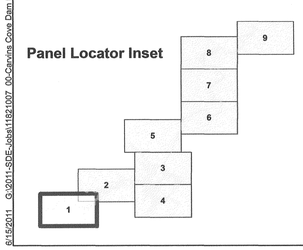
Panel Locator Inset



Cross Section
Stream
Spillway Design Flood
Sunny Day Breach
Spillway Design Flood With Breach
School
Hospital
City/County Boundary

Cross Section	Distance from Dam (miles)	Sunny Day Dam Breach: First Flood Waters* (hr: min)	Sunny Day Dam Breach: Peak Flood Level* (hr:min)	Sunny Day Dam Breach: Depth of Water*** (feet)	Spillway Design Flood Breach: First Flood Waters** (hr:min)	Spillway Design Flood Breach: Peak Flood Level* (hr:min)	Spillway Design Flood Breach: Depth of Water*** (feet)
A	0.4	0:01	0:30	47.3	12:35	0:24	66.8
B	0.7	0:03	0:30	69.2	12:40	0:25	72.1
C	1.7	0:15	1:00	41.8	13:08	0:56	54.4
D	2.0	0:20	1:10	44.6	13:14	0:58	58.0
E	2.3	0:28	1:15	44.9	13:15	0:59	58.2
F	2.6	0:30	1:25	45.2	13:20	1:05	58.1
G	3.5	0:40	1:30	32.5	13:35	1:10	59.0
H	4.3	0:45	2:05	38.6	13:54	1:34	52.3

* Start time is the beginning of the breach.
** Start time is the beginning of the storm.
*** Depth of water above channel bottom.

Notes:
1. The information contained in this map is prepared for use in notification of downstream property owners by emergency management personnel.
2. Mapping of flooded areas and floodwave travel times are approximate. Timing and extent of actual inundation may differ from information presented on this map.
3. It is prudent to assume that areas outside, but adjacent to, the inundation limits shown could also be flooded.
4. Due to the topography, floodwave similarities, and map scale, inundation lines may obscure other inundation lines at some locations on the map.
5. Hazard Potential Classification: **HIGH**
6. Spillway Design Flood: **Probable Maximum Flood**
7. The dam's hazard potential classification information shown in this map documents the conditions at the time the map is signed and printed.
8. The impacted addresses shown on the map are a result of the Spillway Design Flood with Breach.
9. Dam break inundation zone maps shall be provided by the owner to the local government for use in review of proposed development plans and zoning.

0 600 1,200 2,400 Feet

Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet
Sources: Virginia Geographic Information Network (2009)
Aerial Imagery Copyright 2002 Commonwealth of Virginia (2009)
ESRI MediaKit (2010)

REV	DESCRIPTION	DATE

DESIGNED BY: MRG
DRAWN BY: GAN
CHECKED BY: AWG

ANTHONY W. GRUBBS, P.E.
DATE 6/2/11
VIRGINIA PROFESSIONAL ENGINEER NUMBER 046668

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CARVINS COVE DAM BREACH ANALYSIS
DAM BREAK INUNDATION ZONE MAP
BOTETOURT COUNTY, VA

PANEL 1

WESTERN VIRGINIA WATER AUTHORITY

DRAWING NO: 11821007.00

SHEET: 2 OF 10

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