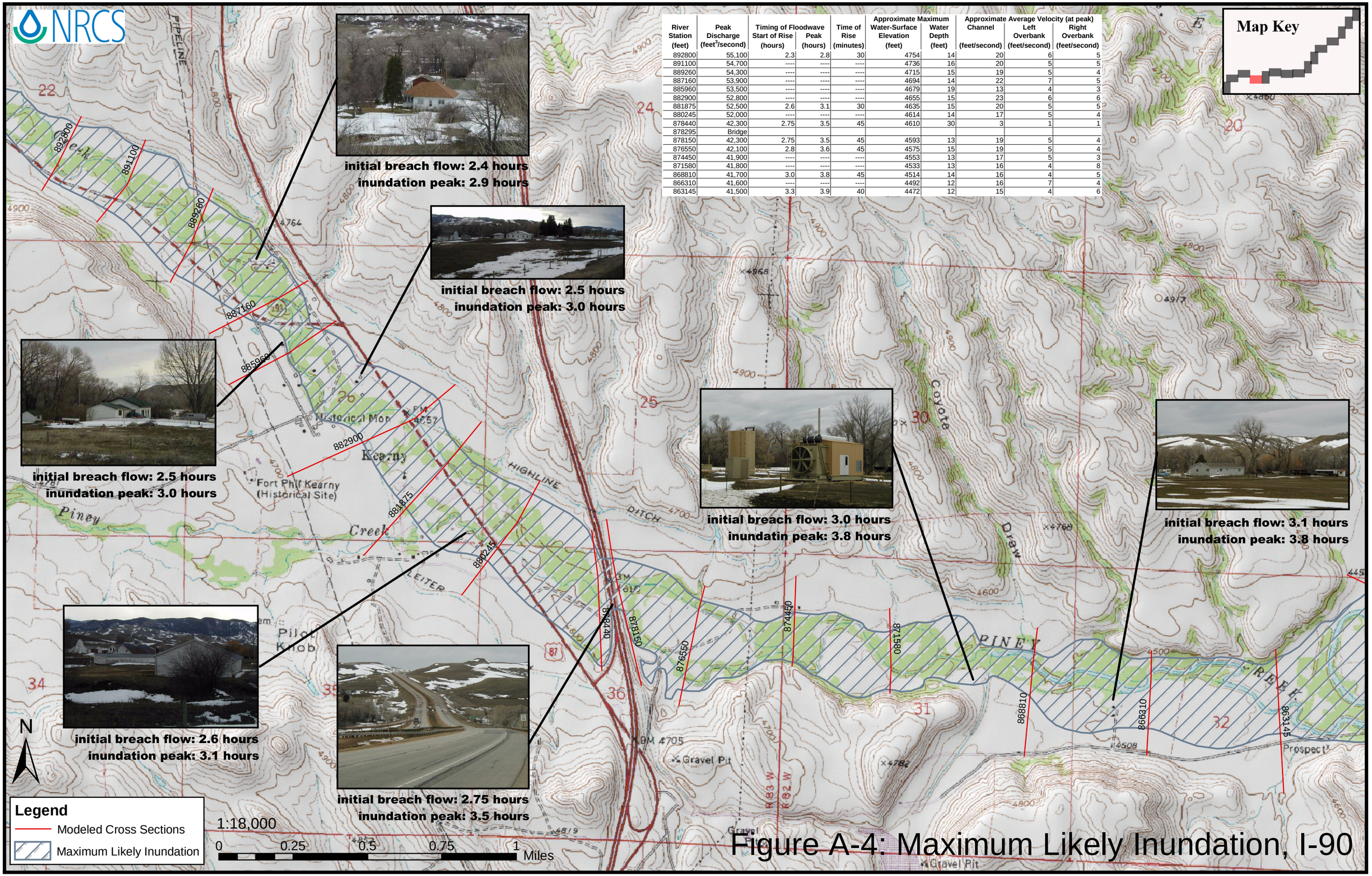
River Station (feet)	Peak Discharge (feet³/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
957735	67,000	----	----	----	7296	16	22	13	14
957285	67,000	----	----	----	7252	12	19	9	9
956745	66,900	----	----	----	7213	13	20	10	10
956235	66,800	----	----	----	7179	19	26	4	7
955465	66,700	----	----	----	7138	18	22	11	7
954695	66,600	----	----	----	7100	20	23	13	13
954135	66,600	0.7	1.3	40	7065	25	26	13	9
953195	66,500	----	----	----	7030	30	32	16	14
952650	66,400	----	----	----	6988	28	27	11	8
951480	66,200	----	----	----	6952	32	30	15	14
950900	66,200	----	----	----	6914	34	33	13	13
950300	66,100	----	----	----	6878	38	30	14	12
949640	66,100	----	----	----	6831	31	30	12	17
948980	66,000	----	----	----	6789	29	27	13	13
948270	65,900	----	----	----	6754	34	31	11	13
947320	65,800	0.75	1.4	40	6708	28	27	12	14
946740	65,800	----	----	----	6670	30	30	12	12
945960	65,700	----	----	----	6633	33	31	13	11
945235	65,600	----	----	----	6593	33	30	13	9
944525	65,600	----	----	----	6552	32	33	14	14
943865	65,500	----	----	----	6509	29	28	13	13
943305	65,400	----	----	----	6471	31	27	12	10
942505	65,400	----	----	----	6429	29	29	12	12
941730	65,300	----	----	----	6392	32	30	13	11
941020	65,200	----	----	----	6356	36	33	13	13
940370	65,100	0.83	1.5	40	6314	34	35	22	15
939180	65,100	----	----	----	6237	37	31	15	14
938550	65,000	----	----	----	6194	34	29	10	13
937810	65,000	----	----	----	6149	29	29	13	12
937090	64,900	----	----	----	6108	28	27	12	10
936300	64,800	----	----	----	6077	37	32	13	10
935420	64,700	----	----	----	6035	35	37	14	15
934620	64,700	----	----	----	5991	31	25	12	10
933710	64,600	----	----	----	5951	31	31	10	12
932910	64,500	0.92	1.6	40	5914	34	34	12	12
931810	64,400	----	----	----	5869	29	29	12	12
930990	64,300	----	----	----	5833	33	31	9	10
929950	64,200	----	----	----	5794	34	33	14	14
928960	64,100	----	----	----	5744	24	25	8	5
927840	63,800	----	----	----	5714	34	28	16	14
927440	63,800	----	----	----	5675	35	35	21	17
927100	63,800	----	----	----	5633	33	29	11	9
926600	63,700	1.0	1.7	40	5616	24	27	13	10

