

2003 Annual Report

Sugar Creek Advisory Committee

Montgomery County Building Administration Summary

- I. Violations
 - A. No Violations
- II. Permits
 - A. 1 permit issued for logging activities.
 - B. 0 permits issued for improvements.
 - C. 2 reviews for corridor determination
- III. Other
 - A. Improvement location permit and fee schedule – permit form was adopted and fee approved November 2003
- IV. Attachments
 - A. Copy of adopted improvement location permit

Annual Report 2003

Sugar Creek Advisory Board

ARTICLE 1 ANNUAL REPORT¹: An annual report will be prepared by the Sugar Creek Advisory Committee to be submitted to the County Commissioners each year. This report will include but not be limited to the following:

1. Number of permits
2. Number of violations
3. Changes in land use along the riparian corridor, *i.e.*, building, tree planting, tree harvest, bank stabilization signage, *etc.*
4. Any other matter that the Advisory Board deems significant

Attached are local media reports on the creek, Montgomery County Departments of Health, Building and Sheriff yearly reports on creek activities, cruise report and meeting minutes.

The Sugar Creek Advisory Board elected officers and set the agenda for the year. A primary objective of the Board's work is assessing changes that occurred along the corridor. Of particular interest in 2003 was determining the current condition of the corridor below Crawfordsville thereby establishing a baseline by which all future changes could be measured [Title IX, article 1, item 3]. The Board decided the best way to evaluate the current state of the north corridor was to "float" the creek and to record its findings. The list of reportable criteria includes:

1. Clear cut to bank, *i.e.*, no trees to bank of creek
2. Obstructions, *e.g.*, log jams, dumping
3. Drainage tiles and pipes
4. Artificial bank stabilization
5. ATV activity
6. Beaver activity
7. Visible structures within 75 feet of the creek

Participants on the May trip From Old Lafayette Rd. to Offield Rd. included employees of the County Highway Department, a reporter from the Journal Review, members of the Indiana Department of Natural Resources, members of the general public and a members of the Sugar Creek Advisory Board. Once more in an effort to create an accurate record of areas of the creek corridor deemed needing attention, GPS technology was used to locate and to mark on a map of the creek areas needing attention or containing items of note. A limited number of photos were taken.

Findings and Recommendations

Changes along the corridor and other information:

The single most important biological feature necessary for maintaining both the health and scenic beauty of the creek is a well-established growth of trees along the banks. These trees stabilize the bank, shade the water and serve as a buffer between the fields and the creek, lessening silting of the creek and helping to filter out chemicals applied to fields before they enter the water.

Conclusions and general observations

¹ Sugar Creek Ordinance, Title IX

For the most part the banks were in good condition with deep woods protection. However there were spots where there was only one row of mature trees between the stream and either pasture or row crop land. Also observed were a few areas, some small and some rather large, of manmade riprap on the creek banks. These were primarily on the outside of turns, presumably trying to stabilize the existing bank.

A single row of trees can be a problem for a number of reasons. If the sun is allowed to shine on the water it raises its temperature killing some more sensitive species. Since there is only one row of trees if anything happens to them there is no protection from the sun. For the landowner there is then also no protection from the creek and its erosion. With only one row of trees, the wind and water forces are concentrated on them. There are no co-mingled, horizontally extending roots. With multiple trunks extending away from the stream, the roots interlock and provide more protection to erosion and wind throw. With only one row if there is a "blow out" of a tree the water forces can be concentrated and create a swirl. With a single aged row of even aged trees, as there are in a number of cases, all the trees will tend to die nearly together. This creates a loss of large and deep roots. Wind and water forces are then more concentrated on the survivors. Erosion can occur before the new, little roots get down to the depth that is needed to protect the bank.

In a few places landowners had, in years past, placed large amounts of mostly old masonry riprap on the outside of turns trying to protect the bank from erosion. The 1945 Flood Control Act limits this and other activities in riparian zones that drain more than 640 acres, one square mile. Many times landowner actions have unintended and unforeseen results that are counter productive to their desires. In some of these places erosion is starting to concentrate above and below the masonry piles. Over time these piles will form the heads of islands in the stream forcing the channel faster and farther over into the land that was trying to be protected. This could cause the landowner to take more and more drastic measures to change the water flow leading to continuing violations of the 1945 FCA.

There were a few old dumps that are eroding into the stream down stream from Old Lafayette Rd. on river left. These seem to be pre Whitlock Street dump dumps. The material has lost most of its organic content and contains no modern, post WW II materials. However metal, glass and ceramic items are entering the stream. Monitoring needs to be done so no overly dangerous items leave the site.

Beavers have been active on spots along the creek. Their activity seems to be cyclical, at least on specific sites. This may be driven by availability of preferred food or water levels in the tributaries.

All visible structures within 75 feet of the Normal High Water were noted by GIS.

A house on Wayne Ave. in Crawfordsville at the top of a 50-foot till bank had its backyard cut to within 5 feet of the house. Through efforts of the SCAB, the owners, the mortgage holder, the City, the County and Masterscape the structure was totally removed. The street and other infrastructure in that area need to be watched as the creek continues to cut aggressively at the bottom of the bank.

Aerial photos have now been added to the GIS from the three years' cruises. These should be studied to see how our field observations match. If possible a virtual creek tour should be created on a web site so folks can click and see much if not all of the creek and access our information.

NEW GAUGING STATION AT CEL&P

A new visual gauging station has been placed next to the current satellite/ on line station on the CEL&P retaining wall. Through the efforts of Bob Ginger this will be a new way for direct field observations of river level.

**MONTGOMERY COUNTY
SUGAR CREEK ORDINANCE
IMPROVEMENT LOCATION PERMIT**

DATE: _____

PERMIT # _____

NAME: _____

PHONE: _____

ADDRESS: _____

TYPE OF ACTIVITY: _____

LEGAL DESCRIPTION: _____ PARCEL #: _____

DIRECTIONS TO SITE: (Please give accurate directions): _____

DESCRIPTION OF ACTIVITY: _____

IF PERMIT IS FOR CLEARING OR LOGGING ACTIVITIES:

Name of Consulting Forester _____

Date of Certification of Undisturbed Basal Area _____

Building Administrator Approval Date _____

Signature of Building Administrator _____

IF PERMIT IS FOR CONSTRUCTION OR IMPROVEMENT LOCATION:

Date of Advisory Board Recommendation _____

Signature of Advisory Board President _____

Date of Building Administrator Approval _____

Signature of Building Administrator _____

IF BUILDING PERMIT IS REQUIRED:

Permit # _____

IF CONSTRUCTION IN FLOODWAY PERMIT IS REQUIRED: Permit # _____

THIS IS NOT A BUILDING PERMIT!