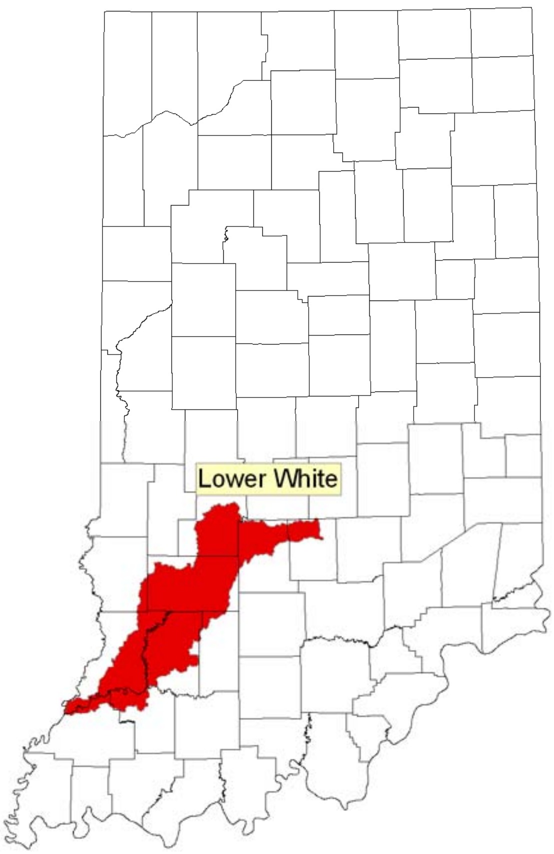
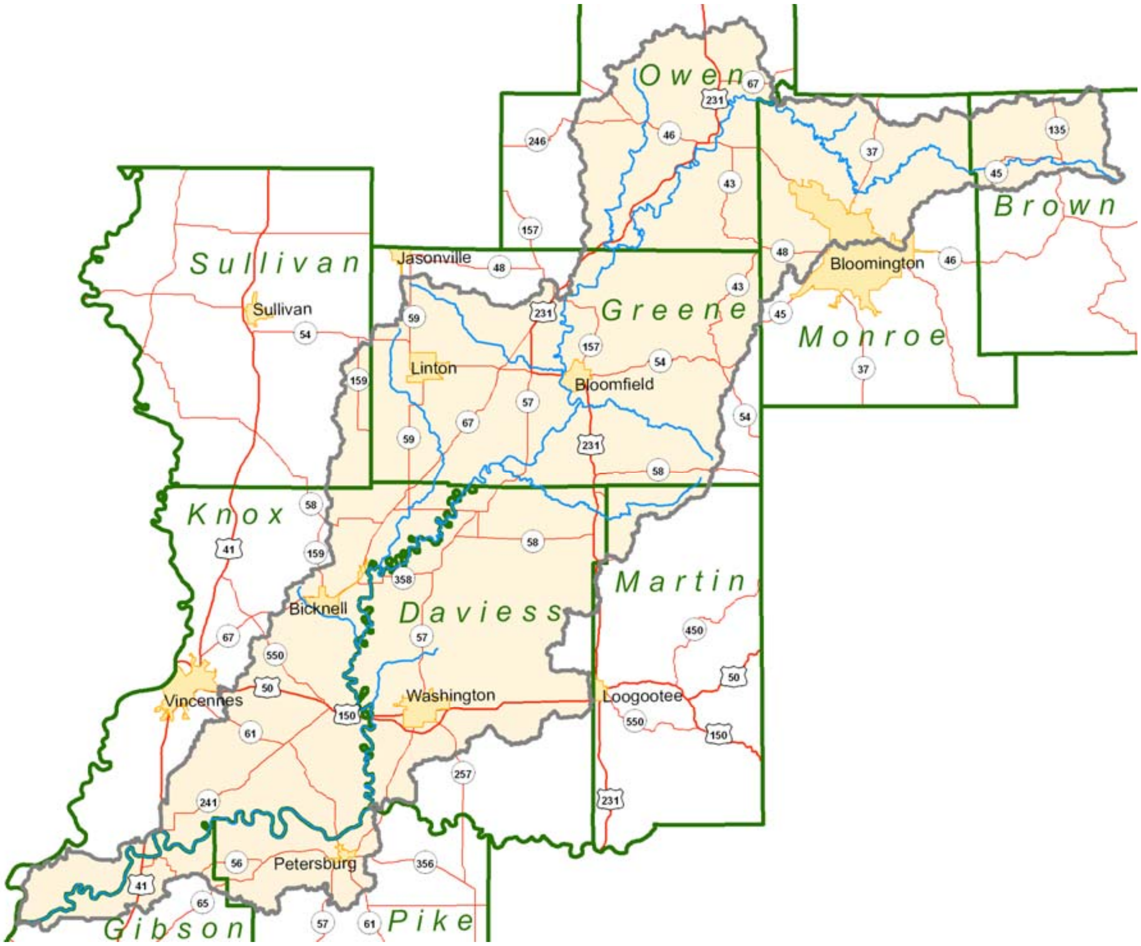
Rapid Watershed Assessment
Lower White Watershed



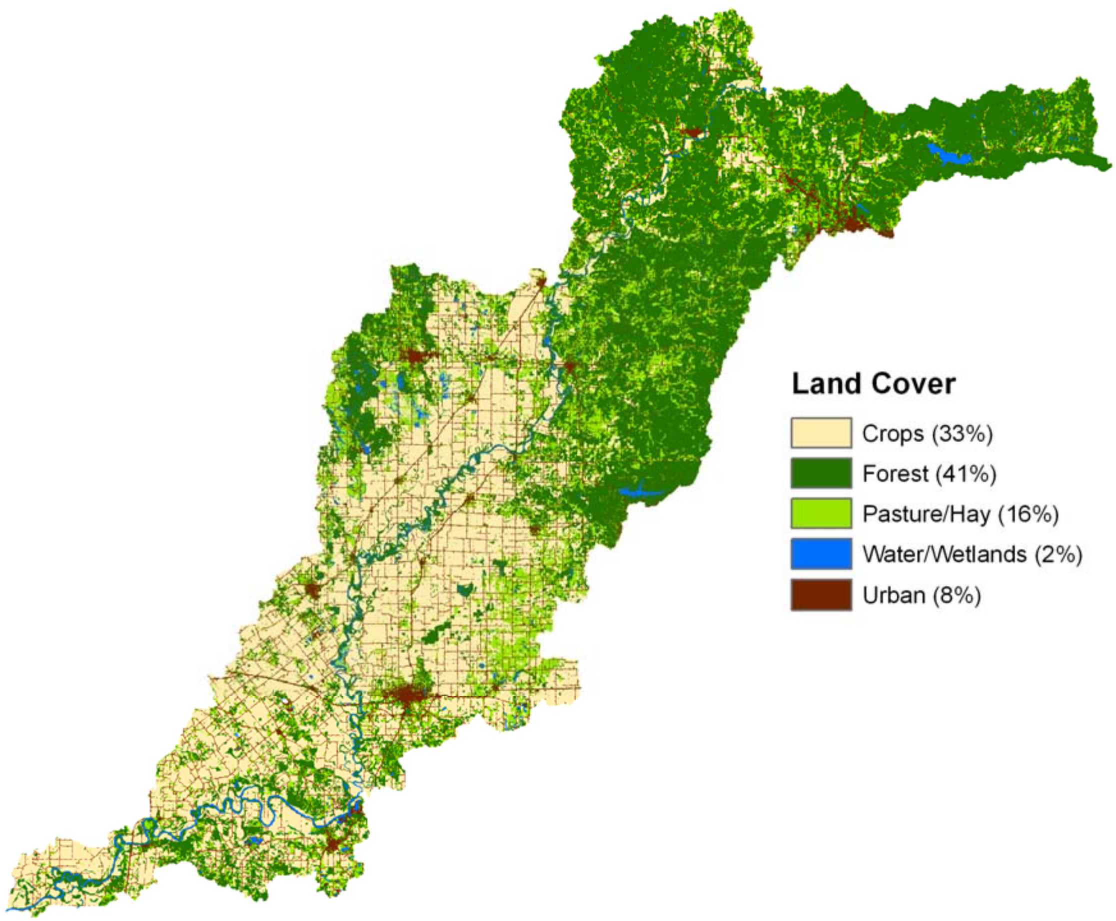
Rapid Watershed Assessments provide initial estimates of where conservation investments would best address the concerns of land owners, conservation districts, and community organizations and stakeholders. These assessments help land owners and local leaders set priorities and determine the best actions to achieve their goals.

Lower White Watershed



Introduction

The Lower White watershed is an eight digit (05120202) hydrologic unit code HUC) watershed located in the Southwestern part of Indiana. The watershed drainage area is just over 1,071,300 acres. The watershed covers eleven different Indiana counties. It is subdivided into 70 subbasins represented on the map by 12 digit HUCs (Figure 2-1).

