

Cost of the Flash Flood Event
 July 18, 2001
 Polk Run Creek Watershed

Below I have pulled a few telling sentences and paragraphs from the report titled, Section 905(B) (WRDAD 1986) Analysis, Polk Run Creek, Hamilton & Warren Counties, OHIO, March 2004, published by the U.S. Army Corps of Engineers, Louisville District, and the Polk Run Creek Watershed Coalition.

“Polk Run flows through the northeast corner of Hamilton County and the southwest corner of Warren County near Cincinnati, Ohio. The Polk Run Basin encompasses a drainage area of 10.2 square miles at its confluence with the Little Miami River. (pg 2)

Numerous studies and reports have been done over the years on flooding problems in Cincinnati’s Greater Metropolitan Area. None of these studies or reports, however, has specifically addressed flooding problems in the Polk Run watershed. (pg 2)

The most destructive flood occurring in the Polk Run watershed in recent history was in July of 2001. In a 4-hour period, the affected communities received 7-10 inches of precipitation. The frequency for this event was not calculated, but it is much more rare than a 1% chance (100-year) rainfall event. During this event, out of bank flooding caused physical and non-physical damages in Symmes Township, Loveland, Indian Hills, Deerfield Township, Sycamore Township and Montgomery. In Symmes Township, a 17-year old girl was swept away by the current and was killed. High velocities through the stream have caused erosion problems along the banks of Polk Run. During this event several residents in the area lost their back yards due to erosion that then led to basement flooding. In addition, a city sewer line was washed away. These damages have since been repaired by Cincinnati’s Metropolitan Sewer District, and the creek banks in this area have been armored to prevent further erosion damages. Many residents in the area are concerned about the high velocities in Polk Run during normal rainfall events and are particularly concerned during flooding events. (pg3)

I have been asked to collect information on the cost of flooding. The report states that “Total average annual damages for the study area are approximately \$100,000. (pg 3)

Table 2 (pg 3)

<i>Average Annual Damages for Associated Events</i>			
<i>Event Frequency</i>	<i>10%</i>	<i>1%</i>	<i>.2%</i>
<i>Damages</i>	<i>\$110,000</i>	<i>\$268,000</i>	<i>\$876,000”</i>

Below are the tabulations from the jurisdictions affected.

Montgomery;

Total Actual Expenditures	\$87,195.31
Fema Reimbursement	\$68,631.00
State Reimbursement	\$ 10,899.00
City Costs	\$ 7,665.31

Not included in these expenses are any costs associated with damage and erosion to private property on Tanagerhills Dr. which were extensive.
Source; Cheryl Hilvert, City Manager, City of Montgomery, 891-2424

Loveland

Total Actual Expenditures	\$ 33,333.34
FEMA Reimbursement	\$25,000 est.
State Reimbursement	\$ 4,200 est.
City Costs	\$ 4,200 est.

Not included in these expenses are any costs related to extensive damage to the Safety Center which was covered by private insurance.
Source; Josie Balisomic, City of Loveland, 683-0150

Indian Hill

Total Actual Expenditures	\$450,000
FEMA Reimbursement	\$ 344,346
State Reimbursement	\$
City Costs	\$

Source; Dave Couch, Village of Indian Hill, 561-6500

Symmes Township

Total Actual Expenditures	\$62,434.00
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Source; Jerry Beckman, Manager Administrator, Symmes Township 683-5626

Deerfield Township

Total Actual Expenditures	\$0 (they were under the % required for reimbursement.)
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Source; Larry Weiss, Public Works, 683-5805

Metropolitan Sewer District

Total Actual Expenditures	\$2,651,435
Reimbursed by FEMA	\$250,000

Remainder covered by insurance
The sewage treatment facility flooded and was inoperable for nearly 24 hours.
(\$2.5mil) Also, a sewer pipes along Polk Creek washed away, (\$151,435).

Minimum All Total costs (covered and not) = \$3,132,962.60
Total covered by FEMA = \$ 406,305.00
And one loss of life

Note; page 6 lists the cost of 3 possible plans aimed at reducing flash flooding.
Plan 1- \$ 1.893 mil. Plan 2 - \$ 2.552 mil. Plan 3 \$562.K. However, no plan will be acted upon based on the Corps cost-benefit analysis.

Colerain Township has purchased 13 homes subject to repetitive flooding through the Ohio Emergency Management Agencies Hazard Mitigation Grant Program and the Flood mitigation Assistance Program. The total cost in labor, purchase, and demolition of the structures is estimated at 1.3 million dollars.

In addition, we have incurred a great amount of labor cost in evacuating and aiding in cleanup of flooded homes.

Sincere Regards,

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