Figure A-2: Maximum Likely Inundation, S. Piney Canyon



River Station (feet)	Peak Discharge (feet³/second)	Timing of Floodwave Start of Rise (hours)	Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Left Overbank (feet/second)	Right Overbank (feet/second)
926600	63,700	1.0	1.7	40	5616	24	27	13	10
925217	63,300	----	----	----	5537	17	25	7	10
923967	63,100	----	----	----	5493	13	19	6	6
923087	62,900	----	----	----	5452	12	18	5	6
922032	62,800	----	----	----	5411	11	18	4	5
921142	62,600	1.3	1.8	30	5373	13	19	4	5
920252	62,300	----	----	----	5332	12	18	4	6
919397	62,100	----	----	----	5292	12	18	4	5
918487	61,900	----	----	----	5252	12	19	4	5
917117	61,400	1.5	2.0	30	5213	13	19	4	5
915892	61,000	----	----	----	5172	12	19	4	5
914752	60,600	----	----	----	5132	12	19	4	5
913522	60,300	1.8	2.2	25	5093	13	20	3	4
911802	59,700	----	----	----	5051	11	19	3	4
910660	59,300	----	----	----	5012	12	19	3	4
908870	58,500	----	----	----	4974	14	21	4	4
907490	58,200	2.1	2.5	25	4939	19	22	4	6
906370	57,800	----	----	----	4917	17	22	7	5
905210	57,400	----	----	----	4899	19	26	7	6
903460	57,200	----	----	----	4877	17	22	7	5