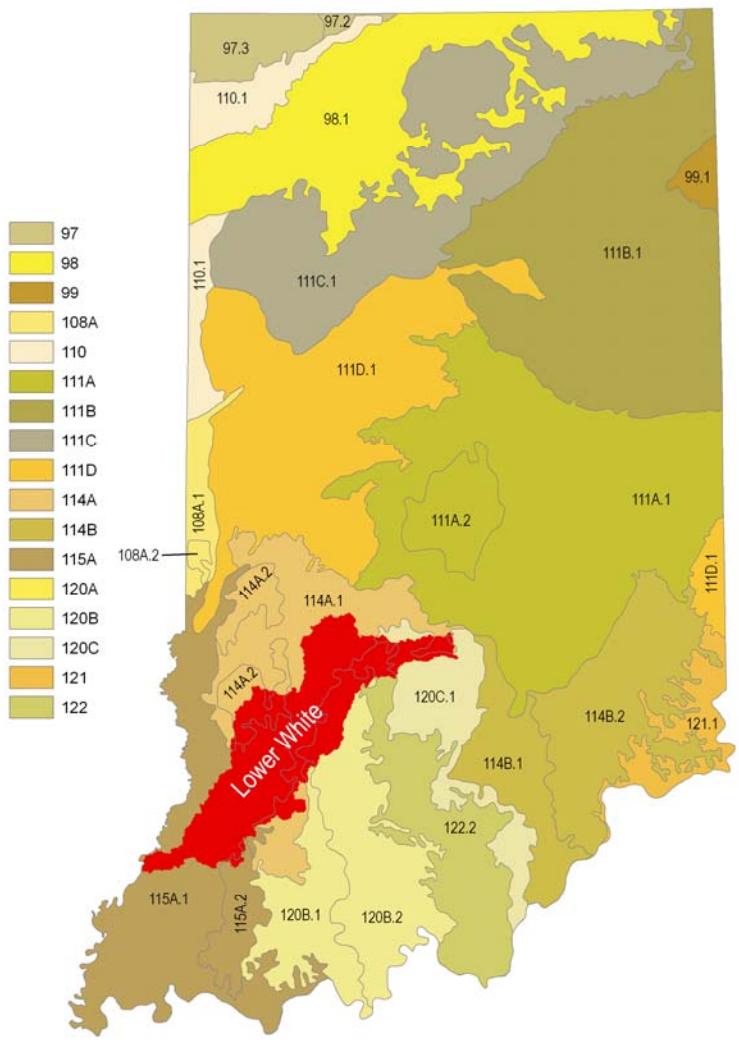


Common Resource Area

There are six common resource areas for the watershed:

The Illinois, Indiana and Ohio Thin Loess and Till Plain, Eastern Part – (114A.1). Pre-Wisconsin till plain with a moderately thick mantle of loess in most places. Corn, soybeans, livestock, and general farming are the main uses with some woodland and tobacco farms. Soils are poorly drained to well drained, formed in Illinoian Age till and overlain in many areas with a layer of loess.

The Interior River Lowland Central Mississippi Valley Wooded Slopes, Eastern Part – (115A.1). Wabash bottomland along the lower Wabash and Ohio Rivers. Low, nearly level flood plains, terraces, and bayous are composed of alluvial and outwash deposits. Hardwood forests dominate in the woodland that remains. Corn, soybeans, wheat, alfalfa, or livestock farming are dominant. Poor drainage and doughtiness are concerns. Soils are very poorly drained to well drained, formed in loamy and silty alluvial and lacustrine sediments.



The Interior Plateau of Kentucky and Indiana Sandstone and Shale Hills and Valleys, Northwestern Part – 120B.1). Area is heavily dissected by medium to high gradient streams, more rugged and wooded. Oaks are found on well-drained upper slopes, mixed mesophytic forest occurs in coves as well as on north facing slopes. Specialized plant communities dominate the eastern sandstone-limestone cliffs. General farming occurs especially in the west and in the wider valleys. Soils are excessively drained to very poorly drained, formed in loess and in sandstone and shale residuum.

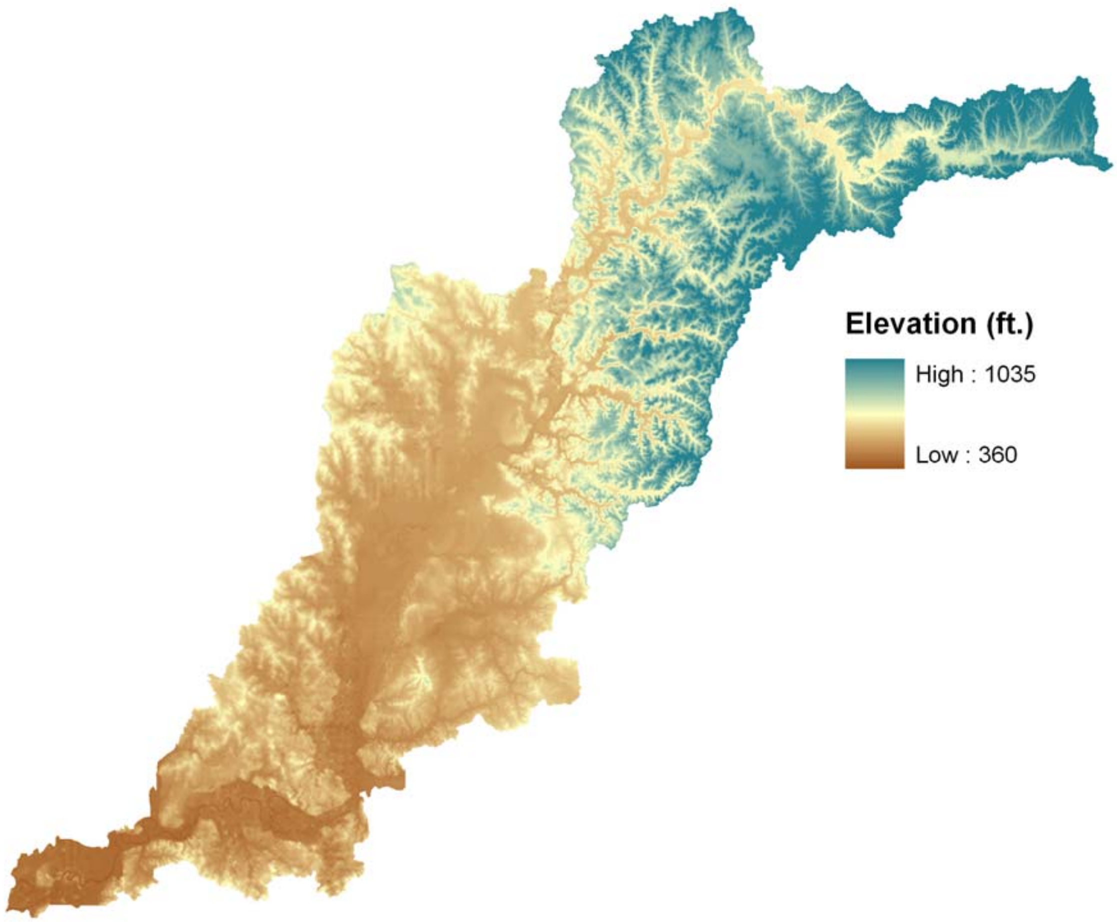
The Forested subsection – Interior Plateau of Kentucky and Indiana Sandstone and Shale Hills and Valleys, Northwestern Part – (120B.2). This area is heavily dissected by medium to high gradient streams, more rugged and wooded. Permanent forest is main use. Oaks are found on well-drained upper slopes. Mixed mesophytic forest occurs in coves as well as on north facing slopes. Specialized plant communities dominate the eastern sandstone-limestone cliffs. Soils are well drained to very poorly drained, formed in loess and in sandstone and shale residuum.

