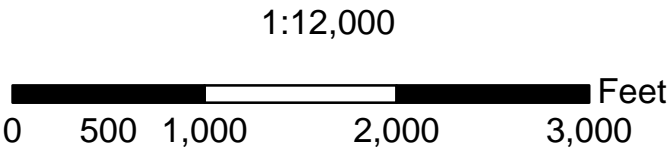


Section	HECRAS Station	Distance Downstream of Dam, ft	Max. Elev of Breach Flood	Elevation of Stream bed	Travel Time, hrs	Flow at Section @ Peak Elev	Flow Top Width at Section @ Peak Elev	Avg. Velocity at Section, ft/sec
CL Dam	14164	0	1071.9	1056.7	0.2	12,923	288	11.1
16	13879	284	1064.7	1054.3	0.2	12,706	289	7.7
15	12947	1,216	1059.8	1048.0	0.3	7,947	276	4.1
14	12062	2,102	1059.7	1046.0	0.3	8,263	642	1.5
13	11293	2,871	1059.7	1047.3	0.3	8,202	656	1.5
12	11198	2,966	1043.6	1033.9	0.3	8,151	193	7.3
11	9949	4,214	1033.1	1019.8	0.4	7,767	260	7.2
10	9319	4,845	1026.9	1014.6	0.4	7,645	423	3.4
9	8819	5,345	1024.4	1013.5	0.4	7,158	310	4.4
8	8199	5,965	1022.5	1010.2	0.4	6,890	353	4.2
7	7325	6,838	1018.3	1007.1	0.5	6,235	577	1.9
6	6136	8,027	1012.6	1002.1	0.5	6,090	243	6.1
5	5341	8,823	1008.4	999.8	0.6	5,834	414	3.6
4	4052	10,112	1003.6	992.3	0.6	5,481	247	4.6
3	3765	10,398	1002.5	992.0	0.7	5,296	645	2.9
2	2099	12,065	995.9	985.9	0.8	4,829	635	2.7
1	860	13,303	993.4	983.7	0.8	4,683	700	2.0

\* 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 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

DDG-0199 NID-KS00031  
DOUGLAS COUNTY, KANSAS



File Name
Drawing Name
6/29/2009 Sheet 1 of 1