1.0 EXECUTIVE SUMMARY

**Public Concerns:**
- Sediment
- Pollutants
- Resource Loss & Protection
- Growth Impacts
- Lack of Knowledge

**Broad Goals:**
- Erosion
- Water Quality
- Habitat and Recreation
- Land Use/Development
- Education/Outreach

**Sediment:**
- Reduce Sediment Load by 1% in 5 years

**Water Quality Targets:**
- Sediment Reduction
- Nitrate Reduction
- Phosphorus Reduction
- E.Coli Reduction
- Natural Area Protection & Enhancement
- Public Awareness

**Nutrients:**
- Reduce Nitrate & Phosphorus by 20% in 5 years, & Nitrate by 40% in 10 years

**E. Coli:**
- Reduce future values at all sample sites to meet State standards in 10 years for both base and storm flow events

**Strategies:**
- BMP Implementation
- Public Education
- Build Partnerships
- Host Public Workshops and Fieldtrips
- Utilize Resources of IDNR, TNC, & CILTI
- Promote Water Conservation
- Improve Enforcement of Regulations
- Continue Monitoring

**BMP Selection:**
- Agricultural
- Urban
- Educational
- Regulatory

**Success Measures:**
- Number of new partners identified
- Number of BMPs installed
- Number of workshops held
- Number of follow-up emails/phone calls from workshop
- Number of meetings with planning authorities
2.0 INTRODUCTION
The Big Walnut Creek Watershed Management planning process was initiated by the Putnam County Soil and Water Conservation District (SWCD). A variety of local land use and water quality concerns exist throughout the watershed. The interconnected nature of these concerns, as well as the desire to protect local natural resource assets, led the Putnam County SWCD to explore funding for a comprehensive watershed management plan that would lead to a strategic approach for conversation and restoration in the watershed.

2.1 Local Leadership
The following watershed management plan and assessment was funded via a Section 319 grant from the Indiana Department of Environmental Management (IDEM). While the Putnam County SWCD oversaw the grant administration, decisions related to the planning process were arrived at via consensus and collaboration among a diverse Steering Committee with multi-county representation. Technical aspects of this project were guided by a Watershed Coordinator and associated team of environmental consultants from Empower Results, LLC.

The Steering Committee
The Steering Committee was comprised of individuals from the following organizations:
- Boone County SWCD
- Hendricks County SWCD
- Putnam County SWCD
- Natural Resource Conservation Service
- Putnam County Board of Health
- Hendricks County Surveyor/Clean Water Department
- Sycamore Trails RC&D
- Putnam County Extension
- Greencastle Water Works
- Putnam County Planning & Zoning
- Area 30 Career Center – DePauw University
- Putnam County Commissioners
- The Nature Conservancy
- Little Walnut Creek Conservancy District
- Heritage Lake Conservancy District
- Altra Indiana, LLC
- Putnamville Correctional Facility

As the Steering Committee began to develop its mission statement and goals, the group began to refer to itself as the Big Walnut Creek Watershed Alliance (BWCWA). A formal identity will likely help the group grow and gain recognition in the community.

2.2 Mission Statement
The Big Walnut Creek Watershed Alliance is focused on improving water quality in the Big Walnut and Deer Creek areas by raising public awareness, protecting natural areas, enhancing adjacent landscapes, and allowing for the public use and enjoyment of the river.
2.3 Watershed Location
The Big Walnut Watershed is located in the west central portion of Indiana approximately 50 miles west from Indianapolis (Figures A, B1-B6). It encompasses 271,267 acres, or 424 square miles, of land across portions of five counties – Boone, Clay, Hendricks, Parke, and Putnam. The majority of the watershed is located within Putnam County. The Big Walnut Watershed is comprised of five smaller 11-digit watersheds. The watershed includes two major streams - Big Walnut Creek and Deer Creek. The headwaters of the watershed begin in Boone County, just south of Lebanon and flow southwesterly, through northwest Hendricks County and then on through Putnam County. Deer Creek flows into Mill Creek. Mill Creek continues westerly where it meets with Big Walnut Creek and the Eel River begins here at the confluences of Big Walnut Creek and Mill Creek. US Highway 36 runs east-west through the central portion of the watershed, dividing it in half. Greencastle is the largest city located within the watershed as it is the county seat of Putnam County. Other notable towns within the watershed include Jamestown, Lizton, North Salem, Bainbridge, Fillmore, and Cloverdale (Figure C).

2.4 Brief History of the Big Walnut Watershed
The Big Walnut Watershed has been studied for decades by several well-known biological scientists. Thomas Simon and Dr. James Gammon have researched the Big Walnut Creek to much extent. Their work has focused primarily on fish habitat and communities within the Big Walnut and Deer Creek Watersheds. Dr. Gammon’s works on Big Walnut Creek date as far back as 1967.

Volunteer stream monitoring data is also available dating back to 2002. Several other scientists and conservation groups have expressed interest in protecting and managing Big Walnut watershed resources as well. Some of these scientists include staff from the Indiana Department of Natural Resources’ Division of Nature Preserves (IDNR-DNP), The Nature Conservancy (TNC), and the Central Indiana Land Trust (CILTI). Several natural resource professionals concur that elements of the Big Walnut Watershed are unique, high quality, and regionally significant from an ecological perspective.

3.0 WATERSHED DESCRIPTION
3.1 Physical Setting
3.1.1 Topography
The Big Walnut Watershed encompasses approximately 271,267 acres, or 424 square miles, of land across portions of five counties – Boone, Clay, Hendricks, Parke, and Putnam. The majority of the watershed is located within Putnam County. This large watershed is located in all or portions of 17 USGS 7.5 minute quadrangles. The topography of the watershed ranges from flat rolling agricultural fields to undulating hills and valleys (Figure D). The Big Walnut Watershed is comprised of five smaller 11-digit watersheds, HUC numbers 05120203010, 05120203020, 05120203030, 05120203040, 05120203050.