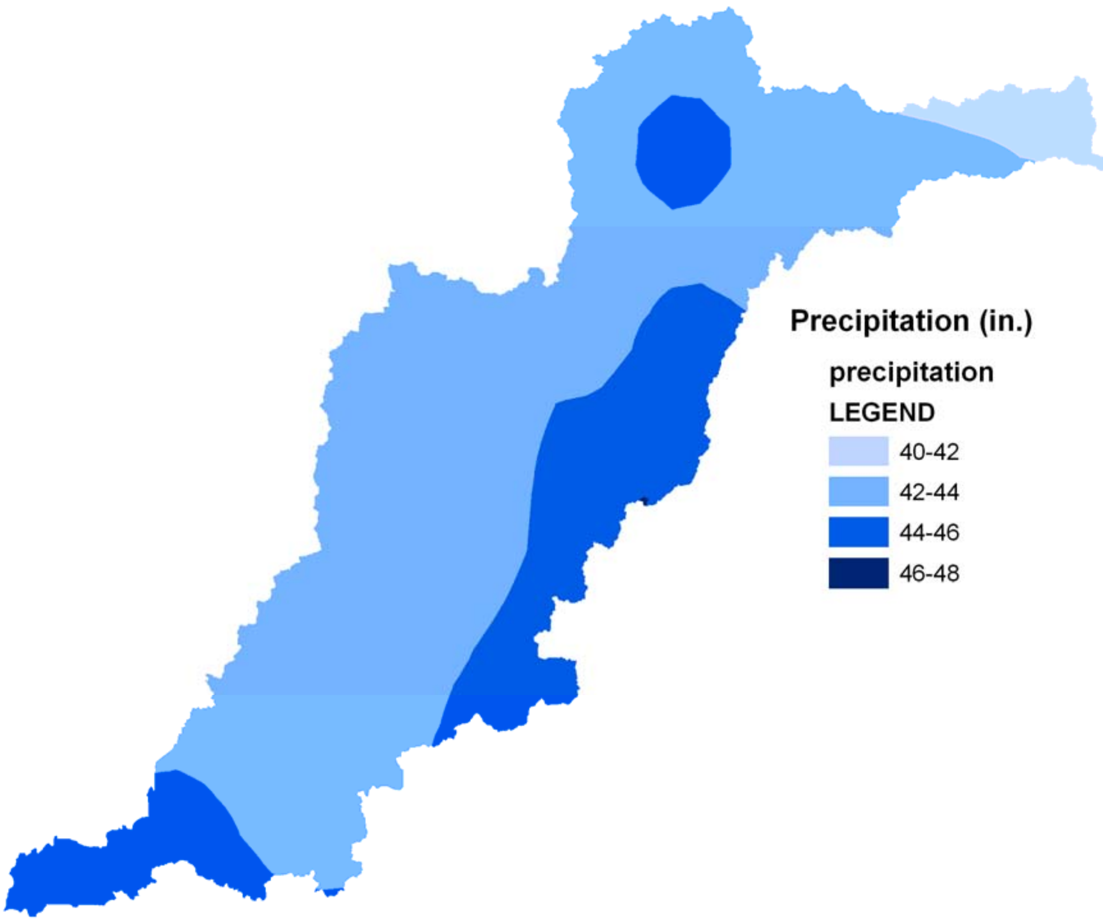
The Interior Plateau of Kentucky and Indiana Sandstone and Shale Hills and Valleys, Northeaster Part – (120C.1). Dissected, high hills, knobs, narrow valleys, and medium to high gradient streams. Oak-hickory forests are on the uplands and beech forests were found in the valleys. Chestnut oak has replaced American chestnut on the well-drained upland slopes. Virginia pine grows on the southern uplands. Soils are well drained to very poorly drained. Silty to clayey soils formed in loess and in siltstone, sandstone and shale residuum.

The Interior Plateau of Highland Rim and Pennyroyal – (122.1). The Mitchell Plain in Indiana differentiated by its karst topography and low relief, residential-urban areas, and limestone quarries. Peripheral hills are wooded. Sink holes and underground drainage and terra rossa soils dominate. Karst wetland communities and limestone glades also occurred. Pre-Wisconsinan glaciation, in the north and is flatter and wetter. Soils are moderately well drained and well drained, leached, formed in loess and limestone residuum.

Physical Description

The Lower White watershed is an eight digit (05120202) hydrologic unit code HUC) watershed located in the Southwestern part of Indiana. The watershed drainage area is just over 1,071,300 acres. The watershed covers eleven different Indiana counties. It is subdivided into 70 subbasins represented on the map by 12 digit HUCs (Figure 2-1).





Assessment of waters

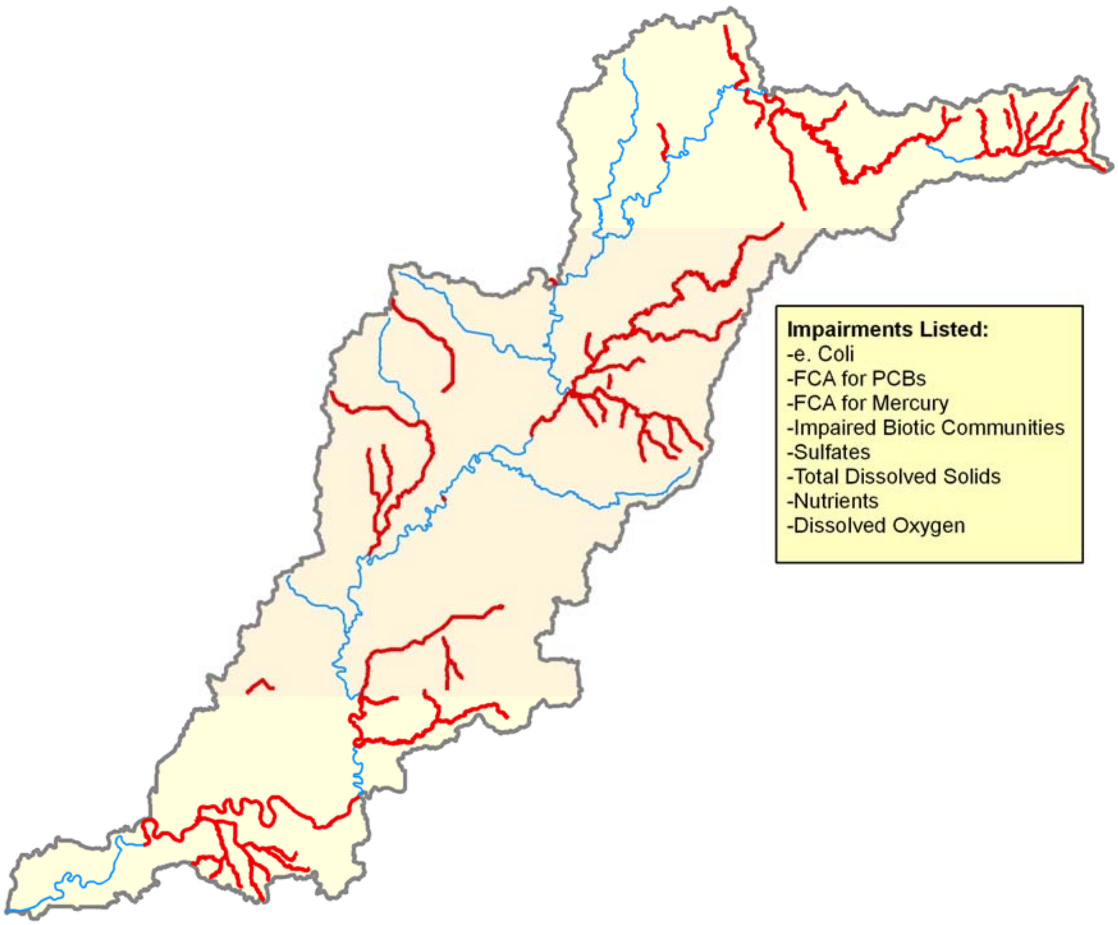
Section 303(d) of the Clean Water Act requires states to identify waters that do not meet, or are not expected to meet, applicable water quality standards. The Clean Water Act Section 303(d) list for Indiana provides a basis for understanding the current status of water quality in the Lower White Watershed.

WATERBODY SEGMENT ID	WATERBODY SEGMENT NAME	CAUSE OF IMPAIRMENT
INW0211_T1001	BEANBLOSSOM CREEK	E. COLI
INW0214_T1053	BEANBLOSSOM CREEK	E. COLI
INW0215_T1004	BEANBLOSSOM CREEK	E. COLI
INW0216_T1005	BEANBLOSSOM CREEK	E. COLI
INW0218_T1006	BEANBLOSSOM CREEK	E. COLI
INW0219_T1007	BEANBLOSSOM CREEK	E. COLI
INW021A_T1008	BEANBLOSSOM CREEK	E. COLI
INW0211_00	BEANBLOSSOM CREEK-HEADWATERS	E. COLI
INW0213_00	BEANBLOSSUM CREEK	E. COLI
INW0213_T1004	BEAR CREEK	E. COLI

