**Stream Mitigation Database Project** 

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## **Project Summary**

We are the World Changers group. Our task was to determine areas of potential stream/wetland mitigation sites throughout Boone county to offset the effects of rapid development within the area. Working alongside Mark Jacobs, with the Boone County Conservation District, our group learned how to identify areas for stream mitigation both electronically, using GIS applications, and physically by going to sites that are in the process of being mitigated.

Mitigation is done through the payment of companies towards stream credits, which in turn support the business of stream restoration and mitigation and offset the effects of development that the company has created. Our project has many important applications including restoring habitat for animals, bringing native species back to areas of destruction, and protecting the hydrology of an area (which can impact land use and contamination in areas).

The goal of this project was to create a list of properties that could be used for future mitigation projects. What our database of properties can also be used for is a guideline of things to look at when finding areas for mitigation. For intro-level employees or people wanting to know the process of mitigation, our database highlights the main points of interest that should be looked at when finding areas for mitigation.

## Purpose

The purpose of this database is to provide a readily available list of streams in Boone County that could potentially be mitigated. This list of streams was created to try and make finding streams to mitigate an easier and more efficient process for BCCDKY. The database will allow BCCDKY to go through the readily available streams' locations and determine if the stream can be mitigated or not. This database provides the following information:

- Watershed the stream is located in
- Parcel ID
- Owner
- Address of parcel
- Latitude and Longitude
- Land use on parcel
- Stream length within parcel
- Quadrant the stream is located in (more info below)

## **Recommendations for reading the database**

- Be sure to check the stream length on the template to ensure that it is enough for a field inspection.
- Searching streams by quadrant or watershed is best because it will keep you in areas with streams in the same vicinity.
- Once streams are found as projects, potential projects, or unavailable land, you can begin to remove any streams that aren't able to be mitigated to improve and update database.
- Map of Boone County was split into four quadrants. The map quadrants were labeled as such(below):

