

Introducing the Project

1.1: Location of the Big Creek Watershed

This section provides the reader with a map of the location of the project area and a definition for the word watershed.

Figure 1.1-A: Location of the Big Creek Watershed shows the area considered to be the Big Creek Watershed by the USGS. A watershed is the area of land that drains to a particular river or lake. The area is located in Southwestern Indiana upstream of the confluence of the Wabash and Ohio Rivers near the Indiana cities of Evansville and Mt. Vernon. It has been given the HUC (Hydrologic Unit Code) of 05120113110. It is part of a larger 8 digit watershed 05120113 or the Lower Wabash Watershed. The area drains to the Wabash River and later the Ohio and Mississippi Rivers before flowing into the Gulf of Mexico.

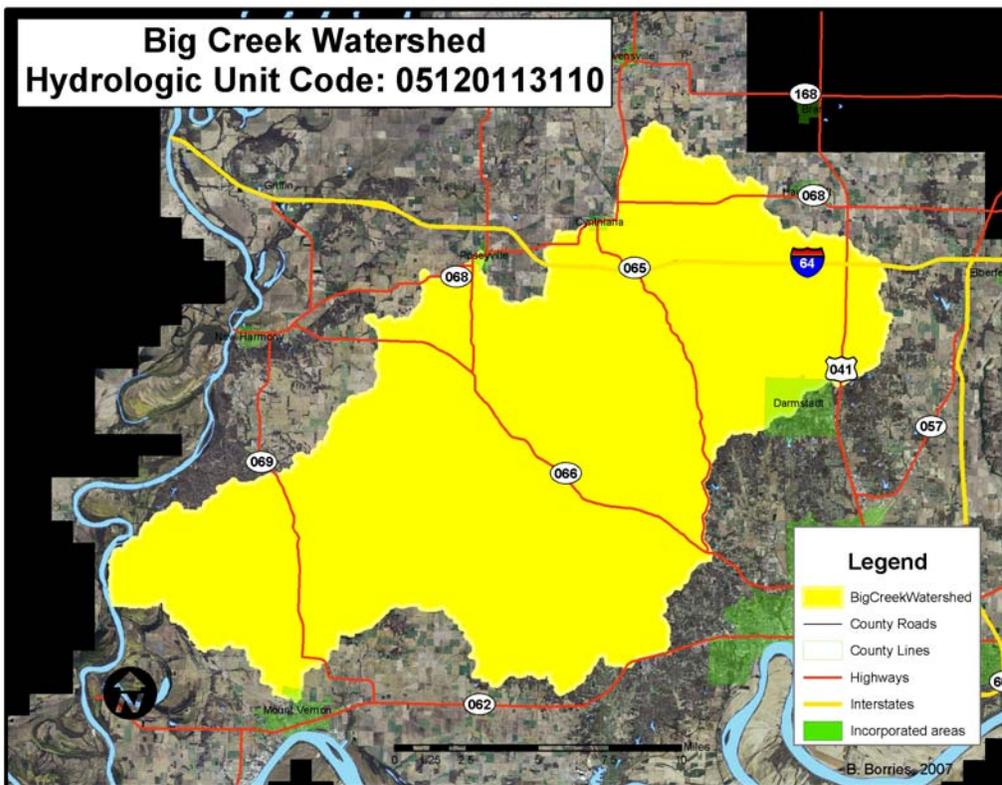


Figure 1.1-A: The Big Creek Watershed, HUC 05120113110

Figure 1.1-B: Location in Lower Wabash Watershed shows the location of the Big Creek Watershed in yellow on top of the Lower Wabash Watershed (HUC 05120113) in red. The Lower Wabash Watershed is 1,321 Square miles in area and the Big Creek Watershed makes up a little less than 1/5 of its total area.