WATERBODY SEGMENT ID	WATERBODY SEGMENT NAME	CAUSE OF IMPAIRMENT
INW0244_00	BEECH CREEK	E. COLI
INW0213_T1002	BELL CREEK (UPSTREAM OF EDWARD LEWIS LAKE)	E. COLI
INW0221_00	BIG CREEK/LIMESTONE CREEK TRIBUTARYS	E. COLI
INW0246_00	BLACK ANKLE CREEK	E. COLI
INW0262_00	BLACK CREEK-BREWER DITCH	IMPAIRED BIOTIC COMMUNITIES
INW0262_00	BLACK CREEK-BREWER DITCH	SULFATES
INW0262_00	BLACK CREEK-BREWER DITCH	TOTAL DISSOLVED SOLIDS
INW0265_00	BLACK CREEK-RAMSEY/CALICO SLASH DITCHES	E. COLI
INW0267_00	BLACK CREEK-SINGER DITCH-WHITE R OXBOWS TRIBUTARIES	E. COLI
INW0263_00	BUCK CREEK (GREENE)	E. COLI
INW0263_00	BUCK CREEK (GREENE)	SULFATES
INW0263_00	BUCK CREEK (GREENE)	TOTAL DISSOLVED SOLIDS
INW02A5_00	CONGER CREEK-LITTLE CONGER CREEK	E. COLI
INW0286_T1167	EAGAN DITCH BASIN	NUTRIENTS
INW0249_00	FLYBLOW BR - BURCHAM BR	E. COLI
INW02P1079_00	GRIFFY RESERVOIR	FCA for MERCURY
INW02A6_00	HARBIN CREEK	E. COLI
INW0291_T1038	HAWKINS CREEK	IMPAIRED BIOTIC COMMUNITIES
INW0215_00	HONEY CREEK	E. COLI
INW0219_00	INDIAN CREEK	E. COLI
INW021A_T1017	JACKS DEFEAT CREEK	E. COLI
INW02P1003_00	LAKE LEMON	FCA for MERCURY
INW02P1003_00	LAKE LEMON	FCA for PCBs
INW0213_T1001	LICK CREEK	E. COLI
INW0241_T1164	LITTLE RICHLAND CREEK	E. COLI
INW0241_T1164	LITTLE RICHLAND CREEK	IMPAIRED BIOTIC COMMUNITIES
INW0212_00	NORTH BEAR FORK	E. COLI
INW0283_T1047	NORTH FORK PRAIRIE CREEK	IMPAIRED BIOTIC COMMUNITIES
INW02P1045_00	NORTH FORK PRAIRIE CREEK RESERVOIR #A-4-1(Fisher Dam)	E. COLI
INW0246_T1023	PLUMMER CREEK	E. COLI
INW0249_T1024	PLUMMER CREEK	E. COLI
INW0287_T1063	PRAIRIE CREEK	IMPAIRED BIOTIC COMMUNITIES
INW0288_T1064	PRAIRIE CREEK	IMPAIRED BIOTIC COMMUNITIES
INW0225_T1059	RATTLESNAKE CREEK	IMPAIRED BIOTIC COMMUNITIES
INW0241_T1019	RICHLAND CREEK	E. COLI
INW0241_T1019	RICHLAND CREEK	FCA for MERCURY
INW0242_T1020	RICHLAND CREEK	E. COLI
INW0242_T1020	RICHLAND CREEK	FCA for MERCURY
INW0243_T1021	RICHLAND CREEK	E. COLI
INW0243_T1021	RICHLAND CREEK	FCA for MERCURY
INW0245_T1022	RICHLAND CREEK	E. COLI
INW0245_T1022	RICHLAND CREEK	FCA for MERCURY
INW0241_T1019	RICHLAND CREEK	FCA for PCBs
INW0242_T1020	RICHLAND CREEK	FCA for PCBs
INW0243_T1021	RICHLAND CREEK	FCA for PCBs
INW0245_T1022	RICHLAND CREEK	FCA for PCBs
INW0245_00	RITTER BRANCH	E. COLI
INW0217_T1015	S.F. GRIFFY CR	IMPAIRED BIOTIC COMMUNITIES
INW0266_00	SINGER DITCH(UPPER)-HILL DITCH	E. COLI
INW0218_T1016	STOUT CREEK	FCA for MERCURY
INW0218_T1016	STOUT CREEK	FCA for PCBs

WATERBODY SEGMENT ID	WATERBODY SEGMENT NAME	CAUSE OF IMPAIRMENT
INW022A_T1060	UNNAMED BRANCH E.F. FISH CREEK	IMPAIRED BIOTIC COMMUNITIES
INW0294_00	UNNAMED TRIBUTARY NW OF OLD WHEATLAND RD	DISSOLVED OXYGEN
INW0294_00	UNNAMED TRIBUTARY NW OF OLD WHEATLAND RD	PH
INW0294_00	UNNAMED TRIBUTARY NW OF OLD WHEATLAND RD	TOTAL DISSOLVED SOLIDS
INW0292_00	VEALE CREEK SLOUGH	E. COLI
INW0293_00	VEALE CREEK-LOWER	E. COLI
INW022F_M1014	WHITE RIVER	FCA for MERCURY
INW022F_M1061	WHITE RIVER	FCA for MERCURY
INW0231_M1026	WHITE RIVER	FCA for MERCURY
INW0235_M1027	WHITE RIVER	FCA for MERCURY
INW0251_M1028	WHITE RIVER	FCA for MERCURY
INW0221_M1009	WHITE RIVER	FCA for MERCURY
INW0221_M1009	WHITE RIVER	FCA for PCBs
INW0223_M1010	WHITE RIVER	FCA for MERCURY
INW0223_M1010	WHITE RIVER	FCA for PCBs
INW0224_M1011	WHITE RIVER	CYANIDE
INW0224_M1011	WHITE RIVER	FCA for MERCURY
INW0224_M1011	WHITE RIVER	FCA for PCBs
INW0226_M1012	WHITE RIVER	FCA for MERCURY
INW0226_M1012	WHITE RIVER	FCA for PCBs
INW0229_M1013	WHITE RIVER	FCA for MERCURY
INW0229_M1013	WHITE RIVER	FCA for PCBs
INW022F_M1014	WHITE RIVER	FCA for PCBs
INW022F_M1061	WHITE RIVER	FCA for PCBs
INW0231_M1026	WHITE RIVER	FCA for PCBs
INW0235_M1027	WHITE RIVER	FCA for PCBs
INW0251_M1028	WHITE RIVER	FCA for PCBs
INW0251_M1028	WHITE RIVER	IMPAIRED BIOTIC COMMUNITIES
INW0259_M1032	WHITE RIVER	FCA for MERCURY
INW0259_M1032	WHITE RIVER	FCA for PCBs
INW0291_M1039	WHITE RIVER	IMPAIRED BIOTIC COMMUNITIES
INW0297_M1040	WHITE RIVER	FCA for MERCURY
INW0297_M1040	WHITE RIVER	FCA for PCBs
INW02A3_M1052	WHITE RIVER	FCA for MERCURY
INW02A3_M1052	WHITE RIVER	FCA for PCBs
INW02A3_M1052	WHITE RIVER	IMPAIRED BIOTIC COMMUNITIES
INW02AA_M1055	WHITE RIVER	FCA for MERCURY
INW02AA_M1055	WHITE RIVER	FCA for PCBs
INW02AA_M1055	WHITE RIVER	IMPAIRED BIOTIC COMMUNITIES
INW02AC_M1056	WHITE RIVER	FCA for MERCURY
INW02AC_M1056	WHITE RIVER	FCA for PCBs
INW0271_M1035	White River - Black Cr Edwardsport	FCA for MERCURY
INW0271_M1035	White River - Black Cr Edwardsport	FCA for PCBs
INW0272_M1036	White River - Edwardsport to Indian Creek	FCA for MERCURY
INW0272_M1036	White River - Edwardsport to Indian Creek	FCA for PCBs
INW025A_M1033	White River - Elnora to Smothers Cr cutoff	FCA for MERCURY
INW025A_M1033	White River - Elnora to Smothers Cr cutoff	FCA for PCBs
INW0291_M1039	White River - Maysville	FCA for MERCURY
INW0291_M1039	White River - Maysville	FCA for PCBs
INW0267_M1034	White River - Smother Cr cutoff to Black Cr	FCA for MERCURY
INW0267_M1034	White River - Smother Cr cutoff to Black Cr	FCA for PCBs
INW0275_M1037	White River - Wheatland	FCA for MERCURY

WATERBODY SEGMENT ID	WATERBODY SEGMENT NAME	CAUSE OF IMPAIRMENT
INW0275_M1037	White River - Wheatland	FCA for PCBs
INW0254_M1029	WHITE RIVER-NEWBERRY TRIBS	FCA for MERCURY
INW0254_M1029	WHITE RIVER-NEWBERRY TRIBS	FCA for PCBs



Soils

The dominant soil orders in Major Land Resource Area (MLRA) (114A) are Alfisols and Inceptisols. The MLRA also has small areas of Entisols. The soils in the area have a mesic soil temperature regime, an aquic or udic soil moisture regime, and mixed mineralogy. They formed in loess, Illinoian glacial till or outwash, and alluvium derived from these deposits. The soils are deep or very deep, poorly drained to well drained, and loamy, silty, or clayey. Glossaqualfs (Avonburg, Clermont, and Cobbsfork series) are on broad, flat till plains. Fragiudalfs (Cincinnati, Homewood, Nabb, and Rossmoyne series) are on gently sloping to strongly sloping side slopes on till plains. Hapludalfs (Blocher, Bonnell, and Hickory series) are on moderately sloping to very steep side slopes on till plains. Hapludalfs

(Cana, Grayford, and Jessup series), Paleudalfs (Ryker series), and Fragiudalfs (Weisburg series) are on gently sloping to steep side slopes that are underlain by bedrock residuum. Paleudalfs (Negley series), Hapludalfs (Parke and Pike series), and Fragiudalfs (Medora series) formed in outwash deposits on high stream terraces, kames, and moraines. Fragiudalfs (Otwell and Haubstadt series) and Fragiaqualfs (Dubois series) formed in a thin layer of loess and the underlying weathered outwash, lacustrine sediments, or old alluvium on high stream terraces or lake plains. Eutrudepts (Haymond, Oldenburg, Wilbur, and Wirt series), Endoaquepts (Holton and Stendal series), and Fluvaquents (Birds, Bonnie, and Wakeland series) formed in alluvium on flood plains.

