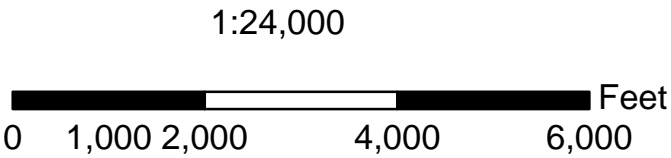


Section	HECRAS Station	Distance Downstream of Dam, ft	Max. Elev of Breach Flood	Elevation of Stream bed	Travel Time, hrs	Flow at Section @ Peak Elev	Flow Top Width at Section @ Peak Elev	Avg. Velocity at Section, ft/sec
CL Dam	DDG- 0197_1_1920	0	888.3	881.8	0.3	15,774	569	8.1
22	DDG- 0197_1_1032	888	872.9	862.9	0.3	14,359	655	7.9
21	DDG- 0197_1_708	1,212	868.0	859.0	0.3	13,884	384	7.2
20	DDG- 0197_1_456	1,463	864.0	856.7	0.3	13,627	362	12.3
19	Washington Creek_1_33043	1,920	862.9	848.4	0.4	3,953	420	2.9
19_TRIB	Washington Creek_2_33330	2,207	862.9	847.7	0.4	- 5,806	272	- 5.0
19_TRIB_2A	Washington Creek_4_33529	2,406	862.6	848.0	0.4	- 1,759	255	- 1.8
19_TRIB_2A	Washington Creek_4_35663	4,540	862.3	850.6	0.5	- 528	277	- 0.9
19_TRIB_2A	Washington Creek_4_37670	6,547	861.7	856.1	0.6	- 243	45	- 1.6
19_TRIB_2A	Washington Creek_4_39673	8,550	861.1	857.5	0.8	9	45	0.1
19_TRIB_2B	Chicken Creek_1_5998	8,211	862.1	859.1	0.7	16	27	0.3
18	Washington Creek_1_29733	5,230	857.6	847.0	0.6	2,056	75	3.7
17	Washington Creek_1_27145	7,817	855.1	844.2	0.9	1,435	161	1.6
16	Washington Creek_1_24363	10,600	852.1	842.3	1.0	1,365	65	4.4
15	Washington Creek_1_22548	12,414	849.1	838.7	1.5	1,088	165	1.5
14	Washington Creek_1_20275	14,688	847.8	837.2	1.6	1,022	64	2.2
13	Washington Creek_1_19412	15,551	847.3	836.0	1.7	1,009	103	2.1
12	Washington Creek_1_17171	17,792	845.3	835.3	1.8	982	61	3.0
11	Washington Creek_1_13211	21,752	841.2	831.3	2.3	882	58	2.4
10	Washington Creek_1_10053	24,910	839.2	828.0	2.6	811	66	2.0
9	Washington Creek_1_8361	26,602	838.4	829.3	2.8	787	60	2.0
8	Washington Creek_1_7016	27,947	837.7	828.0	2.9	777	61	1.8
7	Washington Creek_1_5791	29,172	837.0	826.6	2.9	770	73	2.3
6	Wakarusa River_1_22847	34,963	828.3	822.4	3.0	725	49	3.8
6_TRIB	Washington Cr Tr_2_1496	36,459	828.3	823.4	3.0	- 4	37	0.0

\* Travel time is measured from the initiation of breach formation to the time the breach wave arrives at the section.

The inundation area was developed based on a breach with the water surface at the higher of the Top of Dam elevation. Cross Sections were developed using 2-meter LIDAR data.



Attachment 1:  
Inundation Area  
Boundary Map

REVISIONS		
DATE	APPROVED	TITLE

Date	Designed	Drawn	Checked	Approved
06/20/09	EWR	DMM	JW	AGB
07/15/2009				
08/20/09				

DDG-0197 NID-KS00030  
DOUGLAS COUNTY, KANSAS



File Name
Drawing Name
07/15/2009
Sheet 1 of 2