

Appendix B – ENVIRONMENTAL OVERVIEW



Table of Contents

EXECUTIVE SUMMARY	i
1.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING	4
1.1 PROJECT DESCRIPTION, HISTORY AND STATUS	4
1.2 PURPOSE AND NEED	7
1.3 LAND COVER	7
1.4 PHYSIOGRAPHY AND TOPOGRAPHY	8
1.5 GEOLOGY AND SOILS	8
1.6 HYDROGEOLOGY	9
1.7 DRAINAGE	9
2.0 NATURAL ENVIRONMENT	10
2.1 SURFACE WATER RESOURCES	10
2.2 FLOODPLAINS	10
2.3 WETLANDS AND PONDS	11
2.4 GROUNDWATER RESOURCES AND PUBLIC WATER SUPPLIES	11
2.5 THREATENED AND ENDANGERED SPECIES	11
2.6 SECTION 4(F) AND SECTION 6(F) FACILITIES	13
3.0 HUMAN ENVIRONMENT	14
3.1 SOCIAL AND ECONOMIC RESOURCES	14
3.2 ARCHAEOLOGICAL AND CULTURAL HISTORIC RESOURCES	14
3.2 HAZARDOUS MATERIALS	19
3.3 UNDERGROUND STORAGE TANKS	20
3.4 AGRICULTURE	20
3.5 MINING	20
3.6 AIR QUALITY AND NOISE	20
3.7 SOCIOECONOMIC DATA AND ENVIRONMENTAL JUSTICE	21
3.9 ADDITIONAL ITEMS OF CONCERN	22
REFERENCES	23



FIGURES

- 1 PROJECT STUDY AREA
- 2 EXISTING CONDITIONS AERIAL MAP
- 3 PROJECT
- 4 *ENVIRONMENTAL FOOTPRINT – USGS TOPOGRAPHIC MAP*

APPENDICES

- A PROJECT ALTERNATIVES
- B EJ EPA INFORMATION



EXECUTIVE SUMMARY

This report provides an overview of potential impacts to the human and natural environments anticipated for the proposed New Route from KY 44 to KY 480 in Bullitt County. The KY 44 to KY 480 Connector Study was initiated by the Kentucky Transportation Cabinet (KYTC) to evaluate a new north-south connector route, add another crossing over the Salt River, and address the rapid growth in Shepherdsville and Mount Washington in Bullitt County. The project study area, shown in Figure 1, includes an area bounded north and south by KY 44 and KY 480 respectively, on the west just east of I-65 then continuing to the east to the Pine Creek Barrens, including a portion of the Salt River. The purpose of KY 44 to KY 480 Connector Study is to enhance mobility and safety within Bullitt County by providing a new connector route between KY 44 and KY 480.

The following is a summary of potential environmental concerns identified as part of the new route:

Human

- Potential relocation of residential properties with the new route
- Potential loss of agricultural revenue for land owners

Natural

- Potential impacts to floodplains – routes cross over numerous floodplains.
- Potential impacts to streams – routes would impact ephemeral, intermittent and perennial streams.
- Potential impacts to tree habitat – areas of trees will require mitigation compensation to USFWS for Indiana Bat.
- Potential for intact archaeological deposits in undisturbed areas.



1.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

1.1 PROJECT DESCRIPTION, HISTORY AND STATUS

This environmental overview addresses the potential environmental impacts associated with the proposed project within the study area. The entire project area is located within Bullitt County along KY 480 and extends northward from US 480 to KY 44 and is located east of I-65 (between exits 116 and 117). This environmental overview identifies potential concerns within the study area as illustrated in Figure 4 based upon available data and information sources. This project could bring changes to the local communities including improvements in vehicular access, safety conditions, convenience, emergency response times, and reduced driving times. In addition, this project could enhance the future quality of life and the economic vitality for residents within the area based on local and regional development efforts.

I-65 is the only major roadway that intersects with KY 44 and KY 480 within the project study area. This project will reduce commute times for residents between the commercial, industrial, and residential land uses in and near the project area.

The project is listed in the **2014 Final Highway Plan** on Page 18 of 158 with the following information:

ITEM No.	DESCRIPTION	FUNDING	PHASE	YEAR	AMOUNT
05-8709.00	New Route From KY 480 to KY 44 with Salt River Crossing (12CCN)(14CCN) Purpose and Need: Reliability / New Route (0)	SP	D	2015	\$3,000,000

This environmental overview identifies issues likely to require consideration during preliminary and final design. It summarizes the results of several environmental investigations, based primarily upon literature, archival, known database, and map



research. Limited amounts of fieldwork were conducted, consisting mainly of windshield surveys to confirm identified sites, and visually identify previously unknown sites. This environmental overview does not provide a detailed analysis and assessment of any potential impacts. The study area is depicted in **Figure 1**