The dominant soil orders in MLRA (115A) are Alfisols, Entisols, Inceptisols, and Mollisols. The soils in the area have a mesic soil temperature regime, a udic or aquic soil moisture regime, and dominantly mixed or smectitic mineralogy. The soils are very deep, poorly drained to excessively drained, and loamy, silty, or clayey. Nearly level Endoaqualfs (Iva series) and Argiaquolls (Ragsdale series) formed in loess on broad upland summits and flats. Nearly level to steep Hapludalfs (Alford, Iona, Muren, Stoy, and Sylvan series) and Fragiudalfs (Hosmer series) formed in loess on uplands. Hapludalfs (Alvin, Bloomfield, and Princeton series) and Argiudolls (Ade series) formed in sandy eolian material in areas of dunes on uplands and stream terraces. Steep and very steep Hapludalfs (Hickory series) formed in Illinoian till along the major streams and dissected upland drainageways. Hapludalfs (Wellston series) formed in siltstone or sandstone residuum on strongly sloping to steep side slopes underlain by bedrock. The soils in the major stream valleys include Hapludolls (Carmi series), Argiudolls (Elston series), and Hapludalfs (Skelton series), all of which formed in outwash on nearly level to moderately sloping stream terraces and outwash plains. Endoaquolls (Montgomery series), Endoaquepts (Zipp series), Epiaqualfs (McGary series), and Hapludalfs (Shircliff and Markland series) formed in clayey lacustrine sediments on nearly level to strongly sloping lacustrine terraces or lake plains. Endoaquepts (Evansville series), Endoaquolls (Patton series), and Hapludalfs (Henshaw and Uniontown series) formed in silty sediments on terraces and lake plains. Endoaquolls (Beaucoup and Wabash series), Hapludolls (Armiesburg, Landes, and Tice series), Eutrudepts (Nolin series), and Endoaquepts (Petrolia series) formed in alluvium on nearly level, broad flood plains. Fluvaquents (Birds and Wakeland series) and Eutrudepts (Haymond and Wilbur series) are along the smaller upland drainageways. Udorthents (Bethesda, Fairpoint, Nawakwa, and Tapawingo series) and Udarents (Hollybrook, Minnehaha, and Swanwick series) formed in regolith from surface-mining operations.

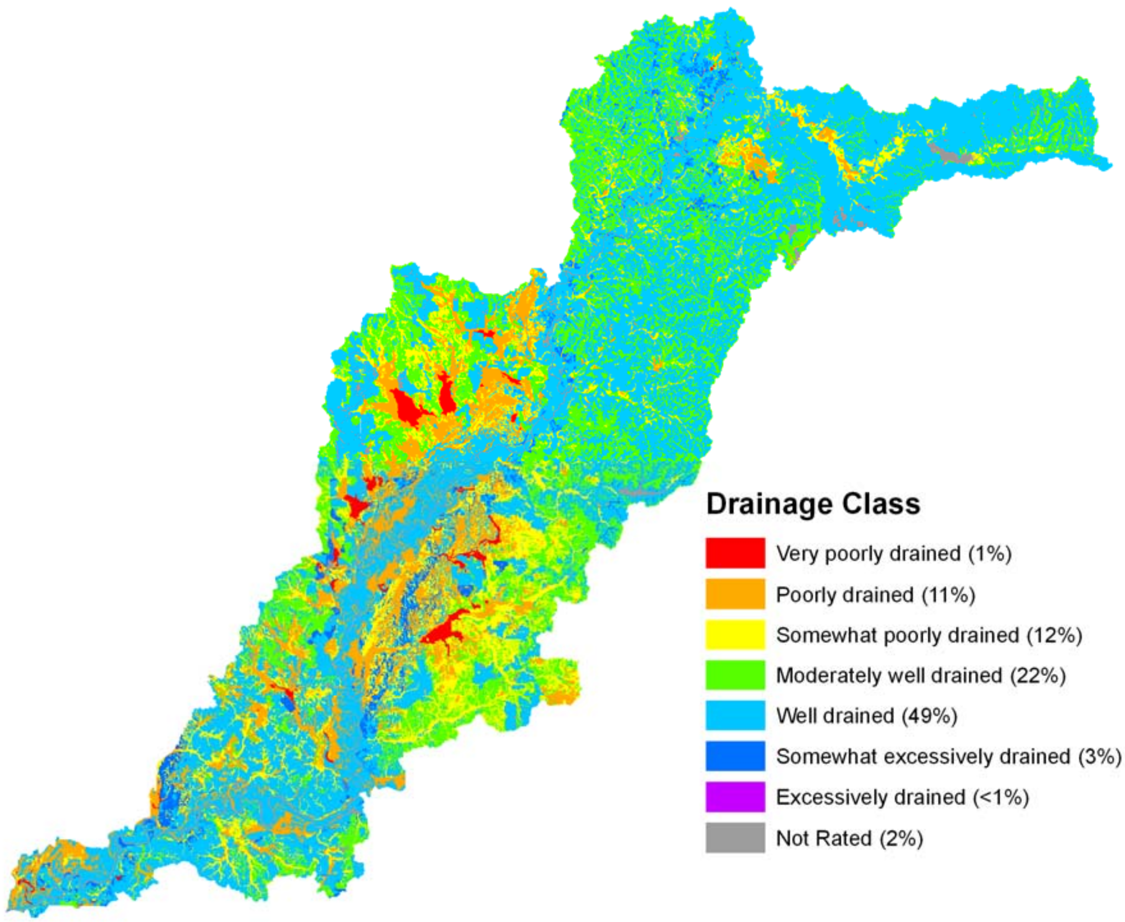
The dominant soil orders in MLRA (120B) are Alfisols, Ultisols, and Inceptisols. The soils in the area have a mesic soil temperature regime, a udic or aquic soil moisture regime, and dominantly mixed mineralogy. They formed dominantly in less than 40 inches of loess and in residuum or colluvium derived from sandstone, shale, and siltstone. The soils range from moderately deep to very deep and from poorly drained to somewhat excessively drained and are loamy, silty, or clayey. Fragiudalfs (Apalona and Zanesville series) and Hapludalfs (Wellston series) are the dominant soils on ridgetops and the upper part of side slopes. Hapludults (Adyeville series) and Dystrudepts (Tipsaw series) are on strongly sloping to very steep side slopes, and Hapludults (Tulip series) are on strongly sloping and steep footslopes. Hapludalfs (Deuchars, Ebal, and Kitterman series) are on moderately sloping to steep structural benches and scarps. Endoaquepts (Zipp series), Epiaqualfs (McGary series), and Hapludalfs (Shircliff and Markland series) formed in lacustrine sediments on nearly level to strongly sloping lacustrine terraces or lake plains. Hapludults (Millstone series), Hapludalfs (Elkinsville series), Fragiudalfs (Sciotoville series), and Epiaqualfs (Hatfield series) are on terraces along the Ohio River. Hapludolls (Huntington series), Eutrudepts (McAdoo and Lindside series), and Endoaquepts (Newark series) are on flood plains along the major streams. Dystrudepts (Cuba and Steff series), Eutrudepts (Gatchel and Haymond series), Endoaquepts (Belknap and Stendal series), and Fluvaquents (Birds and Bonnie series) are on local flood plains. Udorthents (Bethesda and Fairpoint series) formed in regolith from surface-mining operations.

