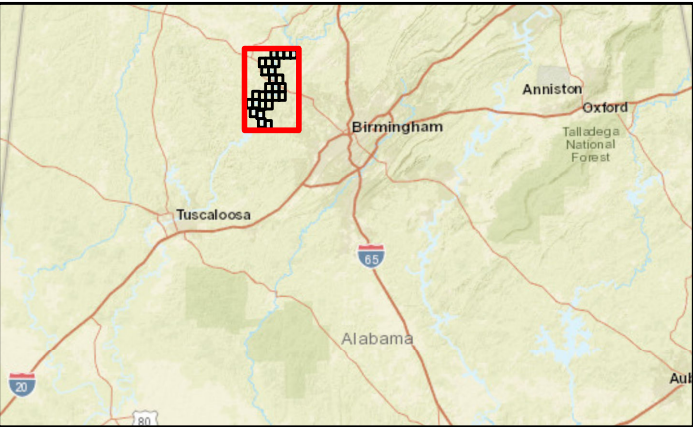
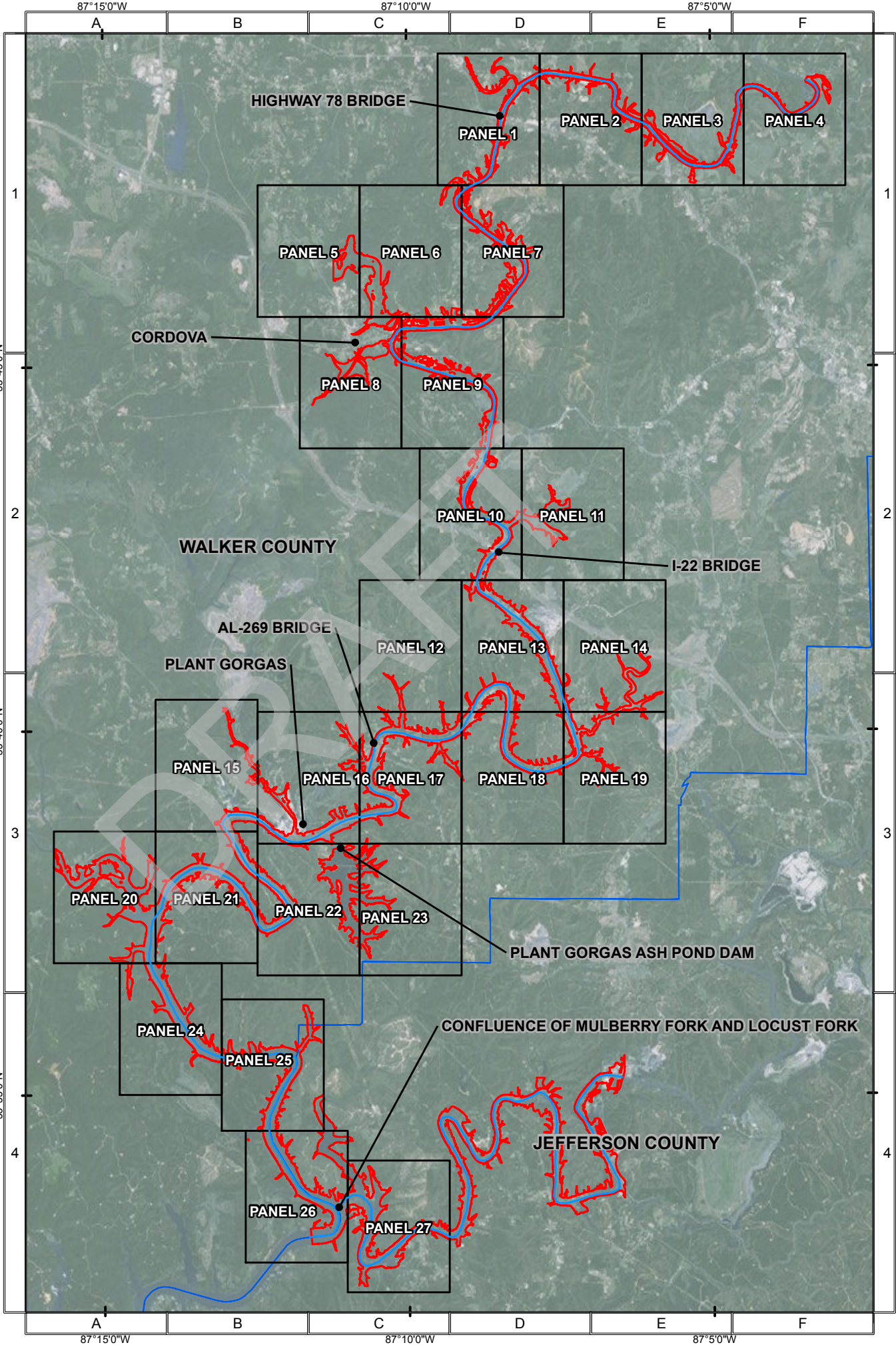