901620	56,800	2.2	2.6	25	4856	16	21	7	5
899510	56,300	----	----	----	4835	15	28	7	7
898410	56,200	----	----	----	4816	16	20	6	6
896510	55,800	----	----	----	4797	17	24	8	6
895210	55,500	----	----	----	4779	19	23	6	6
892800	55,100	2.3	2.8	30	4754	14	20	6	5

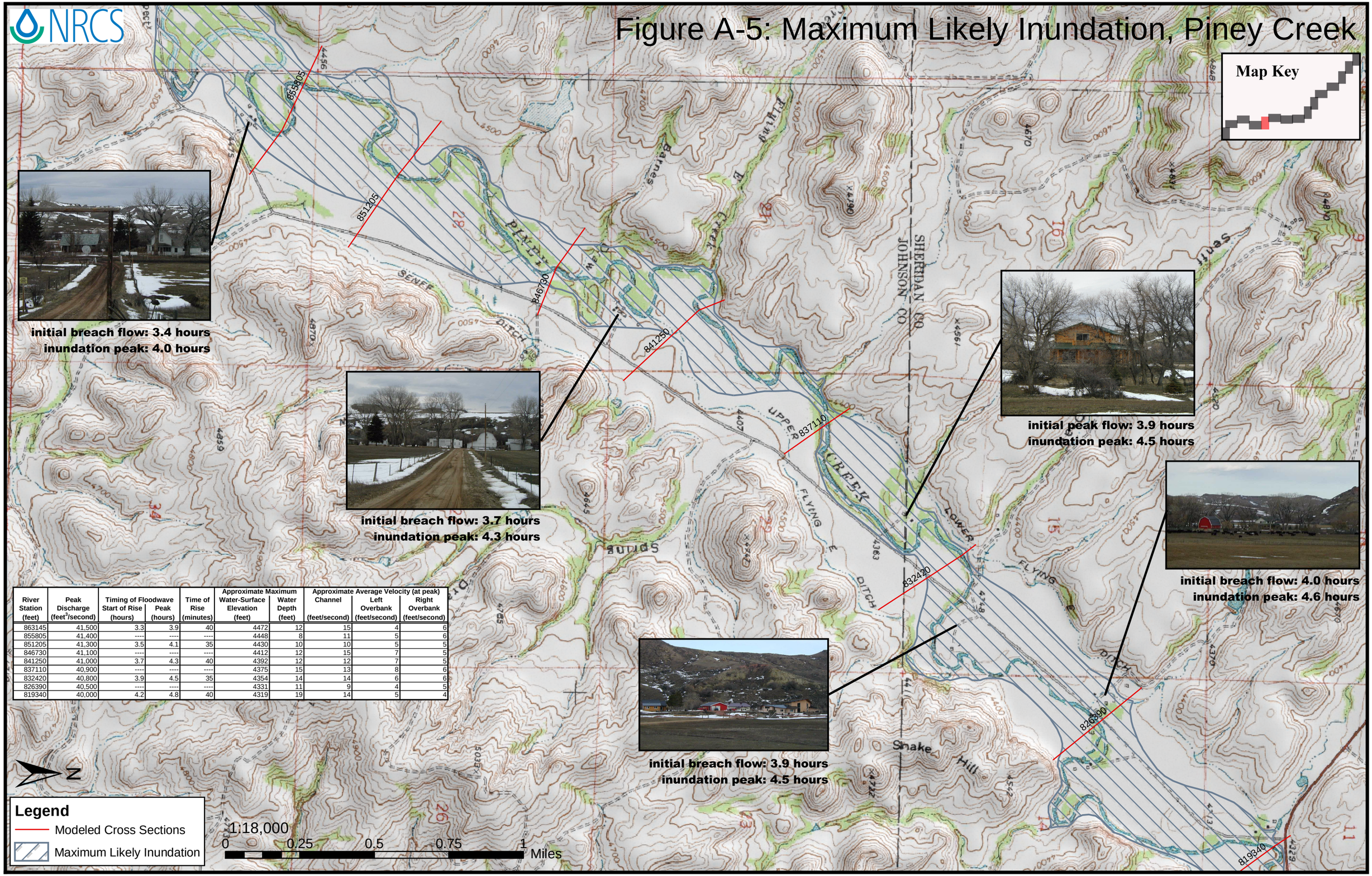
Figure A-3: Maximum Likely Inundation, Story



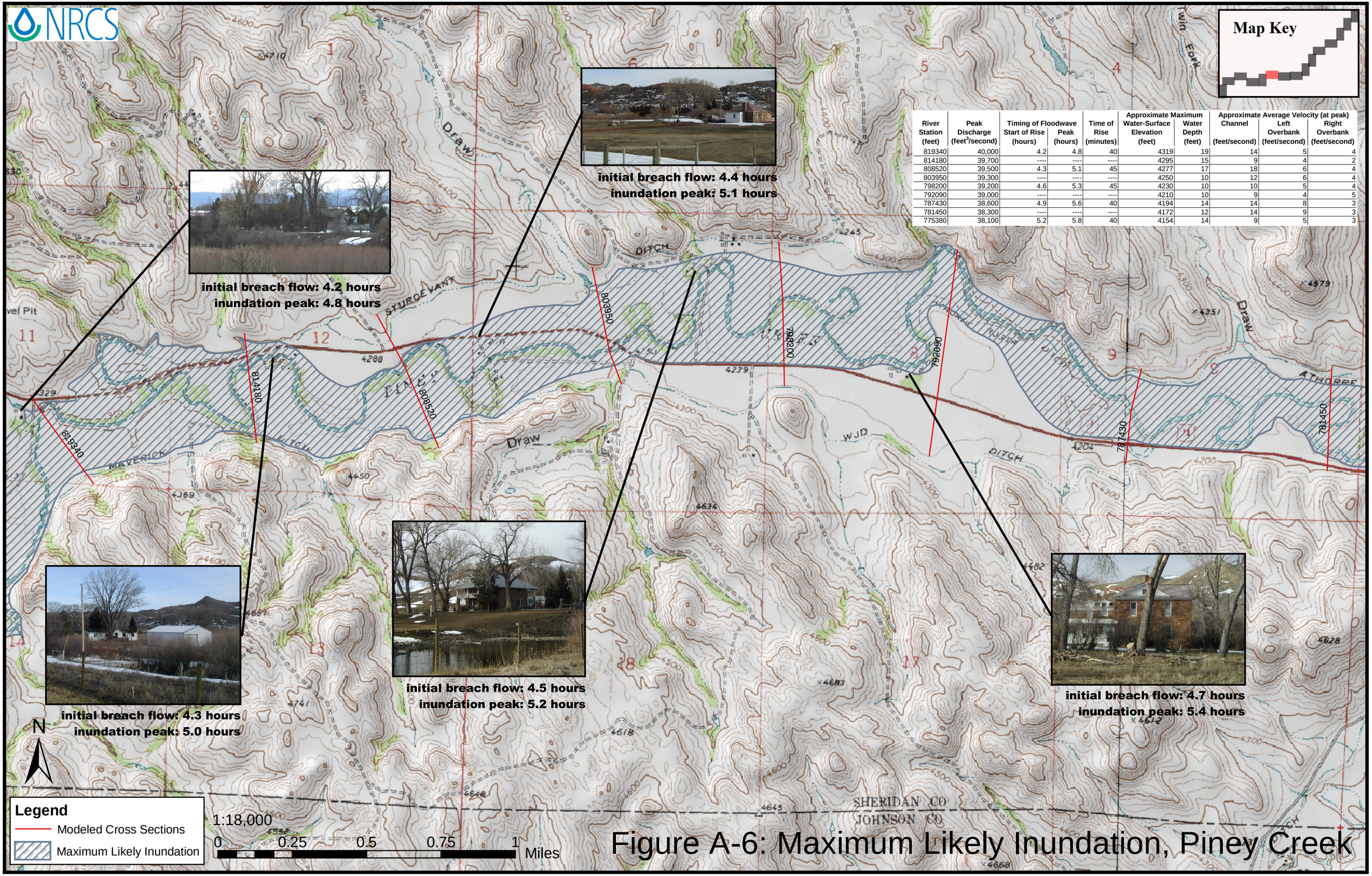
River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
892800	55,100	2.3	2.8	30	4754	14	20	6	5
891100	54,700	----	----	----	4736	16	20	5	5
889260	54,300	----	----	----	4715	15	19	5	4
887160	53,900	----	----	----	4694	14	22	7	5
885960	53,500	----	----	----	4679	19	13	4	3
882900	52,800	----	----	----	4655	15	23	6	6
881875	52,500	2.6	3.1	30	4635	15	20	5	5
880245	52,000	----	----	----	4614	14	17	5	4
878440	42,300	2.75	3.5	45	4610	30	3	1	1
878295	Bridge								
878150	42,300	2.75	3.5	45	4593	13	19	5	4
876550	42,100	2.8	3.6	45	4575	15	19	5	4
874450	41,900	----	----	----	4553	13	17	5	3
871580	41,800	----	----	----	4533	13	16	4	8
868810	41,700	3.0	3.8	45	4514	14	16	4	5
866310	41,600	----	----	----	4492	12	16	7	4
863145	41,500	3.3	3.9	40	4472	12	15	4	6