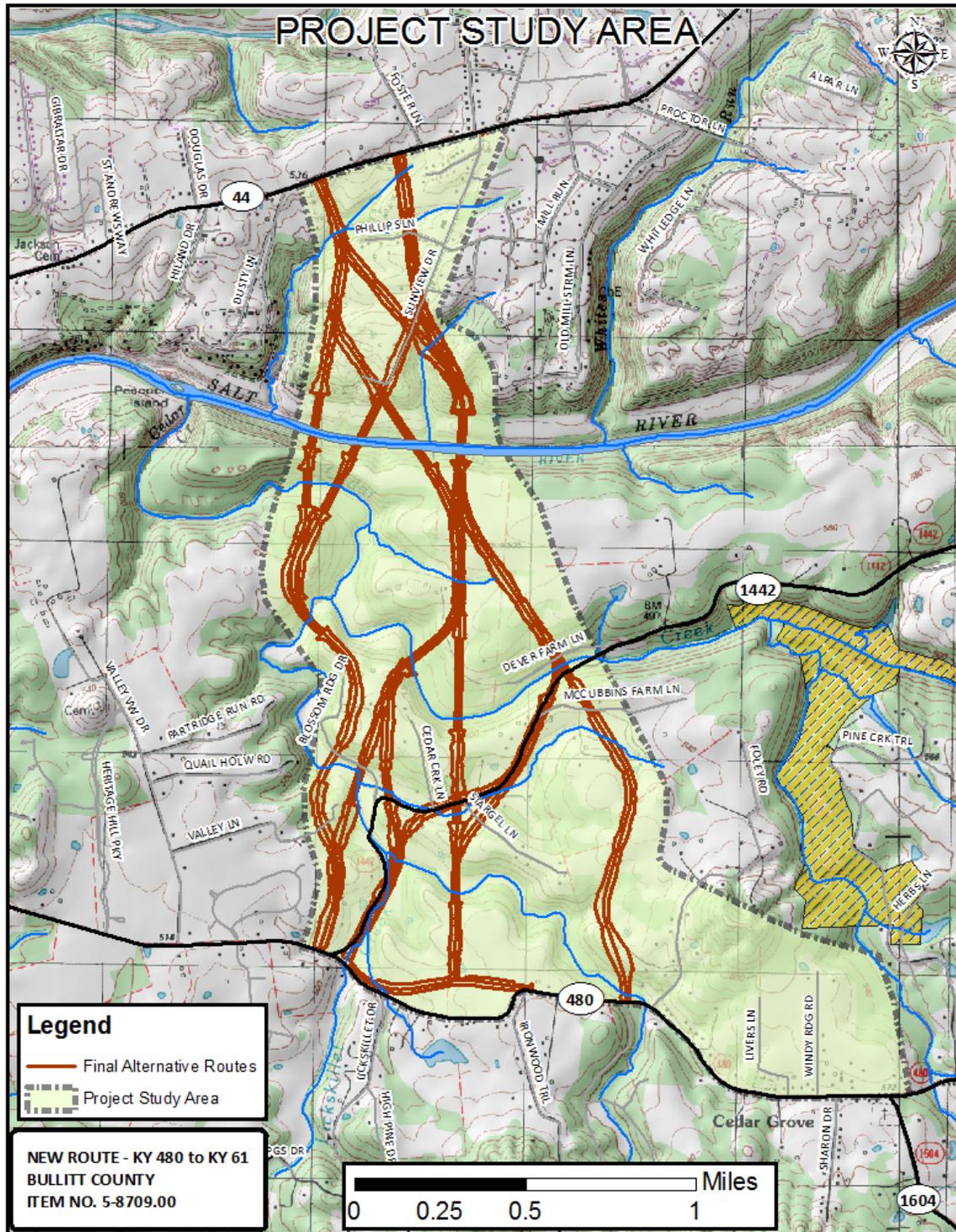


FIGURE 1.