The dominant soil orders in MLRA (120C) are Alfisols, Ultisols, and Inceptisols. The soils in the area have a mesic soil temperature regime, a udic or aquic soil moisture regime, and dominantly mixed mineralogy. They formed dominantly in loess and in residuum derived from siltstone and shale. They range from moderately deep to very deep and from somewhat poorly drained to well drained and are loamy, silty, or clayey. Fragiudults (Spickert and Tilsit series) and Hapludults (Wrays series) are the dominant soils on ridgetops and the upper parts of hills and knobs. Halpudalfs (Kurtz series), Hapludults (Gilwood and Gnawbone series), and Dystrudepts (Brownstown series) are on moderately sloping to very steep side slopes. Hapludalfs (Coolville, Rarden, Stonehead, and Wellrock series) are on the gently sloping to moderately steep lower parts of side slopes. Hapludalfs (Elkinsville series), Fragiudalfs (Pekin series), and Fragiaqualfs (Bartle series) are on stream terraces. Dystrudepts (Beanblossom, Cuba, and Steff series) and Endoaquepts (Stendal series) are on flood plains.

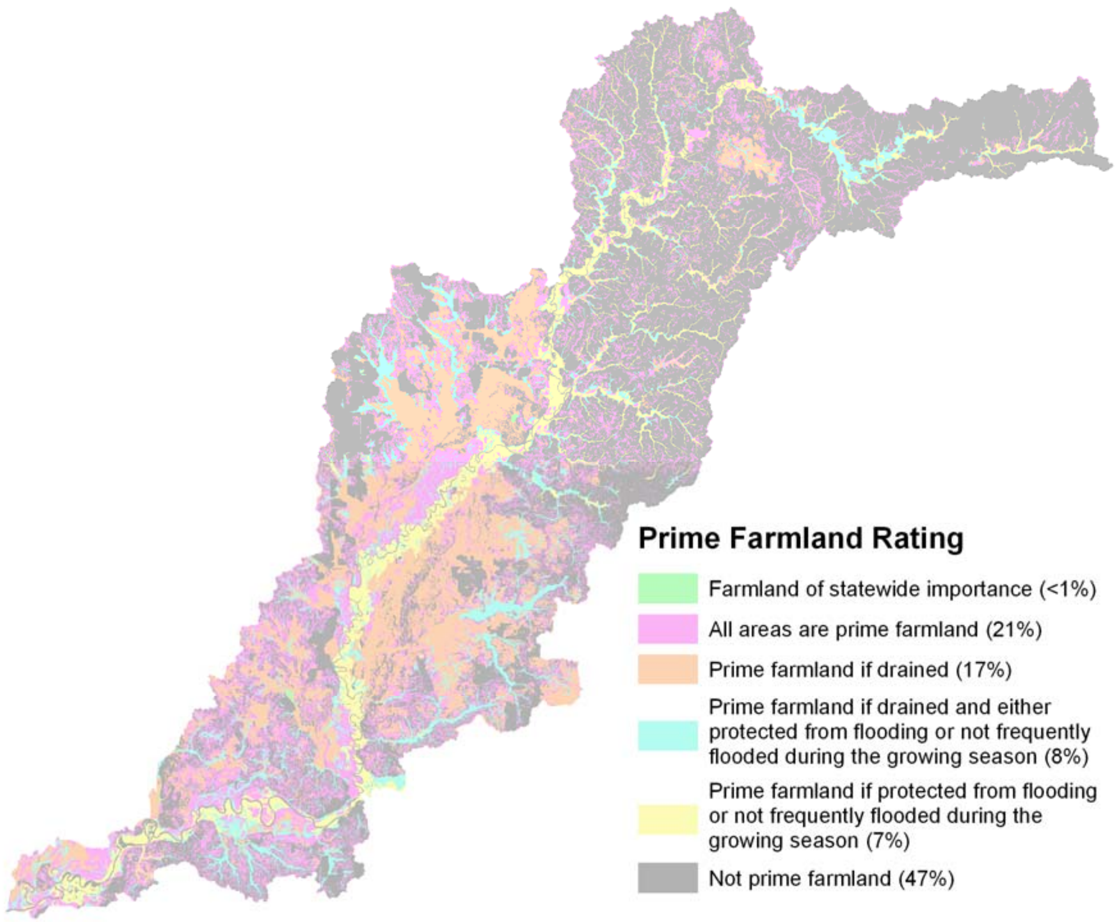
The dominant soil orders in MLRA (122) are Alfisols, Inceptisols, and Ultisols. The soils in the area dominantly have a mesic soil temperature regime, a udic soil moisture regime, and mixed or siliceous mineralogy. They are moderately deep to very deep, generally moderately well drained or well drained, and loamy or clayey. Paleudalfs formed in residuum (Baxter and Vertrees series) and loess over residuum or old alluvium (Crider, Hammack, and Pembroke series) on hills and ridges. Hapludalfs (Caneyville series) and Hapludults (Frankstown series) formed in residuum on hills and ridges. Fragiudalfs (Bedford and Nicholson series) and Fragiudults (Dickson series) formed in loess over residuum on hills and ridges. Eutrudepts formed in residuum on hills (Garmon series) and in alluvium on flood plains (Nolin series). Paleudults formed in residuum on uplands (Frederick series) and in loess over residuum on ridges and plateaus (Mountview series).

Drainage Classification

Drainage class (natural) refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized–excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."



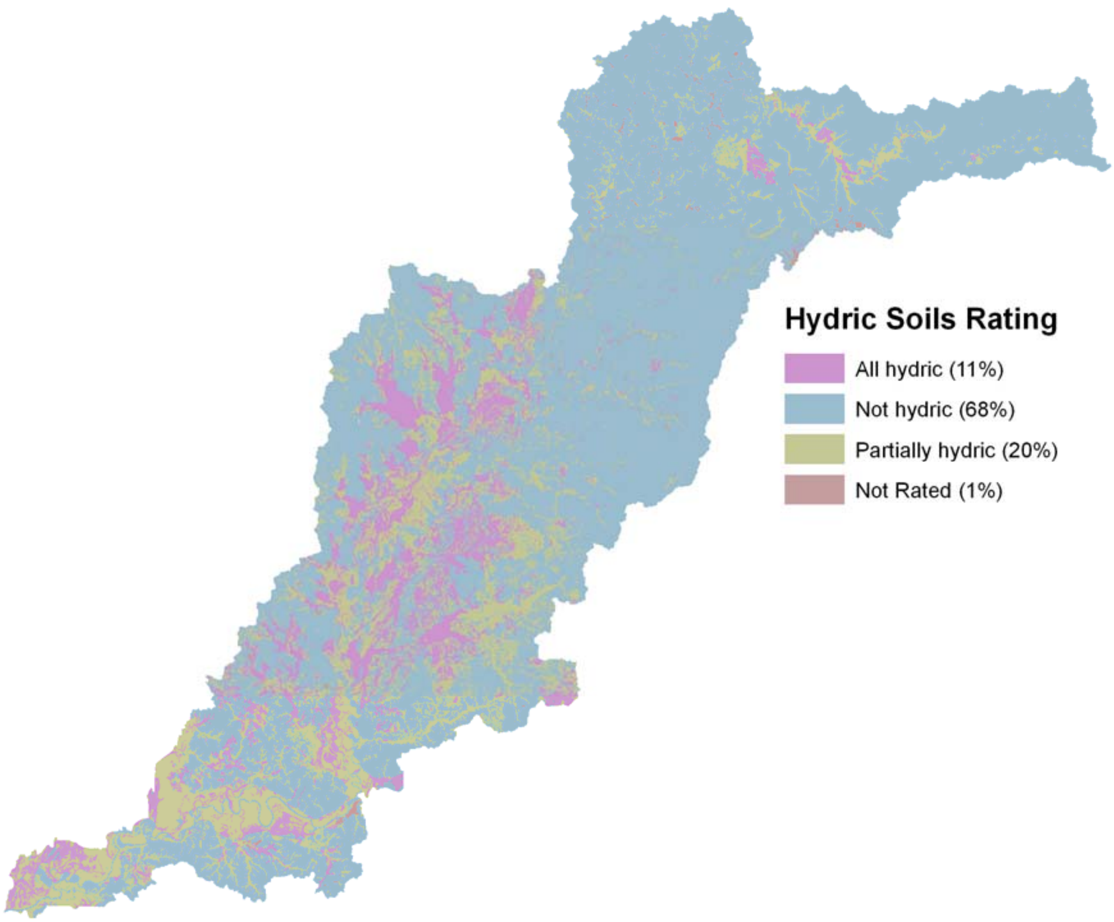
Farmland Classification Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. Farmland classification identifies the location and extent of the most suitable land for producing food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the Federal Register, Vol. 43, No 21, January 31, 1978.



Hydric Soils This rating provides an indication of the proportion of the map unit that meets criteria for hydric soils. Map units that are dominantly made up of hydric soils may have small areas, or inclusions of non-hydric soils in the higher positions on the landform, and map units dominantly made up of non–hydric soils may have inclusions of hydric soils in the lower positions on the landform.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make on site determinations of hydirc soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 2002).