Figure A-4: Maximum Likely Inundation, I-90

Figure A-5: Maximum Likely Inundation, Piney Creek



River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
863145	41,500	3.3	3.9	40	4472	12	15	4	6
855805	41,400	----	----	----	4448	8	11	5	6
851205	41,300	3.5	4.1	35	4430	10	10	5	5
846730	41,100	----	----	----	4412	12	15	7	5
841250	41,000	3.7	4.3	40	4392	12	12	7	5
837110	40,900	----	----	----	4375	15	13	8	6
832420	40,800	3.9	4.5	35	4354	14	14	6	6
826390	40,500	----	----	----	4331	11	9	4	5
819340	40,000	4.2	4.8	40	4319	19	14	5	4

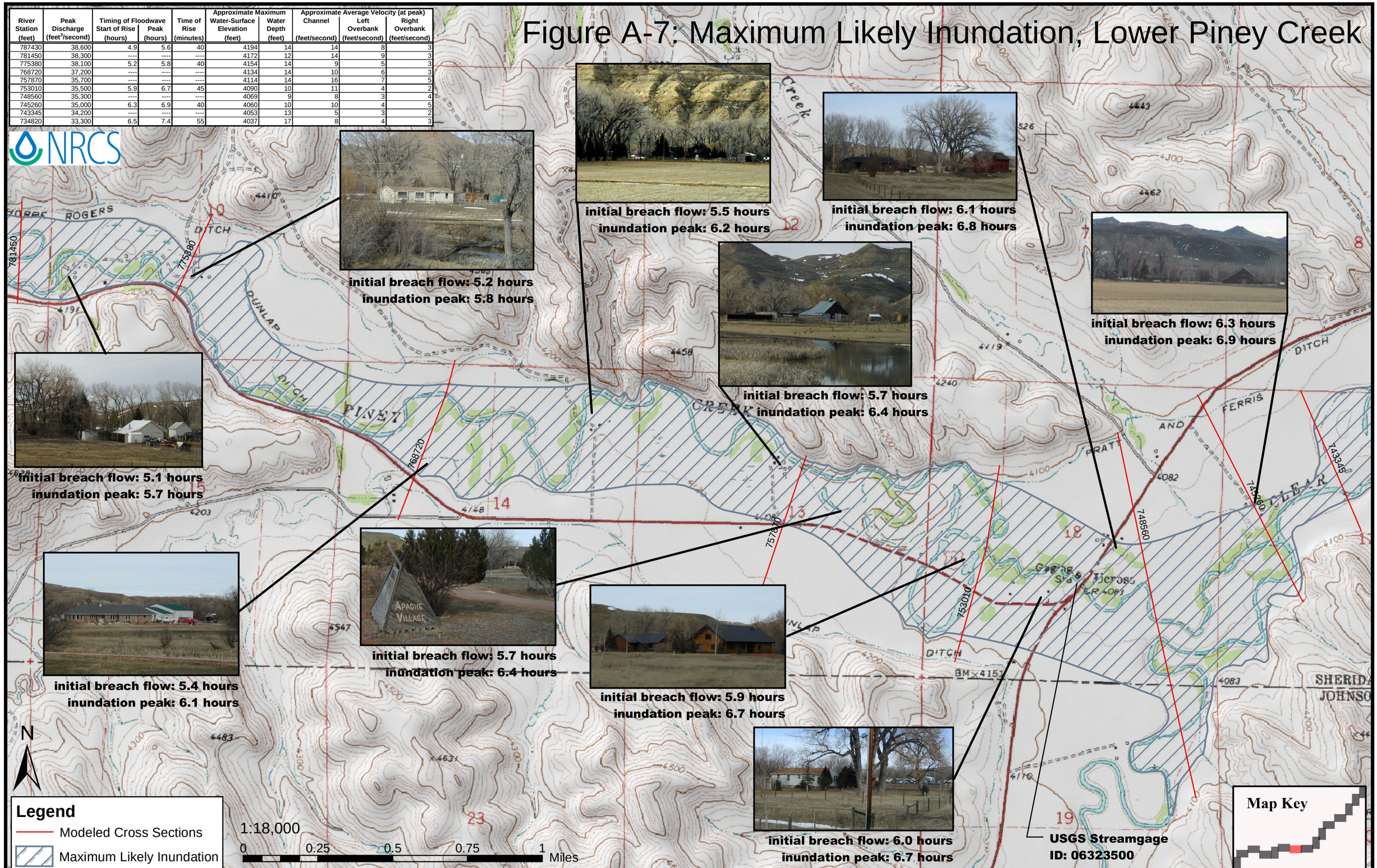


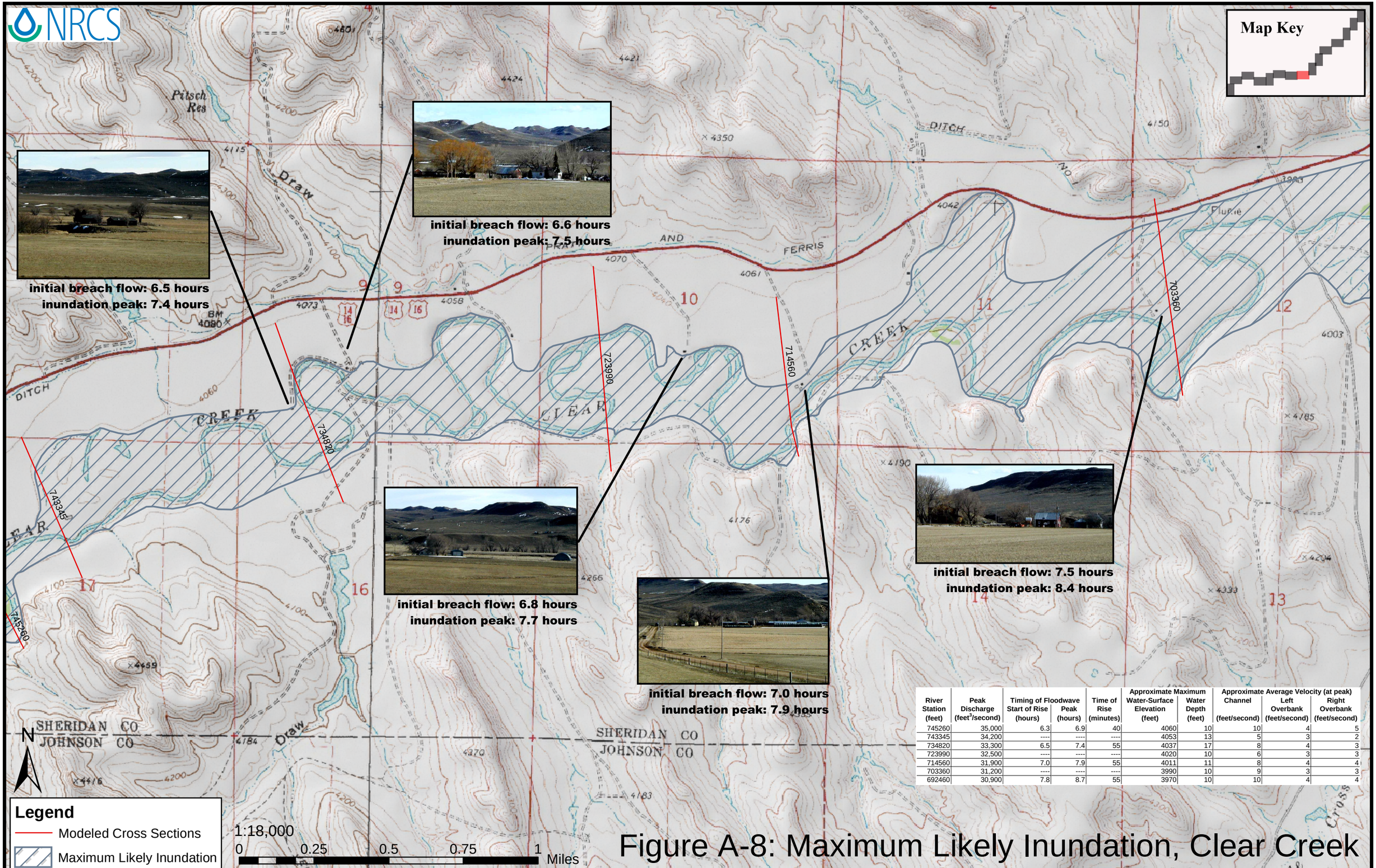
River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
819340	40,000	4.2	4.8	40	4319	19	14	5	4
814180	39,700	----	----	----	4295	15	9	4	2
808520	39,500	4.3	5.1	45	4277	17	18	6	4
803950	39,300	----	----	----	4250	10	12	6	4
798200	39,200	4.6	5.3	45	4230	10	10	5	4
792090	39,000	----	----	----	4210	10	9	4	5
787430	38,600	4.9	5.6	40	4194	14	14	8	3
781450	38,300	----	----	----	4172	12	14	9	3
775380	38,100	5.2	5.8	40	4154	14	9	5	3

Figure A-6: Maximum Likely Inundation, Piney Creek

Figure A-7: Maximum Likely Inundation, Lower Piney Creek

River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave: Start of Rise (hours)	Timing of Floodwave: Peak (hours)	Time of Rise (minutes)	Approximate Maximum: Water-Surface Elevation (feet)	Approximate Maximum: Water Depth (feet)	Approximate Average Velocity (at peak): Channel (feet/second)	Approximate Average Velocity (at peak): Left Overbank (feet/second)	Approximate Average Velocity (at peak): Right Overbank (feet/second)
787430	38,600	4.9	5.6	40	4194	14	14	8	3
781450	38,300	----	----	----	4172	12	14	9	3
775380	38,100	5.2	5.8	40	4154	14	9	5	3
768720	37,200	----	----	----	4134	14	10	6	3
757870	35,700	----	----	----	4114	14	16	7	5
753010	35,500	5.9	6.7	45	4090	10	11	4	2
748560	35,300	----	----	----	4069	9	8	3	4
745260	35,000	6.3	6.9	40	4060	10	10	4	5
743345	34,200	----	----	----	4053	13	5	3	2
734820	33,300	6.5	7.4	55	4037	17	8	4	3