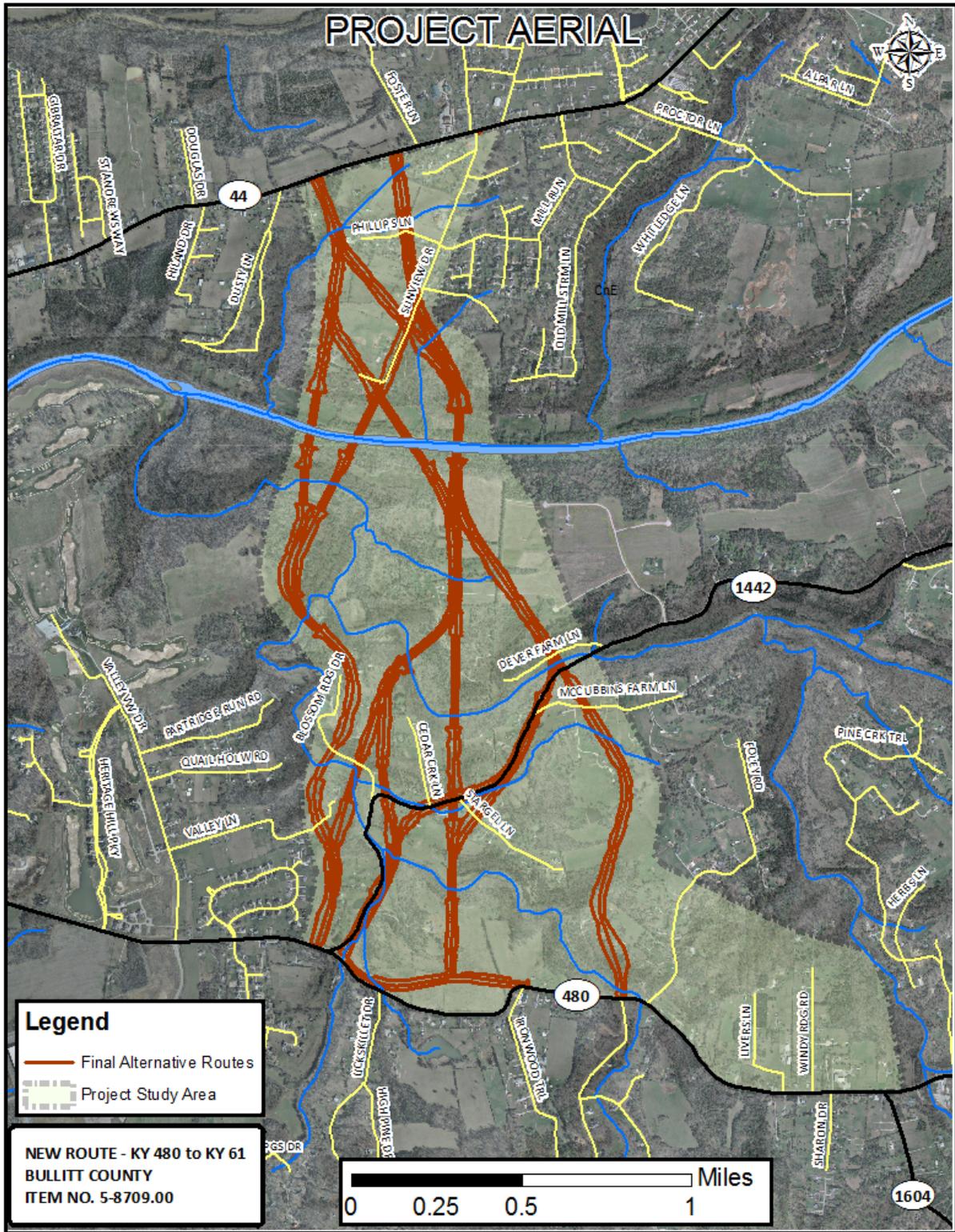


FIGURE 2.



1.2 PURPOSE AND NEED

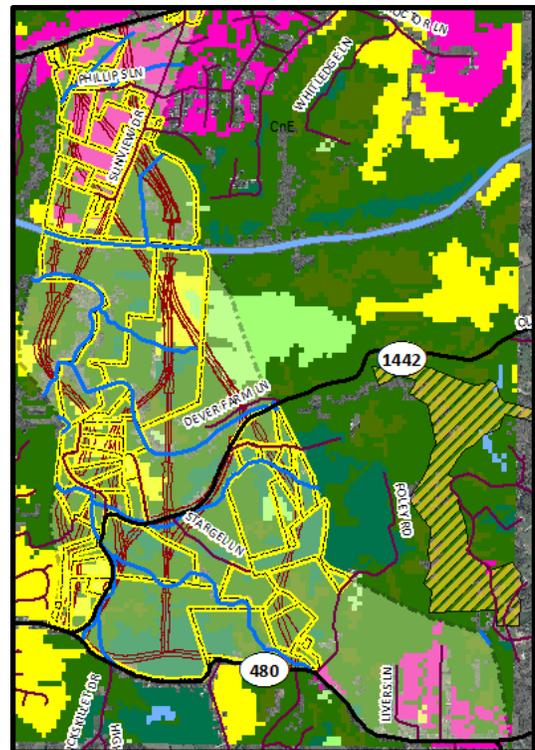
The purpose of KY 44 to KY 480 Connector Study is to enhance mobility and safety within Bullitt County by providing a new connector route between KY 44 and KY 480.

The needs of the project include the following:

- Due to the rapid growth within the area (commercial and residential), the existing roads cannot accommodate existing and future traffic volumes.
- I-65 and US-31E are the prominent north/south transportation routes within this area but are separated by 14 miles.
- A new connector route with a Salt River bridge crossing will meet the future needs of Bullitt County by providing a new north/south connector.

1.3 LAND COVER

Land cover in the project area was determined through a review of aerial photographs and the 2005 Kentucky Land Cover Dataset (KDGI, 2007a; Attachment B1), as well as field reconnaissance. Low density and medium density development covers approximately 20 % of the study area, primarily in the area adjacent to KY 44 on the north and KY 480 on the south. Agriculture and deciduous forest are the dominant land covers in the study area.



CORRIDOR LAND COVER



1.4 PHYSIOGRAPHY AND TOPOGRAPHY

The project is located in Bullitt County, Kentucky. Bullitt County is located in the Highland Rim Section of the Interior Low Plateaus physiographic province (USGS, 2014), a gently rolling plain of the eastern United States. A USGS topographic map of the study area and identified environmental considerations is included in Figure 4.

The United States Geological Survey 7.5-minute topographic map of the Brooks and Shepherdsville, Kentucky quadrangles indicates that the project area elevations range from 400 to 600 feet (KGS 2014). Surface topography in the subject area is rolling and hilly in mostly residential and agricultural land. In the absence of man-made influences (e.g. storm water drains and drainage ditches) surface water in the study area likely drains to northwesterly flowing tributaries to the Salt River following surface topography. The northernmost portion of the proposed route is located on a topographic ridge and likely drains generally to the south following surface topography. The average annual precipitation in the study area is approximately 44 to 48 inches. The average annual runoff in undeveloped areas is approximately 15 to 20 inches (Lloyd and Lyke, 1995).

1.5 GEOLOGY AND SOILS

The study area is located in the Highland Rim Section of the Interior Low Plateaus physiographic province (USGS, 2014). The majority of the surface soils mapped in the study area are identified as the Caneyville Silt Loams and Caneyville Rock outcrops (USDA, 2014). Caneyville soils are described as moderately deep, well drained, with a moderate water capacity. Lower lying areas, particularly near the Salt River are mapped as Nolin silt loams, and are described as deep, well drained, with a moderate water capacity. The majority of the study area is likely underlain by middle Silurian Middle age dolomitic limestone bedrock, specifically the Louisville Limestone, Laurel Dolomite and Waldron Shale (KGS 2014). The study area is generally mapped as moderate Karst potential; however, numerous LiDAR derived sinkhole outlines are mapped in the study area to the north of the Salt River (KGS 2014).



