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## **The use of benchmarks as a tool for watershed planning and implementation strategies**

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Watershed plans often fail due to planning processes that are too big and too complicated to be effective. However, guidelines for watershed plans often list some 16 categories of information necessary for a successful plan. As identifying and prioritizing restoration sites are a critical piece to watershed planning, developing a simple but comprehensive tool for evaluating watersheds would help to facilitate the creation and implementation of successful watershed plans. Work on Central Indiana's Eagle Creek Watershed (11-Digit-HUC#05120201120) necessitated the development of such a tool: historical data collections from a 1992-1996 NAWQA study to monitoring data collected by a volunteer citizens group (Eagle Creek Watershed Taskforce) to on-going data collections from County Health Departments to studies by IUPUI researchers and graduate students resulted in a large repository of water quality and land use/land cover data that had never before been consolidated or analyzed. To identify areas of concern, researchers parsed data into two broad categories: data that spoke to the level of water quality degradation and data that spoke to the level of vulnerability to on-going and future degradation. These were then used in an overall evaluation to develop priorities. This evaluation included the two categories of data sources and a Feasibility Evaluation, resulting in a simple process for identifying and prioritizing areas based on three criteria: (1) Level of Degradation; (2) Level of Vulnerability; and (3) Feasibility of Restoration.

The Eagle Creek Watershed Alliance (ECWA) has incorporated this information into an implementation plan that will begin to address priority sub-watershed concerns. ECWA objectives include implementing a series of Best Management Practices (BMPs) targeting three high priority sub-watersheds. These efforts include a Cost-Share Program for agricultural producers and urban BMPs and educational and outreach efforts that include water festivals, watershed tours, technical education and outreach, and watershed signage. Effectiveness of these strategies toward meeting benchmarks will be evaluated by watershed and specific BMP monitoring and social indicator survey tools.