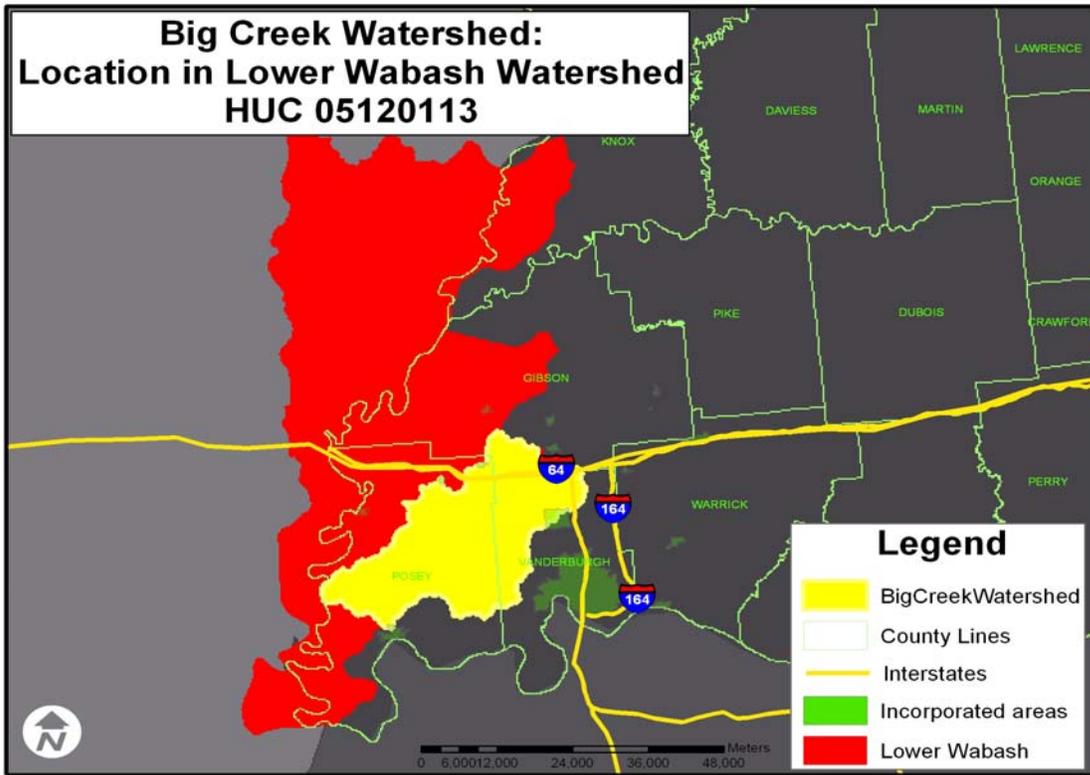


Figure 1.1-B: Location in the Lower Wabash Watershed

Figure 1.1-C: Location in the Wabash River Basin shows the location of the Big Creek Watershed in yellow on top of the entire area that drains to the Wabash River in purple. The total area of the Wabash River Basin is 33,000 sq. mi. and the Big Creek Watershed makes up about one half of a percent of its total area. A Total Maximum Daily Load assessment for nutrients and pathogens has been developed for the entire Wabash Watershed by IDEM's NPS/TMDL section. It can be found at http://www.in.gov/idem/files/tmdl_wabash_report.pdf