1.6 HYDROGEOLOGY

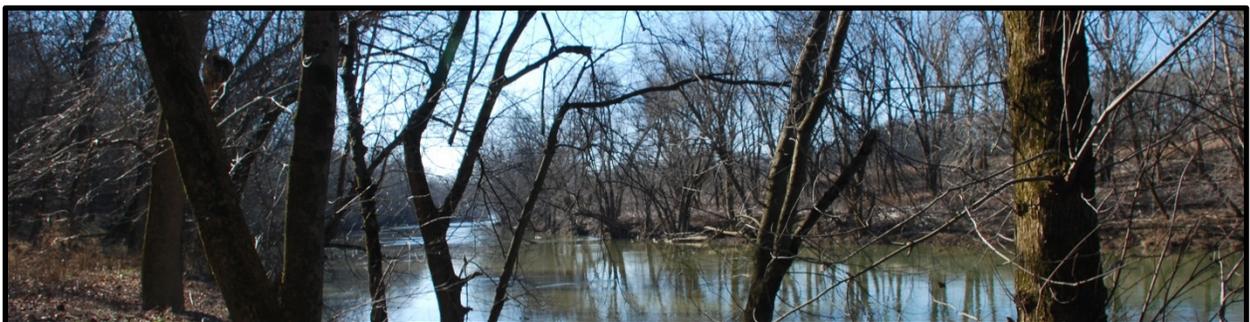
The Silurian-Devonian aquifer is mapped in the study area and likely serves as a regional source for groundwater (Lloyd and Lyke, 1995). Groundwater in the Silurian-Devonian aquifer is generally stored in fractures, open pore spaces, and along bedding planes in limestone bedrock. Water well records from domestic use water wells shown mapped within the study area report uppermost groundwater in the bedrock between 40 and 95 feet below the ground surface (KGS 2014). Based on information provided by the Kentucky Geological Survey (KGS) and local topography, uppermost groundwater is likely encountered within 60 feet of the ground surface within the study area. Lower elevation areas near the Salt River and tributaries will likely encounter uppermost groundwater at shallower depths. Uppermost groundwater flow for the majority of the project area likely follows local topography, generally northwest towards the Salt River. Uppermost groundwater in the portion of the study north of the Salt River likely follows local topography towards the south and the Salt River.

1.7 DRAINAGE

The study area is part of the Salt River Basin. The following table summarizes the additional Hydrologic Units within the study area.

BASIN	ACCOUNTING UNIT(S) (HUC-6)	CATALOG UNIT (HUC-8)	DRAINAGE (HUC-10)	WATERSHED (HUC-12)	DRAINAGE AREA (SQ MI)
Salt River	051401 Lower Ohio -Salt	05140102	Long Lick Creek (North) Plum Creek (South)	Whitaker Run – Salt River (North) Cedar Creek (South)	2.27

Drainage within the study area flows to the north on the south side of the Salt River and to the south on the north side of the river.





2.0 NATURAL ENVIRONMENT

2.1 SURFACE WATER RESOURCES

Within the project study area there is approximately 39,718 linear feet of blue-line streams identified using existing Kentucky National Hydrography Data (NHD). Major streams within the study area include the following: Cedar Creek, Lickskillet Creek and the Salt River. The remaining streams are unnamed tributaries.

The project area has numerous ephemeral, intermittent and perennial streams which may be impacted by construction. Impacts to these areas may range from water quality issues to channel changes to removal of plant and animal habitat.

Because the project has the likelihood to impact streams, a permit will be required from the US Army Corps of Engineers. In addition, a Water Quality Certification will be needed from the Kentucky Division of Water (KDOW). An estimation of stream impacts will be completed during Phase I design and completion of field assessment.

2.2 FLOODPLAINS

The Federal Emergency Management Agency (FEMA) website was reviewed for information regarding floodplains within the proposed corridors. Published information was searched to identify potential floodplain encroachments within Bullitt County. The corridor crosses four known floodplain zones of the following: Salt River, Cedar Creek, and Lickskillet Creek and an unnamed tributary of Lickskillet Creek. All floodplains crossed are listed as 100-year flood areas with no flood hazard factors determined (Zone A areas). Maps of the areas where the 100-year Floodplain coincides with the project area are included in Figure 4. The locations of the floodplains in this figure are illustrated in purple shading. It should be noted that new FEMA flood maps are in production and are anticipated to be adopted in 2015 or 2016. Furthermore, the floodplain extents are likely to increase.

Impacts to floodplains will require further evaluation during Phase I design. A permit will be required from the Kentucky Division of Water. Detailed hydraulic analysis may be required as new structures are anticipated throughout the route.



2.3 WETLANDS AND PONDS

Figure 4 provides an overview of the hydrology in the project area. There are numerous freshwater ponds in the project area. In addition, areas of hydric soil are noted to be within the project study area. Further evaluation of these areas will be needed during Phase I design. Wetland impacts greater than 0.1 acres will require a USACE permit. Impacts greater than 0.5 acres will require mitigation.

