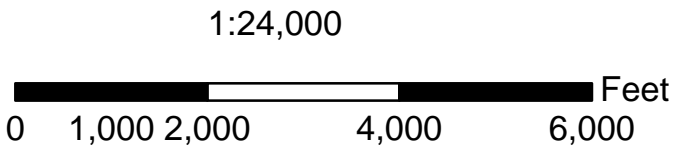


Section	HECRAS Station	Distance Downstream of Dam, ft	Max. Elev of Breach Flood	Elevation of Stream bed	Travel Time, hrs	Flow at Section @ Peak Elev	Flow Top Width at Section @ Peak Elev	Avg. Velocity at Section, ft/sec
27	Coal Creek_2_22427	22,404	853.5	836.4	1.3	41,236	2,096	3.0
27_TRIB	DDG- 0247_1_1628	24,032	853.6	841.9	1.3	10	639	0.0
26	Coal Creek_2_18863	25,969	847.5	831.2	1.5	36,915	1,749	3.6
25	Coal Creek_2_15319	29,513	840.2	828.9	1.8	31,911	2,934	2.3
24	Coal Creek_2_10982	33,850	834.3	818.3	2.2	27,985	2,459	2.6
23	Coal Creek_2_9067	35,764	830.2	816.9	2.3	26,450	2,223	3.0
22	Coal Creek_1_7125	37,707	828.9	814.5	2.5	24,756	4,257	1.8
22_TRIB	Coal Creek Trib_1_1118	38,825	828.9	819.2	2.5	4	838	0.0
21	Coal Creek_1_2950	41,882	825.5	812.4	2.7	22,702	2,602	1.7
20	Coal Creek_1_2813	42,018	823.9	813.1	2.8	22,345	2,754	2.1
19	Coal Creek_1_1417	43,415	822.1	810.9	3.1	20,277	2,123	2.6
18	Wakarusa River_3_49315	44,832	821.6	807.8	3.2	19,141	3,119	1.6
18_TRIB	DDG- 0102_1_1947	46,779	821.6	817.9	3.2	10	45	0.2
17	Wakarusa River_3_45717	48,430	818.0	803.1	3.7	16,750	2,808	2.3

* 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 Auxiliary Spillway elevation , which is higher than the 100-year,6-hour storm elevation. Cross Sections were developed using 2-meter LIDAR data.



Attachment 1:
Inundation Area
Boundary Map

REVISIONS		
DATE	APPROVED	TITLE

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

DOUGLAS COUNTY STATE LAKE DAM
DDG-0281 NID-KS00870
DOUGLAS COUNTY, KANSAS



File Name	
Drawing Name	
07/06/2009	Sheet 2 of 3