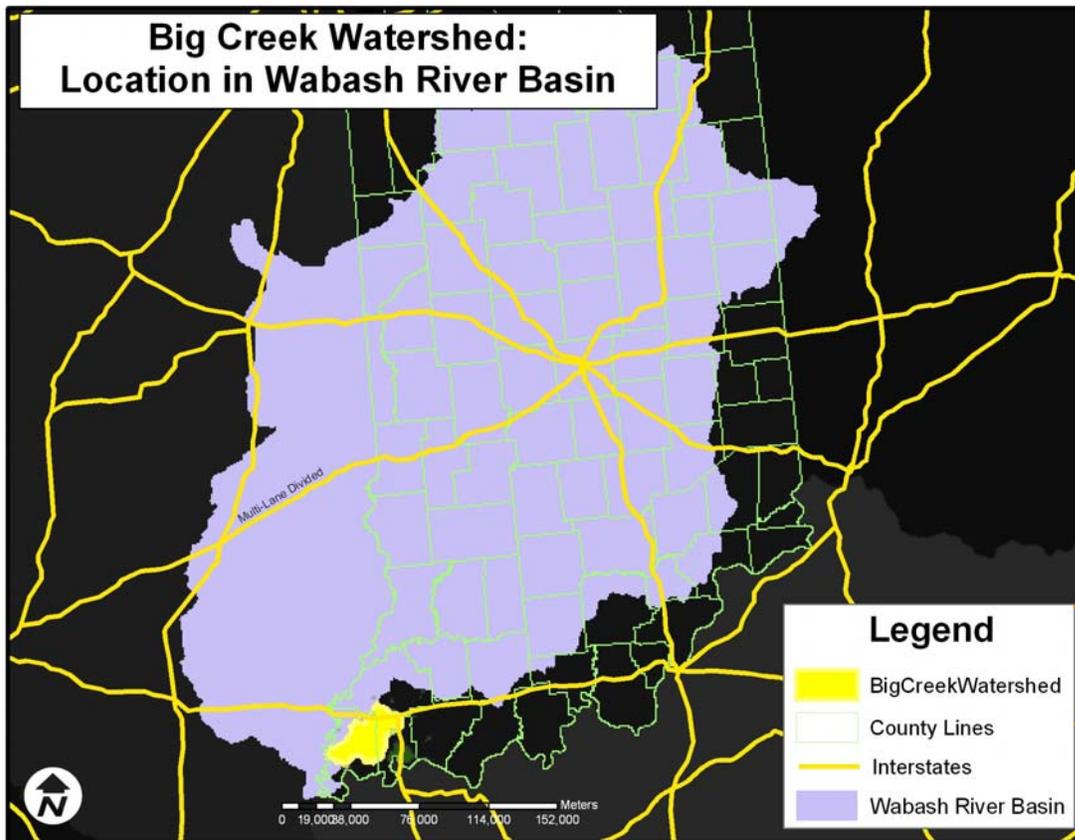


Figure 1.1-C: Location in the Wabash River Basin

1.2 Project Initiation

This section provides the reader with a background of how and why the project was started.

The Big Creek Watershed project was initiated by local citizens serving on the Posey County Soil & Water Conservation District board of supervisors in response to findings that water bodies within the watershed were impaired for pH, nutrients, and impaired biotic communities. The district then met with representatives from the Vanderburgh County SWCD, Gibson County SWCD, Southwestern Indiana Brine Coalition, Natural Resource Conservation Service, Four Rivers Resource Conservation & Development Area, Inc., Indiana Department of Environmental Management, Purdue Extension Service, Posey County Planning Commission, and Posey County Council. It was decided to approach the problem through a watershed study. The district then held two public meetings and announced the project through newsletter articles and press releases.

In December of 2006, the district was awarded a 205(j) watershed planning grant by the Indiana Department of Environmental Management. The grant was to fund a watershed coordinator who would organize a steering committee to guide the watershed planning process. Water monitoring would also be conducted including biological, chemical and habitat assessments. Public meetings and outreach activities would be held over the course of the grant to get input and educate the community on the findings. The process would culminate in the development

of a watershed management plan that meets IDEM's 2003 Watershed Management Plan checklist.

1.3: Public Outreach

This section describes the methods that were used to obtain public input and to keep the community informed about the project.

During the development of the Big Creek Watershed plan, a number of media outlets, activities and meetings were used to enhance the understanding of the issues and encourage participation.

Public meetings were held before the grant was obtained and throughout the project. Prior to receiving the 205(j) grant, the Posey County Soil & Water Conservation district received Clean Water Indiana monies to host public meetings about initiating the plan on August 16th, 2006 at North Posey High School in Poseyville, IN and August 17th, 2006 in Mt. Vernon, IN. To advertise, postcards were sent to all landowners in the watershed. A notice was also posted in the local newspapers. February 1st, after receiving the grant, a public meeting was held to announce the project's initiation and to solicit individuals to join the steering committee. To advertise the February 1st meeting postcards were sent to all individuals who left their names and addresses at the first meeting plus a number of government and private entities. The total mailing included 147 members.