BREACH PROPAGATION INFORMATION

AREA OF INTEREST ID NUMBER	PANEL NUMBER	DISTANCE FROM BREACH*	TIME TO PEAK	BREACH WAVE ARRIVAL TIME**
#		MILES	HOURS	HOURS
1	4	29.9	2.98	2.42
2	4	29.7	2.97	2.42
3	1	22.3	2.38	1.83
4	8	16.7	1.98	1.42
5	8	16.7	1.98	1.42
6	8	16.6	1.98	1.33
7	8	16.5	1.98	1.33
8	8	16.5	1.97	1.33
9	8	16.5	1.97	1.33
10	9	15.6	1.93	1.17
11	10	13.3	1.80	1.08
12	10	13.2	1.79	1.08
13	10	11.4	1.68	0.92
14	13	9.9	1.61	0.83
15	19	8.1	1.53	0.75
16	19	7.9	1.52	0.75
17	19	7.6	1.50	0.67
18	18	6.7	1.46	0.58
19	13	4.6	1.36	0.50
20	18	4.2	1.34	0.42
21	17	3.6	1.31	0.33
22	17	3	1.28	0.33
23	17	2.5	1.26	0.25
24	17	2.4	1.26	0.25
25	17	2.1	1.24	0.25
26	17	2.1	1.24	0.25
27	17	1.3	1.20	0.17
28	16	-0.2	1.17	0.17
29	16	-0.5	1.17	0.08
30	21	-4.7	1.35	0.25
31	20	-6.9	1.46	0.50
32	20	-6.9	1.46	0.50
33	20	-7.2	1.48	0.67
34	20	-7.3	1.49	0.67
35	25	-10.6	1.65	0.67
36	25	-11.6	1.70	0.75
37	26	-13.8	1.79	0.75
38	27	-14.1	1.79	0.75
39	27	-14.3	1.80	0.75
40	27	-14.4	1.81	0.75
41	27	-14.5	1.82	0.92
42	27	-15.8	1.93	0.92
43	27	-15.9	1.94	0.92

\* DISTANCE FROM BREACH IS TAKEN AS APPROXIMATE MILES ABOVE THE REACH ALONG THE RIVER CENTERLINE. NEGATIVE VALUES INDICATE THAT THE HAZARD IS DOWNSTREAM OF THE BREACH.

\*\* WAVE ARRIVAL TIME IS CALCULATED AS THE TIME FROM BREACH FOR AN AREA TO EXPERIENCE A BREACH INDUCED 0.5 FOOT RISE IN WATER SURFACE LEVEL.



LEGEND

SUNNY DAY BREACH

MAP PANEL

COUNTY

- NOTES
1. THIS MAP DEPICTS THE EXTENT OF THE MAXIMUM WATER SURFACE ELEVATION FROM A SUNNY DAY BREACH OF THE GORGAS ASH POND DAM.

2. MAPPING OF FLOODED AREAS AND FLOOD WAVE TRAVEL TIMES ARE APPROXIMATE AND SHOULD BE USED AS A GUIDANCE FOR ESTABLISHING EVACUATION ZONES.

3. ACTUAL AREAS INUNDATED WILL DEPEND ON FAILURE MODE AND PRE-FAILURE HYDROLOGIC CONDITIONS AND MAY DIFFER SIGNIFICANTLY FROM INFORMATION SHOWN ON THESE MAPS.
- REFERENCES
1. BREACH MODEL ADAPTED FROM A USACE HEC-RAS FLOOD MODEL PROVIDED BY SOUTHERN COMPANY SERVICES.

2. TOPOGRAPHY UTILIZED FOR MAPPING TAKEN FROM USGS QL2 LIDAR COLLECTED 12/2015 - 02/2016 BY DIGITAL AERIAL SOLUTIONS, LLC CONTRACT #G10PC00093 TASK ORDER #G15PD00518.

3. RIVER BASEFLOWS TAKEN FROM FEMA FIS 01127CV000B, WALKER COUNTY, AL. SUPPLEMENTARY FLOWS GATHERED FROM USGS STREAMSTATS.

4. AERIAL IMAGERY AND BASEMAP SOURCES: ESRI, HERE, DELORME, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), MAPMYINDIA, NGCC, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR

PLANT GORGAS

ASH POND DAM

BREACH ANALYSIS

WALKER COUNTY, AL

2

1

0

2

4 Miles

Golder Associates

Projection

Transverse Mercator

NAD 1983 Alabama West

State Plane

N

W

E

S

ISSUE DATE: 3/10/2017 INDEX MAP