

HIGH WATER ON
LUTHERVILLE REACH OF
ROLAND RUN
BALTIMORE COUNTY, MARYLAND

Description of the Stream's Path

A branch of Roland Run flows through Lutherville in Baltimore County, Maryland. The Lutherville Community Association (LCA) is particularly concerned about this branch of the stream because it has caused severe problems in the past and poses trepidation for the future. The stream rises just to the rear of the Timonium Fairgrounds, flows under Timonium Road, Business Park Drive, Morris Avenue, and Seminary Avenue. The stream then flows on through the jurisdictions of other community associations until it reaches Lake Roland. The tracks of the light rail, operated by the Maryland Transit Administration (MTA), run roughly parallel to the stream and to its east.

The Problem

During the "David" hurricane of the late 1970's, property owners on the Lutherville branch of Roland Run experienced very high water. Several homes experienced flooding. As a result, the Department of Public Works of Baltimore County (DPW) commissioned a study to determine the extent and shape of the 1% chance per year flood plain. The study brought to light the fact that the Morris Avenue Bridge acts as a dam in high water events. Eventually the depth of water is such that the stream flows over the Morris Avenue Bridge and proceeds to the Seminary Avenue Bridge. The opening to accommodate the stream at the Seminary Avenue Bridge itself is quite small. (In the past the Seminary Avenue Bridge backed up enough water to threaten a Veterinary practice on Seminary Avenue but some measures were taken by DPW to decrease the risk to that practice.). The study commissioned by DPW included a Hydraulic and Hydrologic (H&H) analysis that was used to map the flood plain, which in turn was used to determine which properties would be purchased or moved to higher ground by the County. After the determination of the extent of the flood plain was made, there were those who felt that the bounds of the flood plain were not extensive enough and they requested help from the LCA. The LCA helped several Lutherville homeowners to be granted consideration and DPW included them in the program. Recently, issues of high water on the Lutherville branch of Roland Run during storms have again resurfaced.

Recent Interaction between the LCA and DPW

In answer to members concerns, the LCA requested that Baltimore County restudy a portion of the reach of Roland Run that flows through the area represented by the LCA. (The reach in question is noted above.) The DPW contends that the topography of the sub-basin of this reach has not changed and that the original study completed in 1980 still describes the H&H of the sub-basin accurately. The LCA countered that the original study, although using a "built out" model was based on zoning that has gone through several cycles that resulted in much more impermeable area. LCA also feels that the parameter used for the permeability of the steam bed itself does not reflect the amount and shallow depth of ledge present.

The LCA continued to investigate the situation and discovered the following:

We have examined the railroad/ light rail roadbed parallel to and just east of the stream in question. It was built in the early 1900's. The track continues to be used by trains and by the light rail system of the MTA. Near the north end of the stream Industrial Park Drive crosses the stream and the light rail tracks. In the vicinity of the Business Park Drive crossing is

a passage under the tracks constructed when the railroad was built to allow water to flow from the east to the west side of the tracks. In the 1980's DPW upgraded the existing passage to enhance the ability of the water to cross under the tracks. This resulted in a "split flow" situation with some of the water passing under the tracks and into the stream and some flowing down the east side of the tracks. Water flowing on the east side of the tracks enters a depression when it reaches Trebor Court and then flows west, under the railroad, into the back yards and sometimes into the houses on that court.

After the Light Rail system was built, the Lutherville Light Rail Station started to experience flooding. In order to rectify that situation the MTA built a drop structure on the east side of the light rail tracks. They then placed twin 36-inch diameter pipes under the tracks and the water from the east side of the tracks is diverted to the left bank of the stream. LCA feels that this could have a profound impact on flooding on the Lutherville Branch of Roland Run (see the aside below).

In addition, there is a proposal by a developer to build houses on the left bank of the stream near Morris Avenue. In order to make the project viable, he proposes to build a 400' long 6' high retaining wall in what LCA feels is the 1% chance flood plain. This wall would be built behind the homes on the right bank that have experienced the worst of the high water already. The developer and the LCA are locked in legal proceedings over a variance to the forest buffer that the developer has requested. If the LCA is not successful, the wall will be built and the right bank of the stream will be negatively impacted.

There is an environmental project being developed by The Baltimore County Department of Recreation and Environmental Management (DEPRM) for the Lutherville reach of Roland Run. It will not include any provisions to address flooding on Roland Run. This project could still influence the Hydraulics of the stream and LCA feels should be included in our requested study.

Reason for bringing our concerns to your attention

The LCA has long realized that Baltimore County is reluctant to open up the Morris Avenue Bridge, as is the State of Maryland to open up the Seminary Avenue Bridge. If those bridges were opened up, they would no longer act as dams and cause high water in our area. The County and State point to impacts that opening the bridges would cause down stream as to why they refuse to rebuild the bridges. The reason that we bring these concerns to your agency is that the flood map, when officially adopted will be the document that used to grant or deny help to our members when they need relief. The LCA is only asking for an accurate depiction of the flood plain in our area of concern. We would like to have this matter settled before the flood map of this area is made official.

An aside

A Representative of DPW has noted that recent studies conducted at Cornell University in Ithaca, New York show that shorter period, high intensity storms can and do inundate areas that are equal to those caused by the 1% per year storm. Since these types of storms seem to be occurring with greater frequency, it seems that our members who live on the banks of the Lutherville Branch of Roland Run could face even more severe flooding.