Regular updates from the project were sent to local newspapers and printed in the Posey, Vanderburgh, & Gibson Counties' SWCD newsletters.

Indiana Department of Natural Resources' Hoosier Riverwatch program was utilized to educate the community on water resource issues through various ways. On March 8th, 2007, a presentation was done at Central High School to an environmental science class. Central is an Evansville-Vanderburgh School Corporation school whose district includes a portion of the watershed. The presentation included an overview of local watersheds, the importance of water quality, macroinvertebrate identification, and instructions on water monitoring with Hoosier Riverwatch equipment. The students then were able to test from a pond located at the school and discuss the results.

Steering committee meetings were used both as a way to engage the community and for the steering committee to take part in educating the community. The first meeting was held on March 26th, 2007 at First Christian Church. The meeting was advertised through the local newspaper, Posey County SWCD newsletter, at a local drainage 101 seminar, and at the Big Creek Drainage Association 2007 annual meeting. In addition, letters were sent to the supporters listed in the 205(j) grant application and to individuals who had shown interest in serving on the steering committee. At the meeting, steering committee members set a second date for April 16th, 2007 and the 2nd meeting was held at Poseyville Community Center. Attendees at the 2nd meeting evaluated the participation of stakeholders within the watershed. It was decided that the following groups, stakeholder categories, or individuals were represented at the time: Livestock owners, excavators, row crop farmers, homebuilders, homeowners, owners of large tracks of land, land developers, Gibson chamber of commerce, Posey chamber of commerce, Southwest Indiana Builders Association, Robinson township Conservation Club, Mt. Vernon Mayor's Committee, 4-H club, Envirothon, Frog Follies, Southwestern Indiana Brine Coalition, Big Creek Drainage Association, Mt Vernon Kiwanis, Posey/Vanderburgh County Co-

ops, Posey/Vanderburgh Farm Bureaus, local realtor's associations. The concern list was also reassessed and new concerns were added. Additional steering committee meetings were held on July 30th, 2007; August 22nd, 2007; December 12th, 2007; March 19th, 2008; May 28th, 2008; and September 19th, 2008. Additional public meetings were held on November 13th, 2007; May 28th, 2008; and November 13th, 2008.

1.4: Initial Concerns

This section describes the conditions and issues identified by the public that were important to the community before a study of the watershed was completed. It forms the basis for the main problems that will be addressed later in the plan.

Concerns related to the watershed and its waterways were obtained through public meetings and conversations with community members. During the meeting held March 26th, 2007, an initial list was generated with NRCS Co-implementation Team Leader, Chris Lee facilitating. The concerns are listed below. Eighteen people were in attendance at the meeting. More concerns were added through personal contacts and a short follow-up session at the beginning of the April 16th meeting.

Initial Concerns

- aquatic life
- backflow gates creating flooding on downstream people
- bridge design
- bridge scour
- business/development
- clean up the creek at the wabash
- confined feeding
- contaminants in the water
- diversity of steering committee
- drainage
- education
- erosion
- flooding
- groundwater quality
- gully erosion
- invasive species-particularly scouring rush (*Equisetum arvense*) and Johnson Grass
- lack of centralized wastewater treatment around Wadesville/Blairsville area
- lack of filter/buffer strips
- lack of information
- lack of public access areas
- legislative involvement
- leveeing the stream banks
- litter
- more wascobs on the high ground to hold water in the hills
- natural debris accumulation
- noxious species-particularly Johnson grass
- oil contamination/brine sites
- packaged sewer treatment facilities
- regional coordination
- resources going towards legal drains
- road side ditches
- soil loss
- stream bank condition
- surface water quality
- washing where farms drain into the creek
- waterway integrity/bank stability
- waterway openings
- wetland mitigation/uses/planning

These initial concerns are grouped here into six categories for reference through the rest of the plan.

