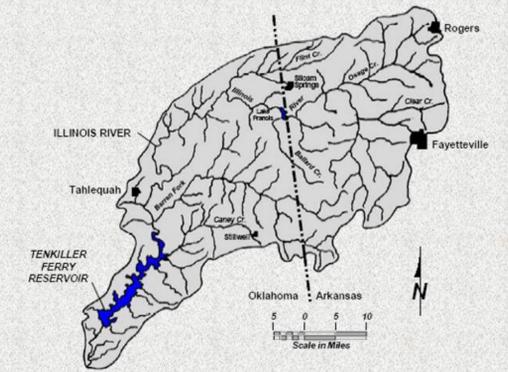




Illinois River Basin Blue Thumb Volunteer Monitor Program



Storm, DE, et al. 1996. Basin-wide pollution inventory for the Illinois River Comprehensive basin management program.

Project Description

The Illinois River Basin (IRB) Blue Thumb Volunteer Monitoring and Education Program began as part of the Illinois Basin 319 NPS Education Project (the Project) in October 2000. Sixty-four volunteers, including 18 Tahlequah High School students, have been trained since then. Approximately 45 volunteers, including 10 high school students, are currently active in the Basin and nearby Spring Creek Watershed. Currently (fall 2003), 9 stream sites are monitored for water chemistry on a monthly basis. Two other sites, Spring Creek - Oaks and Cherokee Cattle Ranch, are monitored on an intermittent basis. Macro-invertebrate collection and habitat assessments are conducted twice yearly on all sites by volunteers with staff assistance.

During the Project period ending October 2002, volunteers returned a total of 206 site reports, and contributed approximately 1260 hours to monitoring activities. In addition, about 1150 volunteer hours were devoted to training, 130 hours to QA activities, and 80 hours conducting educational events. High School students worked three resource fairs for younger children, and volunteers also assisted at the Project-sponsored River Fair and Flotilla Tour.

Measures of Success

A significant measure of success is the retention of trained volunteers and their level of participation in the program. In addition, other students frequently accompany teachers and trained student volunteers while they are doing their monitoring fieldwork. New training opportunities have been repeatedly requested. Much of the credit for this success is due to the level of support received from the Statewide Blue Thumb staff, employees of the Oklahoma Conservation Commission.

Results

In pre-post tests, participants' average scores increased from 2.88 to 5.85 correct out of 8 questions, an increase of over 100%. Trainees gained knowledge of: (1) what biological monitoring includes, (2) where to take water samples, (3) the best time of day to sample, and (4) how kit glassware should be cleaned. There were lesser gains concerning questions about (1) the QA schedule, (2) which area of a stream has the greatest water velocity, (3) the meaning of the word "benthic", and (4) the interpretation of biological diversity.

To gauge the Project's progress to date, a self-assessment survey was sent to volunteers in early May 2003. Responses from 25 of 52 active and inactive Blue Thumb volunteers indicated a perceived increase in understanding of the main local water quality issues as a result of being in the program. The majority considered themselves very well informed on many water quality issues since becoming a Blue Thumb member. Understanding watersheds and non-point vs. point-source pollution were the subjects where respondents showed the greatest confidence levels attributable to Blue Thumb. Lower confidence was expressed in the area of riparian issues.

Twenty-two respondents reported at least one area of change in lifestyle behavior since joining Blue Thumb. More than half reported increased water conservation and better care of riparian areas. Ten of the 22 performed volunteer environmental education activities.

While the great majority expressed positive views of their preparation to do Blue Thumb work and of the program organization and staff support, there was somewhat lower, though still positive, confidence in the areas of data management/volunteer feedback and the Quality Assurance (QA) process. This was not surprising. These areas of the program are potentially the most demanding of staff time, on both statewide and local coordination levels. Despite heroic and well-organized efforts of statewide Blue Thumb staff, there is simply insufficient time available for staff to fulfill volunteers' needs without the assistance of energetic teachers.

Teachers have responded extremely well to the program. One teacher stated that Blue Thumb "upped classroom focus on water quality," indicating teachers have found a significant spillover effect of the program on non-volunteer students.

Summary

- 2000 - 2002 Training Activity
 - 64 volunteers trained between Oct. 2000 & Sept. 2002
 - 56 volunteers still in touch with Program
 - 45 volunteers currently active
- 2000 - 2002 Monitoring Activity
 - 11 stream sites used for semi-annual invertebrate collection
 - 9 stream sites monitored monthly for water quality
 - 2 stream sites monitored intermittently for water quality
 - 4 counties - Adair, Cherokee, Delaware, Mayes
 - 2 basins - Spring Creek and Illinois River
- 2000 - 2002 Volunteer Activity
 - 1260 hours of monitoring, invertebrate sampling and subsampling
 - 1150 hours of training
 - 206 site reports
 - 130 hours of Quality Assurance updating
 - 40 hours conducting education activities for others
- New for 2003
 - 10 new H.S. students trained (several others graduated)
 - 6 student volunteers labeling storm drains