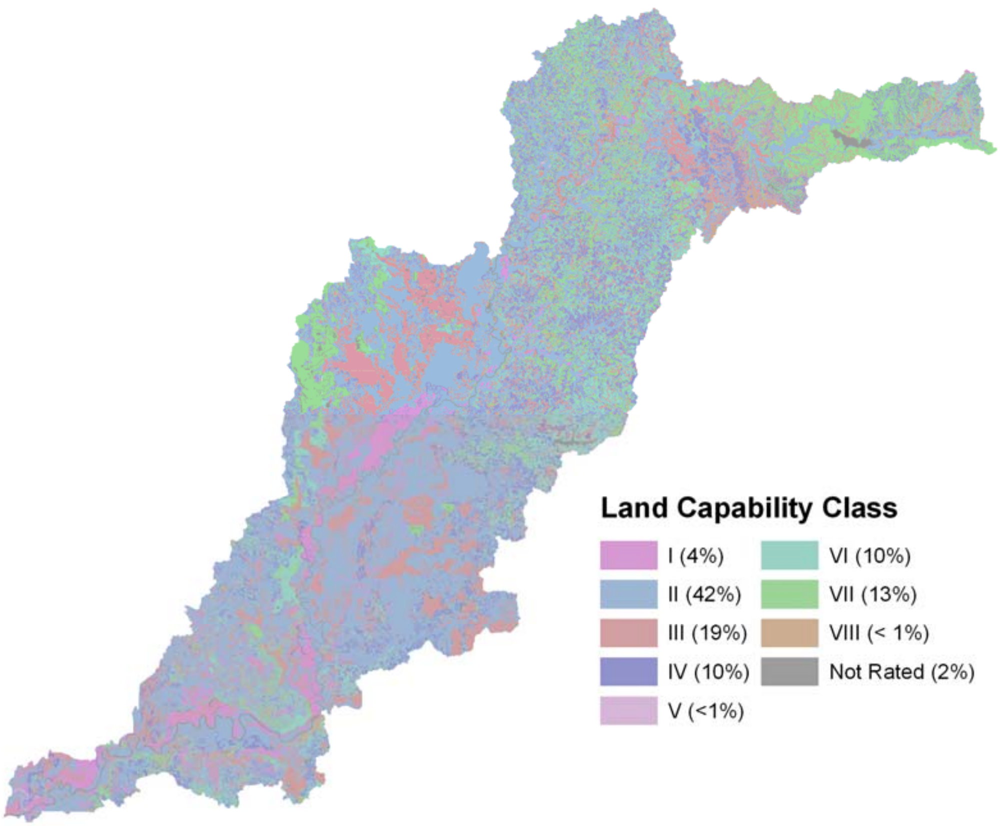


Highly Erodible Land (HEL)

A soil map unit with an erodibility index (EI) of 8 or greater is considered to be highly erodible land (HEL). The EI for a soil map unit is determined by dividing the potential erodibility for the soil map unit by the soil loss tolerance (T) value established for the soil in the FOTG as of January 1, 1990. Potential erodibility is based on default values for rainfall amount and intensity, percent and length of slope, surface texture and organic matter, permeability, and plant cover. Actual erodibility and EI for any specific map unit depends on the actual values for these properties.

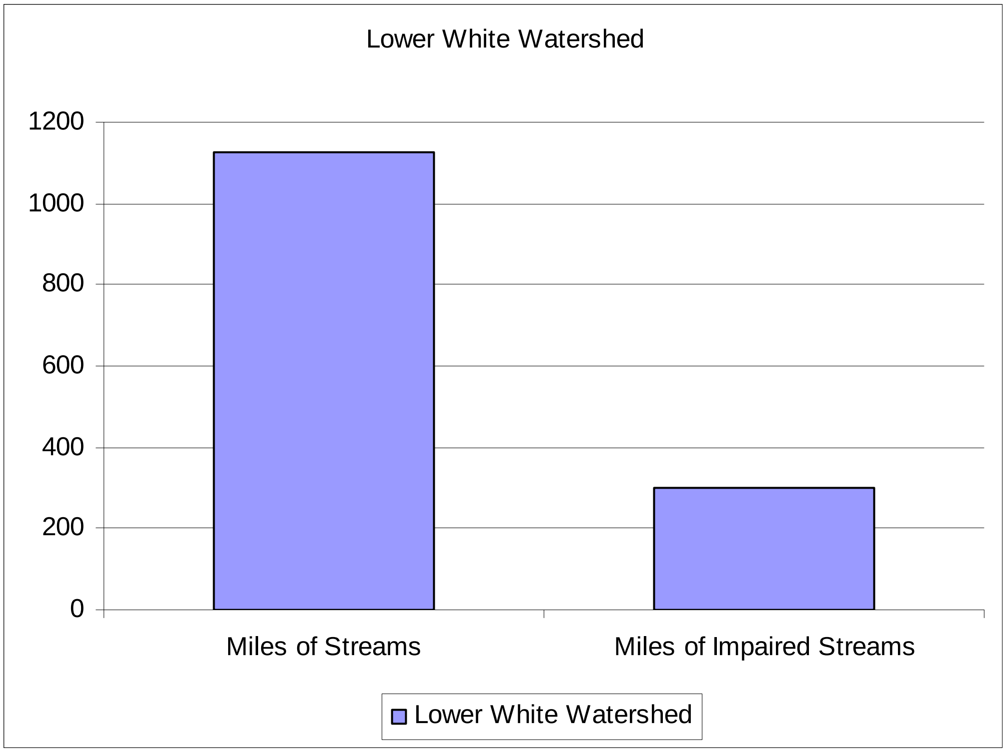
Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive land forming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.



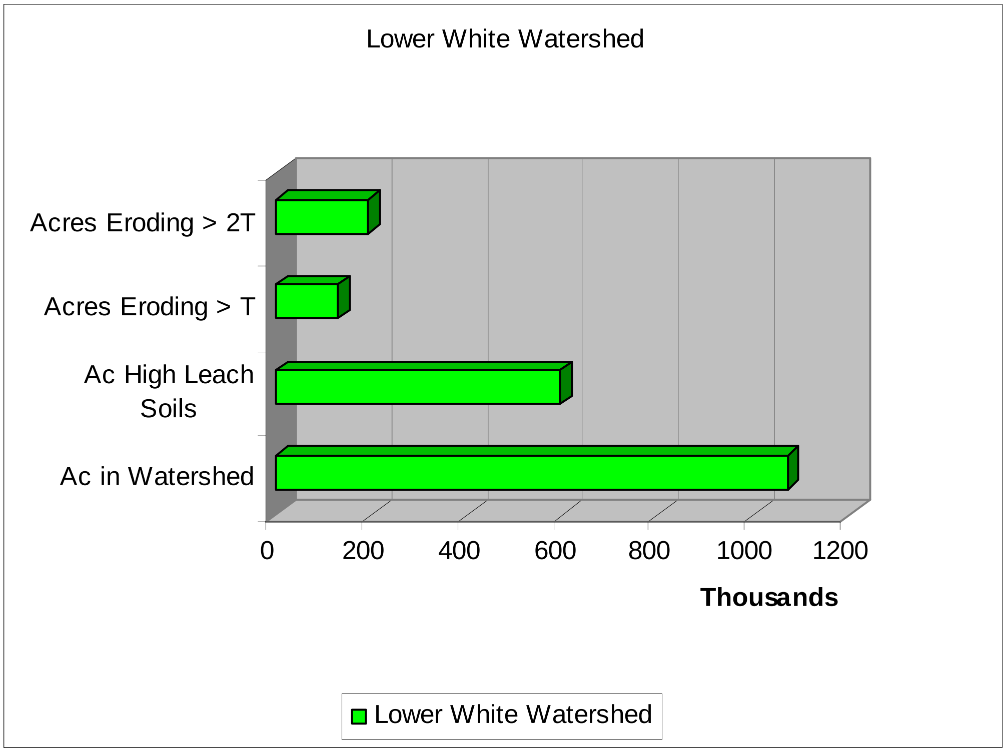
Resource Concerns
Stakeholders and electronic analysis have been identified the following resource concerns as being the top priority:

- Surface Water Quality – There is approximately 26.8 percent or 301 miles of the 1,126 total miles of the streams within the watershed that have identified impairments. Excessive amounts of sediments, nutrients, and bacteria degrade the water quality causing an unbalanced fish community with depressed populations and limited diversity.