Group: Sediment loading and soil loss

Related concerns: aquatic life, bridge design, bridge scour, business/development, contaminants in the water, drainage, education, erosion, gully erosion, lack of filter/buffer strips, more wascobs on the high ground to hold water in the hills, natural debris accumulation, road side ditches, soil loss, stream bank condition, surface water quality, washing where farms drain into the creek, waterway integrity/bank stability, waterway openings

Group: Pathogens

Related Concerns: contaminants in the water, confined feeding, groundwater quality, packaged sewer treatment facilities, lack of centralized wastewater treatment opportunities, surface water quality, lack of filter/buffer strips

Group: Channel Quality

Related Concerns: aquatic life, backflow gates creating flooding on downstream people, bridge design, bridge scour, business/development, clean up the creek at the Wabash, drainage, erosion, flooding, gully erosion, leveeing the stream banks, legislative involvement, more structures on the high ground to hold water in the hills, noxious species-particularly Johnson grass, natural debris accumulation, regional coordination, resources going towards legal drains, surface water quality, stream bank condition, waterway integrity/bank stability, wetland mitigation/uses/planning, lack of filter/buffer strips

Group: Nutrient Loading and Loss

Related Concerns: aquatic life, confined feeding, contaminants in the water, erosion, groundwater quality, gully erosion, lack of centralized wastewater treatment opportunities, lack of filter/buffer strips, packaged sewer treatment facilities, surface water quality, soil loss

Group: Education

Related Concerns: aquatic life, business/development, contaminants in the water, groundwater quality, lack of filter/buffer strips, lack of information, litter, surface water quality, contaminants in the water, erosion, groundwater quality, lack of information, oil contamination/brine sites

1.5: Steering Committee Structure and Members

This section describes the structure and membership of the group that directed the planning process.

A steering committee was formed after numerous solicitations through media outlets, mailings, and personal contacts. Interested individuals were invited to the 3/26/07 meeting and asked to introduce themselves confirming that they were volunteering for the position. An additional member was added at a later meeting. The group makes decisions by consensus with a goal of maintaining membership throughout the project. The steering committee members are listed below:

Member	Affiliation(s)
John Bittner, Chairperson	Farmer, Member of Big Creek Drainage Association
Wilfred Goedde, Posey County Co-Chair	Farmer, Member of Southwest Indiana

	Brine Coalition
Mark Nass, Gibson County Co-Chair	Farmer, Excavator, Owner of Nass Trucking, Member of Gibson County Chamber of Commerce
Jim Droege, Recorder	Farmer, President of Indiana Association of Soil & Water Conservation Districts, Board member of Posey County Farm Bureau
Janet Schneider	Farmer
Gerald Schneider	Farmer
Jerry Walden	Insurance sales, President of Mt. Vernon Kiwanis (2007)
Scott Becker	Farmer, Board member of Posey County Farm Bureau
Steve Reineke	Farmer, Member of Robinson Township Conservation Club
Don Kuhlenschmidt	Farmer, Pilot
Paul Breeze	Posey County Surveyor
Tim Seifert	Farmer, President of Posey County Farm Bureau
Andy Rudolph	Developer, member of Southwestern Indiana Builders Association, Evansville Chamber of Commerce, Realtor's Association, Principal Broker – Tri County Realty & Development, President & Owner of Andy Rudolph Construction and Development LLC.

Table 1.5-A: Steering Committee Membership & Affiliation

The mission of the Big Creek Watershed Steering Committee is to:

“Understand and Improve Water Quality through Broad Community Involvement”

Maps were also created to show the spatial distribution of the steering committee throughout the watershed. *Figure 1.5-A: Big Creek Steering Committee Representation* and *Figure 1.5-B: Big Creek Steering Committee Representation Based on FSA Farming Interest* depict the amount of representation in each watershed. In *Figure 1.5-A*, addresses provided by the members were used to tie them to a sub-watershed. Sub-watersheds without any representation according to this method are shown in white (no color), sub-watersheds with one member representing are shown in green and sub-watersheds with 2 members are shown in yellow. In *Figure 1.5-B*, FSA farming interest was used to determine all land units that committee members own or rent. This method only accounts for farmers. In this map, the areas with the most representation is shown in red, less representation in orange, yellow, green, teal, and those with no representation are shown in dark blue. From the data, it appears that the most representation is concentrated in and around the Little Creek – Lower Sub-watershed though all are fairly well represented. The least representation is found in the Pond Flat Ditch – Jordan Creek, Buente Creek – Maidlow Ditch, and Big Creek – Alexander Creek Sub-watersheds.