2.4 GROUNDWATER RESOURCES AND PUBLIC WATER SUPPLIES

There are nine (9) identified wells within the project study area. Eight (8) of the wells are listed as domestic use. One well may be impacted by the proposed alternatives. The remaining well is listed as for agricultural purposes.

Several water lines are present within the area and will require further evaluation during Phase I design. The water lines are under the jurisdiction of the Louisville Water Company.

Several KPDES permitted facilities are located near or within the project study area. Several property owners have permits for discharges to sinkholes.

2.5 THREATENED AND ENDANGERED SPECIES

The US Fish and Wildlife Service (USFWS) website database was researched for federally protected species potentially affected by the project. Database research identified three endangered species. The Kentucky Glade Cress was listed as an endangered species in 2014. The USFWS species list for Bullitt County is shown in Table 2.



Table 2 – Bullitt County USFWS SPECIES LIST

Group	Species	Common name	Legal* Status	Known** Potential
Mammals	<i>Myotis sodalis</i>	Indiana Bat	E	K
	<i>Myotis grisescens</i>	Gray Bat	E	K
Mussels	<i>Pleurobema clava</i>	Club Shell	E	K
	<i>Plethobasus cooperianus</i>	Orangefoot Pimpleback	E	K
	<i>Pleurobema plenum</i>		E	P
	<i>Potamilus capax</i>	Fat pocketbook	E	P
	<i>Cyprogenia stegaria</i>	Fanshell	E	P
	<i>Epioblasma torulosa rangiana</i>	Northern riffleshell	E	P
	<i>Lampsilis</i>	Pink mucket	E	P
	<i>Plethobasus cyphus</i>	sheepnose	C	P
	<i>Obovaria retusa</i>	Ring pink	E	P
Flowering Plants	<i>Leavenworthis exigua laciniata</i>	Kentucky Glade Cress	E	K

NOTES:

* Key to notations: E = Endangered, T = Threatened, C = Candidate, CH = Critical Habitat

**Key to notations: K = Known occurrence record within the county, P = Potential for the species to occur within the county based upon historic range, proximity to known occurrence records, biological, and physiographic characteristics.

In regards to Indiana Bat, mitigation will need to be considered including compensation for tree removal or tree cutting restrictions during Phase I design. Tree habitat removal will require compensation. The study area is not within an identified USFWS priority polygon. A large portion of the study area is deciduous trees.

Although mussels are listed, KSNPC records indicate endangered mussel populations within the Salt River have been extirpated. USFWS may require further evaluation of tributaries adjacent to the Salt River such as Cedar Creek depending on impacts from the new route.





Currently, the Northern Long-eared Bat is proposed for listing as endangered due to White-nose syndrome impacts to the species. In the event the species is listed, further USFWS consultation may be required.

The Kentucky Glade Cress was listed as an endangered species by the USFWS in 2014. Pine Creek is located to the east of the project study area. This property is owned by Nature Conservancy and is one of the areas listed as critical habitat for the Glade Cress (see Figure 3). All study alternatives avoid this area.

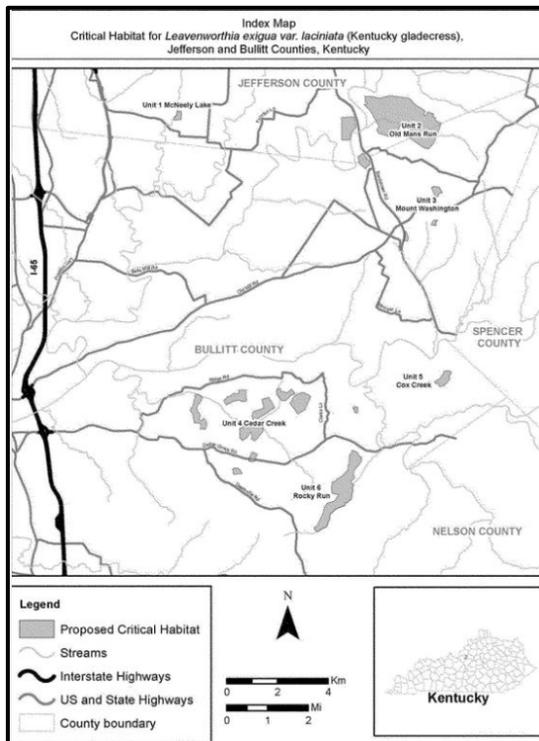


FIGURE 3.
Critical Habitat Area from USFWS
Proposed Listing

2.6 SECTION 4(F) AND SECTION 6(F) FACILITIES

The project is state funded therefore Section 4(f) does not apply. No parks or recreational facilities which utilized Section 6(f) funds are located within the project area.



3.0 HUMAN ENVIRONMENT

3.1 SOCIAL AND ECONOMIC RESOURCES

Cemeteries – No identified cemeteries are located within the project study area. The Cedar Grove Cemetery is located at the corner of KY 480 and Deatsville Road (KY 1604). No impacts to cemeteries are anticipated from the study alternatives.

Churches/House of Worship – Two churches are located on the southern boundary of the study area along KY 480. Cedar Grove United Methodist Church is located at the corner of KY 480 and Deatsville Road (KY 1604). Cedar Grove Baptist Church is located on KY 480 to the west of Deatsville Road. No church is impacted by any of the study alternatives.

Fire Departments and Emergency Services – No emergency medical services or fire departments are located within the project study area. These facilities are located in Shepherdsville to the east of the study area.

Hospitals – No hospitals are identified within the project study area.

Law Enforcement – No law enforcement facilities are located within the project study area.