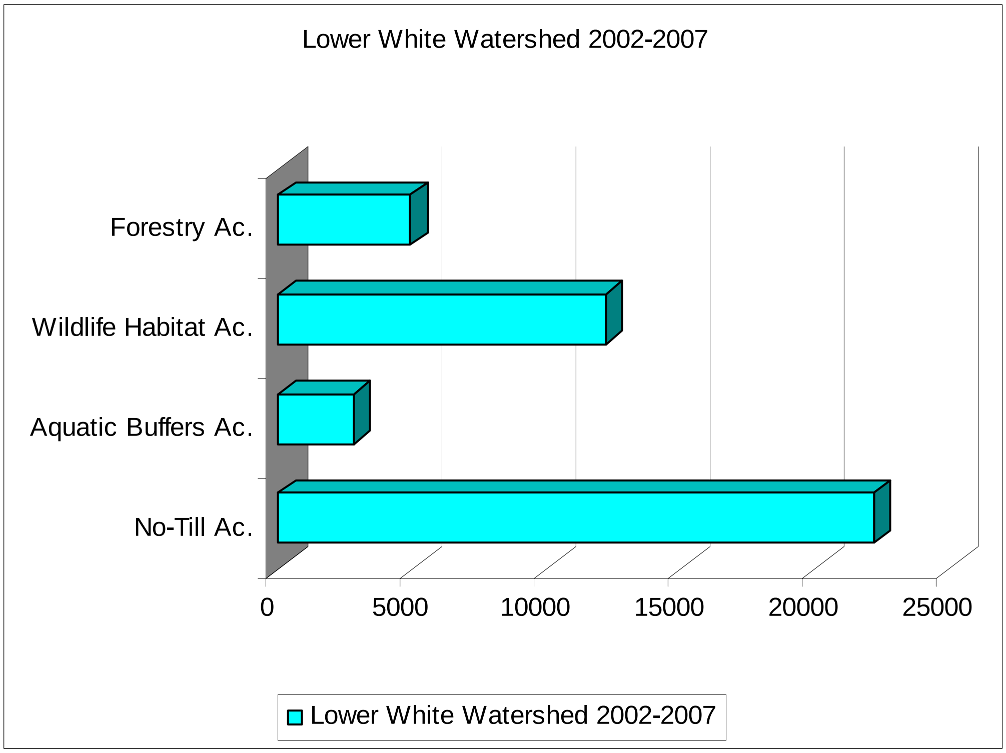
- Ground Water Quality - The watershed has in excess of 597,200 acres of soils with high leaching index (> 10) which allows containments on the land surface to be carried easily into the ground water from infiltrating water. There are an additional 14,100 acres of wellhead protection areas. Because of this condition, non–point pollutants such as fertilizers, pesticides, and livestock waste have the potential to contaminate the ground water aquifer. This represents 72 percent of the watershed.
- Air Quality – 27.4 percent of the watershed has been identified by the Environmental Protection Agency as have an air quality concern.

- Threatened & Endangered Species – Just over 24.8 percent of the 1,071,300 acres in the watershed lie within the range of know Threatened and Endangered Species.



- Soil Quality – The watershed has over 324,900 acres of soils subject to soil erosion. There is over 192,700 acres eroding at twice the tolerable level or "T" and just less than 1,000 acres subject to wind erosion.

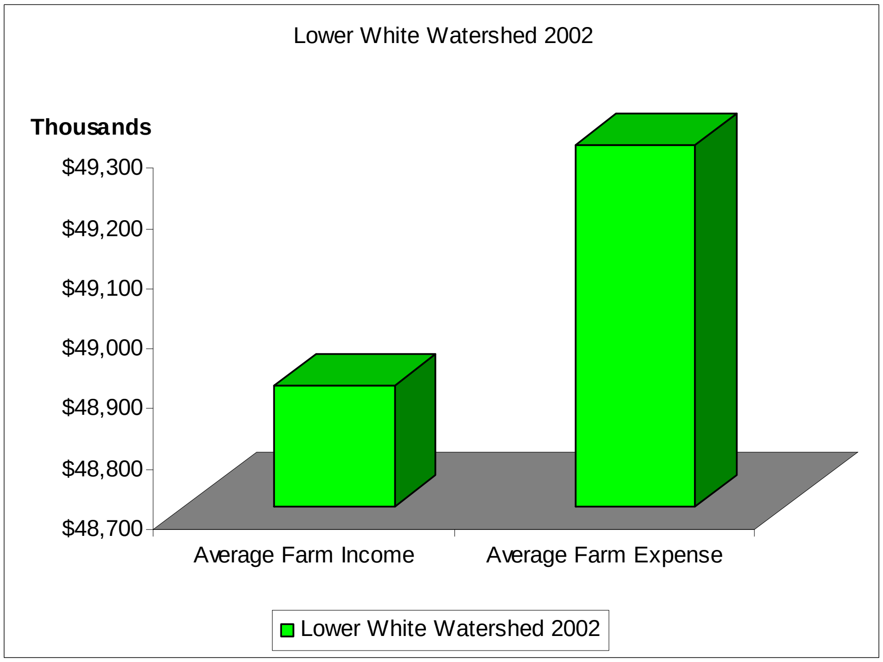
Performance Results System and Other Data
The producers within the watershed have implemented a variety of conservation practices over the past five years.



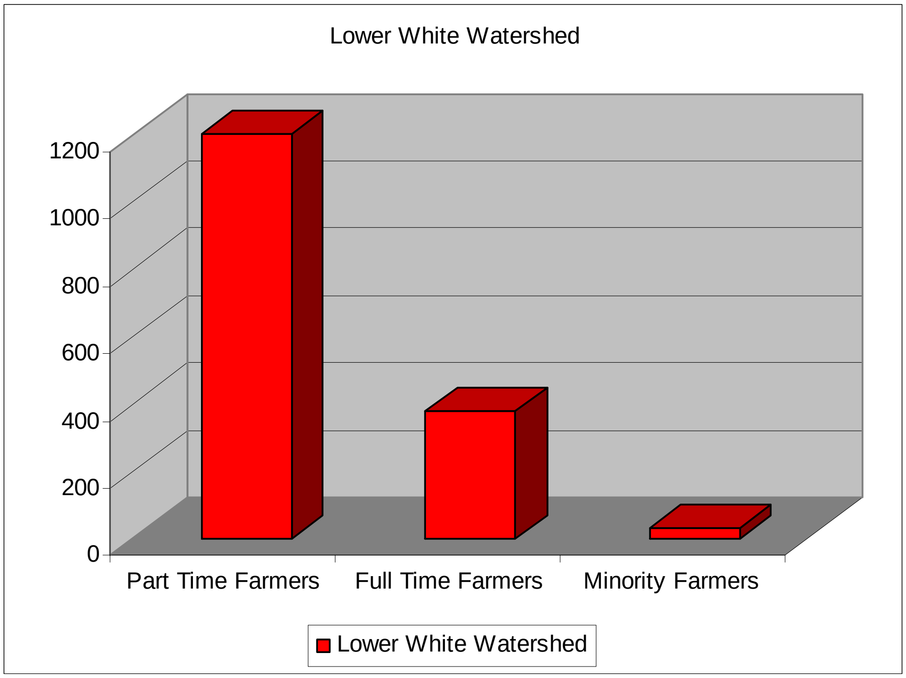
Since 2002 through 2007 landowners have implemented over 22,200 acres of No-Till, approximately 252,300 feet of upland buffers, and just over 2,800 acres of aquatic buffers. Wildlife habitat has been improved or established on more than 12,200 acres within the watershed and just over than 4,900 acres of forestry practices have been applied.

Census and Social Data (Relevant)

There are approximately 6055 farms in the watershed that average approximately 255 acres in size. The 2002 average farm total income for all the counties was $48,900,000 while average expense was $49,300,000.



There are approximately 1,200 part time farmers, 380 full time farmers and 30 minority farmers.



All data is provided "as is." There are no warranties, express or implied, including the warranty of fitness for a particular purpose, accompanying this document. Use for general planning purposes only.

Data Sources:

Indiana Common Resource Area (CRA) Map delineations are defined as geographical areas where resource concerns, problems, or treatment needs are similar. It is considered a subdivision of an existing Major Land Resource Area (MLRA) map delineation or polygon. Landscape conditions, soil, climate, human considerations, and other natural resource information are used to determine the geographic boundaries of a CRA.

Indiana Agricultural Statistics 2003 – 2004 - Indiana Agricultural Statistics, 1435 Win Hentshcel Blvd., Suite B105, West Lafayette

Major Land Resource Area Map Tool - Indiana NRCS Soils Page - http://www.in.nrcs.usda.gov/mlra11/soils.html

Indiana Hydrologic Units Indiana Geodata

Indiana Watershed Action Strategy Plan

Indiana Rapid Watershed Assessment (Electronic Data Sets – Web based application.

Indiana 2006 303d List – Indiana Department of Agriculture, Division of Natural Resources