Big Creek Watershed Steering Committee Representation

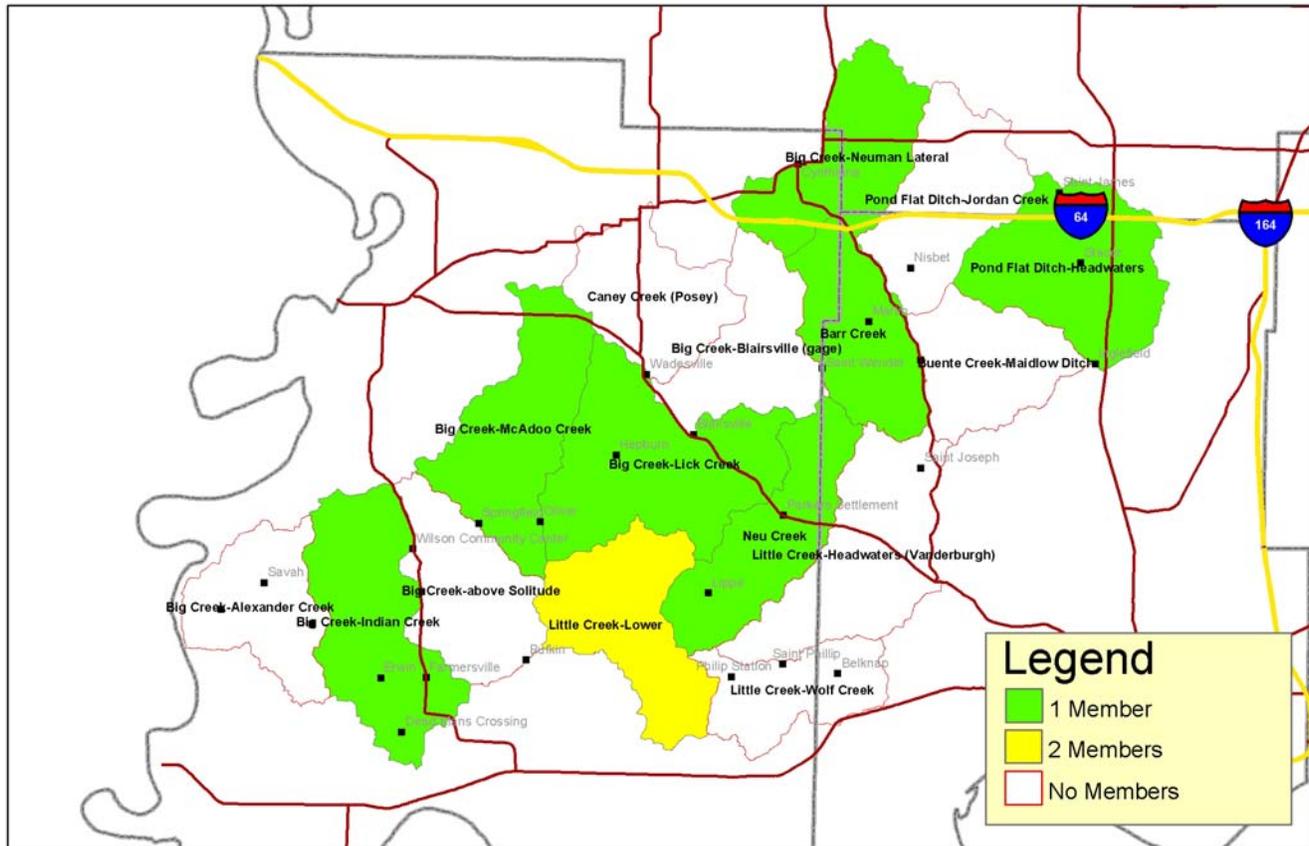


Figure 1.5-A Big Creek Watershed Steering Committee Representation Based on Address