Schools, Institutions, and Learning Centers – No schools, institutions or learning centers are located within the project study area. Cedar Grove Elementary is located to the west of the area on KY 480.

Industrial Parks – No industrial parks are located directly in the project study area. The Cedar Grove Business Park is located to the west on KY 480. This park has several large employers including Gordon’s Food Service and Zappos.

Federal Facilities – No federal facilities are located within the project study area.

Golf Courses – No golf courses are located directly within the project study area. Heritage Hill Golf Course is located to the west of the study area.

3.2 ARCHAEOLOGICAL AND CULTURAL HISTORIC RESOURCES

The National Register of Historic Places database and existing data from the Office of State Archaeology were evaluated to determine if historic properties or archaeological sites of



significance are present within the study area. No sites listed on the NRHP are within the project study area.

3.2.1 Archaeological Resources

Background research for the study area identified 33 known archaeological sites and ten previously surveyed areas within a two-kilometer (1.6-mile) radius of the study area. Of these cultural resources, one prehistoric archaeological site is directly within the study area. The prehistoric archaeological site appears to be either very close or within the one of the proposed alternatives. In addition, a small portion of one of the Phase I archaeological surveys occurs within the study area.

Data from the 33 previously recorded archaeological sites indicates that most of the sites are prehistoric (n=27), followed by sites with no temporal affiliation recorded (n=5) and historic sites (n=1). Of the prehistoric sites, 22 contained unassigned prehistoric components, while the remaining five date to the Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Prehistoric periods. Most are open habitations without mounds, but six are rockshelters. The one historic site is a Euro-American cemetery.

Archaeological sites were recorded on a variety of different landforms including uplands (n=12), terraces (n=7), floodplains (n=6), and hillsides (n=5). Three sites did not have landform information recorded. More importantly, a majority of the archaeological sites (n=31) are close to water sources being located within 30 meters (98 feet) or less. The main water sources are Salt River and Floyd's Fork (located to the north and west of the study area).

As a result, it is considered likely that prehistoric sites would be identified on upland, hillside, terrace, and floodplain settings within the study area. Most of these cultural resources would be close to water, specifically Salt River, Cedar Creek and Lickskillet Creek. In addition, most of these sites will be open habitation without mounds, however, rockshelters are also likely to be identified along hillsides and bluff bases overlooking water ways (i.e. Salt River).

Of the 33 archaeological sites, none are listed in the National Register of Historic Places (NRHP). Most have not been assessed for NRHP eligibility (n=24) or are considered not



eligible for listing in the NRHP (n=9). The information from this dataset is consistent with the Salt River Management Area (the study area falls within this management area), which has only five NRHP-listed sites (Stackelbeck and Mink 2008:58). However, three of these NRHP-listed sites are rockshelters/caves, so if this type of site is identified within the study area, it may be eligible for listing in the NRHP.

3.2.2 Cultural Historic Resources

Prior to conducting field reviews, available surveys, reports, studies, maps, and other data pertinent to the project area were identified and reviewed. This task began with an investigation of the records of the KHC (FY14 7991). Geographic Information System (GIS) data requested from the KHC indicated that two architectural resources 50 years of age or older (BU 40 and 41) are within the study area for the proposed project. The eligibility of the two sites is currently undetermined. No properties listed on the National Register of Historic Places (NRHP) are within the project study area.

Site Information provided by KHC is as follows:

Site Number	Structure Type	Location
BU40	House	N SIDE KY 480 3 M E OF I-65
BU 41	Cedar Creek Bridge	Ridge Road – 1 Mile North of KY 480

Site BU40 is located to the west of the project study area. This house may be potentially eligible under Criterion C but is not included in this evaluation as it is not in APE. Site BU 41 is within the study area. This bridge is less than 50 years old having been built in 1988.

A total of 89 parcels were identified to be within the project study alternatives. Of the 89 parcels, 66 were determined to contain structures. A review of records at the Bullitt County PVA indicates 3 of the structures may be over 50 years old.

The following is a summary of the property and location and a preliminary assessment of eligibility:

OWNER NAME	LOCATION	PARCEL #	ELIGIBILITY
CRIGLER	635 Ridge Road	055-S00-03-001	Altered – Not Eligible



According to the PVA this house was built in 1956. It appears to have had several additions built onto the original house. It does not appear to be eligible under Criterion C.

OWNER NAME	LOCATION	PARCEL #	ELIGIBILITY
READING	Cedar Grove Road	056-NE0-11-007	Unknown



This property does not have year built data on the PVA card. However based on the picture it may be over 50 years old. The property is located at the end of a long driveway. Further assessment of this property will be required during Phase I design to determine its condition and potential eligibility.

OWNER NAME	LOCATION	PARCEL #	ELIGIBILITY
ROUSE	Cedar Grove Road	055-00-00-043	Not Eligible



This house appears to over 50 years old. The PVA card indicated the property was in poor condition. Based on the condition it is not recommended for eligibility under Criterion C.

The remaining houses within the project study area are not over 50 years old, newer construction, or modular/mobile home type structures.