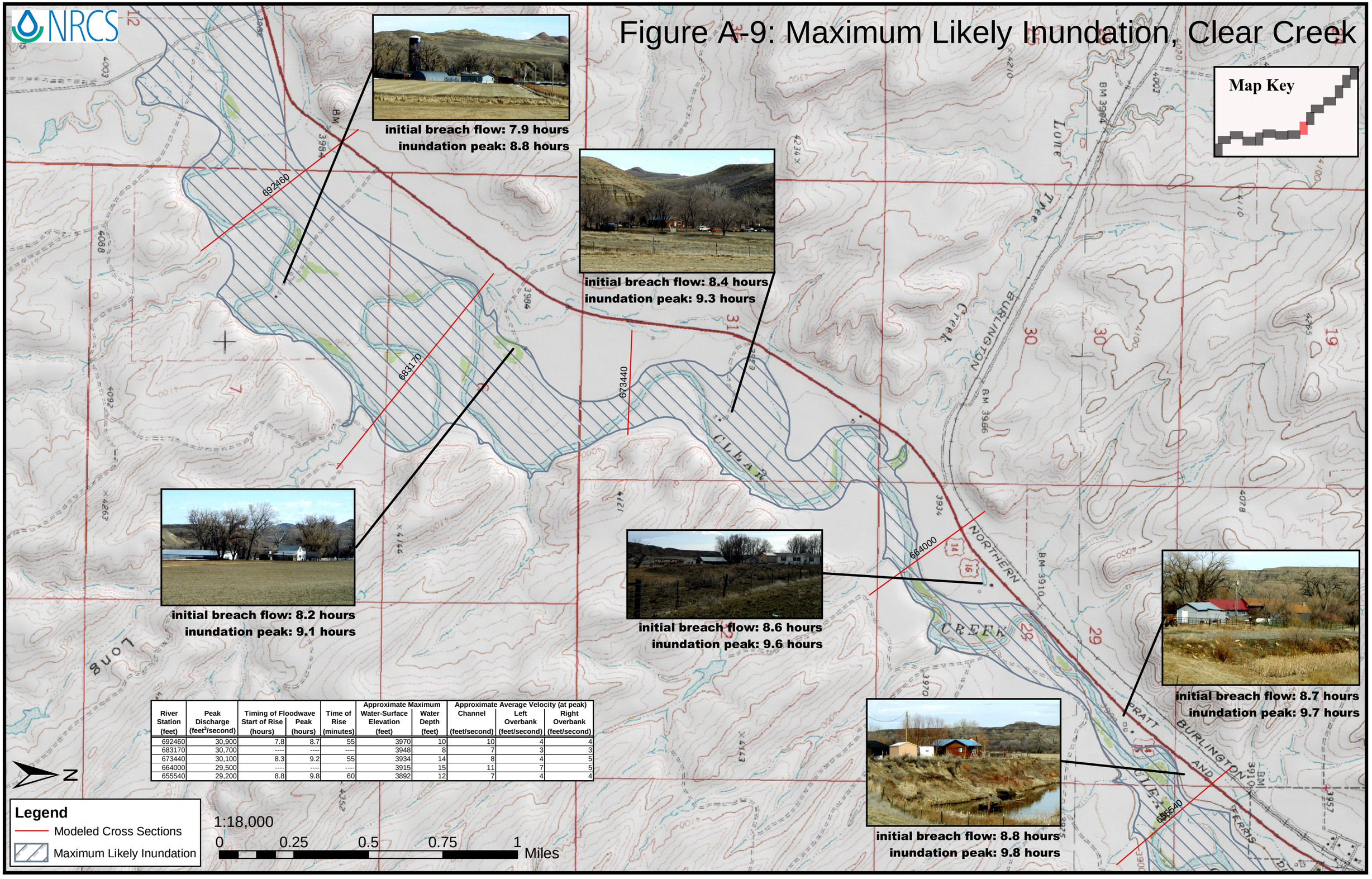




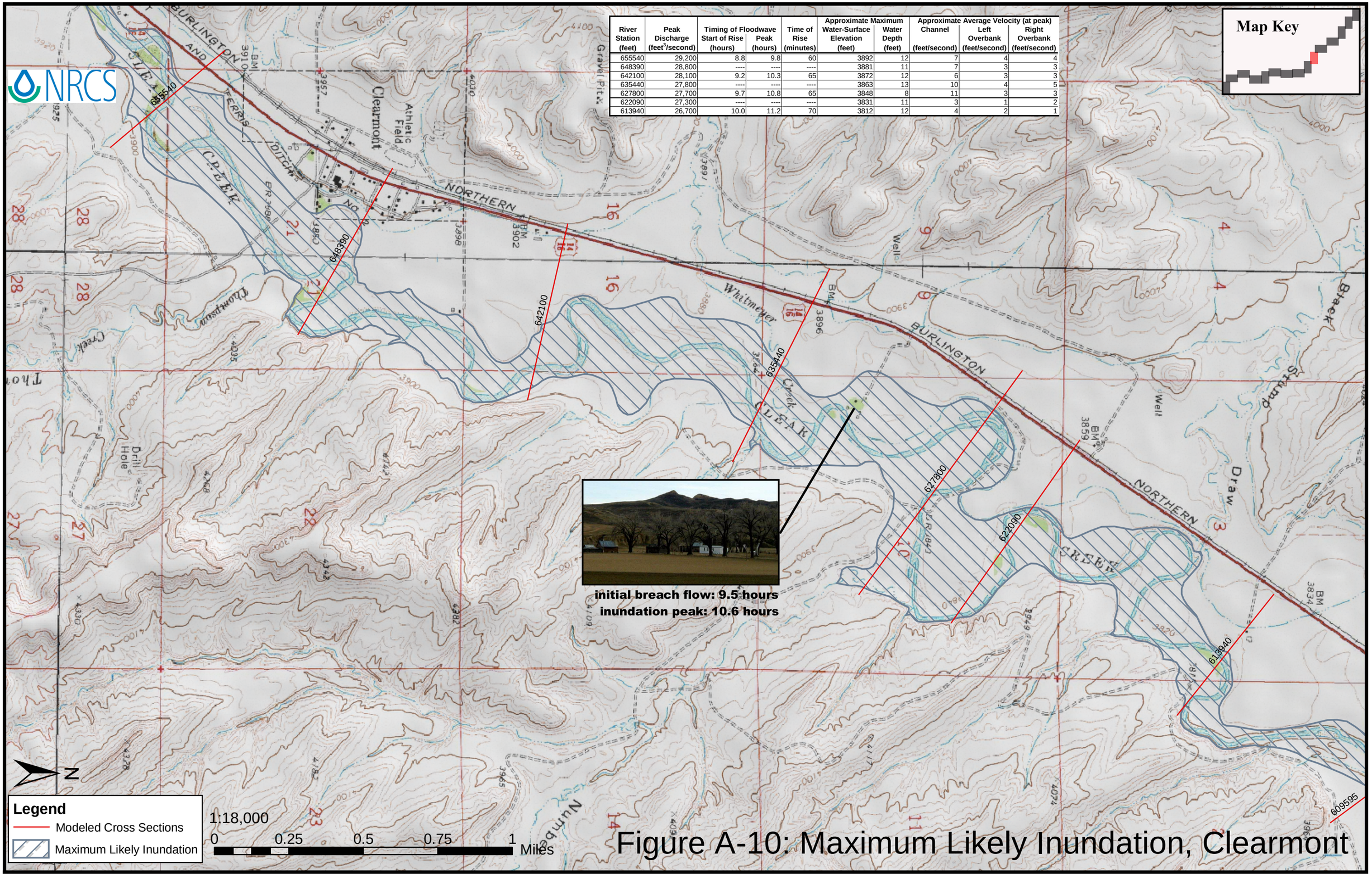
River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
745260	35,000	6.3	6.9	40	4060	10	10	4	5
743345	34,200	----	----	----	4053	13	5	3	2
734820	33,300	6.5	7.4	55	4037	17	8	4	3
723990	32,500	----	----	----	4020	10	6	3	3
714560	31,900	7.0	7.9	55	4011	11	8	4	4
703360	31,200	----	----	----	3990	10	9	3	3
692460	30,900	7.8	8.7	55	3970	10	10	4	4

