Annual Report 2001

Sugar Creek Advisory Board

ARTICLE 1 ANNUAL RPEPORT[1]: 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

Introduction

In the first year of its operation, the Sugar Creek Advisory Board elected officers, established operating procedures and set the agenda for the year. A primary objective of the Board's work last year was to develop procedures and guidelines for assessing changes that occurred along the corridor. Of particular interest was determining the current condition of the corridor 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 corridor was to "float" the creek and to record its findings. Lengthy discussions to determine which criteria should be used in evaluating the corridor, what additional information it deemed significant [Title IX, article 1, item 4] and how this information should be recorded and tabulated were held. It was decided that we should focus, initially, on those factors that are manmade or "correctable". The list of criteria approved 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

Because of an unusually dry spring, the float trip was delayed until the end of May after the trees had fully leafed out and we were able to float only the creek downstream from Crawfordsville. Participants on the trip included employees of the County, a reporter from the Journal Review, members of the Indiana Department of Natural Resources, Crawfordsville Department of Parks and Recreation and a member of the Sugar Creek Advisory Board. 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.

---

[1] Sugar Creek Ordinance, Title IX

Findings and Recommendations

Number of permits issued and number of violations:

No permits were issued and no violations were reported.

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 and serve as a buffer between the fields and the creek, preventing silting of the creek and helping to filter out chemicals applied to fields before they enter the water. It became apparent that while there were few areas along the banks that were clear-cut, *i.e.* devoid of any trees, it was quite clear that a number of areas between Crawfordsville and Offield Creek were sufficiently degraded as to warrant concern. While these areas had trees growing along the bank, the trees were few in number often limited to a single row and are very likely inadequate for the protection of the creek. A simple solution, one that would require a minimal amount of work, would be to leave uncut or untilled a swath sufficient to allow the existing trees to re-seed and eventually re-populate the banks. The riparian growth along the corridor below Offield Creek appears to be in good condition.

In addition to the degraded riparian tree growth, drainage tiles, buildings ATV activity, and artificial bank stabilization were noted and marked on a map (see attached). The number of buildings, and other visual intrusions and activities decreased markedly below Offield Creek; however, several (10 to 20) tires in the creek were observed. Logjams at the railroad trestle and the US 136 Bridge were examined. Little beaver damage was noted from the creek, and it became apparent that beaver activity is better seen from the bank than from the creek.

Conclusions and general observations

Our first trip down the creek provided some important lessons. First, a survey of the creek is a time consuming, arduous task. Identifying, describing and recording by GPS technology visual intrusions and areas of potential concern are not easy. We allowed ourselves one day to do the fifteen miles between Crawfordsville and Deere's Mill Bridge. We could easily have spent the full day doing half of that distance. A full and accurate description of the creek will require a lot of work and time.

Second, the survey should be done before the leaves have fully leafed out. Once the trees are in full leaf and other vegetation is in full growth, it is difficult to observe drainage tiles *etc*.

Third, it may prove difficult for the advisory board to conduct the survey with just the members of the board. For this trip we had ample help from County employees and two members of the DNR, but only one member of the Sugar Creek Advisory Board was able to make the trip.

Fourth, and finally, the board should explore other means of acquiring data on the extent of riparian vegetation. For example USGS aerial photographs taken of Sugar Creek in the 1950's and satellite images of the creek could provide useful information regarding the loss of vegetation and provide an easily quantifiable method for documenting further losses or gains.