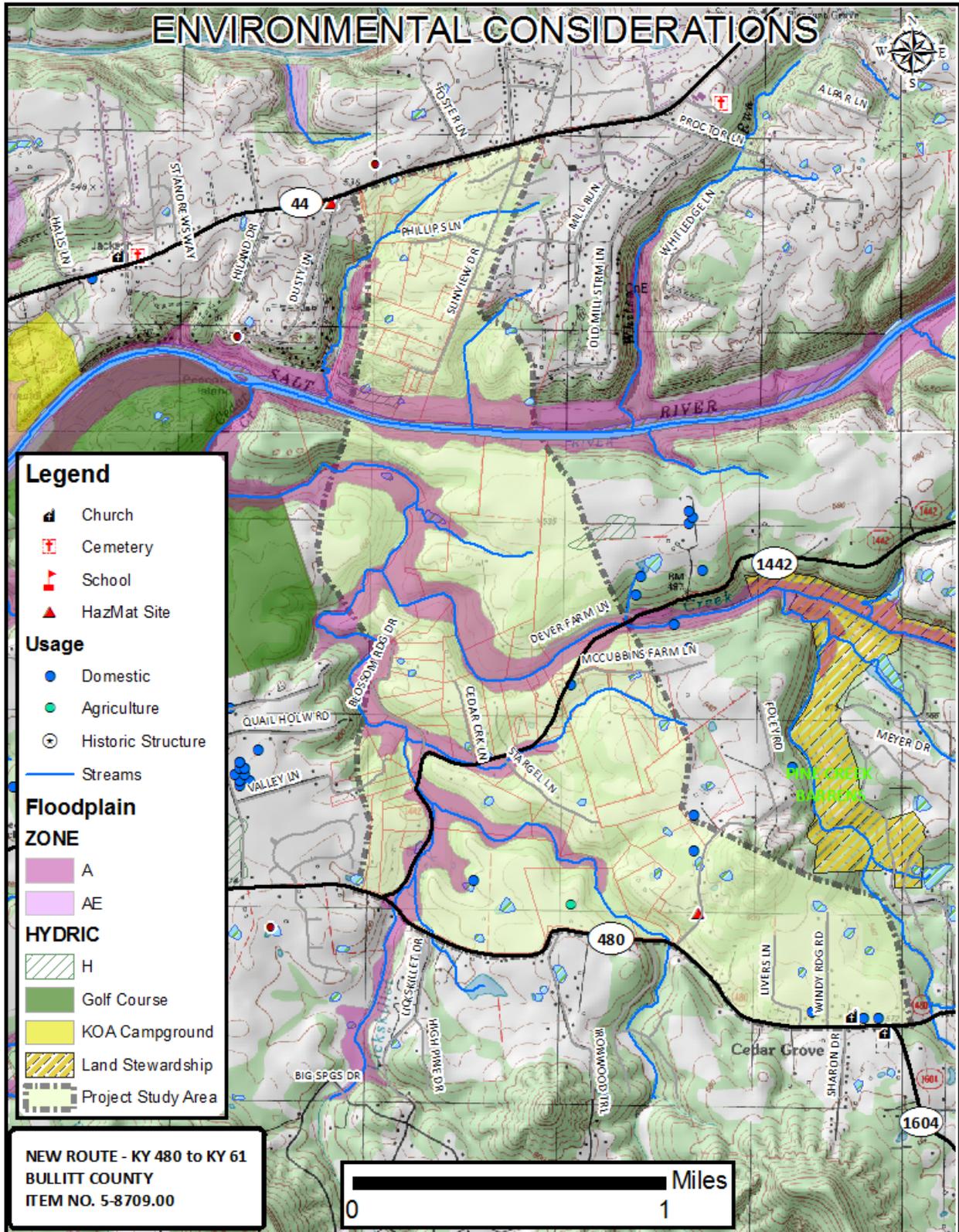


FIGURE 4.



3.2 HAZARDOUS MATERIALS

One suspected hazardous waste facility (meth lab) is directly within the project study area. Several hazardous waste generator facilities are identified near the project study area. These facilities include a Dairy Mart, Dollar General Store, Amazon.com, and Blair’s Food Market. The project will not impact any known hazardous waste activities.

3.3 UNDERGROUND STORAGE TANKS

No UST site locations are present within the project study area. Two underground storage tank locations are within one mile of the study area. Both sites are located near the I-65 interchange with KY 480. These facilities include the Loves Truck Stop and Valero Food Mart,

3.4 AGRICULTURE



Within the study area undeveloped land is prevalent throughout the majority of the project area. This area is used primarily for cattle grazing and crop production. There are approximately 1480 acres of land within the study area. Of this area approximately 17.4 acres are considered to be prime farmland. Further coordination

with NRCS will be required during Phase I design.

3.5 MINING

There are no identified mining activities within the project study area.

3.6 AIR QUALITY AND NOISE

3.6.1 Air Quality

Bullitt County is designated in maintenance for 8-hour ozone and non-attainment for PM2.5, as per the 1990 Clean Air Act Amendments. Transportation control measures are not likely to be required as the project is not likely to be a project of concern. The project is not currently listed in the Kentuckiana Planning and Development Agency (KIPDA) FY 2014-FY 2017 Transportation Improvement Program or in KIPDA’s Long-Range Transportation Plan – Horizon 2030, adopted November 2006. Further advancement of this project would require more detailed analysis and interagency review. If implemented, the project is not expected to adversely impact air quality in the region.