Figure A-8: Maximum Likely Inundation, Clear Creek

Figure A-9: Maximum Likely Inundation, Clear Creek

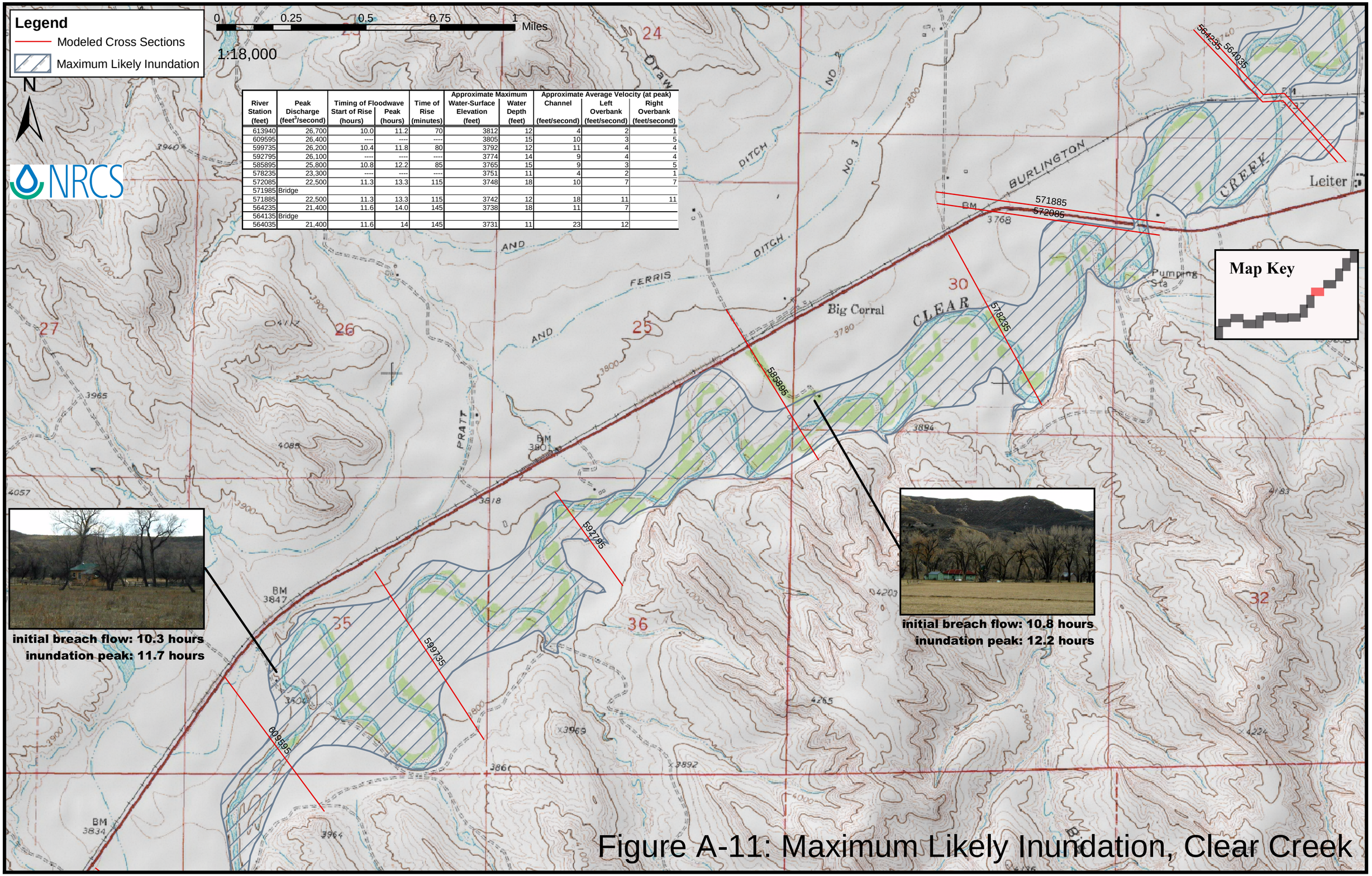


River Station (feet)	Peak Discharge (feet³/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
692460	30,900	7.8	8.7	55	3970	10	10	4	4
683170	30,700	----	----	----	3948	8	7	3	3
673440	30,100	8.3	9.2	55	3934	14	8	4	5
664000	29,500	----	----	----	3915	15	11	7	5
655540	29,200	8.8	9.8	60	3892	12	7	4	4



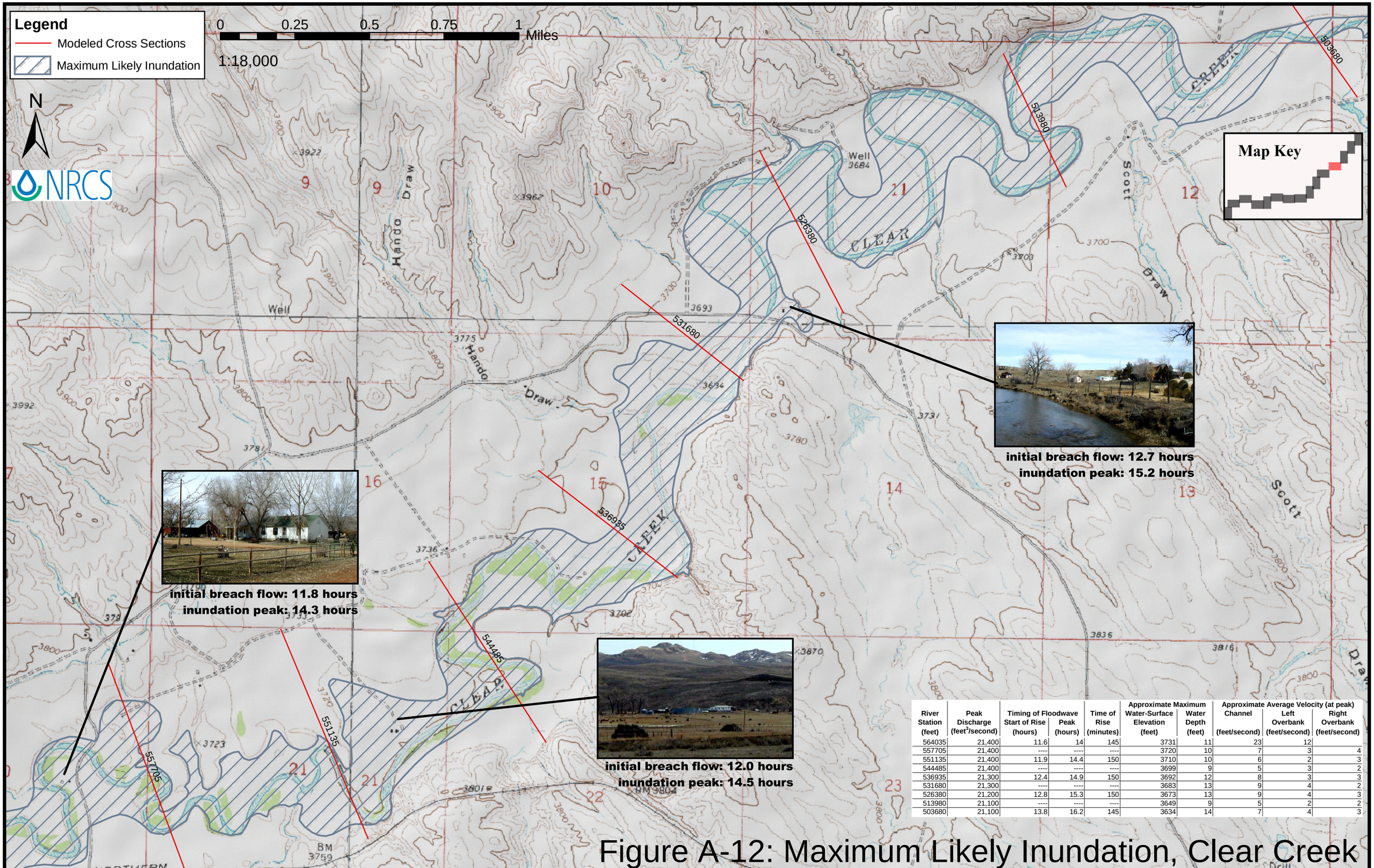
River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
655540	29,200	8.8	9.8	60	3892	12	7	4	4
648390	28,800	----	----	----	3881	11	7	3	3
642100	28,100	9.2	10.3	65	3872	12	6	3	3
635440	27,800	----	----	----	3863	13	10	4	5
627800	27,700	9.7	10.8	65	3848	8	11	3	3
622090	27,300	----	----	----	3831	11	3	1	2
613940	26,700	10.0	11.2	70	3812	12	4	2	1