Big Creek Watershed Steering Committee Representation Based on FSA Farming Interest

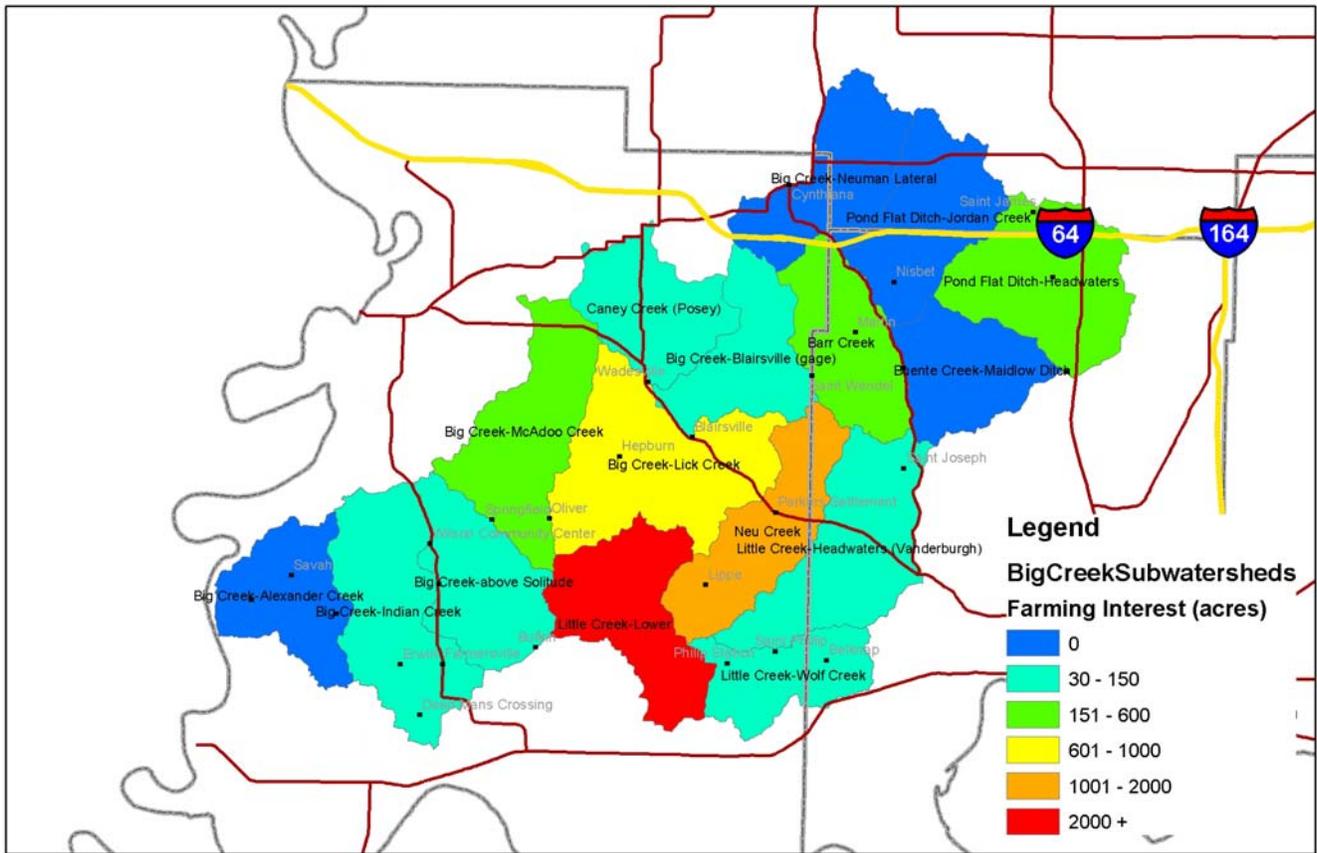


Figure 1.5-B: Big Creek Watershed Steering Committee Representation Based on FSA Farming Interest