3.6.2 Noise

Highway traffic noise, or unwanted sound, is one of the most common public complaints regarding highways. Although several options exist for addressing noise impacts, none are more effective than noise barriers, although they even have limited effectiveness. Barriers can only be effective if no openings exist, as noise will bend and infiltrate through such openings. Therefore, noise barriers can only be installed along roadways that either have full access control or have a significant stretch of roadway that has no driveway openings or intersecting roads. Other noise mitigation measures that should be considered include quiet pavements, horizontal and vertical alignment shifts, and the acquisition of property along the roadway to create a buffer zone. Noise impacts for the project are anticipated to be negligible due to undeveloped nature of the corridor. In addition, due to the uncertainty regarding the type of future development (commercial, residential, mixed use) which may occur in Bullitt County; noise impacts are difficult to predict at this time.



3.7 SOCIOECONOMIC DATA AND ENVIRONMENTAL JUSTICE

3.7.1 Socioeconomic Data

Bullitt County has 299.1 square miles in land area and a population density of 205 people per square mile. The 2013 population estimate is 76,854 which is a 3.4% change since 2010. The 2013 Census estimate provides 1% reporting African-American and 1.7% Hispanic (of any race). The average household size in the county is 2.75 persons compared to an average family size of 3.07 persons statewide.

3.7.2 Environmental Justice

Information was obtained from US Environmental Protection Agency (USEPA) regarding potential environmental justice concerns within the project study area using the EJ Mapper.

The following is a summary of the EJ Assessment:

- Has a population of 594.
- Approximately 99% of the population is White.
- There are 253 households within the assessment area.
- 81% of the population is 18 years and older.



- 88% of the households in the assessment have an income greater than \$25,000, 34% are greater than \$75,000.

Environmental justice issues are not likely within the study area based on the assessment.

Information obtained from USEPA is included in **Appendix B**.

3.9 ADDITIONAL ITEMS OF CONCERN

3.9.1 *Permits*

The following permits are likely to be required for the route:

- USACE Section 404 Permit – Stream/Wetland
- KDOW 401 Water Quality Certification
- General Permit for Stormwater Discharges Associated with Construction Activities (KYR10)
- Permit to Construct Across or Along a Stream (Floodplain)

Construction cannot begin until permits are issued by regulatory agencies.

Figure 4 is a map of all identified environmental considerations within and adjacent to the study area.



References

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National Register of Historic Places, <http://nrhp.focus.nps.gov/natreghome>.



EJView ACS Summary Report



Location:

Study Area:

Summary of ACS Estimates 2006 - 2010

Population
Population Density (per sq. mile)
Minority Population
% Minority
Households
Housing Units
Housing Units Built Before 1950
Per Capita Income
Land Area (sq. miles) (Source: SF1)
% Land Area
Water Area (sq. miles) (Source: SF1)
% Water Area

	2006 - 2010 ACS Estimates	Percent	MOE (±)
--	------------------------------	---------	---------

Population by Race

Total
Population Reporting One Race
White
Black
American Indian
Asian
Pacific Islander
Some Other Race
Population Reporting Two or More Races
Total Hispanic Population
Total Non-Hispanic Population
White Alone
Black Alone
American Indian Alone
Non-Hispanic Asian Alone
Pacific Islander Alone
Other Race Alone
Two or More Races Alone

Population by Sex

Male
Female

Population by Age

Age 0-4
Age 0-17
Age 18+
Age 65+

Data Note: Detail may not sum to totals dues to rounding. Hispanic population can be of any race. N/A means not available.
Source: U.S. Census Bureau, American Community Survey (ACS) 2006 - 2010.



EJView ACS Summary Report



Location:

Study Area:

	2006 - 2010 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total			
Less than 9th Grade			
9th - 12th Grade, No Diploma			
High School Graduate			
Some College, No Degree			
Associate Degree			
Bachelor's Degree or more			
POPULATION AGE 5+ YEARS BY ABILITY TO SPEAK ENGLISH			
Total			
Speak only English			
Non-English at Home ¹⁺²⁺³⁺⁴			
¹ Speak English "very well"			
² Speak English "well"			
³ Speak English "not well"			
⁴ Speak English "not at all"			
³⁺⁴ Speak English "less than well"			
²⁺³⁺⁴ Speak English "less than very well"			
POPULATION AGE 5+ YEARS BY LANGUAGE SPOKEN AT HOME			
Total			
Speak only English			
Non-English Speaking			
Population by Place of Birth for the Foreign-Born			
Total			
Europe			
Asia			
Africa			
Oceania			
Americas			
Households by Household Income in 1999			
Household Income Base			
< \$15,000			
\$15,000 - \$25,000			
\$25,000 - \$50,000			
\$50,000 - \$75,000			
\$75,000 +			
Occupied Housing Units by Tenure			
Total			
Owner Occupied			
Renter Occupied			

Data Note: Detail may not sum to totals dues to rounding. Hispanic population can be of any race. N/A means not available.

2006-2010 ACS 5-year Estimates: The American Community Survey (ACS) summary files provide nation-wide population and housing characteristic data at all Census summary levels down to the Block Group level. This data was collected between January 1, 2006 and December 31, 2010. ACS replaces the decennial census sample data, and is not the 2010 Census population counts data. (<http://www.census.gov/acs/www/#fragment-3>)

Margin of error (MOE): The MOE provides a measure of the uncertainty in the estimate due to sampling error in the ACS survey. Applying the MOE value yields the confidence interval for the estimate. For example, an estimate value of 50 and +/- MOE of 5 means the true value is between 45 and 55 with a 90 percent certainty (http://www.census.gov/acs/www/Downloads/data_documentation/Accuracy/MultiyearACSAccuracyofData2010.pdf). Maximum MOE is shown for each value within study area.

Source: U.S. Census Bureau, American Community Survey (ACS) 2006 - 2010.