Figure A-10: Maximum Likely Inundation, Clearmont



River Station (feet)	Peak Discharge (feet³/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
613940	26,700	10.0	11.2	70	3812	12	4	2	1
609595	26,400	----	----	----	3805	15	10	3	5
599735	26,200	10.4	11.8	80	3792	12	11	4	4
592795	26,100	----	----	----	3774	14	9	4	4
585895	25,800	10.8	12.2	85	3765	15	9	3	5
578235	23,300	----	----	----	3751	11	4	2	1
572085	22,500	11.3	13.3	115	3748	18	10	7	7
571985	Bridge								
571885	22,500	11.3	13.3	115	3742	12	18	11	11
564235	21,400	11.6	14.0	145	3738	18	11	7	
564135	Bridge								
564035	21,400	11.6	14	145	3731	11	23	12	

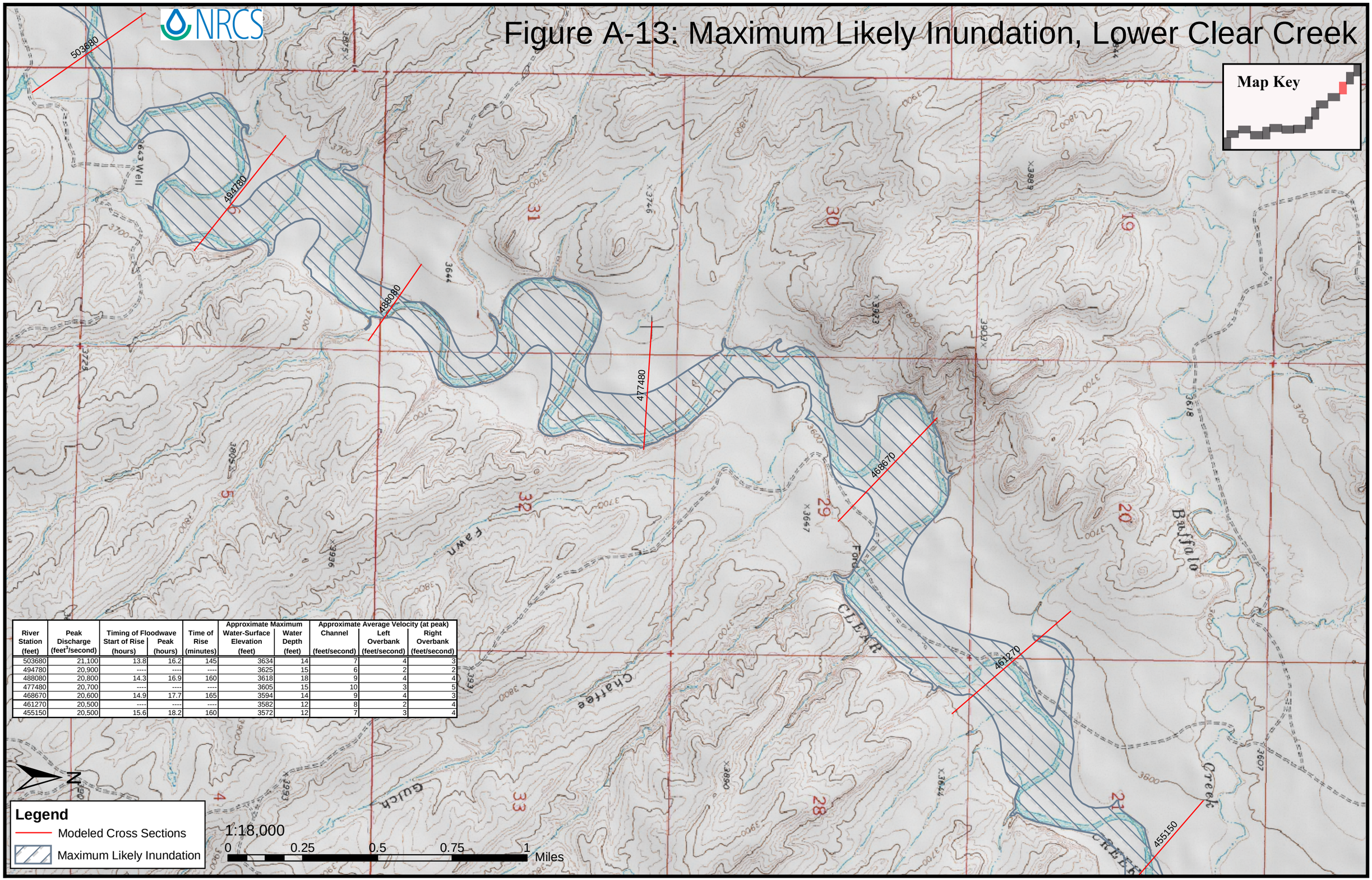
Figure A-11: Maximum Likely Inundation, Clear Creek



River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
564035	21,400	11.6	14	145	3731	11	23	12	
557705	21,400	----	----	----	3720	10	7	3	4
551135	21,400	11.9	14.4	150	3710	10	6	2	3
544485	21,400	----	----	----	3699	9	5	3	2
536935	21,300	12.4	14.9	150	3692	12	8	3	3
531680	21,300	----	----	----	3683	13	9	4	2
526380	21,200	12.8	15.3	150	3673	13	9	4	3
513980	21,100	----	----	----	3649	9	5	2	2
503680	21,100	13.8	16.2	145	3634	14	7	4	3

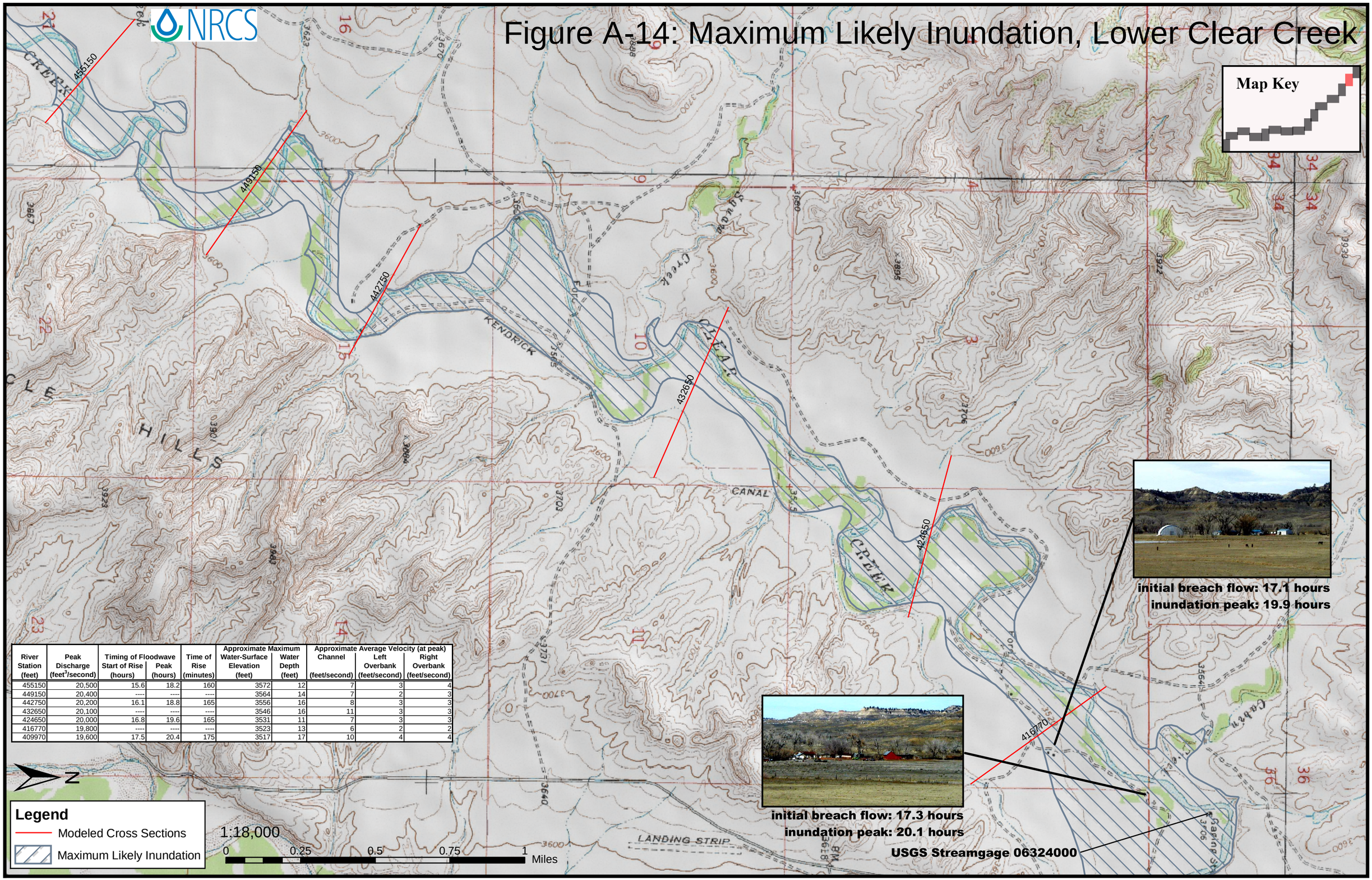
Figure A-12: Maximum Likely Inundation, Clear Creek

Figure A-13: Maximum Likely Inundation, Lower Clear Creek

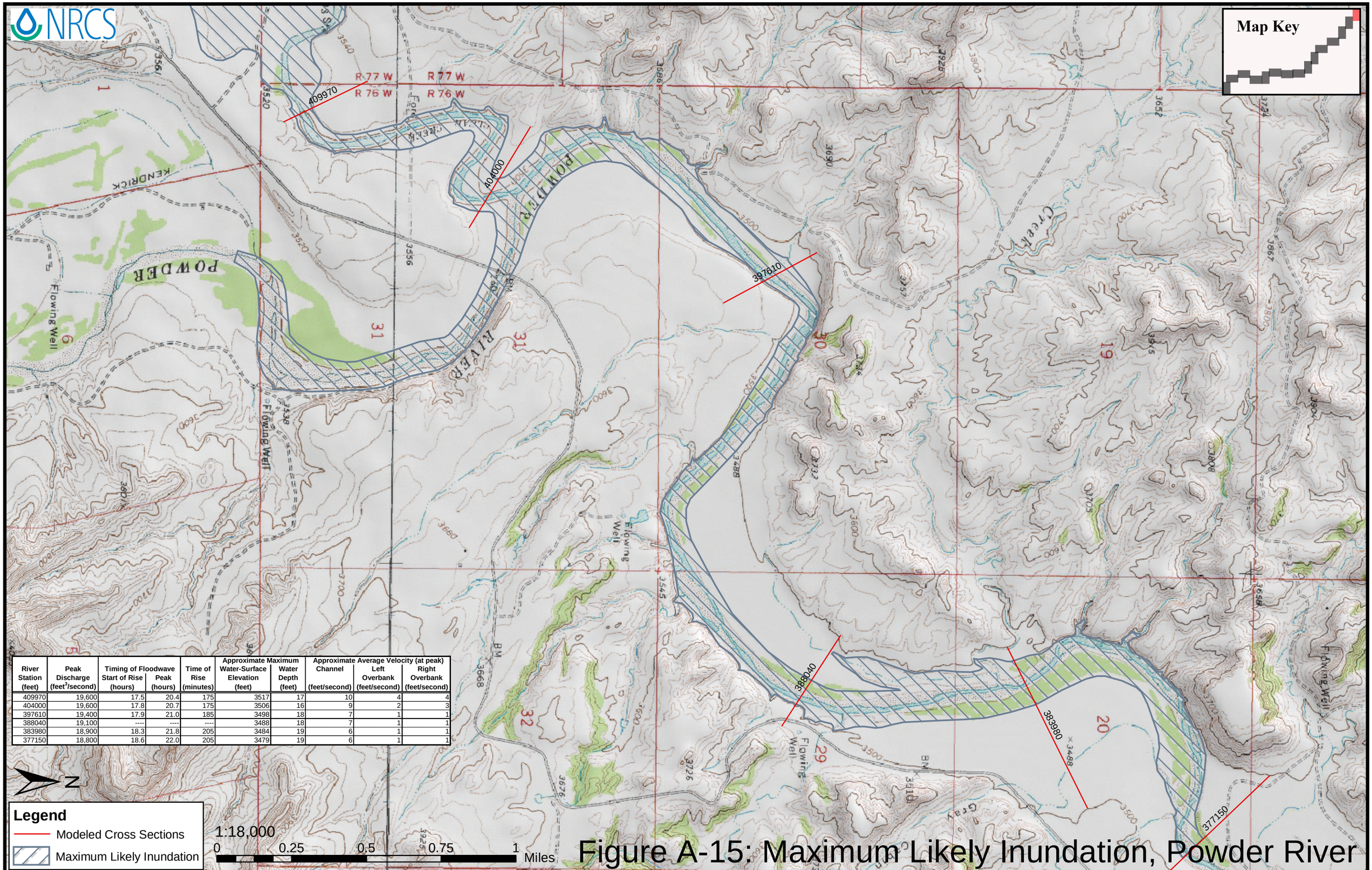


River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
503680	21,100	13.8	16.2	145	3634	14	7	4	3
494780	20,900	----	----	----	3625	15	6	2	2
488080	20,800	14.3	16.9	160	3618	18	9	4	4
477480	20,700	----	----	----	3605	15	10	3	5
468670	20,600	14.9	17.7	165	3594	14	9	4	3
461270	20,500	----	----	----	3582	12	8	2	4
455150	20,500	15.6	18.2	160	3572	12	7	3	4

Figure A-14: Maximum Likely Inundation, Lower Clear Creek



River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
455150	20,500	15.6	18.2	160	3572	12	7	3	4
449150	20,400	----	----	----	3564	14	7	2	3
442750	20,200	16.1	18.8	165	3556	16	8	3	3
432650	20,100	----	----	----	3546	16	11	3	3
424650	20,000	16.8	19.6	165	3531	11	7	3	3
416770	19,800	----	----	----	3523	13	6	2	2
409970	19,600	17.5	20.4	175	3517	17	10	4	4



River Station (feet)	Peak Discharge (feet^3/second)	Timing of Floodwave Start of Rise (hours)	Timing of Floodwave Peak (hours)	Time of Rise (minutes)	Approximate Maximum Water-Surface Elevation (feet)	Approximate Maximum Water Depth (feet)	Approximate Average Velocity (at peak) Channel (feet/second)	Approximate Average Velocity (at peak) Left Overbank (feet/second)	Approximate Average Velocity (at peak) Right Overbank (feet/second)
409970	19,600	17.5	20.4	175	3517	17	10	4	4
404000	19,600	17.8	20.7	175	3506	16	9	2	3
397610	19,400	17.9	21.0	185	3498	18	7	1	1
388040	19,100	----	----	----	3488	18	7	1	1
383980	18,900	18.3	21.8	205	3484	19	6	1	1
377150	18,800	18.6	22.0	205	3479	19	6	1	1

Figure A-15: Maximum Likely Inundation, Powder River